

Byron 2

1Q/2000 Performance Indicators

Licensee's General Comments: 1. An initiative to ensure NEI 99-02 guidelines are consistently applied to Safety System Unavailability (SSU) performance indicators amongst the 10 Commonwealth Edison Company plants was completed. No change to the historical SSU data was required. 2. The first quarter 2000 performance indicator data elements were prepared in accordance with NEI 99-02 {Draft Revision D} and Regulatory Issues Summary 2000-08.

Unplanned Scrams per 7000 Critical Hrs



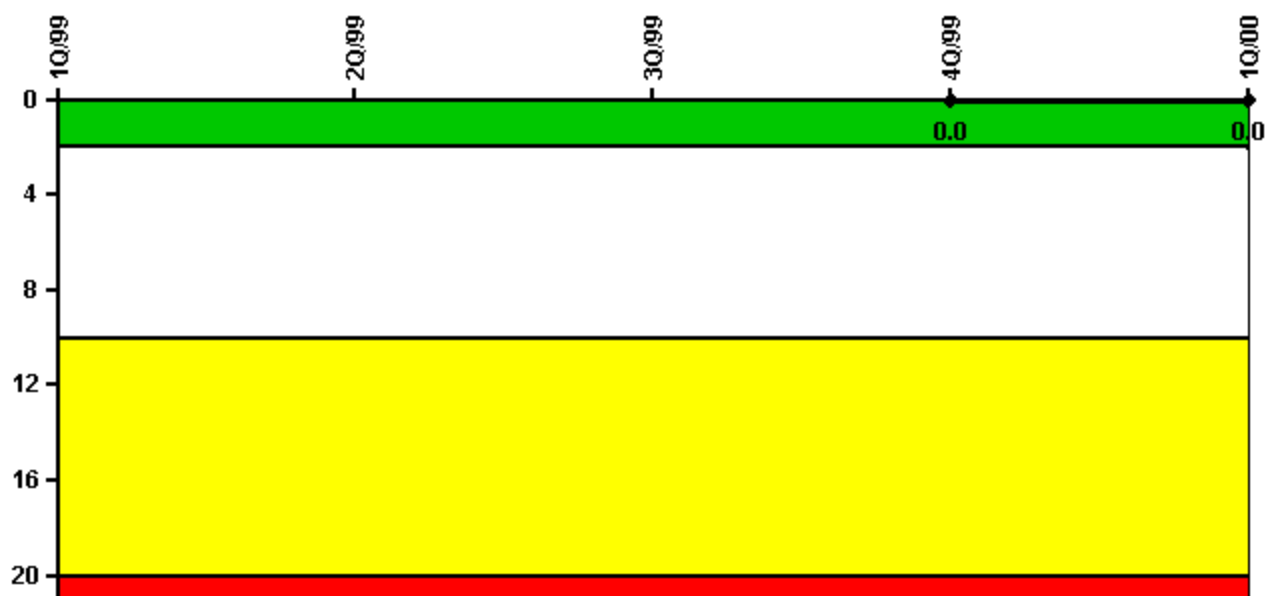
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Unplanned scrams	0	0	0	0	1.0
Critical hours	2160.0	2183.0	2208.0	1650.1	2156.5
Indicator value	0	0	0	0	0.9

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



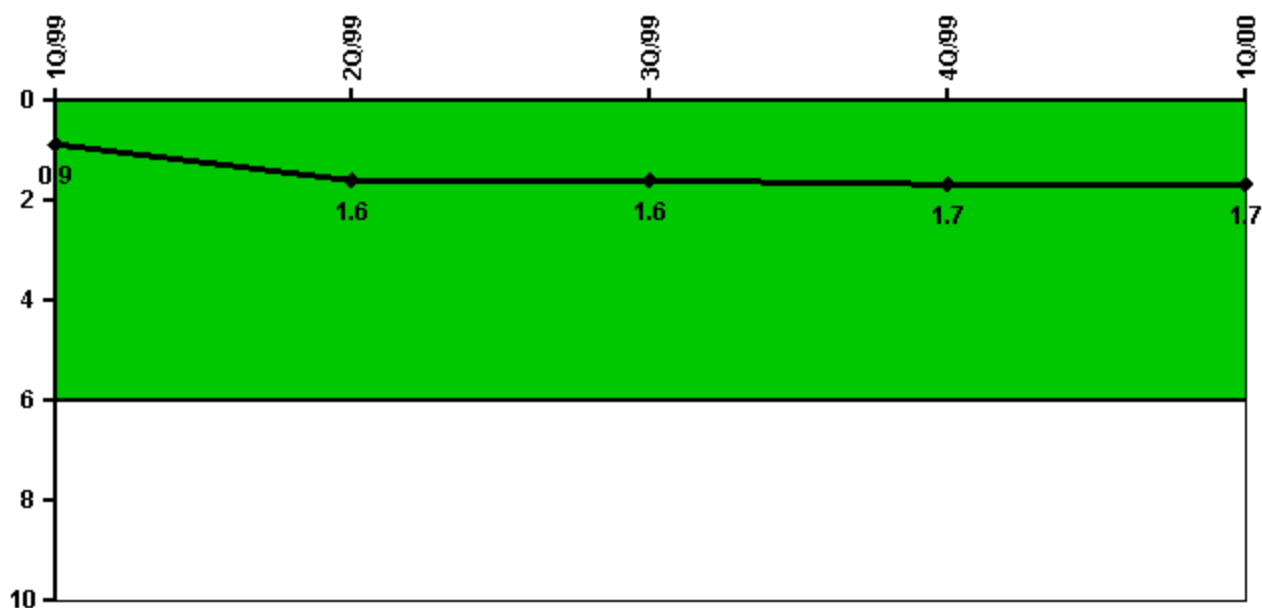
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Scrams	0	0	0	0	0
Indicator value				0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Unplanned power changes	0	1.0	1.0	0	0
Critical hours	2160.0	2183.0	2208.0	1650.1	2156.5
Indicator value	0.9	1.6	1.6	1.7	1.7

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

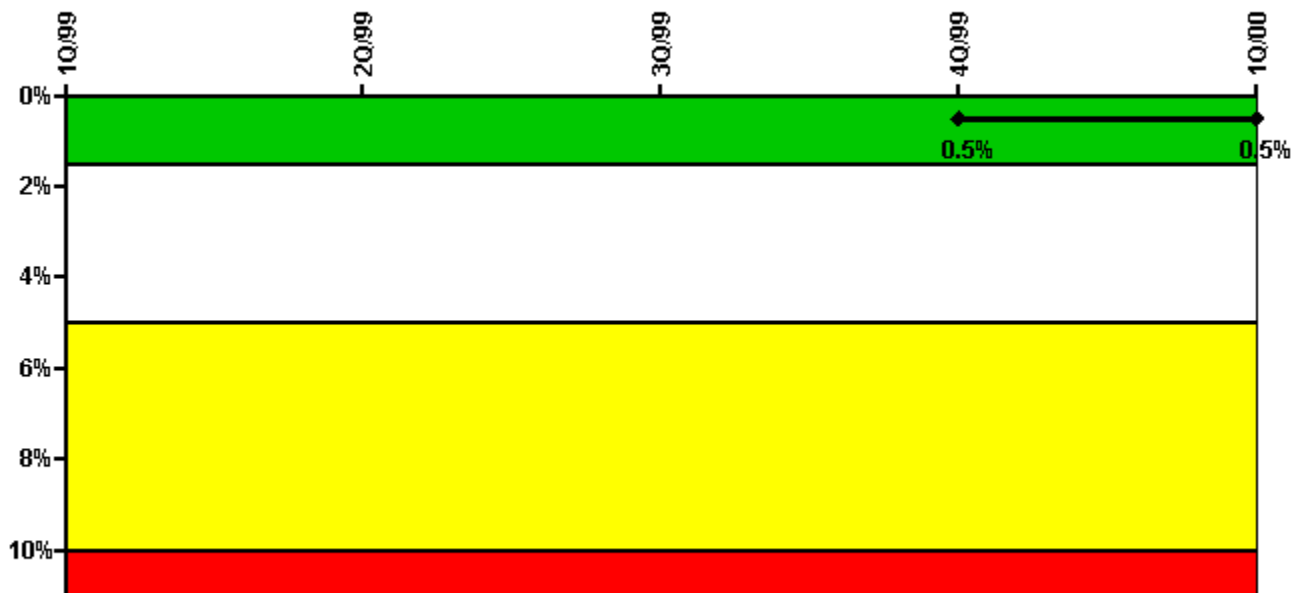
Safety System Unavailability, Emergency AC Power	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	0	27.40	74.00	0	16.30
Unplanned unavailable hours	0	0	0	10.60	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00
Train 2					
Planned unavailable hours	29.70	82.20	0.40	3.20	0
Unplanned unavailable hours	0	1.30	0	1.30	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00
Indicator value				0.7%	0.7%

Licensee Comments:

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

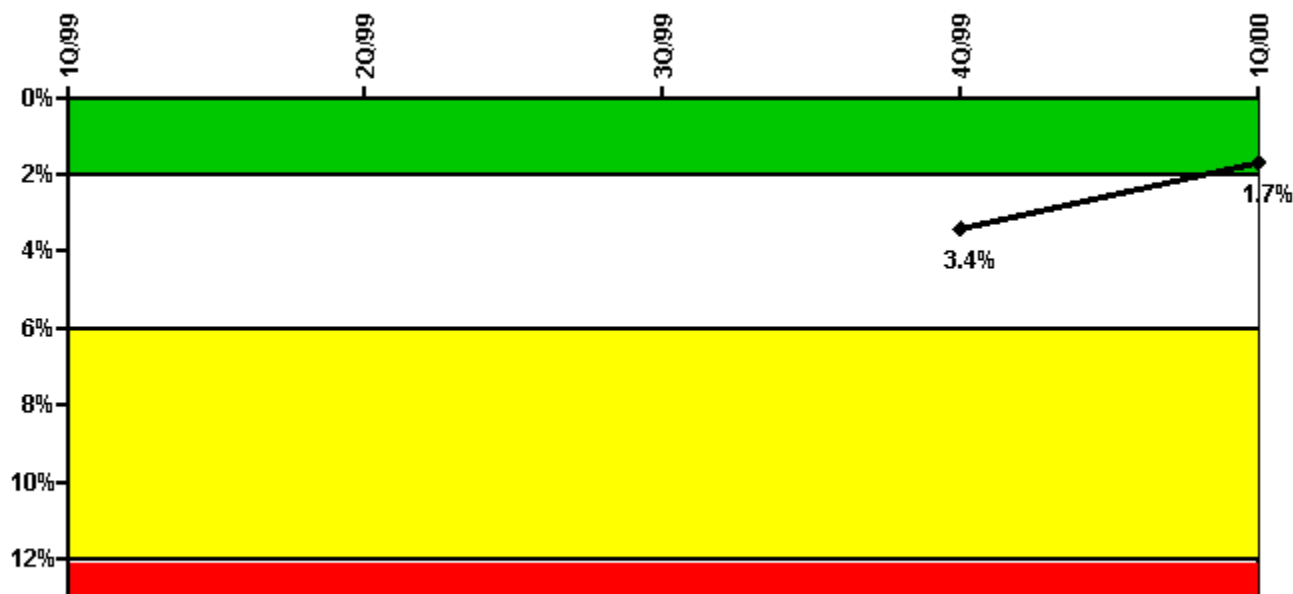
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	2.30	14.00	32.90	1.30	0.90
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 2					
Planned unavailable hours	2.00	1.00	21.30	2.00	1.40
Unplanned unavailable hours	0	0	20.40	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 3					
Planned unavailable hours	25.50	0	0	0	42.00
Unplanned unavailable hours	0	0	0	0	14.80
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 4					
Planned unavailable hours	0	0	21.70	0	0
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48

Indicator value				0.5%	0.5%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	20.80	19.90	36.70	10.50	24.00
Unplanned unavailable hours	0.60	0	8.10	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 2					
Planned unavailable hours	13.30	34.30	31.60	20.30	23.70
Unplanned unavailable hours	0	1.90	0	10.40	0
Fault exposure hours	0	0	0	180.70	0
Effective Reset hours	0	0	0	0	872.60
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Indicator value				3.4%	1.7%

Licensee Comments:

1Q/00: Removed 872.6 fault exposure hours from 5/13/97 event on 2B Auxiliary Feedwater train due to meeting all criteria in NEI 99-02 for

removing fault exposure hours

2Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

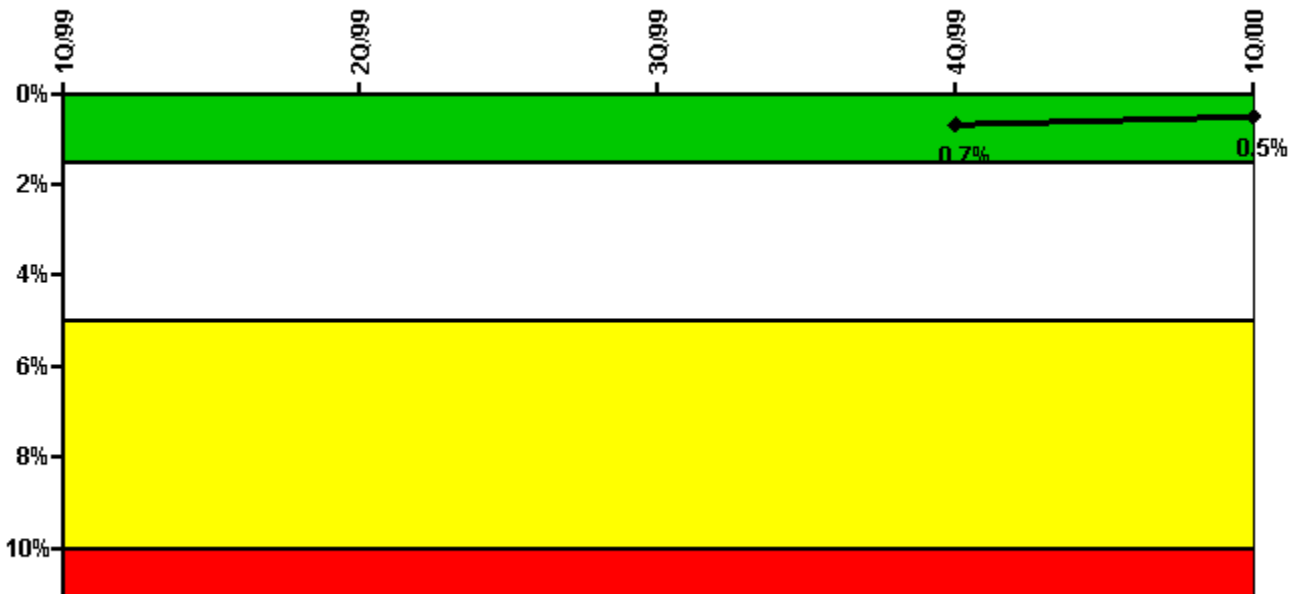
1Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

2Q/97: Removed 872.6 fault exposure hours from 5/13/97 event on 2B Auxiliary Feedwater train due to meeting all criteria in NEI 99-02 for removing fault exposure hours.

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

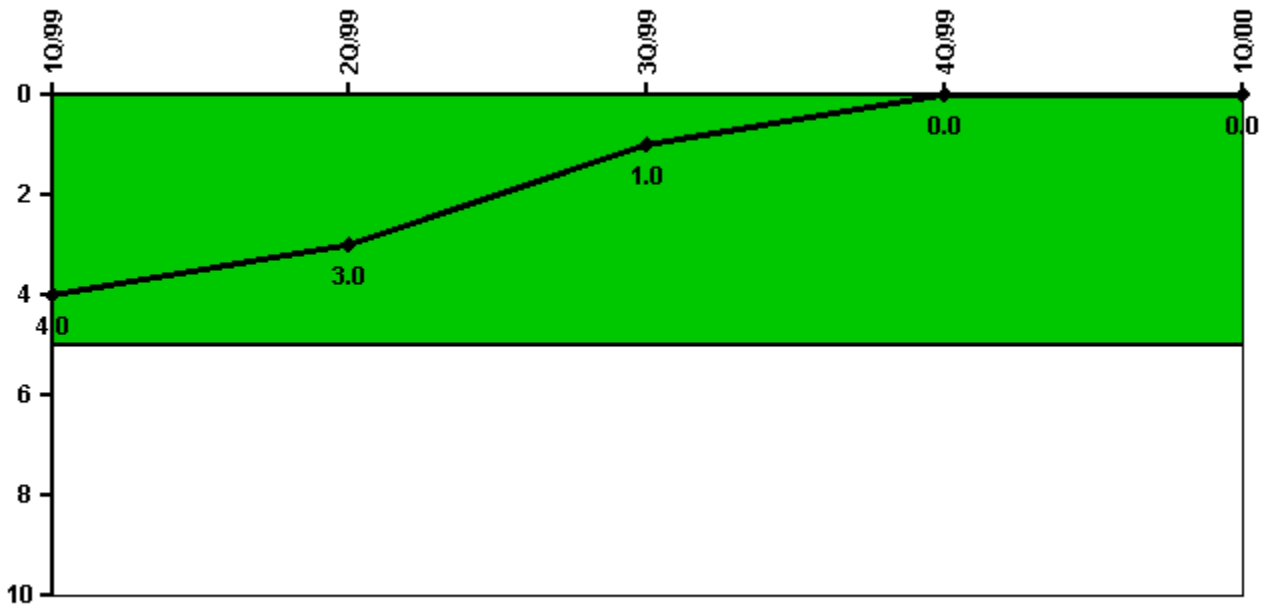
Notes

Safety System Unavailability, Residual Heat Removal System	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	43.40	0.20	5.00	5.40	2.40
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00

Train 2					
Planned unavailable hours	38.90	1.40	5.80	2.30	2.10
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00
Indicator value				0.7%	0.5%

Licensee Comments: none

Safety System Functional Failures (PWR)



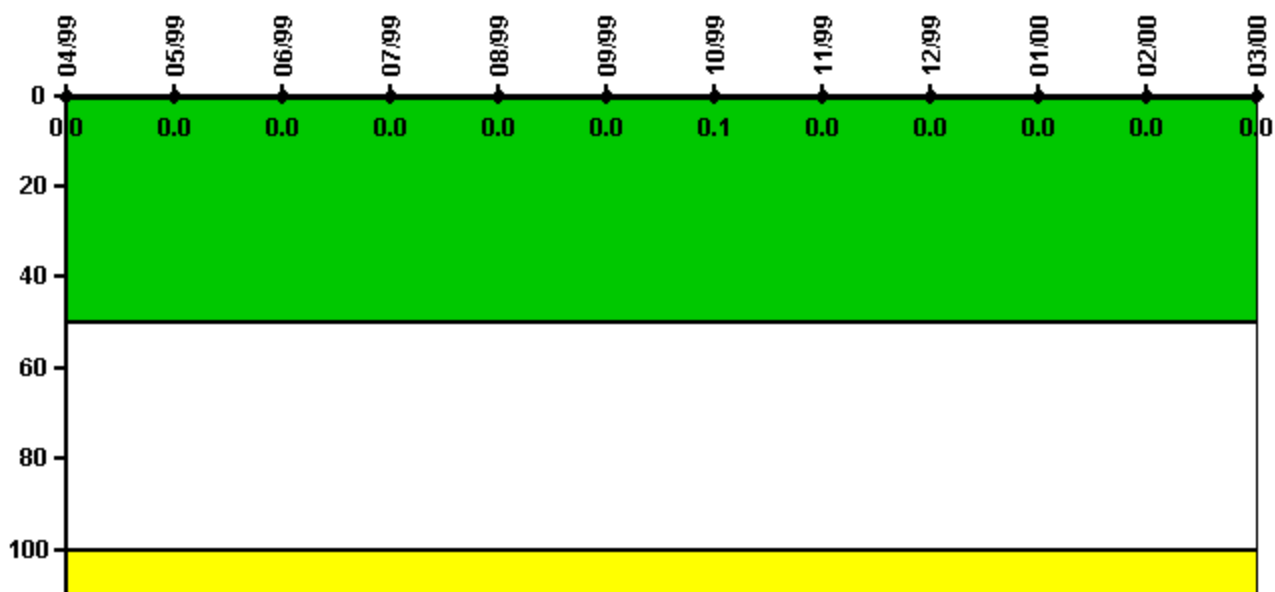
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Safety System Functional Failures	0	0	0	0	0
Indicator value	4	3	1	0	0

Licensee Comments: none

Reactor Coolant System Activity



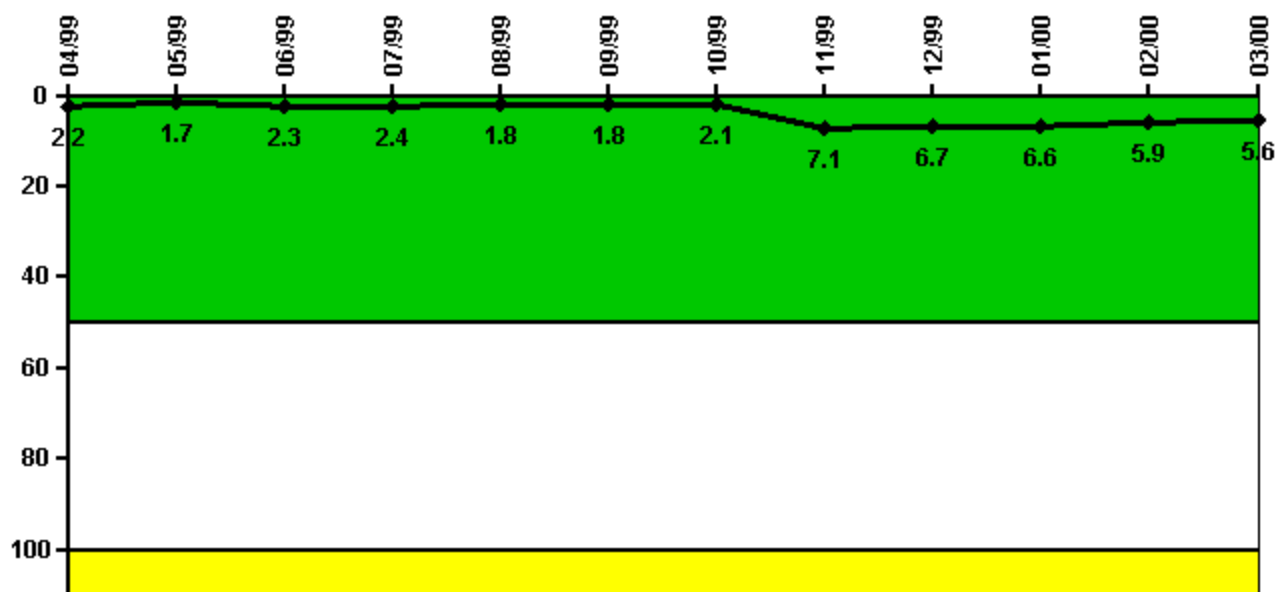
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/99	5/99	6/99	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00
Maximum activity	0.000339	0.000330	0.000343	0.000361	0.000378	0.000368	0.000818	0.000196	0.000213	0.000231	0.000243	0.000263
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0.1	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



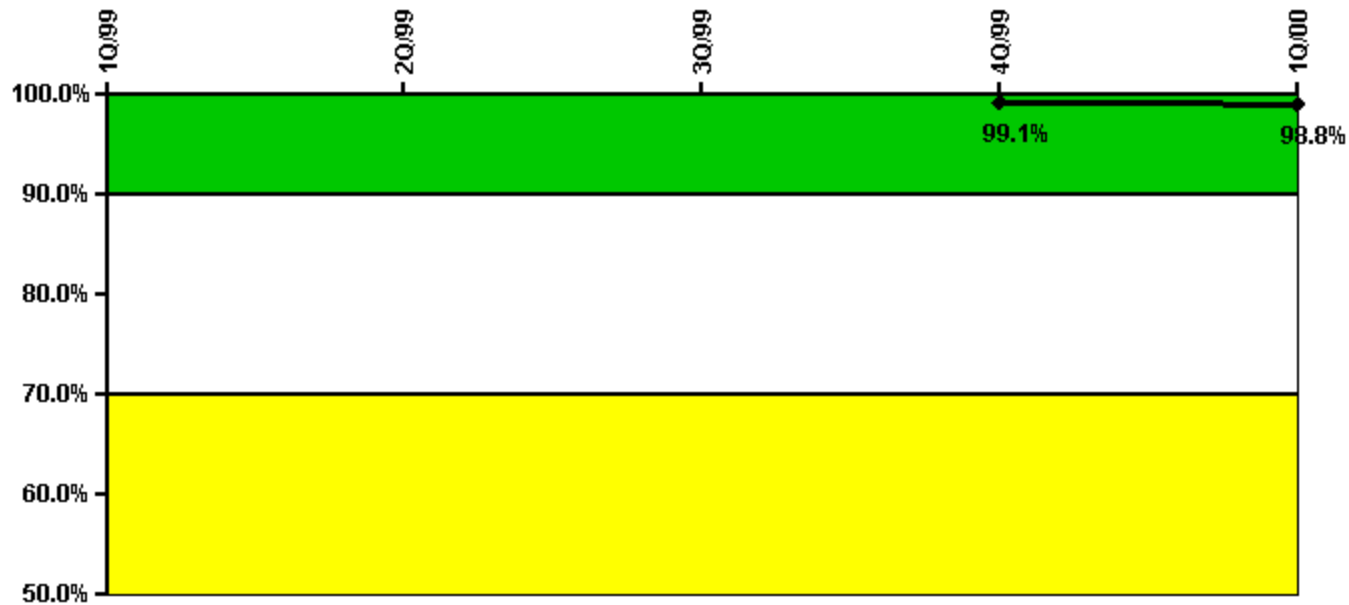
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/99	5/99	6/99	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00
Maximum leakage	0.215	0.170	0.229	0.238	0.182	0.184	0.205	0.707	0.674	0.659	0.586	0.562
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.2	1.7	2.3	2.4	1.8	1.8	2.1	7.1	6.7	6.6	5.9	5.6

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

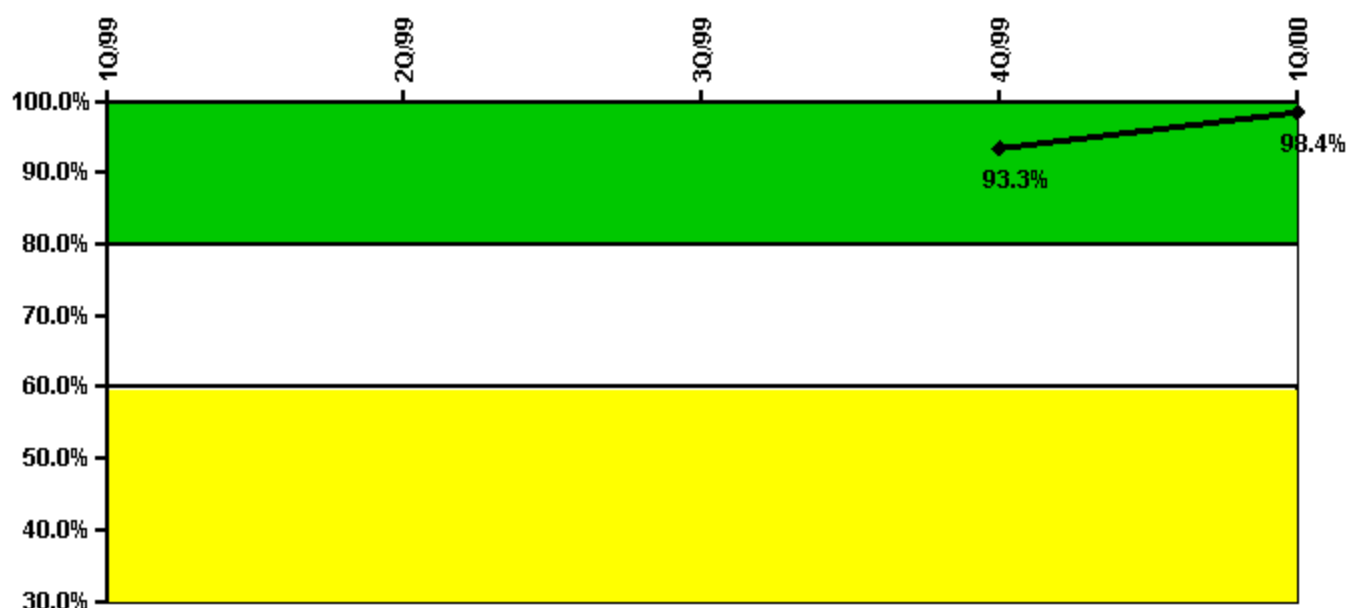
Drill/Exercise Performance	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Successful opportunities	0	54.0	39.0	4.0	63.0
Total opportunities	0	54.0	40.0	4.0	64.0
Indicator value				99.1%	98.8%

Licensee Comments:

4Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

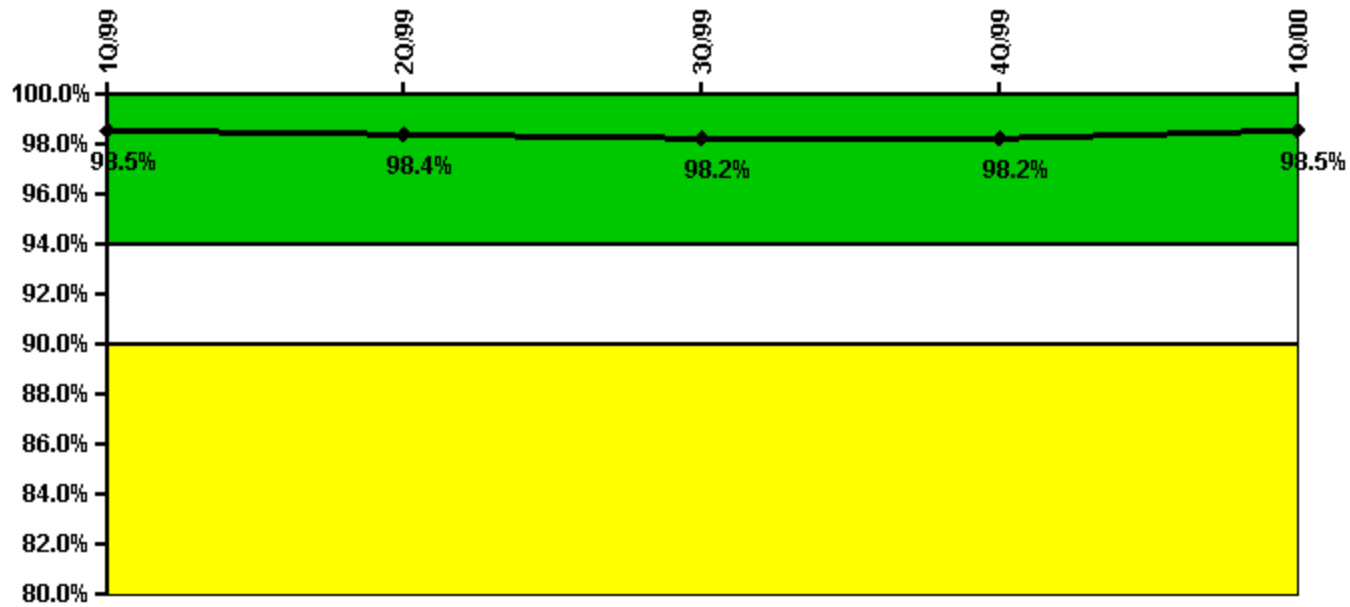
Notes

ERO Drill Participation	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Participating Key personnel				56.0	61.0
Total Key personnel				60.0	62.0
Indicator value				93.3%	98.4%

Licensee Comments:

1Q/00: Frequently asked question (FAQ) #22 in FAQ log #3 was reviewed by Commonwealth Edison (ComEd) Company Emergency Planning management and it was determined that no historical data changes were required. Common guidance was developed and implemented at the 10 ComEd plants for the collection of first quarter 2000 Emergency Response Organization Drill Participation performance indicator data.

Alert & Notification System



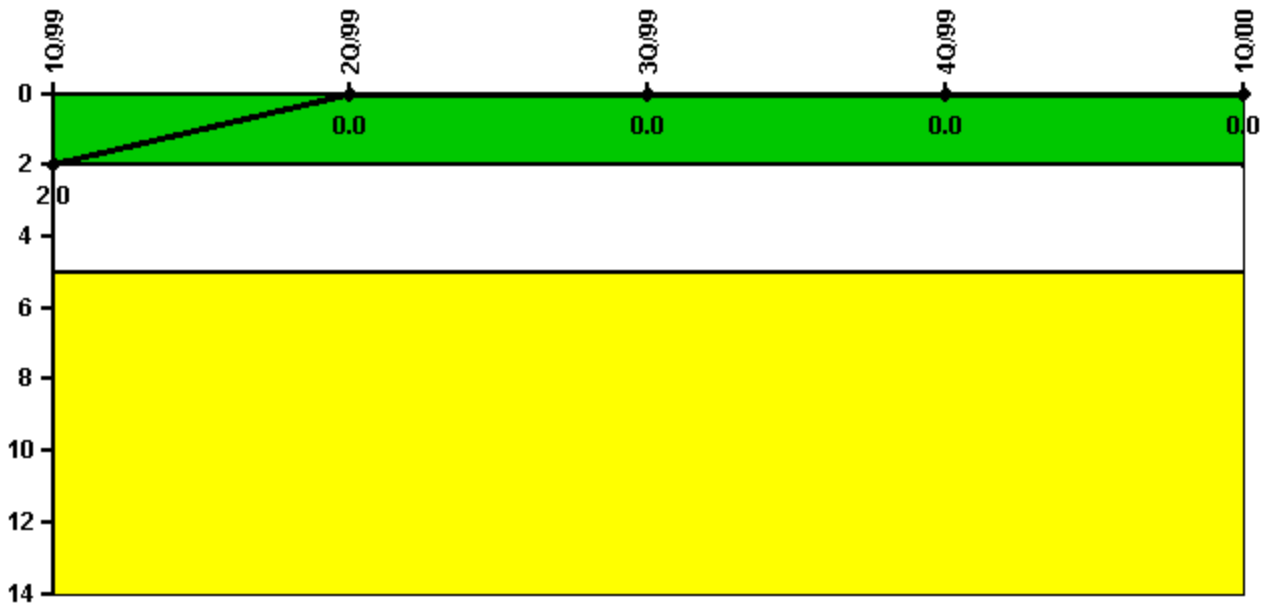
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Successful siren-tests	5740	5913	5996	5883	6000
Total sirens-tests	5922	6016	6110	5922	6110
Indicator value	98.5%	98.4%	98.2%	98.2%	98.5%

Licensee Comments: none

Occupational Exposure Control Effectiveness



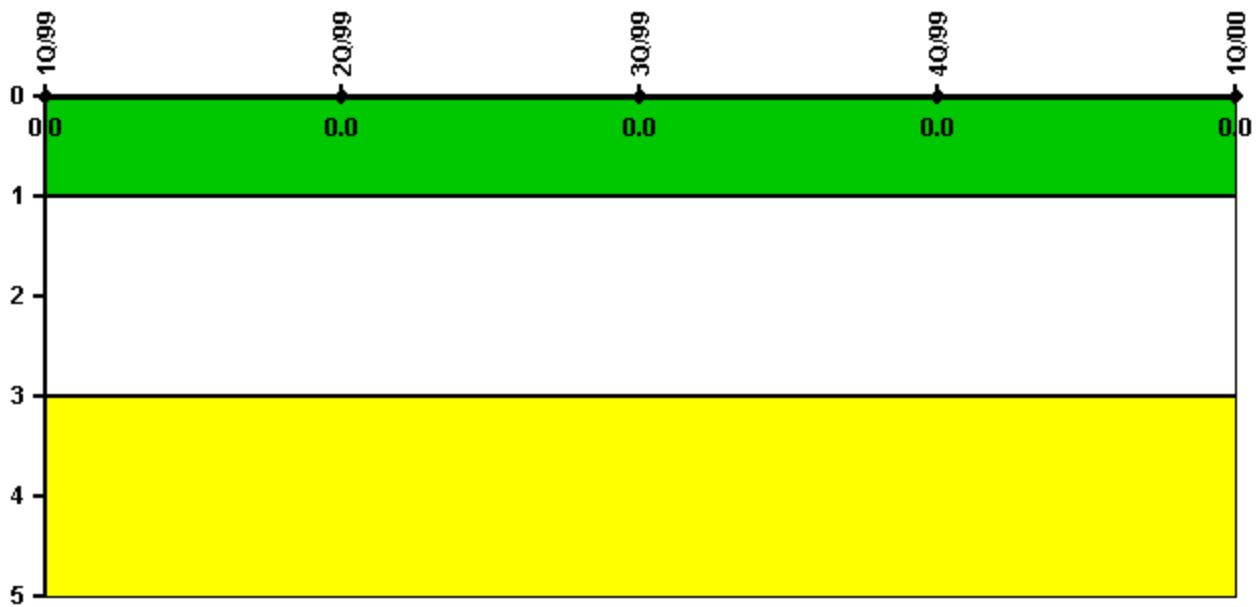
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
High radiation area occurrences	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0
Indicator value	2	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



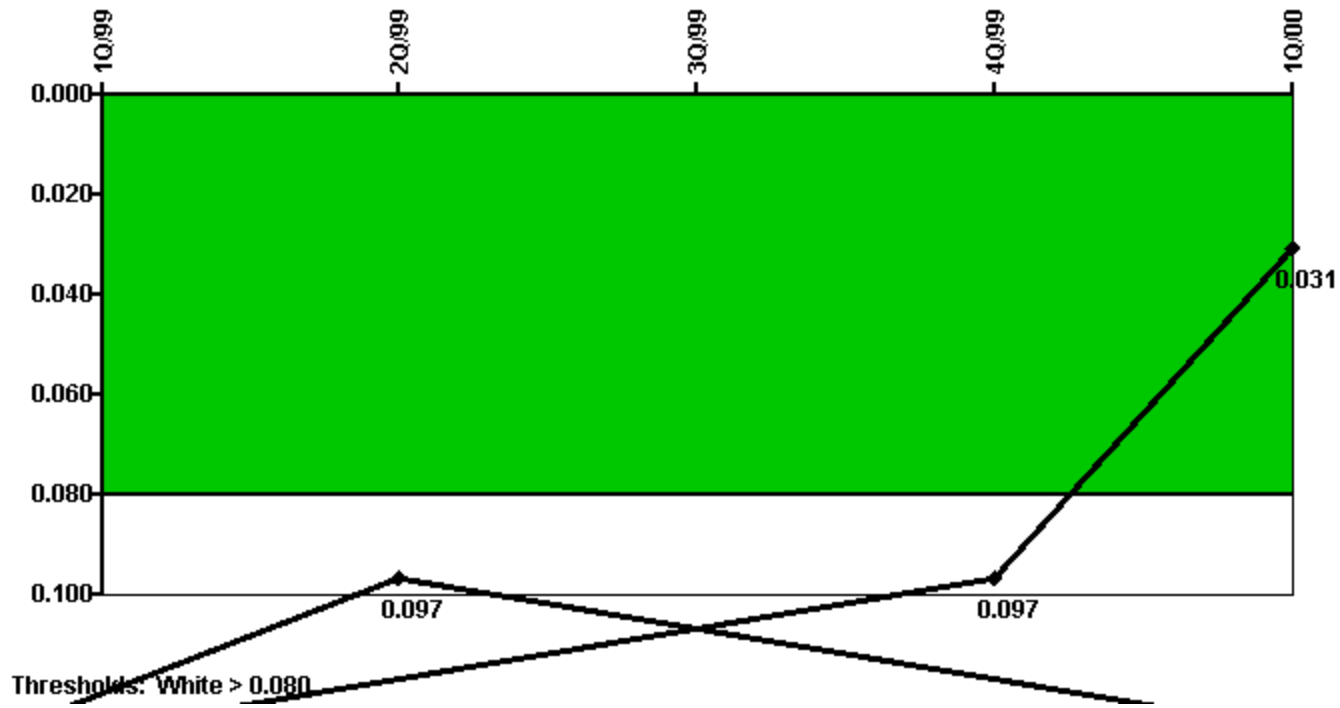
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
RETS/ODCM occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index

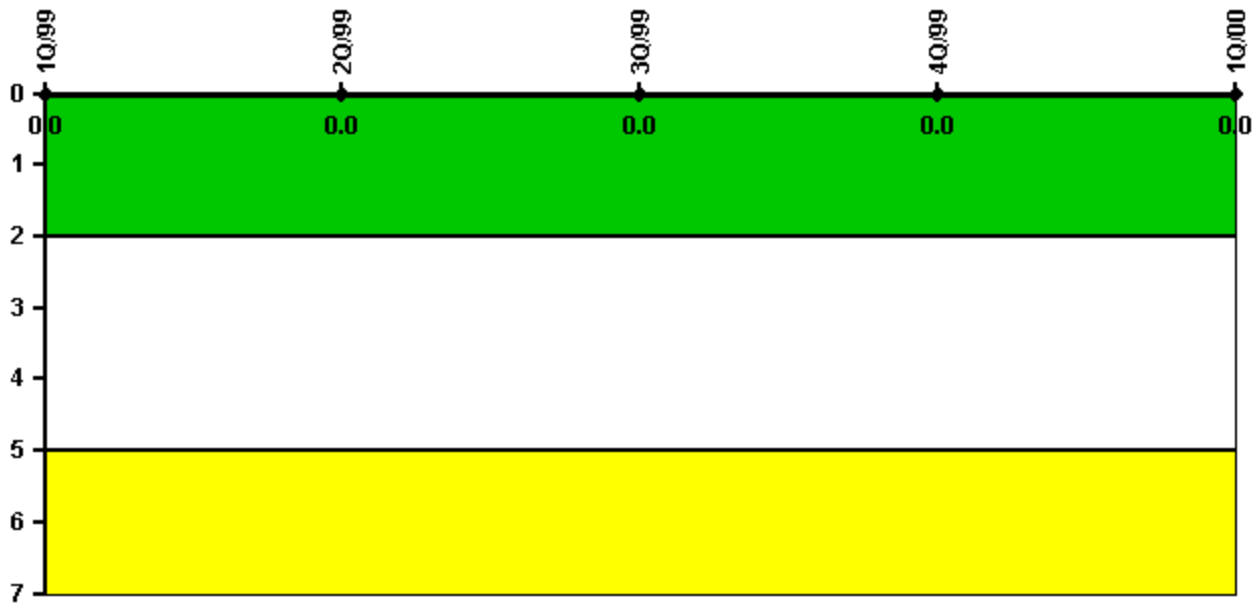


Notes

Protected Area Security Performance Index	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
IDS compensatory hours	715.00	203.70	330.00	57.60	57.60
CCTV compensatory hours	753.0	10.1	0.8	6.5	67.8
IDS normalization factor	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0
Index Value	0.120	0.097	0.107	0.097	0.031

Licensee Comments: none

Personnel Screening Program



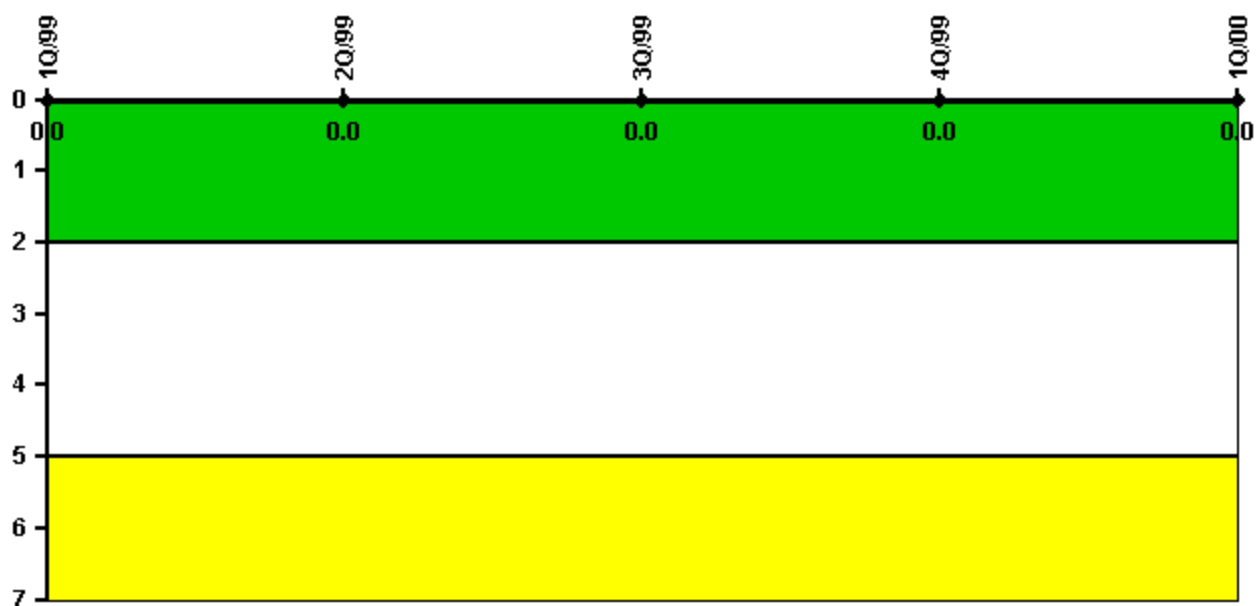
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Program failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Program Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none



[PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

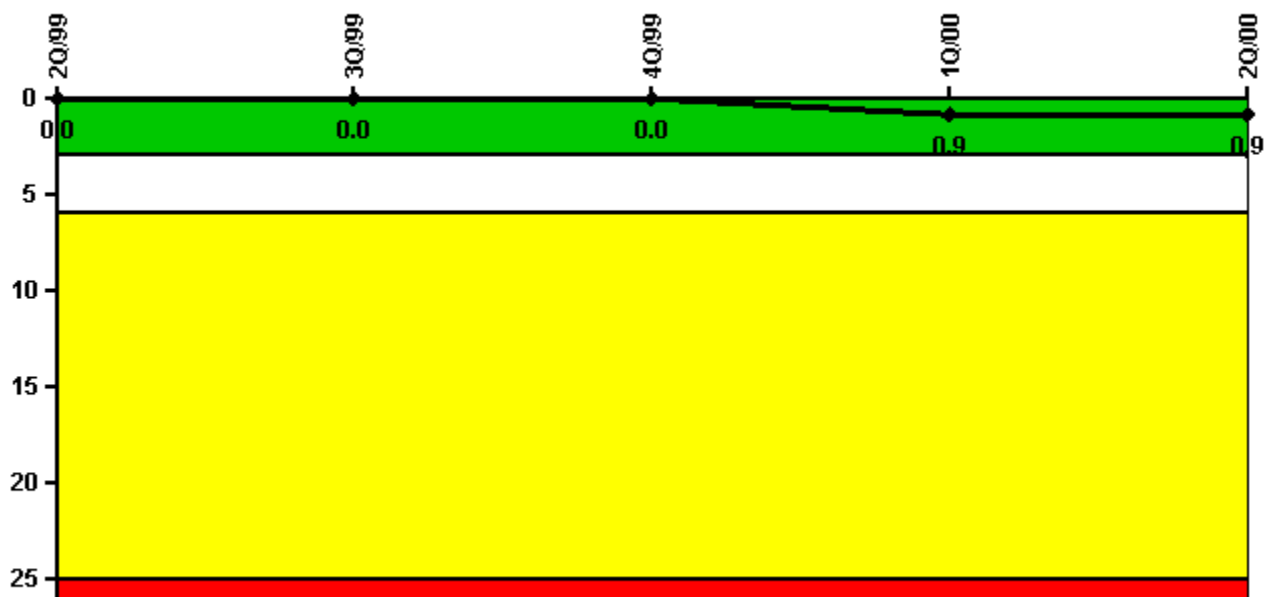
Last Modified: April 1, 2002

Byron 2

2Q/2000 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



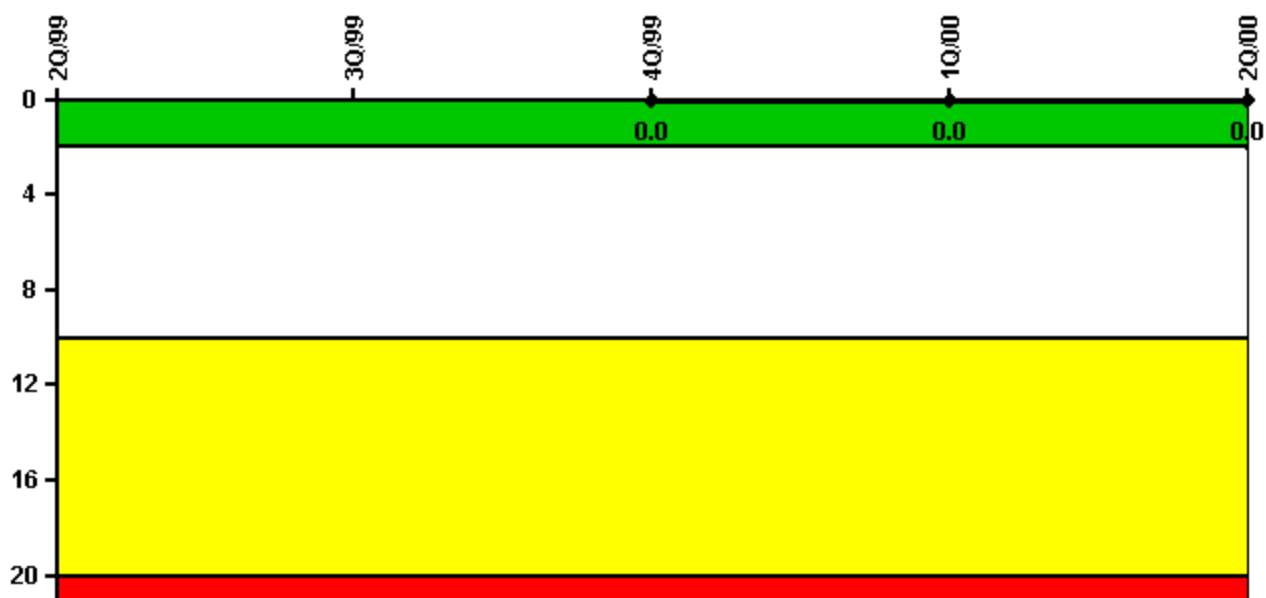
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Unplanned scrams	0	0	0	1.0	0
Critical hours	2183.0	2208.0	1650.1	2156.5	2183.0
Indicator value	0	0	0	0.9	0.9

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



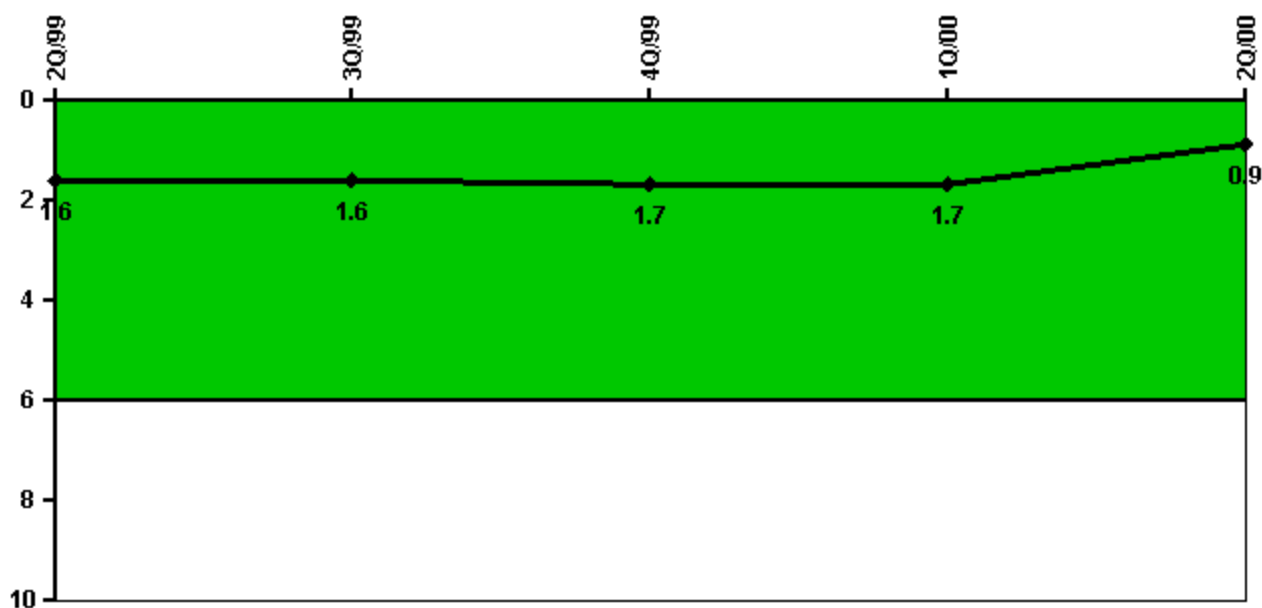
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Scrams	0	0	0	0	0
Indicator value			0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



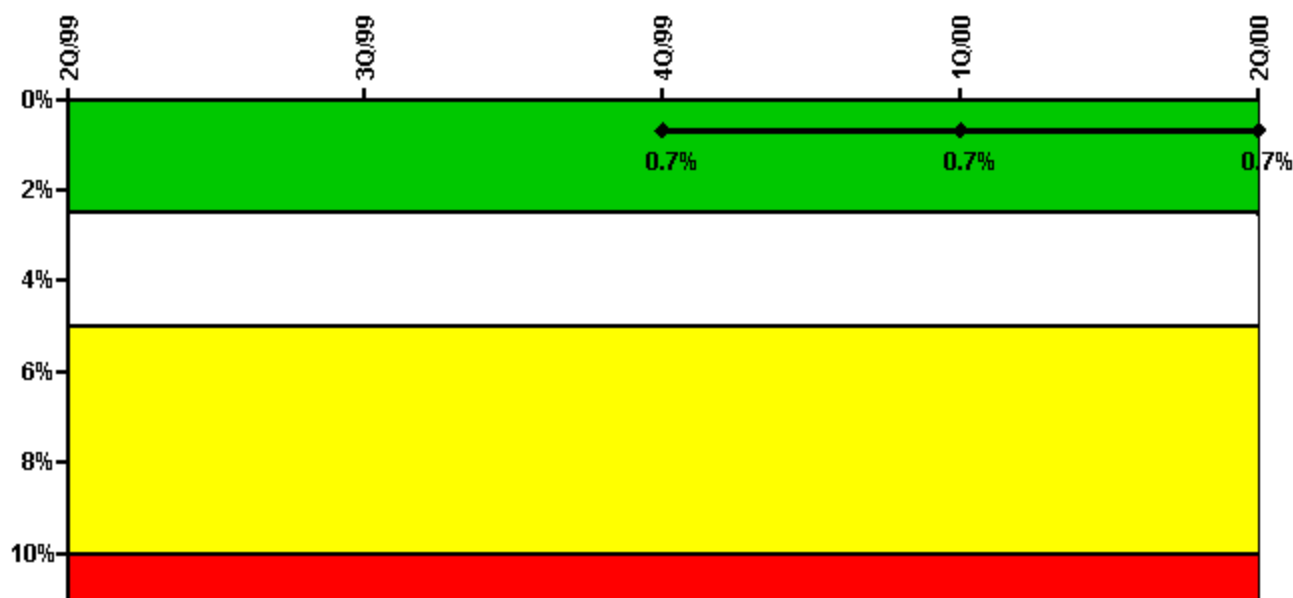
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Unplanned power changes	1.0	1.0	0	0	0
Critical hours	2183.0	2208.0	1650.1	2156.5	2183.0
Indicator value	1.6	1.6	1.7	1.7	0.9

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Train 1					
Planned unavailable hours	27.40	74.00	0	16.30	0
Unplanned unavailable hours	0	0	10.60	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2					
Planned unavailable hours	82.20	0.40	3.20	0	8.00
Unplanned unavailable hours	1.30	0	1.30	0	27.30
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value			0.7%	0.7%	0.7%

Licensee Comments:

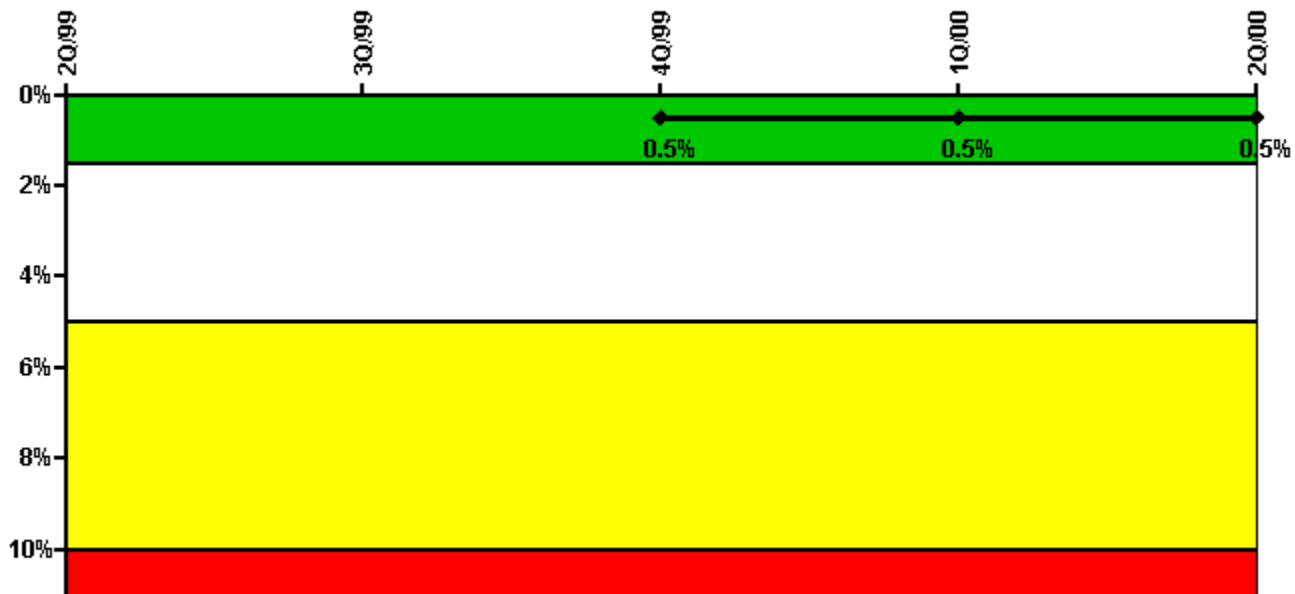
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of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

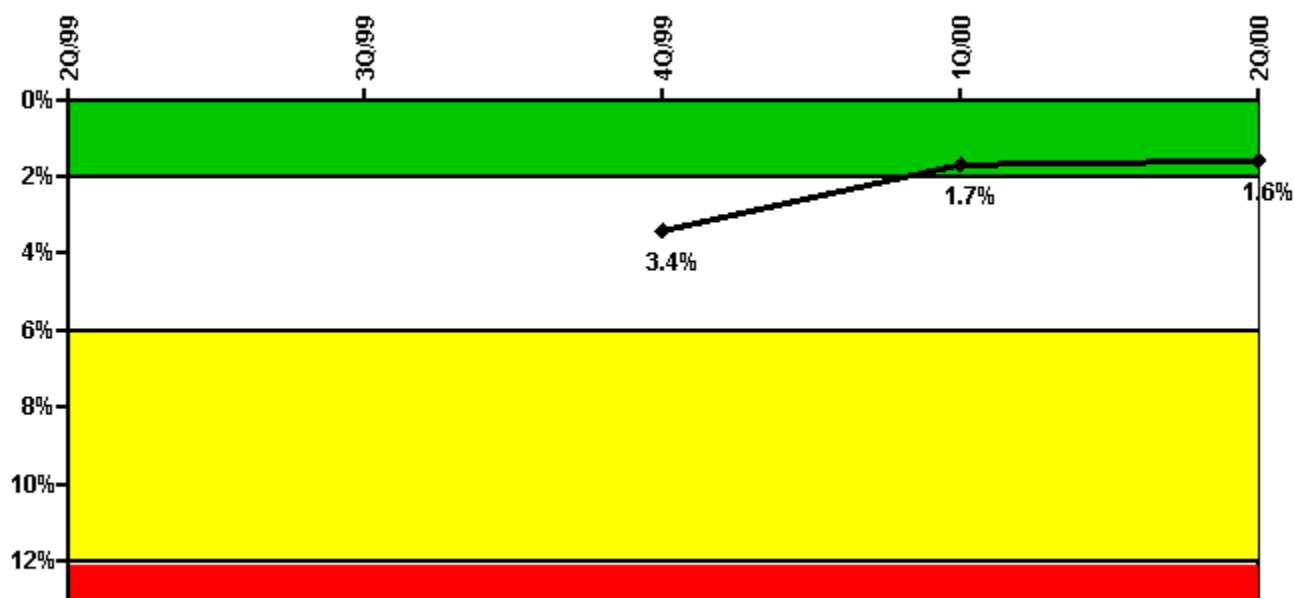
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Train 1					
Planned unavailable hours	14.00	32.90	1.30	0.90	1.50
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	1650.07	2156.48	2183.00
Train 2					
Planned unavailable hours	1.00	21.30	2.00	1.40	0.90
Unplanned unavailable hours	0	20.40	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	1650.07	2156.48	2183.00
Train 3					
Planned unavailable hours	0	0	0	42.00	9.80
Unplanned unavailable hours	0	0	0	14.80	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	1650.07	2156.48	2183.00
Train 4					
Planned unavailable hours	0	21.70	0	0	0
Unplanned unavailable hours	0	0	0	0	0

Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	1650.07	2156.48	2183.00
Indicator value			0.5%	0.5%	0.5%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Train 1					
Planned unavailable hours	19.90	36.70	10.50	24.00	1.80
Unplanned unavailable hours	0	8.10	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	1650.07	2156.48	2183.00
Train 2					
Planned unavailable hours	34.30	31.60	20.30	23.70	4.40
Unplanned unavailable hours	1.90	0	10.40	0	0
Fault exposure hours	0	0	180.70	0	0
Effective Reset hours	0	0	0	872.60	0
Required hours	2183.00	2208.00	1650.07	2156.48	2183.00
Indicator value			3.4%	1.7%	1.6%

Licensee Comments:

2Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

1Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

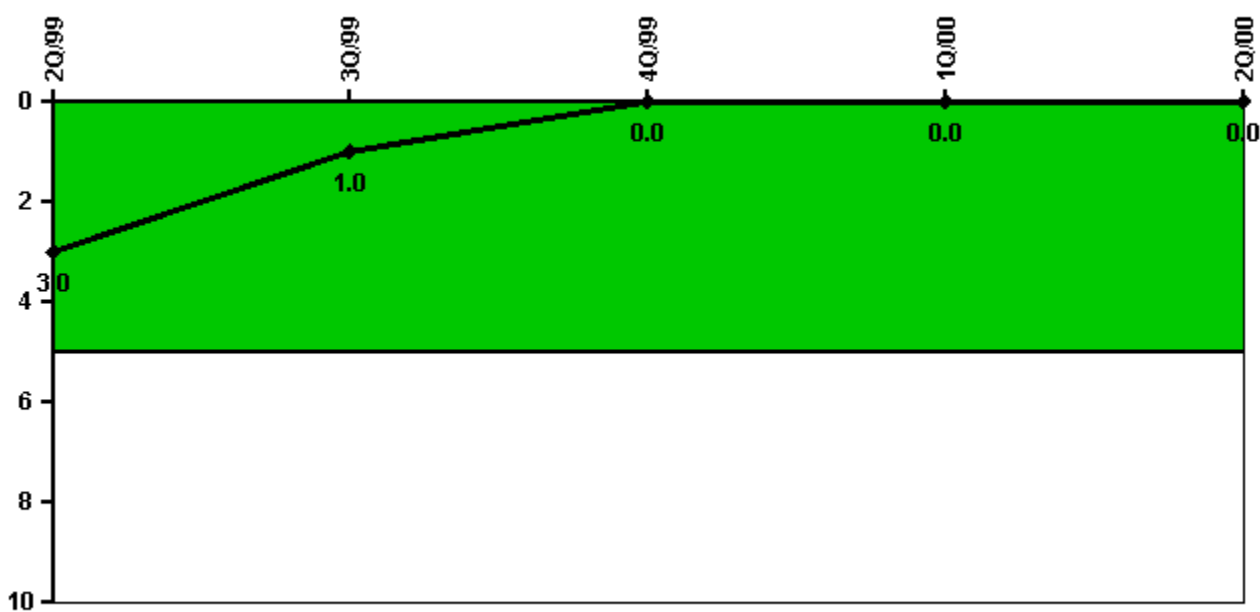
Safety System Unavailability, Residual Heat Removal System	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Train 1					
Planned unavailable hours	0.20	5.00	5.40	2.40	8.50
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2					
Planned unavailable hours	1.40	5.80	2.30	2.10	2.60

Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value			0.7%	0.5%	0.5%

Licensee Comments:

2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

Safety System Functional Failures (PWR)



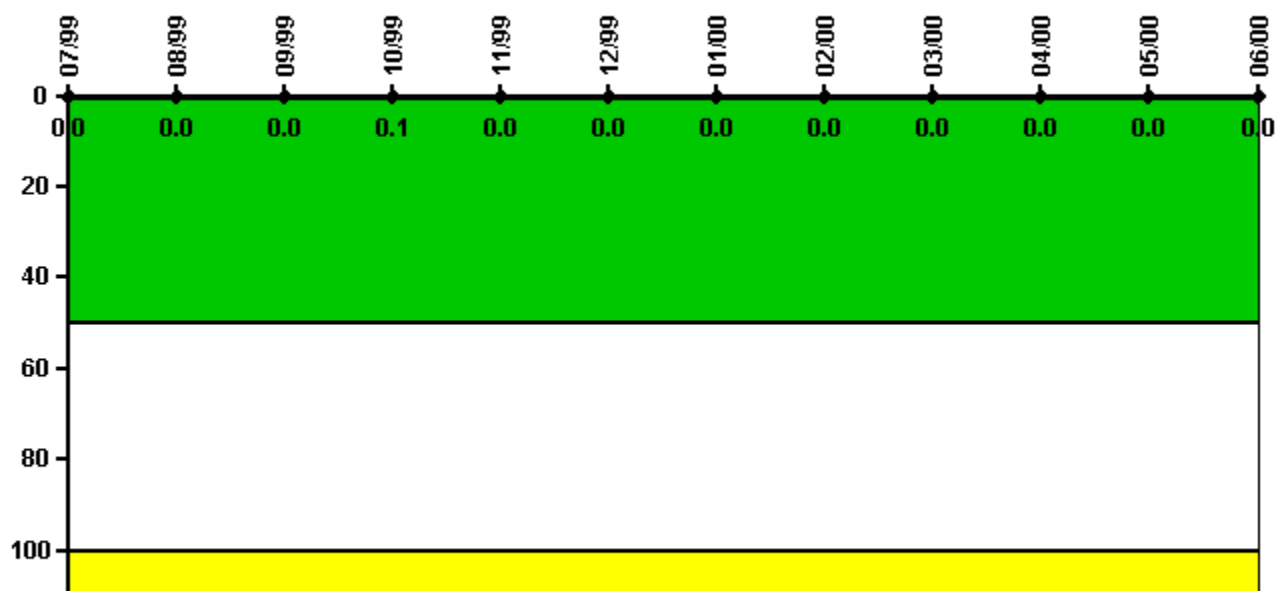
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Safety System Functional Failures	0	0	0	0	0
Indicator value	3	1	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



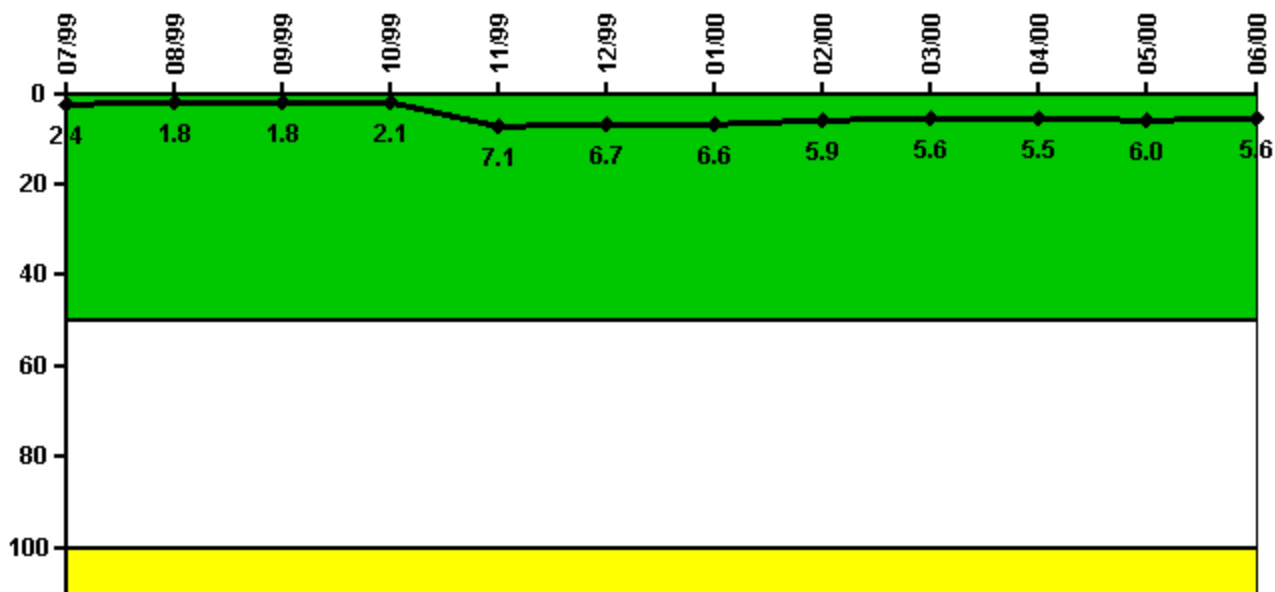
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00
Maximum activity	0.000361	0.000378	0.000368	0.000818	0.000196	0.000213	0.000231	0.000243	0.000263	0.000294	0.000309	0.000334
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0.1	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



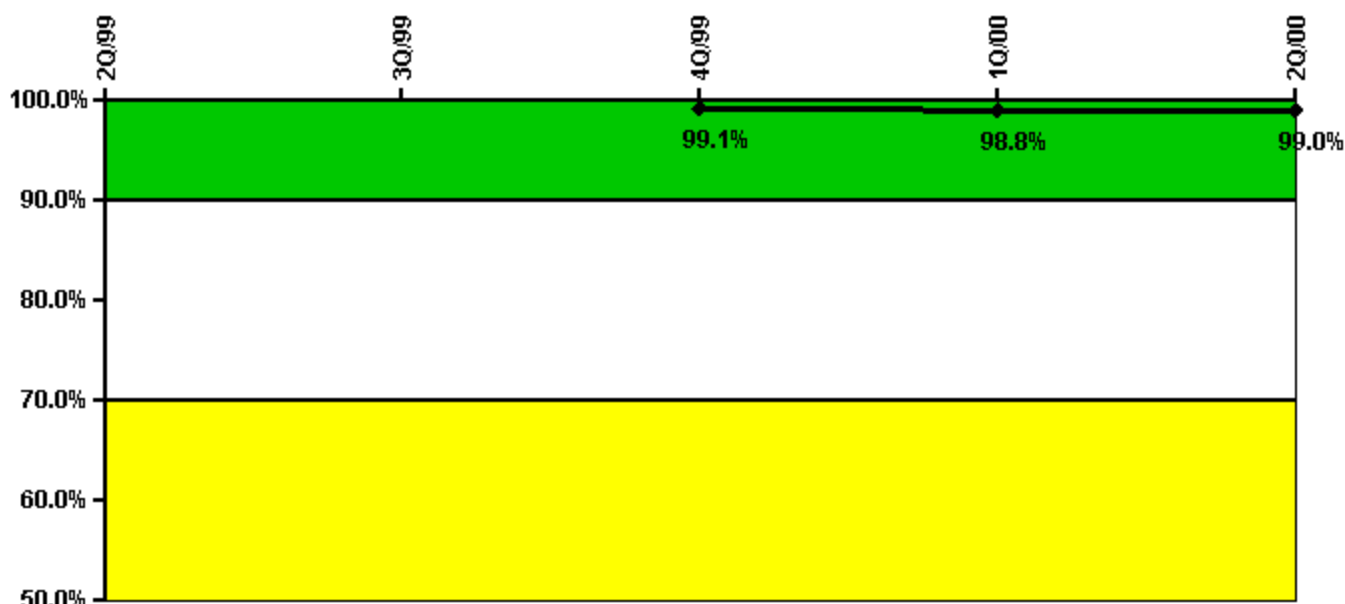
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00
Maximum leakage	0.238	0.182	0.184	0.205	0.707	0.674	0.659	0.586	0.562	0.550	0.600	0.561
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.4	1.8	1.8	2.1	7.1	6.7	6.6	5.9	5.6	5.5	6.0	5.6

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Successful opportunities	54.0	39.0	4.0	63.0	30.0
Total opportunities	54.0	40.0	4.0	64.0	30.0
Indicator value			99.1%	98.8%	99.0%

Licensee Comments:

2Q/00: Commonwealth Edison (ComEd) Company has reviewed the guidance for determining the number of opportunities for the Nuclear Regulatory Commission Drill, Exercise and Event (DEP) Performance Indicator 08. The process ComEd uses is to make a notification for a concurrent classification of General Emergency and an initial Protective Action Recommendation (PAR) for that classification and cannot be logically separated into two notifications. The notification is made via the same call to the same audience. Success criteria requires both the classification and PAR to be timely and accurate to count as a success. Therefore the notification is counted as one opportunity instead of two as suggested by the Nuclear Energy Institute.

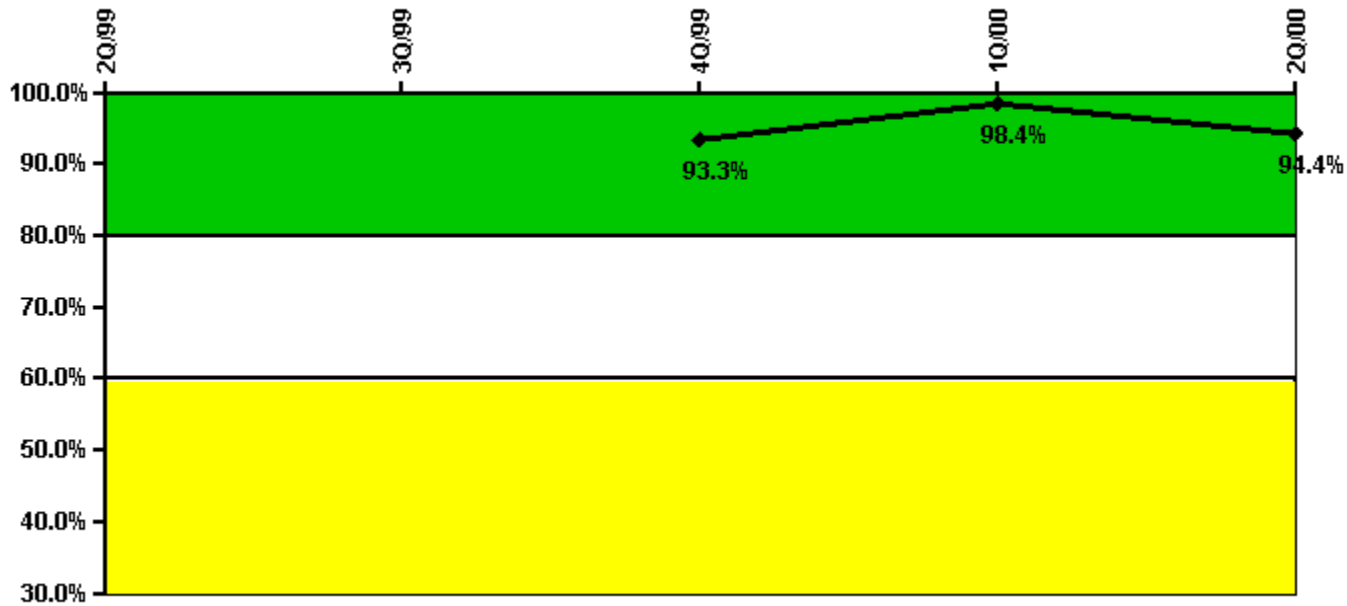
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4Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect

the color of the indicator.

ERO Drill Participation



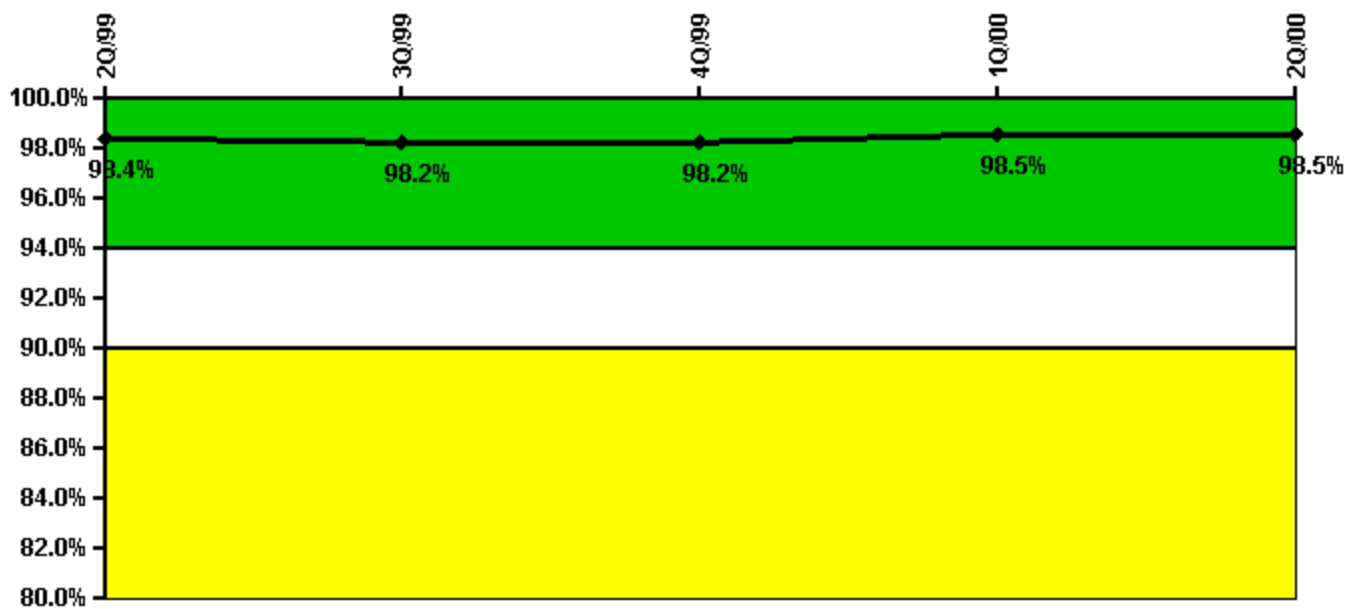
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Participating Key personnel			56.0	61.0	68.0
Total Key personnel			60.0	62.0	72.0
Indicator value			93.3%	98.4%	94.4%

Licensee Comments: none

Alert & Notification System



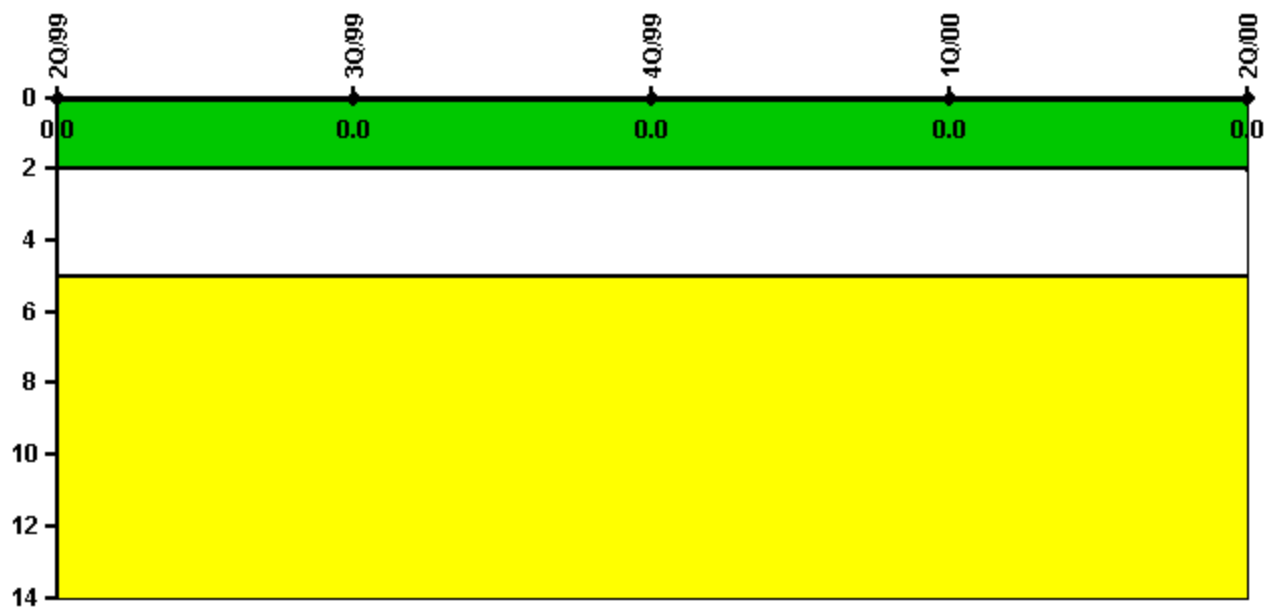
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Successful siren-tests	5913	5996	5883	6000	5915
Total sirens-tests	6016	6110	5922	6110	6016
Indicator value	98.4%	98.2%	98.2%	98.5%	98.5%

Licensee Comments: none

Occupational Exposure Control Effectiveness



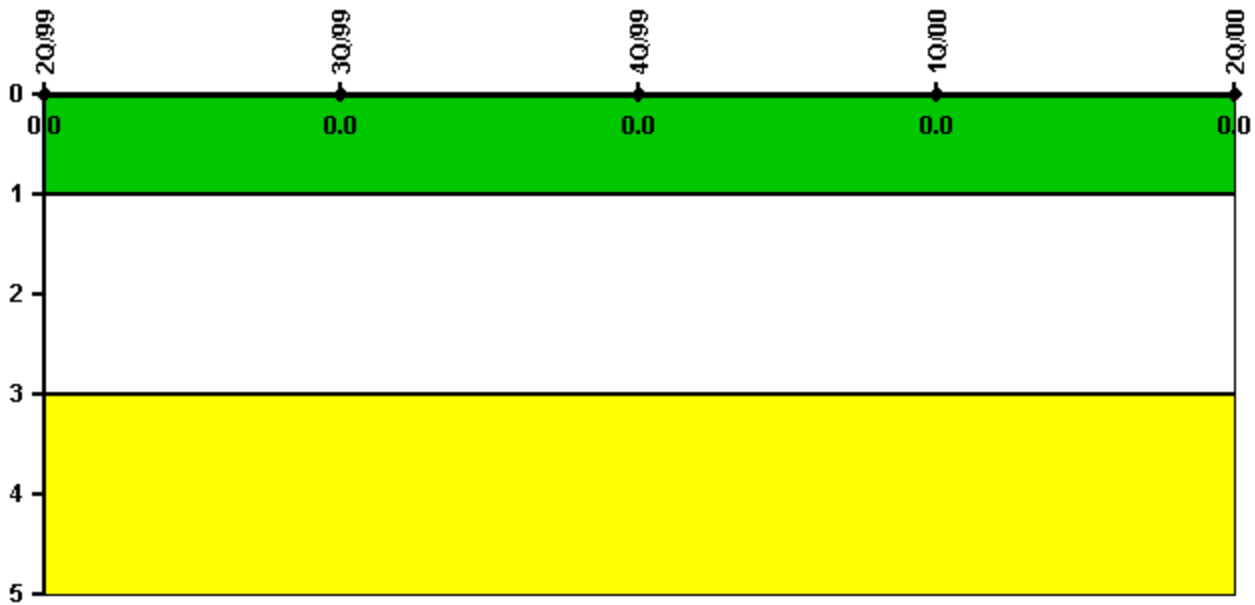
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
High radiation area occurrences	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



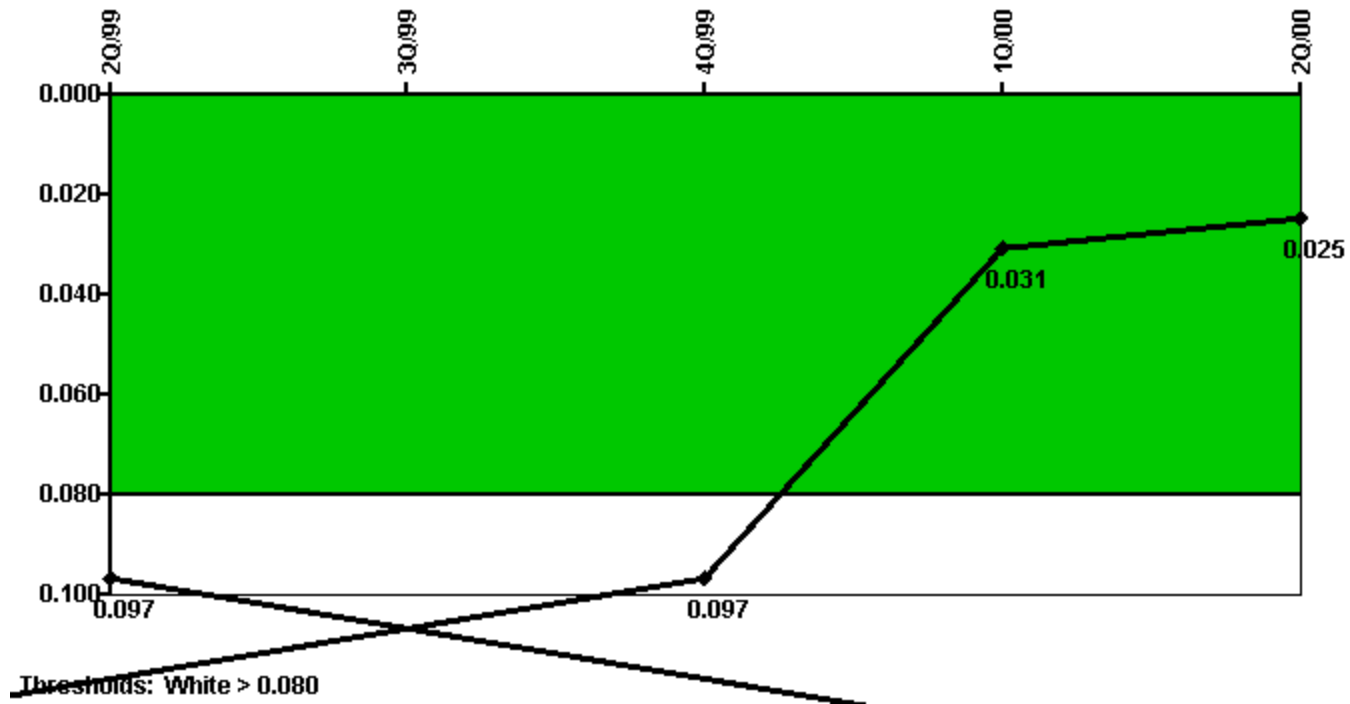
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
RETS/ODCM occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



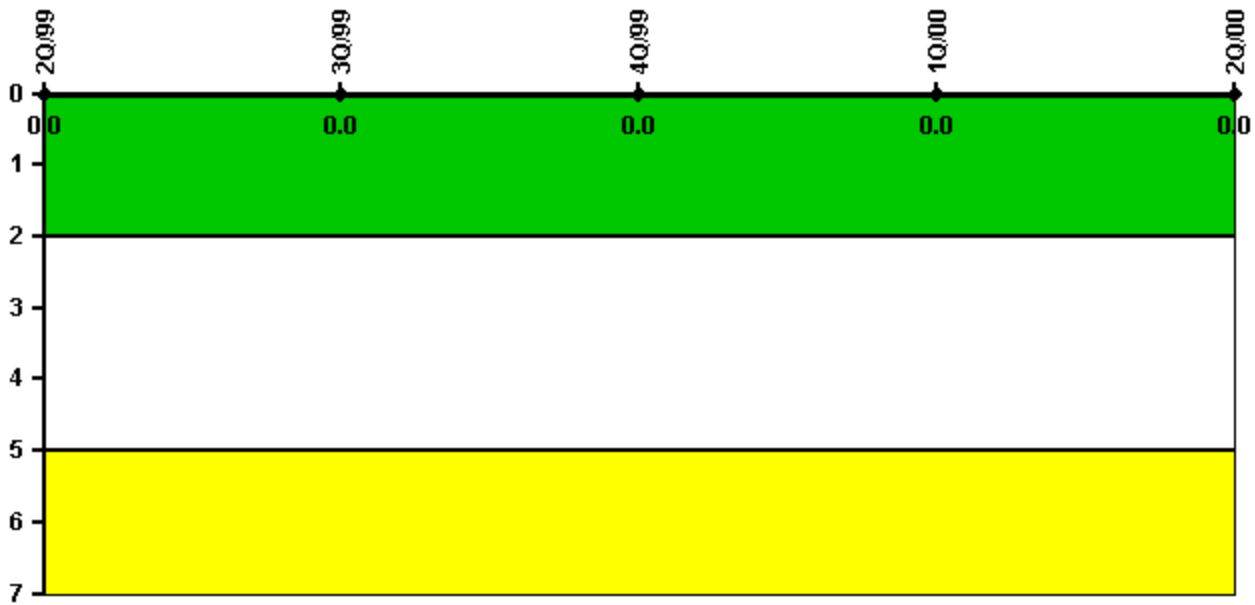
Notes

Protected Area Security Performance Index	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
IDS compensatory hours	203.70	330.00	57.60	57.60	57.60
CCTV compensatory hours	10.1	0.8	6.5	67.8	6.8
IDS normalization factor	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0
Index Value	0.097	0.107	0.097	0.031	0.025

Licensee Comments:

2Q/00: A clarification of Frequently Asked Question (ID #59) has been submitted to the Nuclear Energy Institute/Nuclear Regulatory Commission Task Forces. Commonwealth Edison (ComEd) Company's practice has been that if a zone is required to be declared inoperable for a compliance issue (associated with a Security Plan commitment), but the zone remains functional (capable of performing its intended function), then the hours associated with the compensatory posting are not counted as long as maintenance/test proves the zone to be operable assuming that no corrective maintenance was required. ComEd contends that if the zone tests acceptable per the standard test procedures there is no value added to have maintenance check equipment.

Personnel Screening Program



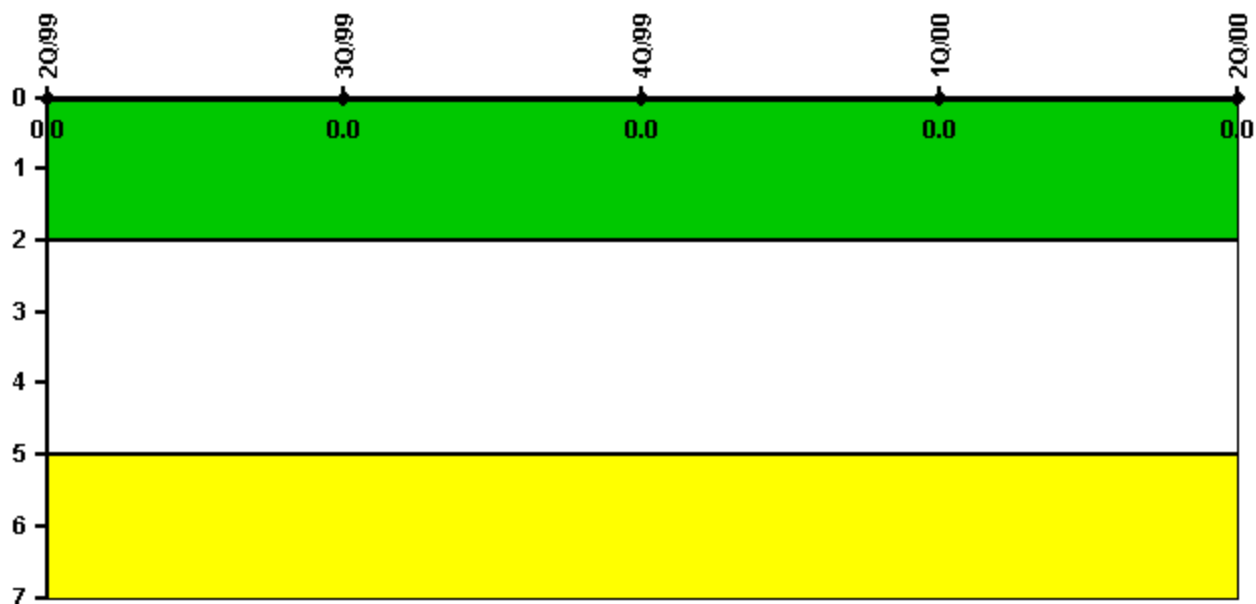
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Program failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Program Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none



[PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

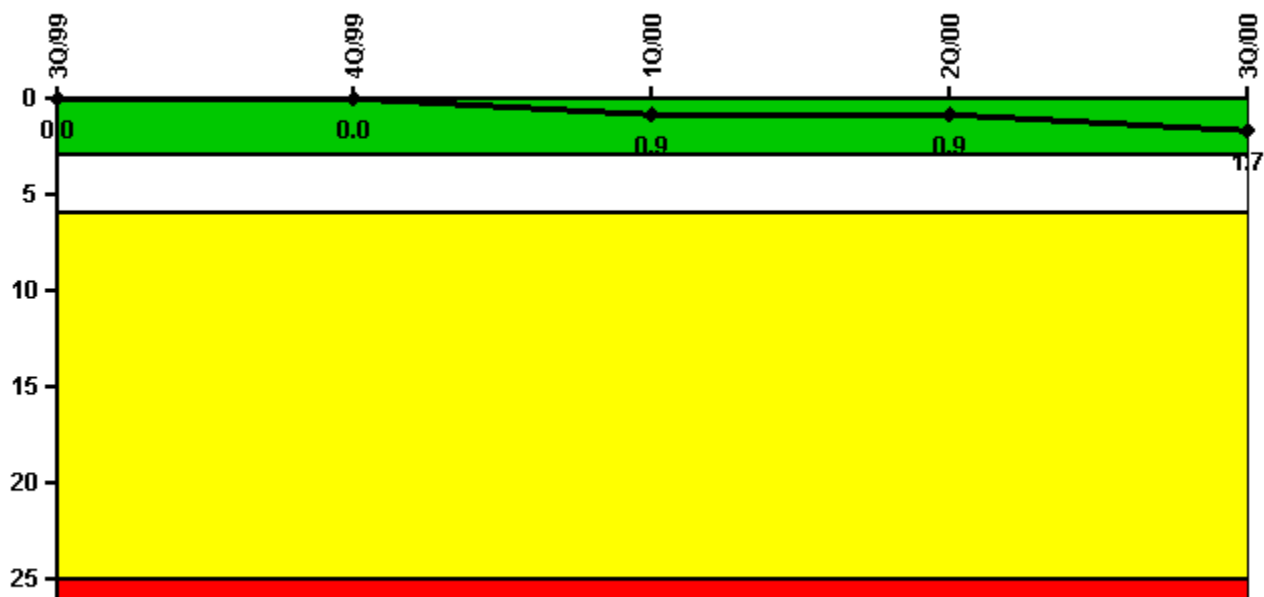
Last Modified: April 1, 2002

Byron 2

3Q/2000 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Unplanned scrams	0	0	1.0	0	1.0
Critical hours	2208.0	1650.1	2156.5	2183.0	2192.1
Indicator value	0	0	0.9	0.9	1.7

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



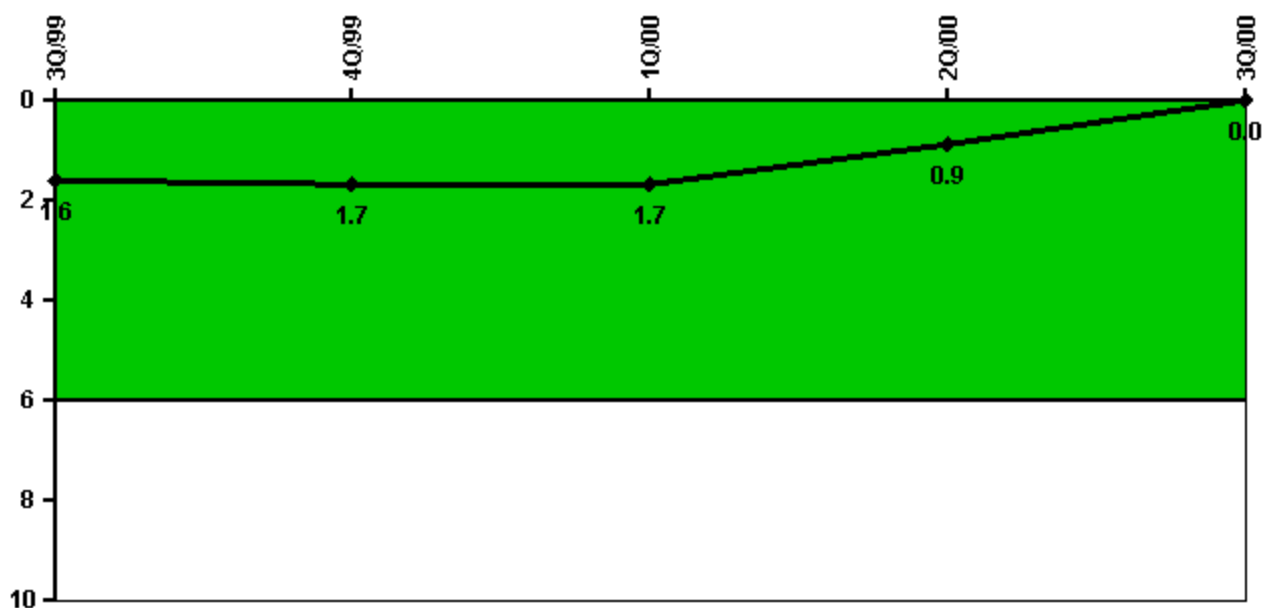
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Scrams	0	0	0	0	0
Indicator value		0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Unplanned power changes	1.0	0	0	0	0
Critical hours	2208.0	1650.1	2156.5	2183.0	2192.1
Indicator value	1.6	1.7	1.7	0.9	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	74.00	0	16.30	0	0
Unplanned unavailable hours	0	10.60	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00
Train 2					
Planned unavailable hours	0.40	3.20	0	8.00	0.32
Unplanned unavailable hours	0	1.30	0	27.30	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00
Indicator value		0.7%	0.7%	0.7%	0.6%

Licensee Comments:

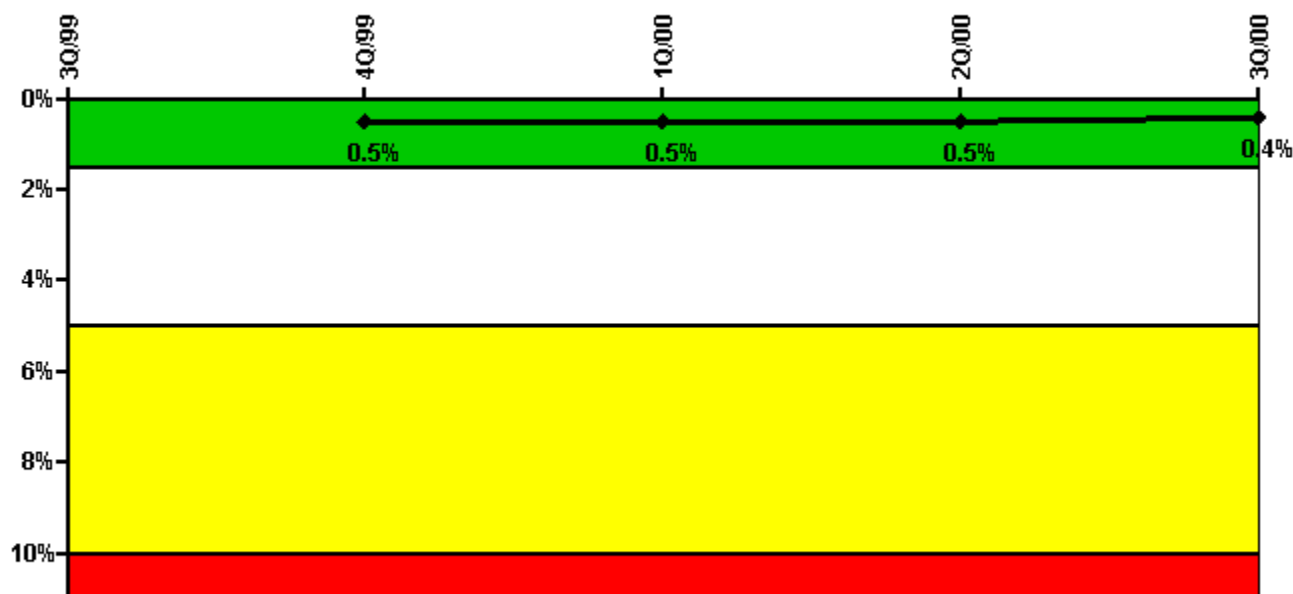
2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color

of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

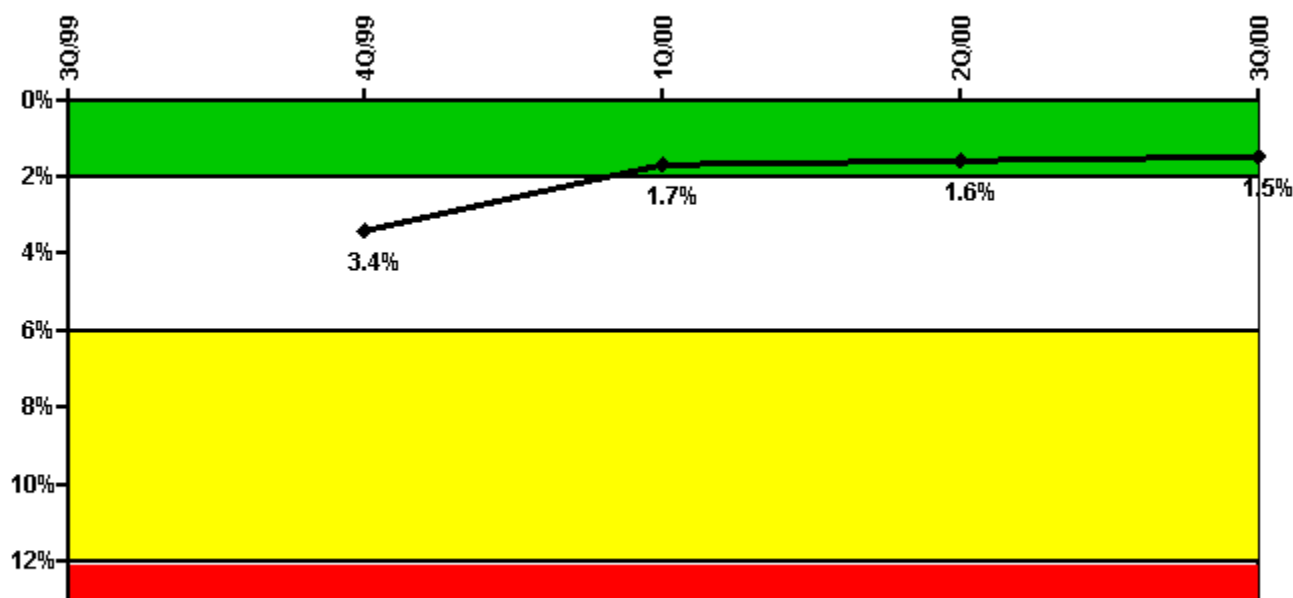
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	32.90	1.30	0.90	1.50	0.50
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	1650.07	2156.48	2183.00	2192.13
Train 2					
Planned unavailable hours	21.30	2.00	1.40	0.90	1.10
Unplanned unavailable hours	20.40	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	1650.07	2156.48	2183.00	2192.13
Train 3					
Planned unavailable hours	0	0	42.00	9.80	0
Unplanned unavailable hours	0	0	14.80	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	1650.07	2156.48	2183.00	2192.13
Train 4					
Planned unavailable hours	21.70	0	0	0	0
Unplanned unavailable hours	0	0	0	0	0

Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	1650.07	2156.48	2183.00	2192.13
Indicator value		0.5%	0.5%	0.5%	0.4%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	36.70	10.50	24.00	1.80	1.80
Unplanned unavailable hours	8.10	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	1650.07	2156.48	2183.00	2192.13
Train 2					
Planned unavailable hours	31.60	20.30	23.70	4.40	1.80
Unplanned unavailable hours	0	10.40	0	0	0
Fault exposure hours	0	180.70	0	0	0
Effective Reset hours	0	0	872.60	0	0
Required hours	2208.00	1650.07	2156.48	2183.00	2192.13
Indicator value		3.4%	1.7%	1.6%	1.5%

Licensee Comments:

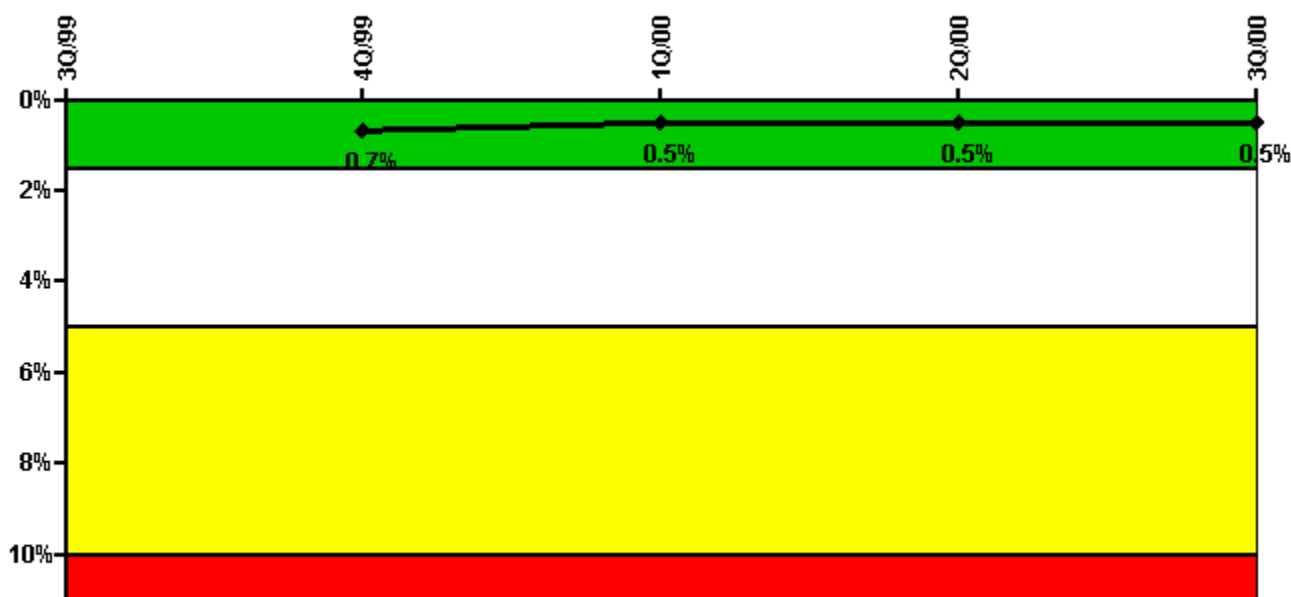
2Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

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Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	5.00	5.40	2.40	8.50	0.40
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00
Train 2					
Planned unavailable hours	5.80	2.30	2.10	2.60	1.30

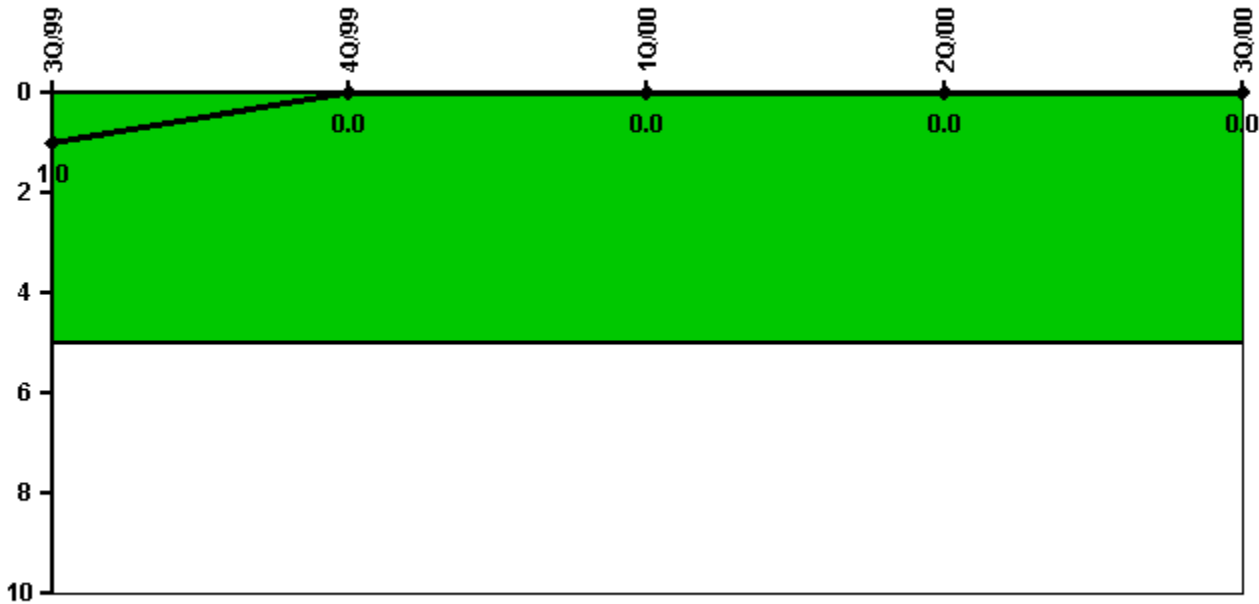
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00
Indicator value		0.7%	0.5%	0.5%	0.5%

Licensee Comments:

3Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

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Safety System Functional Failures (PWR)



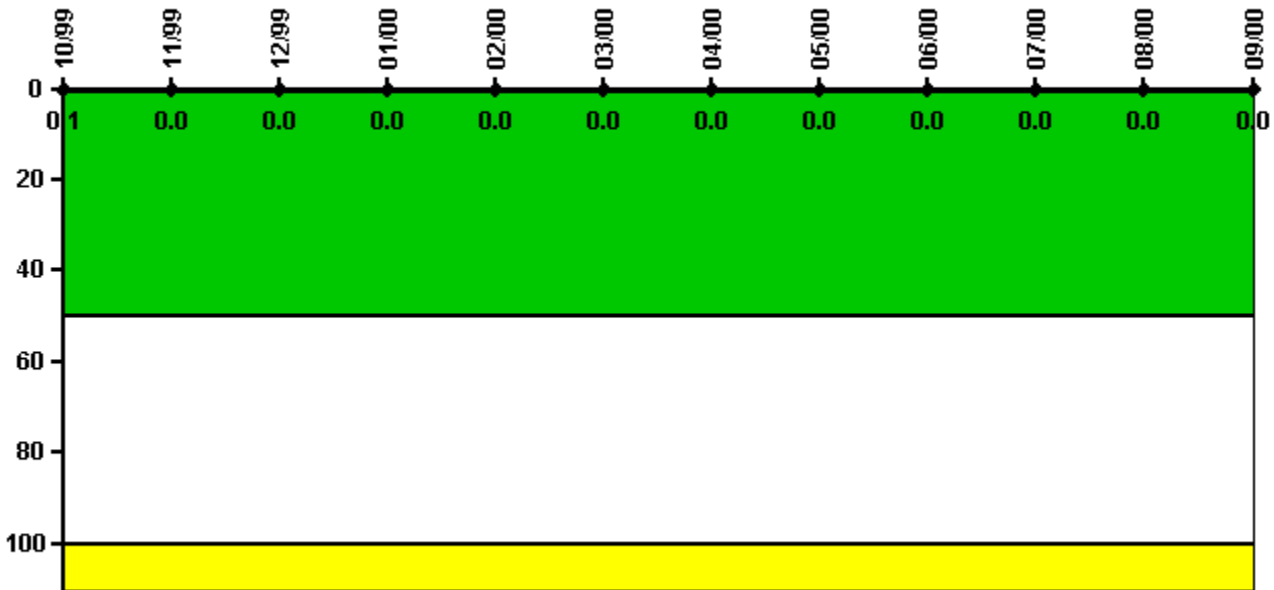
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Safety System Functional Failures	0	0	0	0	0
Indicator value	1	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



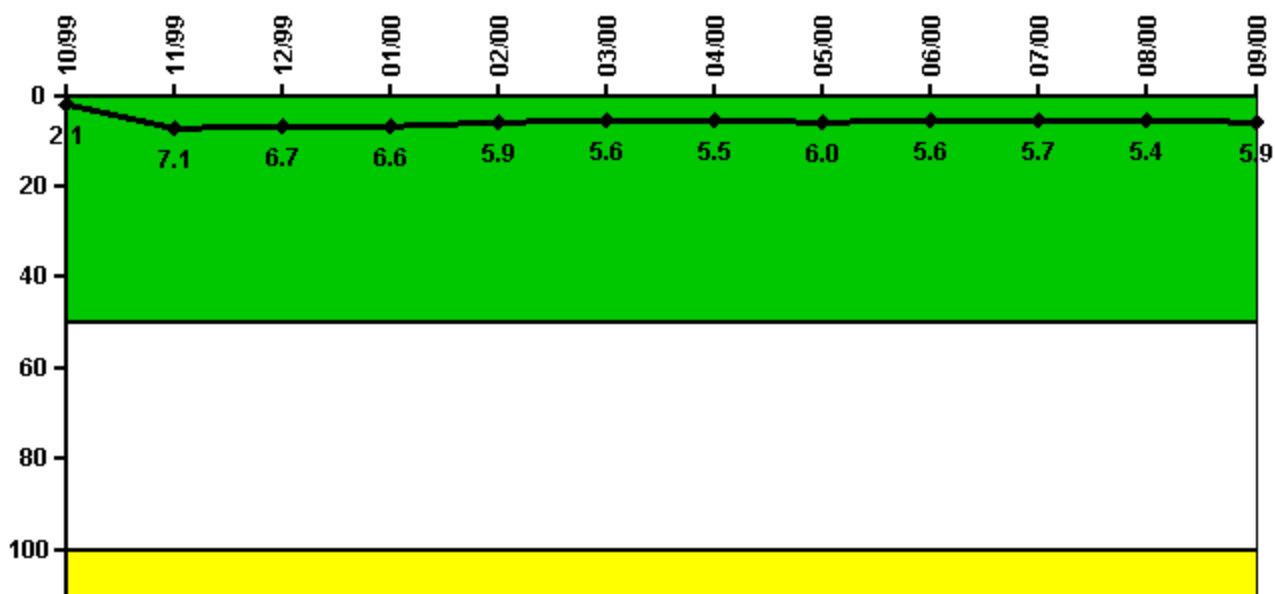
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.000818	0.000196	0.000213	0.000231	0.000243	0.000263	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



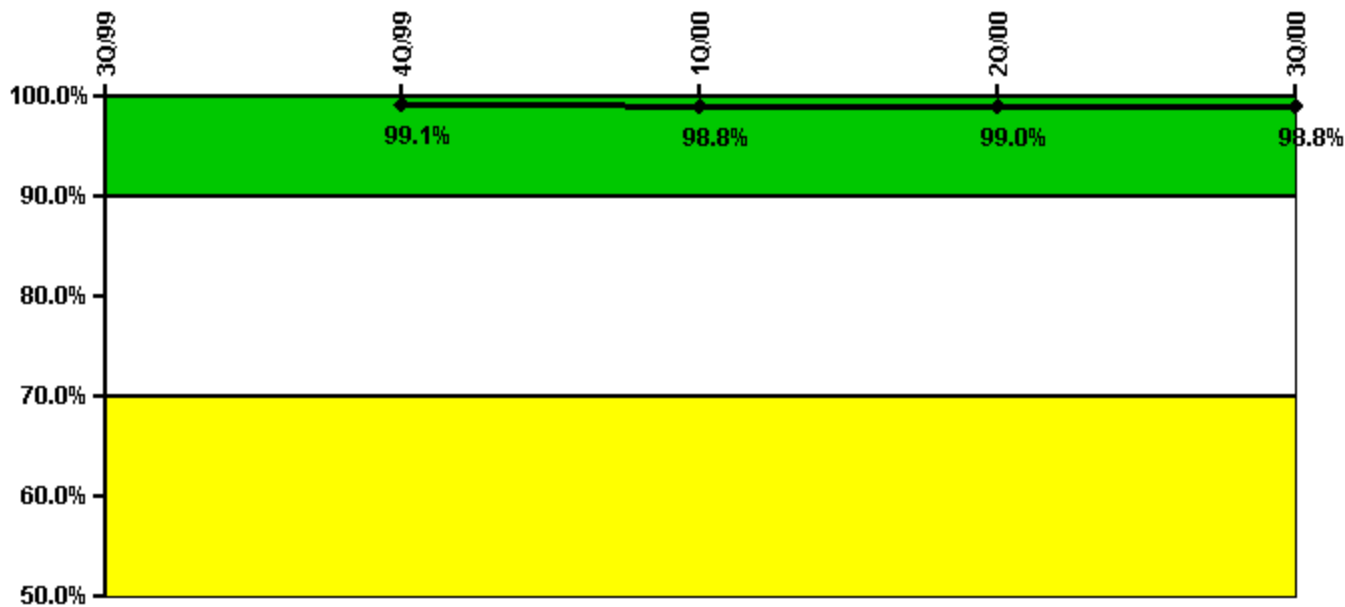
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum leakage	0.205	0.707	0.674	0.659	0.586	0.562	0.550	0.600	0.561	0.567	0.545	0.594
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.1	7.1	6.7	6.6	5.9	5.6	5.5	6.0	5.6	5.7	5.4	5.9

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Successful opportunities	39.0	4.0	63.0	30.0	49.0
Total opportunities	40.0	4.0	64.0	30.0	50.0
Indicator value		99.1%	98.8%	99.0%	98.8%

Licensee Comments:

3Q/00: Third Quarter 2000 data collection process included a change based on FAQ 195 to count a notification opportunity that included both a classification and a Protective Action Recommendation as two notification opportunities. A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

3Q/00: Third Quarter 2000 data collection process included a change based on FAQ 195 to count a notification opportunity that included both a classification and a Protective Action Recommendation as two notification opportunities.

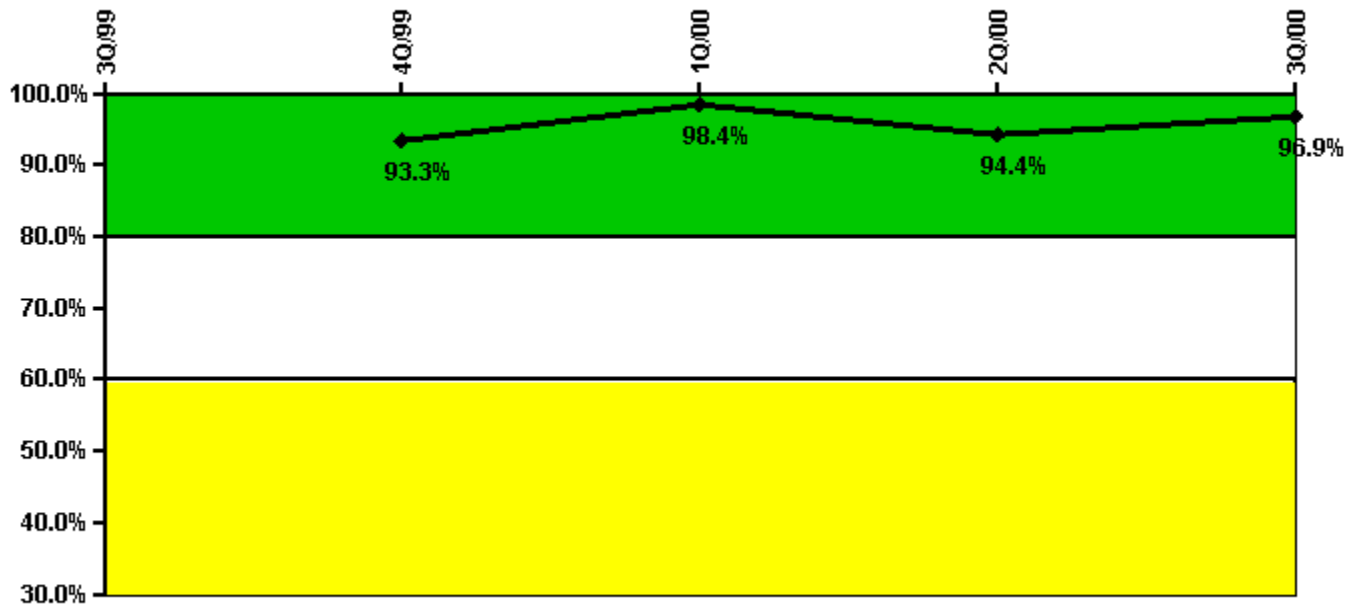
2Q/00: Commonwealth Edison (ComEd) Company has reviewed the guidance for determining the number of opportunities for the Nuclear Regulatory Commission Drill, Exercise and Event (DEP) Performance Indicator 08. The process ComEd uses is to make a notification for a concurrent classification of General Emergency and an initial Protective Action Recommendation (PAR) for that classification and cannot be logically separated into two notifications. The notification is made via the same call to the same audience. Success criteria requires both the classification and PAR to be timely and accurate to count as a success. Therefore the notification is counted as one opportunity instead of two as suggested by the Nuclear Energy Institute. A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

4Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator.

Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

ERO Drill Participation



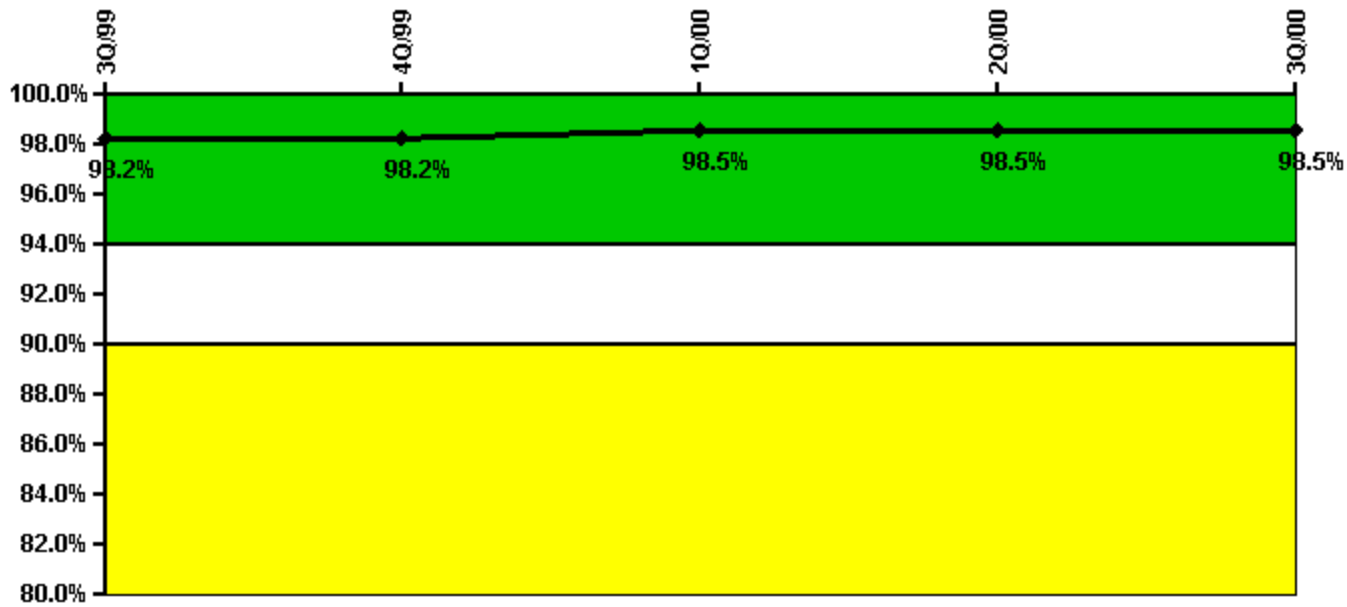
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Participating Key personnel		56.0	61.0	68.0	63.0
Total Key personnel		60.0	62.0	72.0	65.0
Indicator value		93.3%	98.4%	94.4%	96.9%

Licensee Comments: none

Alert & Notification System



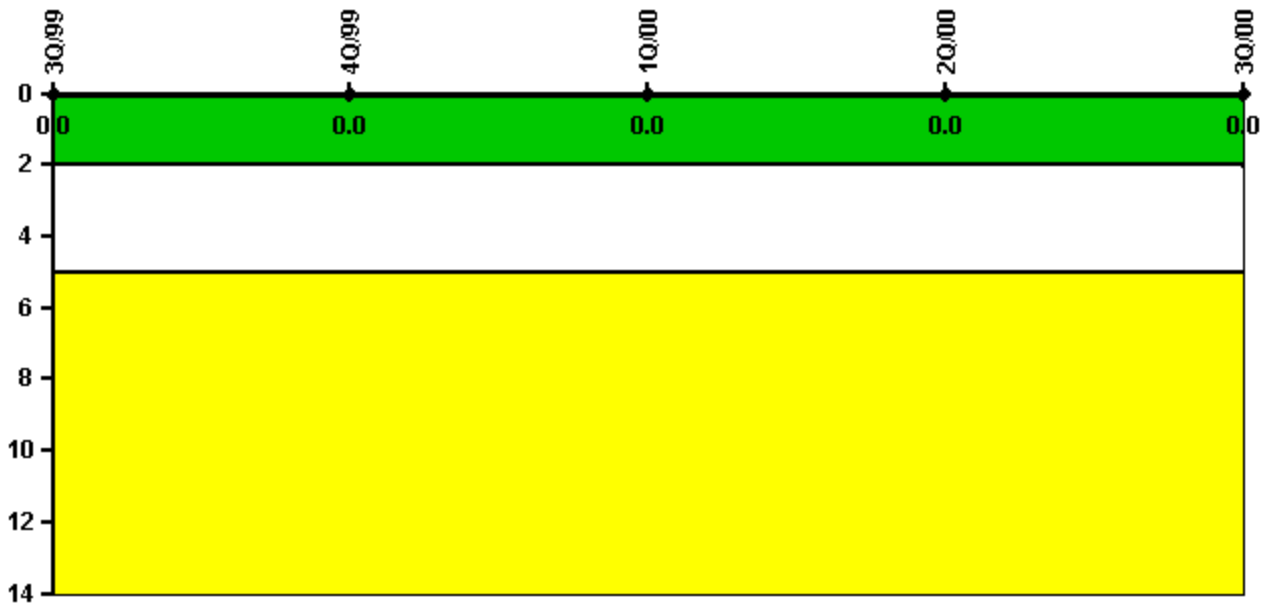
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Successful siren-tests	5996	5883	6000	5915	5821
Total sirens-tests	6110	5922	6110	6016	5922
Indicator value	98.2%	98.2%	98.5%	98.5%	98.5%

Licensee Comments: none

Occupational Exposure Control Effectiveness



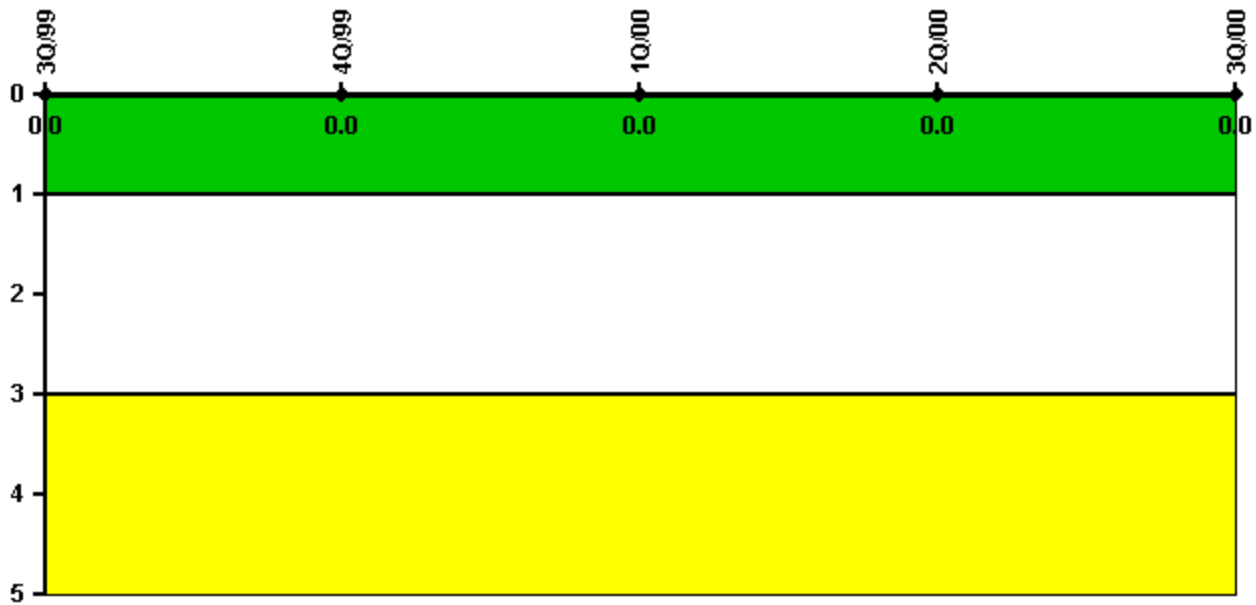
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
High radiation area occurrences	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



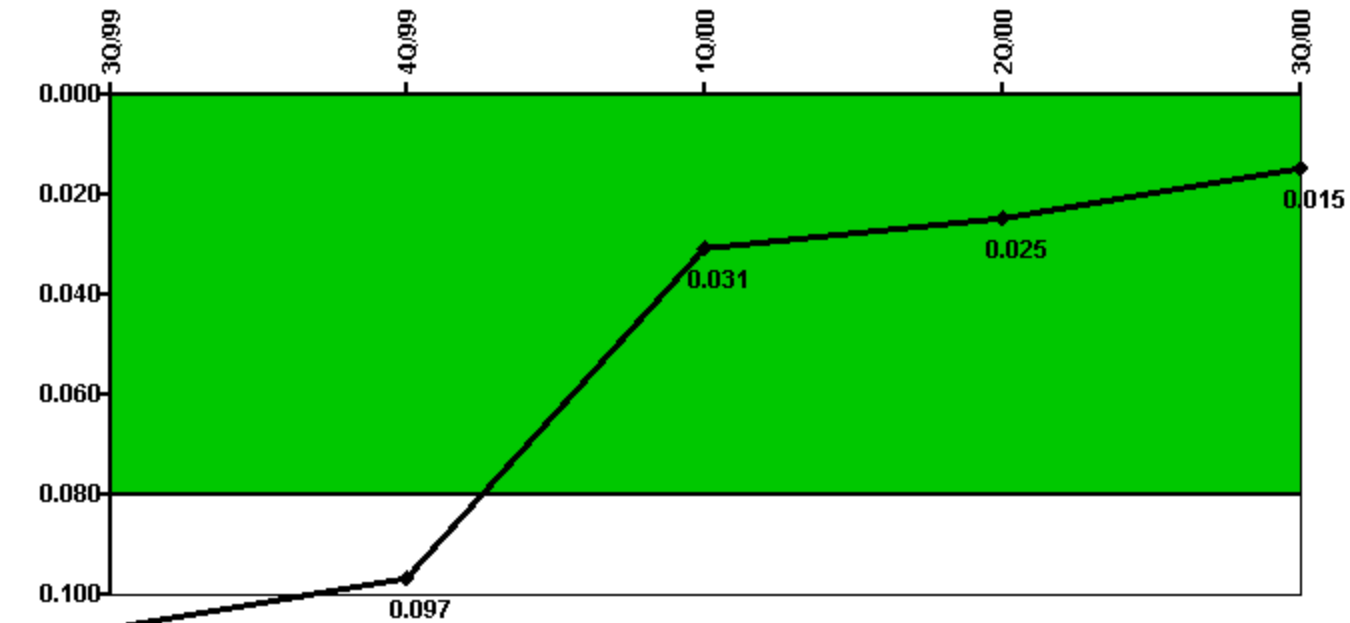
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
RETS/ODCM occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



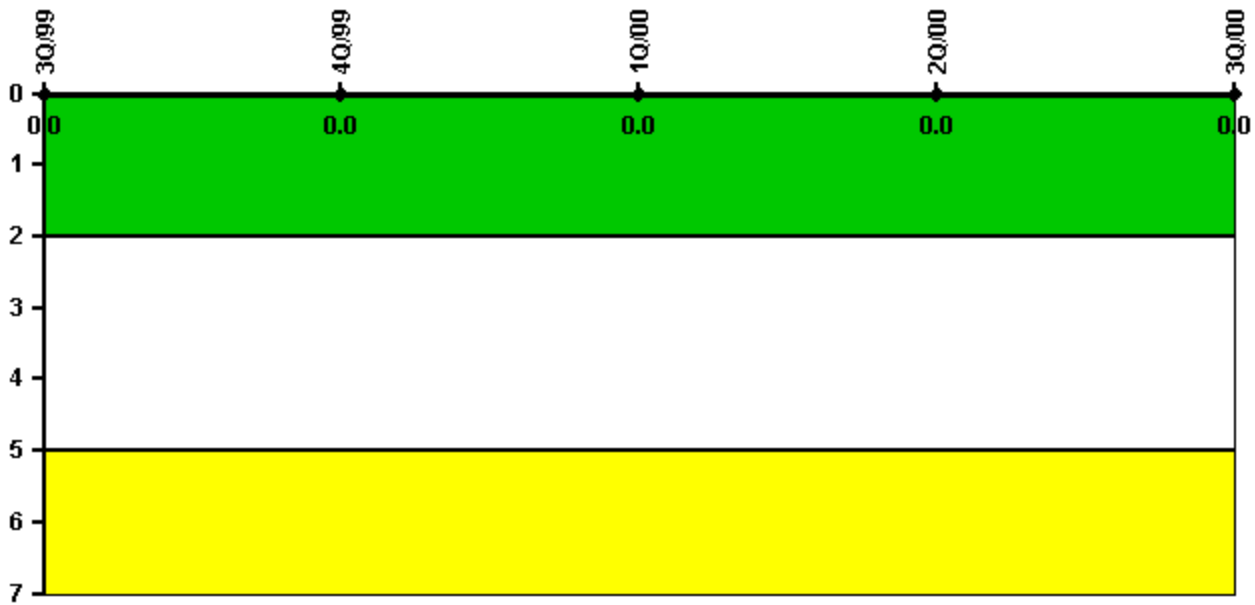
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
IDS compensatory hours	330.00	57.60	57.60	57.60	93.10
CCTV compensatory hours	0.8	6.5	67.8	6.8	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0
Index Value	0.107	0.097	0.031	0.025	0.015

Licensee Comments: none

Personnel Screening Program



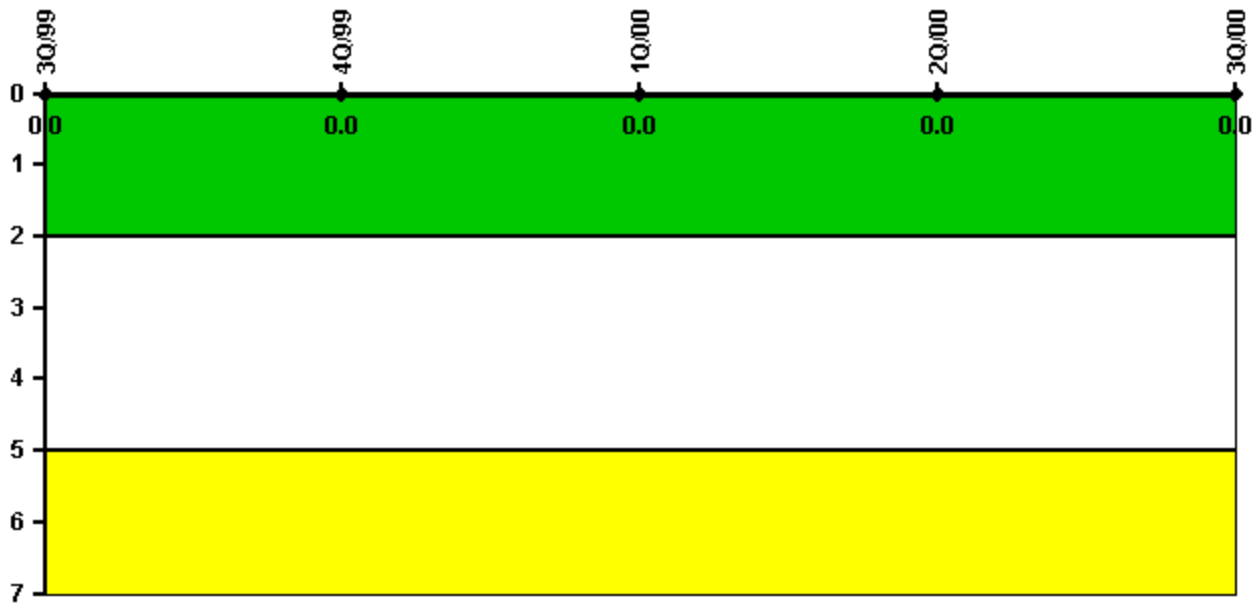
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Program failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Program Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none



[PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

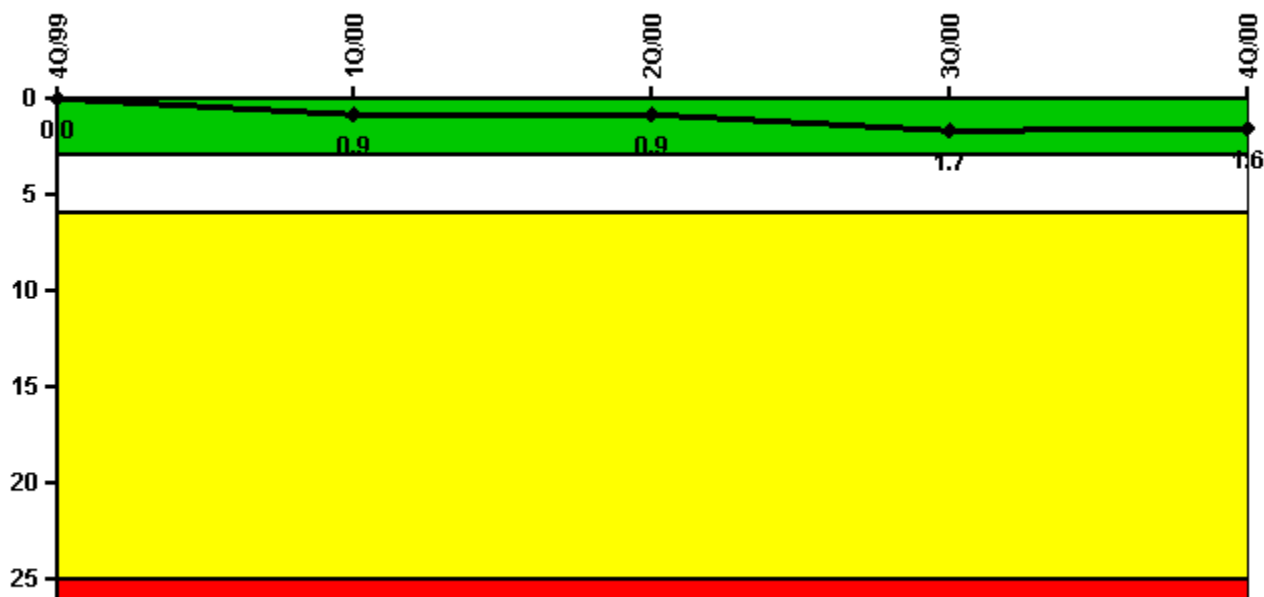
Last Modified: March 29, 2002

Byron 2

4Q/2000 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Unplanned scrams	0	1.0	0	1.0	0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0
Indicator value	0	0.9	0.9	1.7	1.6

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



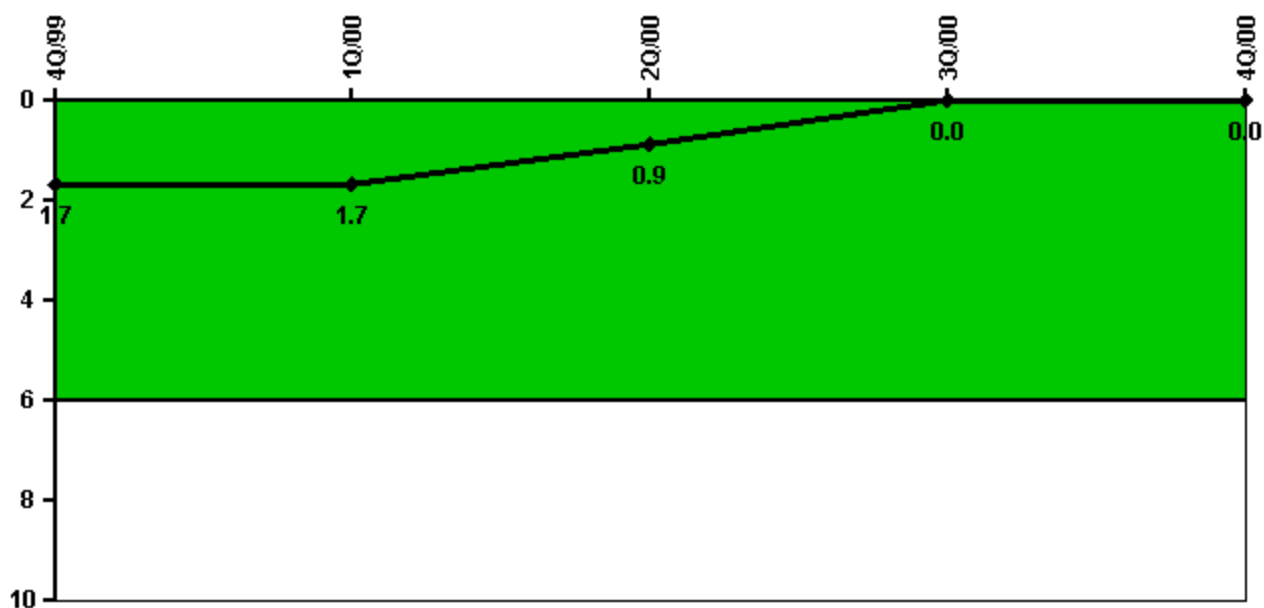
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Scrams	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Unplanned power changes	0	0	0	0	0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0
Indicator value	1.7	1.7	0.9	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Train 1					
Planned unavailable hours	0	16.30	0	0	0.20
Unplanned unavailable hours	10.60	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00
Train 2					
Planned unavailable hours	3.20	0	8.00	0.32	0
Unplanned unavailable hours	1.30	0	27.30	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00
Indicator value	0.7%	0.7%	0.7%	0.6%	0.6%

Licensee Comments:

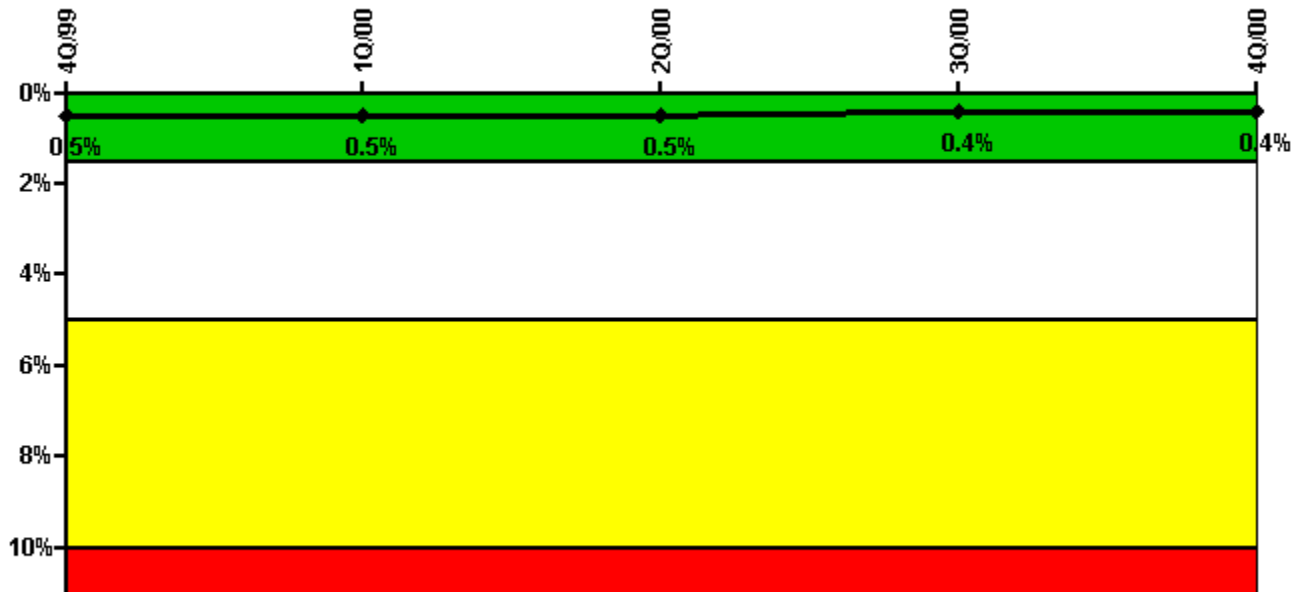
2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color

of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

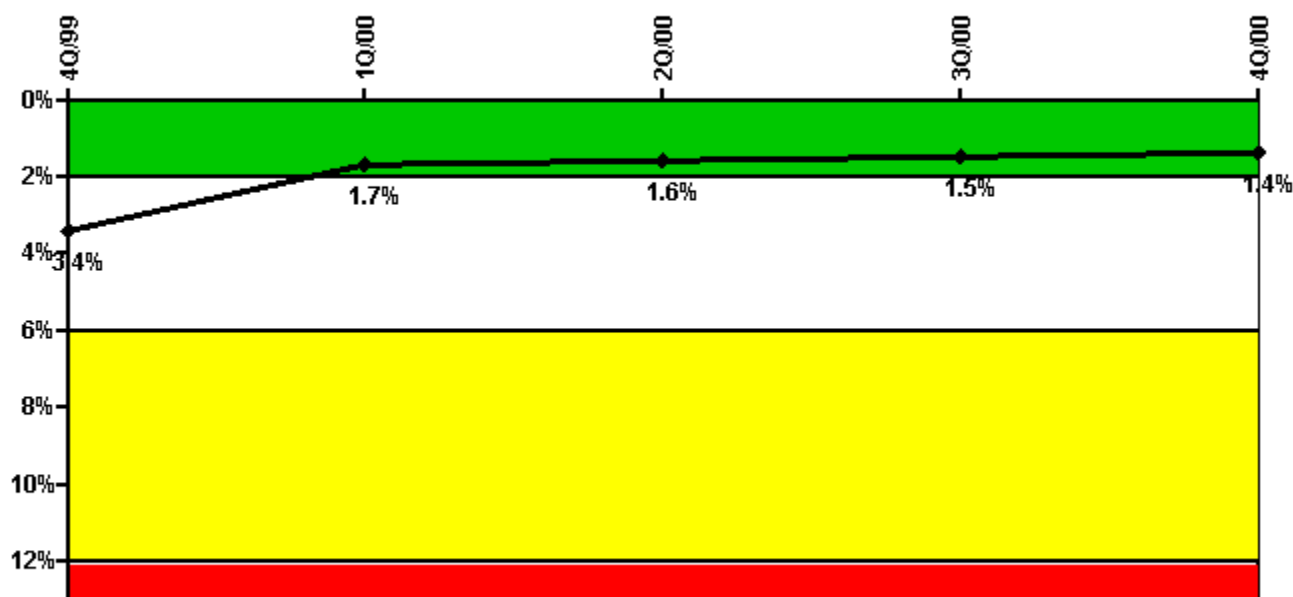
Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Train 1					
Planned unavailable hours	1.30	0.90	1.50	0.50	12.90
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00
Train 2					
Planned unavailable hours	2.00	1.40	0.90	1.10	0.40
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00
Train 3					
Planned unavailable hours	0	42.00	9.80	0	0
Unplanned unavailable hours	0	14.80	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00
Train 4					
Planned unavailable hours	0	0	0	0	19.40
Unplanned unavailable hours	0	0	0	0	0

Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00
Indicator value	0.5%	0.5%	0.5%	0.4%	0.4%

Licensee Comments:

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the High Pressure Safety Injection system for Byron Unit 2. Data for the months of November 2000 and September 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Train 1					
Planned unavailable hours	10.50	24.00	1.80	1.80	2.40
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00
Train 2					
Planned unavailable hours	20.30	23.70	4.40	1.80	2.00
Unplanned unavailable hours	10.40	0	0	0	0
Fault exposure hours	180.70	0	0	0	0
Effective Reset hours	0	872.60	0	0	0

Required hours	1650.07	2156.48	2183.00	2192.13	2209.00
Indicator value	3.4%	1.7%	1.6%	1.5%	1.4%

Licensee Comments:

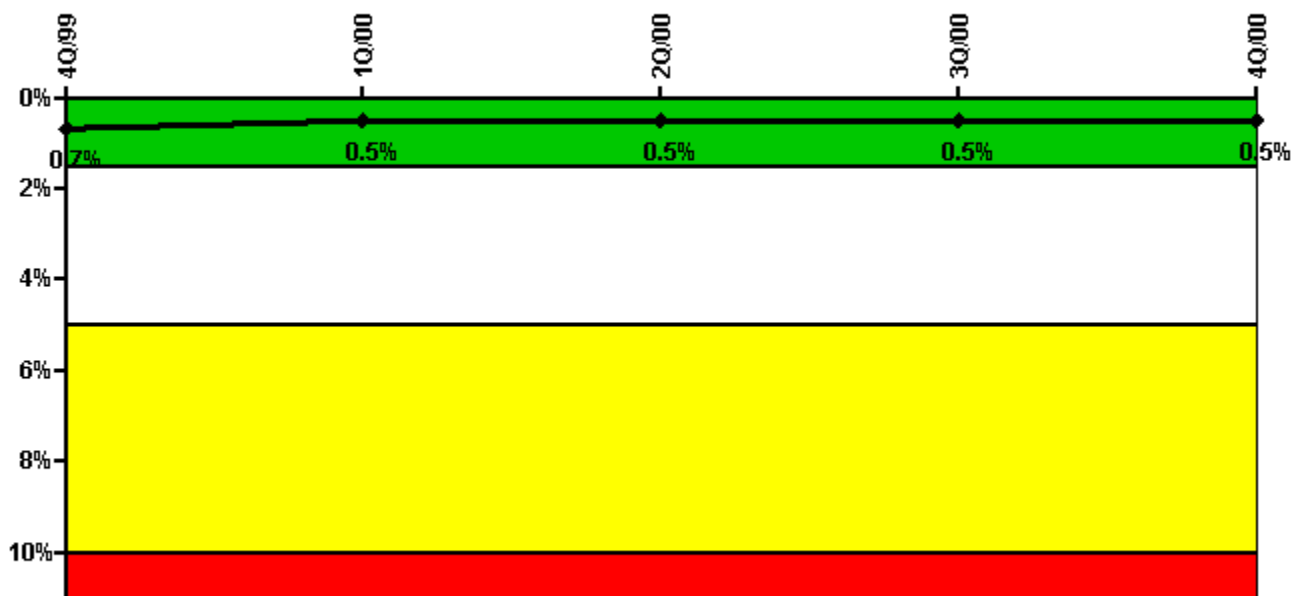
2Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

1Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Train 1					
Planned unavailable hours	5.40	2.40	8.50	0.40	44.00
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0

Effective Reset hours	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00
Train 2					
Planned unavailable hours	2.30	2.10	2.60	1.30	0.60
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00
Indicator value	0.7%	0.5%	0.5%	0.5%	0.5%

Licensee Comments:

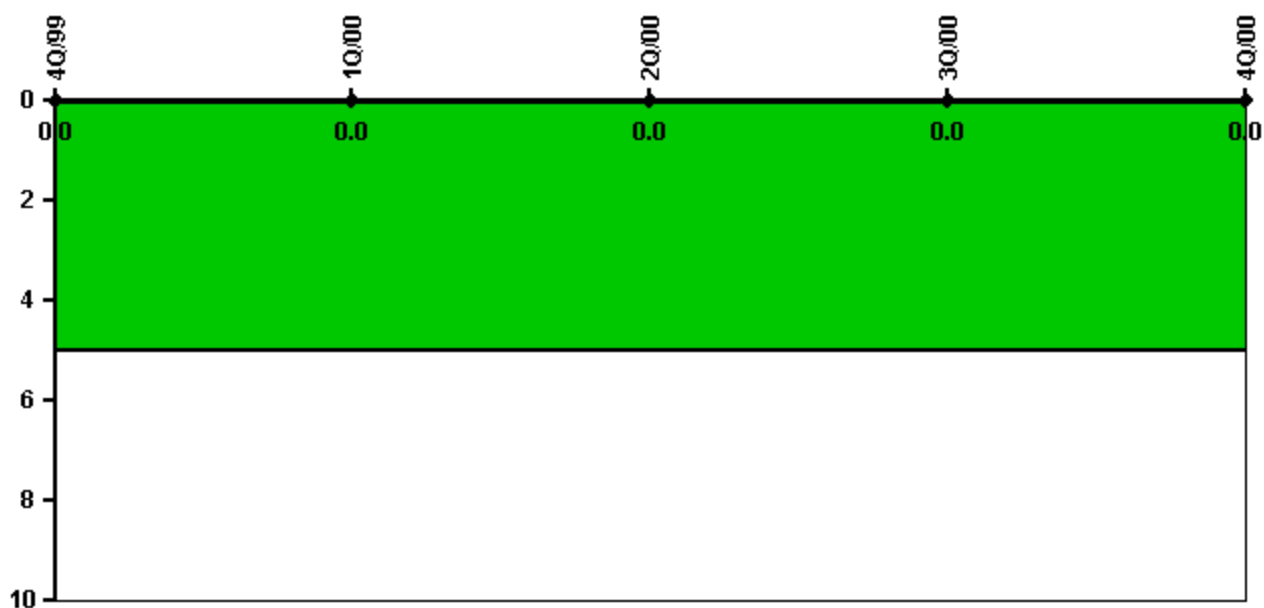
4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator. A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal system for Byron Unit 2. Data for the month of November 2000 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

3Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

Safety System Functional Failures (PWR)



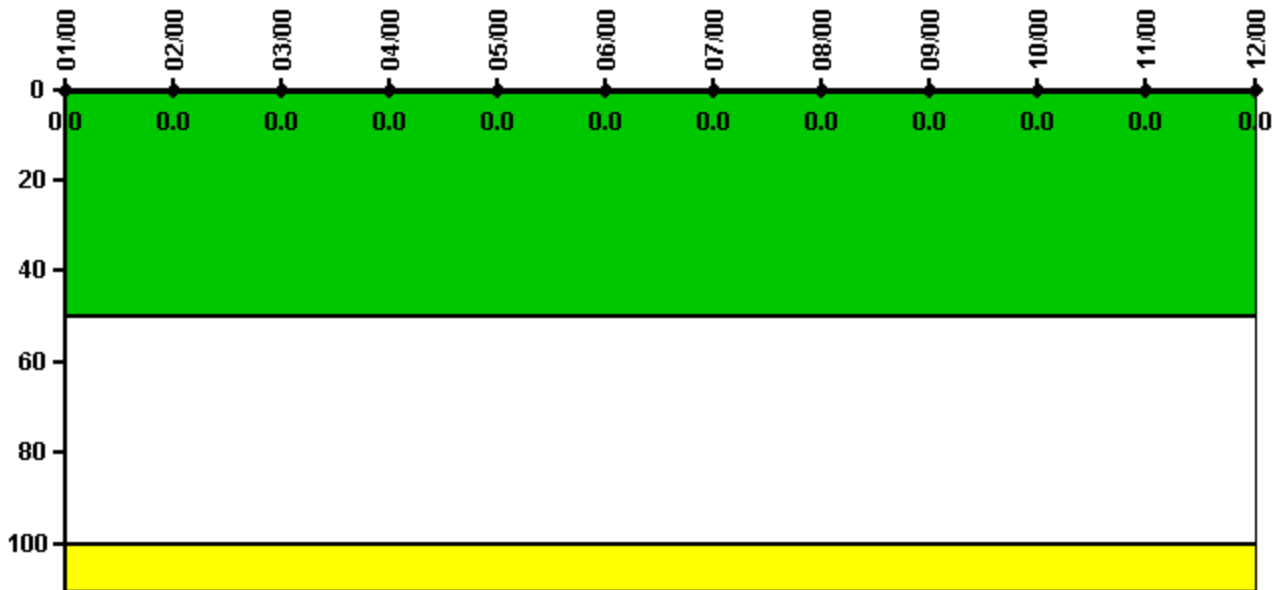
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Safety System Functional Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



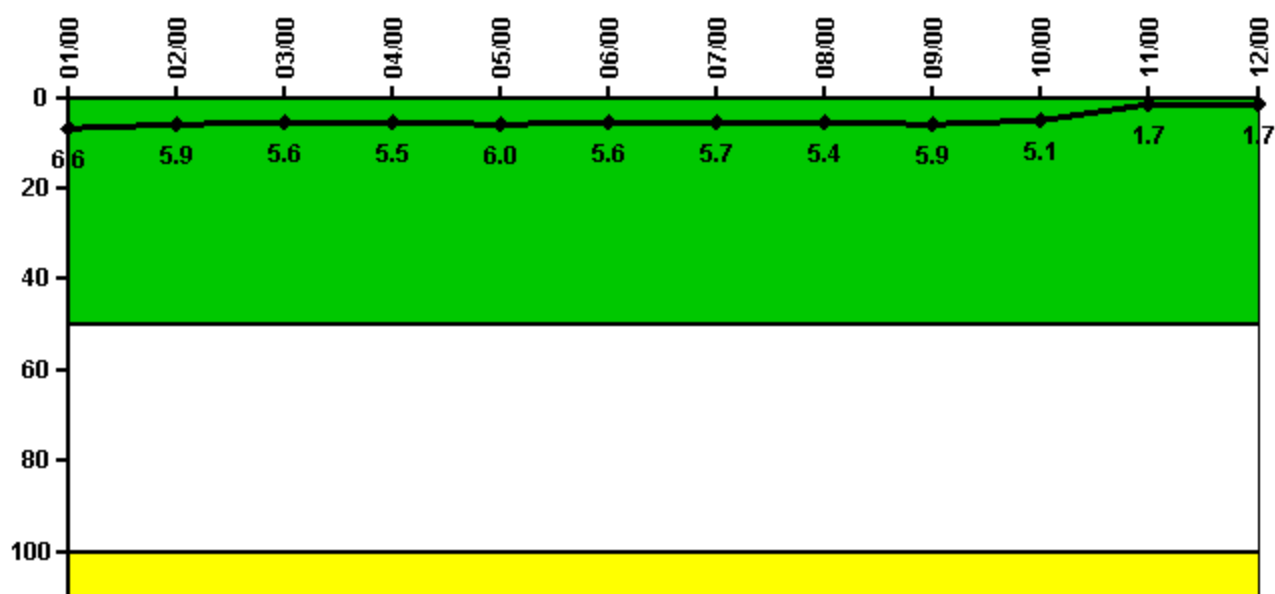
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00
Maximum activity	0.000231	0.000243	0.000263	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354	0.000342	0.000372	0.000366
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



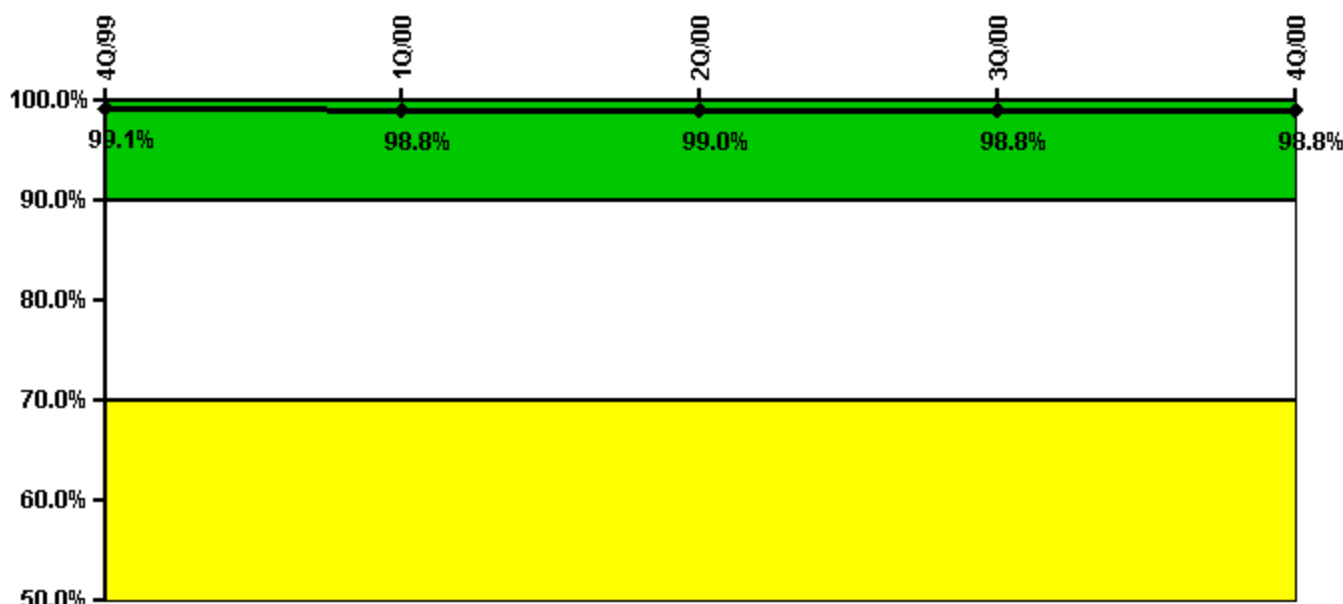
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00
Maximum leakage	0.659	0.586	0.562	0.550	0.600	0.561	0.567	0.545	0.594	0.514	0.172	0.169
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	6.6	5.9	5.6	5.5	6.0	5.6	5.7	5.4	5.9	5.1	1.7	1.7

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Successful opportunities	4.0	63.0	30.0	49.0	0
Total opportunities	4.0	64.0	30.0	50.0	0
Indicator value	99.1%	98.8%	99.0%	98.8%	98.8%

Licensee Comments:

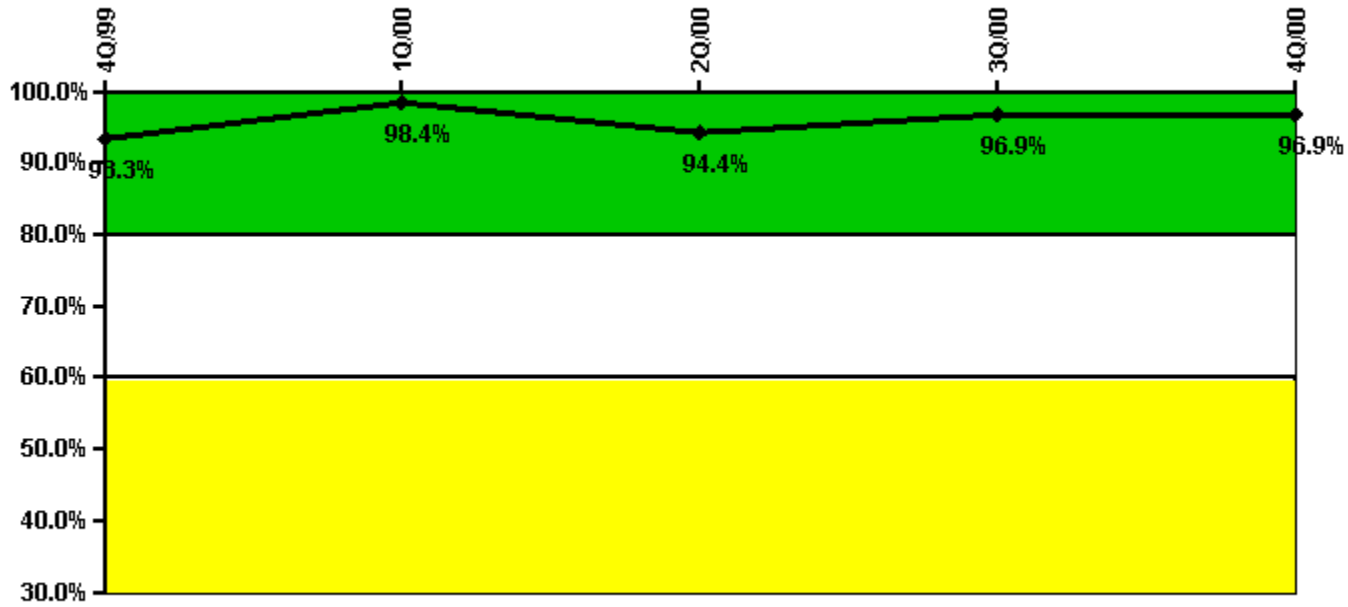
3Q/00: Third Quarter 2000 data collection process included a change based on FAQ 195 to count a notification opportunity that included both a classification and a Protective Action Recommendation as two notification opportunities. A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

2Q/00: Commonwealth Edison (ComEd) Company has reviewed the guidance for determining the number of opportunities for the Nuclear Regulatory Commission Drill, Exercise and Event (DEP) Performance Indicator 08. The process ComEd uses is to make a notification for a concurrent classification of General Emergency and an initial Protective Action Recommendation (PAR) for that classification and cannot be logically separated into two notifications. The notification is made via the same call to the same audience. Success criteria requires both the classification and PAR to be timely and accurate to count as a success. Therefore the notification is counted as one opportunity instead of two as suggested by the Nuclear Energy Institute. A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

4Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

ERO Drill Participation



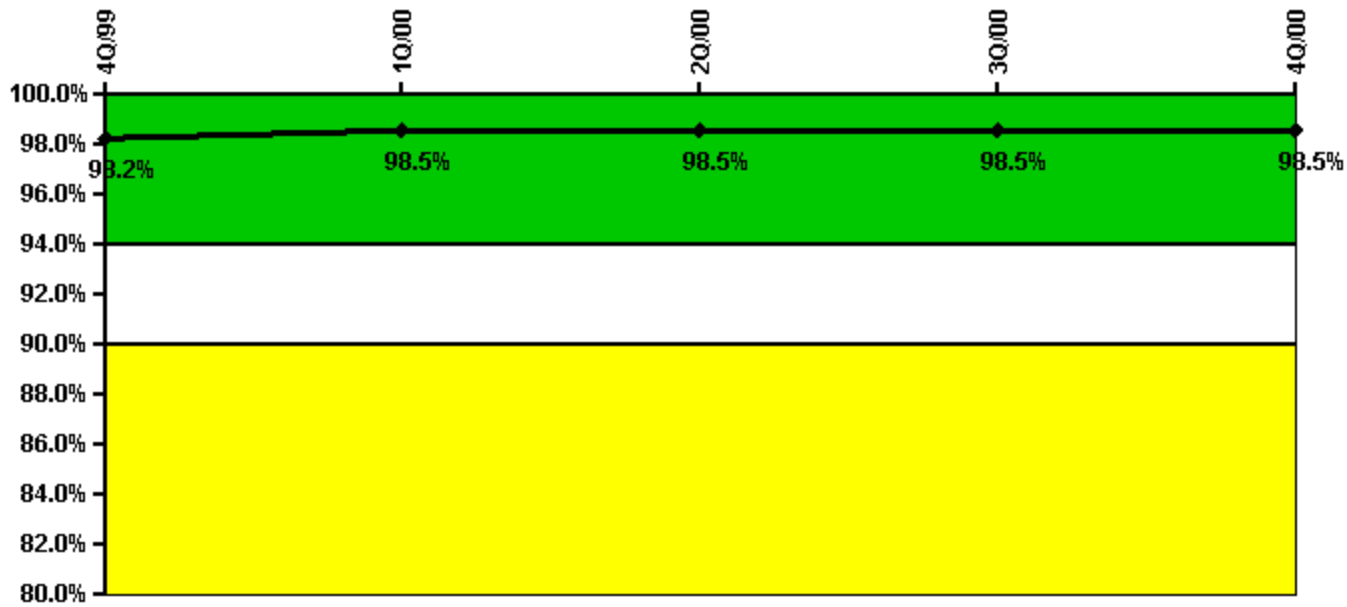
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Participating Key personnel	56.0	61.0	68.0	63.0	63.0
Total Key personnel	60.0	62.0	72.0	65.0	65.0
Indicator value	93.3%	98.4%	94.4%	96.9%	96.9%

Licensee Comments: none

Alert & Notification System



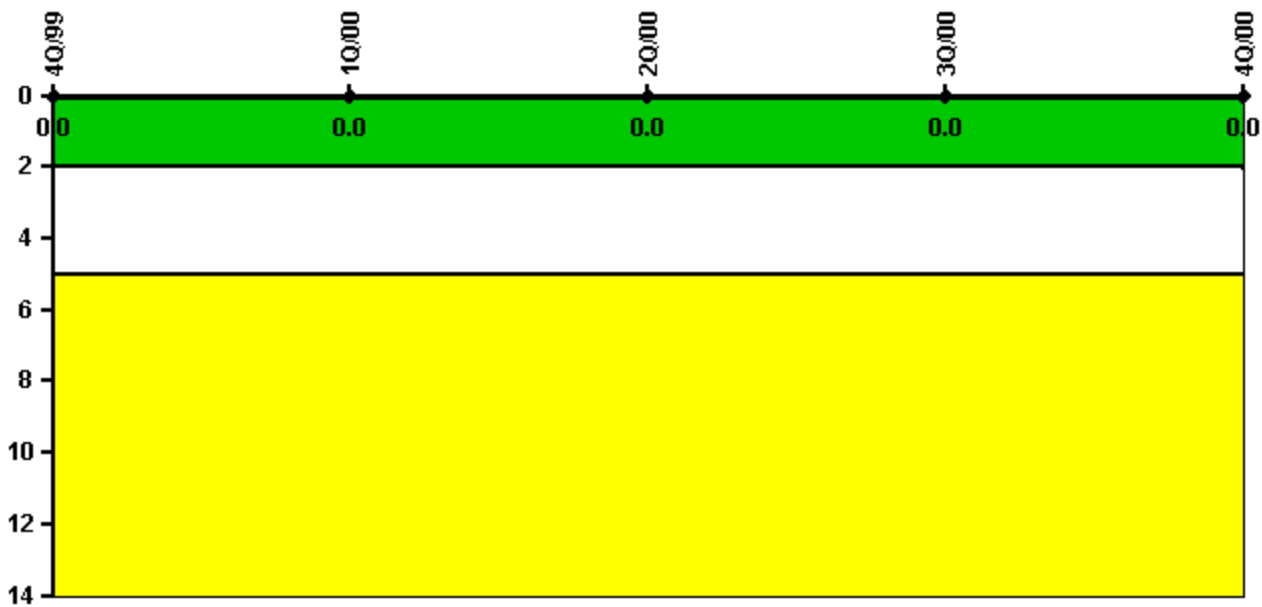
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Successful siren-tests	5883	6000	5915	5821	5864
Total sirens-tests	5922	6110	6016	5922	5922
Indicator value	98.2%	98.5%	98.5%	98.5%	98.5%

Licensee Comments: none

Occupational Exposure Control Effectiveness



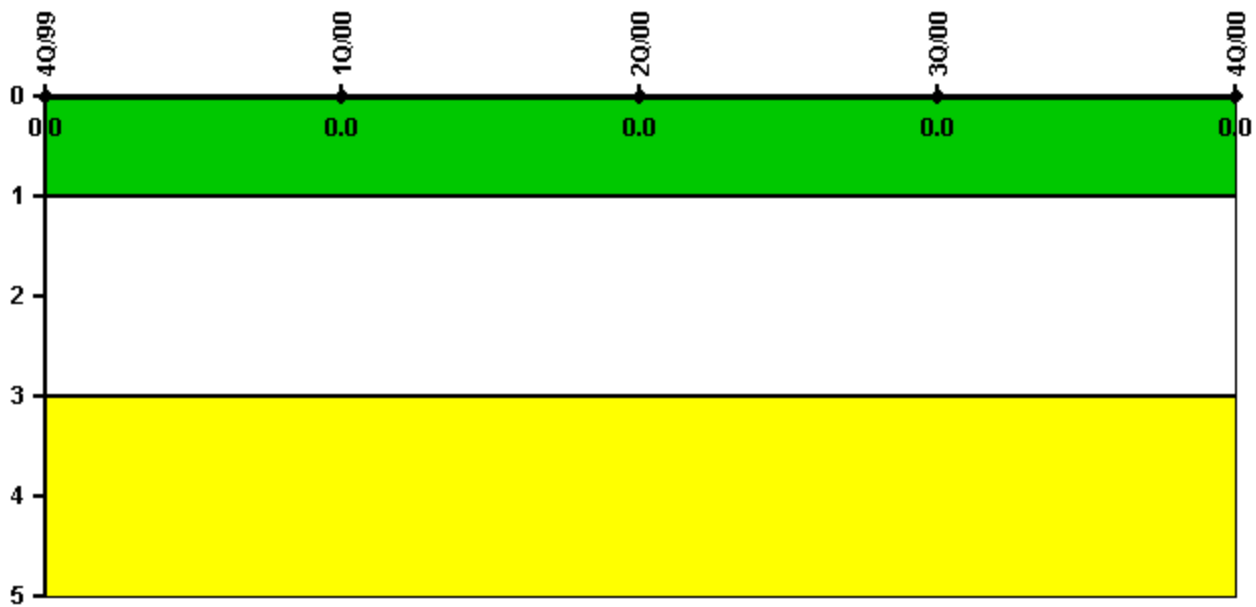
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
High radiation area occurrences	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



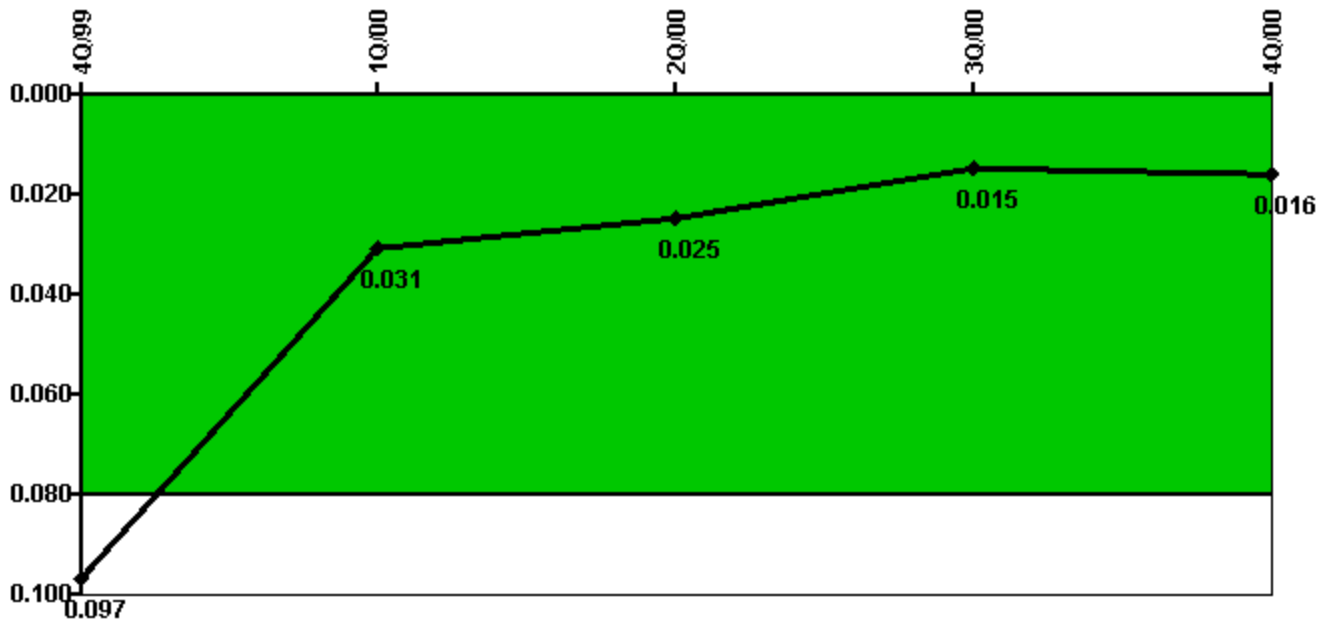
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
RETS/ODCM occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



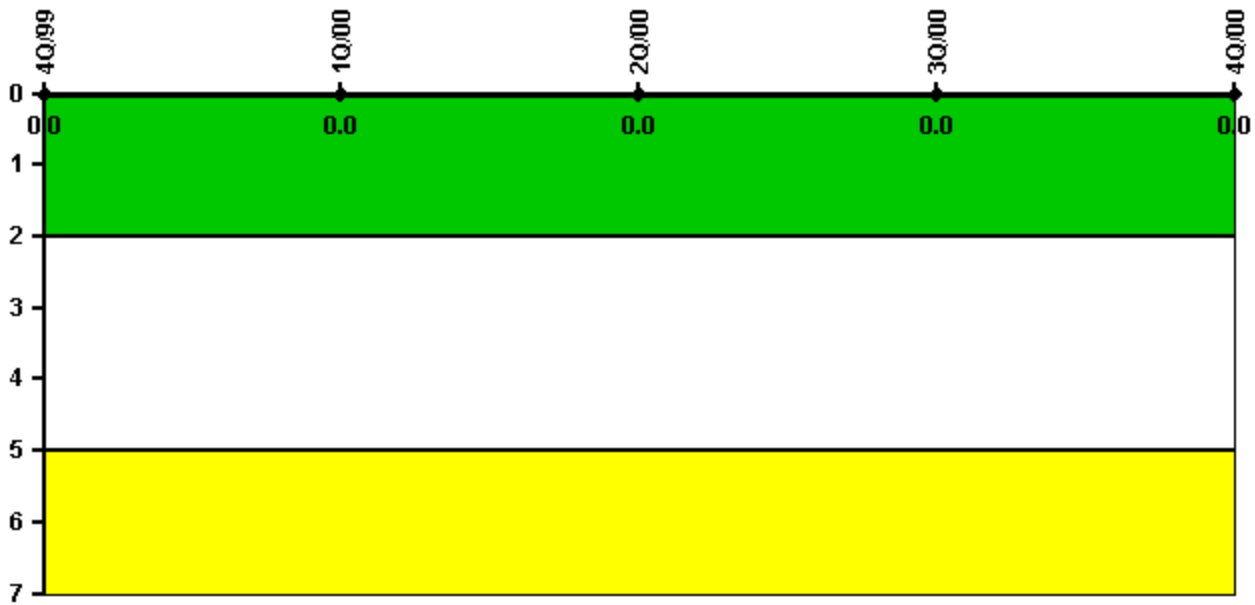
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
IDS compensatory hours	57.60	57.60	57.60	93.10	17.43
CCTV compensatory hours	6.5	67.8	6.8	0	37.5
IDS normalization factor	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0
Index Value	0.097	0.031	0.025	0.015	0.016

Licensee Comments: none

Personnel Screening Program



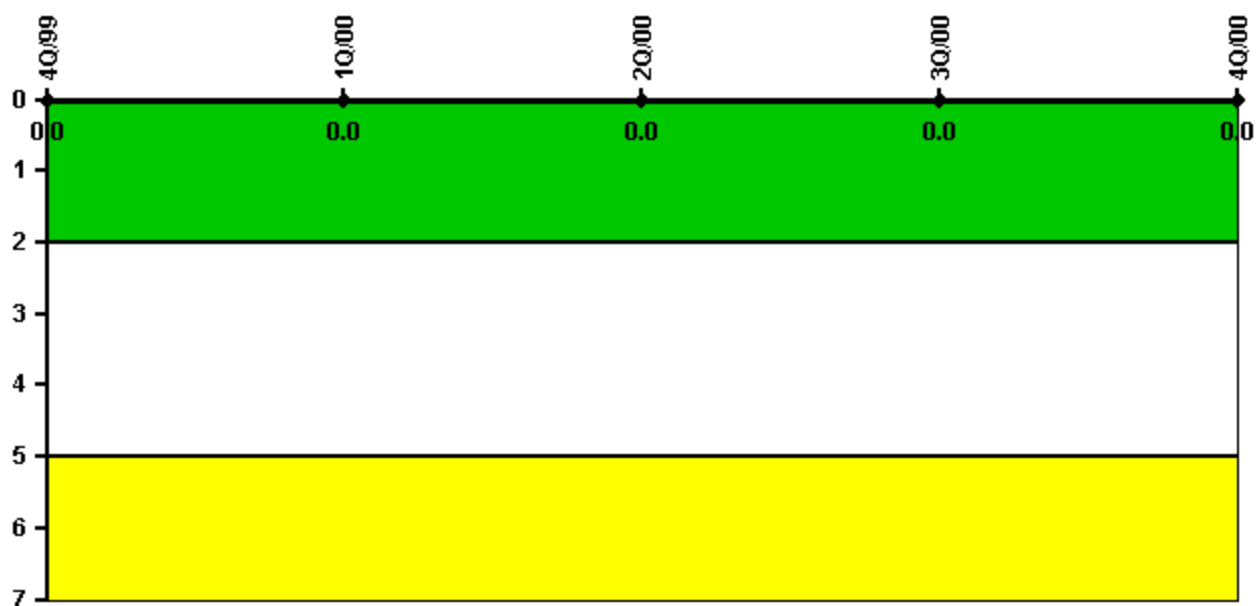
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Program failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00
Program Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Action Matrix Summary](#) | [Reactor Oversight Process](#)

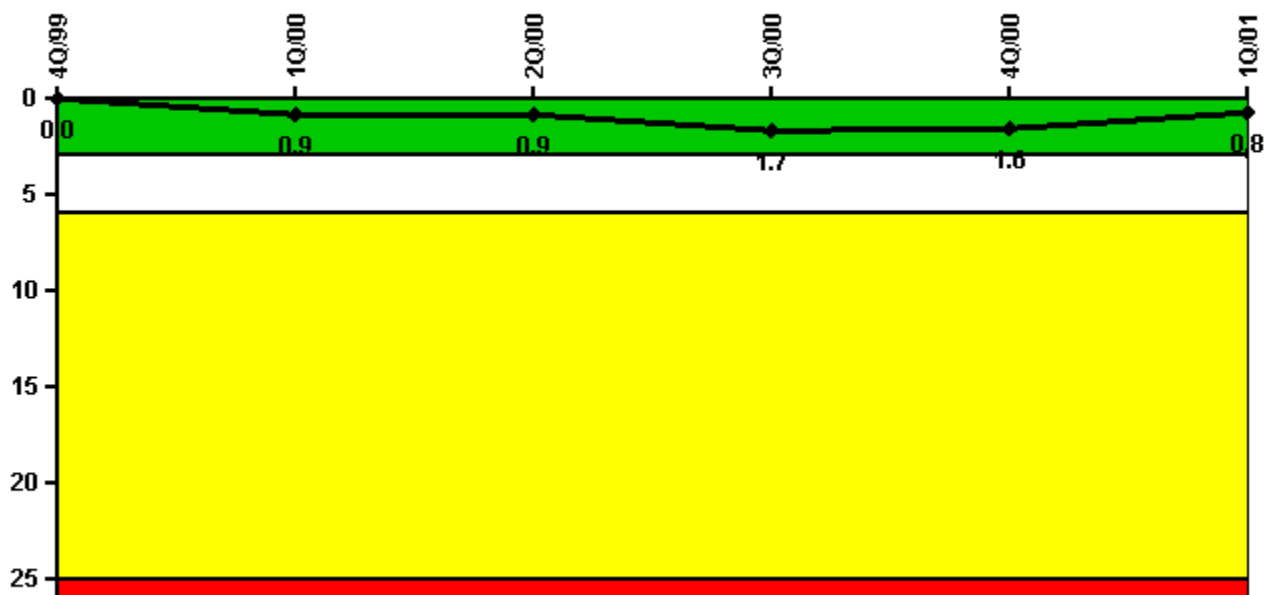
Last Modified: March 28, 2002

Byron 2

1Q/2001 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Unplanned scrams	0	1.0	0	1.0	0	0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0	2160.0
Indicator value	0	0.9	0.9	1.7	1.6	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



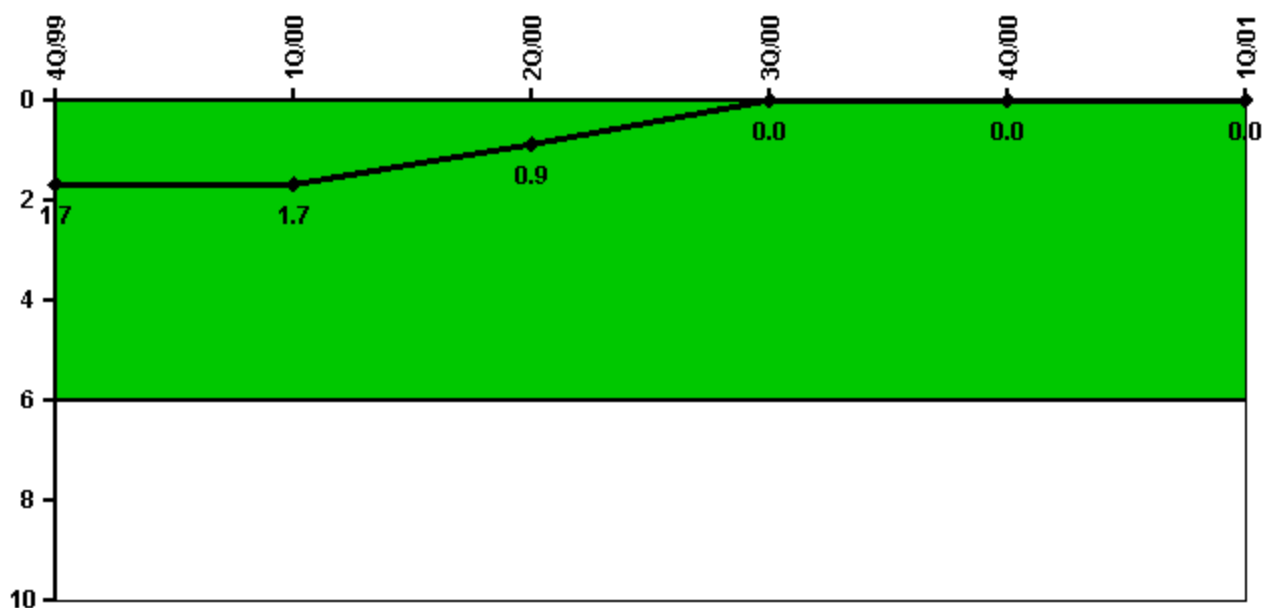
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Scrams	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



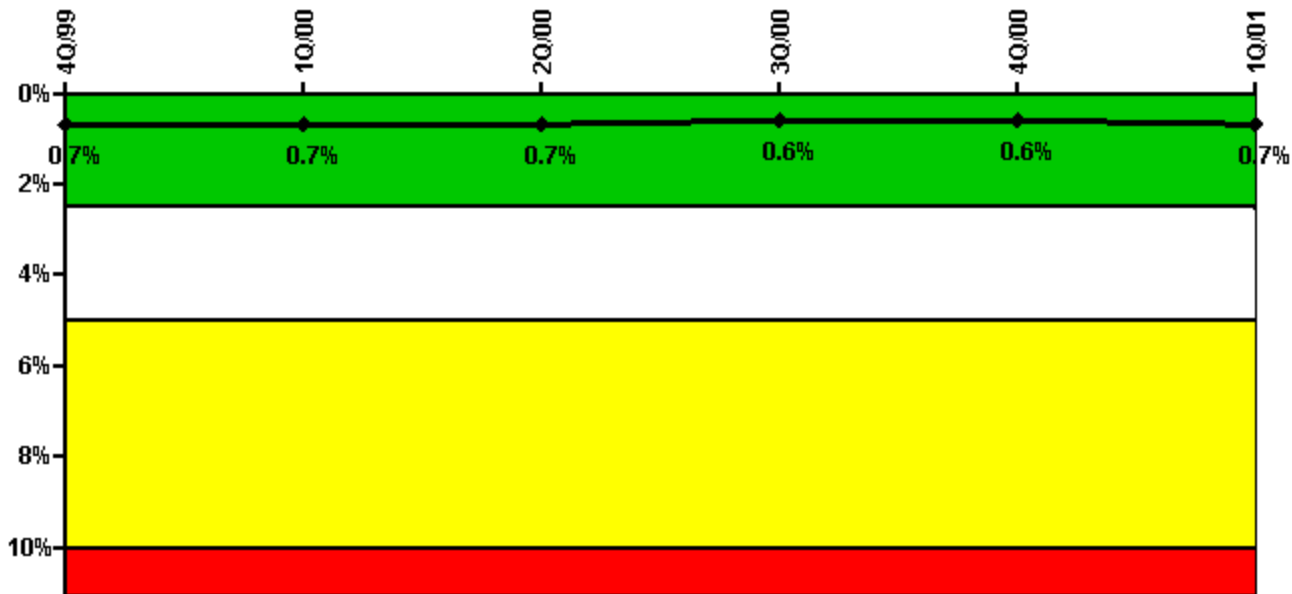
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Unplanned power changes	0	0	0	0	0	0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0	2160.0
Indicator value	1.7	1.7	0.9	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	0	16.30	0	0	0.20	17.50
Unplanned unavailable hours	10.60	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Train 2						
Planned unavailable hours	3.20	0	8.00	0.32	0	0
Unplanned unavailable hours	1.30	0	27.30	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.7%	0.7%	0.7%	0.6%	0.6%	0.7%

Licensee Comments:

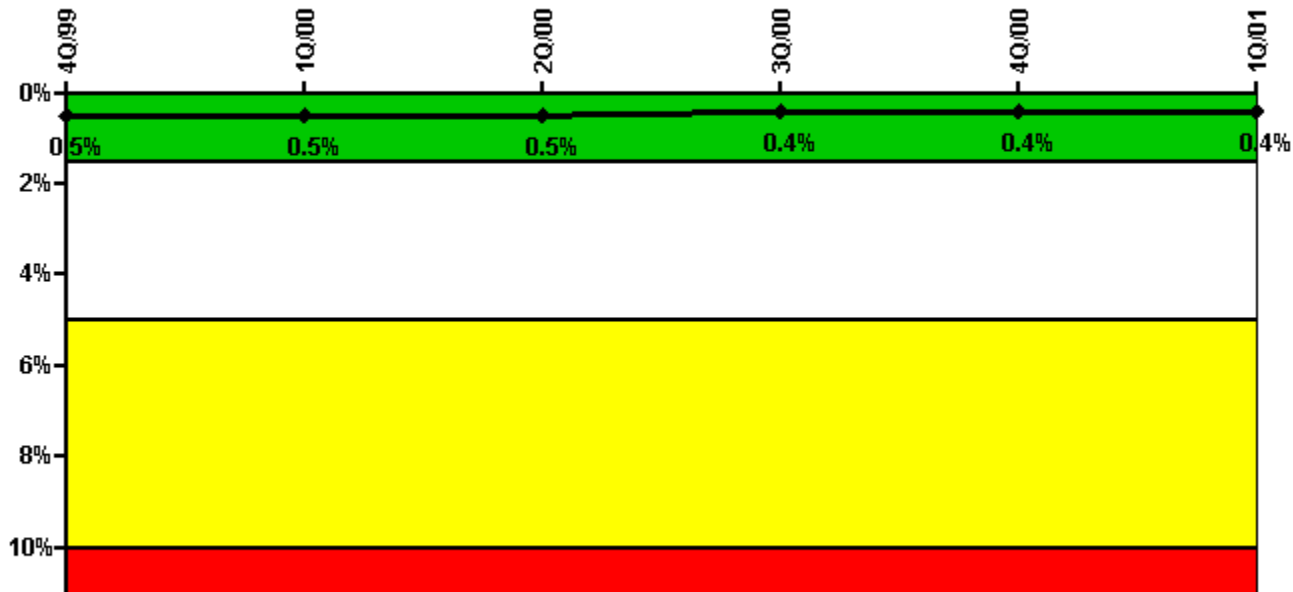
2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color

of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

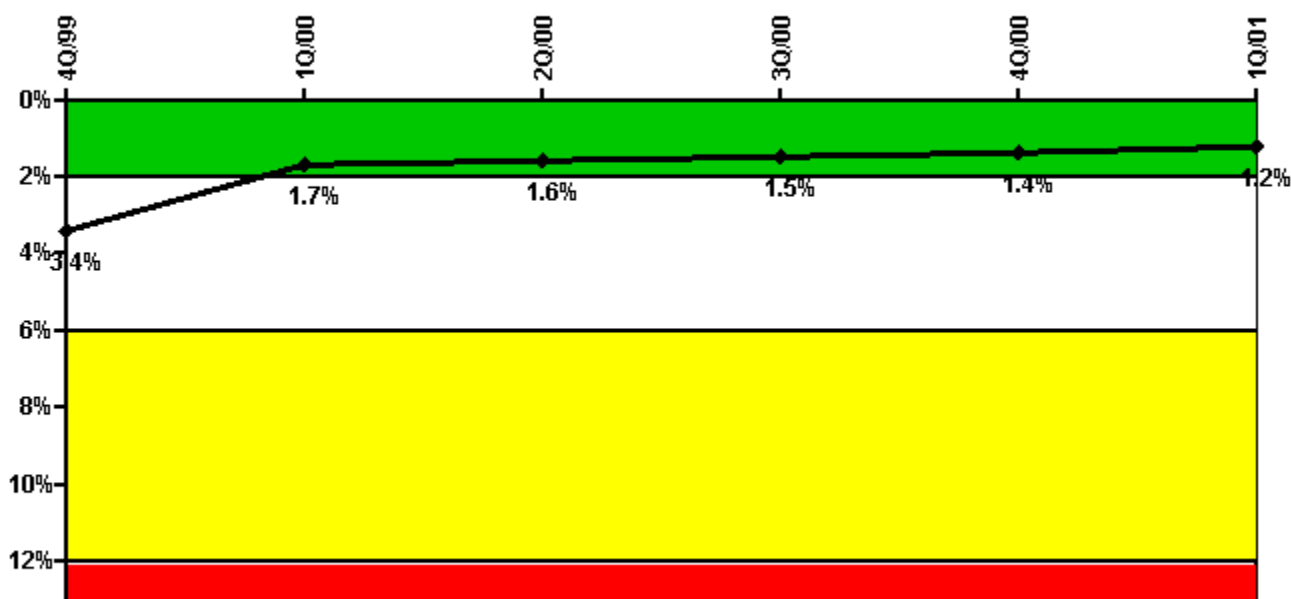
Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	1.30	0.90	1.50	0.50	12.90	42.70
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00
Train 2						
Planned unavailable hours	2.00	1.40	0.90	1.10	0.40	13.93
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00
Train 3						
Planned unavailable hours	0	42.00	9.80	0	0	1.60
Unplanned unavailable hours	0	14.80	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00
Train 4						
Planned unavailable hours	0	0	0	0	19.40	9.18
Unplanned unavailable hours	0	0	0	0	0	0

Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00
Indicator value	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%

Licensee Comments:

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the High Pressure Safety Injection system for Byron Unit 2. Data for the months of November 2000 and September 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	10.50	24.00	1.80	1.80	2.40	2.70
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00
Train 2						
Planned unavailable hours	20.30	23.70	4.40	1.80	2.00	2.70
Unplanned unavailable hours	10.40	0	0	0	0	0
Fault exposure hours	180.70	0	0	0	0	0
Effective Reset hours	0	872.60	0	0	0	0

Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00
Indicator value	3.4%	1.7%	1.6%	1.5%	1.4%	1.2%

Licensee Comments:

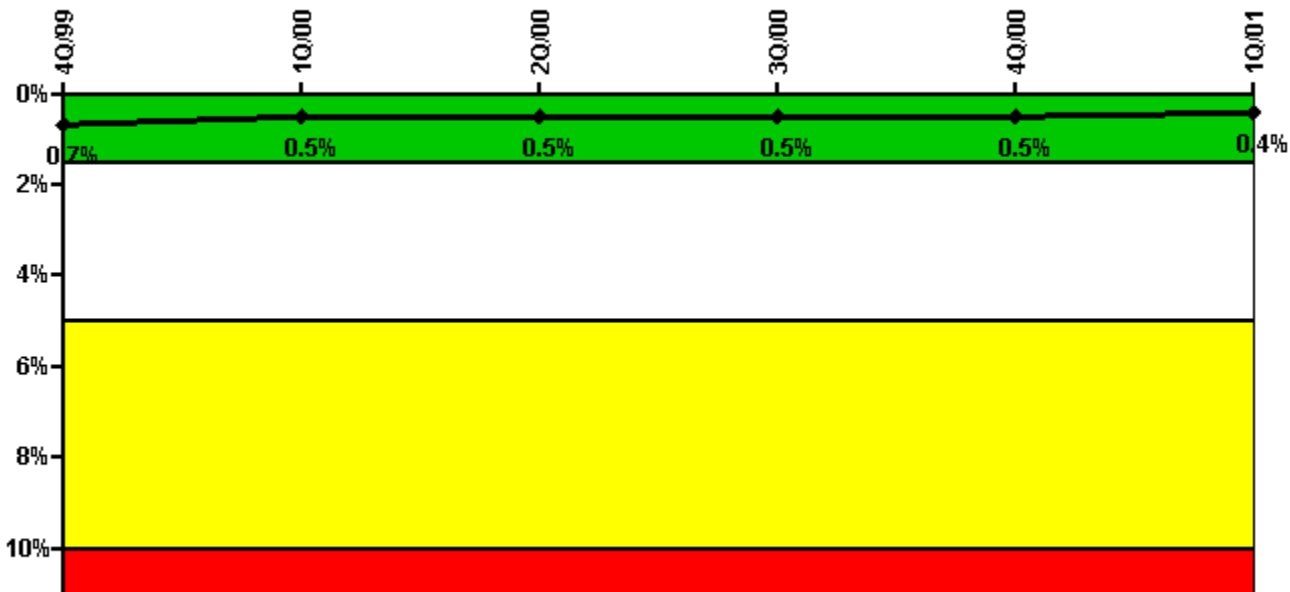
2Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

1Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	5.40	2.40	8.50	0.40	44.00	0.30
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0

Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Train 2						
Planned unavailable hours	2.30	2.10	2.60	1.30	0.60	1.12
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.7%	0.5%	0.5%	0.5%	0.5%	0.4%

Licensee Comments:

1Q/01: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

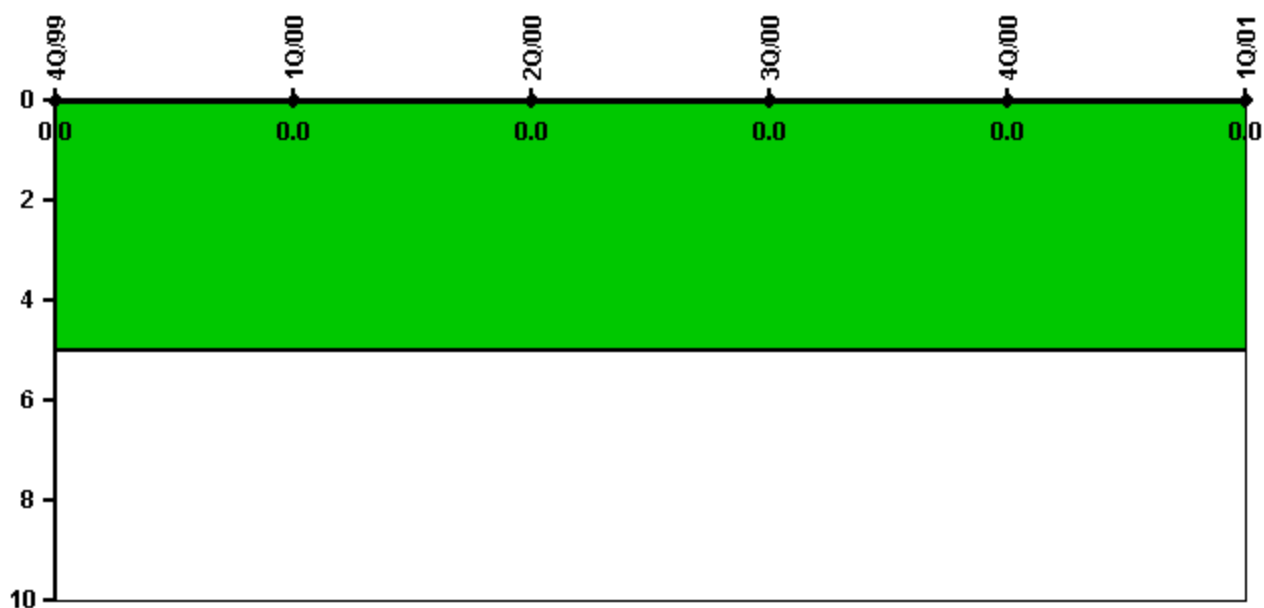
4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator. A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal system for Byron Unit 2. Data for the month of November 2000 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

3Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

Safety System Functional Failures (PWR)



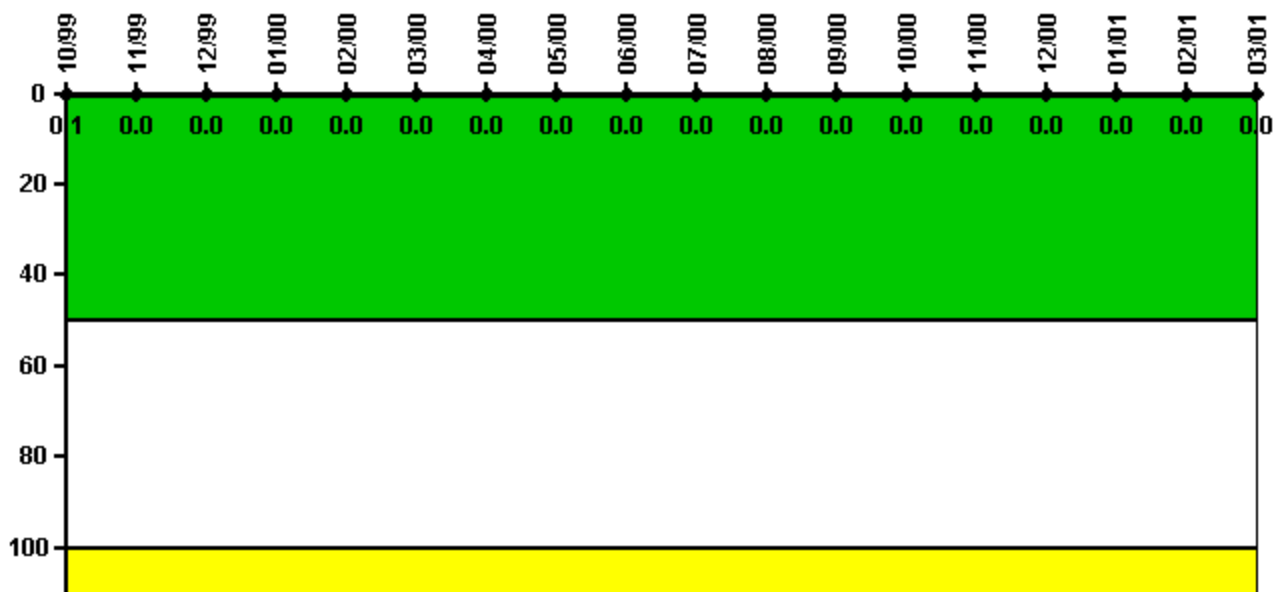
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Safety System Functional Failures	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

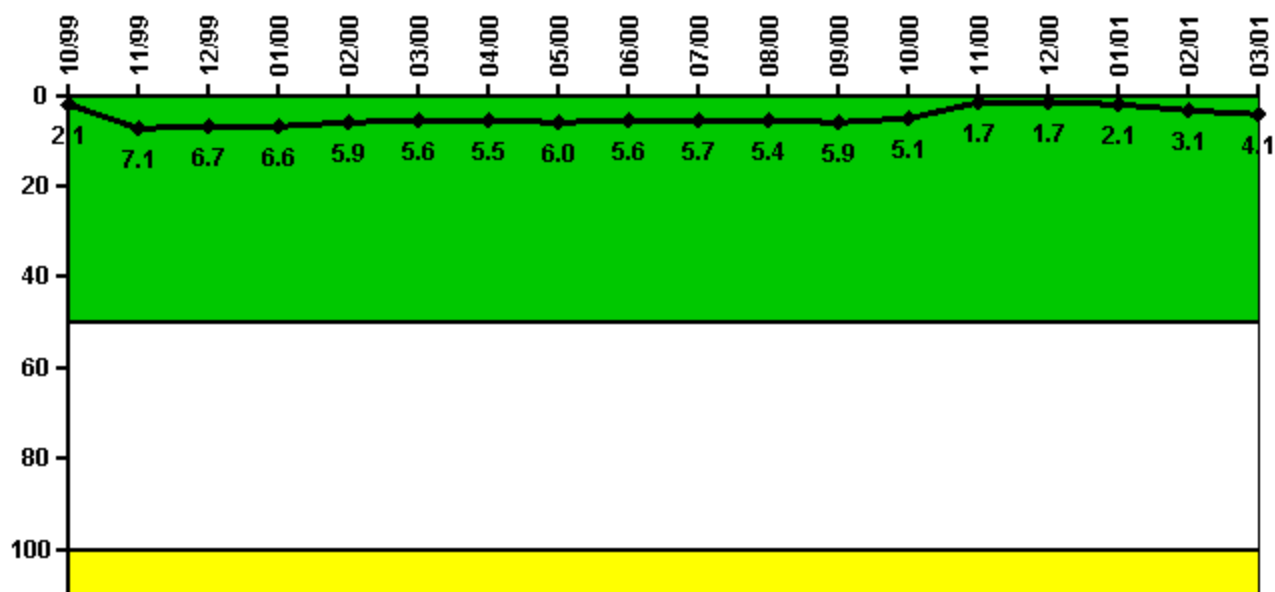
Notes

Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.000818	0.000196	0.000213	0.000231	0.000243	0.000263	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01
Maximum activity	0.000342	0.000372	0.000366	0.000366	0.000410	0.000438
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

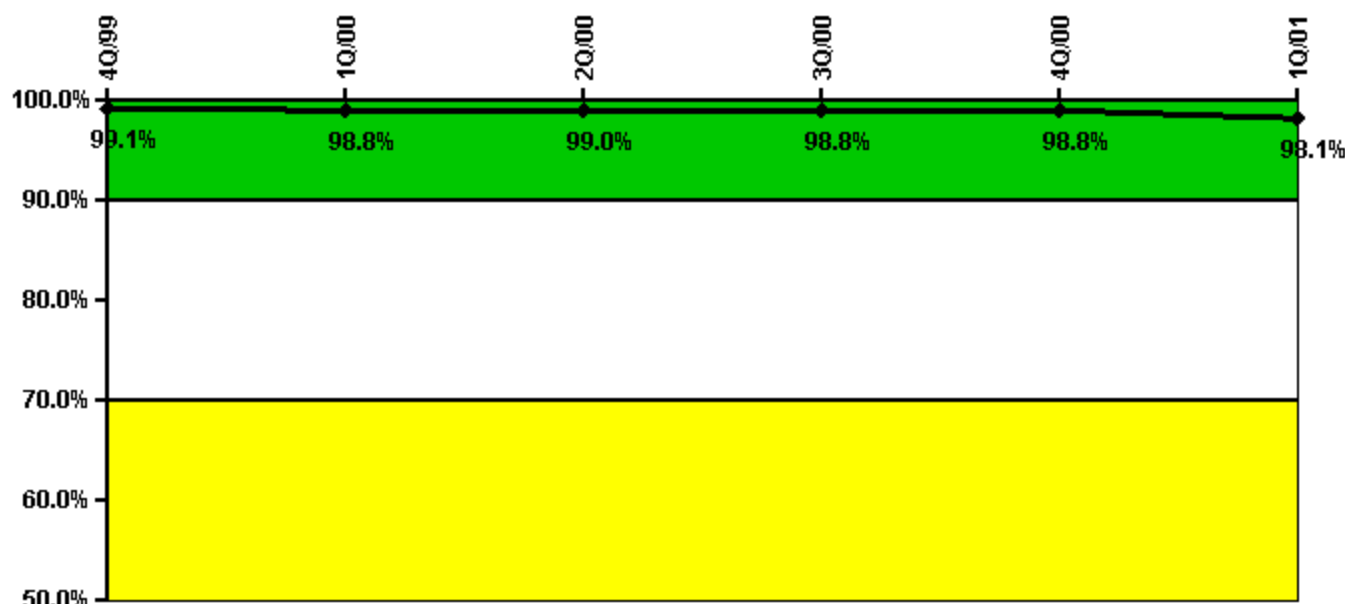
Notes

Reactor Coolant System Leakage	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum leakage	0.205	0.707	0.674	0.659	0.586	0.562	0.550	0.600	0.561	0.567	0.545	0.594
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.1	7.1	6.7	6.6	5.9	5.6	5.5	6.0	5.6	5.7	5.4	5.9

Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01
Maximum leakage	0.514	0.172	0.169	0.209	0.314	0.406
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	5.1	1.7	1.7	2.1	3.1	4.1

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Successful opportunities	4.0	63.0	30.0	49.0	0	14.0
Total opportunities	4.0	64.0	30.0	50.0	0	16.0
Indicator value	99.1%	98.8%	99.0%	98.8%	98.8%	98.1%

Licensee Comments:

1Q/01: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

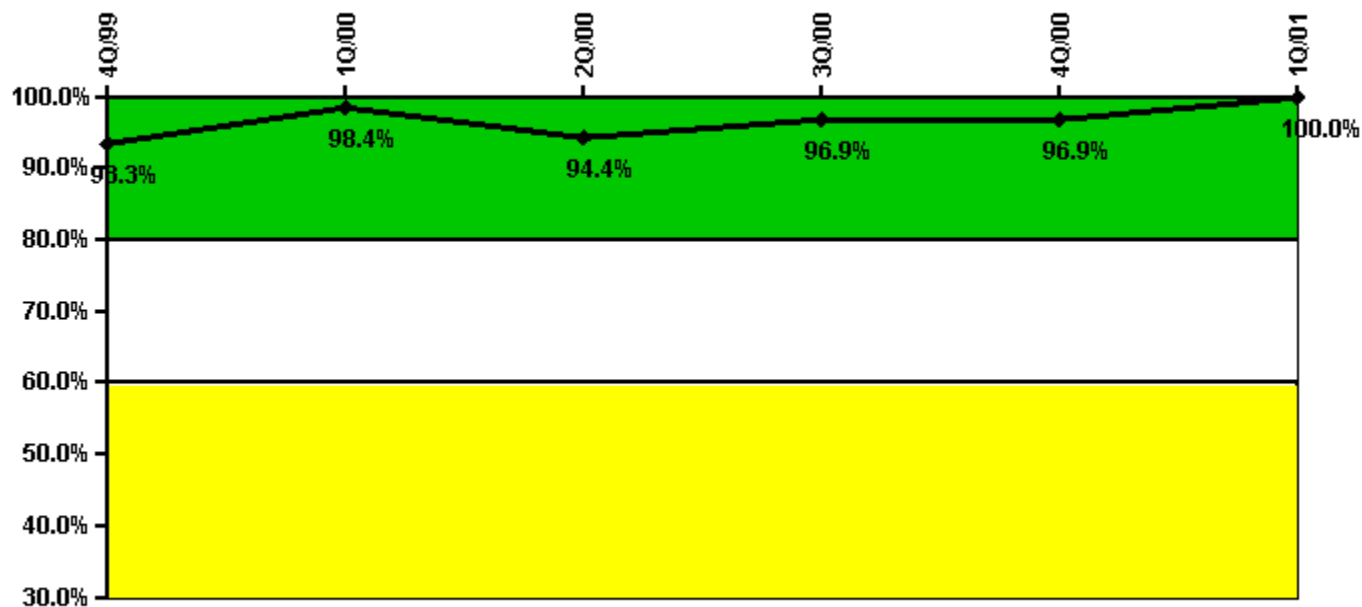
3Q/00: Third Quarter 2000 data collection process included a change based on FAQ 195 to count a notification opportunity that included both a classification and a Protective Action Recommendation as two notification opportunities. A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

2Q/00: Commonwealth Edison (ComEd) Company has reviewed the guidance for determining the number of opportunities for the Nuclear Regulatory Commission Drill, Exercise and Event (DEP) Performance Indicator 08. The process ComEd uses is to make a notification for a concurrent classification of General Emergency and an initial Protective Action Recommendation (PAR) for that classification and cannot be logically separated into two notifications. The notification is made via the same call to the same audience. Success criteria requires both the classification and PAR to be timely and accurate to count as a success. Therefore the notification is counted as one opportunity instead of two as suggested by the Nuclear Energy Institute. A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

4Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

ERO Drill Participation



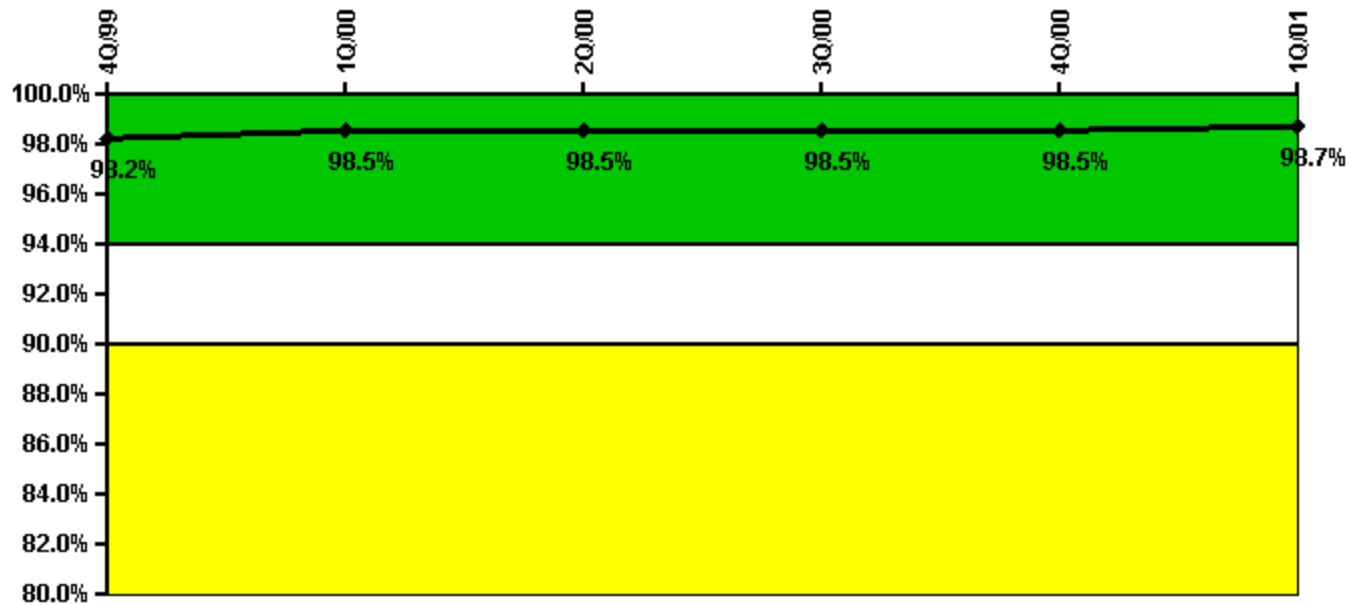
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Participating Key personnel	56.0	61.0	68.0	63.0	63.0	63.0
Total Key personnel	60.0	62.0	72.0	65.0	65.0	63.0
Indicator value	93.3%	98.4%	94.4%	96.9%	96.9%	100.0%

Licensee Comments: none

Alert & Notification System



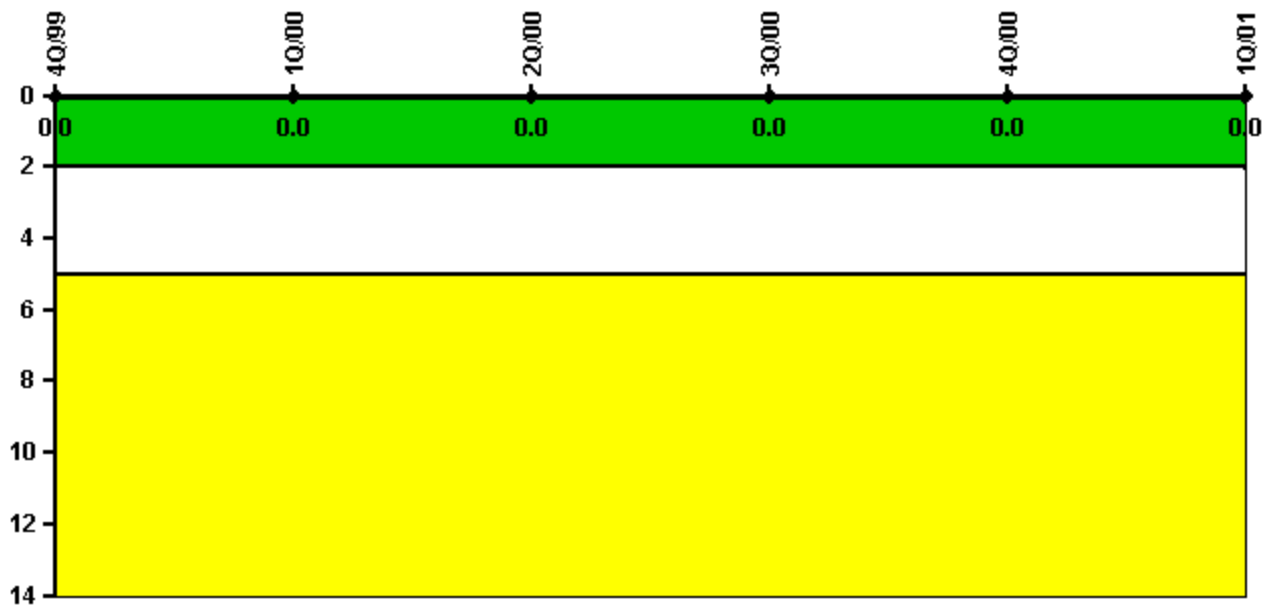
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Successful siren-tests	5883	6000	5915	5821	5864	5964
Total sirens-tests	5922	6110	6016	5922	5922	6016
Indicator value	98.2%	98.5%	98.5%	98.5%	98.5%	98.7%

Licensee Comments: none

Occupational Exposure Control Effectiveness



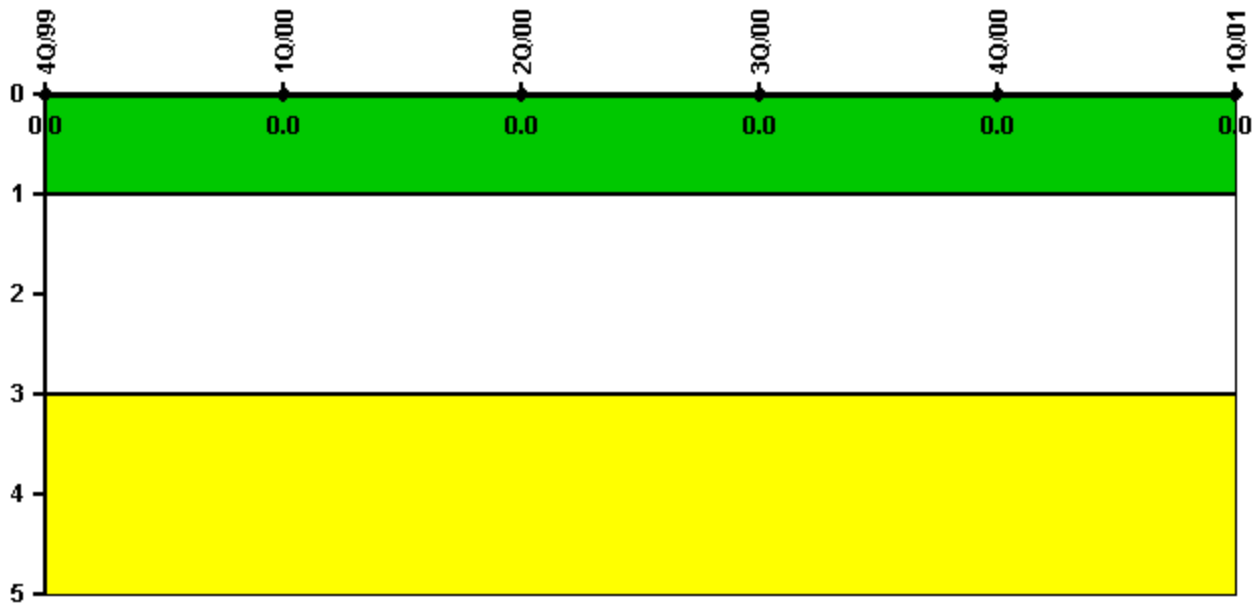
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
High radiation area occurrences	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



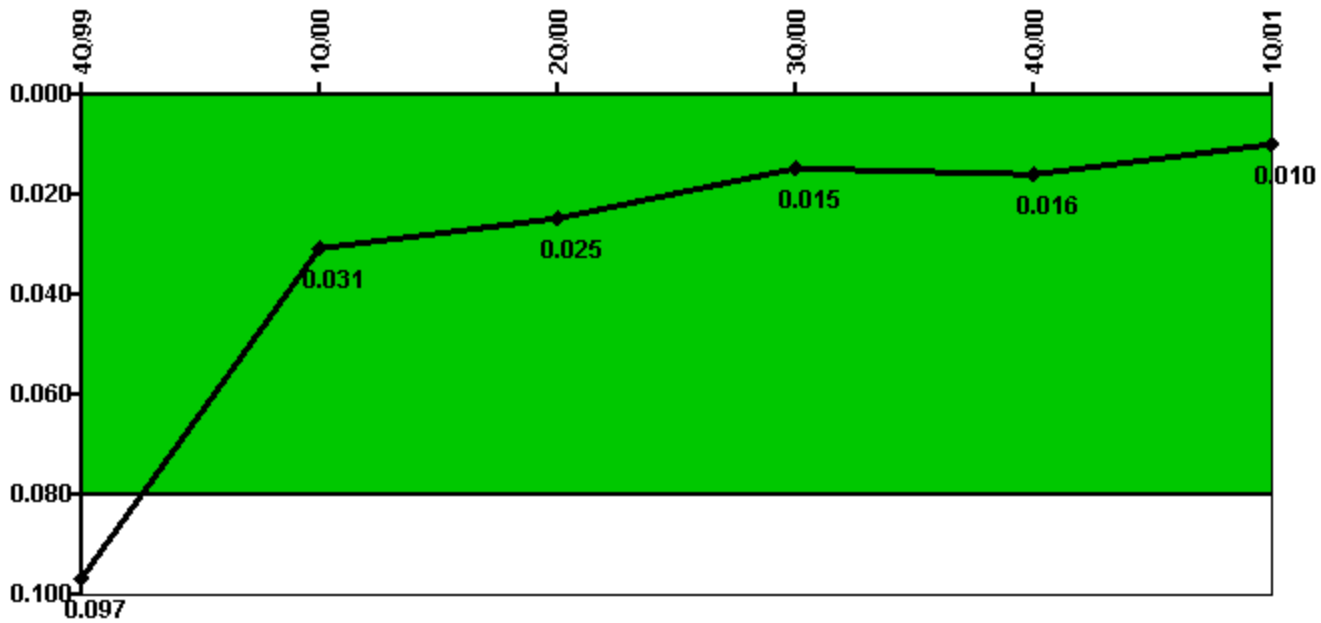
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
RETS/ODCM occurrences	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
IDS compensatory hours	57.60	57.60	57.60	93.10	17.43	21.85
CCTV compensatory hours	6.5	67.8	6.8	0	37.5	2.6
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.097	0.031	0.025	0.015	0.016	0.010

Licensee Comments: none

Personnel Screening Program



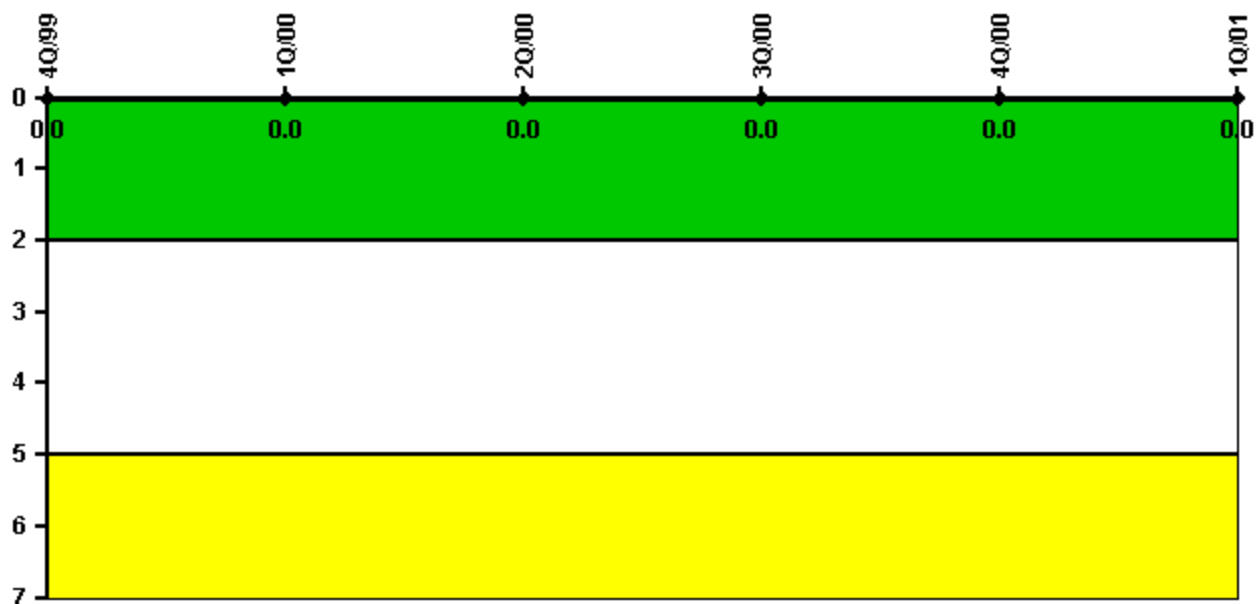
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Program failures	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Program Failures	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Action Matrix Summary](#) | [Reactor Oversight Process](#)

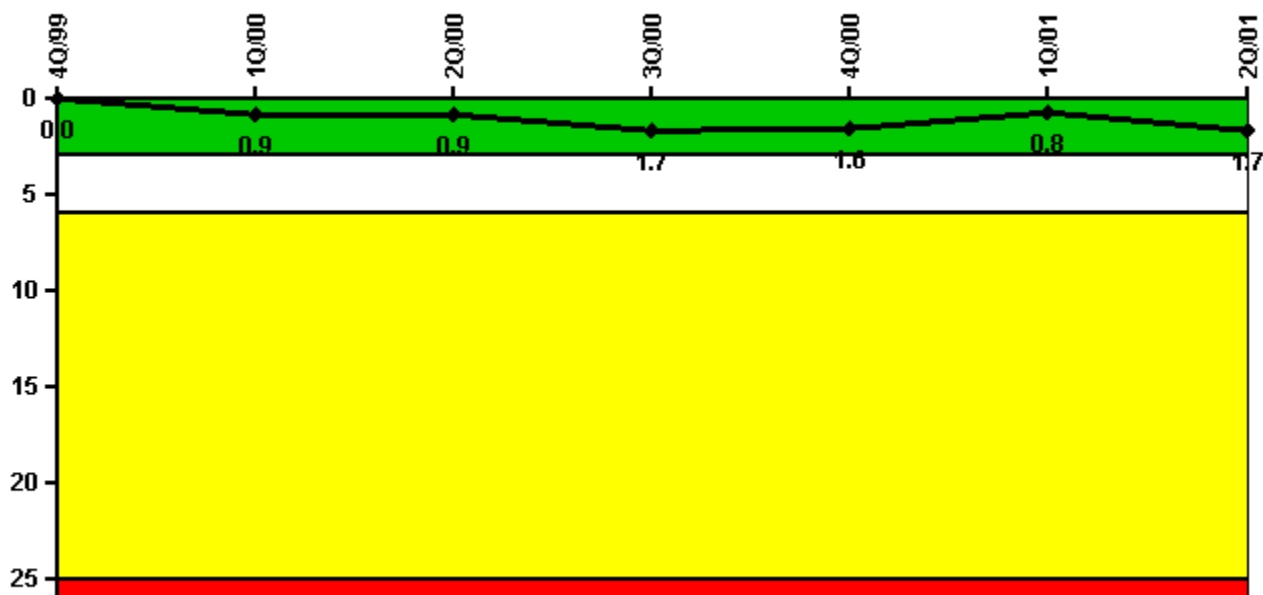
Last Modified: March 28, 2002

Byron 2

2Q/2001 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Unplanned scrams	0	1.0	0	1.0	0	0	1.0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0	2160.0	1795.3
Indicator value	0	0.9	0.9	1.7	1.6	0.8	1.7

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



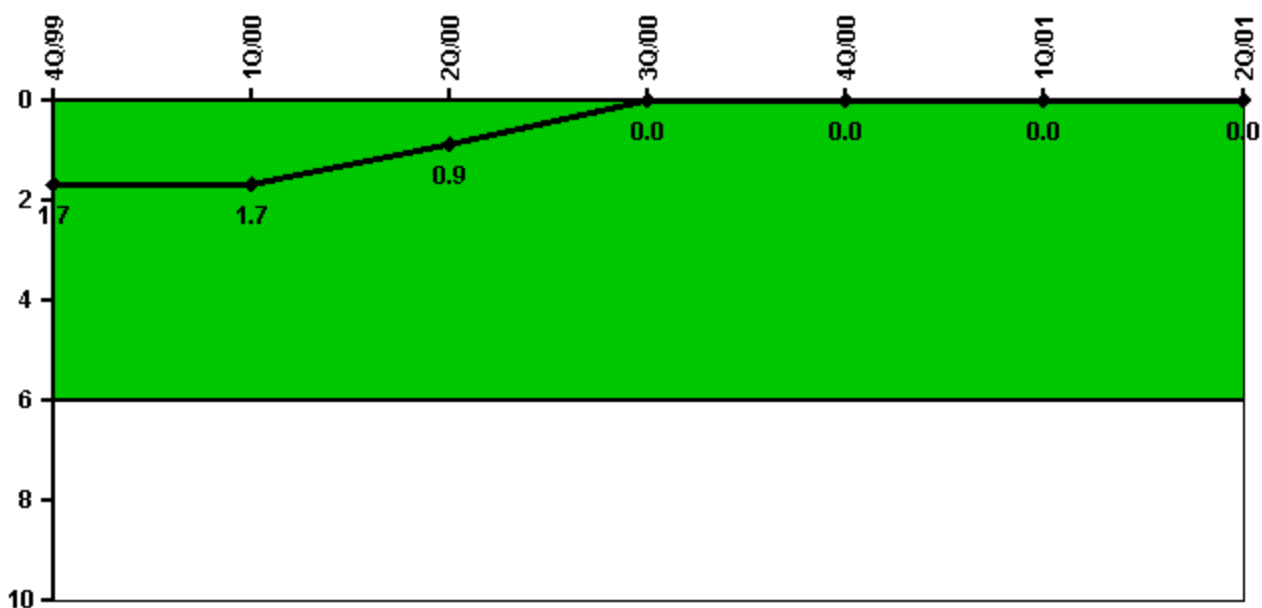
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Scrams	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



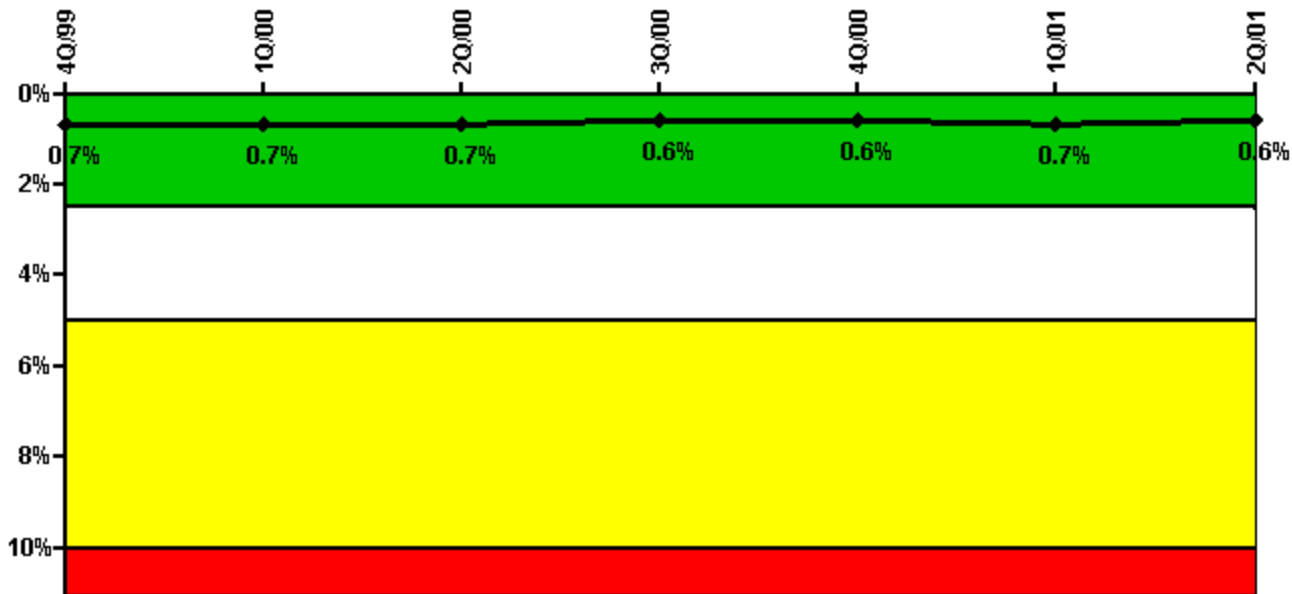
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Unplanned power changes	0	0	0	0	0	0	0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0	2160.0	1795.3
Indicator value	1.7	1.7	0.9	0	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Train 1							
Planned unavailable hours	0	16.30	0	0	0.20	17.50	0
Unplanned unavailable hours	10.60	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2							
Planned unavailable hours	3.20	0	8.00	0.32	0	0	6.20
Unplanned unavailable hours	1.30	0	27.30	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.7%	0.7%	0.7%	0.6%	0.6%	0.7%	0.6%

Licensee Comments:

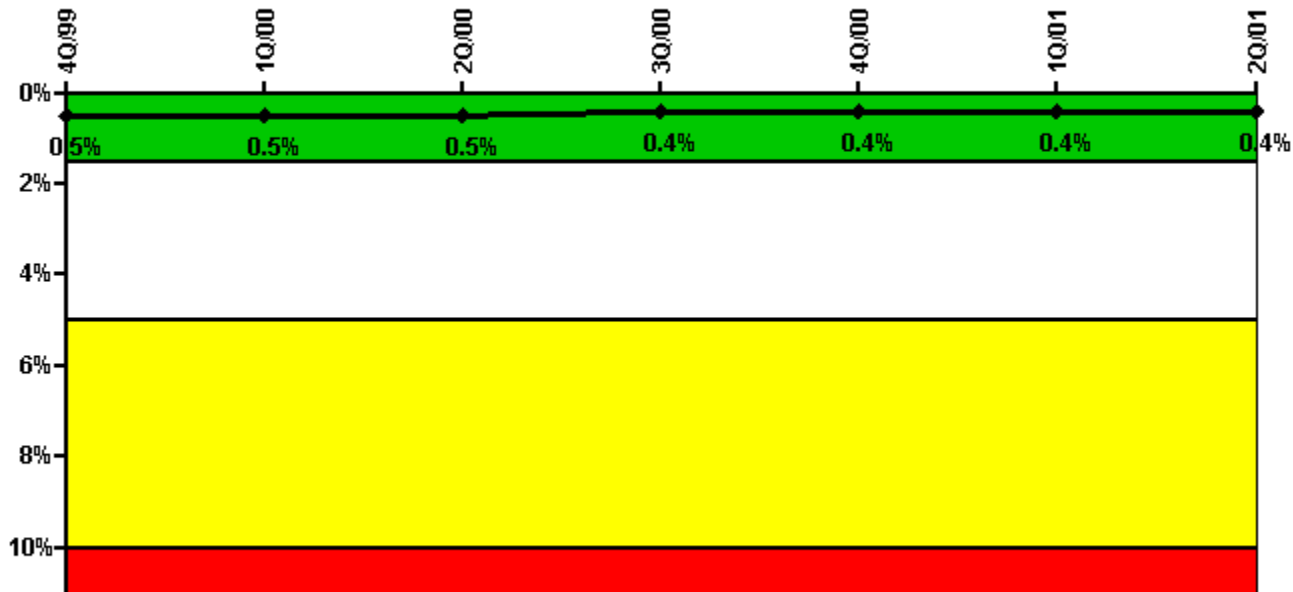
2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color

of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

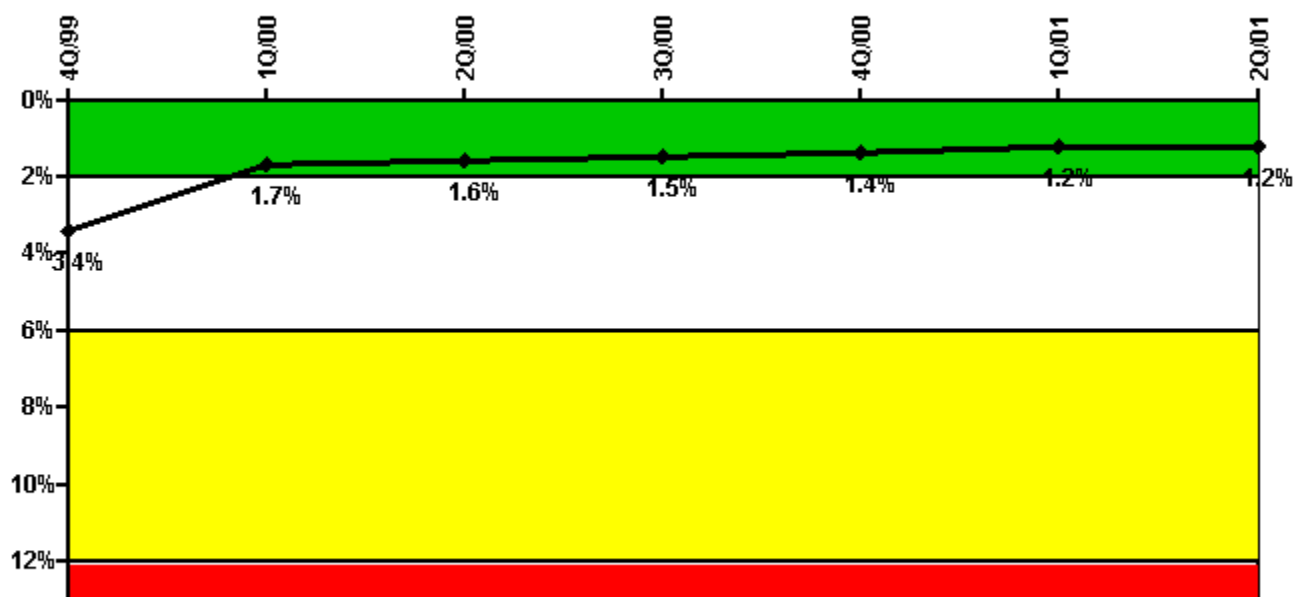
Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Train 1							
Planned unavailable hours	1.30	0.90	1.50	0.50	12.90	42.70	18.50
Unplanned unavailable hours	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32
Train 2							
Planned unavailable hours	2.00	1.40	0.90	1.10	0.40	13.93	0
Unplanned unavailable hours	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32
Train 3							
Planned unavailable hours	0	42.00	9.80	0	0	1.60	10.70
Unplanned unavailable hours	0	14.80	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32
Train 4							
Planned unavailable hours	0	0	0	0	19.40	9.18	0
Unplanned unavailable hours	0	0	0	0	0	0	0

Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32
Indicator value	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%

Licensee Comments:

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the High Pressure Safety Injection system for Byron Unit 2. Data for the months of November 2000 and September 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Train 1							
Planned unavailable hours	10.50	24.00	1.80	1.80	2.40	2.70	1.80
Unplanned unavailable hours	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32
Train 2							
Planned unavailable hours	20.30	23.70	4.40	1.80	2.00	2.70	17.10
Unplanned unavailable hours	10.40	0	0	0	0	0	0
Fault exposure hours	180.70	0	0	0	0	0	0
Effective Reset hours	0	872.60	0	0	0	0	0

Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32
Indicator value	3.4%	1.7%	1.6%	1.5%	1.4%	1.2%	1.2%

Licensee Comments:

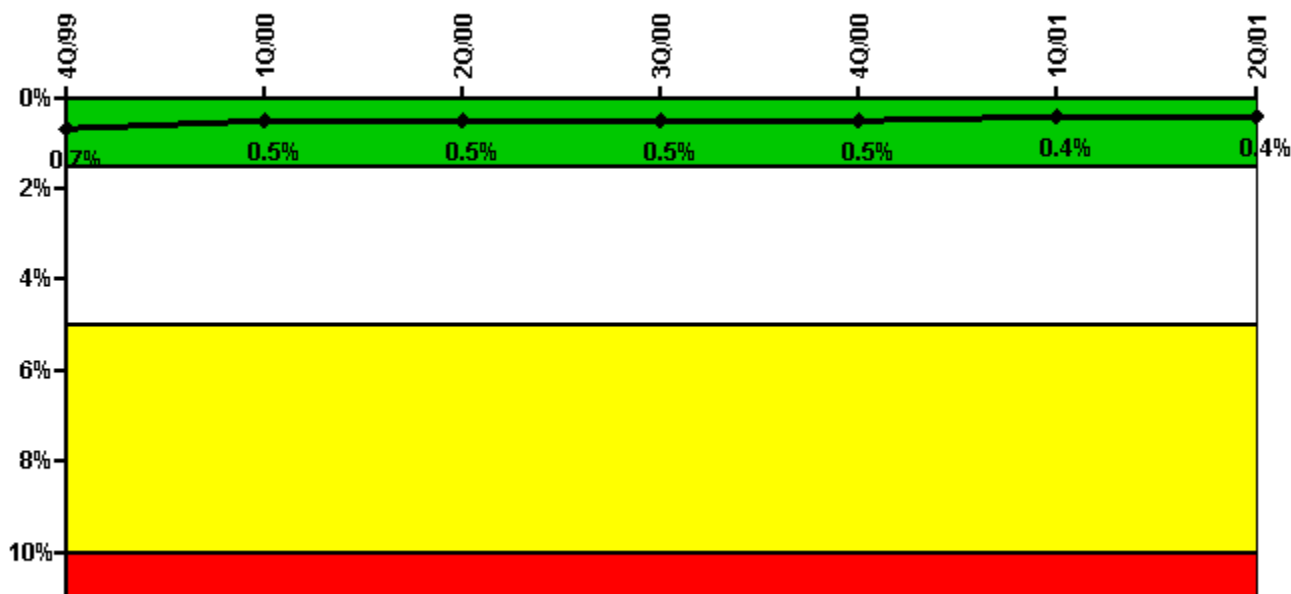
2Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

1Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Train 1							
Planned unavailable hours	5.40	2.40	8.50	0.40	44.00	0.30	3.00
Unplanned unavailable hours	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0

Effective Reset hours	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2							
Planned unavailable hours	2.30	2.10	2.60	1.30	0.60	1.12	1.00
Unplanned unavailable hours	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.7%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%

Licensee Comments:

1Q/01: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

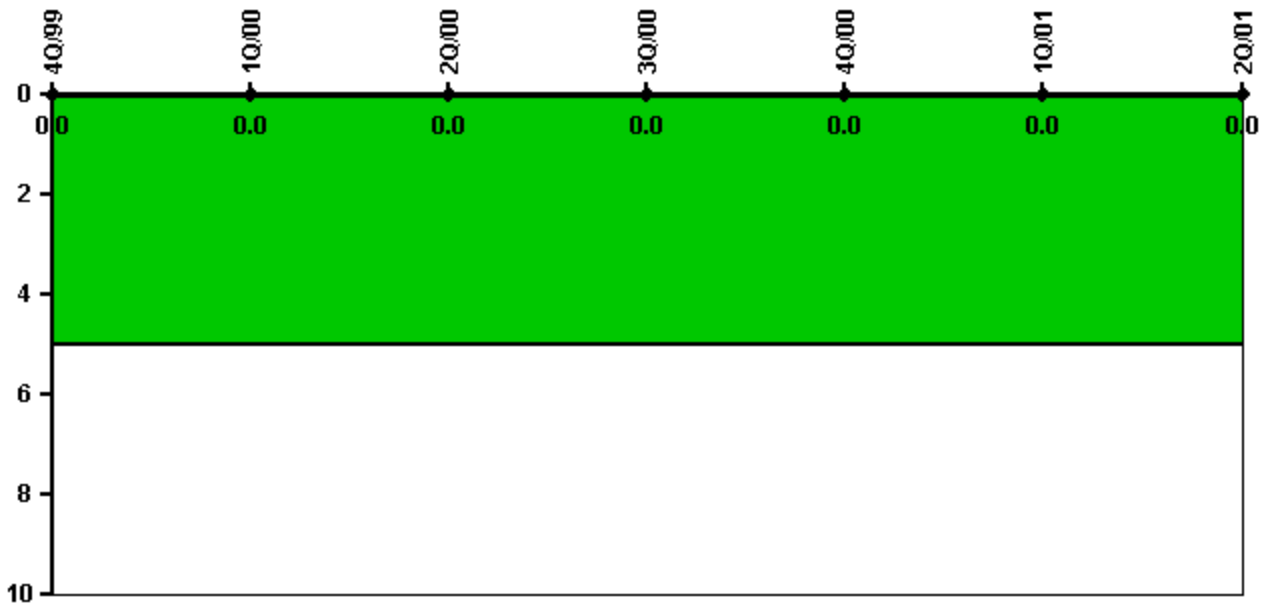
4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator. A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal system for Byron Unit 2. Data for the month of November 2000 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

3Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

Safety System Functional Failures (PWR)



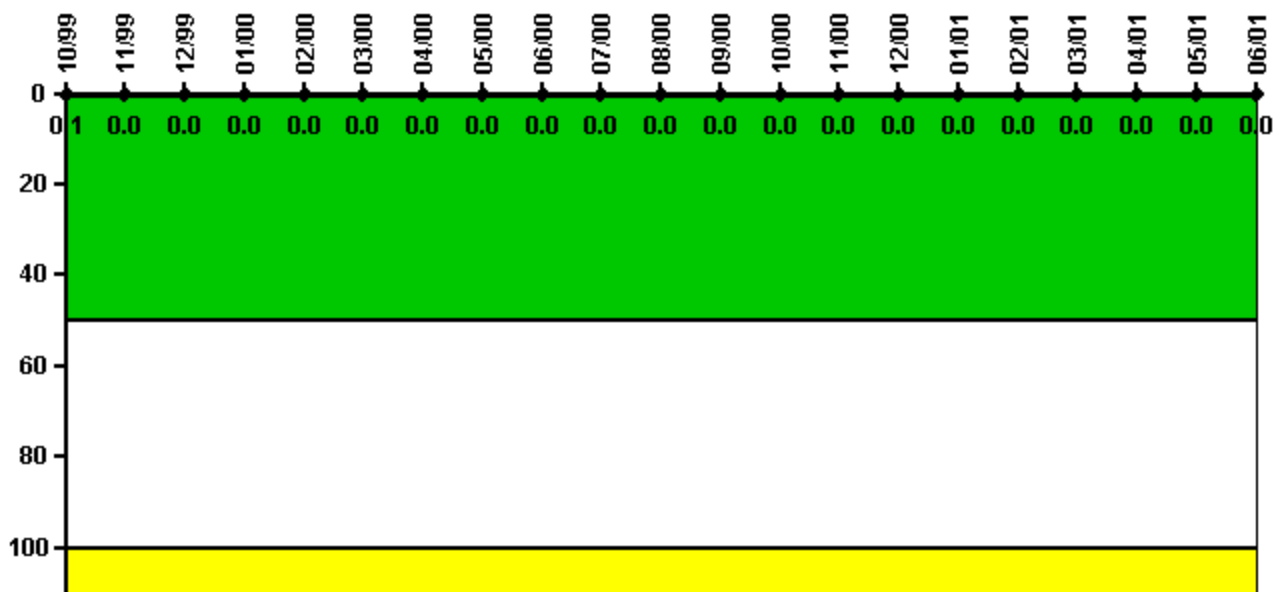
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Safety System Functional Failures	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

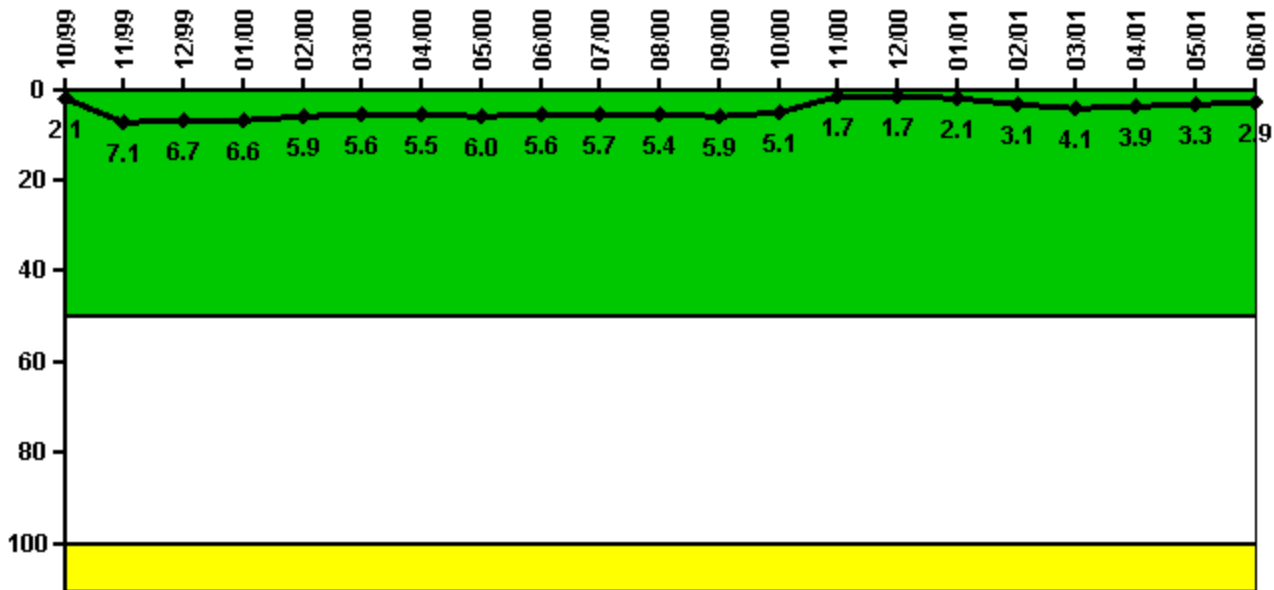
Notes

Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.000818	0.000196	0.000213	0.000231	0.000243	0.000263	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01
Maximum activity	0.000342	0.000372	0.000366	0.000366	0.000410	0.000438	0.000450	0.000250	0.000277
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

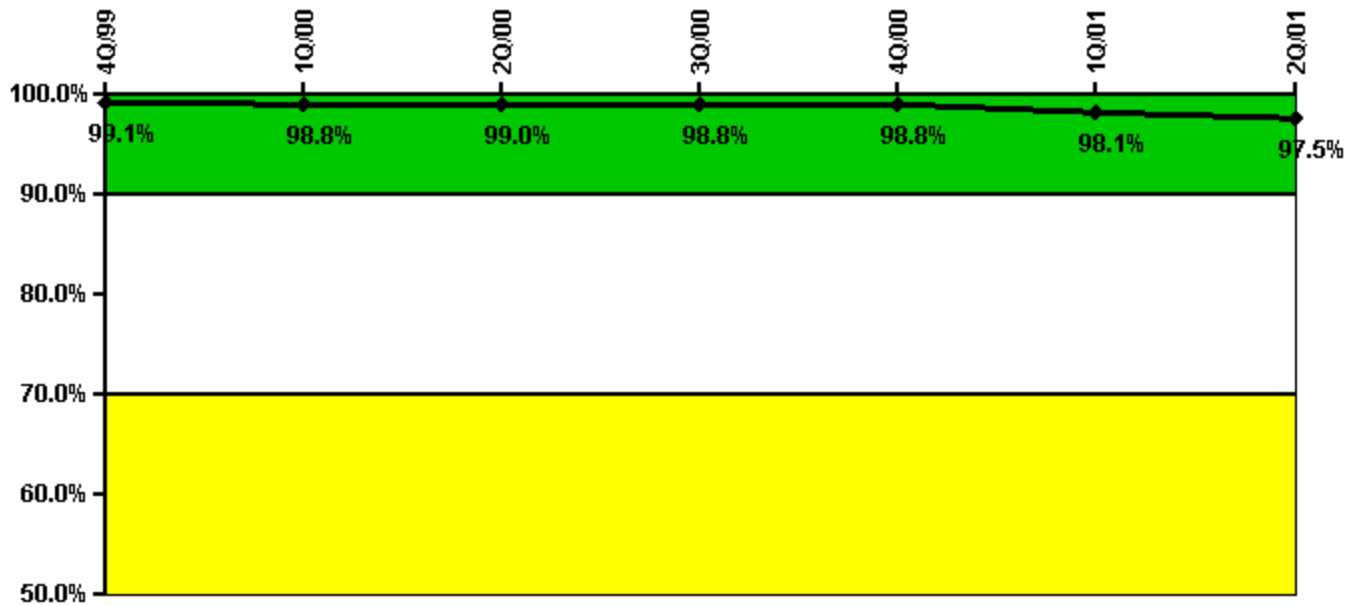
Notes

Reactor Coolant System Leakage	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum leakage	0.205	0.707	0.674	0.659	0.586	0.562	0.550	0.600	0.561	0.567	0.545	0.594
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.1	7.1	6.7	6.6	5.9	5.6	5.5	6.0	5.6	5.7	5.4	5.9

Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01
Maximum leakage	0.514	0.172	0.169	0.209	0.314	0.406	0.395	0.329	0.289
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	5.1	1.7	1.7	2.1	3.1	4.1	3.9	3.3	2.9

Licensee Comments: none

Drill/Exercise Performance



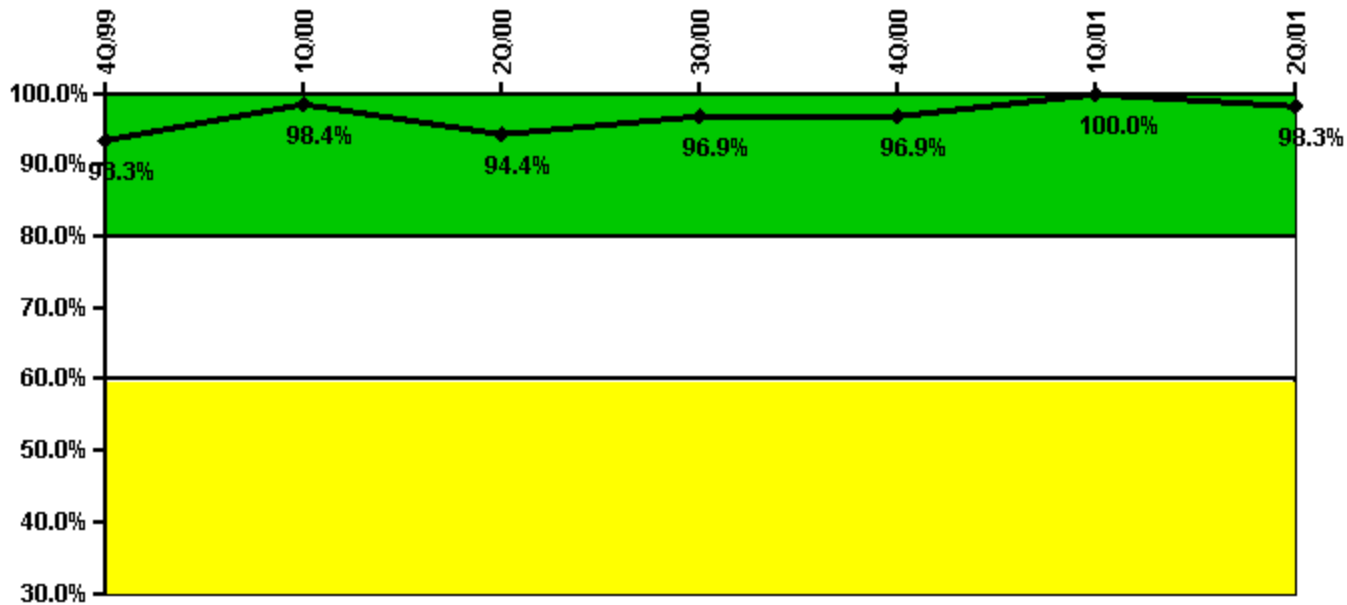
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Successful opportunities	4.0	63.0	30.0	49.0	0	14.0	0
Total opportunities	4.0	64.0	30.0	50.0	0	16.0	0
Indicator value	99.1%	98.8%	99.0%	98.8%	98.8%	98.1%	97.5%

Licensee Comments: none

ERO Drill Participation



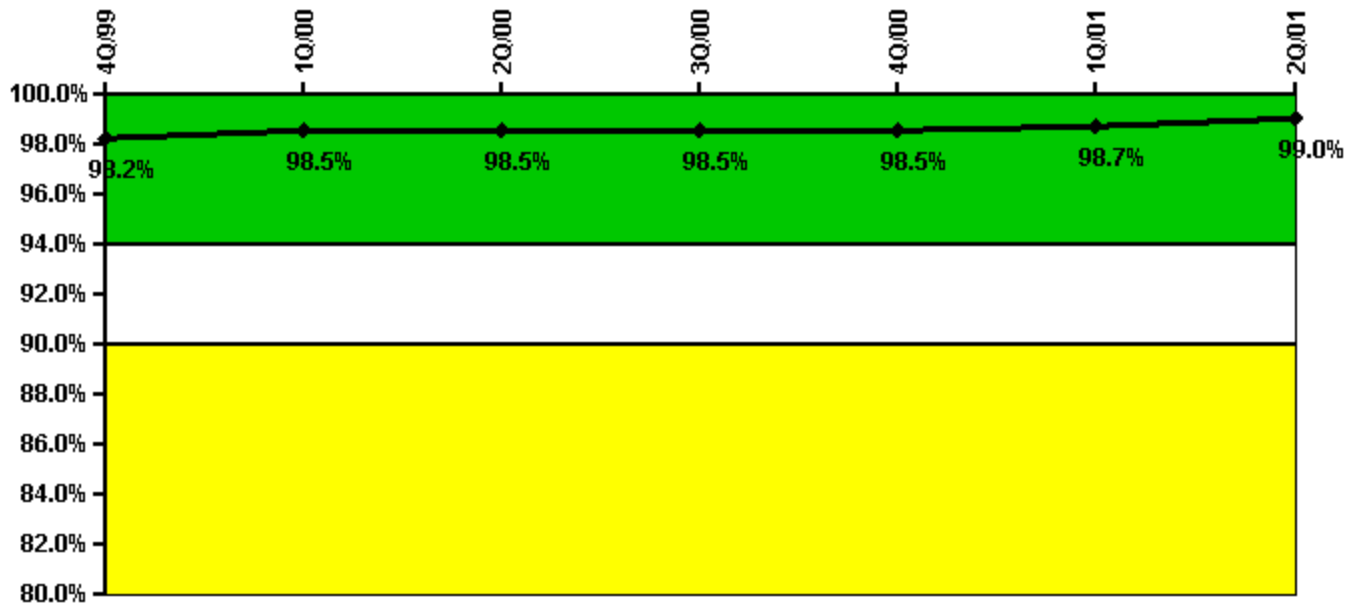
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Participating Key personnel	56.0	61.0	68.0	63.0	63.0	63.0	59.0
Total Key personnel	60.0	62.0	72.0	65.0	65.0	63.0	60.0
Indicator value	93.3%	98.4%	94.4%	96.9%	96.9%	100.0%	98.3%

Licensee Comments: none

Alert & Notification System



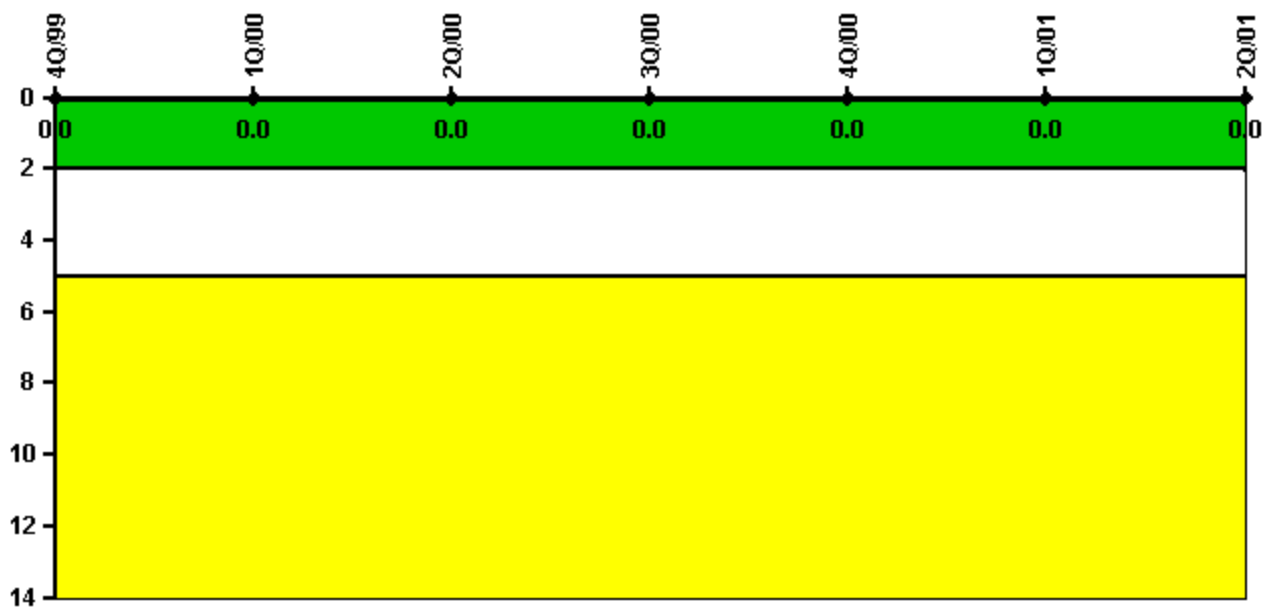
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Successful siren-tests	5883	6000	5915	5821	5864	5964	5978
Total sirens-tests	5922	6110	6016	5922	5922	6016	6016
Indicator value	98.2%	98.5%	98.5%	98.5%	98.5%	98.7%	99.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



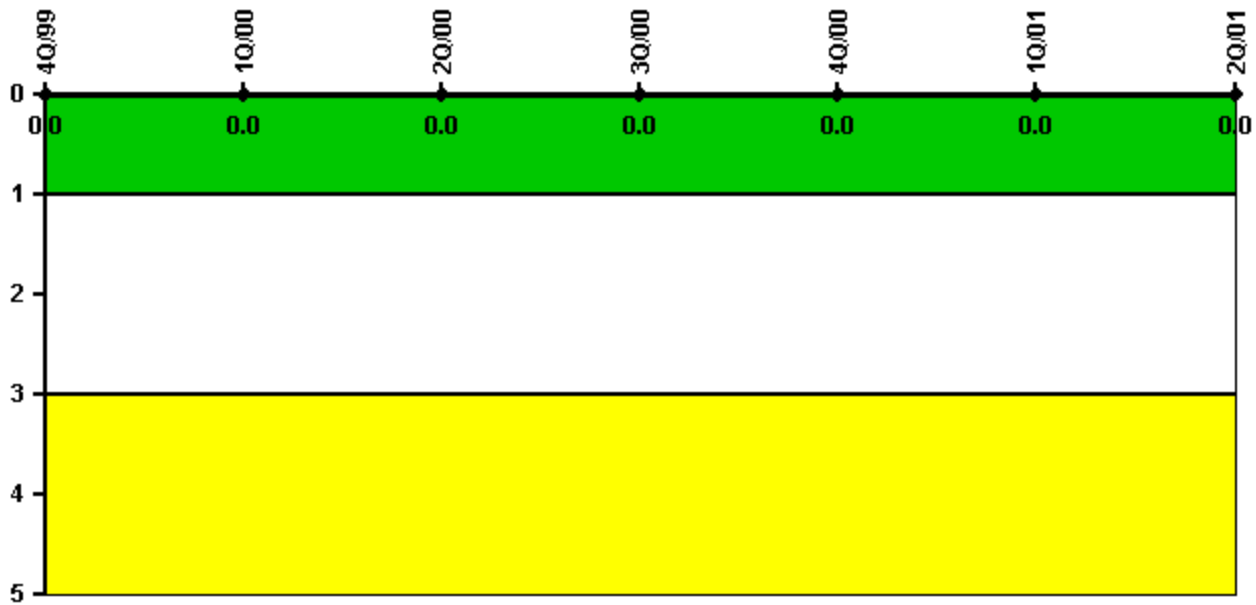
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
High radiation area occurrences	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



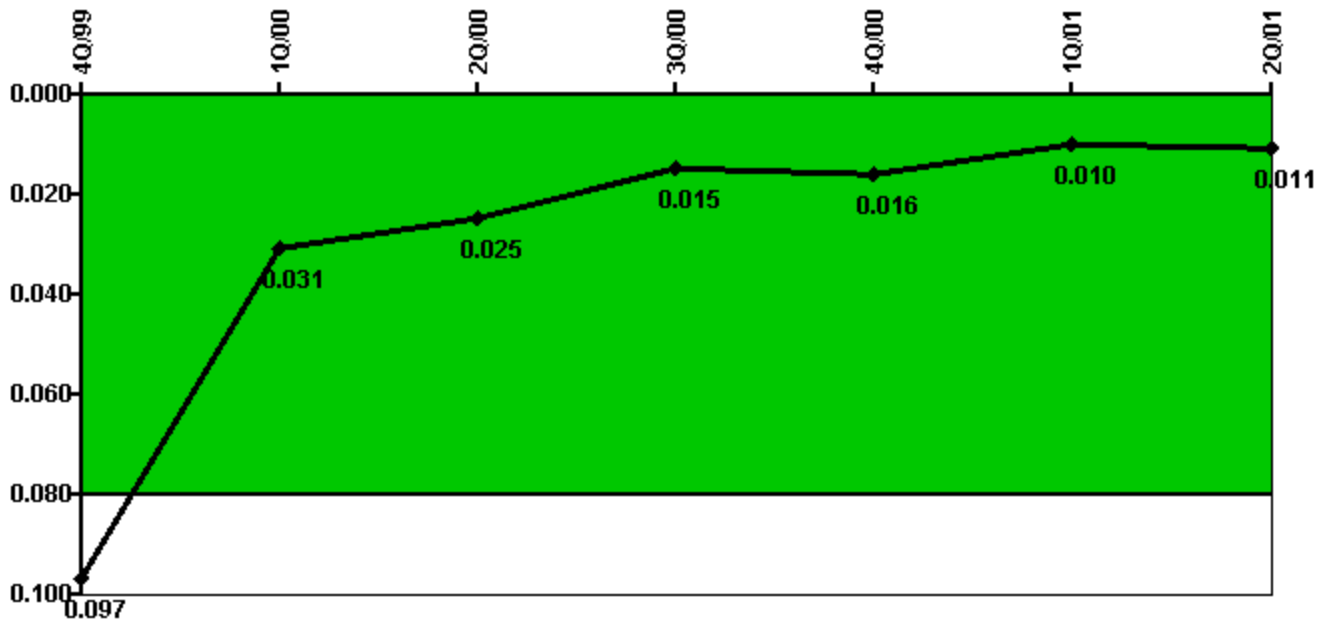
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
RETS/ODCM occurrences	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



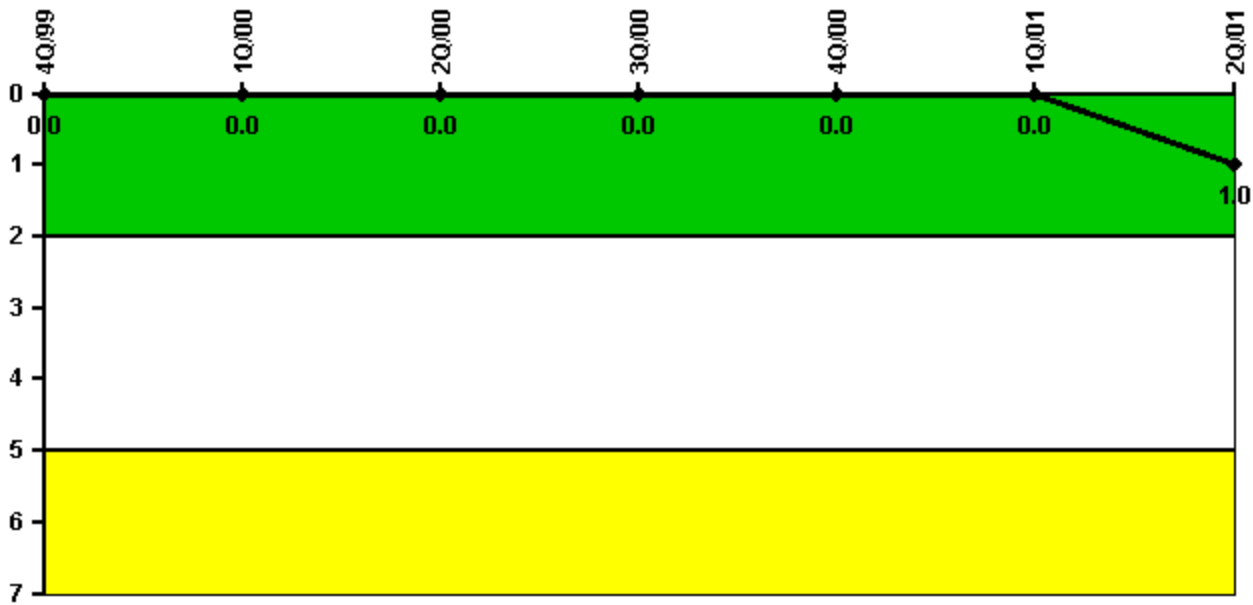
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
IDS compensatory hours	57.60	57.60	57.60	93.10	17.43	21.85	92.99
CCTV compensatory hours	6.5	67.8	6.8	0	37.5	2.6	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.097	0.031	0.025	0.015	0.016	0.010	0.011

Licensee Comments: none

Personnel Screening Program



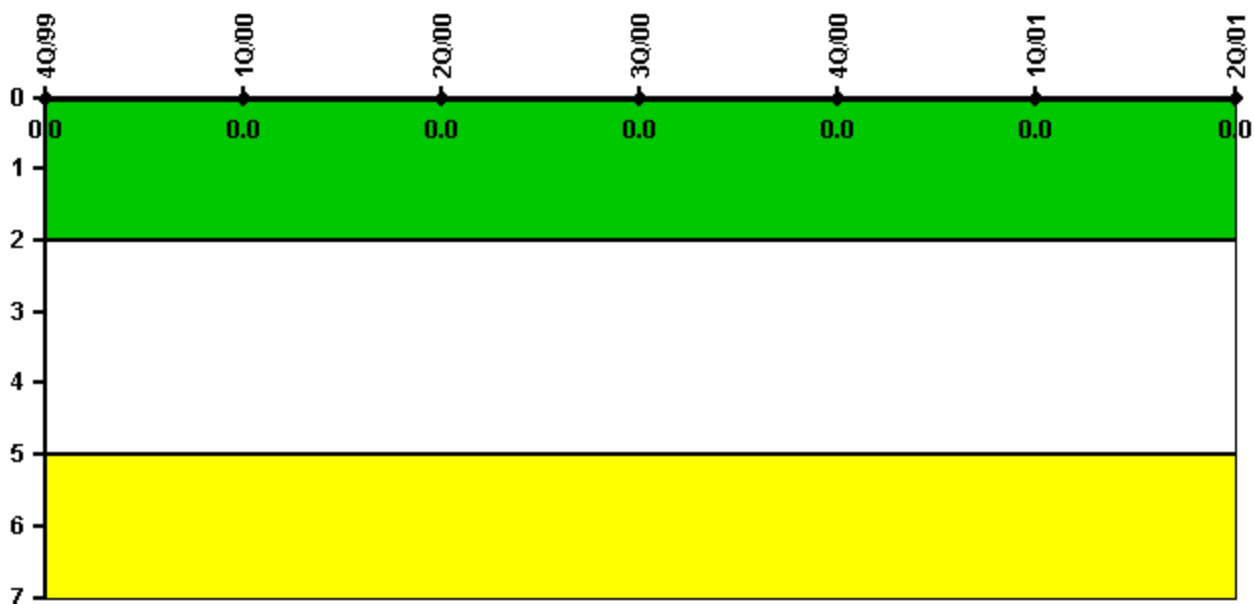
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Program failures	0	0	0	0	0	0	1
Indicator value	0	0	0	0	0	0	1

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Program Failures	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Action Matrix Summary](#) | [Reactor Oversight Process](#)

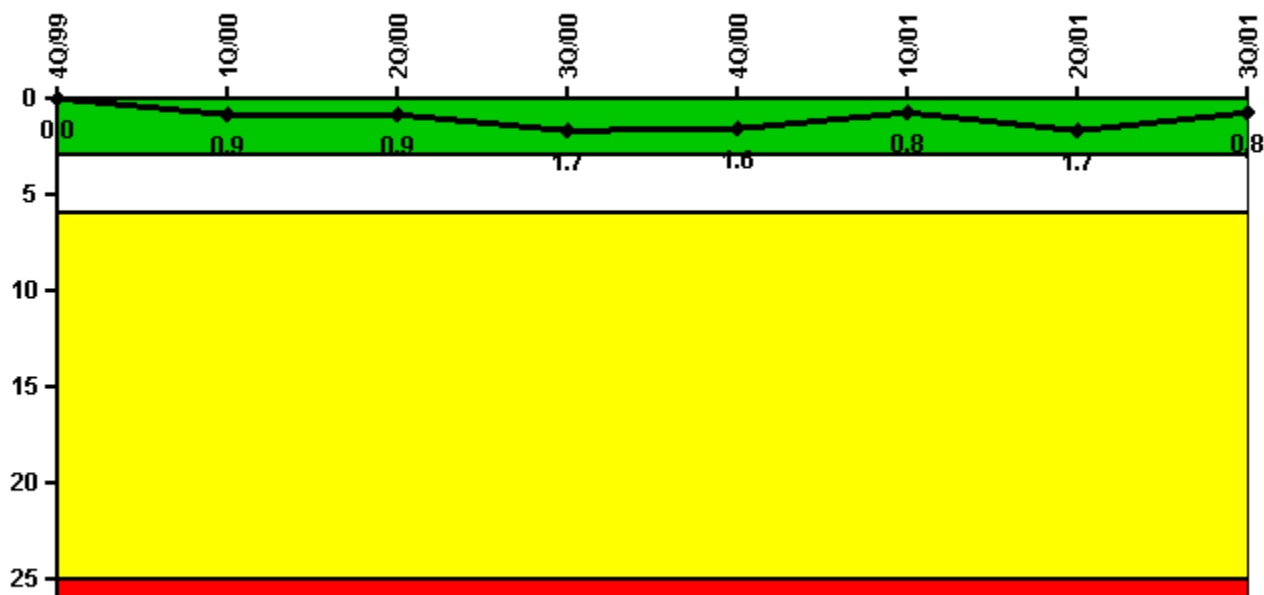
Last Modified: March 27, 2002

Byron 2

3Q/2001 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Unplanned scrams	0	1.0	0	1.0	0	0	1.0	0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0
Indicator value	0	0.9	0.9	1.7	1.6	0.8	1.7	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



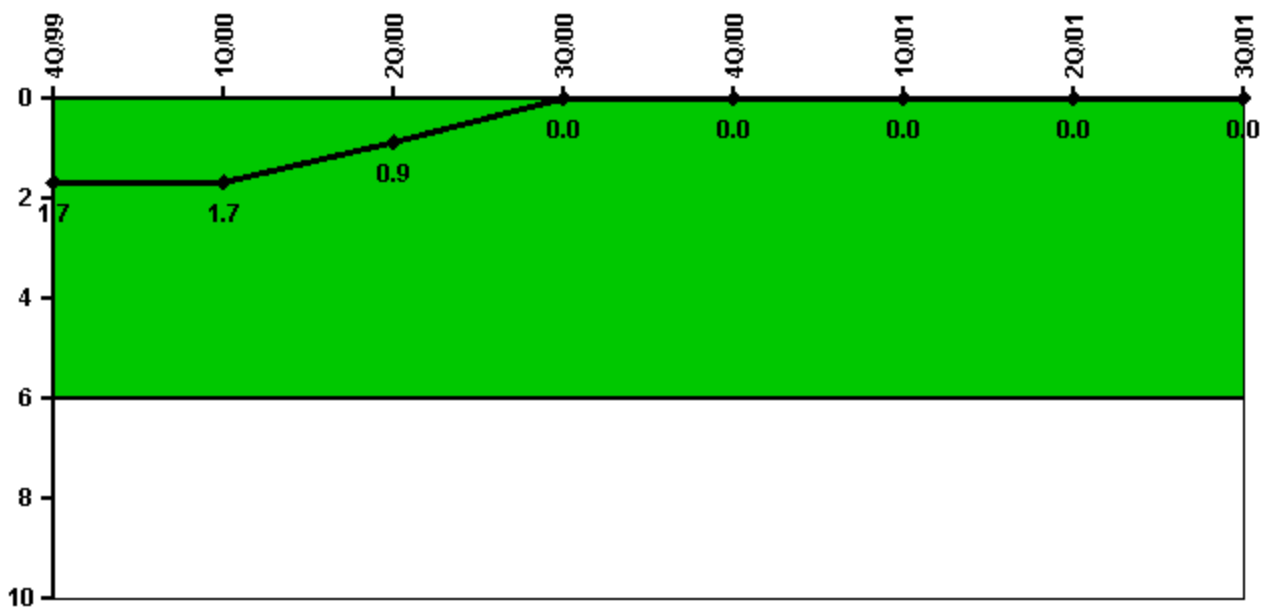
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



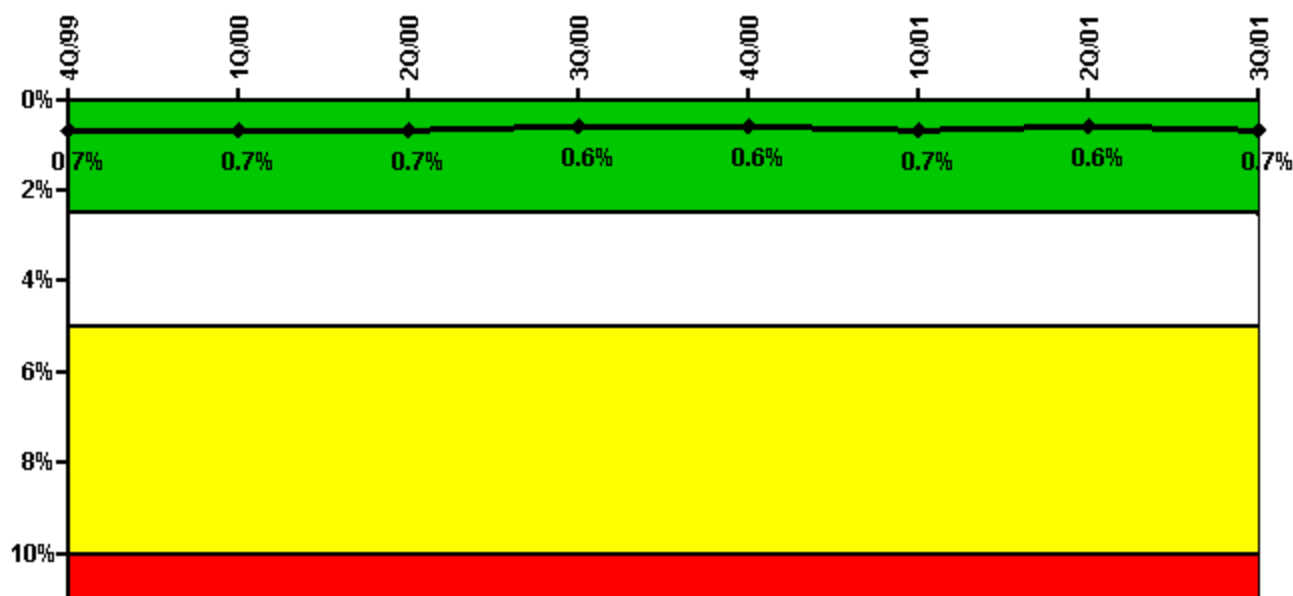
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	1650.1	2156.5	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0
Indicator value	1.7	1.7	0.9	0	0	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Train 1								
Planned unavailable hours	0	16.30	0	0	0.20	17.50	0	11.20
Unplanned unavailable hours	10.60	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	3.20	0	8.00	0.32	0	0	6.20	0
Unplanned unavailable hours	1.30	0	27.30	0	0	0	0	8.20
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	0.7%	0.7%	0.7%	0.6%	0.6%	0.7%	0.6%	0.7%

Licensee Comments:

3Q/01: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

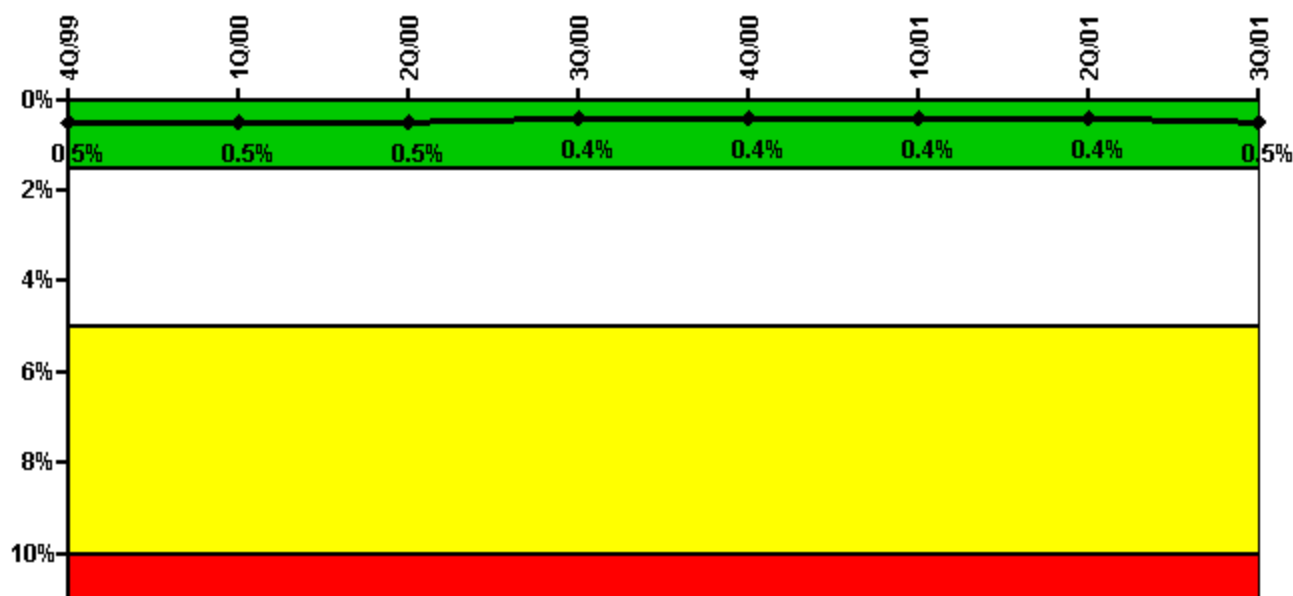
2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color

of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Train 1								
Planned unavailable hours	1.30	0.90	1.50	0.50	12.90	42.70	18.50	4.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00
Train 2								
Planned unavailable hours	2.00	1.40	0.90	1.10	0.40	13.93	0	17.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00
Train 3								
Planned unavailable hours	0	42.00	9.80	0	0	1.60	10.70	27.60
Unplanned unavailable hours	0	14.80	0	0	0	0	0	34.30
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0

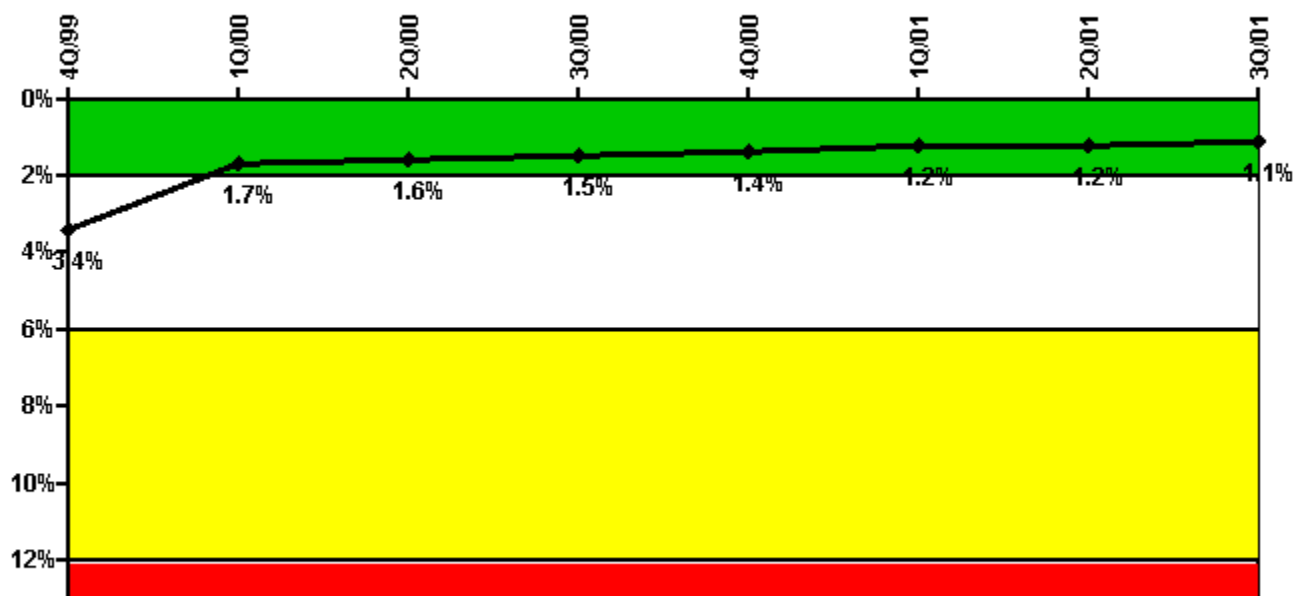
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00
Train 4								
Planned unavailable hours	0	0	0	0	19.40	9.18	0	0
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00
Indicator value	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%

Licensee Comments:

3Q/01: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the High Pressure Safety Injection system for Byron Unit 2. Data for the months of November 2000 and September 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the High Pressure Safety Injection system for Byron Unit 2. Data for the months of November 2000 and September 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Train 1								
Planned unavailable hours	10.50	24.00	1.80	1.80	2.40	2.70	1.80	2.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0

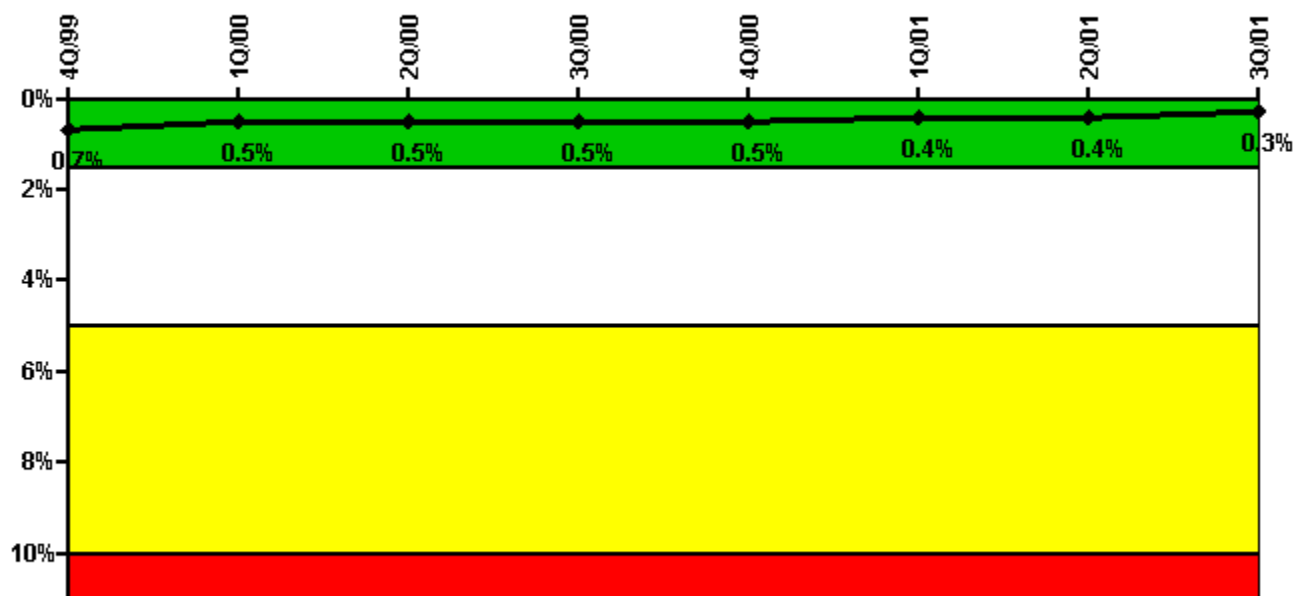
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00
Train 2								
Planned unavailable hours	20.30	23.70	4.40	1.80	2.00	2.70	17.10	3.40
Unplanned unavailable hours	10.40	0	0	0	0	0	0	0
Fault exposure hours	180.70	0	0	0	0	0	0	0
Effective Reset hours	0	872.60	0	0	0	0	0	0
Required hours	1650.07	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00
Indicator value	3.4%	1.7%	1.6%	1.5%	1.4%	1.2%	1.2%	1.1%

Licensee Comments: none

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Train 1								
Planned unavailable hours	5.40	2.40	8.50	0.40	44.00	0.30	3.00	0.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0

Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	2.30	2.10	2.60	1.30	0.60	1.12	1.00	0.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	0.7%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%

Licensee Comments:

1Q/01: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

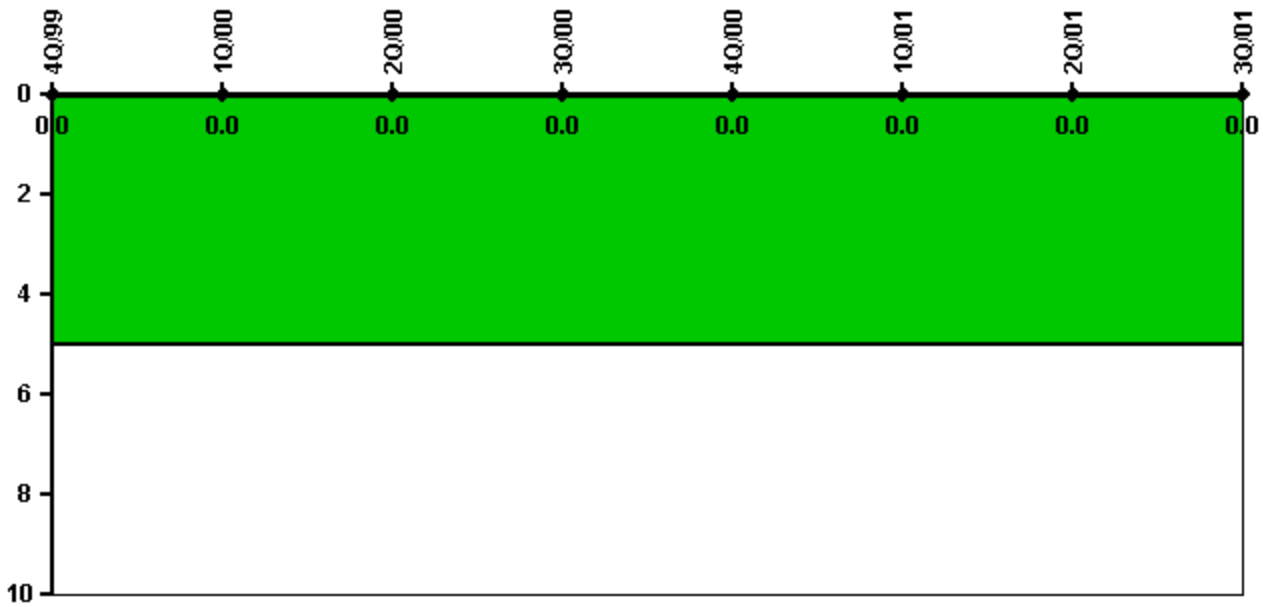
4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator. A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal system for Byron Unit 2. Data for the month of November 2000 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

3Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator.

Safety System Functional Failures (PWR)



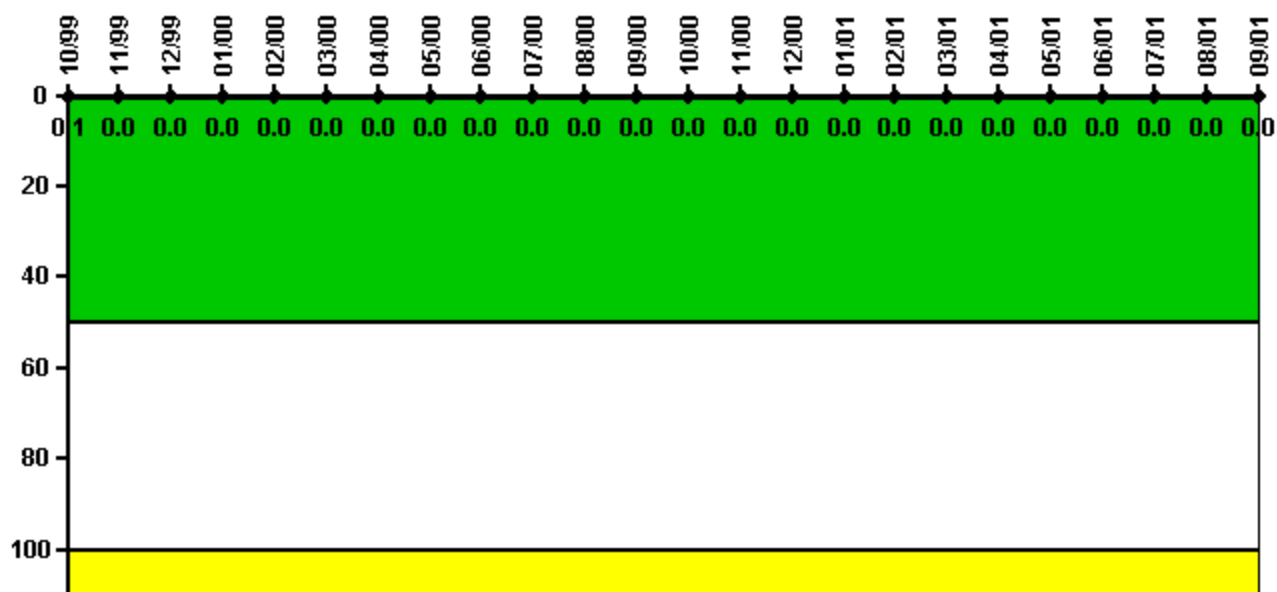
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

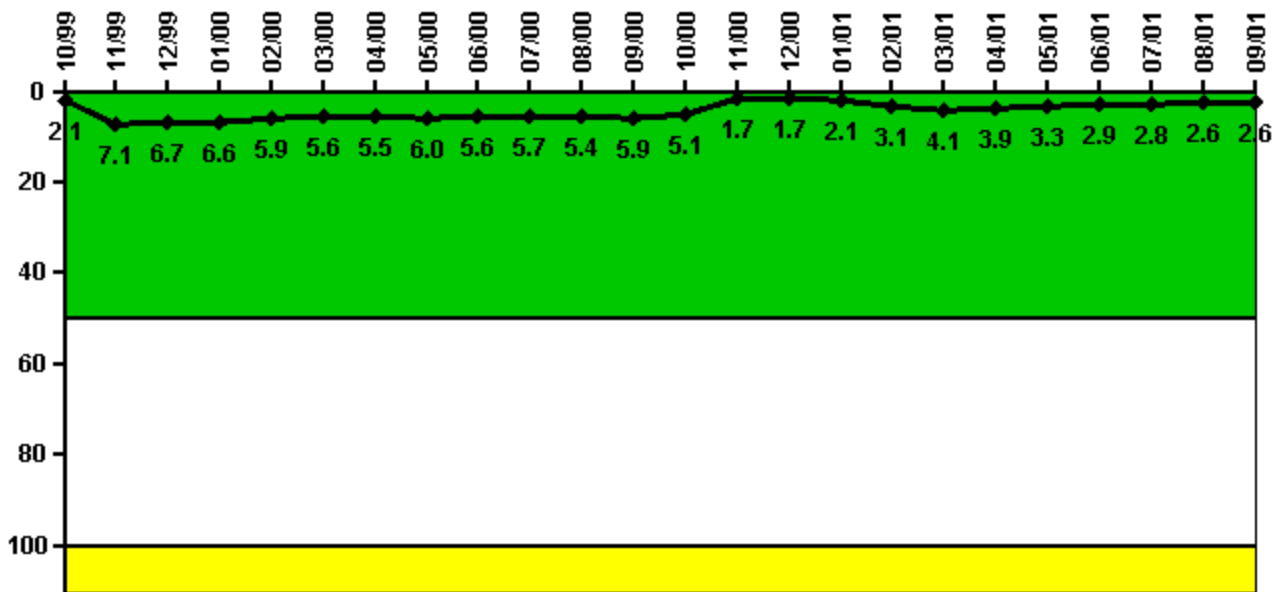
Notes

Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.000818	0.000196	0.000213	0.000231	0.000243	0.000263	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01
Maximum activity	0.000342	0.000372	0.000366	0.000366	0.000410	0.000438	0.000450	0.000250	0.000277	0.000313	0.000324	0.000337
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

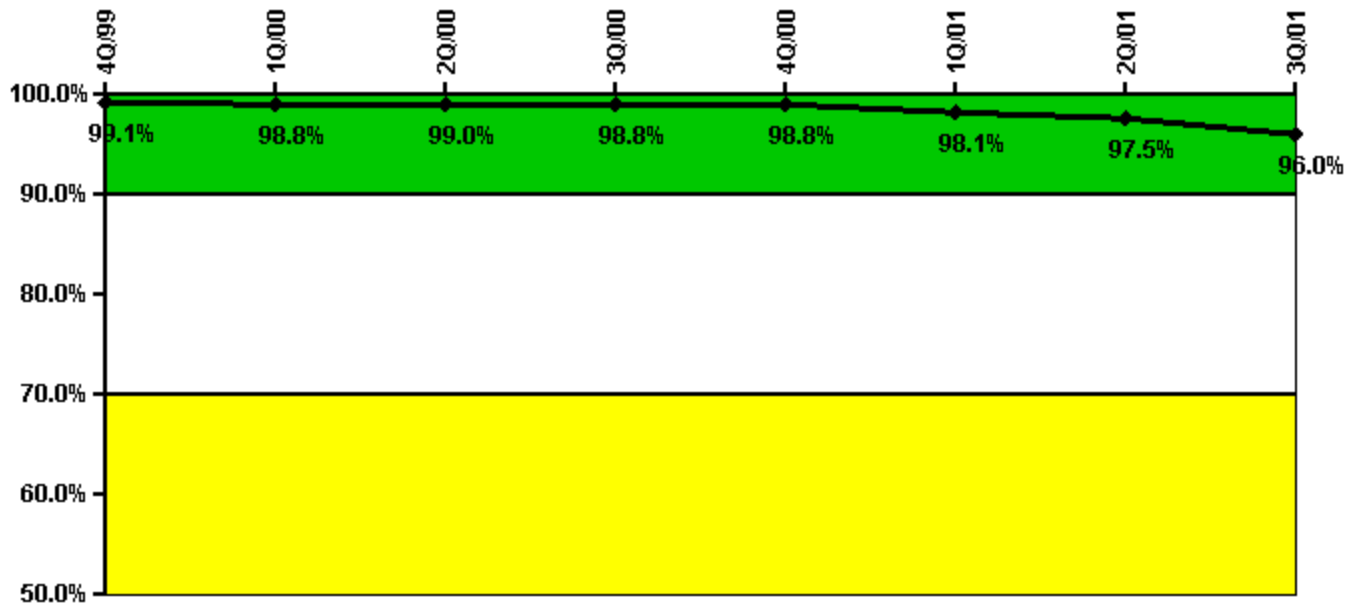
Notes

Reactor Coolant System Leakage	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum leakage	0.205	0.707	0.674	0.659	0.586	0.562	0.550	0.600	0.561	0.567	0.545	0.594
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.1	7.1	6.7	6.6	5.9	5.6	5.5	6.0	5.6	5.7	5.4	5.9

Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01
Maximum leakage	0.514	0.172	0.169	0.209	0.314	0.406	0.395	0.329	0.289	0.284	0.263	0.256
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	5.1	1.7	1.7	2.1	3.1	4.1	3.9	3.3	2.9	2.8	2.6	2.6

Licensee Comments: none

Drill/Exercise Performance



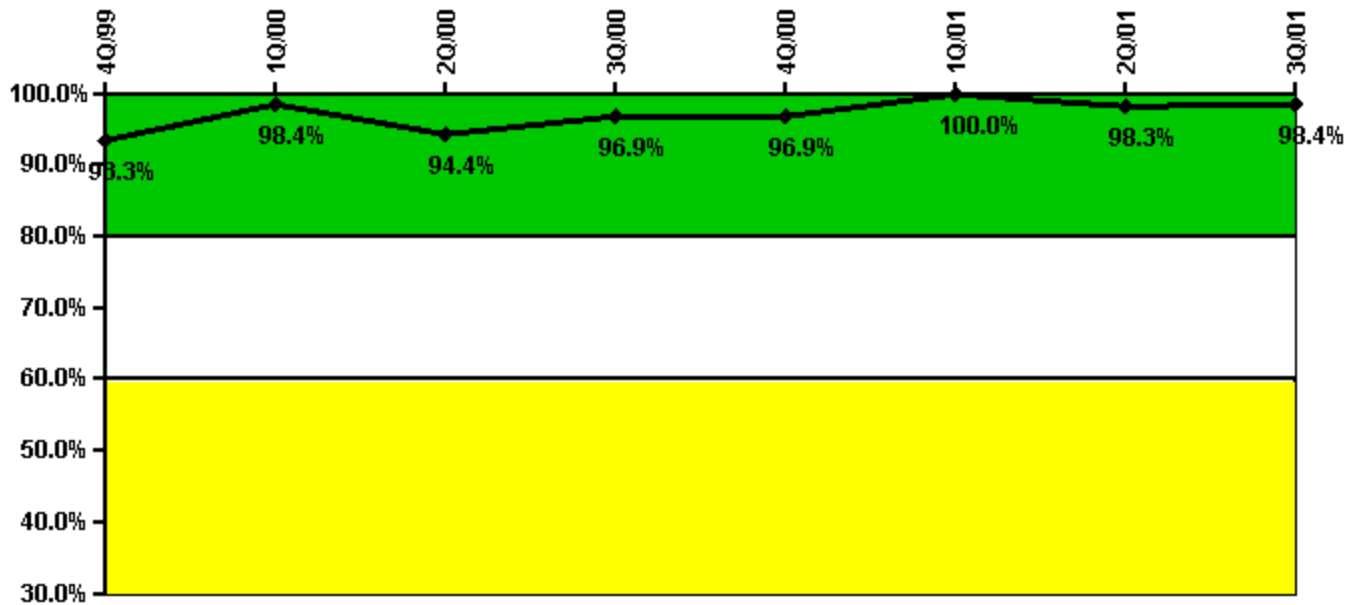
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Successful opportunities	4.0	63.0	30.0	49.0	0	14.0	0	31.0
Total opportunities	4.0	64.0	30.0	50.0	0	16.0	0	35.0
Indicator value	99.1%	98.8%	99.0%	98.8%	98.8%	98.1%	97.5%	96.0%

Licensee Comments: none

ERO Drill Participation



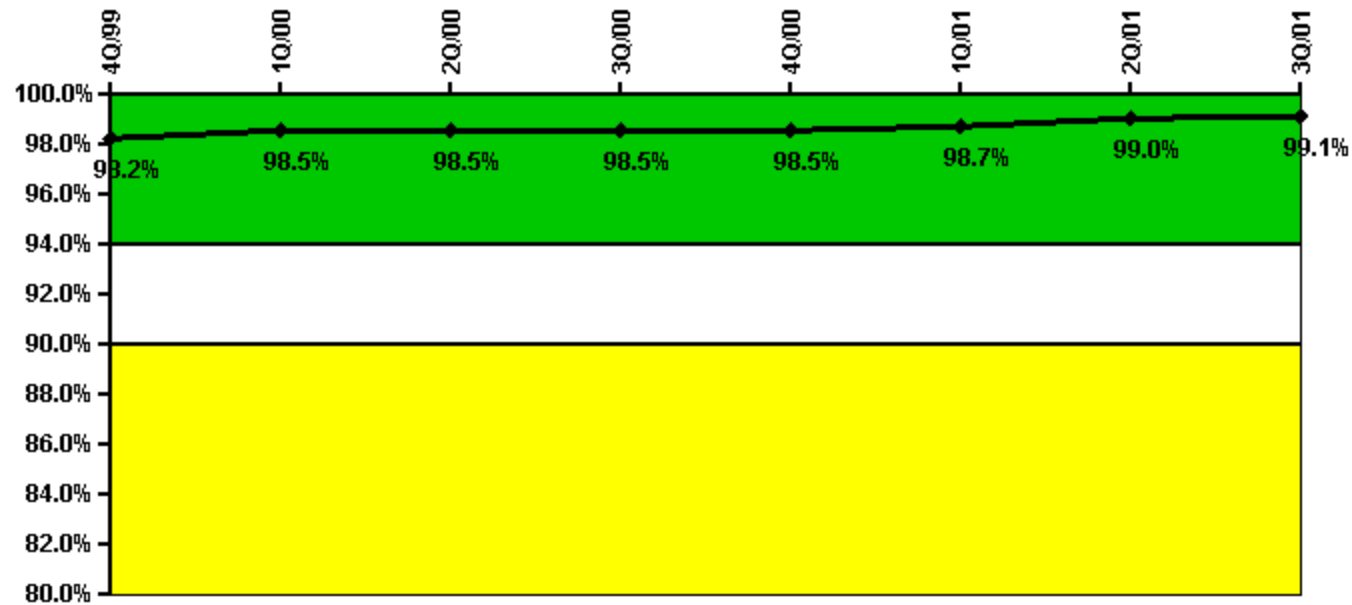
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Participating Key personnel	56.0	61.0	68.0	63.0	63.0	63.0	59.0	60.0
Total Key personnel	60.0	62.0	72.0	65.0	65.0	63.0	60.0	61.0
Indicator value	93.3%	98.4%	94.4%	96.9%	96.9%	100.0%	98.3%	98.4%

Licensee Comments: none

Alert & Notification System



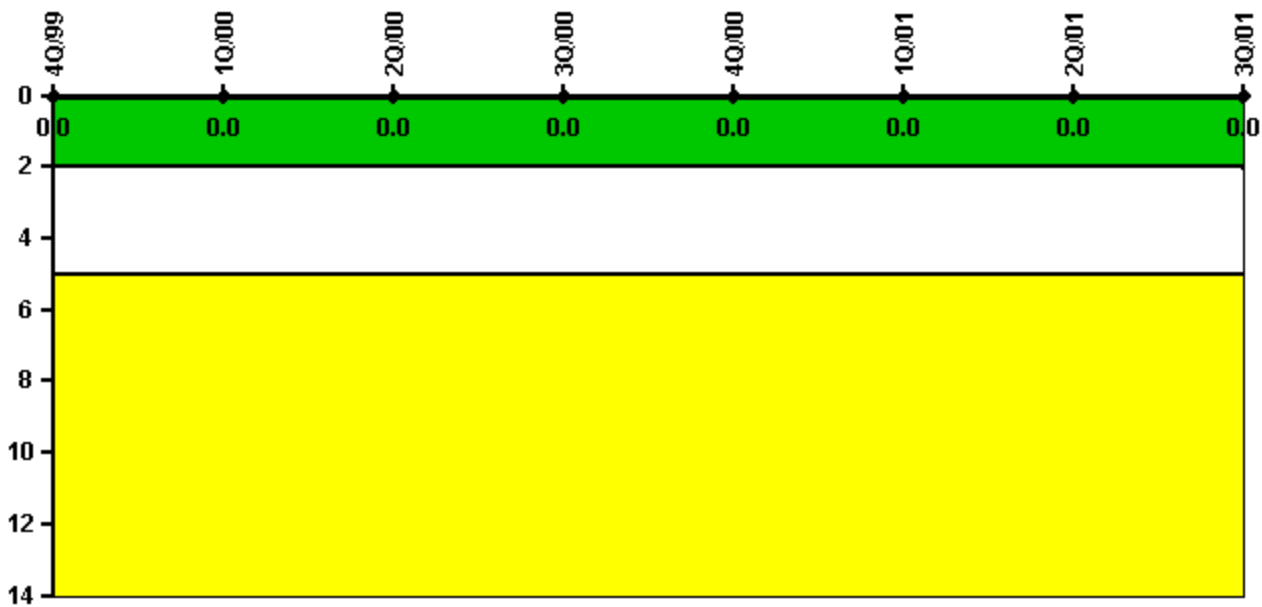
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Successful siren-tests	5883	6000	5915	5821	5864	5964	5978	5864
Total sirens-tests	5922	6110	6016	5922	5922	6016	6016	5922
Indicator value	98.2%	98.5%	98.5%	98.5%	98.5%	98.7%	99.0%	99.1%

Licensee Comments: none

Occupational Exposure Control Effectiveness



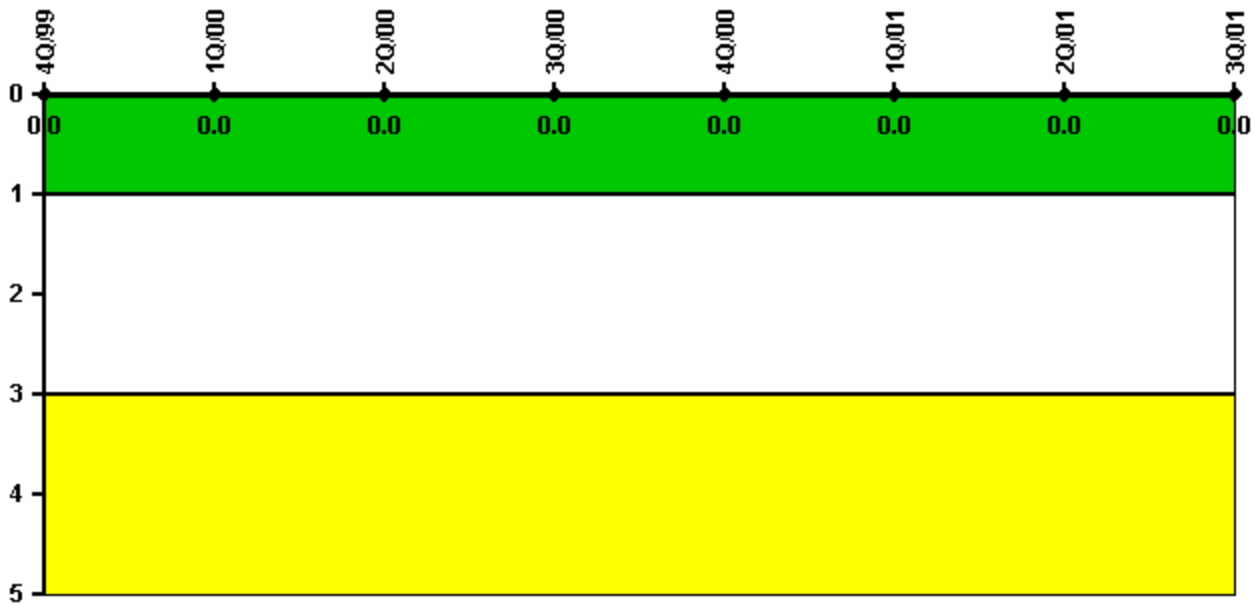
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



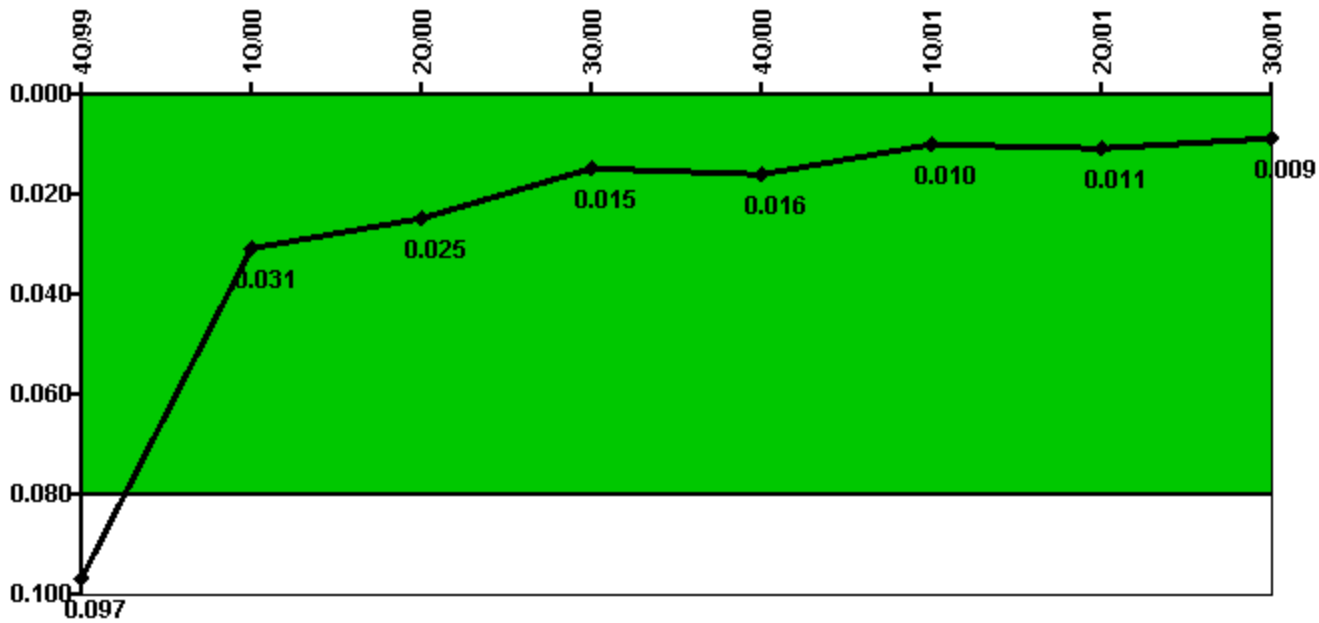
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



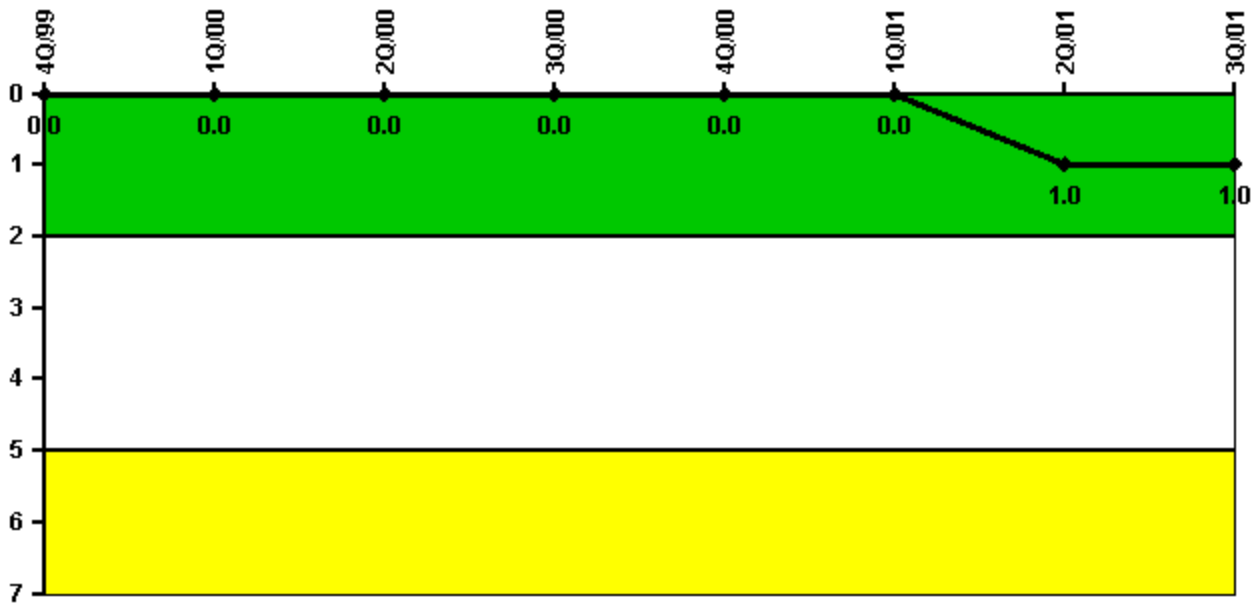
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
IDS compensatory hours	57.60	57.60	57.60	93.10	17.43	21.85	92.99	29.12
CCTV compensatory hours	6.5	67.8	6.8	0	37.5	2.6	0	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.097	0.031	0.025	0.015	0.016	0.010	0.011	0.009

Licensee Comments: none

Personnel Screening Program



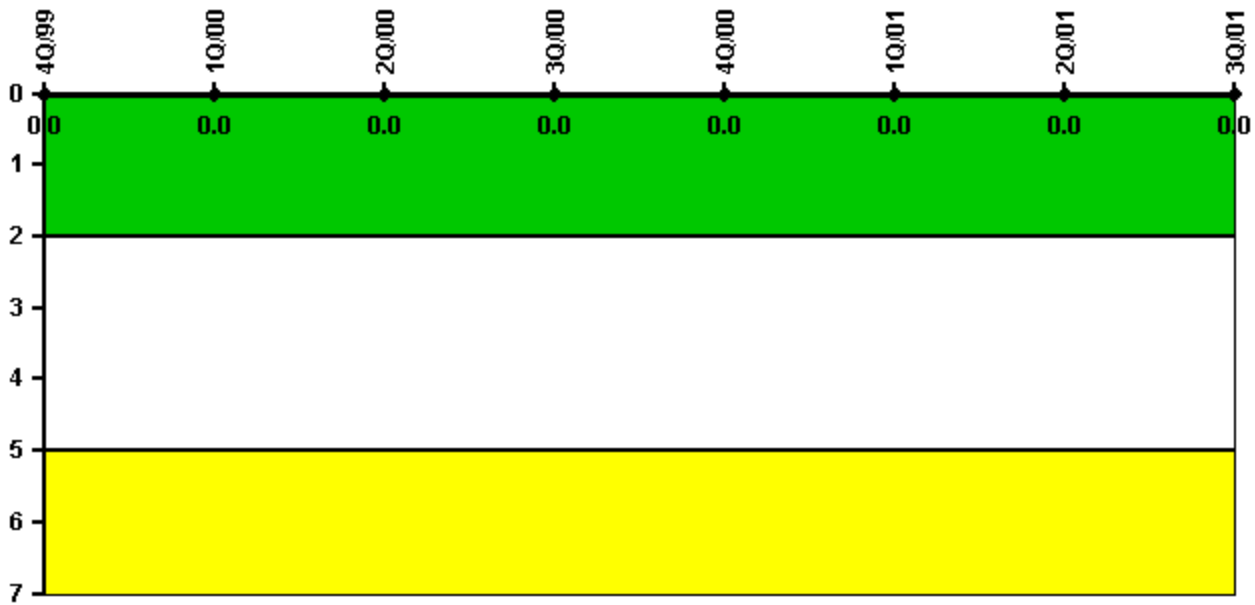
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Program failures	0	0	0	0	0	0	1	0
Indicator value	0	0	0	0	0	0	1	1

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Action Matrix Summary](#) | [Reactor Oversight Process](#)

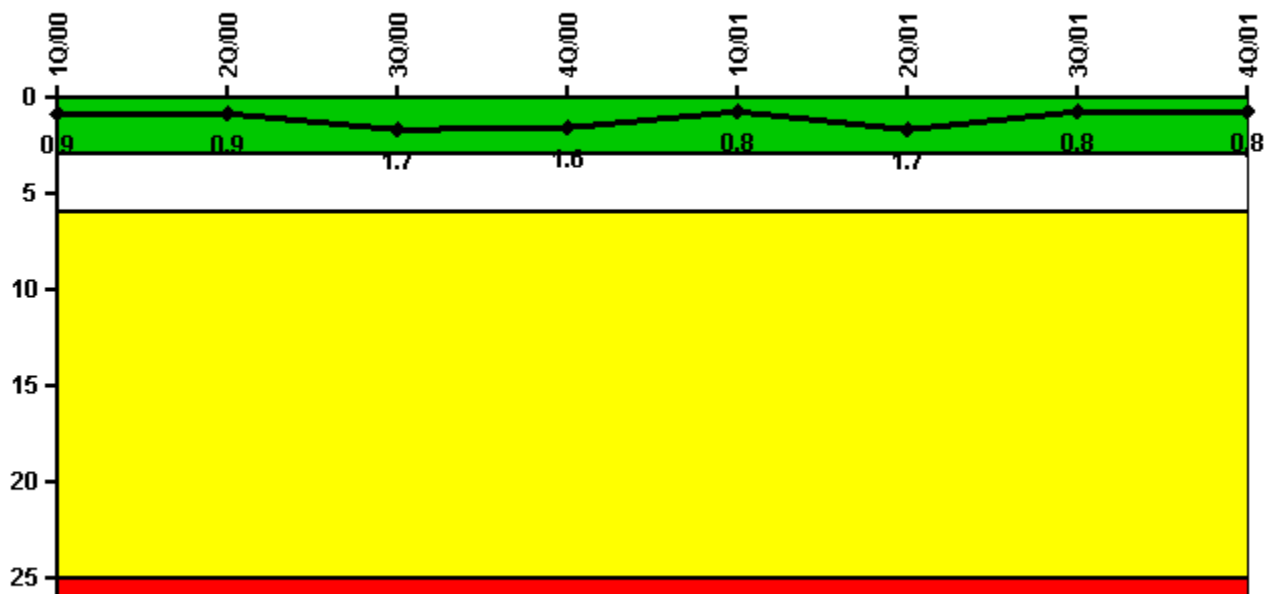
Last Modified: March 26, 2002

Byron 2

4Q/2001 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



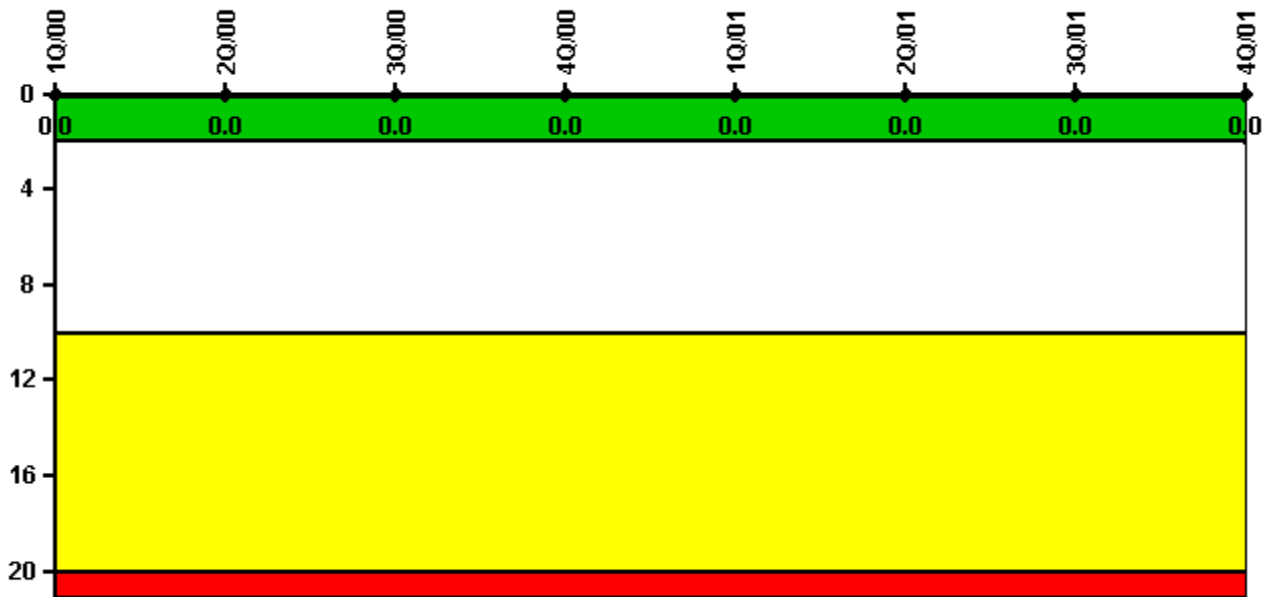
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Unplanned scrams	1.0	0	1.0	0	0	1.0	0	0
Critical hours	2156.5	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0
Indicator value	0.9	0.9	1.7	1.6	0.8	1.7	0.8	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



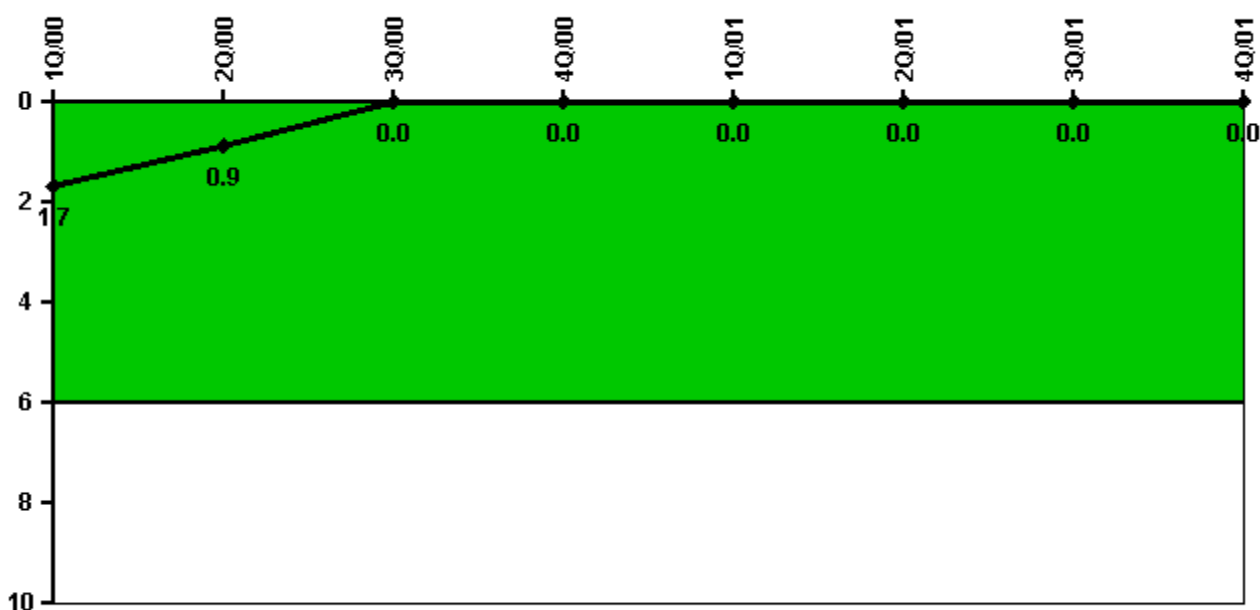
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

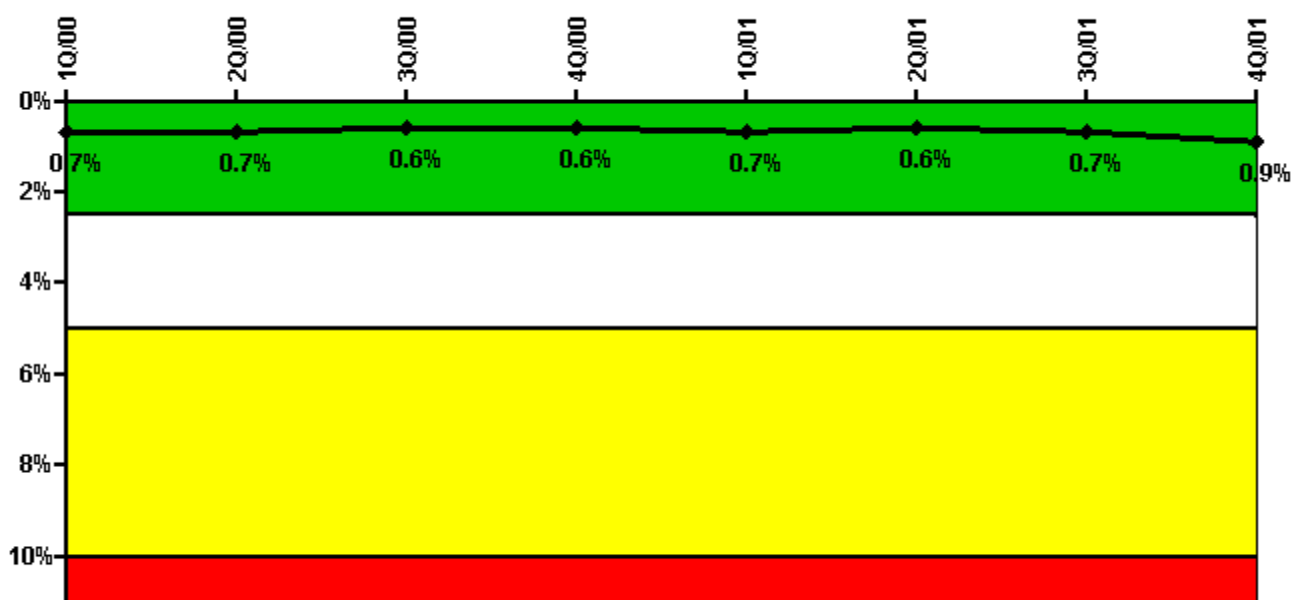
Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2156.5	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0
Indicator value	1.7	0.9	0	0	0	0	0	0

Licensee Comments:

4Q/01: For Byron Units 1 and 2, during September 2001, it was discovered that Main Steam Isolation Valves (MSIV) testing in Mode 3 had not been performed. A Notice of Enforcement Discretion (NOED) was requested and approved. No actual change in reactor power was initiated due to this condition. This event was not counted as an unplanned power change for September. The words in NEI 99-02 revision 1 don't support counting this event as an unplanned power change since no actual change in reactor power occurred. A Frequently Asked Question is being planned for submittal to request further clarification of this issue.

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Train 1								
Planned unavailable hours	16.30	0	0	0.20	17.50	0	11.20	11.80
Unplanned unavailable hours	0	0	0	0	0	0	0	87.50
Fault exposure hours	0	0	0	0	0	0	0	3.90
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	0	8.00	0.32	0	0	6.20	0	18.30
Unplanned unavailable hours	0	27.30	0	0	0	0	8.20	15.90
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.7%	0.7%	0.6%	0.6%	0.7%	0.6%	0.7%	0.9%

Licensee Comments:

4Q/01: Effective with 4th quarter 2001, Safety System Unavailability (SSU) time is being counted for affected systems (Emergency AC Power, High Pressure Safety Injection, Auxiliary Feedwater, and Residual Heat Removal) due to Solid State Protection System (SSPS) testing when an entire train of safety systems may have the automatic feature inhibited. Frequently Asked Question (FAQ) 290, which was posted in 4th quarter 2001, alludes to this. A follow-up FAQ is being planned for submittal to further clarify the intent of FAQ 290.

3Q/01: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

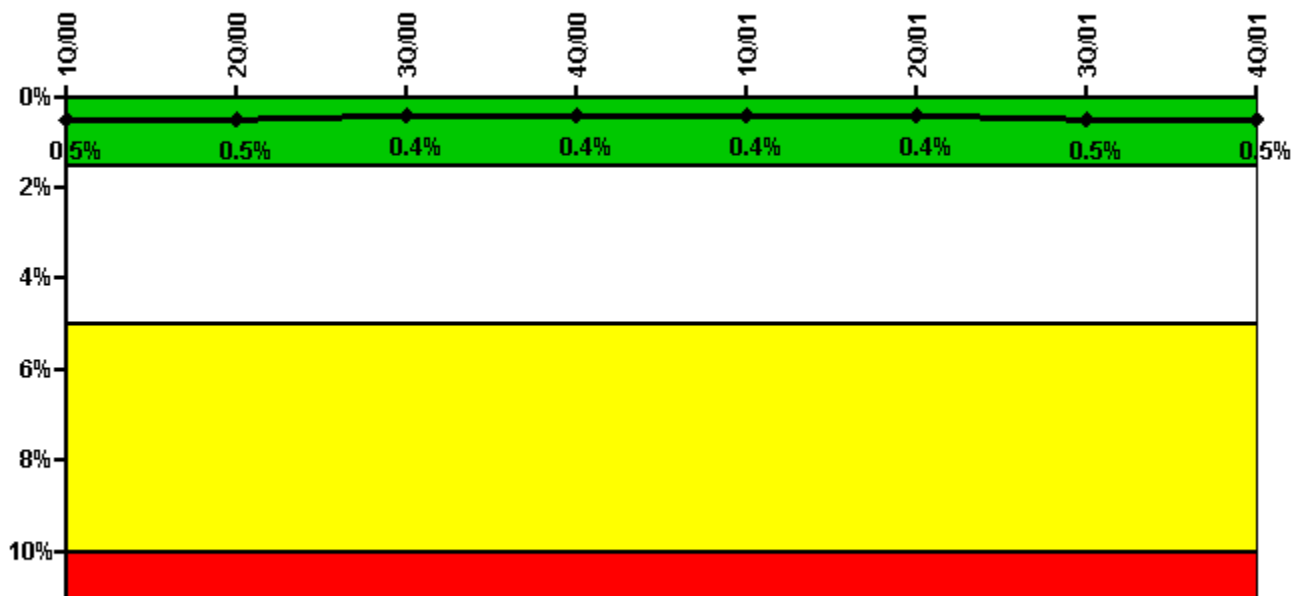
2Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the

Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White < 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Train 1								
Planned unavailable hours	0.90	1.50	0.50	12.90	42.70	18.50	4.80	10.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00
Train 2								
Planned unavailable hours	1.40	0.90	1.10	0.40	13.93	0	17.30	52.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00
Train 3								
Planned unavailable hours	42.00	9.80	0	0	1.60	10.70	27.60	2.90
Unplanned unavailable hours	14.80	0	0	0	0	0	34.30	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00
Train 4								
Planned unavailable hours	0	0	0	19.40	9.18	0	0	1.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00
Indicator value	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%

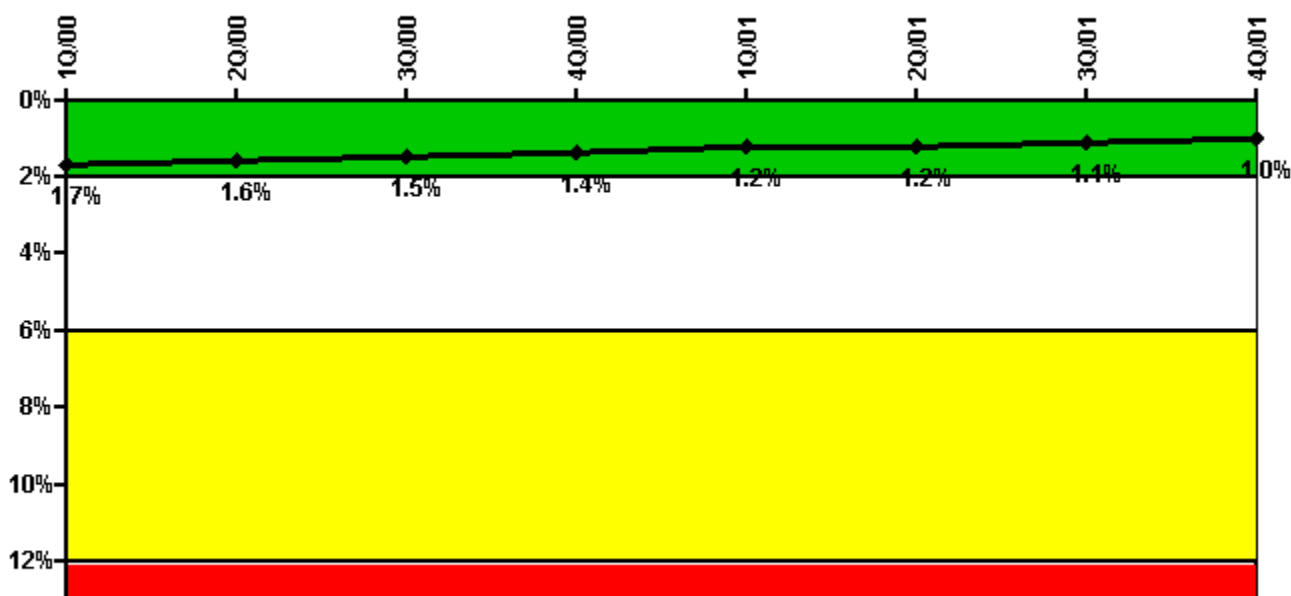
Licensee Comments:

4Q/01: Effective with 4th quarter 2001, Safety System Unavailability (SSU) time is being counted for affected systems (Emergency AC Power, High Pressure Safety Injection, Auxiliary Feedwater, and Residual Heat Removal) due to Solid State Protection System (SSPS) testing when an entire train of safety systems may have the automatic feature inhibited. Frequently Asked Question (FAQ) 290, which was posted in 4th quarter 2001, alludes to this. A follow-up FAQ is being planned for submittal to further clarify the intent of FAQ 290.

3Q/01: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the High Pressure Safety Injection system for Byron Unit 2. Data for the months of November 2000 and September 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the High Pressure Safety Injection system for Byron Unit 2. Data for the months of November 2000 and September 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Train 1								
Planned unavailable hours	24.00	1.80	1.80	2.40	2.70	1.80	2.20	4.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00
Train 2								
Planned unavailable hours	23.70	4.40	1.80	2.00	2.70	17.10	3.40	3.50
Unplanned unavailable hours	0	0	0	0	0	0	0	1.40
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	872.60	0	0	0	0	0	0	0
Required hours	2156.48	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00
Indicator value	1.7%	1.6%	1.5%	1.4%	1.2%	1.2%	1.1%	1.0%

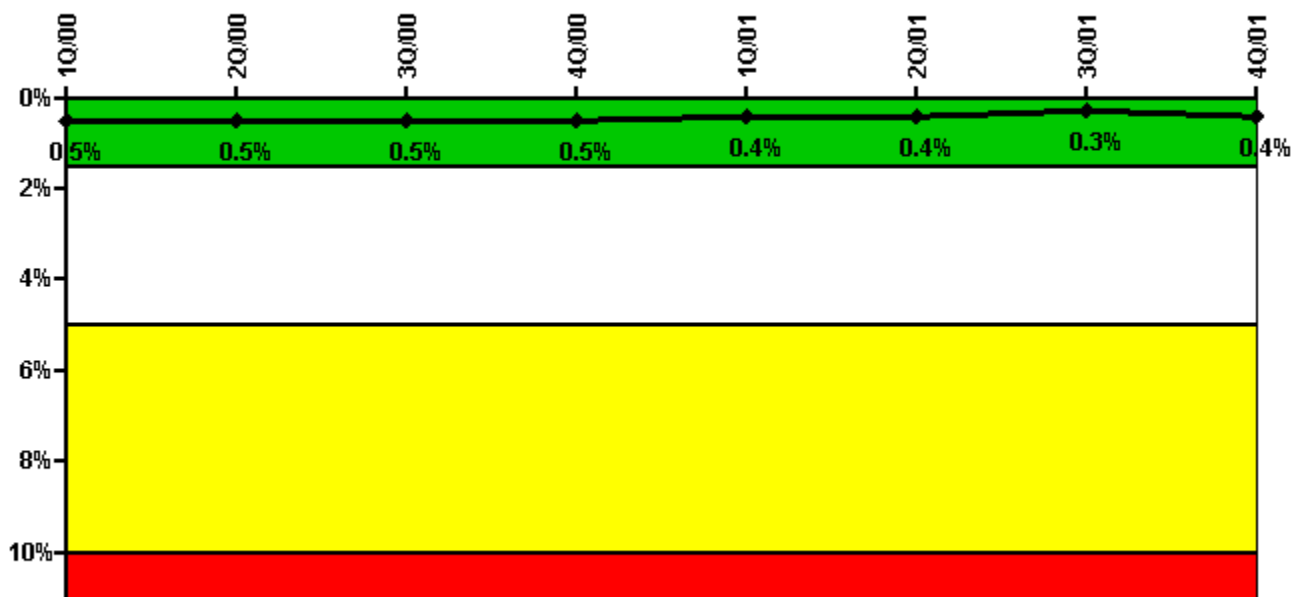
Licensee Comments:

4Q/01: Effective with 4th quarter 2001, Safety System Unavailability (SSU) time is being counted for affected systems (Emergency AC Power, High Pressure Safety Injection, Auxiliary Feedwater, and Residual Heat Removal) due to Solid State Protection System (SSPS) testing when an entire train of safety systems may have the automatic feature inhibited. Frequently Asked Question (FAQ) 290, which was posted in 4th quarter 2001, alludes to this. A follow-up FAQ is being planned for submittal to further clarify the intent of FAQ 290.

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

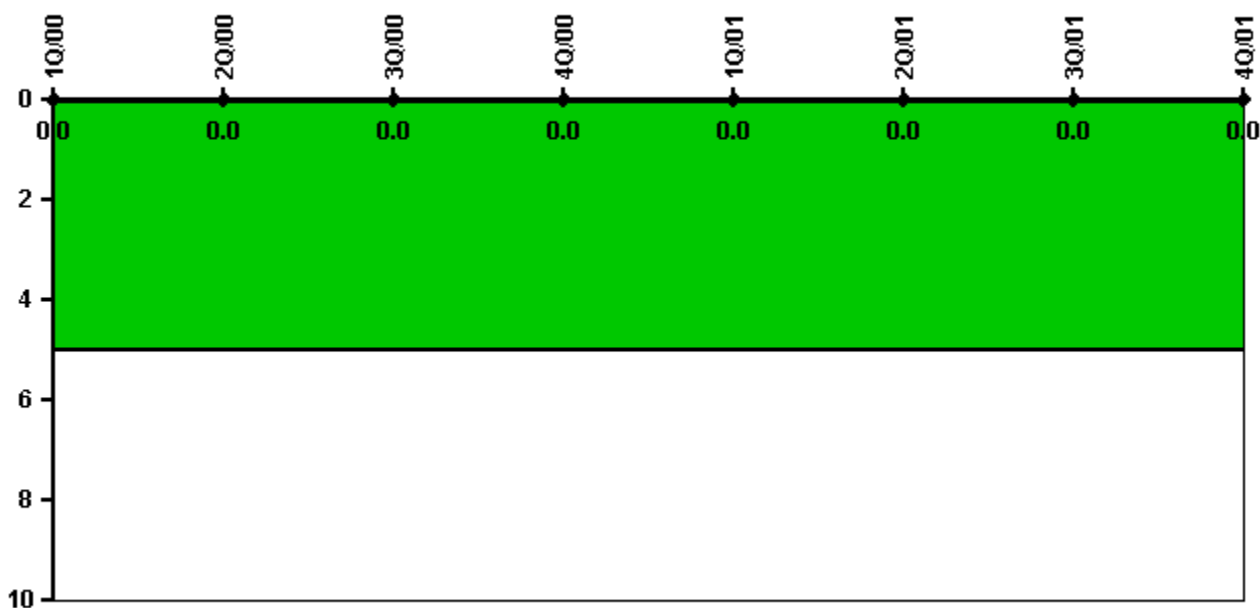
Safety System Unavailability, Residual Heat Removal System	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Train 1								
Planned unavailable hours	2.40	8.50	0.40	44.00	0.30	3.00	0.40	2.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	2.10	2.60	1.30	0.60	1.12	1.00	0.50	13.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%	0.4%

Licensee Comments:

4Q/01: Effective with 4th quarter 2001, Safety System Unavailability (SSU) time is being counted for affected systems (Emergency AC Power, High Pressure Safety Injection, Auxiliary Feedwater, and Residual Heat Removal) due to Solid State Protection System (SSPS) testing when an entire train of safety systems may have the automatic feature inhibited. Frequently Asked Question (FAQ) 290, which was posted in 4th quarter 2001, alludes to this. A follow-up FAQ is being planned for submittal to further clarify the intent of FAQ 290.

4Q/00: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal (RHR) System for Byron Unit 2. An incorrect value for May 2000 for Unit 2 B RHR train was previously reported. Additionally, Unit 2 RHR system data for the months of May 2000, July 2000, August 2000, September 2000, October 2000, and January 2001 was revised as appropriate for consistency with FAQ 152 which was posted on 4-1-00 and remained in place through 6-30-01. The change to the data does not affect the color of the indicator. A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Residual Heat Removal system for Byron Unit 2. Data for the month of November 2000 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

Safety System Functional Failures (PWR)



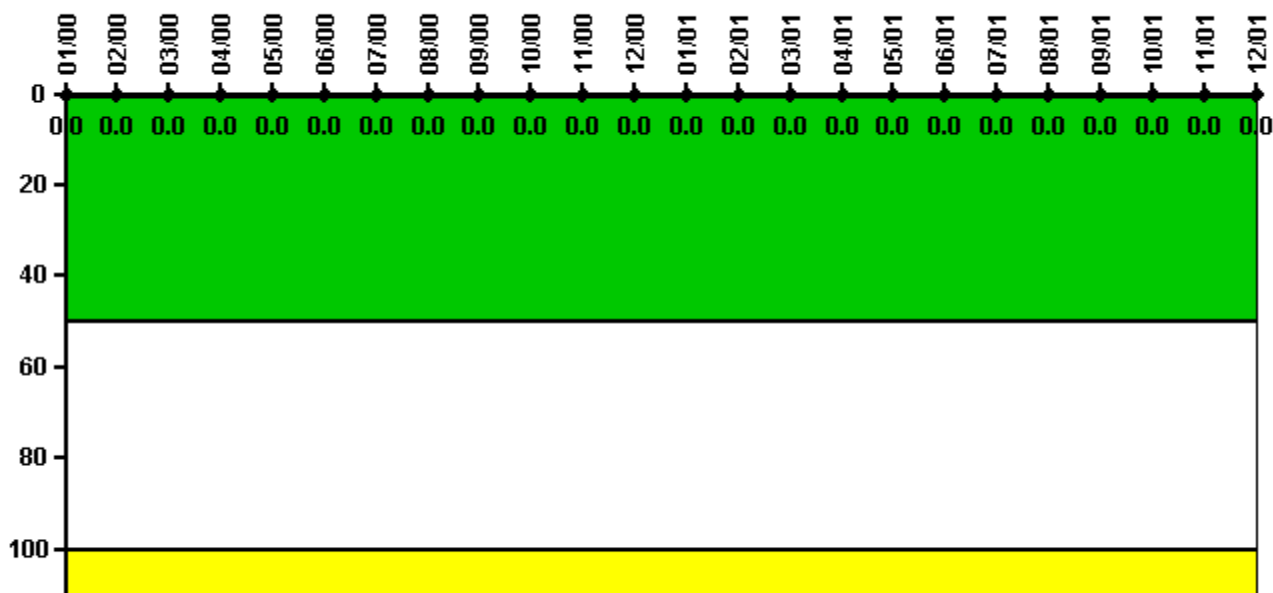
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

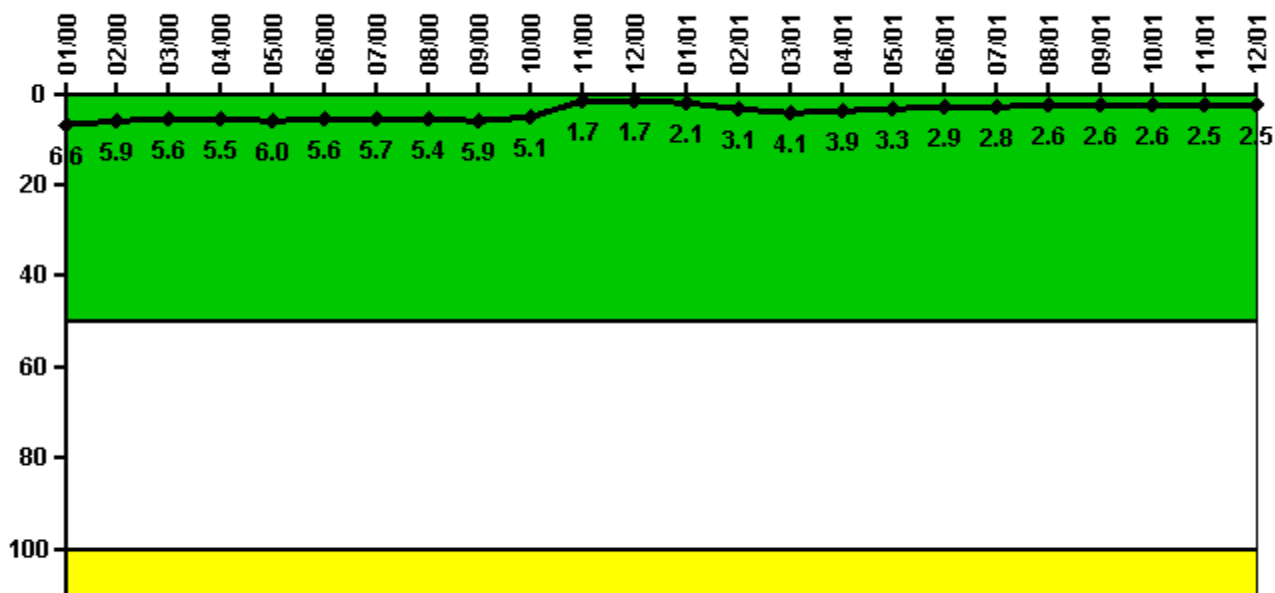
Notes

Reactor Coolant System Activity	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00
Maximum activity	0.000231	0.000243	0.000263	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354	0.000342	0.000372	0.000366
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum activity	0.000366	0.000410	0.000438	0.000450	0.000250	0.000277	0.000313	0.000324	0.000337	0.000351	0.000428	0.000393
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

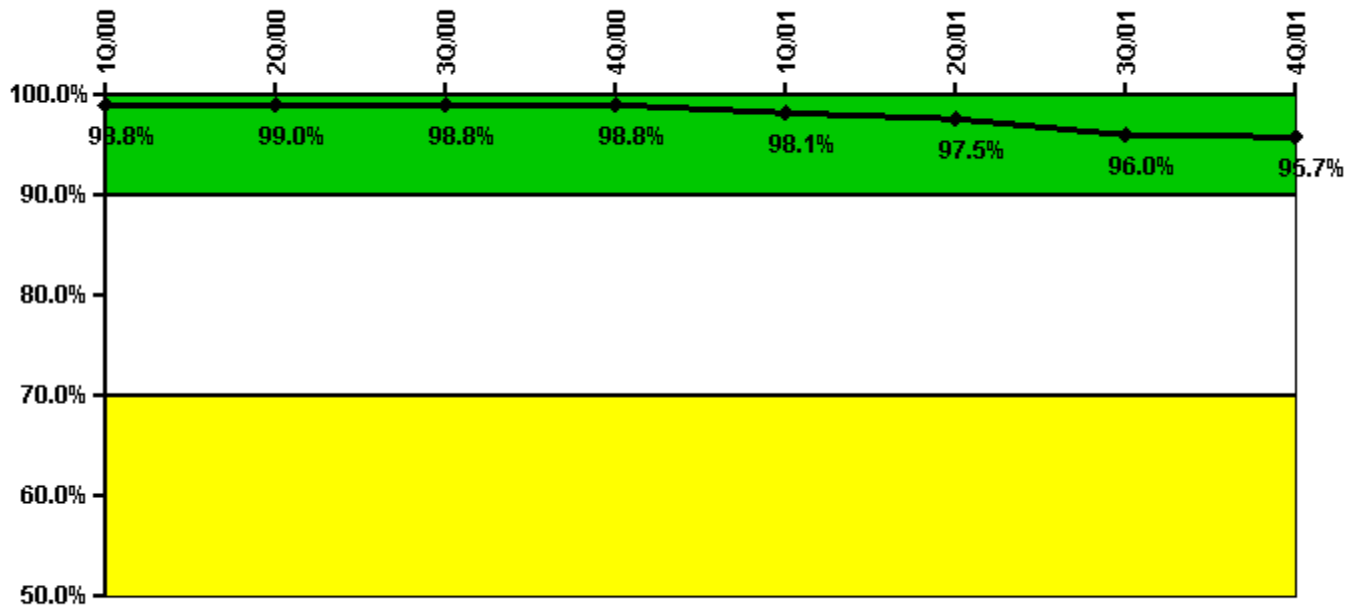
Notes

Reactor Coolant System Leakage	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00
Maximum leakage	0.659	0.586	0.562	0.550	0.600	0.561	0.567	0.545	0.594	0.514	0.172	0.169
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	6.6	5.9	5.6	5.5	6.0	5.6	5.7	5.4	5.9	5.1	1.7	1.7

Reactor Coolant System Leakage	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum leakage	0.209	0.314	0.406	0.395	0.329	0.289	0.284	0.263	0.256	0.259	0.250	0.252
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.1	3.1	4.1	3.9	3.3	2.9	2.8	2.6	2.6	2.6	2.5	2.5

Licensee Comments: none

Drill/Exercise Performance



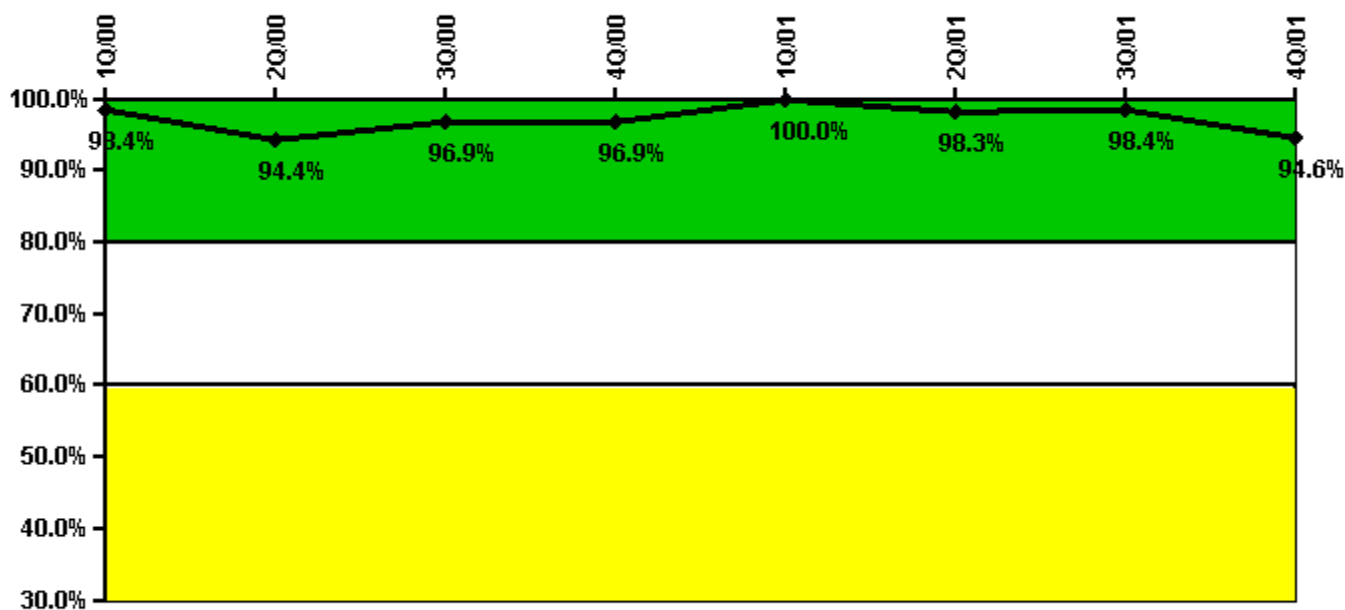
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Successful opportunities	63.0	30.0	49.0	0	14.0	0	31.0	38.0
Total opportunities	64.0	30.0	50.0	0	16.0	0	35.0	40.0
Indicator value	98.8%	99.0%	98.8%	98.8%	98.1%	97.5%	96.0%	95.7%

Licensee Comments: none

ERO Drill Participation



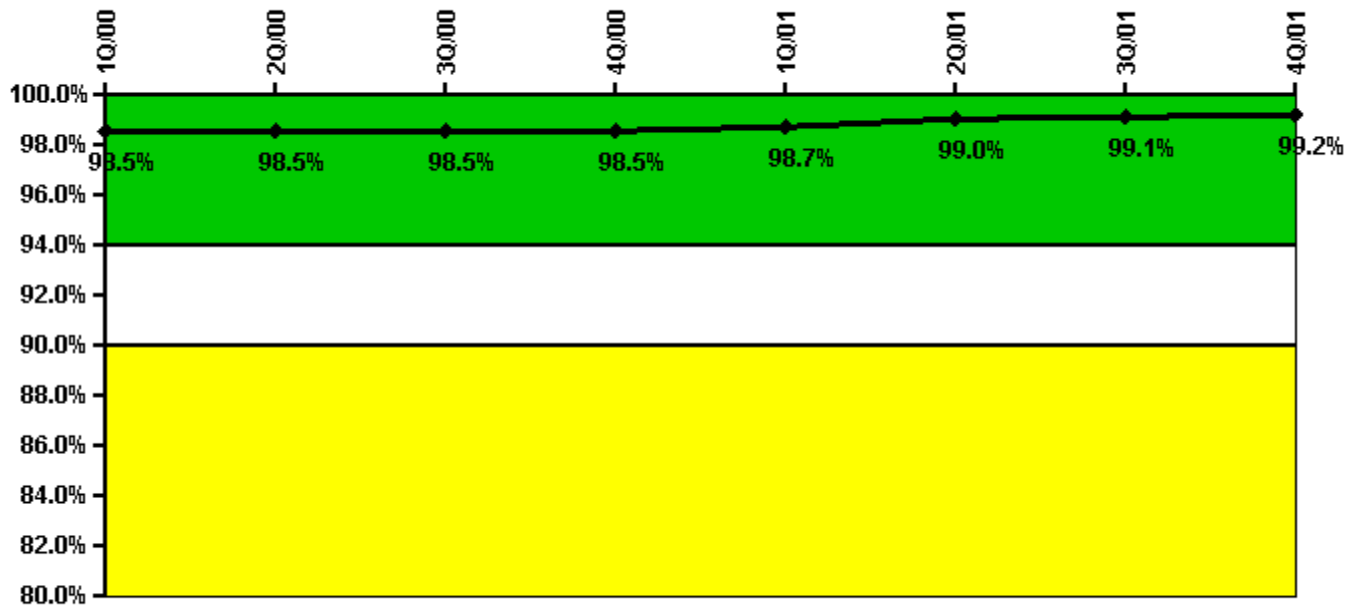
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Participating Key personnel	61.0	68.0	63.0	63.0	63.0	59.0	60.0	53.0
Total Key personnel	62.0	72.0	65.0	65.0	63.0	60.0	61.0	56.0
Indicator value	98.4%	94.4%	96.9%	96.9%	100.0%	98.3%	98.4%	94.6%

Licensee Comments: none

Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Successful siren-tests	6000	5915	5821	5864	5964	5978	5864	5872
Total sirens-tests	6110	6016	5922	5922	6016	6016	5922	5922
Indicator value	98.5%	98.5%	98.5%	98.5%	98.7%	99.0%	99.1%	99.2%

Licensee Comments: none

Occupational Exposure Control Effectiveness

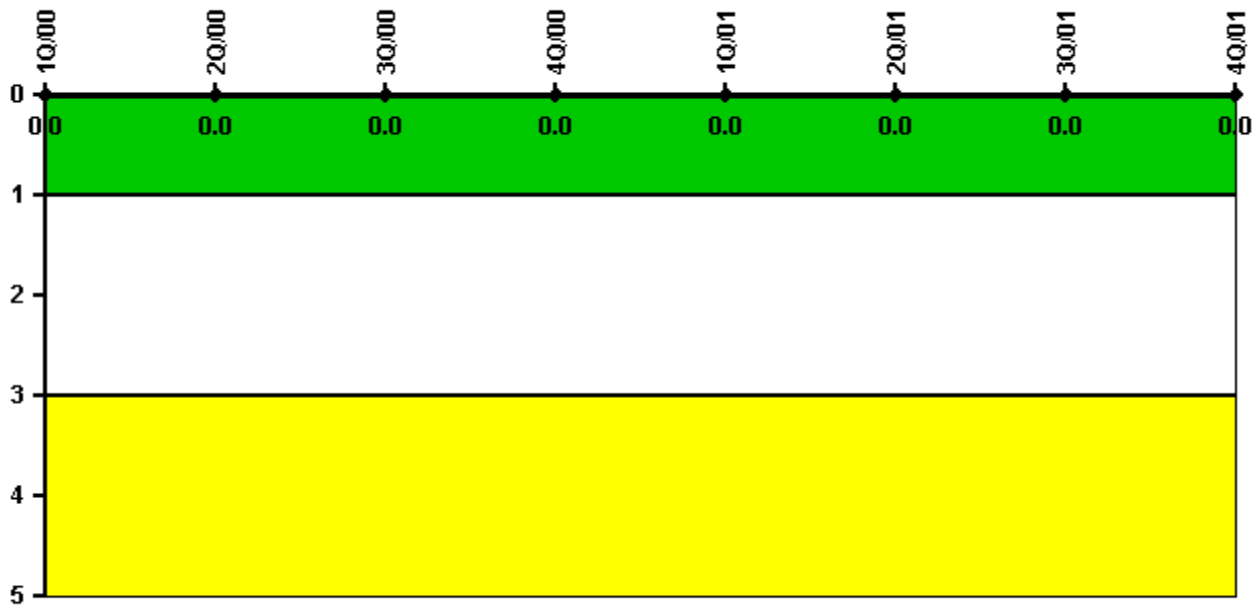


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

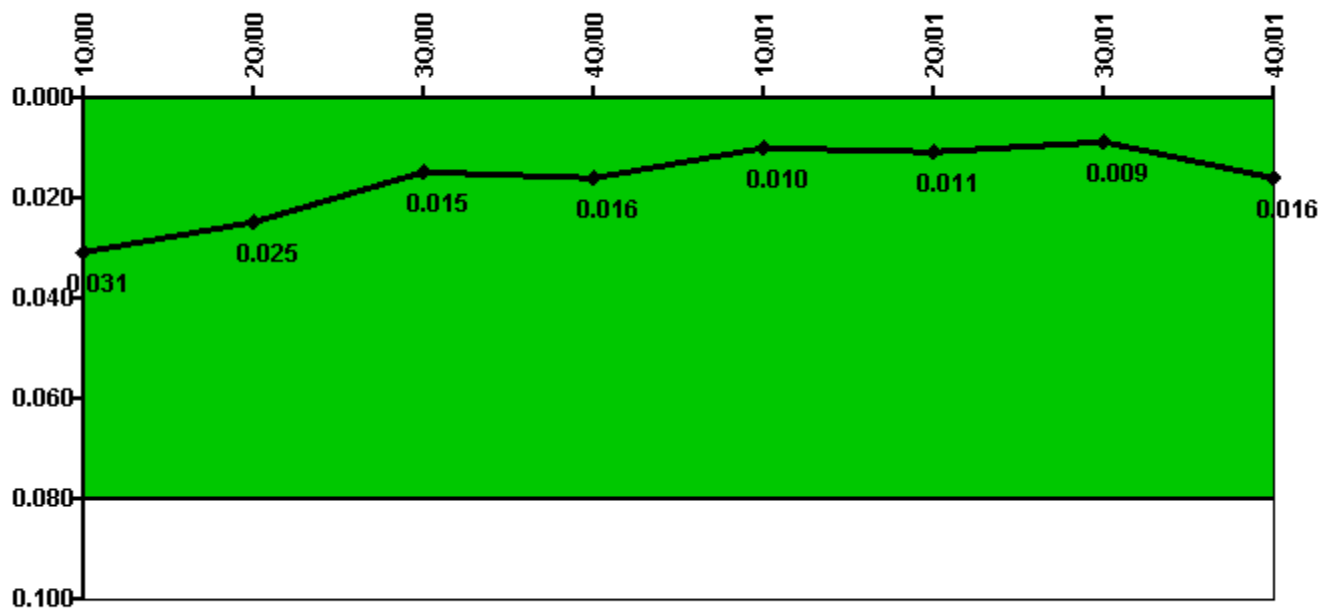
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



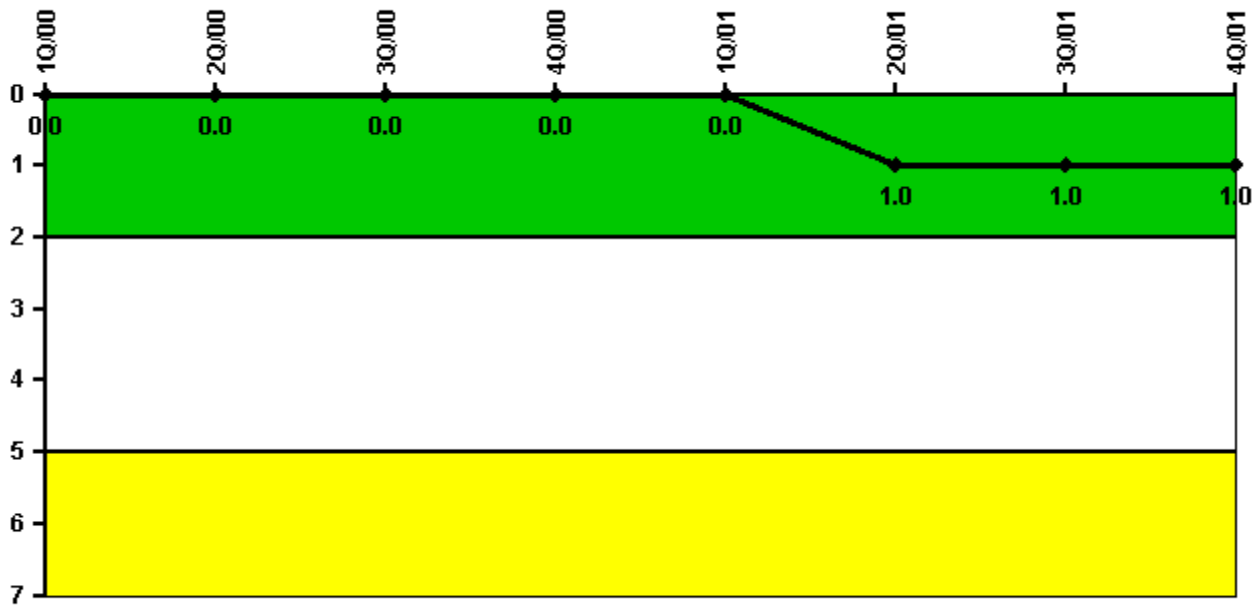
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
IDS compensatory hours	57.60	57.60	93.10	17.43	21.85	92.99	29.12	247.72
CCTV compensatory hours	67.8	6.8	0	37.5	2.6	0	0	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.031	0.025	0.015	0.016	0.010	0.011	0.009	0.016

Licensee Comments: none

Personnel Screening Program



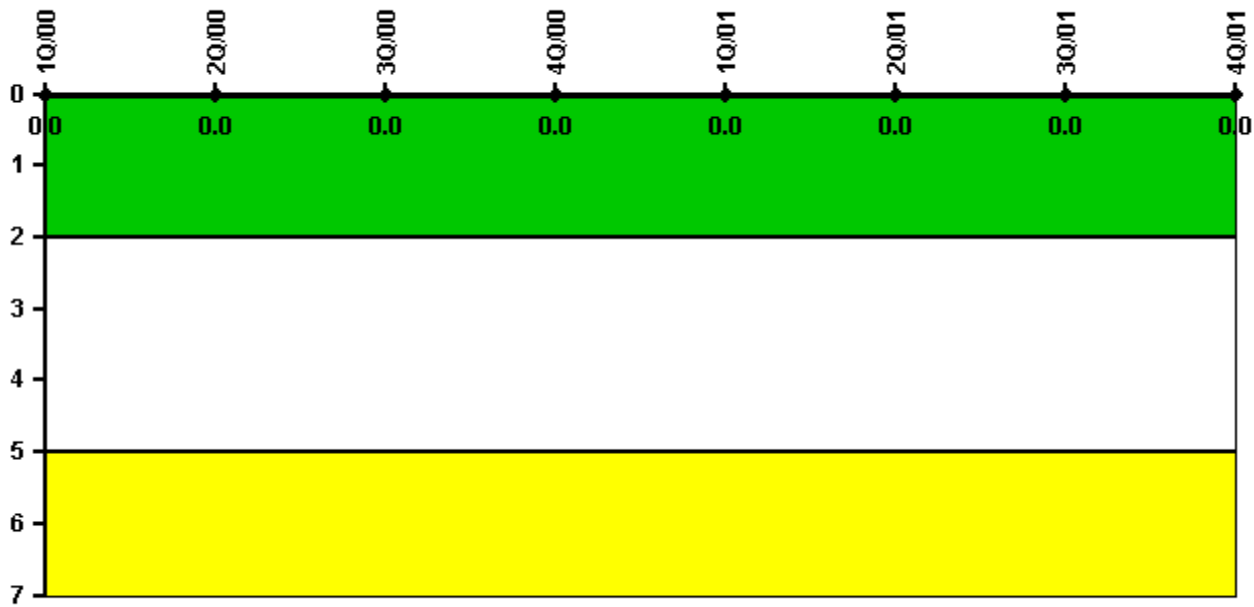
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Program failures	0	0	0	0	0	1	0	0
Indicator value	0	0	0	0	0	1	1	1

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Action Matrix Summary](#) | [Reactor Oversight Process](#)

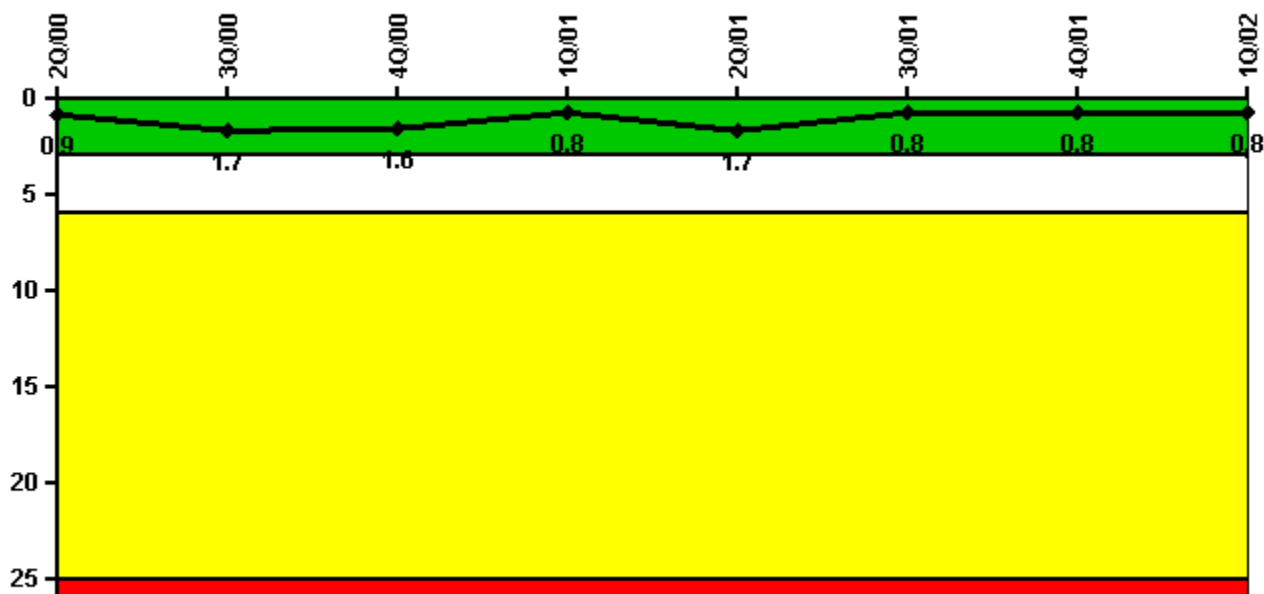
Last Modified: March 15, 2002

Byron 2

1Q/2002 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Unplanned scrams	0	1.0	0	0	1.0	0	0	0
Critical hours	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0
Indicator value	0.9	1.7	1.6	0.8	1.7	0.8	0.8	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



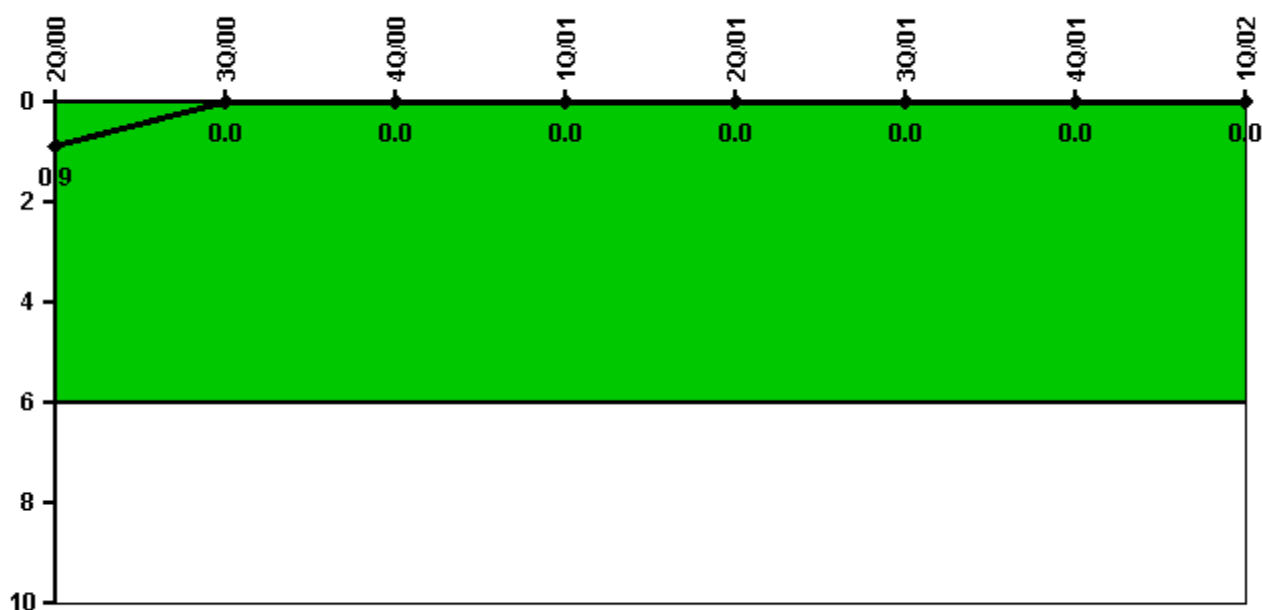
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

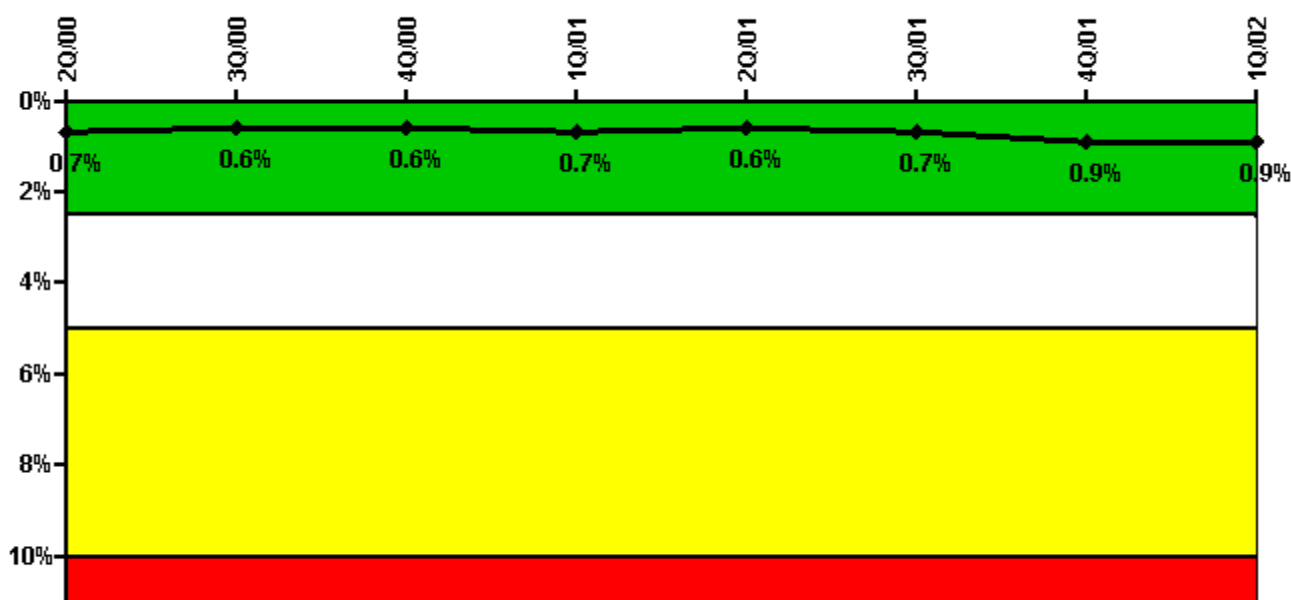
Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0
Indicator value	0.9	0	0	0	0	0	0	0

Licensee Comments:

1Q/02: During submittal of fourth quarter 2001 performance indicator (PI) data, a supporting comment was provided for the Unplanned Power Changes per 7000 Critical Hours PI and mentioned a request for and approval of a Notice of Enforcement Discretion (NOED) for Byron Units 1 and 2 during September 2001. The NOED addressed Main Steam Isolation Valves (MSIV) testing in Mode 3 that had not been performed. If the NRC had not granted the NOED, this may have resulted in an unplanned power change on the units involved. The condition was not counted as an unplanned power change during the third quarter because no actual change in reactor power occurred due to this condition. This is consistent with the response to Frequently Asked Question # 305 on this same topic, which was posted on March 21, 2002.

Safety System Unavailability, Emergency AC Power



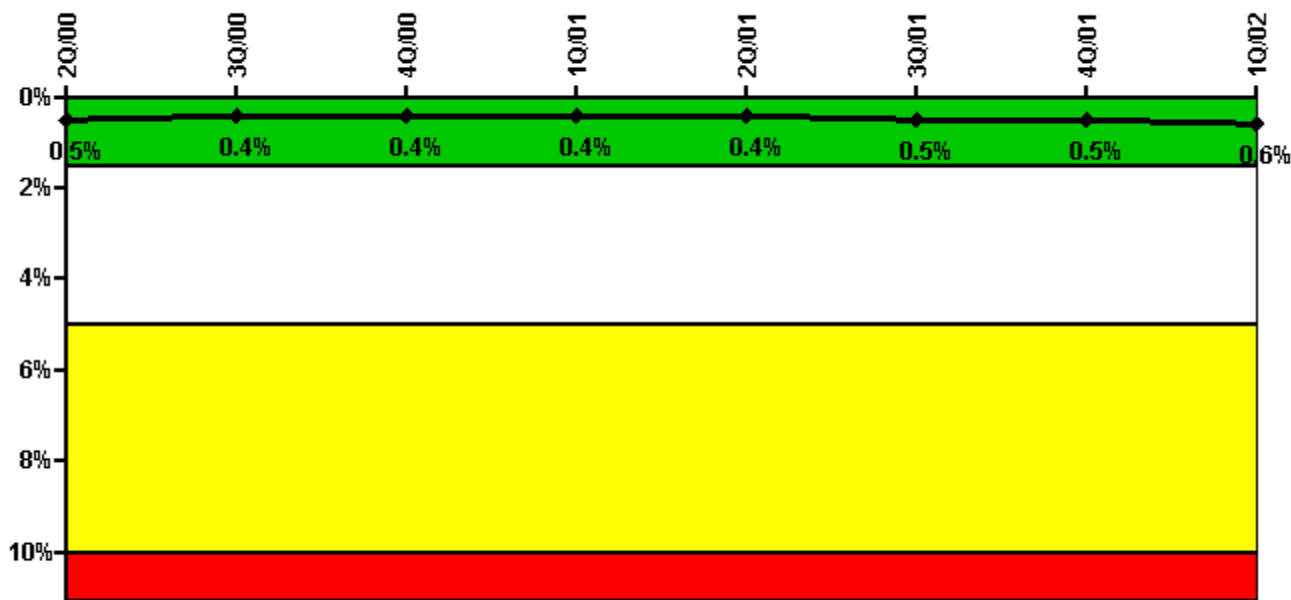
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	0	0	0.20	17.50	0	11.20	11.80	7.80
Unplanned unavailable hours	0	0	0	0	0	0	87.50	0
Fault exposure hours	0	0	0	0	0	0	3.90	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	8.00	0.32	0	0	6.20	0	18.30	17.60
Unplanned unavailable hours	27.30	0	0	0	0	8.20	15.90	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.7%	0.6%	0.6%	0.7%	0.6%	0.7%	0.9%	0.9%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



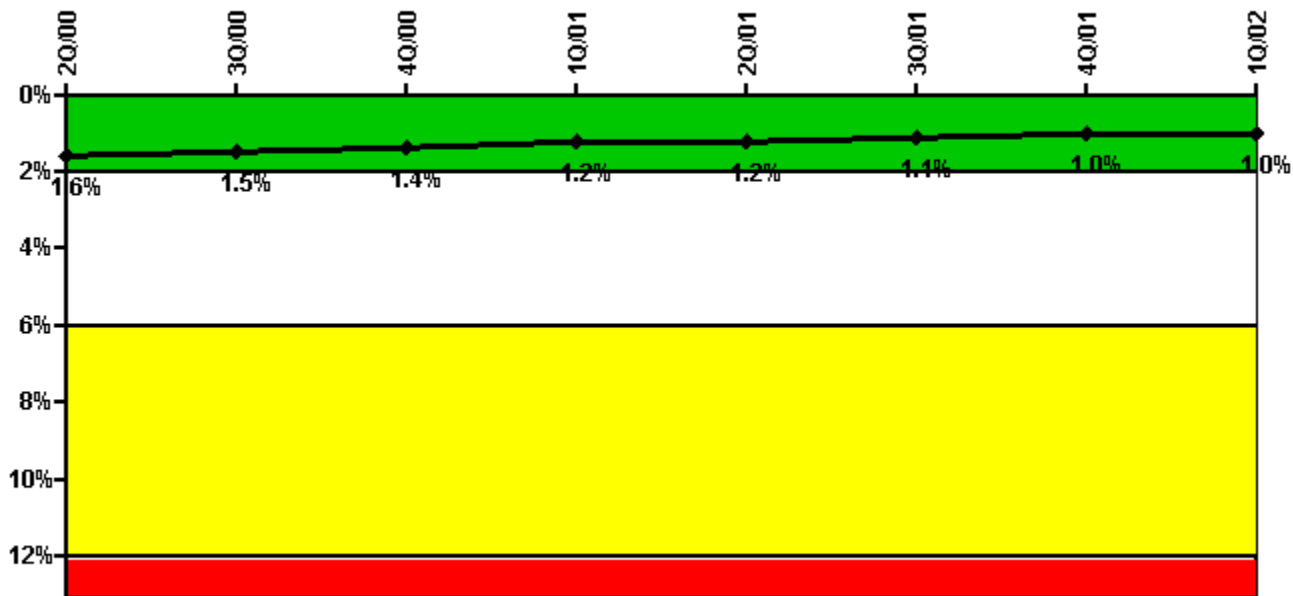
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	1.50	0.50	12.90	42.70	18.50	4.80	10.90	22.00
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	0.90	1.10	0.40	13.93	0	17.30	52.20	3.00
Unplanned unavailable hours	0	0	0	0	0	0	0	64.80
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 3								
Planned unavailable hours	9.80	0	0	1.60	10.70	27.60	2.90	1.20
Unplanned unavailable hours	0	0	0	0	0	34.30	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 4								
Planned unavailable hours	0	0	19.40	9.18	0	0	1.60	3.00
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Indicator value	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.6%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



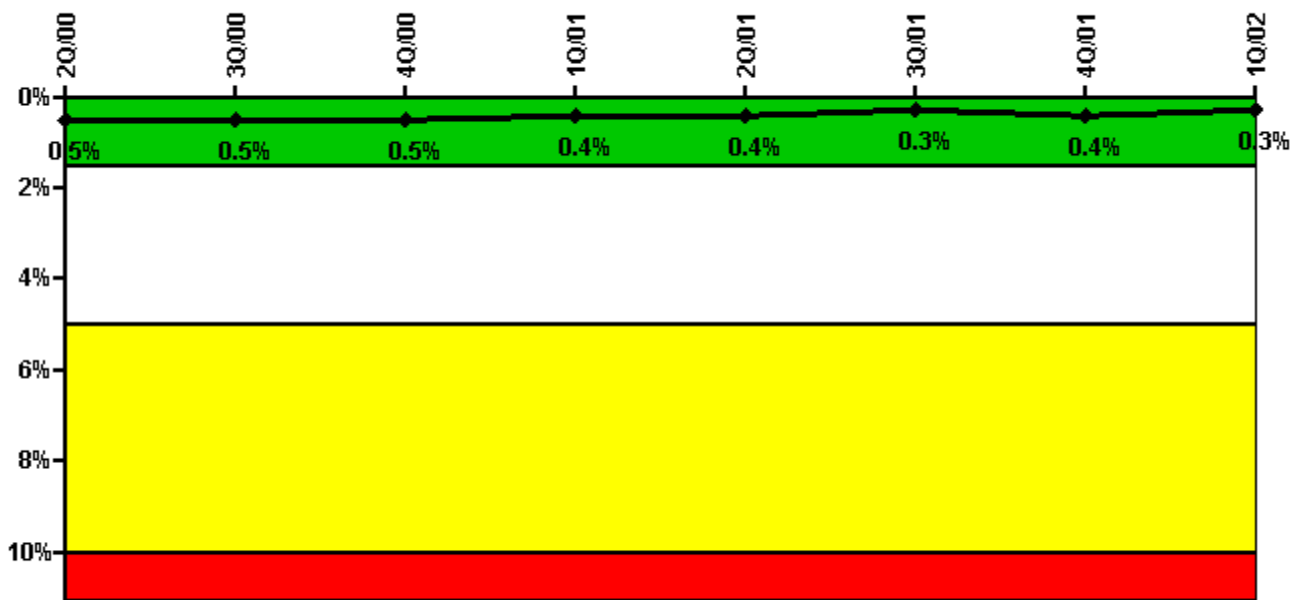
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	1.80	1.80	2.40	2.70	1.80	2.20	4.80	2.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	4.40	1.80	2.00	2.70	17.10	3.40	3.50	32.20
Unplanned unavailable hours	0	0	0	0	0	0	1.40	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Indicator value	1.6%	1.5%	1.4%	1.2%	1.2%	1.1%	1.0%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



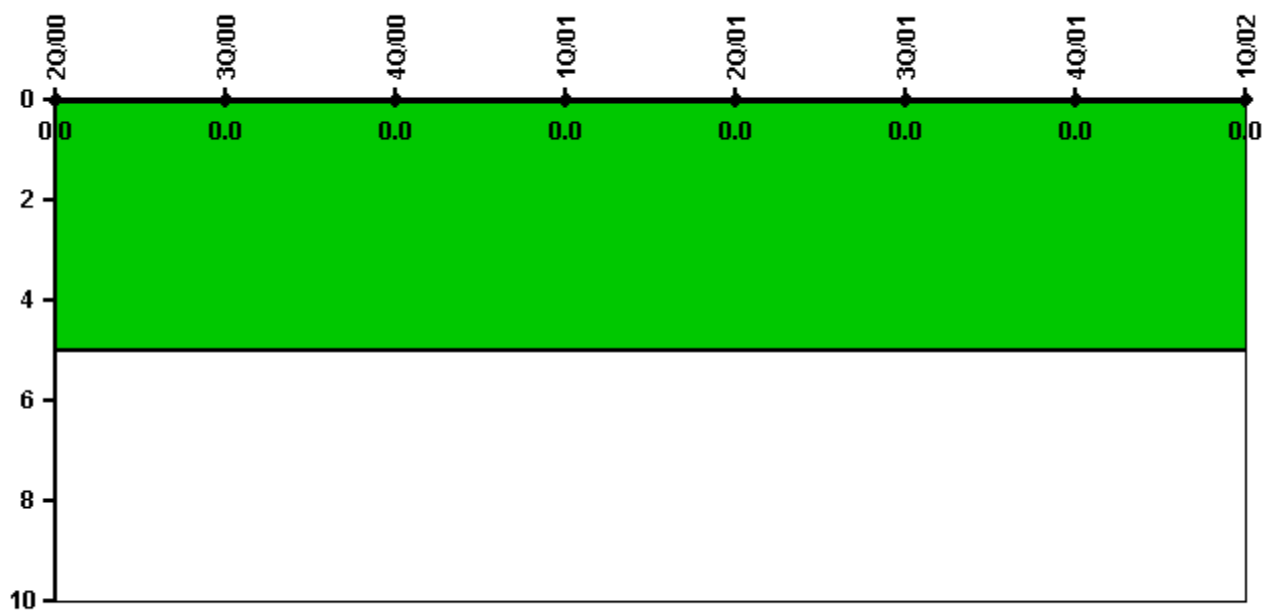
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	8.50	0.40	44.00	0.30	3.00	0.40	2.90	1.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	2.60	1.30	0.60	1.12	1.00	0.50	13.90	26.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%	0.4%	0.3%

Licensee Comments: none

Safety System Functional Failures (PWR)



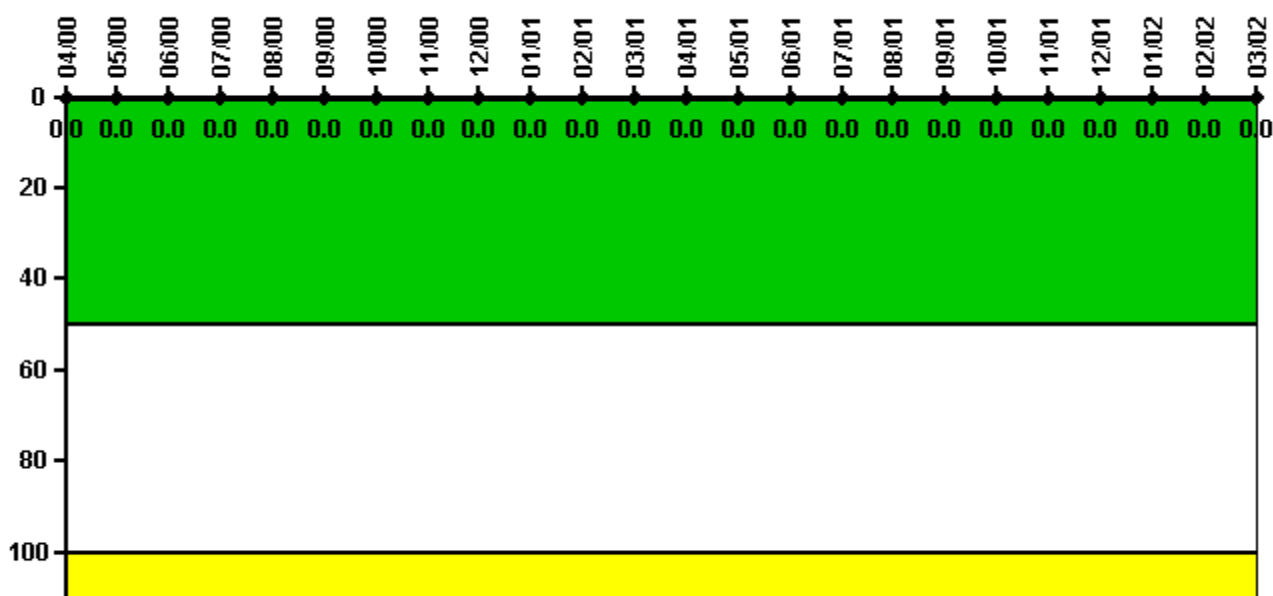
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



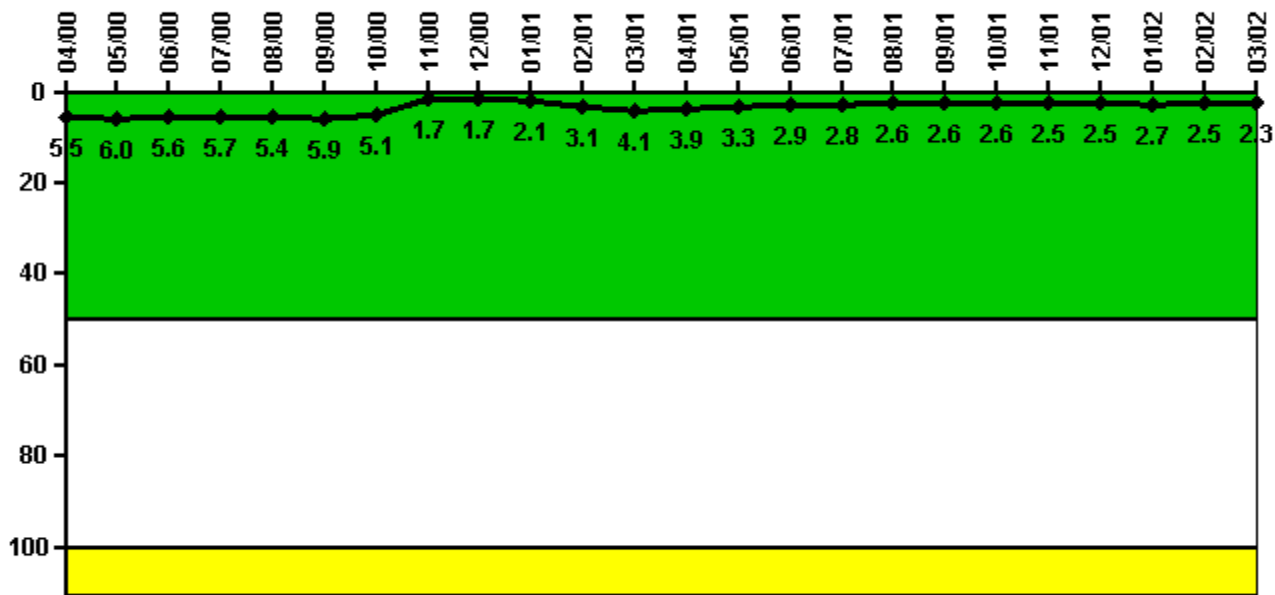
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum activity	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354	0.000342	0.000372	0.000366	0.000366	0.000410	0.000438
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum activity	0.000450	0.000250	0.000277	0.000313	0.000324	0.000337	0.000351	0.000428	0.000393	0.000412	0.000416	0.000398
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



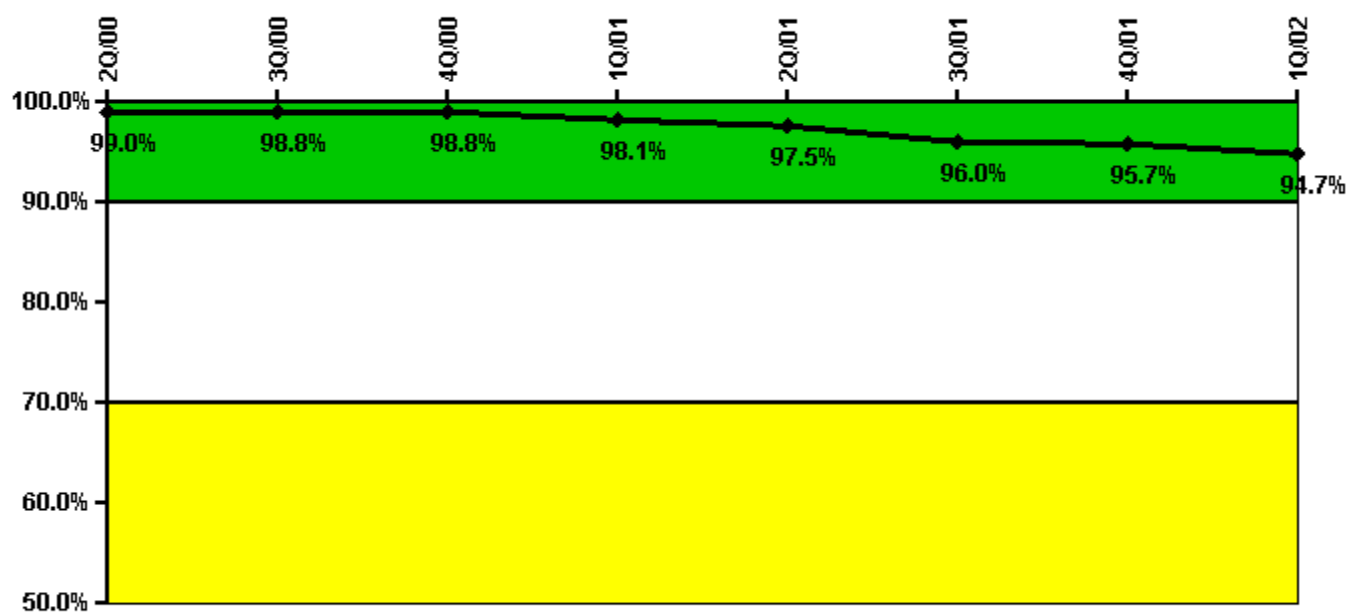
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum leakage	0.550	0.600	0.561	0.567	0.545	0.594	0.514	0.172	0.169	0.209	0.314	0.406
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	5.5	6.0	5.6	5.7	5.4	5.9	5.1	1.7	1.7	2.1	3.1	4.1

Reactor Coolant System Leakage	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum leakage	0.395	0.329	0.289	0.284	0.263	0.256	0.259	0.250	0.252	0.266	0.249	0.234
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	3.9	3.3	2.9	2.8	2.6	2.6	2.6	2.5	2.5	2.7	2.5	2.3

Licensee Comments: none

Drill/Exercise Performance

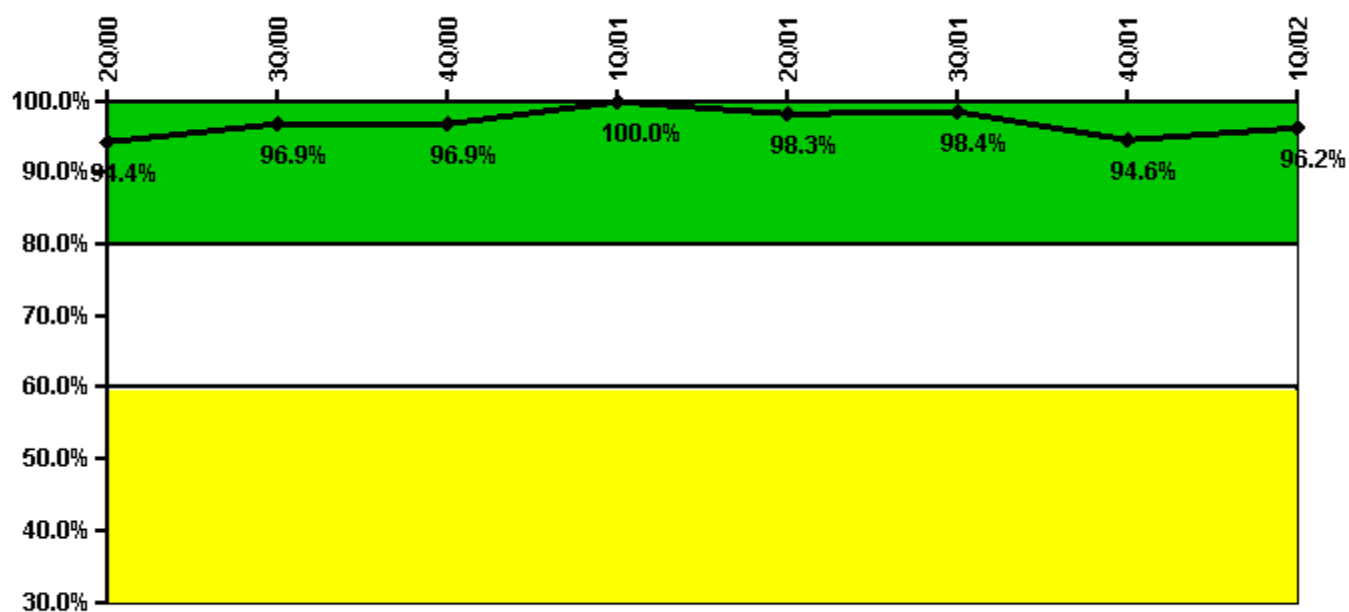
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful opportunities	30.0	49.0	0	14.0	0	31.0	38.0	34.0
Total opportunities	30.0	50.0	0	16.0	0	35.0	40.0	36.0
Indicator value	99.0%	98.8%	98.8%	98.1%	97.5%	96.0%	95.7%	94.7%

Licensee Comments: none

ERO Drill Participation



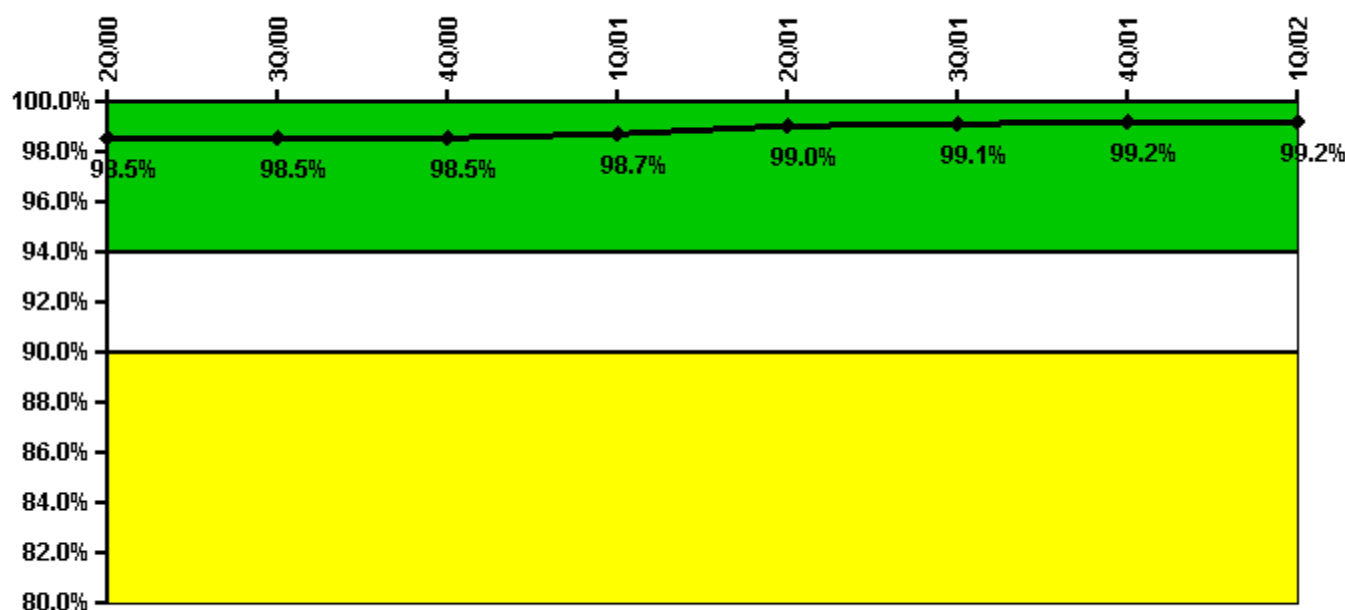
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Participating Key personnel	68.0	63.0	63.0	63.0	59.0	60.0	53.0	50.0
Total Key personnel	72.0	65.0	65.0	63.0	60.0	61.0	56.0	52.0
Indicator value	94.4%	96.9%	96.9%	100.0%	98.3%	98.4%	94.6%	96.2%

Licensee Comments: none

Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful siren-tests	5915	5821	5864	6245	6258	6141	5965	5872
Total sirens-tests	6016	5922	5922	6298	6298	6204	6016	5922
Indicator value	98.5%	98.5%	98.5%	98.7%	99.0%	99.1%	99.2%	99.2%

Licensee Comments:

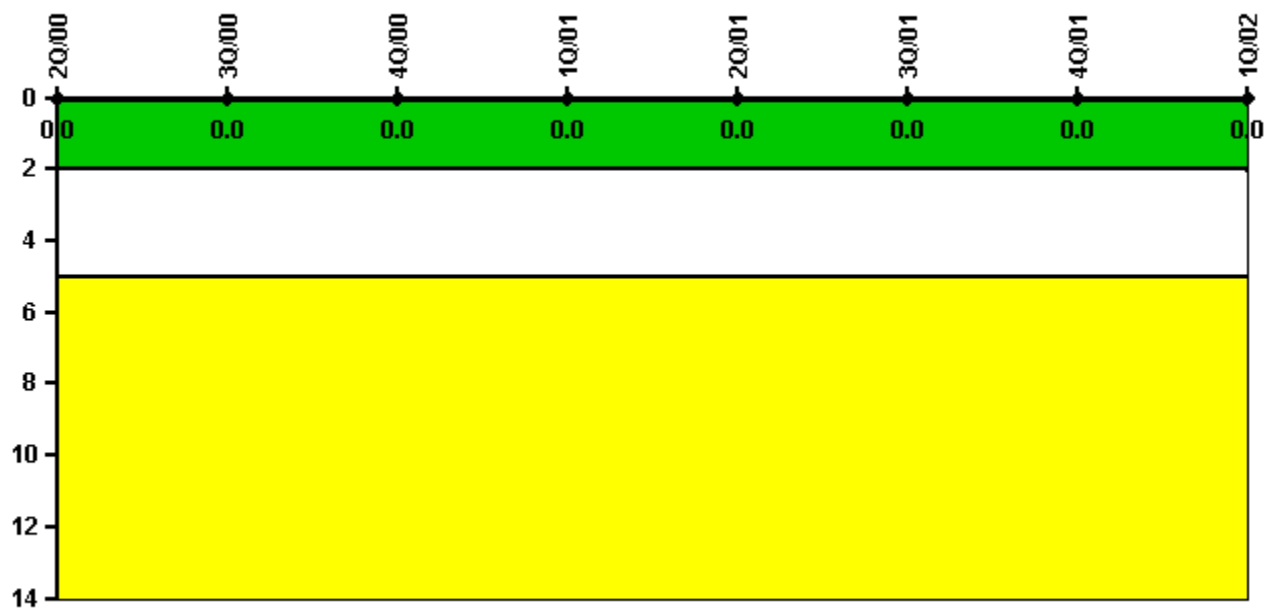
4Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

3Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

2Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

1Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

Occupational Exposure Control Effectiveness

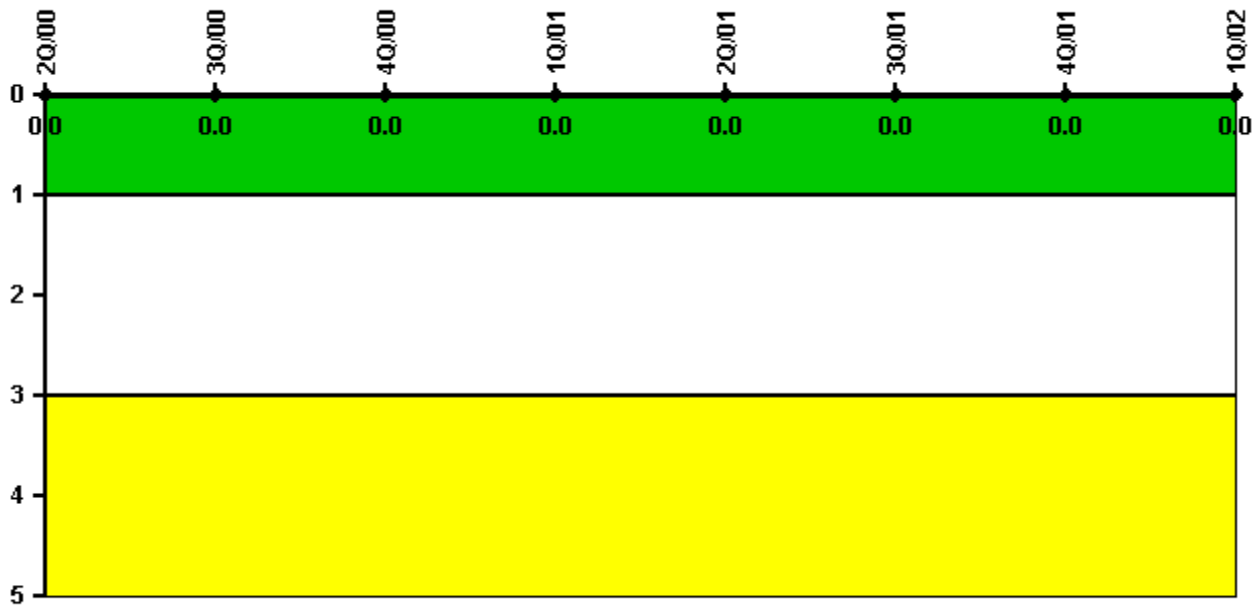


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

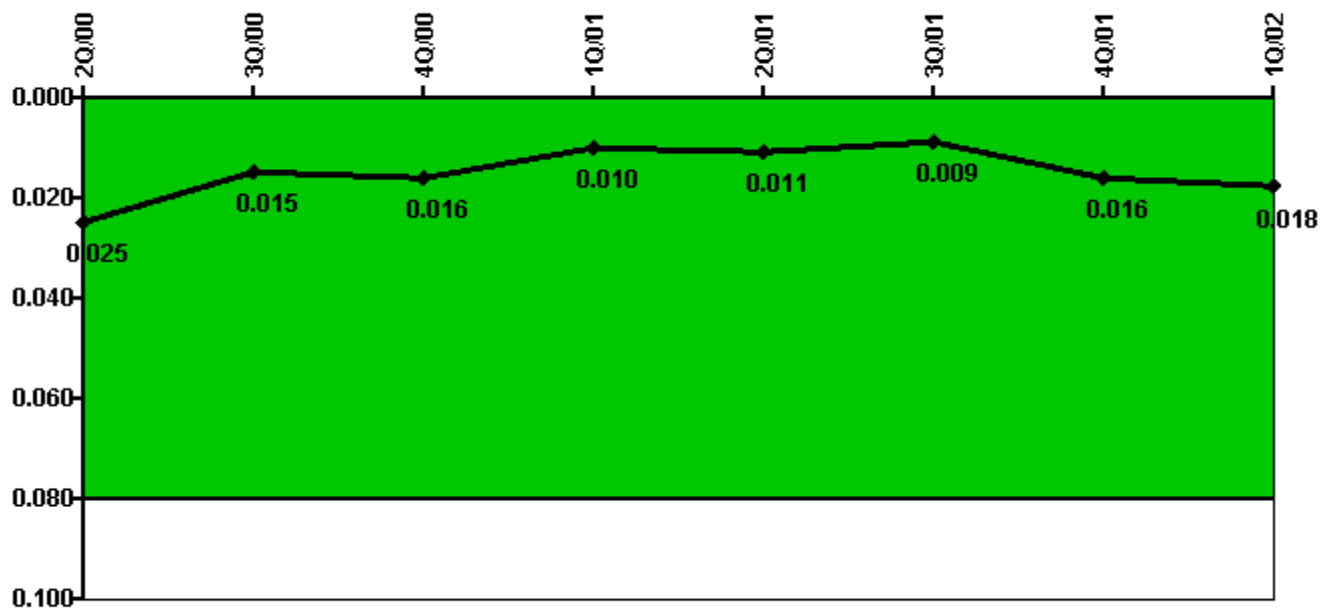
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



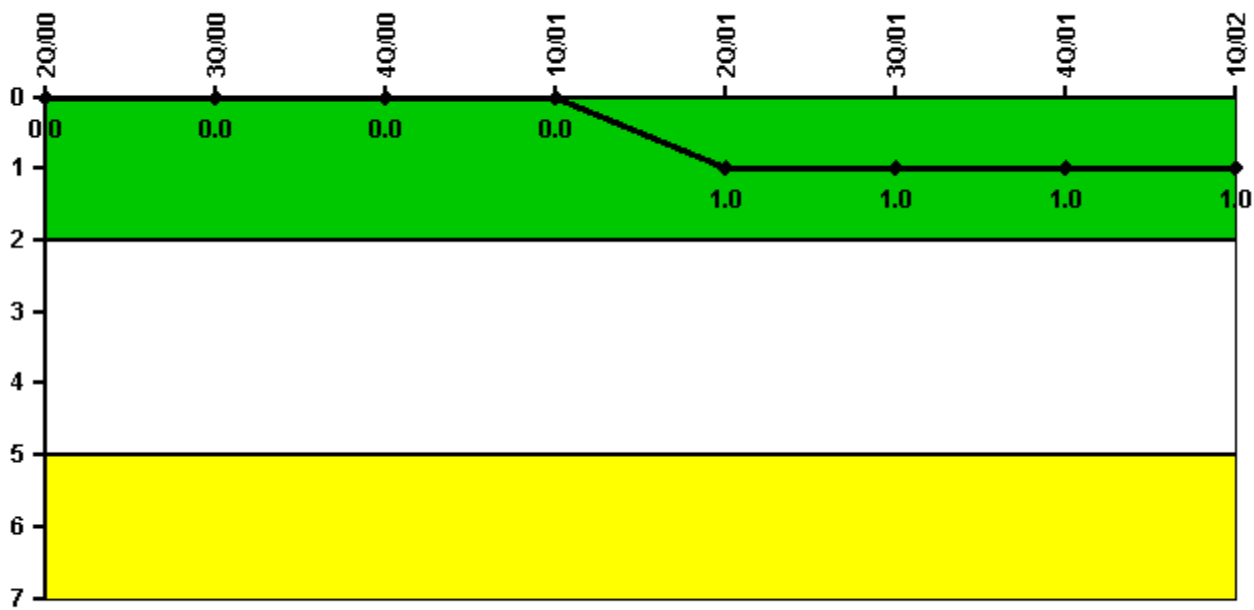
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
IDS compensatory hours	57.60	93.10	17.43	21.85	92.99	29.12	247.72	62.00
CCTV compensatory hours	6.8	0	37.5	2.6	0	0	0	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.025	0.015	0.016	0.010	0.011	0.009	0.016	0.018

Licensee Comments: none

Personnel Screening Program

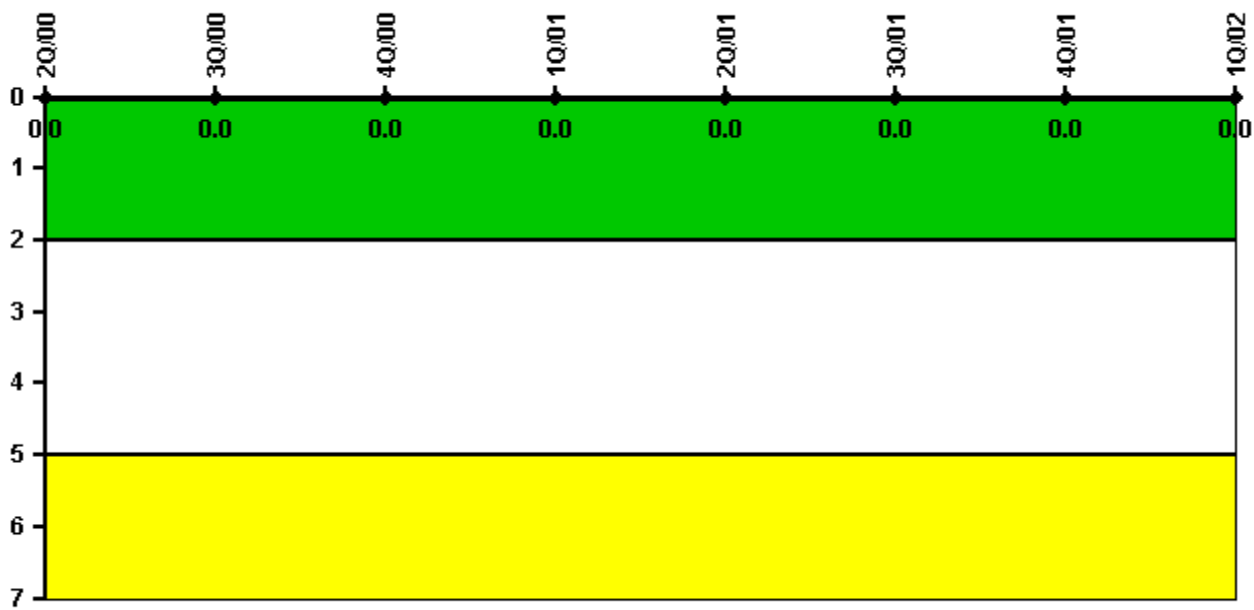


Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Program failures	0	0	0	0	1	0	0	0
Indicator value	0	0	0	0	1	1	1	1

Licensee Comments: none

FFD/Personnel Reliability

Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

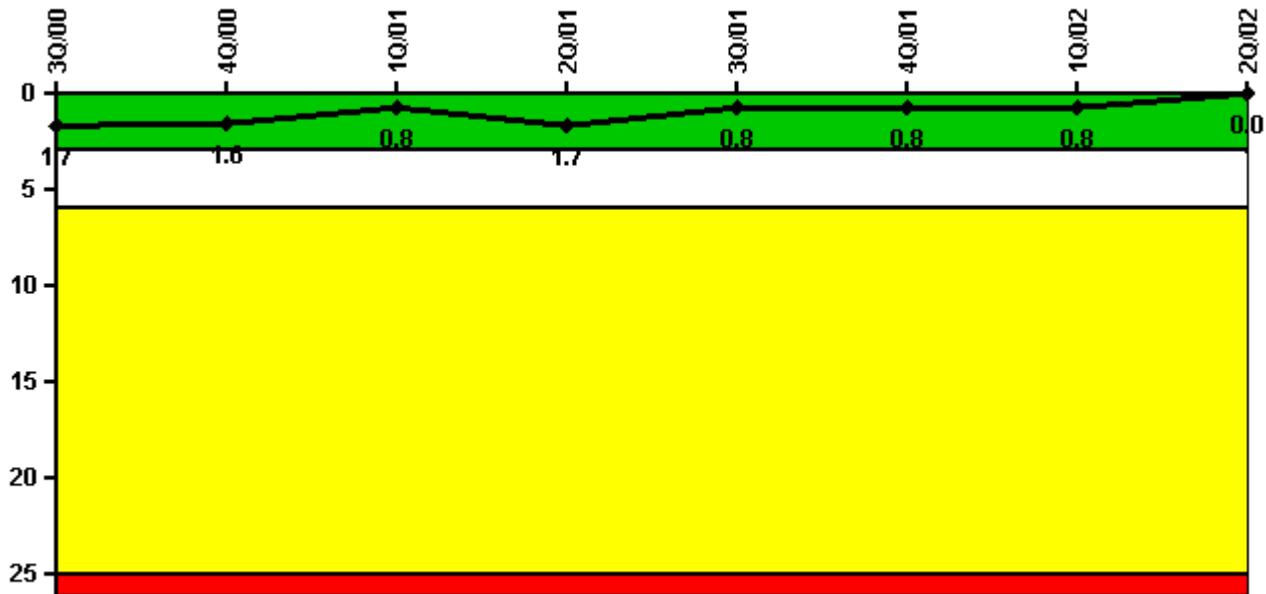
Last Modified: May 1, 2002

Byron 2

2Q/2002 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Unplanned scrams	1.0	0	0	1.0	0	0	0	0
Critical hours	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0	2056.2
Indicator value	1.7	1.6	0.8	1.7	0.8	0.8	0.8	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



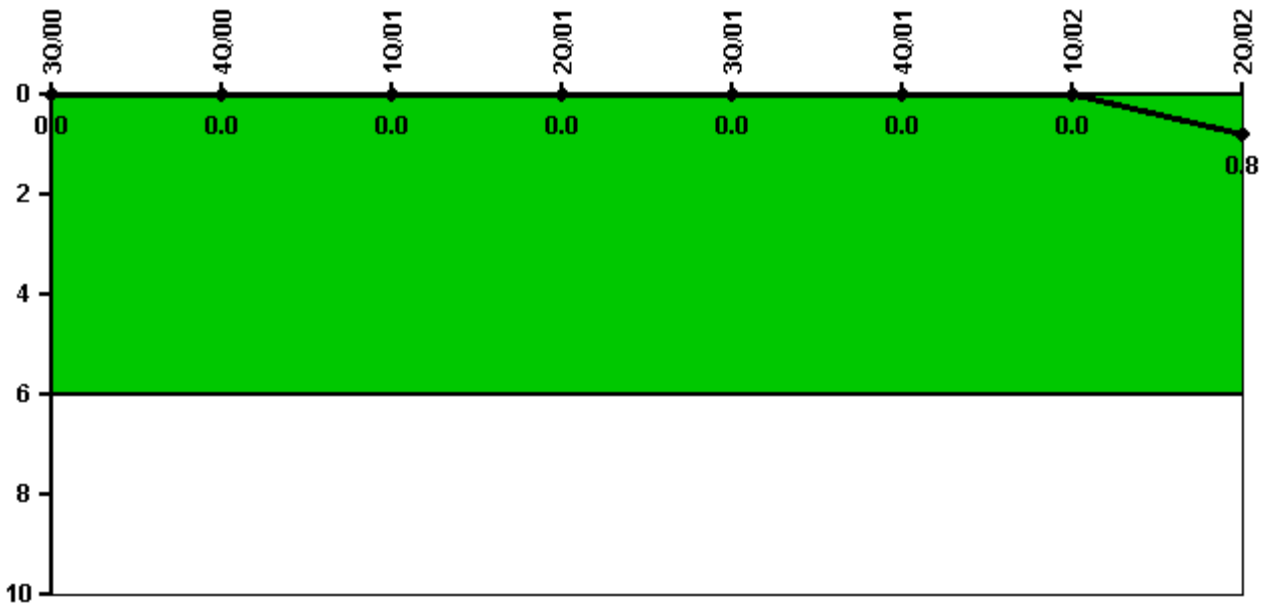
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



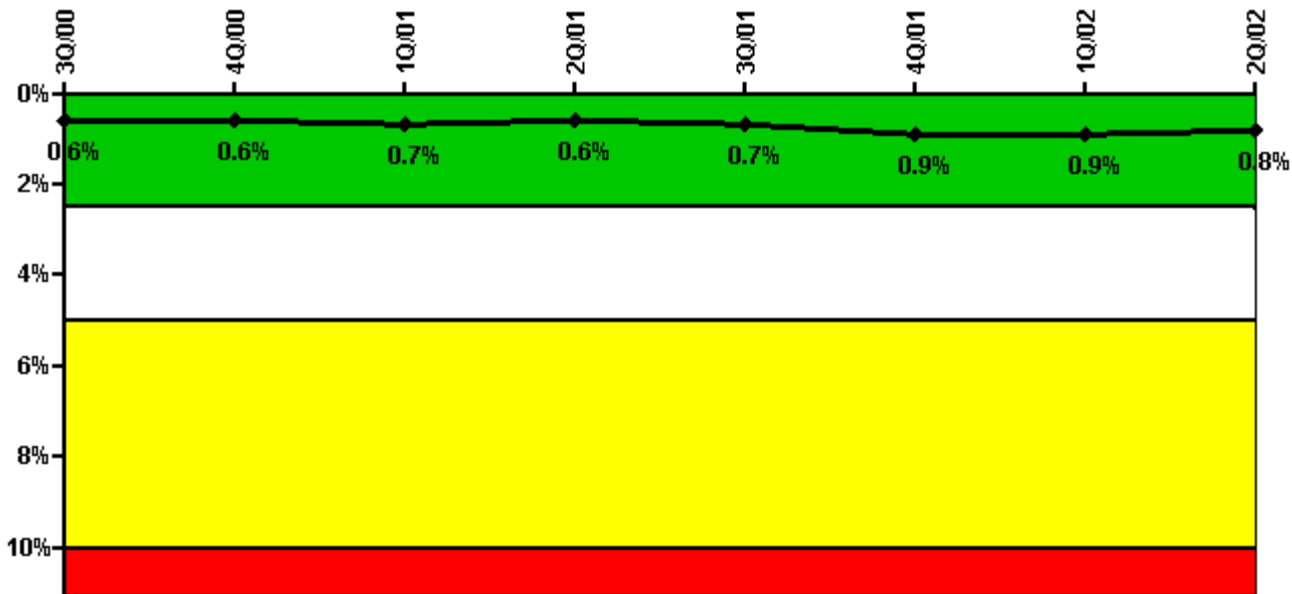
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Unplanned power changes	0	0	0	0	0	0	0	1.0
Critical hours	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0	2056.2
Indicator value	0	0	0	0	0	0	0	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



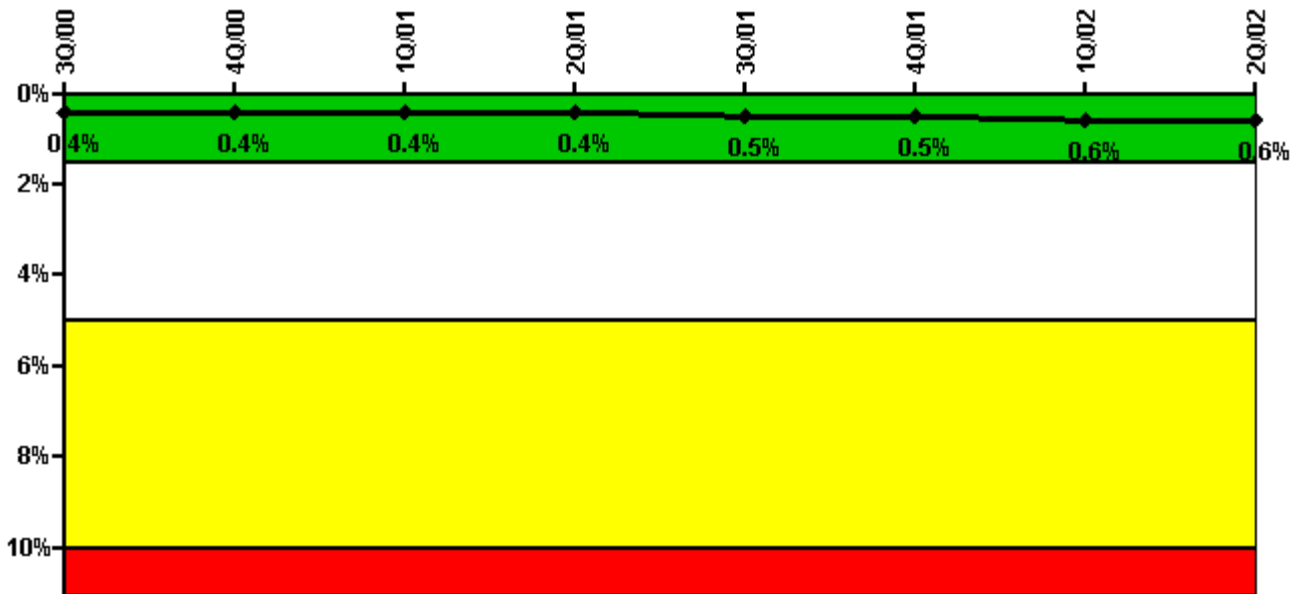
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Train 1								
Planned unavailable hours	0	0.20	17.50	0	11.20	11.80	7.80	13.20
Unplanned unavailable hours	0	0	0	0	0	87.50	0	0
Fault exposure hours	0	0	0	0	0	3.90	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	0.32	0	0	6.20	0	18.30	17.60	12.00
Unplanned unavailable hours	0	0	0	0	8.20	15.90	0	30.40
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.6%	0.6%	0.7%	0.6%	0.7%	0.9%	0.9%	0.8%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

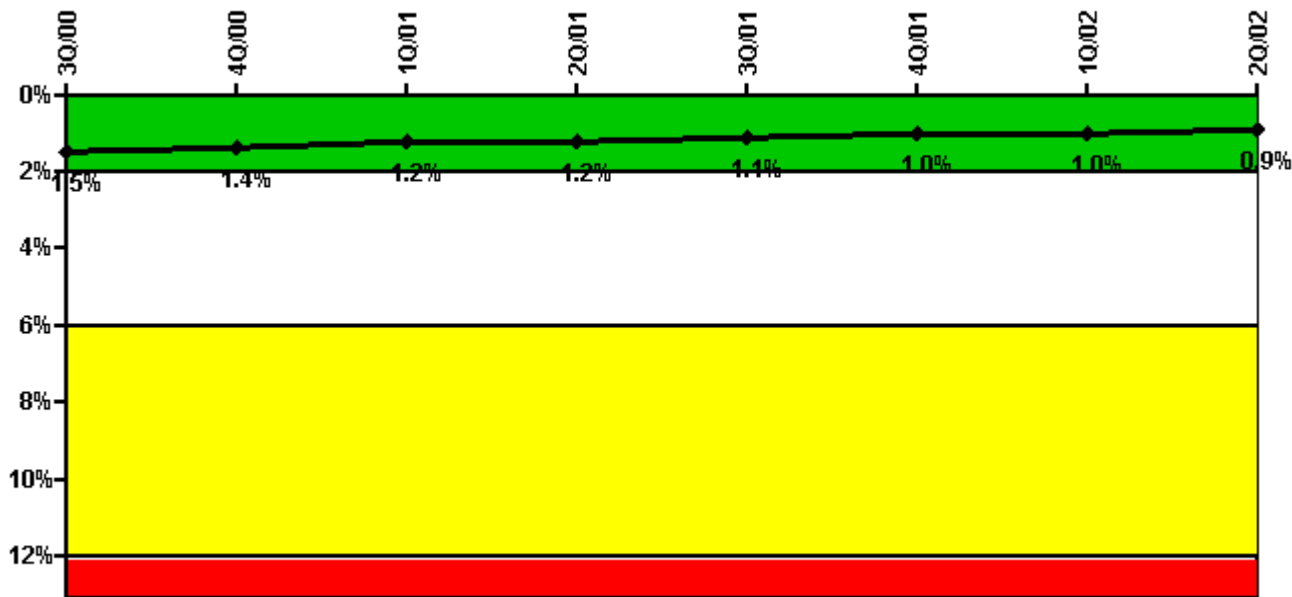
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Train 1								
Planned unavailable hours	0.50	12.90	42.70	18.50	4.80	10.90	22.00	3.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20
Train 2								
Planned unavailable hours	1.10	0.40	13.93	0	17.30	52.20	3.00	6.60
Unplanned unavailable hours	0	0	0	0	0	0	64.80	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20
Train 3								
Planned unavailable hours	0	0	1.60	10.70	27.60	2.90	1.20	3.20
Unplanned unavailable hours	0	0	0	0	34.30	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20
Train 4								
Planned unavailable hours	0	19.40	9.18	0	0	1.60	3.00	26.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0

Required hours	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20
Indicator value	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.6%	0.6%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

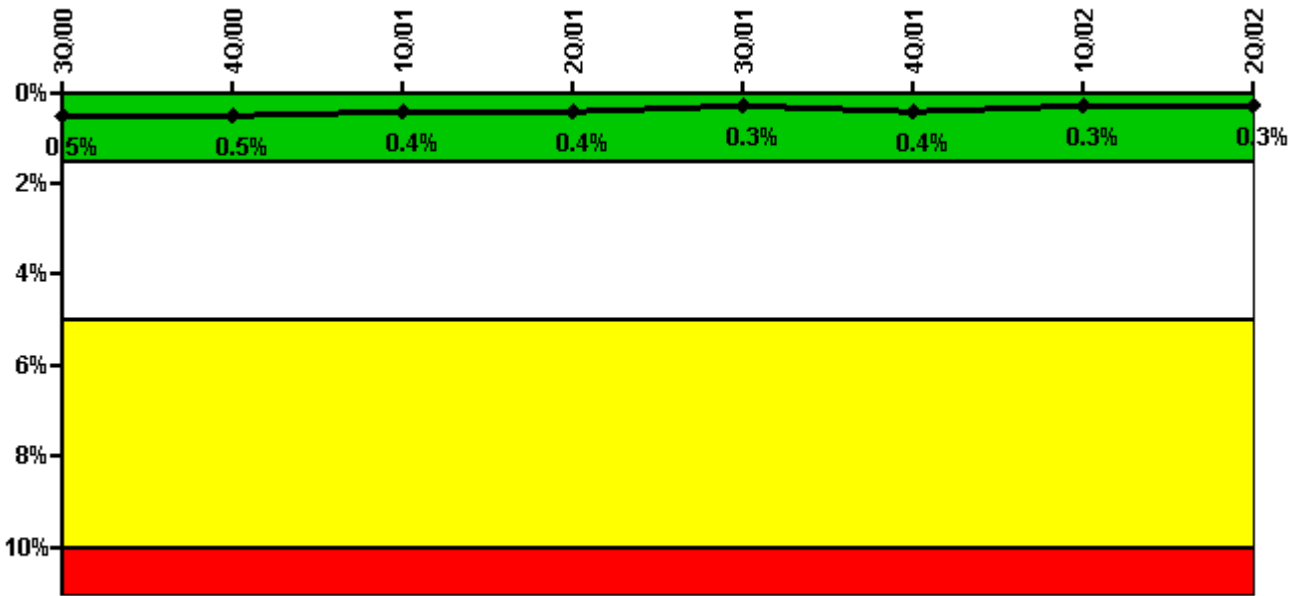
Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Train 1								
Planned unavailable hours	1.80	2.40	2.70	1.80	2.20	4.80	2.90	4.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20
Train 2								
Planned unavailable hours	1.80	2.00	2.70	17.10	3.40	3.50	32.20	2.90
Unplanned unavailable hours	0	0	0	0	0	1.40	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20

Indicator value	1.5%	1.4%	1.2%	1.2%	1.1%	1.0%	1.0%	0.9%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



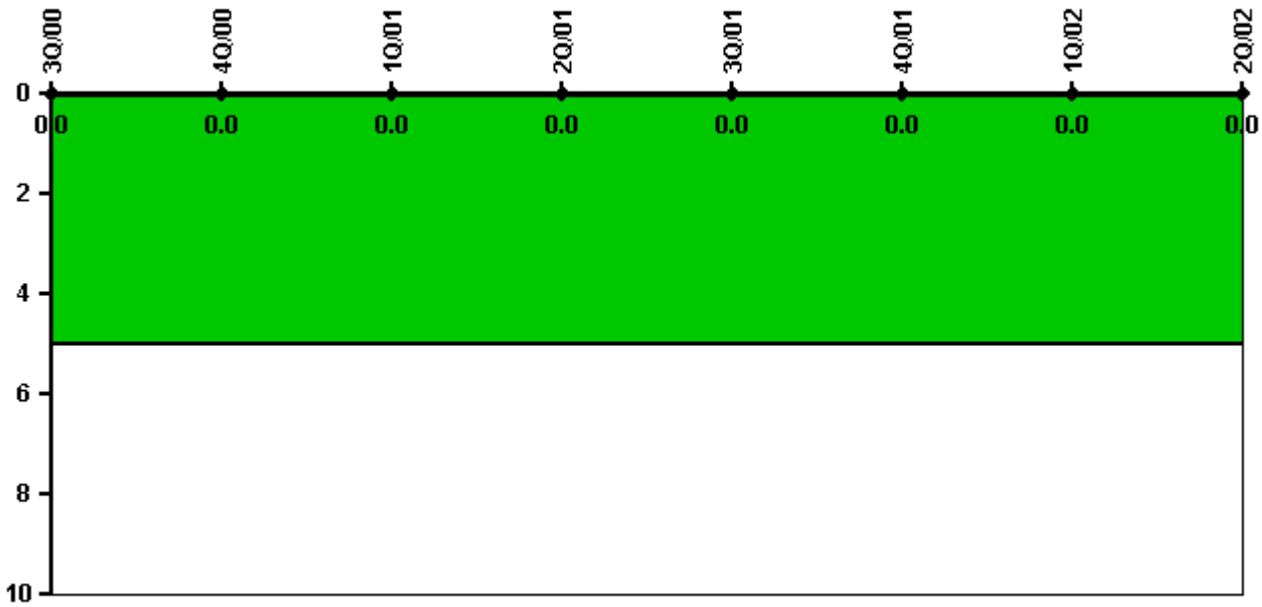
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Train 1								
Planned unavailable hours	0.40	44.00	0.30	3.00	0.40	2.90	1.30	3.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	1.30	0.60	1.12	1.00	0.50	13.90	26.30	2.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.5%	0.5%	0.4%	0.4%	0.3%	0.4%	0.3%	0.3%

Licensee Comments: none

Safety System Functional Failures (PWR)



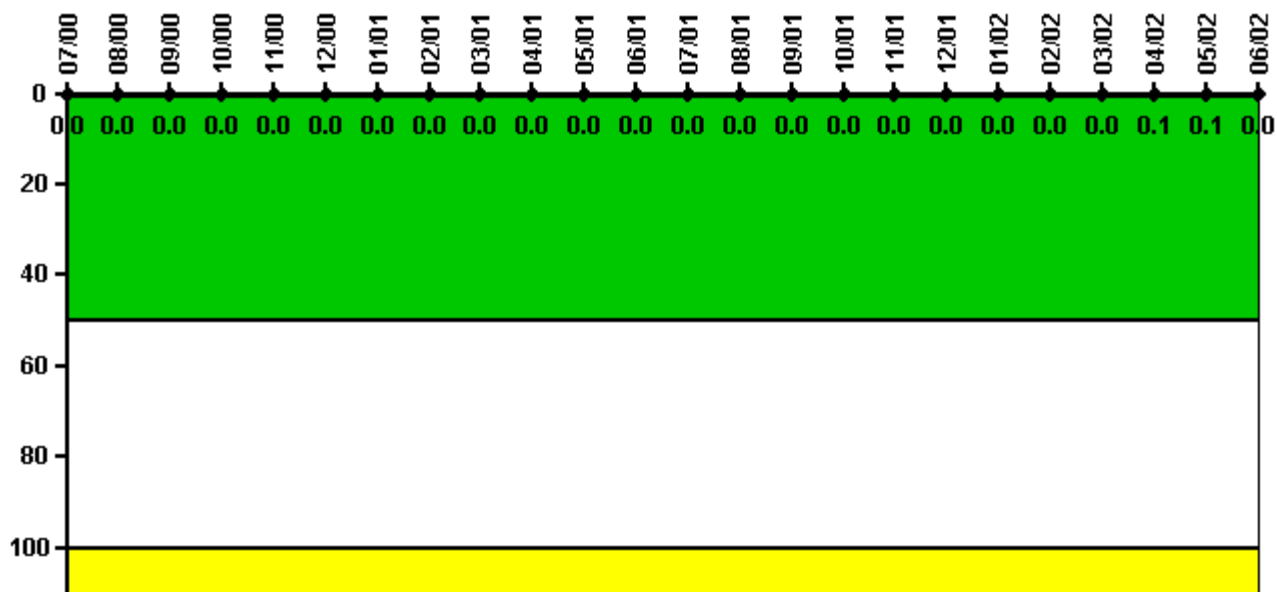
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

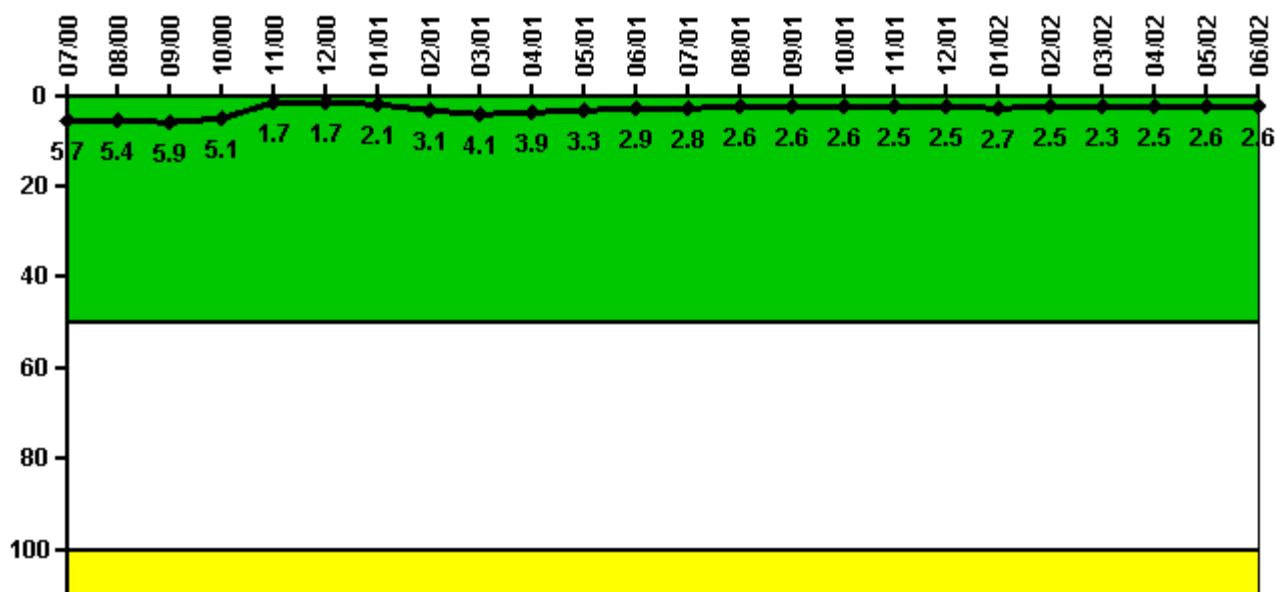
Notes

Reactor Coolant System Activity	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01
Maximum activity	0.000321	0.000354	0.000354	0.000342	0.000372	0.000366	0.000366	0.000410	0.000438	0.000450	0.000250	0.000277
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02
Maximum activity	0.000313	0.000324	0.000337	0.000351	0.000428	0.000393	0.000412	0.000416	0.000398	0.000841	0.001210	0.000483
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0.1	0.1	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

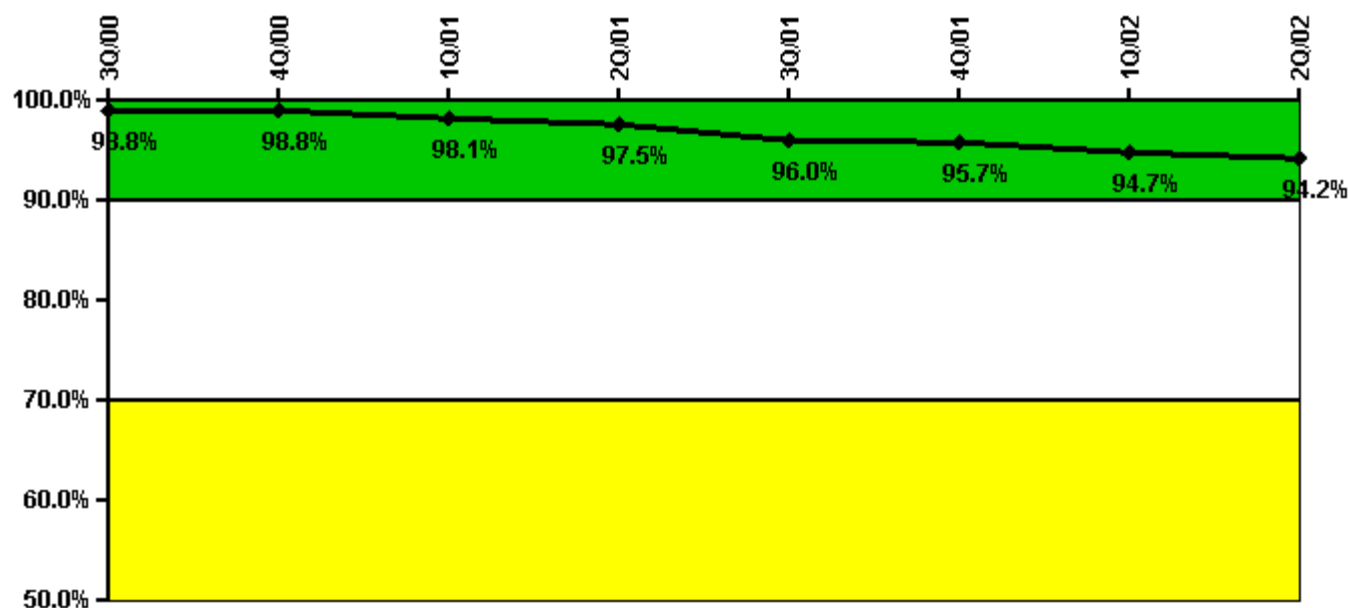
Notes

Reactor Coolant System Leakage	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01
Maximum leakage	0.567	0.545	0.594	0.514	0.172	0.169	0.209	0.314	0.406	0.395	0.329	0.289
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	5.7	5.4	5.9	5.1	1.7	1.7	2.1	3.1	4.1	3.9	3.3	2.9

Reactor Coolant System Leakage	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02
Maximum leakage	0.284	0.263	0.256	0.259	0.250	0.252	0.266	0.249	0.234	0.249	0.257	0.259
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.8	2.6	2.6	2.6	2.5	2.5	2.7	2.5	2.3	2.5	2.6	2.6

Licensee Comments: none

Drill/Exercise Performance



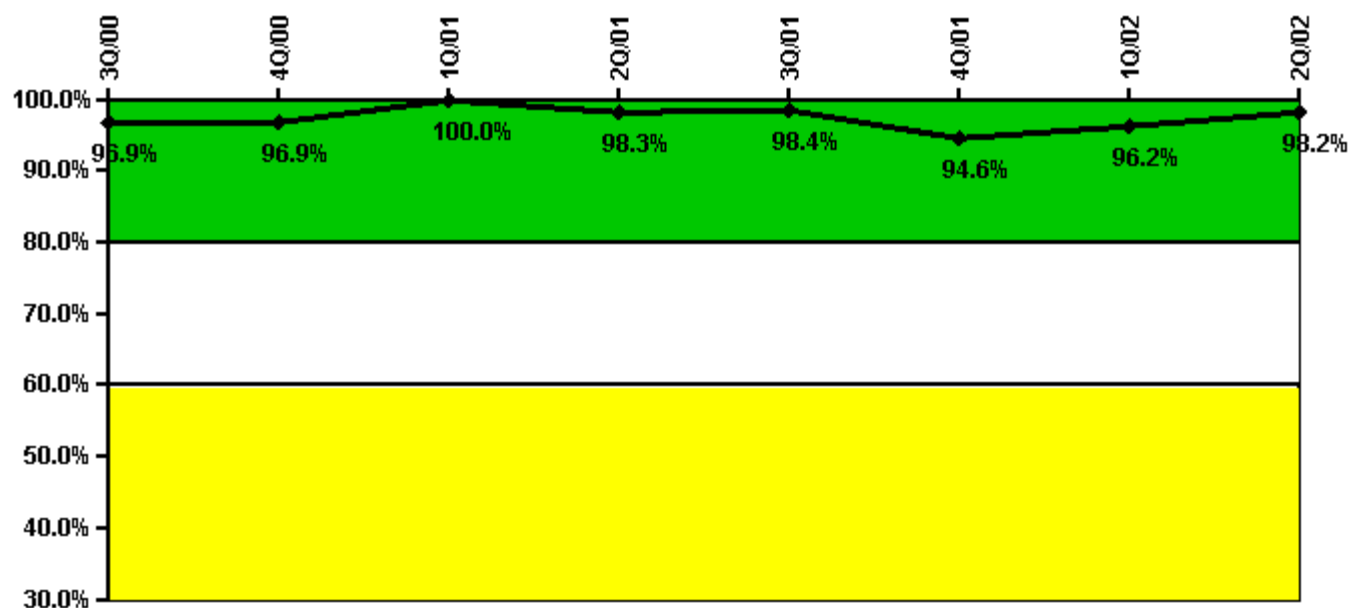
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Successful opportunities	49.0	0	14.0	0	31.0	38.0	34.0	14.0
Total opportunities	50.0	0	16.0	0	35.0	40.0	36.0	14.0
Indicator value	98.8%	98.8%	98.1%	97.5%	96.0%	95.7%	94.7%	94.2%

Licensee Comments: none

ERO Drill Participation



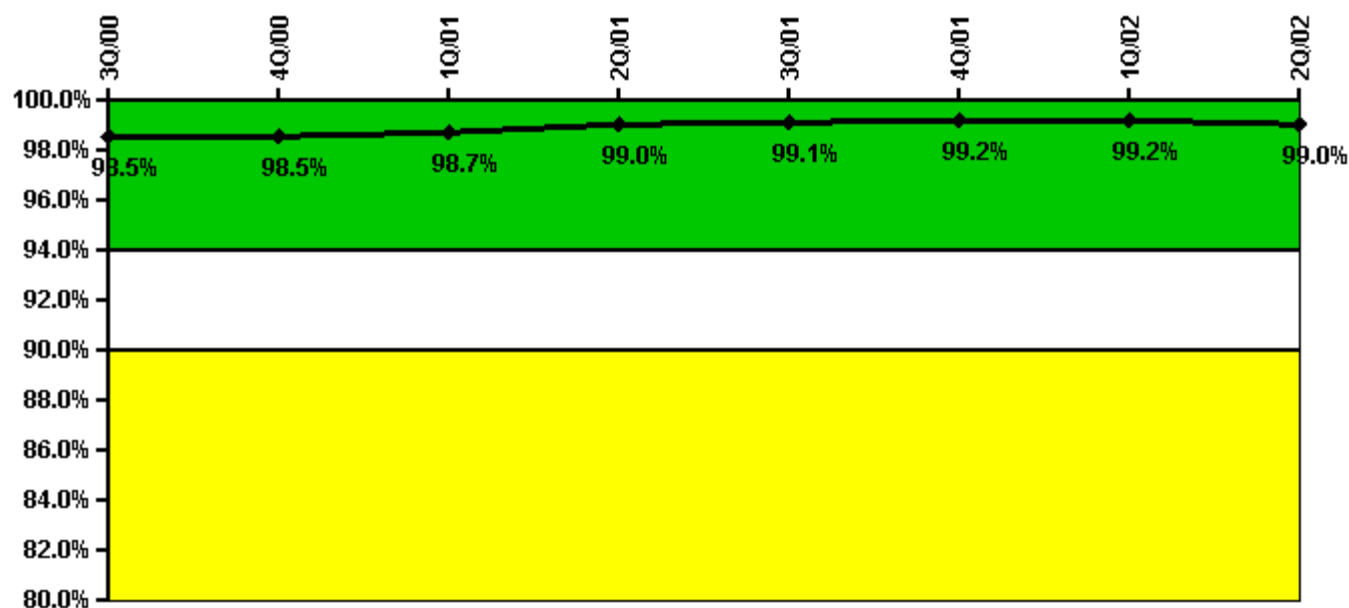
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Participating Key personnel	63.0	63.0	63.0	59.0	60.0	53.0	50.0	55.0
Total Key personnel	65.0	65.0	63.0	60.0	61.0	56.0	52.0	56.0
Indicator value	96.9%	96.9%	100.0%	98.3%	98.4%	94.6%	96.2%	98.2%

Licensee Comments: none

Alert & Notification System



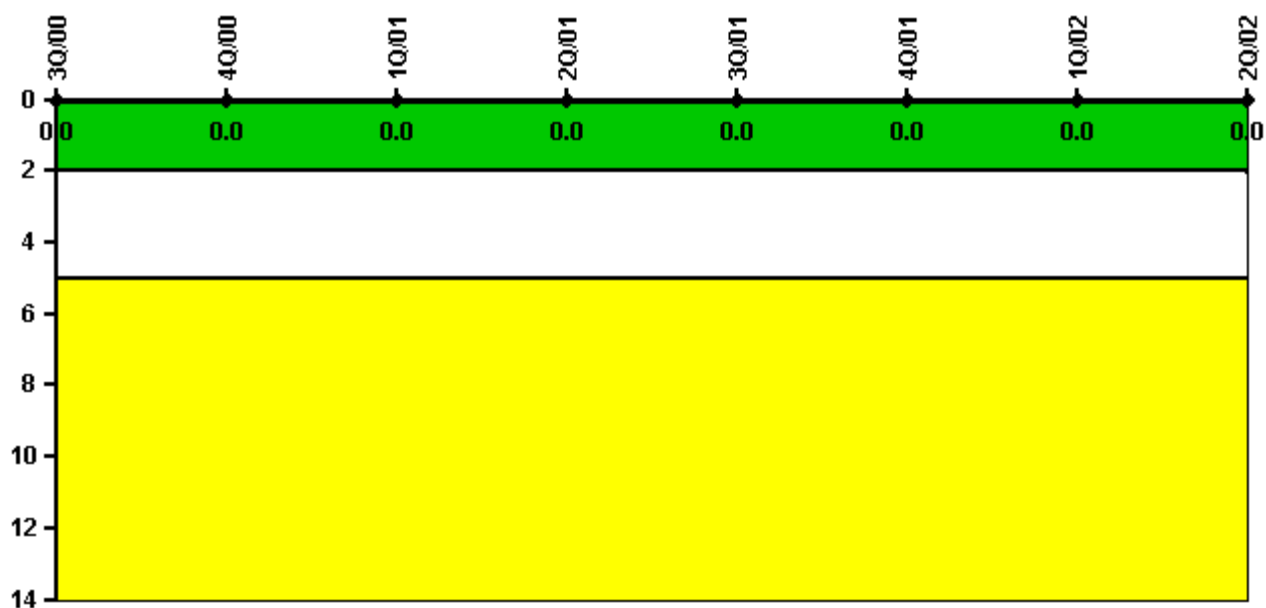
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Successful siren-tests	5821	5864	6245	6258	6141	5965	5872	5945
Total sirens-tests	5922	5922	6298	6298	6204	6016	5922	6016
Indicator value	98.5%	98.5%	98.7%	99.0%	99.1%	99.2%	99.2%	99.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness

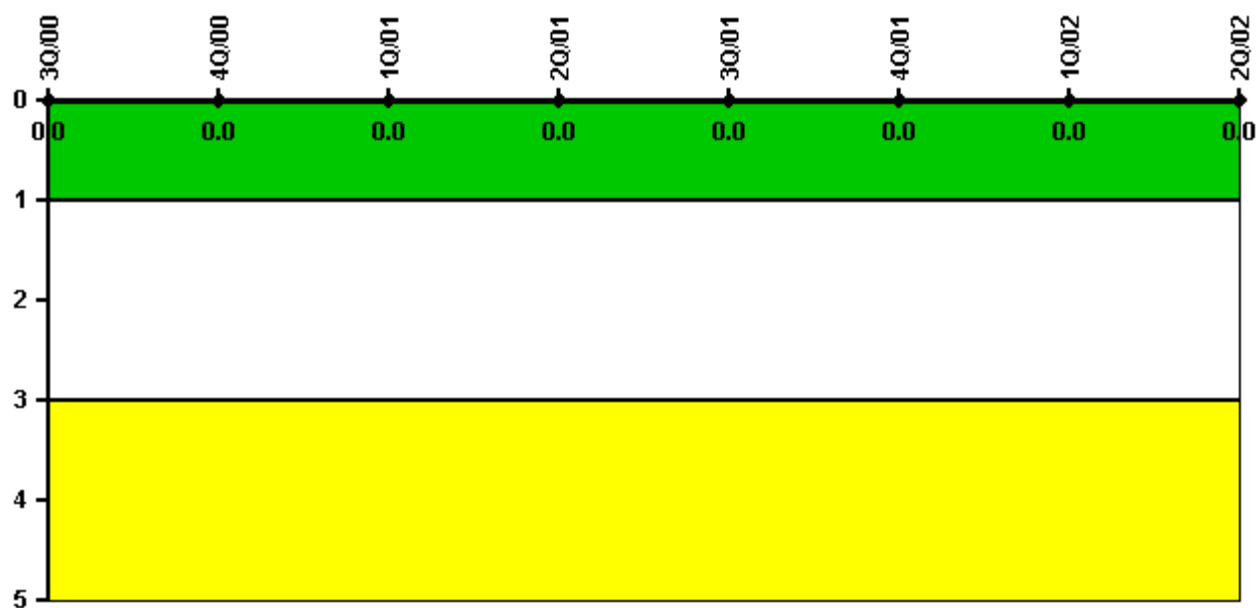


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

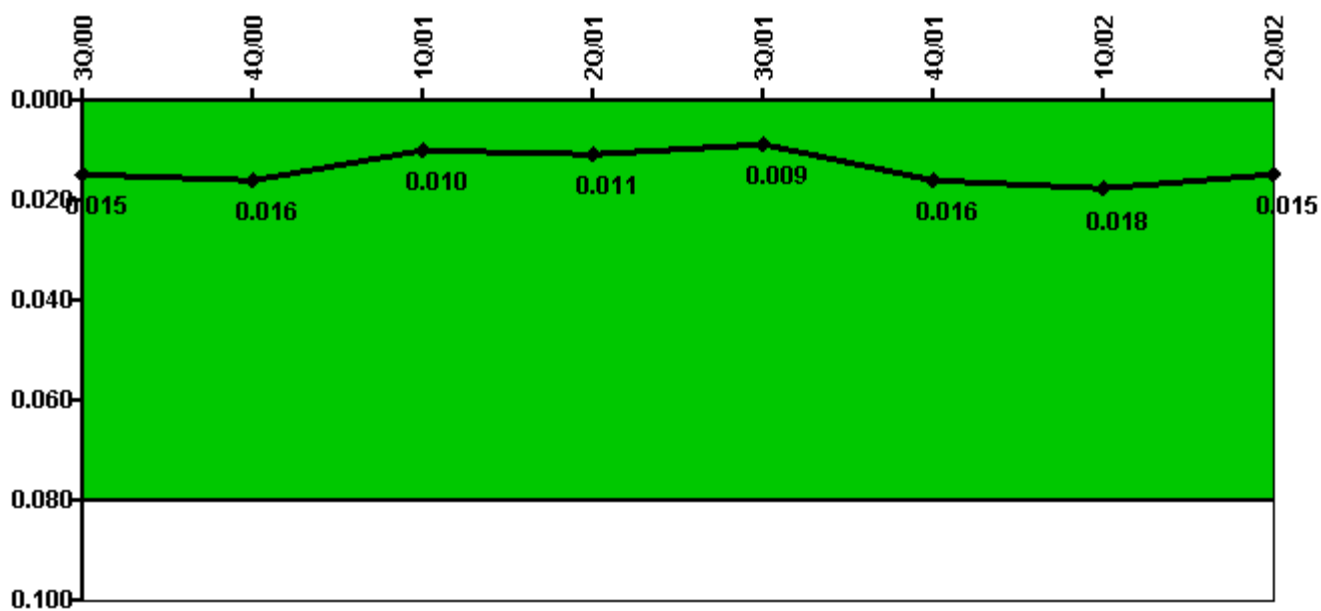
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



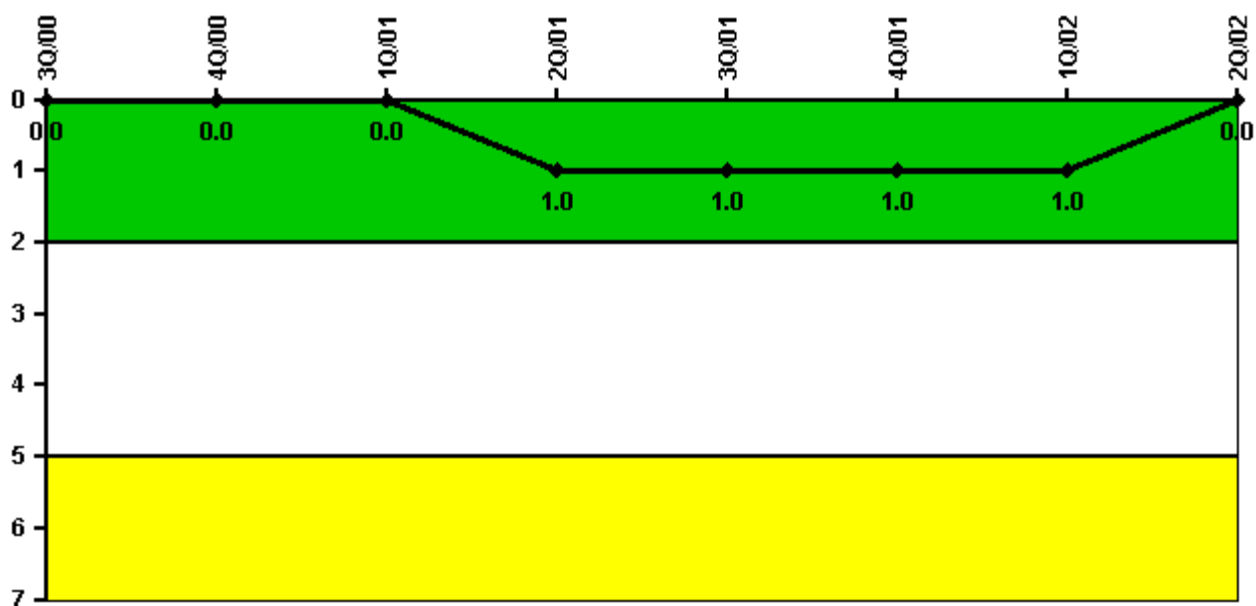
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
IDS compensatory hours	93.10	17.43	21.85	92.99	29.12	247.72	62.00	14.60
CCTV compensatory hours	0	37.5	2.6	0	0	0	0	13.5
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.015	0.016	0.010	0.011	0.009	0.016	0.018	0.015

Licensee Comments: none

Personnel Screening Program



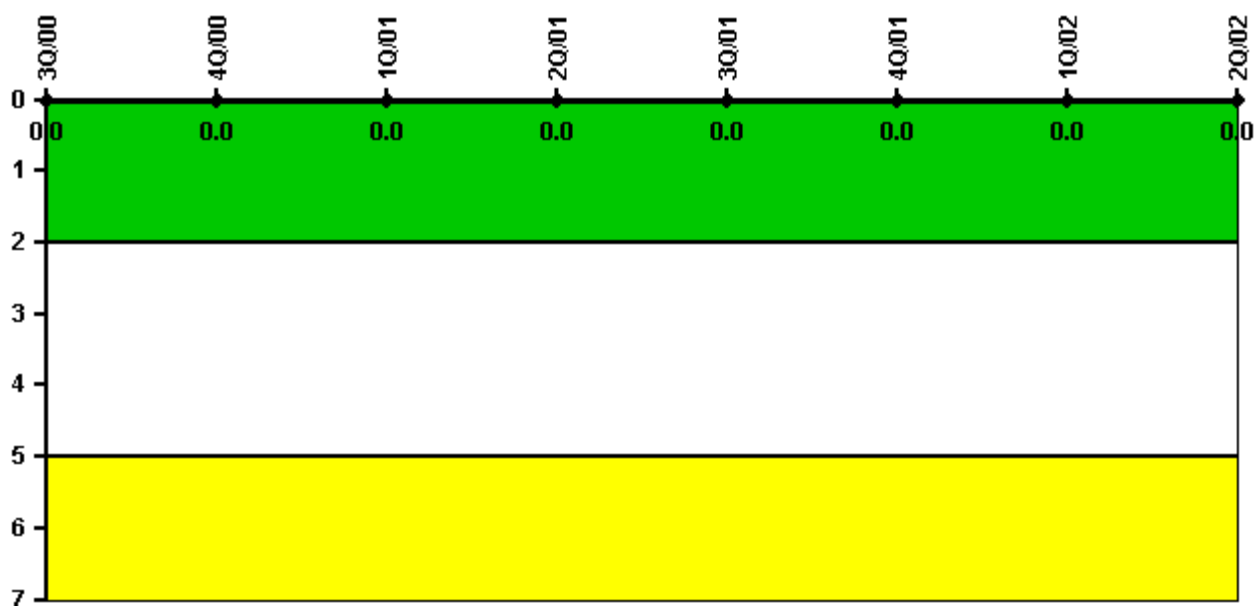
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Program failures	0	0	0	1	0	0	0	0
Indicator value	0	0	0	1	1	1	1	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

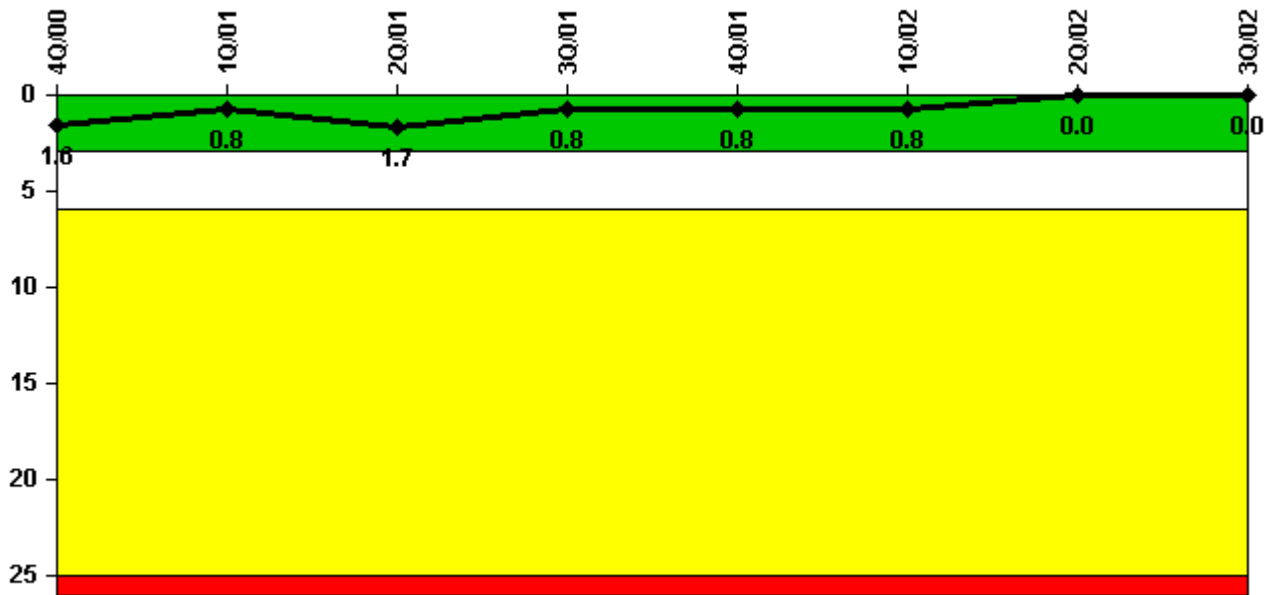
Last Modified: July 31, 2002

Byron 2

3Q/2002 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



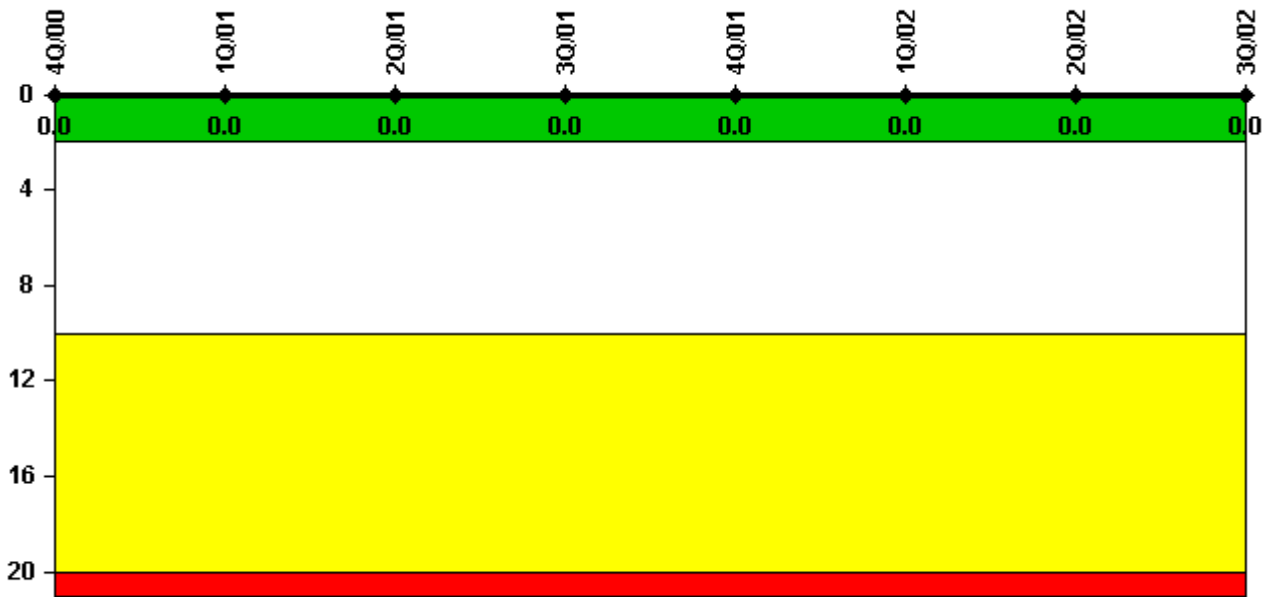
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Unplanned scrams	0	0	1.0	0	0	0	0	0
Critical hours	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0	2056.2	1870.2
Indicator value	1.6	0.8	1.7	0.8	0.8	0.8	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



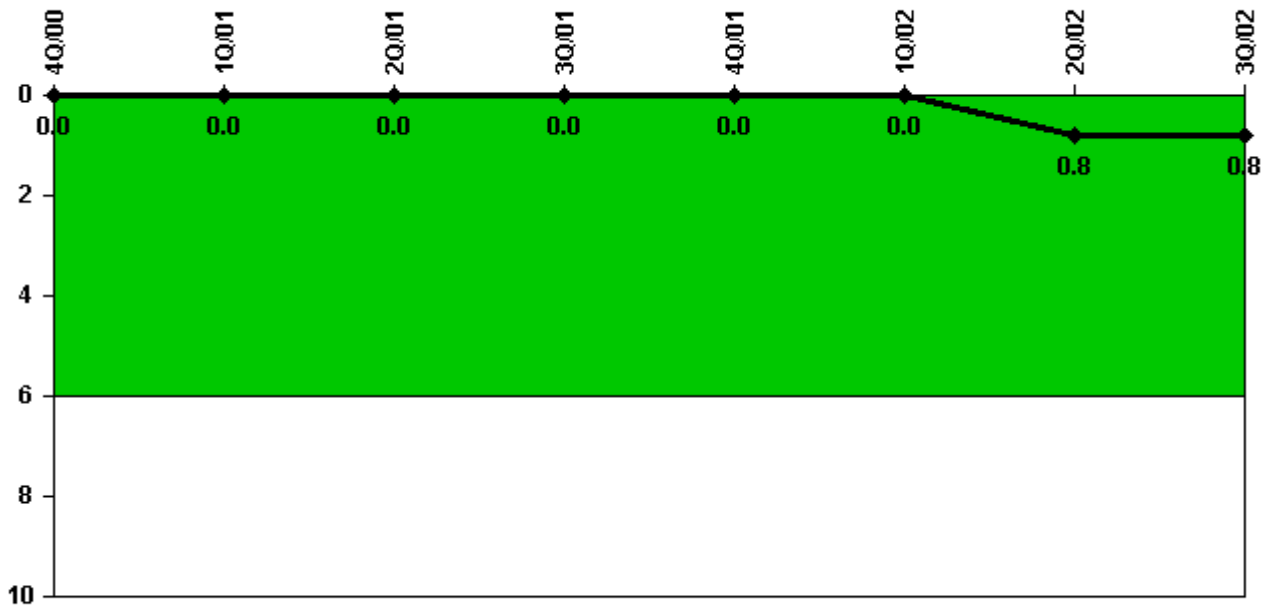
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



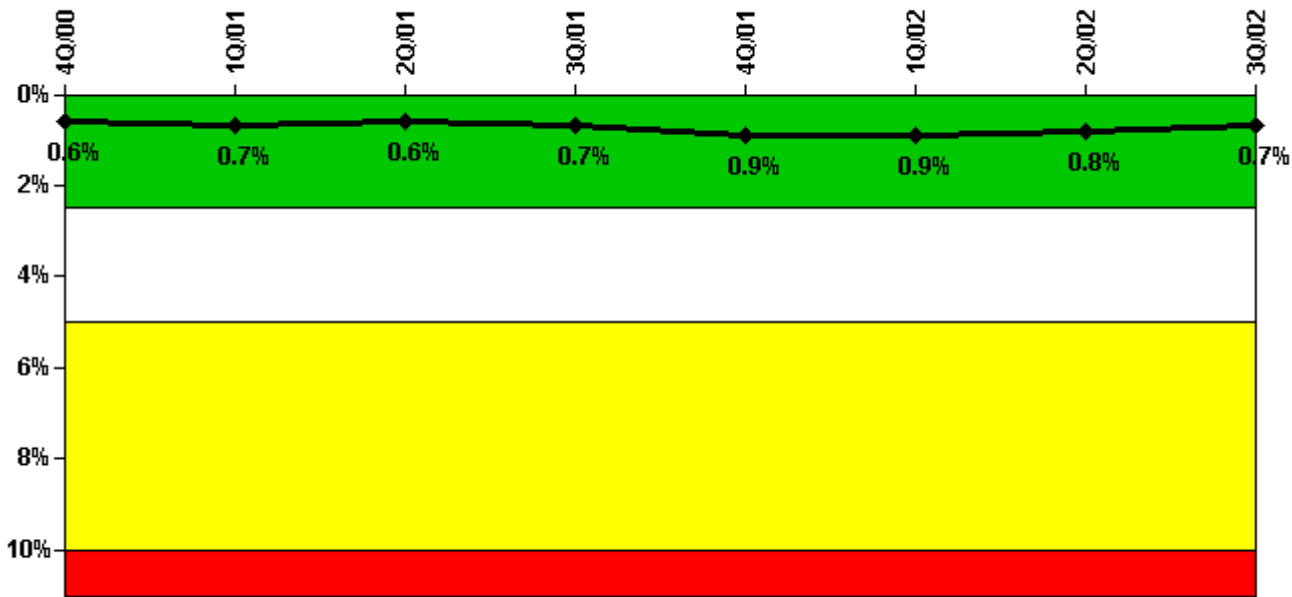
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0	2056.2	1870.2
Indicator value	0	0	0	0	0	0	0.8	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



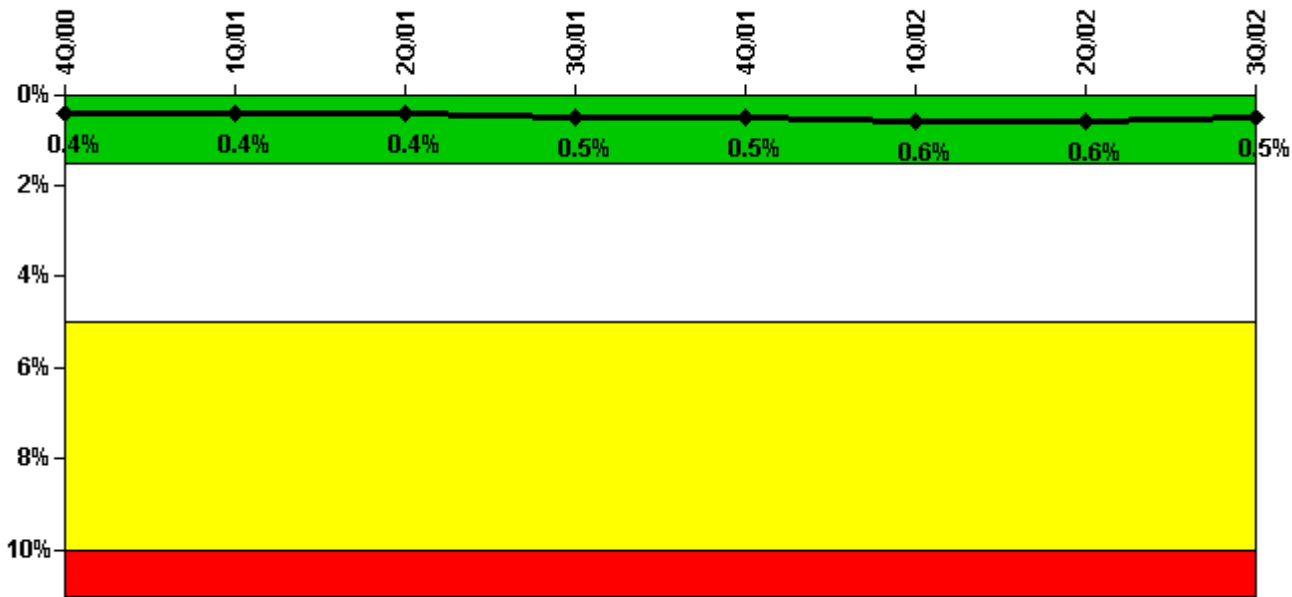
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Train 1								
Planned unavailable hours	0.20	17.50	0	11.20	11.80	7.80	13.20	2.30
Unplanned unavailable hours	0	0	0	0	87.50	0	0	0
Fault exposure hours	0	0	0	0	3.90	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	0	0	6.20	0	18.30	17.60	12.00	3.40
Unplanned unavailable hours	0	0	0	8.20	15.90	0	30.40	10.70
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	0.6%	0.7%	0.6%	0.7%	0.9%	0.9%	0.8%	0.7%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



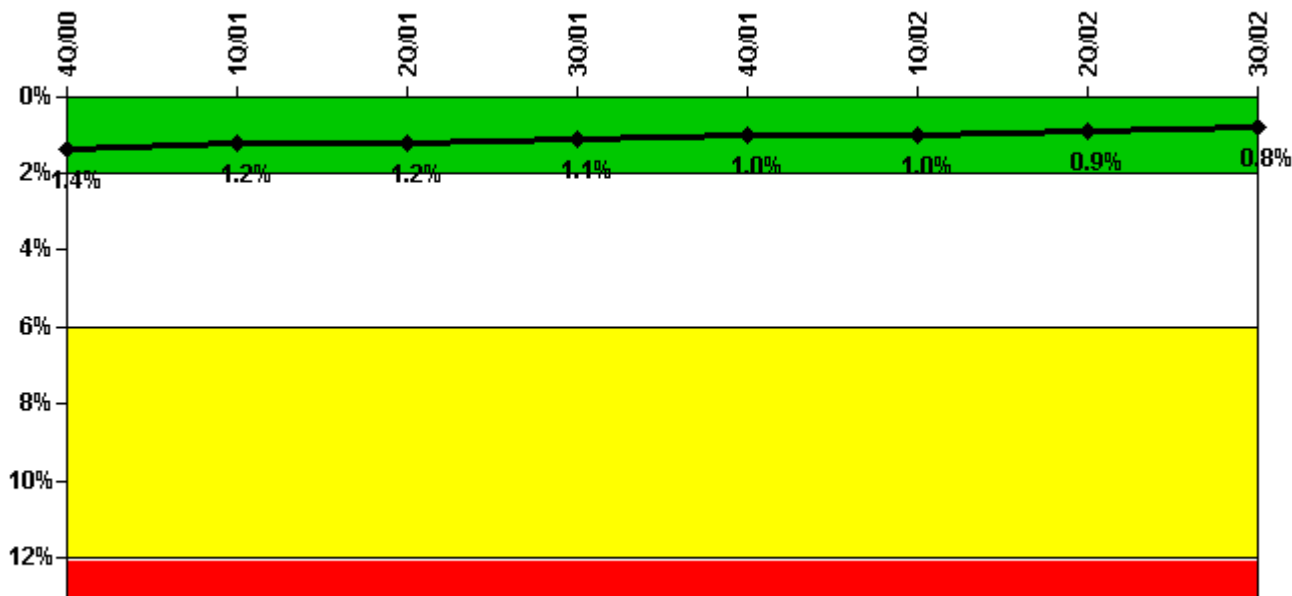
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Train 1								
Planned unavailable hours	12.90	42.70	18.50	4.80	10.90	22.00	3.20	23.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20
Train 2								
Planned unavailable hours	0.40	13.93	0	17.30	52.20	3.00	6.60	3.40
Unplanned unavailable hours	0	0	0	0	0	64.80	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20
Train 3								
Planned unavailable hours	0	1.60	10.70	27.60	2.90	1.20	3.20	4.90
Unplanned unavailable hours	0	0	0	34.30	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20
Train 4								
Planned unavailable hours	19.40	9.18	0	0	1.60	3.00	26.80	3.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20
Indicator value	0.4%	0.4%	0.4%	0.5%	0.5%	0.6%	0.6%	0.5%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



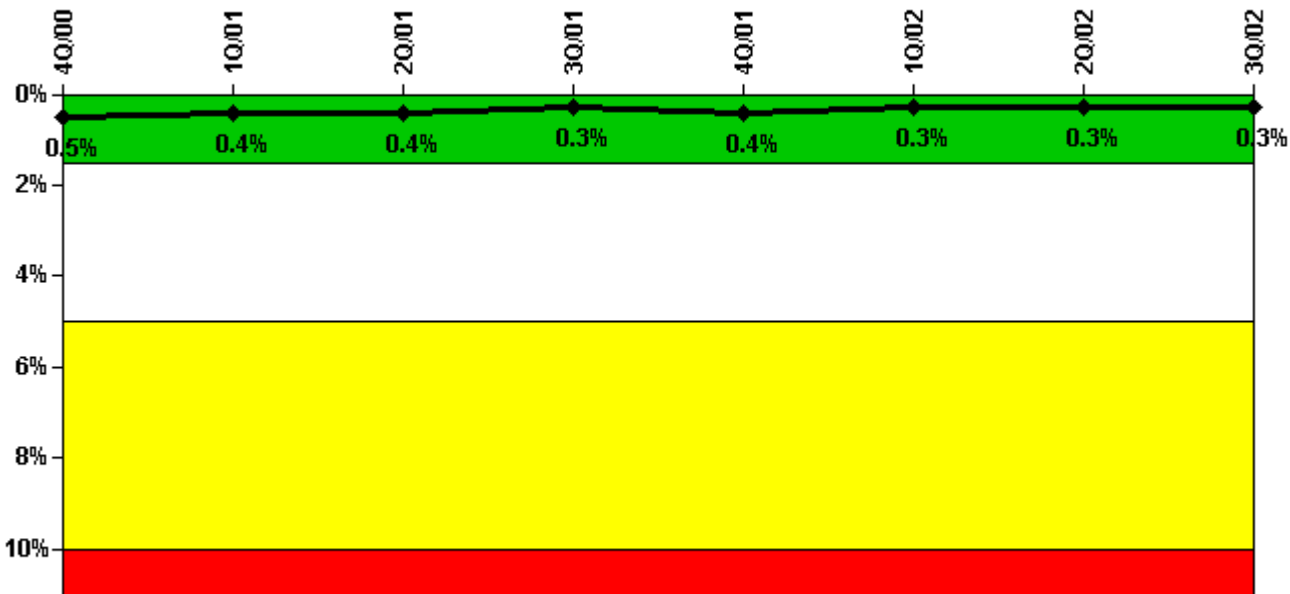
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Train 1								
Planned unavailable hours	2.40	2.70	1.80	2.20	4.80	2.90	4.30	3.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20
Train 2								
Planned unavailable hours	2.00	2.70	17.10	3.40	3.50	32.20	2.90	26.20
Unplanned unavailable hours	0	0	0	0	1.40	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20
Indicator value	1.4%	1.2%	1.2%	1.1%	1.0%	1.0%	0.9%	0.8%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



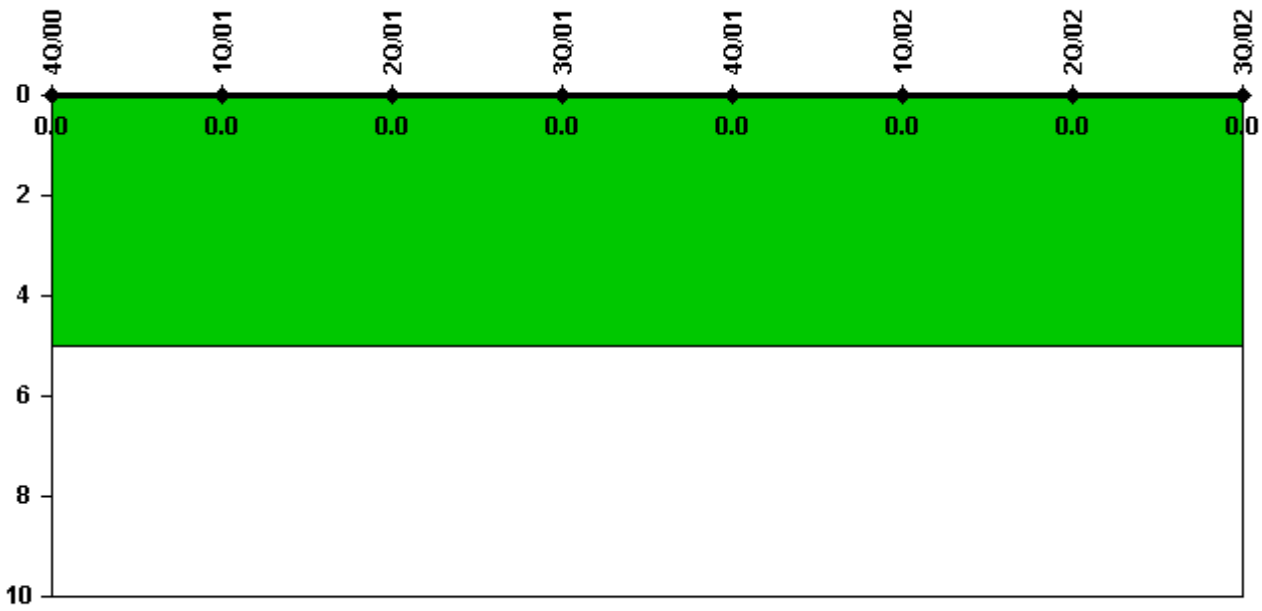
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Train 1								
Planned unavailable hours	44.00	0.30	3.00	0.40	2.90	1.30	3.20	21.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	0.60	1.12	1.00	0.50	13.90	26.30	2.90	3.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	0.5%	0.4%	0.4%	0.3%	0.4%	0.3%	0.3%	0.3%

Licensee Comments: none

Safety System Functional Failures (PWR)



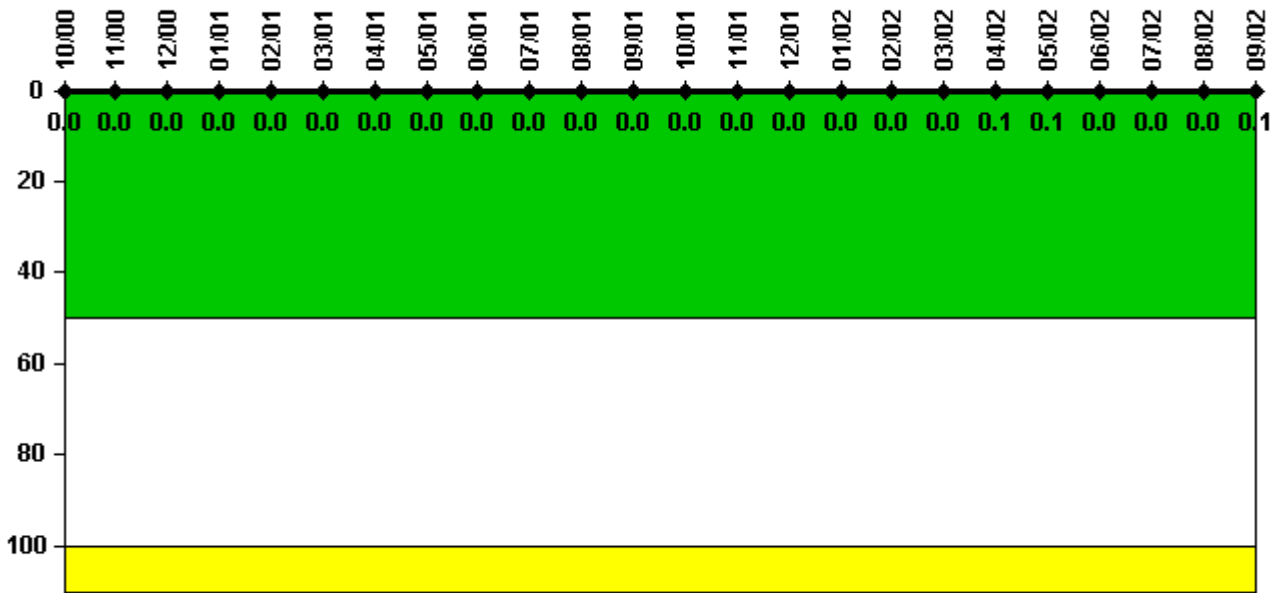
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

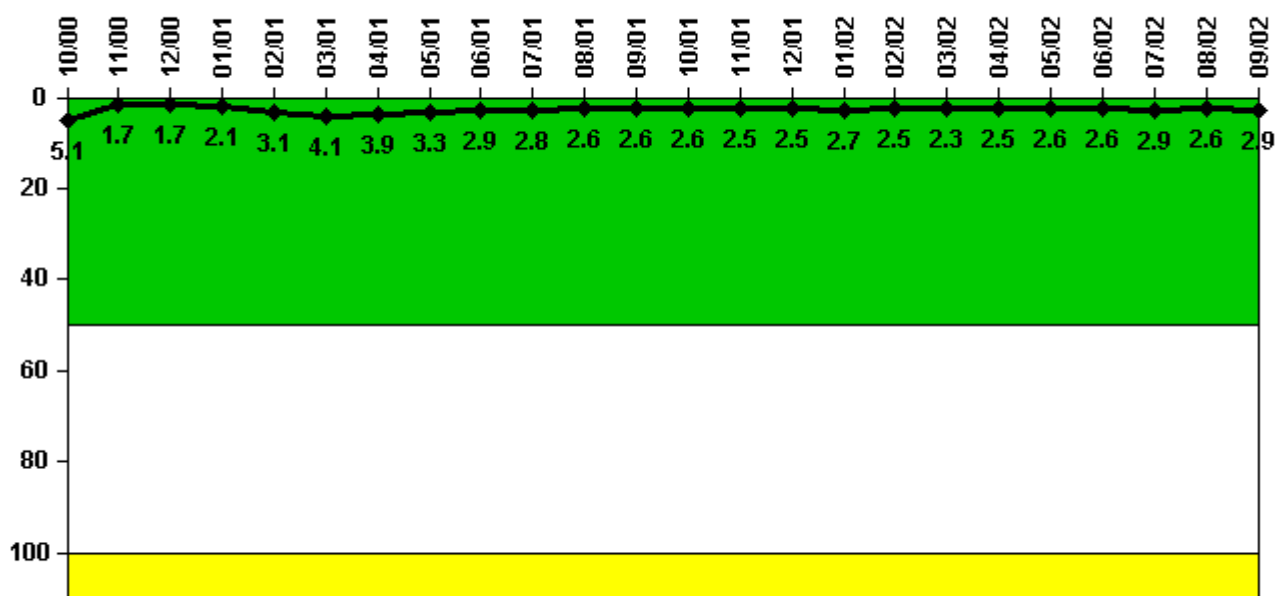
Notes

Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01
Maximum activity	0.000342	0.000372	0.000366	0.000366	0.000410	0.000438	0.000450	0.000250	0.000277	0.000313	0.000324	0.000337
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02
Maximum activity	0.000351	0.000428	0.000393	0.000412	0.000416	0.000398	0.000841	0.001210	0.000483	0.000451	0.000447	0.000855
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0.1	0.1	0	0	0	0.1

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

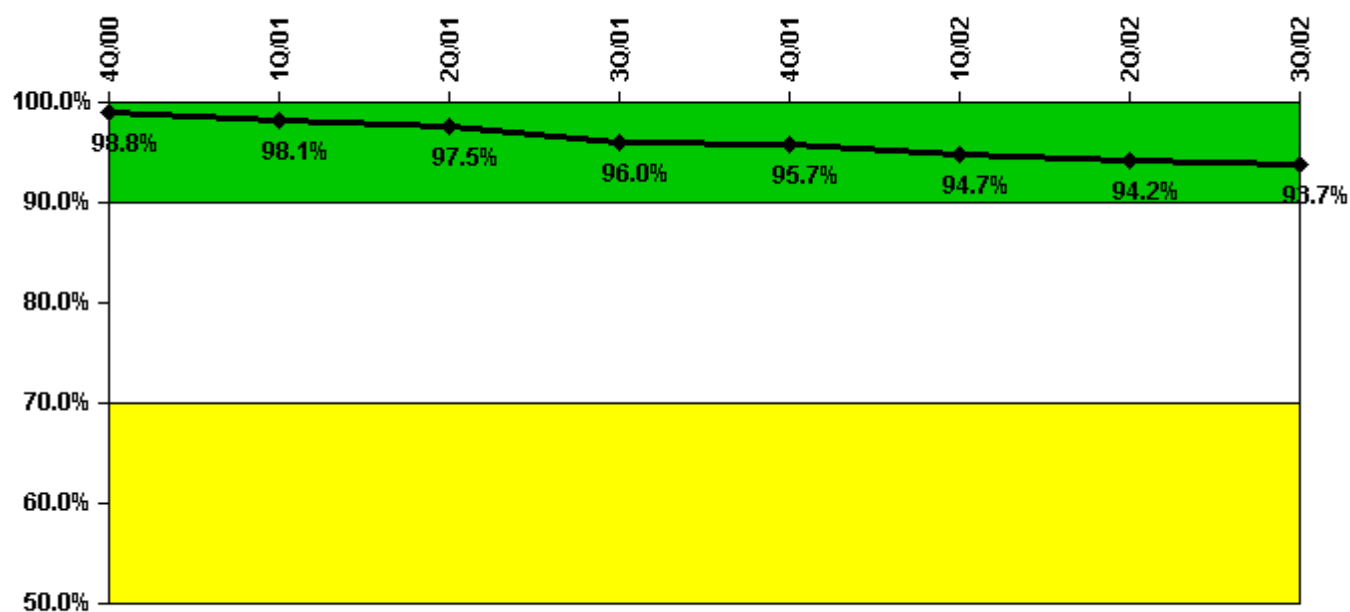
Notes

Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01
Maximum leakage	0.514	0.172	0.169	0.209	0.314	0.406	0.395	0.329	0.289	0.284	0.263	0.256
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	5.1	1.7	1.7	2.1	3.1	4.1	3.9	3.3	2.9	2.8	2.6	2.6

Reactor Coolant System Leakage	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02
Maximum leakage	0.259	0.250	0.252	0.266	0.249	0.234	0.249	0.257	0.259	0.286	0.256	0.287
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.6	2.5	2.5	2.7	2.5	2.3	2.5	2.6	2.6	2.9	2.6	2.9

Licensee Comments: none

Drill/Exercise Performance



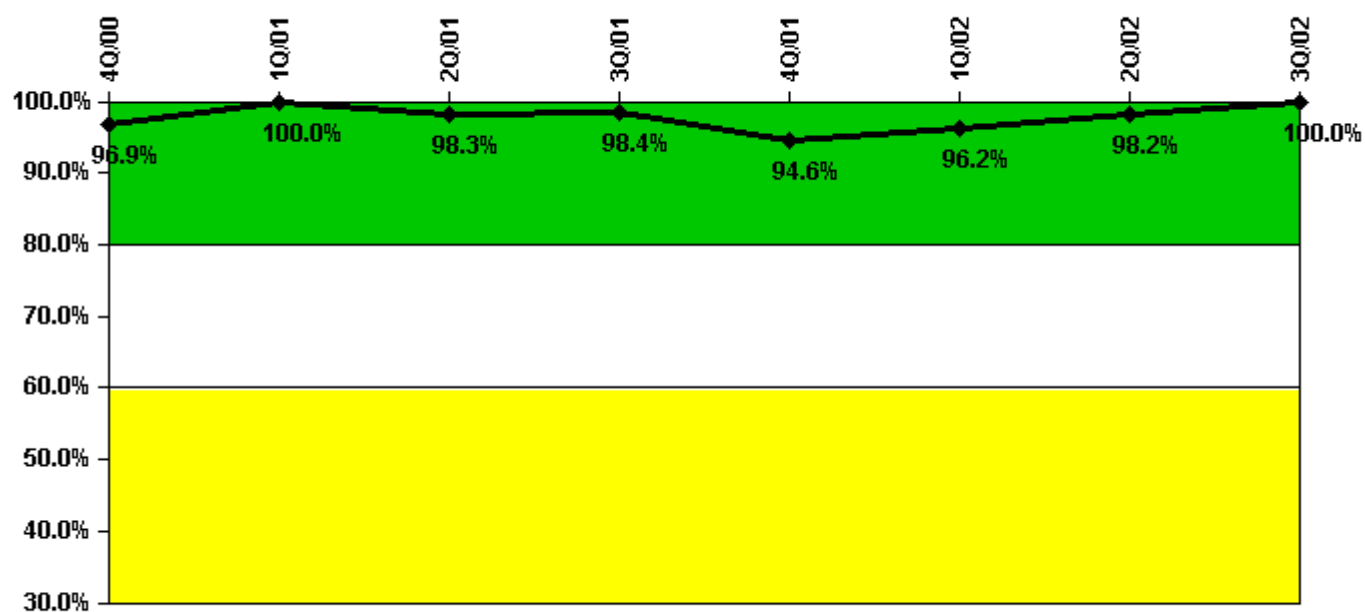
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Successful opportunities	0	14.0	0	31.0	38.0	34.0	14.0	33.0
Total opportunities	0	16.0	0	35.0	40.0	36.0	14.0	34.0
Indicator value	98.8%	98.1%	97.5%	96.0%	95.7%	94.7%	94.2%	93.7%

Licensee Comments: none

ERO Drill Participation



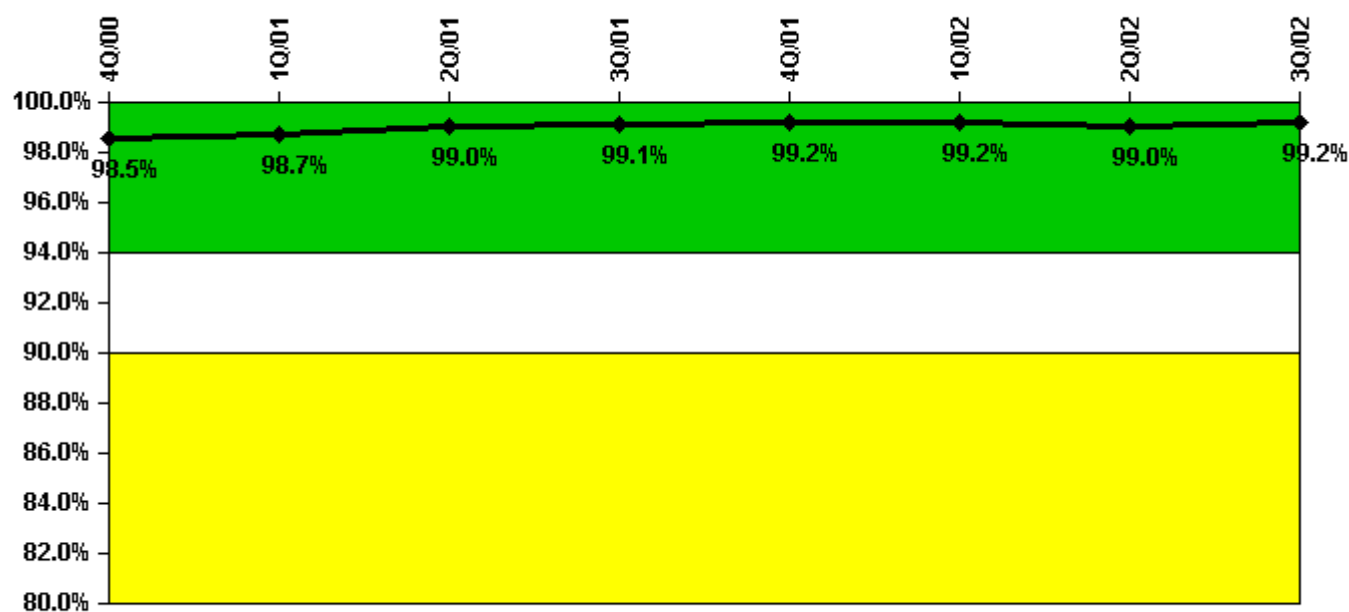
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Participating Key personnel	63.0	63.0	59.0	60.0	53.0	50.0	55.0	55.0
Total Key personnel	65.0	63.0	60.0	61.0	56.0	52.0	56.0	55.0
Indicator value	96.9%	100.0%	98.3%	98.4%	94.6%	96.2%	98.2%	100.0%

Licensee Comments: none

Alert & Notification System



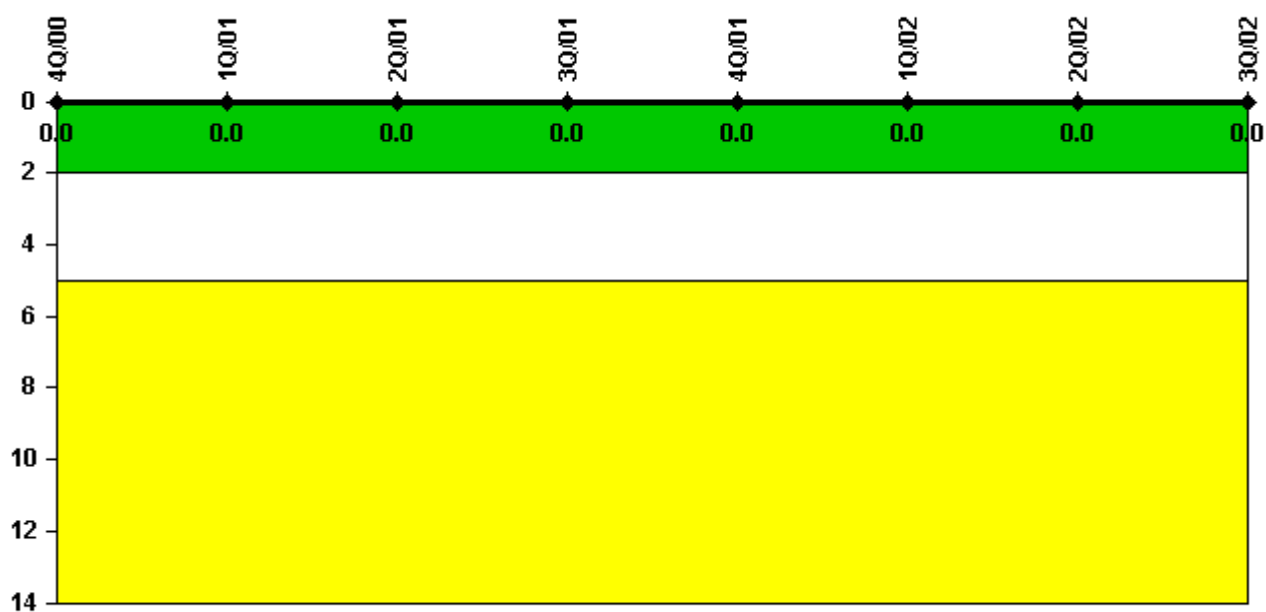
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Successful siren-tests	5864	6245	6258	6141	5965	5872	5945	5994
Total sirens-tests	5922	6298	6298	6204	6016	5922	6016	6016
Indicator value	98.5%	98.7%	99.0%	99.1%	99.2%	99.2%	99.0%	99.2%

Licensee Comments: none

Occupational Exposure Control Effectiveness

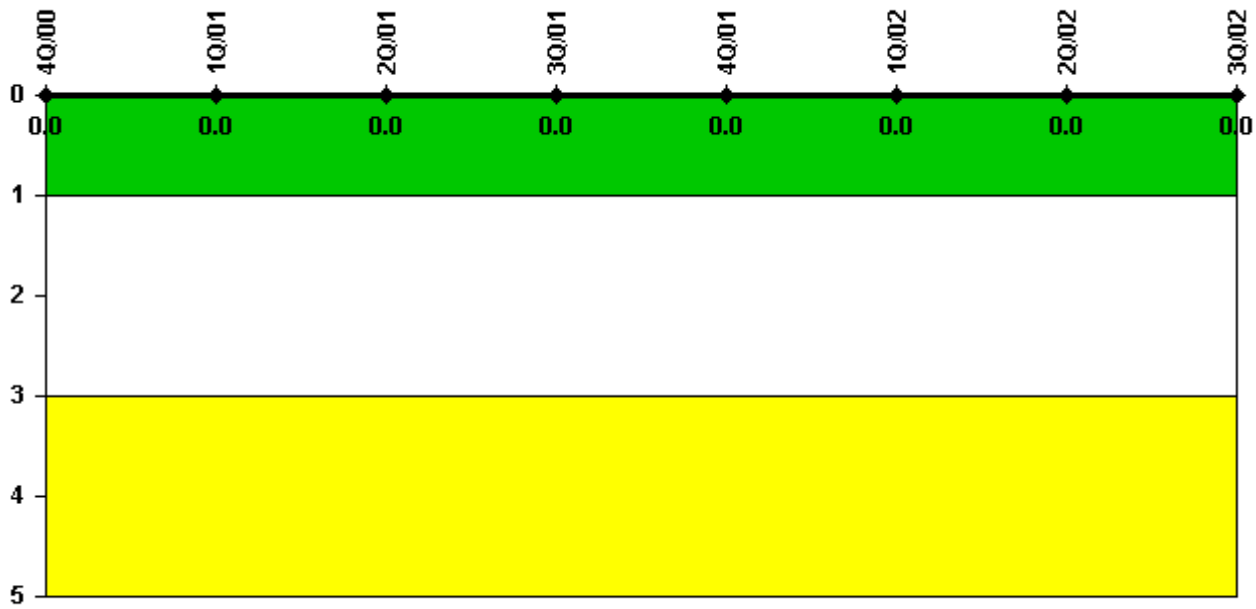


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

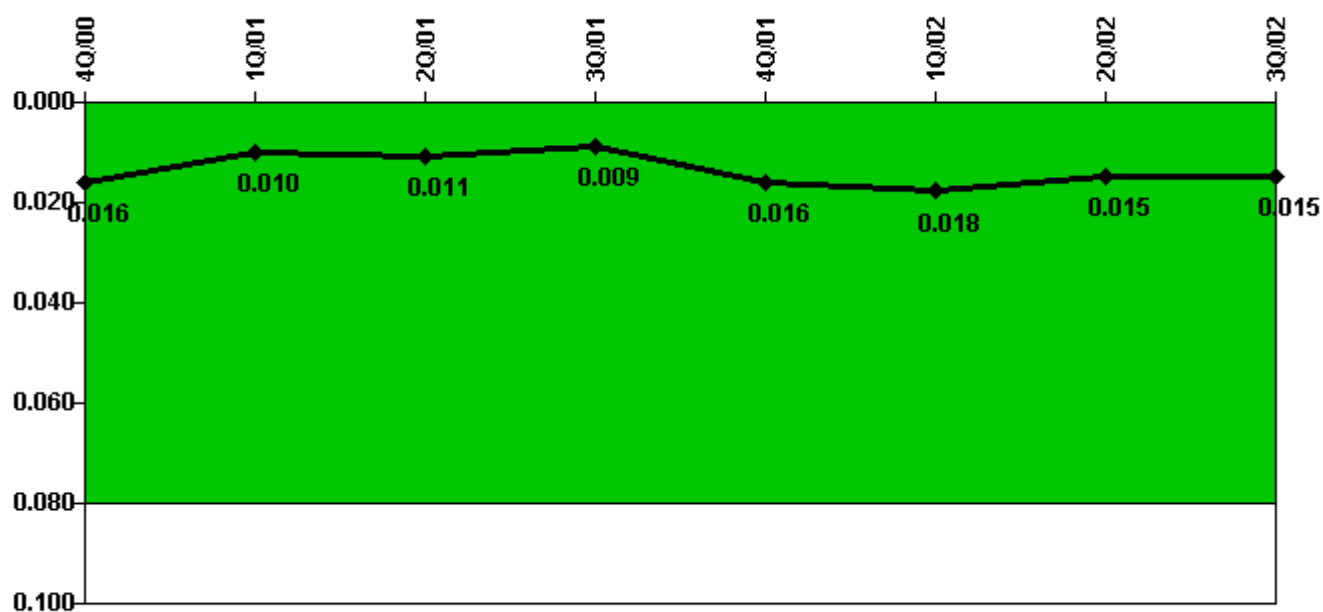
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



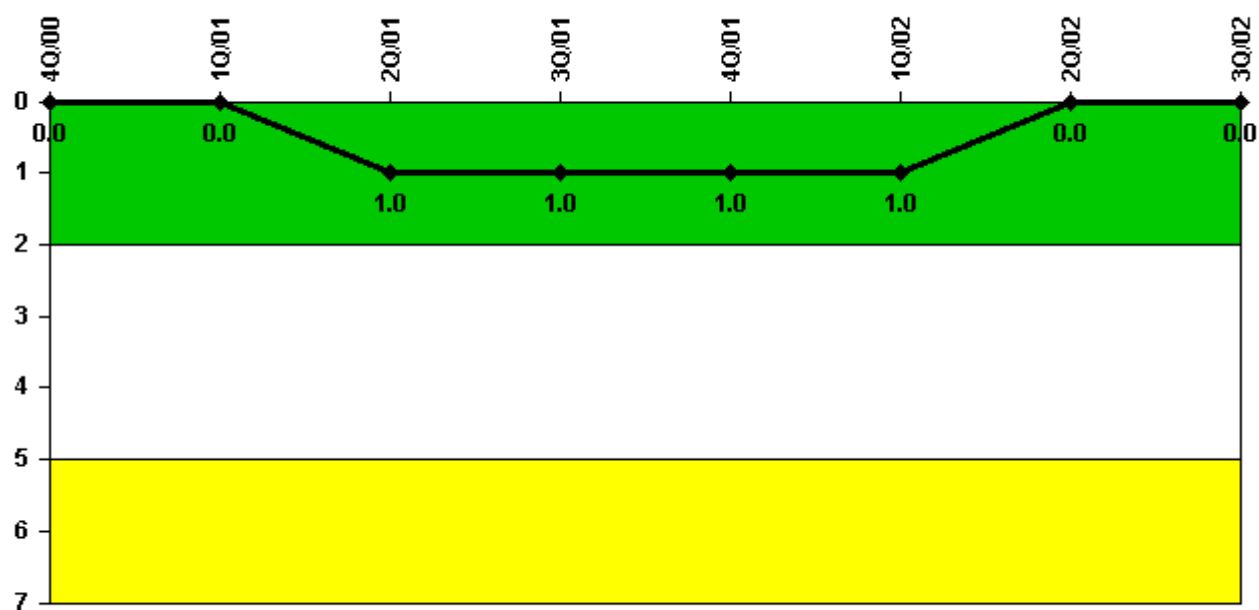
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
IDS compensatory hours	17.43	21.85	92.99	29.12	247.72	62.00	14.60	12.80
CCTV compensatory hours	37.5	2.6	0	0	0	0	13.5	4.3
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.016	0.010	0.011	0.009	0.016	0.018	0.015	0.015

Licensee Comments: none

Personnel Screening Program



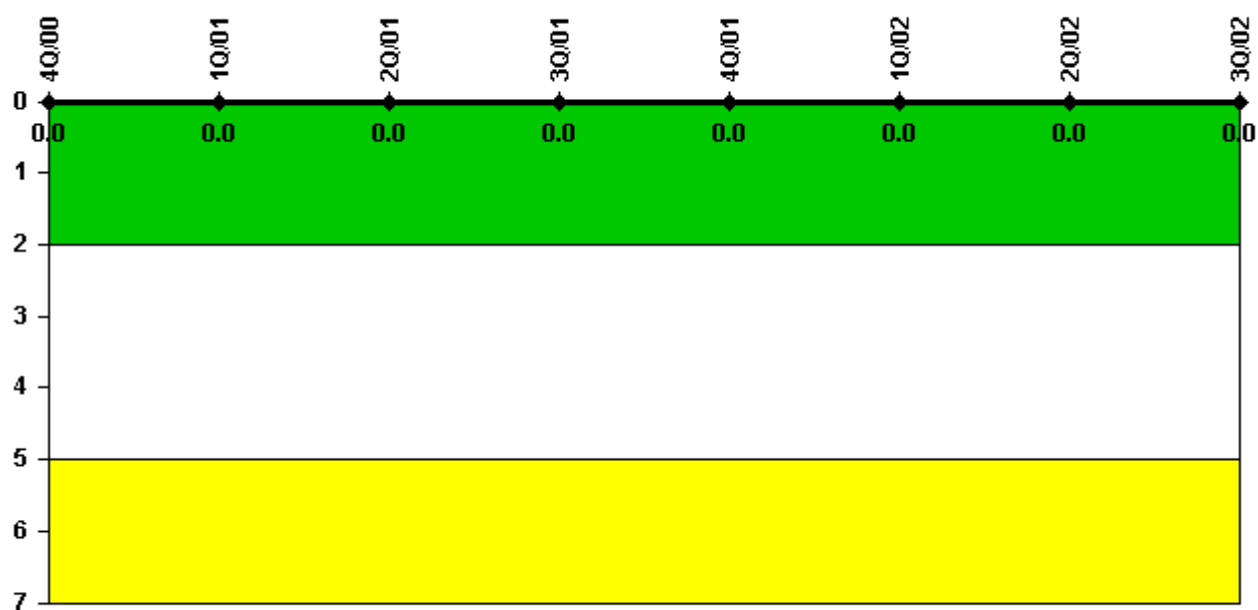
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Program failures	0	0	1	0	0	0	0	0
Indicator value	0	0	1	1	1	1	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

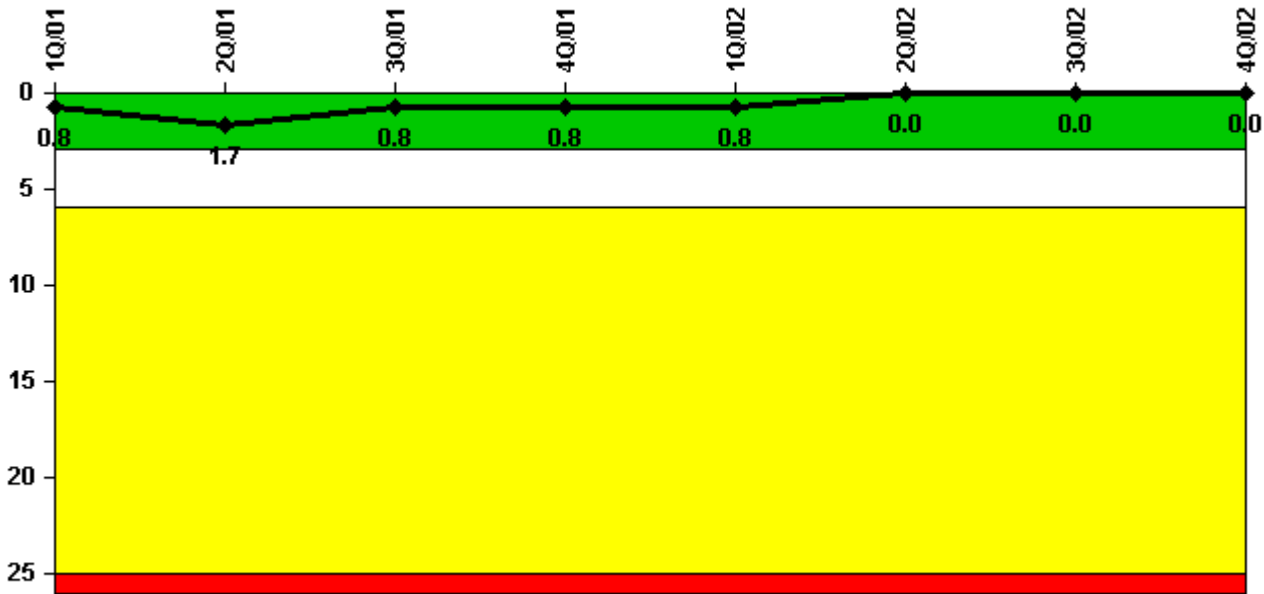
Last Modified: October 22, 2002

Byron 2

4Q/2002 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



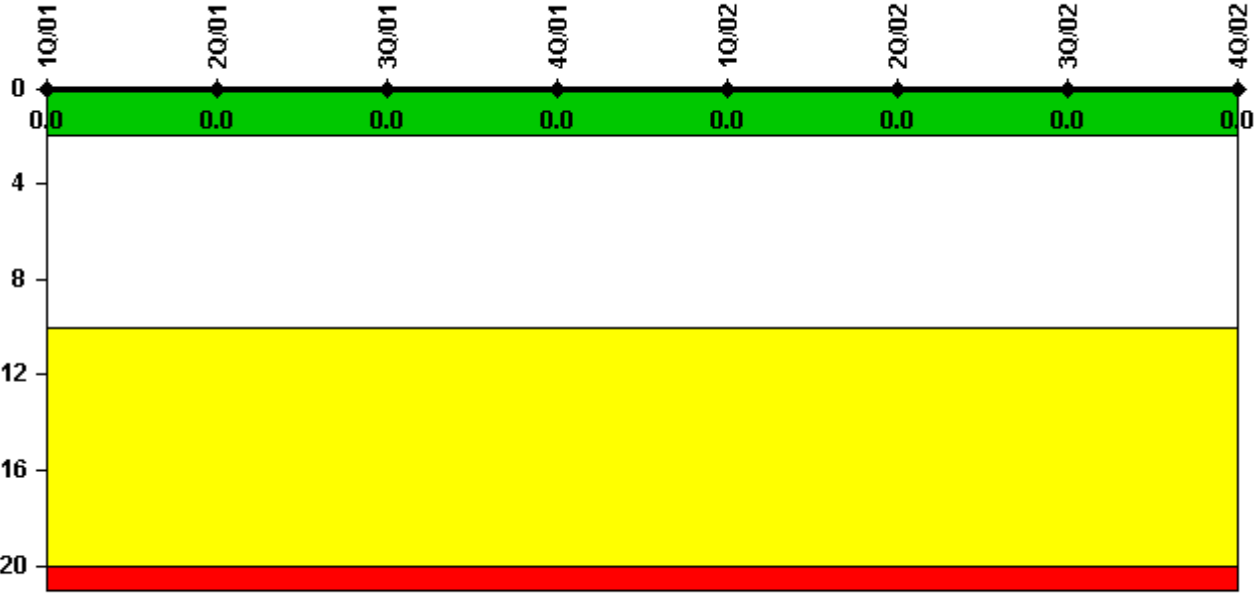
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Unplanned scrams	0	1.0	0	0	0	0	0	0
Critical hours	2160.0	1795.3	2208.0	2209.0	2160.0	2056.2	1870.2	2062.0
Indicator value	0.8	1.7	0.8	0.8	0.8	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



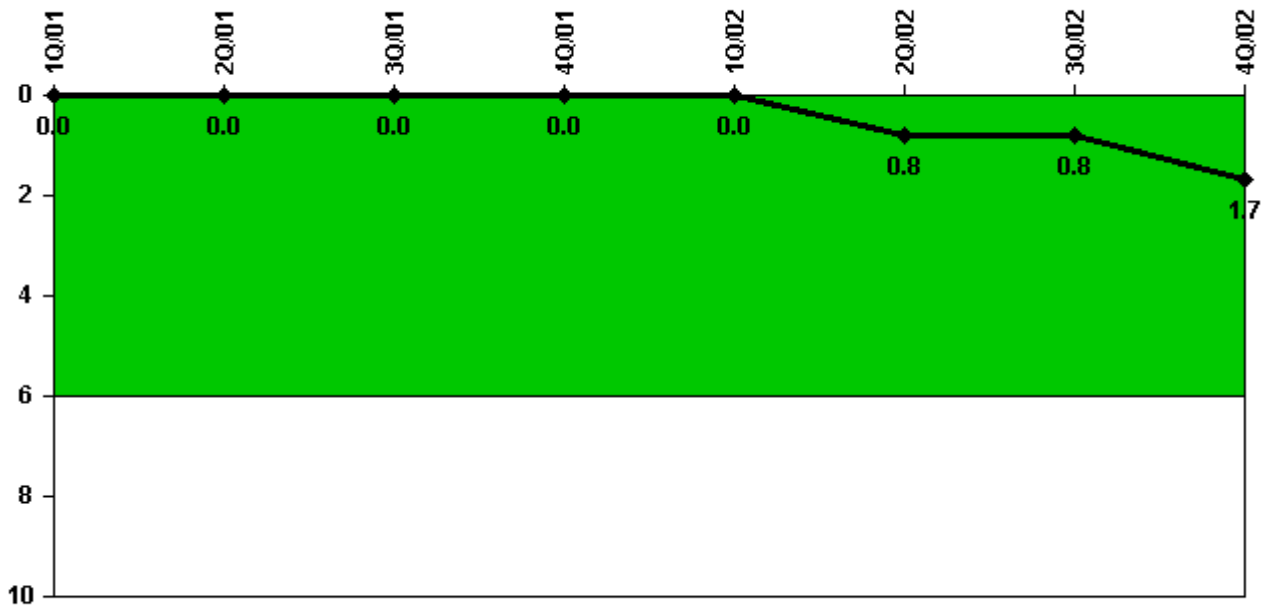
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



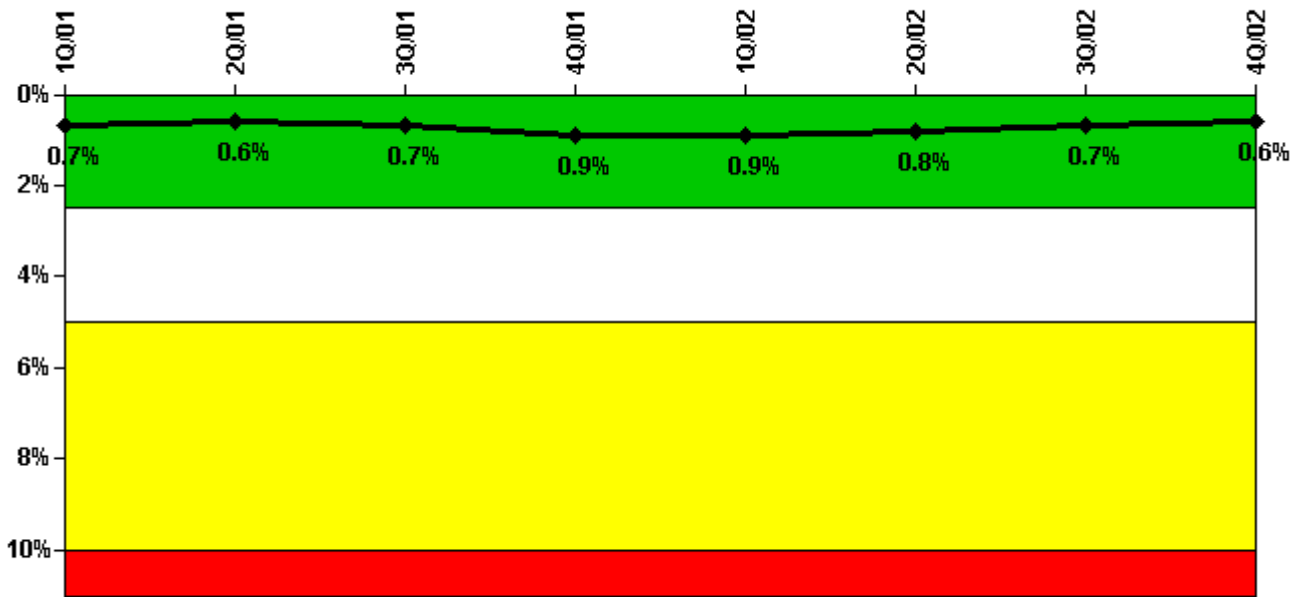
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Unplanned power changes	0	0	0	0	0	1.0	0	1.0
Critical hours	2160.0	1795.3	2208.0	2209.0	2160.0	2056.2	1870.2	2062.0
Indicator value	0	0	0	0	0	0.8	0.8	1.7

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



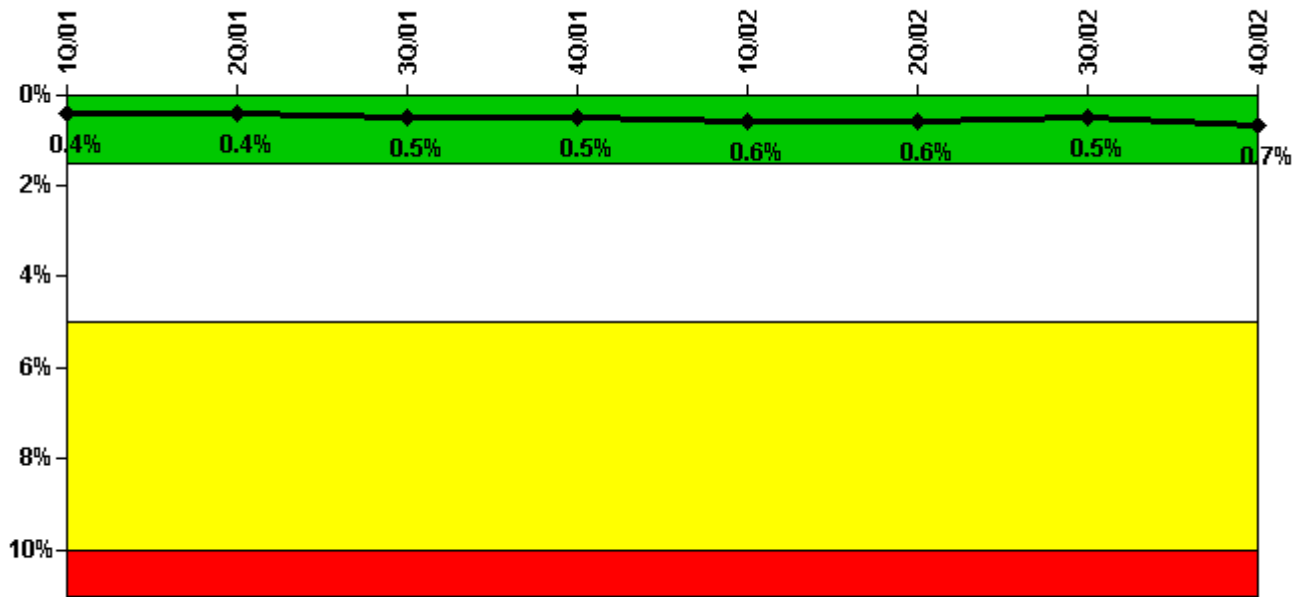
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	17.50	0	11.20	11.80	7.80	13.20	2.30	8.60
Unplanned unavailable hours	0	0	0	87.50	0	0	0	0
Fault exposure hours	0	0	0	3.90	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	0	6.20	0	18.30	17.60	12.00	3.40	2.60
Unplanned unavailable hours	0	0	8.20	15.90	0	30.40	10.70	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.7%	0.6%	0.7%	0.9%	0.9%	0.8%	0.7%	0.6%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



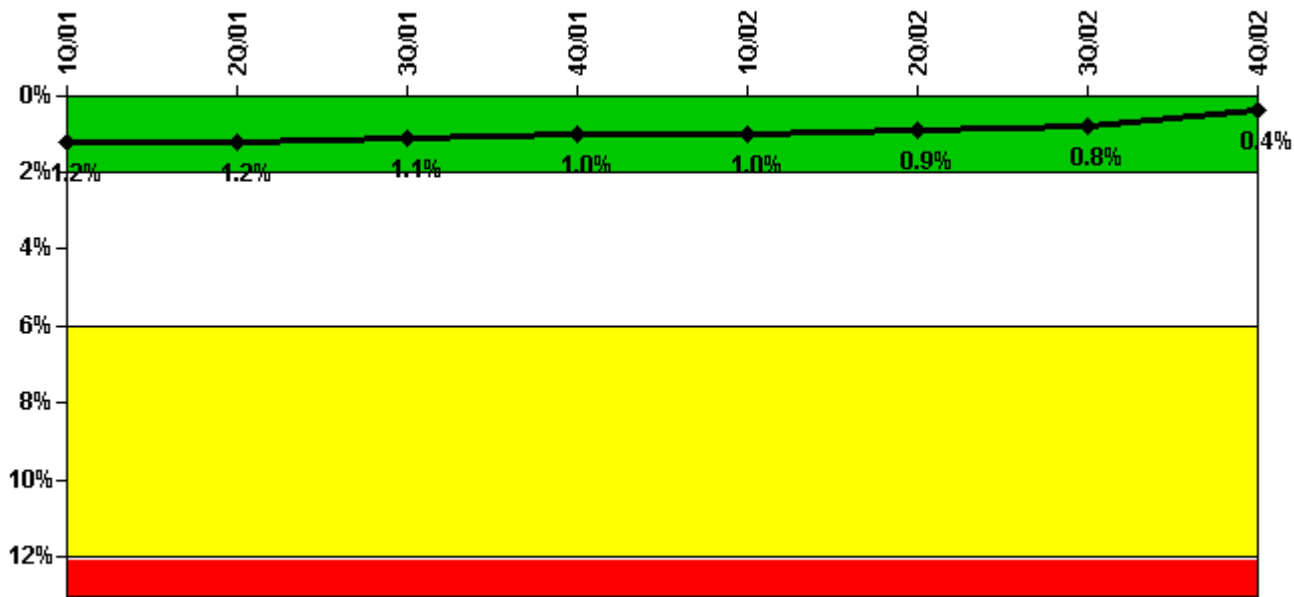
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	42.70	18.50	4.80	10.90	22.00	3.20	23.90	2.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20
Train 2								
Planned unavailable hours	13.93	0	17.30	52.20	3.00	6.60	3.40	1.30
Unplanned unavailable hours	0	0	0	0	64.80	0	0	135.90
Fault exposure hours	0	0	0	0	0	0	0	50.40
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20
Train 3								
Planned unavailable hours	1.60	10.70	27.60	2.90	1.20	3.20	4.90	2.40
Unplanned unavailable hours	0	0	34.30	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20
Train 4								
Planned unavailable hours	9.18	0	0	1.60	3.00	26.80	3.40	3.00
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20
Indicator value	0.4%	0.4%	0.5%	0.5%	0.6%	0.6%	0.5%	0.7%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



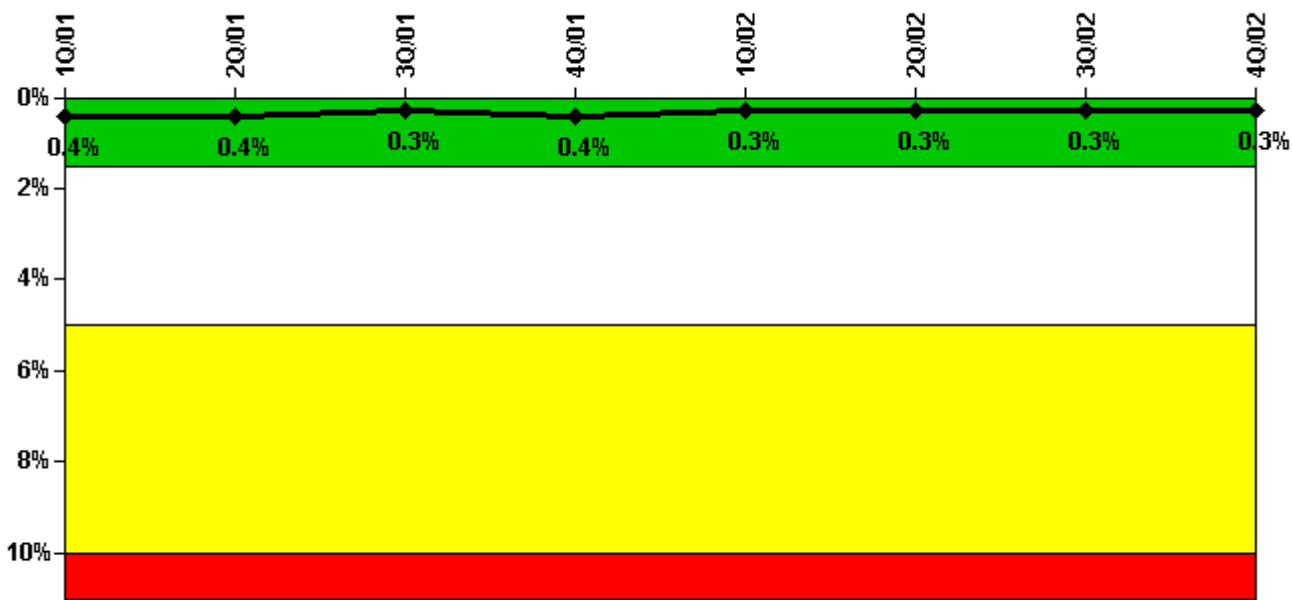
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	2.70	1.80	2.20	4.80	2.90	4.30	3.60	4.10
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20
Train 2								
Planned unavailable hours	2.70	17.10	3.40	3.50	32.20	2.90	26.20	19.30
Unplanned unavailable hours	0	0	0	1.40	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20
Indicator value	1.2%	1.2%	1.1%	1.0%	1.0%	0.9%	0.8%	0.4%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



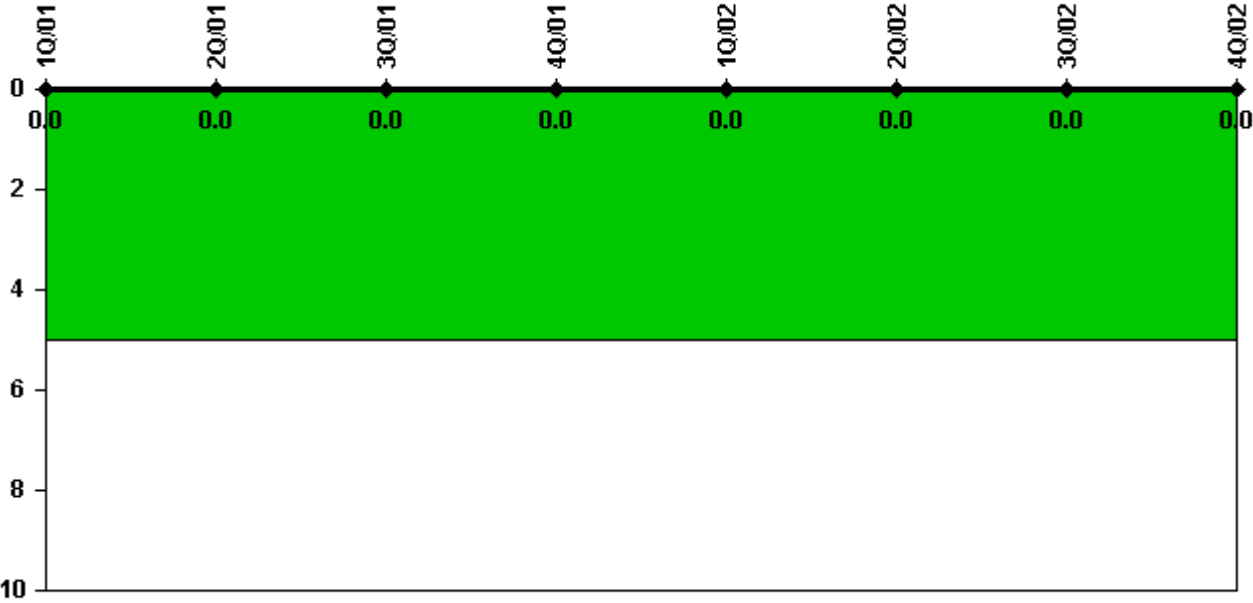
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	0.30	3.00	0.40	2.90	1.30	3.20	21.60	2.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	1.12	1.00	0.50	13.90	26.30	2.90	3.70	2.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.4%	0.4%	0.3%	0.4%	0.3%	0.3%	0.3%	0.3%

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

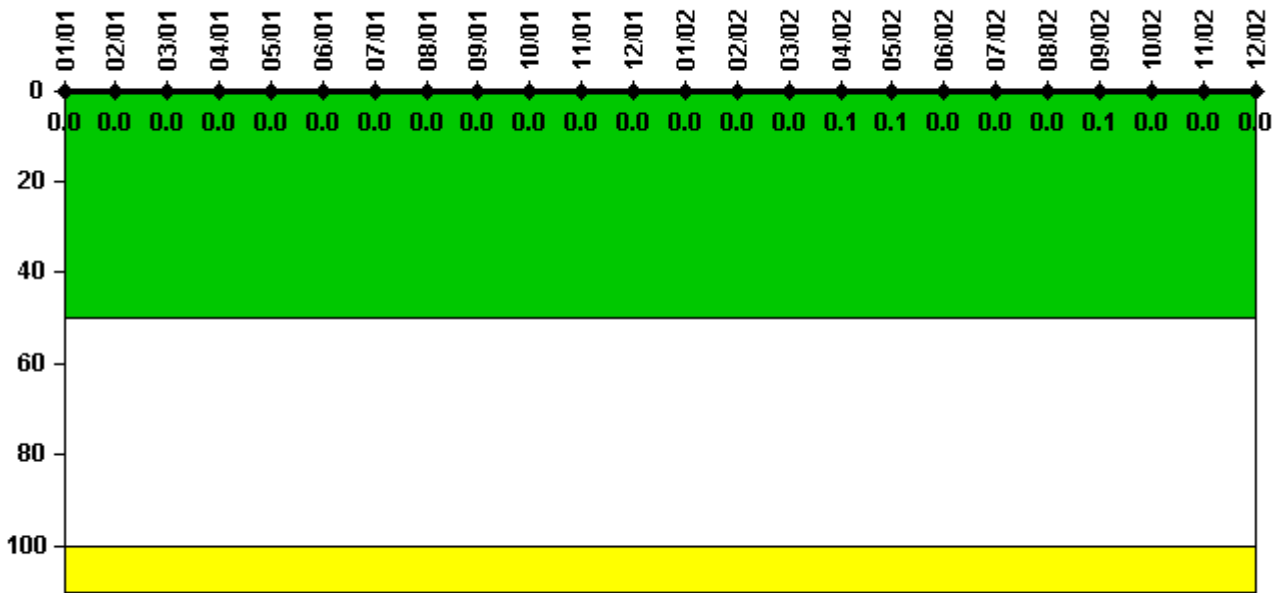
Notes

Safety System Functional Failures (PWR)	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none



Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

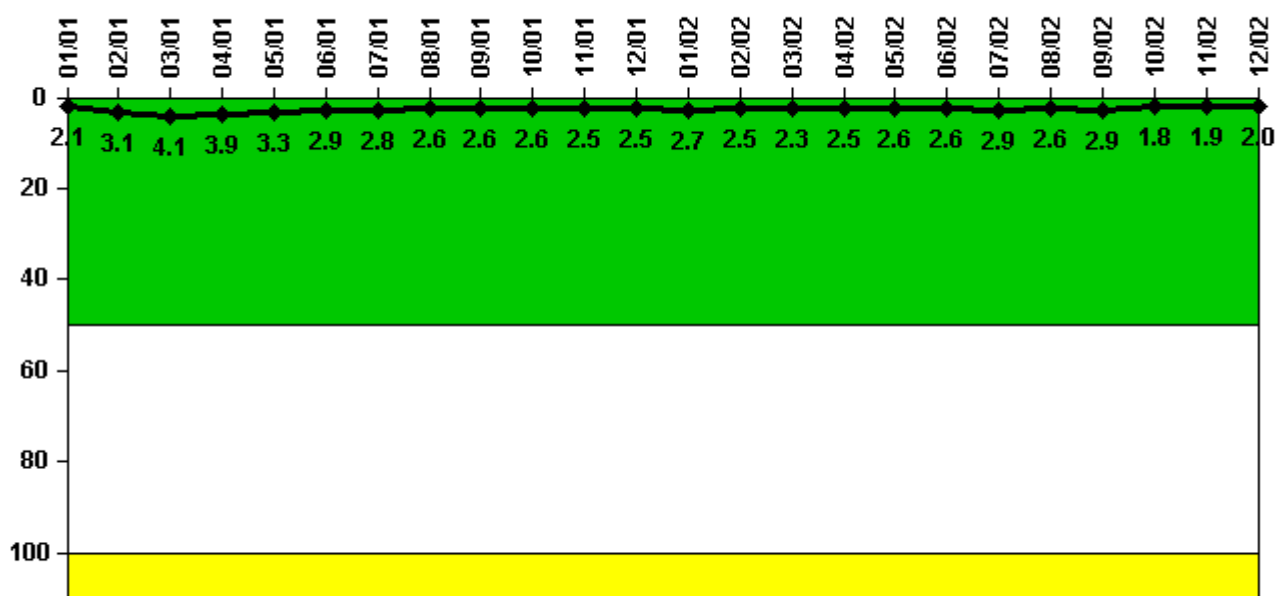
Notes

Reactor Coolant System Activity	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum activity	0.000366	0.000410	0.000438	0.000450	0.000250	0.000277	0.000313	0.000324	0.000337	0.000351	0.000428	0.000393
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum activity	0.000412	0.000416	0.000398	0.000841	0.001210	0.000483	0.000451	0.000447	0.000855	0.000242	0.000318	0.000327
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0.1	0.1	0	0	0	0.1	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

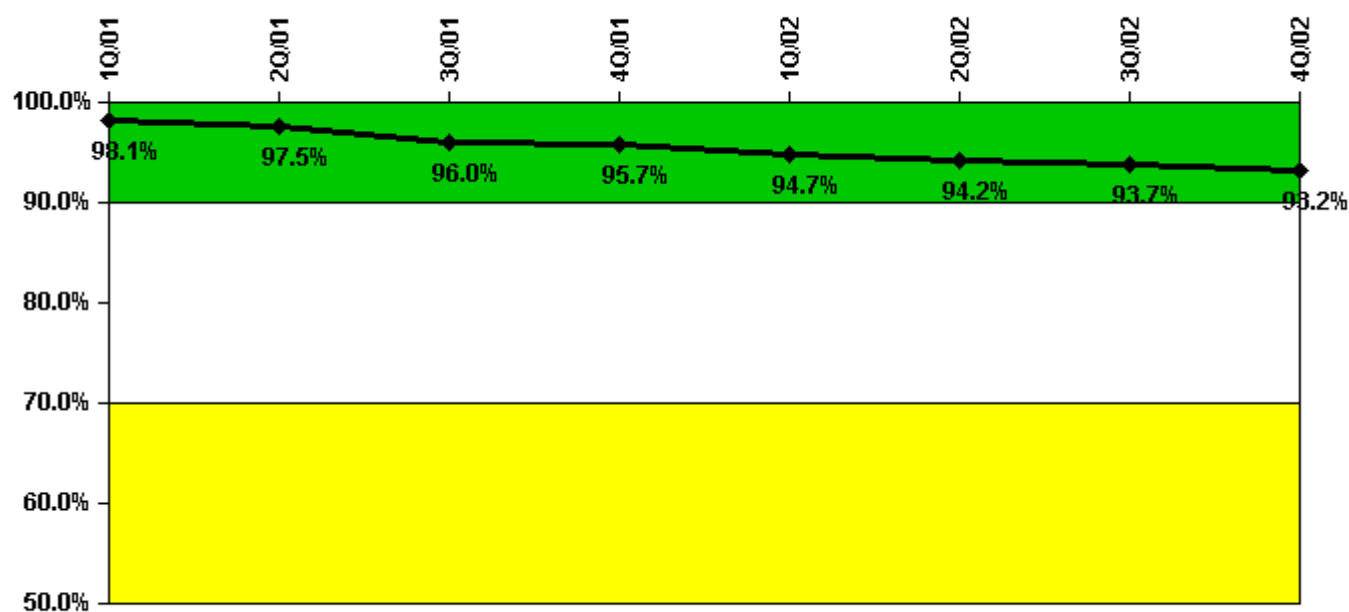
Notes

Reactor Coolant System Leakage	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum leakage	0.209	0.314	0.406	0.395	0.329	0.289	0.284	0.263	0.256	0.259	0.250	0.252
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.1	3.1	4.1	3.9	3.3	2.9	2.8	2.6	2.6	2.6	2.5	2.5

Reactor Coolant System Leakage	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum leakage	0.266	0.249	0.234	0.249	0.257	0.259	0.286	0.256	0.287	0.182	0.192	0.204
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.7	2.5	2.3	2.5	2.6	2.6	2.9	2.6	2.9	1.8	1.9	2.0

Licensee Comments: none

Drill/Exercise Performance



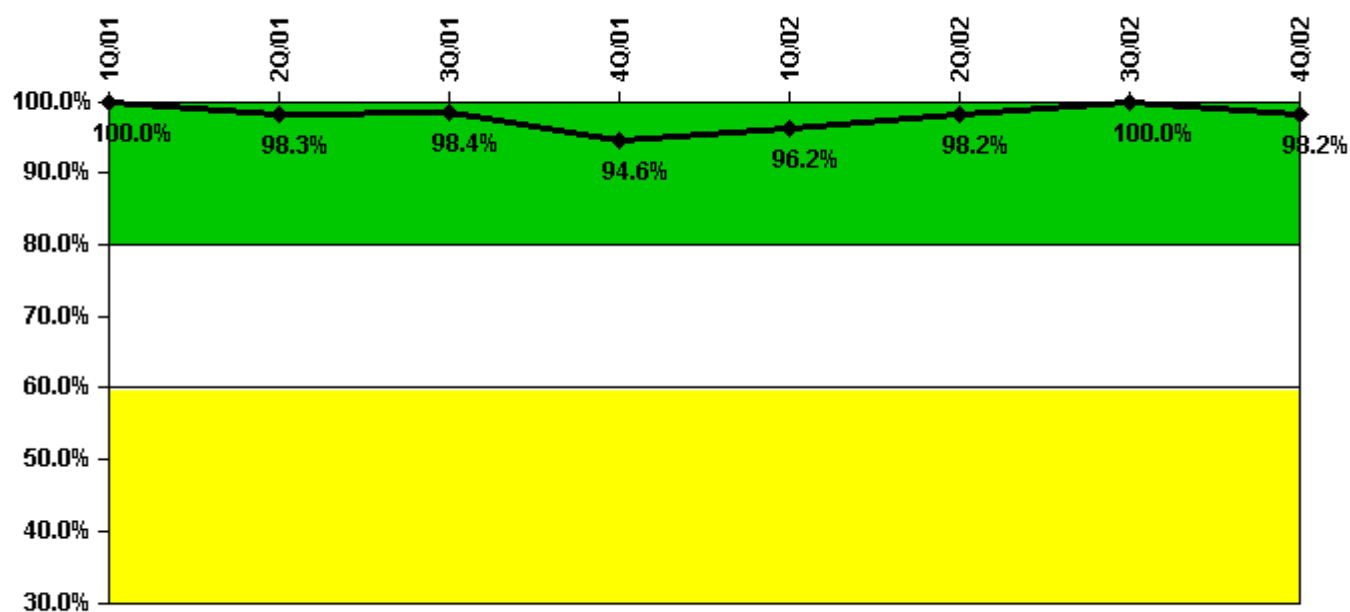
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Successful opportunities	14.0	0	31.0	38.0	34.0	14.0	33.0	43.0
Total opportunities	16.0	0	35.0	40.0	36.0	14.0	34.0	47.0
Indicator value	98.1%	97.5%	96.0%	95.7%	94.7%	94.2%	93.7%	93.2%

Licensee Comments: none

ERO Drill Participation



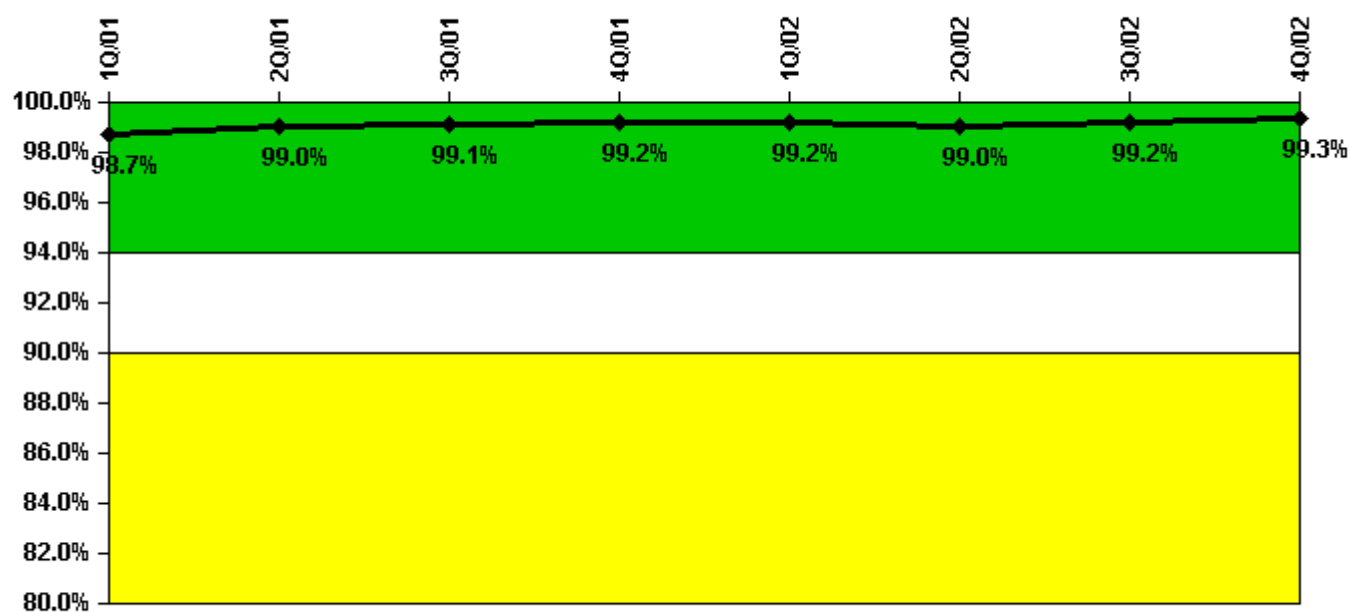
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Participating Key personnel	63.0	59.0	60.0	53.0	50.0	55.0	55.0	54.0
Total Key personnel	63.0	60.0	61.0	56.0	52.0	56.0	55.0	55.0
Indicator value	100.0%	98.3%	98.4%	94.6%	96.2%	98.2%	100.0%	98.2%

Licensee Comments: none

Alert & Notification System



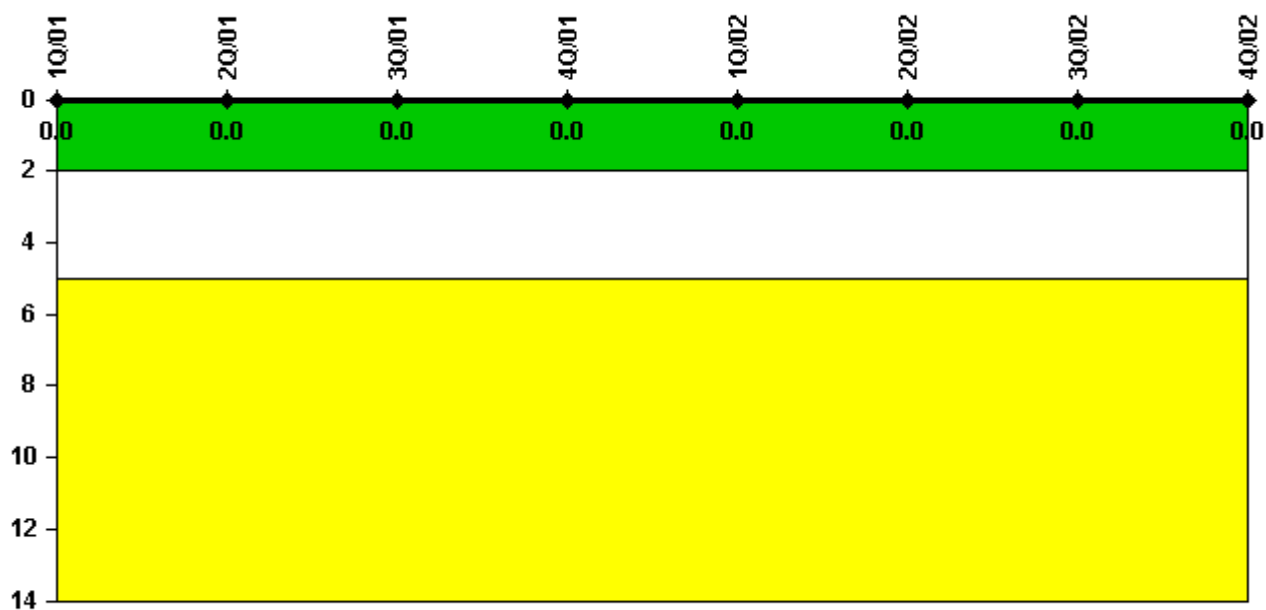
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Successful siren-tests	6245	6258	6141	5965	5872	5945	5994	5991
Total sirens-tests	6298	6298	6204	6016	5922	6016	6016	6016
Indicator value	98.7%	99.0%	99.1%	99.2%	99.2%	99.0%	99.2%	99.3%

Licensee Comments: none

Occupational Exposure Control Effectiveness

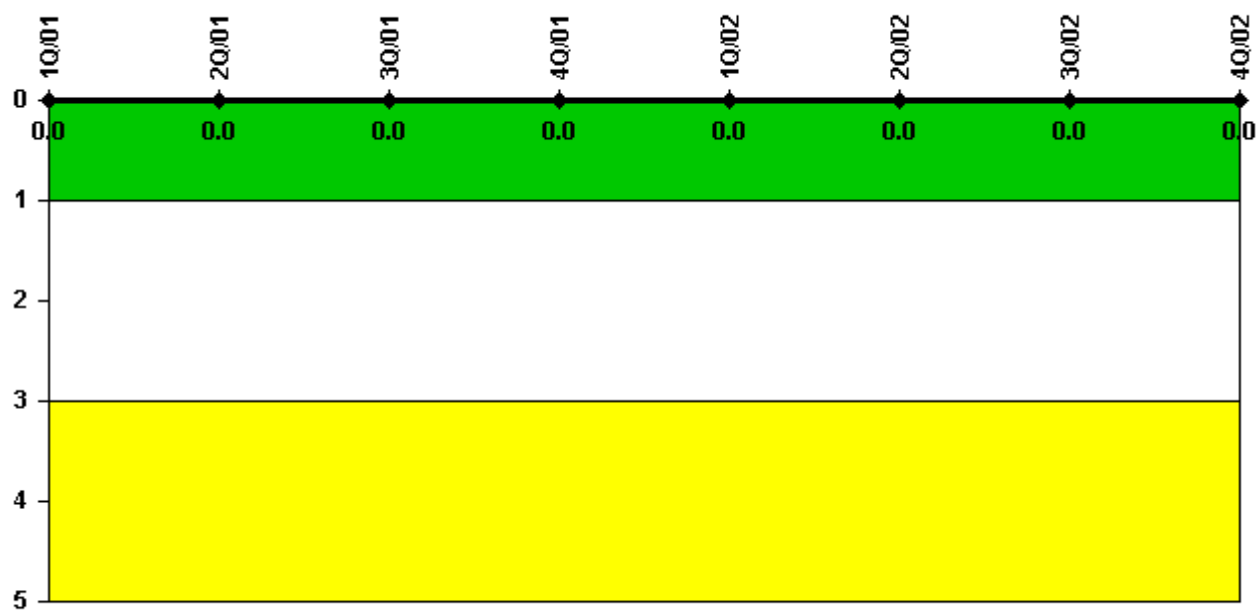


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

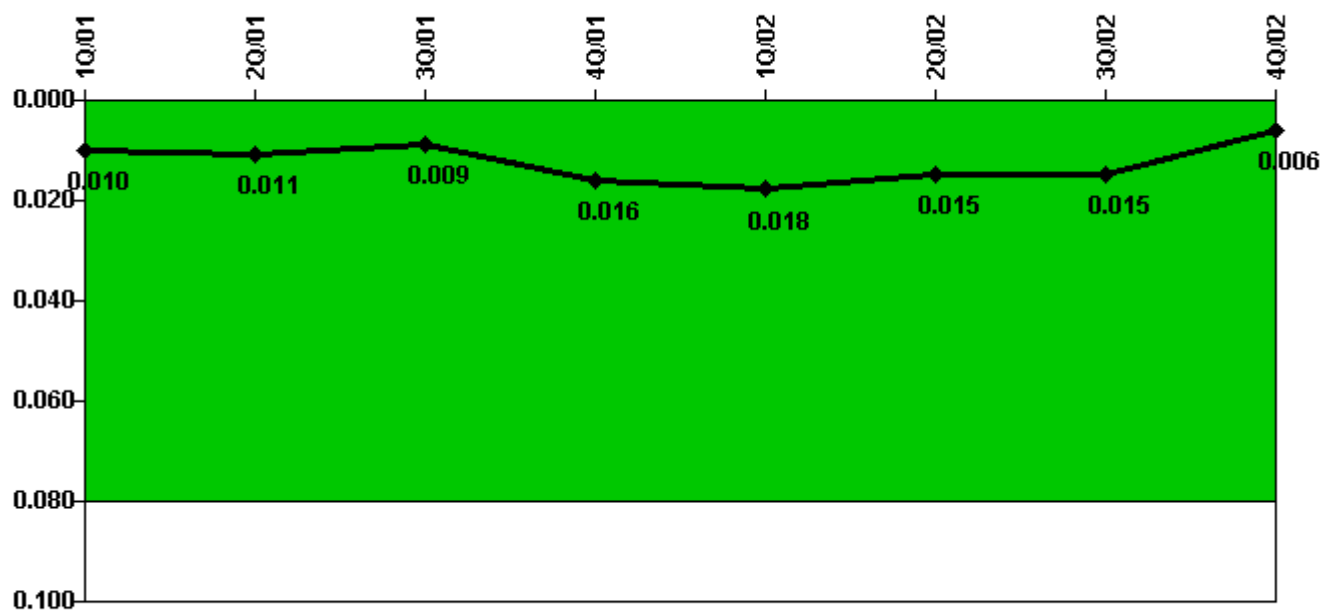
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



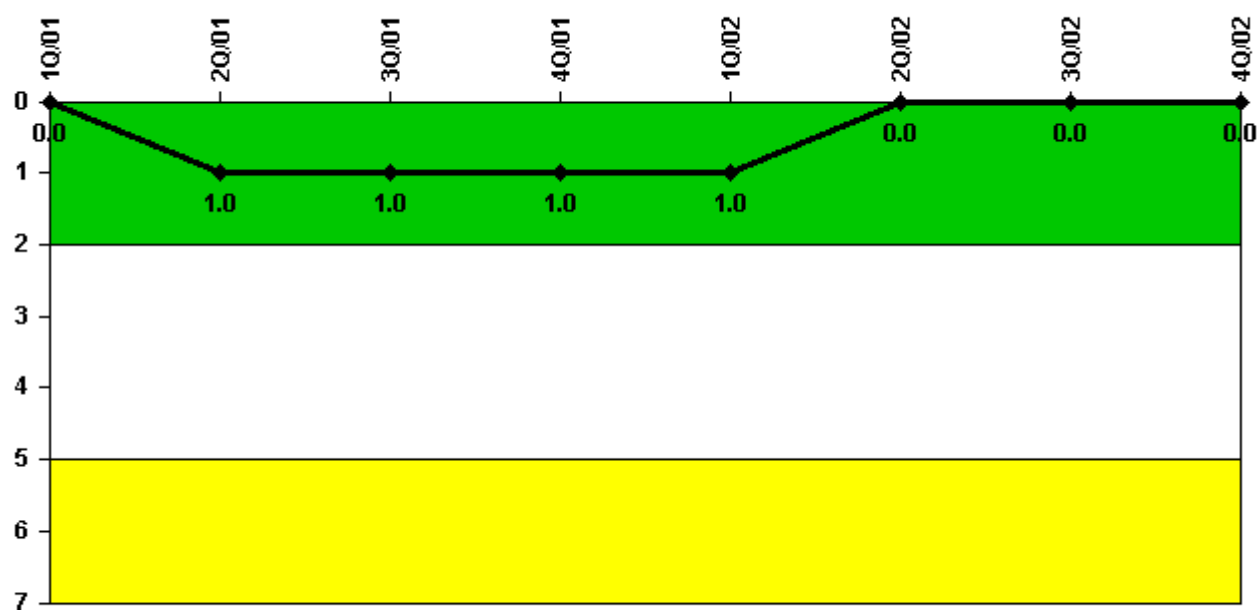
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
IDS compensatory hours	21.85	92.99	29.12	247.72	62.00	14.60	12.80	34.10
CCTV compensatory hours	2.6	0	0	0	0	13.5	4.3	5.8
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.010	0.011	0.009	0.016	0.018	0.015	0.015	0.006

Licensee Comments: none

Personnel Screening Program



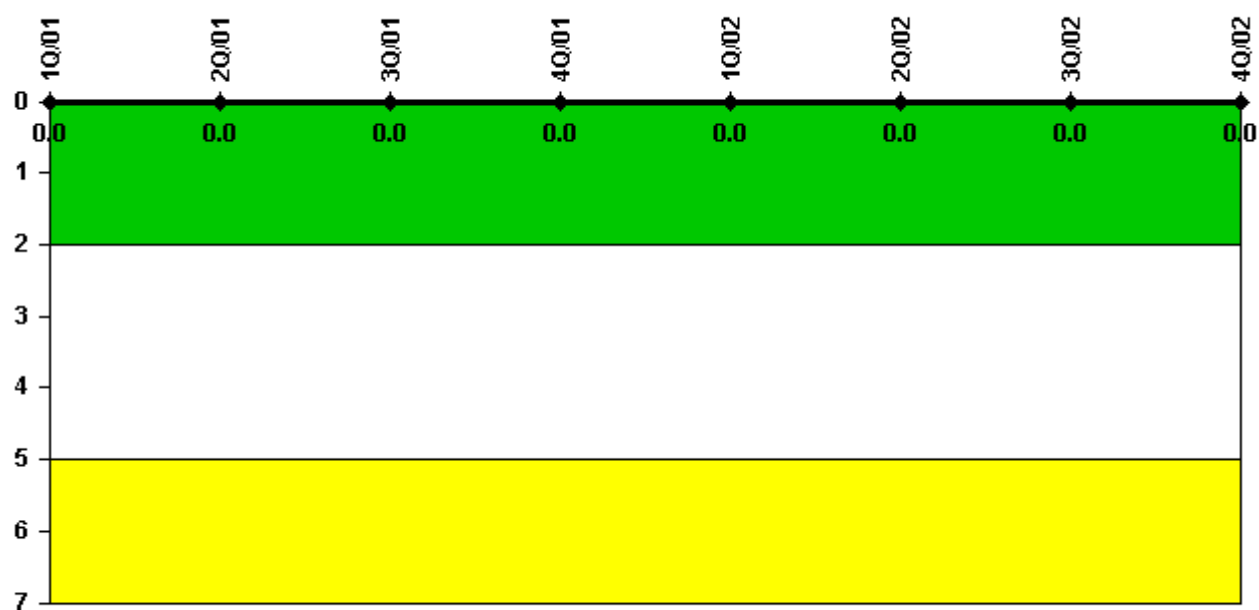
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Program failures	0	1	0	0	0	0	0	0
Indicator value	0	1	1	1	1	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

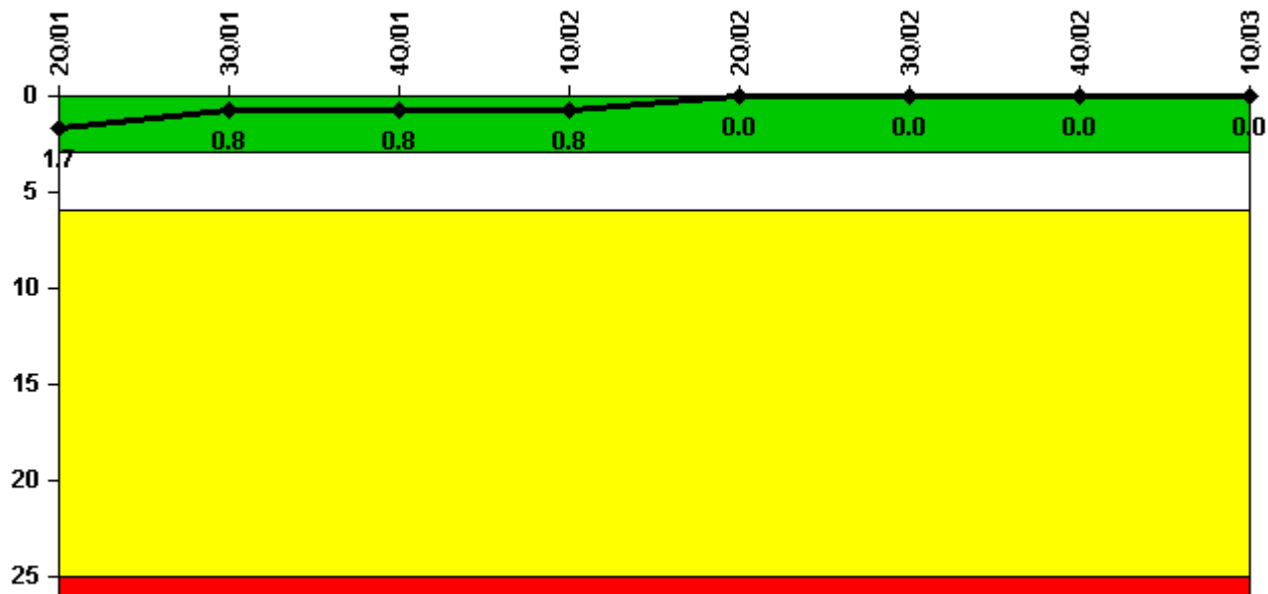
Last Modified: January 30, 2003

Byron 2

1Q/2003 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Unplanned scrams	1.0	0	0	0	0	0	0	0
Critical hours	1795.3	2208.0	2209.0	2160.0	2056.2	1870.2	2062.0	2160.0
Indicator value	1.7	0.8	0.8	0.8	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



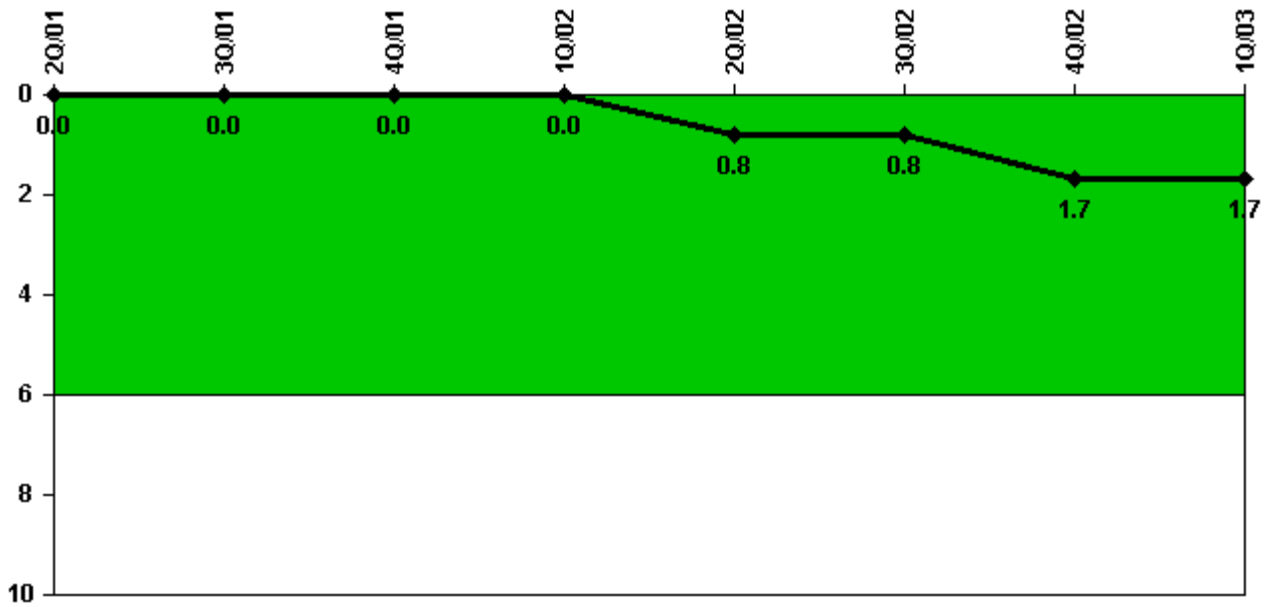
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



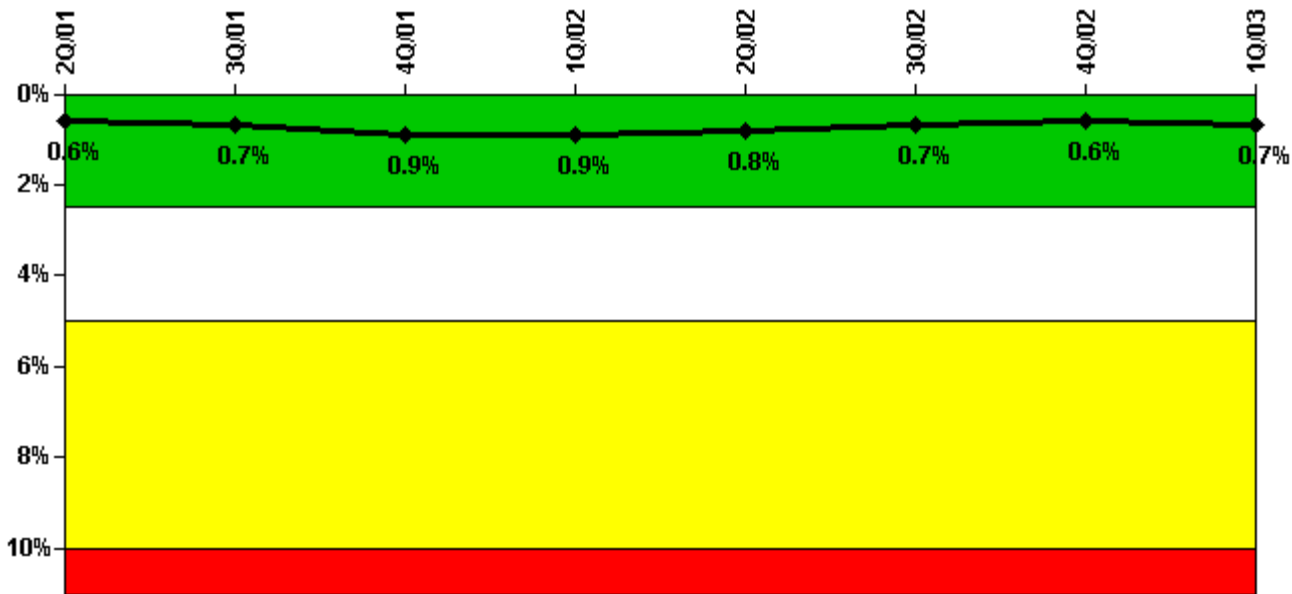
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Unplanned power changes	0	0	0	0	1.0	0	1.0	0
Critical hours	1795.3	2208.0	2209.0	2160.0	2056.2	1870.2	2062.0	2160.0
Indicator value	0	0	0	0	0.8	0.8	1.7	1.7

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



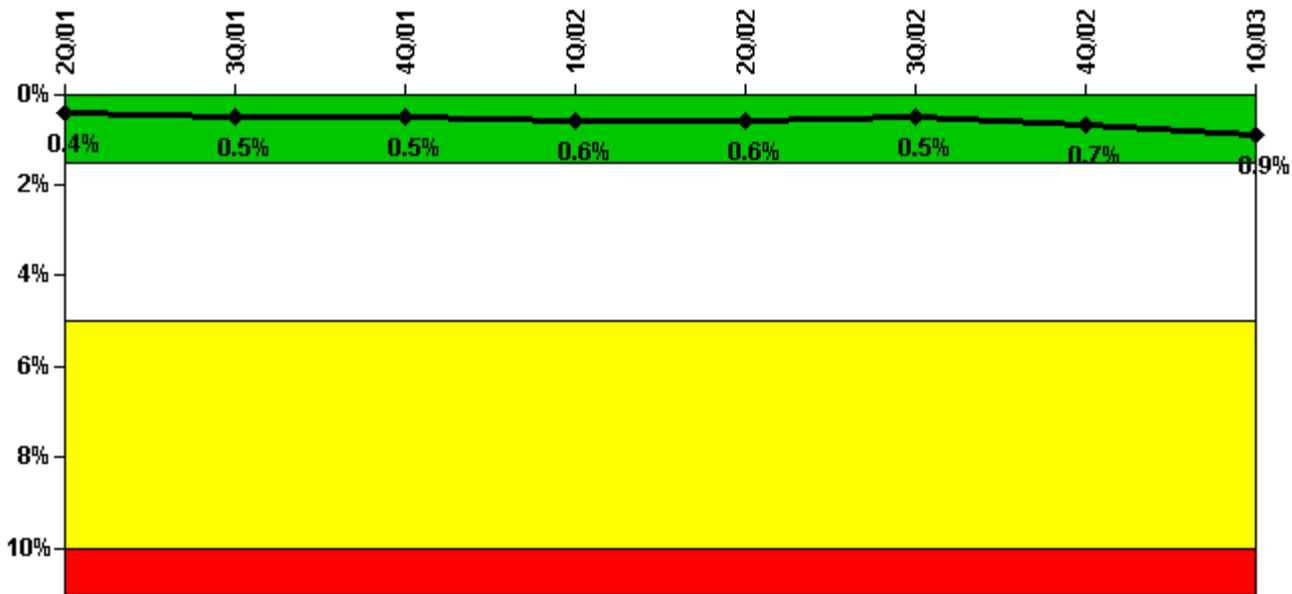
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Train 1								
Planned unavailable hours	0	11.20	11.80	7.80	13.20	2.30	8.60	42.30
Unplanned unavailable hours	0	0	87.50	0	0	0	0	0
Fault exposure hours	0	0	3.90	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	6.20	0	18.30	17.60	12.00	3.40	2.60	1.70
Unplanned unavailable hours	0	8.20	15.90	0	30.40	10.70	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.6%	0.7%	0.9%	0.9%	0.8%	0.7%	0.6%	0.7%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

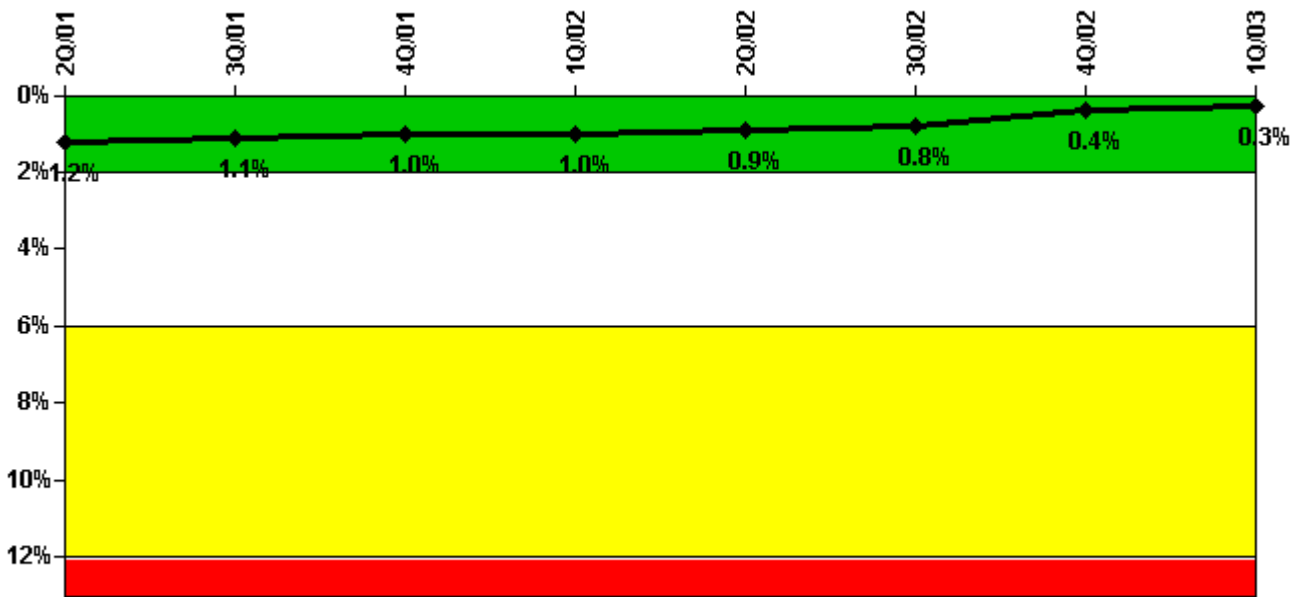
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Train 1								
Planned unavailable hours	18.50	4.80	10.90	22.00	3.20	23.90	2.40	3.60
Unplanned unavailable hours	0	0	0	0	0	0	0	213.80
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00
Train 2								
Planned unavailable hours	0	17.30	52.20	3.00	6.60	3.40	1.30	1.70
Unplanned unavailable hours	0	0	0	64.80	0	0	135.90	2.80
Fault exposure hours	0	0	0	0	0	0	50.40	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00
Train 3								
Planned unavailable hours	10.70	27.60	2.90	1.20	3.20	4.90	2.40	13.60
Unplanned unavailable hours	0	34.30	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00
Train 4								
Planned unavailable hours	0	0	1.60	3.00	26.80	3.40	3.00	1.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0

Required hours	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00
Indicator value	0.4%	0.5%	0.5%	0.6%	0.6%	0.5%	0.7%	0.9%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

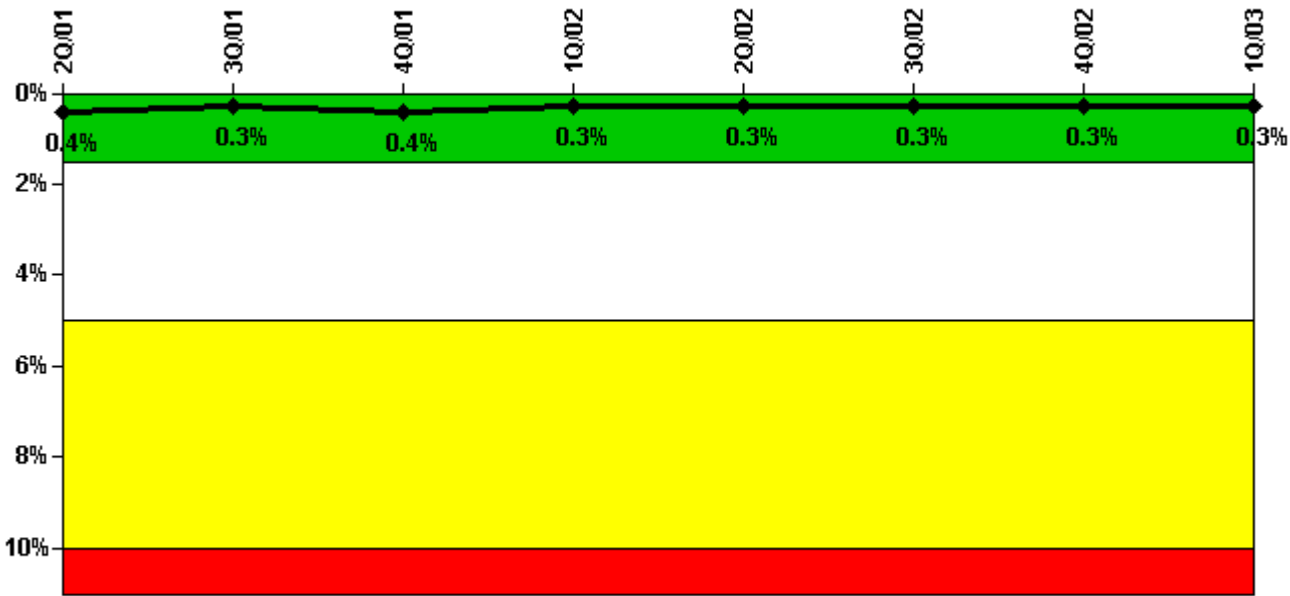
Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Train 1								
Planned unavailable hours	1.80	2.20	4.80	2.90	4.30	3.60	4.10	4.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00
Train 2								
Planned unavailable hours	17.10	3.40	3.50	32.20	2.90	26.20	19.30	2.80
Unplanned unavailable hours	0	0	1.40	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1795.32	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00

Indicator value	1.2%	1.1%	1.0%	1.0%	0.9%	0.8%	0.4%	0.3%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



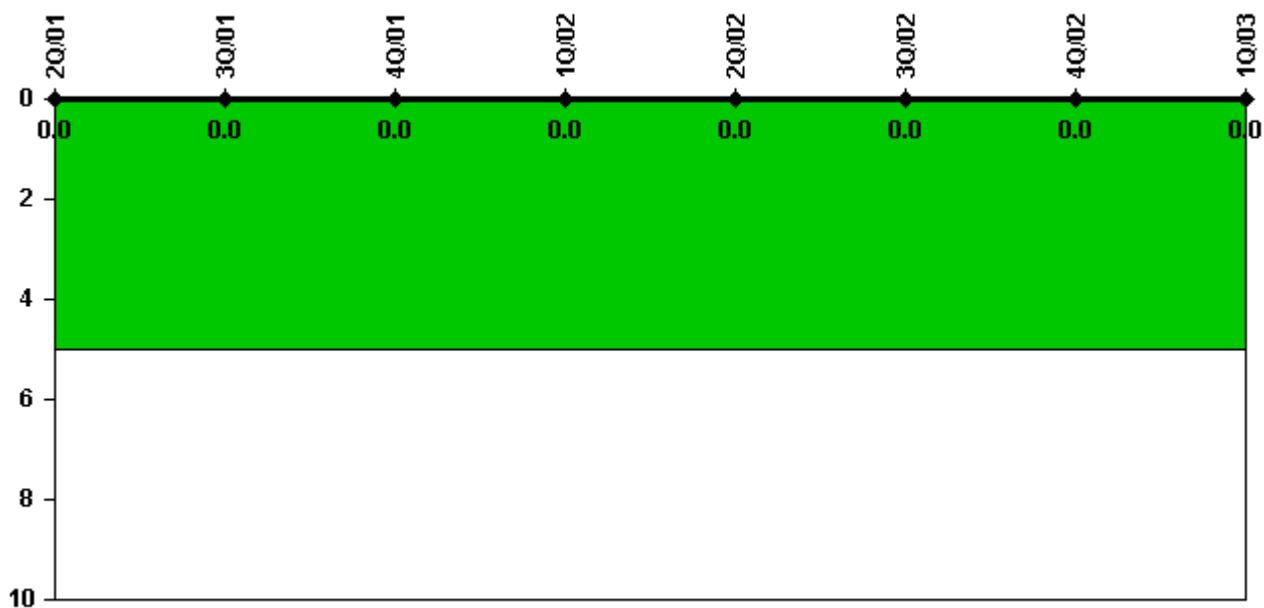
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Train 1								
Planned unavailable hours	3.00	0.40	2.90	1.30	3.20	21.60	2.40	18.10
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	1.00	0.50	13.90	26.30	2.90	3.70	2.60	1.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.4%	0.3%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%

Licensee Comments: none

Safety System Functional Failures (PWR)



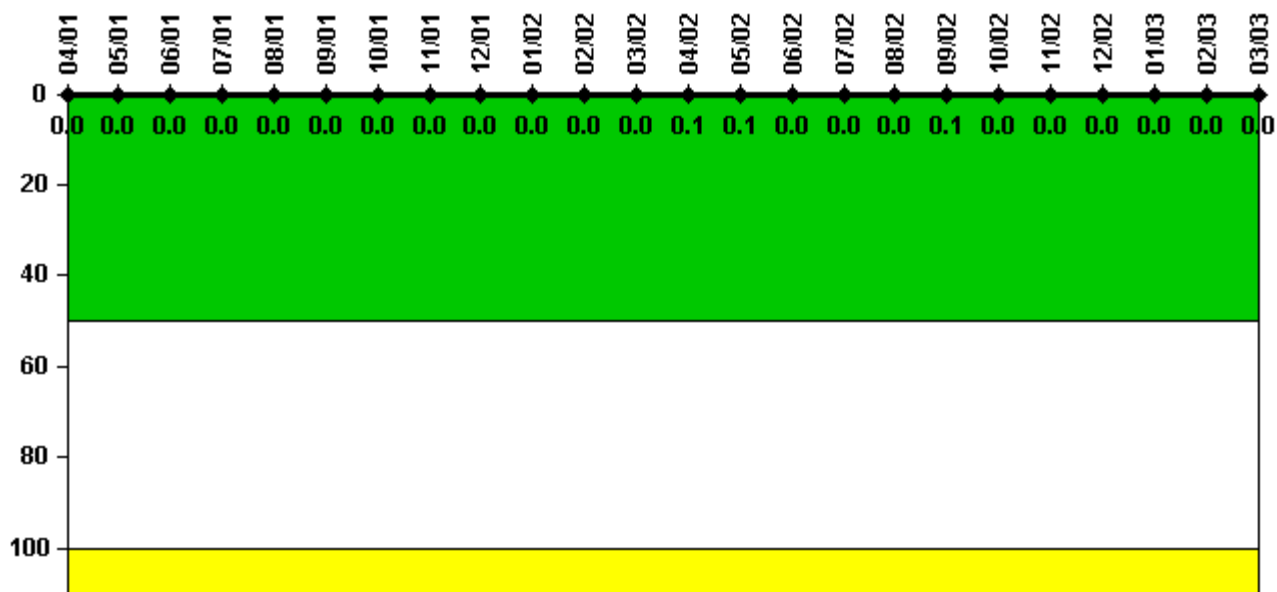
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

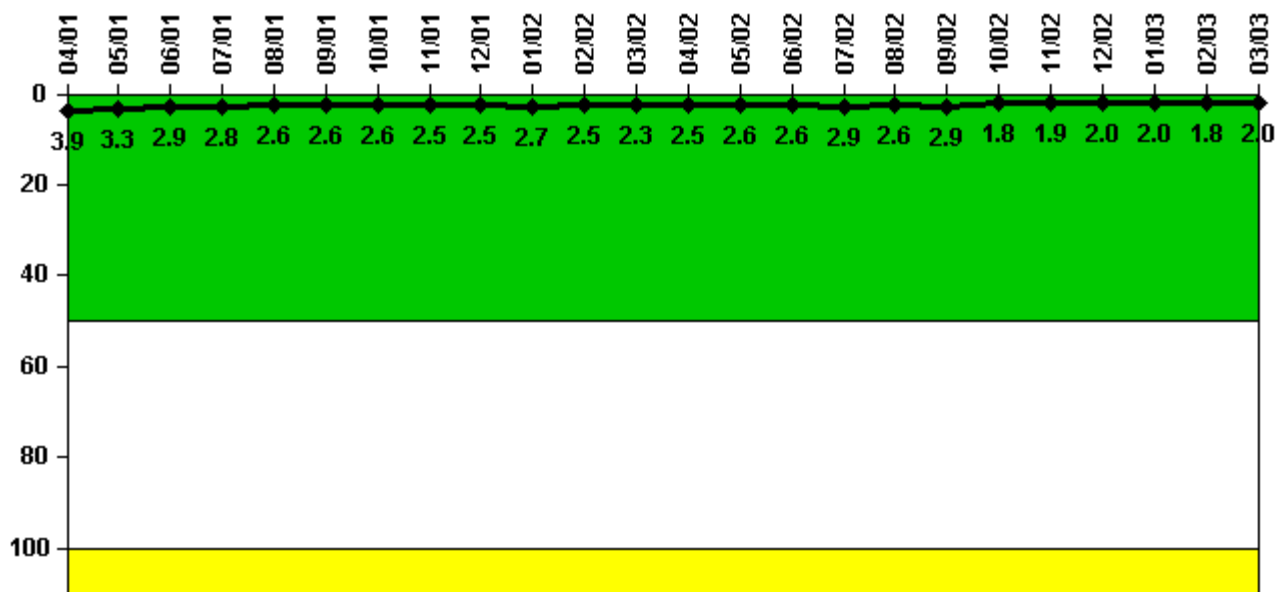
Notes

Reactor Coolant System Activity	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum activity	0.000450	0.000250	0.000277	0.000313	0.000324	0.000337	0.000351	0.000428	0.000393	0.000412	0.000416	0.000398
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum activity	0.000841	0.001210	0.000483	0.000451	0.000447	0.000855	0.000242	0.000318	0.000327	0.000287	0.000301	0.000288
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0.1	0	0	0	0.1	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

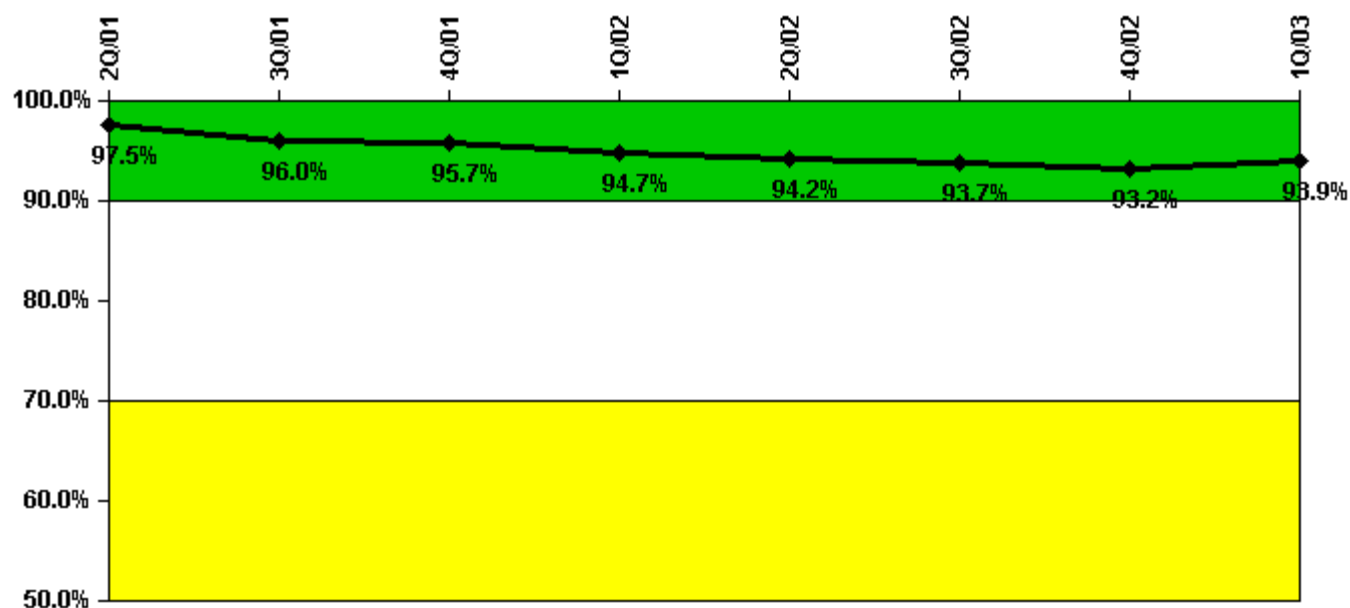
Notes

Reactor Coolant System Leakage	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum leakage	0.395	0.329	0.289	0.284	0.263	0.256	0.259	0.250	0.252	0.266	0.249	0.234
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	3.9	3.3	2.9	2.8	2.6	2.6	2.6	2.5	2.5	2.7	2.5	2.3

Reactor Coolant System Leakage	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum leakage	0.249	0.257	0.259	0.286	0.256	0.287	0.182	0.192	0.204	0.199	0.180	0.199
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.5	2.6	2.6	2.9	2.6	2.9	1.8	1.9	2.0	2.0	1.8	2.0

Licensee Comments: none

Drill/Exercise Performance



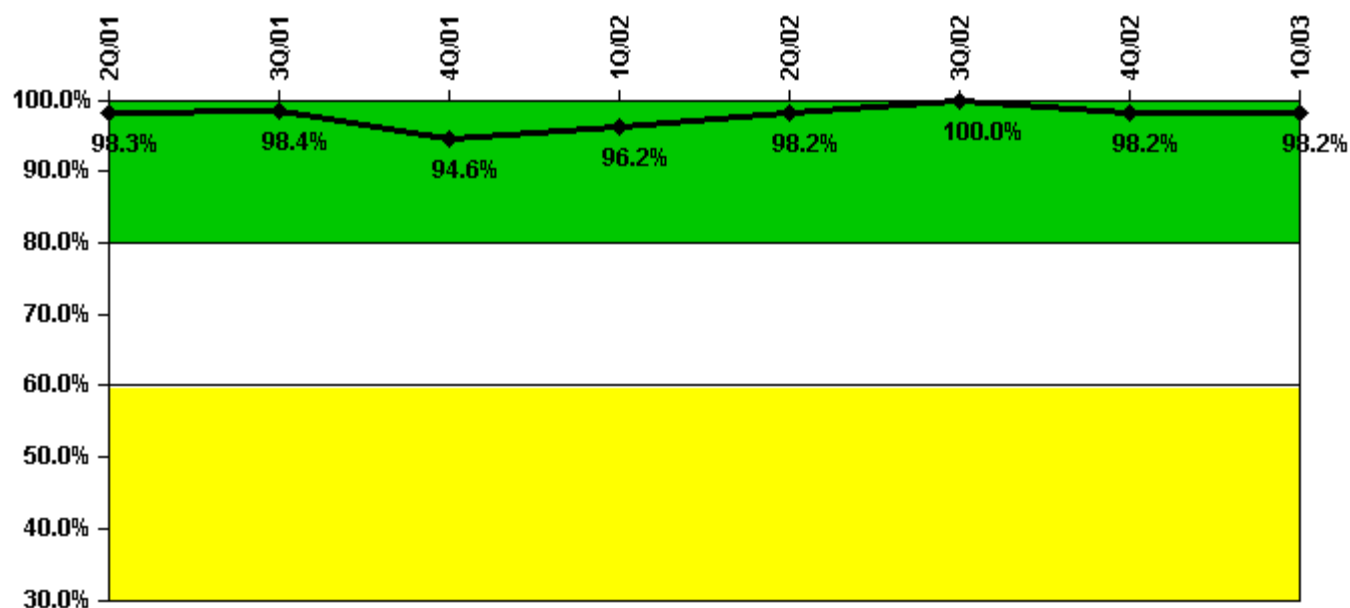
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Successful opportunities	0	31.0	38.0	34.0	14.0	33.0	43.0	39.0
Total opportunities	0	35.0	40.0	36.0	14.0	34.0	47.0	41.0
Indicator value	97.5%	96.0%	95.7%	94.7%	94.2%	93.7%	93.2%	93.9%

Licensee Comments: none

ERO Drill Participation



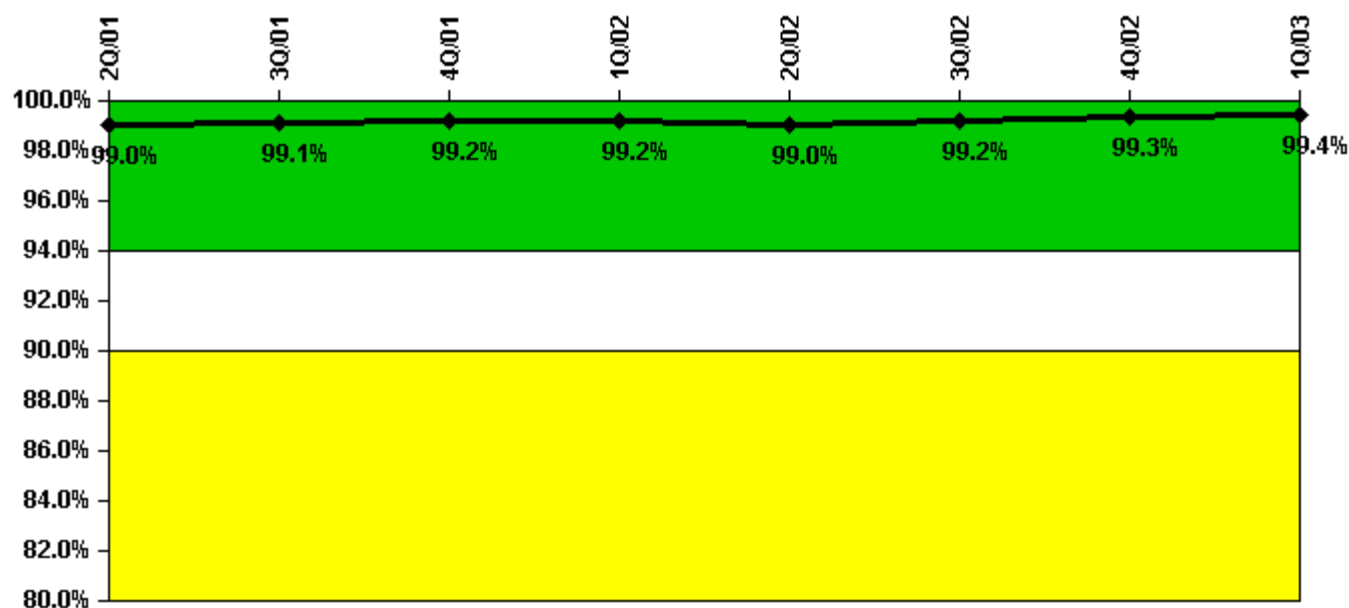
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Participating Key personnel	59.0	60.0	53.0	50.0	55.0	55.0	54.0	54.0
Total Key personnel	60.0	61.0	56.0	52.0	56.0	55.0	55.0	55.0
Indicator value	98.3%	98.4%	94.6%	96.2%	98.2%	100.0%	98.2%	98.2%

Licensee Comments: none

Alert & Notification System



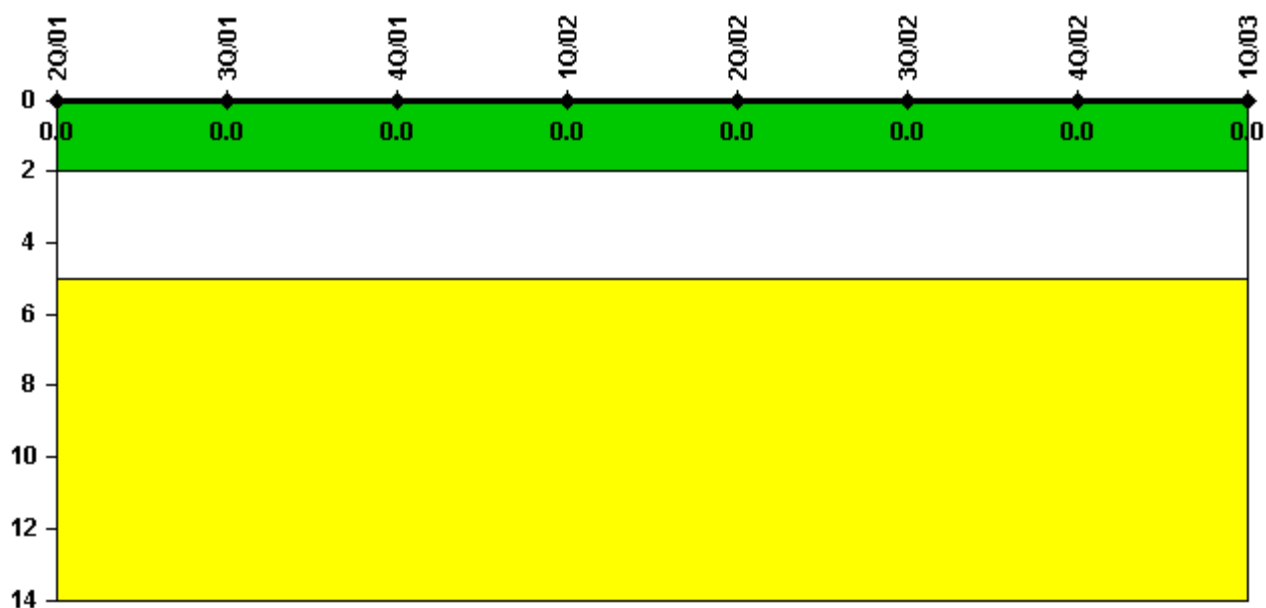
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Successful siren-tests	6258	6141	5965	5872	5945	5994	5991	5898
Total sirens-tests	6298	6204	6016	5922	6016	6016	6016	5922
Indicator value	99.0%	99.1%	99.2%	99.2%	99.0%	99.2%	99.3%	99.4%

Licensee Comments: none

Occupational Exposure Control Effectiveness

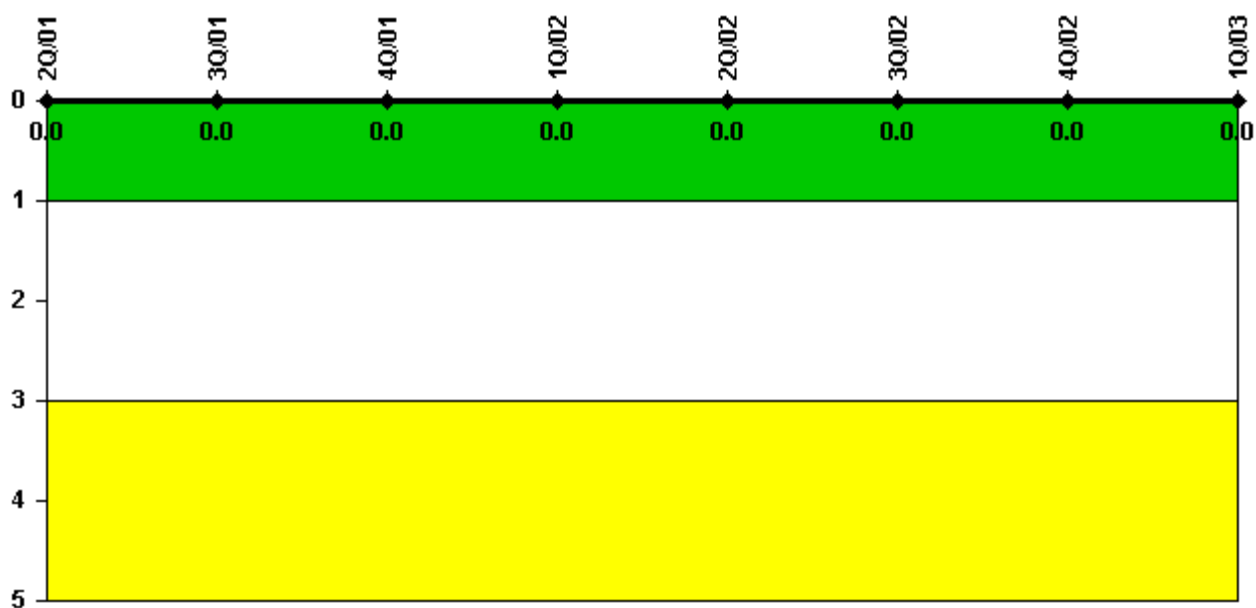


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

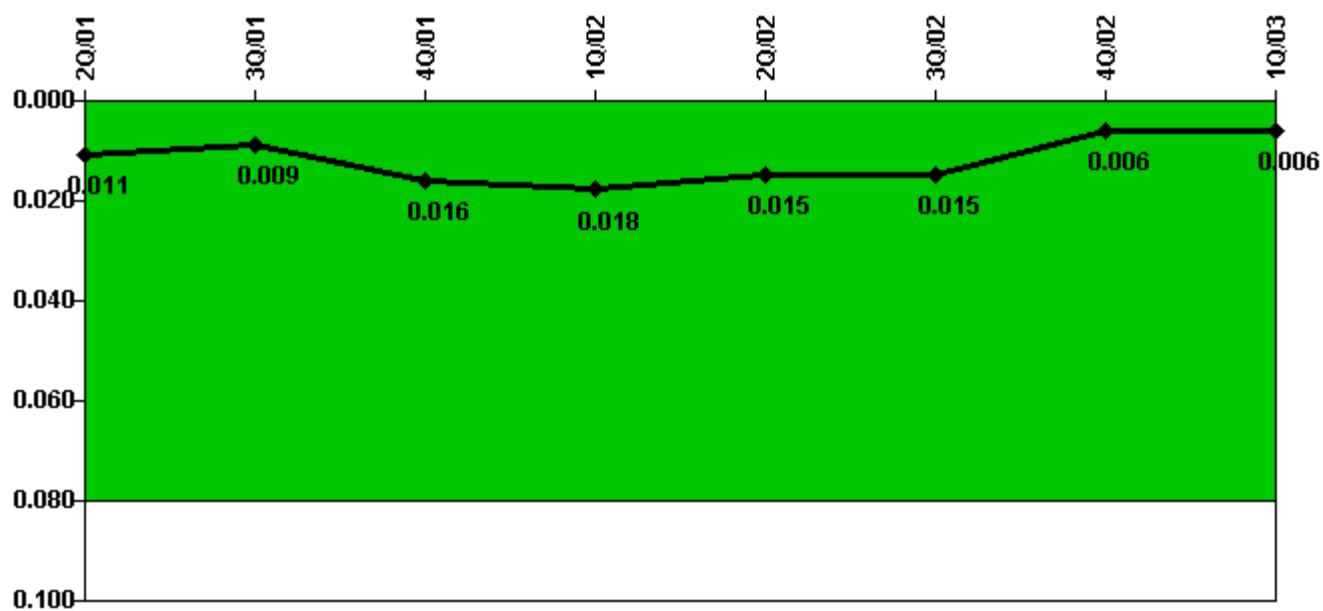
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



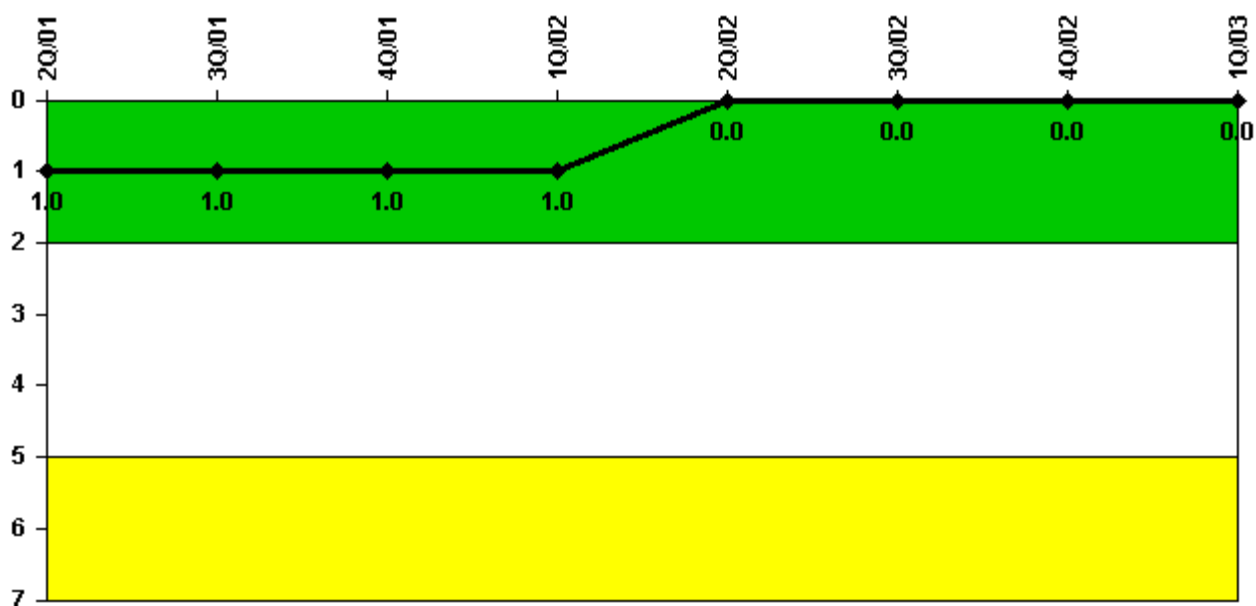
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
IDS compensatory hours	92.99	29.12	247.72	62.00	14.60	12.80	34.10	21.90
CCTV compensatory hours	0	0	0	0	13.5	4.3	5.8	21.4
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.011	0.009	0.016	0.018	0.015	0.015	0.006	0.006

Licensee Comments: none

Personnel Screening Program



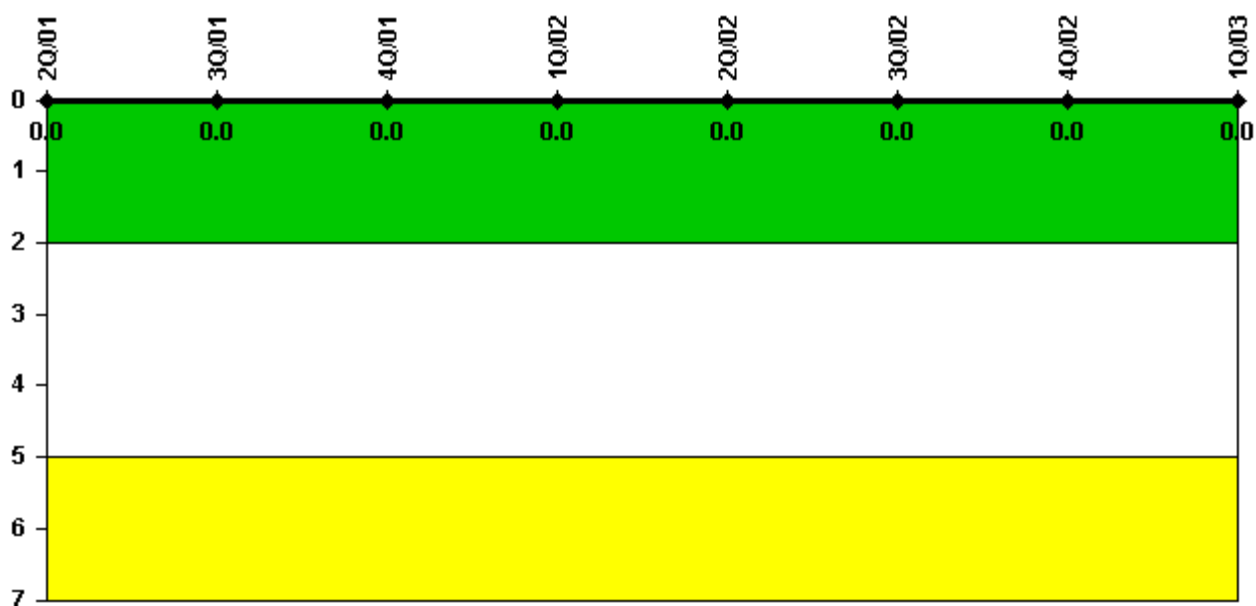
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Program failures	1	0	0	0	0	0	0	0
Indicator value	1	1	1	1	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

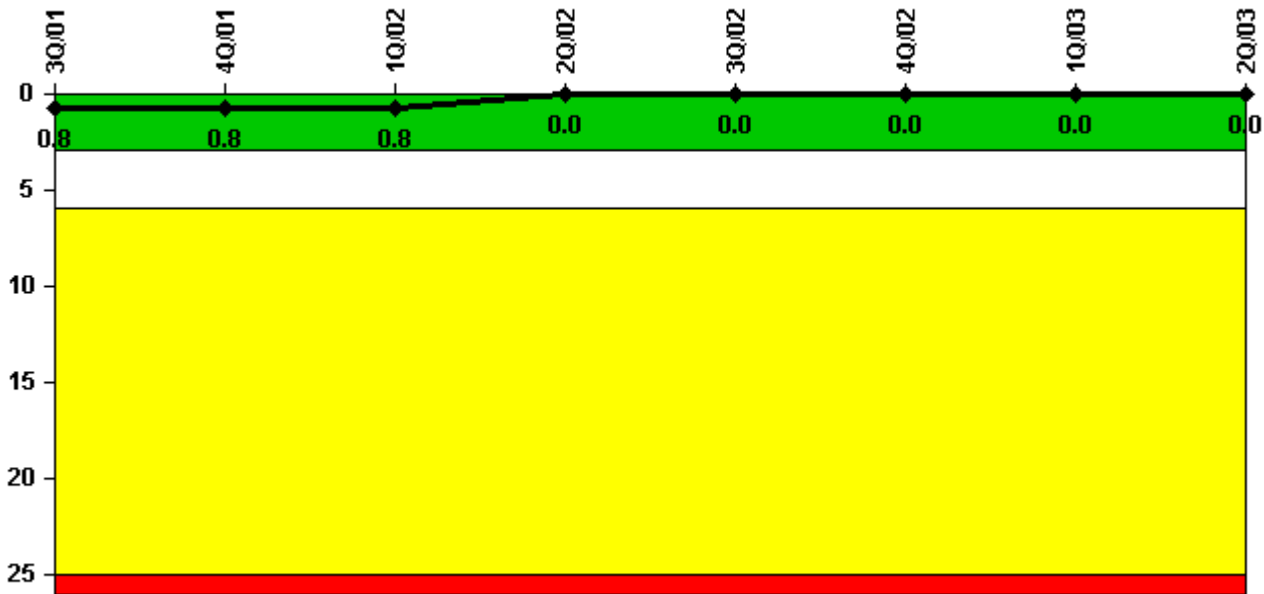
Last Modified: April 22, 2003

Byron 2

2Q/2003 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2160.0	2056.2	1870.2	2062.0	2160.0	2183.0
Indicator value	0.8	0.8	0.8	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



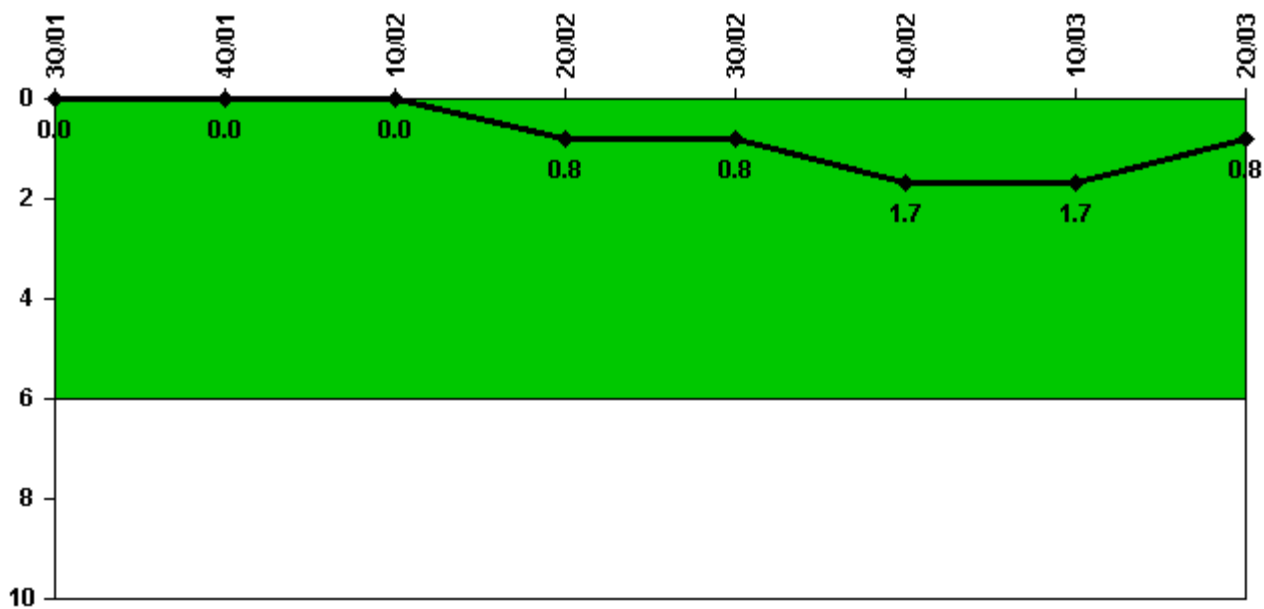
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



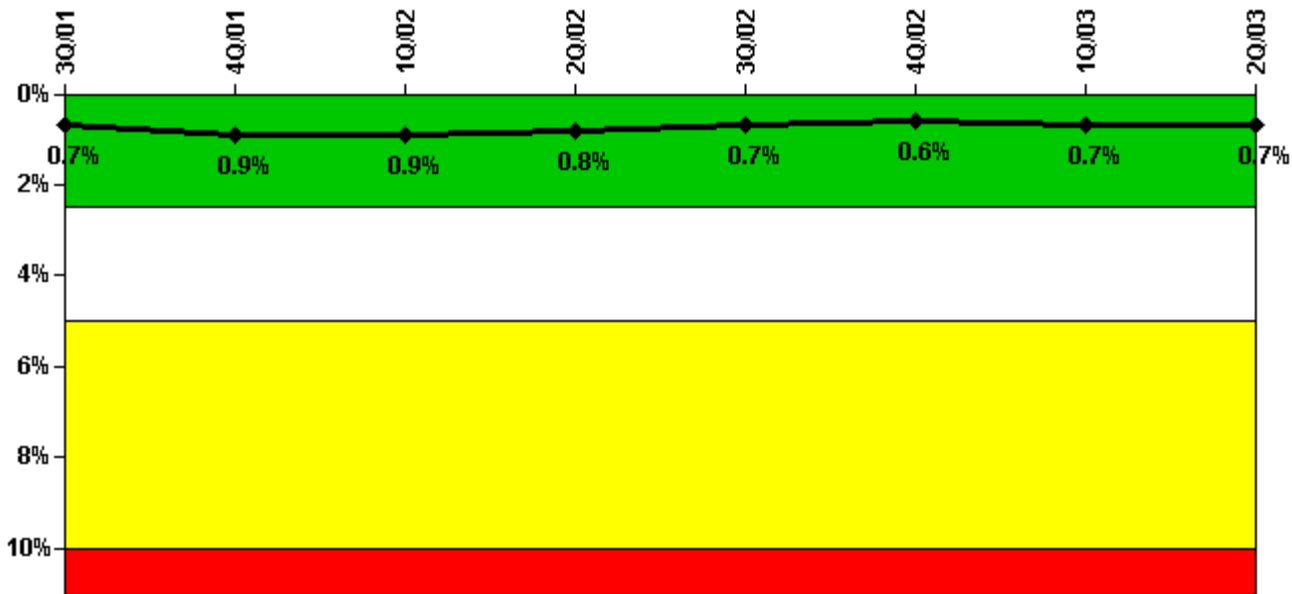
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Unplanned power changes	0	0	0	1.0	0	1.0	0	0
Critical hours	2208.0	2209.0	2160.0	2056.2	1870.2	2062.0	2160.0	2183.0
Indicator value	0	0	0	0.8	0.8	1.7	1.7	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



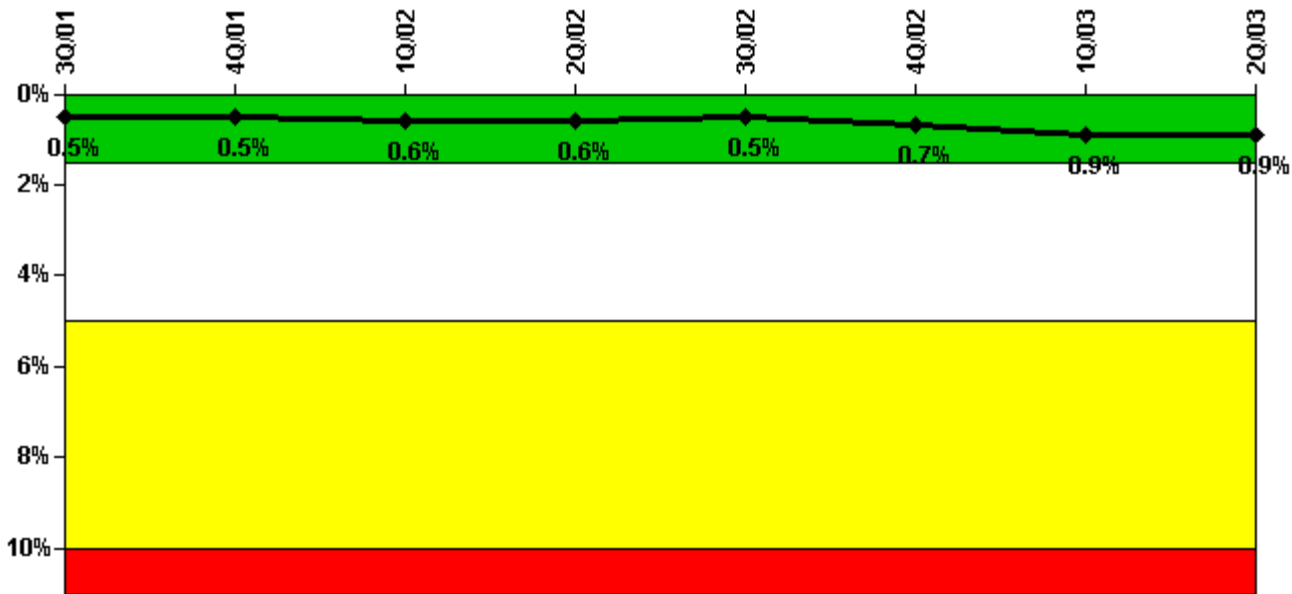
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Train 1								
Planned unavailable hours	11.20	11.80	7.80	13.20	2.30	8.60	42.30	14.80
Unplanned unavailable hours	0	87.50	0	0	0	0	0	0
Fault exposure hours	0	3.90	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	0	18.30	17.60	12.00	3.40	2.60	1.70	11.40
Unplanned unavailable hours	8.20	15.90	0	30.40	10.70	0	0	11.80
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.7%	0.9%	0.9%	0.8%	0.7%	0.6%	0.7%	0.7%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

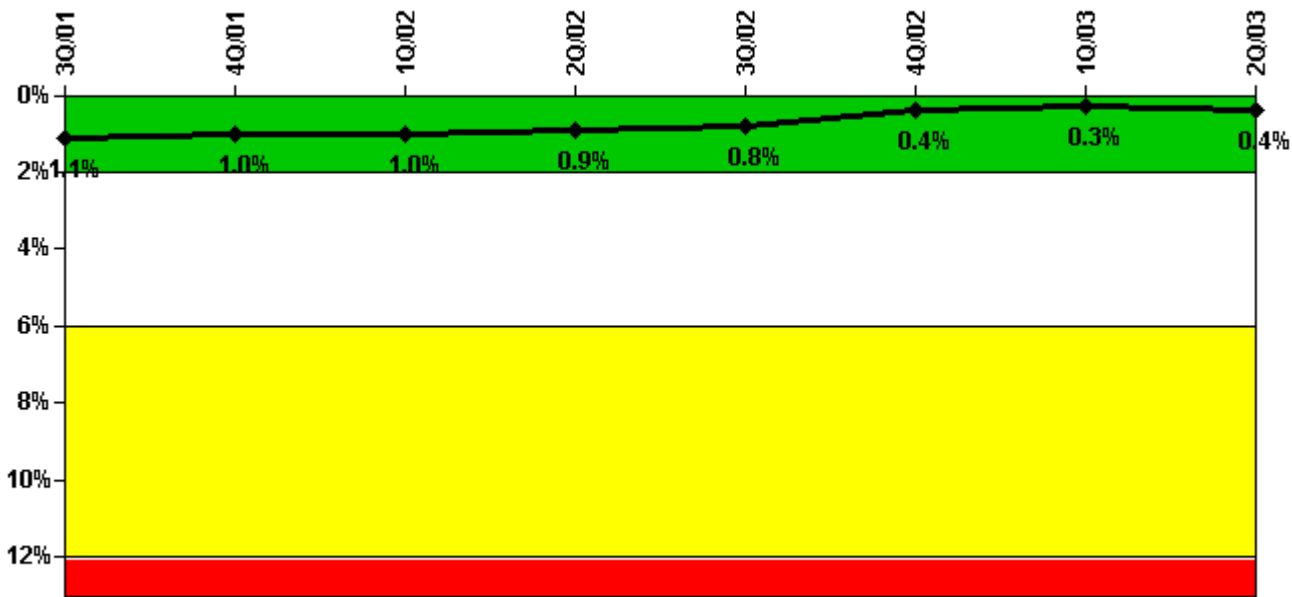
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Train 1								
Planned unavailable hours	4.80	10.90	22.00	3.20	23.90	2.40	3.60	1.80
Unplanned unavailable hours	0	0	0	0	0	0	213.80	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00
Train 2								
Planned unavailable hours	17.30	52.20	3.00	6.60	3.40	1.30	1.70	4.10
Unplanned unavailable hours	0	0	64.80	0	0	135.90	2.80	0
Fault exposure hours	0	0	0	0	0	50.40	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00
Train 3								
Planned unavailable hours	27.60	2.90	1.20	3.20	4.90	2.40	13.60	39.00
Unplanned unavailable hours	34.30	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00
Train 4								
Planned unavailable hours	0	1.60	3.00	26.80	3.40	3.00	1.70	4.10
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0

Required hours	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00
Indicator value	0.5%	0.5%	0.6%	0.6%	0.5%	0.7%	0.9%	0.9%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

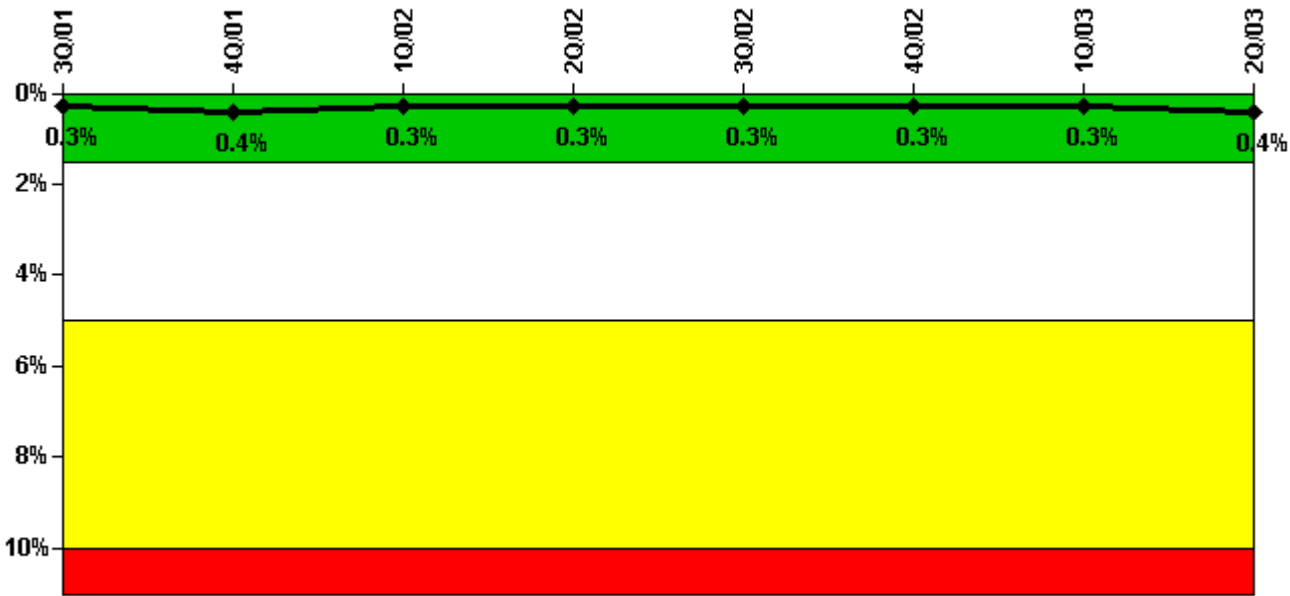
Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Train 1								
Planned unavailable hours	2.20	4.80	2.90	4.30	3.60	4.10	4.60	3.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00
Train 2								
Planned unavailable hours	3.40	3.50	32.20	2.90	26.20	19.30	2.80	59.70
Unplanned unavailable hours	0	1.40	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00

Indicator value	1.1%	1.0%	1.0%	0.9%	0.8%	0.4%	0.3%	0.4%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



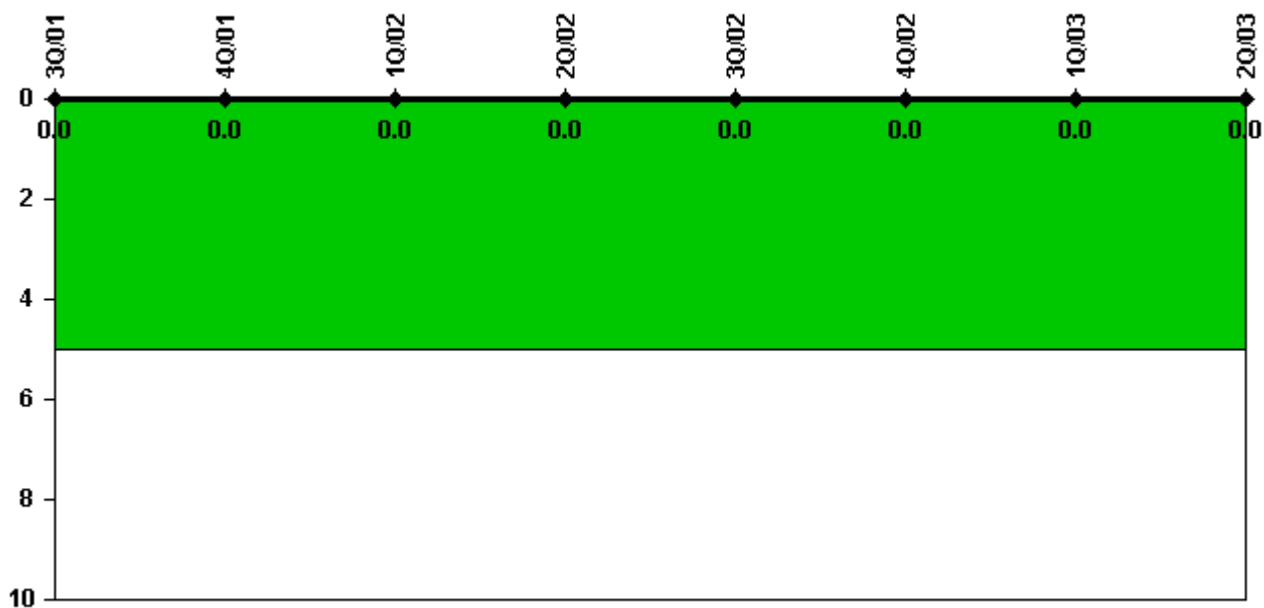
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Train 1								
Planned unavailable hours	0.40	2.90	1.30	3.20	21.60	2.40	18.10	49.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	0.50	13.90	26.30	2.90	3.70	2.60	1.70	18.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.3%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%

Licensee Comments: none

Safety System Functional Failures (PWR)



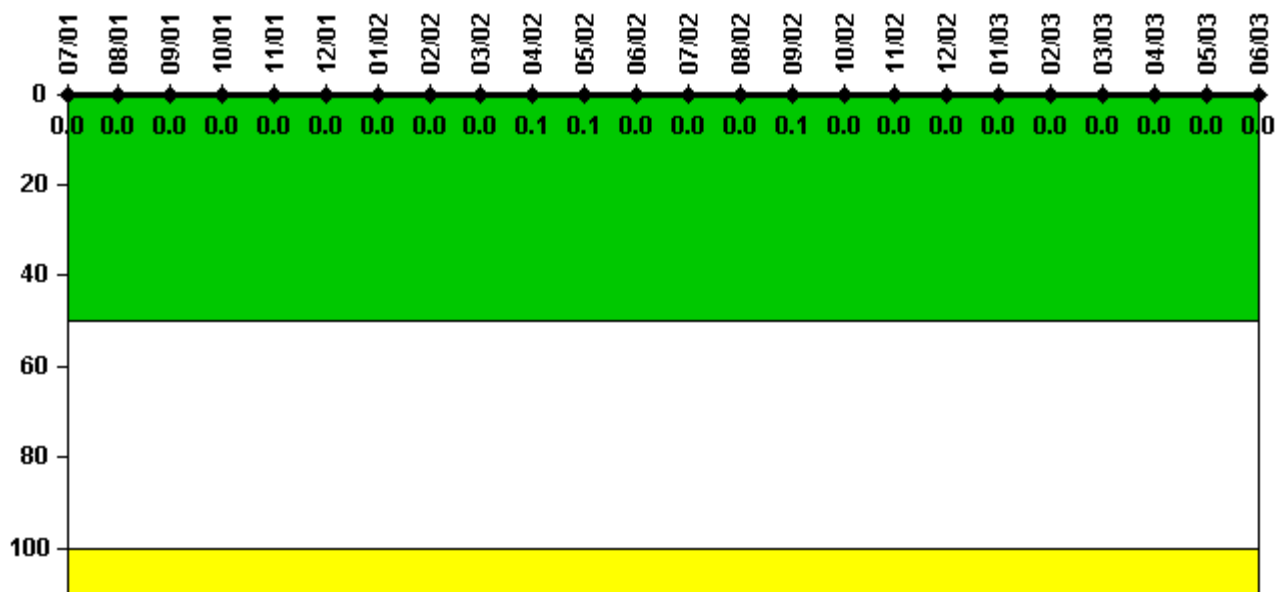
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

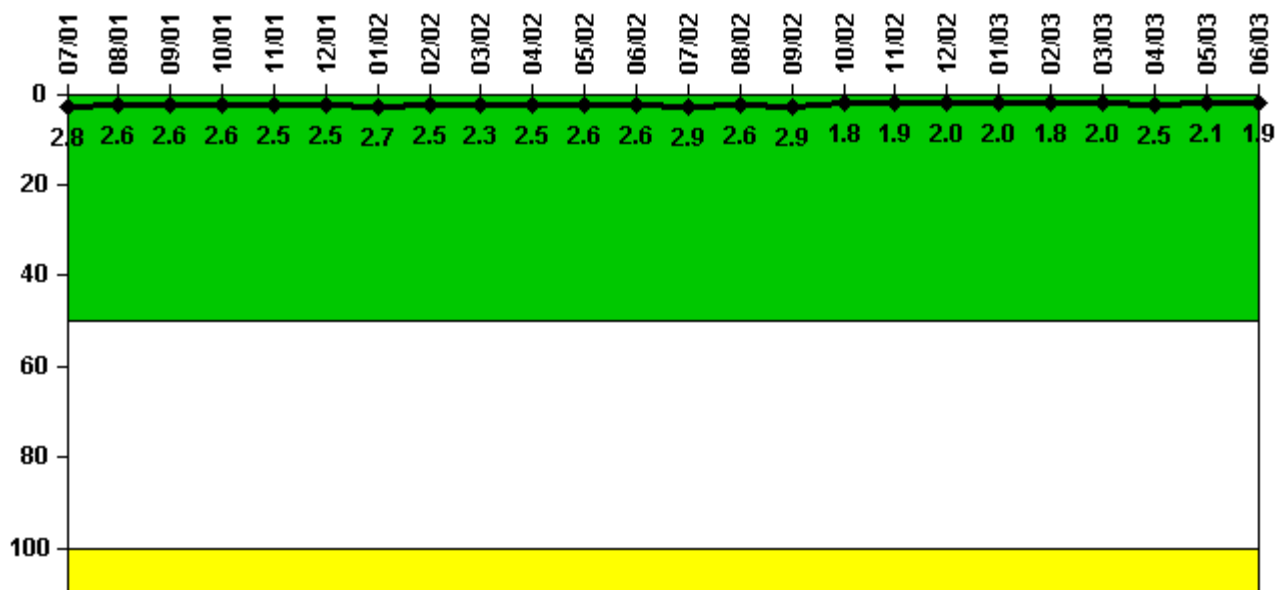
Notes

Reactor Coolant System Activity	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02
Maximum activity	0.000313	0.000324	0.000337	0.000351	0.000428	0.000393	0.000412	0.000416	0.000398	0.000841	0.001210	0.000483
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0.1	0.1	0

Reactor Coolant System Activity	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum activity	0.000451	0.000447	0.000855	0.000242	0.000318	0.000327	0.000287	0.000301	0.000288	0.000295	0.000344	0.000317
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0.1	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

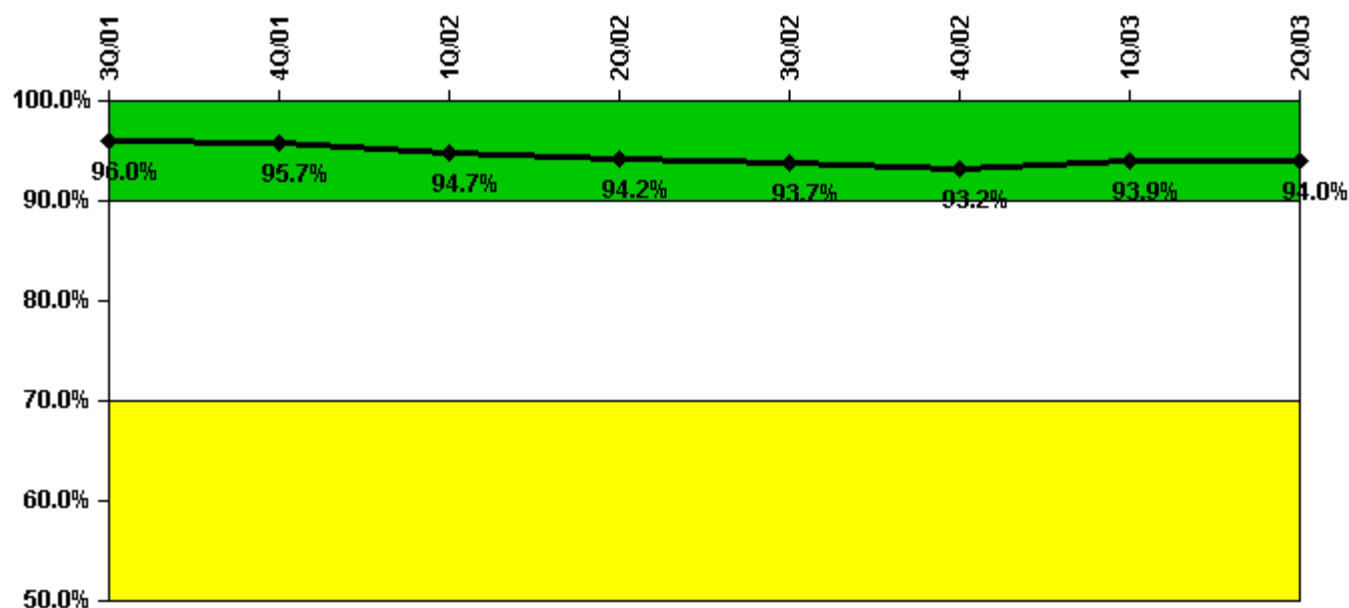
Notes

Reactor Coolant System Leakage	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02
Maximum leakage	0.284	0.263	0.256	0.259	0.250	0.252	0.266	0.249	0.234	0.249	0.257	0.259
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.8	2.6	2.6	2.6	2.5	2.5	2.7	2.5	2.3	2.5	2.6	2.6

Reactor Coolant System Leakage	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum leakage	0.286	0.256	0.287	0.182	0.192	0.204	0.199	0.180	0.199	0.247	0.212	0.188
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.9	2.6	2.9	1.8	1.9	2.0	2.0	1.8	2.0	2.5	2.1	1.9

Licensee Comments: none

Drill/Exercise Performance



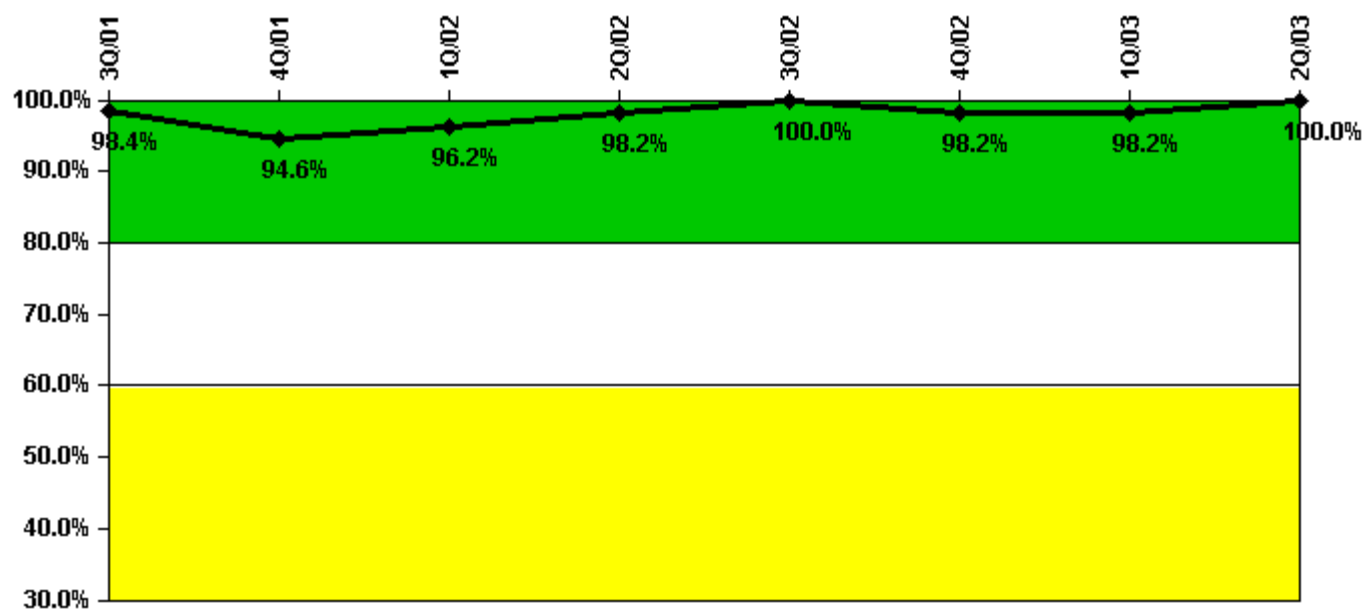
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Successful opportunities	31.0	38.0	34.0	14.0	33.0	43.0	39.0	36.0
Total opportunities	35.0	40.0	36.0	14.0	34.0	47.0	41.0	38.0
Indicator value	96.0%	95.7%	94.7%	94.2%	93.7%	93.2%	93.9%	94.0%

Licensee Comments: none

ERO Drill Participation



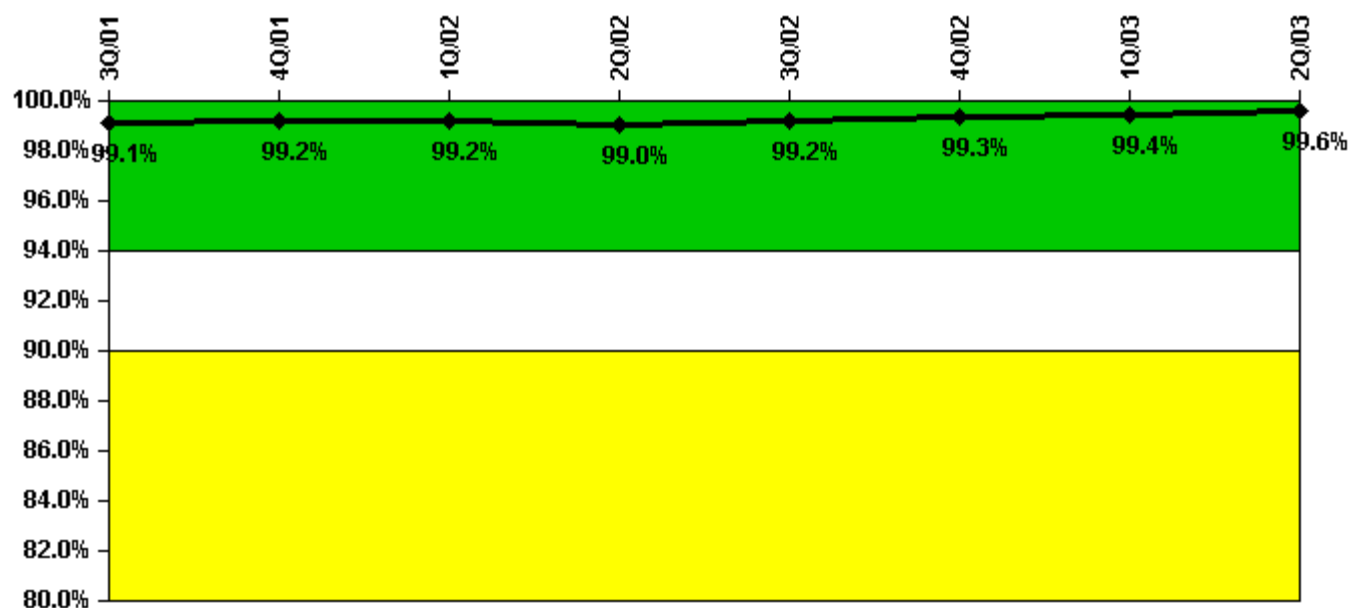
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Participating Key personnel	60.0	53.0	50.0	55.0	55.0	54.0	54.0	57.0
Total Key personnel	61.0	56.0	52.0	56.0	55.0	55.0	55.0	57.0
Indicator value	98.4%	94.6%	96.2%	98.2%	100.0%	98.2%	98.2%	100.0%

Licensee Comments: none

Alert & Notification System



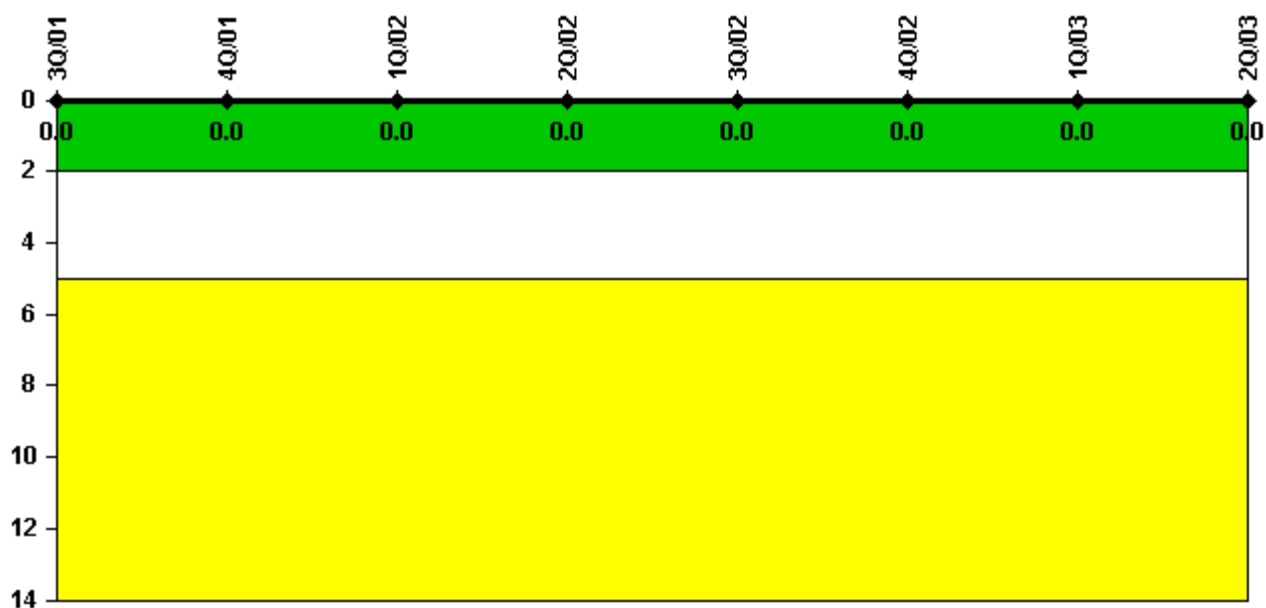
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Successful siren-tests	6141	5965	5872	5945	5994	5991	5898	5990
Total sirens-tests	6204	6016	5922	6016	6016	6016	5922	6016
Indicator value	99.1%	99.2%	99.2%	99.0%	99.2%	99.3%	99.4%	99.6%

Licensee Comments: none

Occupational Exposure Control Effectiveness

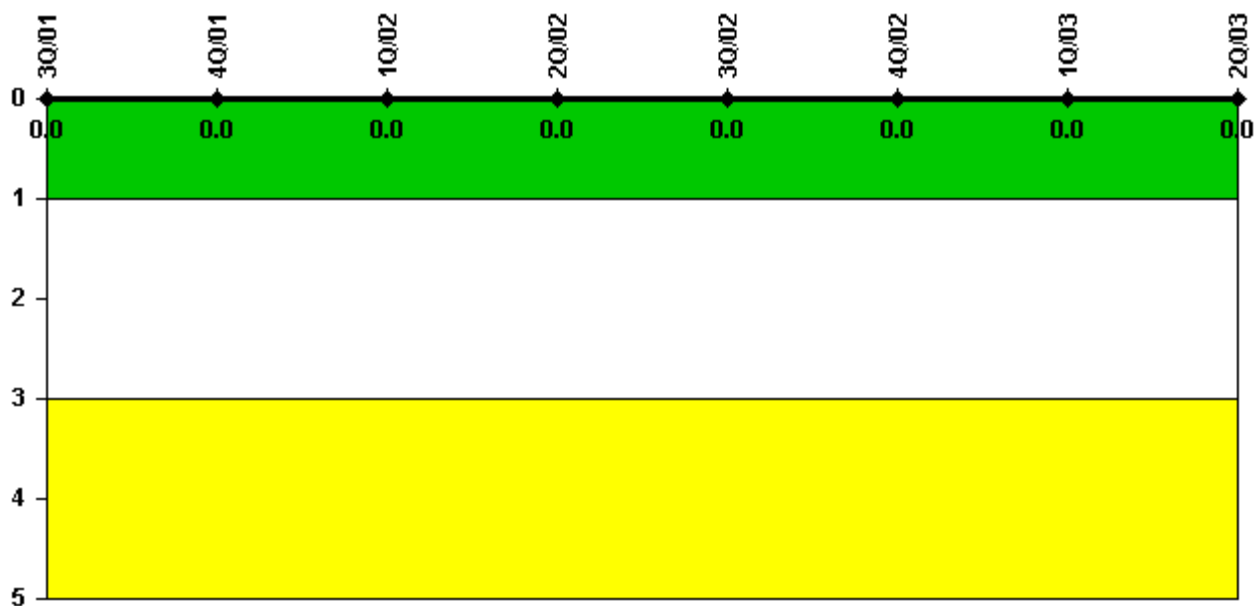


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

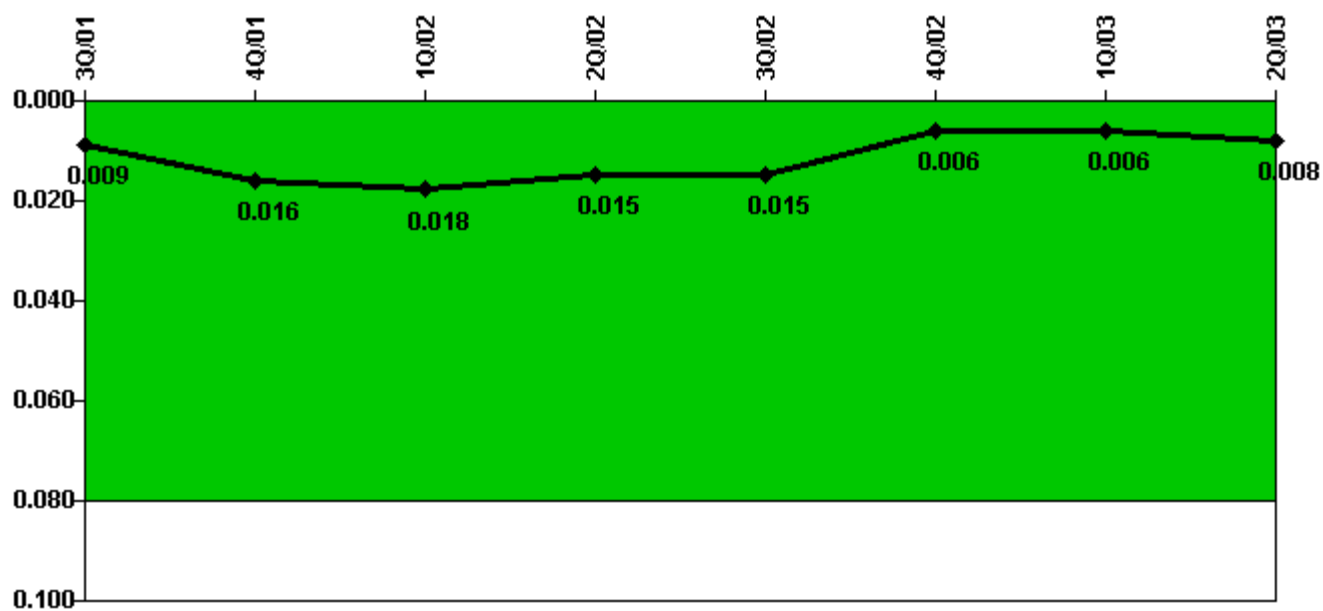
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



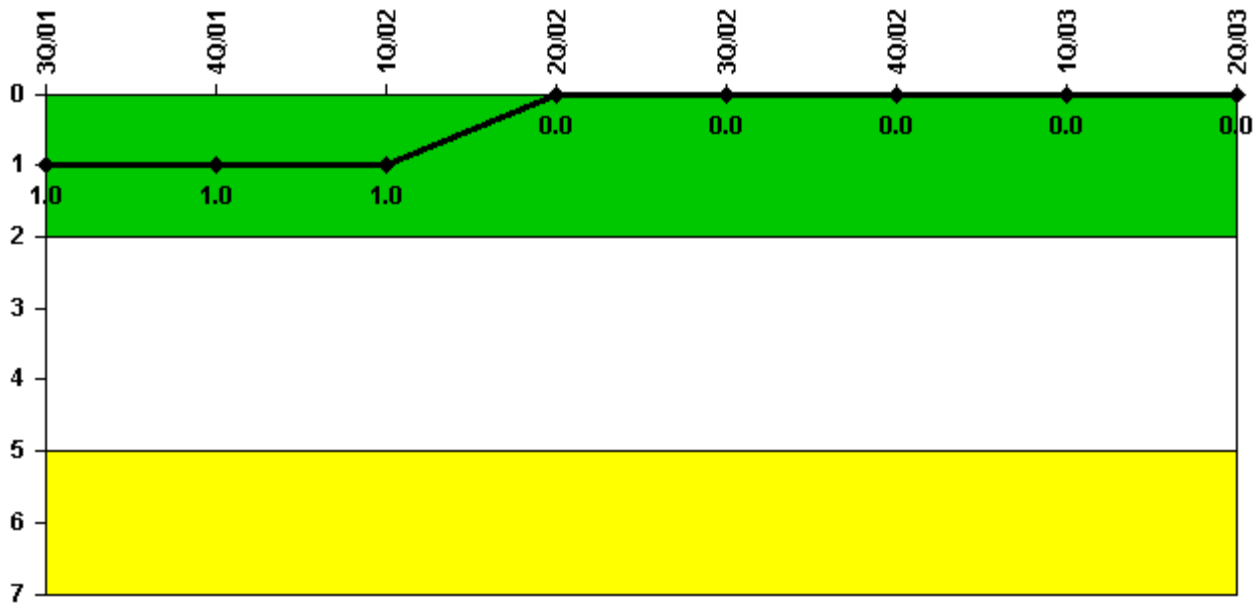
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
IDS compensatory hours	29.12	247.72	62.00	14.60	12.80	34.10	21.90	0
CCTV compensatory hours	0	0	0	13.5	4.3	5.8	21.4	55.9
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.009	0.016	0.018	0.015	0.015	0.006	0.006	0.008

Licensee Comments: none

Personnel Screening Program



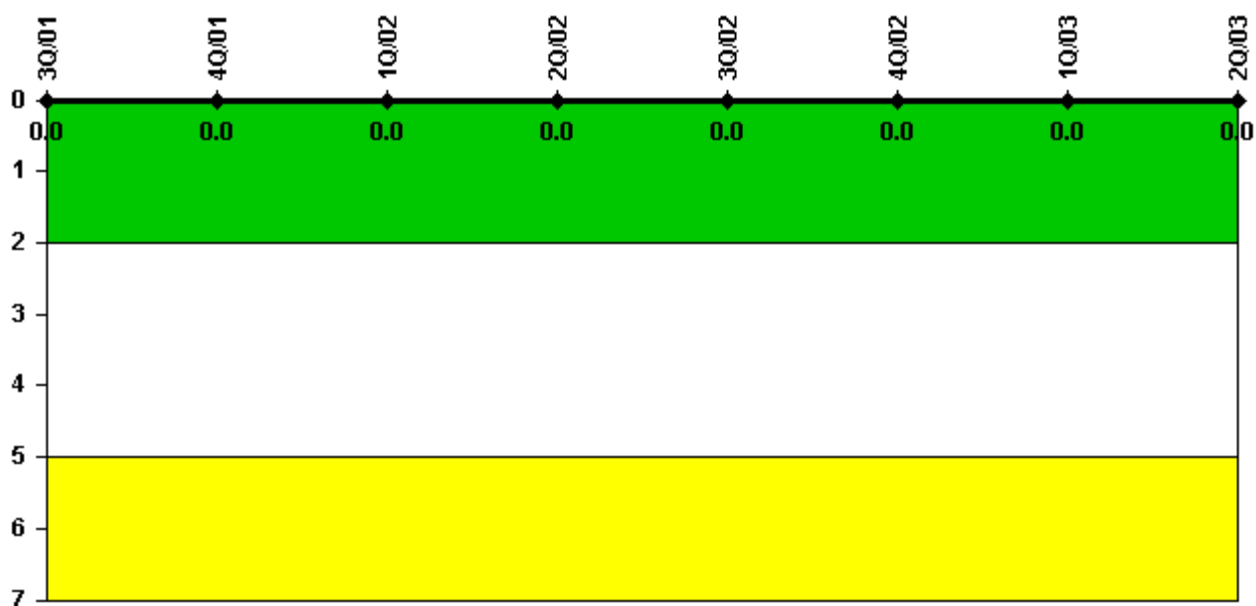
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Program failures	0	0	0	0	0	0	0	0
Indicator value	1	1	1	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

Last Modified: July 22, 2003

Byron 2

3Q/2003 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



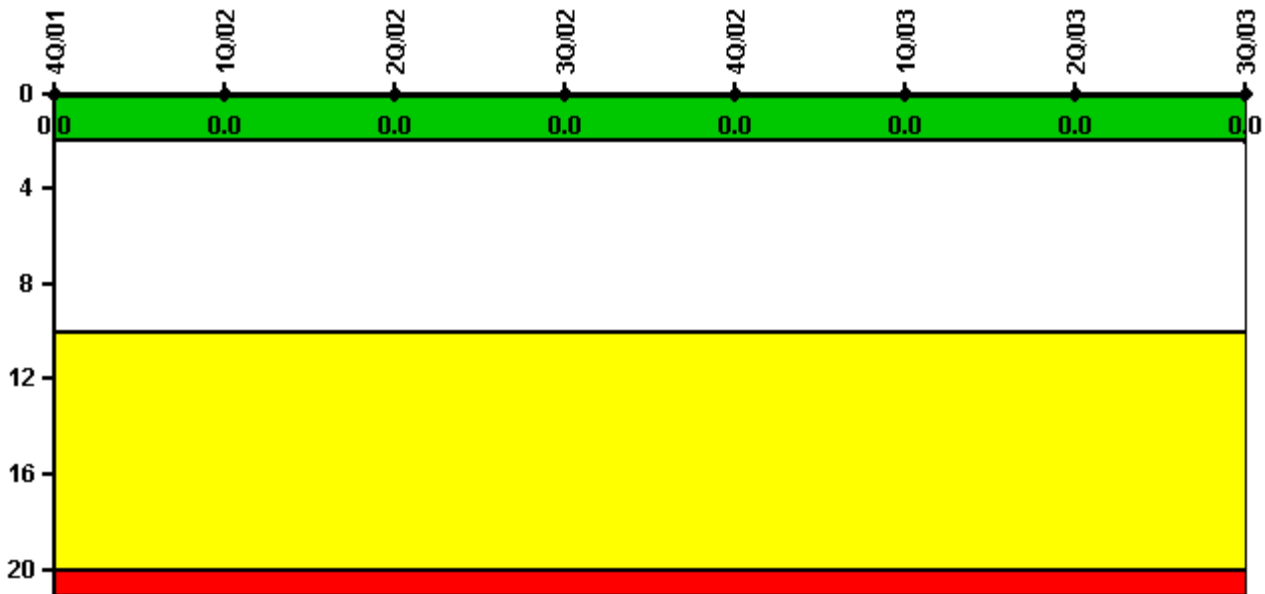
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2209.0	2160.0	2056.2	1870.2	2062.0	2160.0	2183.0	2208.0
Indicator value	0.8	0.8	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



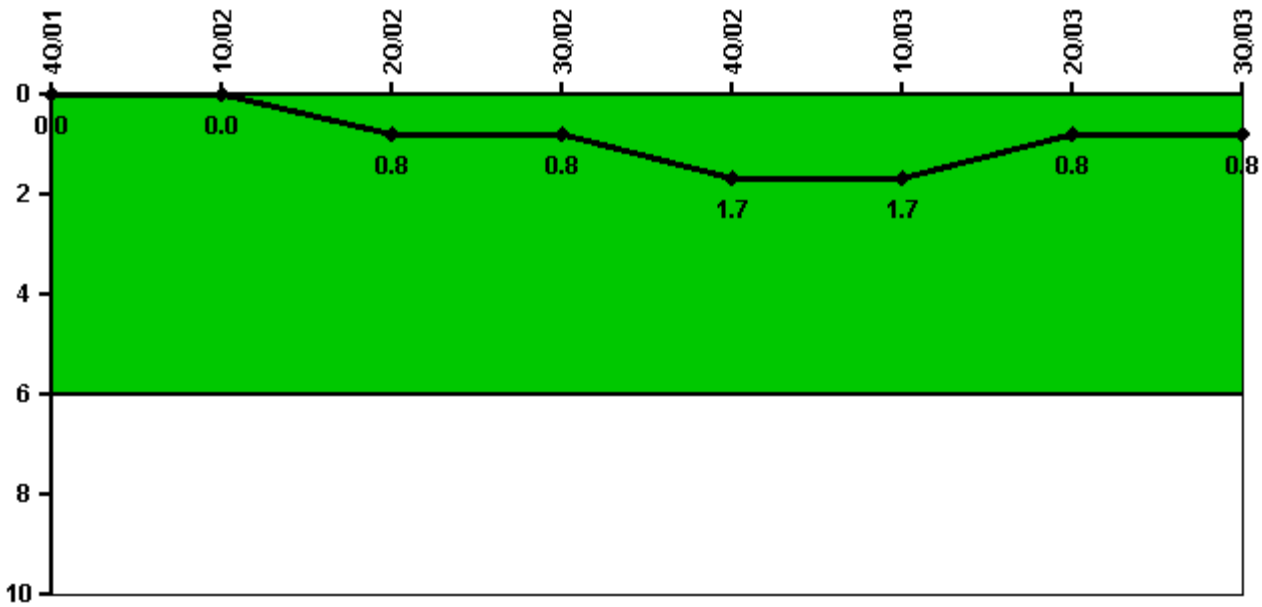
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



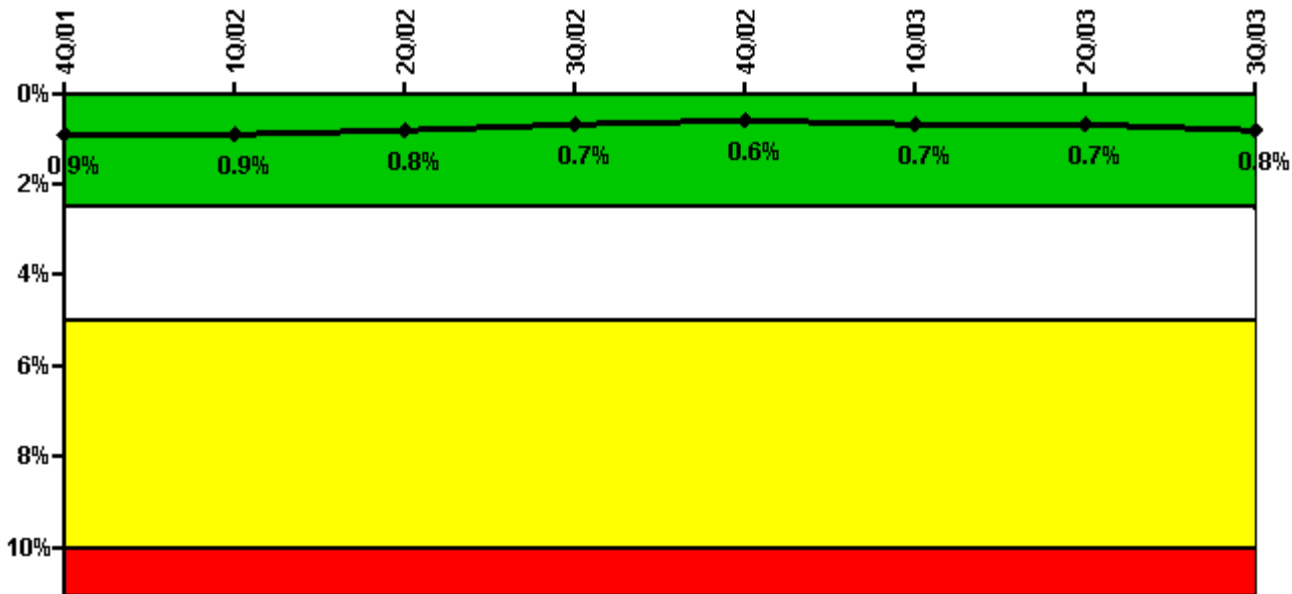
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Unplanned power changes	0	0	1.0	0	1.0	0	0	0
Critical hours	2209.0	2160.0	2056.2	1870.2	2062.0	2160.0	2183.0	2208.0
Indicator value	0	0	0.8	0.8	1.7	1.7	0.8	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

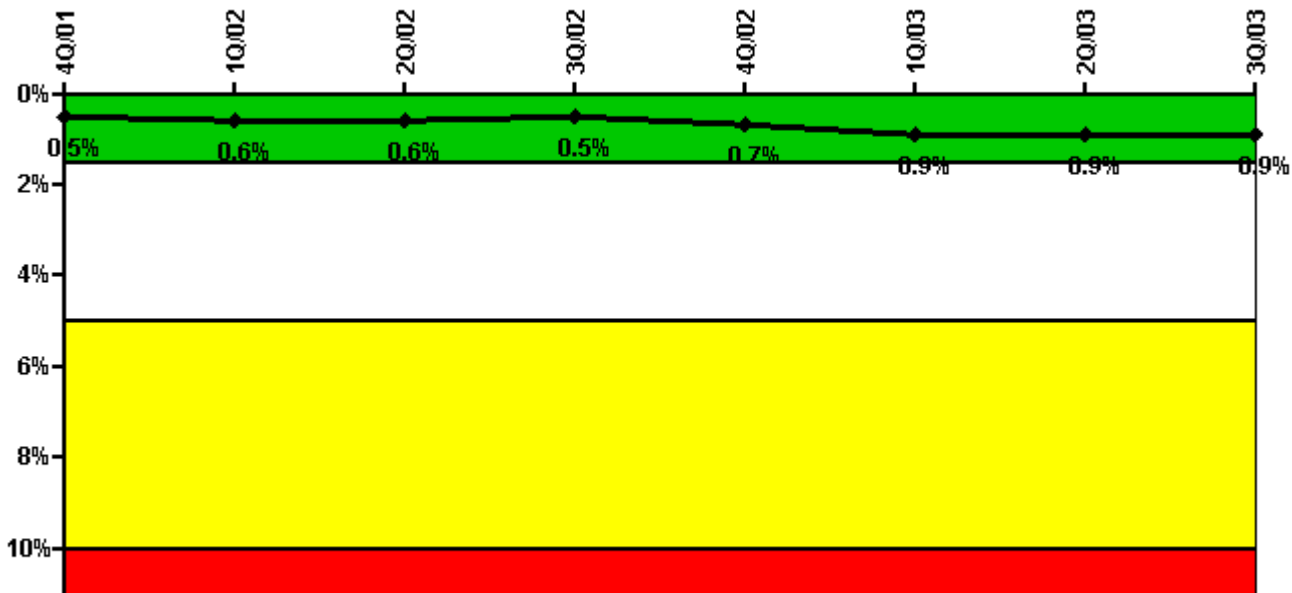
Notes

Safety System Unavailability, Emergency AC Power	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Train 1								
Planned unavailable hours	11.80	7.80	13.20	2.30	8.60	42.30	14.80	3.20
Unplanned unavailable hours	87.50	0	0	0	0	0	0	0
Fault exposure hours	3.90	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	18.30	17.60	12.00	3.40	2.60	1.70	11.40	4.10
Unplanned unavailable hours	15.90	0	30.40	10.70	0	0	11.80	54.90
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	0.9%	0.9%	0.8%	0.7%	0.6%	0.7%	0.7%	0.8%

Licensee Comments:

3Q/03: 308.0 T/2 Fault Exposure Hours are being recorded due to the 2B Diesel Generator Emergency Start failure. Based on NEI 99-02, Revision 2, page 30, lines 37-40, T/2 fault exposure hours, in which the time of the failure is not known, are reported only in the comment section of the NRC PI data file, and are not included in the calculation of safety system unavailability.

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

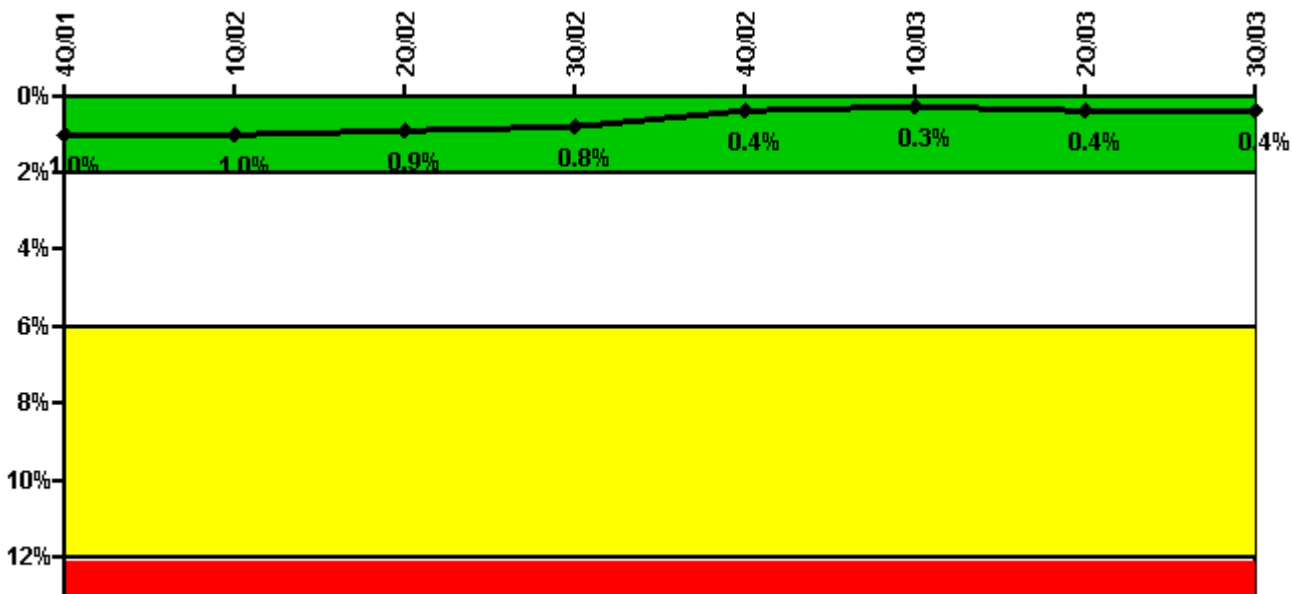
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Train 1								
Planned unavailable hours	10.90	22.00	3.20	23.90	2.40	3.60	1.80	3.20
Unplanned unavailable hours	0	0	0	0	0	213.80	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	52.20	3.00	6.60	3.40	1.30	1.70	4.10	1.90
Unplanned unavailable hours	0	64.80	0	0	135.90	2.80	0	0
Fault exposure hours	0	0	0	0	50.40	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00
Train 3								
Planned unavailable hours	2.90	1.20	3.20	4.90	2.40	13.60	39.00	3.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00
Train 4								
Planned unavailable hours	1.60	3.00	26.80	3.40	3.00	1.70	4.10	3.10

Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00
Indicator value	0.5%	0.6%	0.6%	0.5%	0.7%	0.9%	0.9%	0.9%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

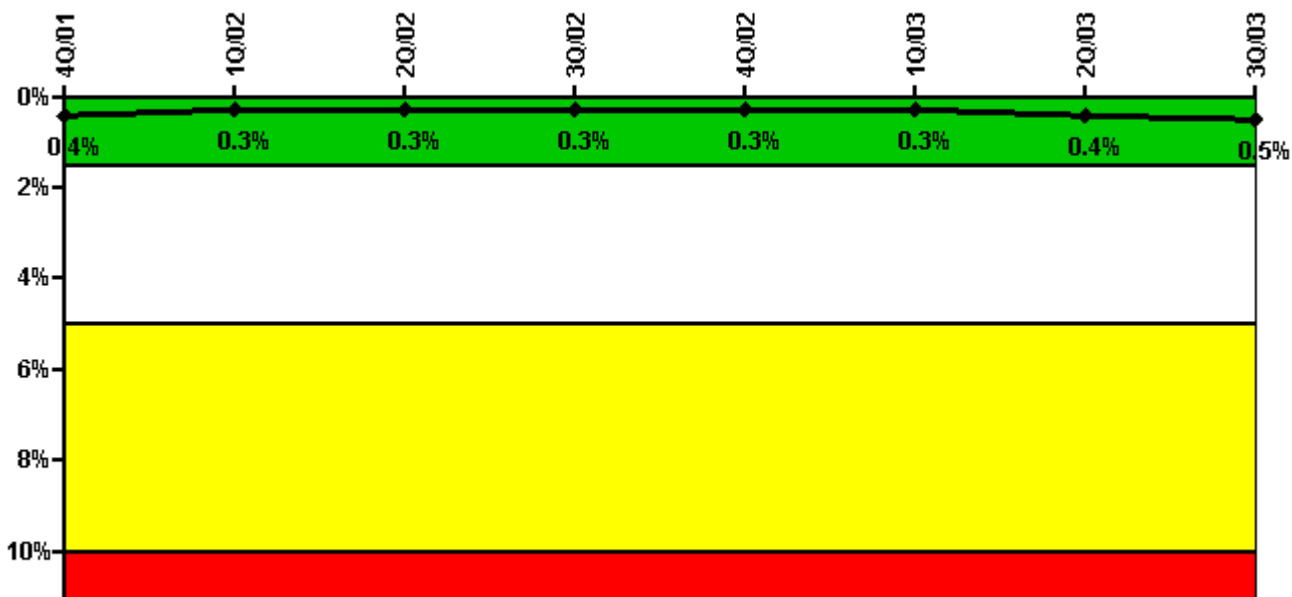
Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Train 1								
Planned unavailable hours	4.80	2.90	4.30	3.60	4.10	4.60	3.30	7.00
Unplanned unavailable hours	0	0	0	0	0	0	0	7.00
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	3.50	32.20	2.90	26.20	19.30	2.80	59.70	3.40
Unplanned unavailable hours	1.40	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0

Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00
Indicator value	1.0%	1.0%	0.9%	0.8%	0.4%	0.3%	0.4%	0.4%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

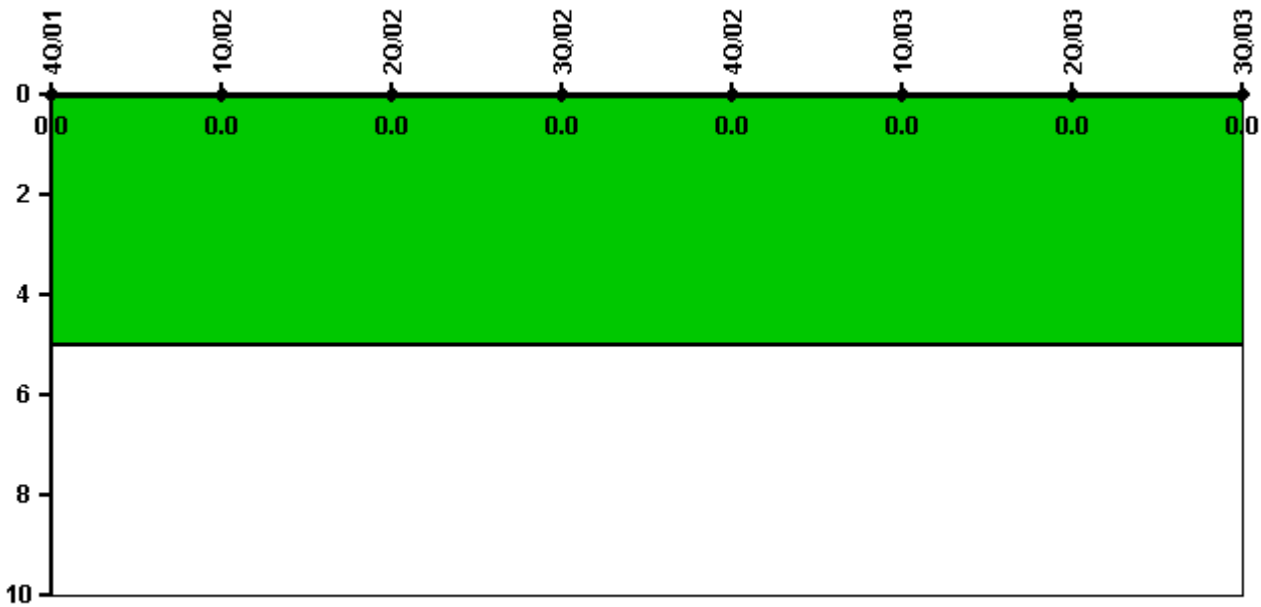
Notes

Safety System Unavailability, Residual Heat Removal System	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Train 1								
Planned unavailable hours	2.90	1.30	3.20	21.60	2.40	18.10	49.80	58.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	13.90	26.30	2.90	3.70	2.60	1.70	18.20	1.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00

Indicator value	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.5%

Licensee Comments: none

Safety System Functional Failures (PWR)



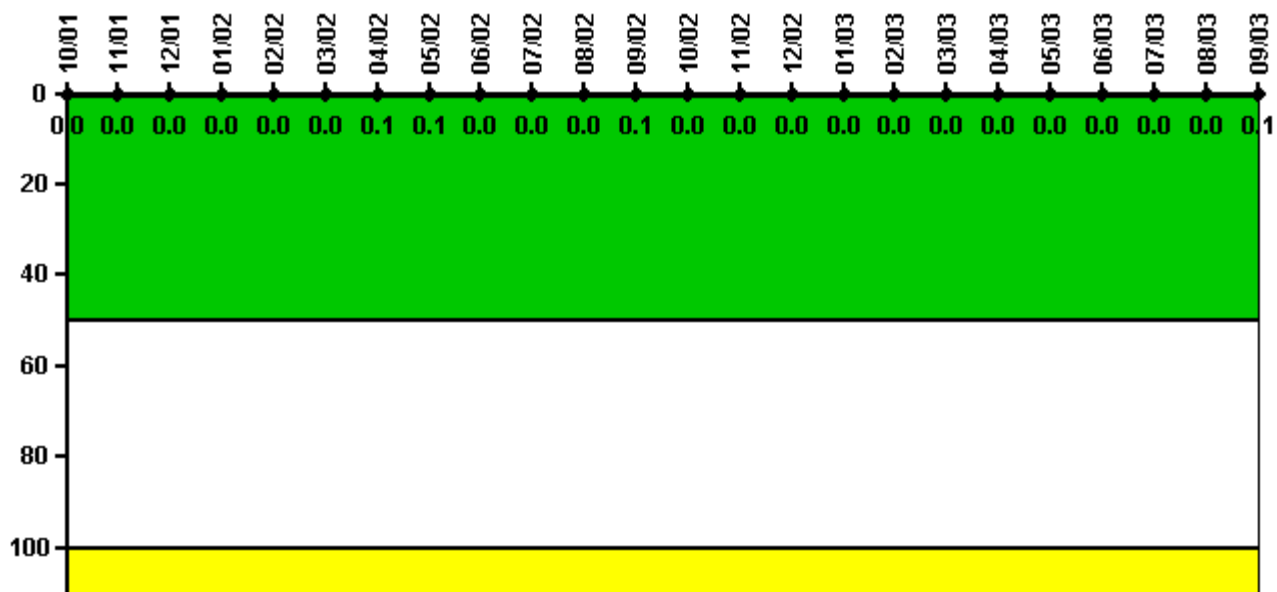
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

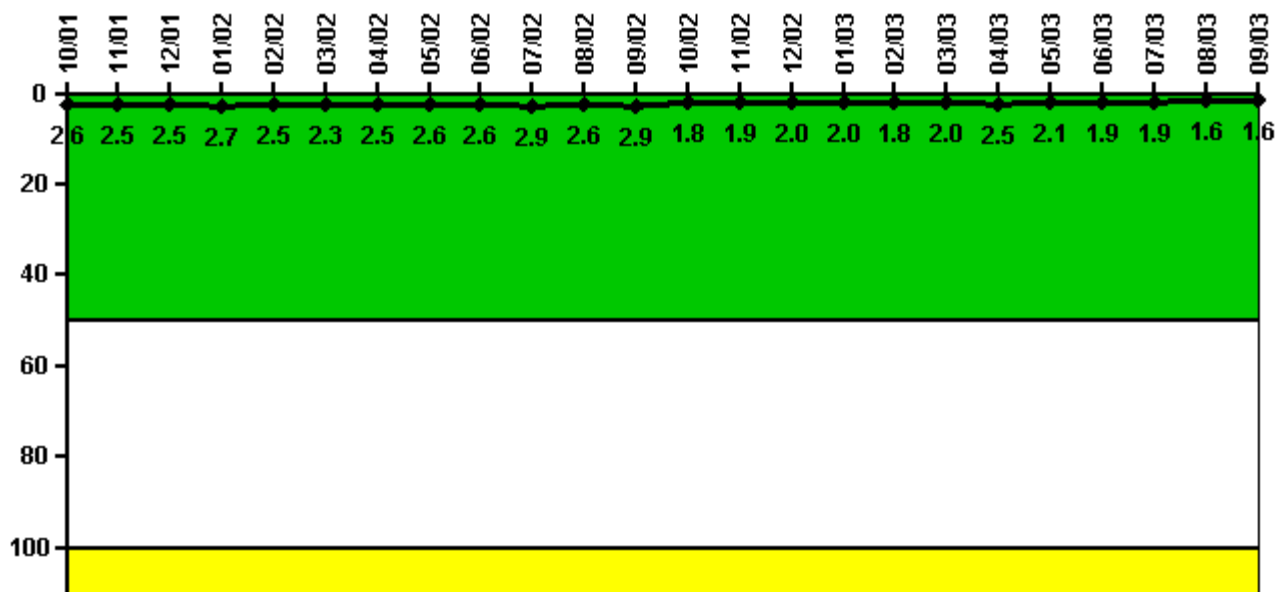
Notes

Reactor Coolant System Activity	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02
Maximum activity	0.000351	0.000428	0.000393	0.000412	0.000416	0.000398	0.000841	0.001210	0.000483	0.000451	0.000447	0.000855
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0.1	0.1	0	0	0	0.1

Reactor Coolant System Activity	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum activity	0.000242	0.000318	0.000327	0.000287	0.000301	0.000288	0.000295	0.000344	0.000317	0.000335	0.000342	0.000523
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0.1

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

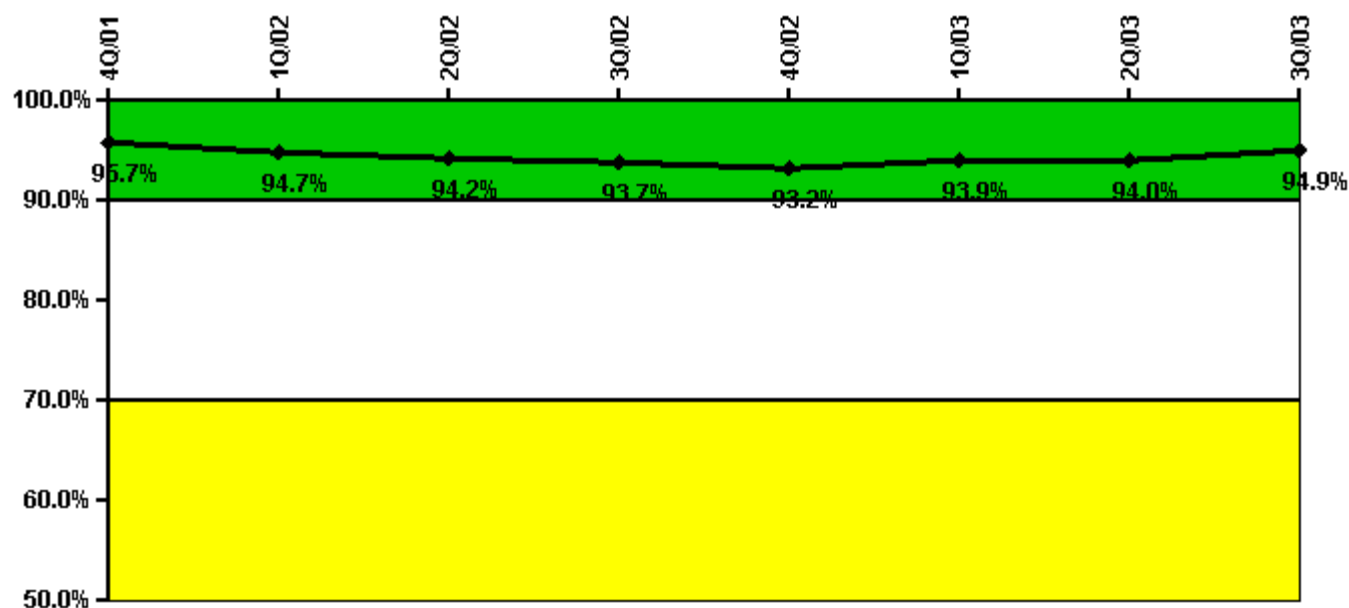
Notes

Reactor Coolant System Leakage	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02
Maximum leakage	0.259	0.250	0.252	0.266	0.249	0.234	0.249	0.257	0.259	0.286	0.256	0.287
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.6	2.5	2.5	2.7	2.5	2.3	2.5	2.6	2.6	2.9	2.6	2.9

Reactor Coolant System Leakage	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum leakage	0.182	0.192	0.204	0.199	0.180	0.199	0.247	0.212	0.188	0.185	0.155	0.157
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.8	1.9	2.0	2.0	1.8	2.0	2.5	2.1	1.9	1.9	1.6	1.6

Licensee Comments: none

Drill/Exercise Performance



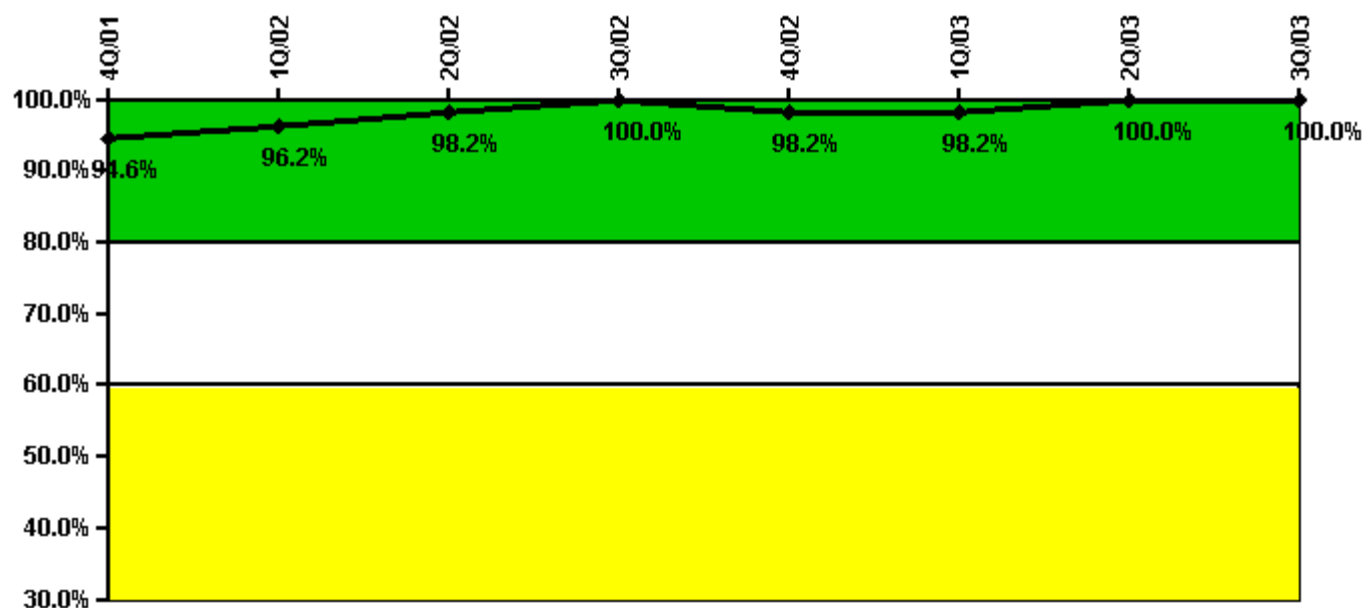
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Successful opportunities	38.0	34.0	14.0	33.0	43.0	39.0	36.0	45.0
Total opportunities	40.0	36.0	14.0	34.0	47.0	41.0	38.0	47.0
Indicator value	95.7%	94.7%	94.2%	93.7%	93.2%	93.9%	94.0%	94.9%

Licensee Comments: none

ERO Drill Participation



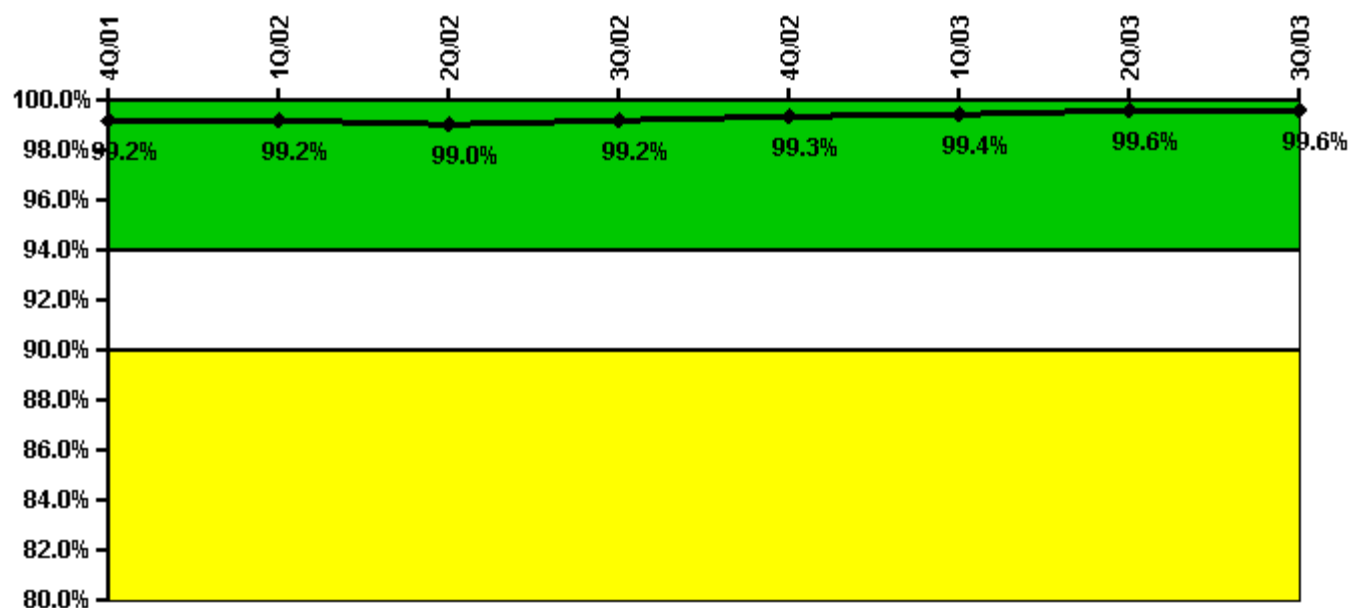
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Participating Key personnel	53.0	50.0	55.0	55.0	54.0	54.0	57.0	59.0
Total Key personnel	56.0	52.0	56.0	55.0	55.0	55.0	57.0	59.0
Indicator value	94.6%	96.2%	98.2%	100.0%	98.2%	98.2%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



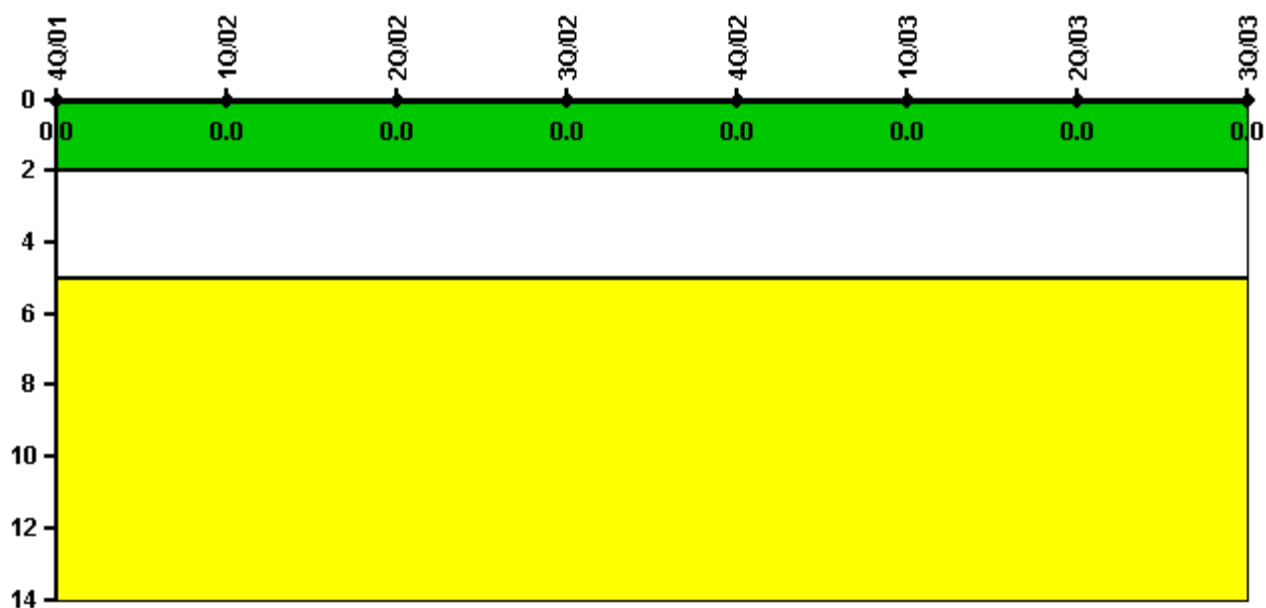
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Successful siren-tests	5965	5872	5945	5994	5991	5898	5990	5988
Total sirens-tests	6016	5922	6016	6016	6016	5922	6016	6016
Indicator value	99.2%	99.2%	99.0%	99.2%	99.3%	99.4%	99.6%	99.6%

Licensee Comments: none

Occupational Exposure Control Effectiveness

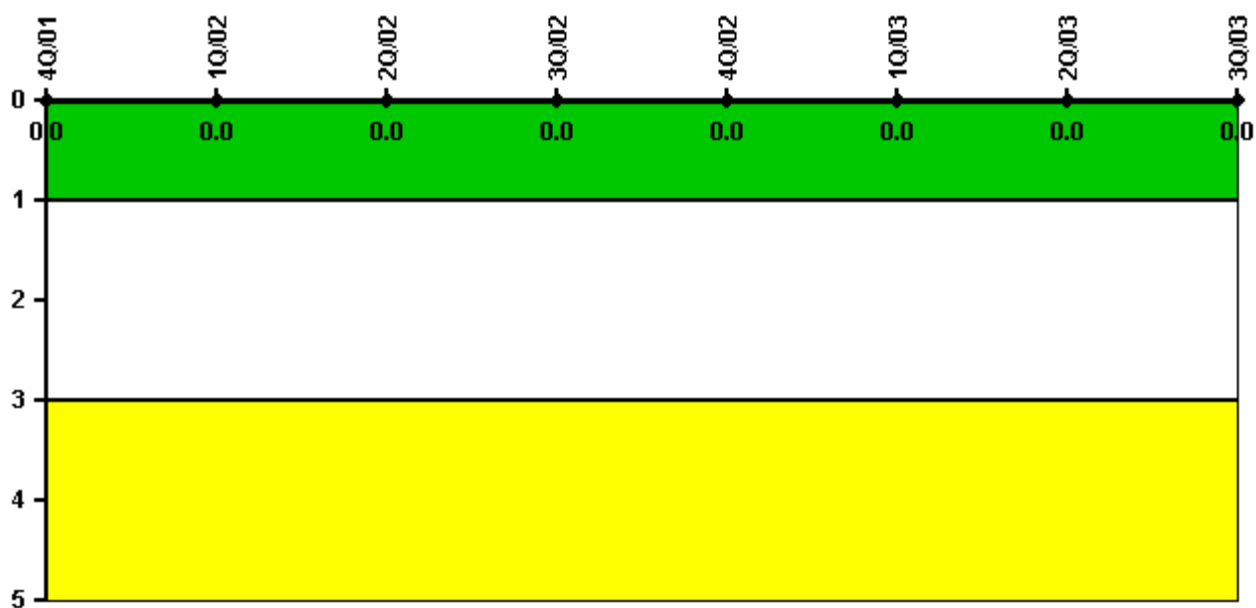


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

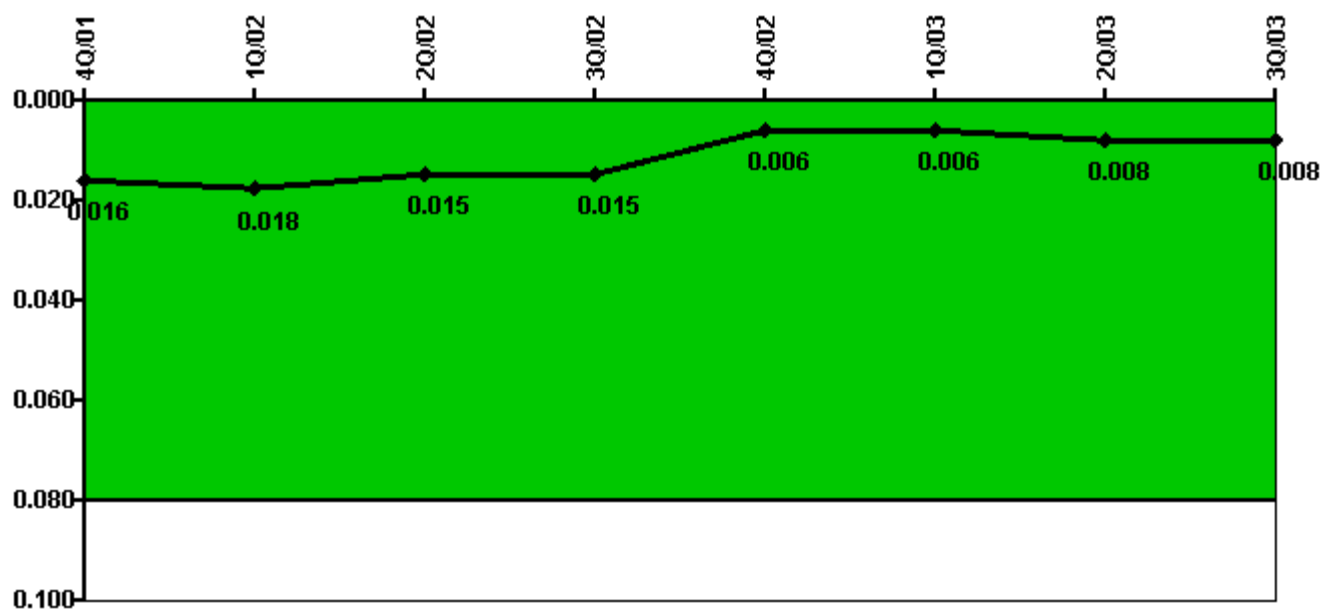
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



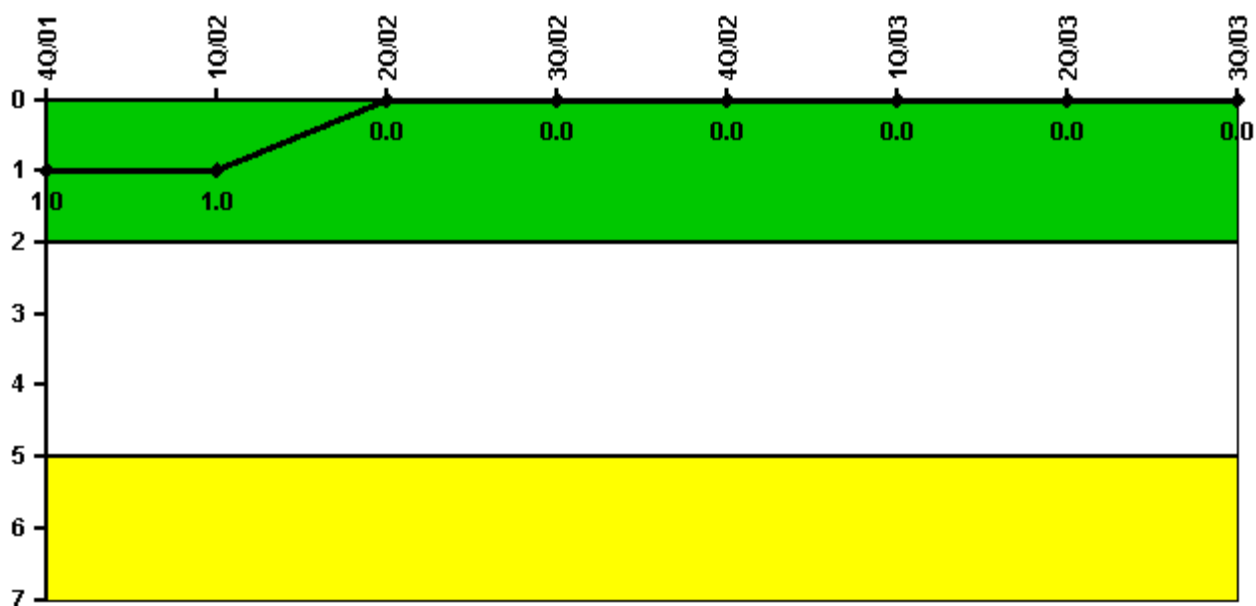
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
IDS compensatory hours	247.72	62.00	14.60	12.80	34.10	21.90	0	5.45
CCTV compensatory hours	0	0	13.5	4.3	5.8	21.4	55.9	19.5
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.016	0.018	0.015	0.015	0.006	0.006	0.008	0.008

Licensee Comments: none

Personnel Screening Program



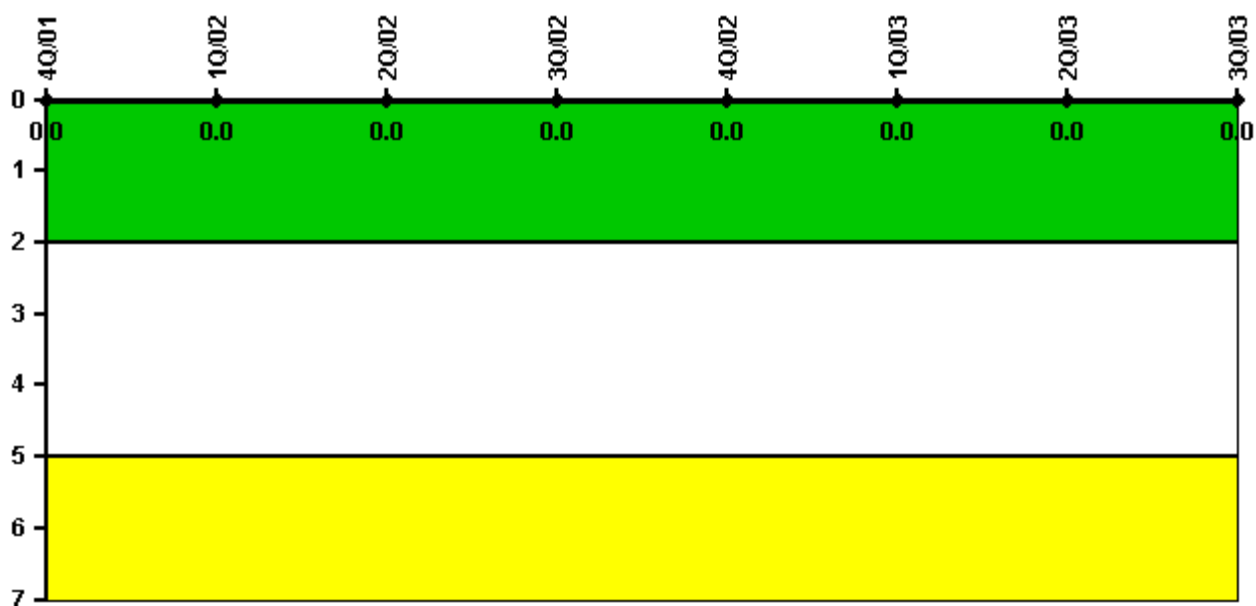
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Program failures	0	0	0	0	0	0	0	0
Indicator value	1	1	0	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

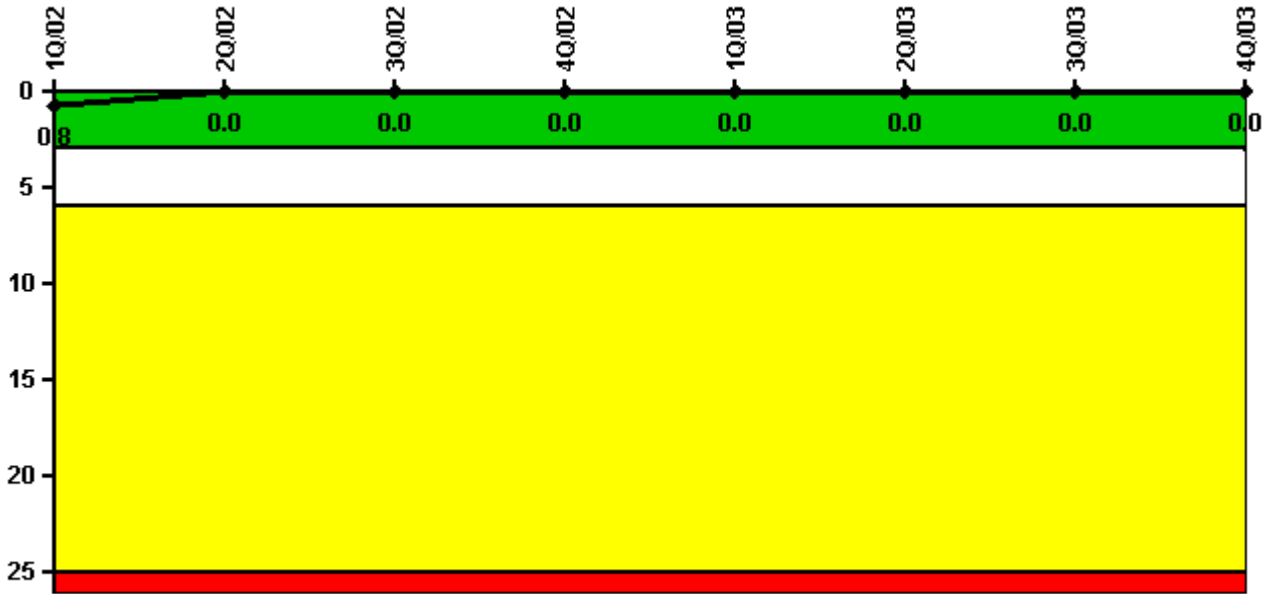
Last Modified: October 22, 2003

Byron 2

4Q/2003 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



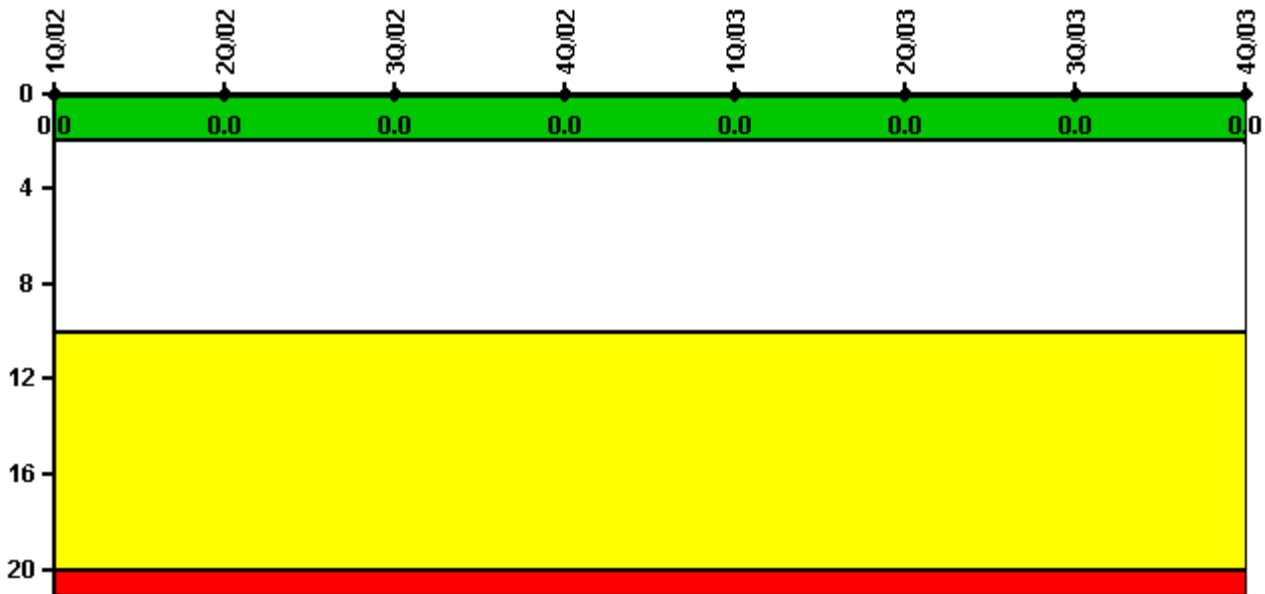
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2160.0	2056.2	1870.2	2062.0	2160.0	2183.0	2208.0	2209.0
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



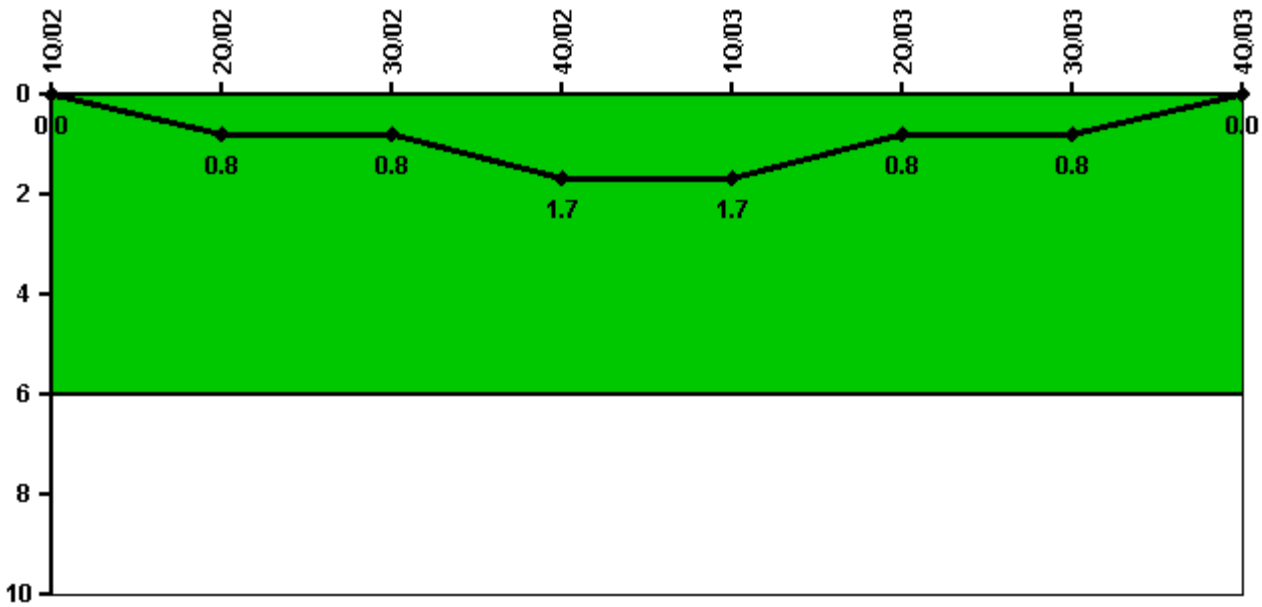
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



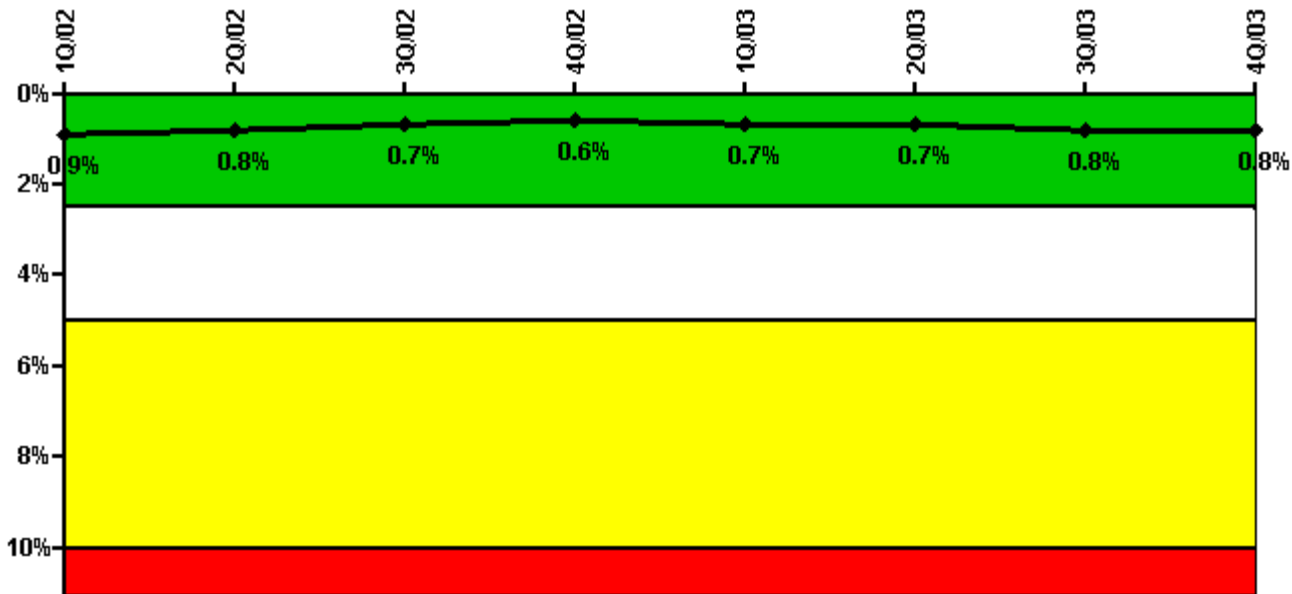
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned power changes	0	1.0	0	1.0	0	0	0	0
Critical hours	2160.0	2056.2	1870.2	2062.0	2160.0	2183.0	2208.0	2209.0
Indicator value	0	0.8	0.8	1.7	1.7	0.8	0.8	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



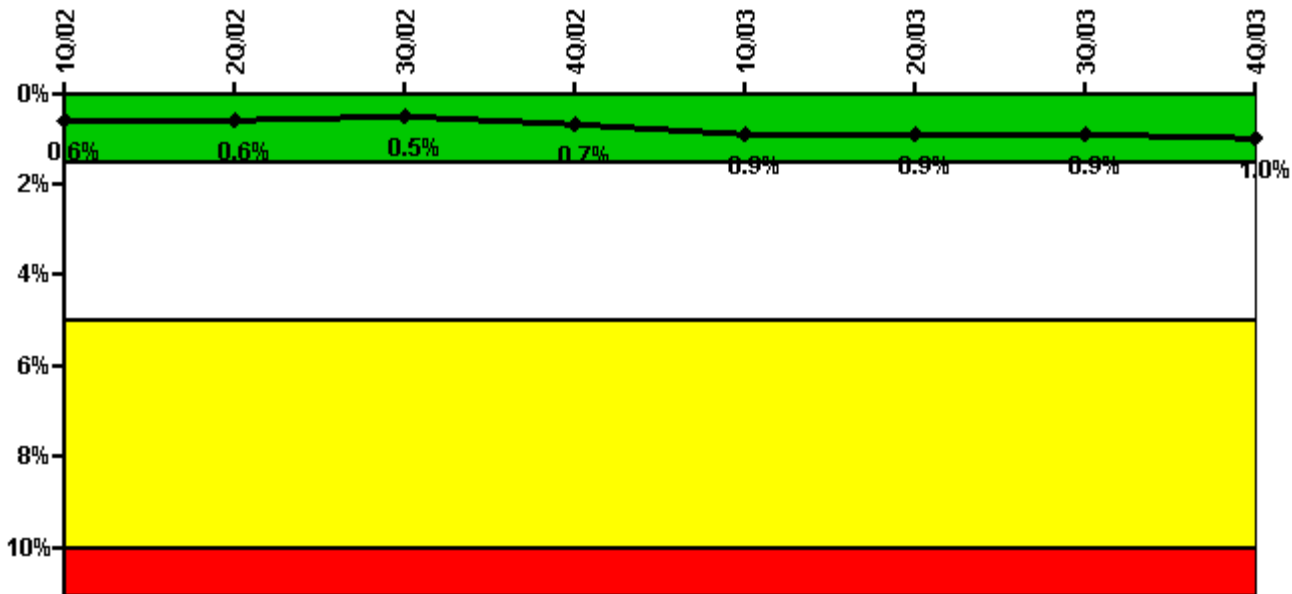
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	7.80	13.20	2.30	8.60	42.30	14.80	3.20	1.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	17.60	12.00	3.40	2.60	1.70	11.40	4.10	2.90
Unplanned unavailable hours	0	30.40	10.70	0	0	11.80	54.90	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.9%	0.8%	0.7%	0.6%	0.7%	0.7%	0.8%	0.8%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

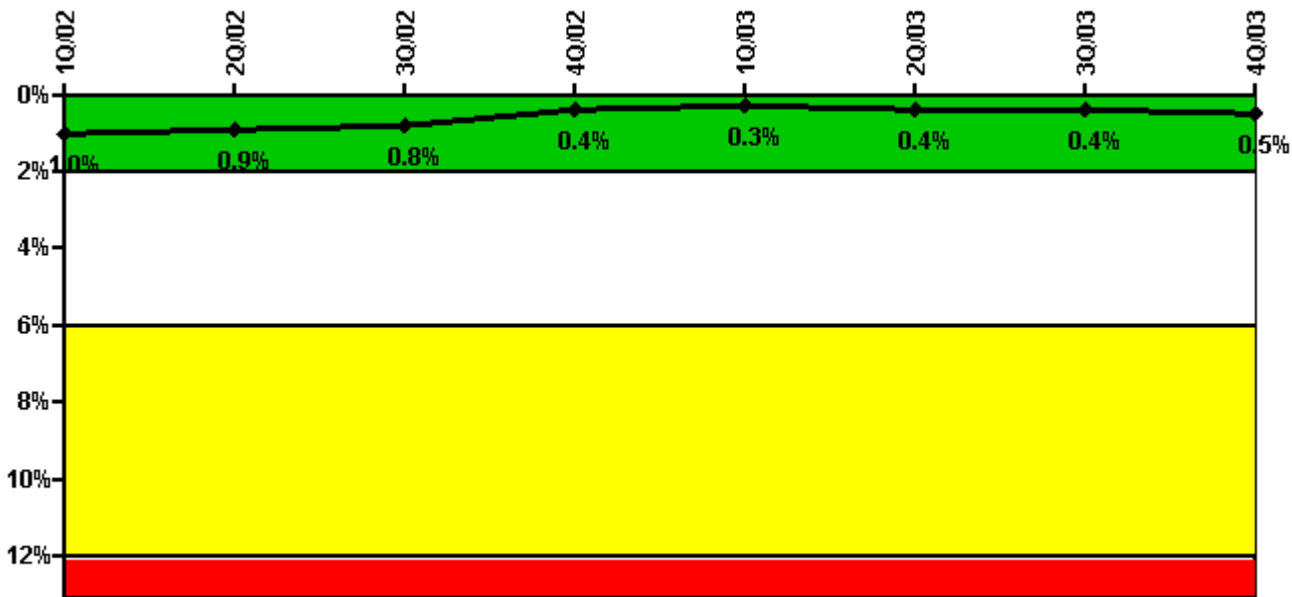
Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	22.00	3.20	23.90	2.40	3.60	1.80	3.20	23.40
Unplanned unavailable hours	0	0	0	0	213.80	0	0	3.70
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	3.00	6.60	3.40	1.30	1.70	4.10	1.90	2.90
Unplanned unavailable hours	64.80	0	0	135.90	2.80	0	0	0
Fault exposure hours	0	0	0	50.40	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00
Train 3								
Planned unavailable hours	1.20	3.20	4.90	2.40	13.60	39.00	3.20	1.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00
Train 4								
Planned unavailable hours	3.00	26.80	3.40	3.00	1.70	4.10	3.10	24.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0

Required hours	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00
Indicator value	0.6%	0.6%	0.5%	0.7%	0.9%	0.9%	0.9%	1.0%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

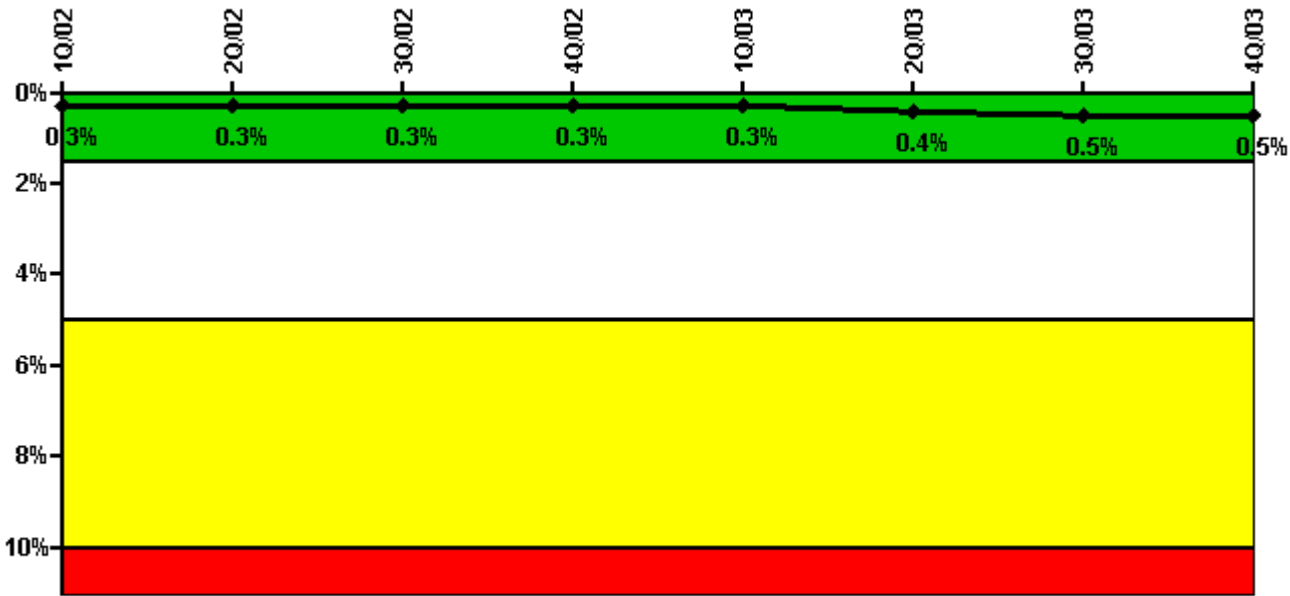
Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	2.90	4.30	3.60	4.10	4.60	3.30	7.00	3.30
Unplanned unavailable hours	0	0	0	0	0	0	7.00	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	32.20	2.90	26.20	19.30	2.80	59.70	3.40	11.10
Unplanned unavailable hours	0	0	0	0	0	0	0	25.60
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00

Indicator value	1.0%	0.9%	0.8%	0.4%	0.3%	0.4%	0.4%	0.5%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



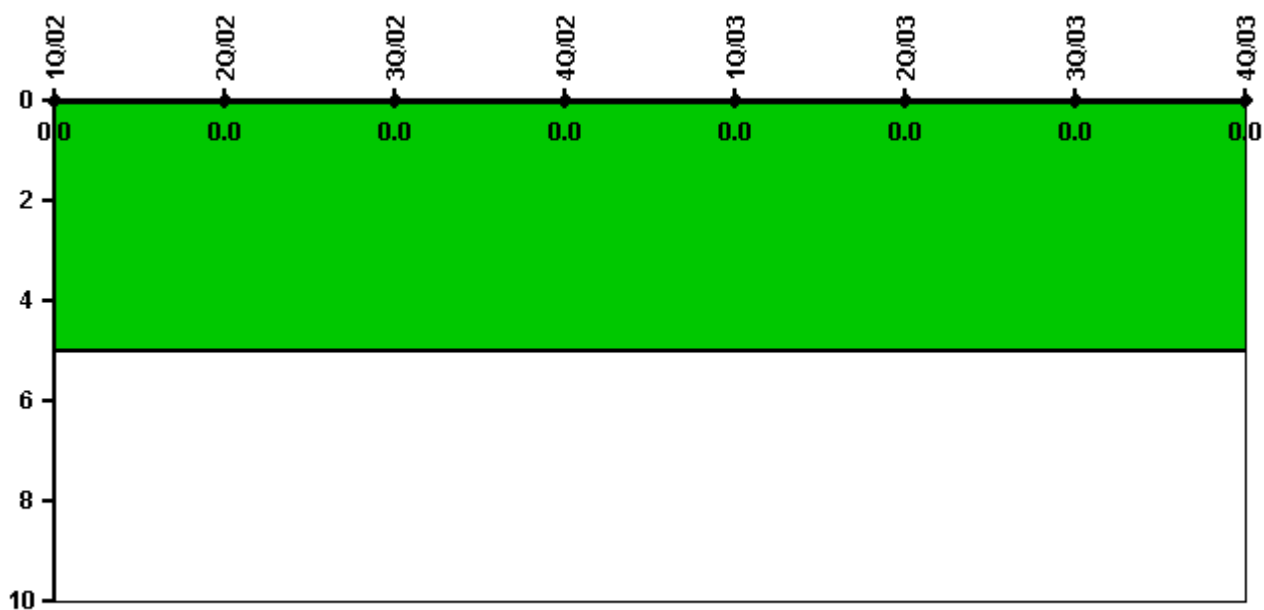
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	1.30	3.20	21.60	2.40	18.10	49.80	58.50	1.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	26.30	2.90	3.70	2.60	1.70	18.20	1.90	44.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.5%	0.5%

Licensee Comments: none

Safety System Functional Failures (PWR)



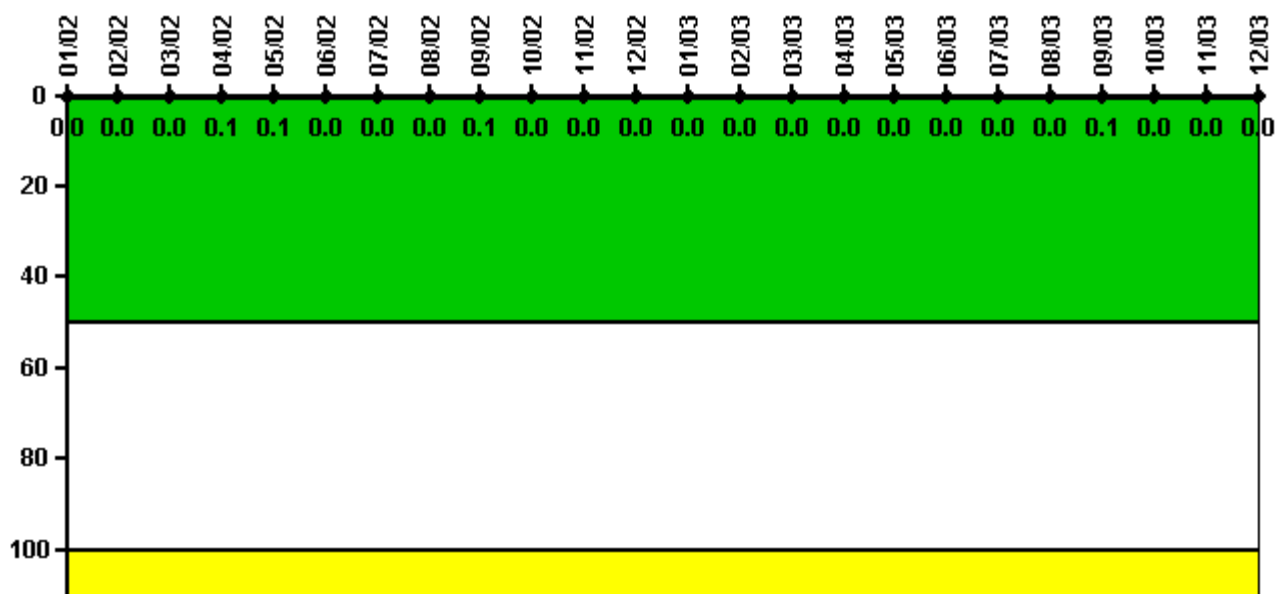
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

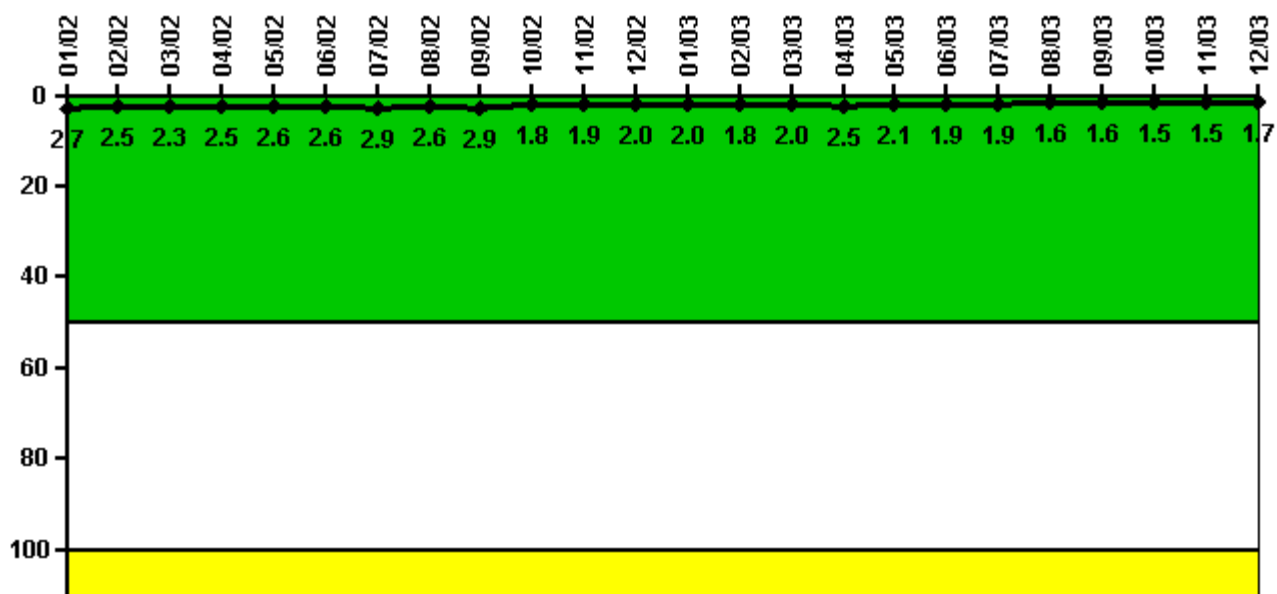
Notes

Reactor Coolant System Activity	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum activity	0.000412	0.000416	0.000398	0.000841	0.001210	0.000483	0.000451	0.000447	0.000855	0.000242	0.000318	0.000327
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0.1	0.1	0	0	0	0.1	0	0	0

Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.000287	0.000301	0.000288	0.000295	0.000344	0.000317	0.000335	0.000342	0.000523	0.000012	0.000365	0.000399
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0.1	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

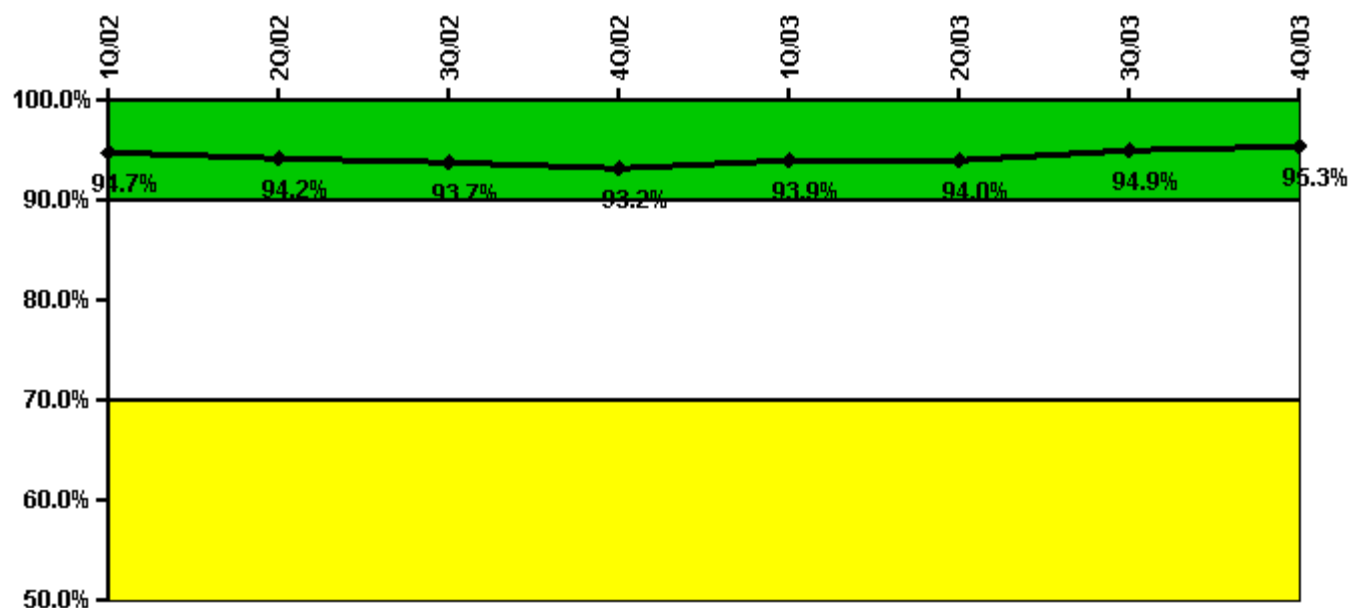
Notes

Reactor Coolant System Leakage	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum leakage	0.266	0.249	0.234	0.249	0.257	0.259	0.286	0.256	0.287	0.182	0.192	0.204
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.7	2.5	2.3	2.5	2.6	2.6	2.9	2.6	2.9	1.8	1.9	2.0

Reactor Coolant System Leakage	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum leakage	0.199	0.180	0.199	0.247	0.212	0.188	0.185	0.155	0.157	0.152	0.148	0.172
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.0	1.8	2.0	2.5	2.1	1.9	1.9	1.6	1.6	1.5	1.5	1.7

Licensee Comments: none

Drill/Exercise Performance



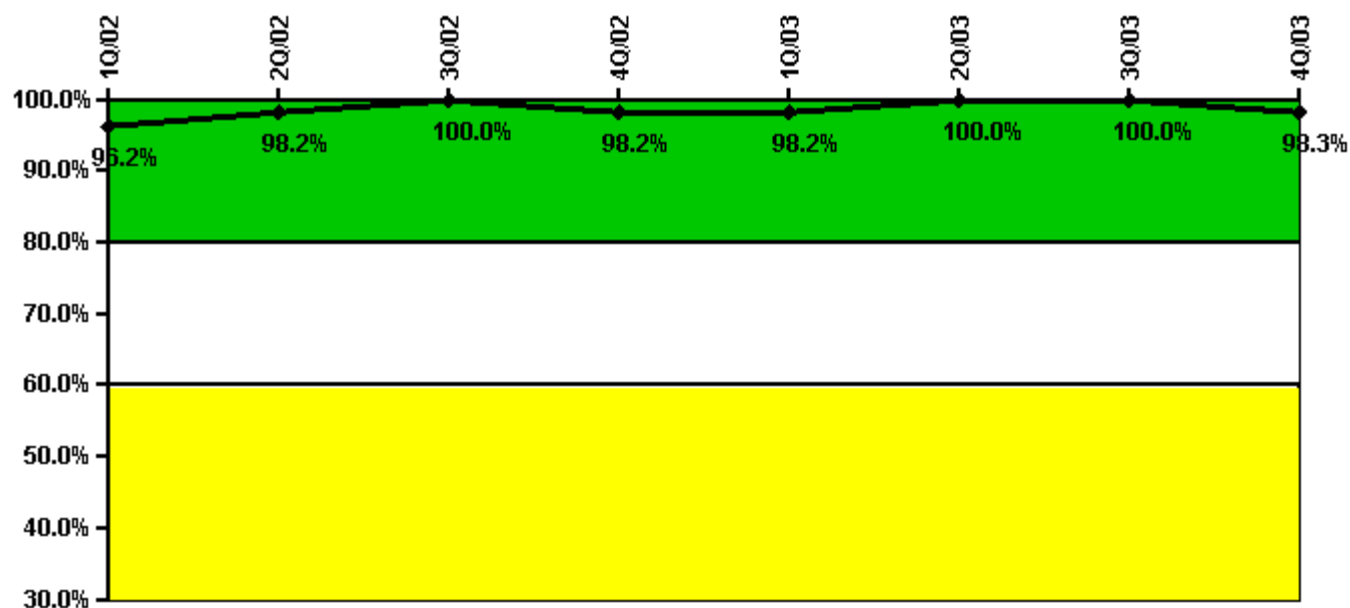
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful opportunities	34.0	14.0	33.0	43.0	39.0	36.0	45.0	18.0
Total opportunities	36.0	14.0	34.0	47.0	41.0	38.0	47.0	18.0
Indicator value	94.7%	94.2%	93.7%	93.2%	93.9%	94.0%	94.9%	95.3%

Licensee Comments: none

ERO Drill Participation



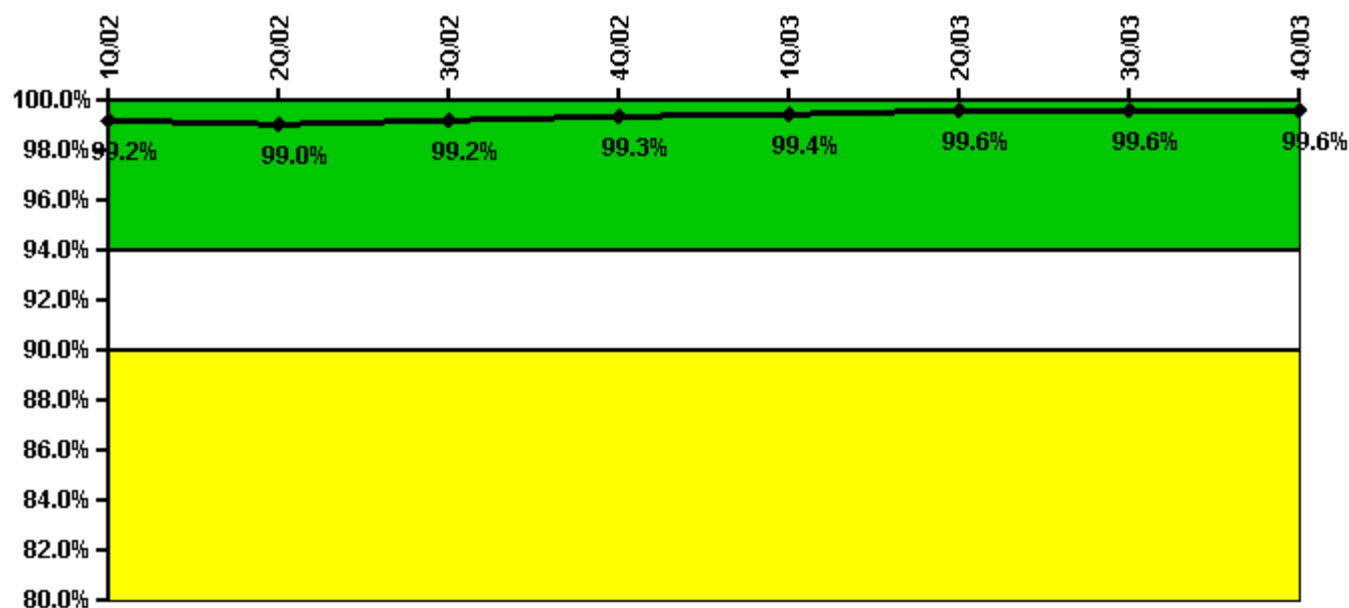
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Participating Key personnel	50.0	55.0	55.0	54.0	54.0	57.0	59.0	57.0
Total Key personnel	52.0	56.0	55.0	55.0	55.0	57.0	59.0	58.0
Indicator value	96.2%	98.2%	100.0%	98.2%	98.2%	100.0%	100.0%	98.3%

Licensee Comments: none

Alert & Notification System



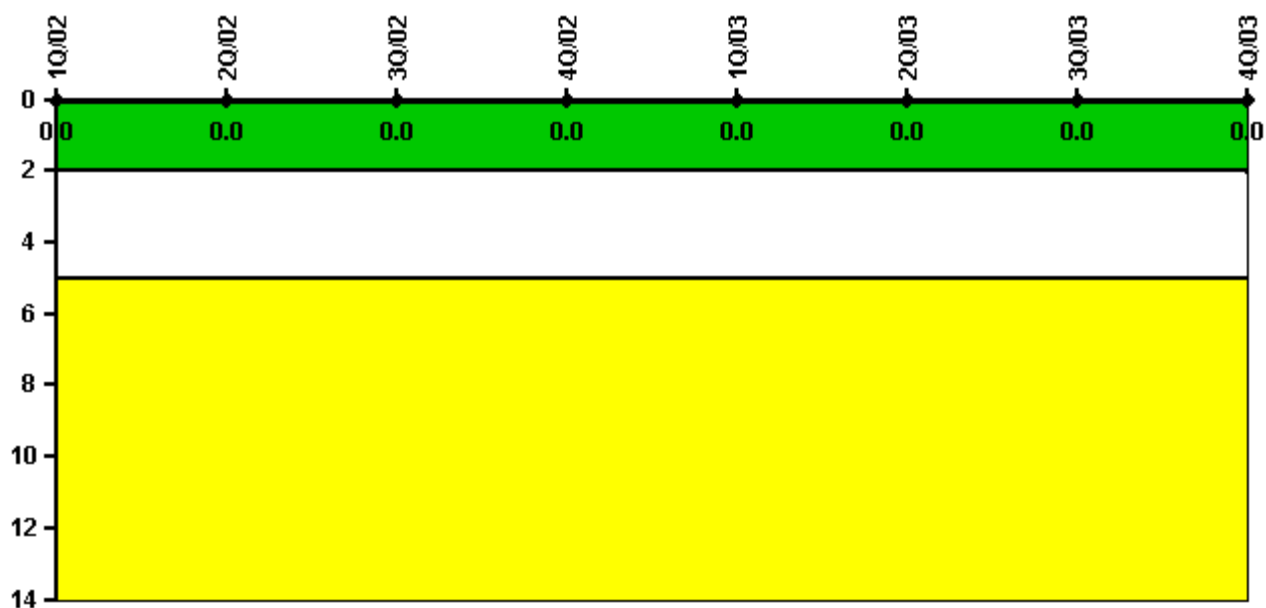
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful siren-tests	5872	5945	5994	5991	5898	5990	5988	5997
Total sirens-tests	5922	6016	6016	6016	5922	6016	6016	6016
Indicator value	99.2%	99.0%	99.2%	99.3%	99.4%	99.6%	99.6%	99.6%

Licensee Comments: none

Occupational Exposure Control Effectiveness

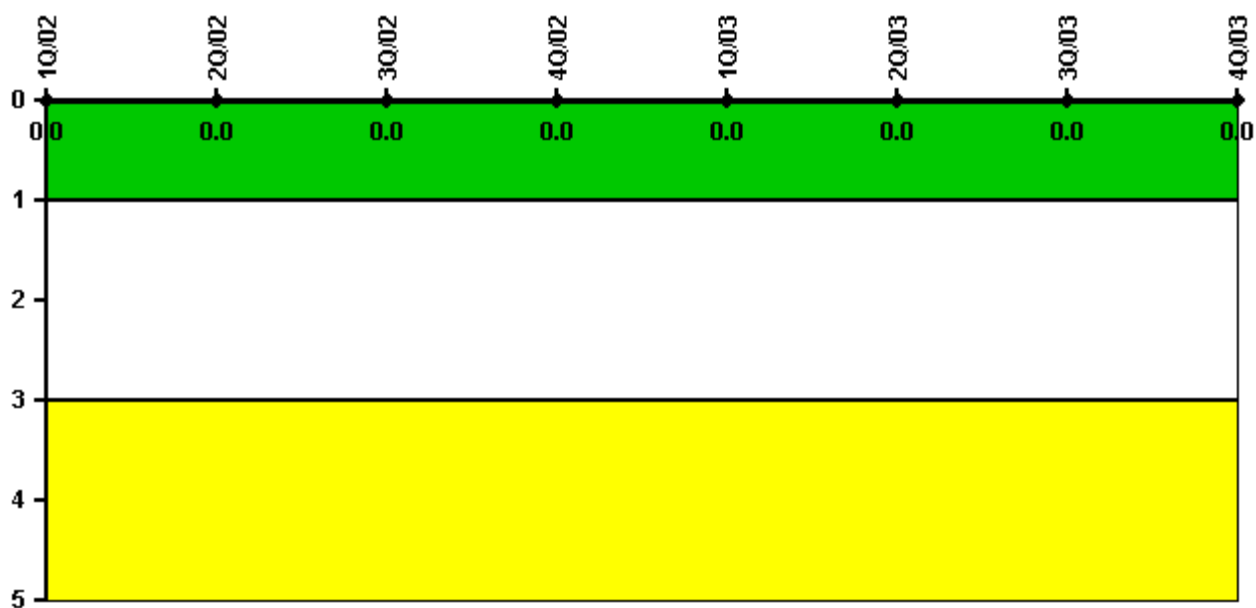


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

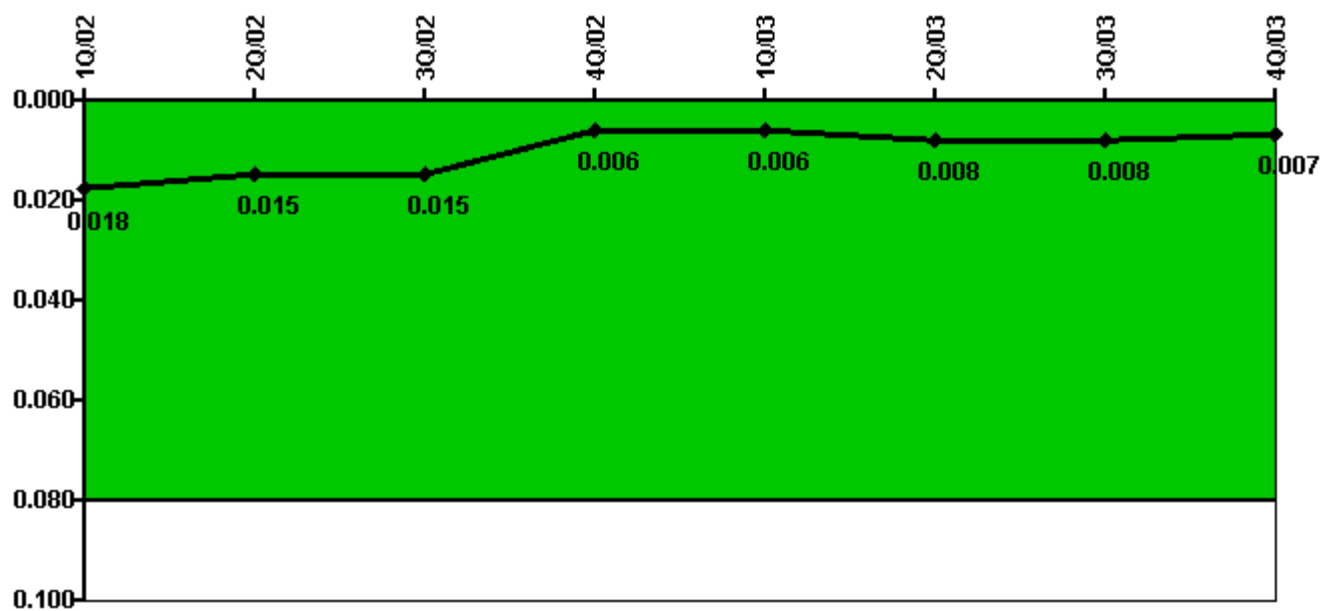
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



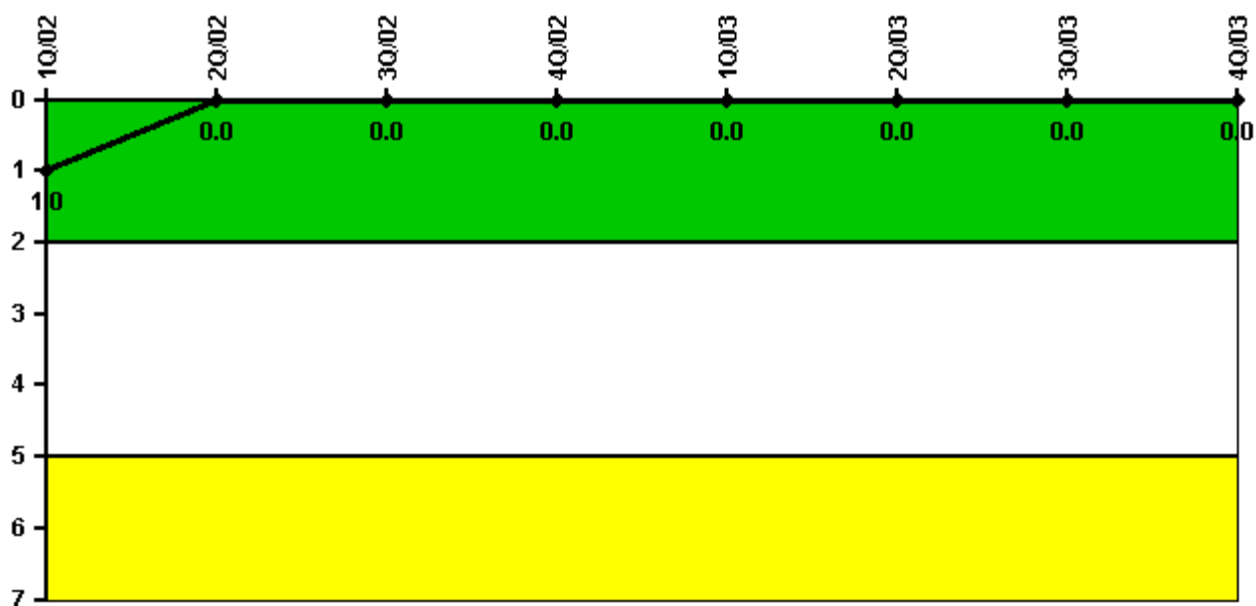
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
IDS compensatory hours	62.00	14.60	12.80	34.10	21.90	0	5.45	0
CCTV compensatory hours	0	13.5	4.3	5.8	21.4	55.9	19.5	2.4
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.018	0.015	0.015	0.006	0.006	0.008	0.008	0.007

Licensee Comments: none

Personnel Screening Program



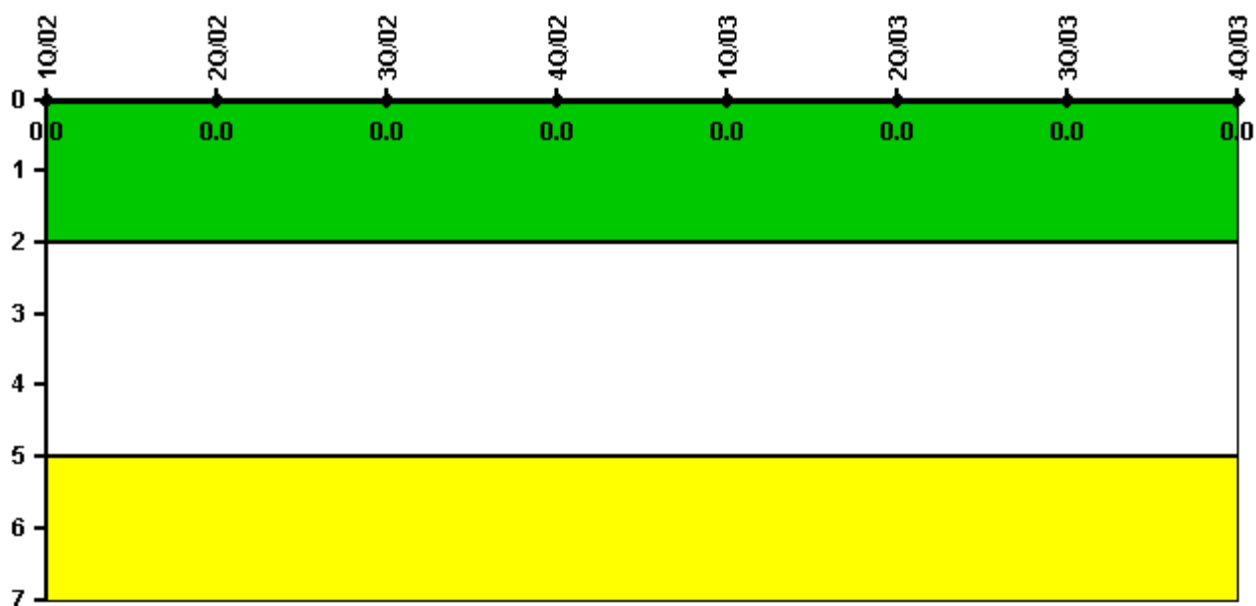
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Program failures	0	0	0	0	0	0	0	0
Indicator value	1	0	0	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

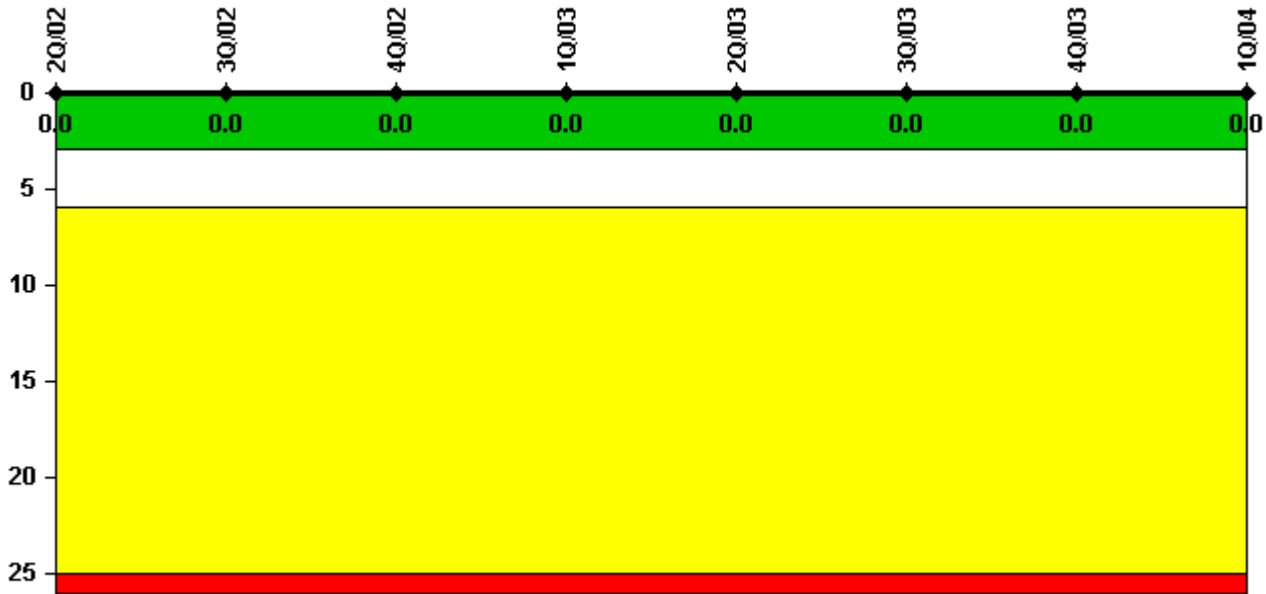
Last Modified: January 23, 2004

Byron 2

1Q/2004 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



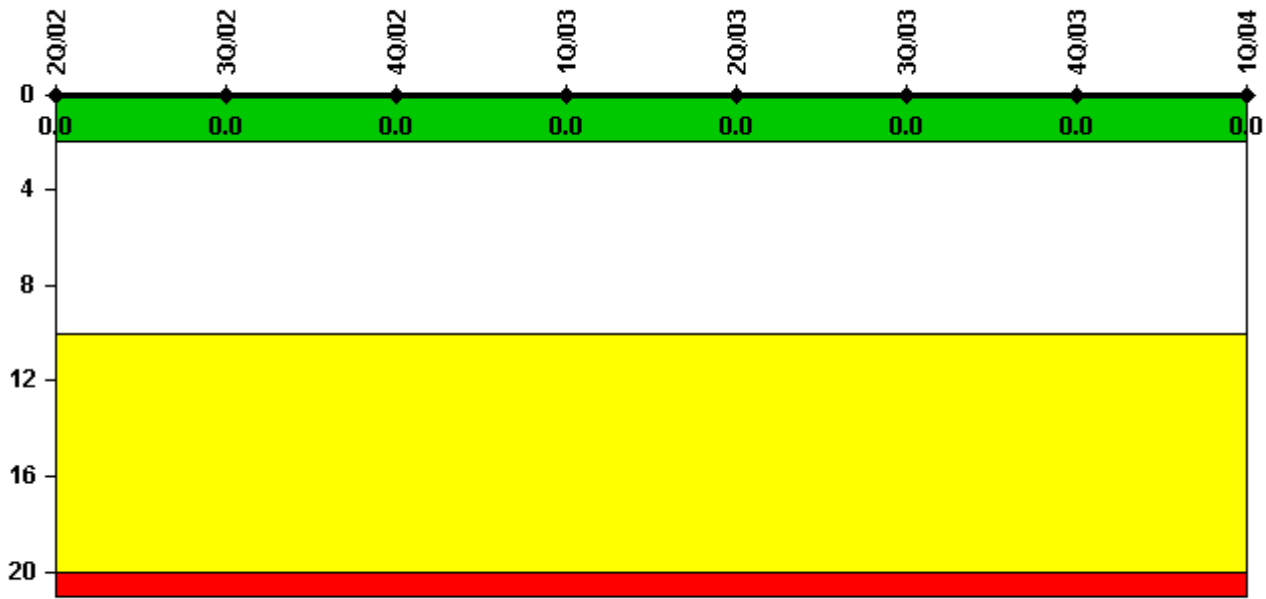
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2056.2	1870.2	2062.0	2160.0	2183.0	2208.0	2209.0	1967.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



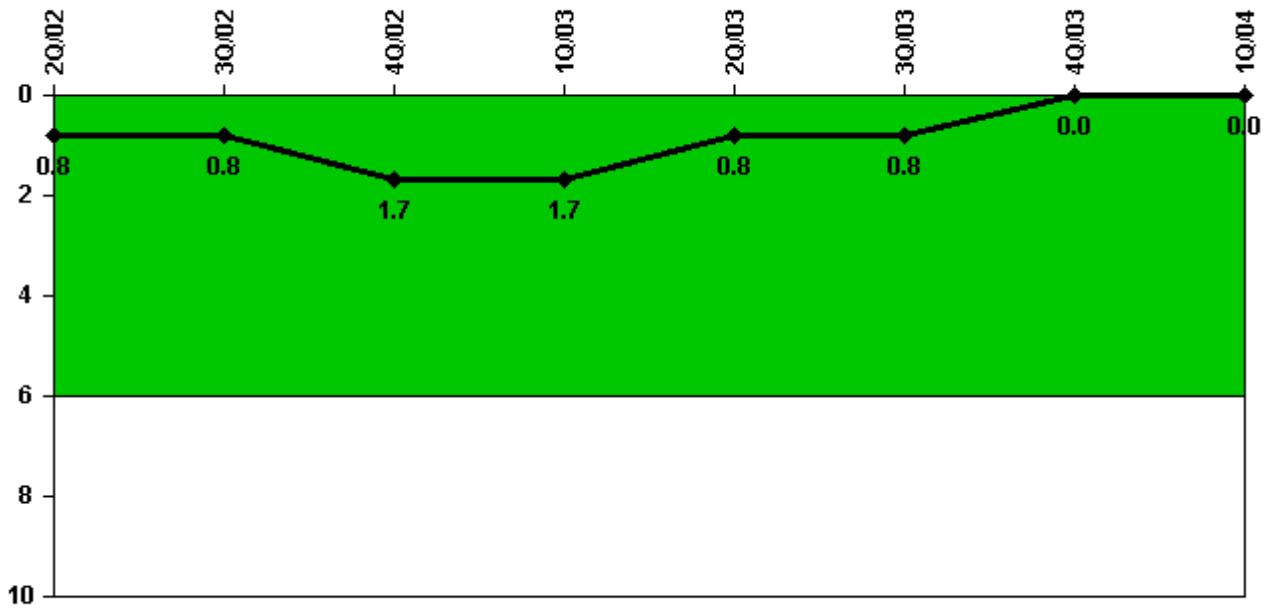
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



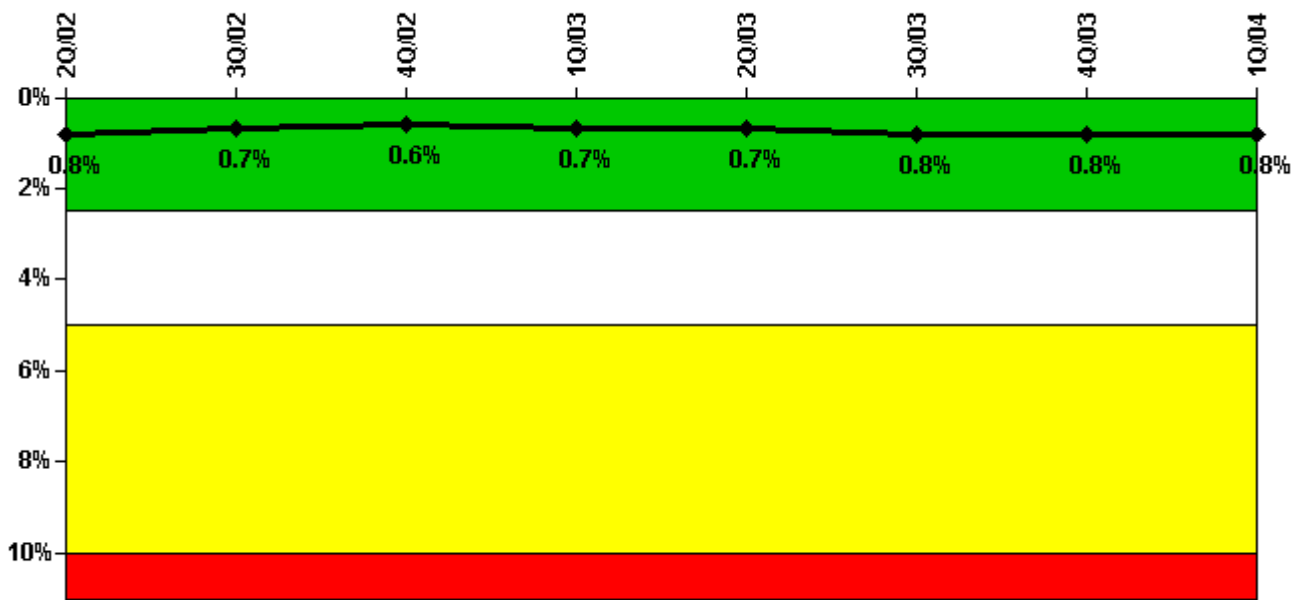
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Unplanned power changes	1.0	0	1.0	0	0	0	0	0
Critical hours	2056.2	1870.2	2062.0	2160.0	2183.0	2208.0	2209.0	1967.0
Indicator value	0.8	0.8	1.7	1.7	0.8	0.8	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



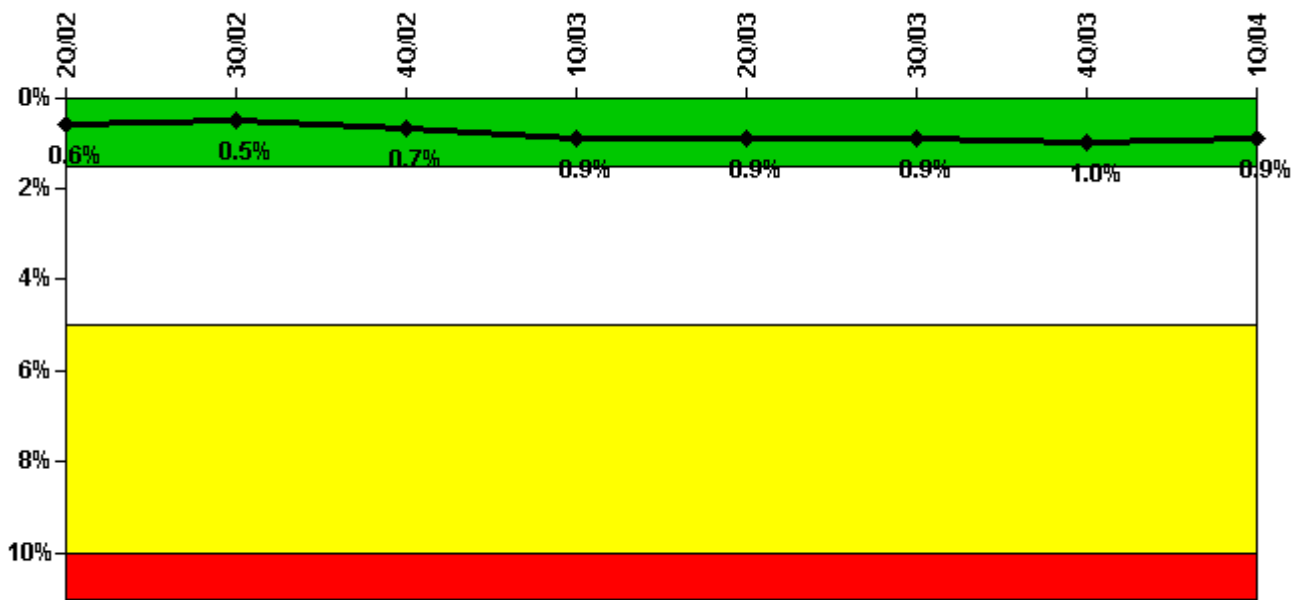
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	13.20	2.30	8.60	42.30	14.80	3.20	1.50	6.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
Train 2								
Planned unavailable hours	12.00	3.40	2.60	1.70	11.40	4.10	2.90	1.80
Unplanned unavailable hours	30.40	10.70	0	0	11.80	54.90	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
Indicator value	0.8%	0.7%	0.6%	0.7%	0.7%	0.8%	0.8%	0.8%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



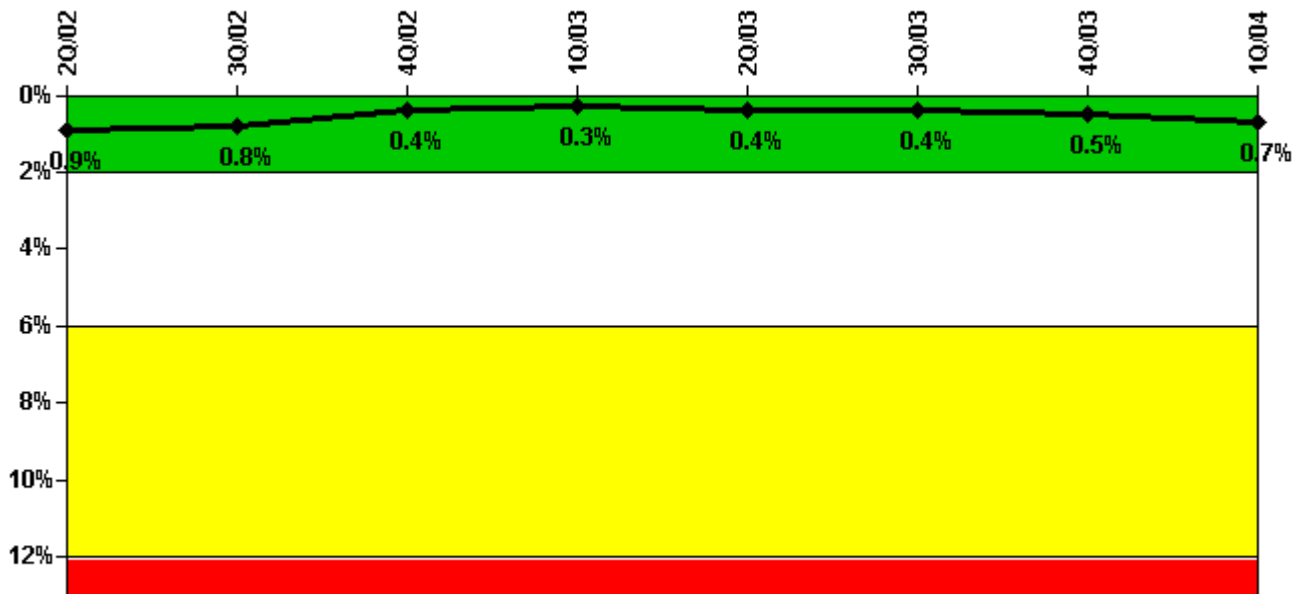
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	3.20	23.90	2.40	3.60	1.80	3.20	23.40	5.30
Unplanned unavailable hours	0	0	0	213.80	0	0	3.70	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02
Train 2								
Planned unavailable hours	6.60	3.40	1.30	1.70	4.10	1.90	2.90	1.80
Unplanned unavailable hours	0	0	135.90	2.80	0	0	0	0
Fault exposure hours	0	0	50.40	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02
Train 3								
Planned unavailable hours	3.20	4.90	2.40	13.60	39.00	3.20	1.50	5.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02
Train 4								
Planned unavailable hours	26.80	3.40	3.00	1.70	4.10	3.10	24.60	1.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02
Indicator value	0.6%	0.5%	0.7%	0.9%	0.9%	0.9%	1.0%	0.9%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



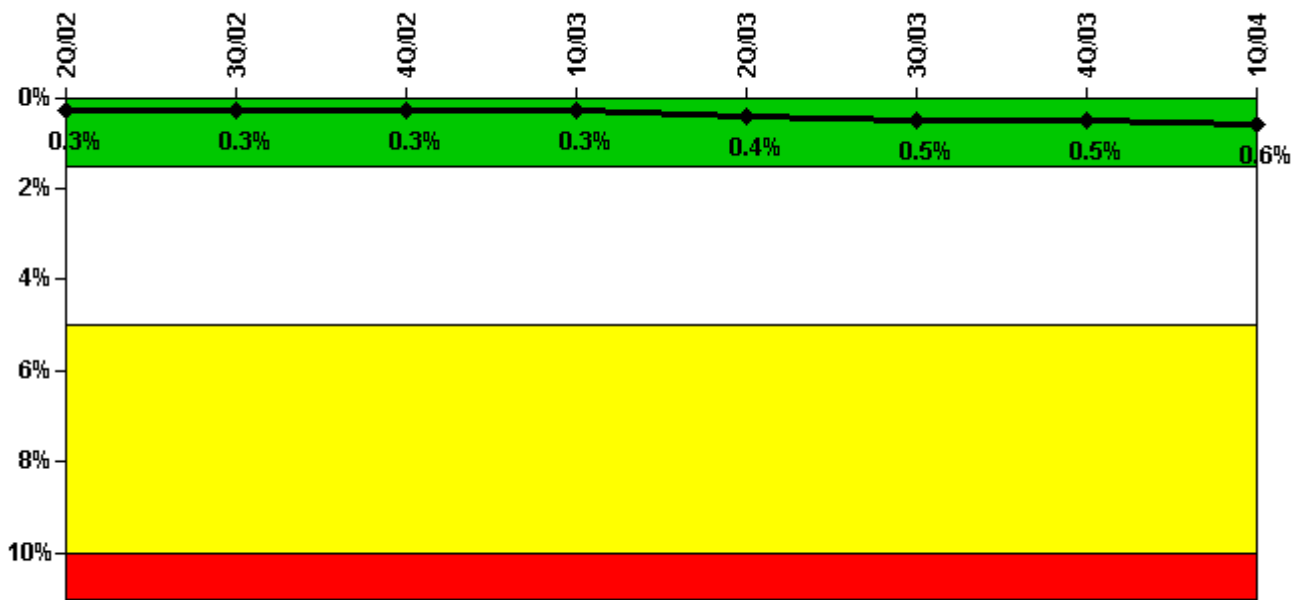
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	4.30	3.60	4.10	4.60	3.30	7.00	3.30	6.90
Unplanned unavailable hours	0	0	0	0	0	7.00	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02
Train 2								
Planned unavailable hours	2.90	26.20	19.30	2.80	59.70	3.40	11.10	42.60
Unplanned unavailable hours	0	0	0	0	0	0	25.60	57.90
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2056.20	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02
Indicator value	0.9%	0.8%	0.4%	0.3%	0.4%	0.4%	0.5%	0.7%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



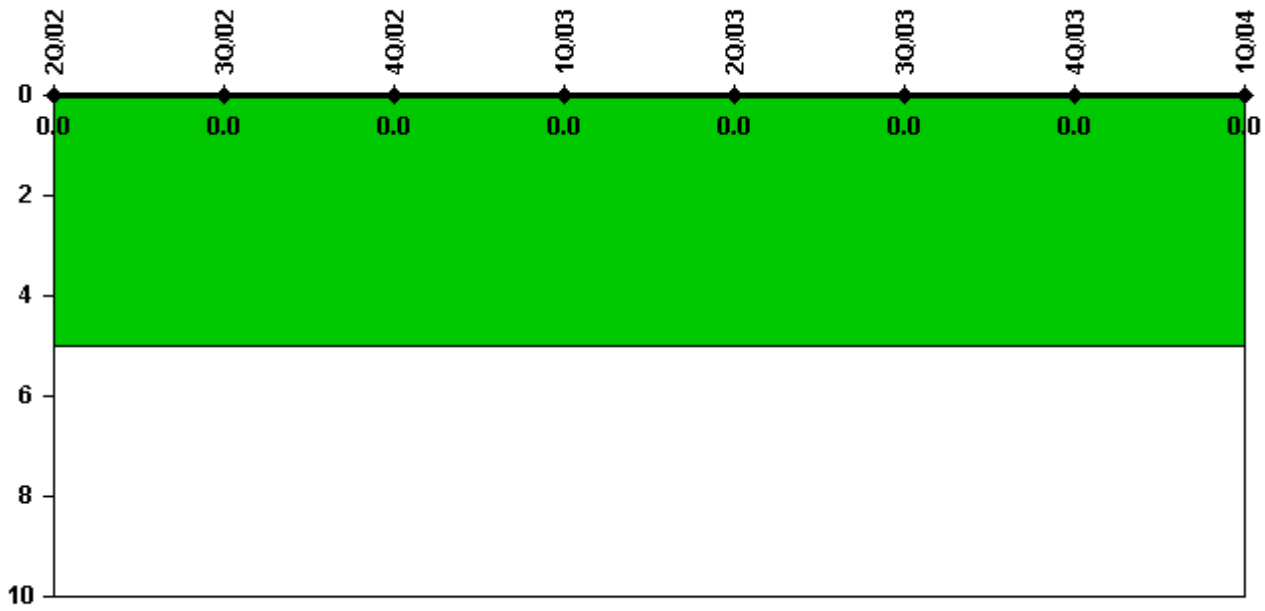
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	3.20	21.60	2.40	18.10	49.80	58.50	1.60	9.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
Train 2								
Planned unavailable hours	2.90	3.70	2.60	1.70	18.20	1.90	44.20	46.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
Indicator value	0.3%	0.3%	0.3%	0.3%	0.4%	0.5%	0.5%	0.6%

Licensee Comments: none

Safety System Functional Failures (PWR)



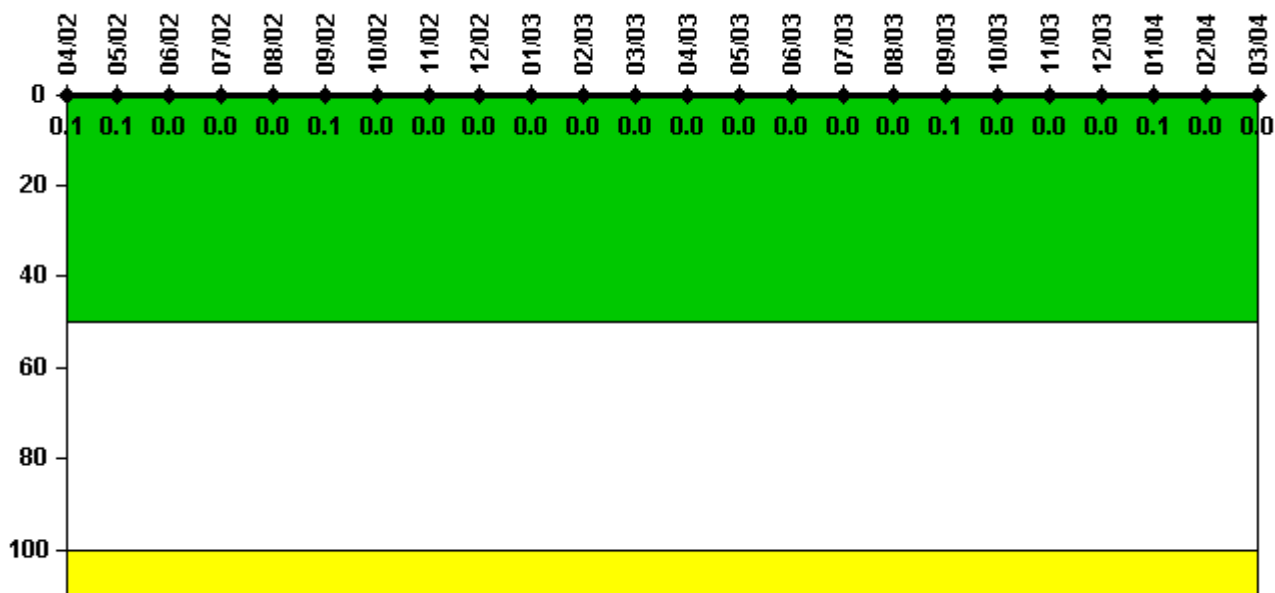
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

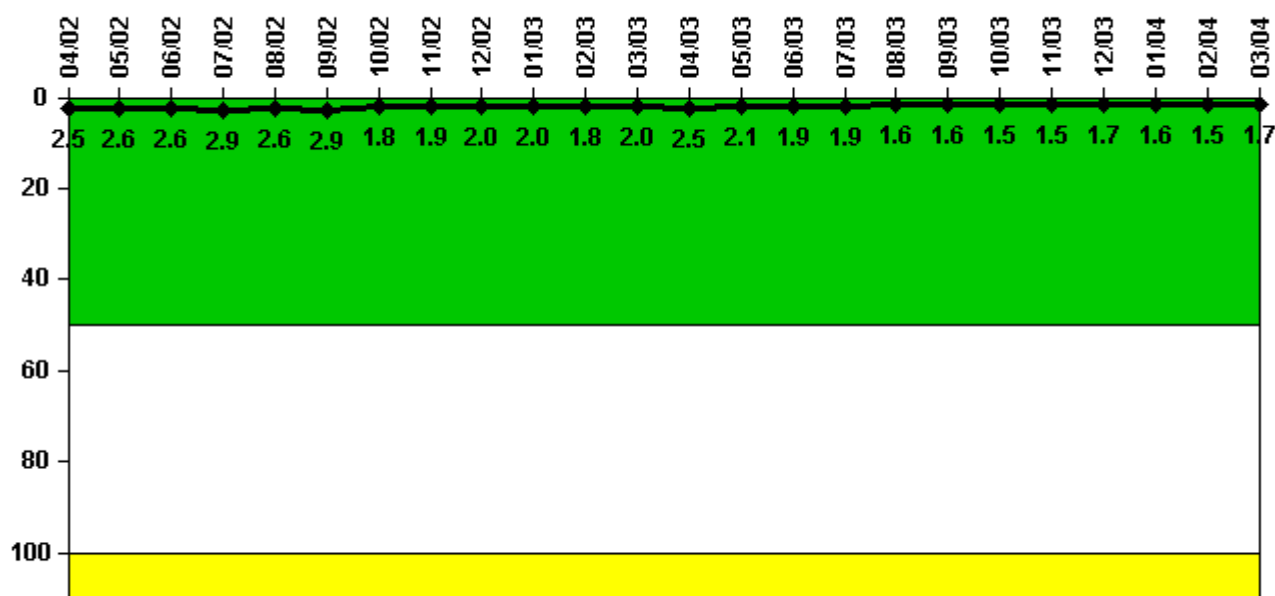
Notes

Reactor Coolant System Activity	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum activity	0.000841	0.001210	0.000483	0.000451	0.000447	0.000855	0.000242	0.000318	0.000327	0.000287	0.000301	0.000288
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0.1	0	0	0	0.1	0	0	0	0	0	0

Reactor Coolant System Activity	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum activity	0.000295	0.000344	0.000317	0.000335	0.000342	0.000523	0.000012	0.000365	0.000399	0.001020	0.000380	0.000384
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0.1	0	0	0	0.1	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

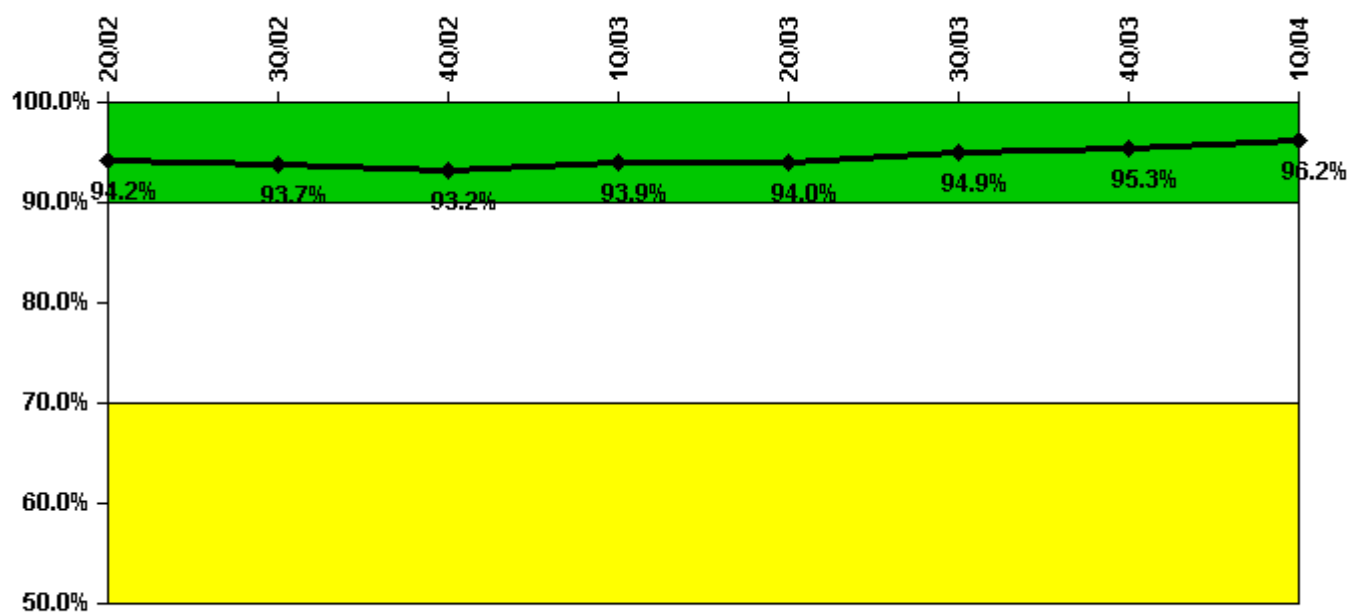
Notes

Reactor Coolant System Leakage	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum leakage	0.249	0.257	0.259	0.286	0.256	0.287	0.182	0.192	0.204	0.199	0.180	0.199
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.5	2.6	2.6	2.9	2.6	2.9	1.8	1.9	2.0	2.0	1.8	2.0

Reactor Coolant System Leakage	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum leakage	0.247	0.212	0.188	0.185	0.155	0.157	0.152	0.148	0.172	0.156	0.154	0.174
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.5	2.1	1.9	1.9	1.6	1.6	1.5	1.5	1.7	1.6	1.5	1.7

Licensee Comments: none

Drill/Exercise Performance



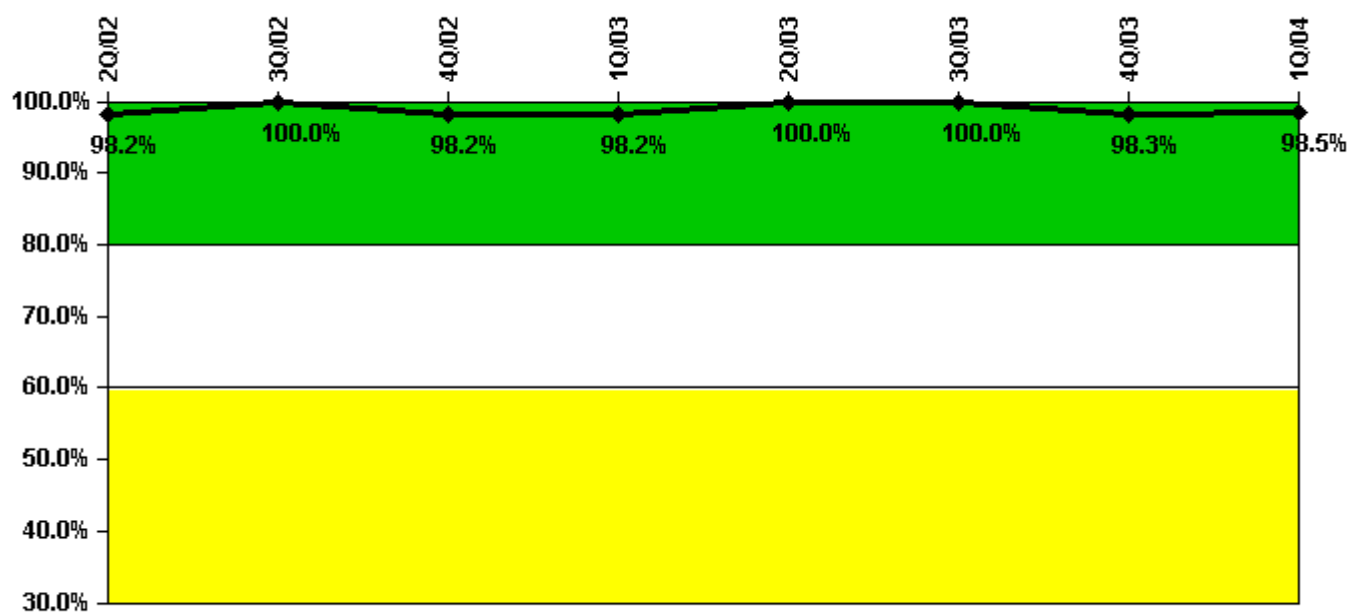
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Successful opportunities	14.0	33.0	43.0	39.0	36.0	45.0	18.0	50.0
Total opportunities	14.0	34.0	47.0	41.0	38.0	47.0	18.0	50.0
Indicator value	94.2%	93.7%	93.2%	93.9%	94.0%	94.9%	95.3%	96.2%

Licensee Comments: none

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

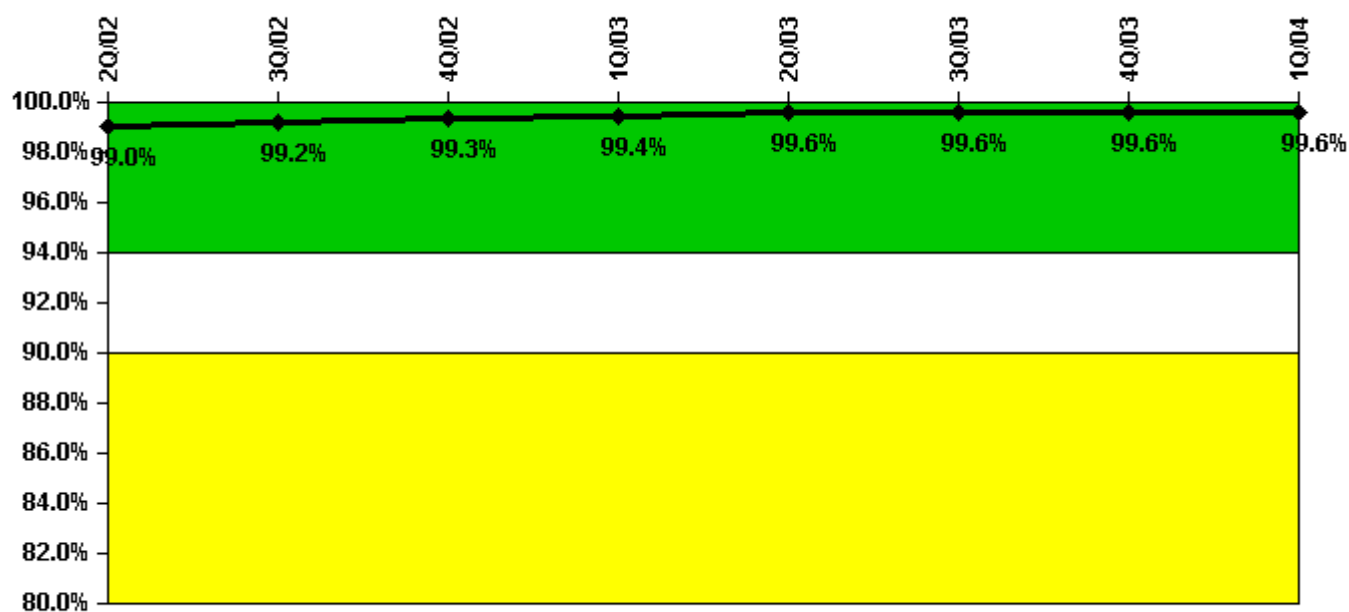
Notes

ERO Drill Participation	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Participating Key personnel	55.0	55.0	54.0	54.0	57.0	59.0	57.0	67.0
Total Key personnel	56.0	55.0	55.0	55.0	57.0	59.0	58.0	68.0
Indicator value	98.2%	100.0%	98.2%	98.2%	100.0%	100.0%	98.3%	98.5%

Licensee Comments:

1Q/04: Exelon has modified the utility procedure for the calculation of the NEI 99-02, Revision 2, ERO Participation PI to count individual opportunities for each Shift Manager function. Exelon has adopted the revised calculation beginning with 1Q 2004.

Alert & Notification System



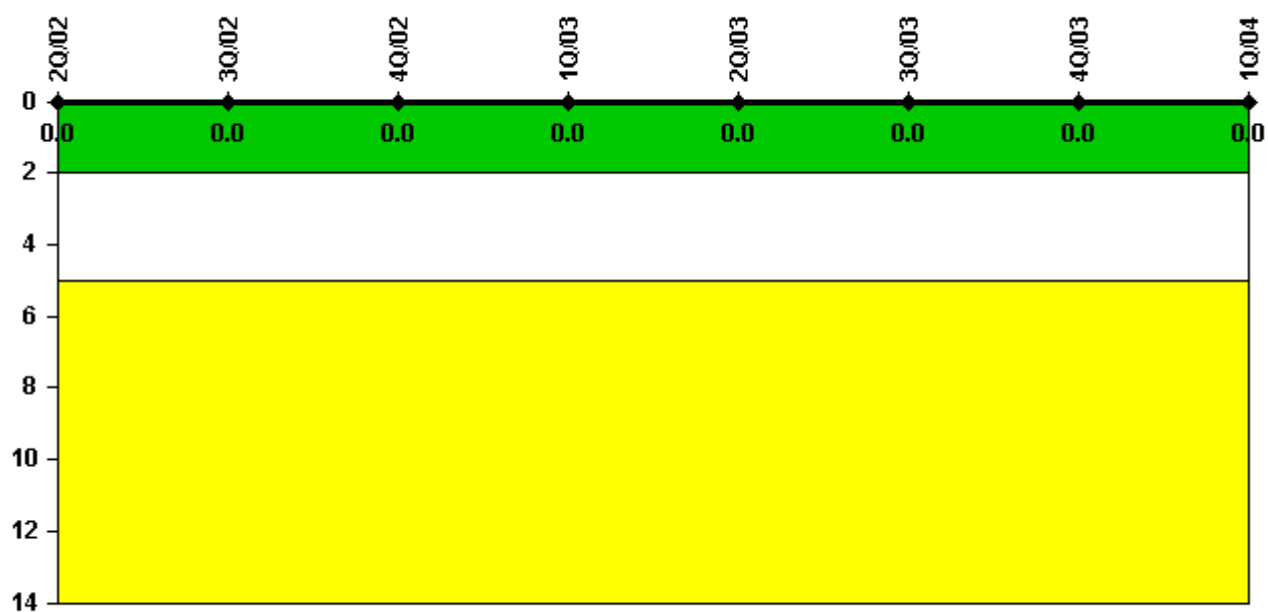
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Successful siren-tests	5945	5994	5991	5898	5990	5988	5997	6000
Total sirens-tests	6016	6016	6016	5922	6016	6016	6016	6016
Indicator value	99.0%	99.2%	99.3%	99.4%	99.6%	99.6%	99.6%	99.6%

Licensee Comments: none

Occupational Exposure Control Effectiveness

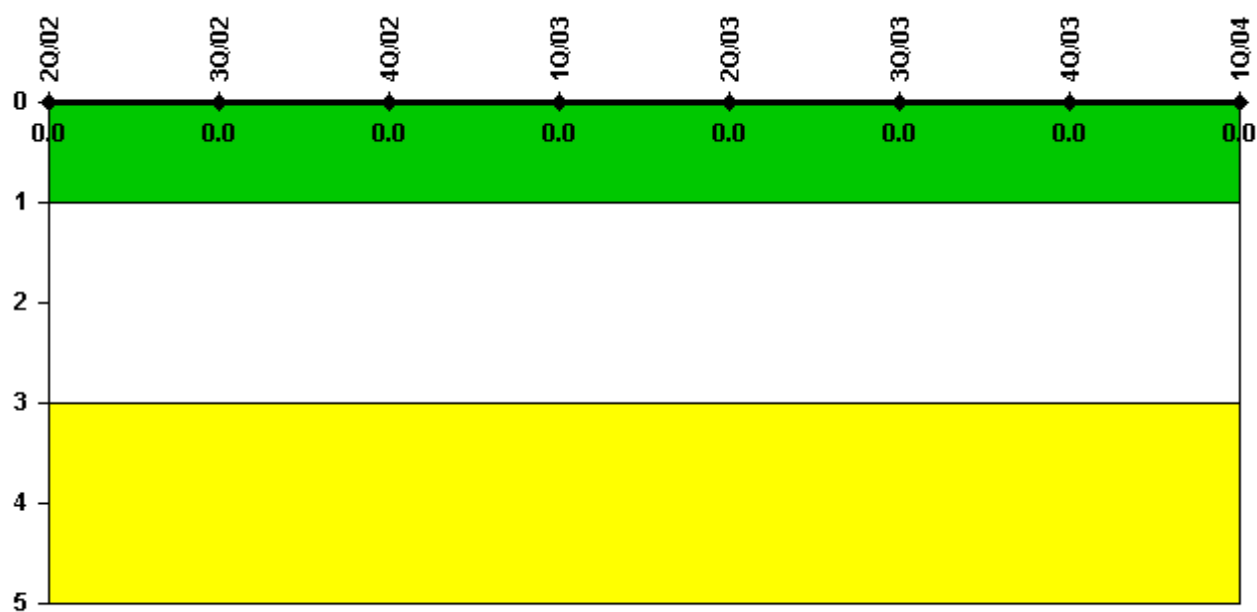


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

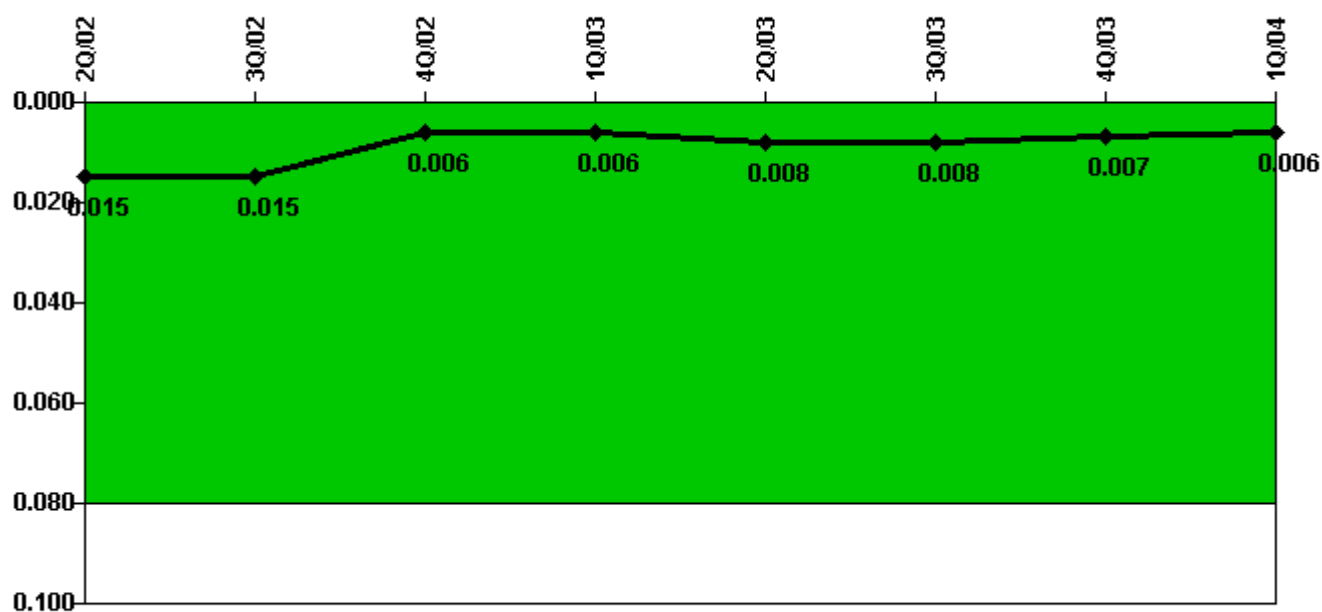
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Protected Area Security Performance Index



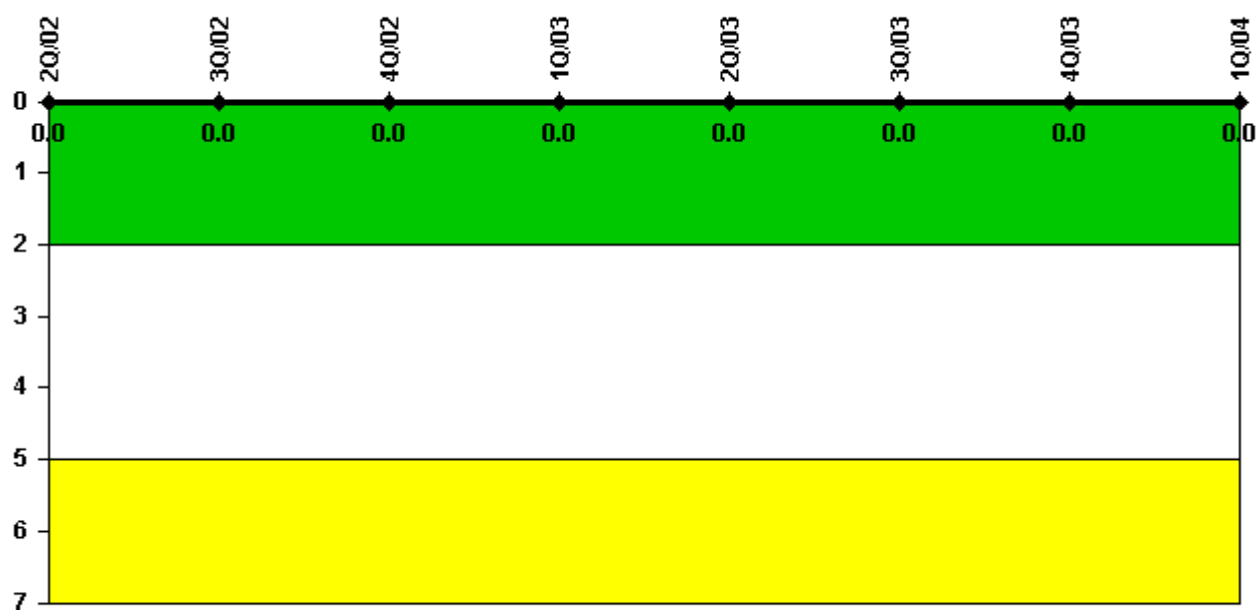
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
IDS compensatory hours	14.60	12.80	34.10	21.90	0	5.45	0	22.85
CCTV compensatory hours	13.5	4.3	5.8	21.4	55.9	19.5	2.4	1.3
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.015	0.015	0.006	0.006	0.008	0.008	0.007	0.006

Licensee Comments: none

Personnel Screening Program



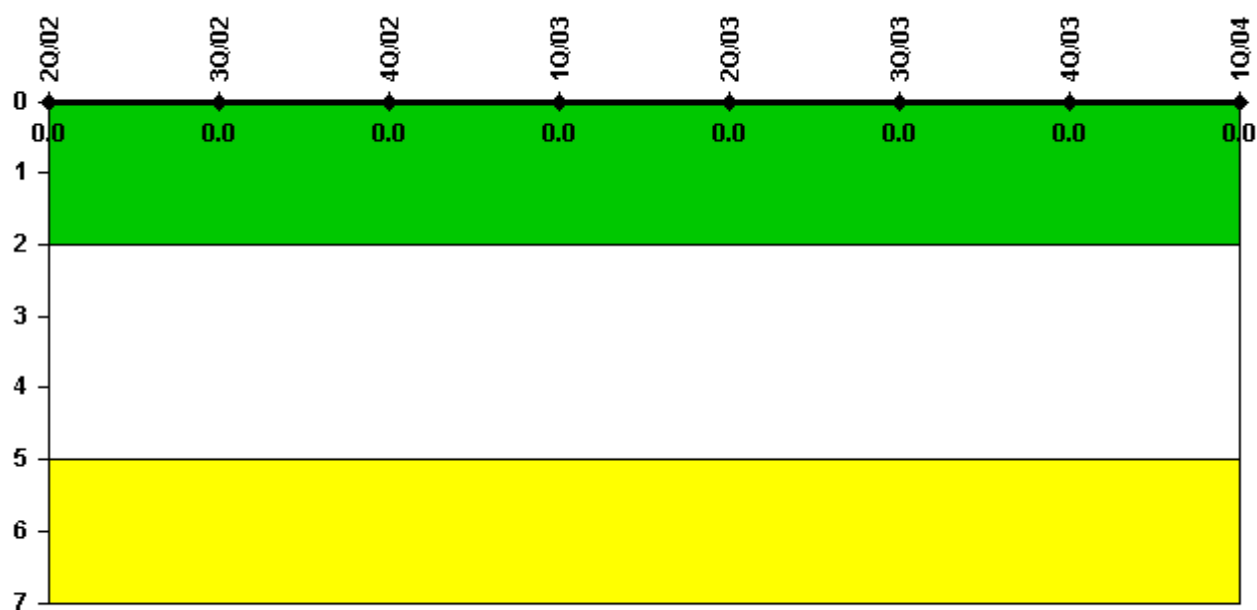
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Program failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

Last Modified: April 22, 2004

Byron 2

2Q/2004 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1870.2	2062.0	2160.0	2183.0	2208.0	2209.0	1967.0	1989.1
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



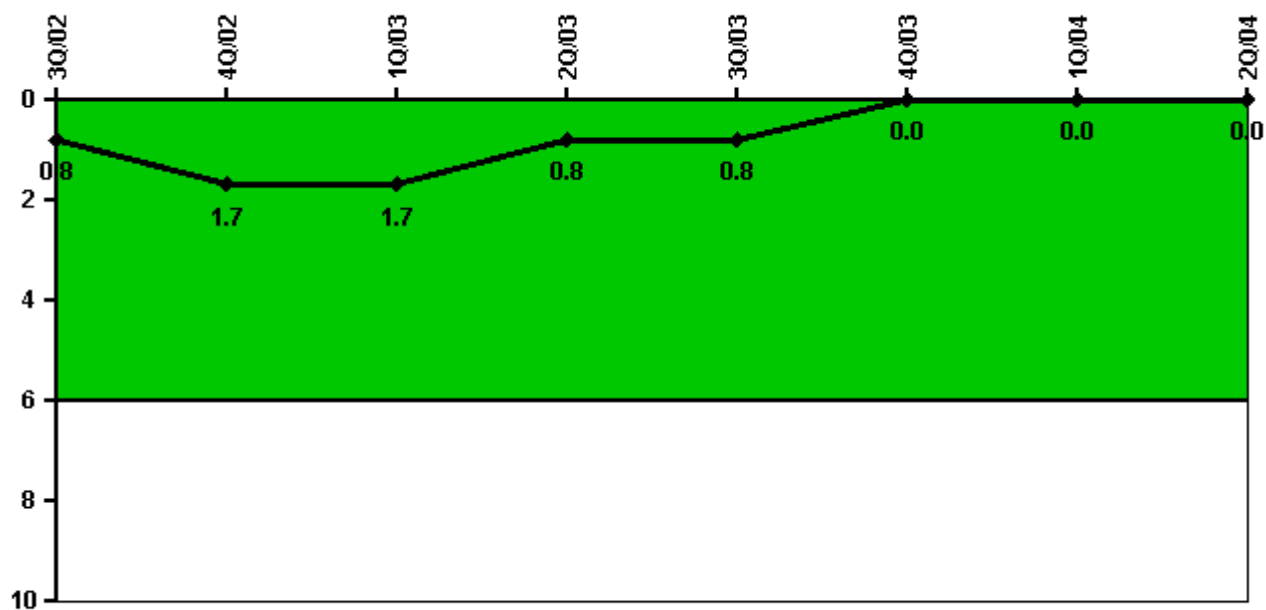
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



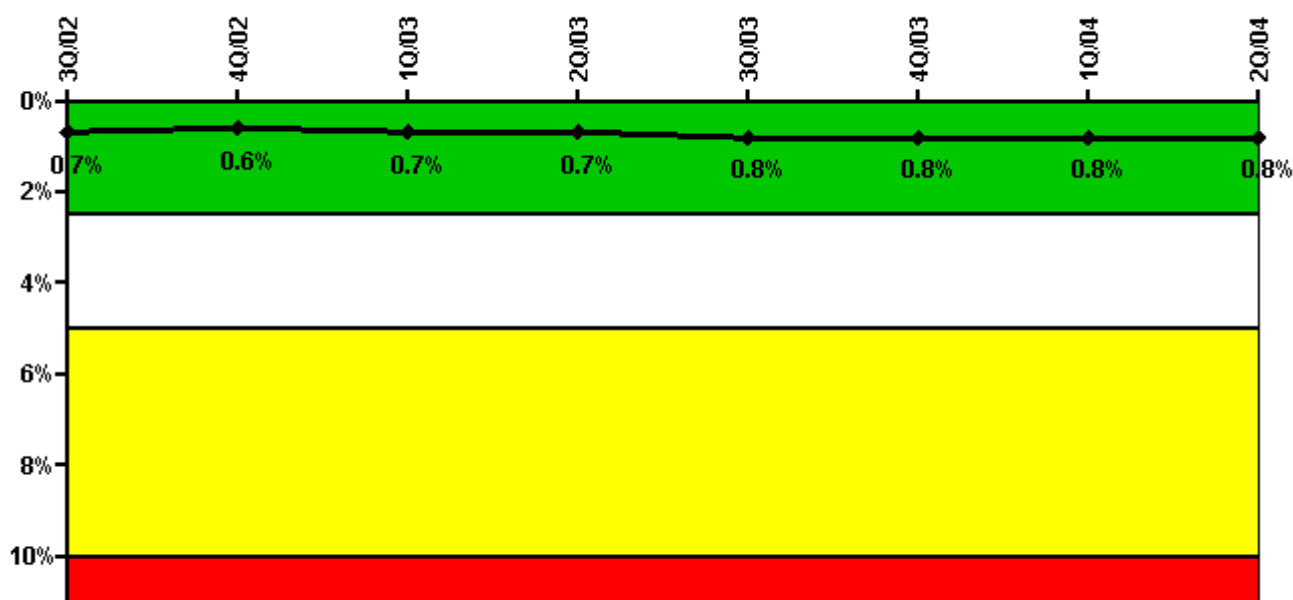
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned power changes	0	1.0	0	0	0	0	0	0
Critical hours	1870.2	2062.0	2160.0	2183.0	2208.0	2209.0	1967.0	1989.1
Indicator value	0.8	1.7	1.7	0.8	0.8	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



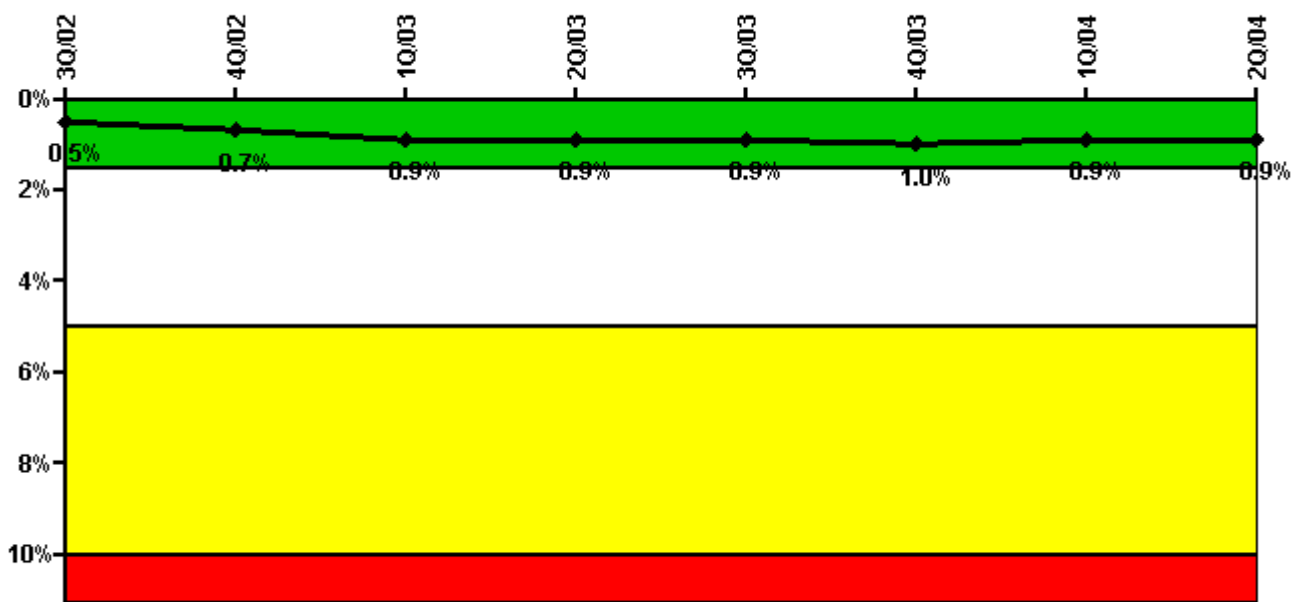
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	2.30	8.60	42.30	14.80	3.20	1.50	6.20	2.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	3.40	2.60	1.70	11.40	4.10	2.90	1.80	17.40
Unplanned unavailable hours	10.70	0	0	11.80	54.90	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value	0.7%	0.6%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



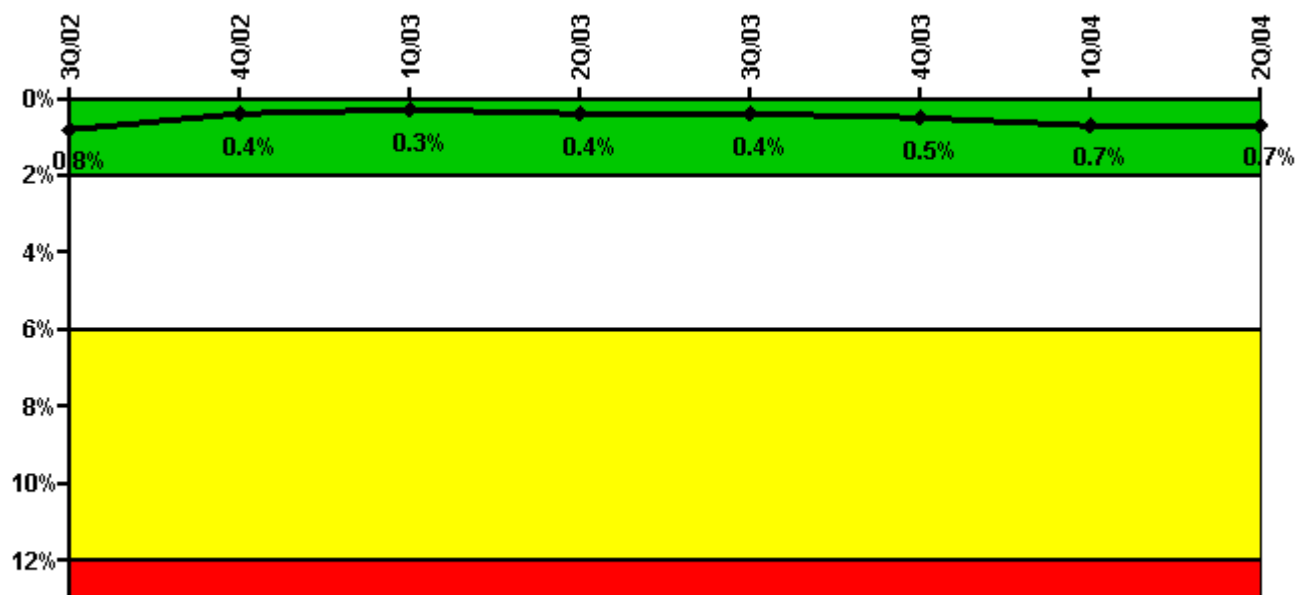
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	23.90	2.40	3.60	1.80	3.20	23.40	5.30	2.20
Unplanned unavailable hours	0	0	213.80	0	0	3.70	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13
Train 2								
Planned unavailable hours	3.40	1.30	1.70	4.10	1.90	2.90	1.80	2.90
Unplanned unavailable hours	0	135.90	2.80	0	0	0	0	0
Fault exposure hours	0	50.40	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13
Train 3								
Planned unavailable hours	4.90	2.40	13.60	39.00	3.20	1.50	5.30	47.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13
Train 4								
Planned unavailable hours	3.40	3.00	1.70	4.10	3.10	24.60	1.80	16.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13
Indicator value	0.5%	0.7%	0.9%	0.9%	0.9%	1.0%	0.9%	0.9%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



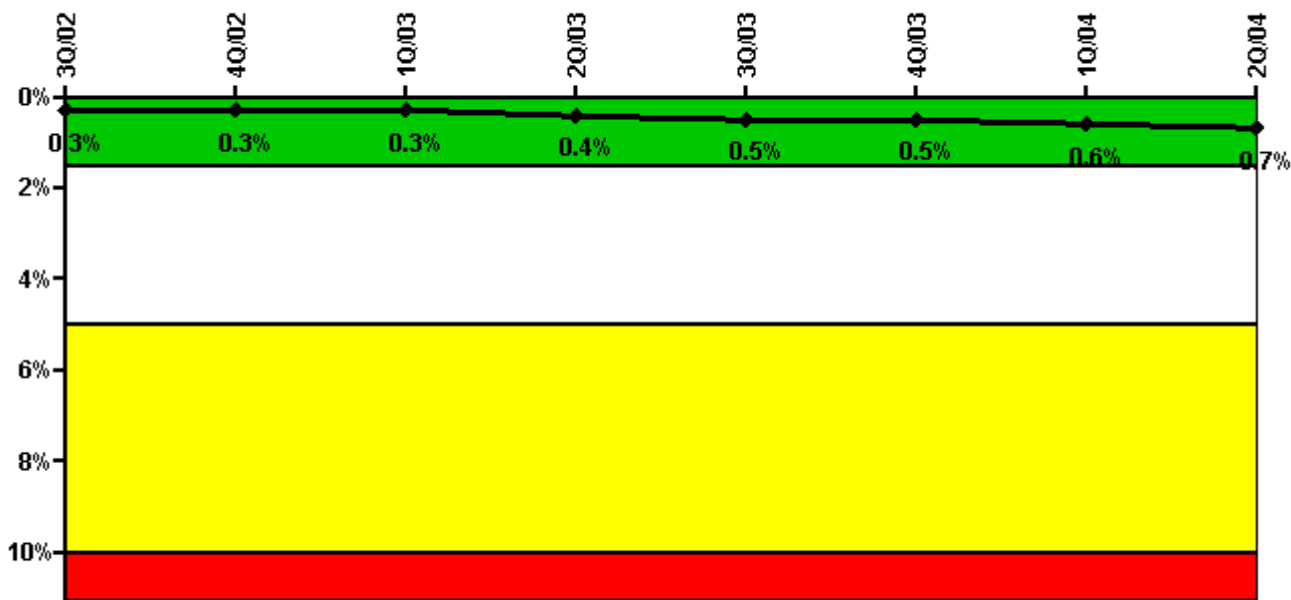
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	3.60	4.10	4.60	3.30	7.00	3.30	6.90	4.10
Unplanned unavailable hours	0	0	0	0	7.00	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13
Train 2								
Planned unavailable hours	26.20	19.30	2.80	59.70	3.40	11.10	42.60	4.90
Unplanned unavailable hours	0	0	0	0	0	25.60	57.90	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1870.20	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13
Indicator value	0.8%	0.4%	0.3%	0.4%	0.4%	0.5%	0.7%	0.7%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



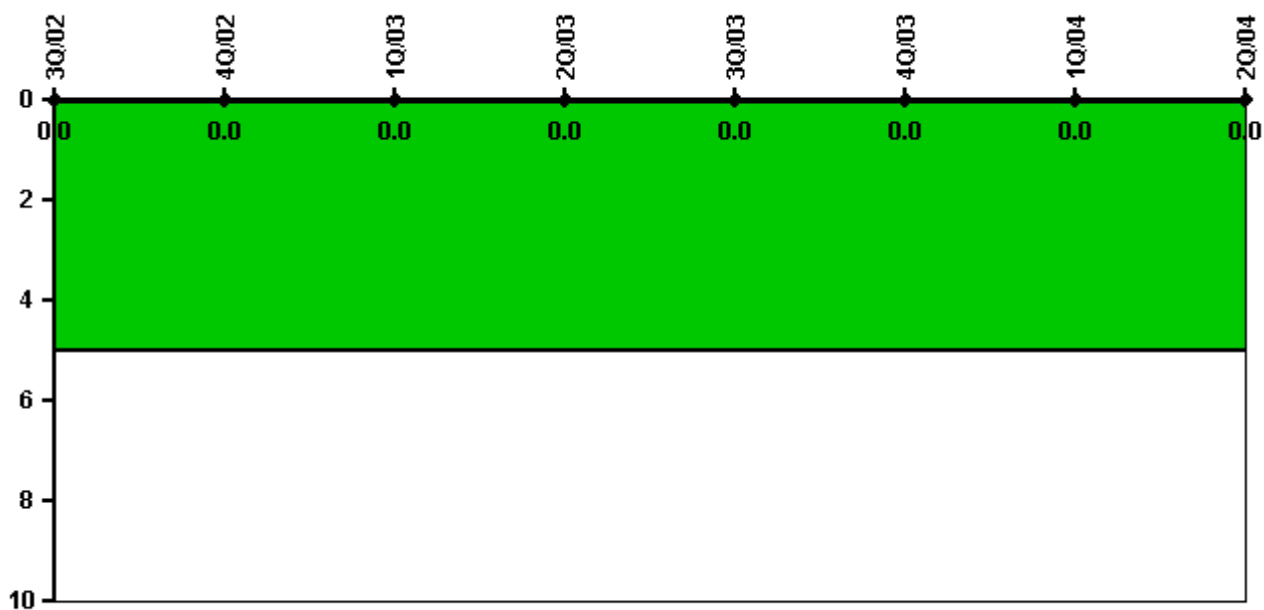
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	21.60	2.40	18.10	49.80	58.50	1.60	9.50	3.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	3.70	2.60	1.70	18.20	1.90	44.20	46.40	30.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value	0.3%	0.3%	0.3%	0.4%	0.5%	0.5%	0.6%	0.7%

Licensee Comments: none

Safety System Functional Failures (PWR)



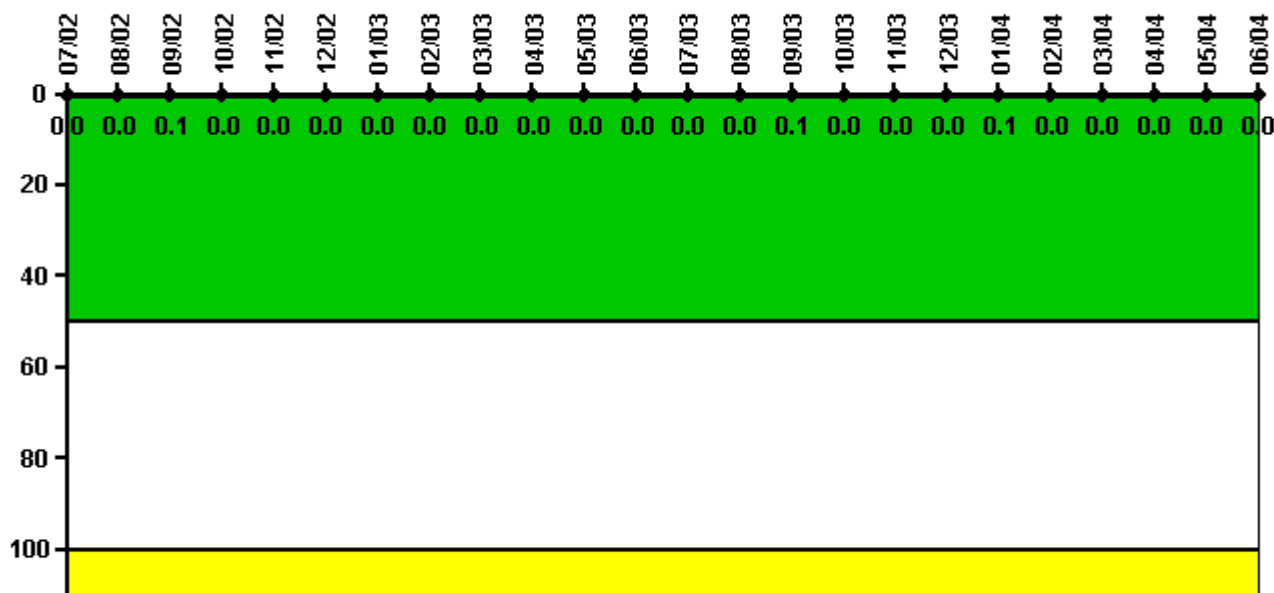
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



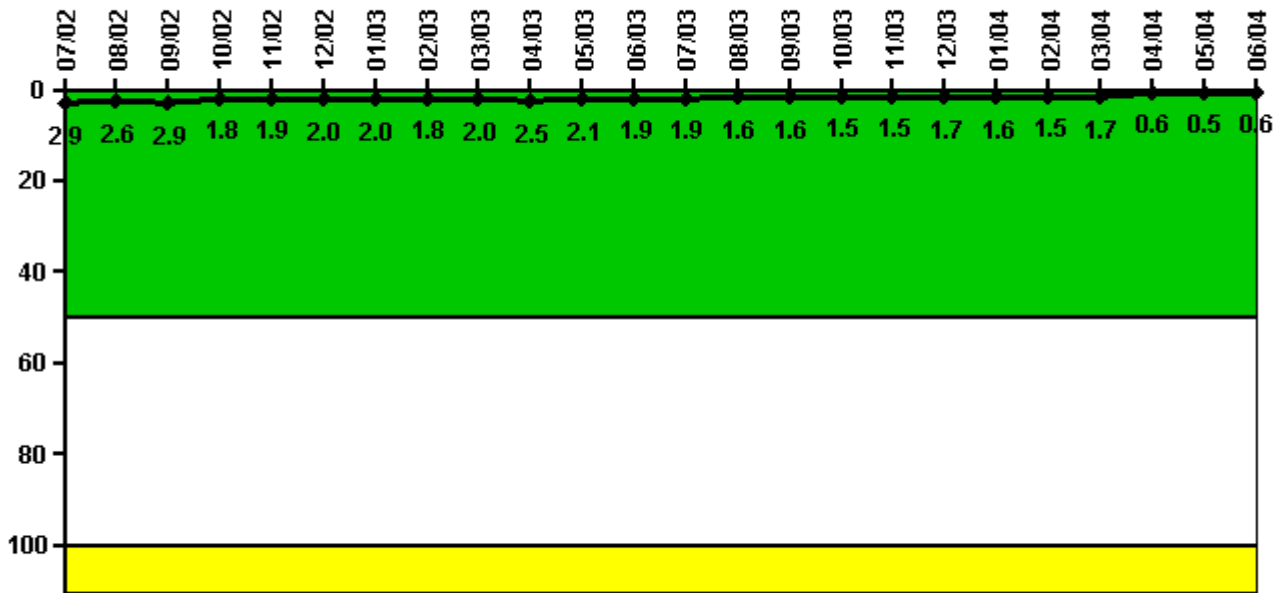
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum activity	0.000451	0.000447	0.000855	0.000242	0.000318	0.000327	0.000287	0.000301	0.000288	0.000295	0.000344	0.000317
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0.1	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum activity	0.000335	0.000342	0.000523	0.000012	0.000365	0.000399	0.001020	0.000380	0.000384	0.000220	0.000239	0.000245
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0.1	0	0	0	0.1	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



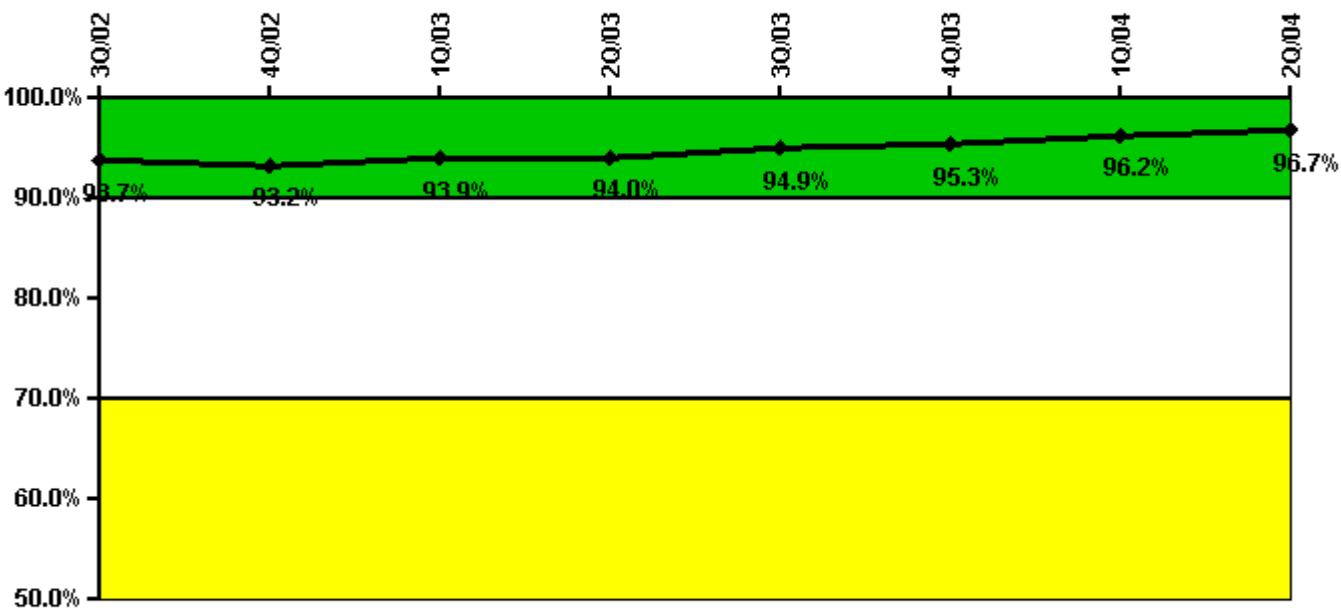
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum leakage	0.286	0.256	0.287	0.182	0.192	0.204	0.199	0.180	0.199	0.247	0.212	0.188
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.9	2.6	2.9	1.8	1.9	2.0	2.0	1.8	2.0	2.5	2.1	1.9
Reactor Coolant System Leakage	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum leakage	0.185	0.155	0.157	0.152	0.148	0.172	0.156	0.154	0.174	0.064	0.051	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.9	1.6	1.6	1.5	1.5	1.7	1.6	1.5	1.7	0.6	0.5	0.6

Licensee Comments: none

Drill/Exercise Performance



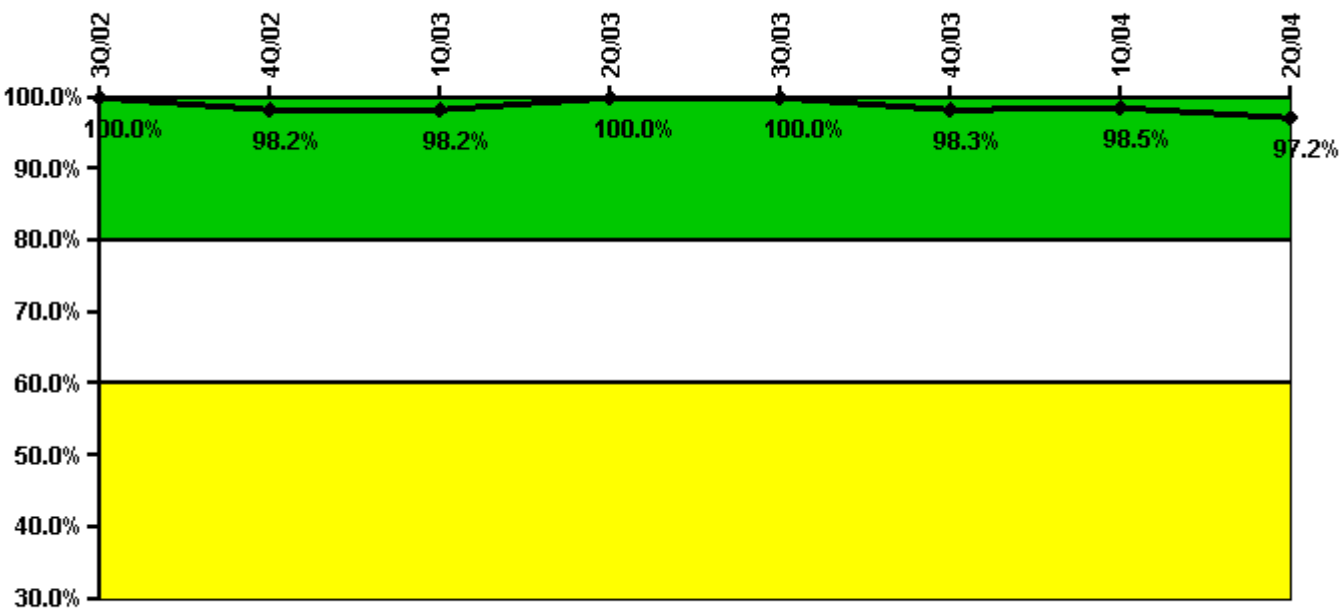
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful opportunities	33.0	43.0	39.0	36.0	45.0	18.0	50.0	62.0
Total opportunities	34.0	47.0	41.0	38.0	47.0	18.0	50.0	62.0
Indicator value	93.7%	93.2%	93.9%	94.0%	94.9%	95.3%	96.2%	96.7%

Licensee Comments: none

ERO Drill Participation



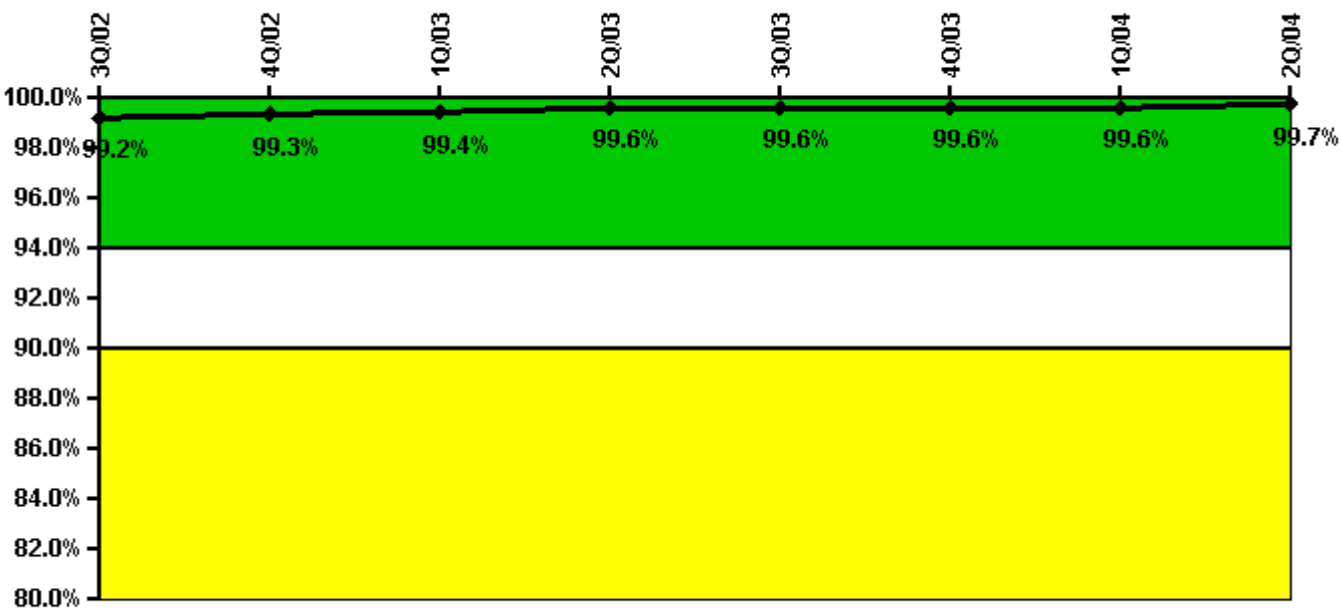
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Participating Key personnel	55.0	54.0	54.0	57.0	59.0	57.0	67.0	70.0
Total Key personnel	55.0	55.0	55.0	57.0	59.0	58.0	68.0	72.0
Indicator value	100.0%	98.2%	98.2%	100.0%	100.0%	98.3%	98.5%	97.2%

Licensee Comments: none

Alert & Notification System



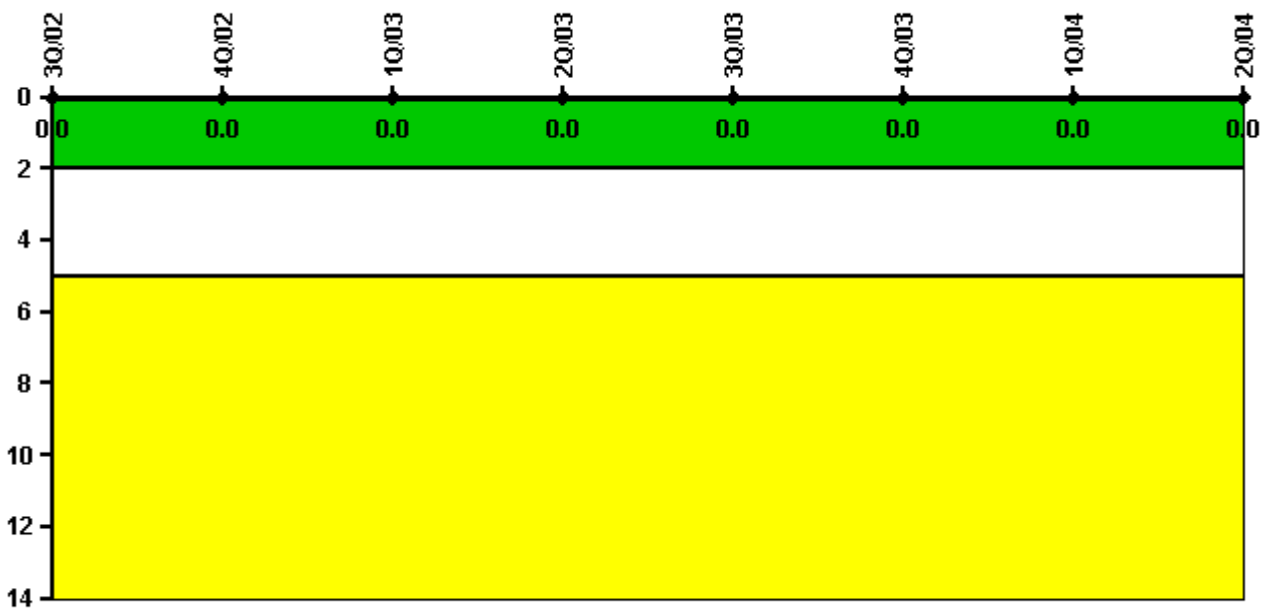
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful siren-tests	5994	5991	5898	5990	5988	5997	6000	5996
Total sirens-tests	6016	6016	5922	6016	6016	6016	6016	6016
Indicator value	99.2%	99.3%	99.4%	99.6%	99.6%	99.6%	99.6%	99.7%

Licensee Comments: none

Occupational Exposure Control Effectiveness

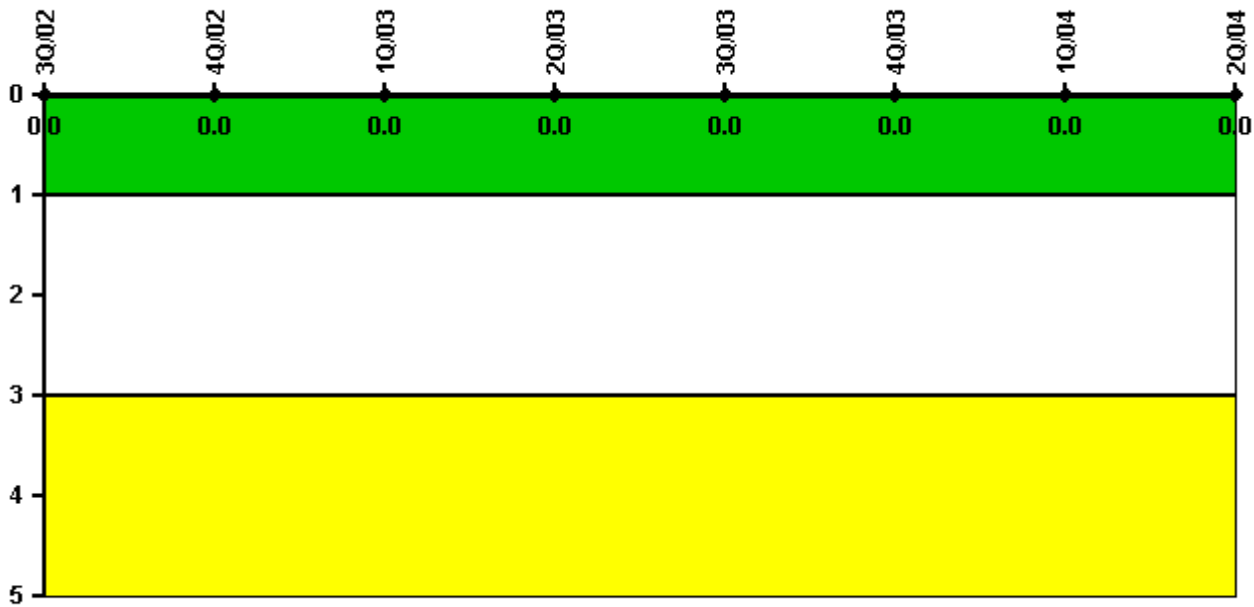


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

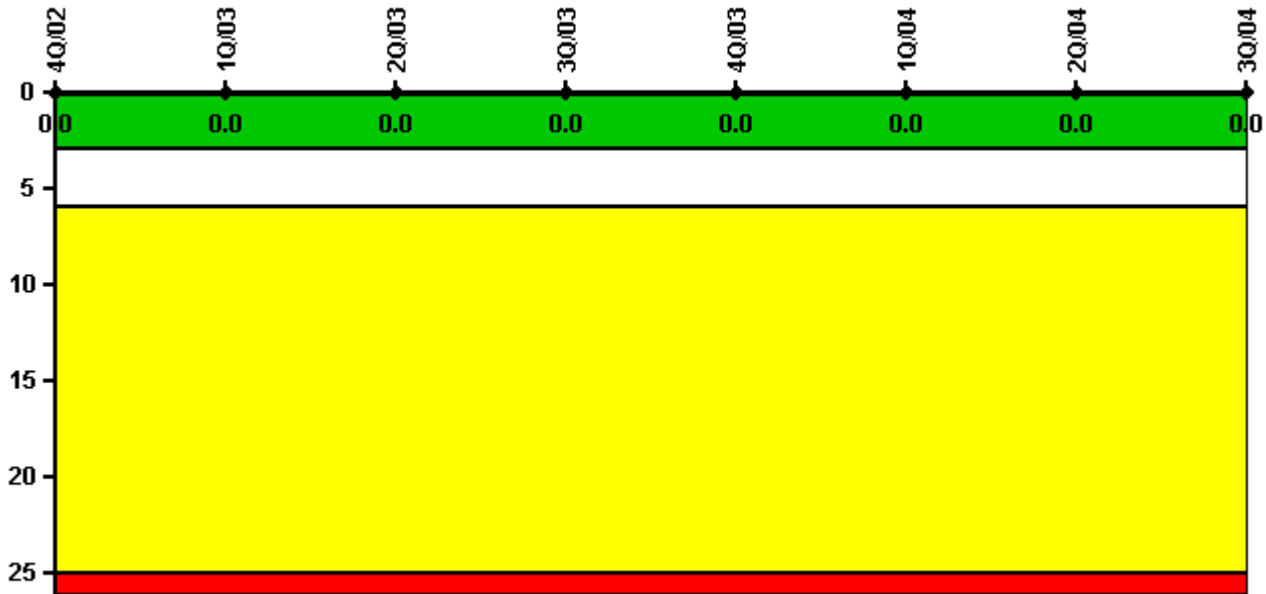
Last Modified: September 8, 2004

Byron 2

3Q/2004 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



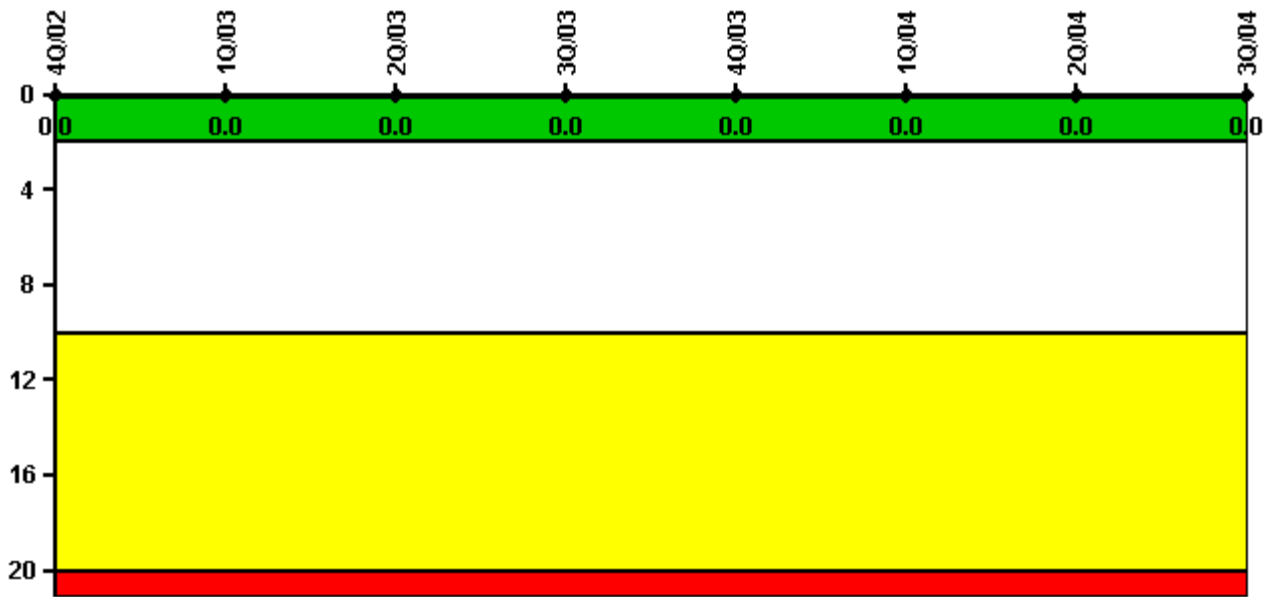
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2062.0	2160.0	2183.0	2208.0	2209.0	1967.0	1989.1	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



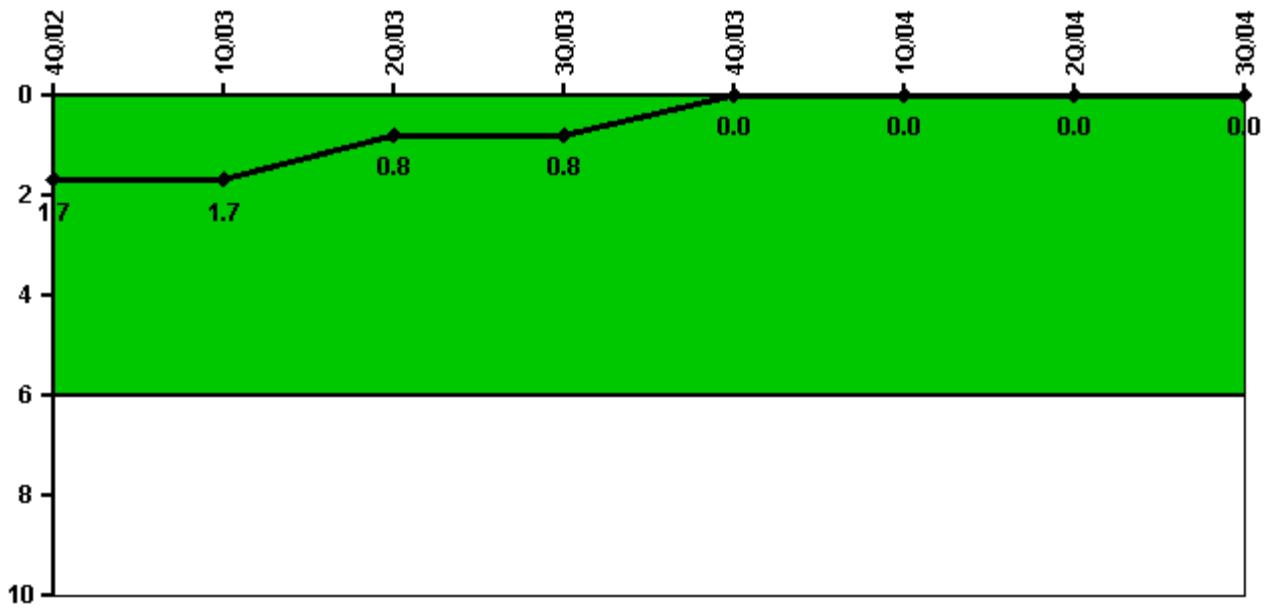
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



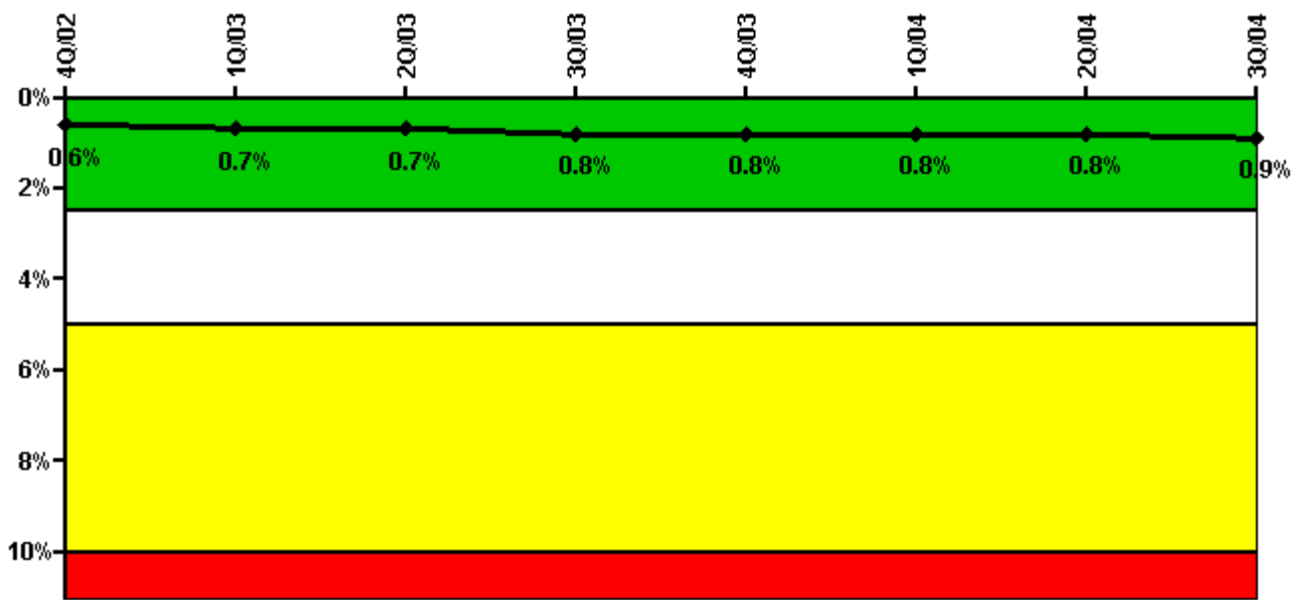
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	2062.0	2160.0	2183.0	2208.0	2209.0	1967.0	1989.1	2208.0
Indicator value	1.7	1.7	0.8	0.8	0	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



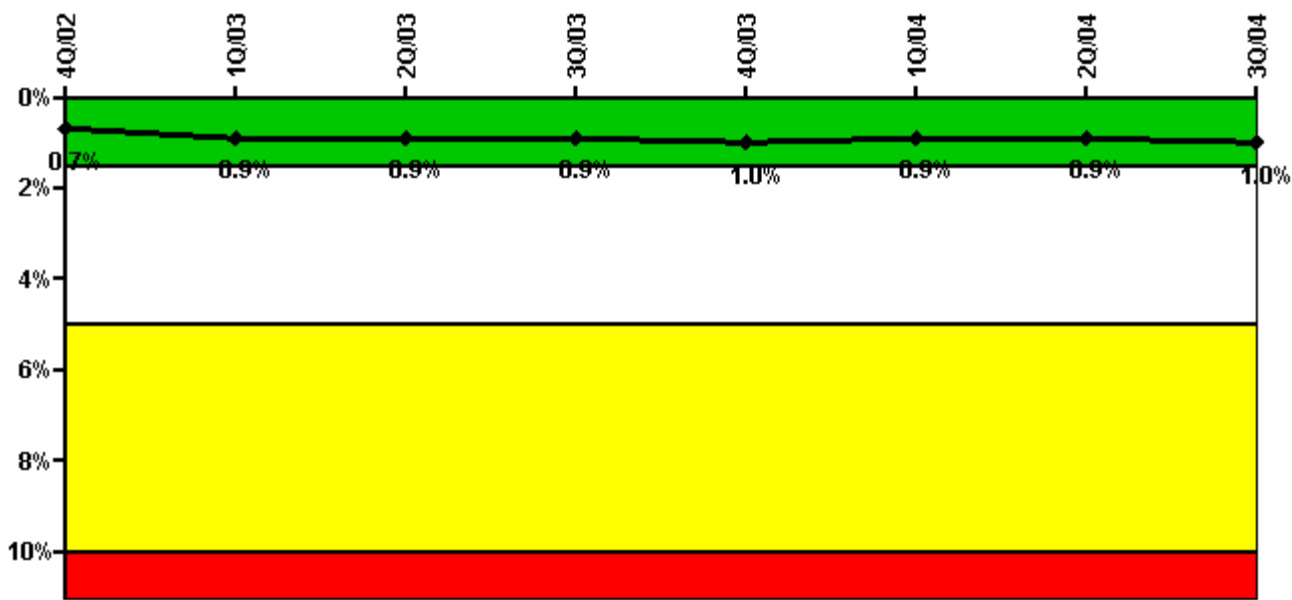
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Train 1								
Planned unavailable hours	8.60	42.30	14.80	3.20	1.50	6.20	2.20	22.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00
Train 2								
Planned unavailable hours	2.60	1.70	11.40	4.10	2.90	1.80	17.40	1.80
Unplanned unavailable hours	0	0	11.80	54.90	0	0	0	25.10
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00
Indicator value	0.6%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.9%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



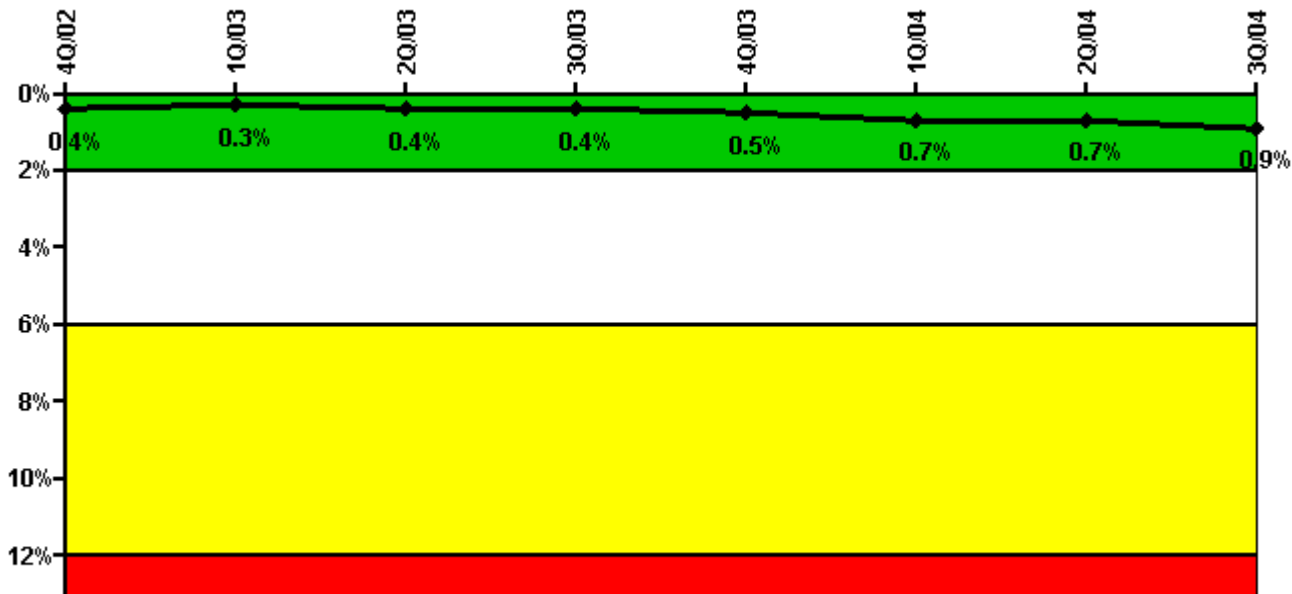
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Train 1								
Planned unavailable hours	2.40	3.60	1.80	3.20	23.40	5.30	2.20	42.60
Unplanned unavailable hours	0	213.80	0	0	3.70	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00
Train 2								
Planned unavailable hours	1.30	1.70	4.10	1.90	2.90	1.80	2.90	4.90
Unplanned unavailable hours	135.90	2.80	0	0	0	0	0	0
Fault exposure hours	50.40	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00
Train 3								
Planned unavailable hours	2.40	13.60	39.00	3.20	1.50	5.30	47.90	3.10
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00
Train 4								
Planned unavailable hours	3.00	1.70	4.10	3.10	24.60	1.80	16.60	45.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00
Indicator value	0.7%	0.9%	0.9%	0.9%	1.0%	0.9%	0.9%	1.0%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



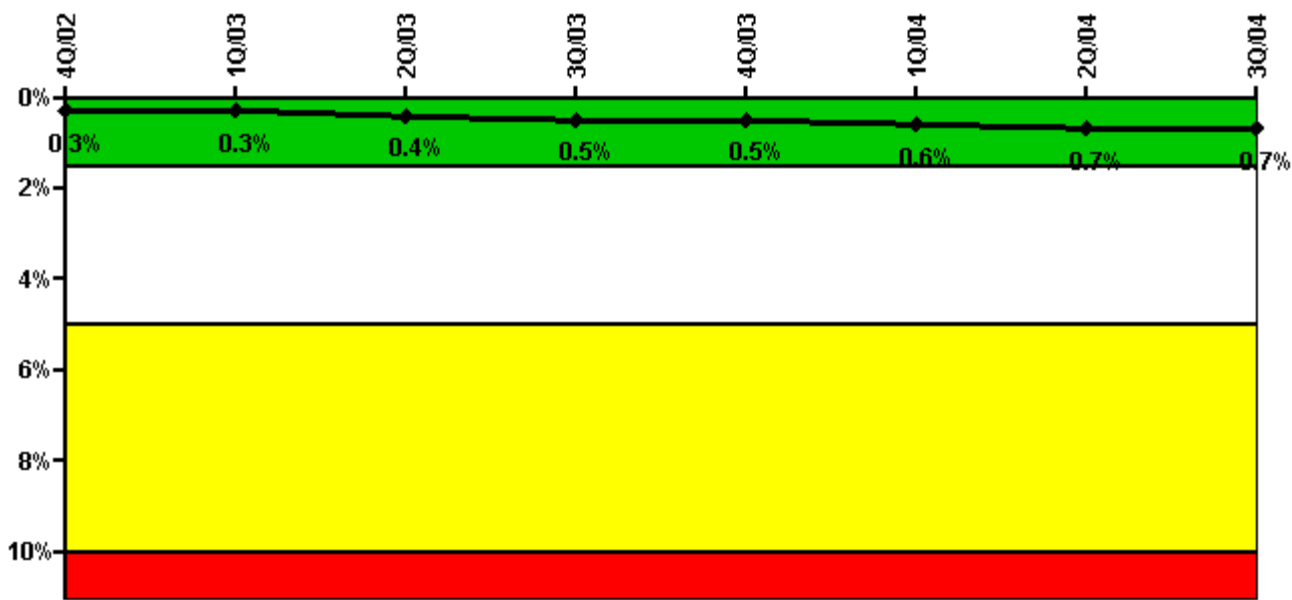
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Train 1								
Planned unavailable hours	4.10	4.60	3.30	7.00	3.30	6.90	4.10	5.80
Unplanned unavailable hours	0	0	0	7.00	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00
Train 2								
Planned unavailable hours	19.30	2.80	59.70	3.40	11.10	42.60	4.90	56.30
Unplanned unavailable hours	0	0	0	0	25.60	57.90	0	66.80
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2062.20	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00
Indicator value	0.4%	0.3%	0.4%	0.4%	0.5%	0.7%	0.7%	0.9%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



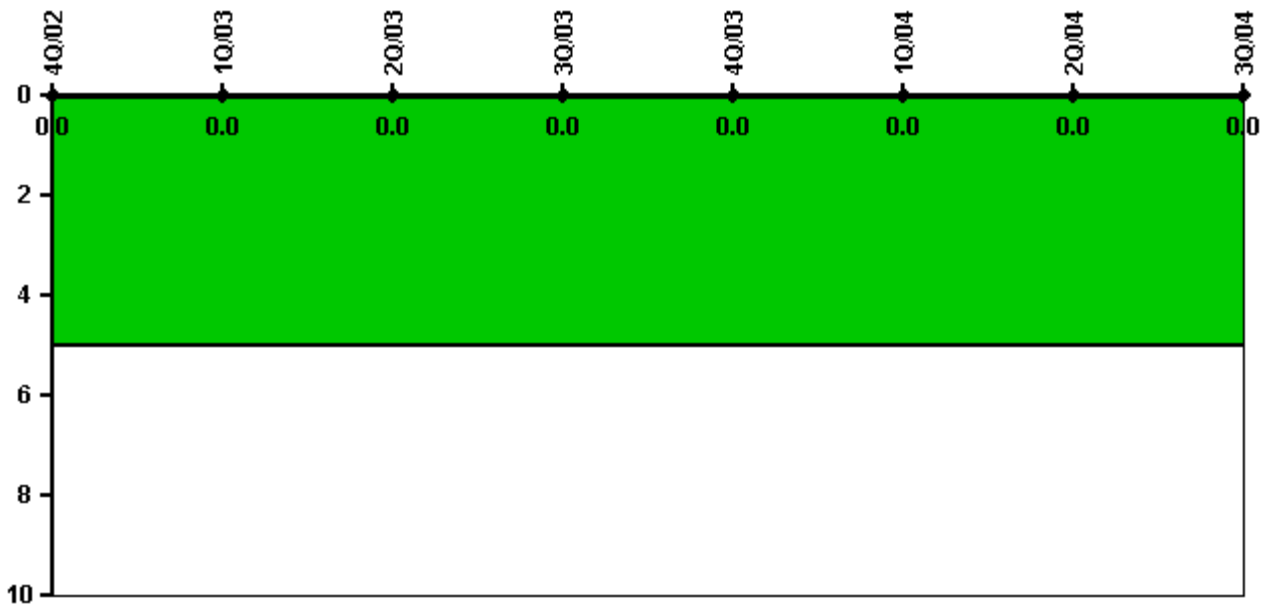
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Train 1								
Planned unavailable hours	2.40	18.10	49.80	58.50	1.60	9.50	3.30	3.10
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00
Train 2								
Planned unavailable hours	2.60	1.70	18.20	1.90	44.20	46.40	30.90	7.20
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00
Indicator value	0.3%	0.3%	0.4%	0.5%	0.5%	0.6%	0.7%	0.7%

Licensee Comments: none

Safety System Functional Failures (PWR)



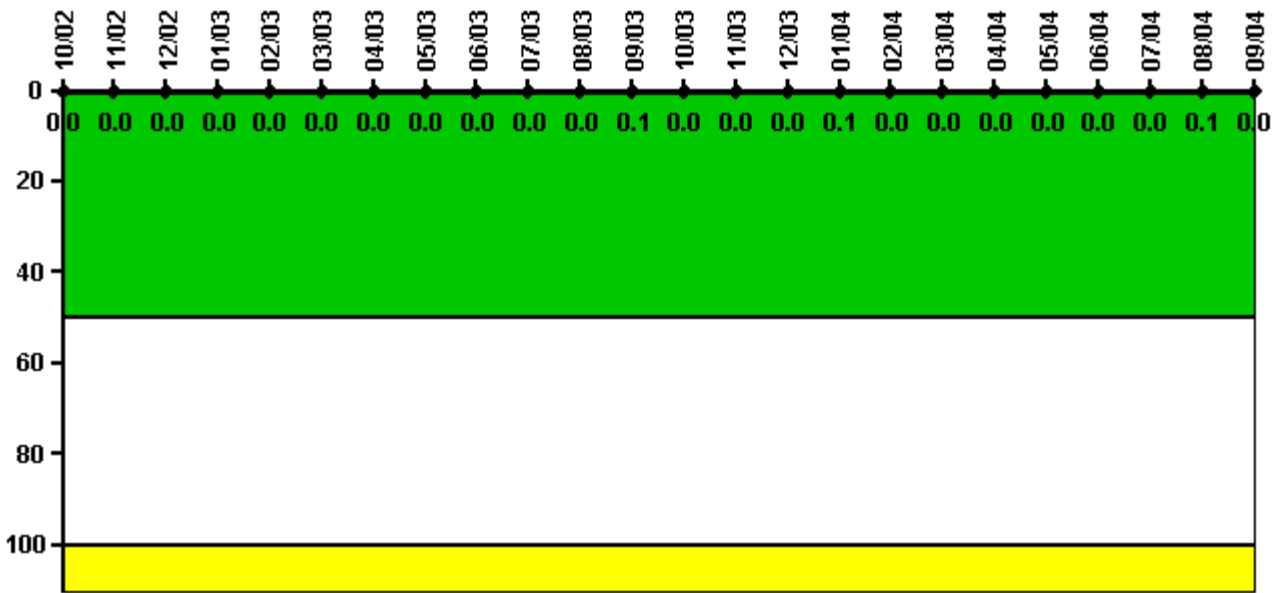
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



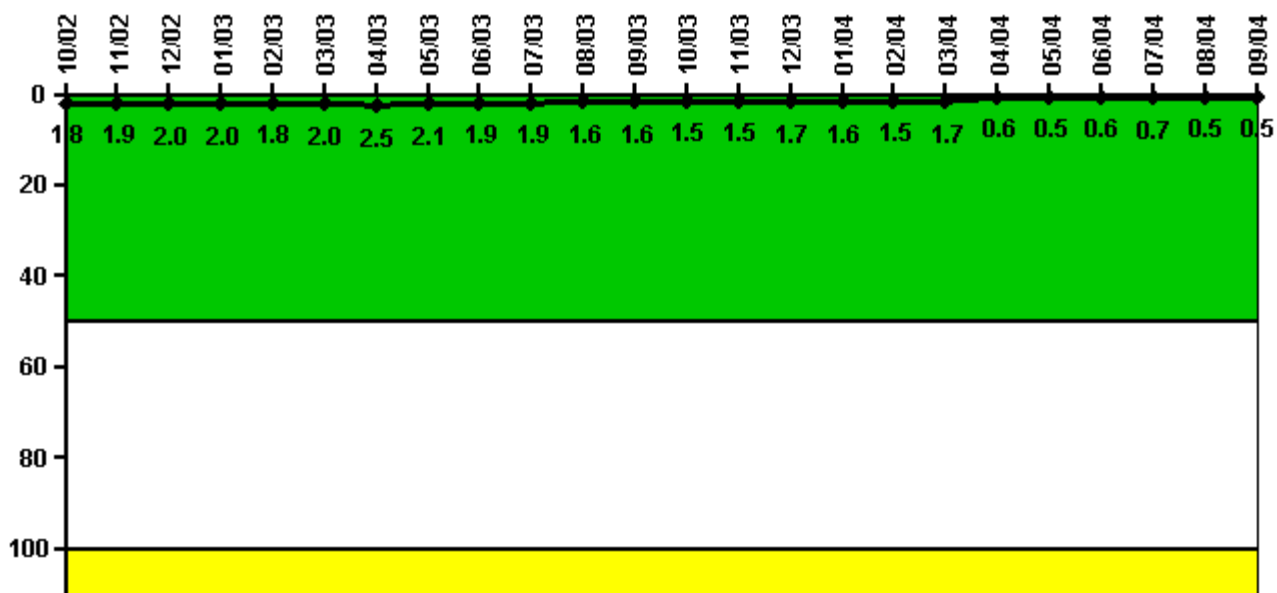
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum activity	0.000242	0.000318	0.000327	0.000287	0.000301	0.000288	0.000295	0.000344	0.000317	0.000335	0.000342	0.000523
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0.1
Reactor Coolant System Activity	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum activity	0.000012	0.000365	0.000399	0.001020	0.000380	0.000384	0.000220	0.000239	0.000245	0.000276	0.000541	0.000288
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0.1	0	0	0	0	0	0	0.1	0

Licensee Comments: none

Reactor Coolant System Leakage



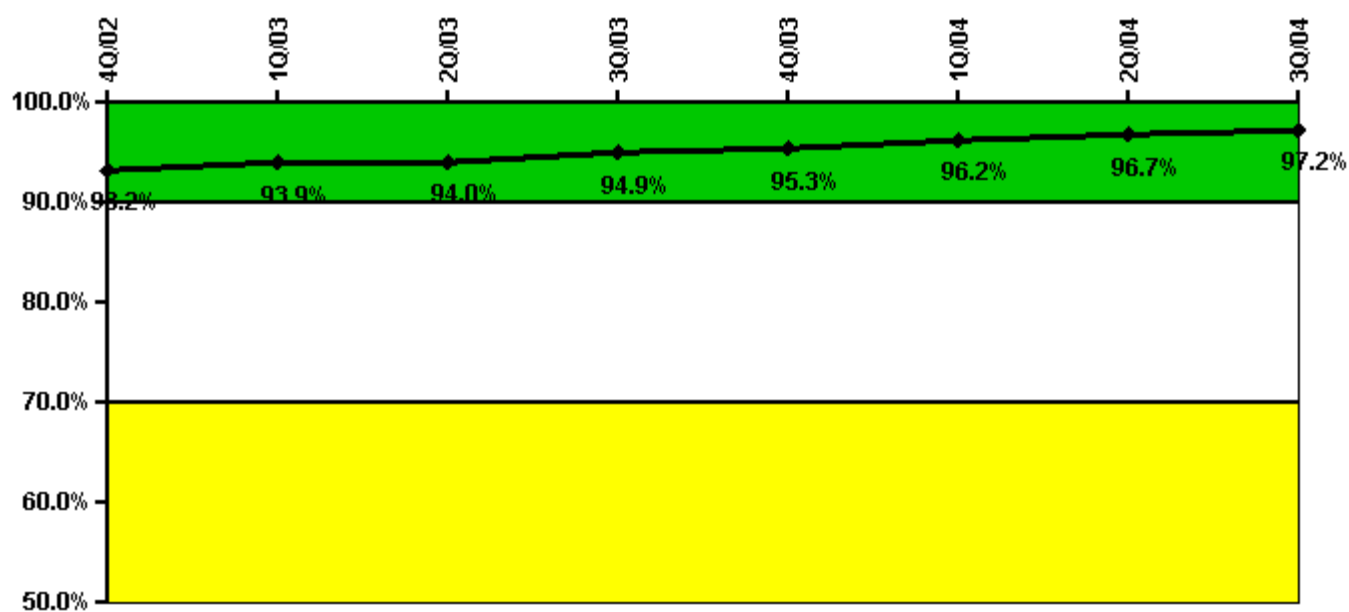
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum leakage	0.182	0.192	0.204	0.199	0.180	0.199	0.247	0.212	0.188	0.185	0.155	0.157
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.8	1.9	2.0	2.0	1.8	2.0	2.5	2.1	1.9	1.9	1.6	1.6
Reactor Coolant System Leakage	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum leakage	0.152	0.148	0.172	0.156	0.154	0.174	0.064	0.051	0.060	0.067	0.054	0.049
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.5	1.5	1.7	1.6	1.5	1.7	0.6	0.5	0.6	0.7	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



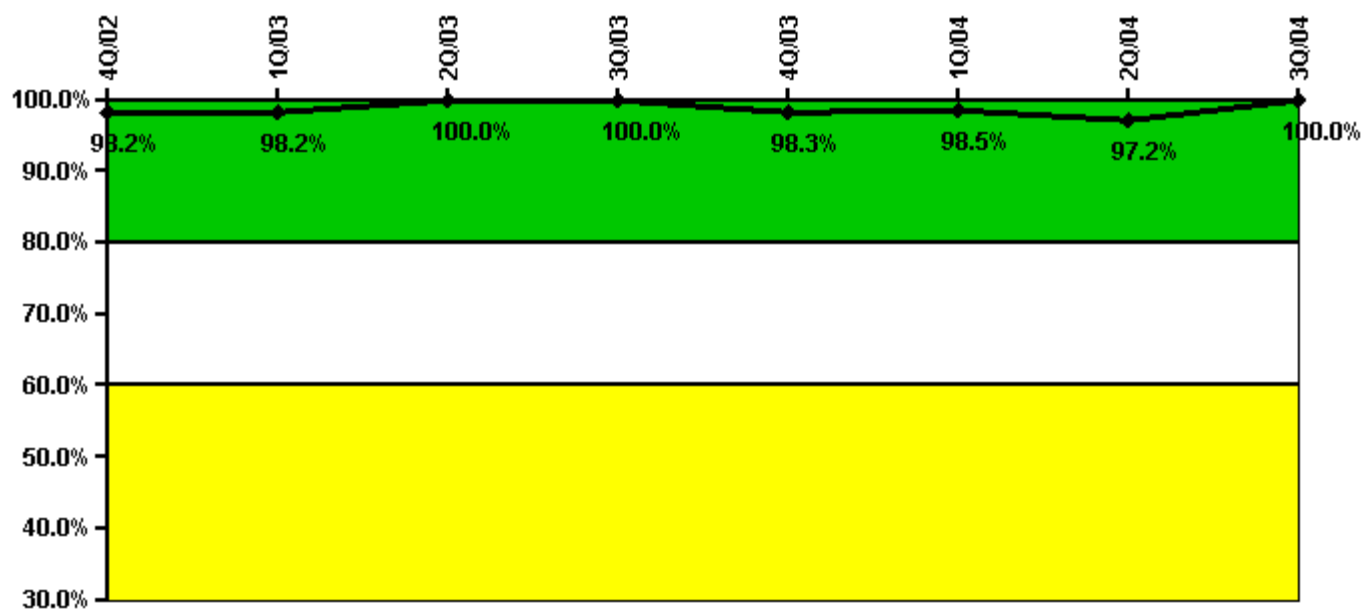
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful opportunities	43.0	39.0	36.0	45.0	18.0	50.0	62.0	93.0
Total opportunities	47.0	41.0	38.0	47.0	18.0	50.0	62.0	94.0
Indicator value	93.2%	93.9%	94.0%	94.9%	95.3%	96.2%	96.7%	97.2%

Licensee Comments: none

ERO Drill Participation



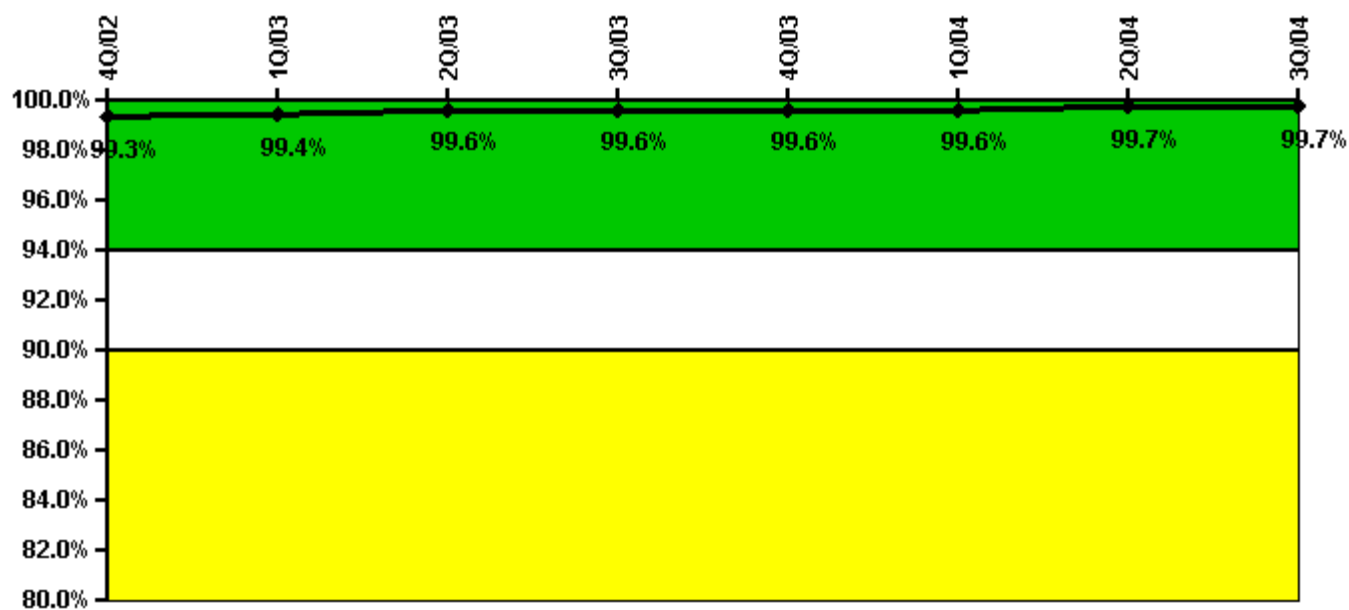
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Participating Key personnel	54.0	54.0	57.0	59.0	57.0	67.0	70.0	76.0
Total Key personnel	55.0	55.0	57.0	59.0	58.0	68.0	72.0	76.0
Indicator value	98.2%	98.2%	100.0%	100.0%	98.3%	98.5%	97.2%	100.0%

Licensee Comments: none

Alert & Notification System



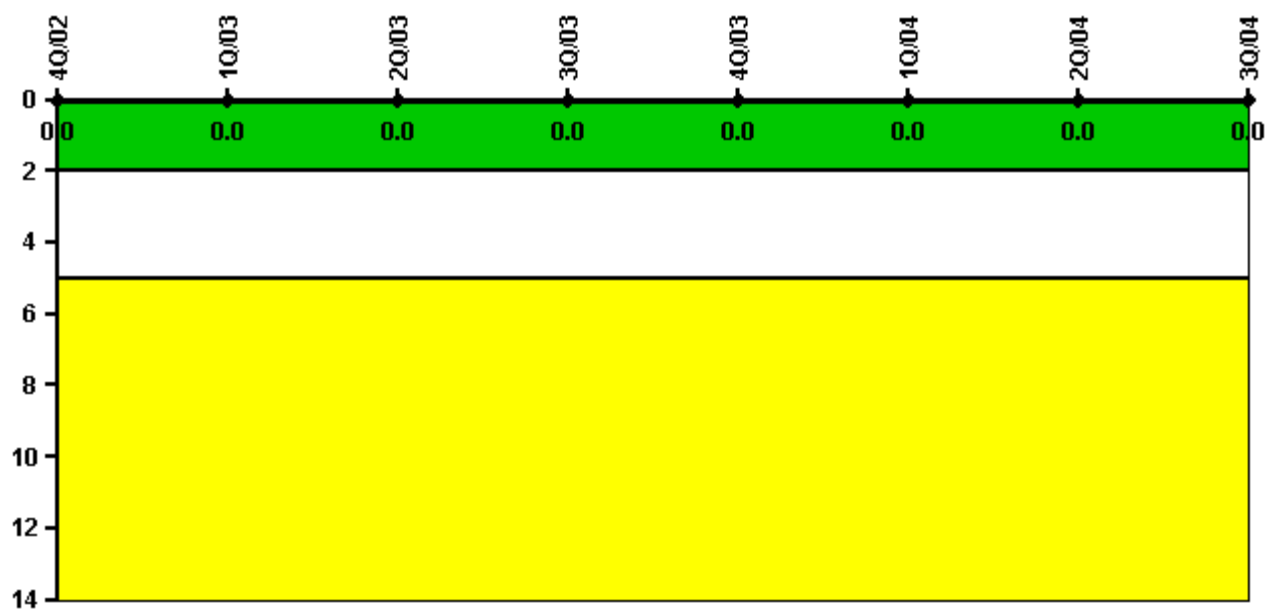
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful siren-tests	5991	5898	5990	5988	5997	6000	5996	6093
Total sirens-tests	6016	5922	6016	6016	6016	6016	6016	6110
Indicator value	99.3%	99.4%	99.6%	99.6%	99.6%	99.6%	99.7%	99.7%

Licensee Comments: none

Occupational Exposure Control Effectiveness



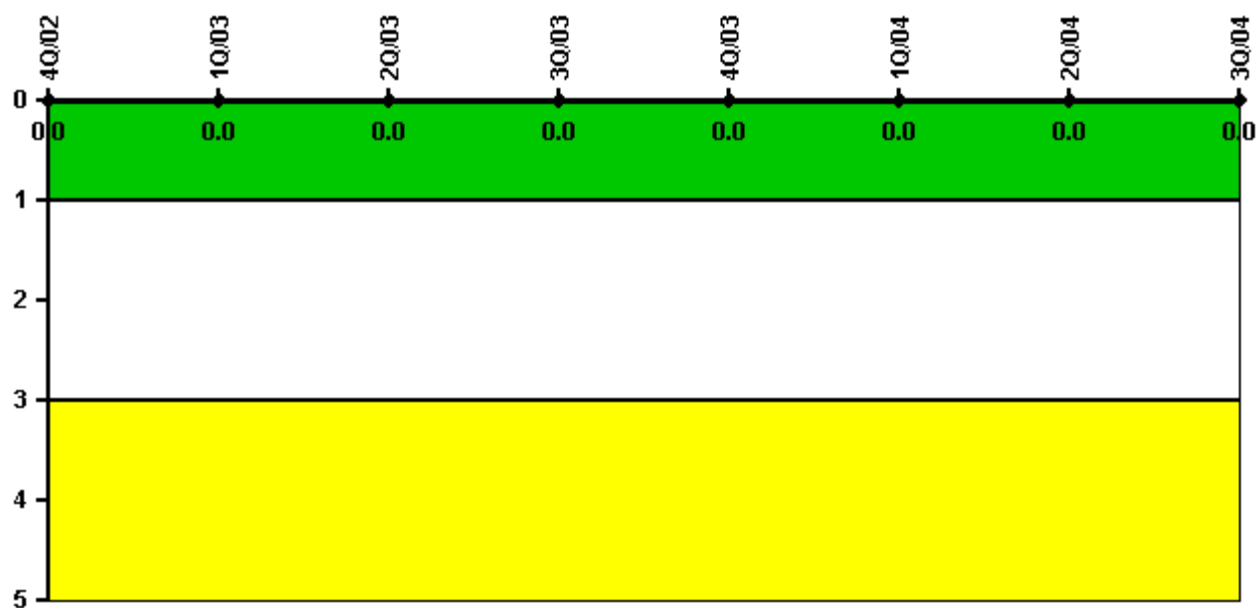
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

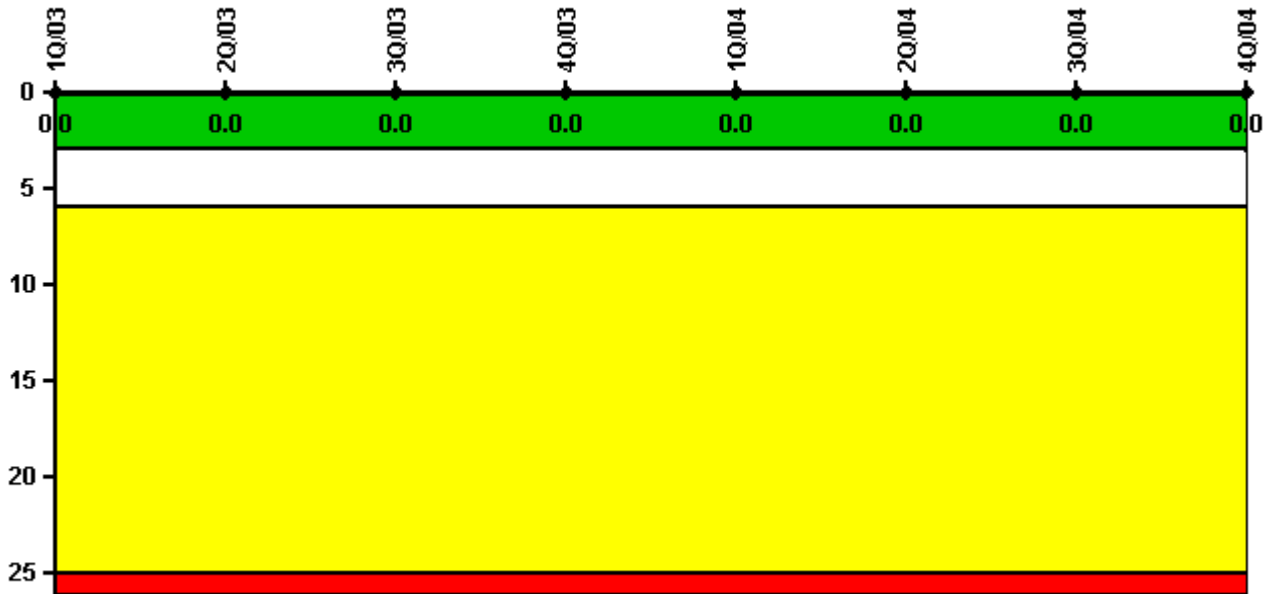
Last Modified: October 25, 2004

Byron 2

4Q/2004 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



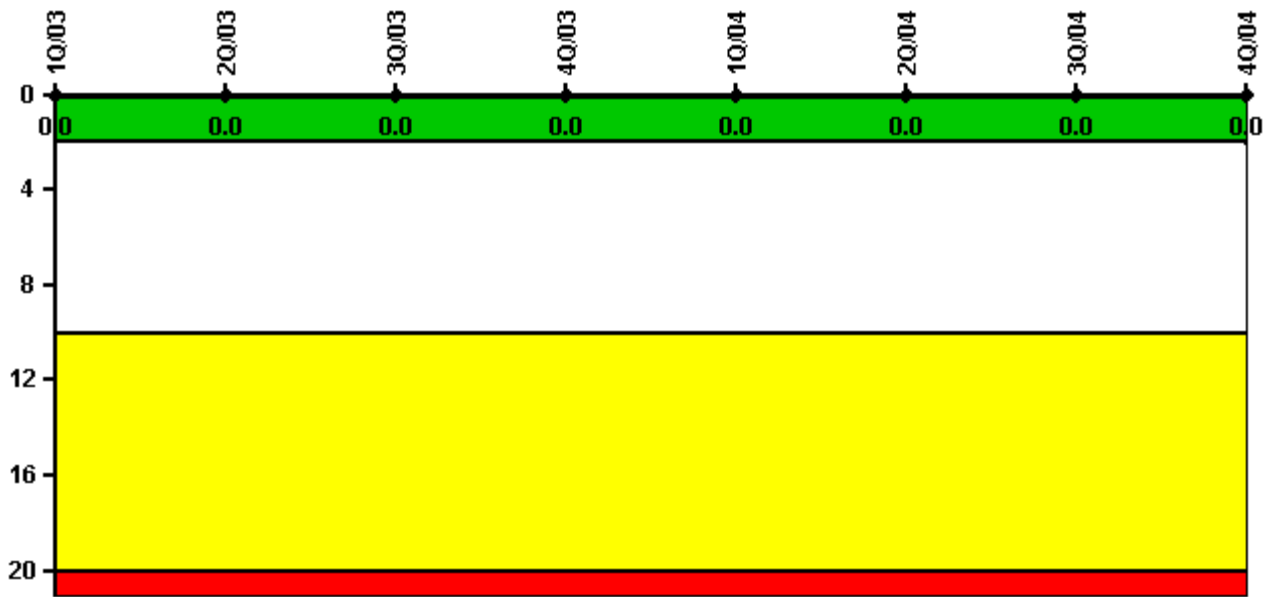
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	1967.0	1989.1	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



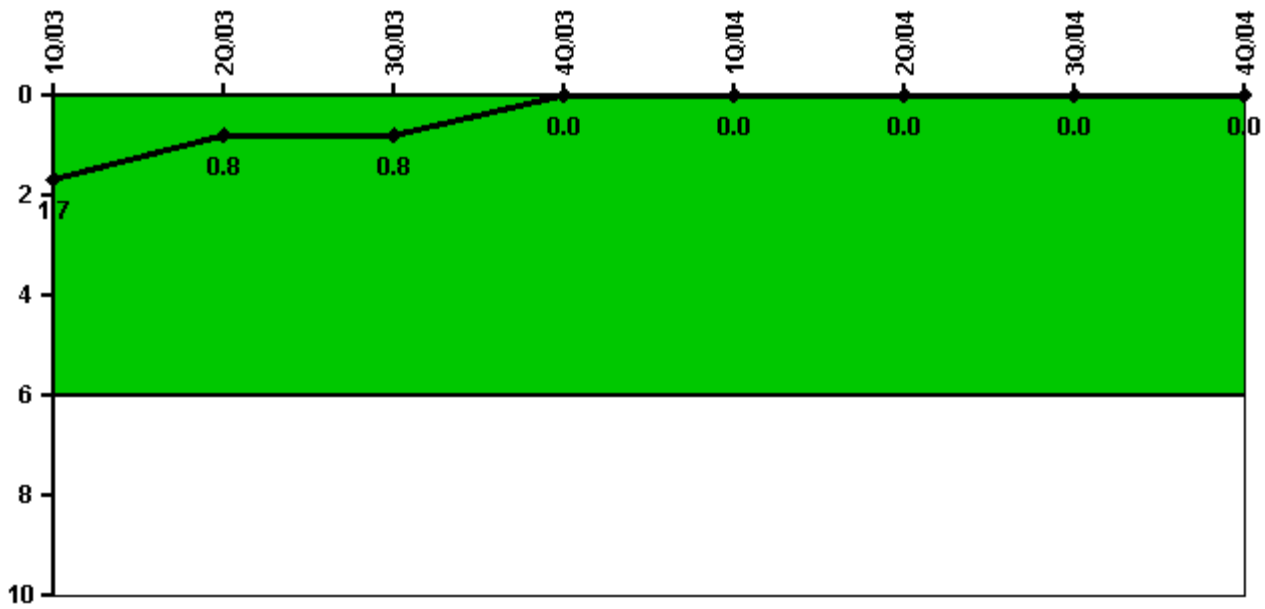
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



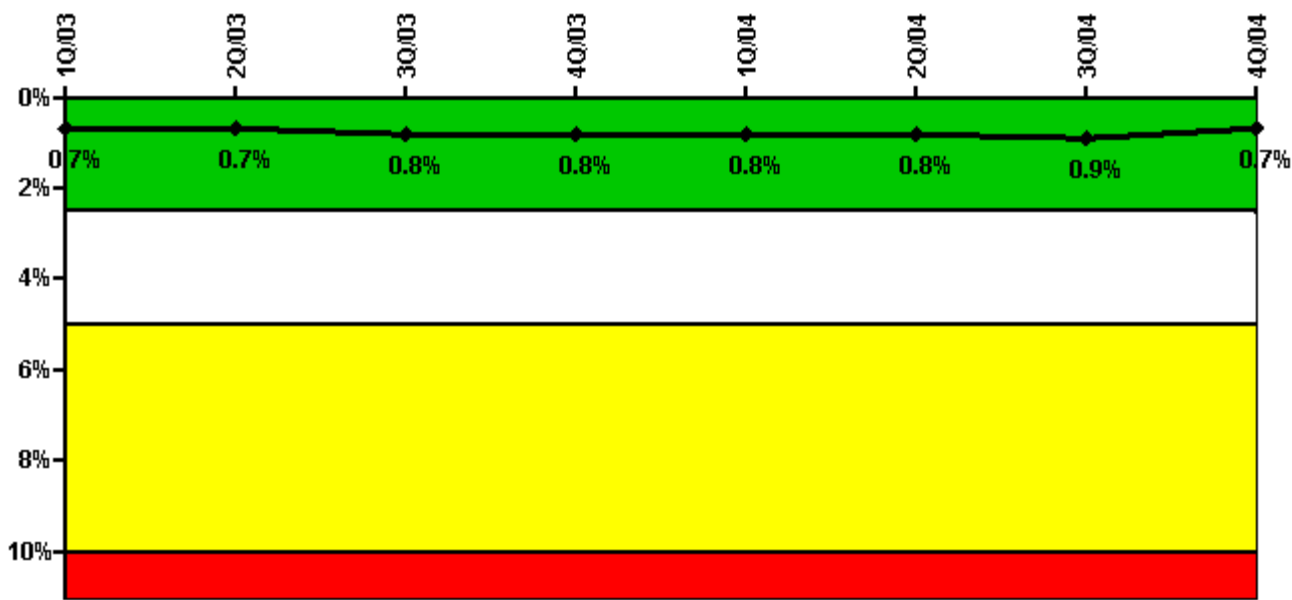
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	1967.0	1989.1	2208.0	2209.0
Indicator value	1.7	0.8	0.8	0	0	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



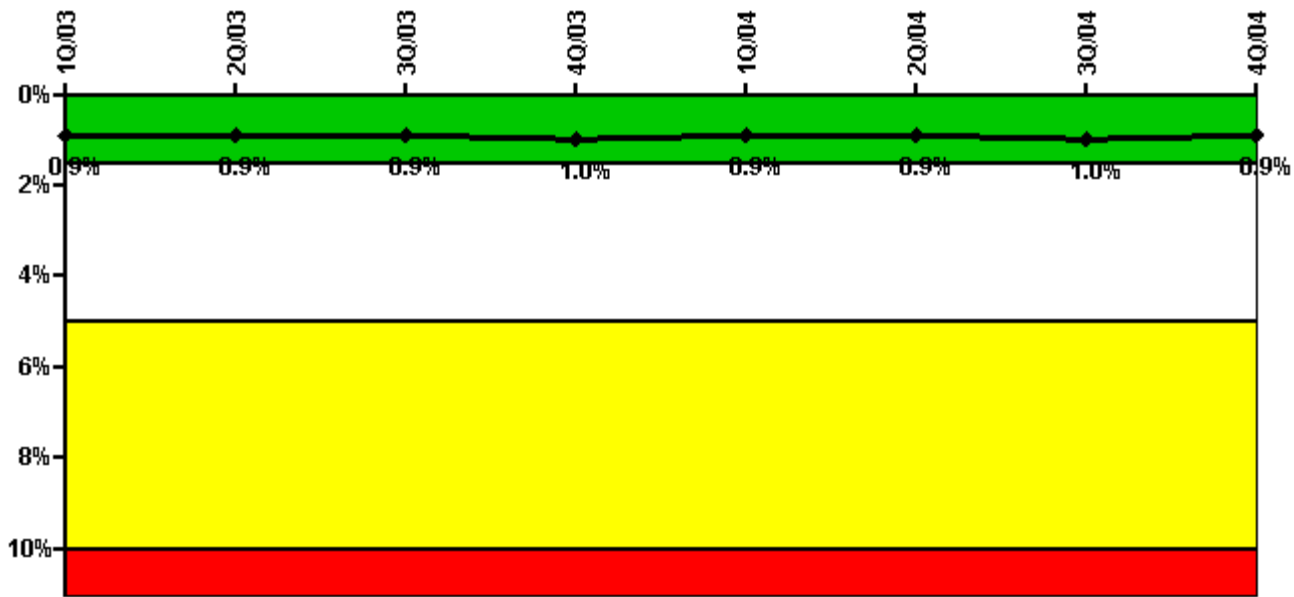
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	42.30	14.80	3.20	1.50	6.20	2.20	22.40	1.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	1.70	11.40	4.10	2.90	1.80	17.40	1.80	41.00
Unplanned unavailable hours	0	11.80	54.90	0	0	0	25.10	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
Indicator value	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.9%	0.7%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



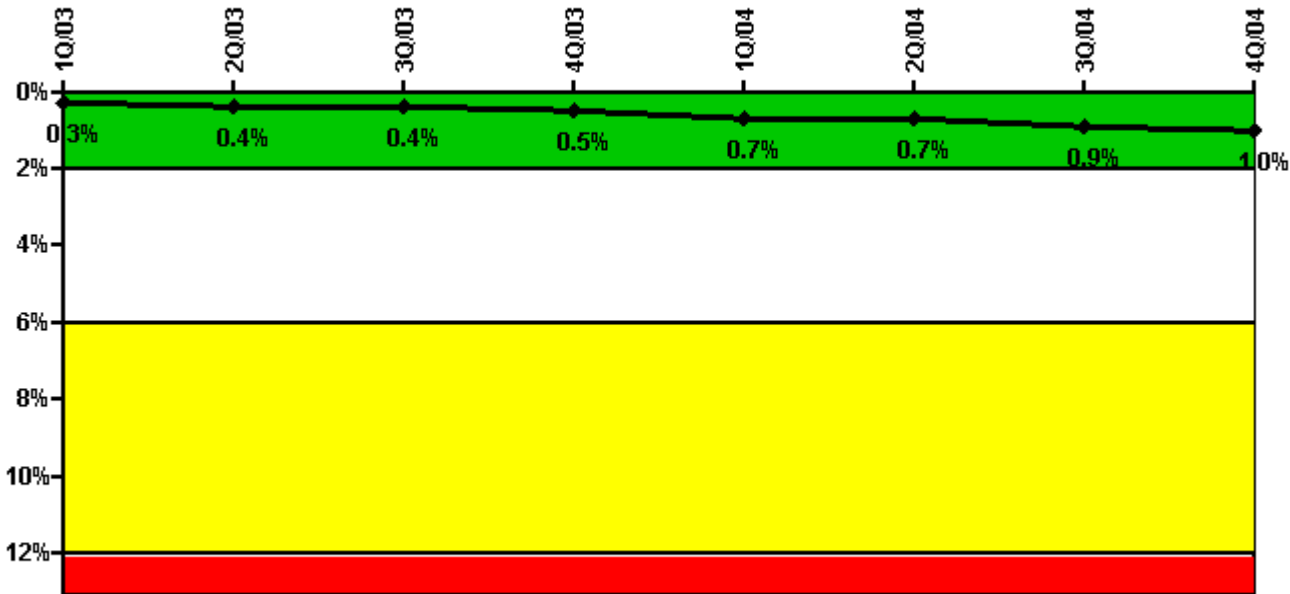
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	3.60	1.80	3.20	23.40	5.30	2.20	42.60	1.80
Unplanned unavailable hours	213.80	0	0	3.70	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00
Train 2								
Planned unavailable hours	1.70	4.10	1.90	2.90	1.80	2.90	4.90	4.50
Unplanned unavailable hours	2.80	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00
Train 3								
Planned unavailable hours	13.60	39.00	3.20	1.50	5.30	47.90	3.10	1.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00
Train 4								
Planned unavailable hours	1.70	4.10	3.10	24.60	1.80	16.60	45.50	3.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00
Indicator value	0.9%	0.9%	0.9%	1.0%	0.9%	0.9%	1.0%	0.9%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



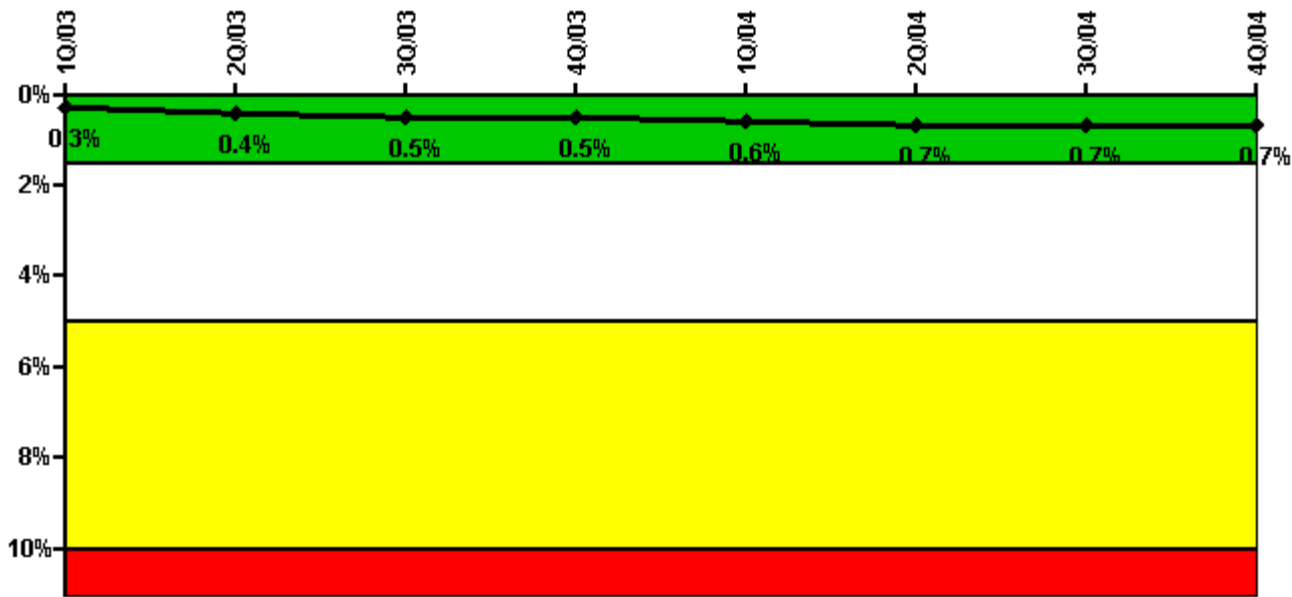
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	4.60	3.30	7.00	3.30	6.90	4.10	5.80	18.60
Unplanned unavailable hours	0	0	7.00	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00
Train 2								
Planned unavailable hours	2.80	59.70	3.40	11.10	42.60	4.90	56.30	5.20
Unplanned unavailable hours	0	0	0	25.60	57.90	0	66.80	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00
Indicator value	0.3%	0.4%	0.4%	0.5%	0.7%	0.7%	0.9%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



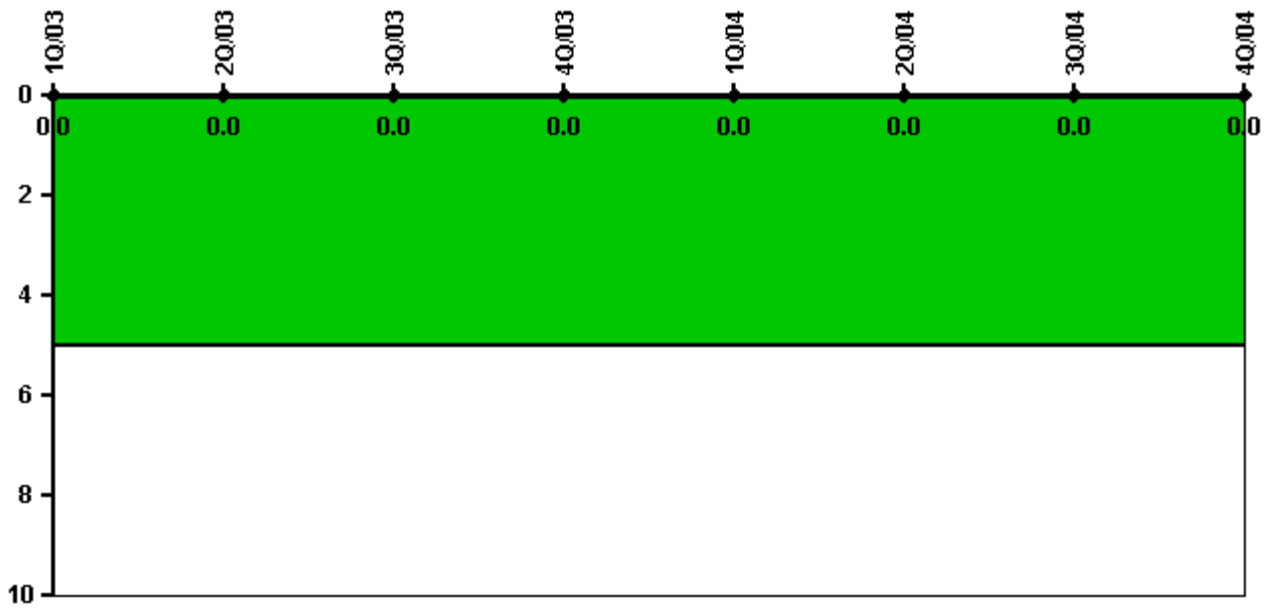
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	18.10	49.80	58.50	1.60	9.50	3.30	3.10	1.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	1.70	18.20	1.90	44.20	46.40	30.90	7.20	7.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
Indicator value	0.3%	0.4%	0.5%	0.5%	0.6%	0.7%	0.7%	0.7%

Licensee Comments: none

Safety System Functional Failures (PWR)



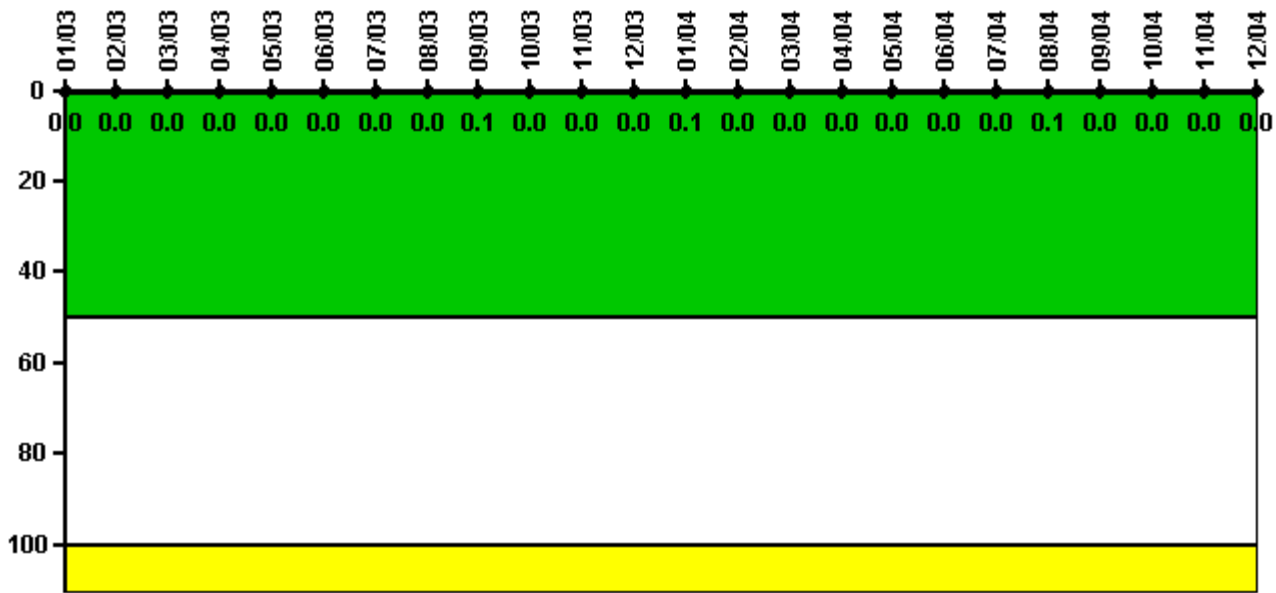
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



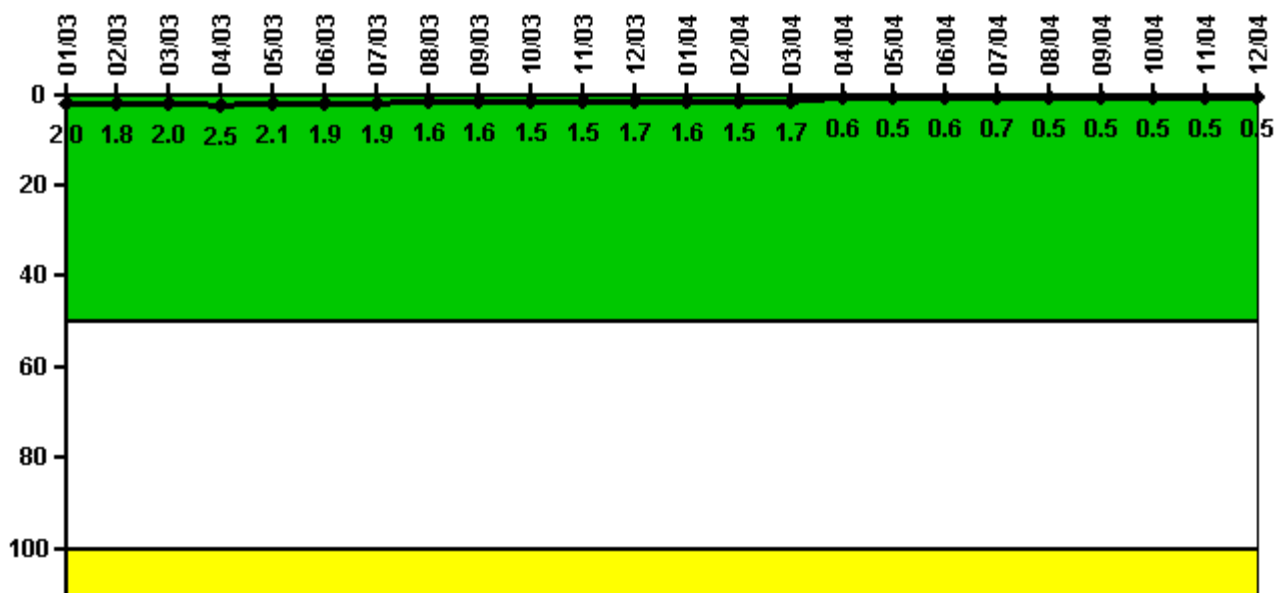
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.000287	0.000301	0.000288	0.000295	0.000344	0.000317	0.000335	0.000342	0.000523	0.000012	0.000365	0.000399
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0.1	0	0	0
Reactor Coolant System Activity	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum activity	0.001020	0.000380	0.000384	0.000220	0.000239	0.000245	0.000276	0.000541	0.000288	0.000310	0.000332	0.000336
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0.1	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



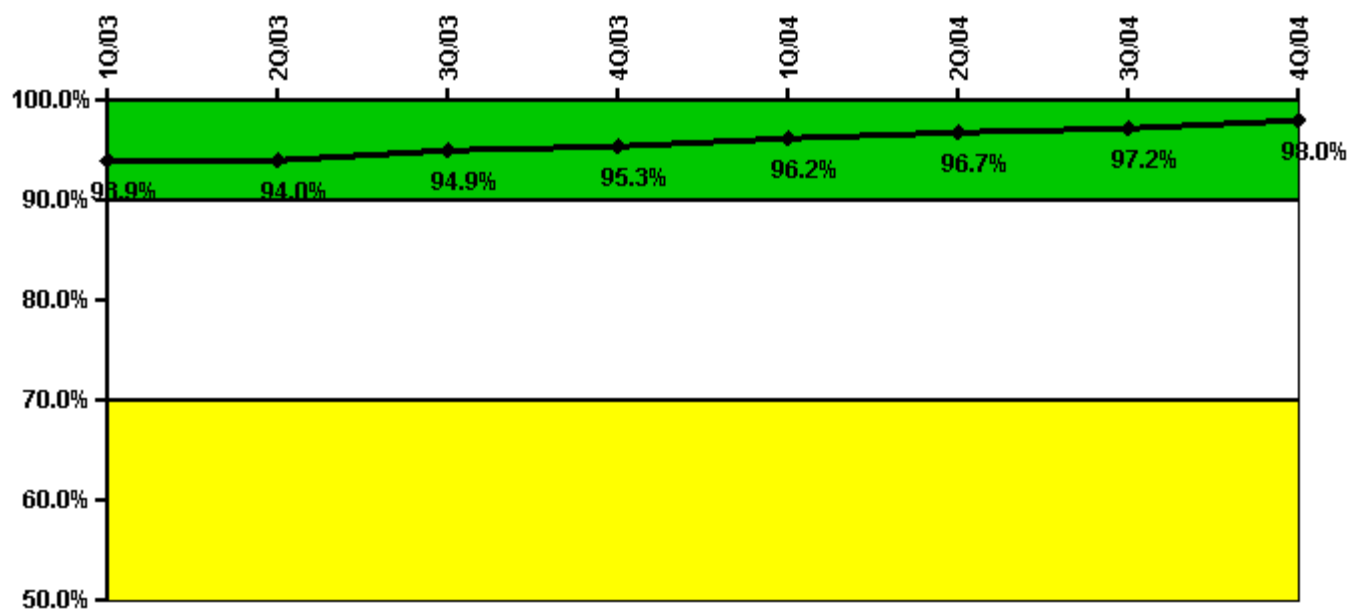
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum leakage	0.199	0.180	0.199	0.247	0.212	0.188	0.185	0.155	0.157	0.152	0.148	0.172
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.0	1.8	2.0	2.5	2.1	1.9	1.9	1.6	1.6	1.5	1.5	1.7
Reactor Coolant System Leakage	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum leakage	0.156	0.154	0.174	0.064	0.051	0.060	0.067	0.054	0.049	0.054	0.049	0.049
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.6	1.5	1.7	0.6	0.5	0.6	0.7	0.5	0.5	0.5	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



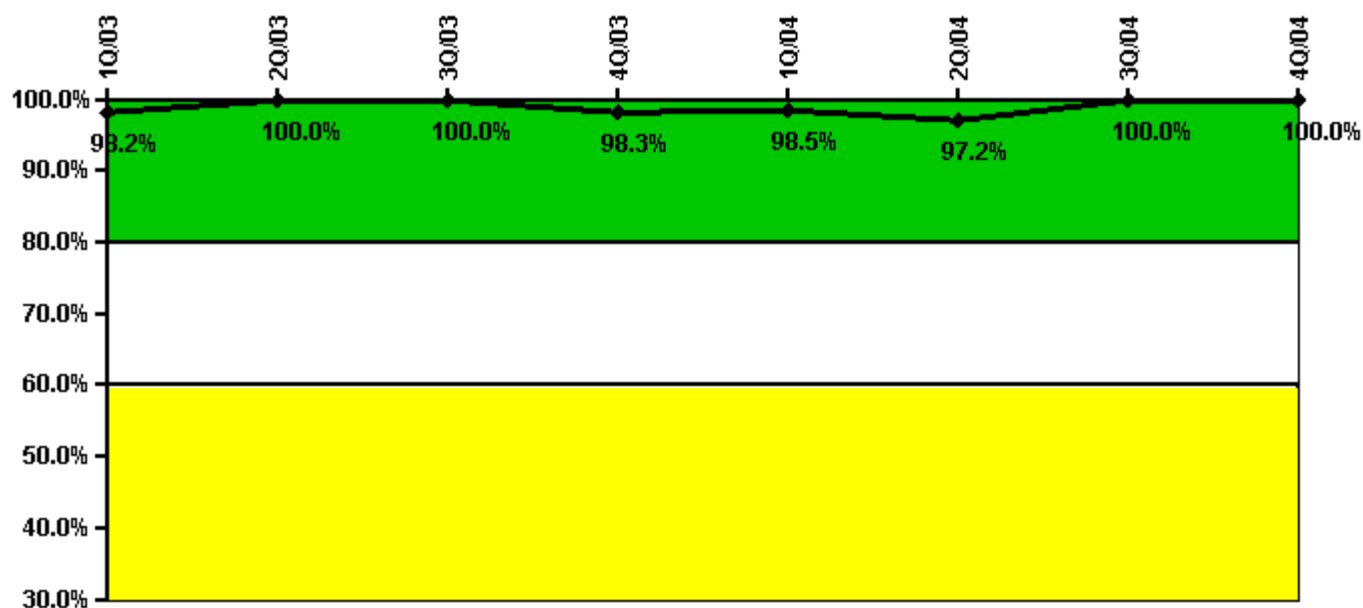
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful opportunities	39.0	36.0	45.0	18.0	50.0	62.0	93.0	4.0
Total opportunities	41.0	38.0	47.0	18.0	50.0	62.0	94.0	4.0
Indicator value	93.9%	94.0%	94.9%	95.3%	96.2%	96.7%	97.2%	98.0%

Licensee Comments: none

ERO Drill Participation



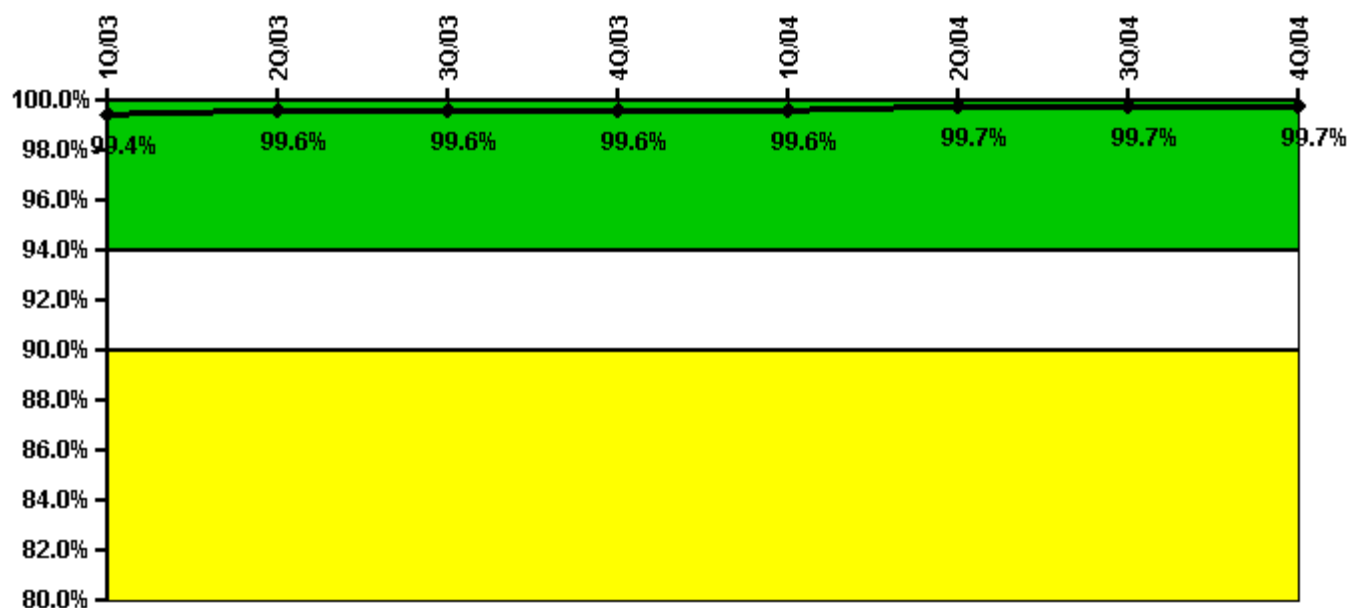
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Participating Key personnel	54.0	57.0	59.0	57.0	67.0	70.0	76.0	74.0
Total Key personnel	55.0	57.0	59.0	58.0	68.0	72.0	76.0	74.0
Indicator value	98.2%	100.0%	100.0%	98.3%	98.5%	97.2%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



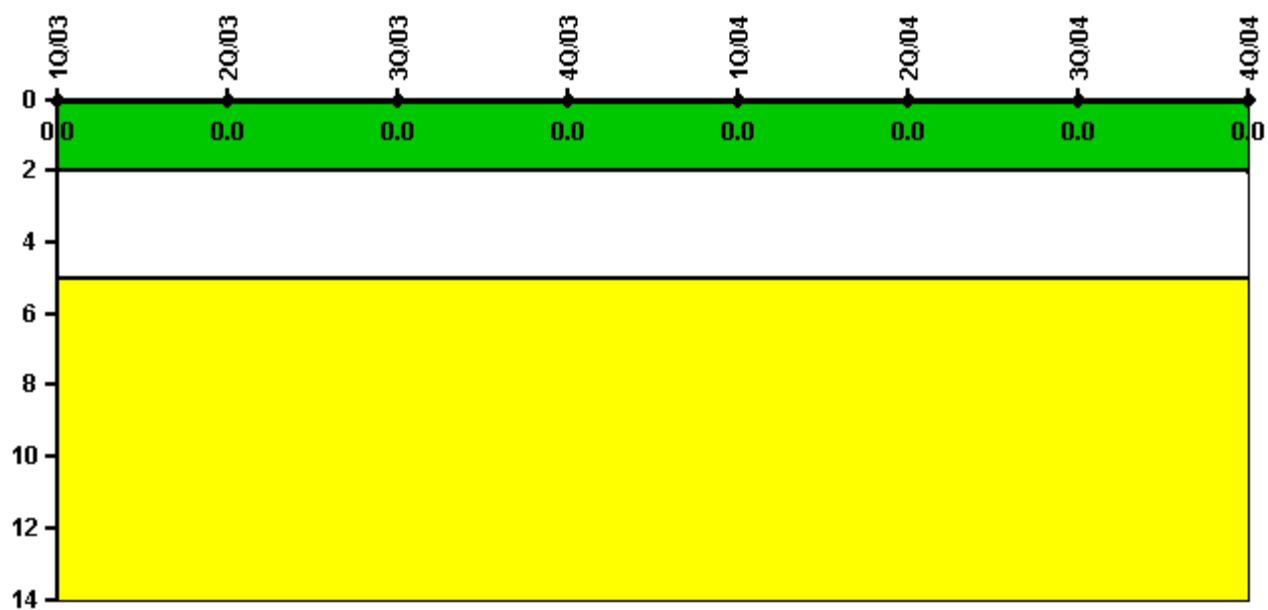
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful siren-tests	5898	5990	5988	5997	6000	5996	6093	6102
Total sirens-tests	5922	6016	6016	6016	6016	6016	6110	6110
Indicator value	99.4%	99.6%	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%

Licensee Comments: none

Occupational Exposure Control Effectiveness



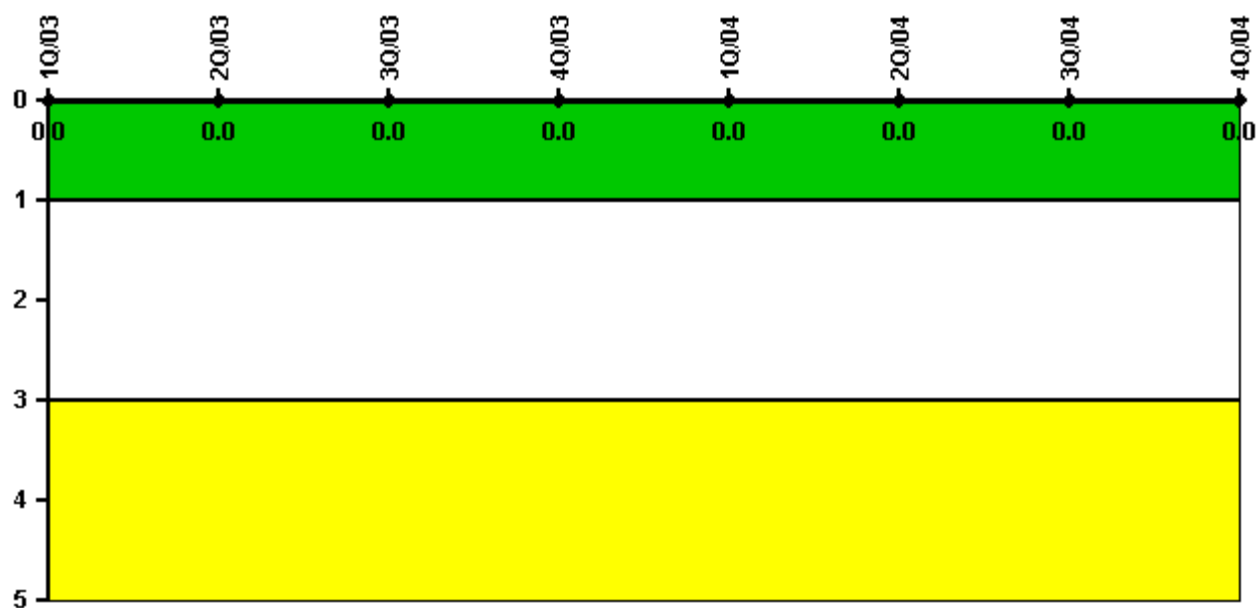
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

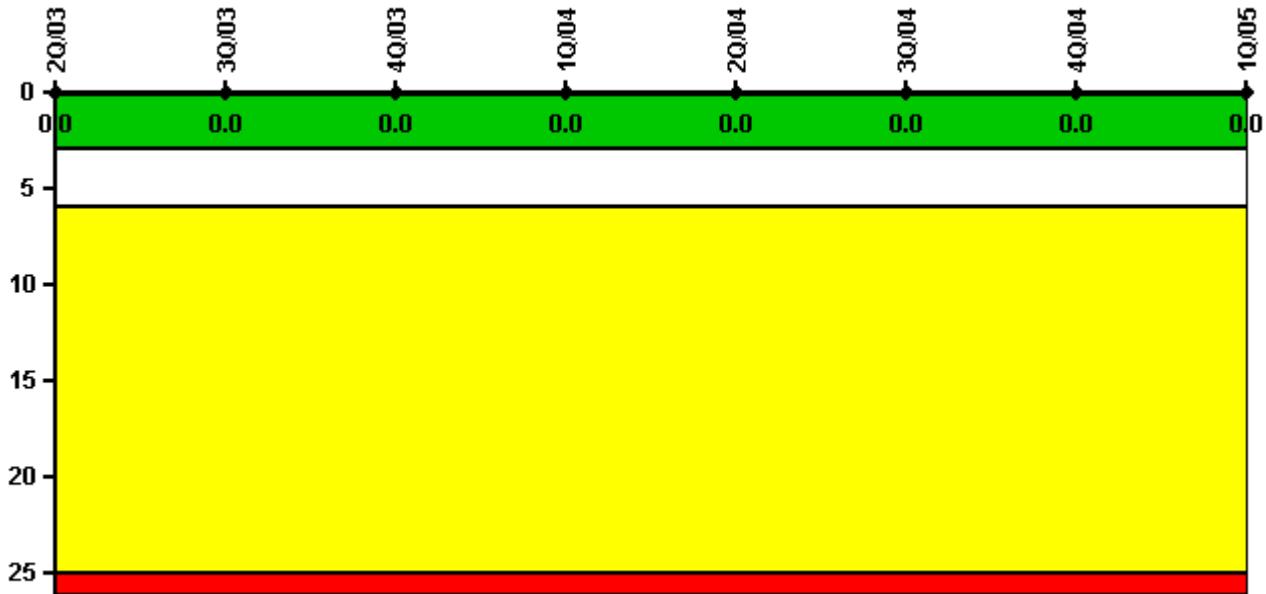
Last Modified: March 9, 2005

Byron 2

1Q/2005 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



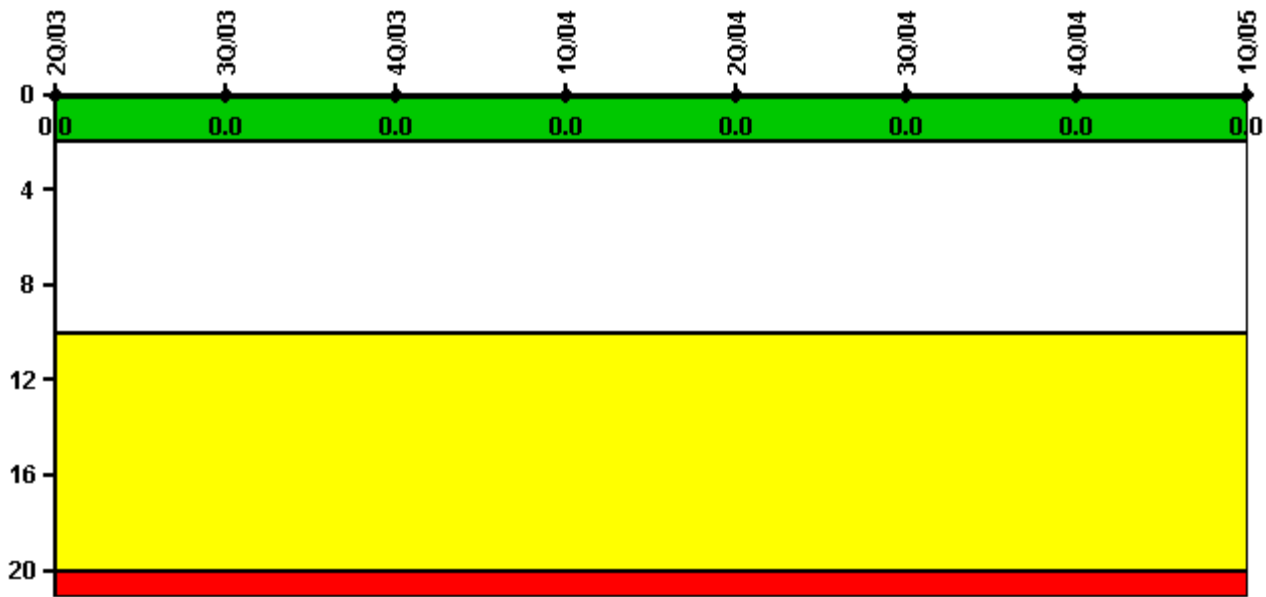
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2208.0	2209.0	1967.0	1989.1	2208.0	2209.0	2160.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



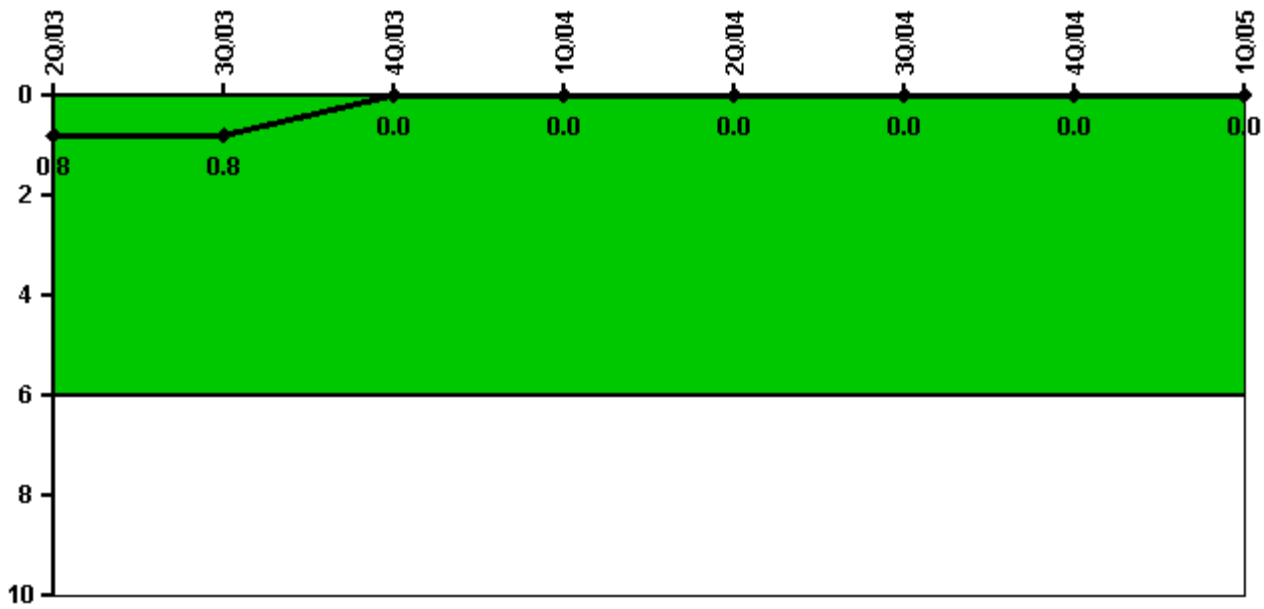
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



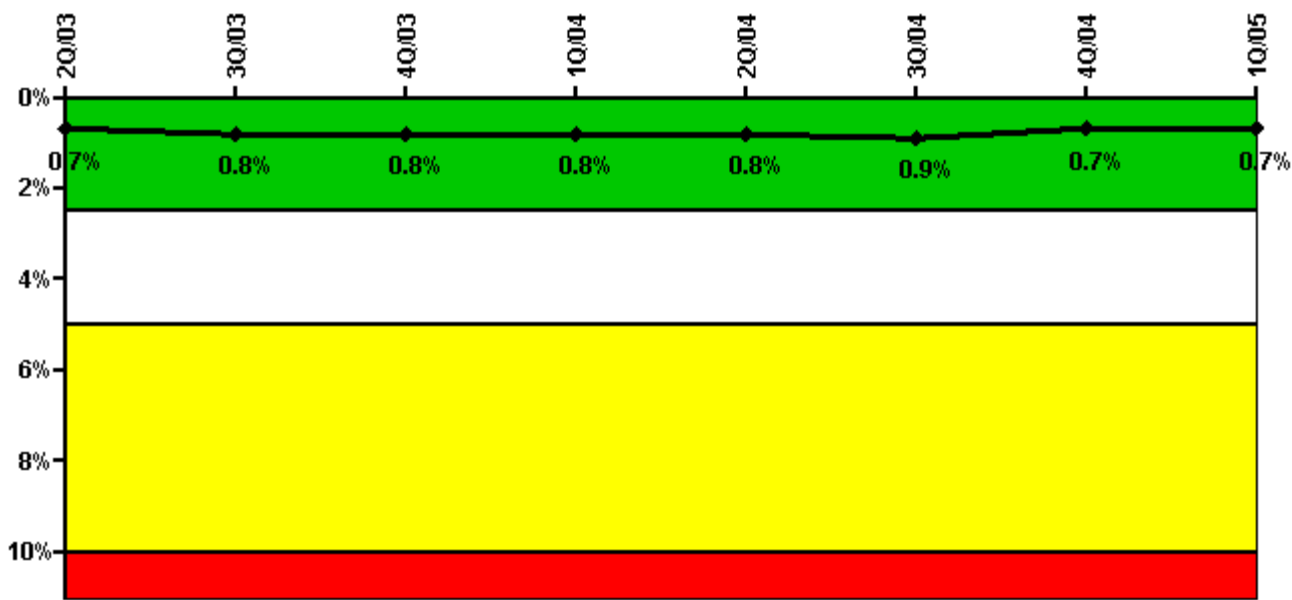
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2183.0	2208.0	2209.0	1967.0	1989.1	2208.0	2209.0	2160.0
Indicator value	0.8	0.8	0	0	0	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



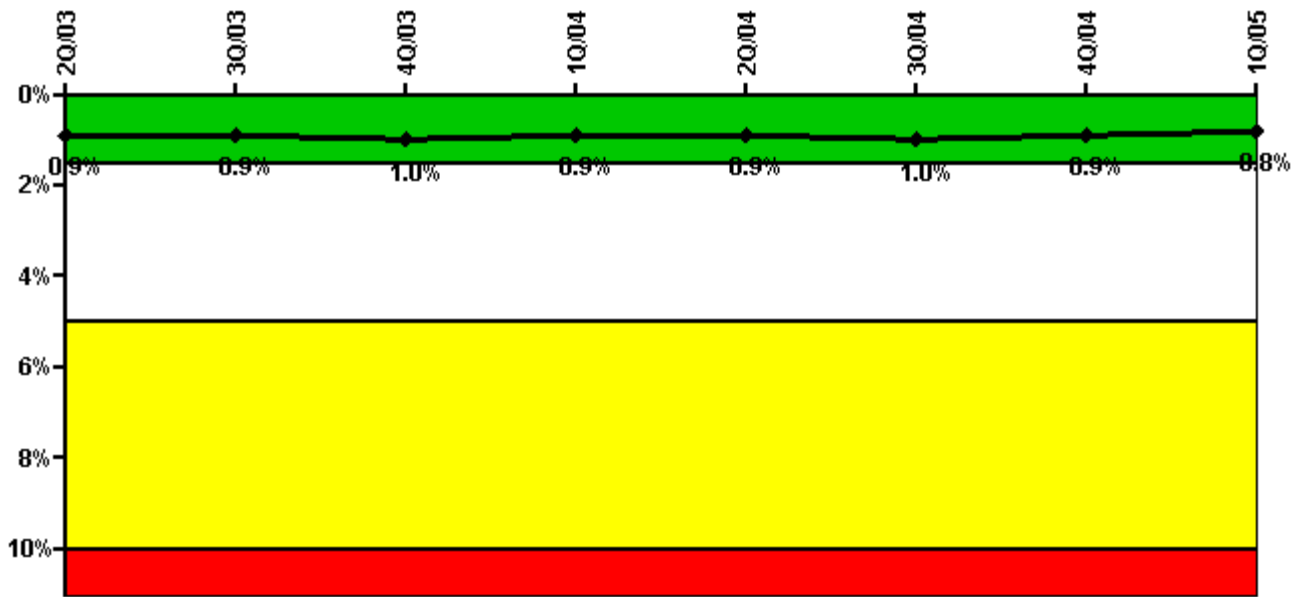
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Train 1								
Planned unavailable hours	14.80	3.20	1.50	6.20	2.20	22.40	1.80	4.00
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	11.40	4.10	2.90	1.80	17.40	1.80	41.00	2.30
Unplanned unavailable hours	11.80	54.90	0	0	0	25.10	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.7%	0.8%	0.8%	0.8%	0.8%	0.9%	0.7%	0.7%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



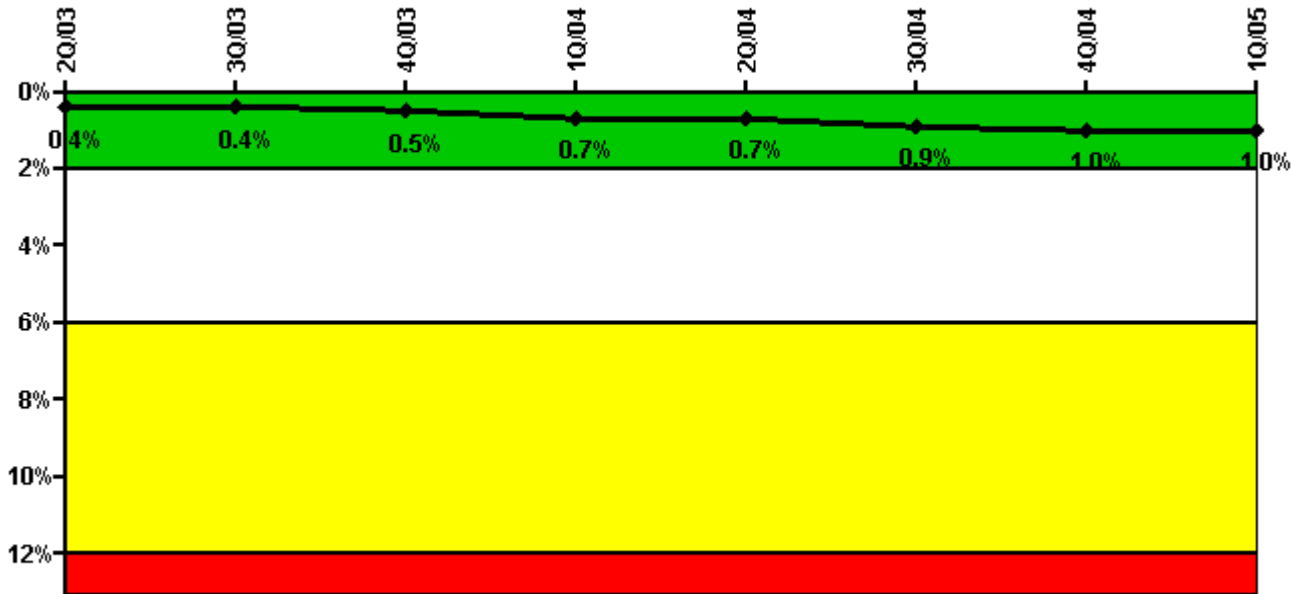
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Train 1								
Planned unavailable hours	1.80	3.20	23.40	5.30	2.20	42.60	1.80	3.30
Unplanned unavailable hours	0	0	3.70	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	4.10	1.90	2.90	1.80	2.90	4.90	4.50	1.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00
Train 3								
Planned unavailable hours	39.00	3.20	1.50	5.30	47.90	3.10	1.80	3.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00
Train 4								
Planned unavailable hours	4.10	2.10	24.60	1.80	16.60	45.50	3.50	1.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00
Indicator value	0.9%	0.9%	1.0%	0.9%	0.9%	1.0%	0.9%	0.8%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



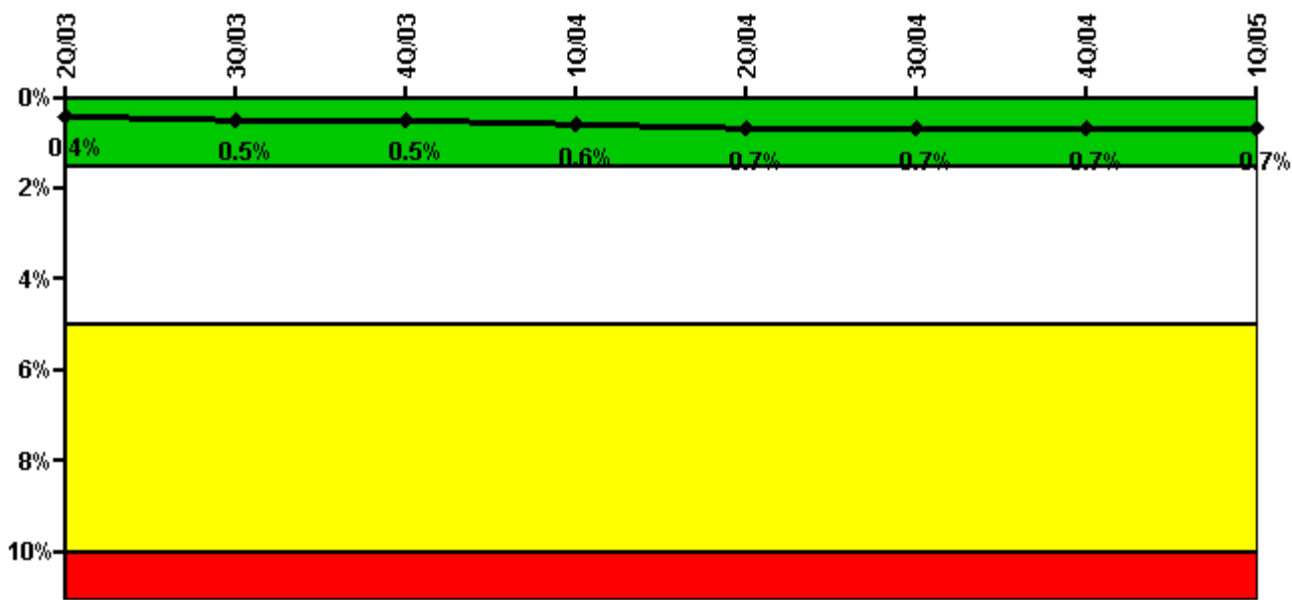
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Train 1								
Planned unavailable hours	3.30	7.00	3.30	6.90	4.10	5.80	18.60	4.90
Unplanned unavailable hours	0	7.00	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	59.70	3.40	11.10	42.60	4.90	56.30	5.20	3.80
Unplanned unavailable hours	0	0	25.60	57.90	0	66.80	0	25.50
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00
Indicator value	0.4%	0.4%	0.5%	0.7%	0.7%	0.9%	1.0%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



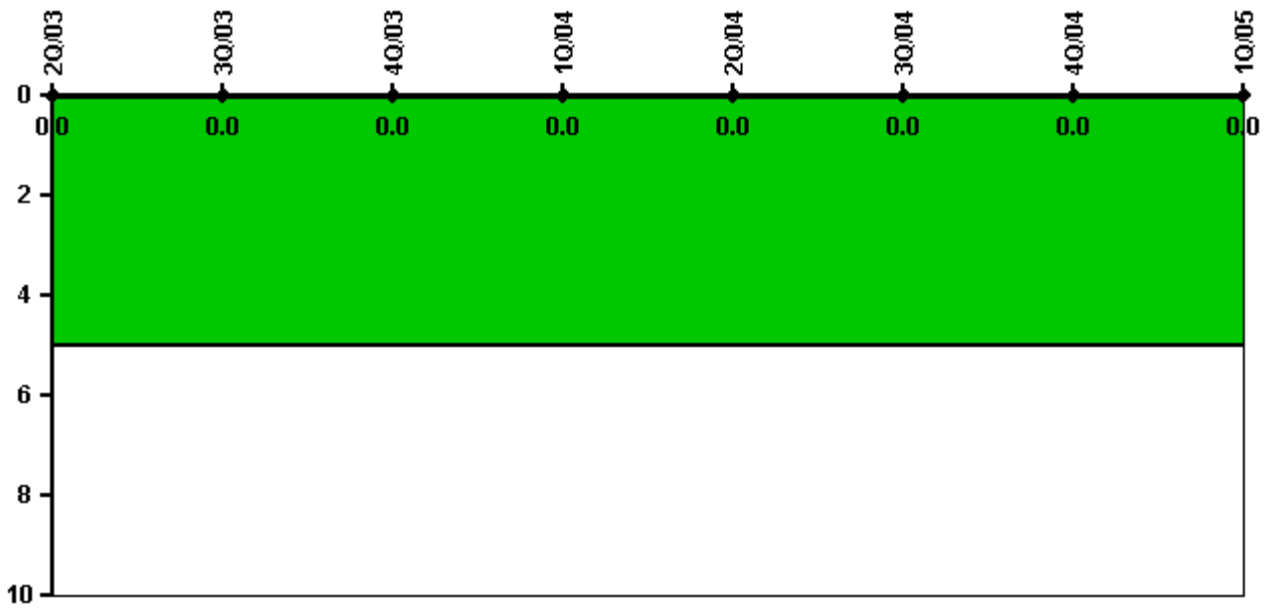
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Train 1								
Planned unavailable hours	49.80	58.50	1.60	9.50	3.30	3.10	1.90	3.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	18.20	1.90	44.20	46.40	30.90	7.20	7.30	5.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.4%	0.5%	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%

Licensee Comments: none

Safety System Functional Failures (PWR)



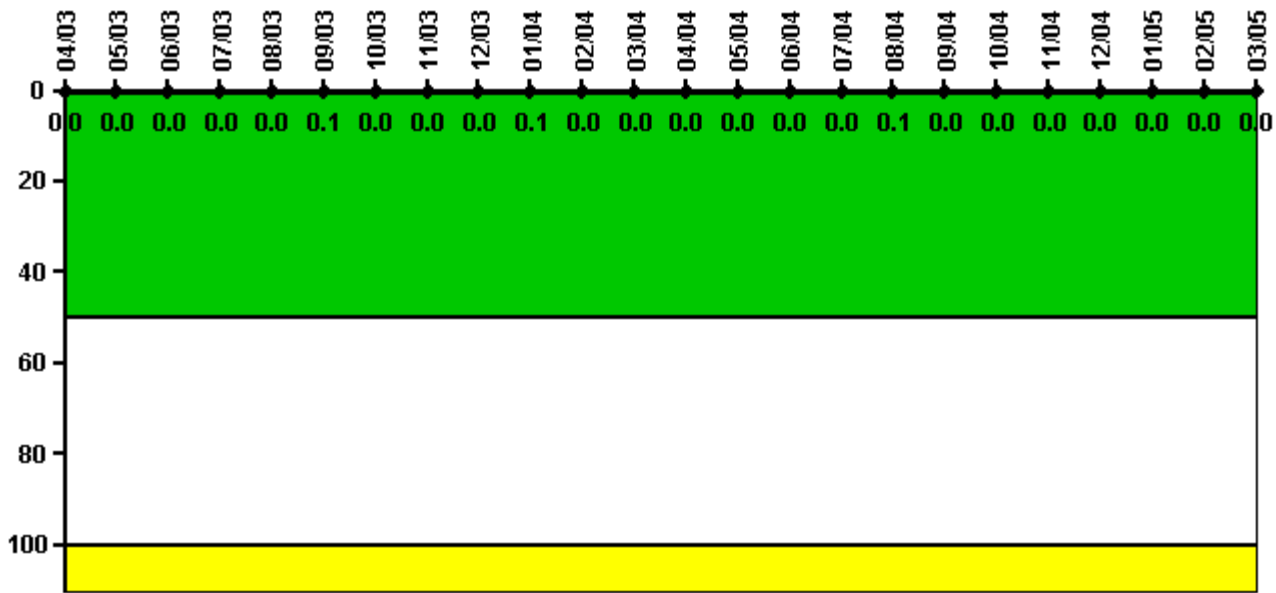
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



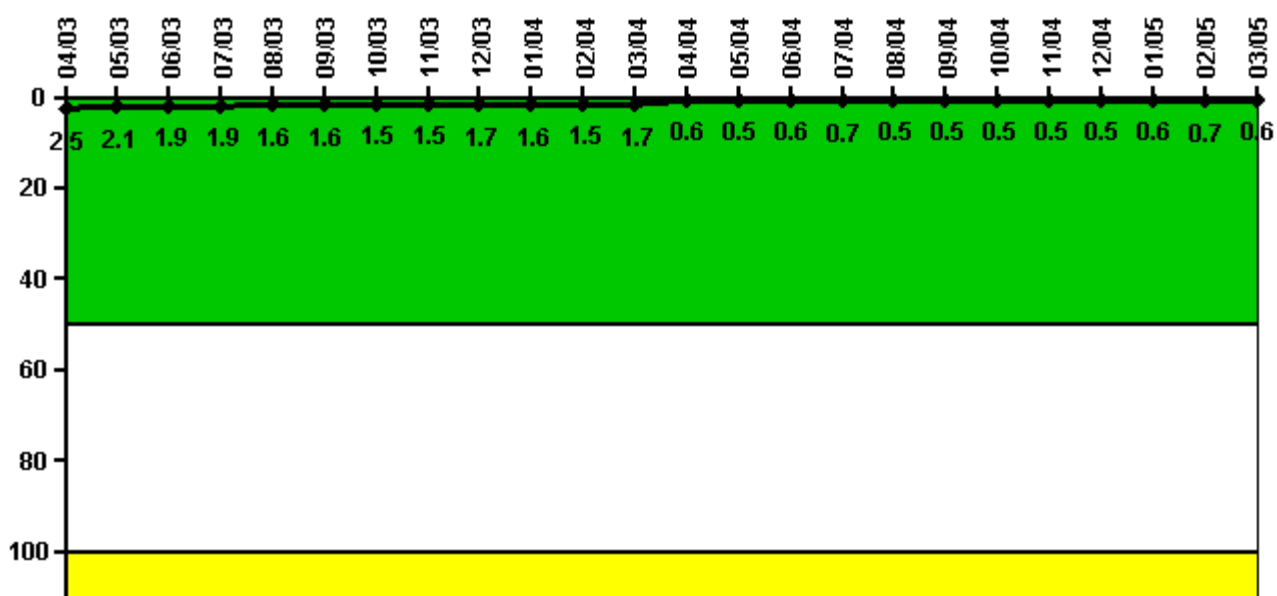
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum activity	0.000295	0.000344	0.000317	0.000335	0.000342	0.000523	0.000012	0.000365	0.000399	0.001020	0.000380	0.000384
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0.1	0	0	0	0.1	0	0
Reactor Coolant System Activity	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05
Maximum activity	0.000220	0.000239	0.000245	0.000276	0.000541	0.000288	0.000310	0.000332	0.000336	0.000341	0.000336	0.000355
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0.1	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



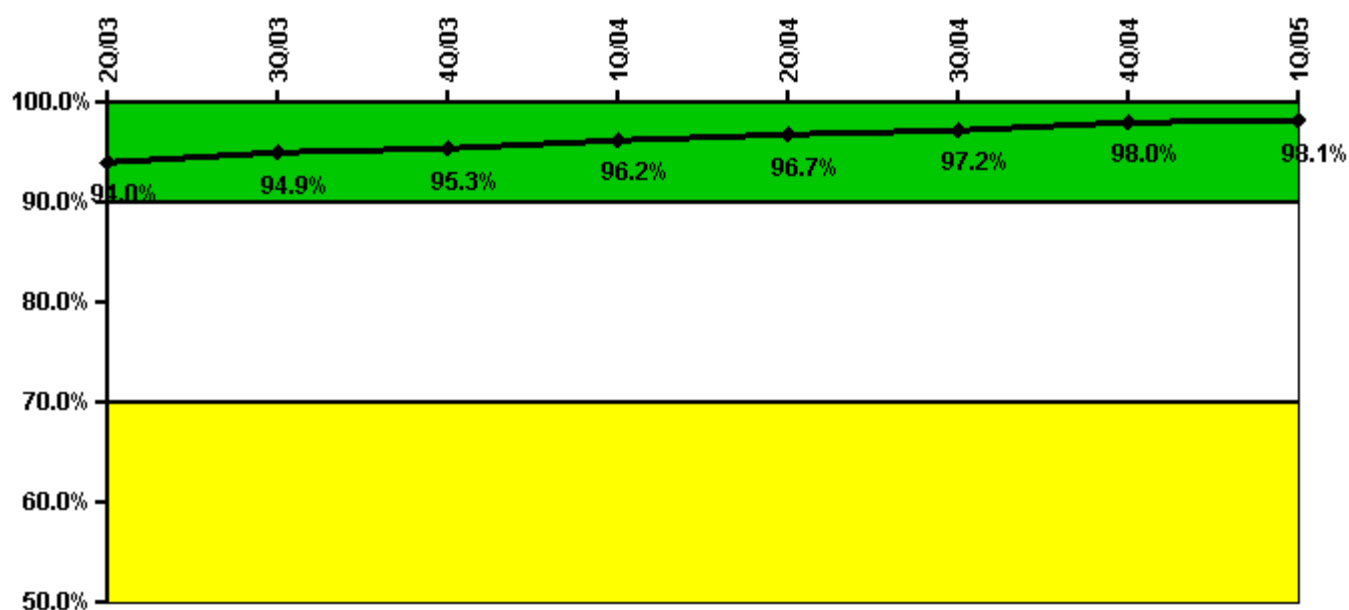
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum leakage	0.247	0.212	0.188	0.185	0.155	0.157	0.152	0.148	0.172	0.156	0.154	0.174
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.5	2.1	1.9	1.9	1.6	1.6	1.5	1.5	1.7	1.6	1.5	1.7
Reactor Coolant System Leakage	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05
Maximum leakage	0.064	0.051	0.060	0.067	0.054	0.049	0.054	0.049	0.049	0.057	0.065	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6

Licensee Comments: none

Drill/Exercise Performance



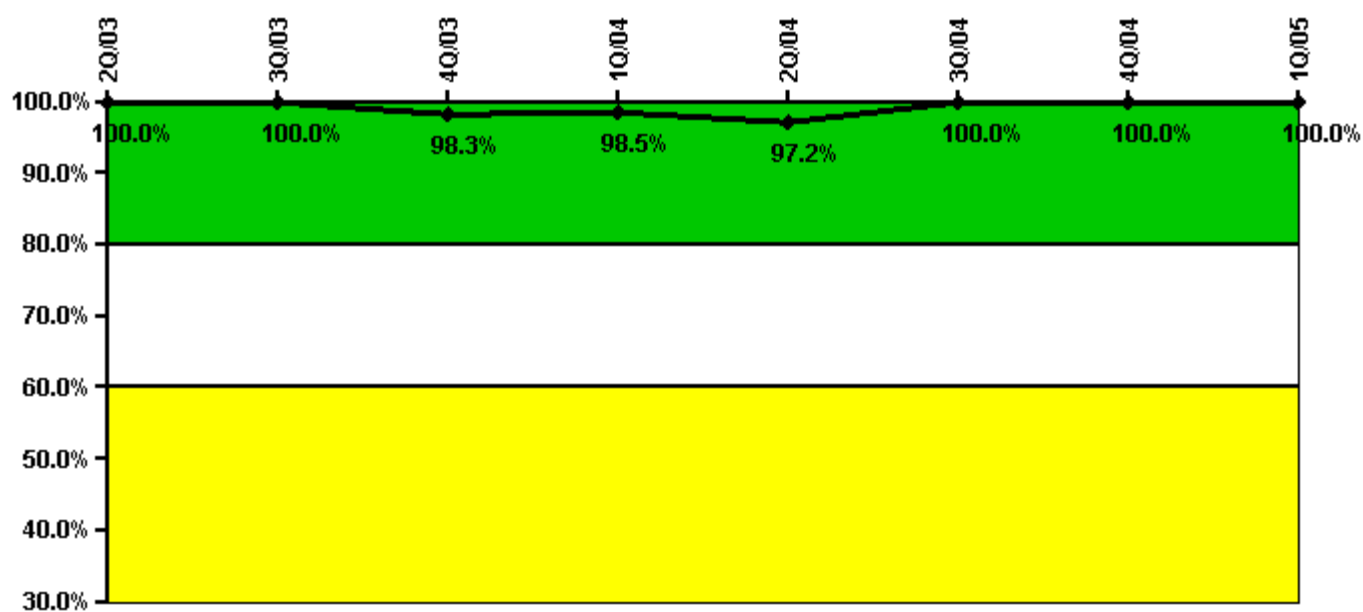
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Successful opportunities	36.0	45.0	18.0	50.0	62.0	93.0	4.0	8.0
Total opportunities	38.0	47.0	18.0	50.0	62.0	94.0	4.0	9.0
Indicator value	94.0%	94.9%	95.3%	96.2%	96.7%	97.2%	98.0%	98.1%

Licensee Comments: none

ERO Drill Participation



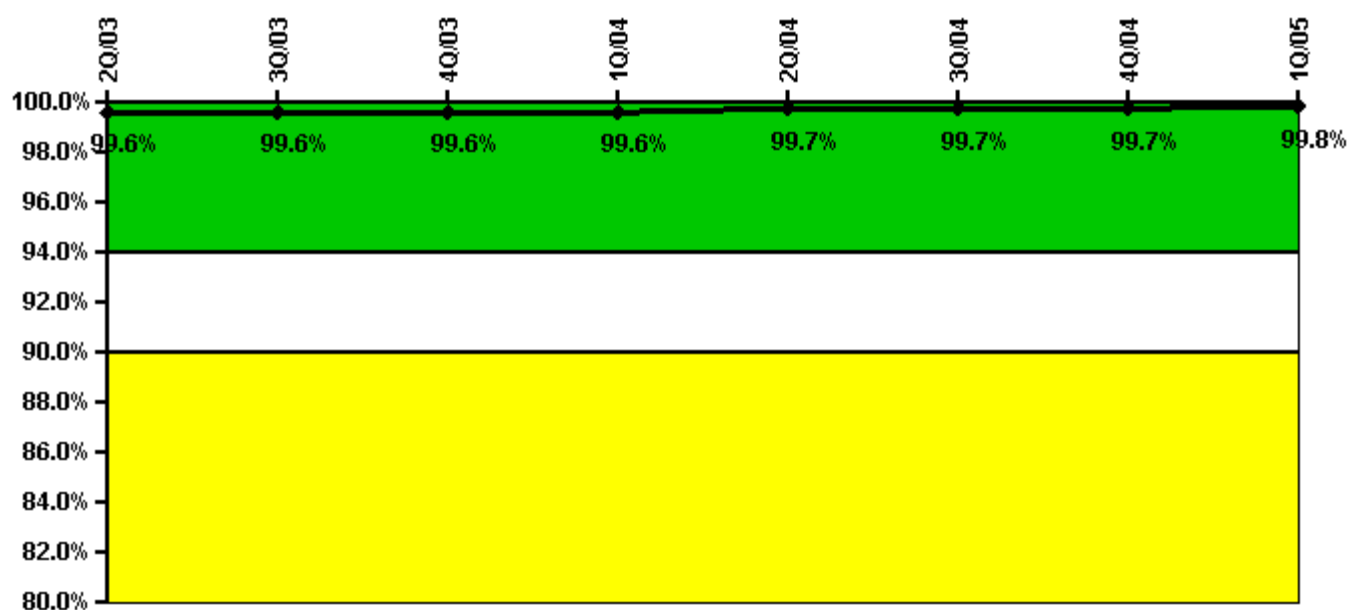
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Participating Key personnel	57.0	59.0	57.0	67.0	70.0	76.0	74.0	75.0
Total Key personnel	57.0	59.0	58.0	68.0	72.0	76.0	74.0	75.0
Indicator value	100.0%	100.0%	98.3%	98.5%	97.2%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



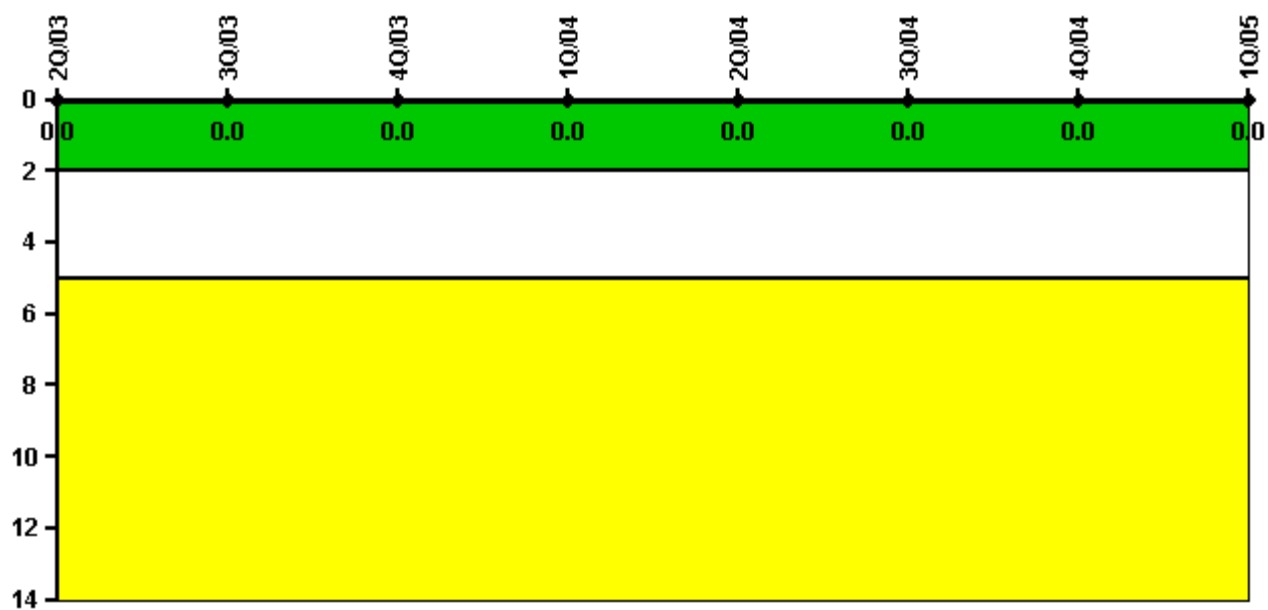
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Successful siren-tests	5990	5988	5997	6000	5996	6093	6102	6004
Total sirens-tests	6016	6016	6016	6016	6016	6110	6110	6016
Indicator value	99.6%	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness

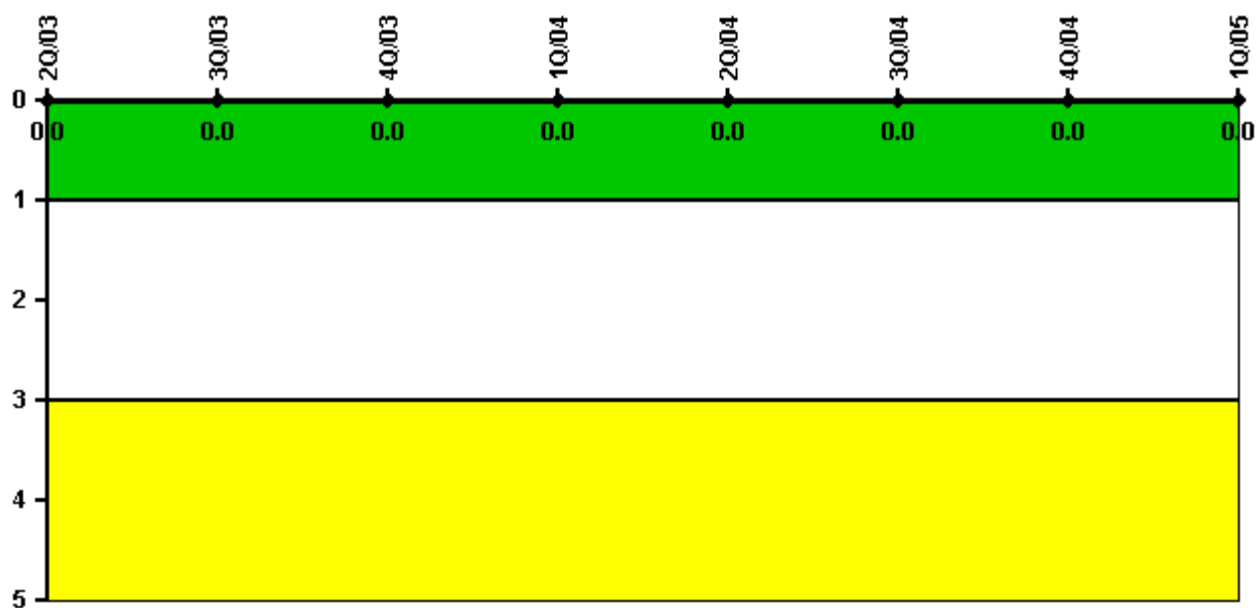


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

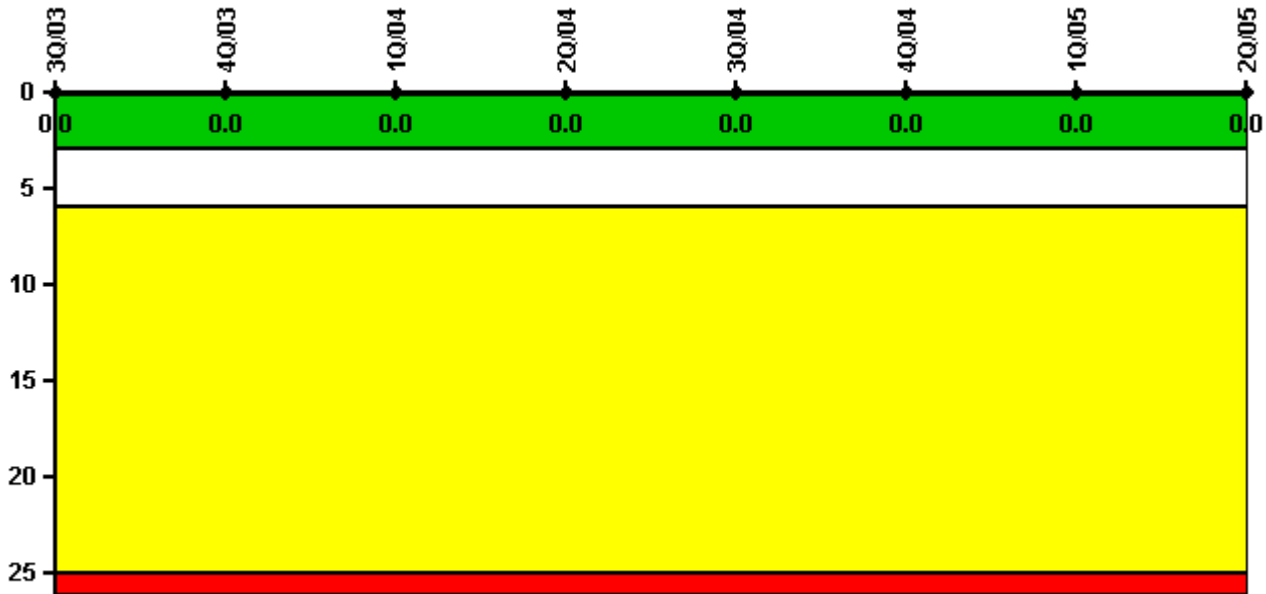
Last Modified: June 17, 2005

Byron 2

2Q/2005 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



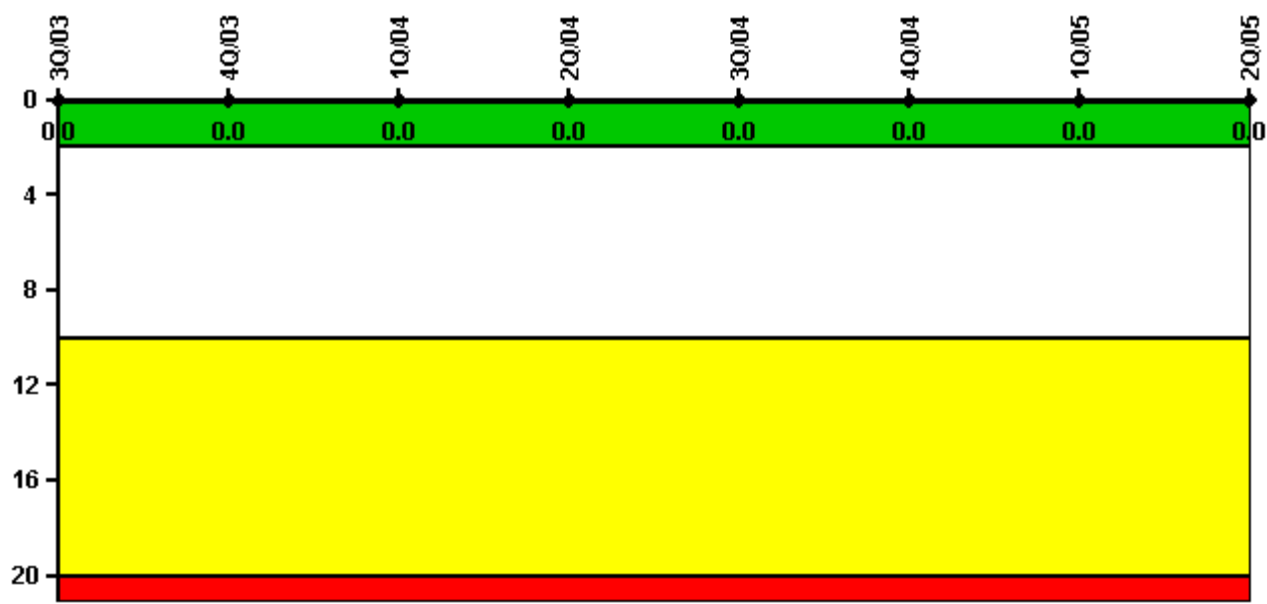
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	1967.0	1989.1	2208.0	2209.0	2160.0	2183.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



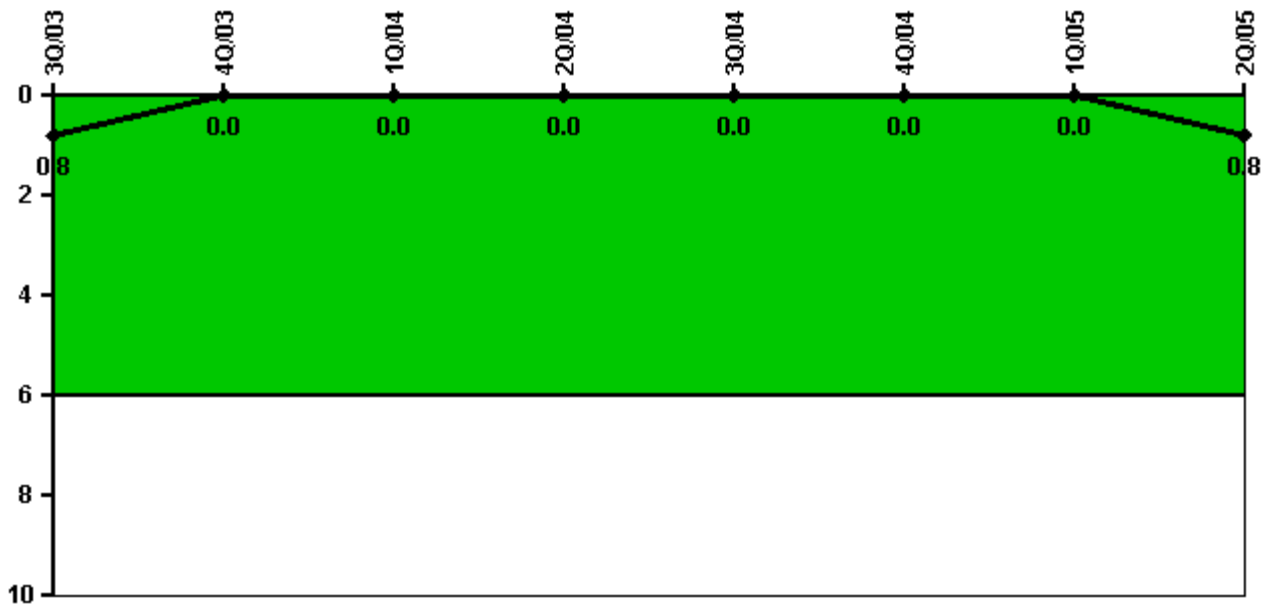
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



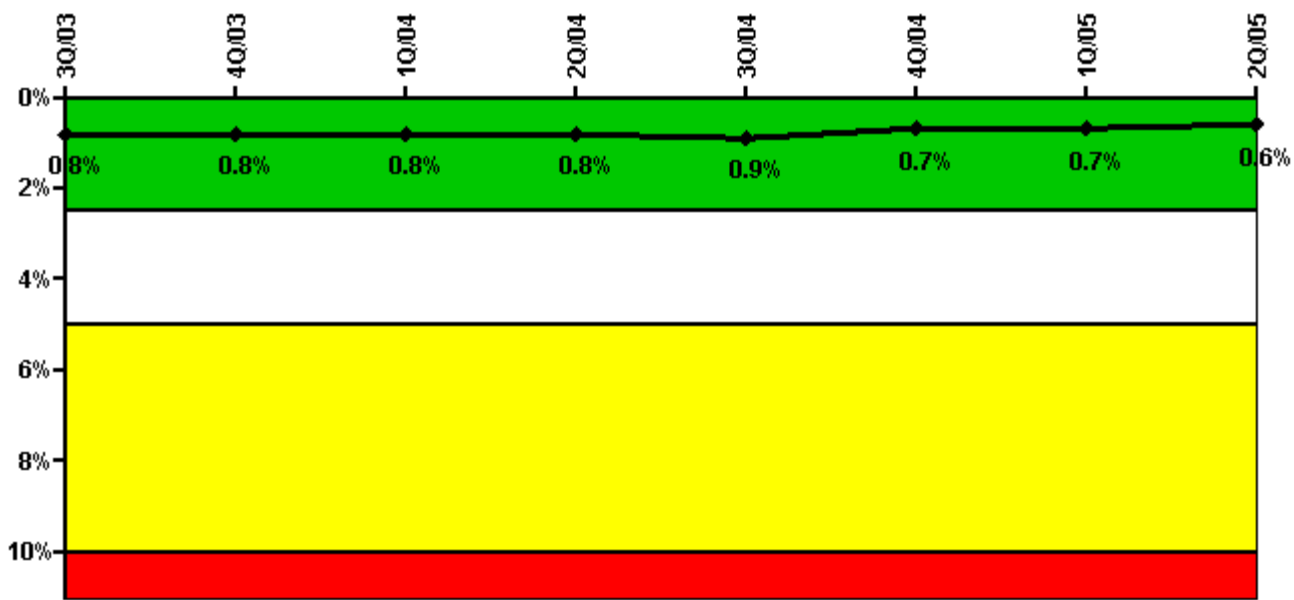
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Unplanned power changes	0	0	0	0	0	0	0	1.0
Critical hours	2208.0	2209.0	1967.0	1989.1	2208.0	2209.0	2160.0	2183.0
Indicator value	0.8	0	0	0	0	0	0	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



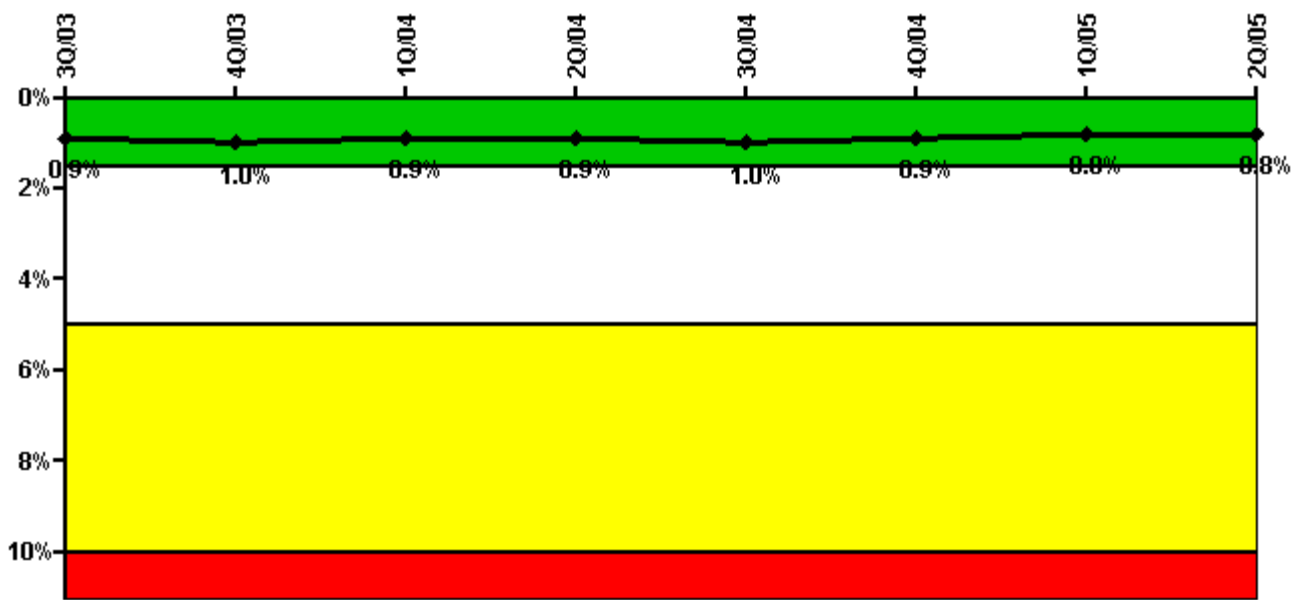
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Train 1								
Planned unavailable hours	3.20	1.50	6.20	2.20	22.40	1.80	4.00	1.80
Unplanned unavailable hours	0	0	0	0	0	0	0	5.20
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	4.10	2.90	1.80	17.40	1.80	41.00	2.30	3.70
Unplanned unavailable hours	54.90	0	0	0	25.10	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.8%	0.8%	0.8%	0.8%	0.9%	0.7%	0.7%	0.6%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



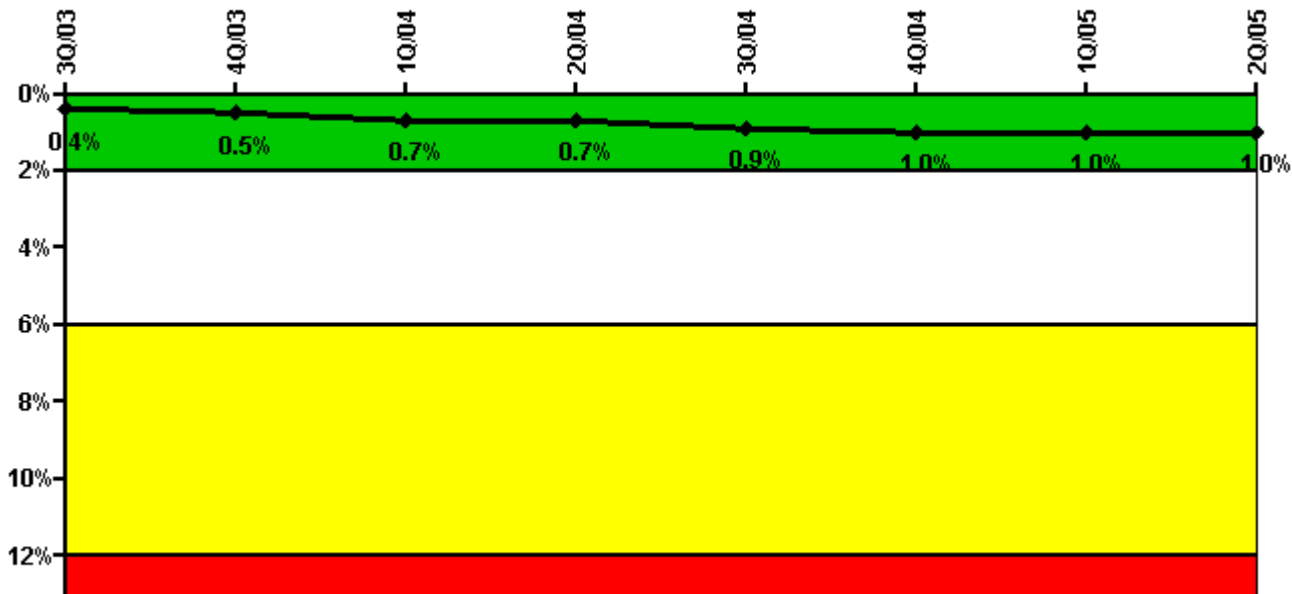
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Train 1								
Planned unavailable hours	3.20	23.40	5.30	2.20	42.60	1.80	3.30	1.90
Unplanned unavailable hours	0	3.70	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	1.90	2.90	1.80	2.90	4.90	4.50	1.50	3.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00
Train 3								
Planned unavailable hours	3.20	1.50	5.30	47.90	3.10	1.80	3.30	17.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00
Train 4								
Planned unavailable hours	2.10	24.60	1.80	16.60	45.50	3.50	1.50	22.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00
Indicator value	0.9%	1.0%	0.9%	0.9%	1.0%	0.9%	0.8%	0.8%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



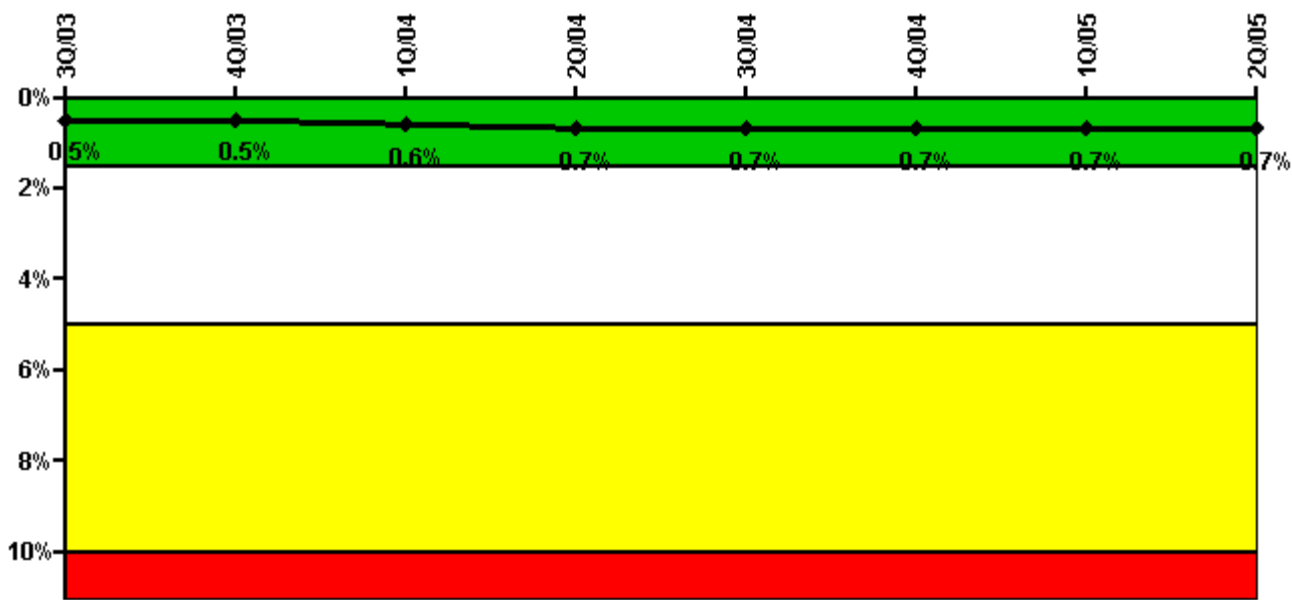
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Train 1								
Planned unavailable hours	7.00	3.30	6.90	4.10	5.80	18.60	4.90	4.00
Unplanned unavailable hours	7.00	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	3.40	11.10	42.60	4.90	56.30	5.20	3.80	40.30
Unplanned unavailable hours	0	25.60	57.90	0	66.80	0	25.50	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00
Indicator value	0.4%	0.5%	0.7%	0.7%	0.9%	1.0%	1.0%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



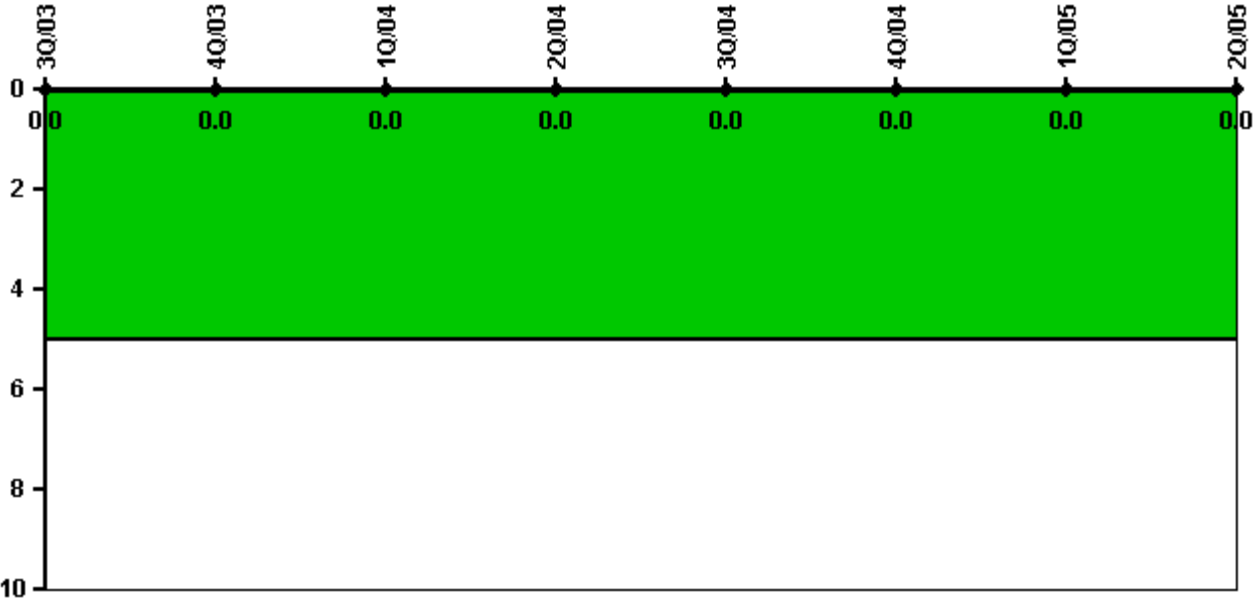
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Train 1								
Planned unavailable hours	58.50	1.60	9.50	3.30	3.10	1.90	3.30	21.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Train 2								
Planned unavailable hours	1.90	44.20	46.40	30.90	7.20	7.30	5.30	30.00
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00
Indicator value	0.5%	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%

Licensee Comments: none

Safety System Functional Failures (PWR)



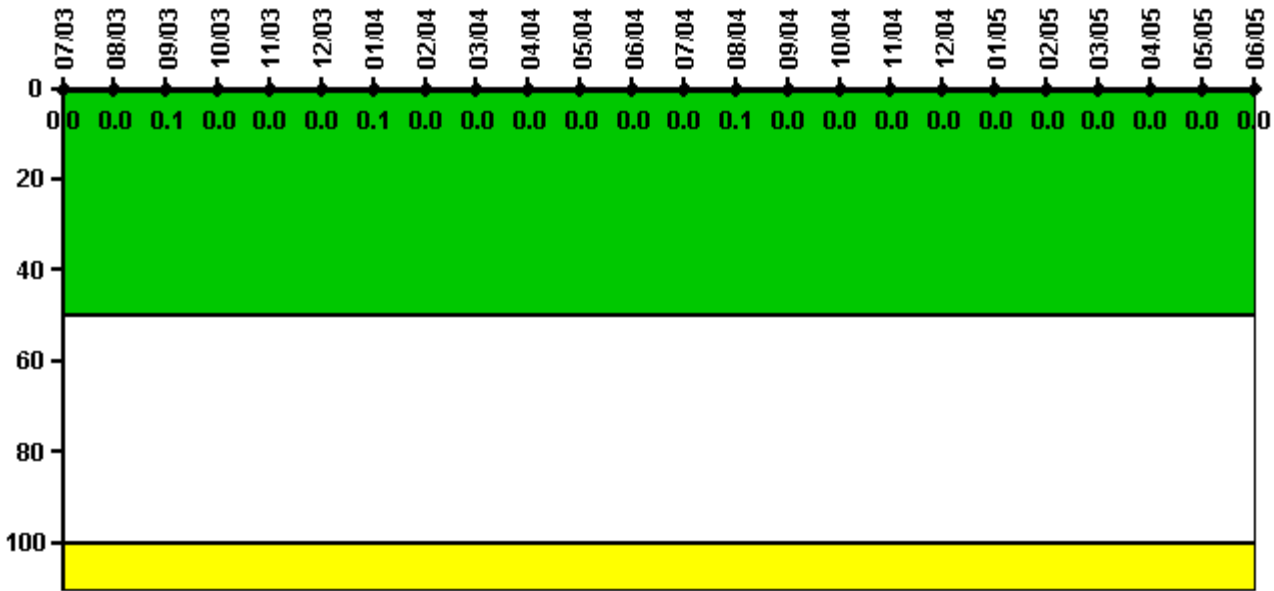
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



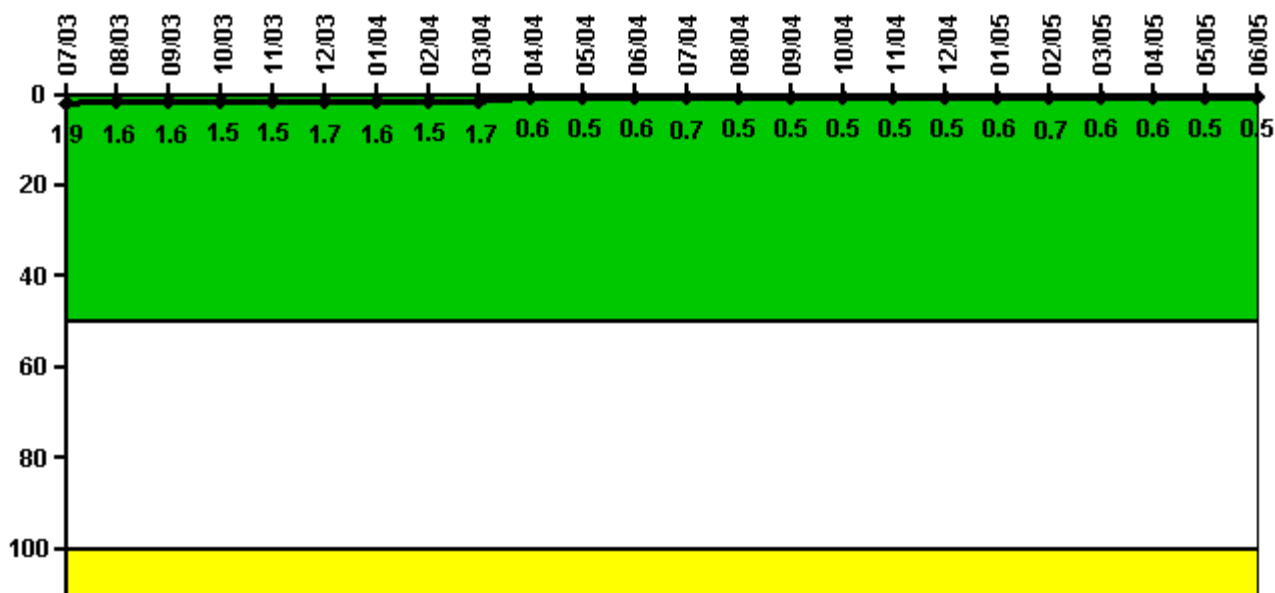
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum activity	0.000335	0.000342	0.000523	0.000012	0.000365	0.000399	0.001020	0.000380	0.000384	0.000220	0.000239	0.000245
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0.1	0	0	0	0.1	0	0	0	0	0
Reactor Coolant System Activity	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05
Maximum activity	0.000276	0.000541	0.000288	0.000310	0.000332	0.000336	0.000341	0.000336	0.000355	0.000366	0.000363	0.000381
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



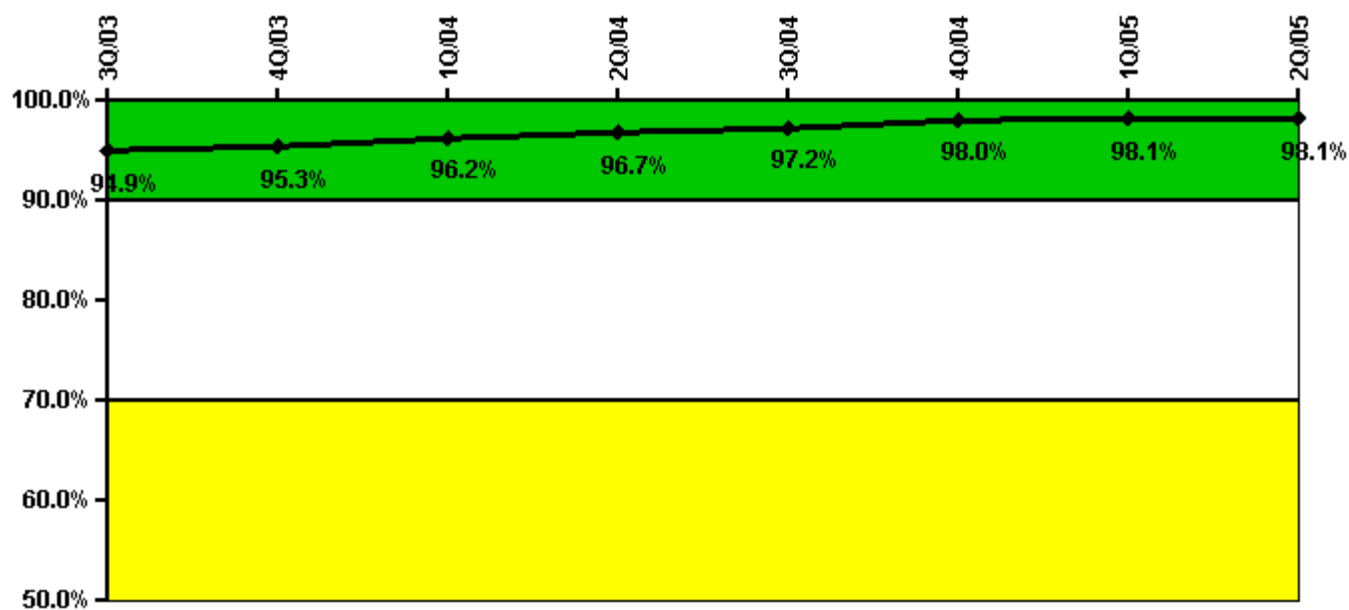
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum leakage	0.185	0.155	0.157	0.152	0.148	0.172	0.156	0.154	0.174	0.064	0.051	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.9	1.6	1.6	1.5	1.5	1.7	1.6	1.5	1.7	0.6	0.5	0.6
Reactor Coolant System Leakage	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05
Maximum leakage	0.067	0.054	0.049	0.054	0.049	0.049	0.057	0.065	0.060	0.064	0.053	0.053
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



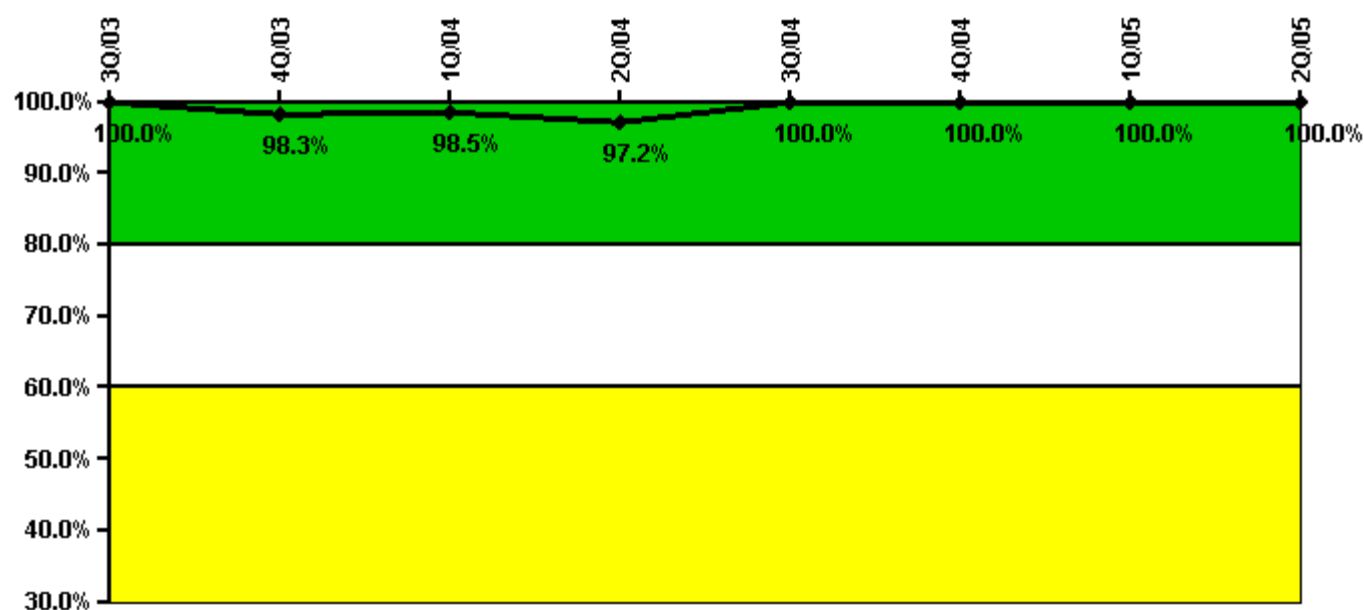
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Successful opportunities	45.0	18.0	50.0	62.0	93.0	4.0	8.0	81.0
Total opportunities	47.0	18.0	50.0	62.0	94.0	4.0	9.0	84.0
Indicator value	94.9%	95.3%	96.2%	96.7%	97.2%	98.0%	98.1%	98.1%

Licensee Comments: none

ERO Drill Participation



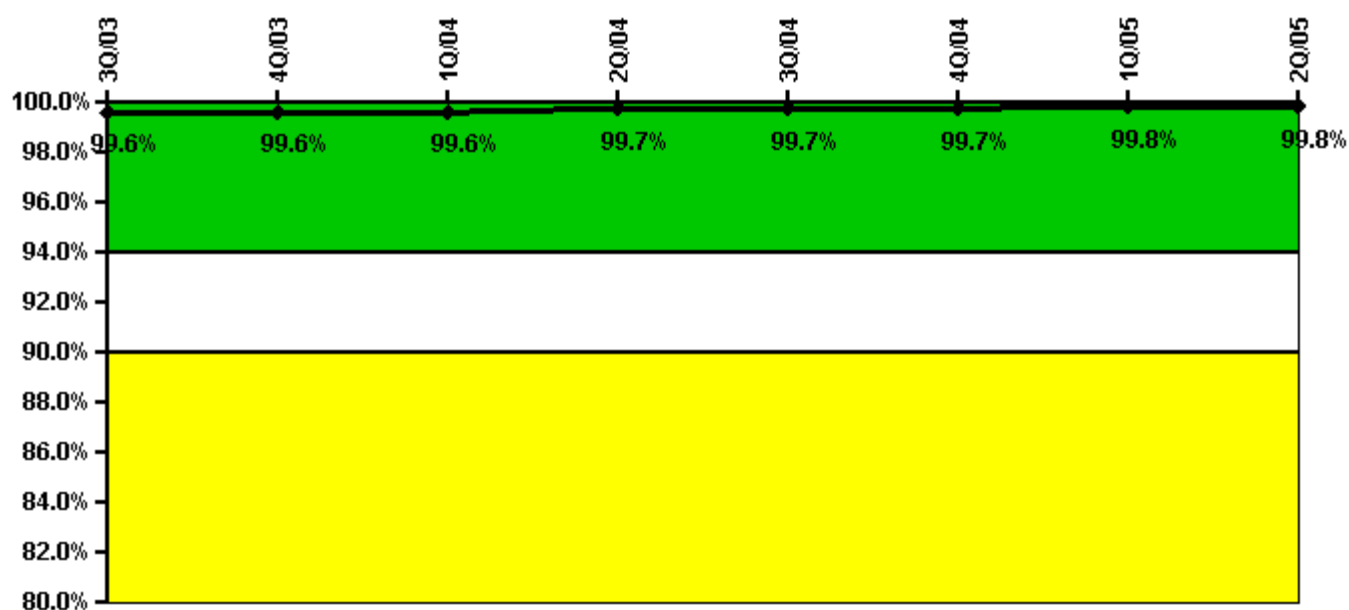
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Participating Key personnel	59.0	57.0	67.0	70.0	76.0	74.0	75.0	71.0
Total Key personnel	59.0	58.0	68.0	72.0	76.0	74.0	75.0	71.0
Indicator value	100.0%	98.3%	98.5%	97.2%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



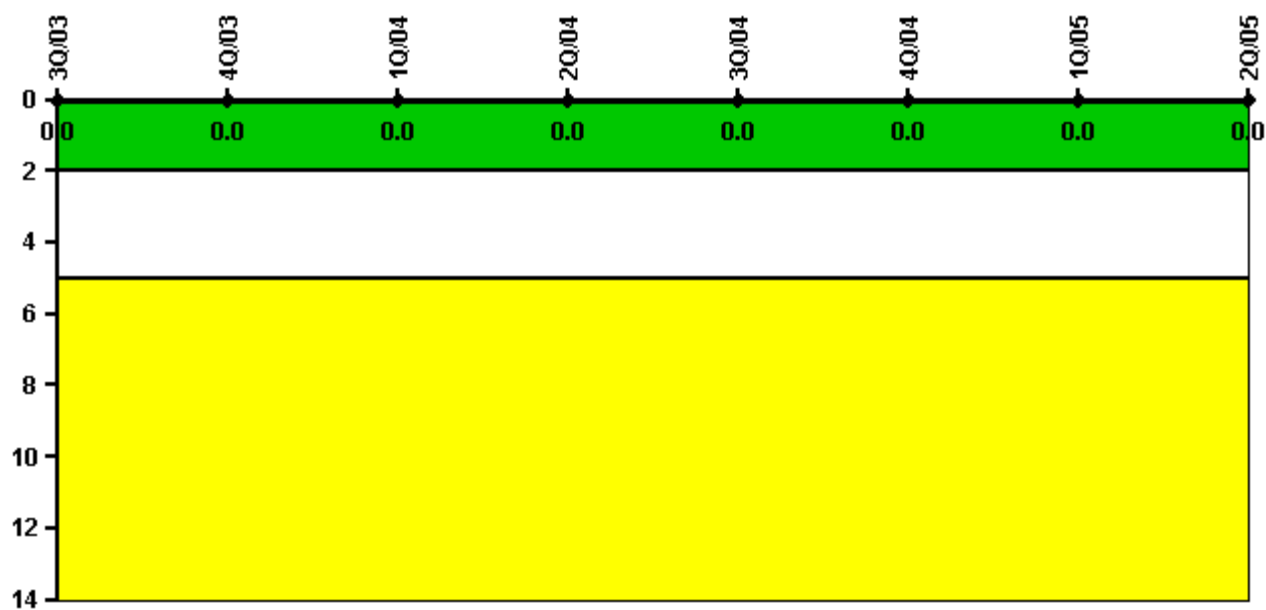
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
Successful siren-tests	5988	5997	6000	5996	6093	6102	6004	6006
Total sirens-tests	6016	6016	6016	6016	6110	6110	6016	6015
Indicator value	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness

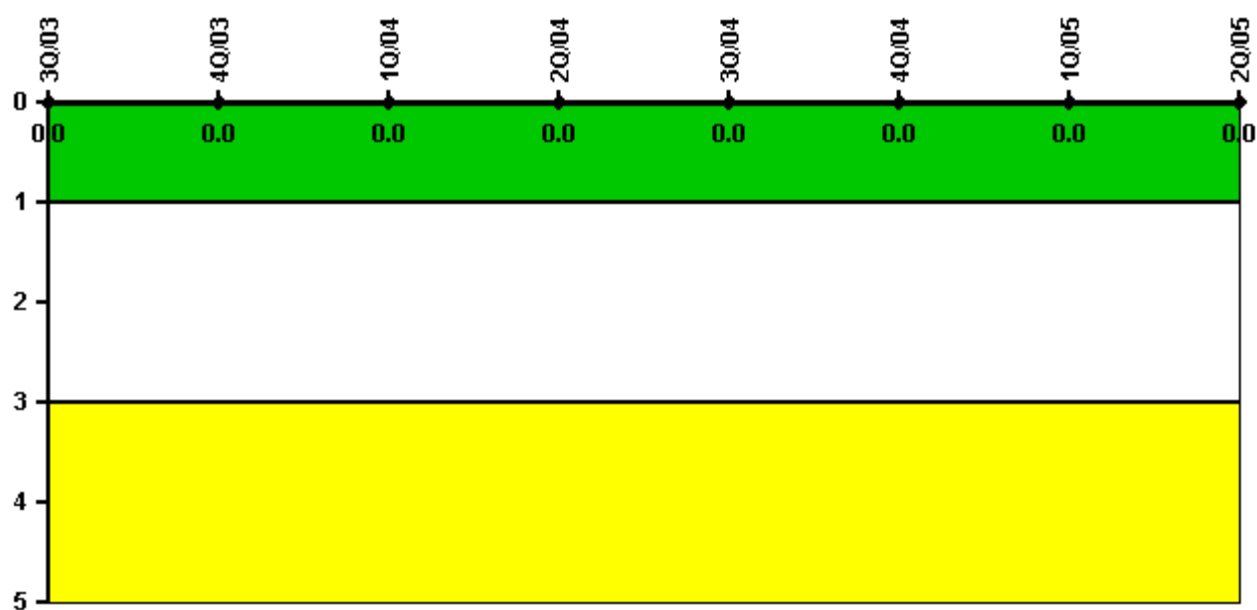


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

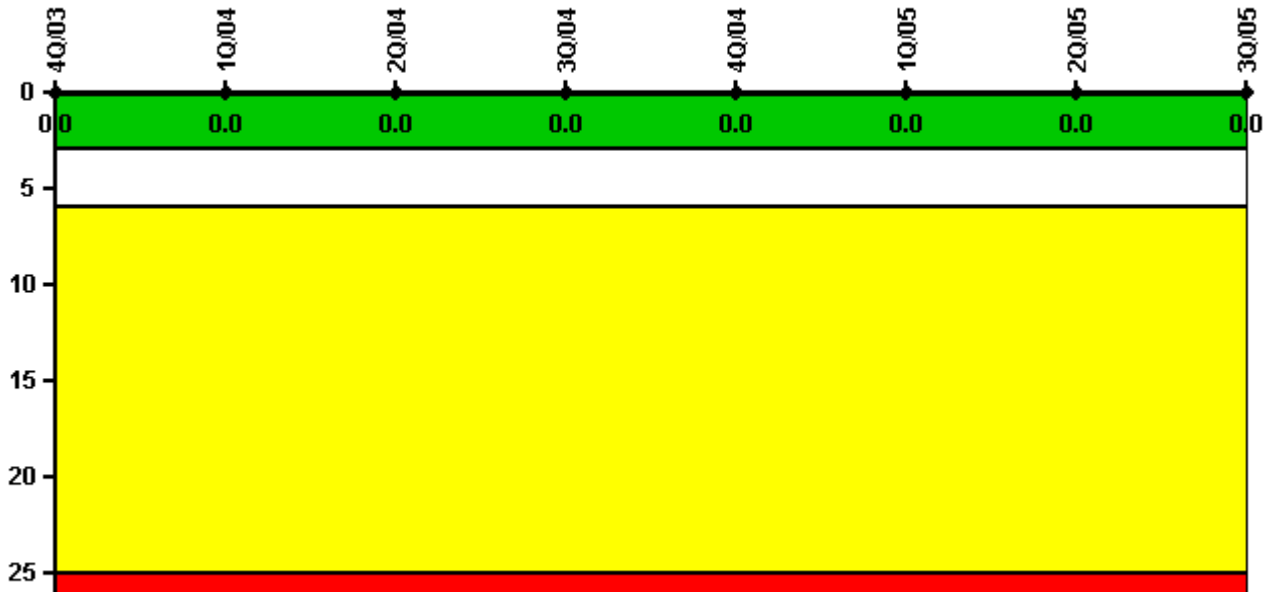
Last Modified: August 3, 2005

Byron 2

3Q/2005 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



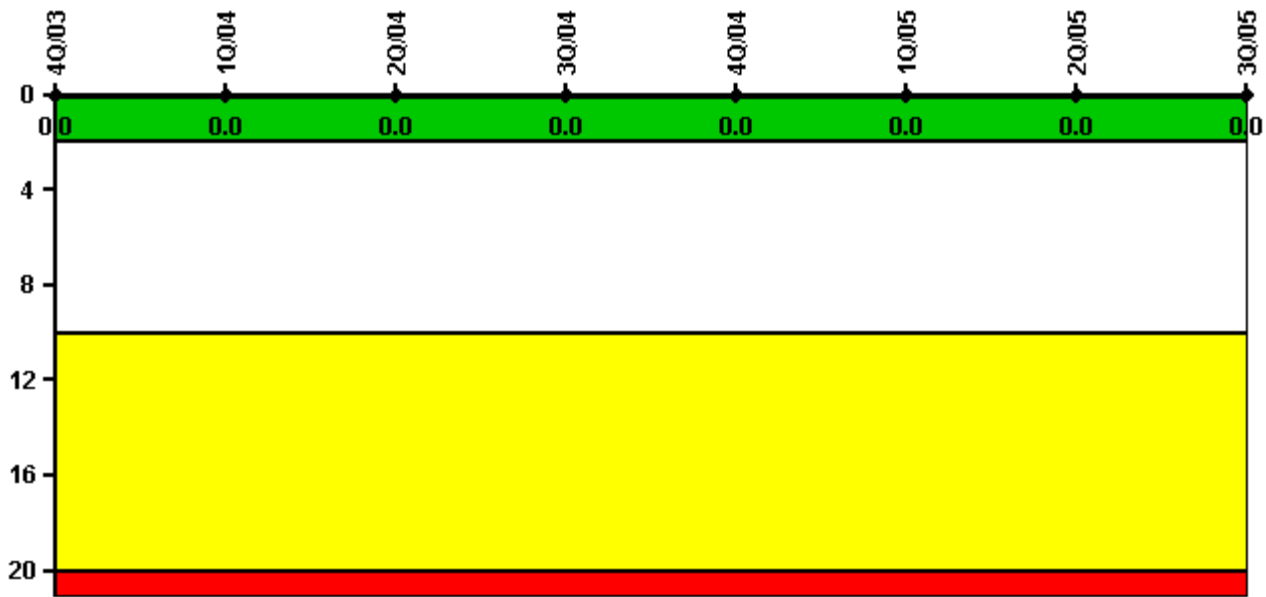
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2209.0	1967.0	1989.1	2208.0	2209.0	2160.0	2183.0	2087.1
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



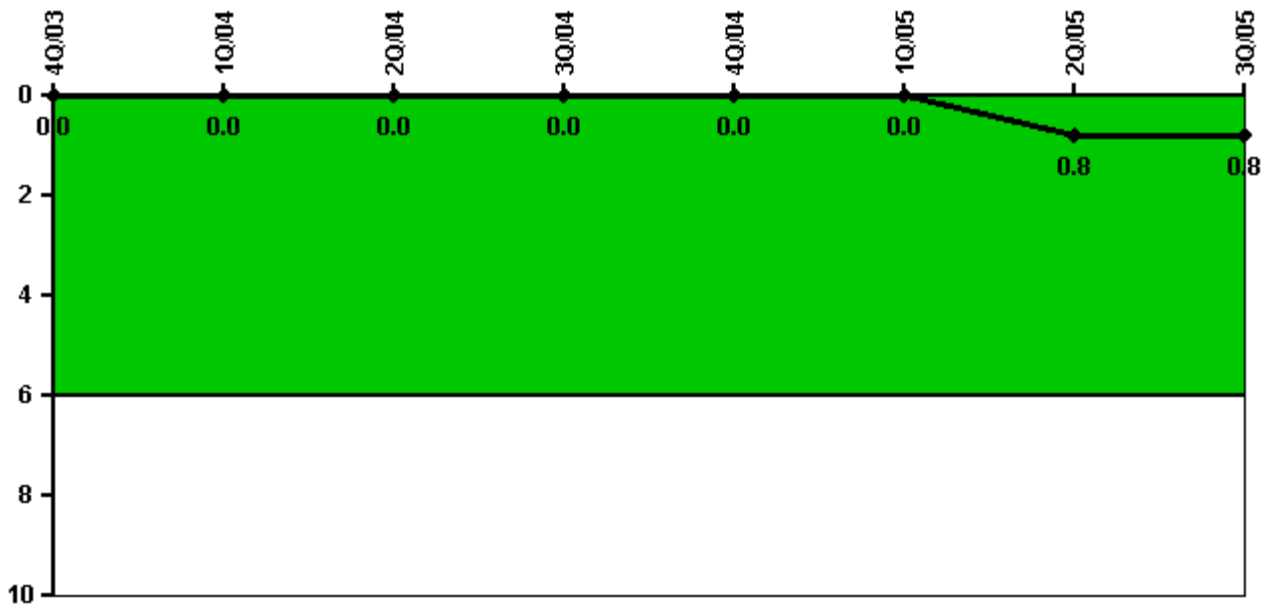
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



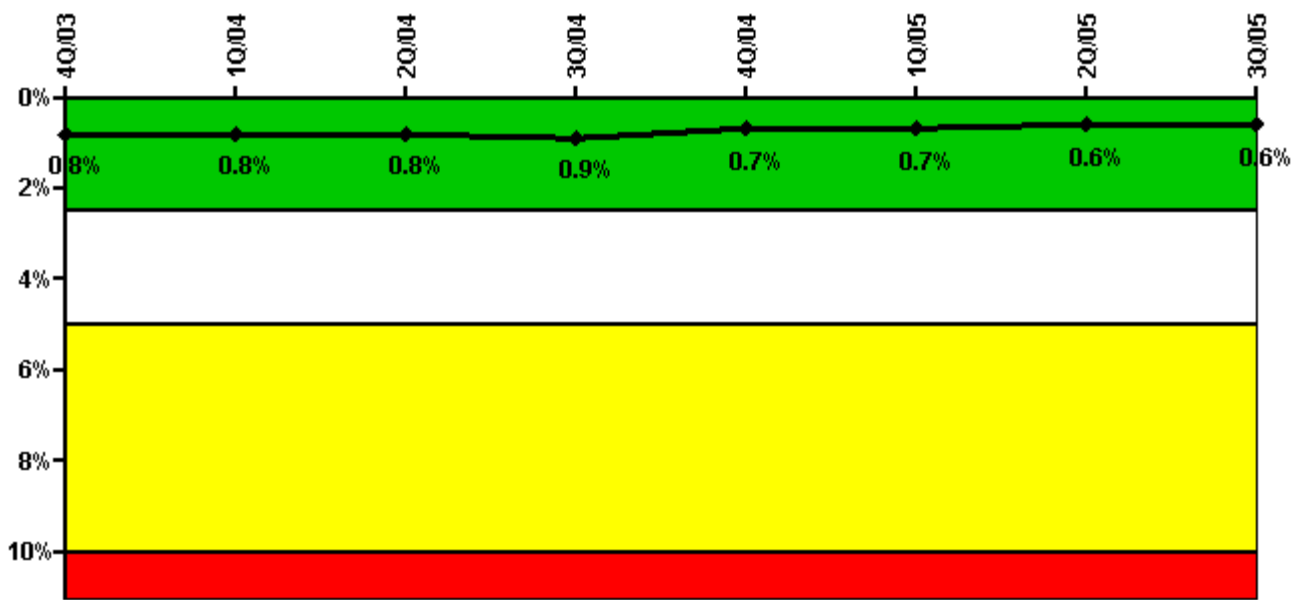
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2209.0	1967.0	1989.1	2208.0	2209.0	2160.0	2183.0	2087.1
Indicator value	0	0	0	0	0	0	0.8	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



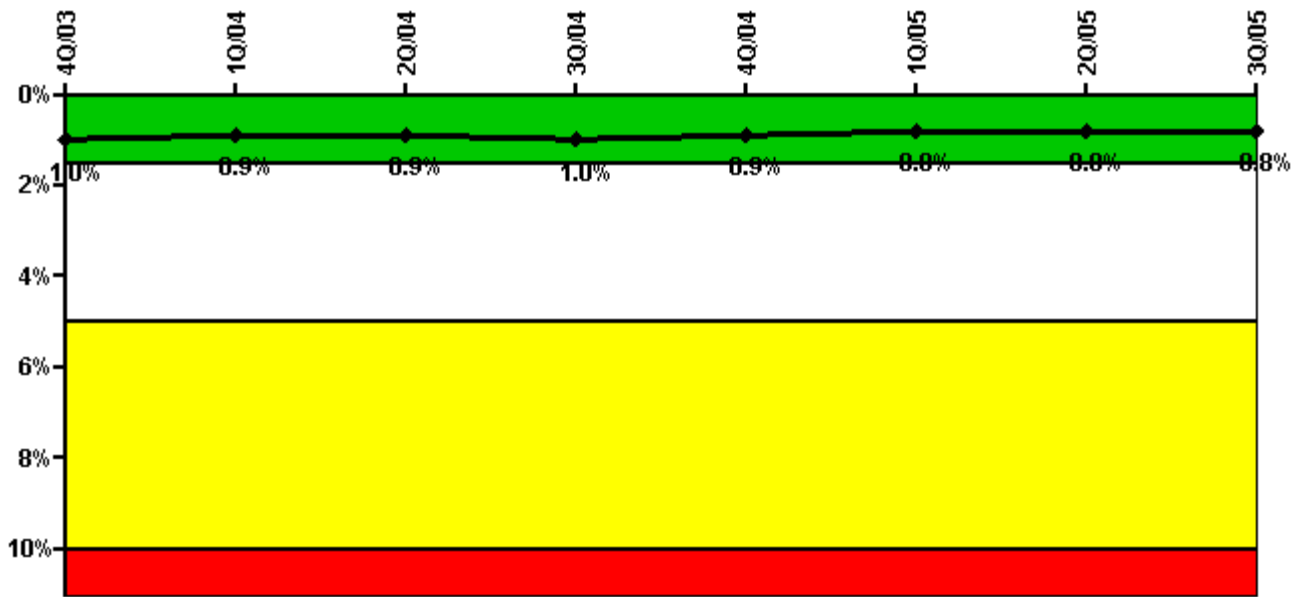
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Train 1								
Planned unavailable hours	1.50	6.20	2.20	22.40	1.80	4.00	1.80	3.30
Unplanned unavailable hours	0	0	0	0	0	0	5.20	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	2.90	1.80	17.40	1.80	41.00	2.30	3.70	1.40
Unplanned unavailable hours	0	0	0	25.10	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	0.8%	0.8%	0.8%	0.9%	0.7%	0.7%	0.6%	0.6%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



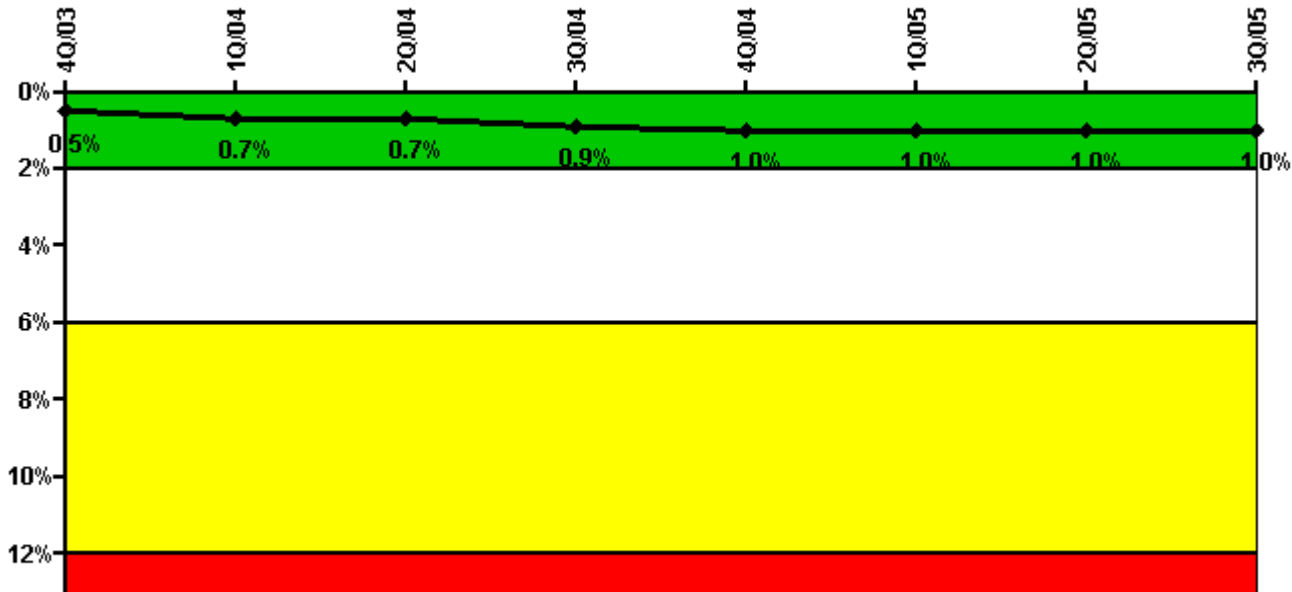
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Train 1								
Planned unavailable hours	23.40	5.30	2.20	42.60	1.80	3.30	1.90	3.30
Unplanned unavailable hours	3.70	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05
Train 2								
Planned unavailable hours	2.90	1.80	2.90	4.90	4.50	1.50	3.70	1.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05
Train 3								
Planned unavailable hours	1.50	5.30	47.90	3.10	1.80	3.30	17.70	3.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05
Train 4								
Planned unavailable hours	24.60	1.80	16.60	45.50	3.50	1.50	22.70	1.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05
Indicator value	1.0%	0.9%	0.9%	1.0%	0.9%	0.8%	0.8%	0.8%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



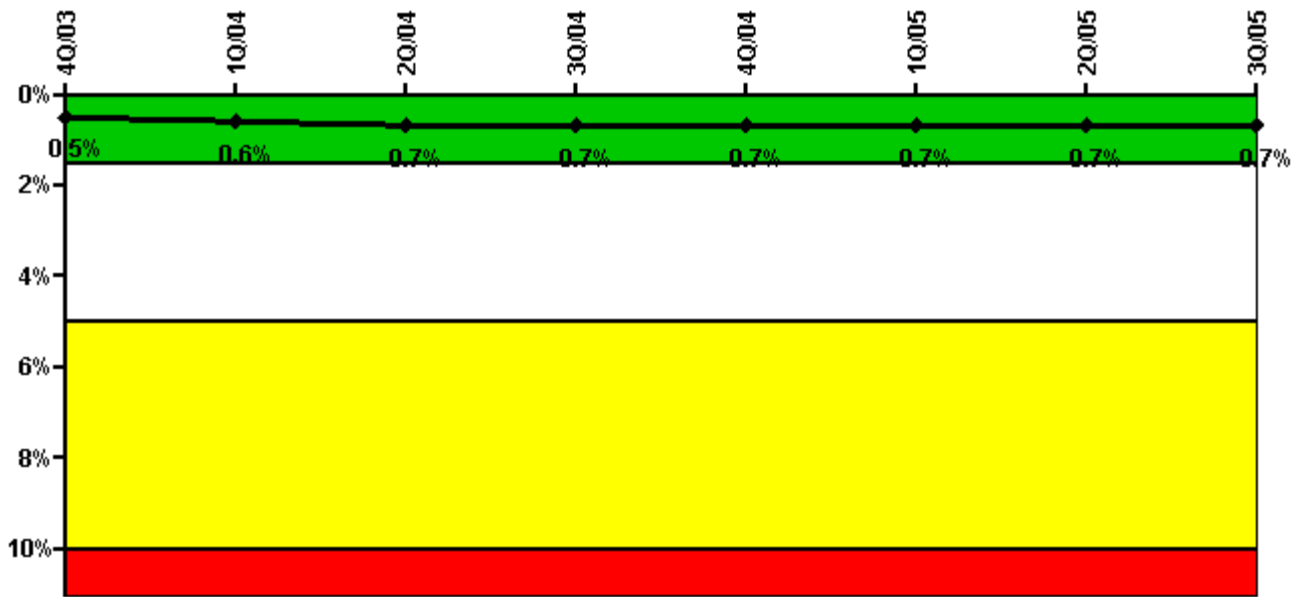
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Train 1								
Planned unavailable hours	3.30	6.90	4.10	5.80	18.60	4.90	4.00	4.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05
Train 2								
Planned unavailable hours	11.10	42.60	4.90	56.30	5.20	3.80	40.30	3.10
Unplanned unavailable hours	25.60	57.90	0	66.80	0	25.50	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05
Indicator value	0.5%	0.7%	0.7%	0.9%	1.0%	1.0%	1.0%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



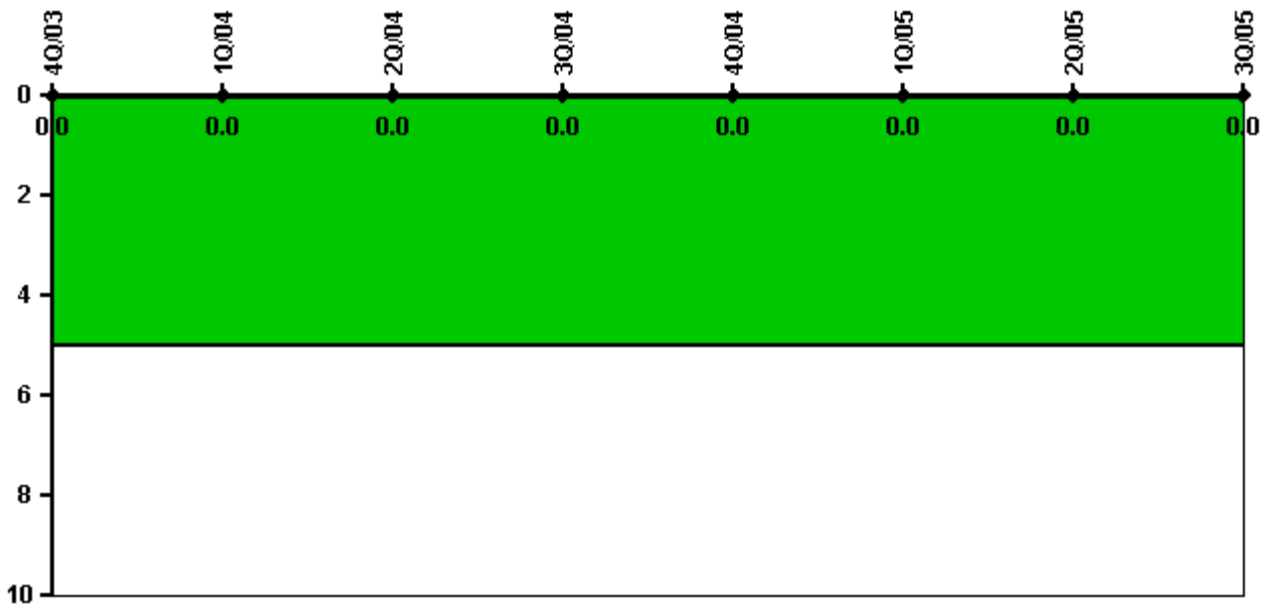
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Train 1								
Planned unavailable hours	1.60	9.50	3.30	3.10	1.90	3.30	21.80	3.50
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	44.20	46.40	30.90	7.20	7.30	5.30	30.00	6.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%

Licensee Comments: none

Safety System Functional Failures (PWR)



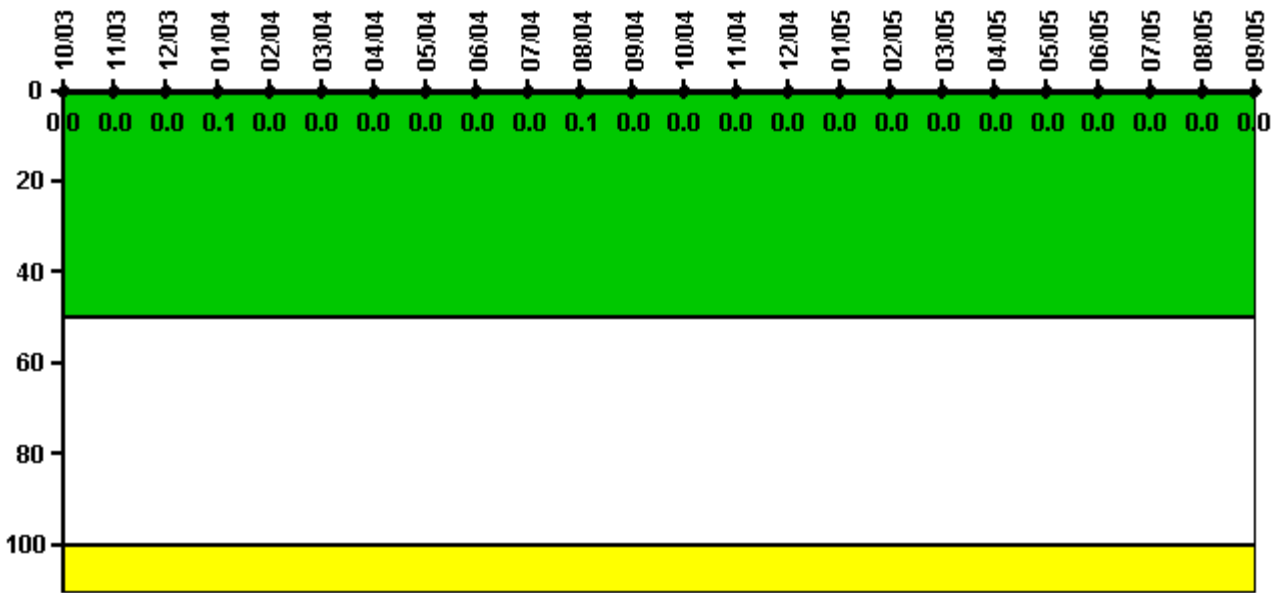
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



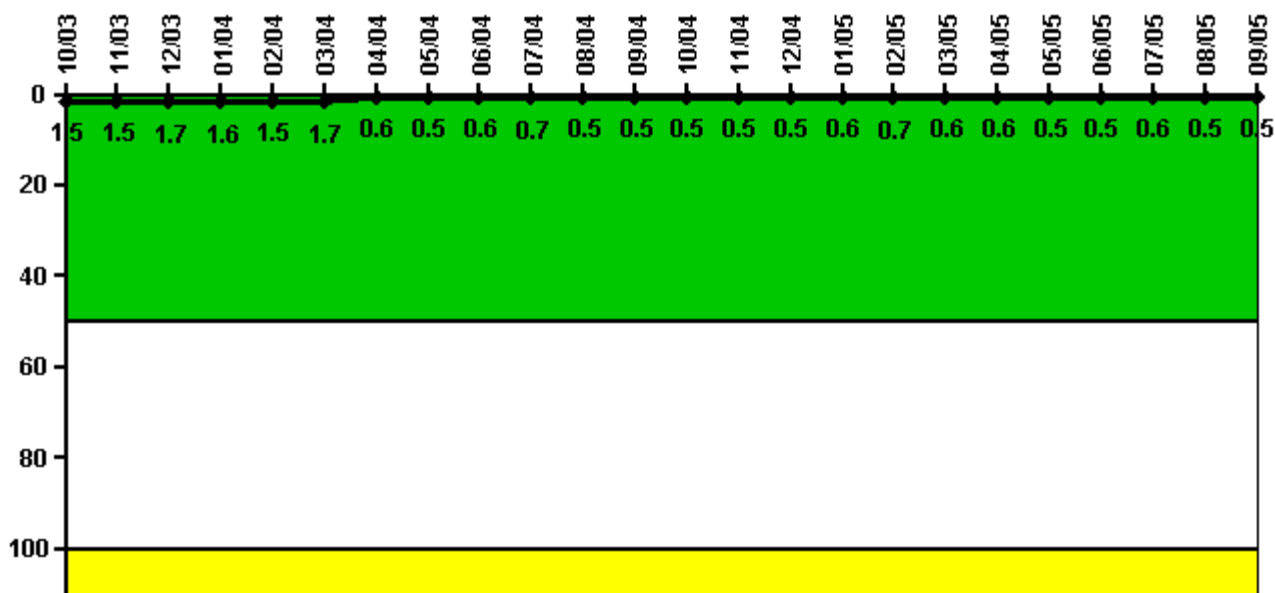
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum activity	0.000012	0.000365	0.000399	0.001020	0.000380	0.000384	0.000220	0.000239	0.000245	0.000276	0.000541	0.000288
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0.1	0	0	0	0	0	0	0.1	0
Reactor Coolant System Activity	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05
Maximum activity	0.000310	0.000332	0.000336	0.000341	0.000336	0.000355	0.000366	0.000363	0.000381	0.000372	0.000499	0.000419
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



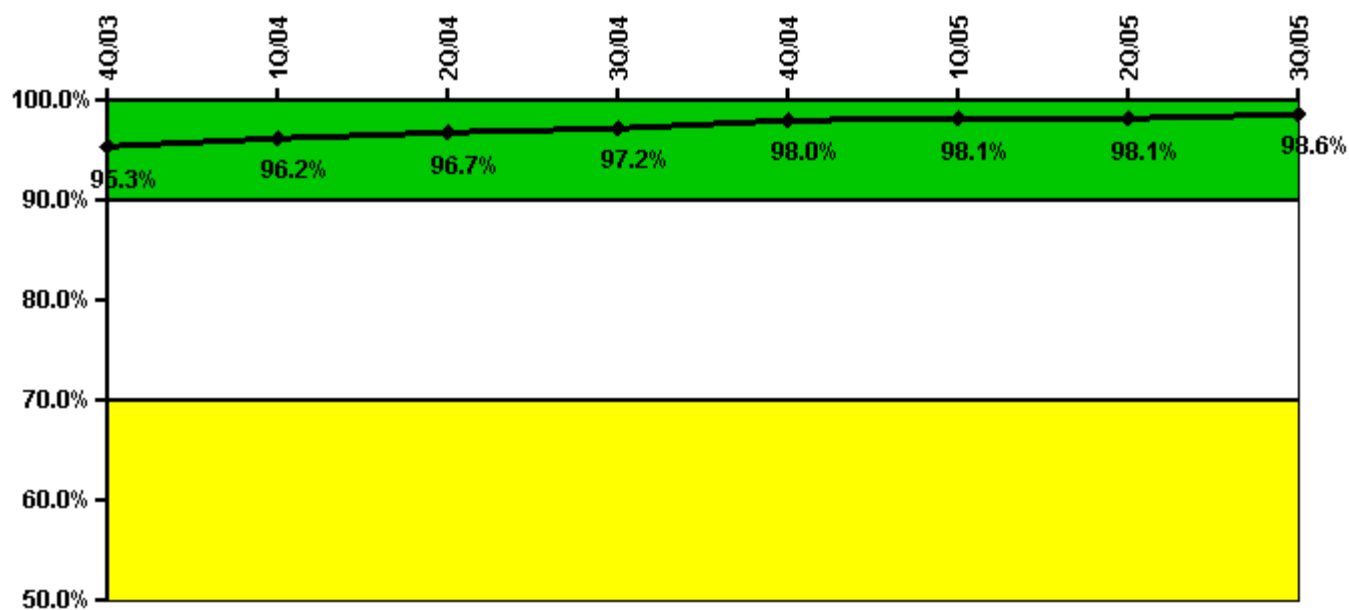
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum leakage	0.152	0.148	0.172	0.156	0.154	0.174	0.064	0.051	0.060	0.067	0.054	0.049
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.5	1.5	1.7	1.6	1.5	1.7	0.6	0.5	0.6	0.7	0.5	0.5
Reactor Coolant System Leakage	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05
Maximum leakage	0.054	0.049	0.049	0.057	0.065	0.060	0.064	0.053	0.053	0.063	0.052	0.054
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.5	0.5	0.6	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



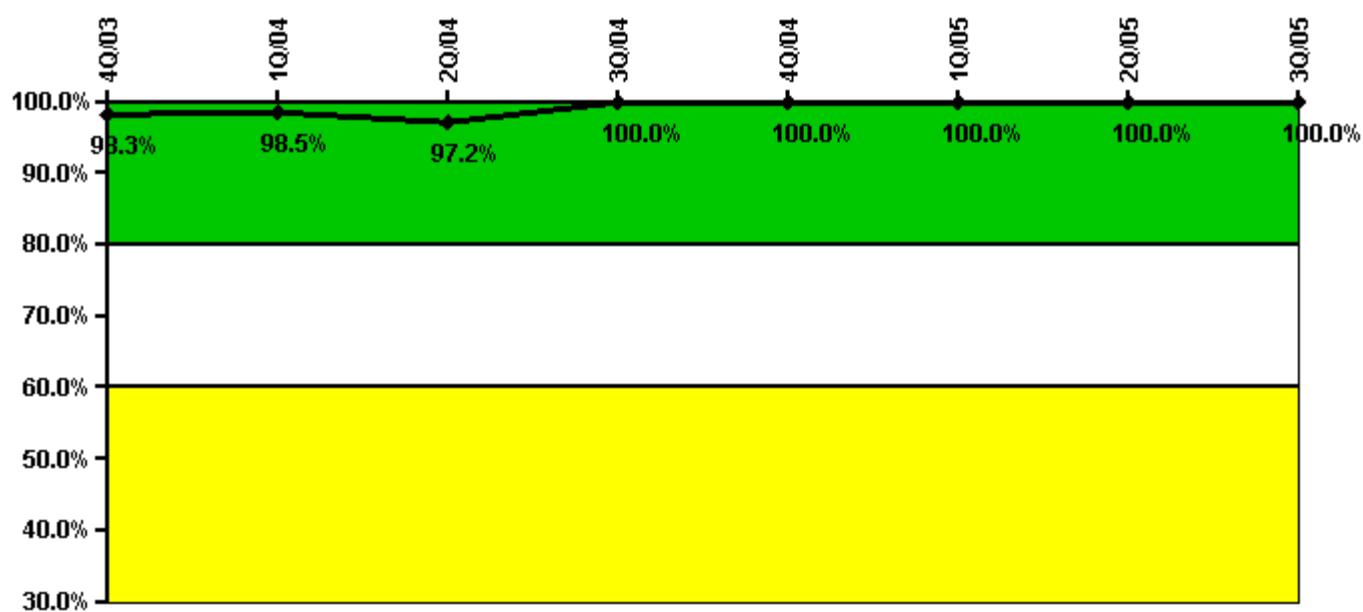
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Successful opportunities	18.0	50.0	62.0	93.0	4.0	8.0	81.0	30.0
Total opportunities	18.0	50.0	62.0	94.0	4.0	9.0	84.0	30.0
Indicator value	95.3%	96.2%	96.7%	97.2%	98.0%	98.1%	98.1%	98.6%

Licensee Comments: none

ERO Drill Participation



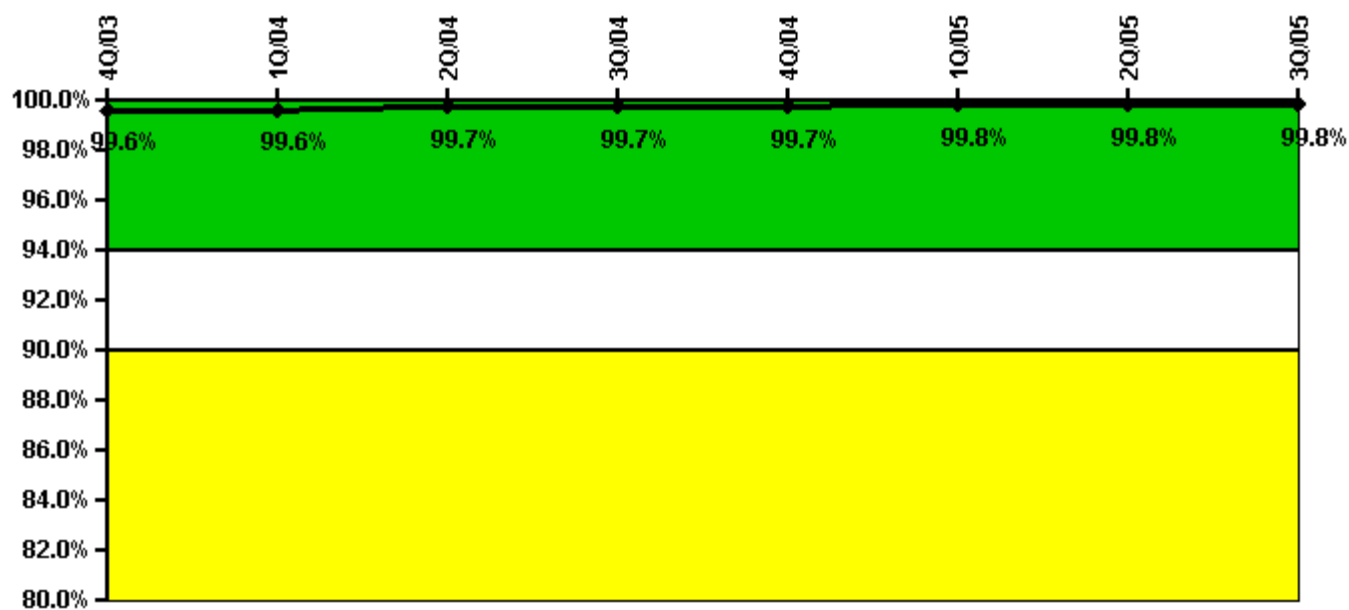
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Participating Key personnel	57.0	67.0	70.0	76.0	74.0	75.0	71.0	76.0
Total Key personnel	58.0	68.0	72.0	76.0	74.0	75.0	71.0	76.0
Indicator value	98.3%	98.5%	97.2%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



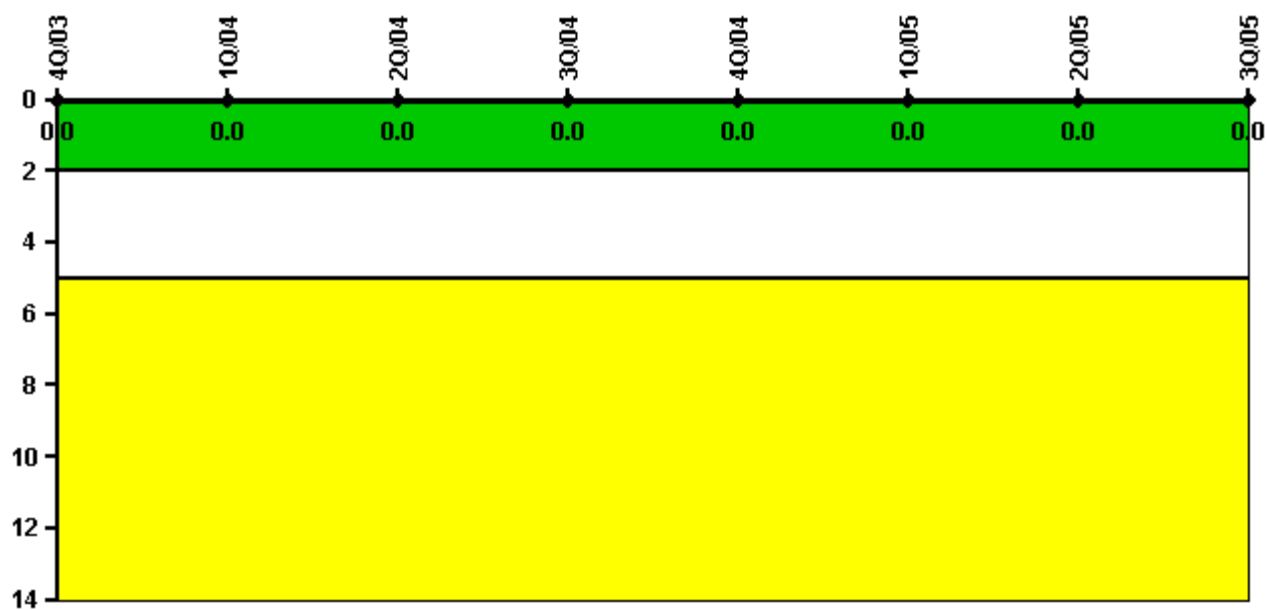
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Successful siren-tests	5997	6000	5996	6093	6102	6004	6006	6005
Total sirens-tests	6016	6016	6016	6110	6110	6016	6015	6014
Indicator value	99.6%	99.6%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness

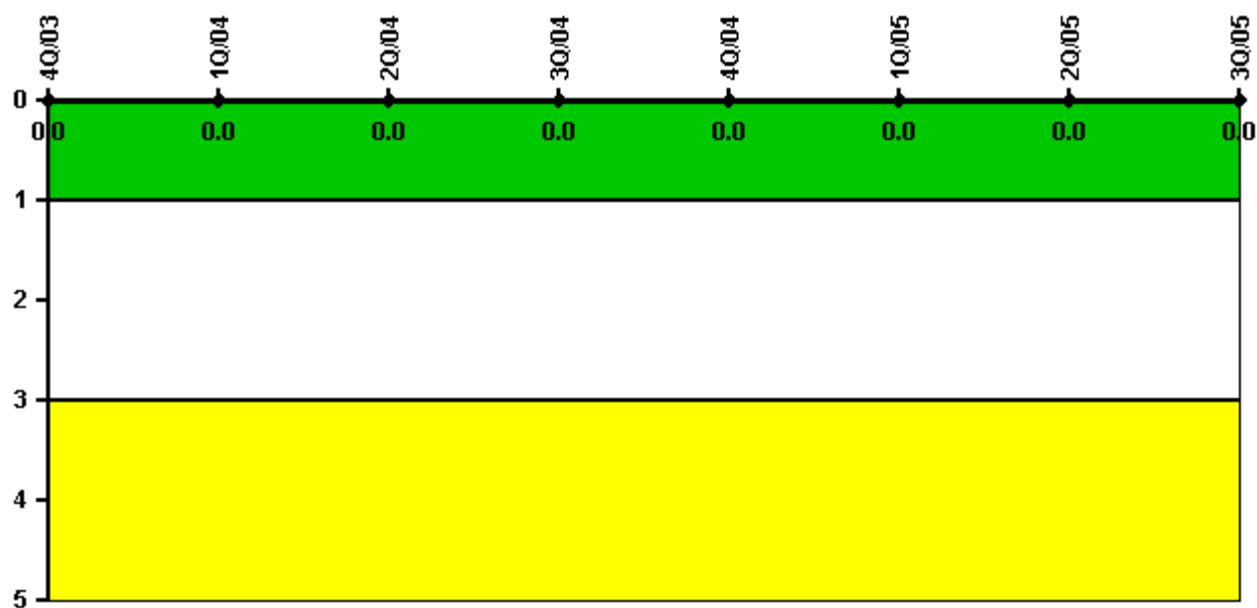


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

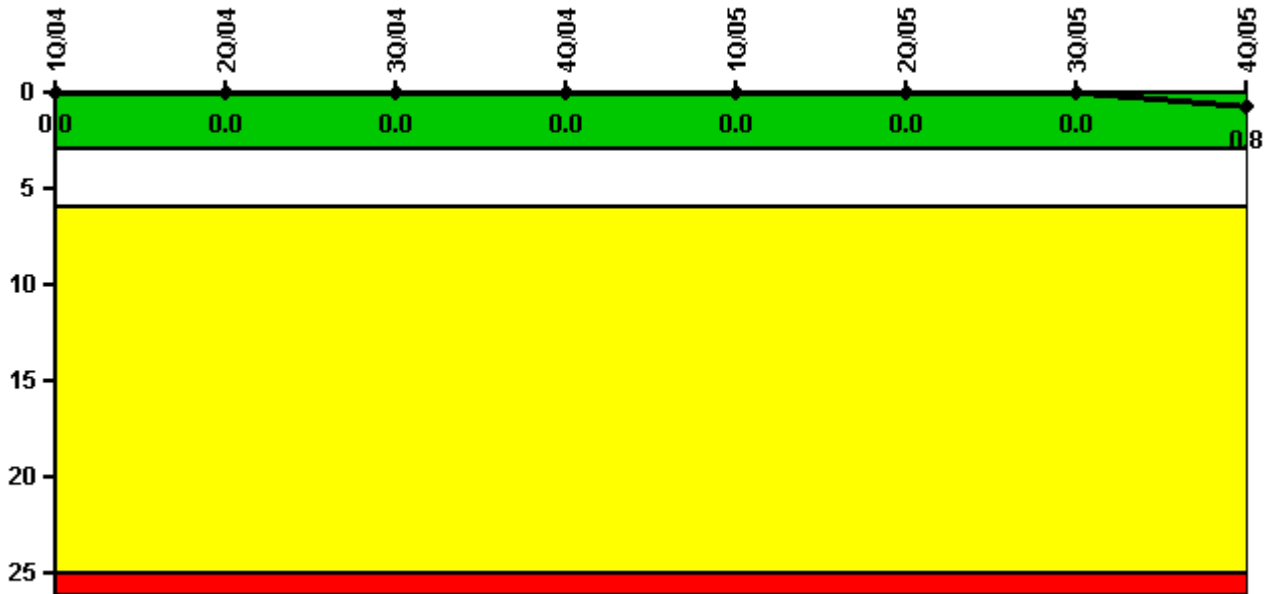
[Physical Protection](#) information not publicly available.

Byron 2

4Q/2005 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Unplanned scrams	0	0	0	0	0	0	0	1.0
Critical hours	1967.0	1989.1	2208.0	2209.0	2160.0	2183.0	2087.1	1922.4
Indicator value	0	0	0	0	0	0	0	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



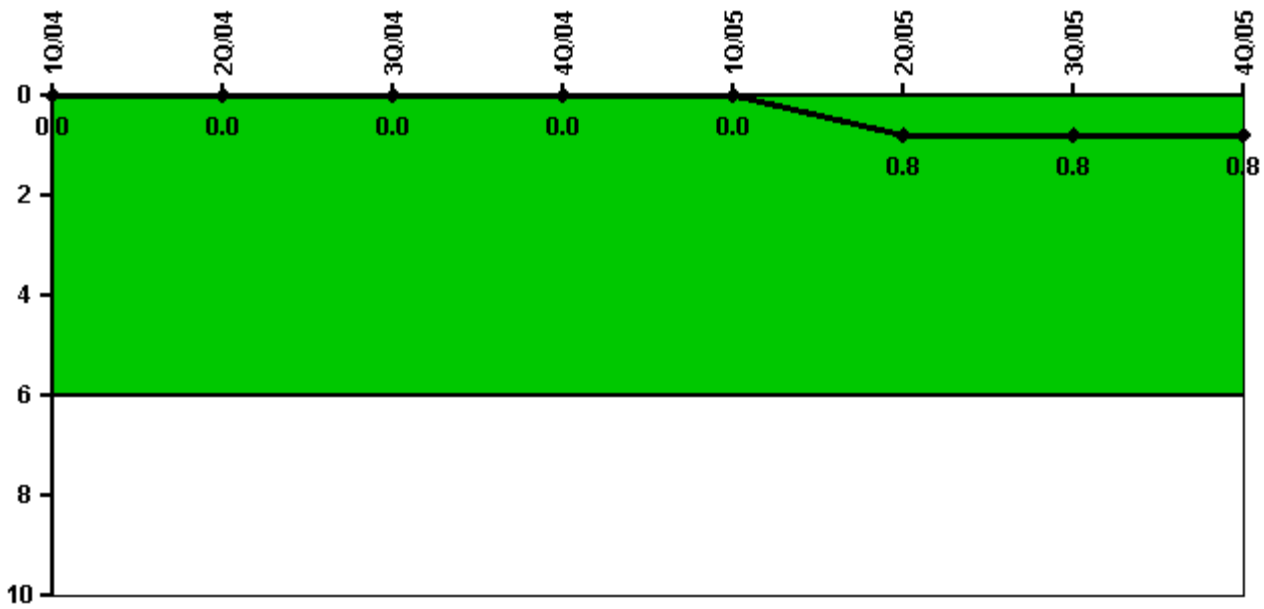
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



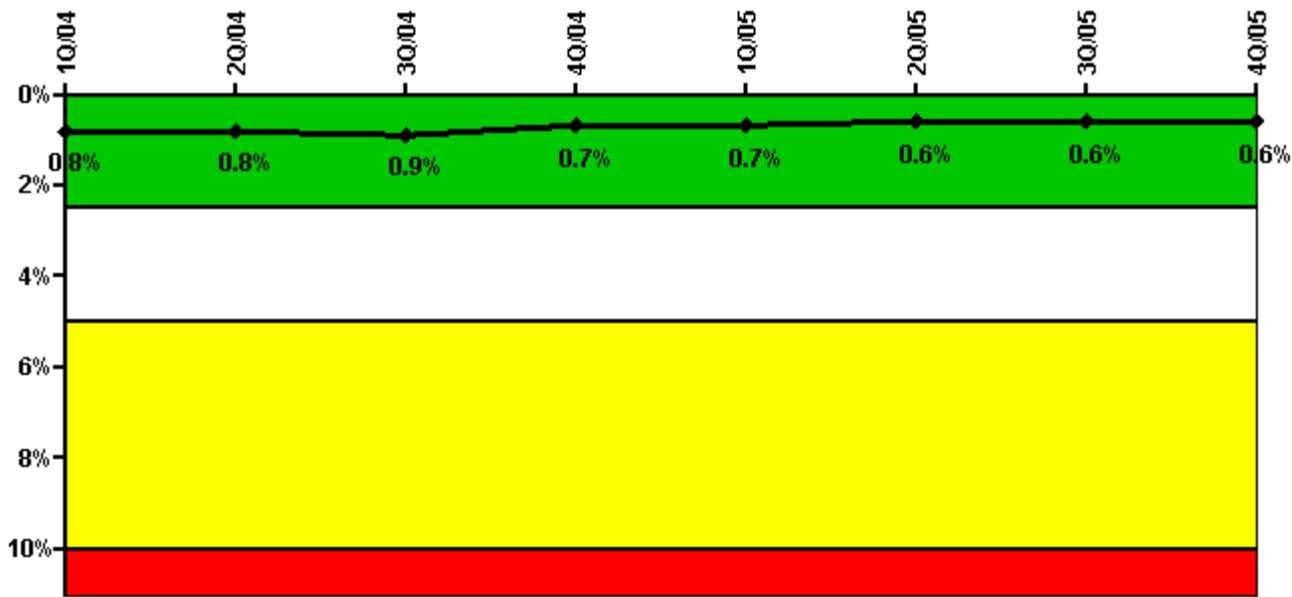
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Unplanned power changes	0	0	0	0	0	1.0	0	0
Critical hours	1967.0	1989.1	2208.0	2209.0	2160.0	2183.0	2087.1	1922.4
Indicator value	0	0	0	0	0	0.8	0.8	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



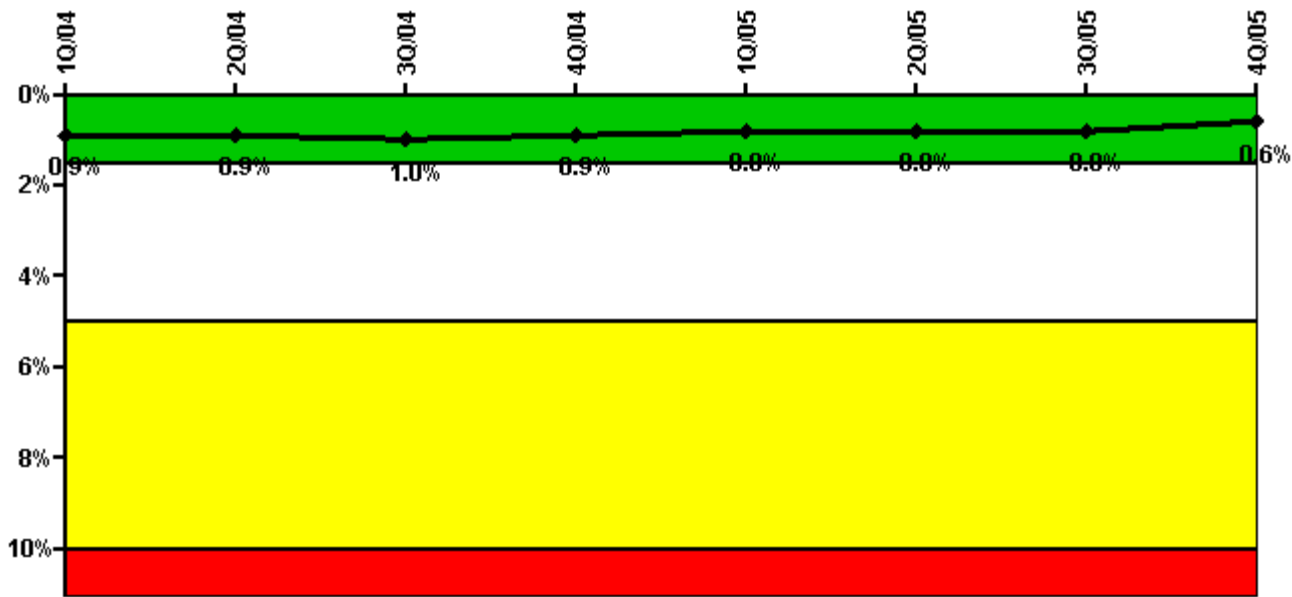
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Train 1								
Planned unavailable hours	6.20	2.20	22.40	1.80	4.00	1.80	3.30	1.90
Unplanned unavailable hours	0	0	0	0	0	5.20	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	1.80	17.40	1.80	41.00	2.30	3.70	1.40	1.60
Unplanned unavailable hours	0	0	25.10	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.8%	0.8%	0.9%	0.7%	0.7%	0.6%	0.6%	0.6%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



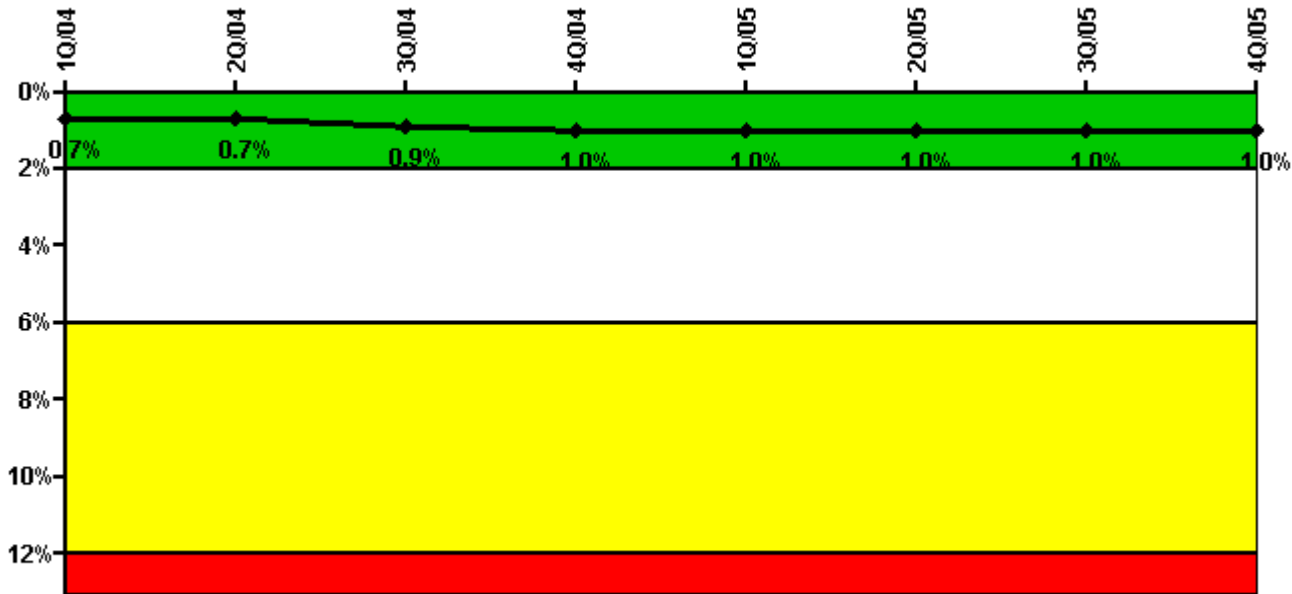
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Train 1								
Planned unavailable hours	5.30	2.20	42.60	1.80	3.30	1.90	3.30	1.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37
Train 2								
Planned unavailable hours	1.80	2.90	4.90	4.50	1.50	3.70	1.40	1.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37
Train 3								
Planned unavailable hours	5.30	47.90	3.10	1.80	3.30	17.70	3.30	1.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37
Train 4								
Planned unavailable hours	1.80	16.60	45.50	3.50	1.50	22.70	1.50	1.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37
Indicator value	0.9%	0.9%	1.0%	0.9%	0.8%	0.8%	0.8%	0.6%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



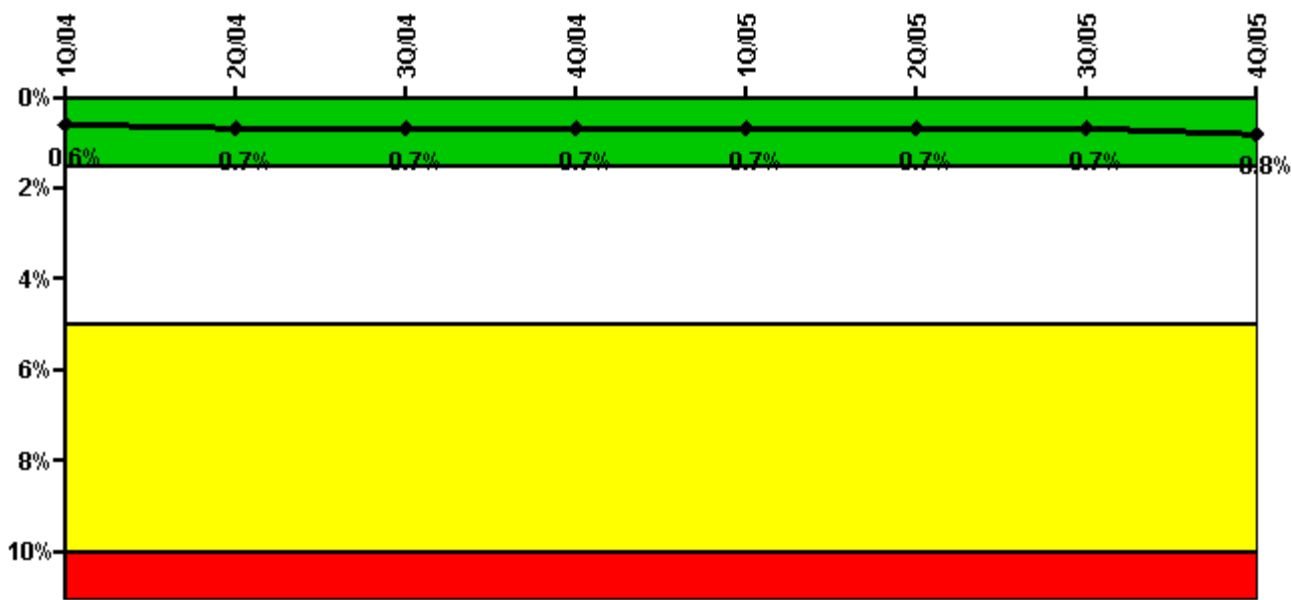
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Train 1								
Planned unavailable hours	6.90	4.10	5.80	18.60	4.90	4.00	4.60	3.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37
Train 2								
Planned unavailable hours	42.60	4.90	56.30	5.20	3.80	40.30	3.10	2.40
Unplanned unavailable hours	57.90	0	66.80	0	25.50	0	0	3.20
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1967.02	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37
Indicator value	0.7%	0.7%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



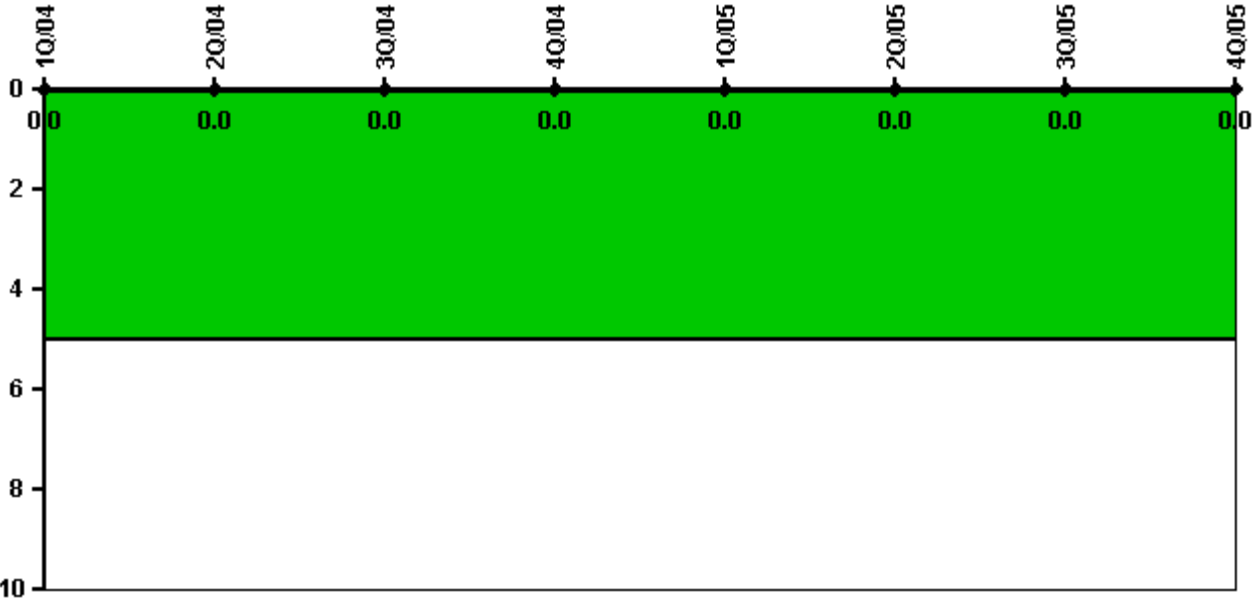
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Train 1								
Planned unavailable hours	9.50	3.30	3.10	1.90	3.30	21.80	3.50	14.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	46.40	30.90	7.20	7.30	5.30	30.00	6.60	14.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%

Licensee Comments: none

Safety System Functional Failures (PWR)



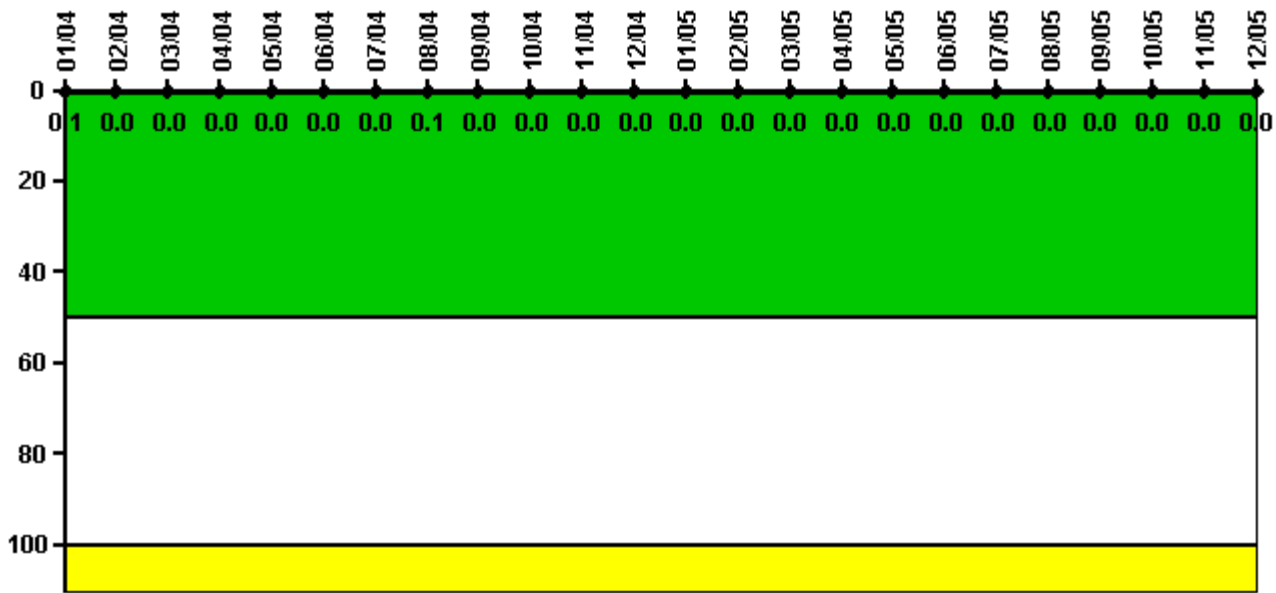
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



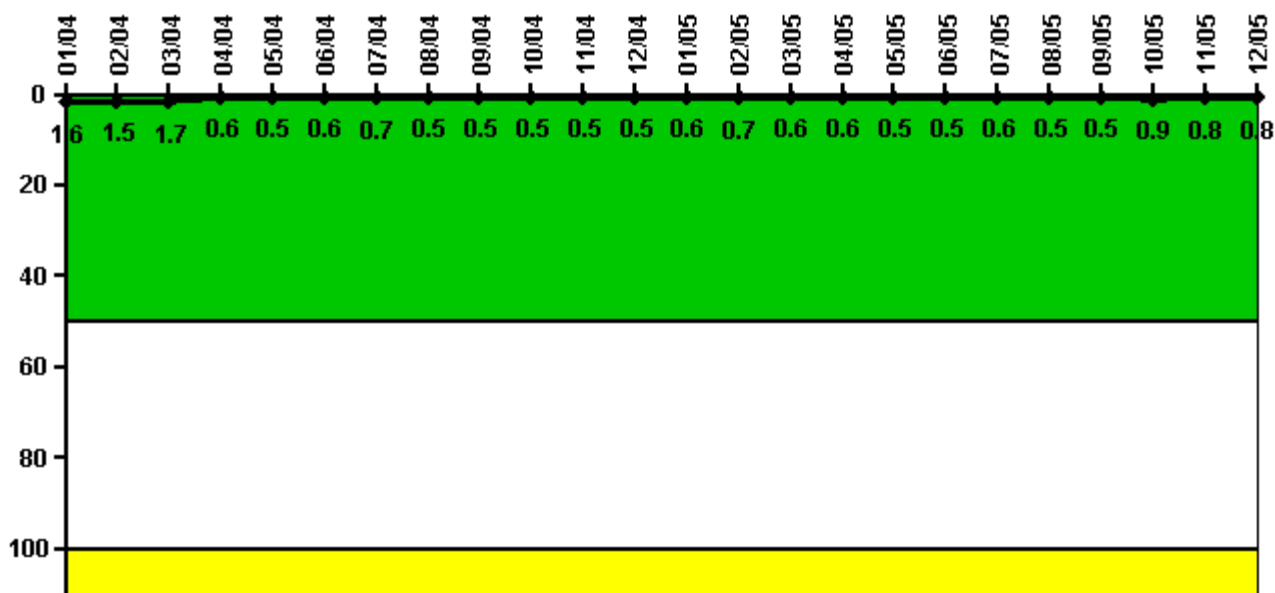
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum activity	0.001020	0.000380	0.000384	0.000220	0.000239	0.000245	0.000276	0.000541	0.000288	0.000310	0.000332	0.000336
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0.1	0	0	0	0
Reactor Coolant System Activity	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum activity	0.000341	0.000336	0.000355	0.000366	0.000363	0.000381	0.000372	0.000499	0.000419	0.000209	0.000222	0.000236
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



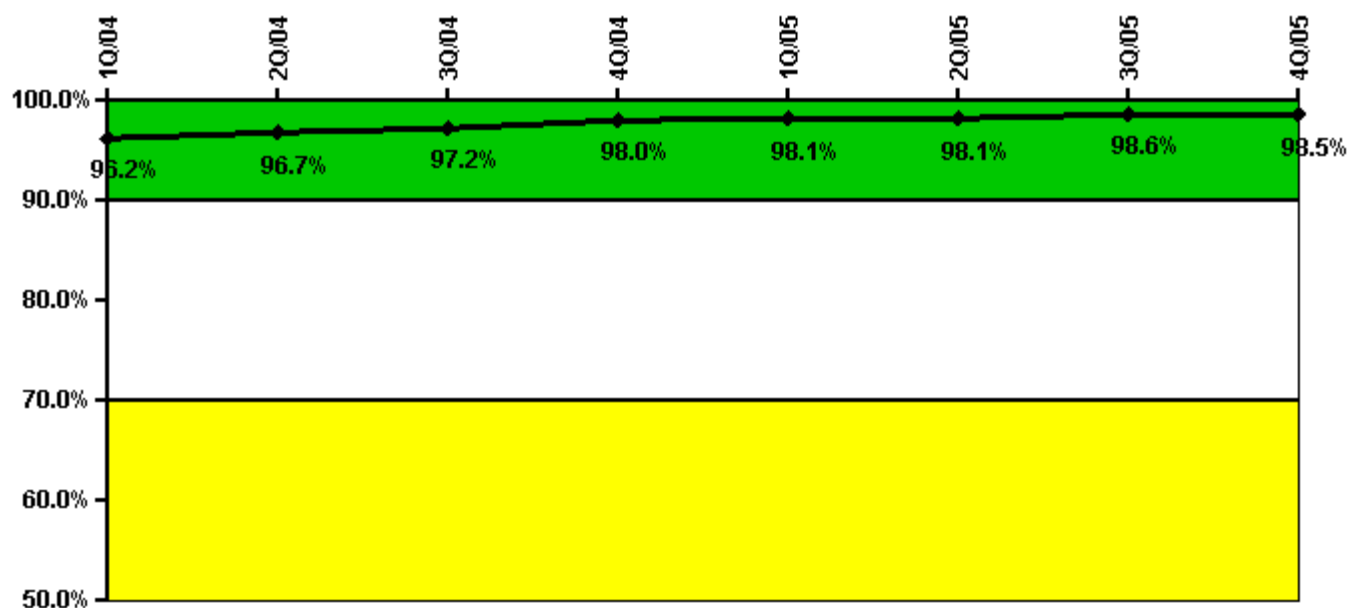
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum leakage	0.156	0.154	0.174	0.064	0.051	0.060	0.067	0.054	0.049	0.054	0.049	0.049
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.6	1.5	1.7	0.6	0.5	0.6	0.7	0.5	0.5	0.5	0.5	0.5
Reactor Coolant System Leakage	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum leakage	0.057	0.065	0.060	0.064	0.053	0.053	0.063	0.052	0.054	0.091	0.079	0.078
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.7	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.9	0.8	0.8

Licensee Comments: none

Drill/Exercise Performance



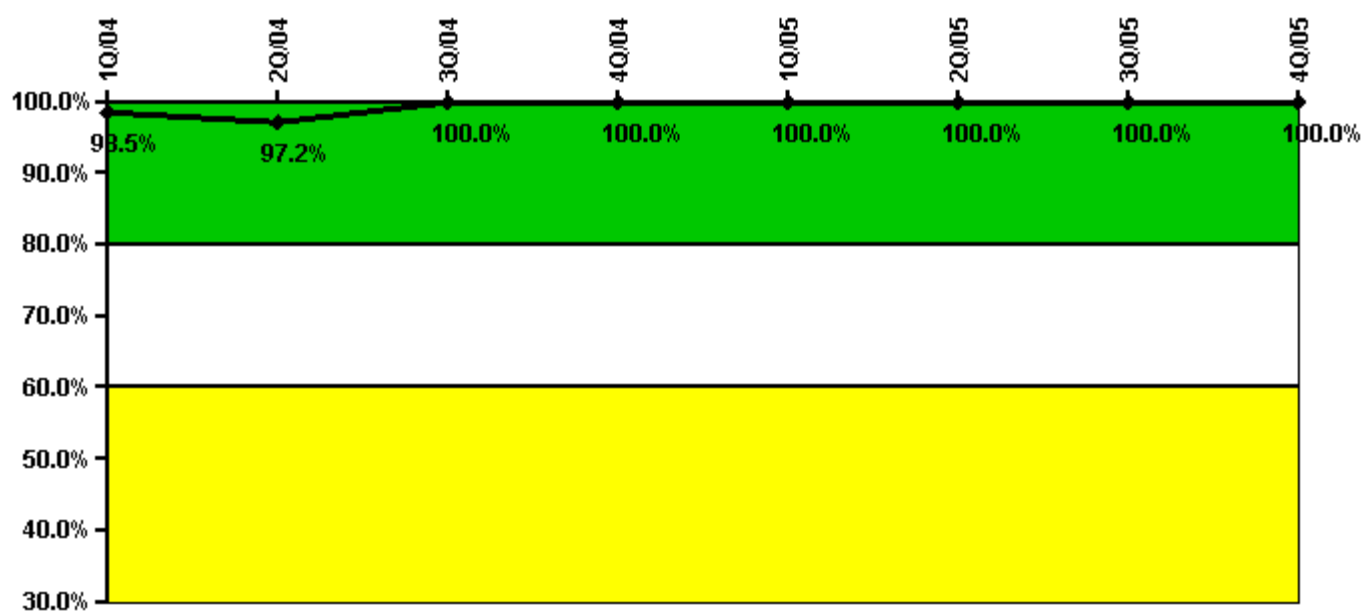
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Successful opportunities	50.0	62.0	93.0	4.0	8.0	81.0	30.0	57.0
Total opportunities	50.0	62.0	94.0	4.0	9.0	84.0	30.0	58.0
Indicator value	96.2%	96.7%	97.2%	98.0%	98.1%	98.1%	98.6%	98.5%

Licensee Comments: none

ERO Drill Participation



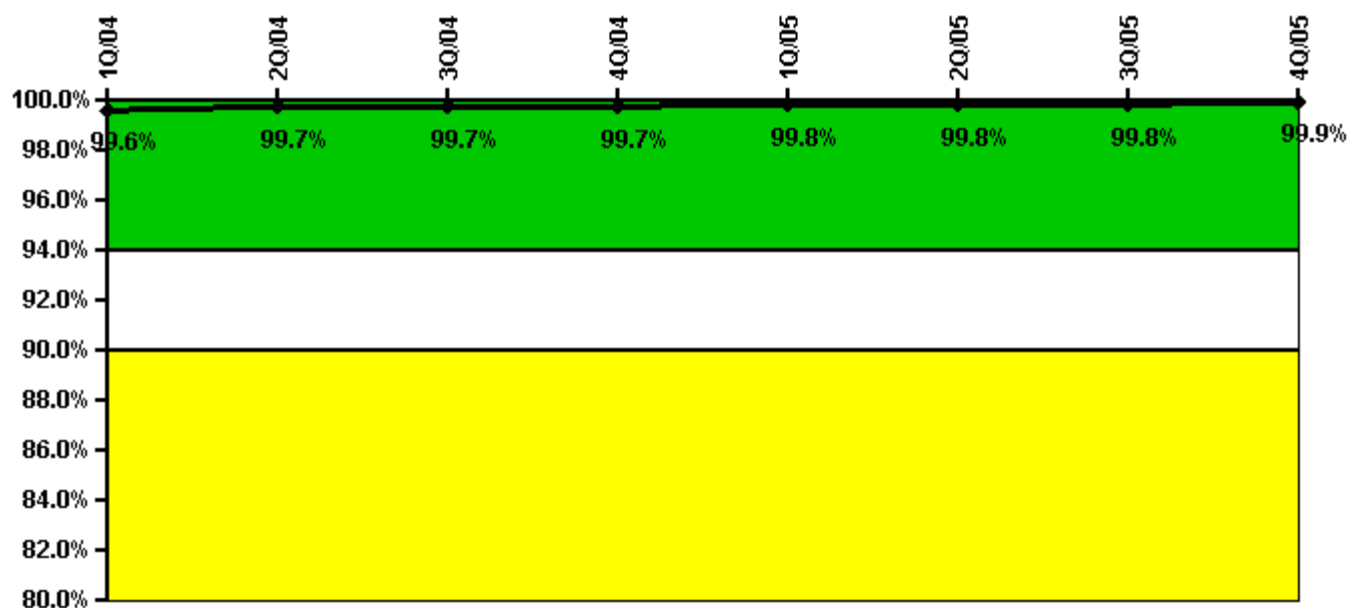
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Participating Key personnel	67.0	70.0	76.0	74.0	75.0	71.0	76.0	74.0
Total Key personnel	68.0	72.0	76.0	74.0	75.0	71.0	76.0	74.0
Indicator value	98.5%	97.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



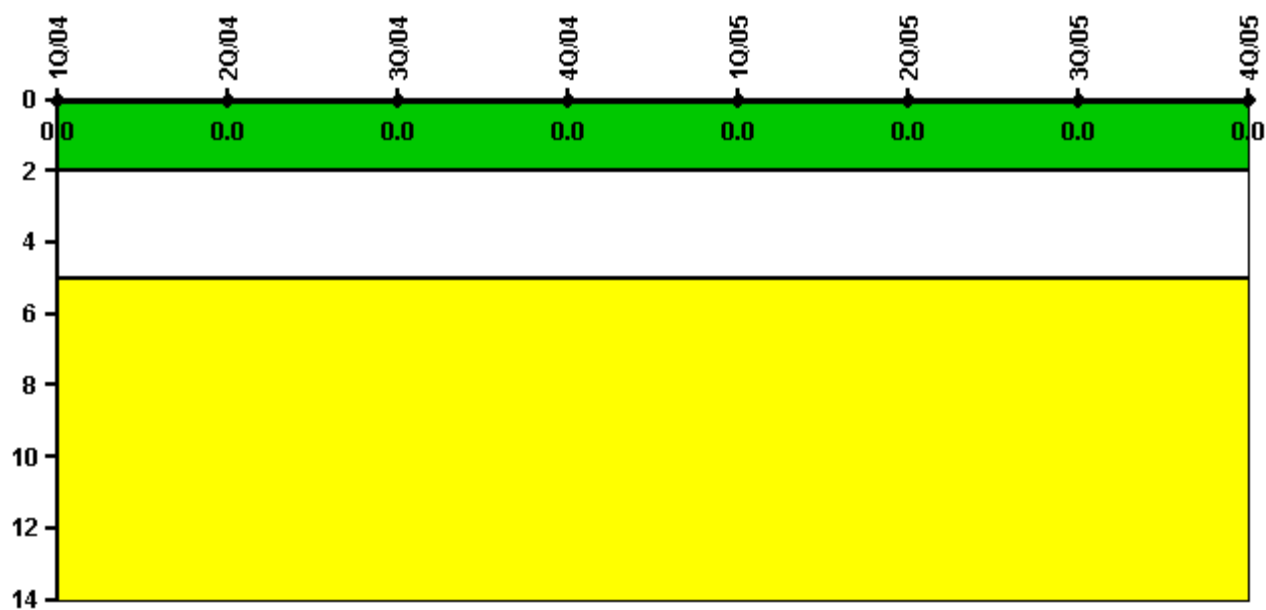
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Successful siren-tests	6000	5996	6093	6102	6004	6006	6005	6012
Total sirens-tests	6016	6016	6110	6110	6016	6015	6014	6016
Indicator value	99.6%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



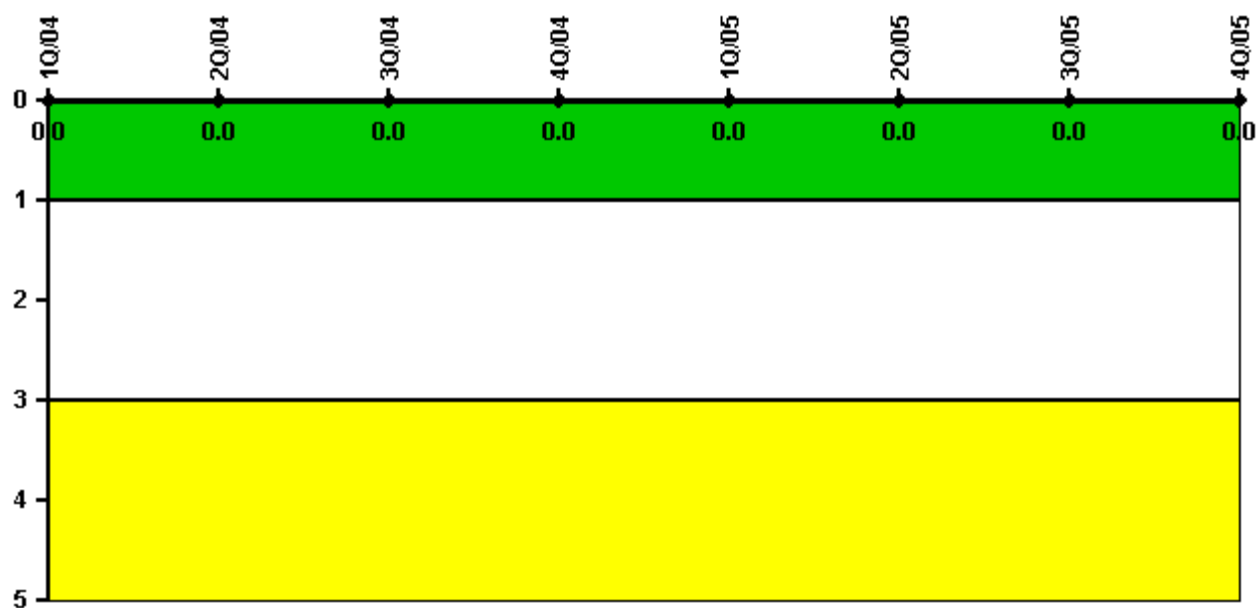
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

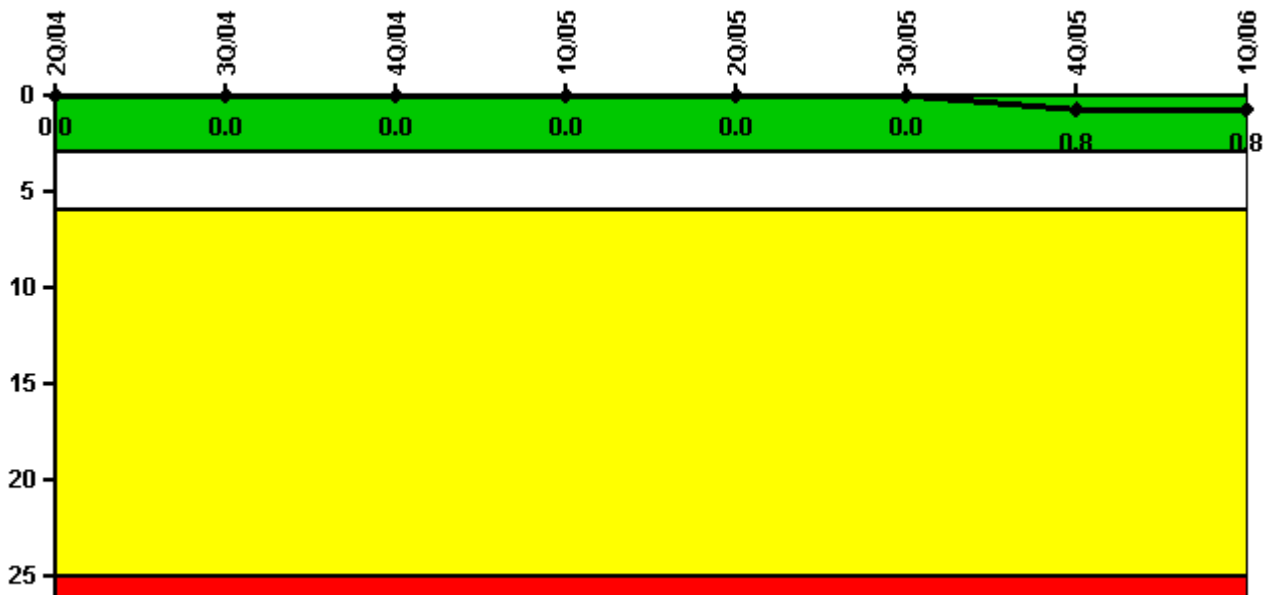
[Physical Protection](#) information not publicly available.

Byron 2

1Q/2006 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



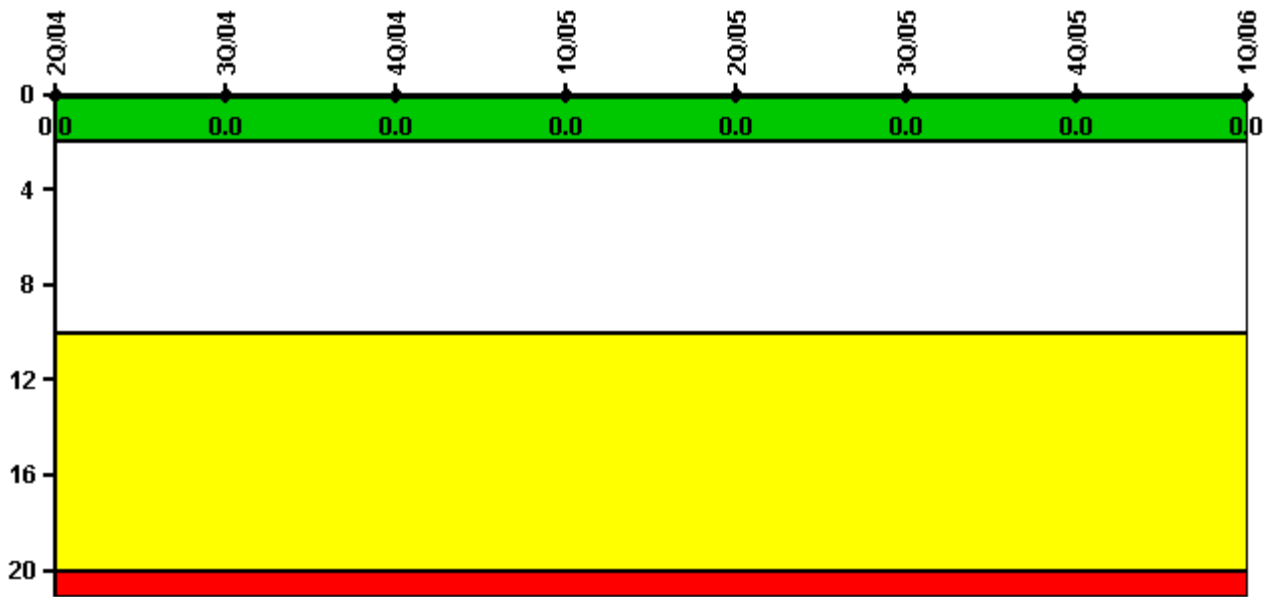
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Unplanned scrams	0	0	0	0	0	0	1.0	0
Critical hours	1989.1	2208.0	2209.0	2160.0	2183.0	2087.1	1922.4	2160.0
Indicator value	0	0	0	0	0	0	0.8	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



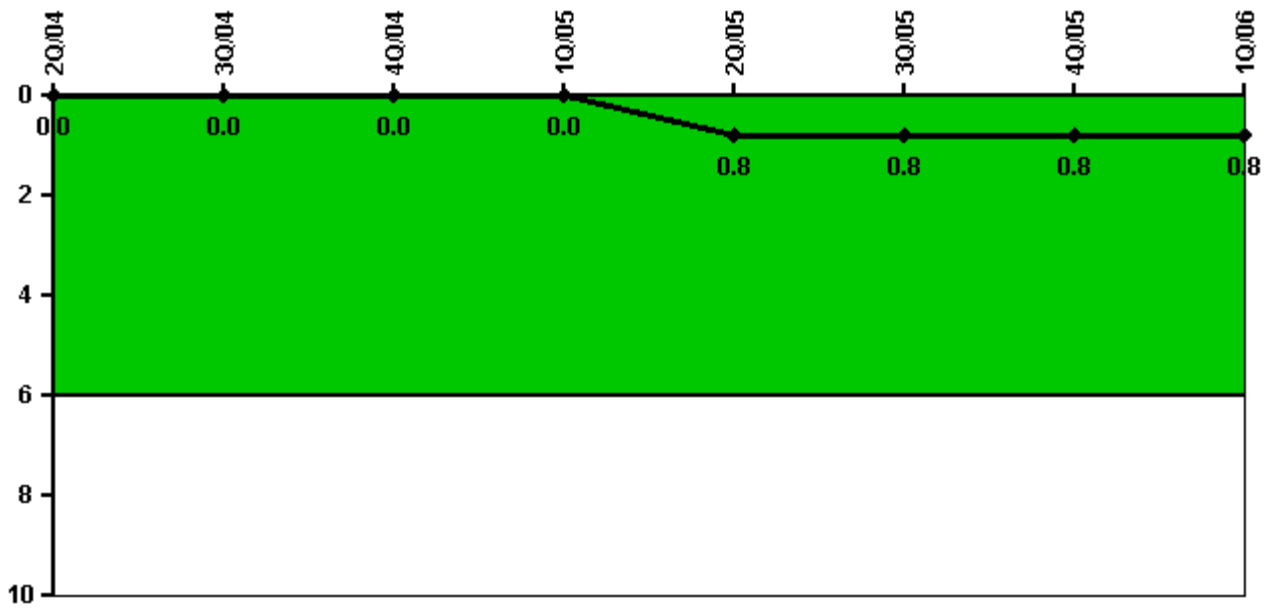
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Unplanned power changes	0	0	0	0	1.0	0	0	0
Critical hours	1989.1	2208.0	2209.0	2160.0	2183.0	2087.1	1922.4	2160.0
Indicator value	0	0	0	0	0.8	0.8	0.8	0.8

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



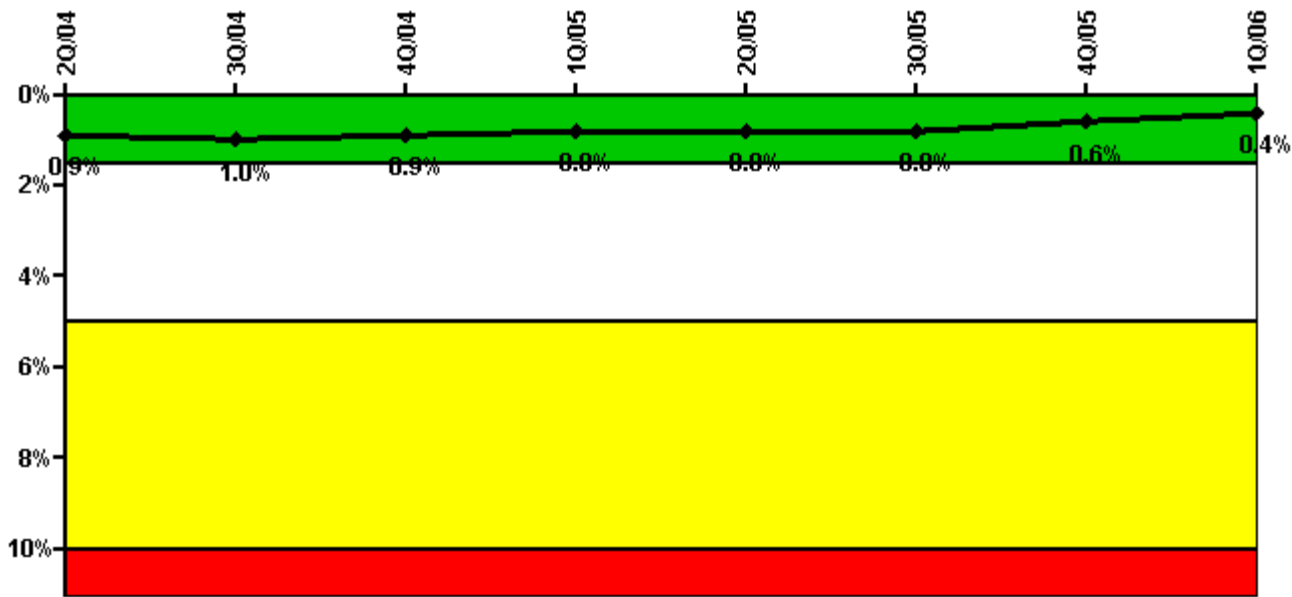
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Train 1								
Planned unavailable hours	2.20	22.40	1.80	4.00	1.80	3.30	1.90	146.10
Unplanned unavailable hours	0	0	0	0	5.20	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	17.40	1.80	41.00	2.30	3.70	1.40	1.60	85.00
Unplanned unavailable hours	0	25.10	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.8%	0.9%	0.7%	0.7%	0.6%	0.6%	0.6%	0.9%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



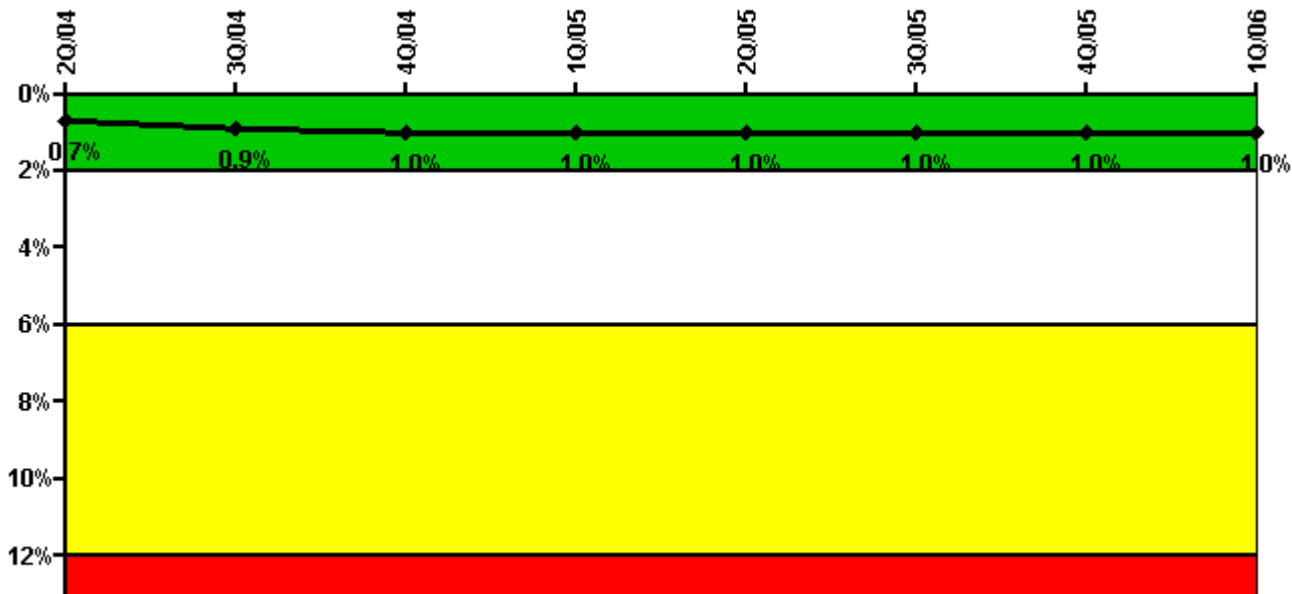
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Train 1								
Planned unavailable hours	2.20	42.60	1.80	3.30	1.90	3.30	1.90	3.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37	2160.00
Train 2								
Planned unavailable hours	2.90	4.90	4.50	1.50	3.70	1.40	1.60	23.00
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37	2160.00
Train 3								
Planned unavailable hours	47.90	3.10	1.80	3.30	17.70	3.30	1.90	25.90
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37	2160.00
Train 4								
Planned unavailable hours	16.60	45.50	3.50	1.50	22.70	1.50	1.60	1.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37	2160.00
Indicator value	0.9%	1.0%	0.9%	0.8%	0.8%	0.8%	0.6%	0.4%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



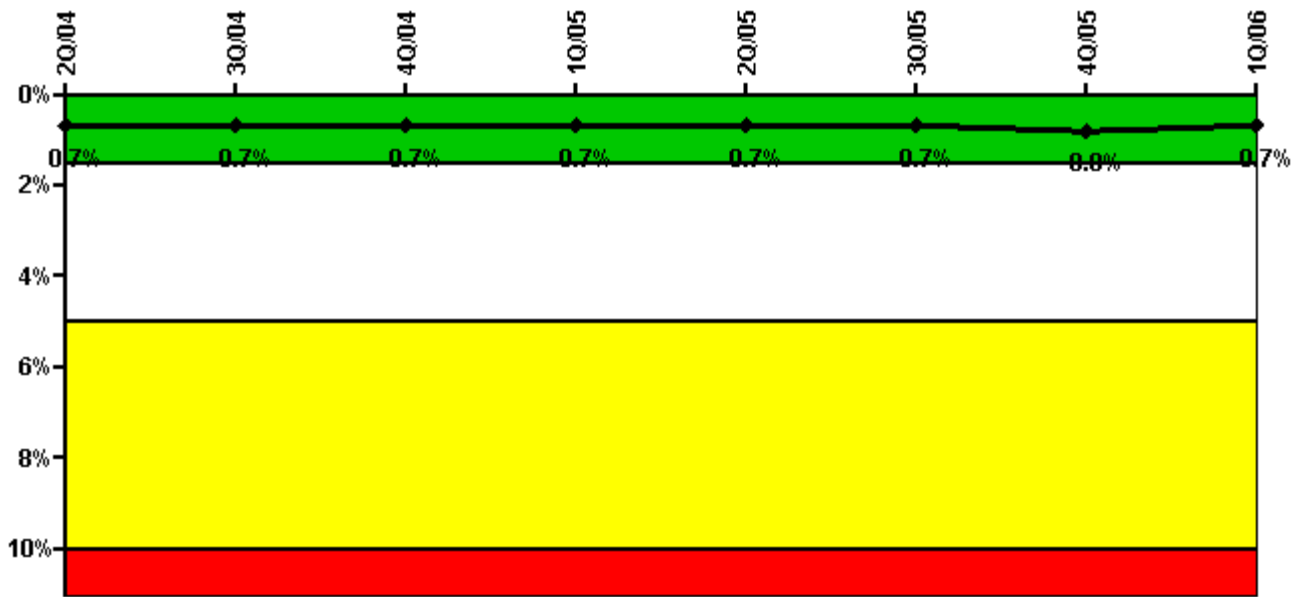
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Train 1								
Planned unavailable hours	4.10	5.80	18.60	4.90	4.00	4.60	3.70	4.80
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37	2160.00
Train 2								
Planned unavailable hours	4.90	56.30	5.20	3.80	40.30	3.10	2.40	3.20
Unplanned unavailable hours	0	66.80	0	25.50	0	0	3.20	35.20
Fault exposure hours	0	0	0	0	0	0	0	3.00
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1989.13	2208.00	2209.00	2160.00	2183.00	2087.05	1922.37	2160.00
Indicator value	0.7%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



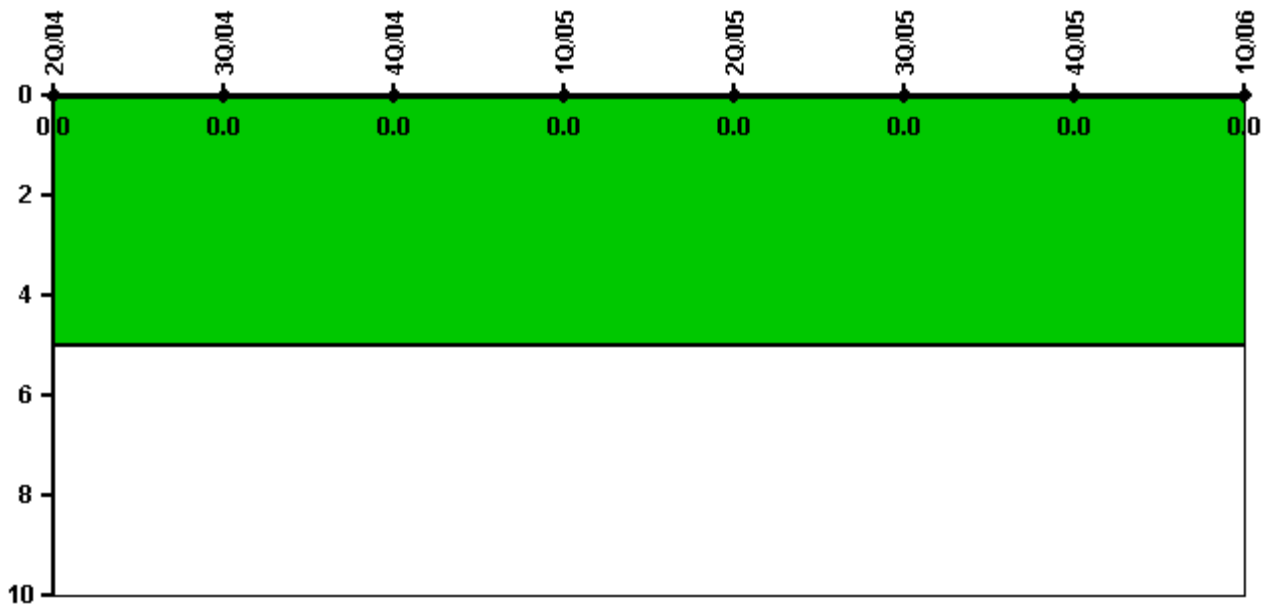
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Train 1								
Planned unavailable hours	3.30	3.10	1.90	3.30	21.80	3.50	14.40	3.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	30.90	7.20	7.30	5.30	30.00	6.60	14.60	5.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%

Licensee Comments: none

Safety System Functional Failures (PWR)



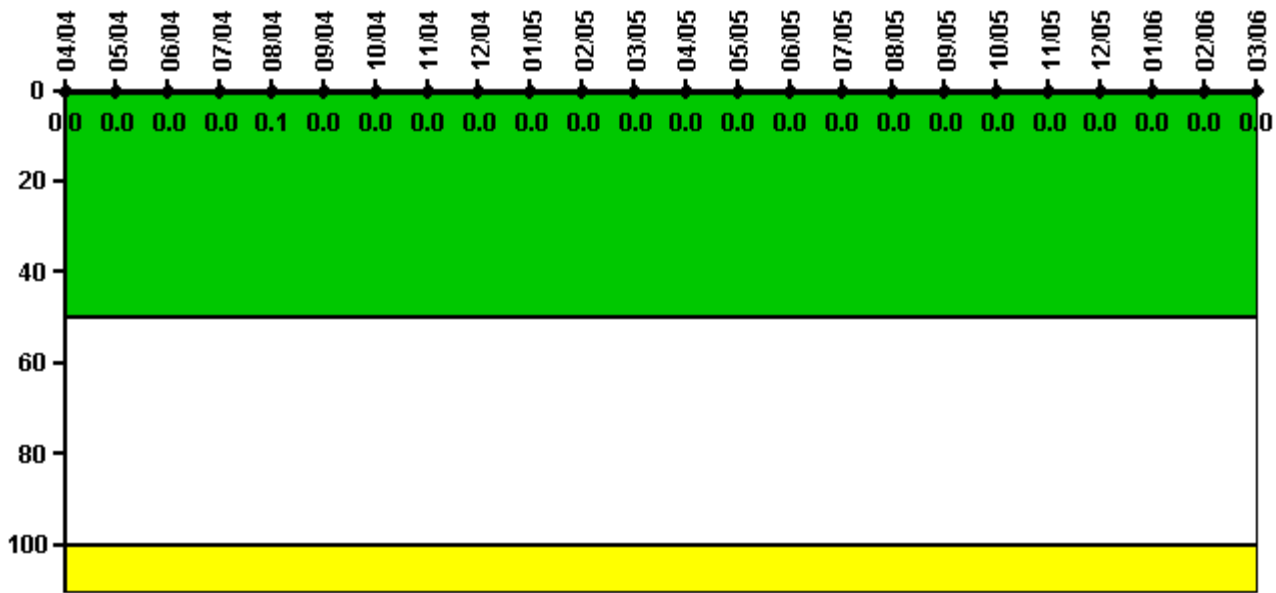
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



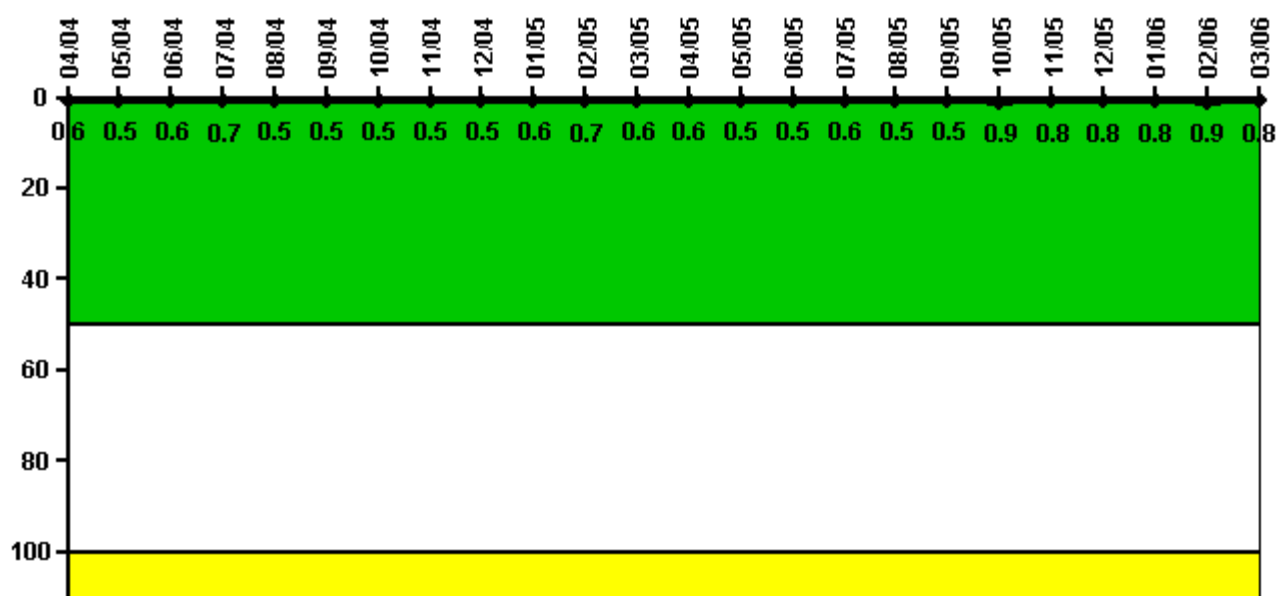
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05
Maximum activity	0.000220	0.000239	0.000245	0.000276	0.000541	0.000288	0.000310	0.000332	0.000336	0.000341	0.000336	0.000355
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0.1	0	0	0	0	0	0	0
Reactor Coolant System Activity	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06
Maximum activity	0.000366	0.000363	0.000381	0.000372	0.000499	0.000419	0.000209	0.000222	0.000236	0.000235	0.000240	0.000404
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



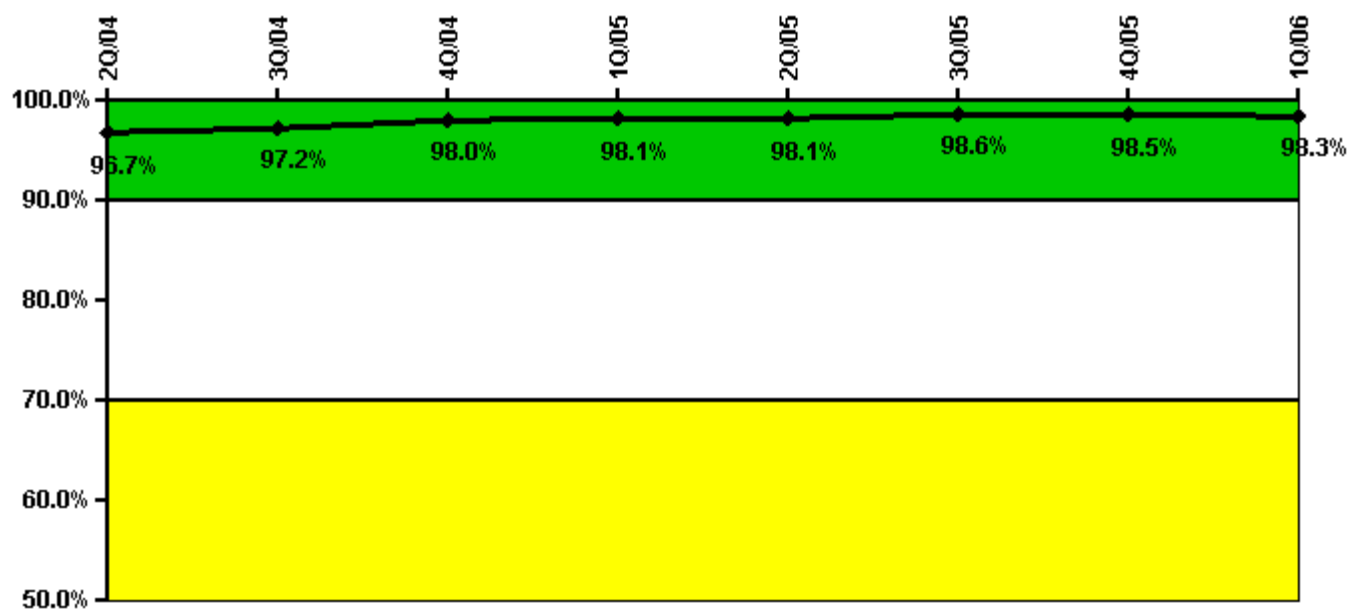
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05
Maximum leakage	0.064	0.051	0.060	0.067	0.054	0.049	0.054	0.049	0.049	0.057	0.065	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6
Reactor Coolant System Leakage	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06
Maximum leakage	0.064	0.053	0.053	0.063	0.052	0.054	0.091	0.079	0.078	0.078	0.091	0.084
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.6	0.5	0.5	0.9	0.8	0.8	0.8	0.9	0.8

Licensee Comments: none

Drill/Exercise Performance



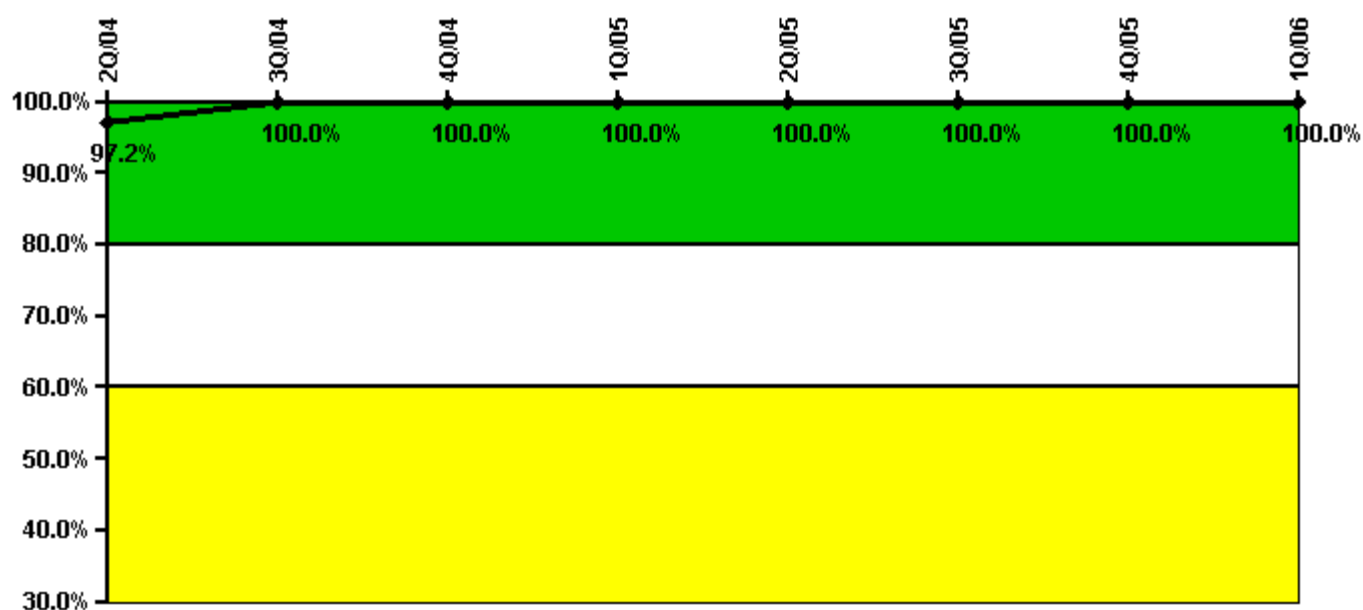
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Successful opportunities	62.0	93.0	4.0	8.0	81.0	30.0	57.0	22.0
Total opportunities	62.0	94.0	4.0	9.0	84.0	30.0	58.0	22.0
Indicator value	96.7%	97.2%	98.0%	98.1%	98.1%	98.6%	98.5%	98.3%

Licensee Comments: none

ERO Drill Participation



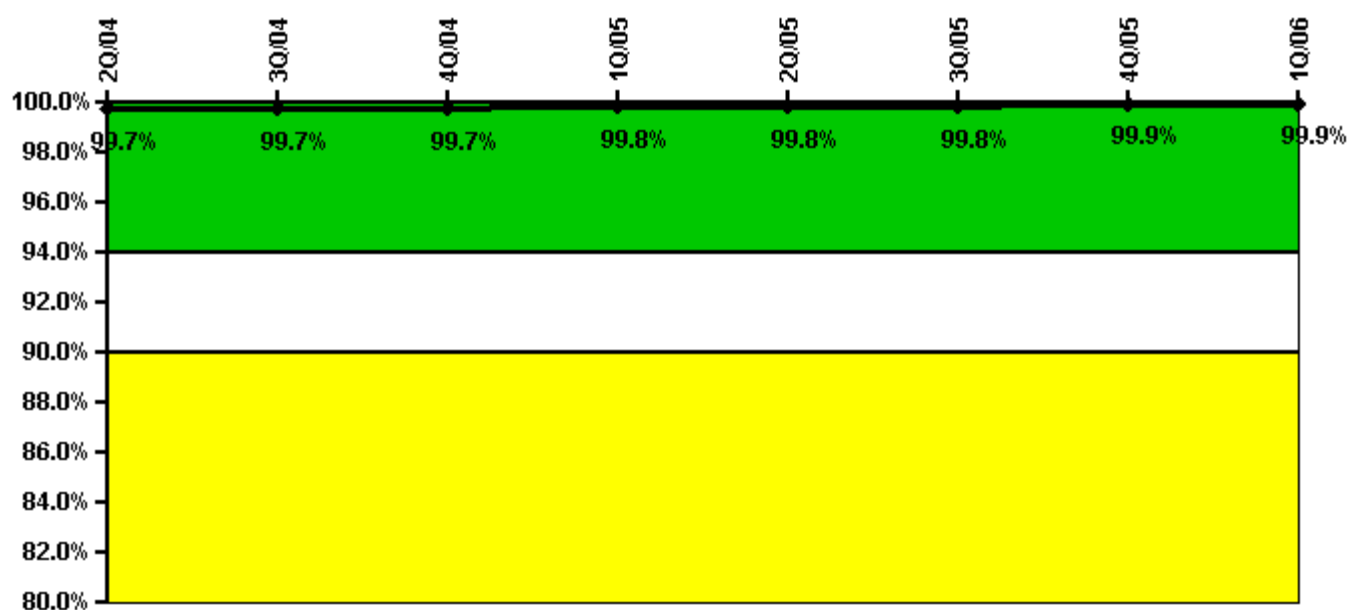
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Participating Key personnel	70.0	76.0	74.0	75.0	71.0	76.0	74.0	78.0
Total Key personnel	72.0	76.0	74.0	75.0	71.0	76.0	74.0	78.0
Indicator value	97.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



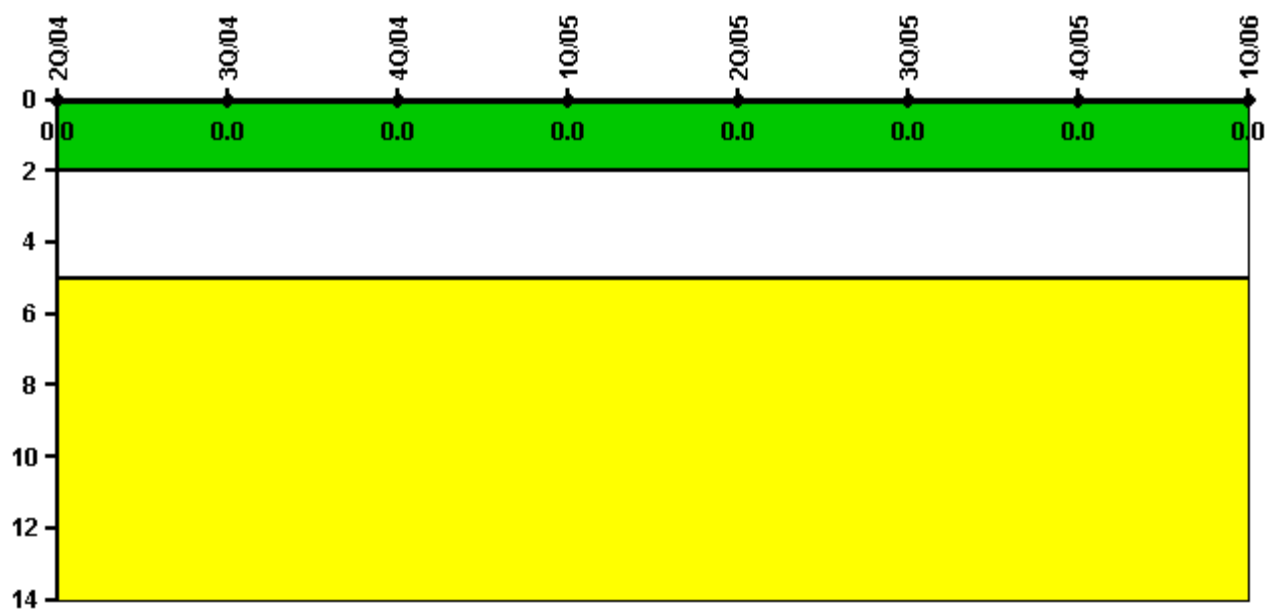
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
Successful siren-tests	5996	6093	6102	6004	6006	6005	6012	6105
Total sirens-tests	6016	6110	6110	6016	6015	6014	6016	6110
Indicator value	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness

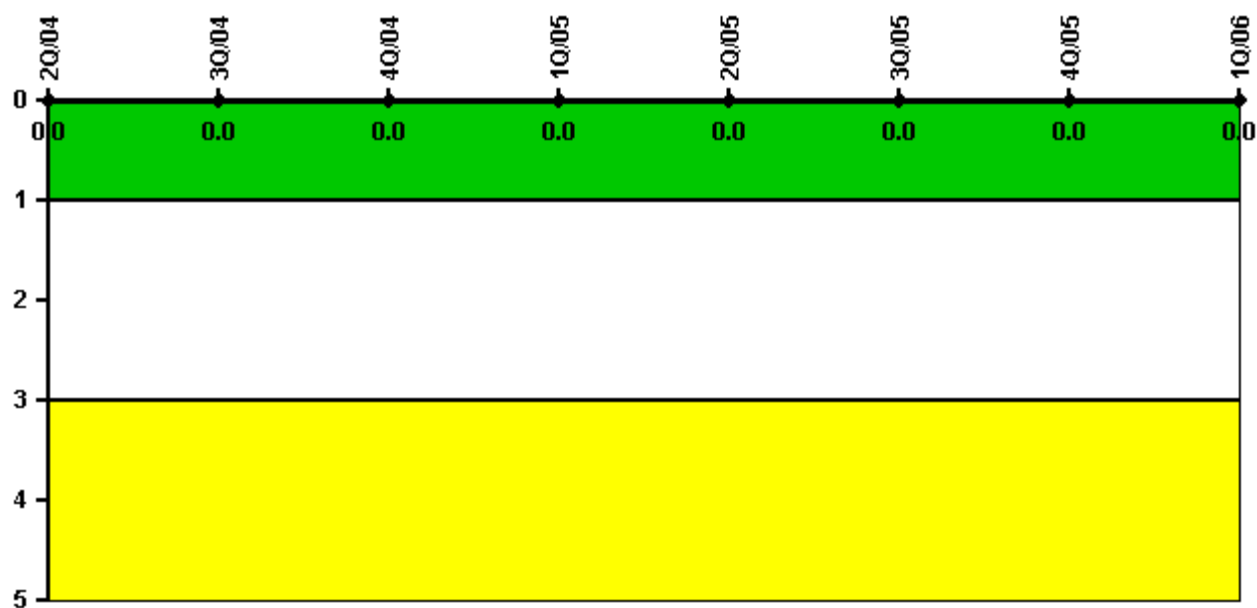


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

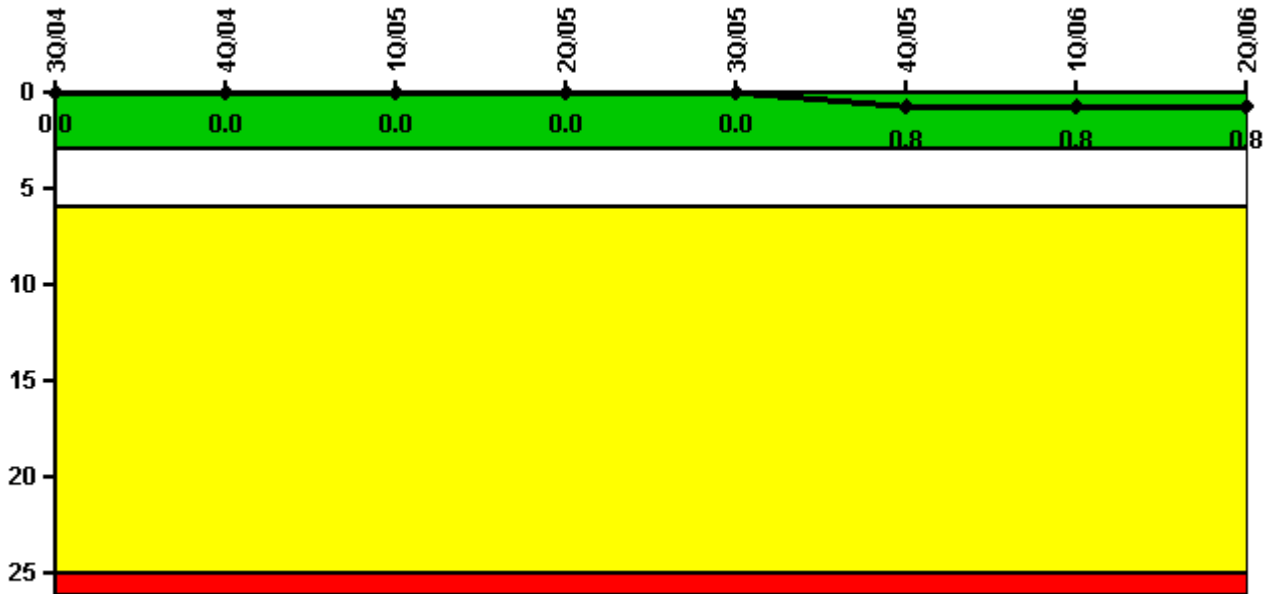
Last Modified: May 5, 2006

Byron 2

2Q/2006 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



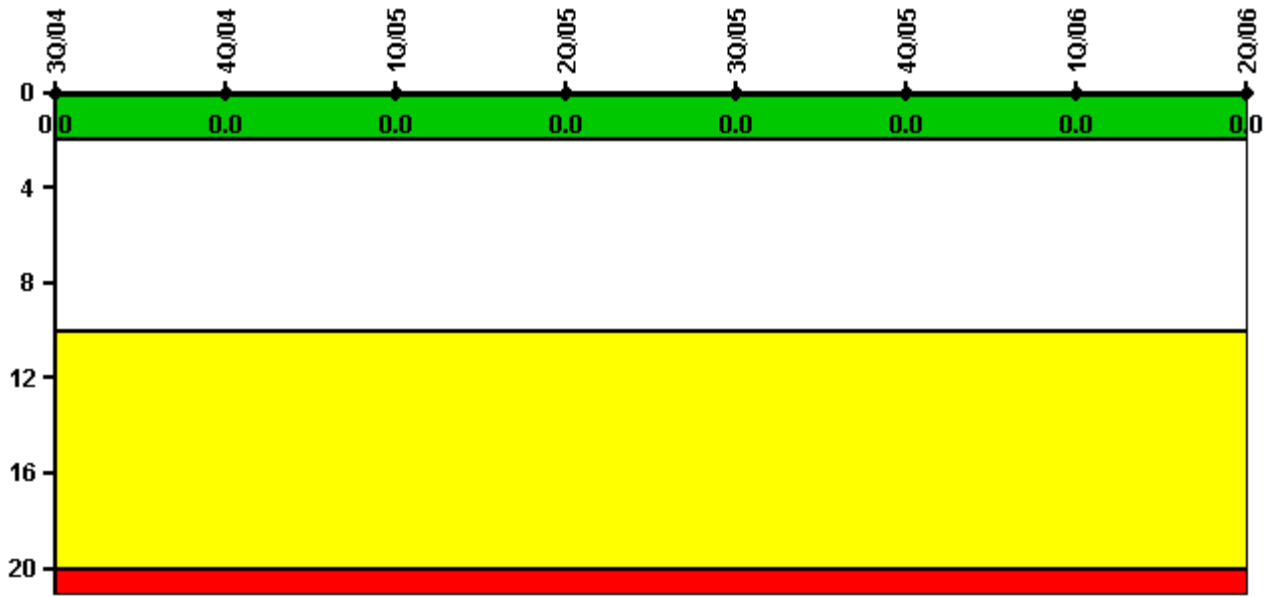
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
Unplanned scrams	0	0	0	0	0	1.0	0	0
Critical hours	2208.0	2209.0	2160.0	2183.0	2087.1	1922.4	2160.0	2183.0
Indicator value	0	0	0	0	0	0.8	0.8	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



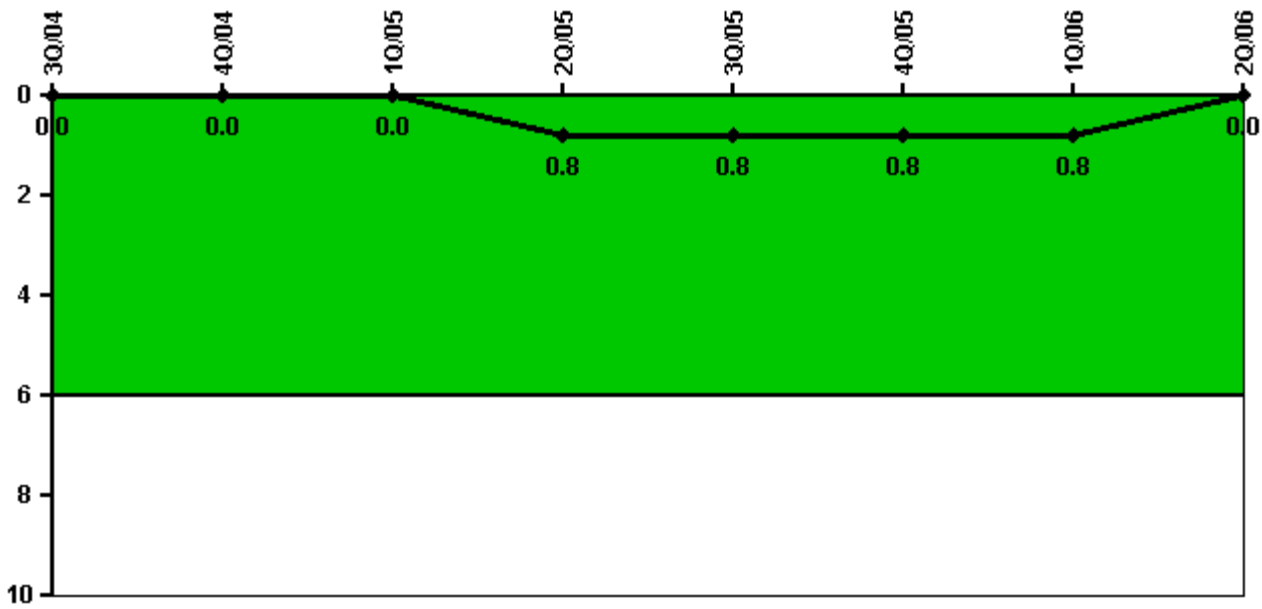
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



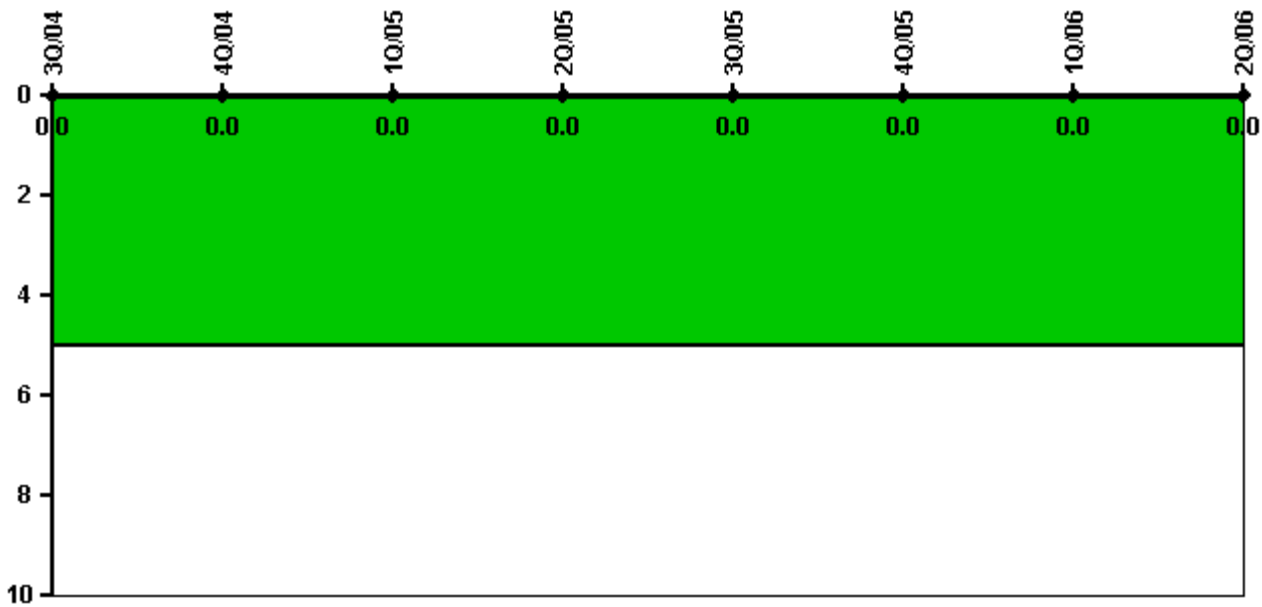
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
Unplanned power changes	0	0	0	1.0	0	0	0	0
Critical hours	2208.0	2209.0	2160.0	2183.0	2087.1	1922.4	2160.0	2183.0
Indicator value	0	0	0	0.8	0.8	0.8	0.8	0

Licensee Comments: none

Safety System Functional Failures (PWR)



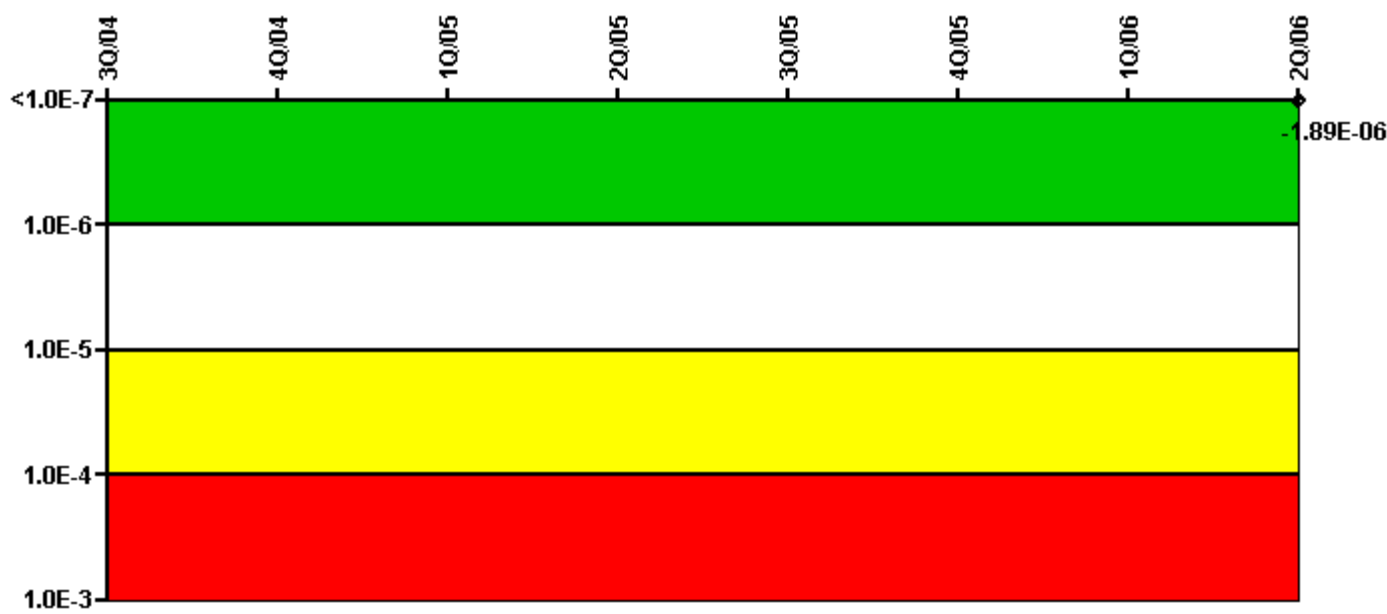
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



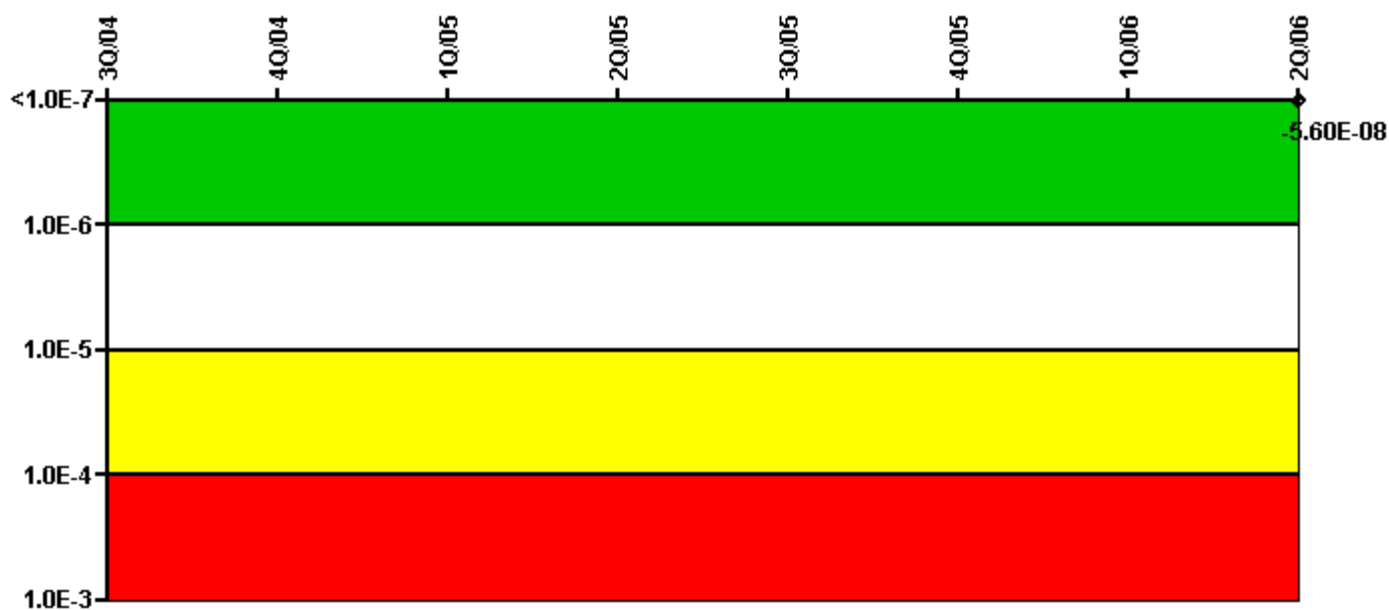
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
UAI (ΔCDF)								6.70E-09
URI (ΔCDF)								-1.90E-06
PLE								NO
Indicator value								-1.89E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00×10^{-6} Yellow > 1.00×10^{-5} Red > 1.00×10^{-4}

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
UAI (Δ CDF)								-4.00E-08
URI (Δ CDF)								-1.60E-08
PLE								NO
Indicator value								-5.60E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

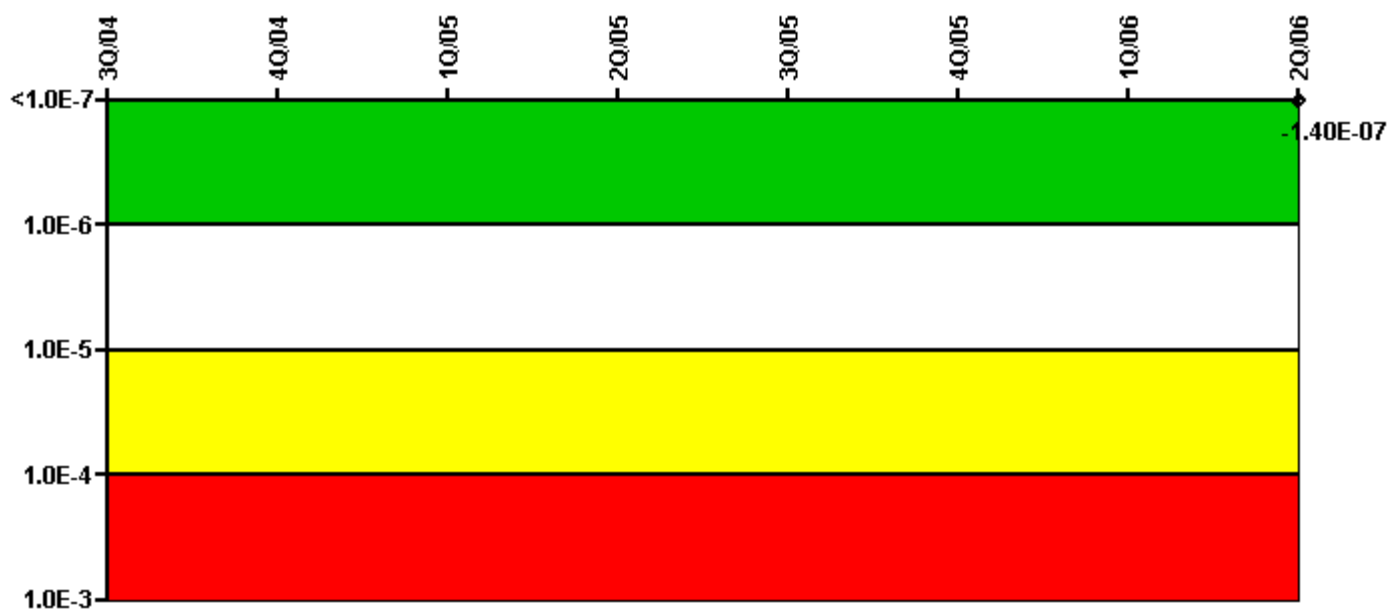
Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
UAI (Δ CDF)								8.50E-07
URI (Δ CDF)								1.60E-06
PLE								NO
Indicator value								2.45E-06

Licensee Comments:

2Q/06: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



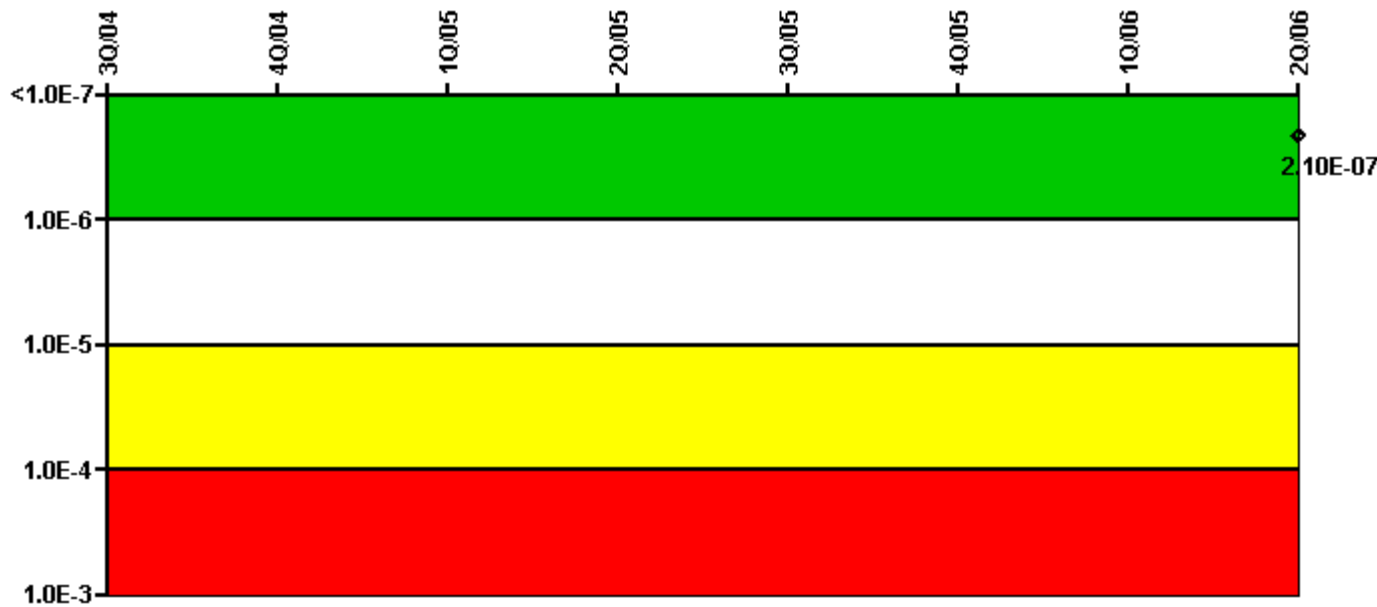
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
UAI (ΔCDF)								9.80E-09
URI (ΔCDF)								-1.50E-07
PLE								NO
Indicator value								-1.40E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



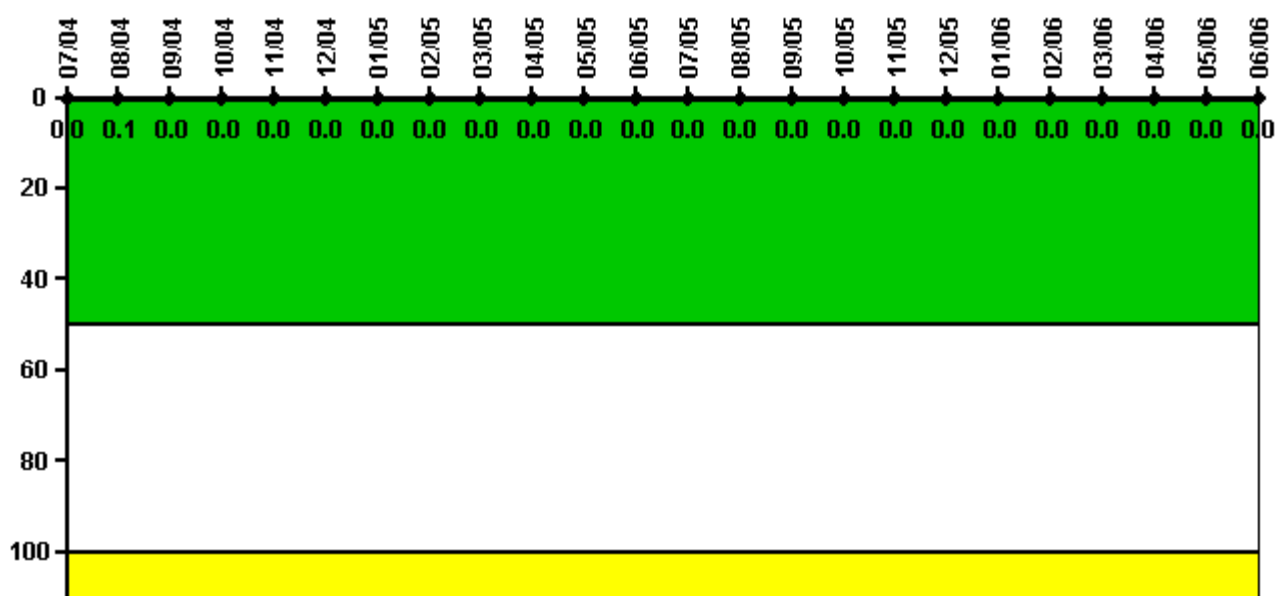
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
UAI (ΔCDF)								9.10E-07
URI (ΔCDF)								-7.00E-07
PLE								NO
Indicator value								2.10E-07

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

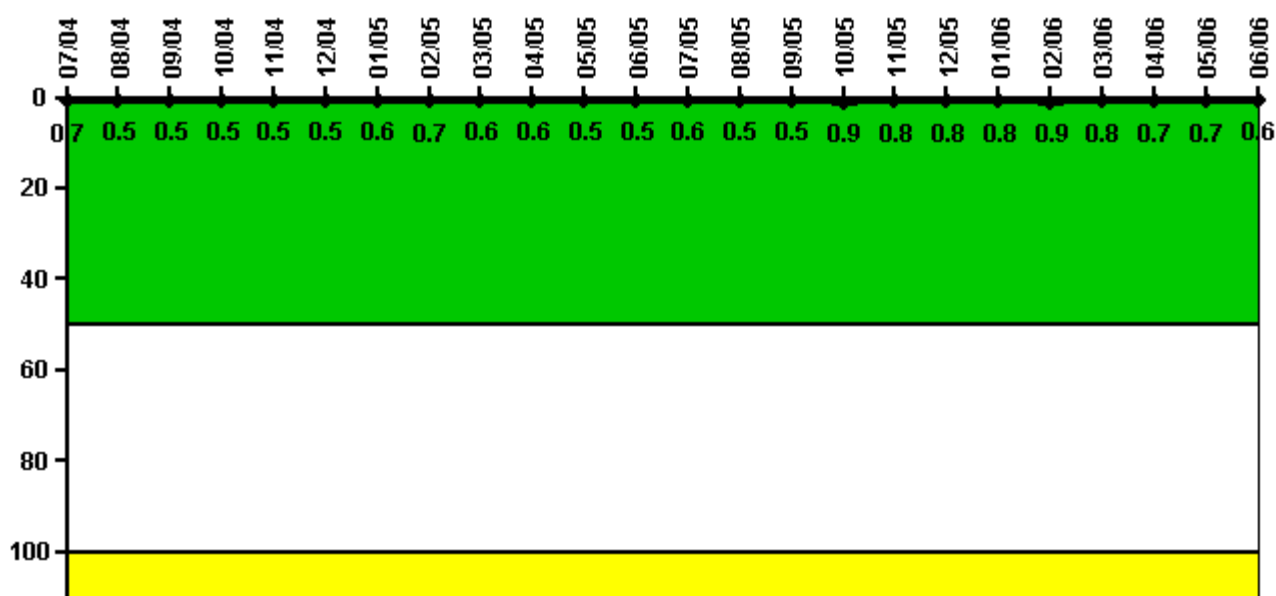
Notes

Reactor Coolant System Activity	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05
Maximum activity	0.000276	0.000541	0.000288	0.000310	0.000332	0.000336	0.000341	0.000336	0.000355	0.000366	0.000363	0.000381
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06
Maximum activity	0.000372	0.000499	0.000419	0.000209	0.000222	0.000236	0.000235	0.000240	0.000404	0.000271	0.000266	0.000267
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



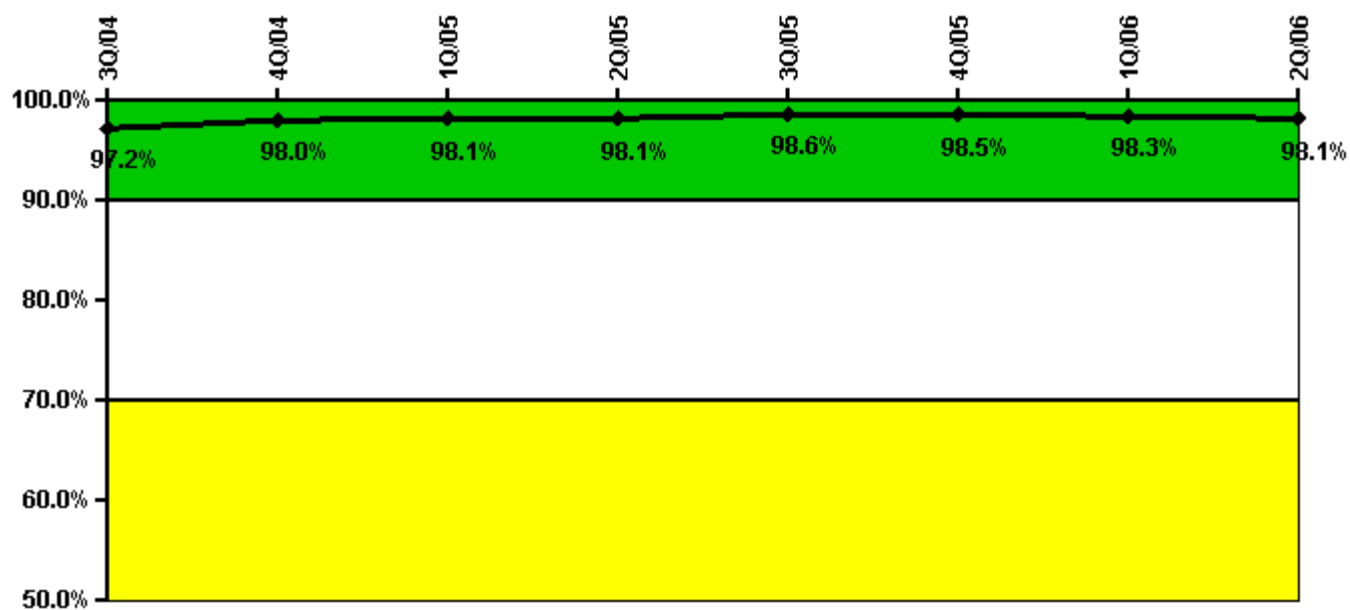
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05
Maximum leakage	0.067	0.054	0.049	0.054	0.049	0.049	0.057	0.065	0.060	0.064	0.053	0.053
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.5	0.5
Reactor Coolant System Leakage	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06
Maximum leakage	0.063	0.052	0.054	0.091	0.079	0.078	0.078	0.091	0.084	0.071	0.068	0.061
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.9	0.8	0.8	0.8	0.9	0.8	0.7	0.7	0.6

Licensee Comments: none

Drill/Exercise Performance



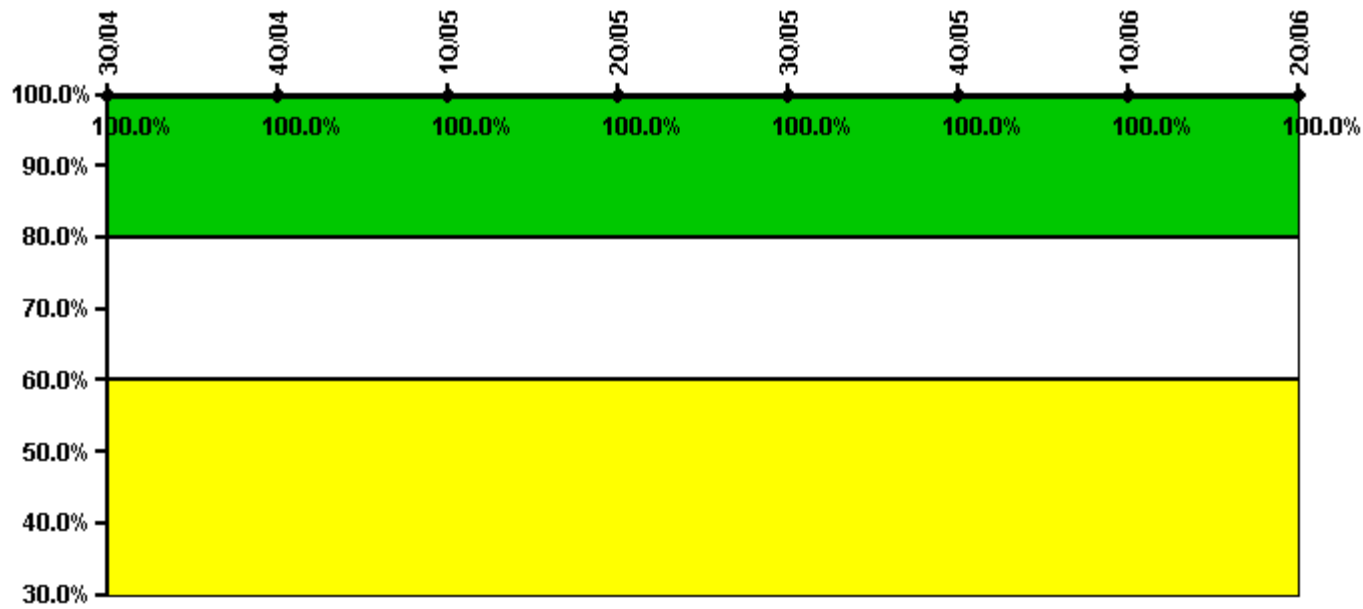
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
Successful opportunities	93.0	4.0	8.0	81.0	30.0	57.0	22.0	12.0
Total opportunities	94.0	4.0	9.0	84.0	30.0	58.0	22.0	12.0
Indicator value	97.2%	98.0%	98.1%	98.1%	98.6%	98.5%	98.3%	98.1%

Licensee Comments: none

ERO Drill Participation



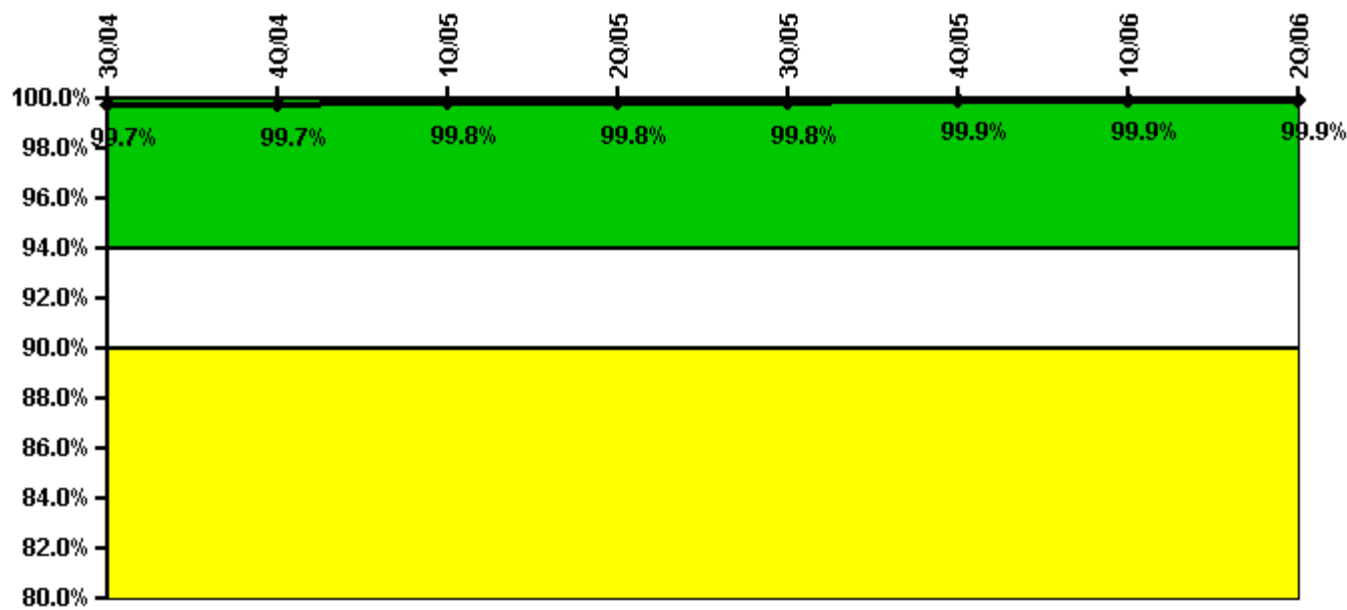
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
Participating Key personnel	76.0	74.0	75.0	71.0	76.0	74.0	78.0	78.0
Total Key personnel	76.0	74.0	75.0	71.0	76.0	74.0	78.0	78.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



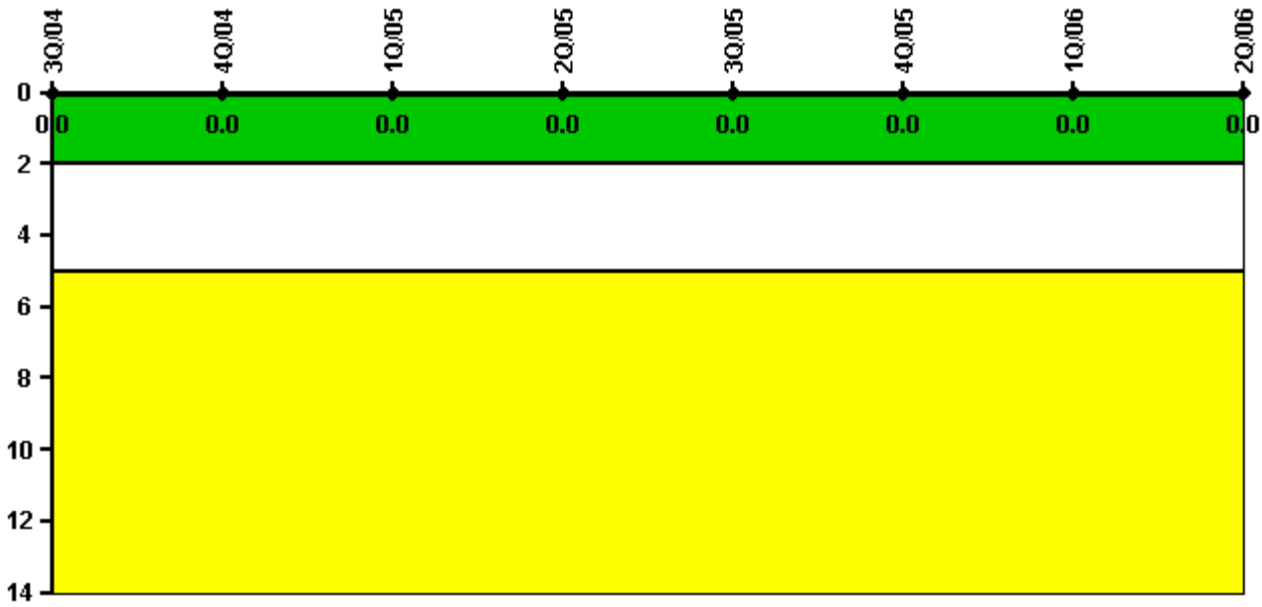
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
Successful siren-tests	6093	6102	6004	6006	6005	6012	6105	6005
Total sirens-tests	6110	6110	6016	6015	6014	6016	6110	6012
Indicator value	99.7%	99.7%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



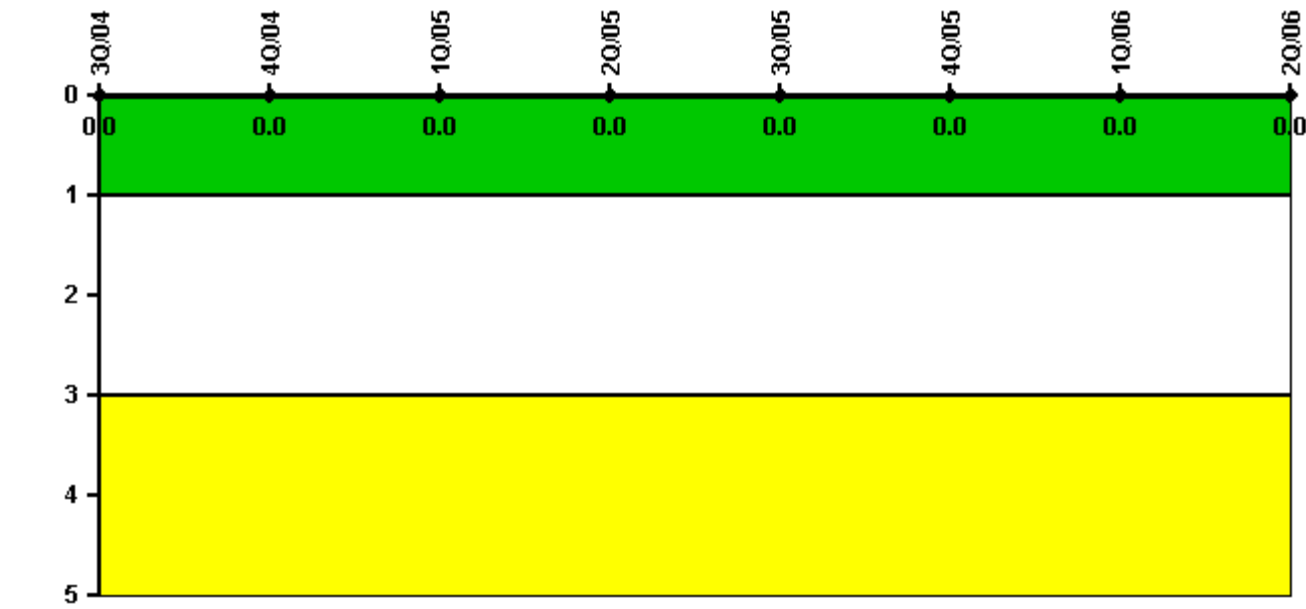
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

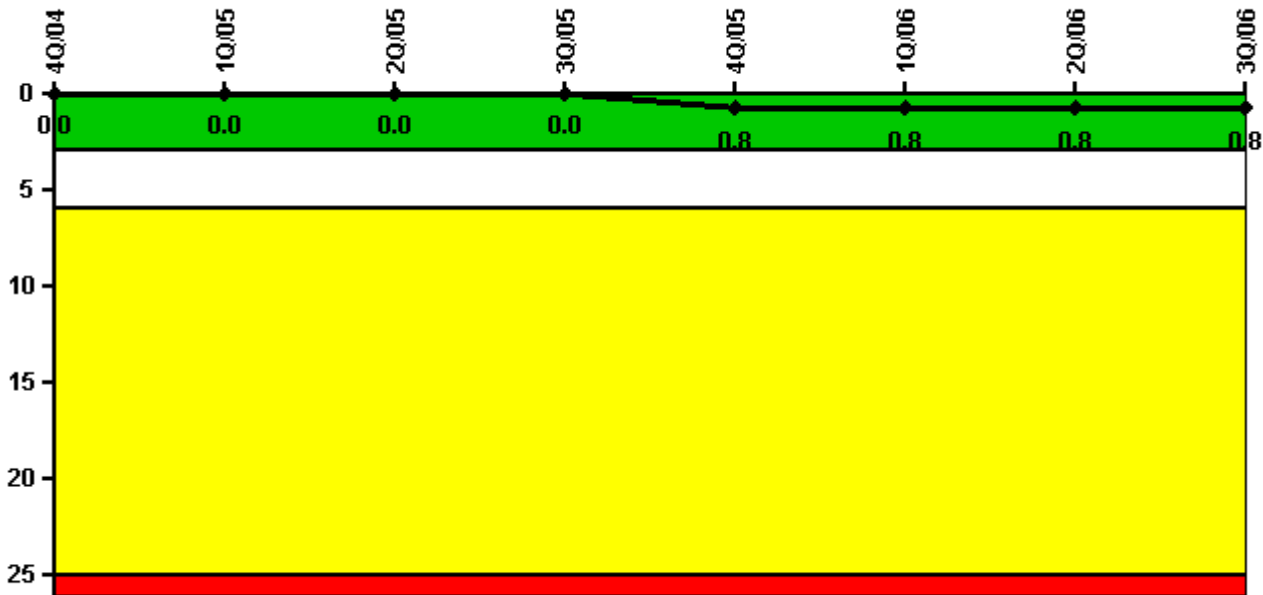
[Physical Protection](#) information not publicly available.

Byron 2

3Q/2006 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



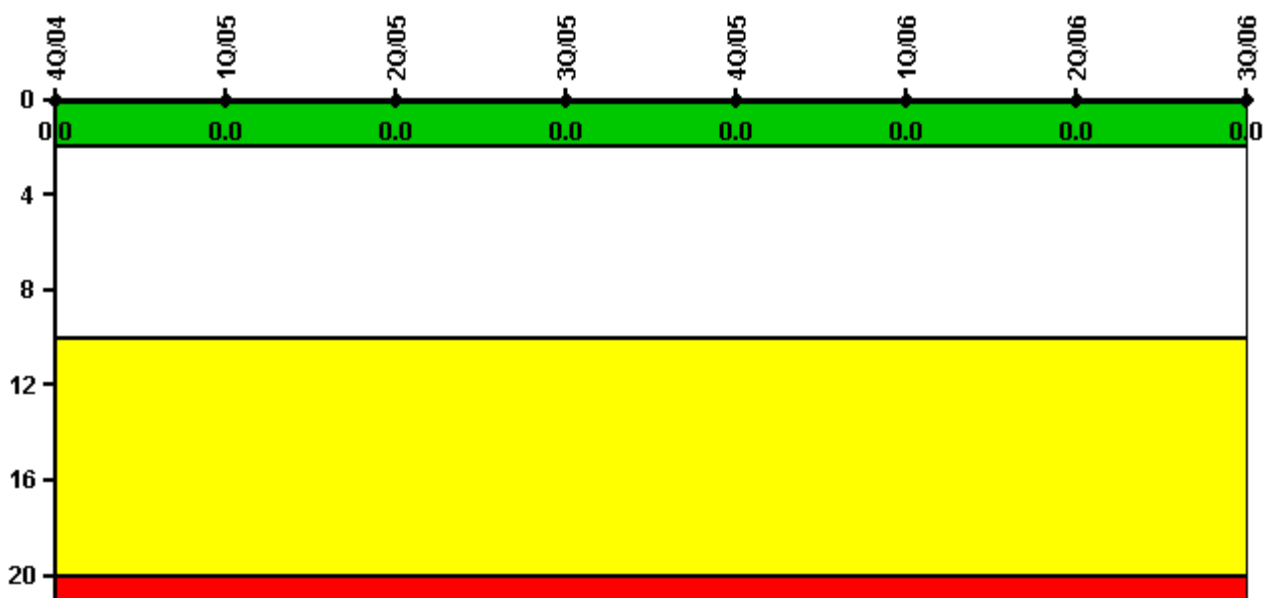
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
Unplanned scrams	0	0	0	0	1.0	0	0	0
Critical hours	2209.0	2160.0	2183.0	2087.1	1922.4	2160.0	2183.0	2208.0
Indicator value	0	0	0	0	0.8	0.8	0.8	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



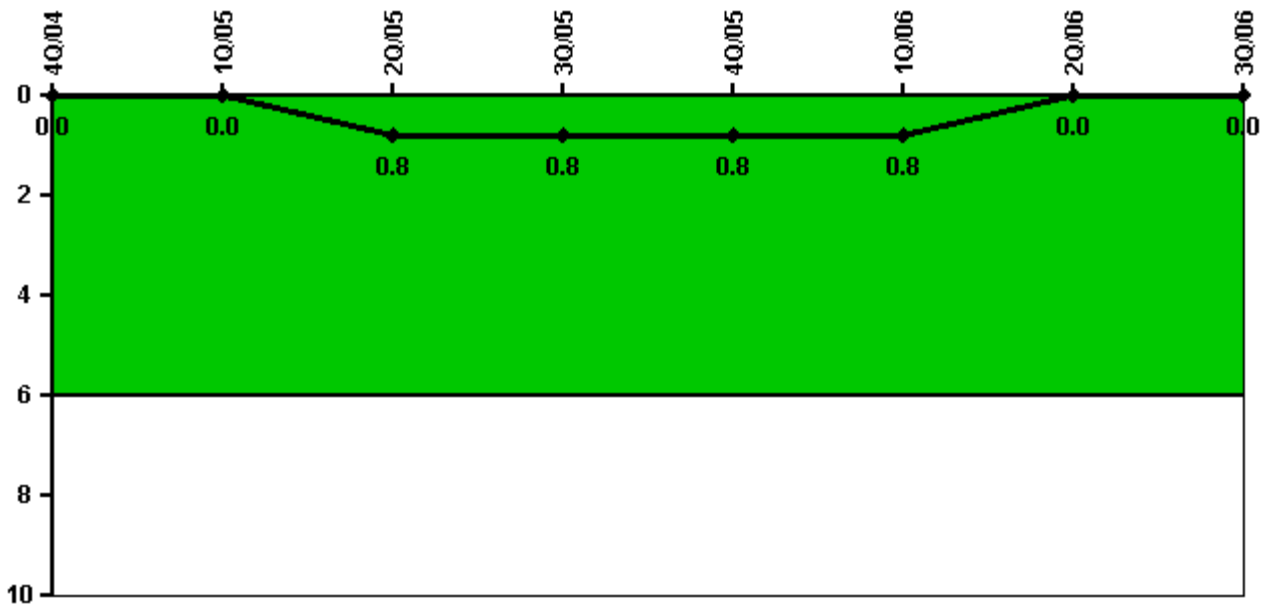
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



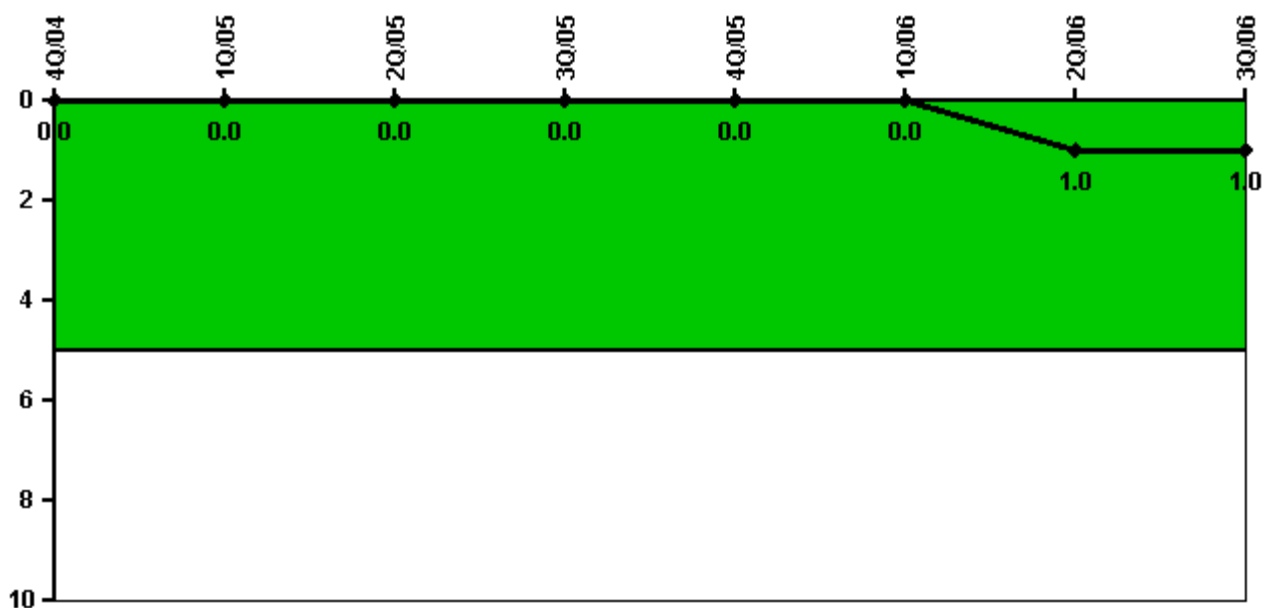
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	2209.0	2160.0	2183.0	2087.1	1922.4	2160.0	2183.0	2208.0
Indicator value	0	0	0.8	0.8	0.8	0.8	0	0

Licensee Comments: none

Safety System Functional Failures (PWR)



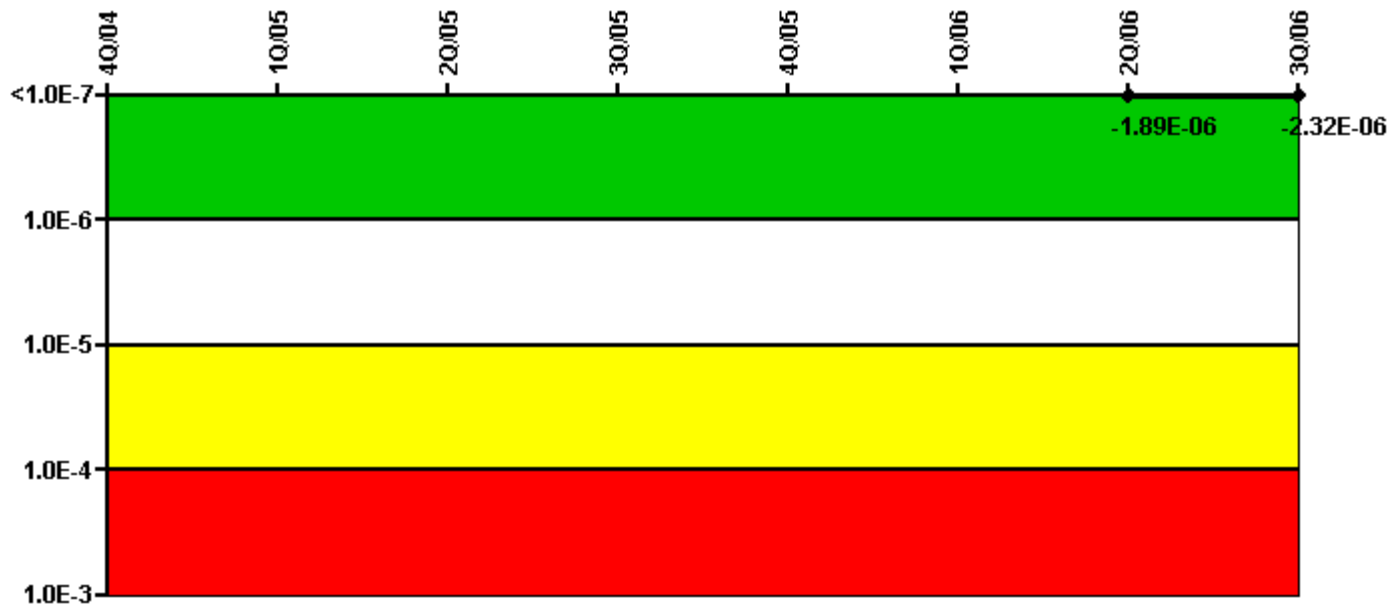
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
Safety System Functional Failures	0	0	0	0	0	0	1	0
Indicator value	0	0	0	0	0	0	1	1

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
UAI (Δ CDF)							6.70E-09	-1.90E-08
URI (Δ CDF)							-1.90E-06	-2.30E-06
PLE							NO	NO
Indicator value							-1.89E-06	-2.32E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



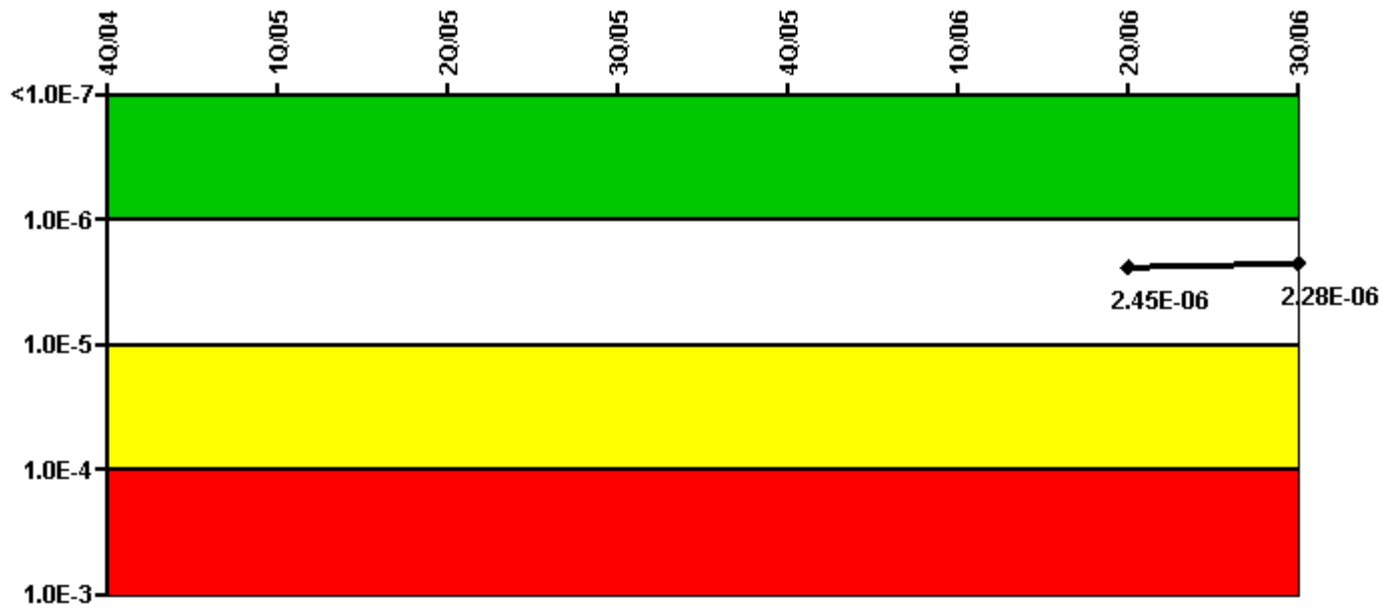
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
UAI (Δ CDF)							-4.00E-08	-4.00E-08
URI (Δ CDF)							-1.60E-08	-1.60E-08
PLE							NO	NO
Indicator value							-5.60E-08	-5.60E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White $> 1.00E-6$ Yellow $> 1.00E-5$ Red $> 1.00E-4$

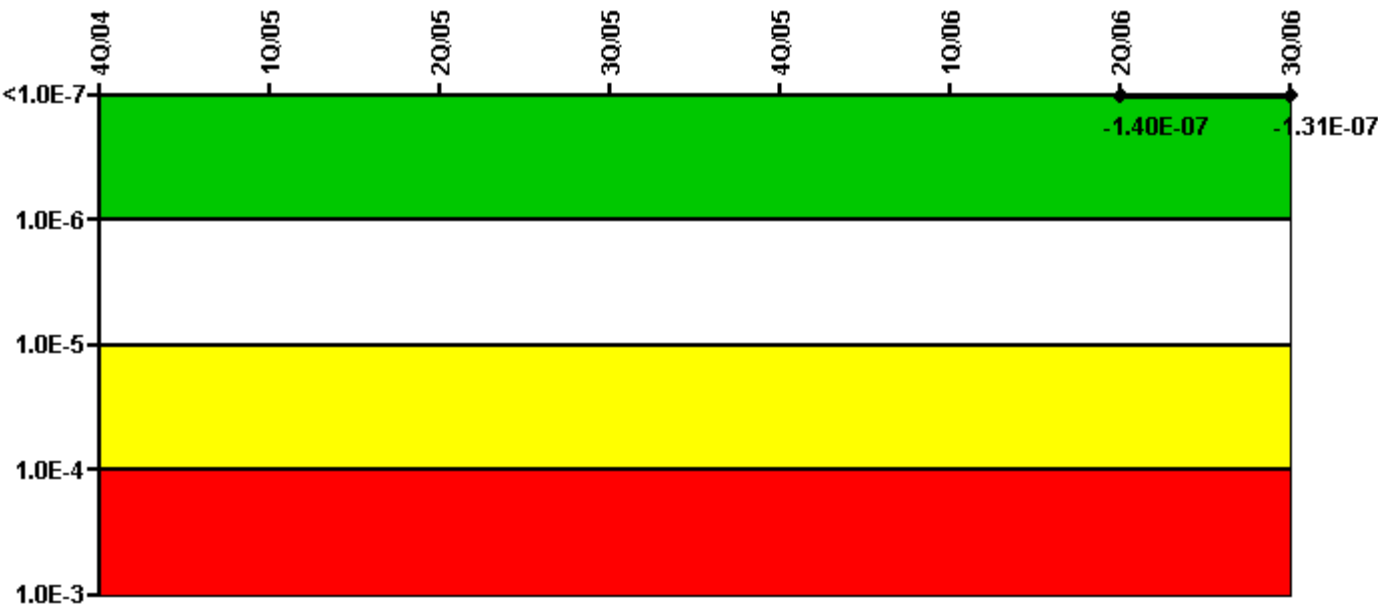
Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
UAI (Δ CDF)							$8.50E-07$	$6.80E-07$
URI (Δ CDF)							$1.60E-06$	$1.60E-06$
PLE							NO	NO
Indicator value							$2.45E-06$	$2.28E-06$

Licensee Comments:

3Q/06: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



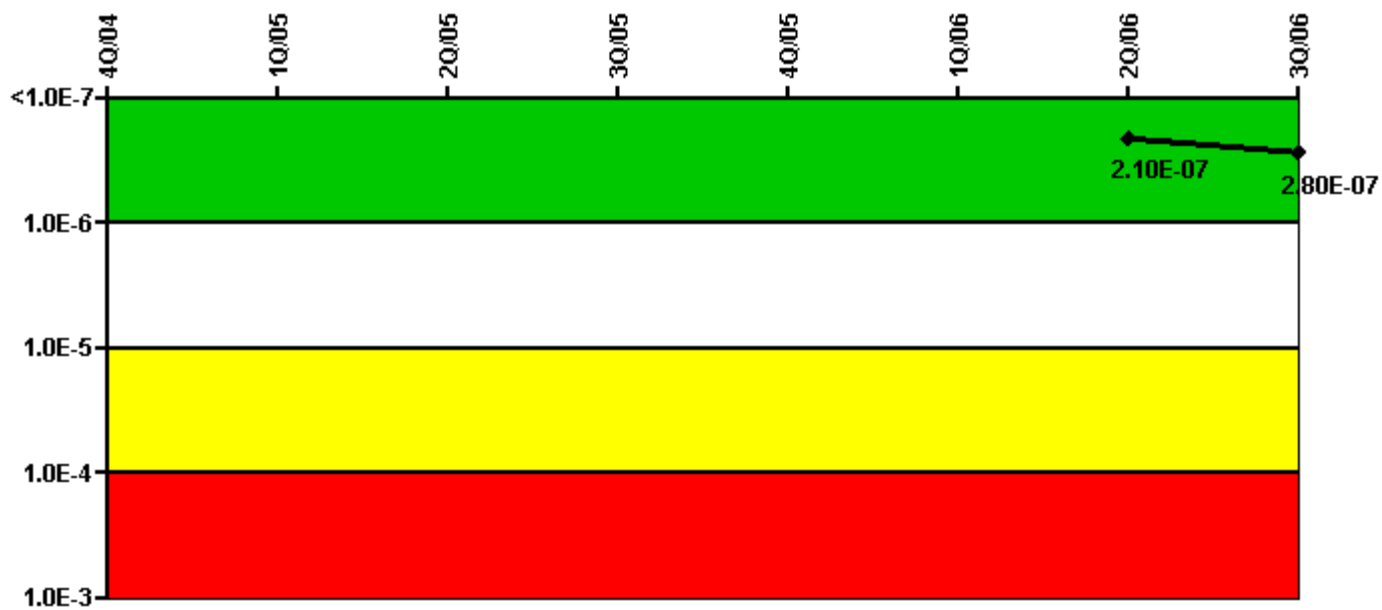
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
UAI (ΔCDF)							9.80E-09	1.90E-08
URI (ΔCDF)							-1.50E-07	-1.50E-07
PLE							NO	NO
Indicator value							-1.40E-07	-1.31E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



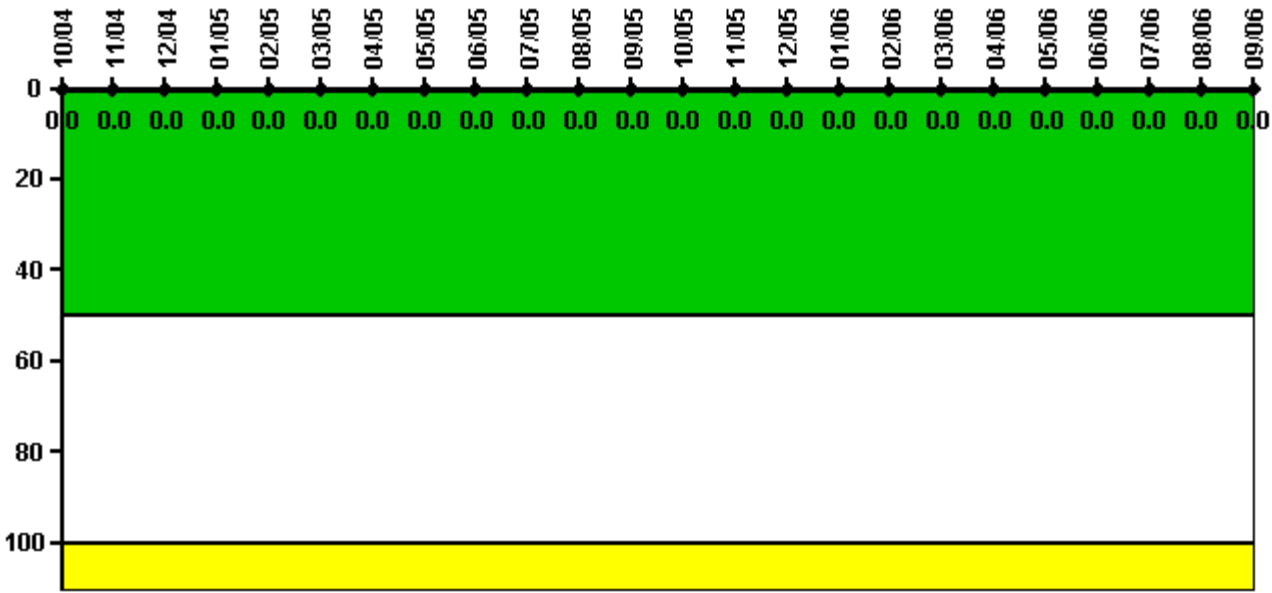
Thresholds: White $> 1.00E-6$ Yellow $> 1.00E-5$ Red $> 1.00E-4$

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
UAI (Δ CDF)							9.10E-07	9.90E-07
URI (Δ CDF)							-7.00E-07	-7.10E-07
PLE							NO	NO
Indicator value							2.10E-07	2.80E-07

Licensee Comments: none

Reactor Coolant System Activity



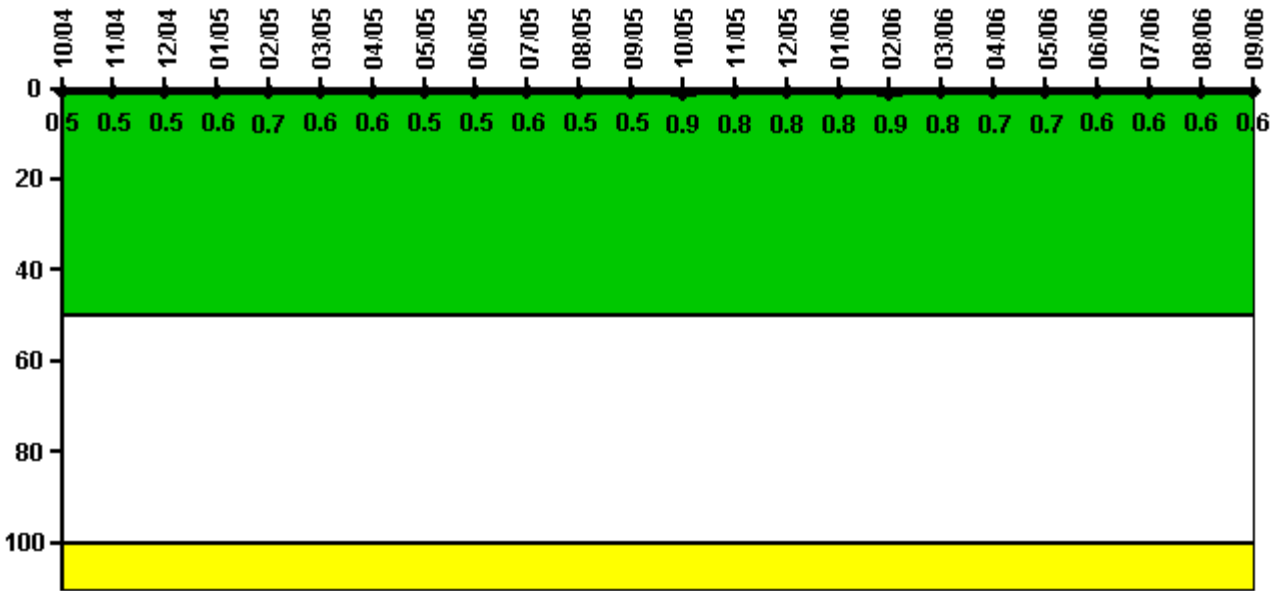
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05
Maximum activity	0.000310	0.000332	0.000336	0.000341	0.000336	0.000355	0.000366	0.000363	0.000381	0.000372	0.000499	0.000419
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06
Maximum activity	0.000209	0.000222	0.000236	0.000235	0.000240	0.000404	0.000271	0.000266	0.000267	0.000294	0.000306	0.000292
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



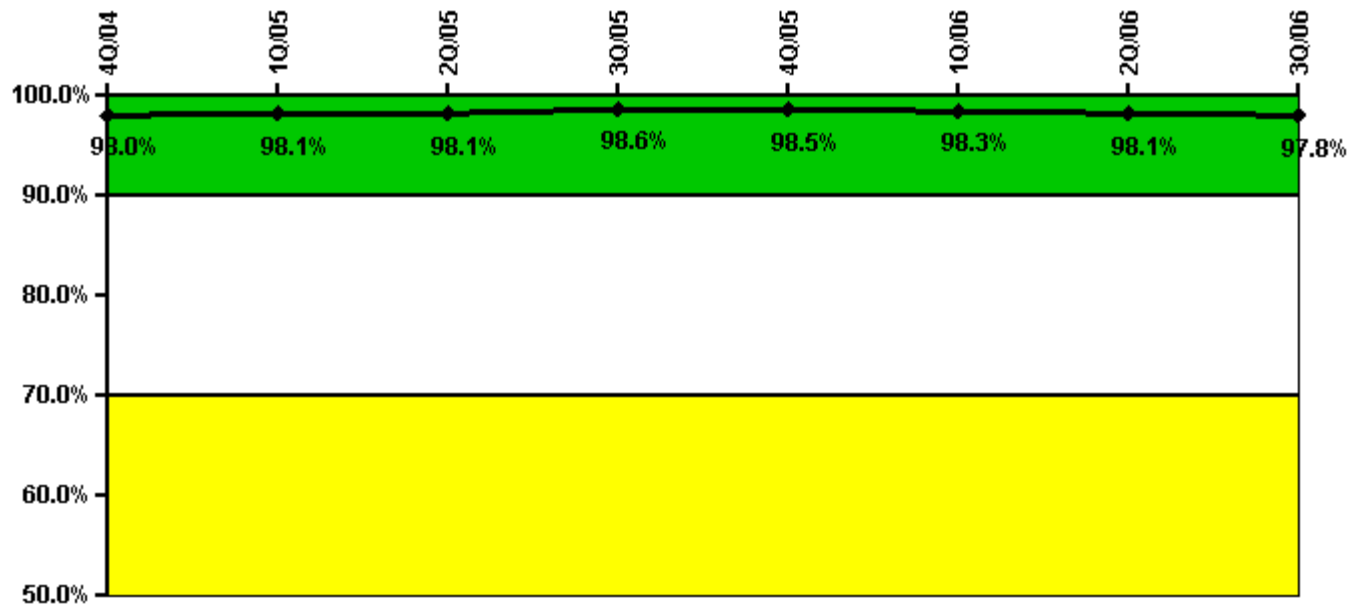
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05
Maximum leakage	0.054	0.049	0.049	0.057	0.065	0.060	0.064	0.053	0.053	0.063	0.052	0.054
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.5	0.5	0.6	0.5	0.5
Reactor Coolant System Leakage	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06
Maximum leakage	0.091	0.079	0.078	0.078	0.091	0.084	0.071	0.068	0.061	0.063	0.058	0.062
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	0.8	0.8	0.8	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6

Licensee Comments: none

Drill/Exercise Performance



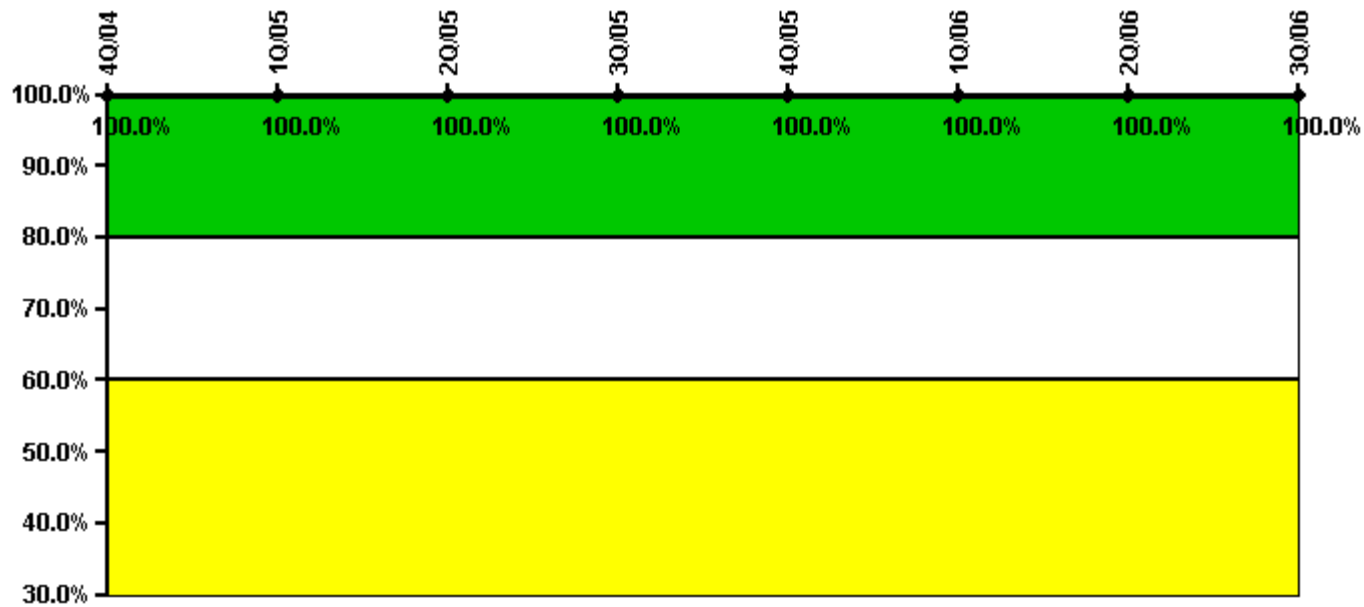
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
Successful opportunities	4.0	8.0	81.0	30.0	57.0	22.0	12.0	136.0
Total opportunities	4.0	9.0	84.0	30.0	58.0	22.0	12.0	139.0
Indicator value	98.0%	98.1%	98.1%	98.6%	98.5%	98.3%	98.1%	97.8%

Licensee Comments: none

ERO Drill Participation



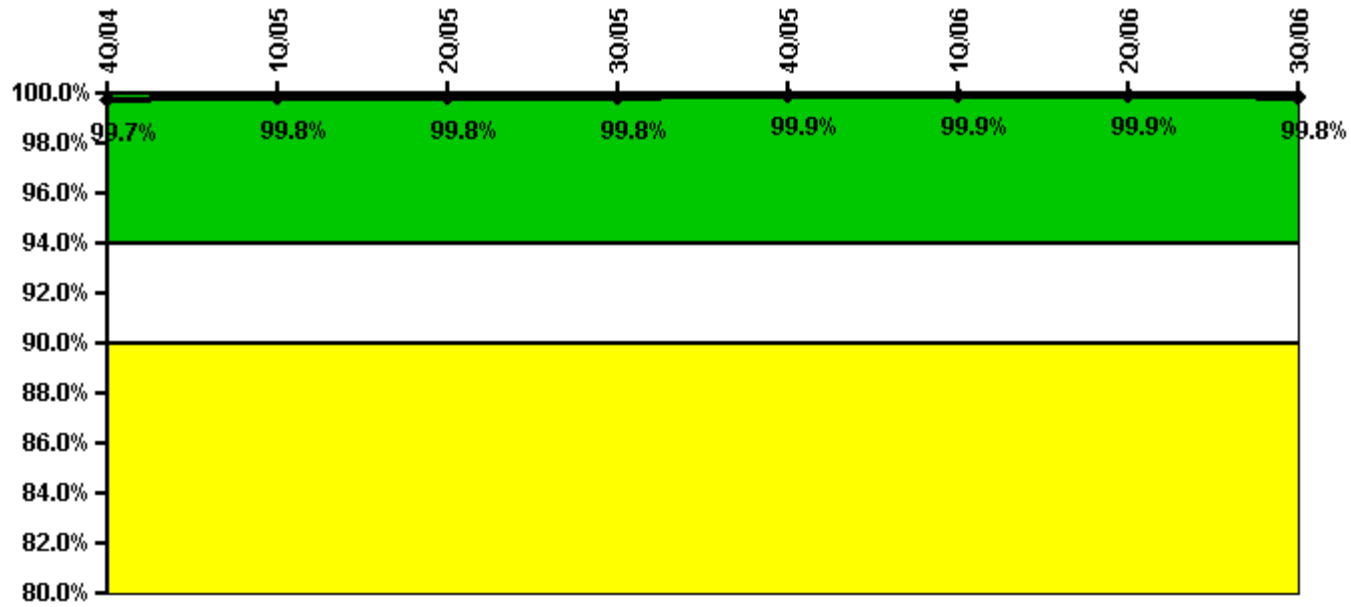
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
Participating Key personnel	74.0	75.0	71.0	76.0	74.0	78.0	78.0	76.0
Total Key personnel	74.0	75.0	71.0	76.0	74.0	78.0	78.0	76.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



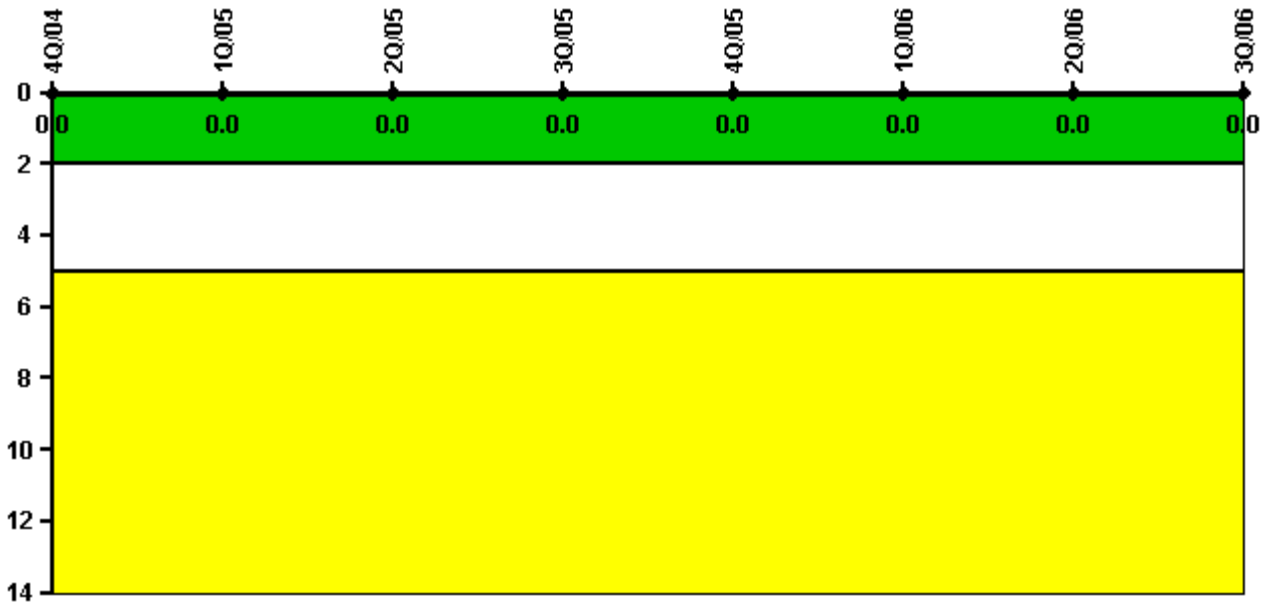
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
Successful siren-tests	6102	6004	6006	6005	6012	6105	6005	5988
Total sirens-tests	6110	6016	6015	6014	6016	6110	6012	6012
Indicator value	99.7%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



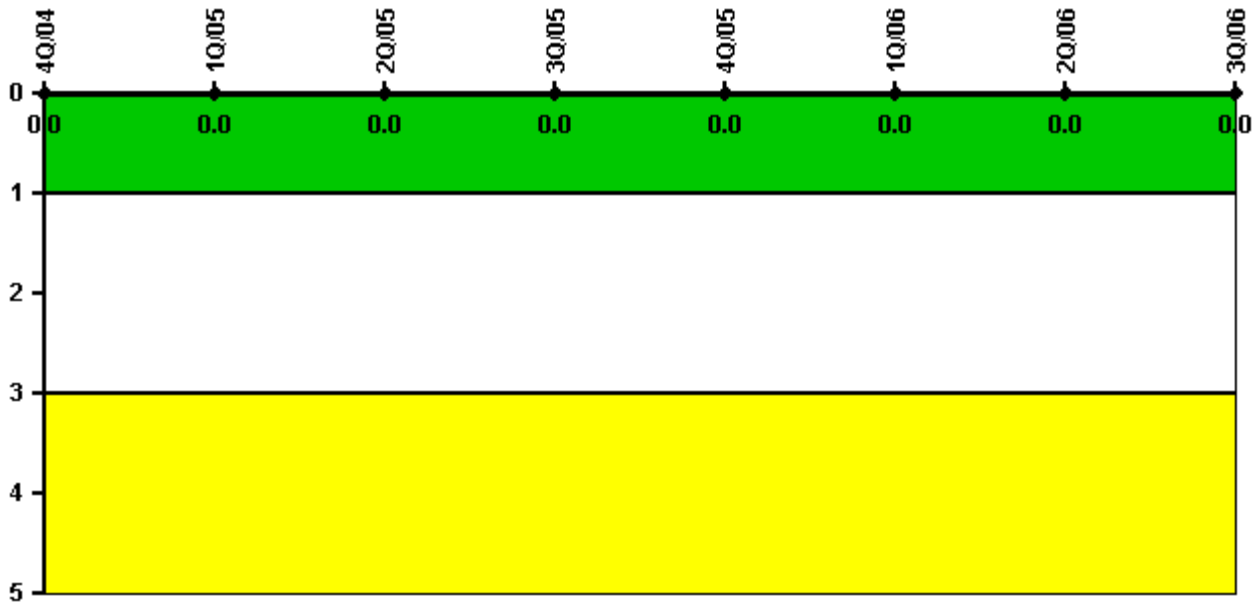
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

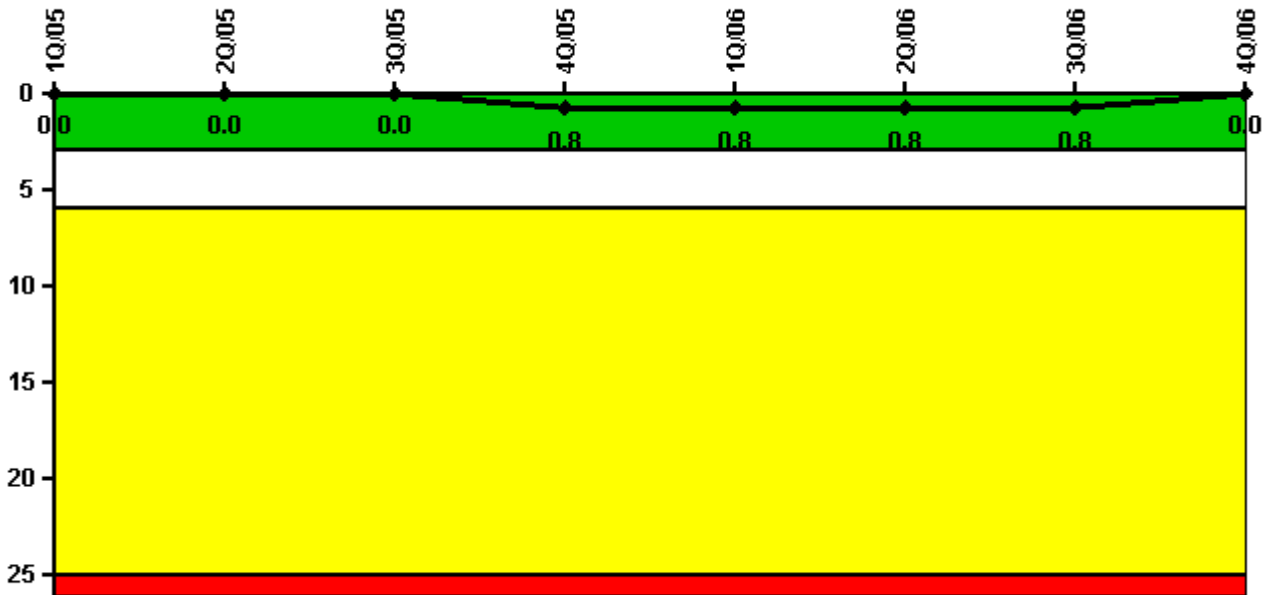
[Physical Protection](#) information not publicly available.

Byron 2

4Q/2006 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



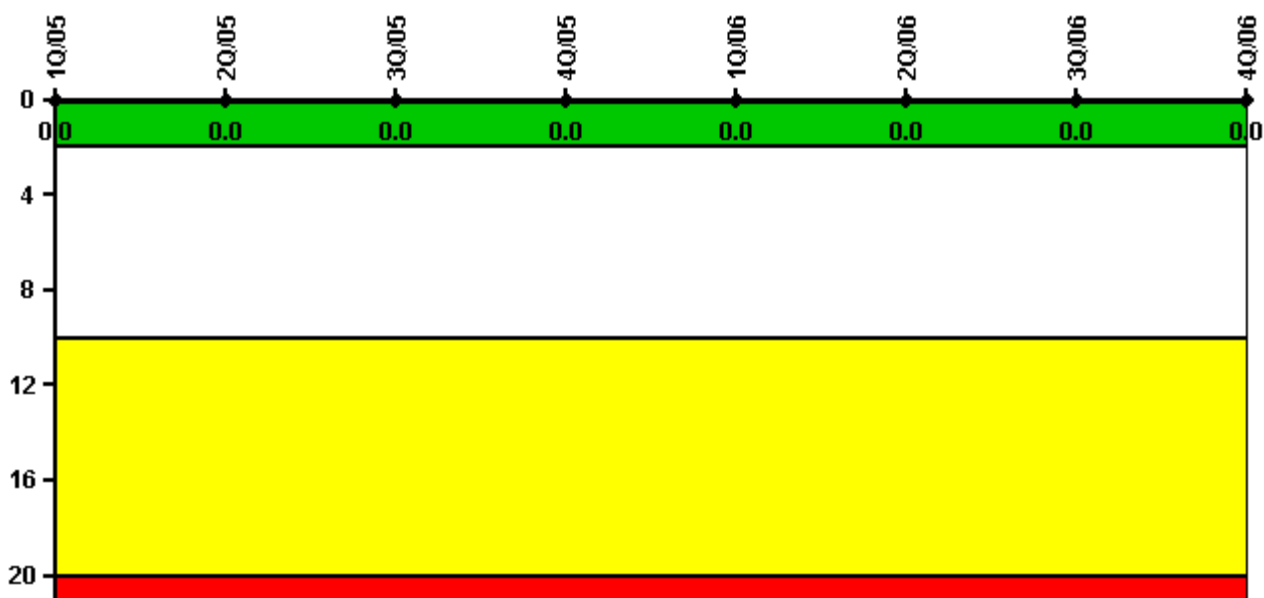
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Unplanned scrams	0	0	0	1.0	0	0	0	0
Critical hours	2160.0	2183.0	2087.1	1922.4	2160.0	2183.0	2208.0	2209.0
Indicator value	0	0	0	0.8	0.8	0.8	0.8	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



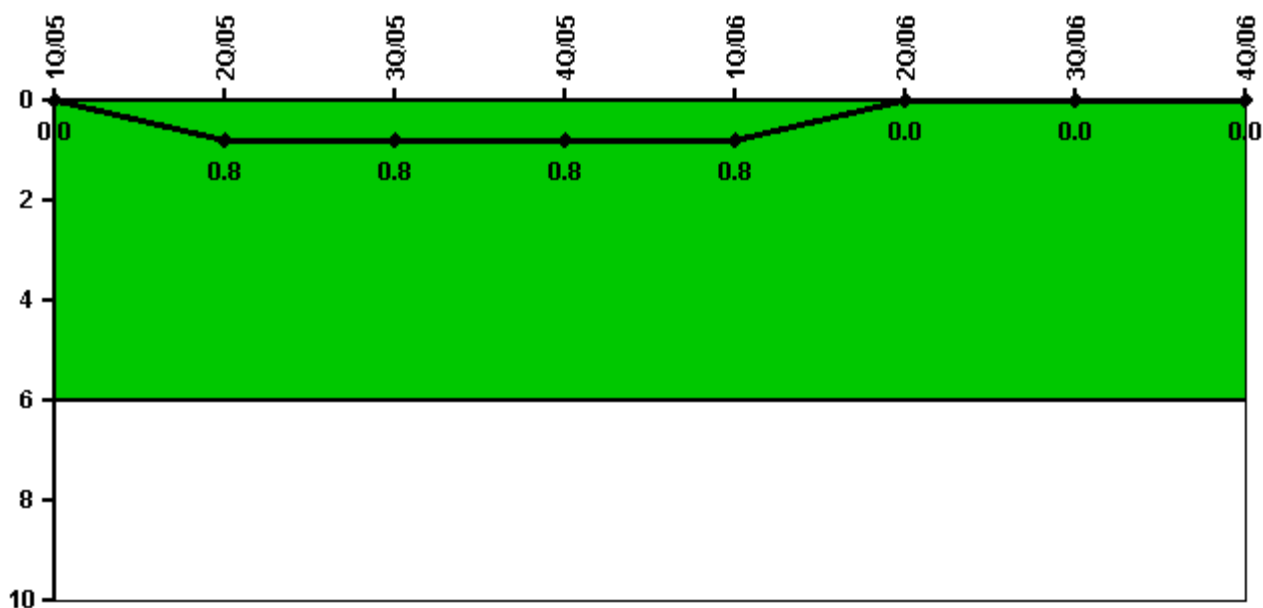
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



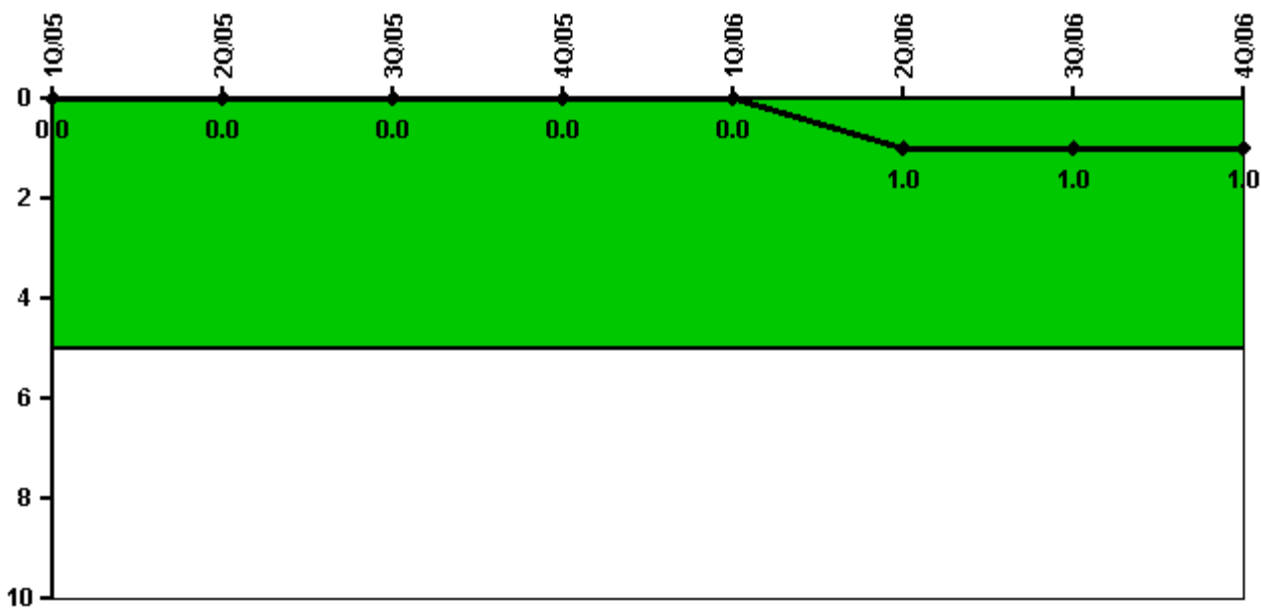
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Unplanned power changes	0	1.0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	2087.1	1922.4	2160.0	2183.0	2208.0	2209.0
Indicator value	0	0.8	0.8	0.8	0.8	0	0	0

Licensee Comments: none

Safety System Functional Failures (PWR)



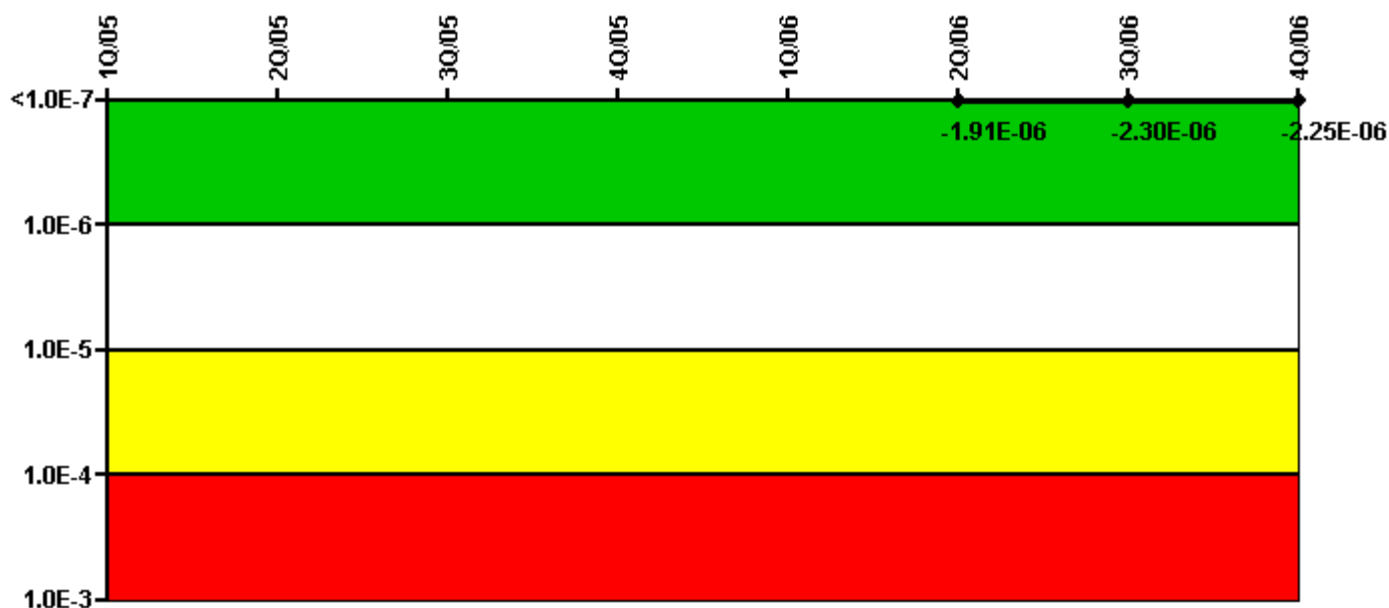
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Safety System Functional Failures	0	0	0	0	0	1	0	0
Indicator value	0	0	0	0	0	1	1	1

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (ΔCDF)						-8.00E-09	4.80E-09	5.10E-08
URI (ΔCDF)						-1.90E-06	-2.30E-06	-2.30E-06
PLE						NO	NO	NO
Indicator value						-1.91E-06	-2.30E-06	-2.25E-06

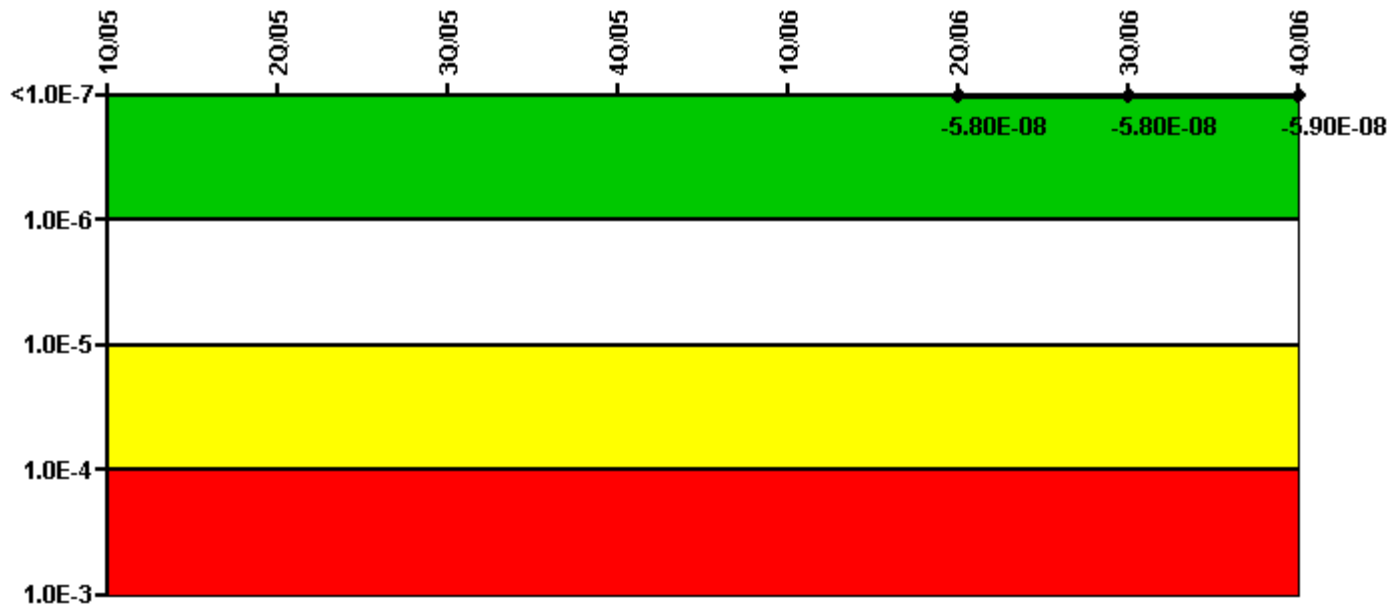
Licensee Comments:

4Q/06: Changed PRA Parameter(s). Corrections made to historical actual UA and Baseline UA

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (Δ CDF)						-4.20E-08	-4.20E-08	-4.20E-08
URI (Δ CDF)						-1.60E-08	-1.60E-08	-1.70E-08
PLE						NO	NO	NO
Indicator value						-5.80E-08	-5.80E-08	-5.90E-08

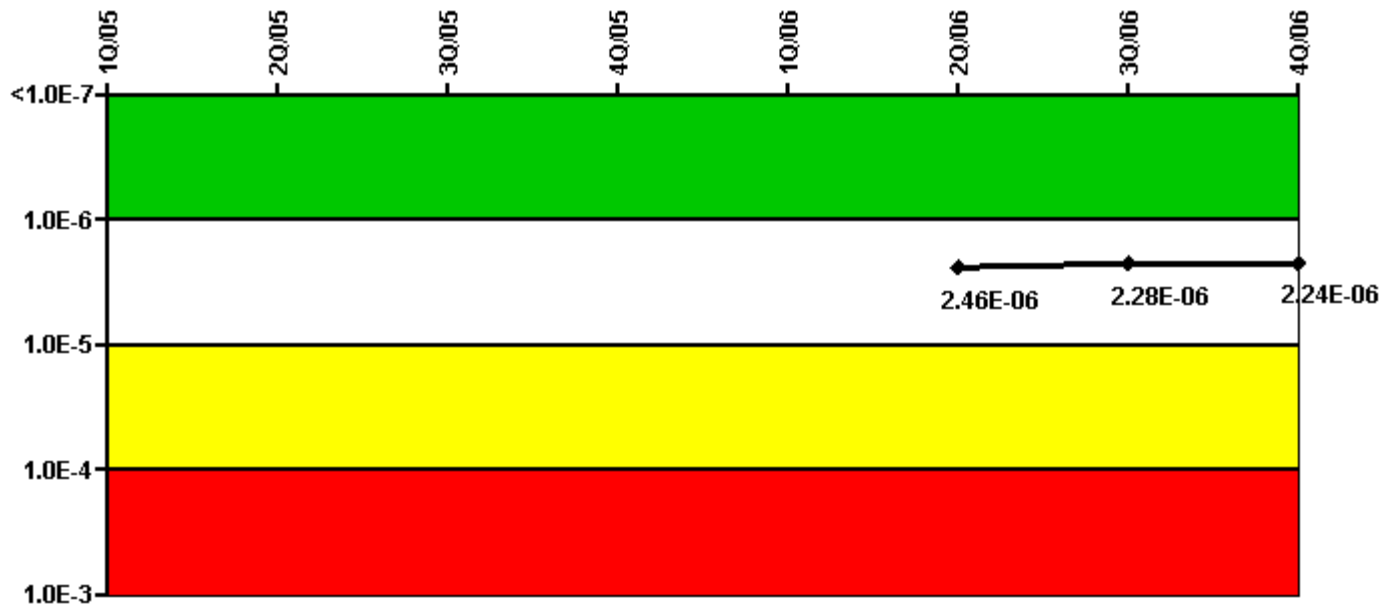
Licensee Comments:

4Q/06: Changed PRA Parameter(s). Corrections made to historical actual UA and Baseline UA

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (ΔCDF)						8.60E-07	6.80E-07	5.40E-07
URI (ΔCDF)						1.60E-06	1.60E-06	1.70E-06
PLE						NO	NO	NO
Indicator value						2.46E-06	2.28E-06	2.24E-06

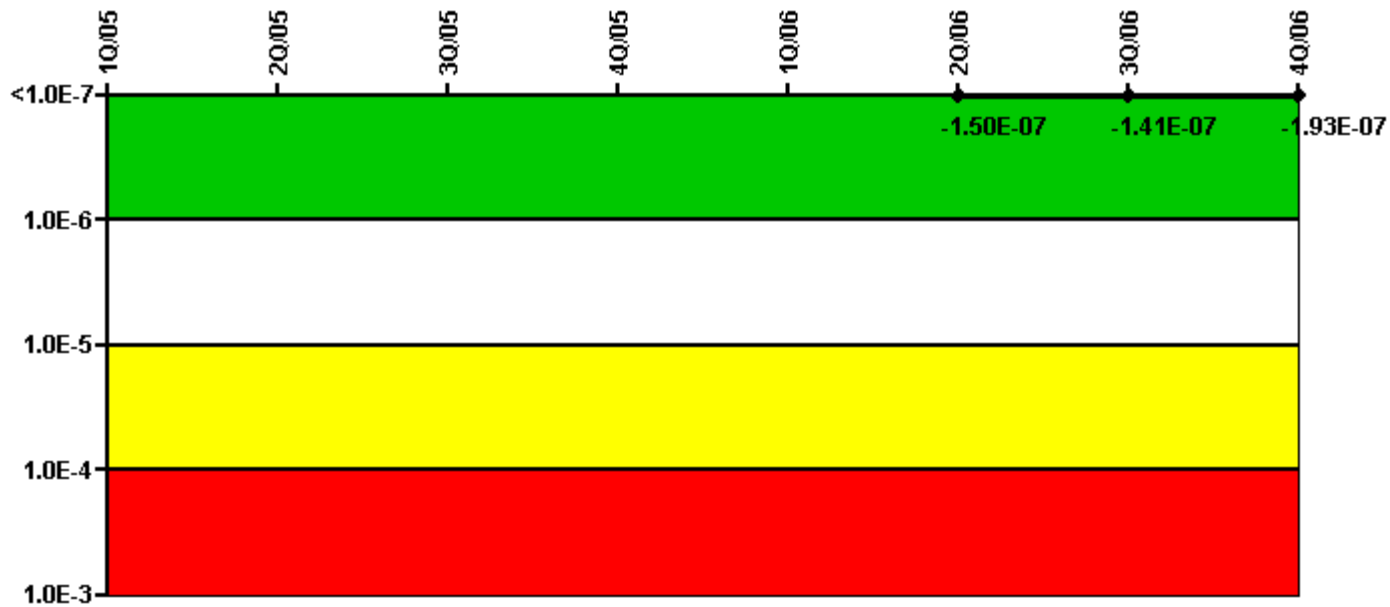
Licensee Comments:

4Q/06: Risk Cap Invoked. Changed PRA Parameter(s).

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (Δ CDF)						6.60E-11	9.50E-09	-4.30E-08
URI (Δ CDF)						-1.50E-07	-1.50E-07	-1.50E-07
PLE						NO	NO	NO
Indicator value						-1.50E-07	-1.41E-07	-1.93E-07

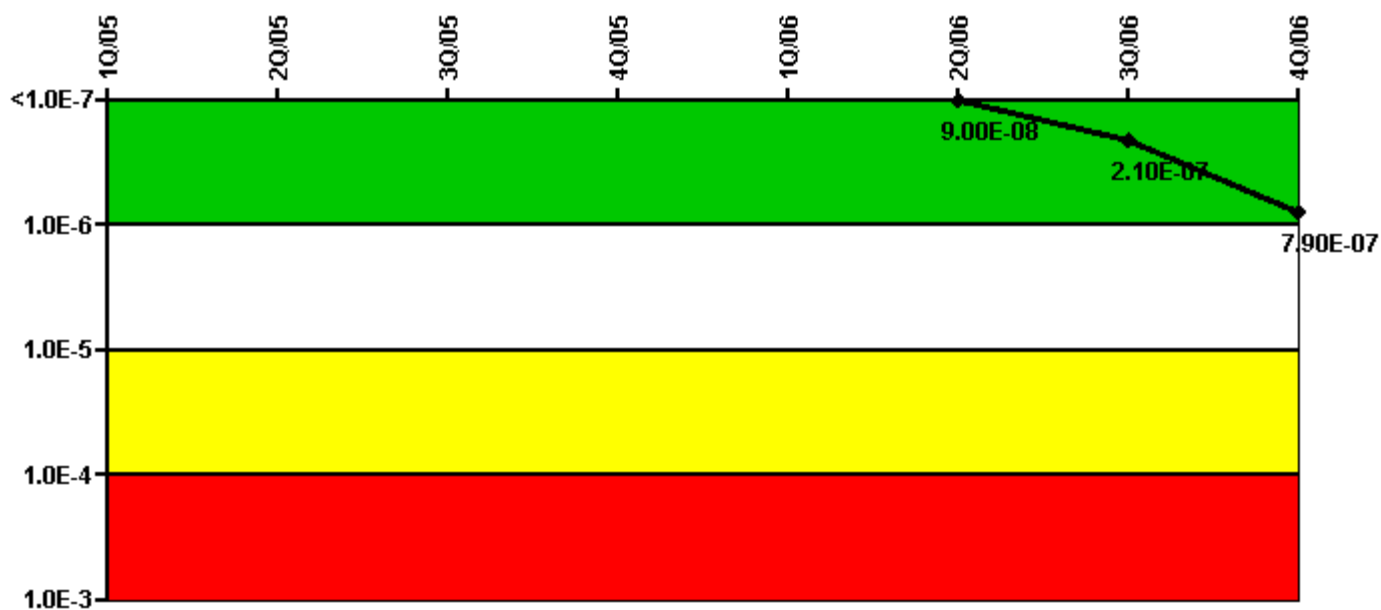
Licensee Comments:

4Q/06: Changed PRA Parameter(s). Corrections made to historical actual UA and Baseline UA

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (ΔCDF)						8.00E-07	9.20E-07	1.50E-06
URI (ΔCDF)						-7.10E-07	-7.10E-07	-7.10E-07
PLE						NO	NO	NO
Indicator value						9.00E-08	2.10E-07	7.90E-07

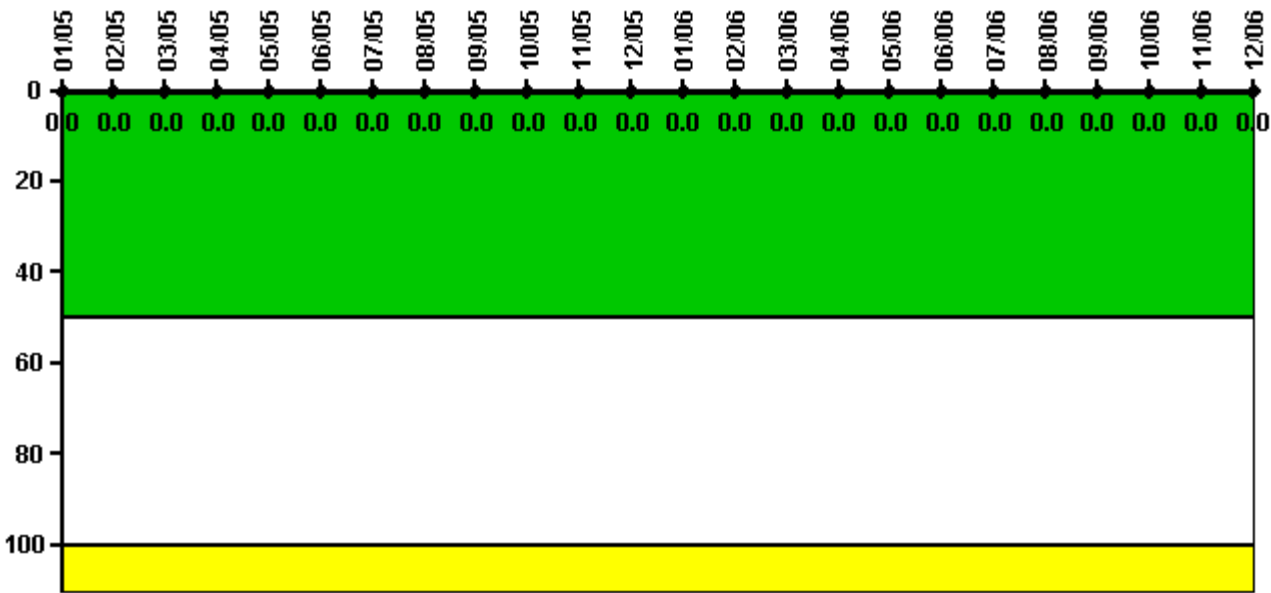
Licensee Comments:

4Q/06: Changed PRA Parameter(s).

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

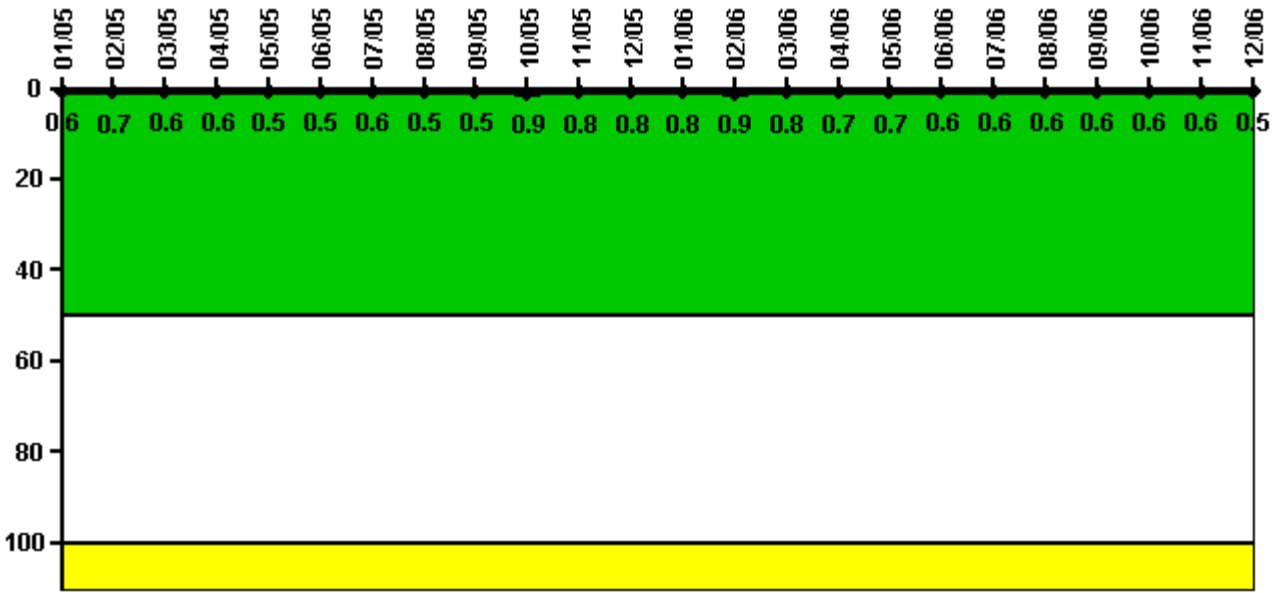
Notes

Reactor Coolant System Activity	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum activity	0.000341	0.000336	0.000355	0.000366	0.000363	0.000381	0.000372	0.000499	0.000419	0.000209	0.000222	0.000236
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum activity	0.000235	0.000240	0.000404	0.000271	0.000266	0.000267	0.000294	0.000306	0.000292	0.000295	0.000307	0.000308
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

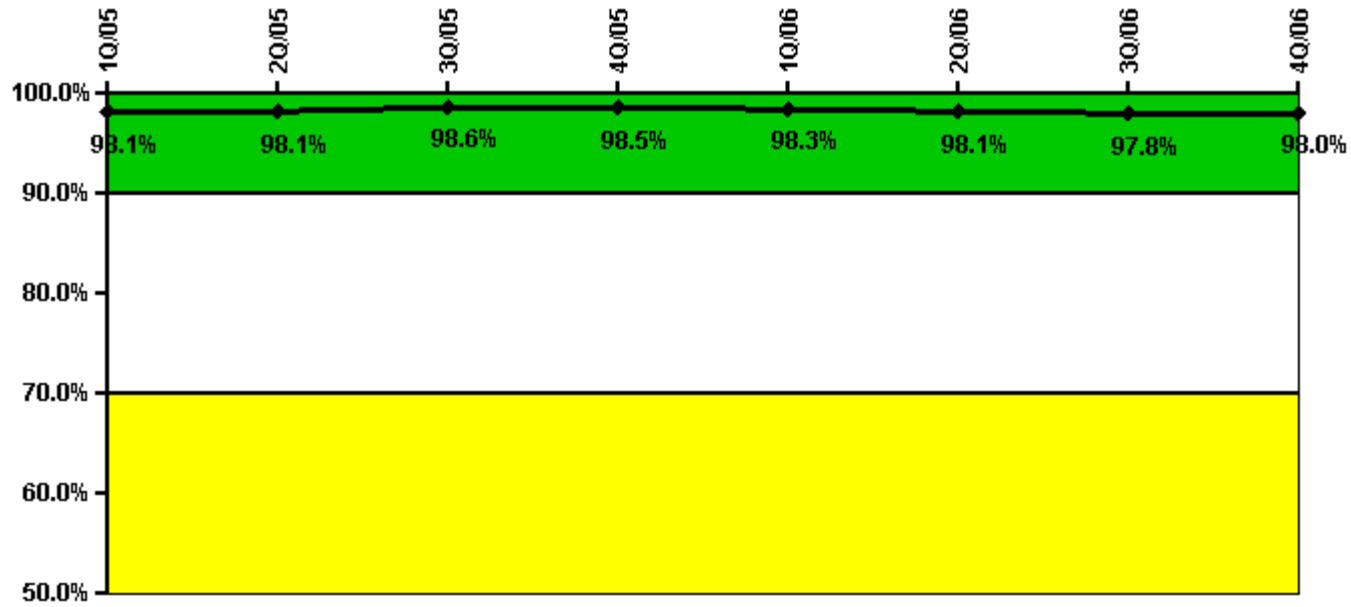
Notes

Reactor Coolant System Leakage	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum leakage	0.057	0.065	0.060	0.064	0.053	0.053	0.063	0.052	0.054	0.091	0.079	0.078
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.7	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.9	0.8	0.8

Reactor Coolant System Leakage	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum leakage	0.078	0.091	0.084	0.071	0.068	0.061	0.063	0.058	0.062	0.061	0.059	0.054
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5

Licensee Comments: none

Drill/Exercise Performance



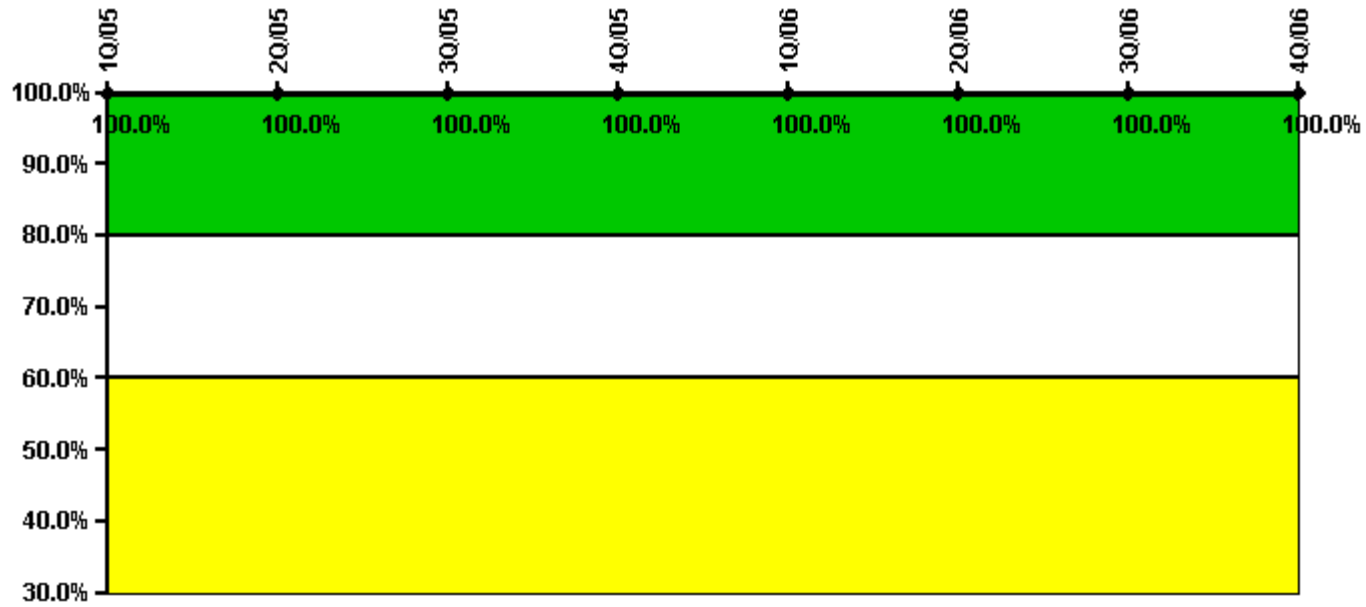
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Successful opportunities	8.0	81.0	30.0	57.0	22.0	12.0	136.0	40.0
Total opportunities	9.0	84.0	30.0	58.0	22.0	12.0	139.0	40.0
Indicator value	98.1%	98.1%	98.6%	98.5%	98.3%	98.1%	97.8%	98.0%

Licensee Comments: none

ERO Drill Participation



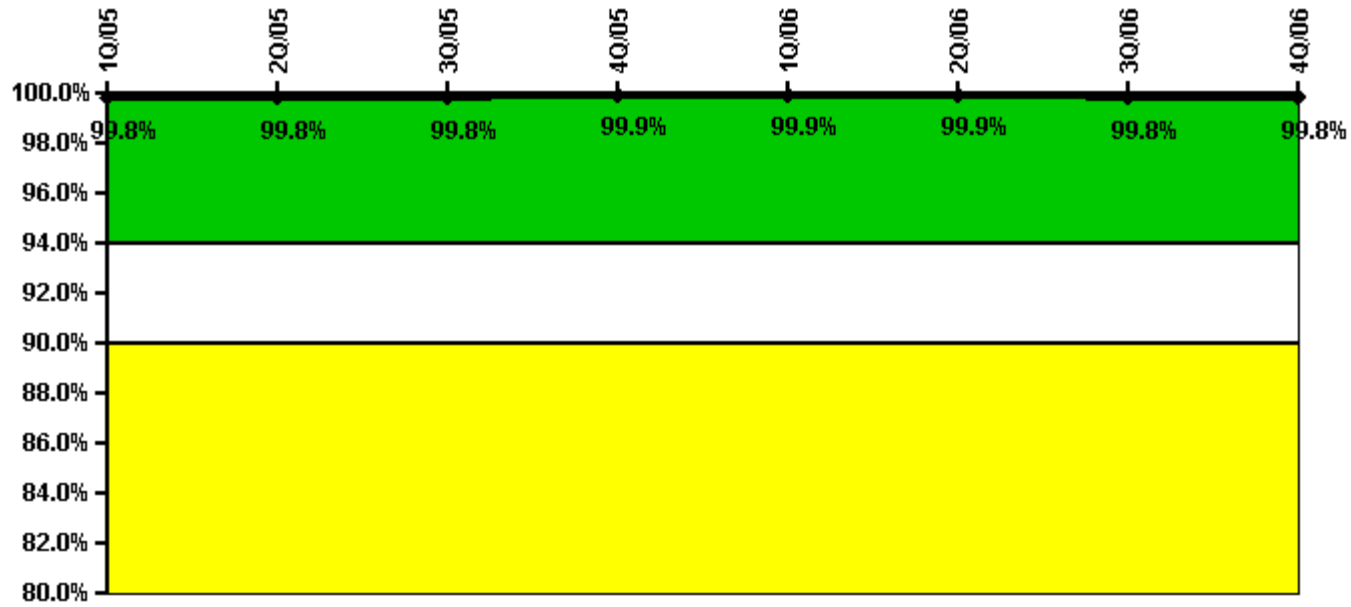
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Participating Key personnel	75.0	71.0	76.0	74.0	78.0	78.0	76.0	76.0
Total Key personnel	75.0	71.0	76.0	74.0	78.0	78.0	76.0	76.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



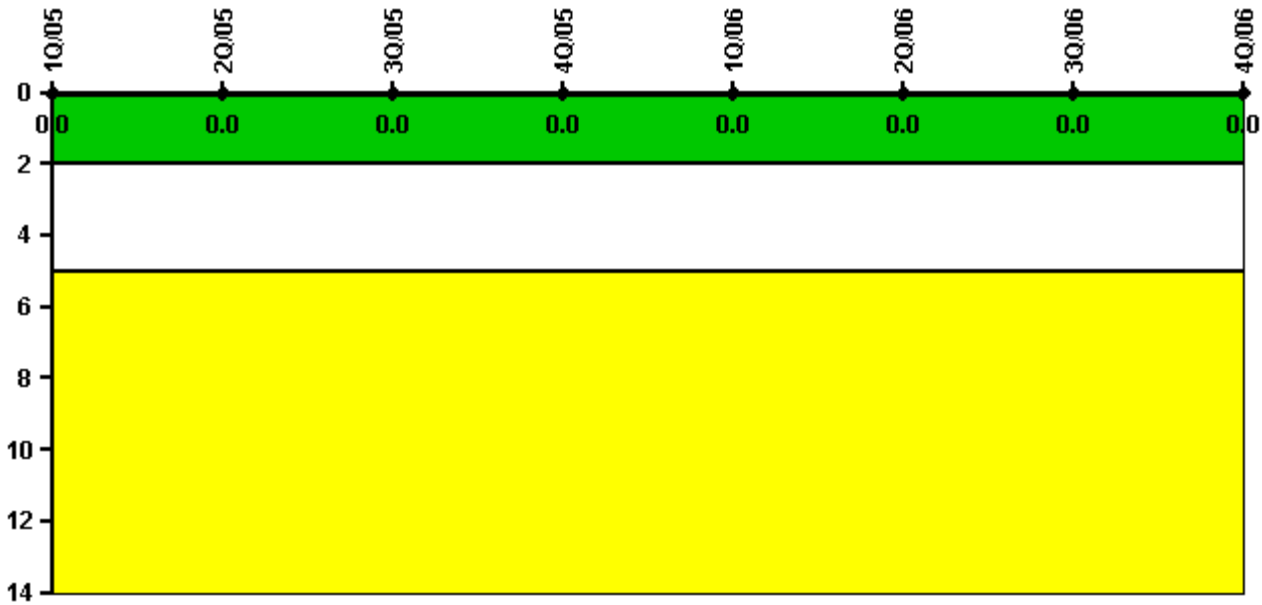
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Successful siren-tests	6004	6006	6005	6012	6105	6005	5988	5915
Total sirens-tests	6016	6015	6014	6016	6110	6012	6012	5922
Indicator value	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



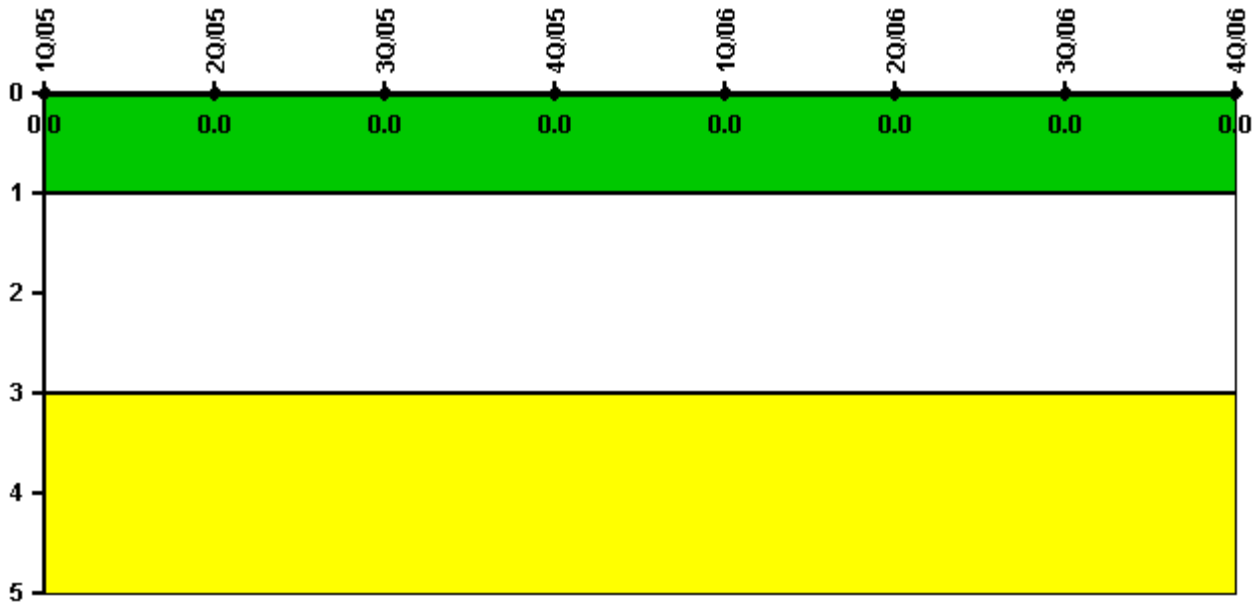
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

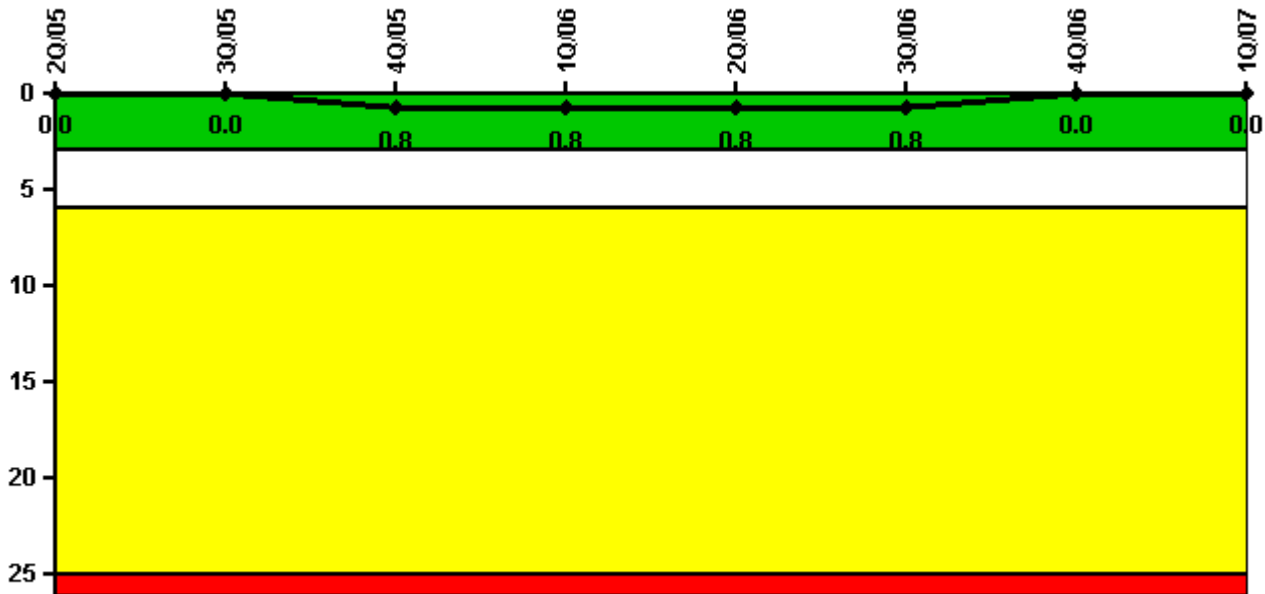
[Physical Protection](#) information not publicly available.

Byron 2

1Q/2007 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
Unplanned scrams	0	0	1.0	0	0	0	0	0
Critical hours	2183.0	2087.1	1922.4	2160.0	2183.0	2208.0	2209.0	2159.0
Indicator value	0	0	0.8	0.8	0.8	0.8	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



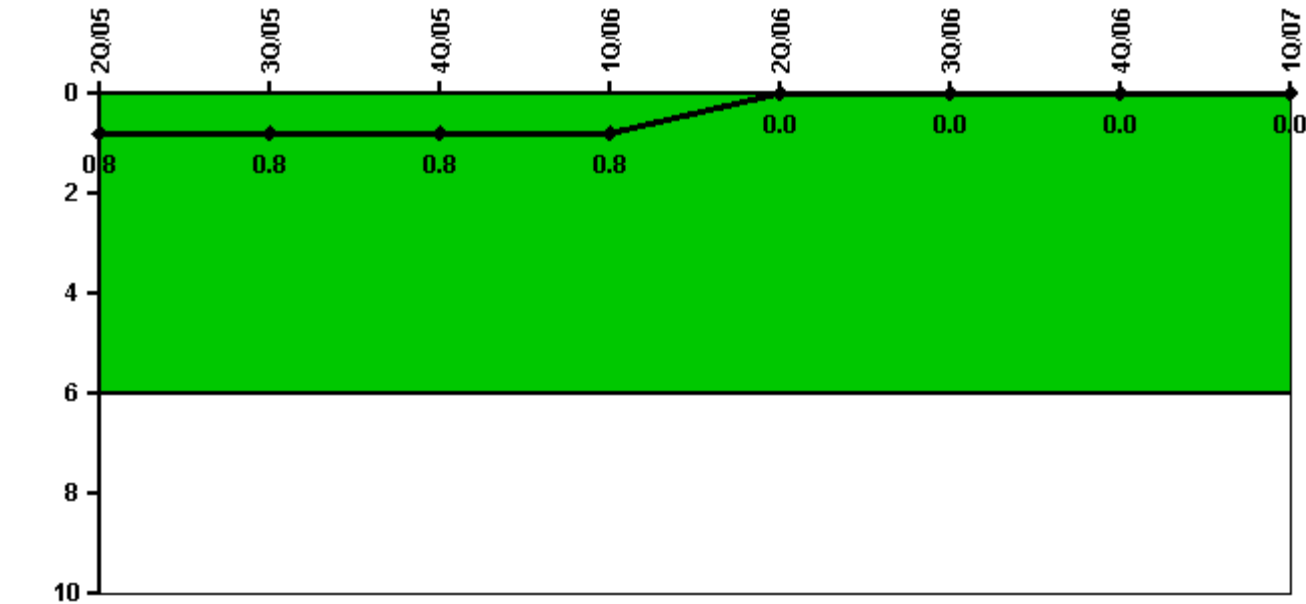
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



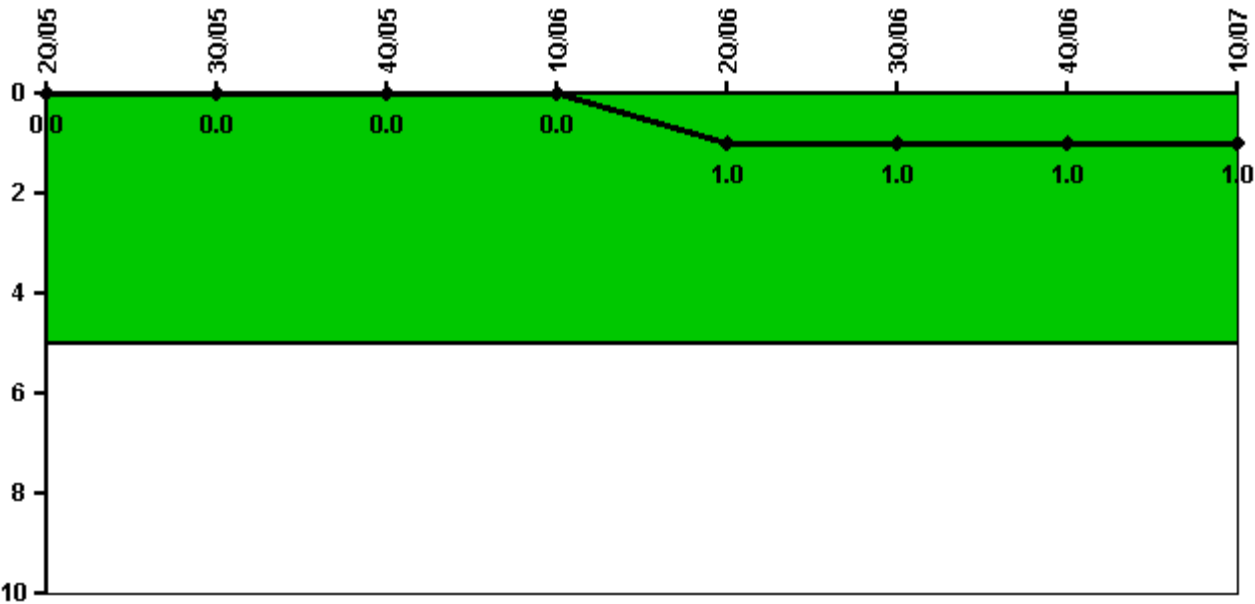
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	2183.0	2087.1	1922.4	2160.0	2183.0	2208.0	2209.0	2159.0
Indicator value	0.8	0.8	0.8	0.8	0	0	0	0

Licensee Comments: none

Safety System Functional Failures (PWR)



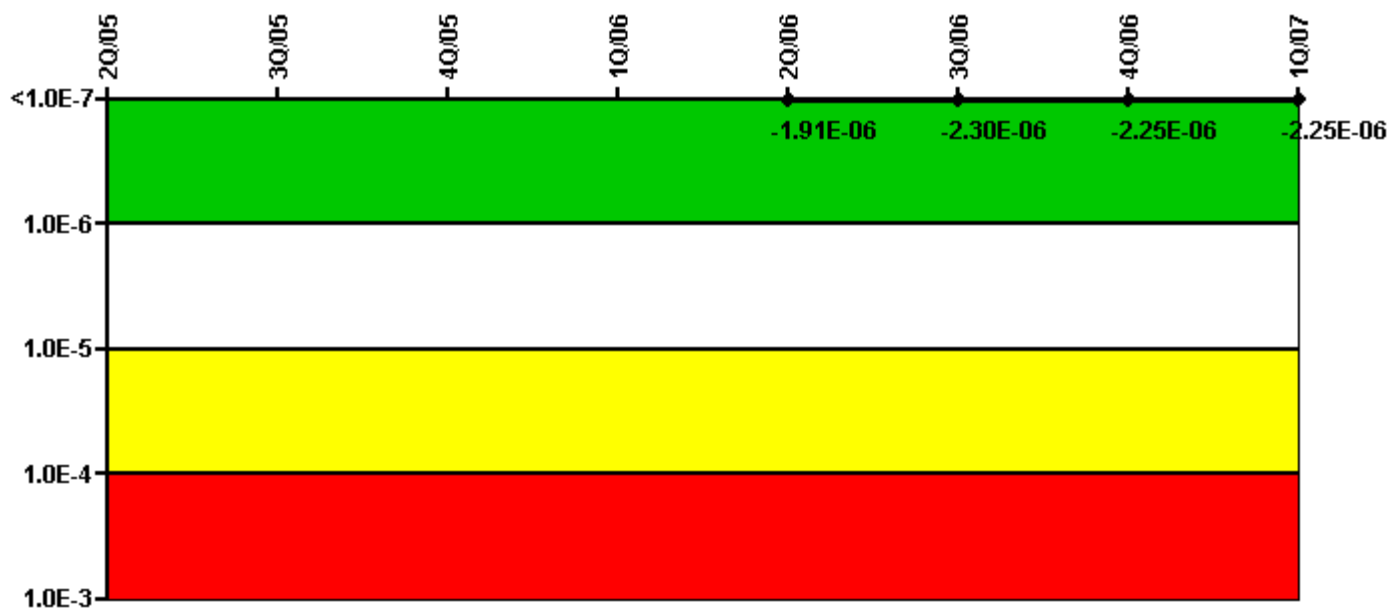
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
Safety System Functional Failures	0	0	0	0	1	0	0	0
Indicator value	0	0	0	0	1	1	1	1

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



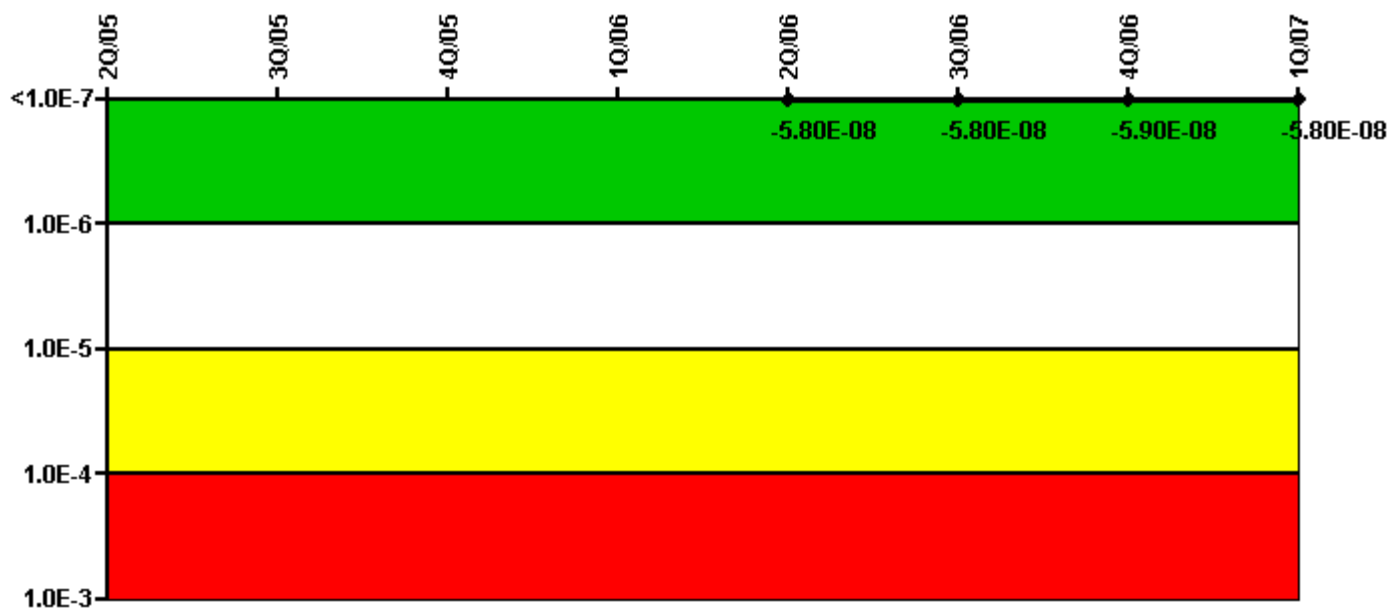
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
UAI (ΔCDF)					-8.00E-09	4.80E-09	5.10E-08	4.80E-08
URI (ΔCDF)					-1.90E-06	-2.30E-06	-2.30E-06	-2.30E-06
PLE					NO	NO	NO	NO
Indicator value					-1.91E-06	-2.30E-06	-2.25E-06	-2.25E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



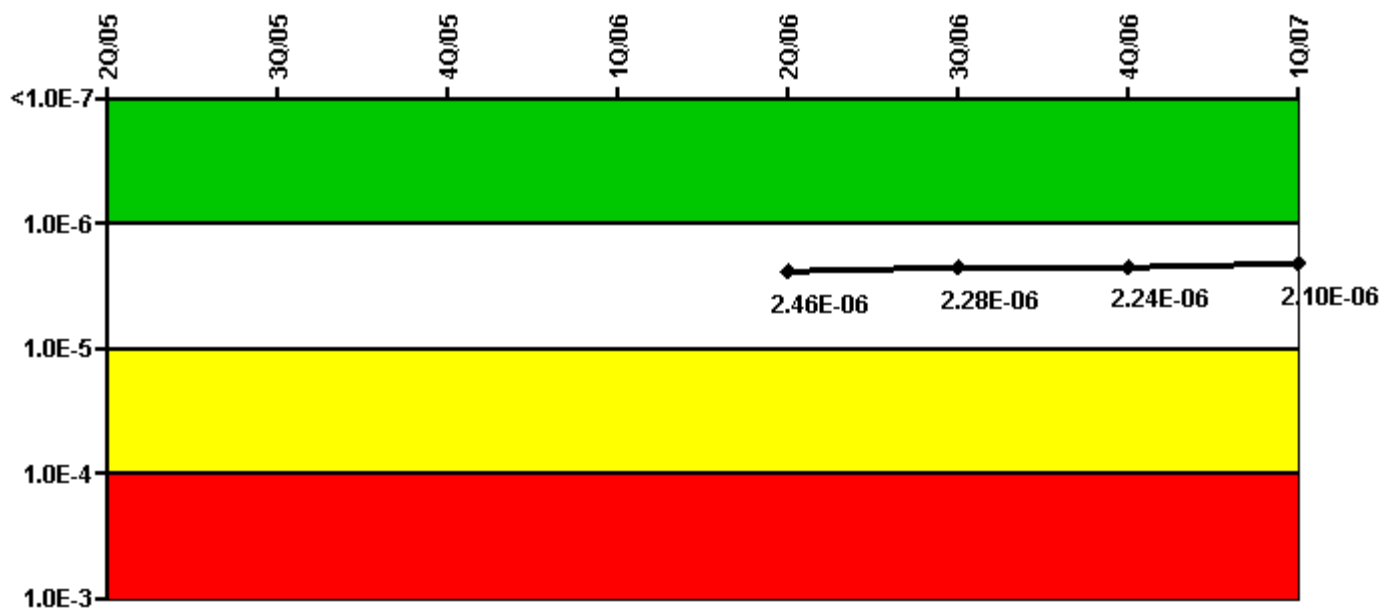
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
UAI (ΔCDF)					-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08
URI (ΔCDF)					-1.60E-08	-1.60E-08	-1.70E-08	-1.60E-08
PLE					NO	NO	NO	NO
Indicator value					-5.80E-08	-5.80E-08	-5.90E-08	-5.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

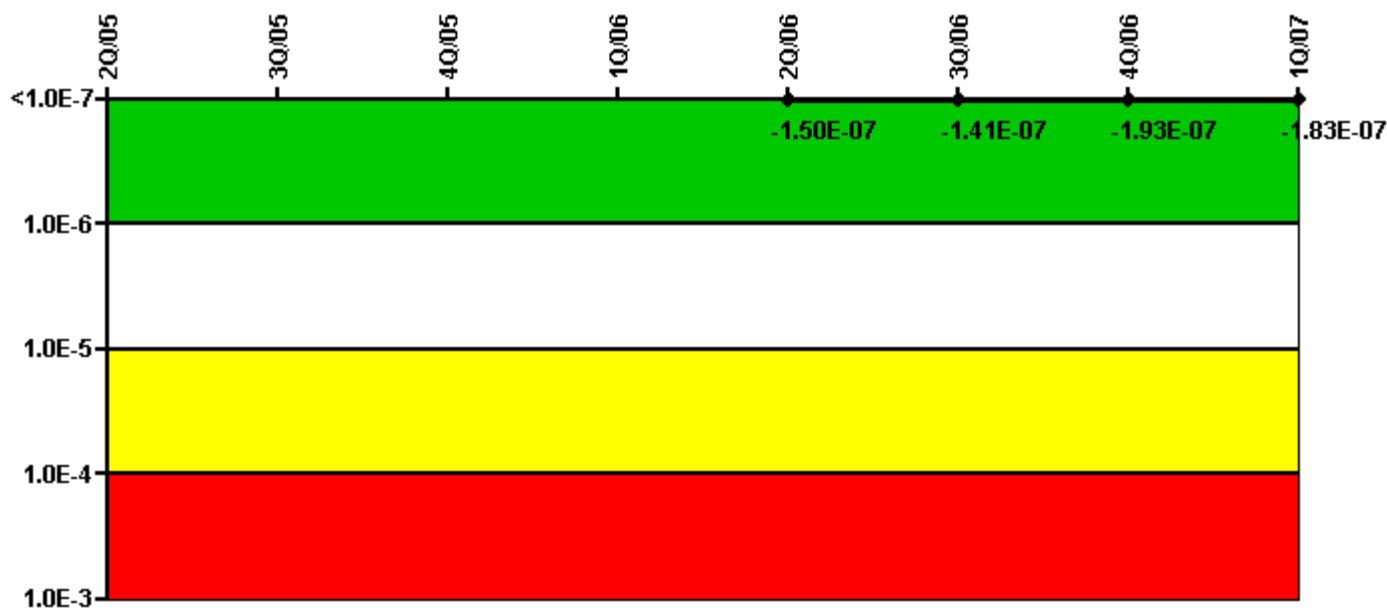
Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
UAI (ΔCDF)					8.60E-07	6.80E-07	5.40E-07	2.00E-07
URI (ΔCDF)					1.60E-06	1.60E-06	1.70E-06	1.90E-06
PLE					NO	NO	NO	NO
Indicator value					2.46E-06	2.28E-06	2.24E-06	2.10E-06

Licensee Comments:

1Q/07: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



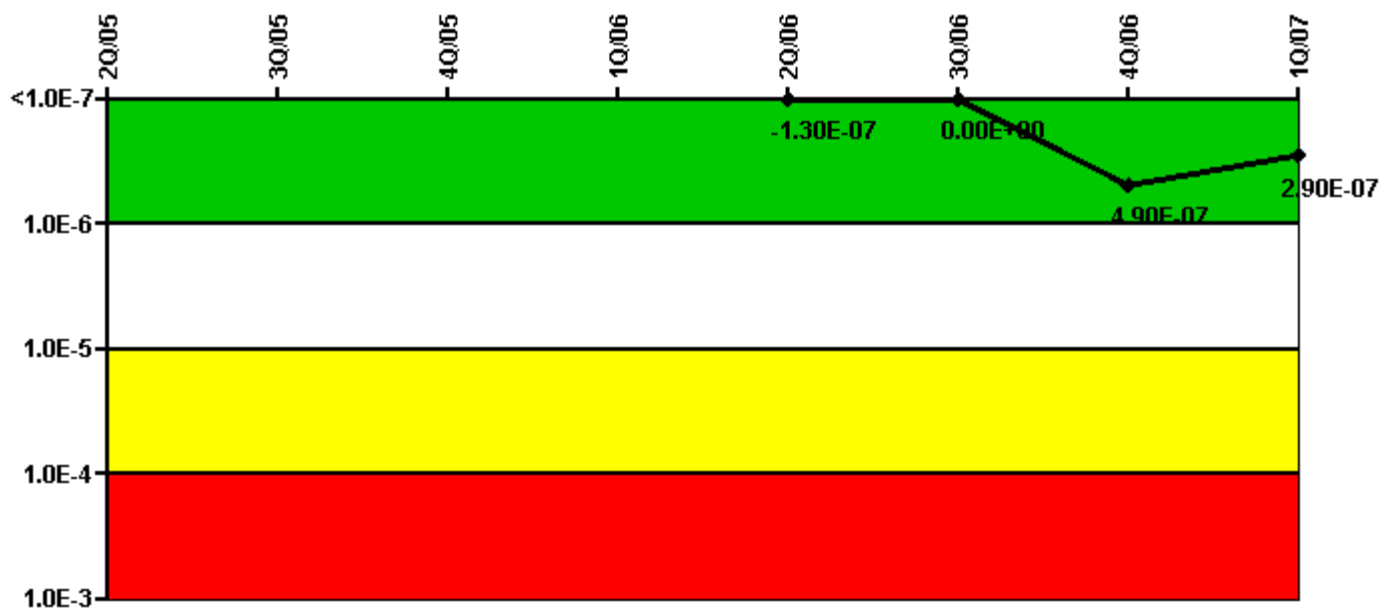
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
UAI (ΔCDF)					6.60E-11	9.50E-09	-4.30E-08	-4.30E-08
URI (ΔCDF)					-1.50E-07	-1.50E-07	-1.50E-07	-1.40E-07
PLE					NO	NO	NO	NO
Indicator value					-1.50E-07	-1.41E-07	-1.93E-07	-1.83E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

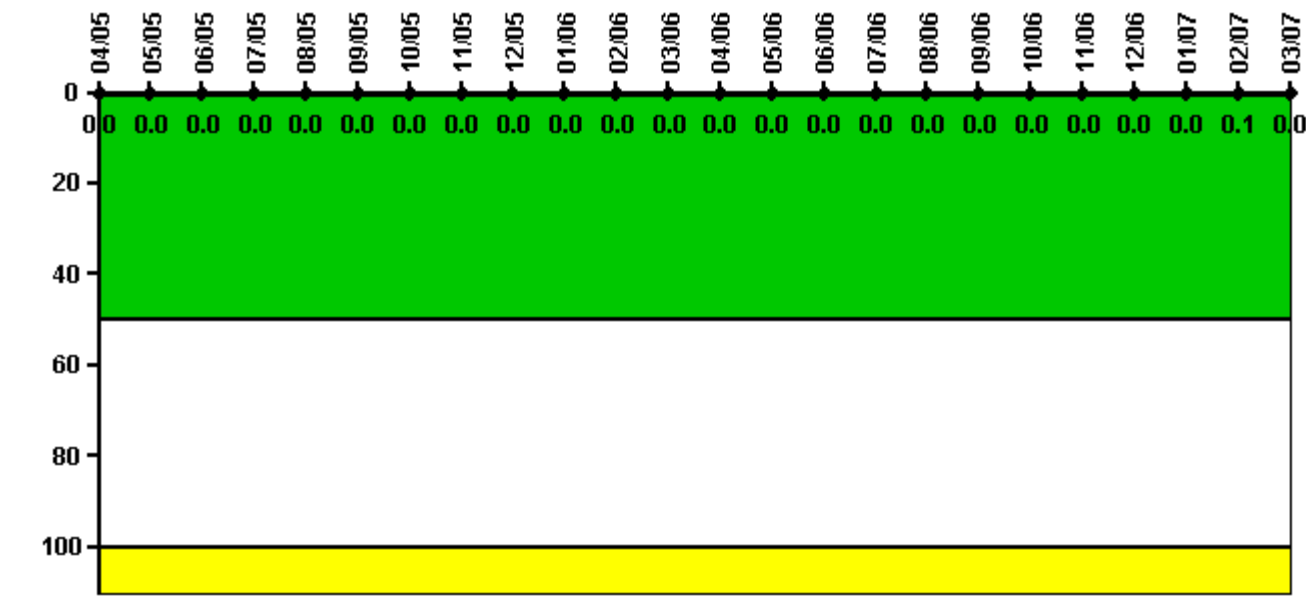
Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
UAI (ACDF)					5.80E-07	7.10E-07	1.20E-06	1.00E-06
URI (ACDF)					-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07
PLE					NO	NO	NO	NO
Indicator value					-1.30E-07	0.00E+00	4.90E-07	2.90E-07

Licensee Comments:

- 1Q/07: Changed PRA Parameter(s).
- 4Q/06: Changed PRA Parameter(s).
- 3Q/06: Changed PRA Parameter(s).
- 2Q/06: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

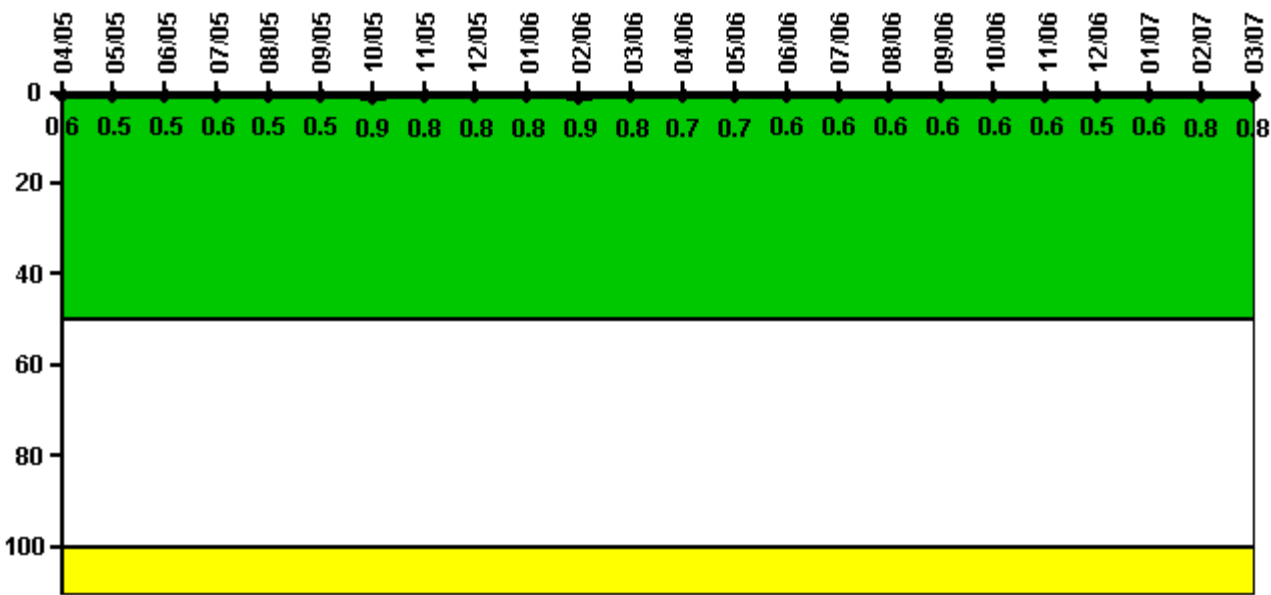
Notes

Reactor Coolant System Activity	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06
Maximum activity	0.000366	0.000363	0.000381	0.000372	0.000499	0.000419	0.000209	0.000222	0.000236	0.000235	0.000240	0.000404
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07
Maximum activity	0.000271	0.000266	0.000267	0.000294	0.000306	0.000292	0.000295	0.000307	0.000308	0.000315	0.000854	0.000371
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0.1	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

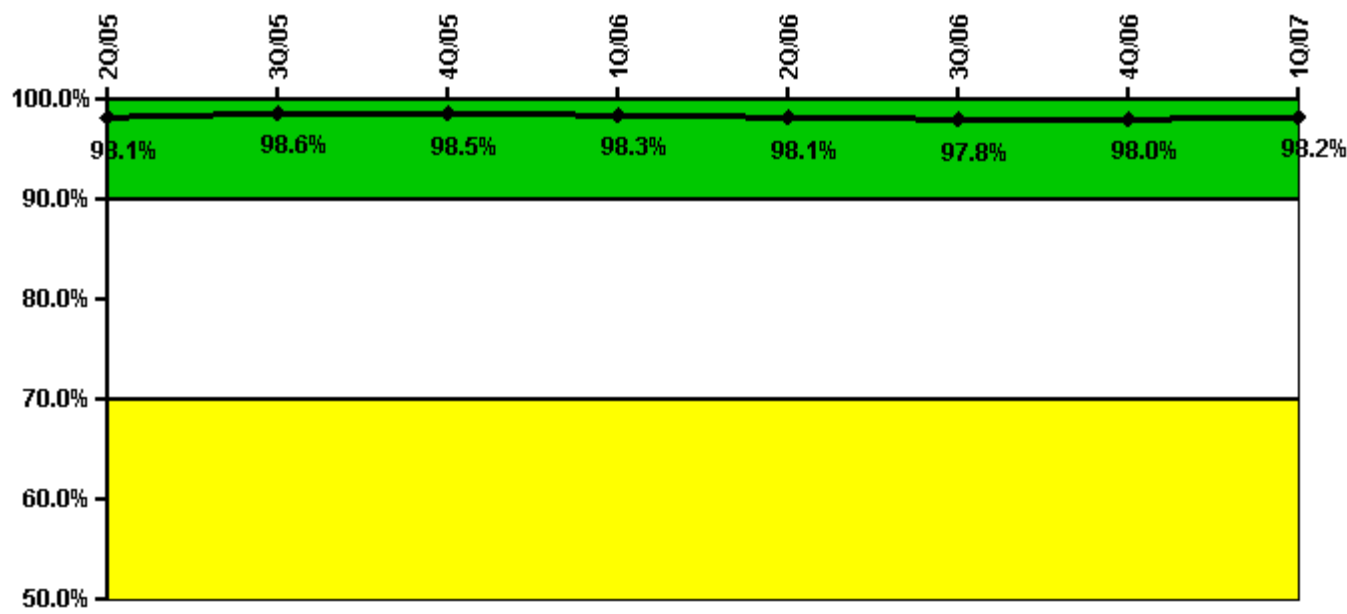
Notes

Reactor Coolant System Leakage	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06
Maximum leakage	0.064	0.053	0.053	0.063	0.052	0.054	0.091	0.079	0.078	0.078	0.091	0.084
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.6	0.5	0.5	0.9	0.8	0.8	0.8	0.9	0.8

Reactor Coolant System Leakage	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07
Maximum leakage	0.071	0.068	0.061	0.063	0.058	0.062	0.061	0.059	0.054	0.061	0.078	0.076
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.8	0.8

Licensee Comments: none

Drill/Exercise Performance



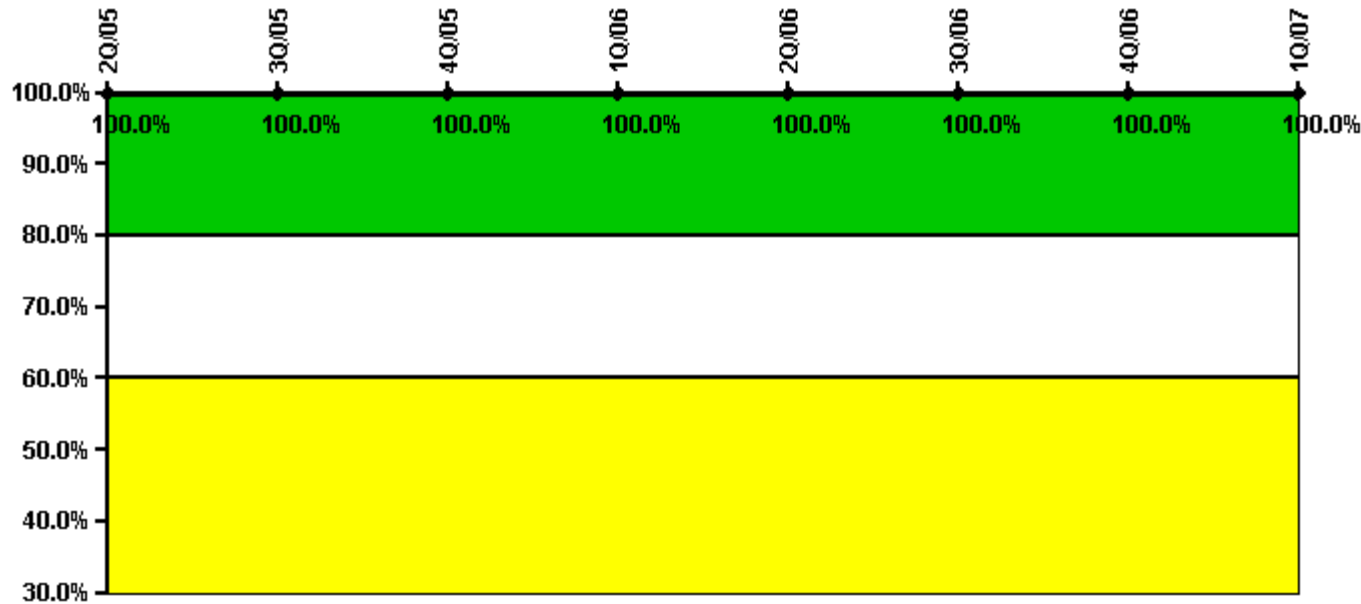
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
Successful opportunities	81.0	30.0	57.0	22.0	12.0	136.0	40.0	10.0
Total opportunities	84.0	30.0	58.0	22.0	12.0	139.0	40.0	10.0
Indicator value	98.1%	98.6%	98.5%	98.3%	98.1%	97.8%	98.0%	98.2%

Licensee Comments: none

ERO Drill Participation



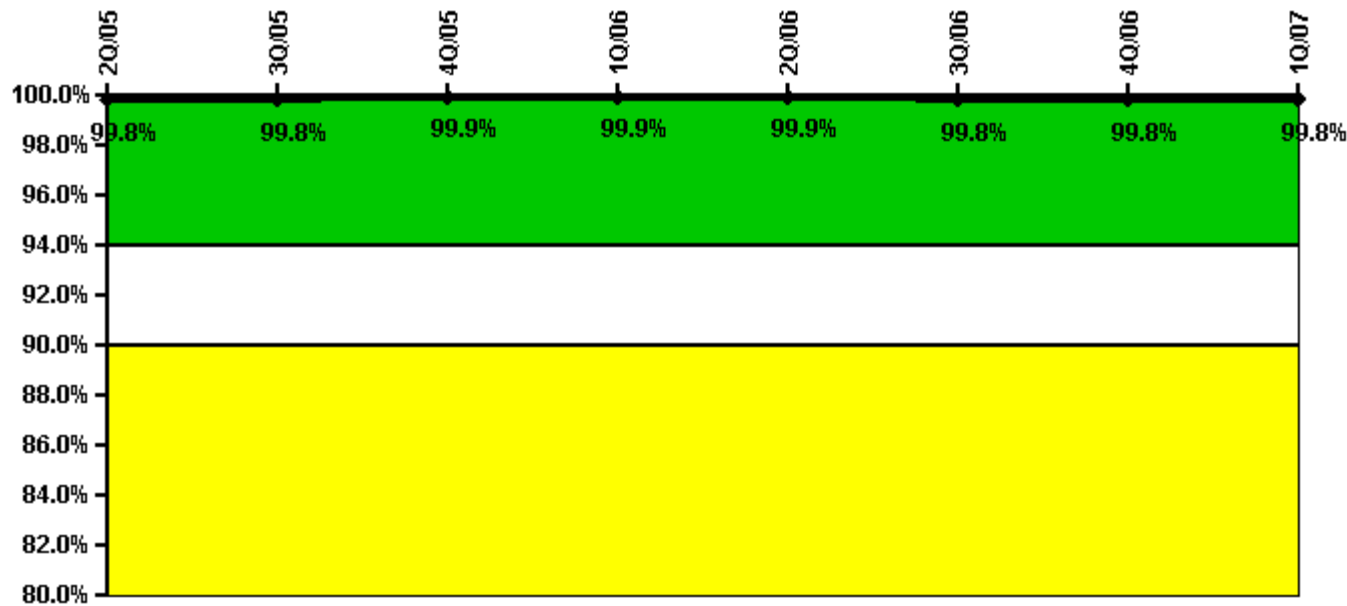
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
Participating Key personnel	71.0	76.0	74.0	78.0	78.0	76.0	76.0	71.0
Total Key personnel	71.0	76.0	74.0	78.0	78.0	76.0	76.0	71.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



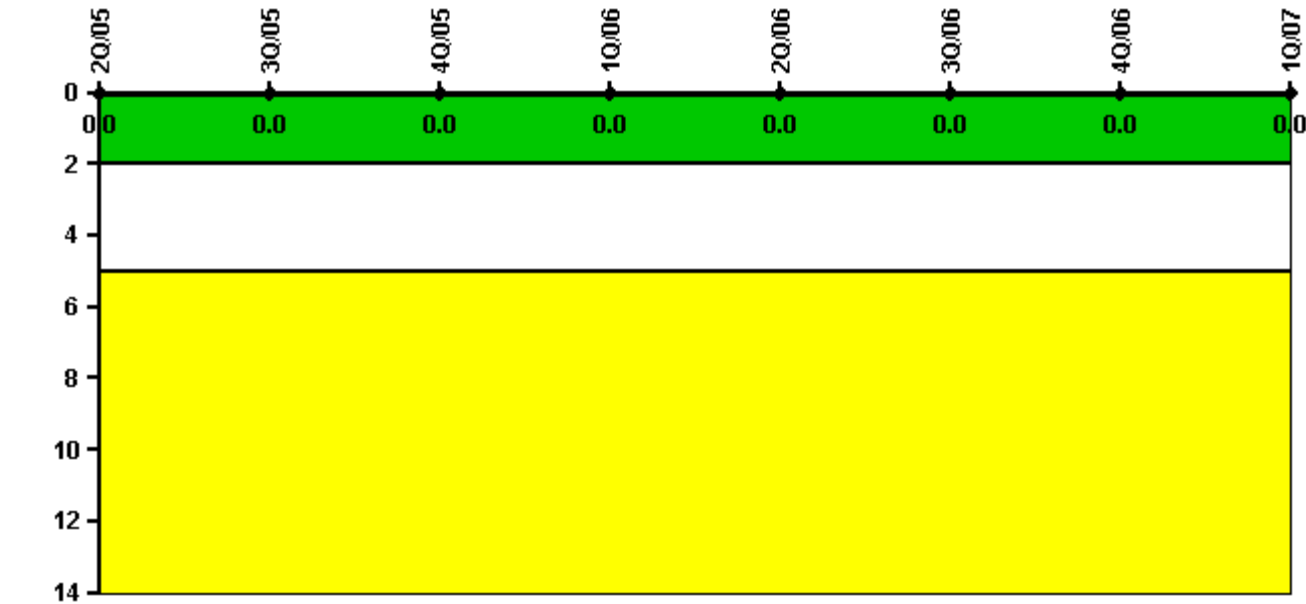
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
Successful siren-tests	6006	6005	6012	6105	6005	5988	5915	6008
Total sirens-tests	6015	6014	6016	6110	6012	6012	5922	6016
Indicator value	99.8%	99.8%	99.9%	99.9%	99.9%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



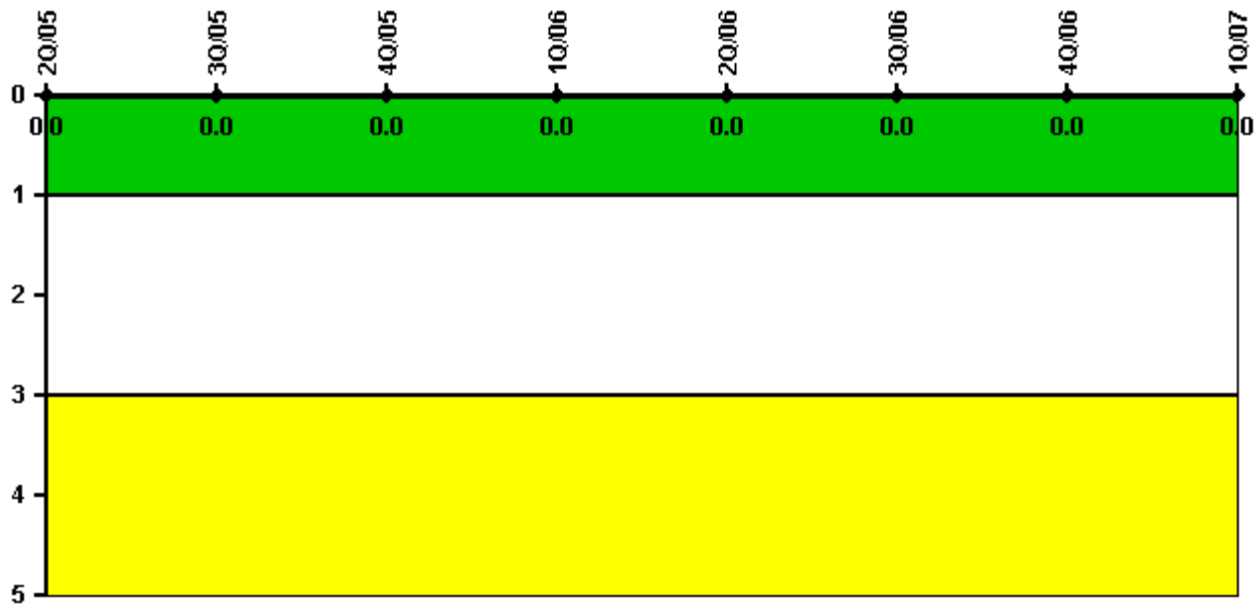
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: June 1, 2007

Byron 2

2Q/2007 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



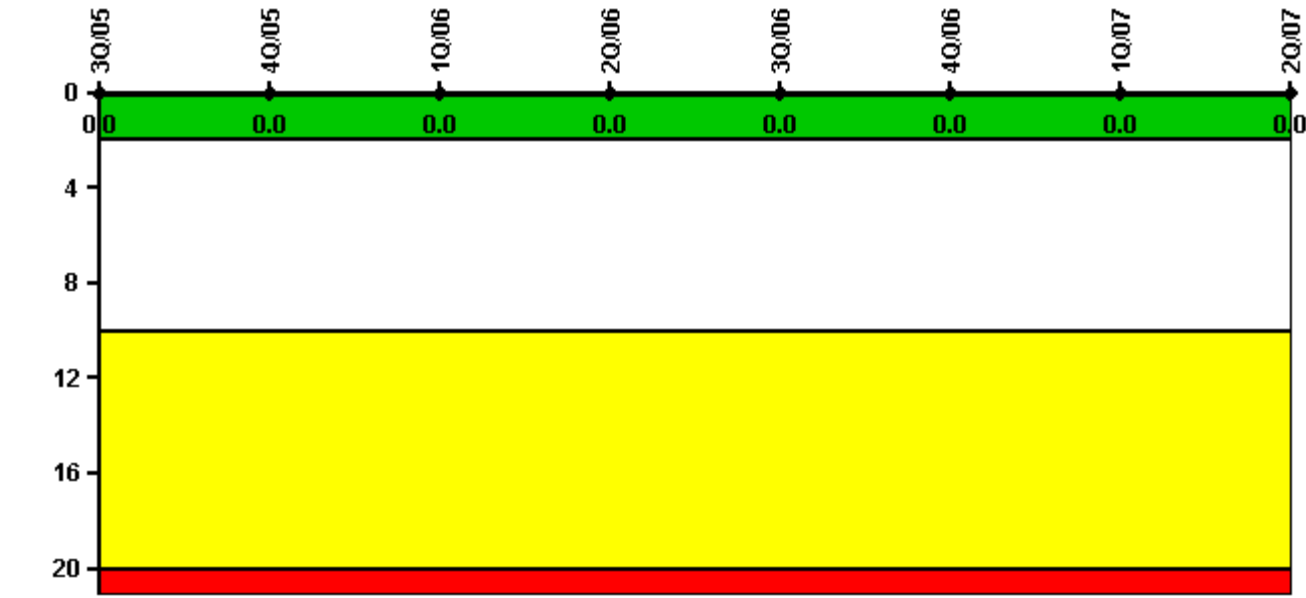
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
Unplanned scrams	0	1.0	0	0	0	0	0	0
Critical hours	2087.1	1922.4	2160.0	2183.0	2208.0	2209.0	2159.0	1441.6
Indicator value	0	0.8	0.8	0.8	0.8	0	0	0

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



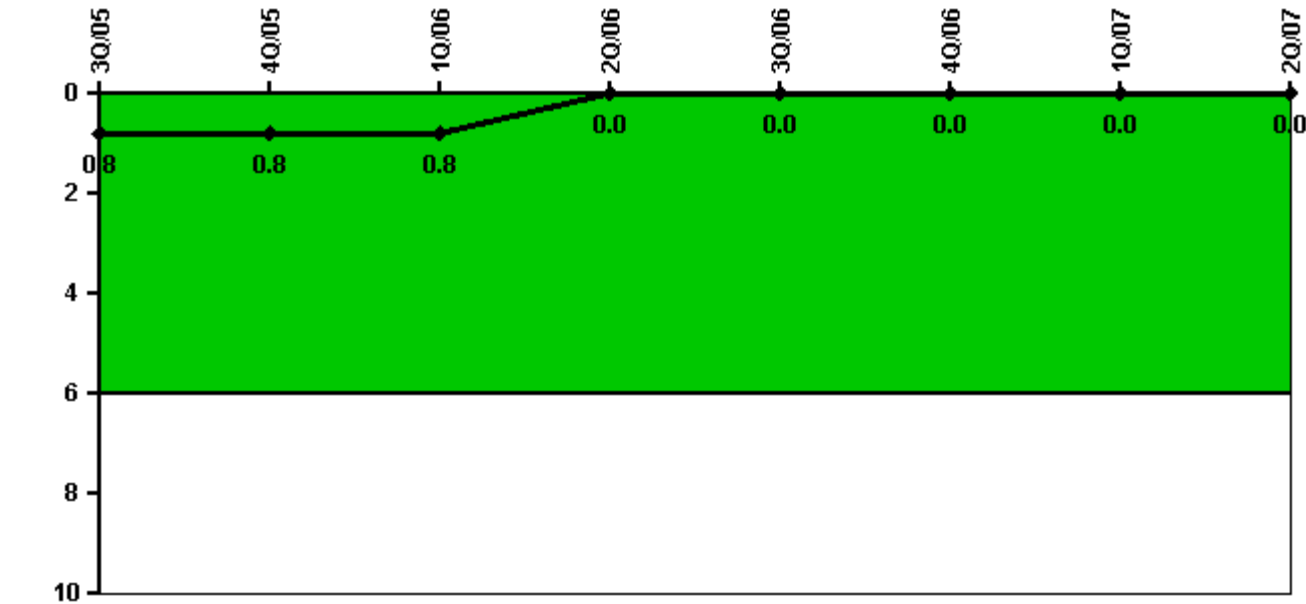
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



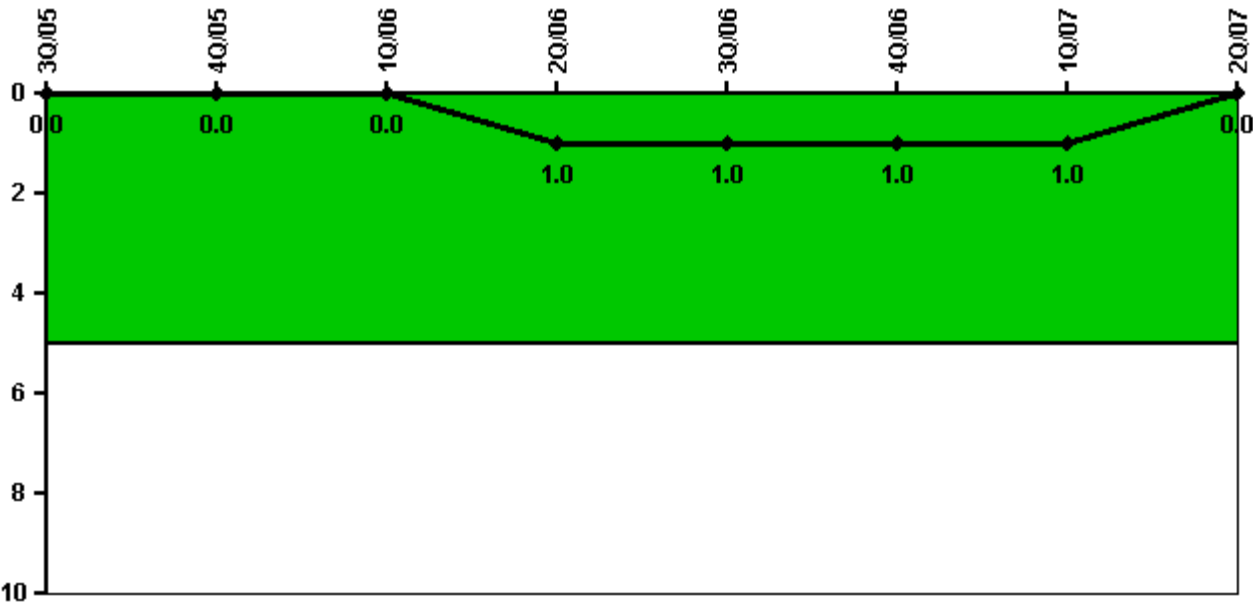
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2087.1	1922.4	2160.0	2183.0	2208.0	2209.0	2159.0	1441.6
Indicator value	0.8	0.8	0.8	0	0	0	0	0

Licensee Comments: none

Safety System Functional Failures (PWR)



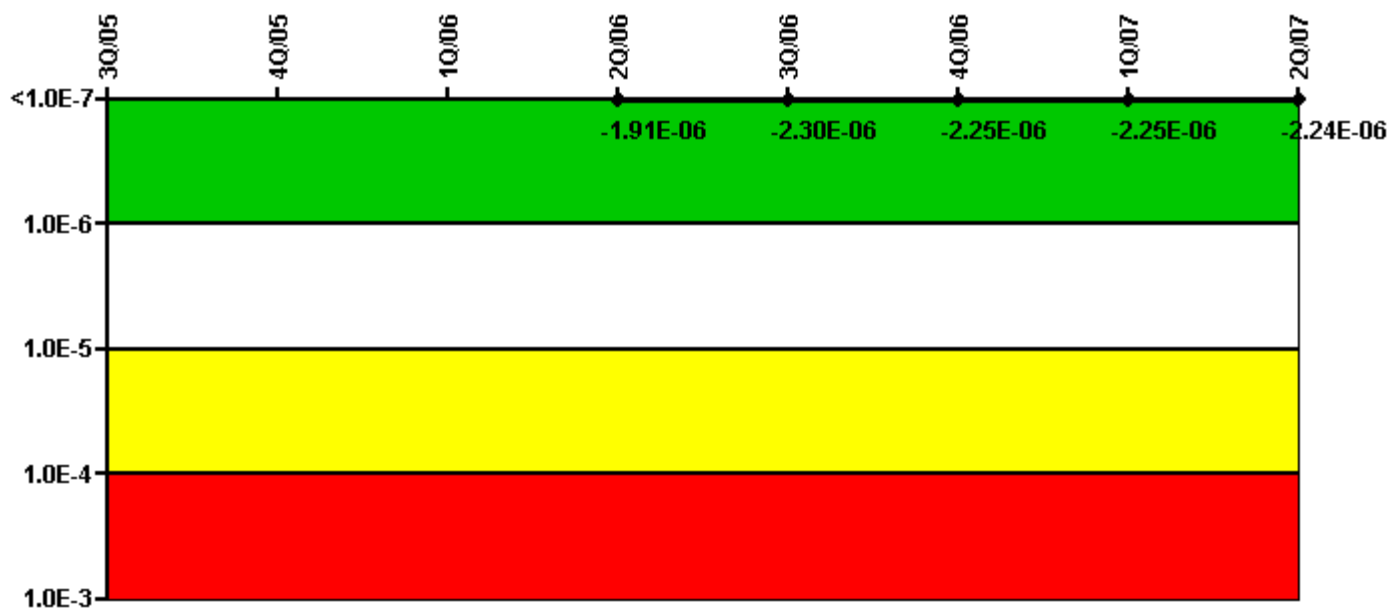
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
Safety System Functional Failures	0	0	0	1	0	0	0	0
Indicator value	0	0	0	1	1	1	1	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



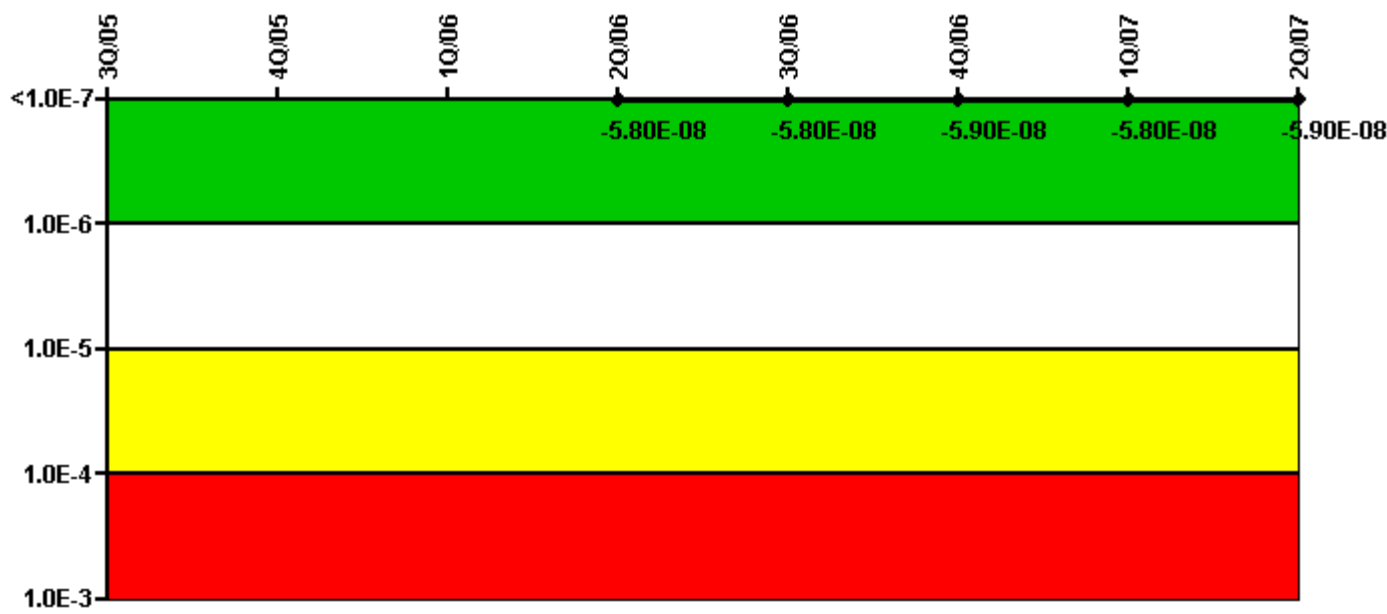
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
UAI (ΔCDF)				-8.00E-09	4.80E-09	5.10E-08	4.80E-08	5.70E-08
URI (ΔCDF)				-1.90E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.30E-06
PLE				NO	NO	NO	NO	NO
Indicator value				-1.91E-06	-2.30E-06	-2.25E-06	-2.25E-06	-2.24E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



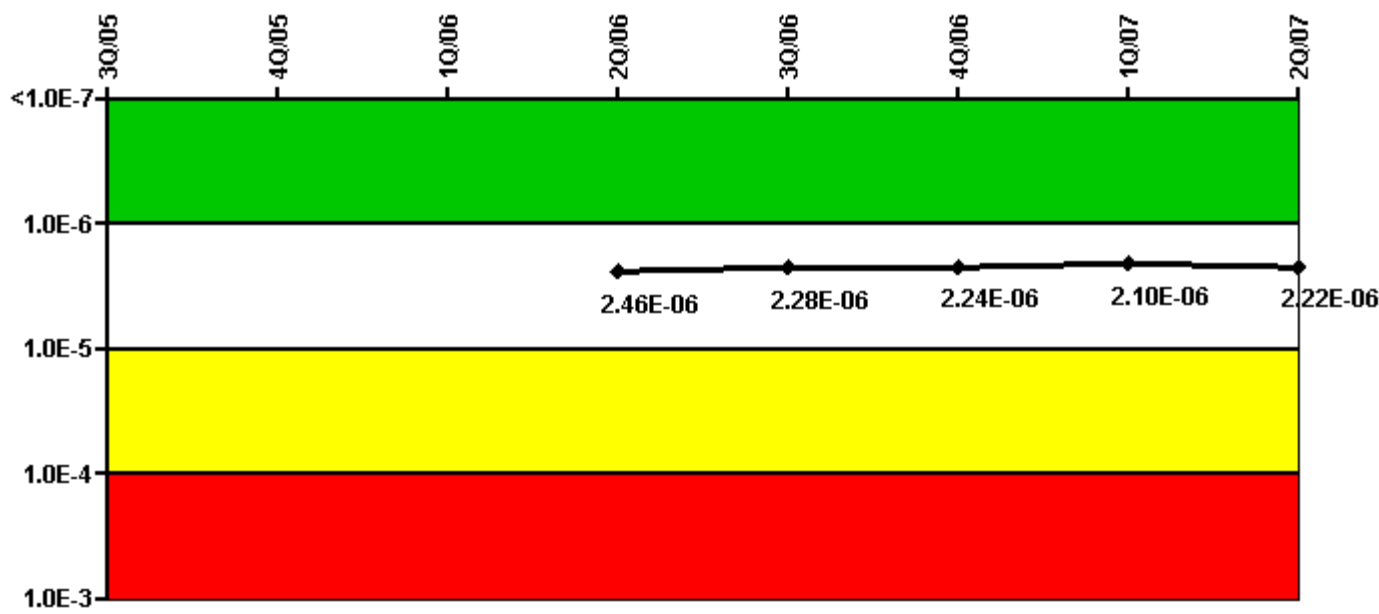
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
UAI (ΔCDF)				-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08
URI (ΔCDF)				-1.60E-08	-1.60E-08	-1.70E-08	-1.60E-08	-1.70E-08
PLE				NO	NO	NO	NO	NO
Indicator value				-5.80E-08	-5.80E-08	-5.90E-08	-5.80E-08	-5.90E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

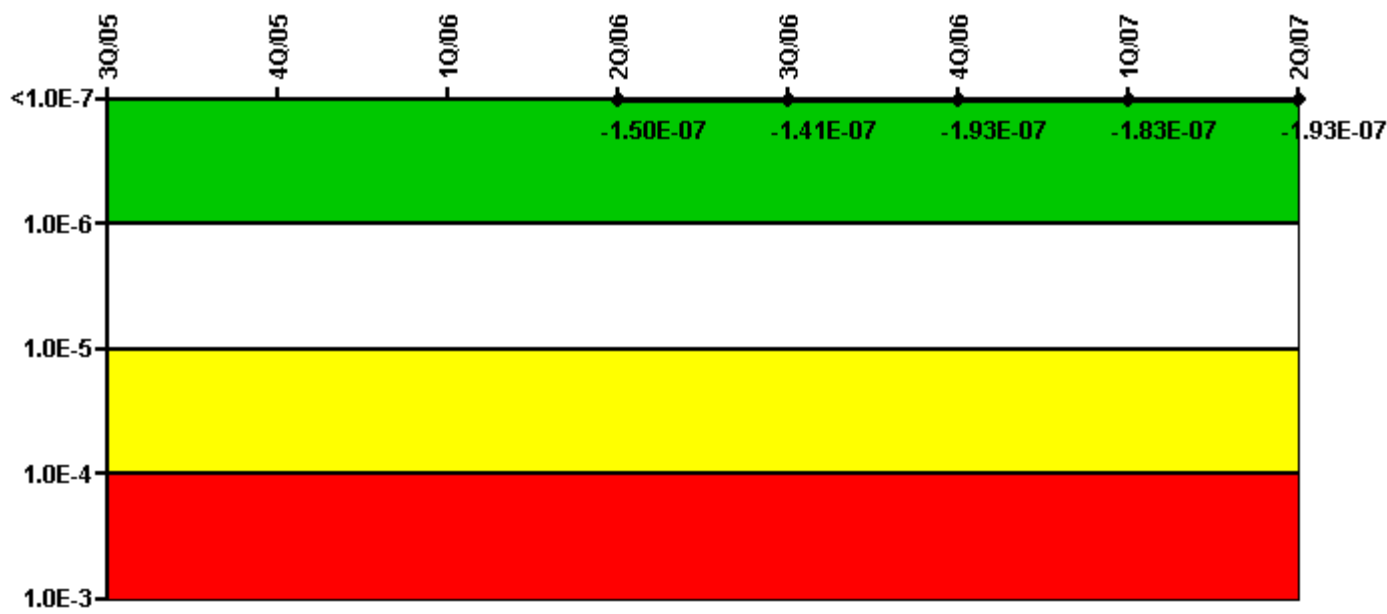
Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
UAI (ΔCDF)				8.60E-07	6.80E-07	5.40E-07	2.00E-07	2.20E-07
URI (ΔCDF)				1.60E-06	1.60E-06	1.70E-06	1.90E-06	2.00E-06
PLE				NO	NO	NO	NO	NO
Indicator value				2.46E-06	2.28E-06	2.24E-06	2.10E-06	2.22E-06

Licensee Comments:

2Q/07: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



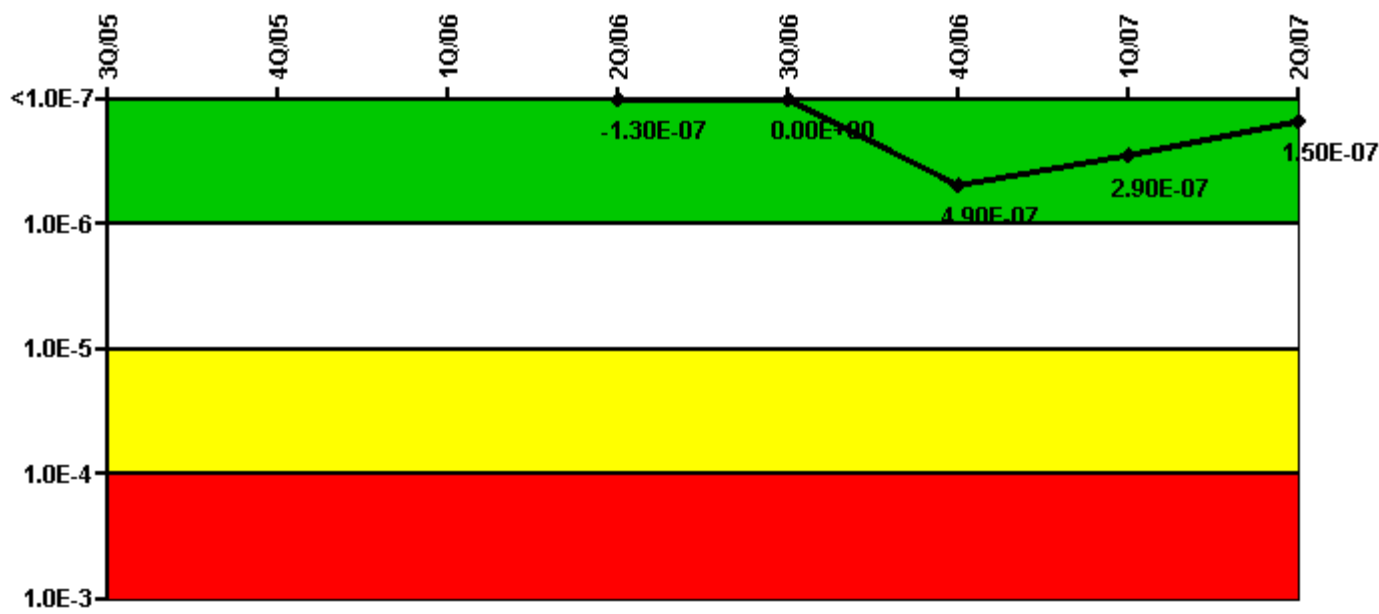
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
UAI (ΔCDF)				6.60E-11	9.50E-09	-4.30E-08	-4.30E-08	-4.30E-08
URI (ΔCDF)				-1.50E-07	-1.50E-07	-1.50E-07	-1.40E-07	-1.50E-07
PLE				NO	NO	NO	NO	NO
Indicator value				-1.50E-07	-1.41E-07	-1.93E-07	-1.83E-07	-1.93E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

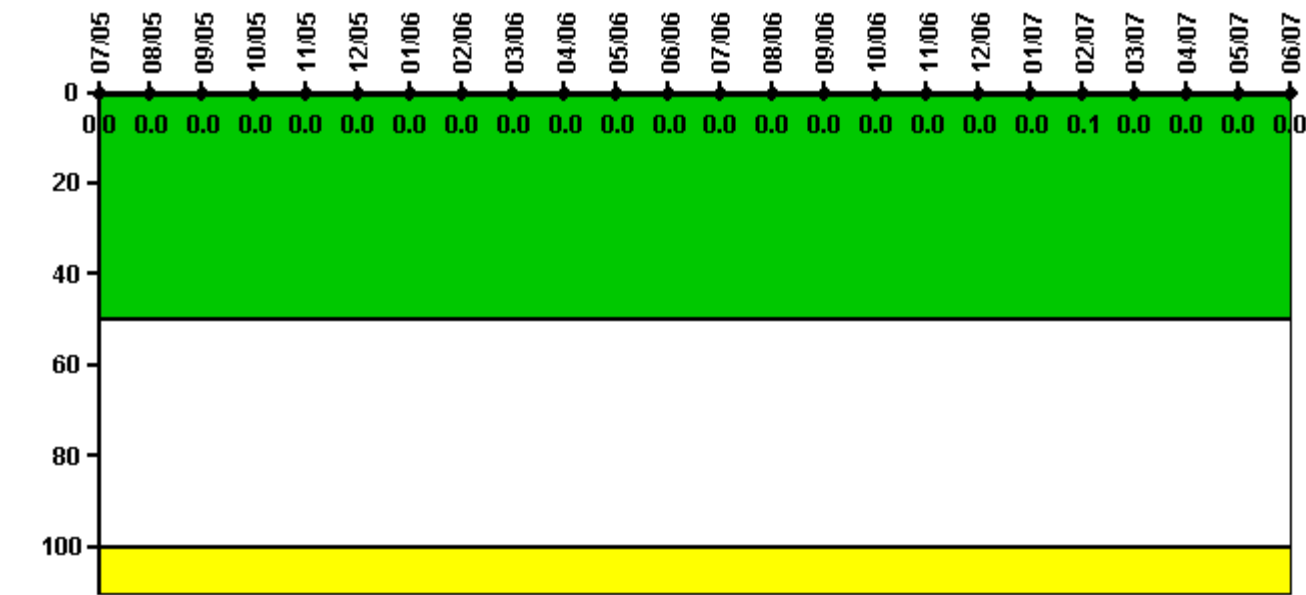
Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
UAI (ACDF)				5.80E-07	7.10E-07	1.20E-06	1.00E-06	8.70E-07
URI (ACDF)				-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07	-7.20E-07
PLE				NO	NO	NO	NO	NO
Indicator value				-1.30E-07	0.00E+00	4.90E-07	2.90E-07	1.50E-07

Licensee Comments:

2Q/07: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

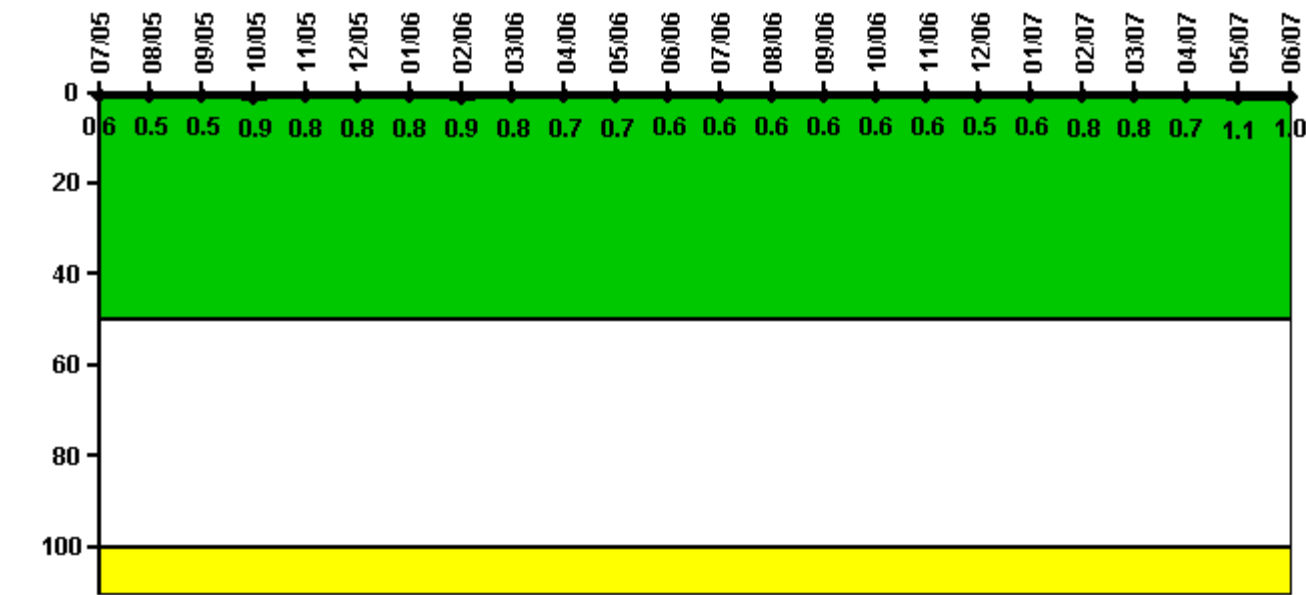
Notes

Reactor Coolant System Activity	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06
Maximum activity	0.000372	0.000499	0.000419	0.000209	0.000222	0.000236	0.000235	0.000240	0.000404	0.000271	0.000266	0.000267
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07
Maximum activity	0.000294	0.000306	0.000292	0.000295	0.000307	0.000308	0.000315	0.000854	0.000371	0.000273	0.000313	0.000318
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0.1	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

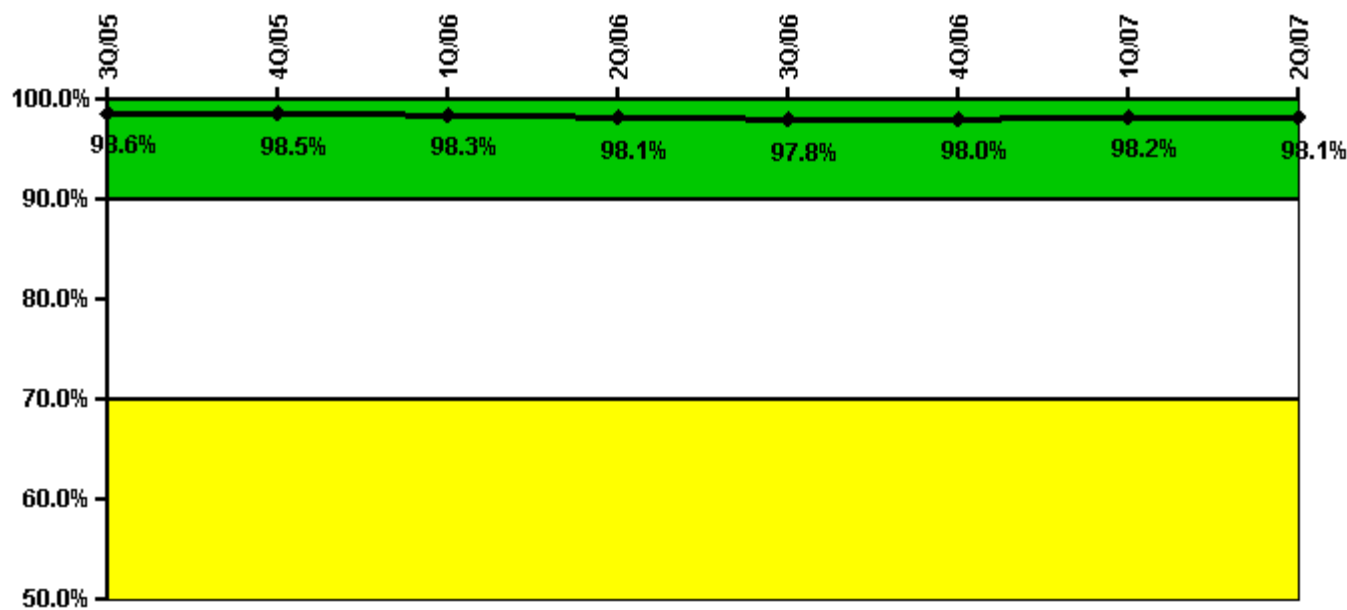
Notes

Reactor Coolant System Leakage	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06
Maximum leakage	0.063	0.052	0.054	0.091	0.079	0.078	0.078	0.091	0.084	0.071	0.068	0.061
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.9	0.8	0.8	0.8	0.9	0.8	0.7	0.7	0.6

Reactor Coolant System Leakage	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07
Maximum leakage	0.063	0.058	0.062	0.061	0.059	0.054	0.061	0.078	0.076	0.072	0.109	0.096
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.8	0.8	0.7	1.1	1.0

Licensee Comments: none

Drill/Exercise Performance



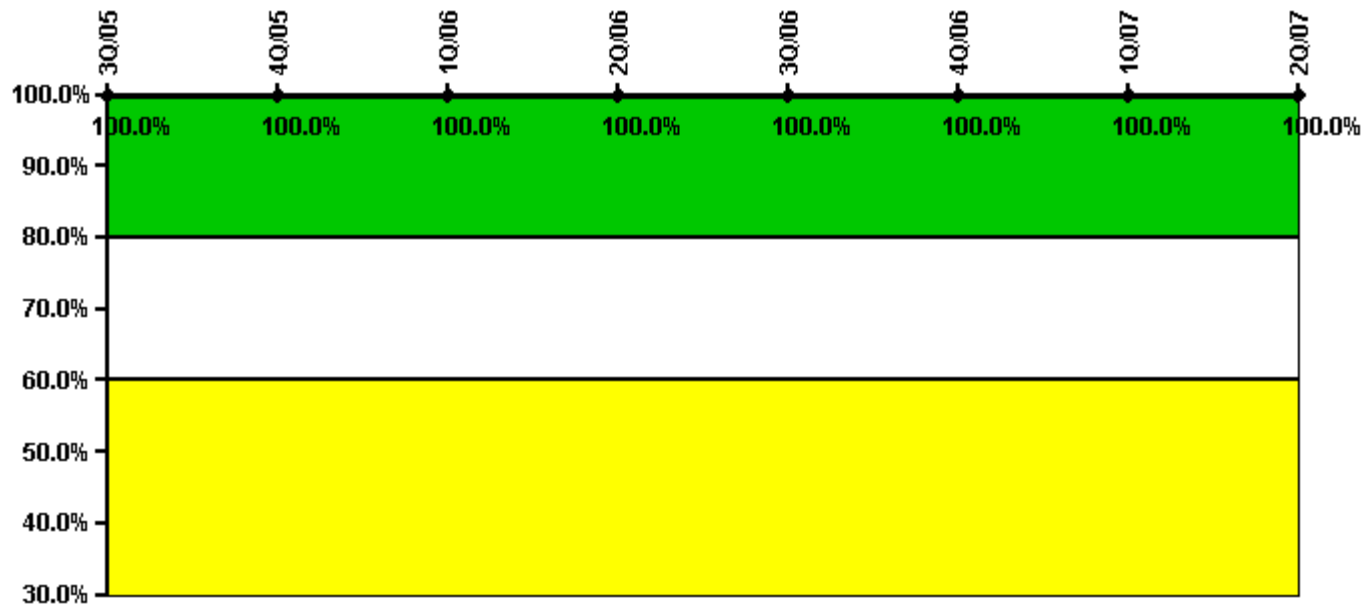
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
Successful opportunities	30.0	57.0	22.0	12.0	136.0	40.0	10.0	46.0
Total opportunities	30.0	58.0	22.0	12.0	139.0	40.0	10.0	49.0
Indicator value	98.6%	98.5%	98.3%	98.1%	97.8%	98.0%	98.2%	98.1%

Licensee Comments: none

ERO Drill Participation



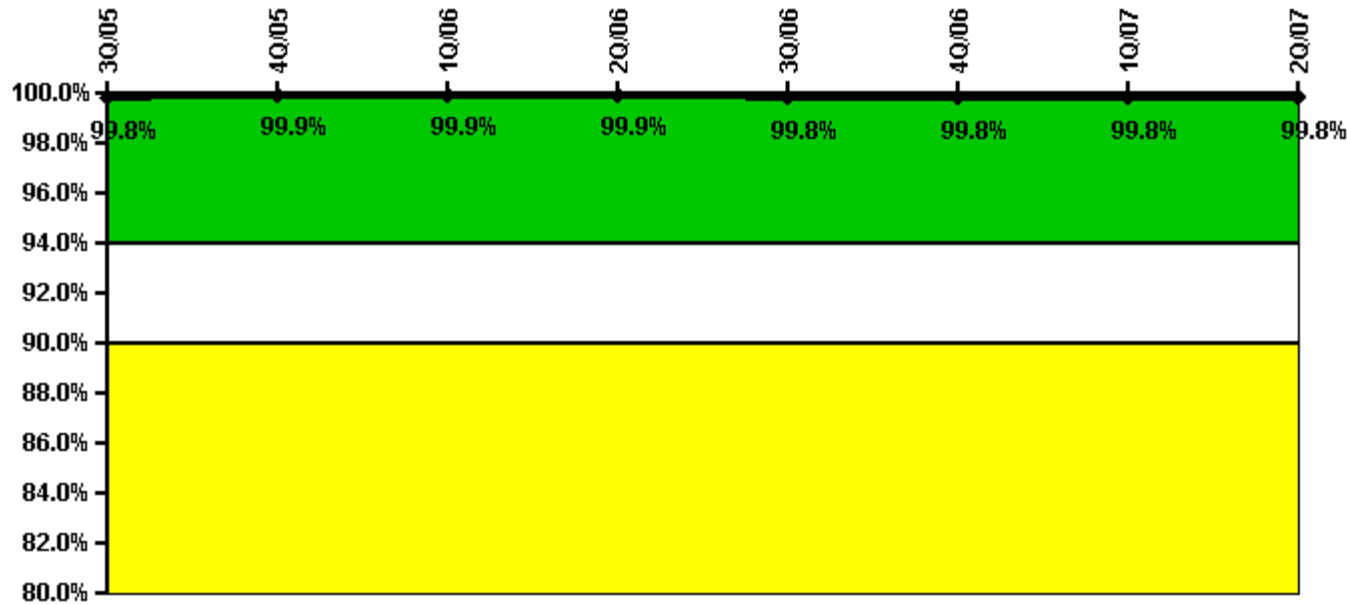
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
Participating Key personnel	76.0	74.0	78.0	78.0	76.0	76.0	71.0	66.0
Total Key personnel	76.0	74.0	78.0	78.0	76.0	76.0	71.0	66.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



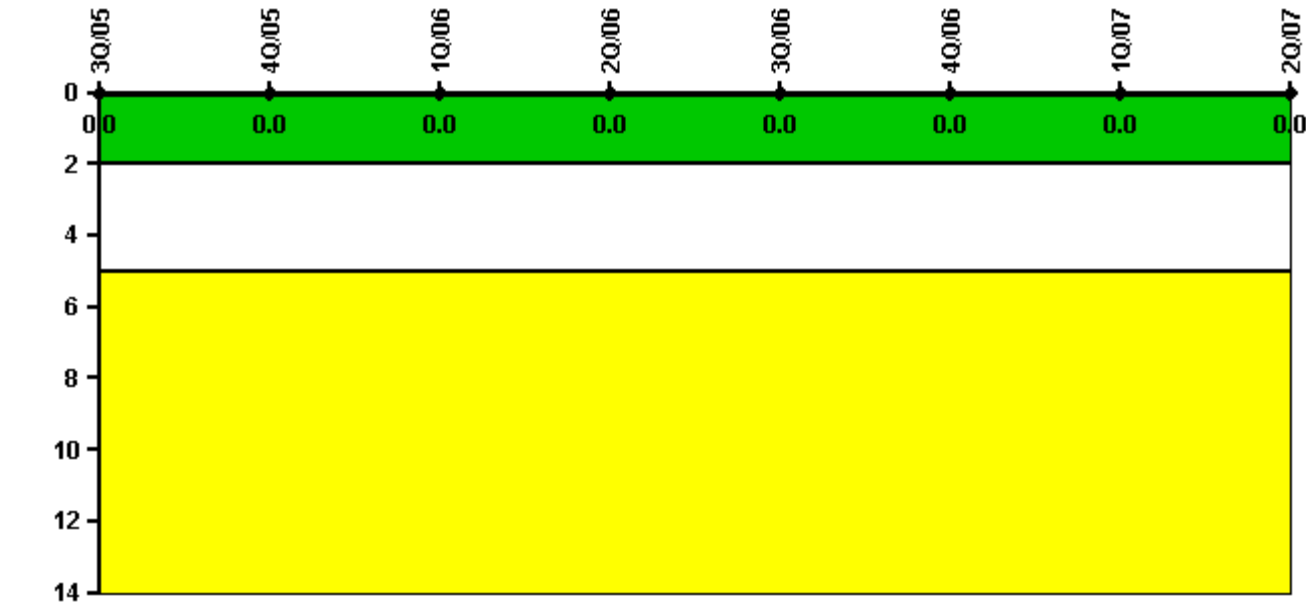
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
Successful siren-tests	6005	6012	6105	6005	5988	5915	6008	5985
Total sirens-tests	6014	6016	6110	6012	6012	5922	6016	6005
Indicator value	99.8%	99.9%	99.9%	99.9%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



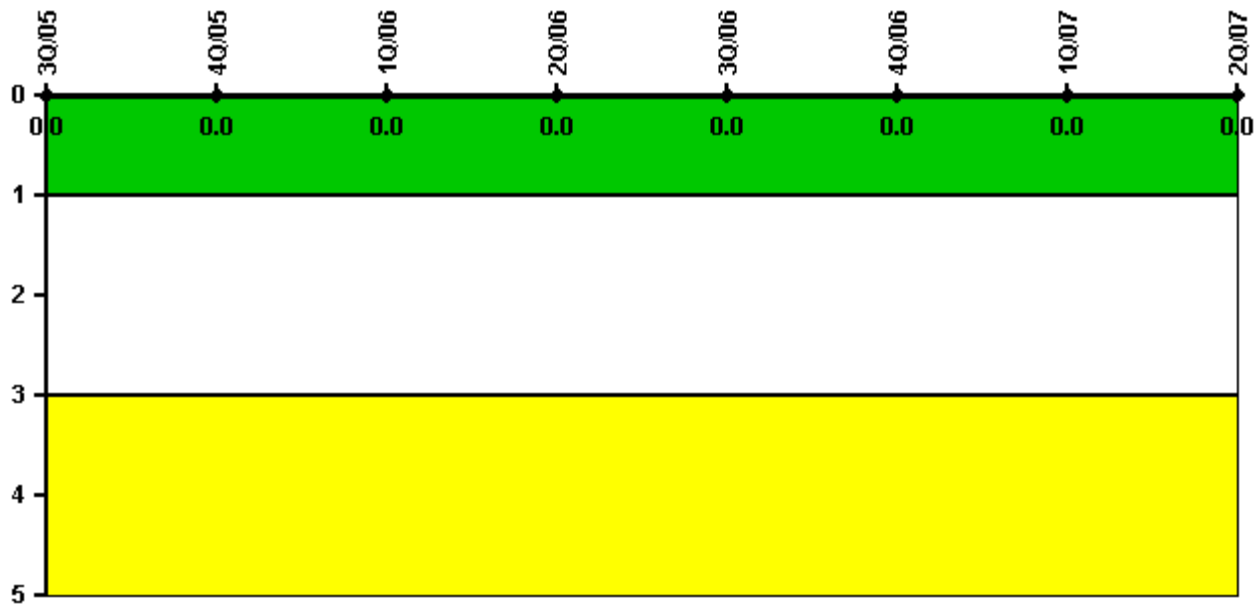
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

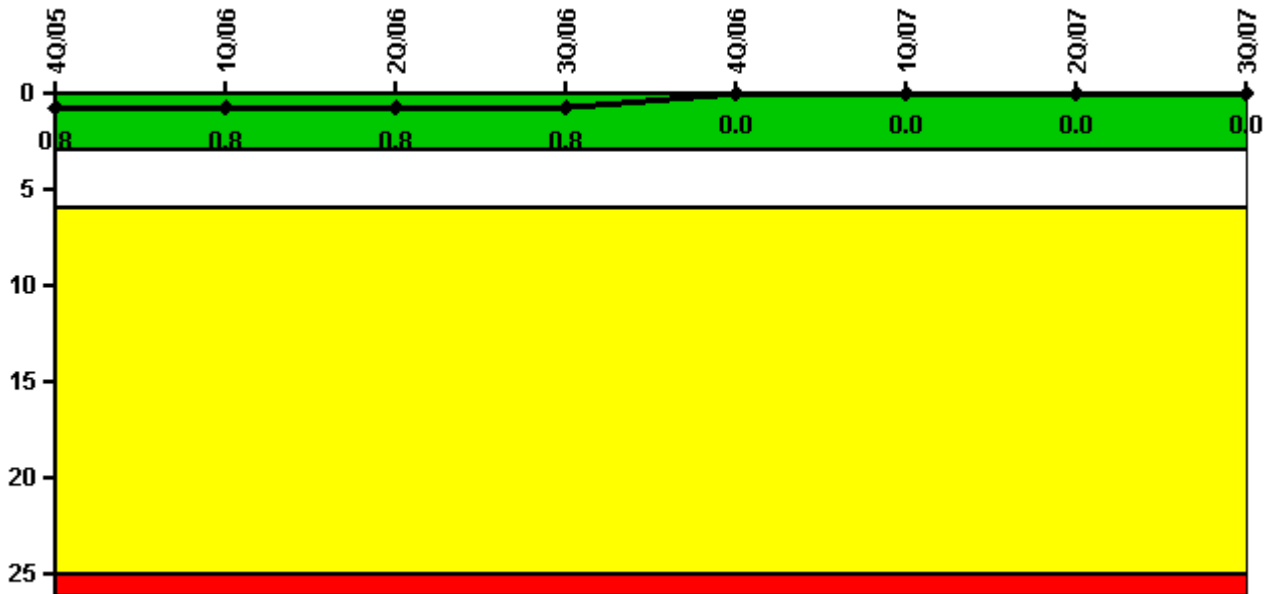
Last Modified: August 6, 2007

Byron 2

3Q/2007 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



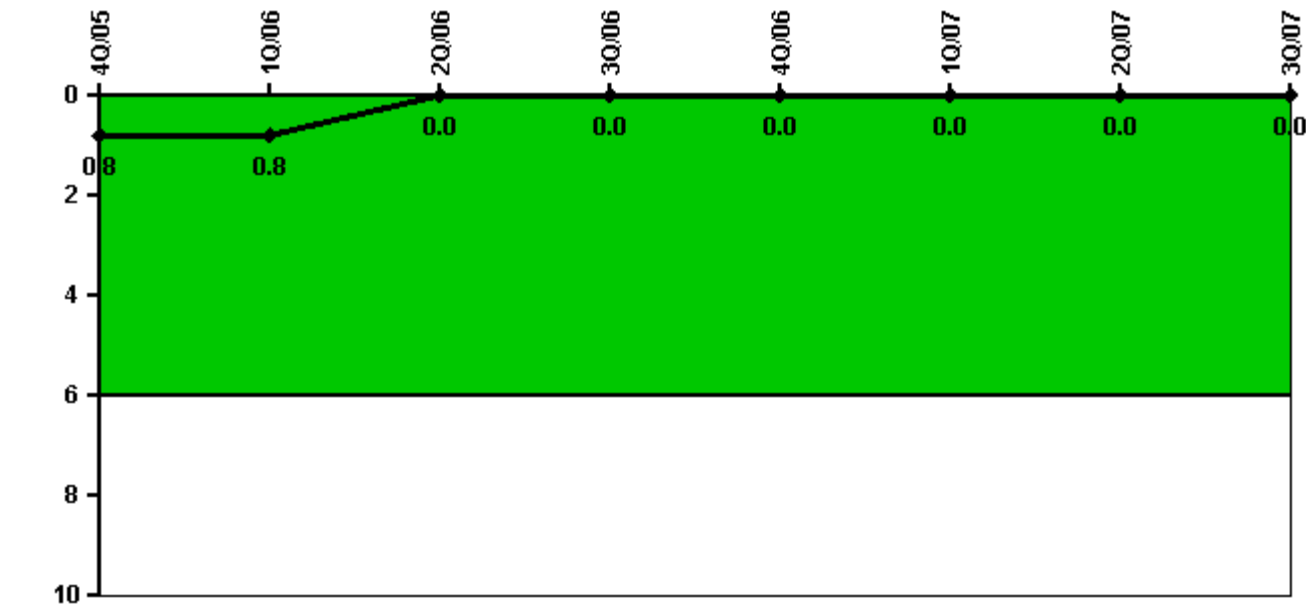
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
Unplanned scrams	1.0	0	0	0	0	0	0	0
Critical hours	1922.4	2160.0	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0
Indicator value	0.8	0.8	0.8	0.8	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



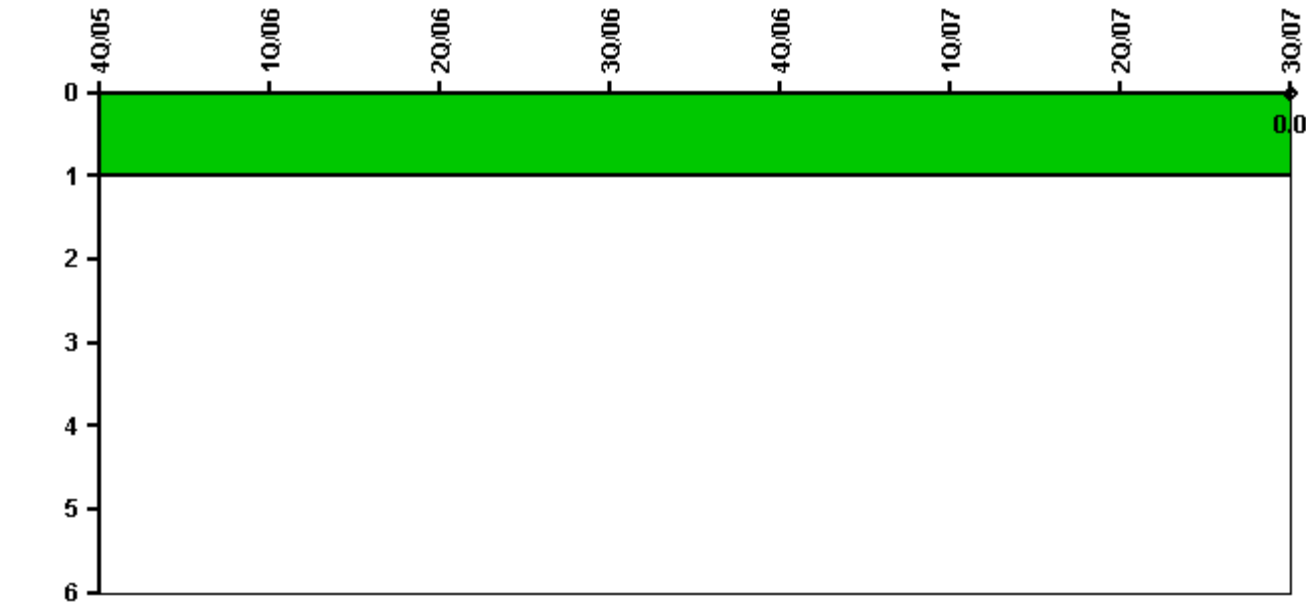
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	1922.4	2160.0	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0
Indicator value	0.8	0.8	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



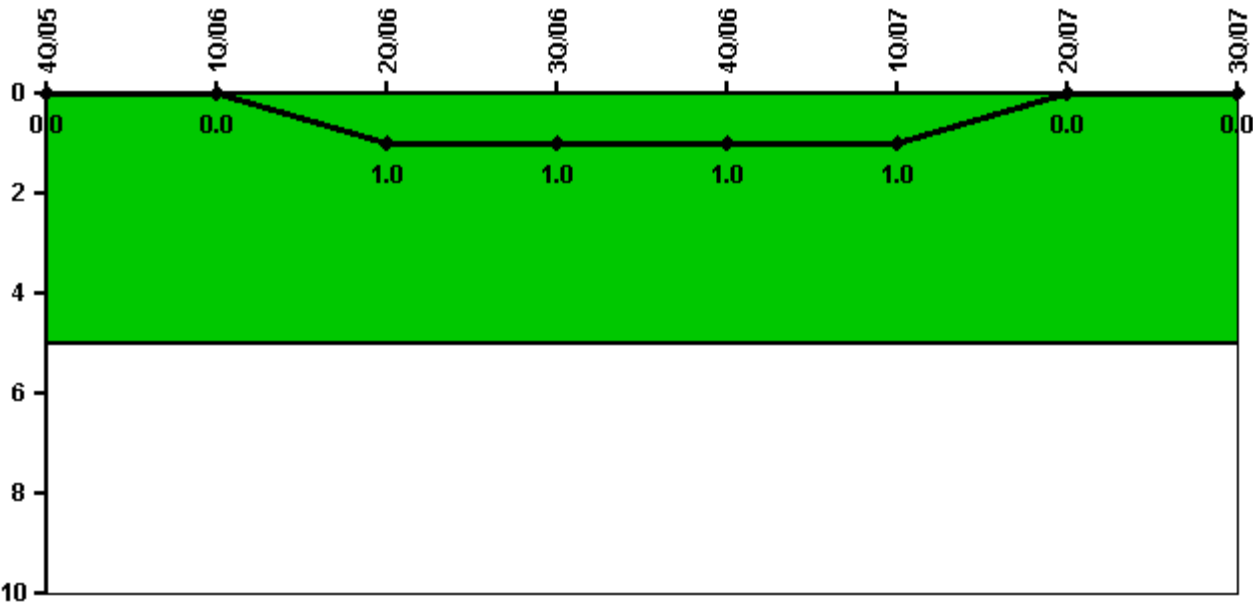
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
Scrams with complications					0	0	0	0
Indicator value								0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



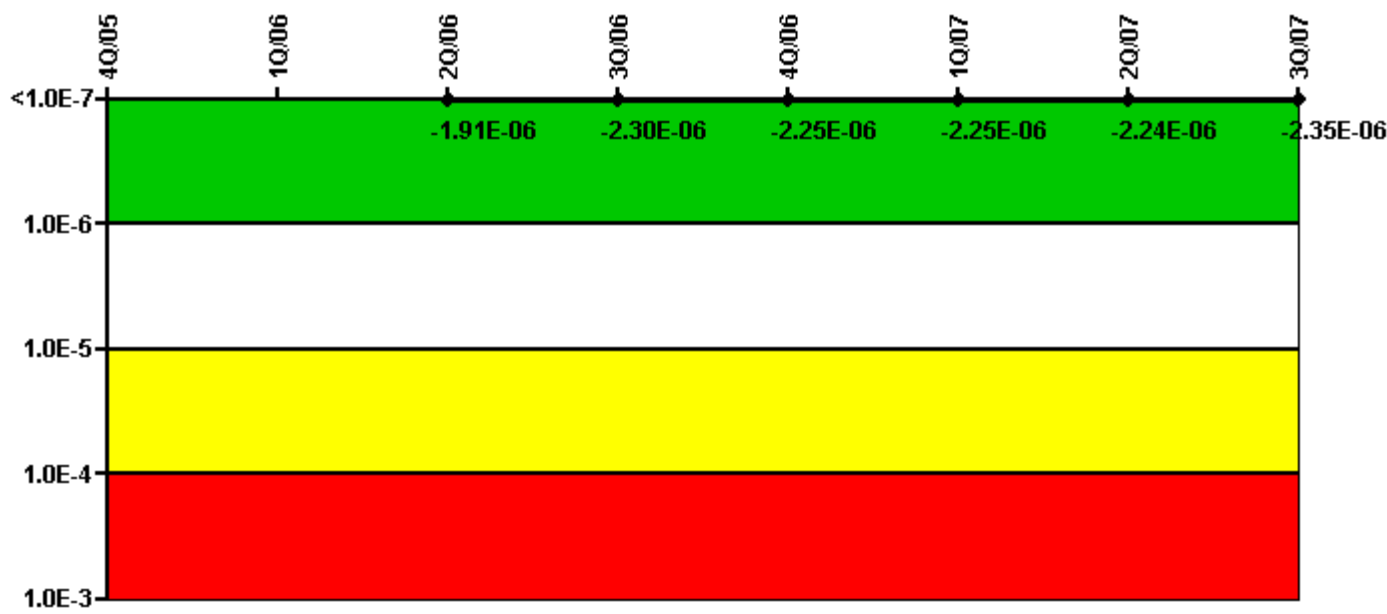
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
Safety System Functional Failures	0	0	1	0	0	0	0	0
Indicator value	0	0	1	1	1	1	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



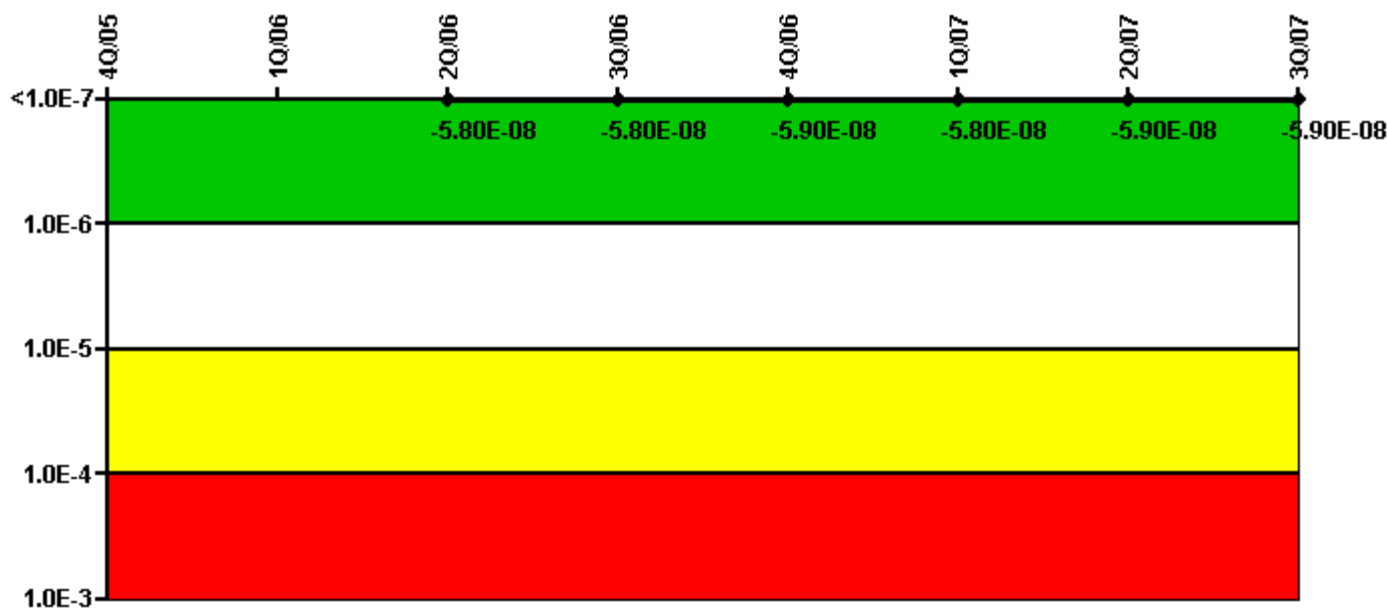
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
UAI (ΔCDF)			-8.00E-09	4.80E-09	5.10E-08	4.80E-08	5.70E-08	4.90E-08
URI (ΔCDF)			-1.90E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.40E-06
PLE			NO	NO	NO	NO	NO	NO
Indicator value			-1.91E-06	-2.30E-06	-2.25E-06	-2.25E-06	-2.24E-06	-2.35E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



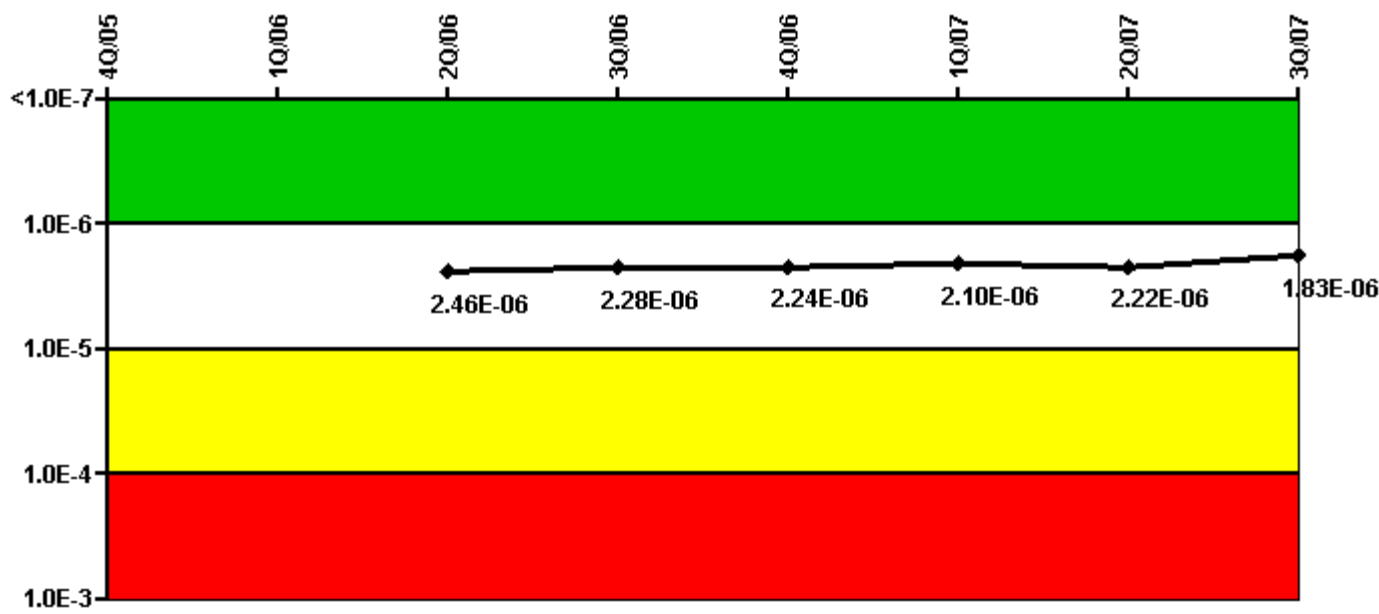
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
UAI (ΔCDF)			-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08
URI (ΔCDF)			-1.60E-08	-1.60E-08	-1.70E-08	-1.60E-08	-1.70E-08	-1.70E-08
PLE			NO	NO	NO	NO	NO	NO
Indicator value			-5.80E-08	-5.80E-08	-5.90E-08	-5.80E-08	-5.90E-08	-5.90E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

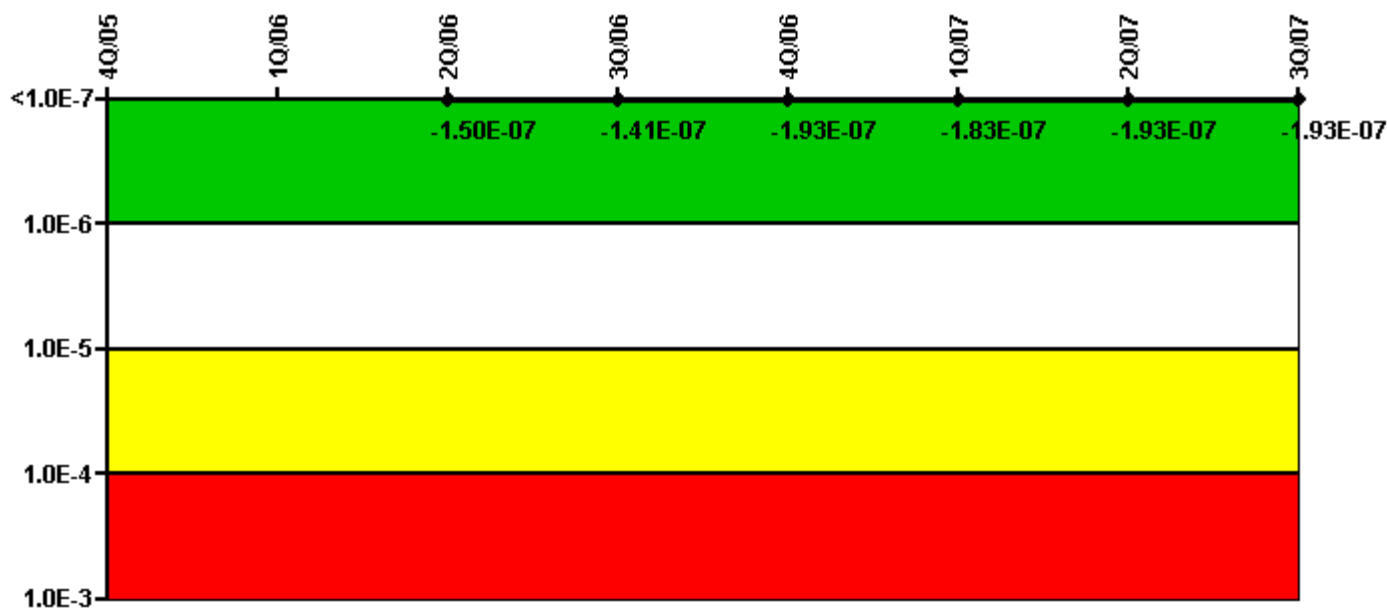
Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
UAI (ACDF)			8.60E-07	6.80E-07	5.40E-07	2.00E-07	2.20E-07	-1.70E-07
URI (ACDF)			1.60E-06	1.60E-06	1.70E-06	1.90E-06	2.00E-06	2.00E-06
PLE			NO	NO	NO	NO	NO	NO
Indicator value			2.46E-06	2.28E-06	2.24E-06	2.10E-06	2.22E-06	1.83E-06

Licensee Comments:

3Q/07: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



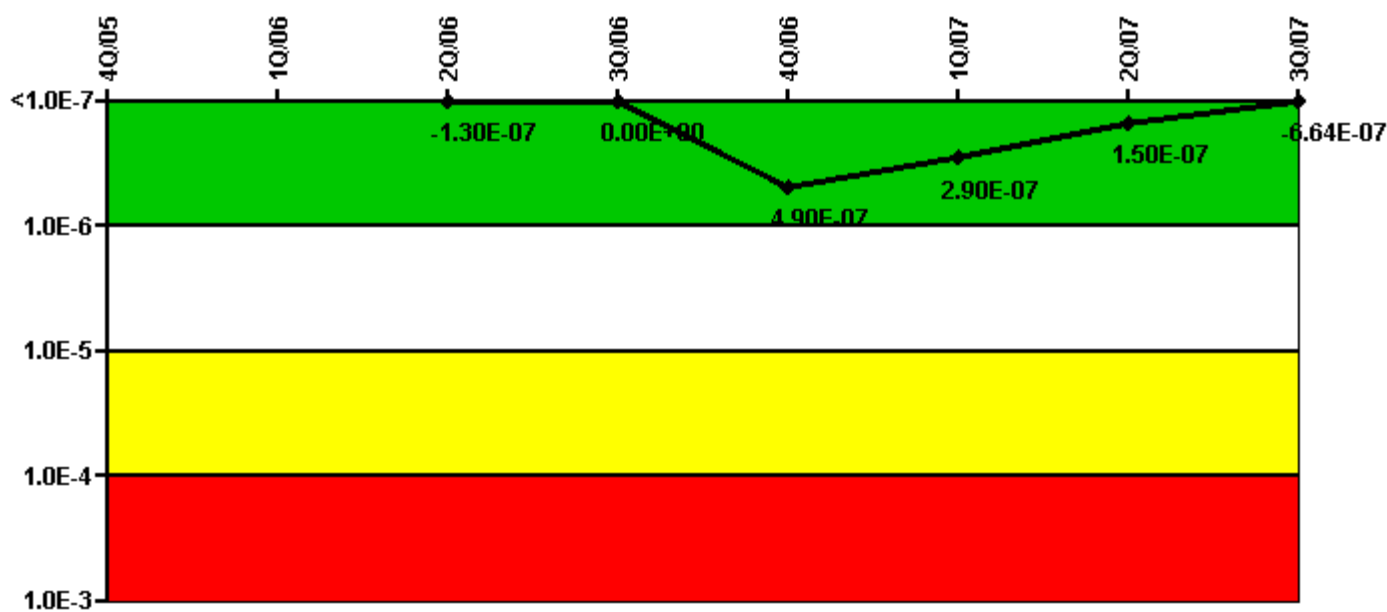
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
UAI (ΔCDF)			6.60E-11	9.50E-09	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08
URI (ΔCDF)			-1.50E-07	-1.50E-07	-1.50E-07	-1.40E-07	-1.50E-07	-1.50E-07
PLE			NO	NO	NO	NO	NO	NO
Indicator value			-1.50E-07	-1.41E-07	-1.93E-07	-1.83E-07	-1.93E-07	-1.93E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



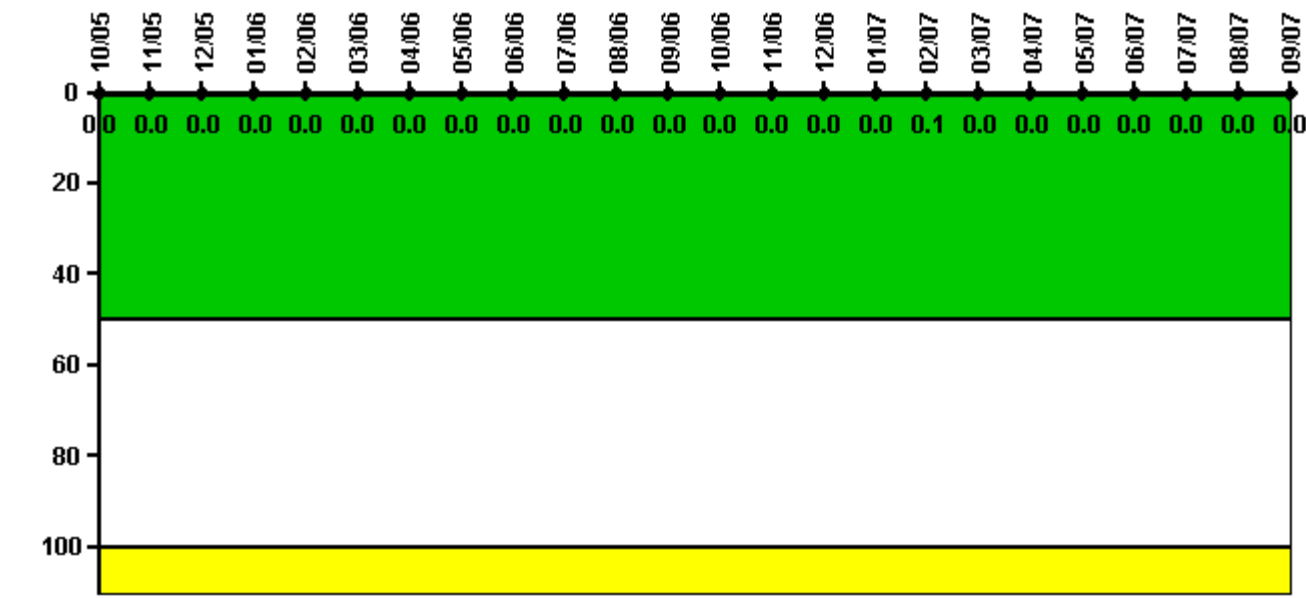
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
UAI (ΔCDF)			5.80E-07	7.10E-07	1.20E-06	1.00E-06	8.70E-07	4.60E-08
URI (ΔCDF)			-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07	-7.20E-07	-7.10E-07
PLE			NO	NO	NO	NO	NO	NO
Indicator value			-1.30E-07	0.00E+00	4.90E-07	2.90E-07	1.50E-07	-6.64E-07

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

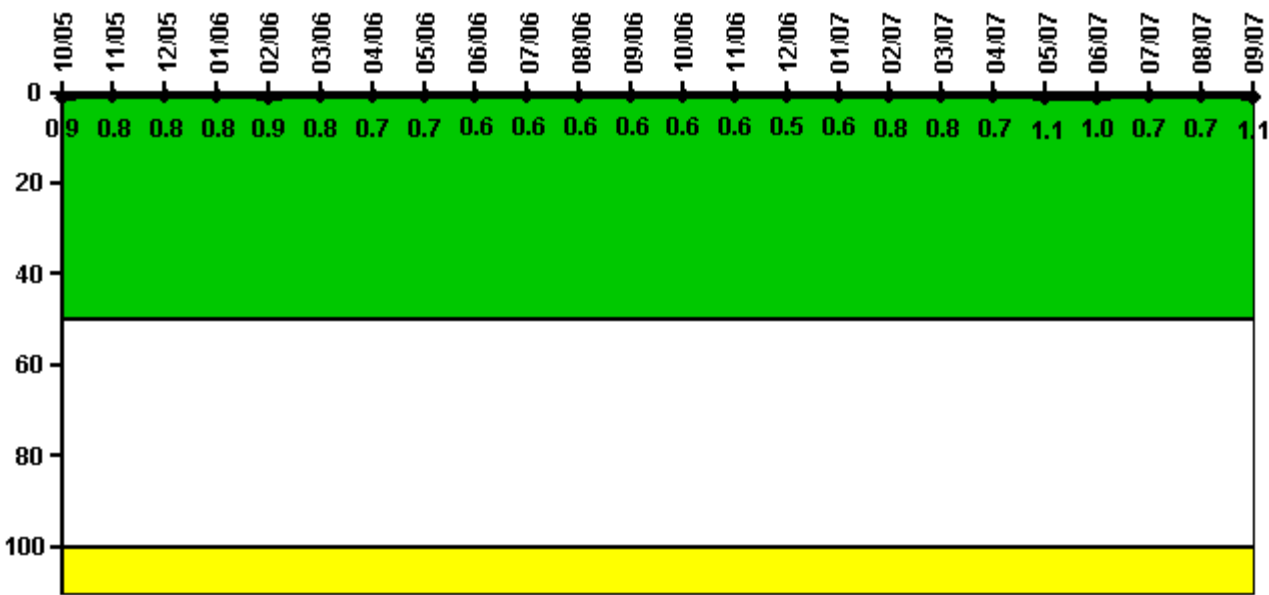
Notes

Reactor Coolant System Activity	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06
Maximum activity	0.000209	0.000222	0.000236	0.000235	0.000240	0.000404	0.000271	0.000266	0.000267	0.000294	0.000306	0.000292
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07
Maximum activity	0.000295	0.000307	0.000308	0.000315	0.000854	0.000371	0.000273	0.000313	0.000318	0.000323	0.000317	0.000315
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0.1	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

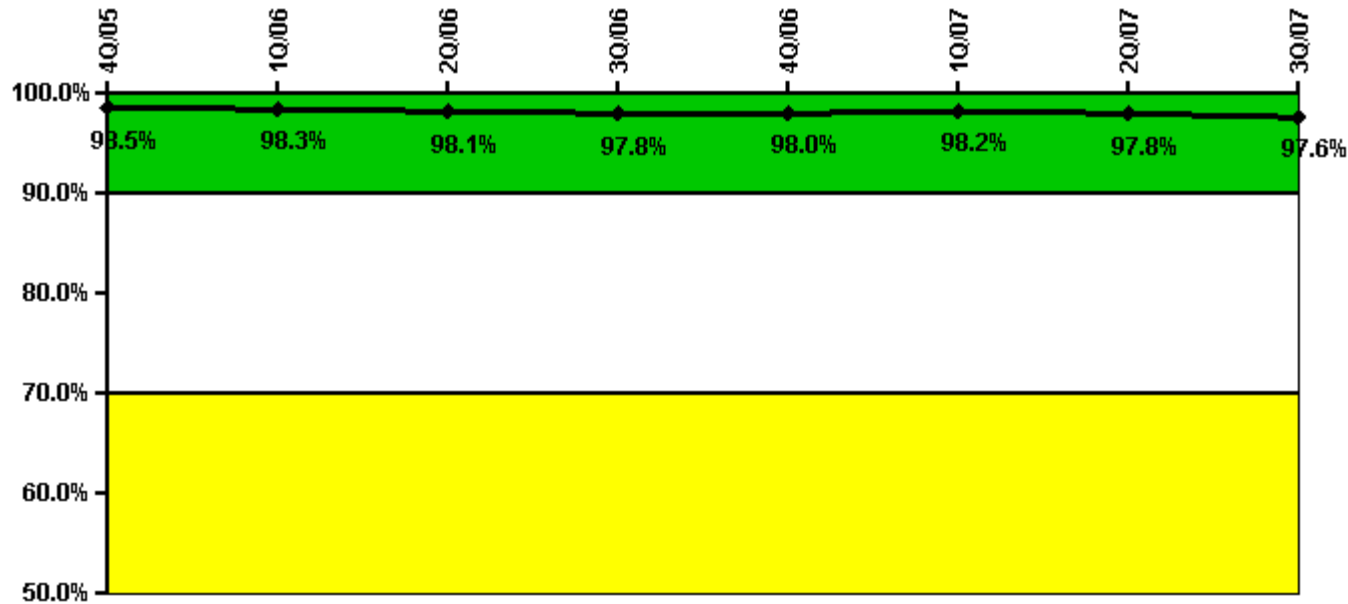
Notes

Reactor Coolant System Leakage	10/05	11/05	12/05	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06
Maximum leakage	0.091	0.079	0.078	0.078	0.091	0.084	0.071	0.068	0.061	0.063	0.058	0.062
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	0.8	0.8	0.8	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6

Reactor Coolant System Leakage	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07
Maximum leakage	0.061	0.059	0.054	0.061	0.078	0.076	0.072	0.109	0.096	0.066	0.072	0.106
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.6	0.5	0.6	0.8	0.8	0.7	1.1	1.0	0.7	0.7	1.1

Licensee Comments: none

Drill/Exercise Performance



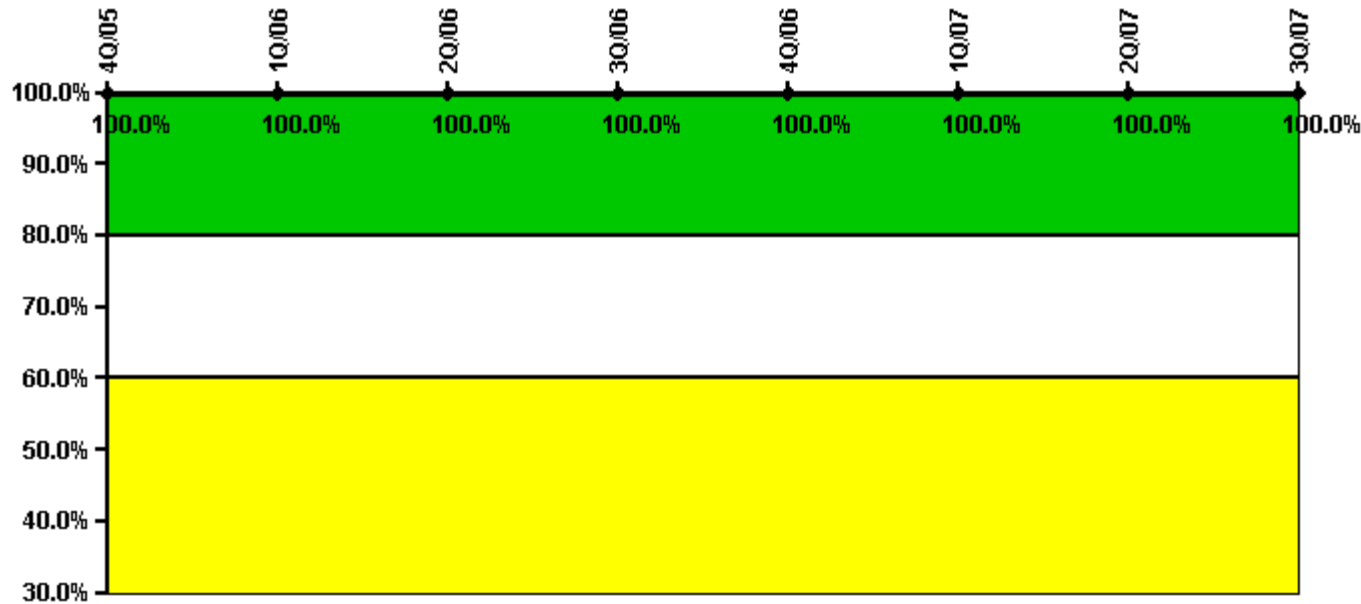
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
Successful opportunities	57.0	22.0	12.0	136.0	40.0	10.0	45.0	43.0
Total opportunities	58.0	22.0	12.0	139.0	40.0	10.0	49.0	44.0
Indicator value	98.5%	98.3%	98.1%	97.8%	98.0%	98.2%	97.8%	97.6%

Licensee Comments: none

ERO Drill Participation



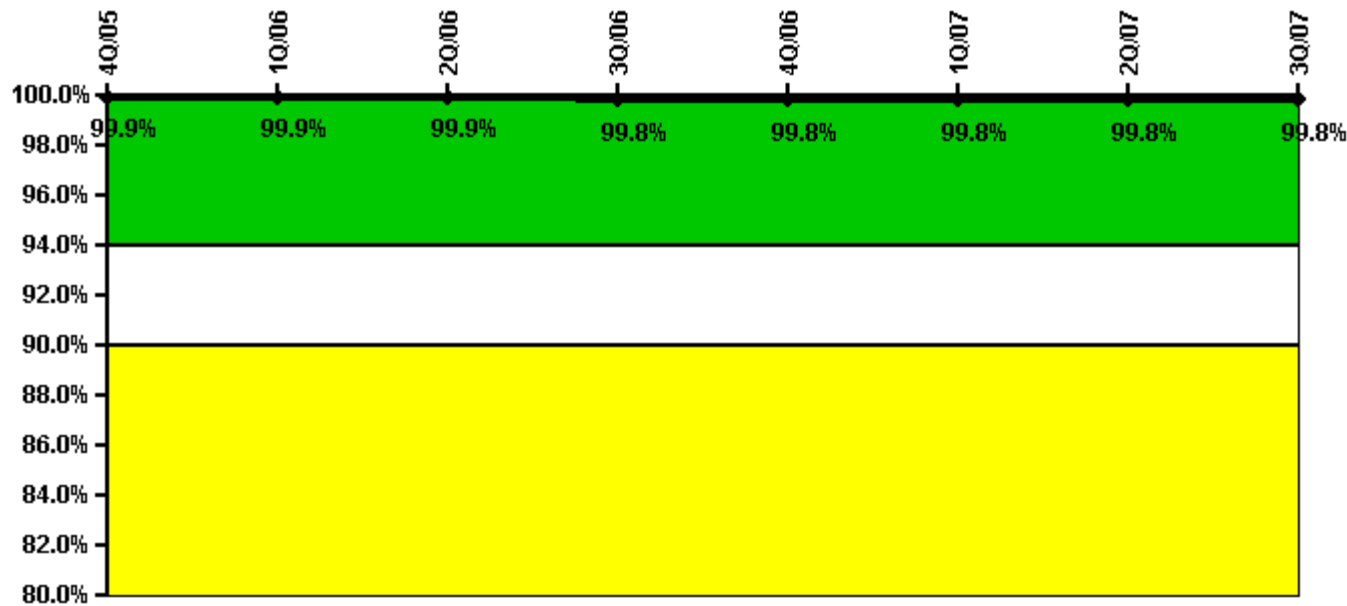
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
Participating Key personnel	74.0	78.0	78.0	76.0	76.0	71.0	66.0	75.0
Total Key personnel	74.0	78.0	78.0	76.0	76.0	71.0	66.0	75.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



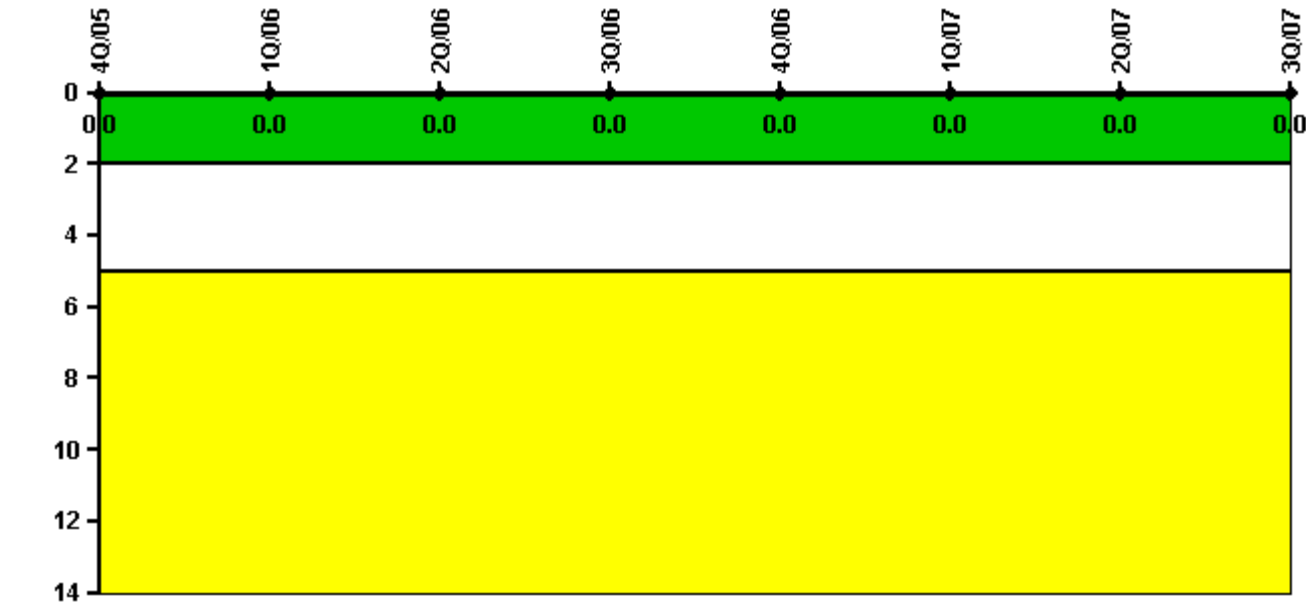
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
Successful siren-tests	6012	6105	6005	5988	5915	6008	5985	5988
Total sirens-tests	6016	6110	6012	6012	5922	6016	6005	6009
Indicator value	99.9%	99.9%	99.9%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



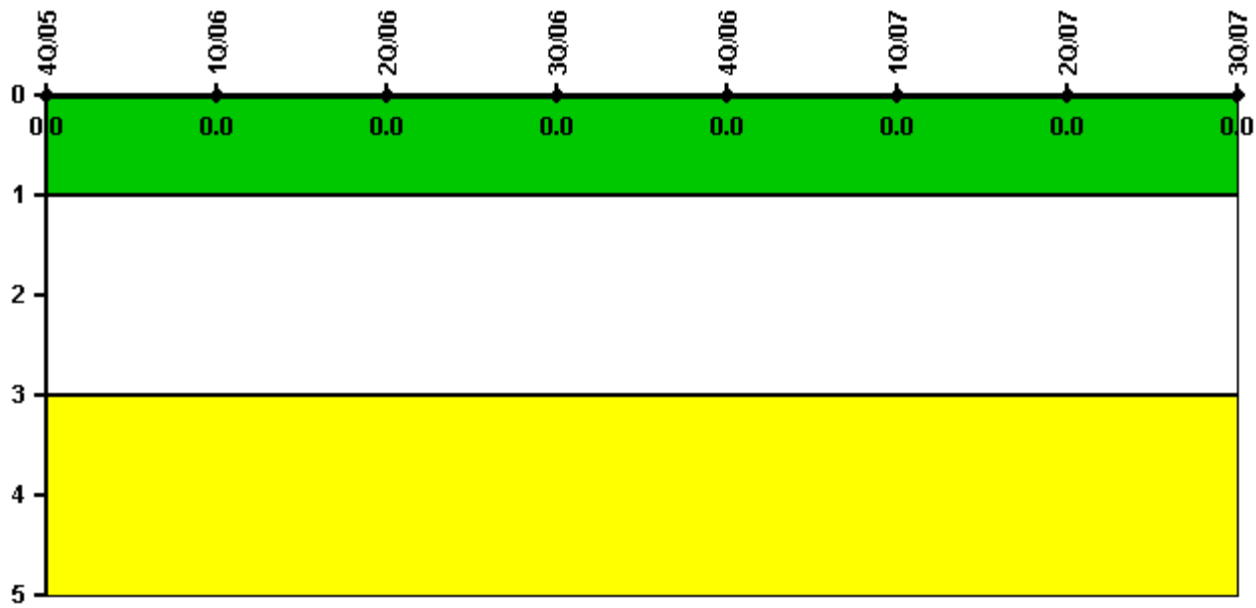
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

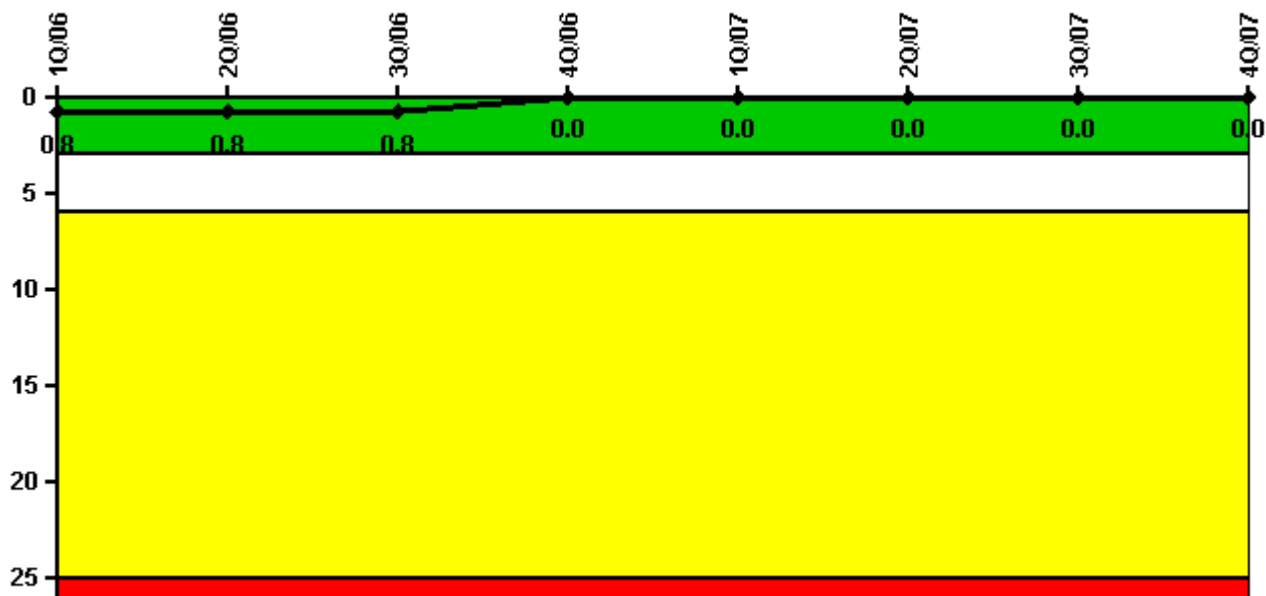
Last Modified: December 7, 2007

Byron 2

4Q/2007 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



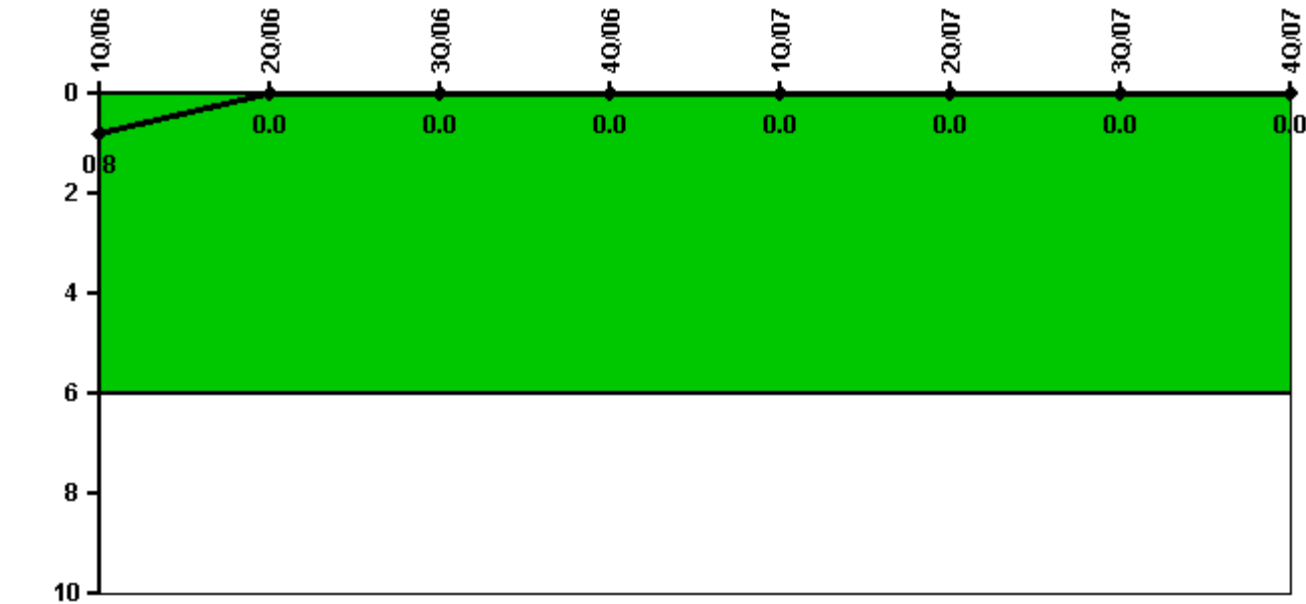
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4
Indicator value	0.8	0.8	0.8	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



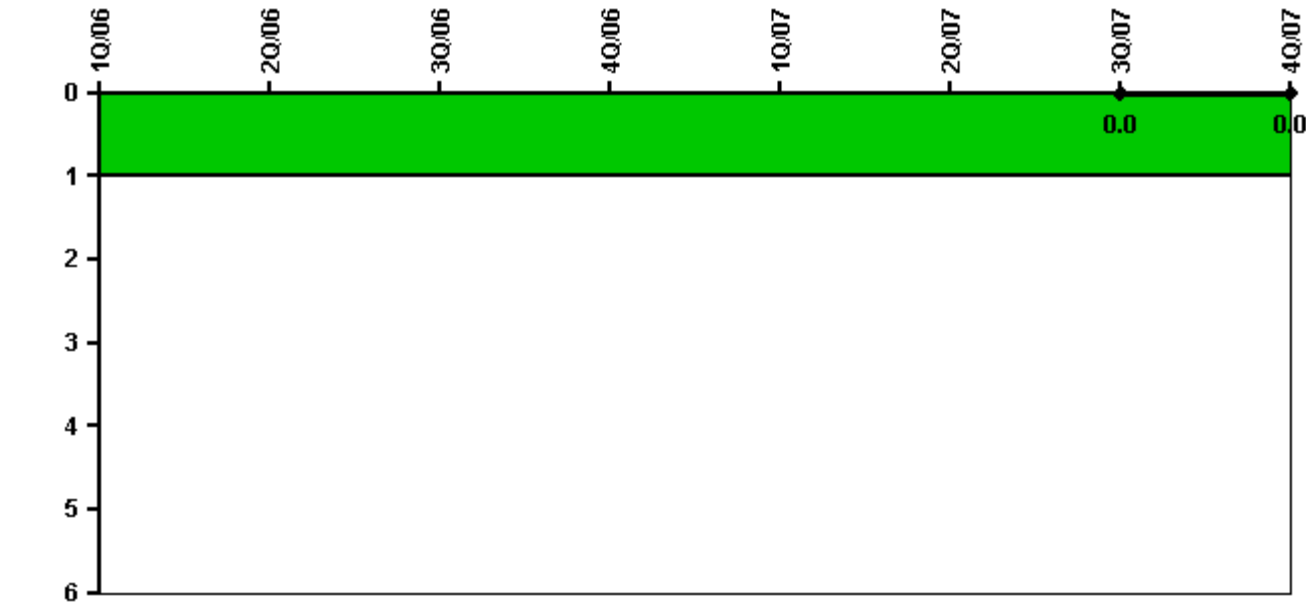
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



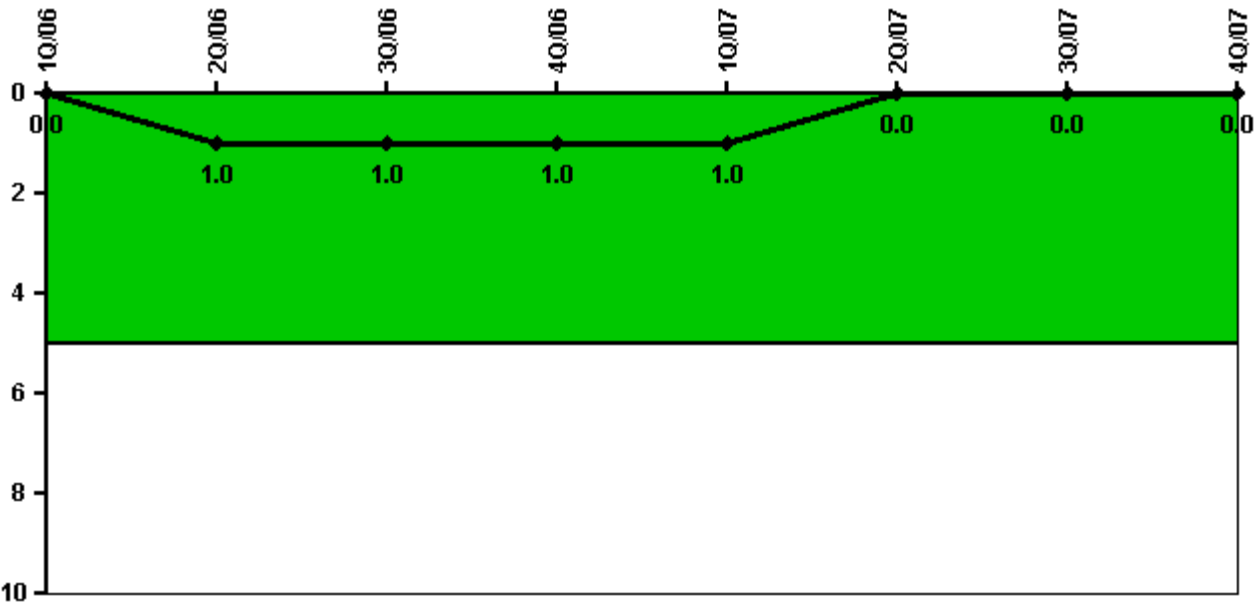
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Scrams with complications				0	0	0	0	0
Indicator value							0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



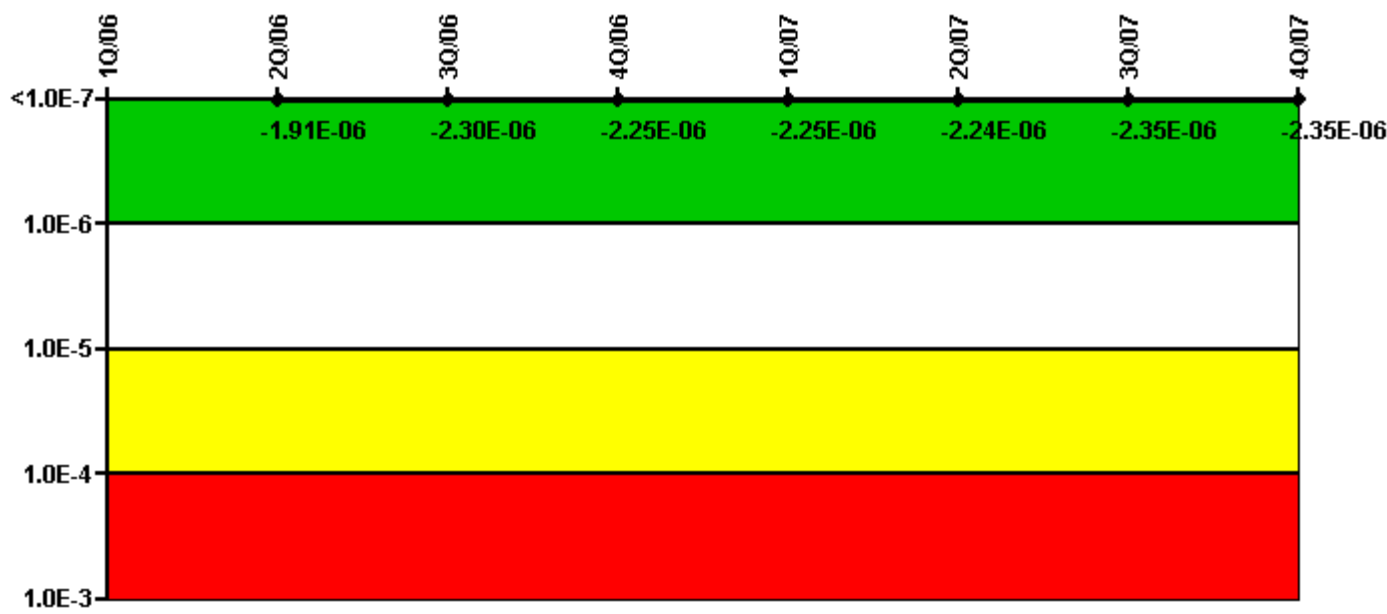
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Safety System Functional Failures	0	1	0	0	0	0	0	0
Indicator value	0	1	1	1	1	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



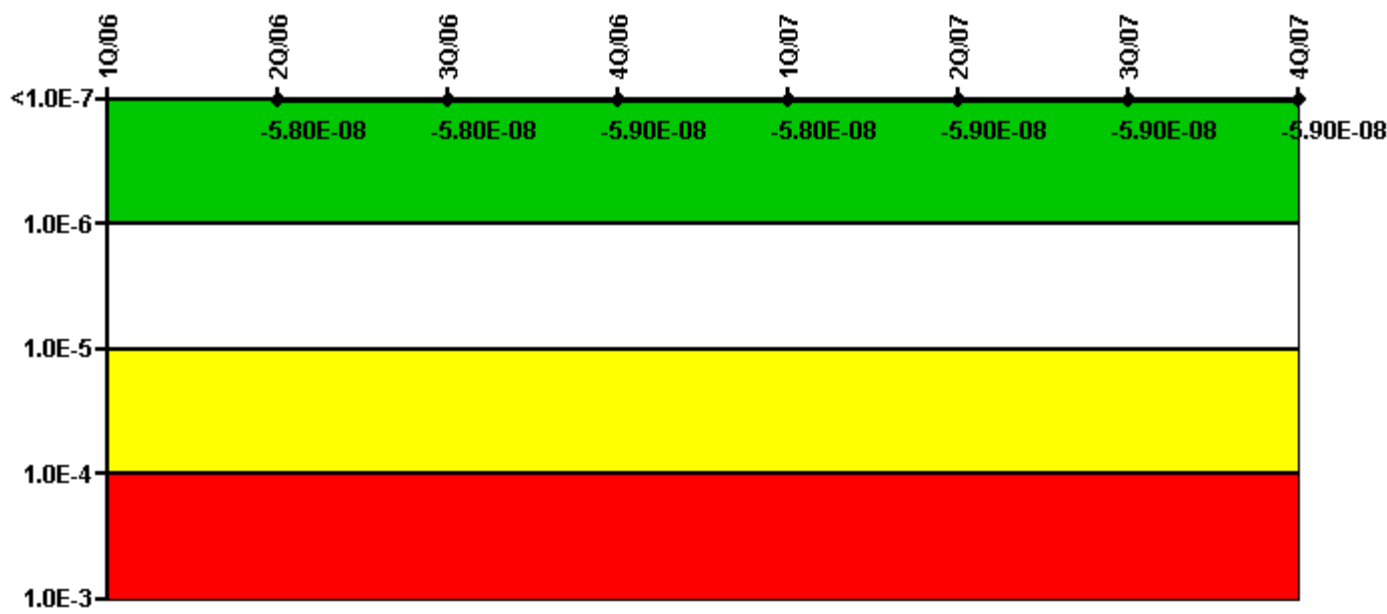
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI (ΔCDF)		-8.00E-09	4.80E-09	5.10E-08	4.80E-08	5.70E-08	4.90E-08	4.80E-08
URI (ΔCDF)		-1.90E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.40E-06	-2.40E-06
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		-1.91E-06	-2.30E-06	-2.25E-06	-2.25E-06	-2.24E-06	-2.35E-06	-2.35E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



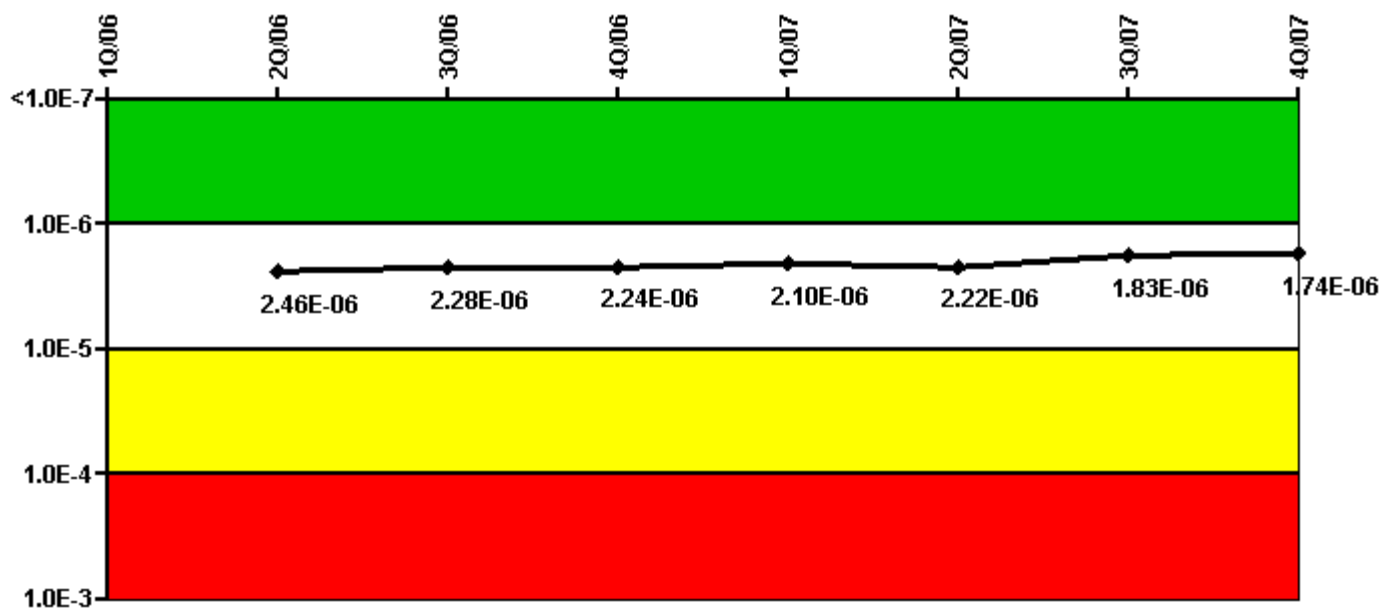
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI (ΔCDF)		-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08
URI (ΔCDF)		-1.60E-08	-1.60E-08	-1.70E-08	-1.60E-08	-1.70E-08	-1.70E-08	-1.70E-08
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		-5.80E-08	-5.80E-08	-5.90E-08	-5.80E-08	-5.90E-08	-5.90E-08	-5.90E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

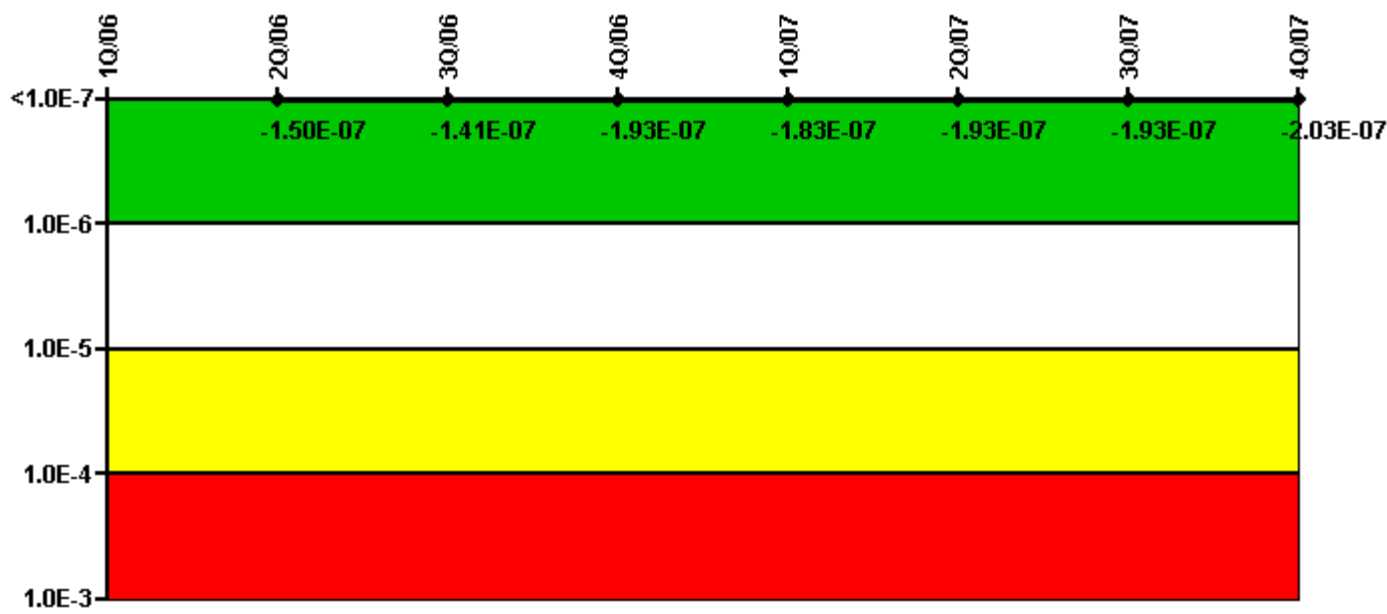
Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI (ACDF)		8.60E-07	6.80E-07	5.40E-07	2.00E-07	2.20E-07	-1.70E-07	-1.60E-07
URI (ACDF)		1.60E-06	1.60E-06	1.70E-06	1.90E-06	2.00E-06	2.00E-06	1.90E-06
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		2.46E-06	2.28E-06	2.24E-06	2.10E-06	2.22E-06	1.83E-06	1.74E-06

Licensee Comments:

4Q/07: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



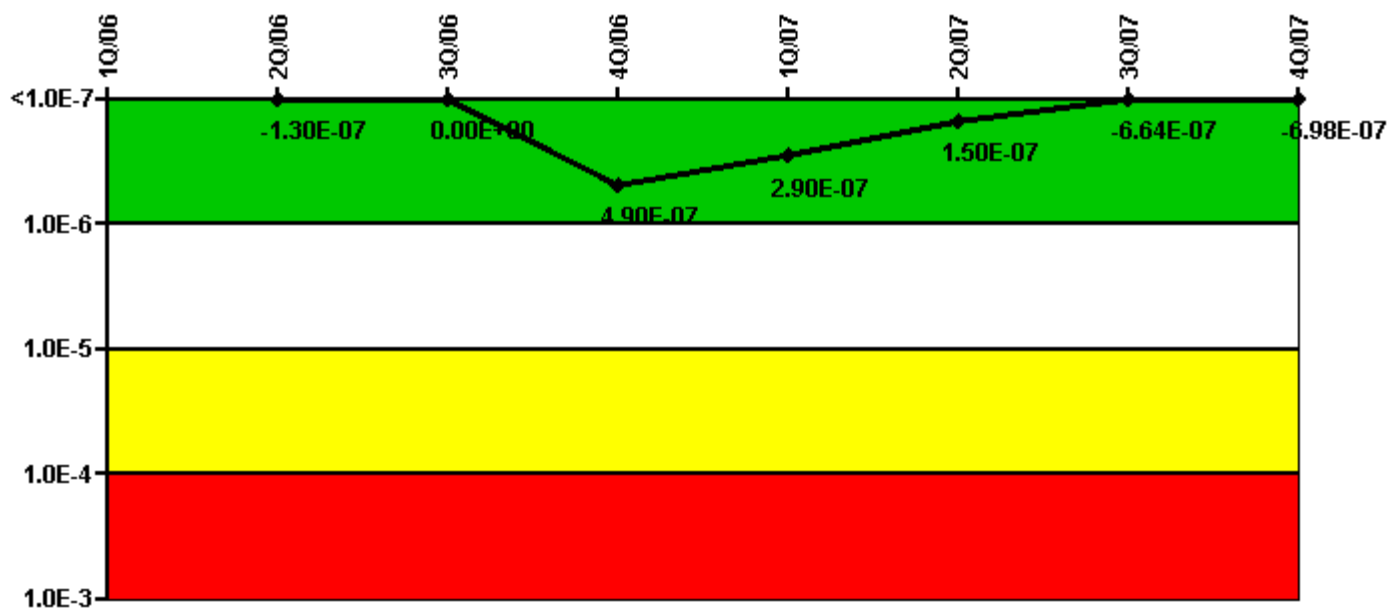
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI (ΔCDF)		6.60E-11	9.50E-09	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08
URI (ΔCDF)		-1.50E-07	-1.50E-07	-1.50E-07	-1.40E-07	-1.50E-07	-1.50E-07	-1.60E-07
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		-1.50E-07	-1.41E-07	-1.93E-07	-1.83E-07	-1.93E-07	-1.93E-07	-2.03E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



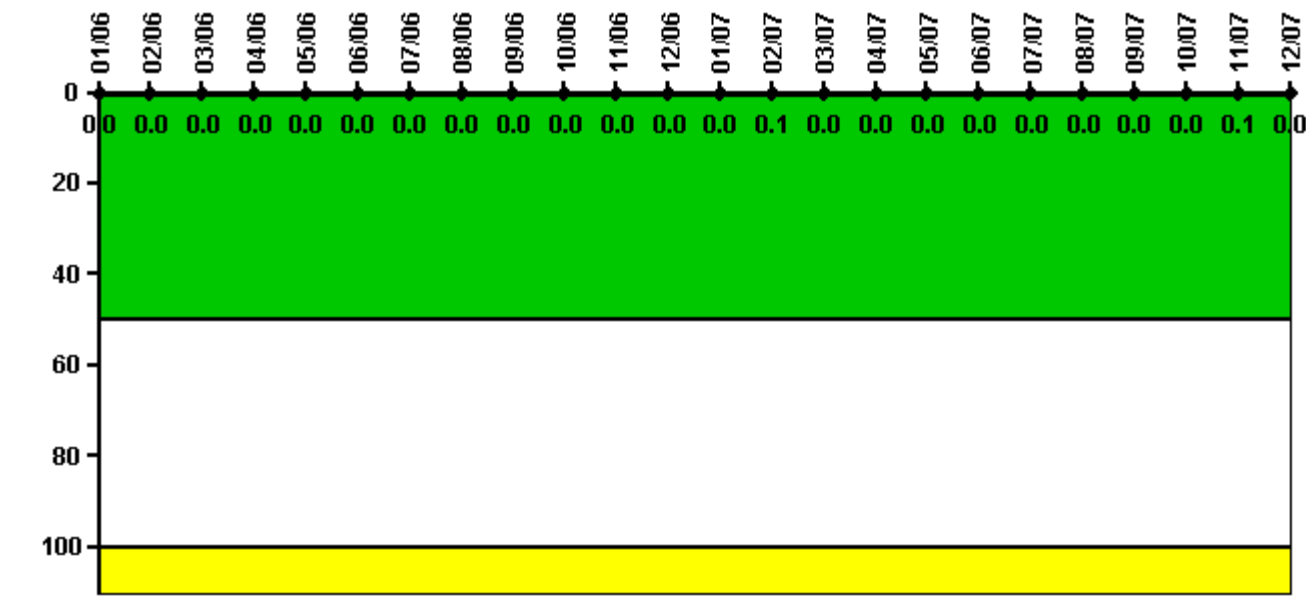
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI (ACDF)		5.80E-07	7.10E-07	1.20E-06	1.00E-06	8.70E-07	4.60E-08	2.20E-08
URI (ACDF)		-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07	-7.20E-07	-7.10E-07	-7.20E-07
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		-1.30E-07	0.00E+00	4.90E-07	2.90E-07	1.50E-07	-6.64E-07	-6.98E-07

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

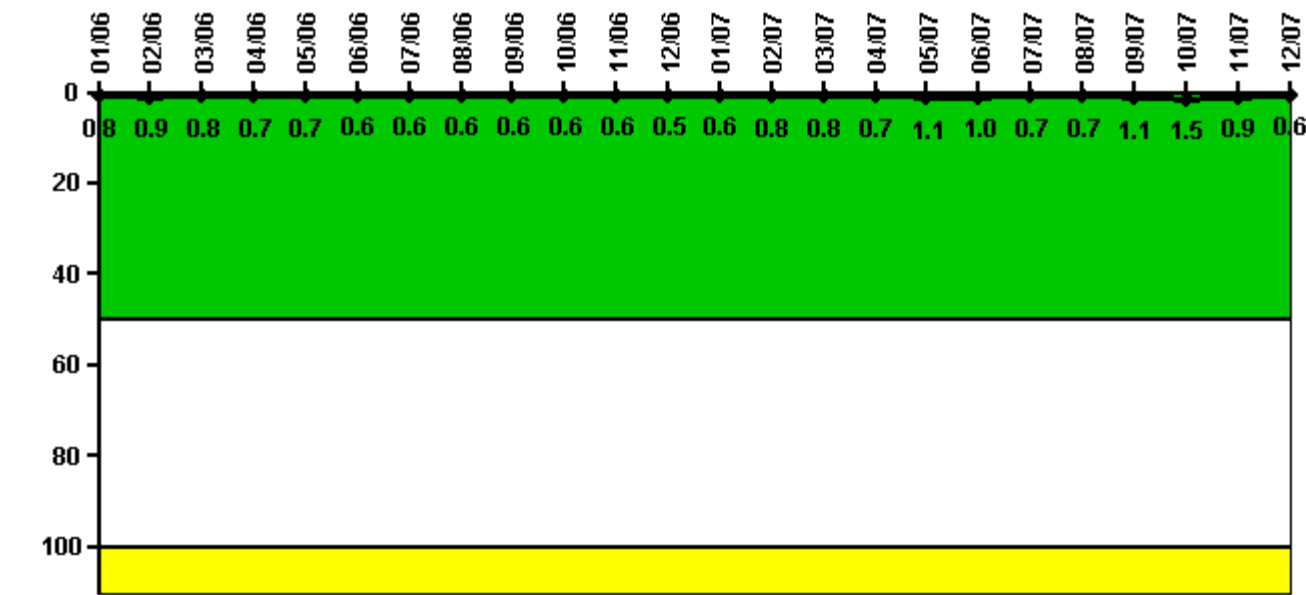
Notes

Reactor Coolant System Activity	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum activity	0.000235	0.000240	0.000404	0.000271	0.000266	0.000267	0.000294	0.000306	0.000292	0.000295	0.000307	0.000308
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum activity	0.000315	0.000854	0.000371	0.000273	0.000313	0.000318	0.000323	0.000317	0.000315	0.000315	0.000618	0.000339
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0	0	0	0	0	0	0	0	0.1	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

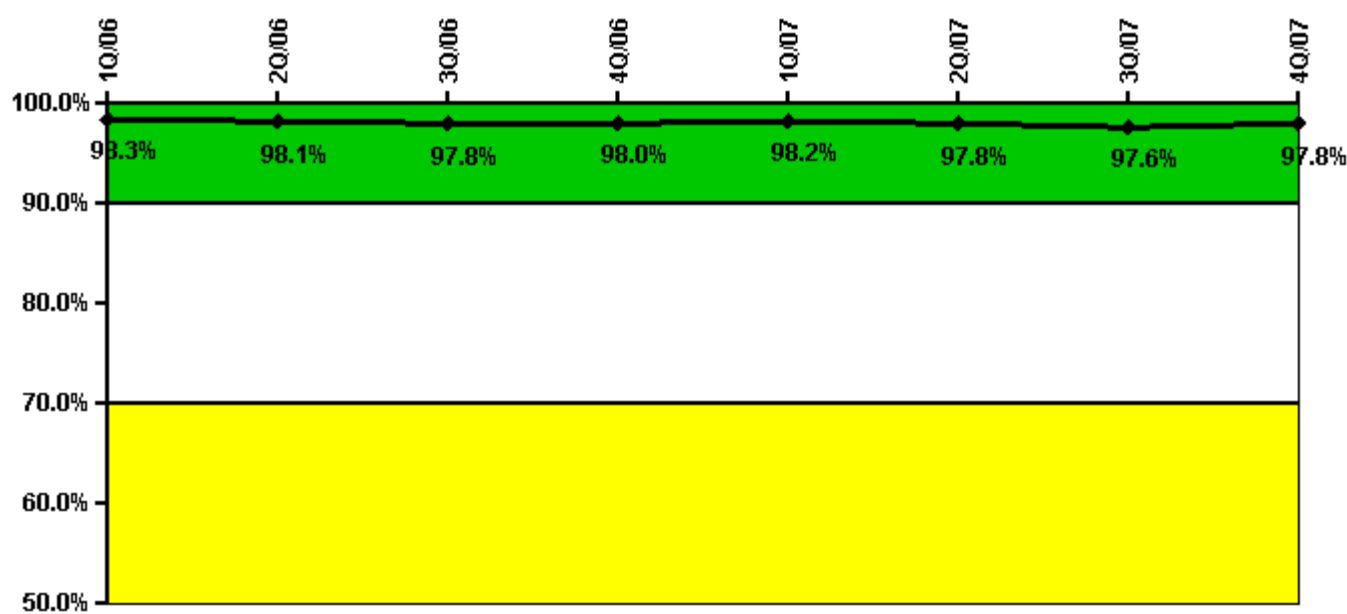
Notes

Reactor Coolant System Leakage	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum leakage	0.078	0.091	0.084	0.071	0.068	0.061	0.063	0.058	0.062	0.061	0.059	0.054
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5

Reactor Coolant System Leakage	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum leakage	0.061	0.078	0.076	0.072	0.109	0.096	0.066	0.072	0.106	0.153	0.088	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.8	0.8	0.7	1.1	1.0	0.7	0.7	1.1	1.5	0.9	0.6

Licensee Comments: none

Drill/Exercise Performance



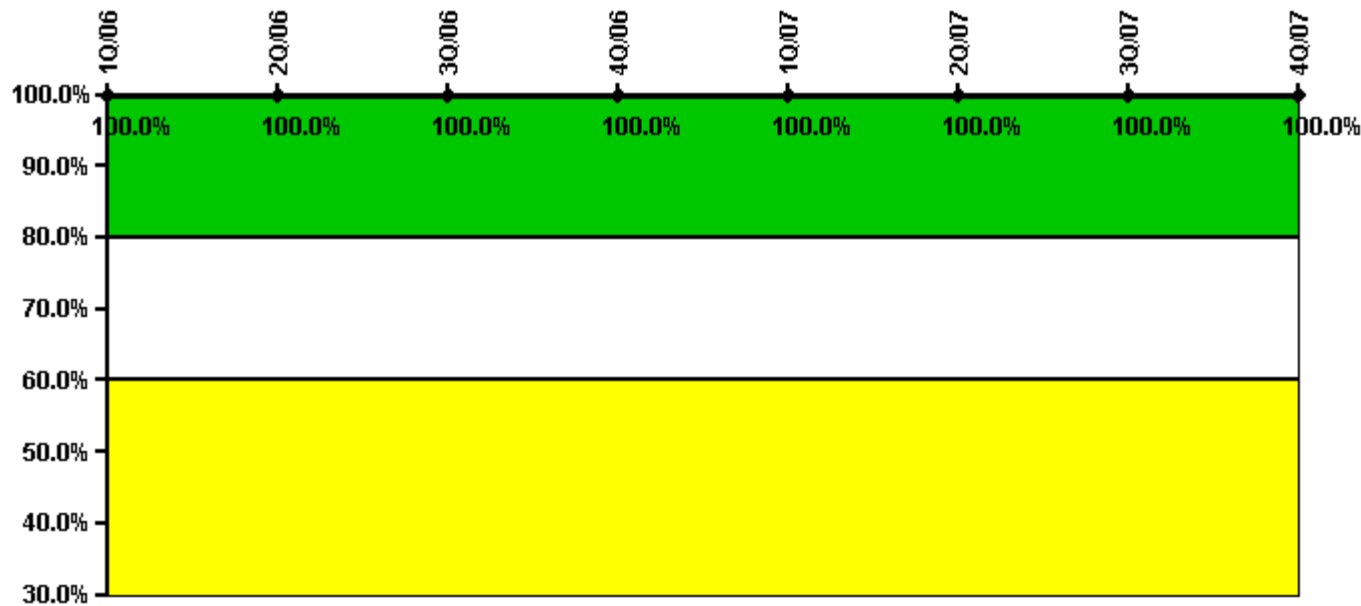
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Successful opportunities	22.0	12.0	136.0	40.0	10.0	45.0	43.0	89.0
Total opportunities	22.0	12.0	139.0	40.0	10.0	49.0	44.0	90.0
Indicator value	98.3%	98.1%	97.8%	98.0%	98.2%	97.8%	97.6%	97.8%

Licensee Comments: none

ERO Drill Participation



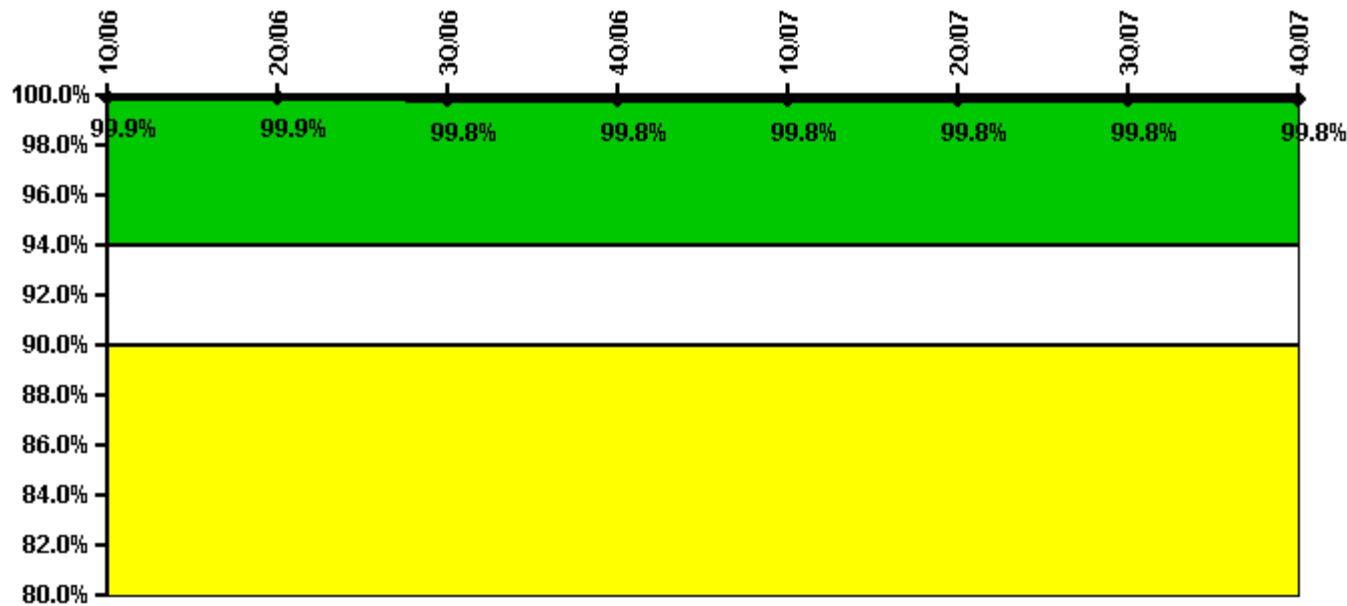
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Participating Key personnel	78.0	78.0	76.0	76.0	71.0	66.0	75.0	75.0
Total Key personnel	78.0	78.0	76.0	76.0	71.0	66.0	75.0	75.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



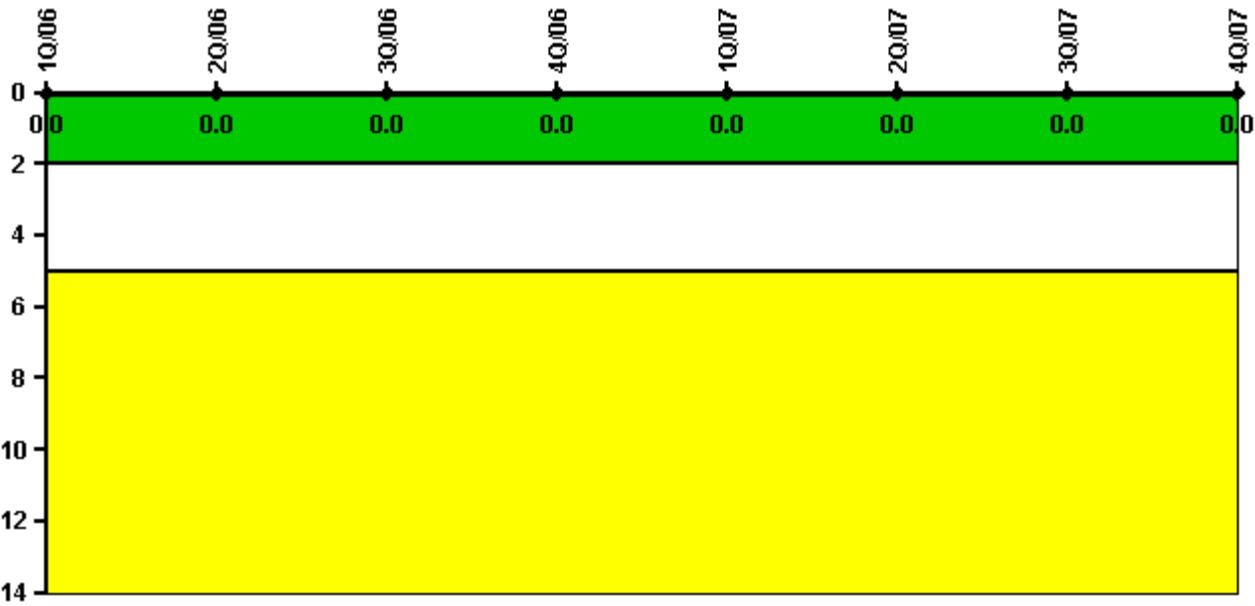
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Successful siren-tests	6105	6005	5988	5915	6008	5985	5988	5997
Total sirens-tests	6110	6012	6012	5922	6016	6005	6009	6007
Indicator value	99.9%	99.9%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



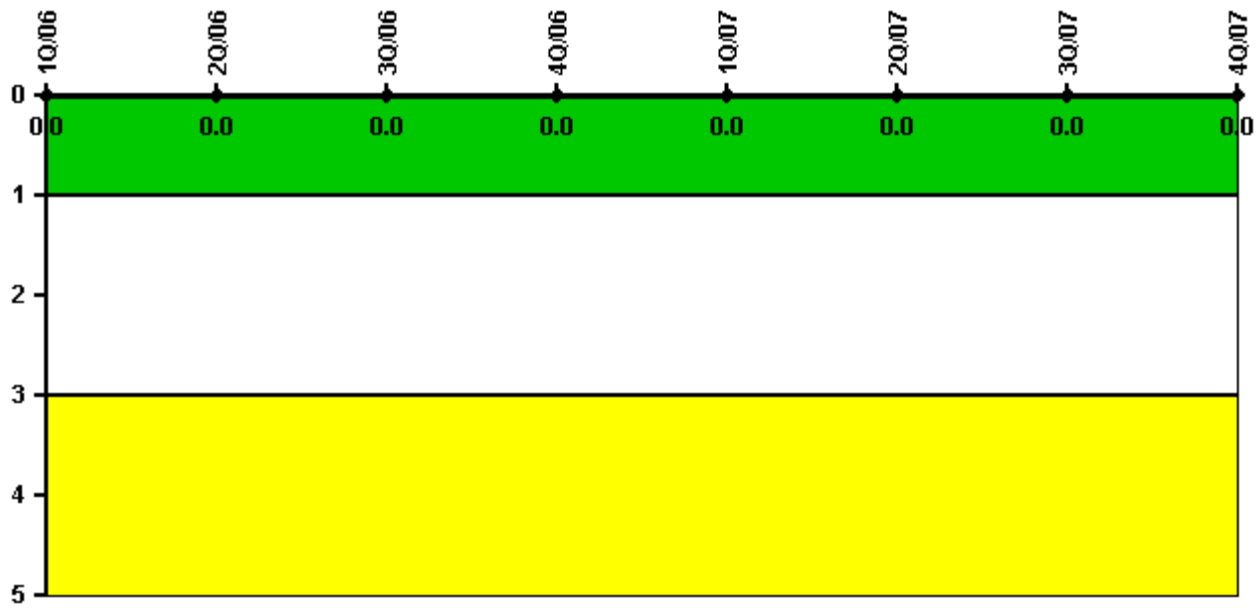
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

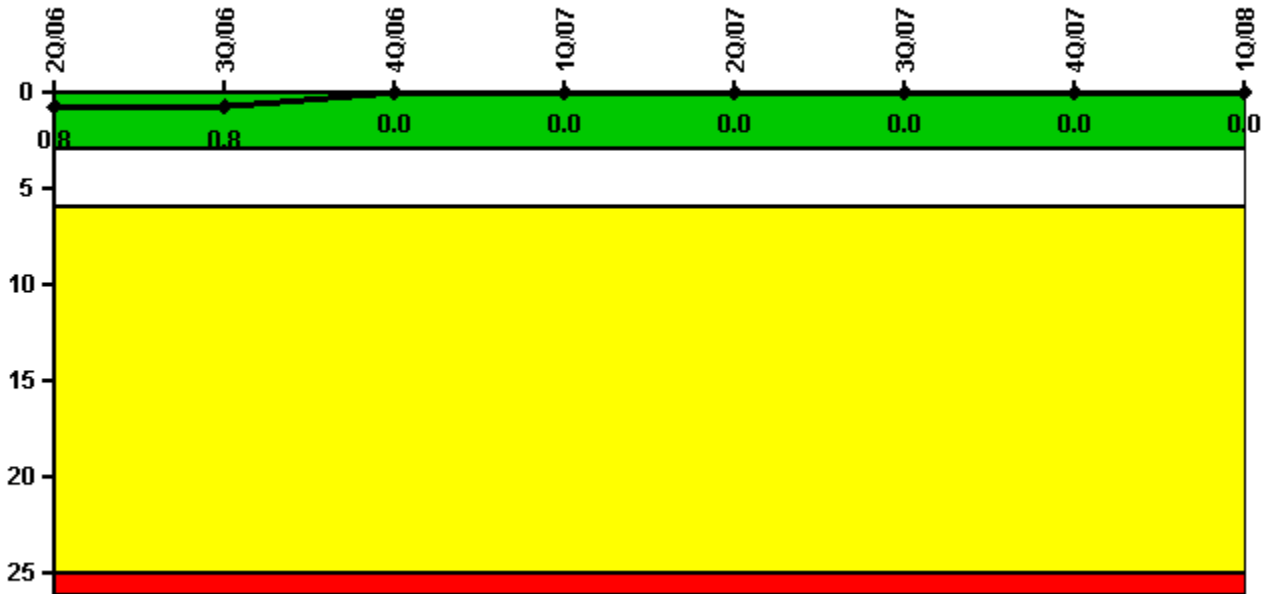
Last Modified: February 4, 2008

Byron 2

1Q/2008 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



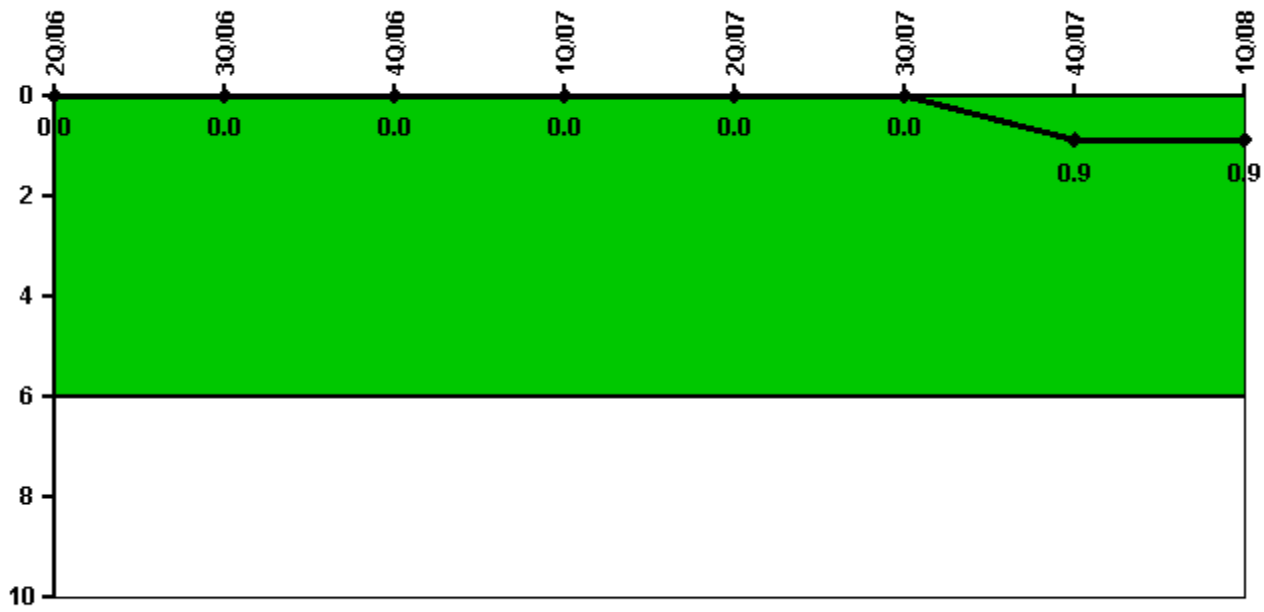
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0
Indicator value	0.8	0.8	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



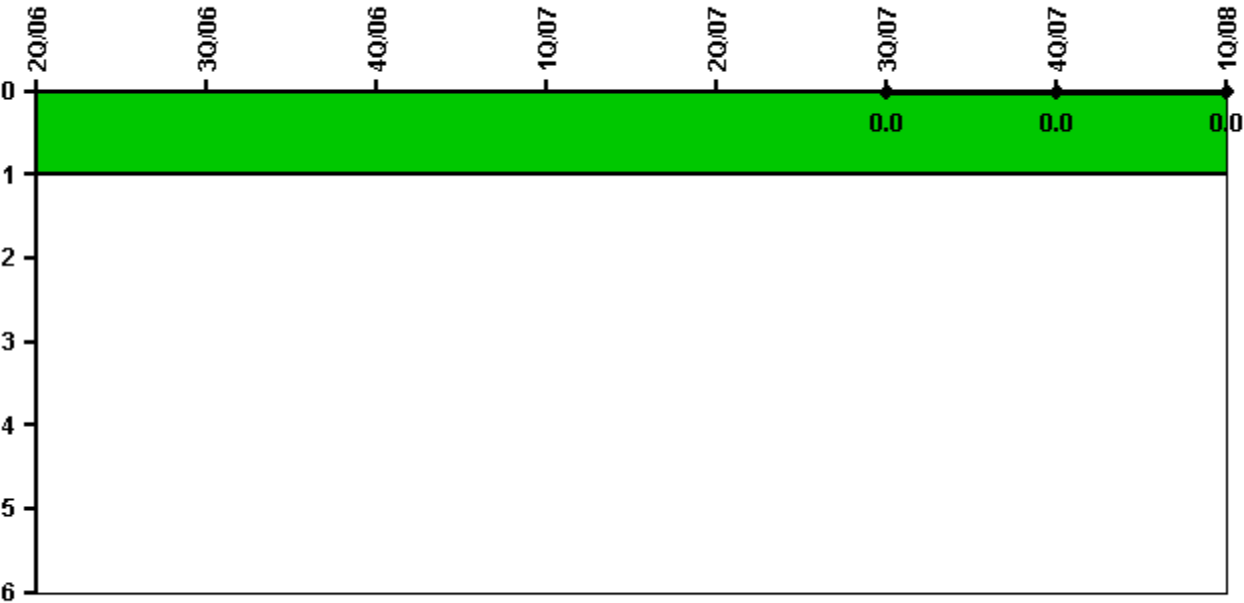
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0
Indicator value	0	0	0	0	0	0	0.9	0.9

Licensee Comments: none

Unplanned Scrams with Complications



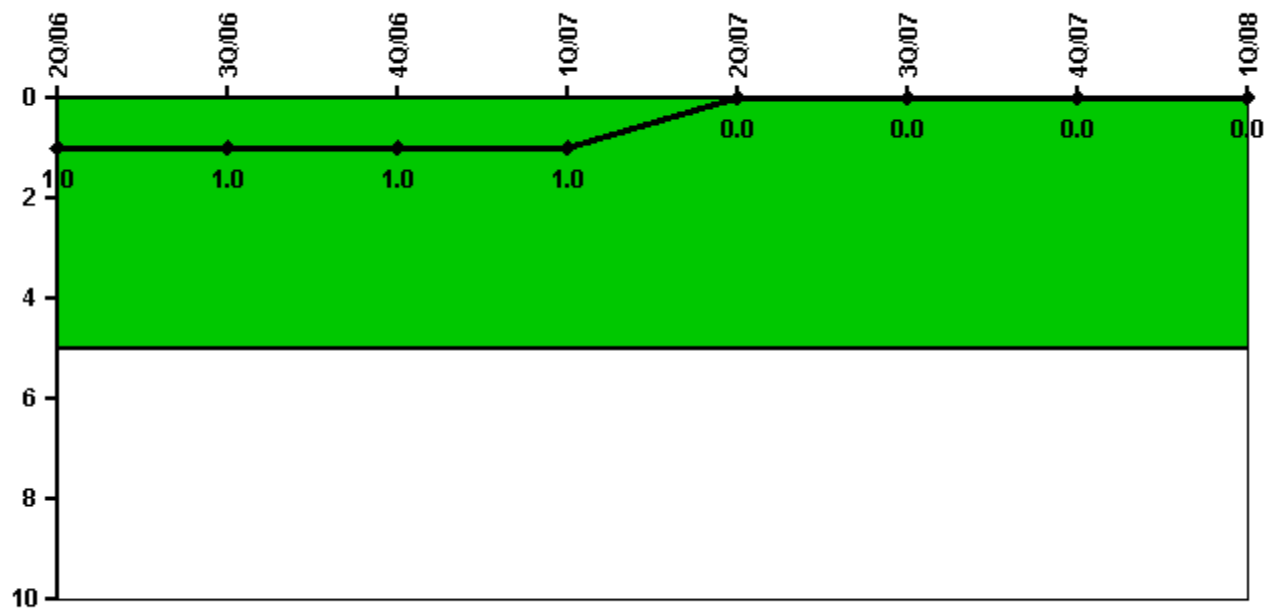
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Scrams with complications			0	0	0	0	0	0
Indicator value						0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



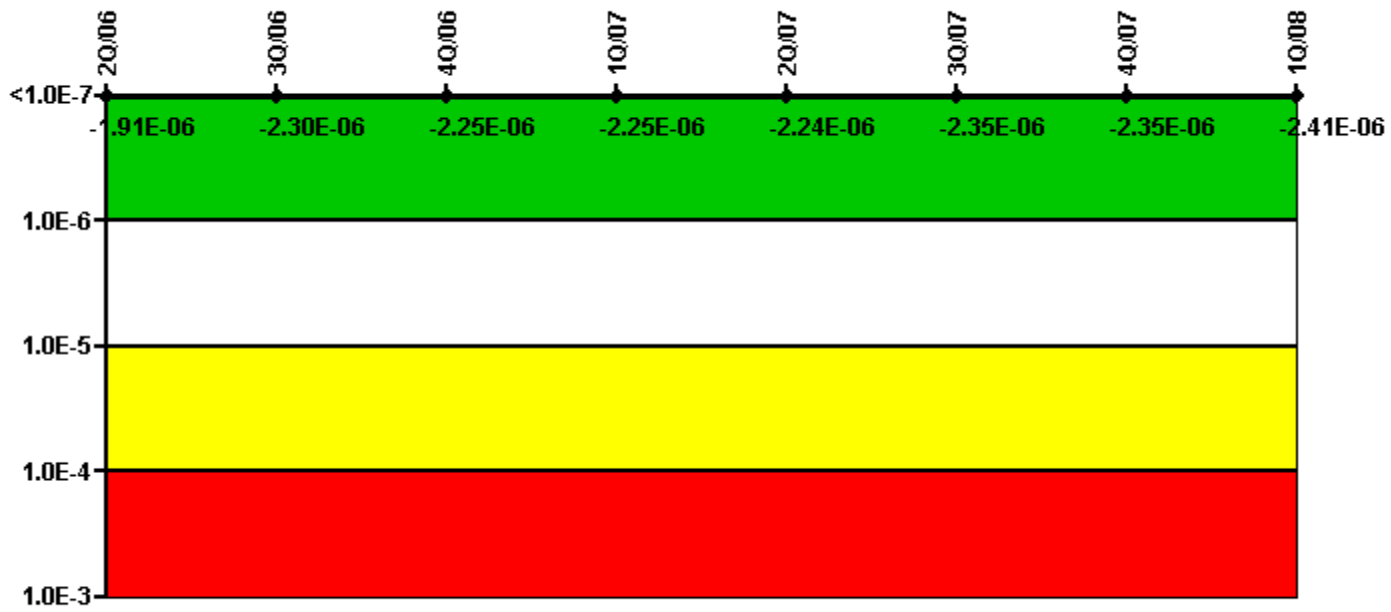
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Safety System Functional Failures	1	0	0	0	0	0	0	0
Indicator value	1	1	1	1	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

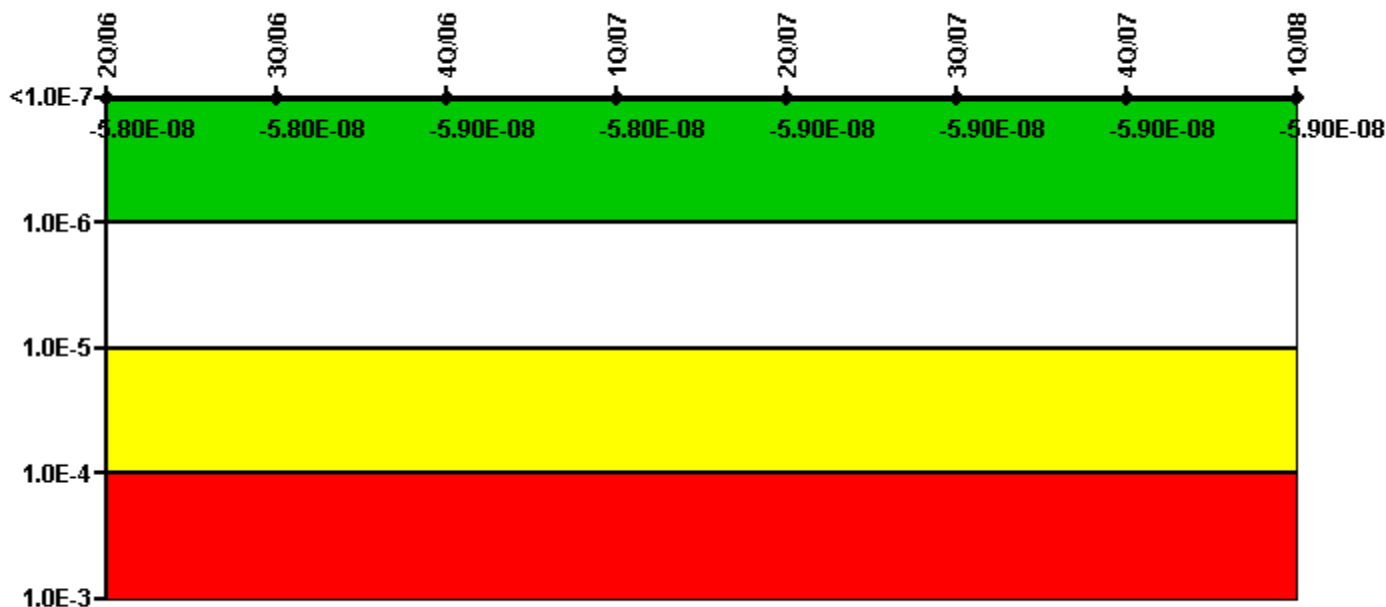
Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (Δ CDF)	-8.00E-09	4.80E-09	5.10E-08	4.80E-08	5.70E-08	4.90E-08	4.80E-08	-9.00E-09
URI (Δ CDF)	-1.90E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.40E-06	-2.40E-06	-2.40E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.91E-06	-2.30E-06	-2.25E-06	-2.25E-06	-2.24E-06	-2.35E-06	-2.35E-06	-2.41E-06

Licensee Comments:

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

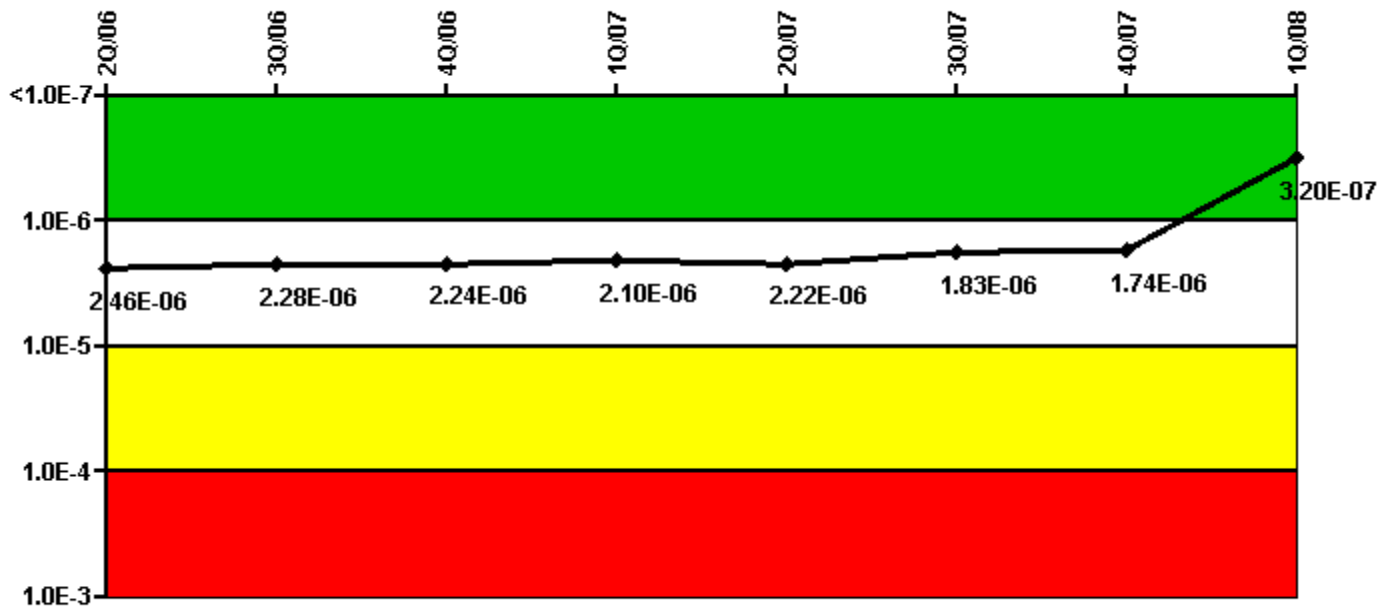
Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (Δ CDF)	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08
URI (Δ CDF)	-1.60E-08	-1.60E-08	-1.70E-08	-1.60E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.80E-08	-5.80E-08	-5.90E-08	-5.80E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08

Licensee Comments:

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (Δ CDF)	8.60E-07	6.80E-07	5.40E-07	2.00E-07	2.20E-07	-1.70E-07	-1.60E-07	-3.10E-07
URI (Δ CDF)	1.60E-06	1.60E-06	1.70E-06	1.90E-06	2.00E-06	2.00E-06	1.90E-06	6.30E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.46E-06	2.28E-06	2.24E-06	2.10E-06	2.22E-06	1.83E-06	1.74E-06	3.20E-07

Licensee Comments:

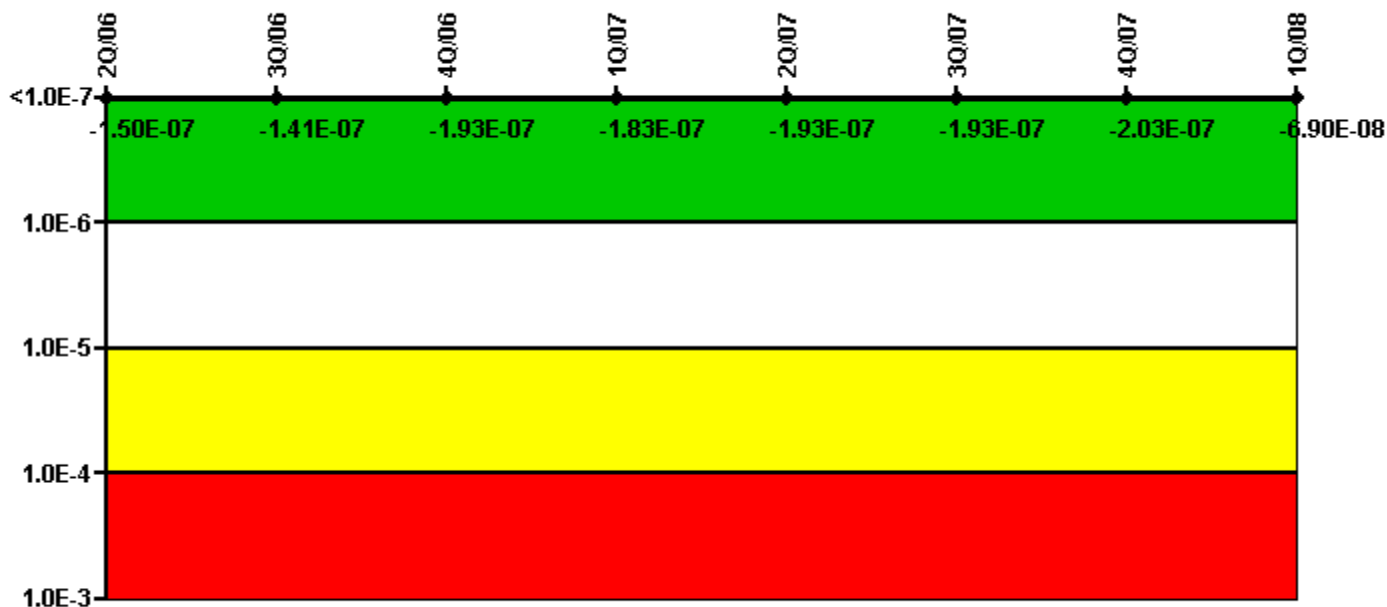
1Q/08: Risk Cap Invoked.

3Q/06: Risk Cap Invoked.

2Q/06: Risk Cap Invoked. Revised PRA parameters per PRA revision 6D.

2Q/06: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

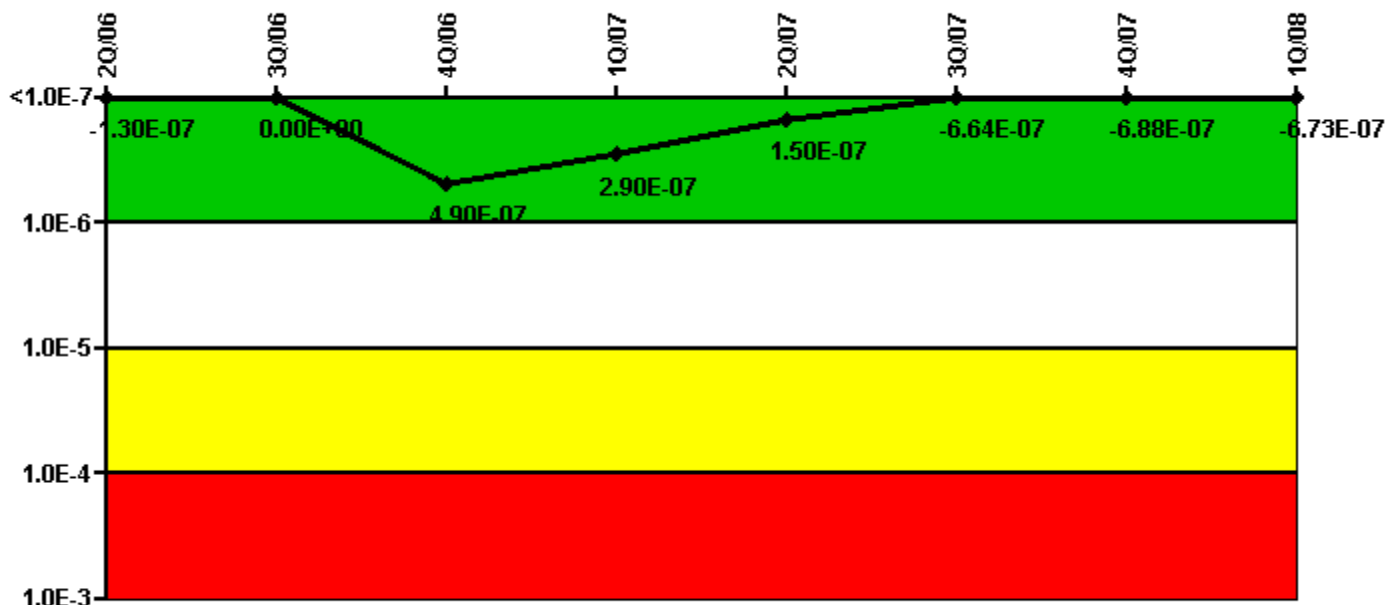
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (Δ CDF)	6.60E-11	9.50E-09	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	9.10E-08
URI (Δ CDF)	-1.50E-07	-1.50E-07	-1.50E-07	-1.40E-07	-1.50E-07	-1.50E-07	-1.60E-07	-1.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-07	-1.41E-07	-1.93E-07	-1.83E-07	-1.93E-07	-1.93E-07	-2.03E-07	-6.90E-08

Licensee Comments:

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (ΔCDF)	5.80E-07	7.10E-07	1.20E-06	1.00E-06	8.70E-07	4.60E-08	2.20E-08	3.70E-08
URI (ΔCDF)	-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07	-7.20E-07	-7.10E-07	-7.10E-07	-7.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	0.00E+00	4.90E-07	2.90E-07	1.50E-07	-6.64E-07	-6.88E-07	-6.73E-07

Licensee Comments:

1Q/08: Changed PRA Parameter(s).

1Q/08: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).

2Q/07: Changed PRA Parameter(s).

1Q/07: Changed PRA Parameter(s).

4Q/06: Changed PRA Parameter(s).

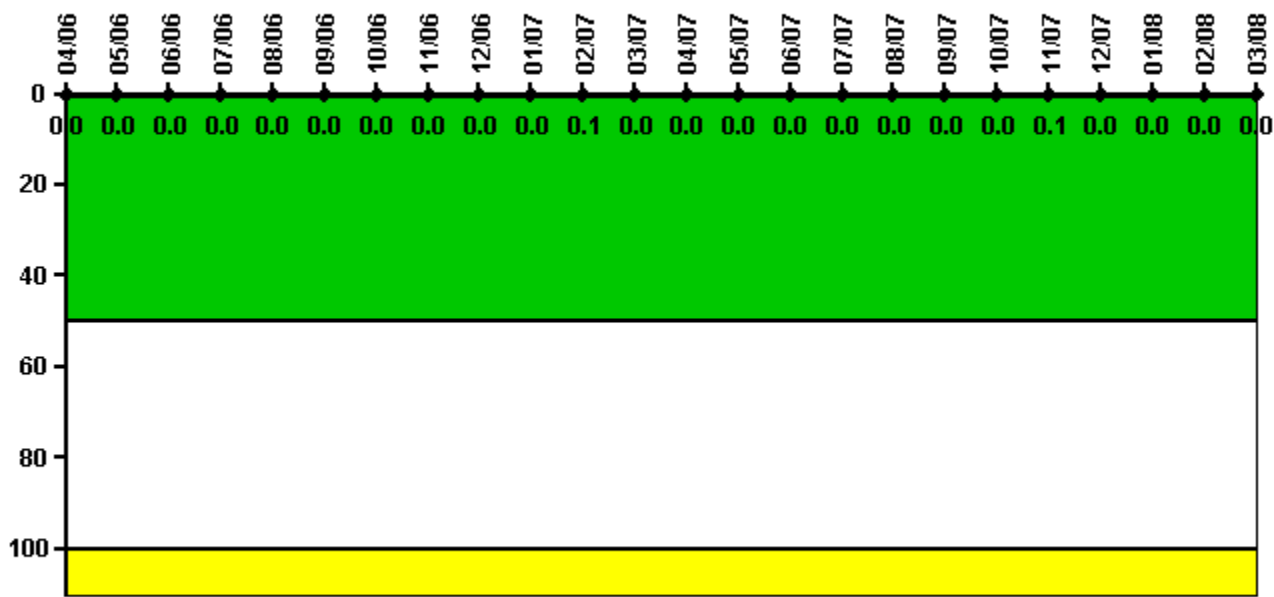
3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s). Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

2Q/06: Corrected erroneous FV and URPC values for CC and SX from last PRA Model Update (Ref. IR #841513)

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

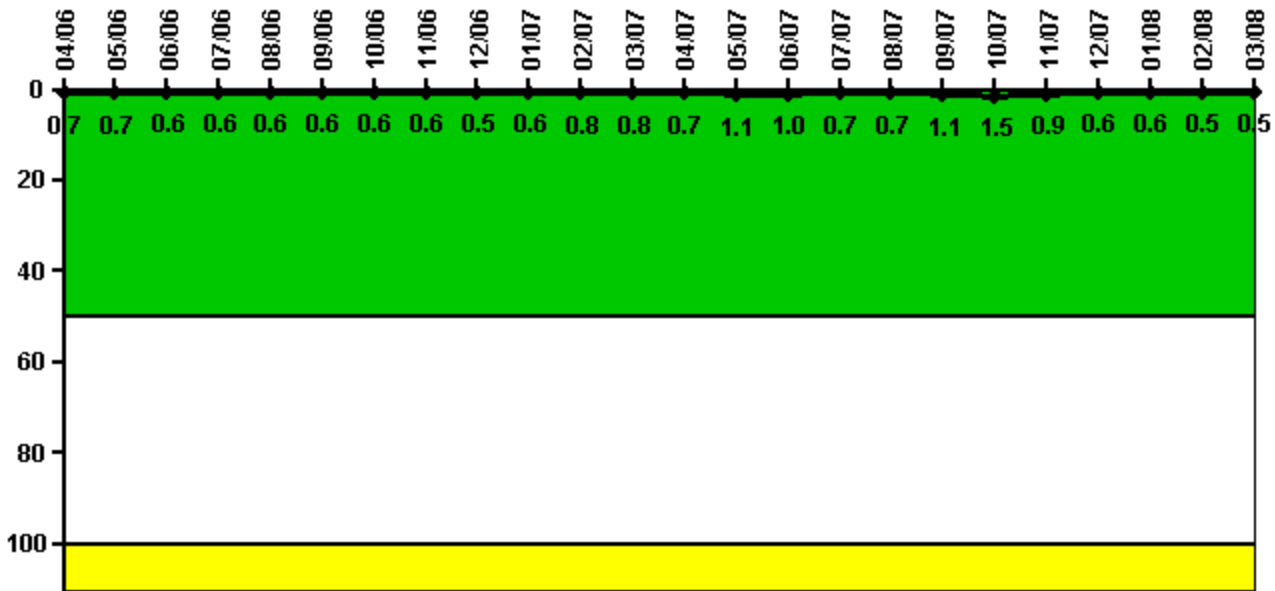
Notes

Reactor Coolant System Activity	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07
Maximum activity	0.000271	0.000266	0.000267	0.000294	0.000306	0.000292	0.000295	0.000307	0.000308	0.000315	0.000854	0.000371
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0.1	0

Reactor Coolant System Activity	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum activity	0.000273	0.000313	0.000318	0.000323	0.000317	0.000315	0.000315	0.000618	0.000339	0.000352	0.000370	0.000381
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0.1	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



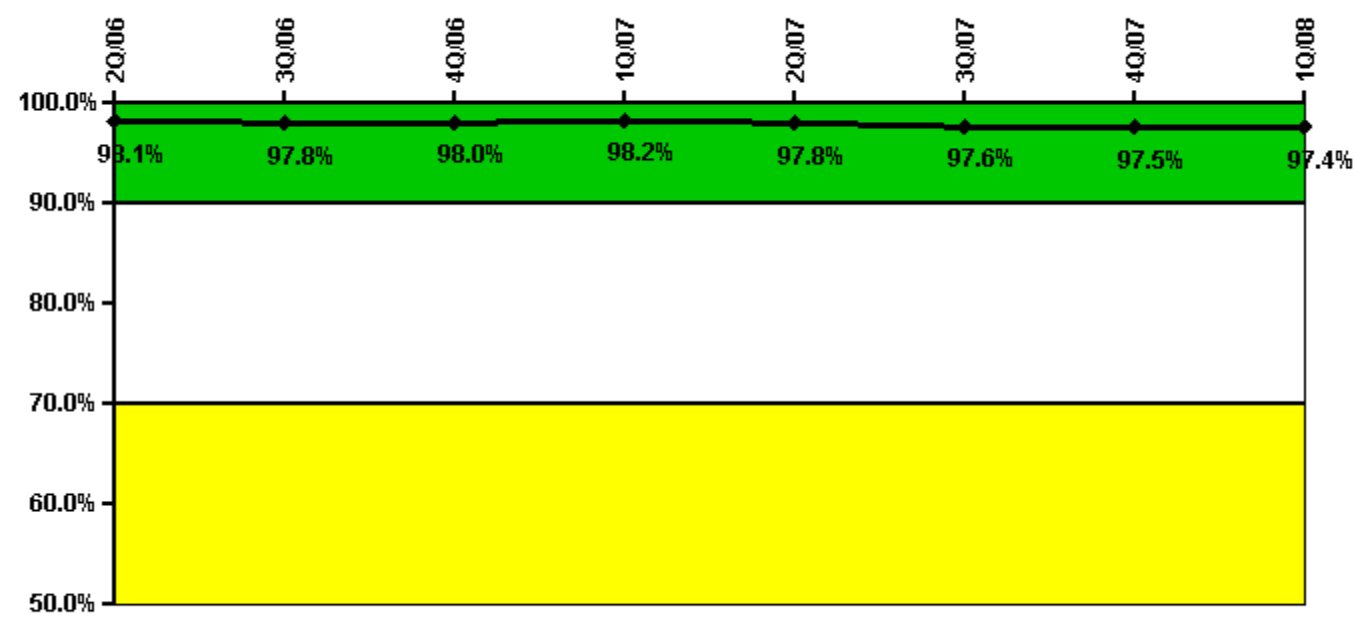
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07
Maximum leakage	0.071	0.068	0.061	0.063	0.058	0.062	0.061	0.059	0.054	0.061	0.078	0.076
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.8	0.8
Reactor Coolant System Leakage	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum leakage	0.072	0.109	0.096	0.066	0.072	0.106	0.153	0.088	0.060	0.061	0.054	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	1.1	1.0	0.7	0.7	1.1	1.5	0.9	0.6	0.6	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



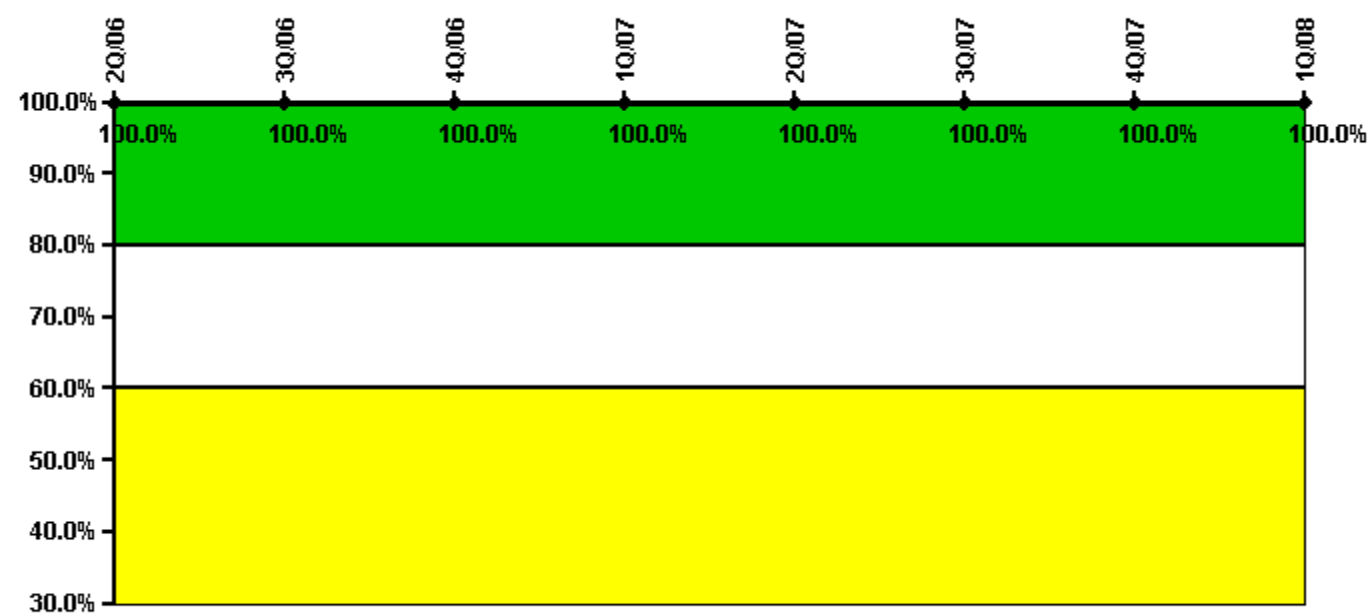
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Successful opportunities	12.0	136.0	40.0	10.0	45.0	43.0	88.0	4.0
Total opportunities	12.0	139.0	40.0	10.0	49.0	44.0	90.0	4.0
Indicator value	98.1%	97.8%	98.0%	98.2%	97.8%	97.6%	97.5%	97.4%

Licensee Comments: none

ERO Drill Participation



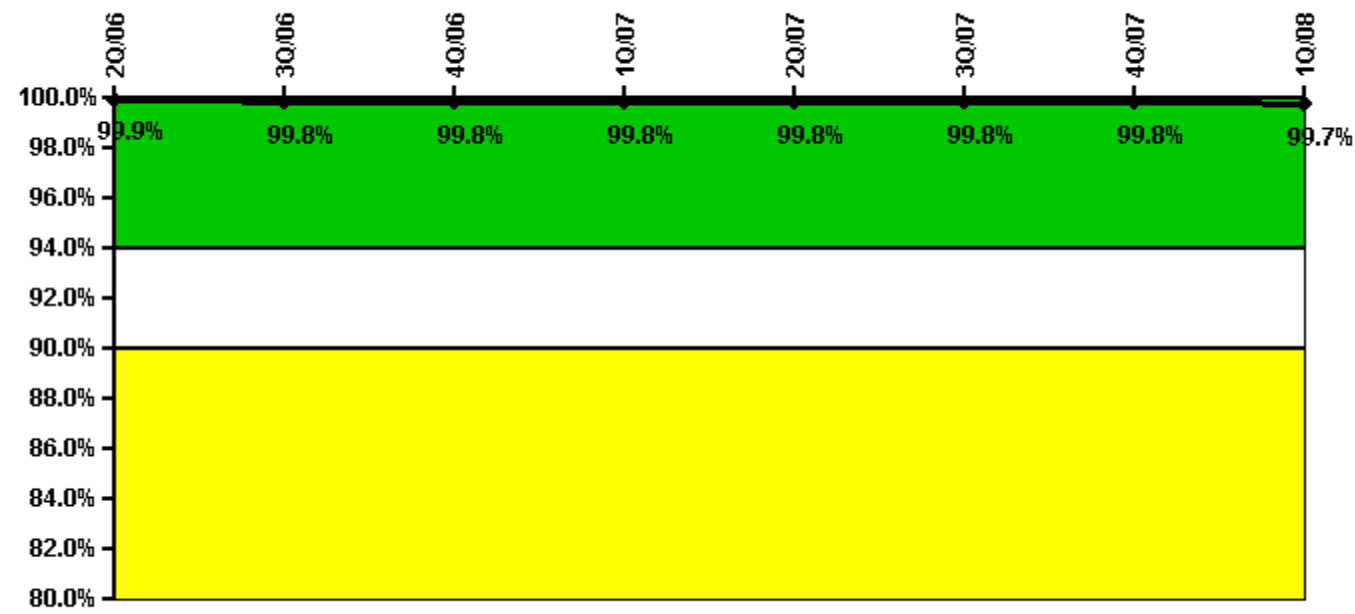
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Participating Key personnel	78.0	76.0	76.0	71.0	66.0	75.0	75.0	74.0
Total Key personnel	78.0	76.0	76.0	71.0	66.0	75.0	75.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Successful siren-tests	6005	5988	5915	6008	5985	5988	5997	5996
Total sirens-tests	6012	6012	5922	6016	6005	6009	6007	6011
Indicator value	99.9%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%

Licensee Comments: none

Occupational Exposure Control Effectiveness



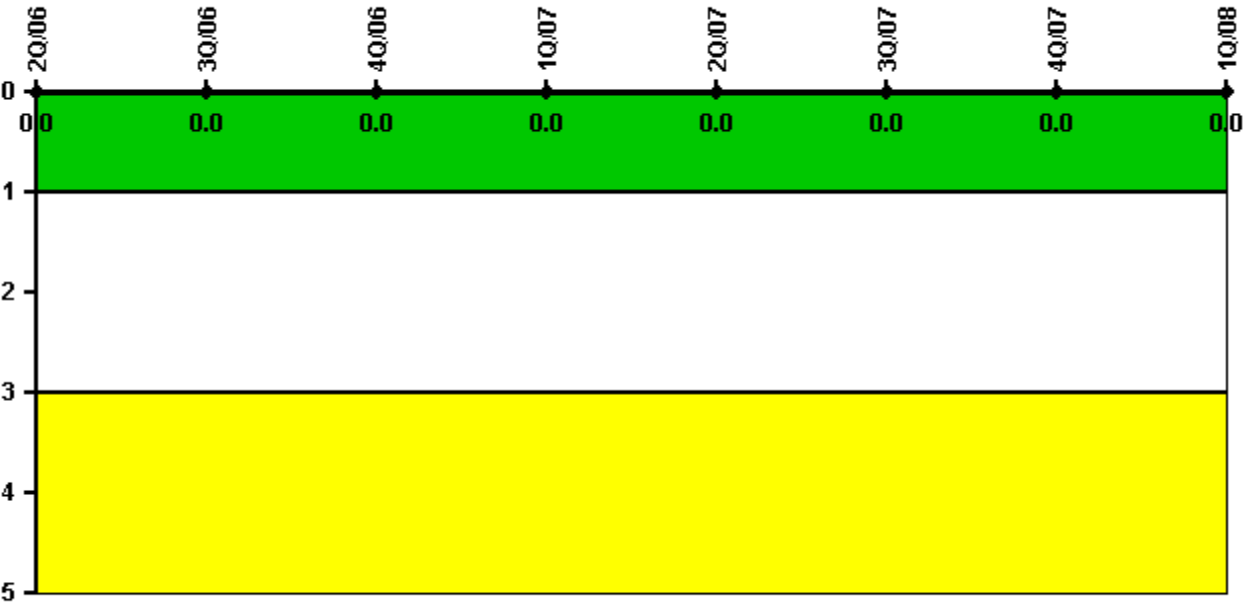
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
High radiation area occurrences	0	0	0	0	0	0	0	1
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	1

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

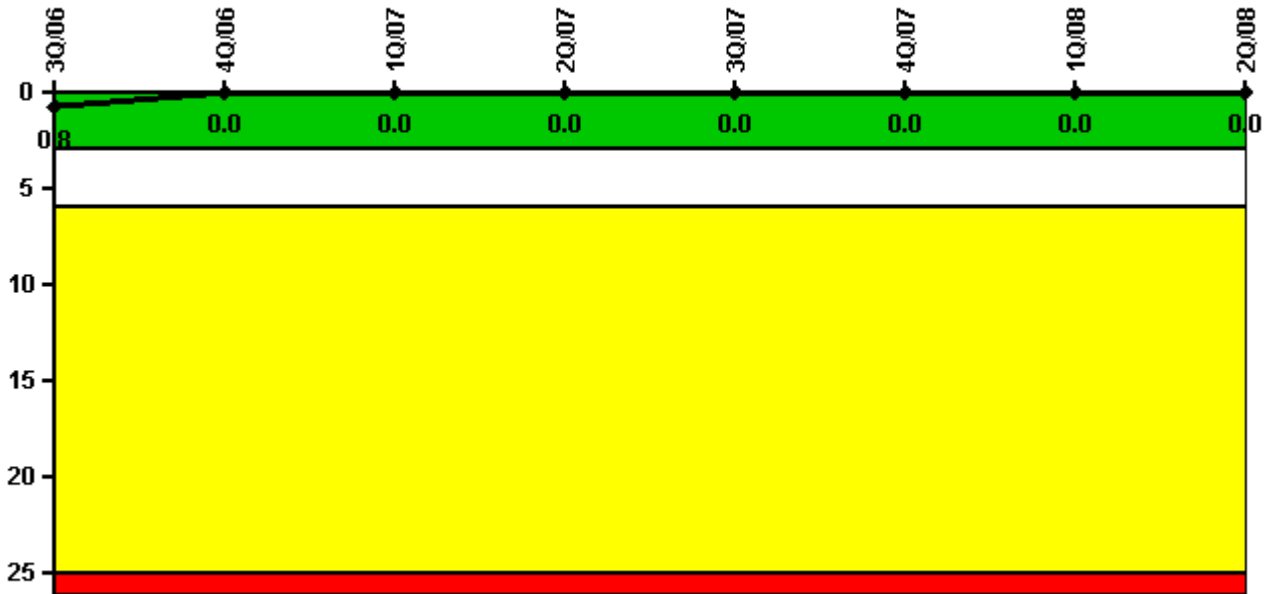
[Security](#) information not publicly available.

Byron 2

2Q/2008 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



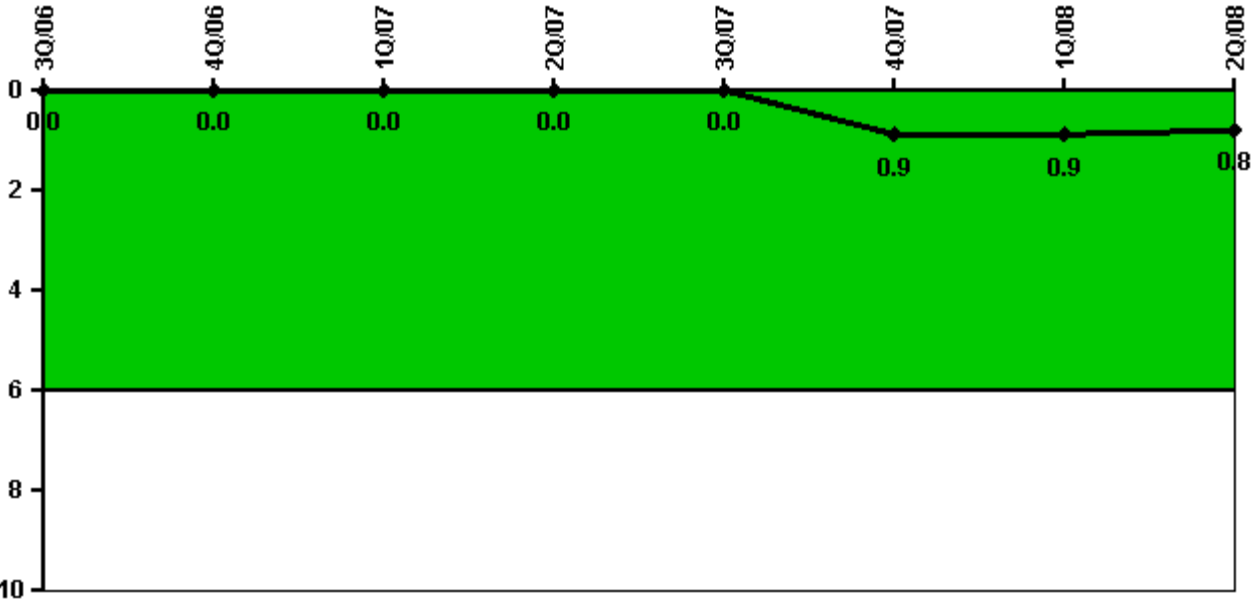
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0	2184.0
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



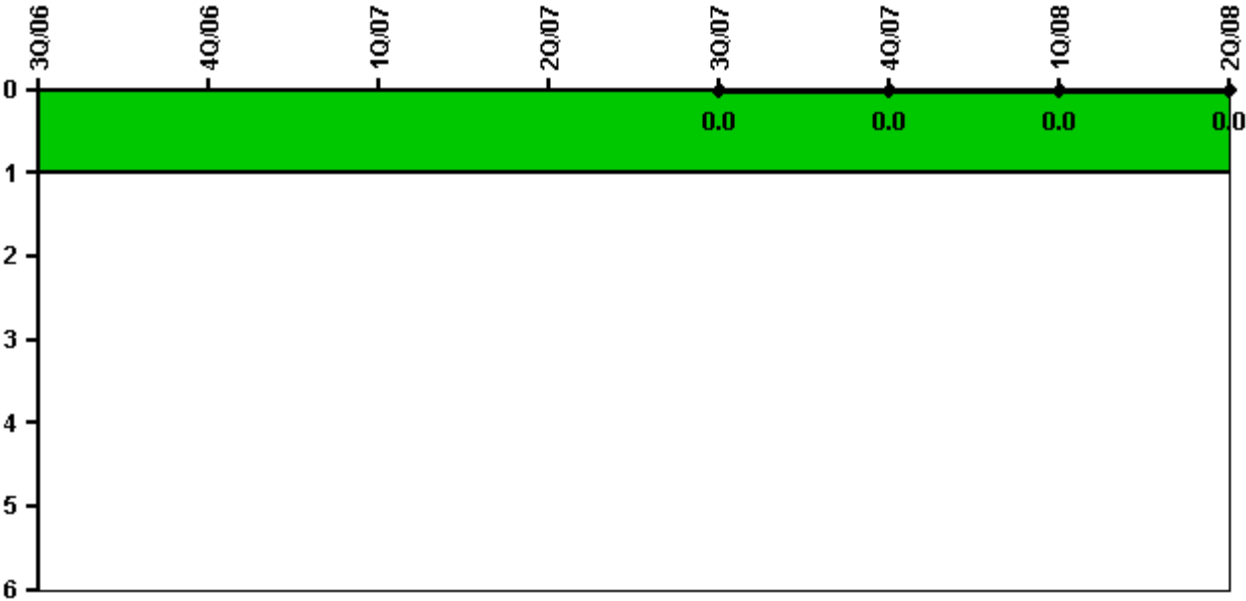
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
Unplanned power changes	0	0	0	0	0	1.0	0	0
Critical hours	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0	2184.0
Indicator value	0	0	0	0	0	0.9	0.9	0.8

Licensee Comments: none

Unplanned Scrams with Complications



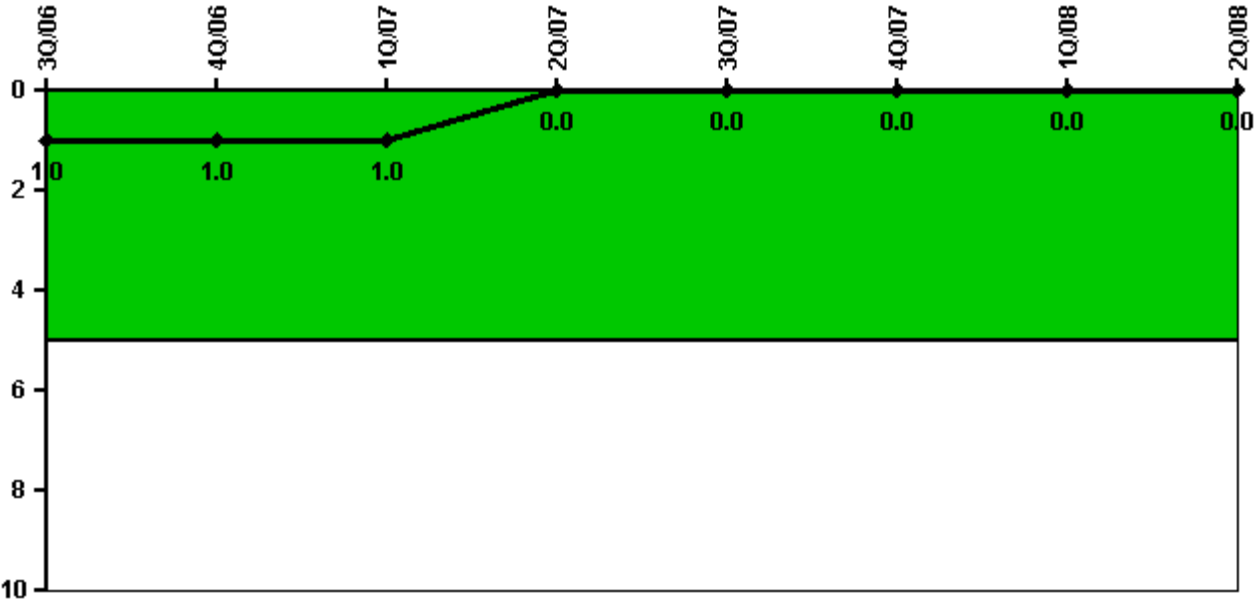
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
Scrams with complications		0	0	0	0	0	0	0
Indicator value					0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



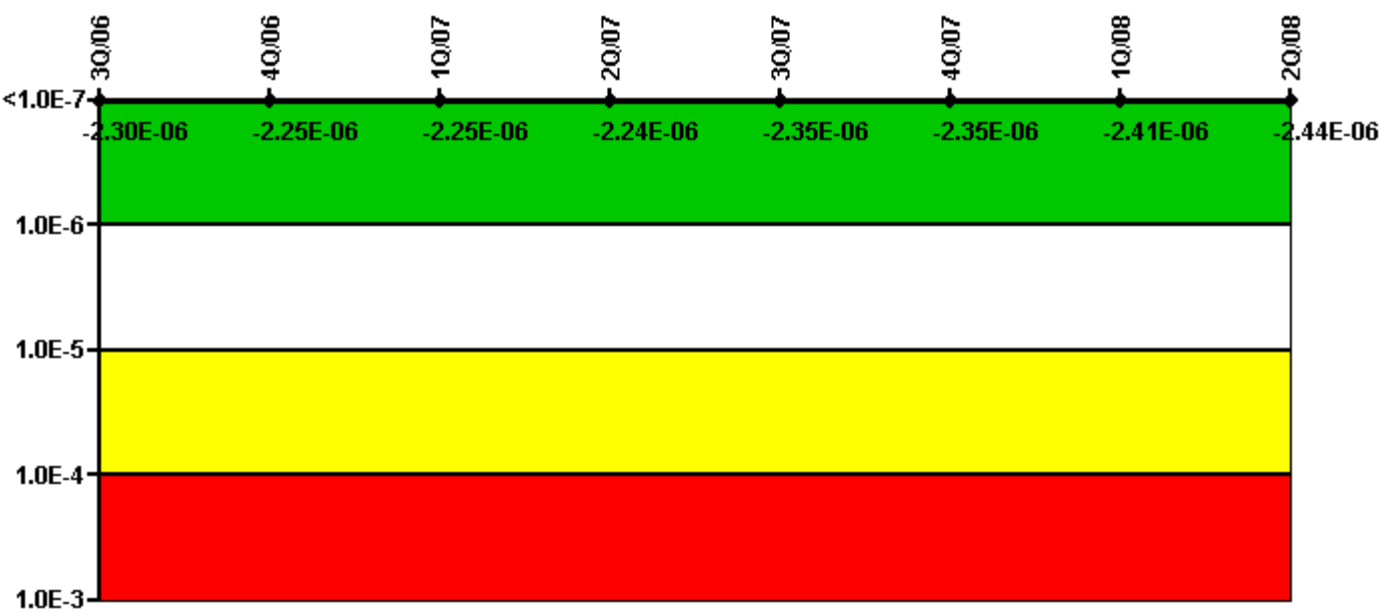
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	1	1	1	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



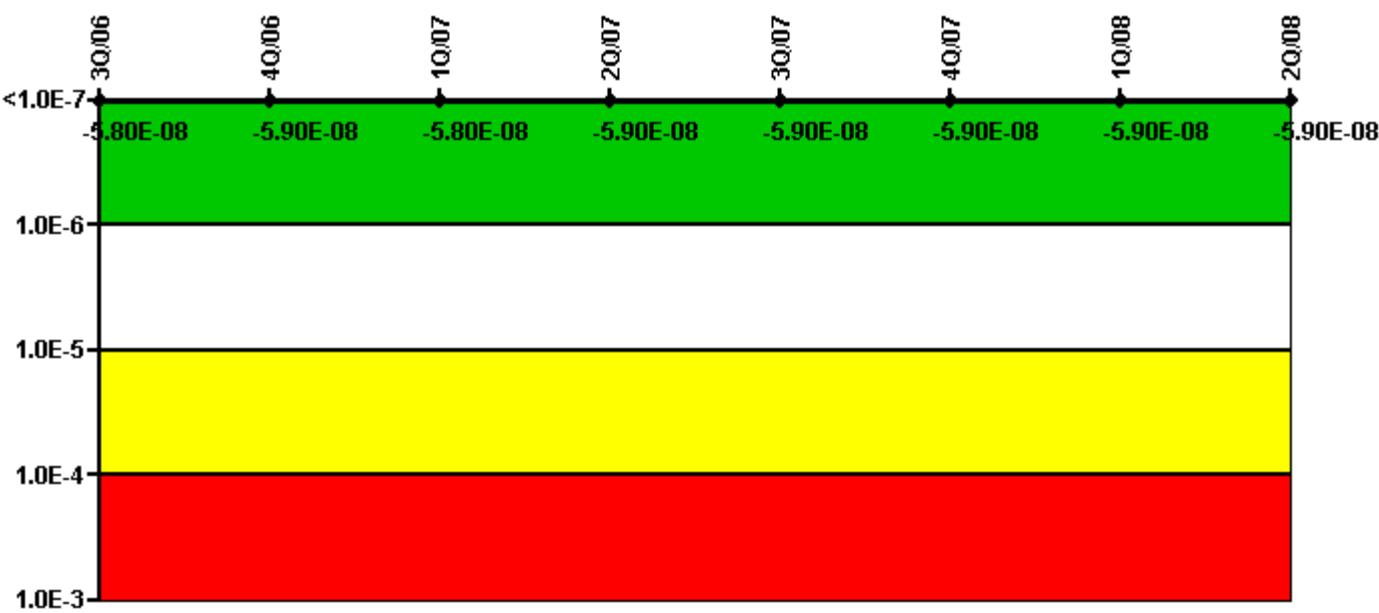
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
UAI (ΔCDF)	4.80E-09	5.10E-08	4.80E-08	5.70E-08	4.90E-08	4.80E-08	-9.00E-09	-4.10E-08
URI (ΔCDF)	-2.30E-06	-2.30E-06	-2.30E-06	-2.30E-06	-2.40E-06	-2.40E-06	-2.40E-06	-2.40E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.30E-06	-2.25E-06	-2.25E-06	-2.24E-06	-2.35E-06	-2.35E-06	-2.41E-06	-2.44E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



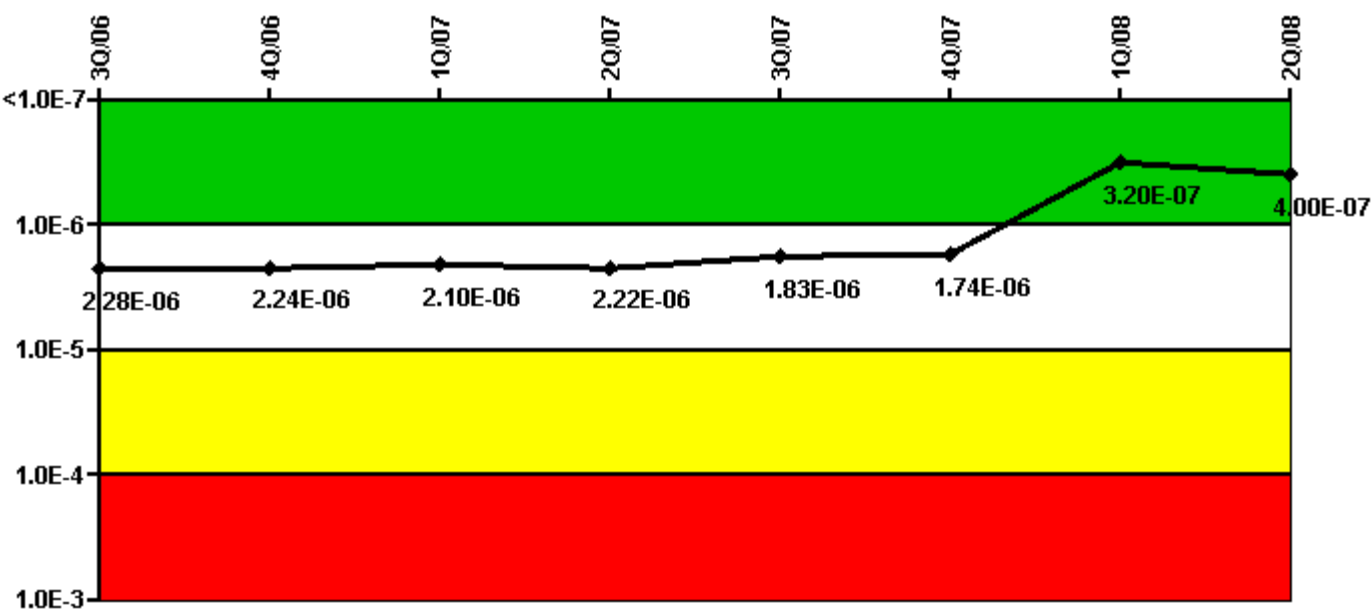
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
UAI (ΔCDF)	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08
URI (ΔCDF)	-1.60E-08	-1.70E-08	-1.60E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.80E-08	-5.90E-08	-5.80E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

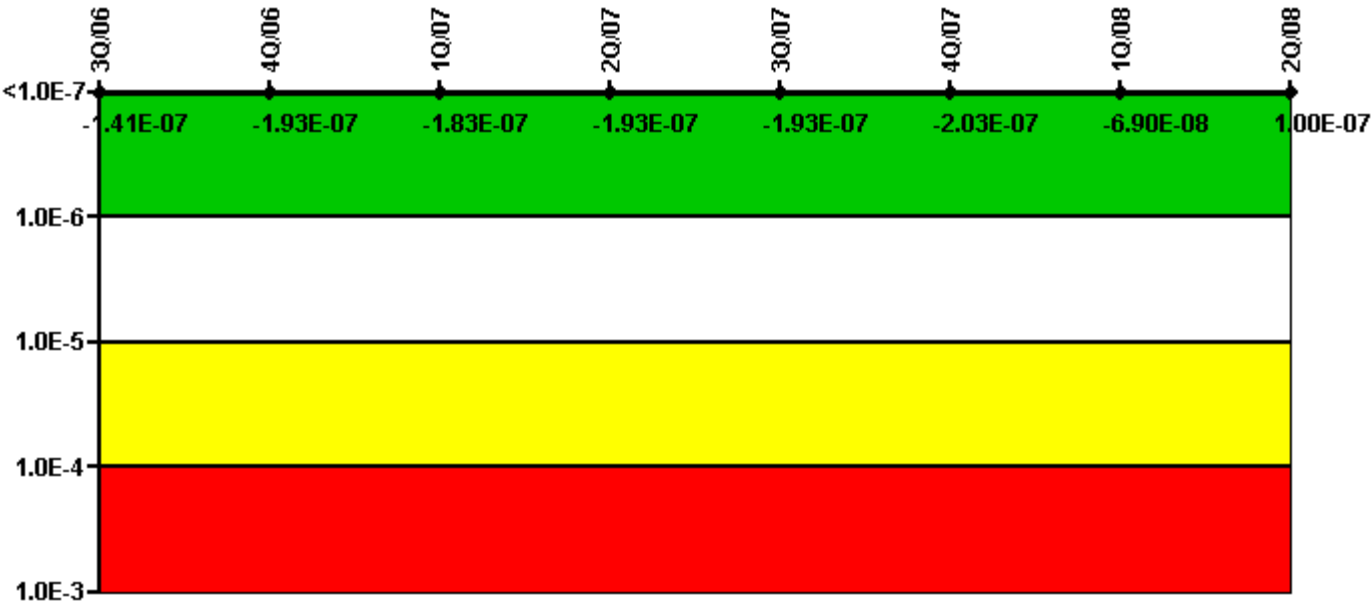
Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
UAI (ΔCDF)	6.80E-07	5.40E-07	2.00E-07	2.20E-07	-1.70E-07	-1.60E-07	-3.10E-07	-3.10E-07
URI (ΔCDF)	1.60E-06	1.70E-06	1.90E-06	2.00E-06	2.00E-06	1.90E-06	6.30E-07	7.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.28E-06	2.24E-06	2.10E-06	2.22E-06	1.83E-06	1.74E-06	3.20E-07	4.00E-07

Licensee Comments:

2Q/08: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System

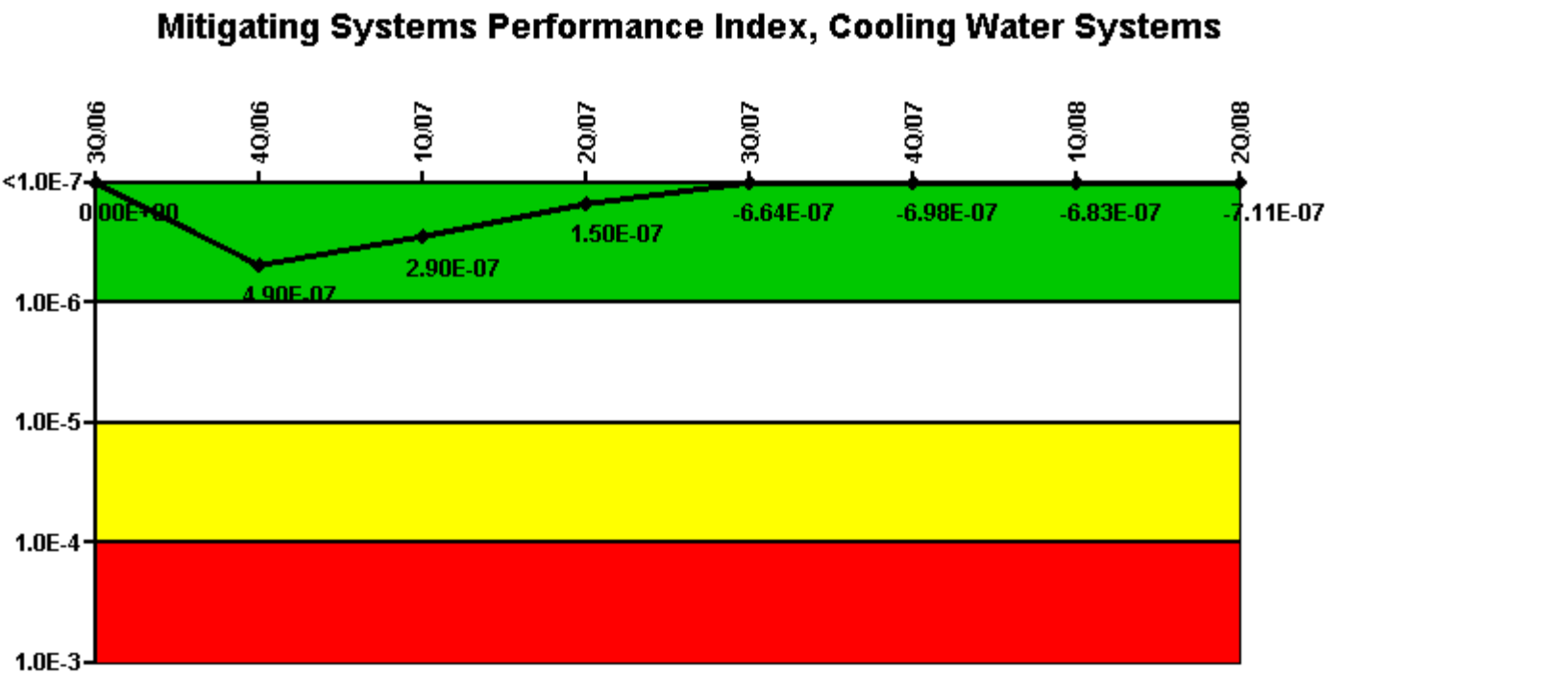


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
UAI (ΔCDF)	9.50E-09	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	9.10E-08	2.60E-07
URI (ΔCDF)	-1.50E-07	-1.50E-07	-1.40E-07	-1.50E-07	-1.50E-07	-1.60E-07	-1.60E-07	-1.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.41E-07	-1.93E-07	-1.83E-07	-1.93E-07	-1.93E-07	-2.03E-07	-6.90E-08	1.00E-07

Licensee Comments: none



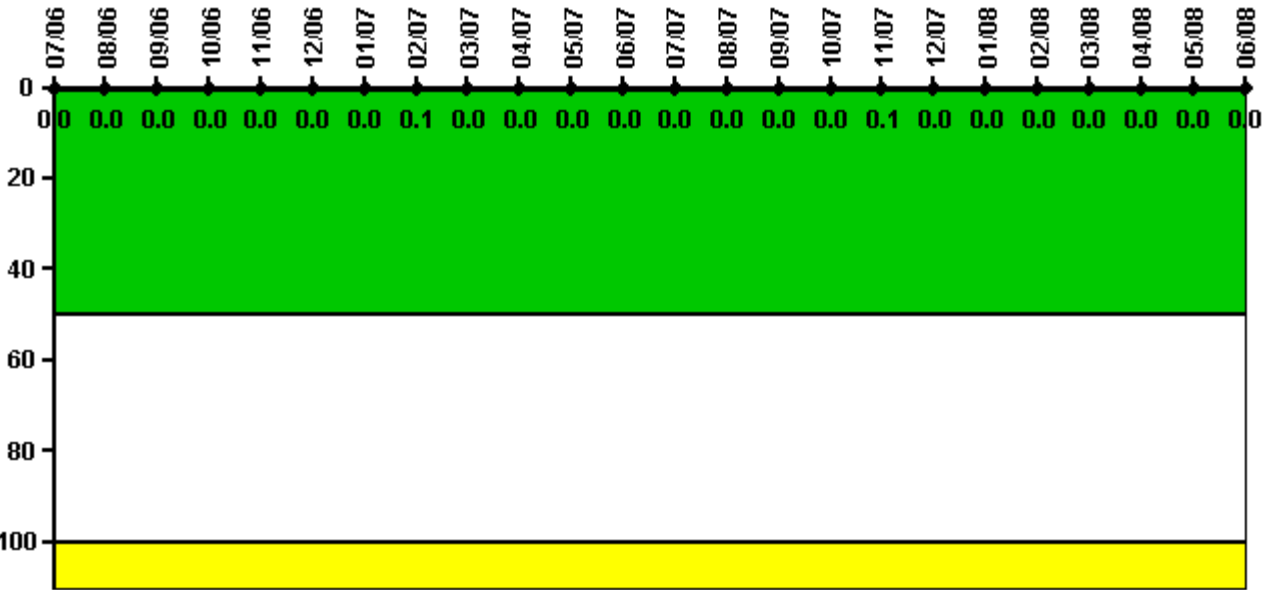
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
UAI (ΔCDF)	7.10E-07	1.20E-06	1.00E-06	8.70E-07	4.60E-08	2.20E-08	3.70E-08	9.10E-09
URI (ΔCDF)	-7.10E-07	-7.10E-07	-7.10E-07	-7.20E-07	-7.10E-07	-7.20E-07	-7.20E-07	-7.20E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	0.00E+00	4.90E-07	2.90E-07	1.50E-07	-6.64E-07	-6.98E-07	-6.83E-07	-7.11E-07

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

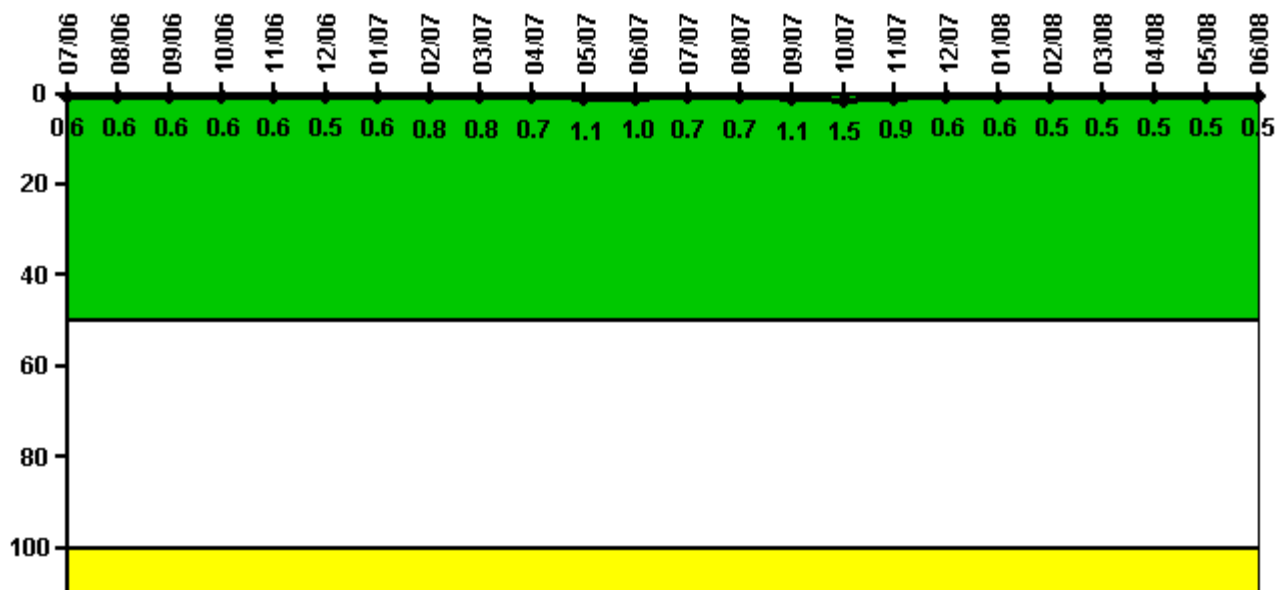
Notes

Reactor Coolant System Activity	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07
Maximum activity	0.000294	0.000306	0.000292	0.000295	0.000307	0.000308	0.000315	0.000854	0.000371	0.000273	0.000313	0.000318
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0.1	0	0	0	0

Reactor Coolant System Activity	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08
Maximum activity	0.000323	0.000317	0.000315	0.000315	0.000618	0.000339	0.000352	0.000370	0.000381	0.000383	0.000383	0.000399
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0.1	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



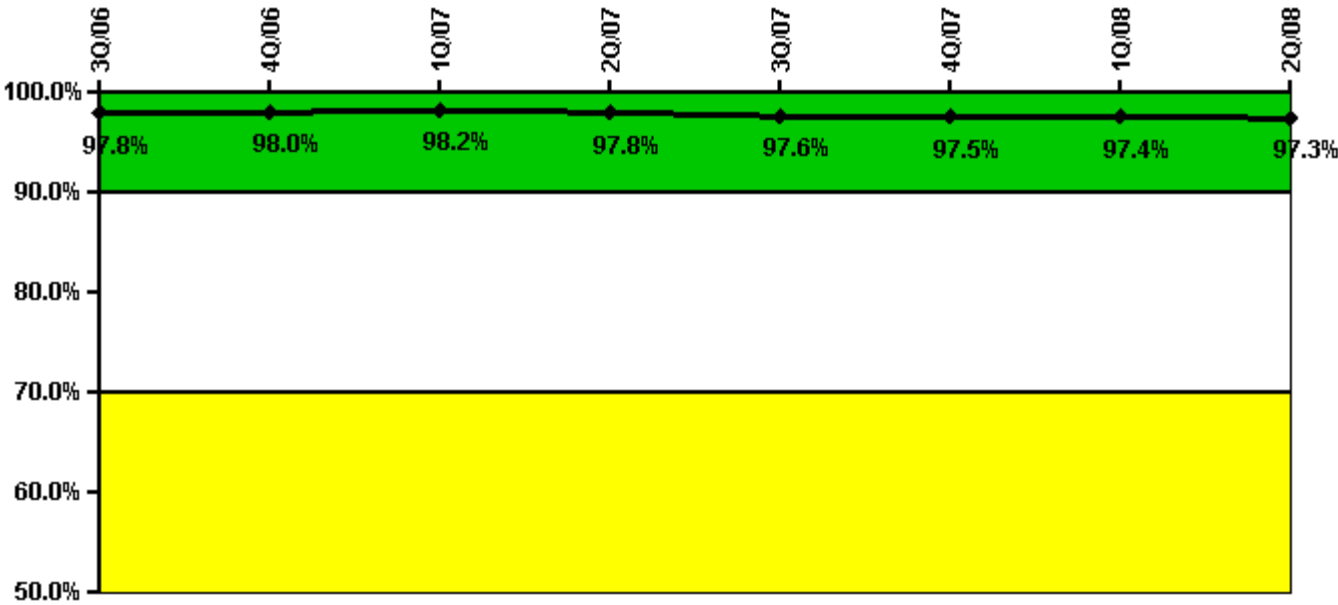
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07
Maximum leakage	0.063	0.058	0.062	0.061	0.059	0.054	0.061	0.078	0.076	0.072	0.109	0.096
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.8	0.8	0.7	1.1	1.0
Reactor Coolant System Leakage	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08
Maximum leakage	0.066	0.072	0.106	0.153	0.088	0.060	0.061	0.054	0.050	0.049	0.046	0.047
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.7	1.1	1.5	0.9	0.6	0.6	0.5	0.5	0.5	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



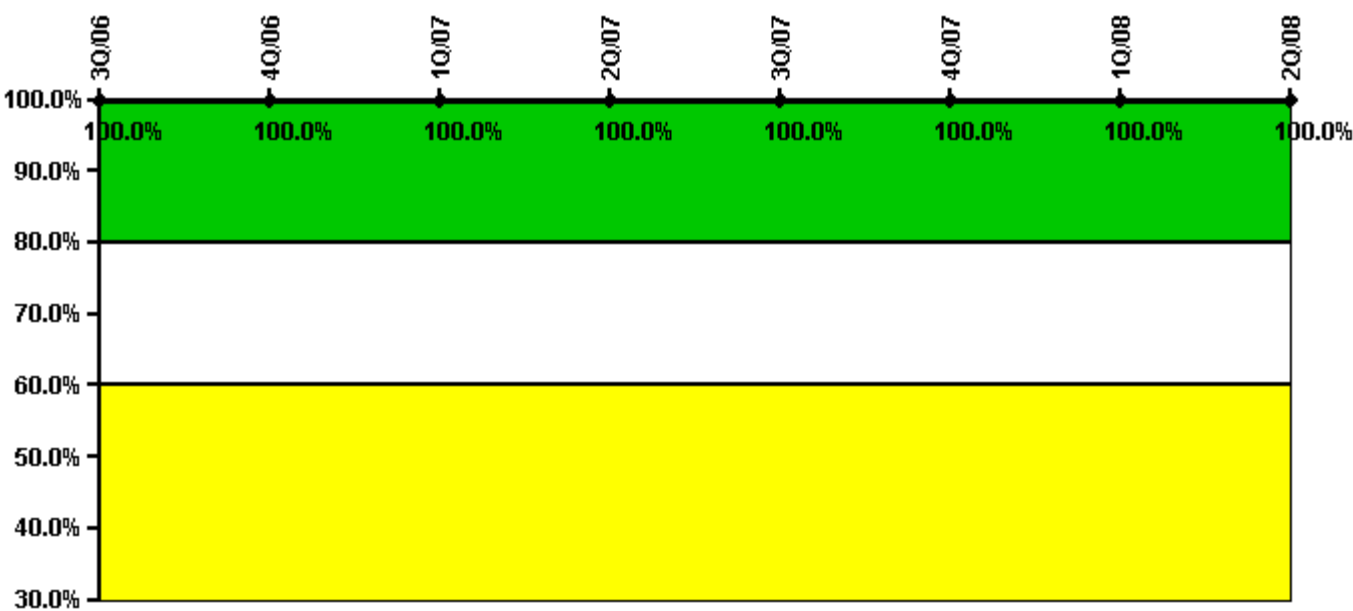
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
Successful opportunities	136.0	40.0	10.0	45.0	43.0	88.0	4.0	27.0
Total opportunities	139.0	40.0	10.0	49.0	44.0	90.0	4.0	28.0
Indicator value	97.8%	98.0%	98.2%	97.8%	97.6%	97.5%	97.4%	97.3%

Licensee Comments: none

ERO Drill Participation



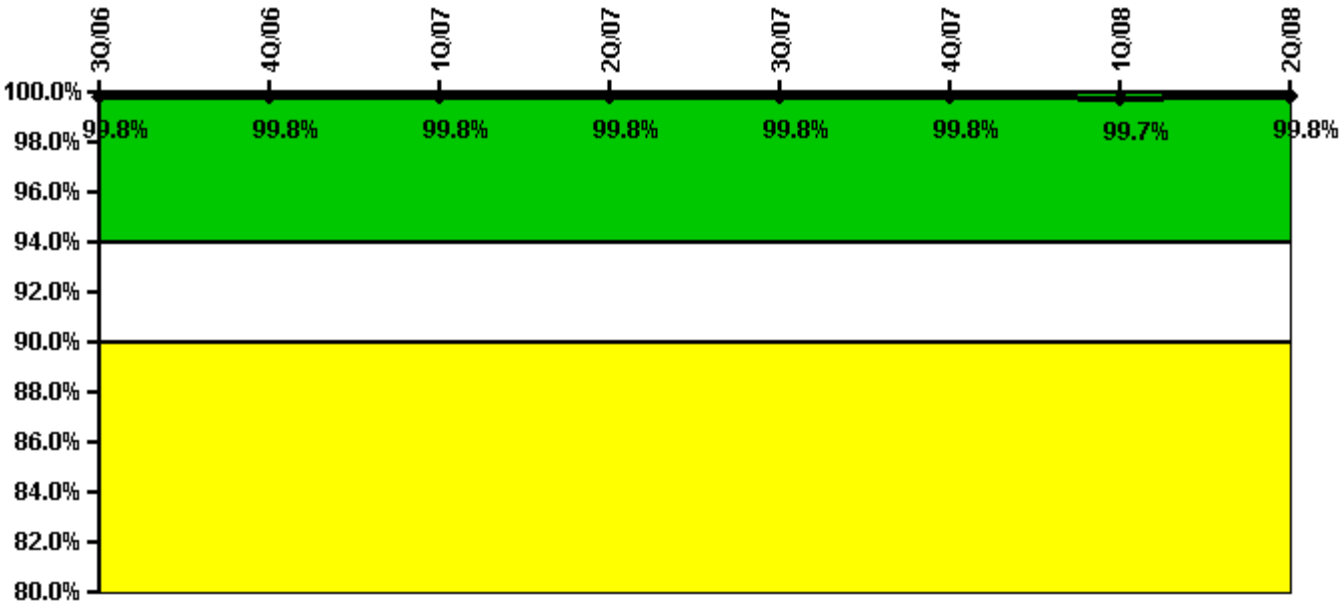
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
Participating Key personnel	76.0	76.0	71.0	66.0	75.0	75.0	73.0	81.0
Total Key personnel	76.0	76.0	71.0	66.0	75.0	75.0	73.0	81.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



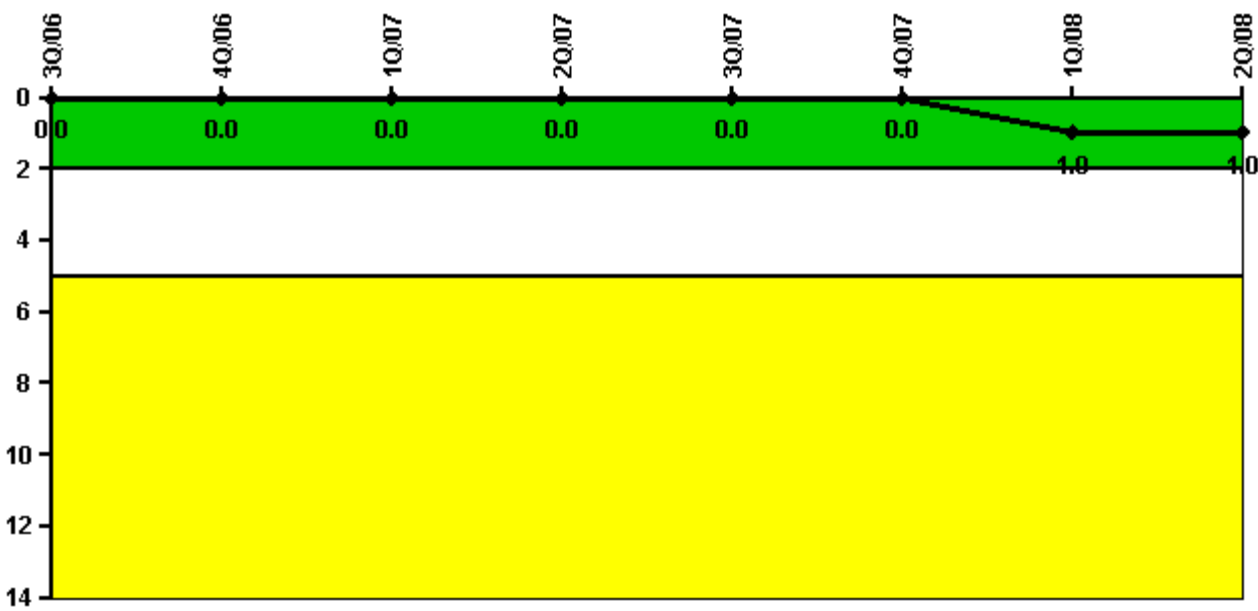
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
Successful siren-tests	5988	5915	6008	5985	5988	5997	5996	6003
Total sirens-tests	6012	5922	6016	6005	6009	6007	6011	6016
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
High radiation area occurrences	0	0	0	0	0	0	1	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	1	1

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

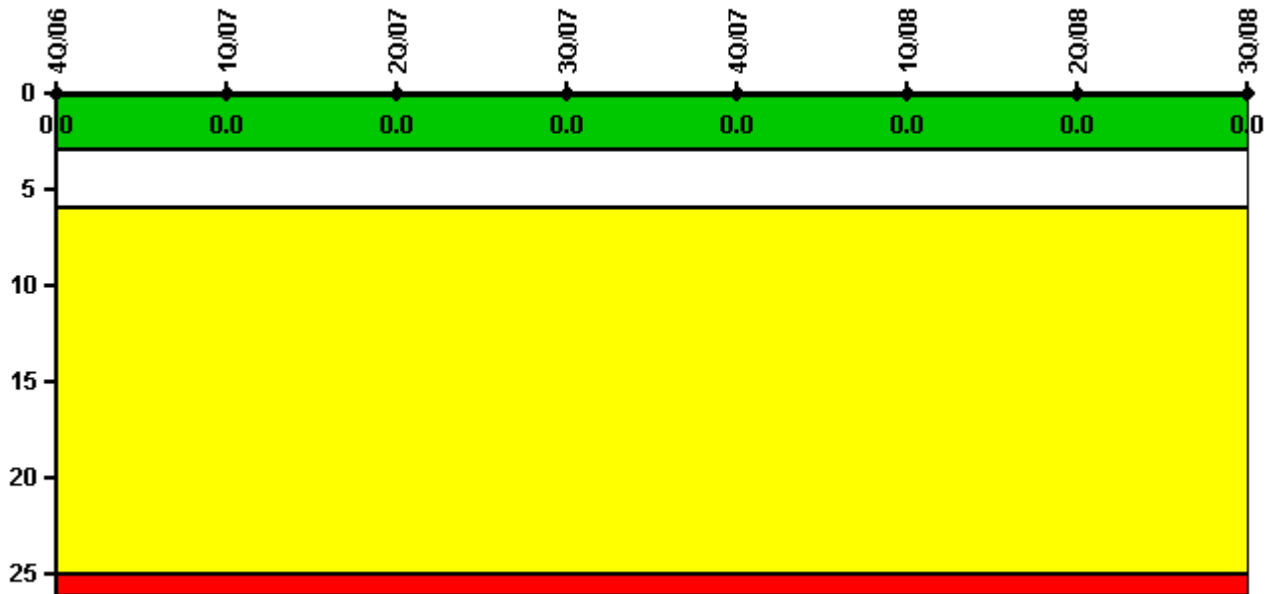
Last Modified: August 4, 2008

Byron 2

3Q/2008 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



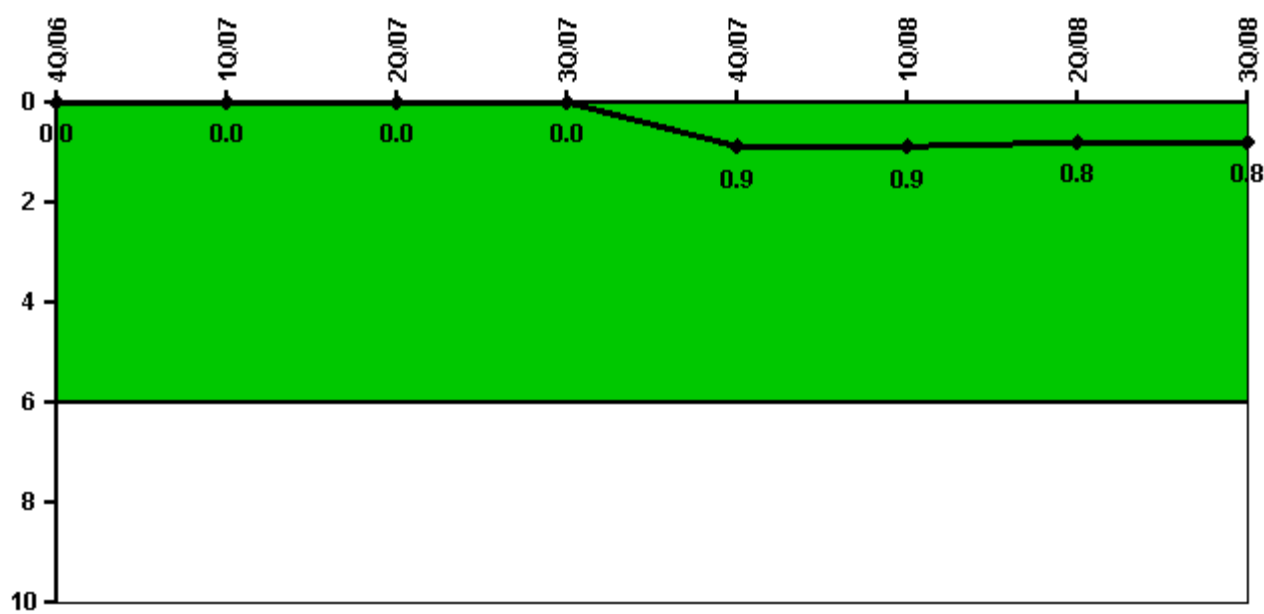
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0	2184.0	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



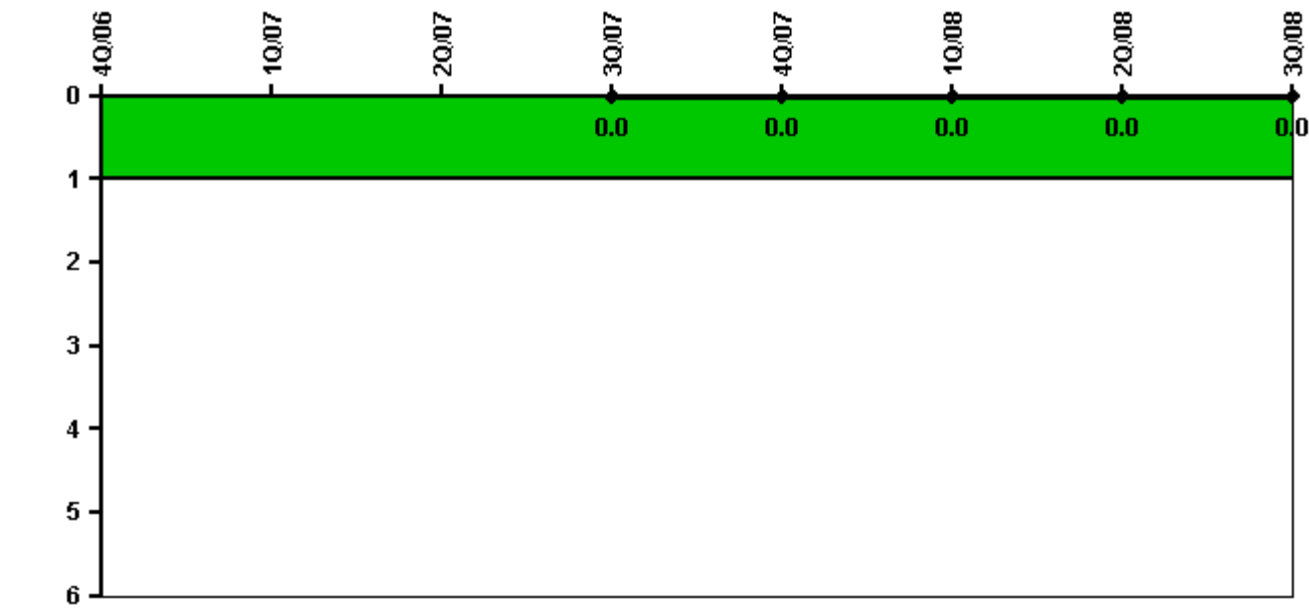
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
Unplanned power changes	0	0	0	0	1.0	0	0	0
Critical hours	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0	2184.0	2208.0
Indicator value	0	0	0	0	0.9	0.9	0.8	0.8

Licensee Comments: none

Unplanned Scrams with Complications



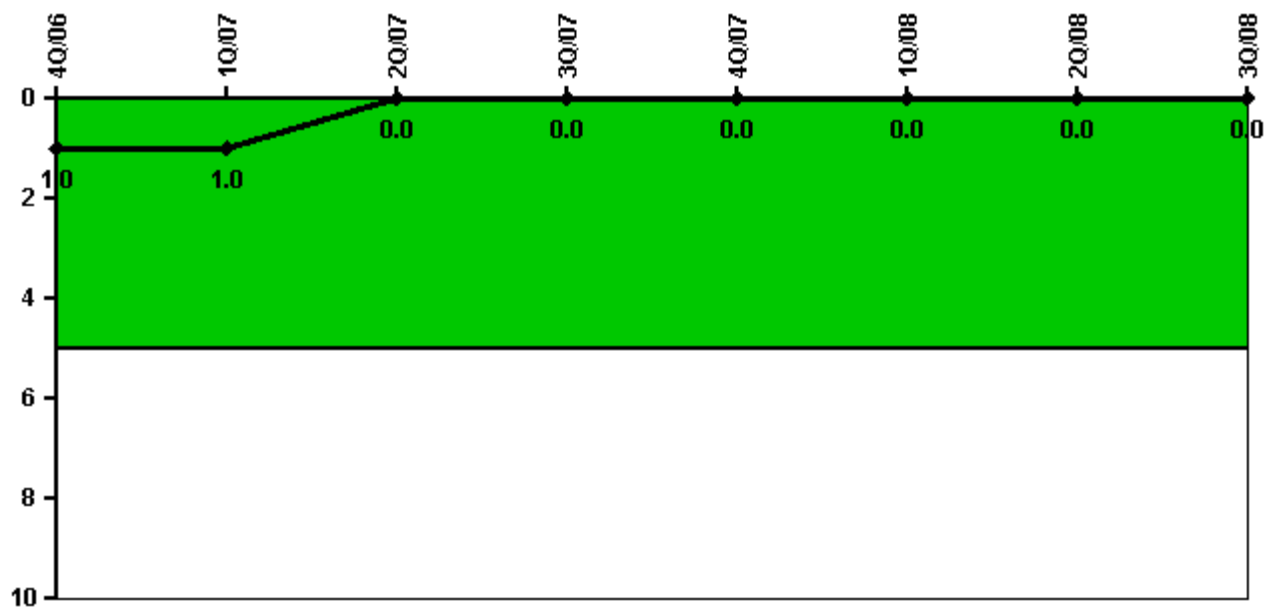
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value				0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)

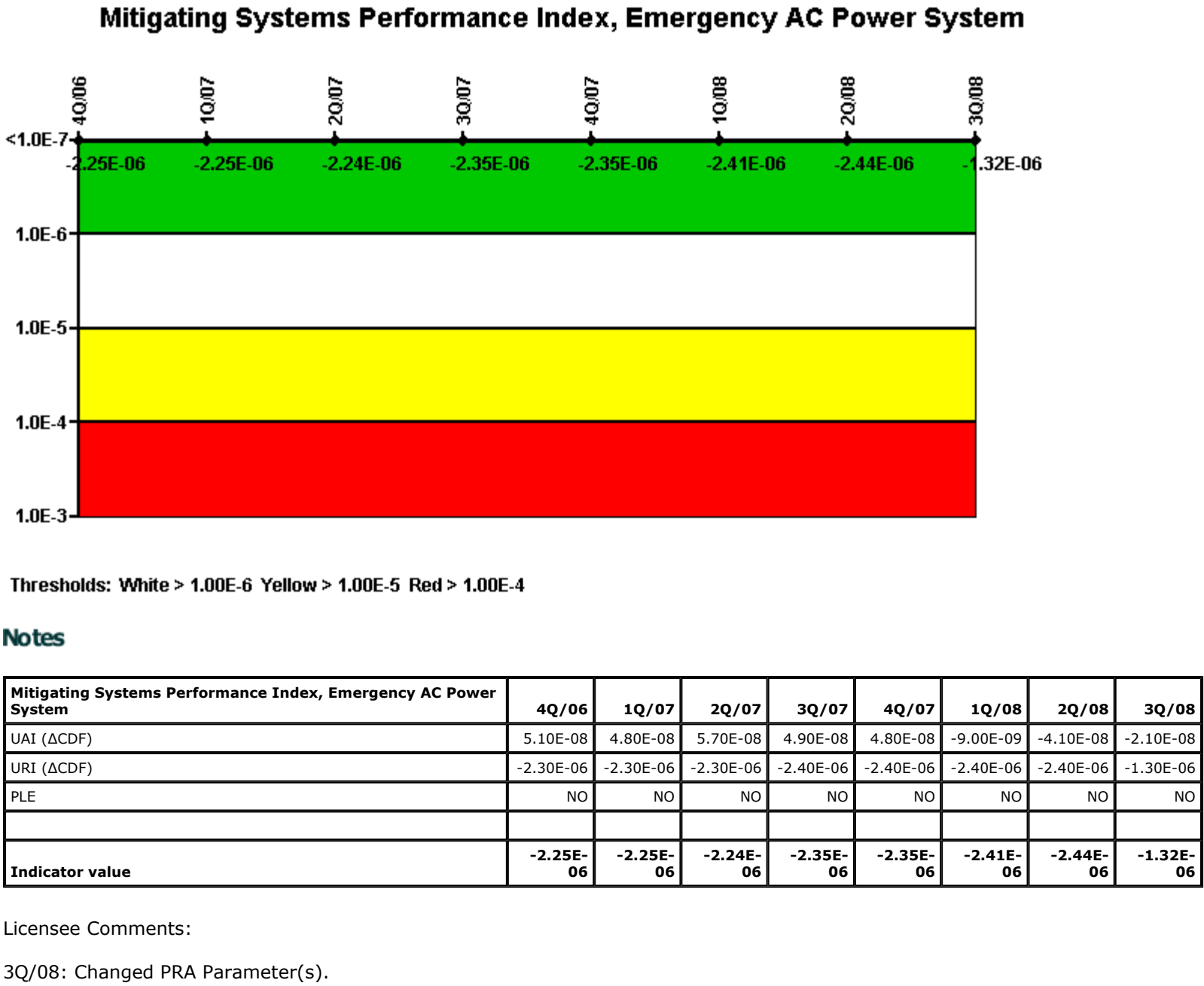


Thresholds: White > 5.0

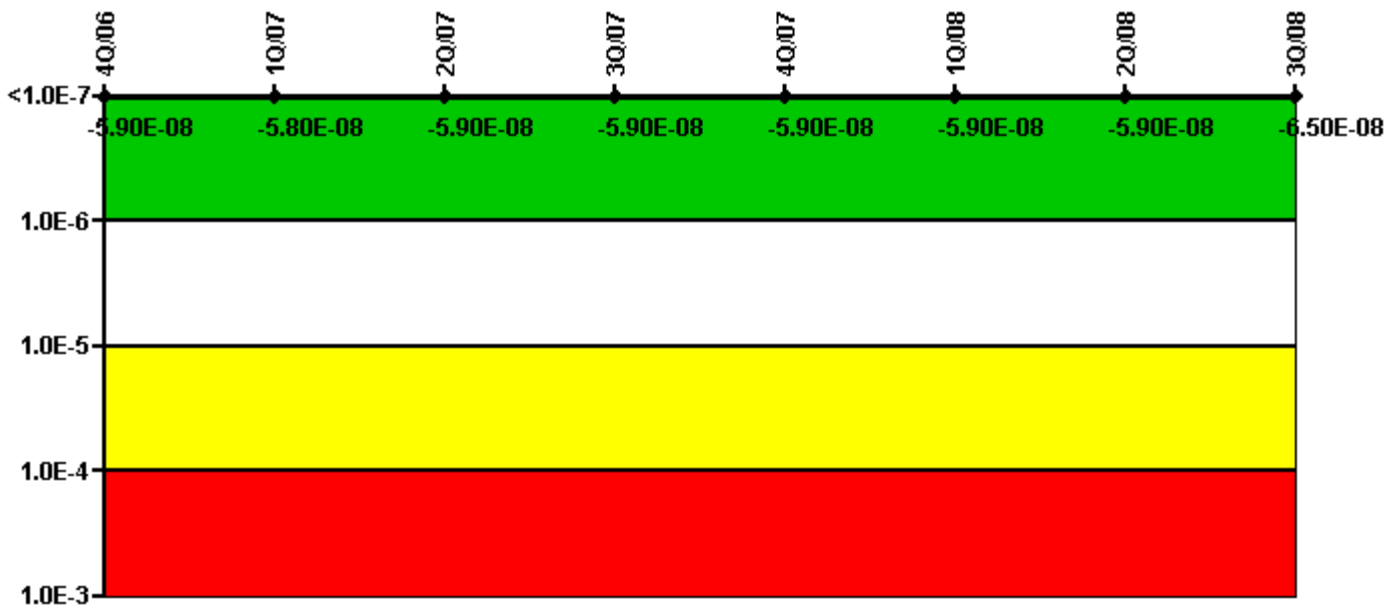
Notes

Safety System Functional Failures (PWR)	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	1	1	0	0	0	0	0	0

Licensee Comments: none



Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

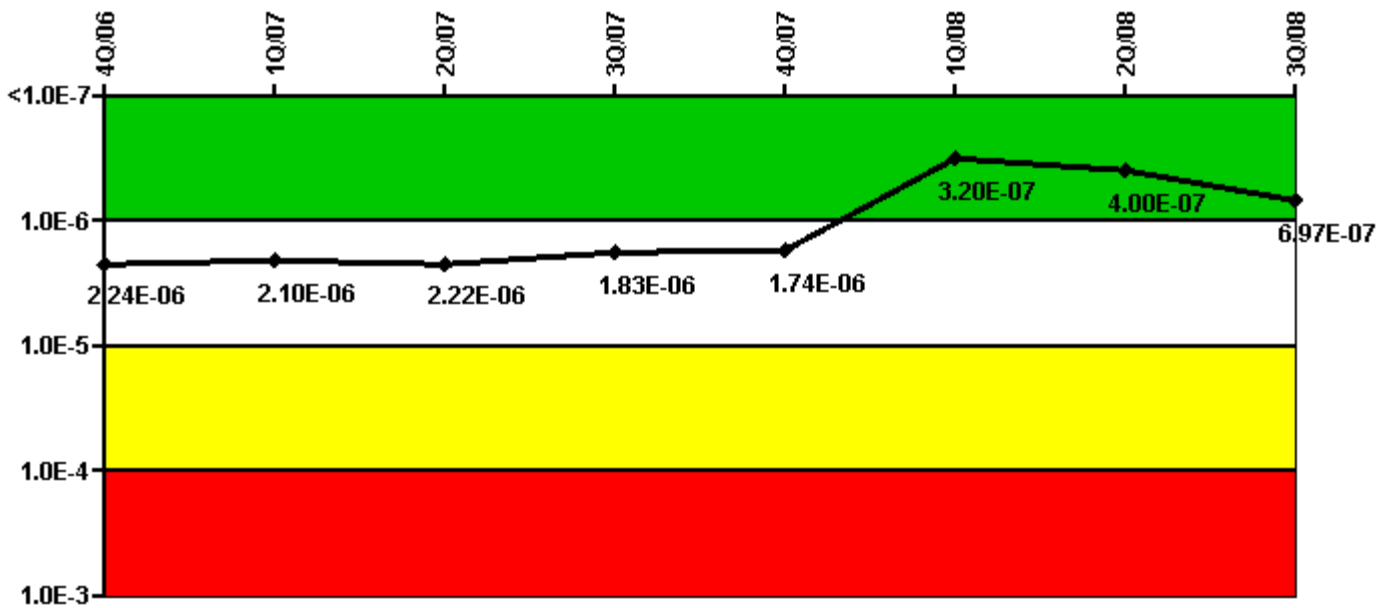
Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
UAI (ΔCDF)	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-5.40E-08
URI (ΔCDF)	-1.70E-08	-1.60E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.10E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.90E-08	-5.80E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08	-6.50E-08

Licensee Comments:

3Q/08: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

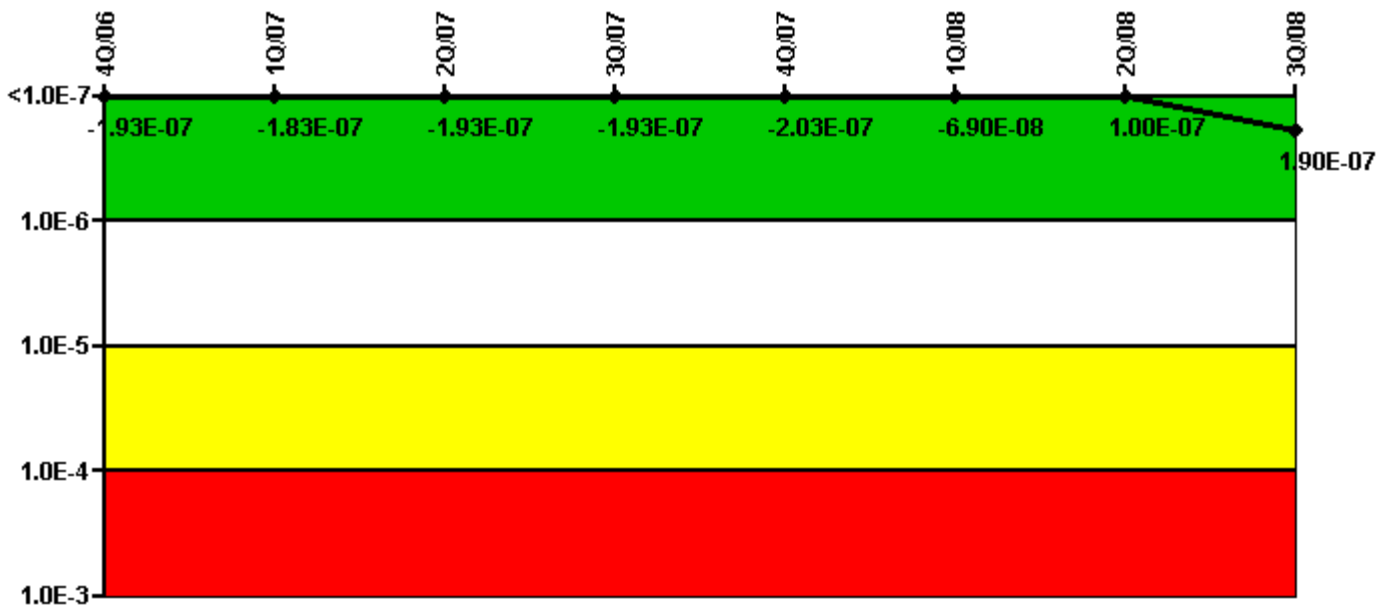
Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
UAI (ΔCDF)	5.40E-07	2.00E-07	2.20E-07	-1.70E-07	-1.60E-07	-3.10E-07	-3.10E-07	-6.30E-08
URI (ΔCDF)	1.70E-06	1.90E-06	2.00E-06	2.00E-06	1.90E-06	6.30E-07	7.10E-07	7.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.24E-06	2.10E-06	2.22E-06	1.83E-06	1.74E-06	3.20E-07	4.00E-07	6.97E-07

Licensee Comments:

3Q/08: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

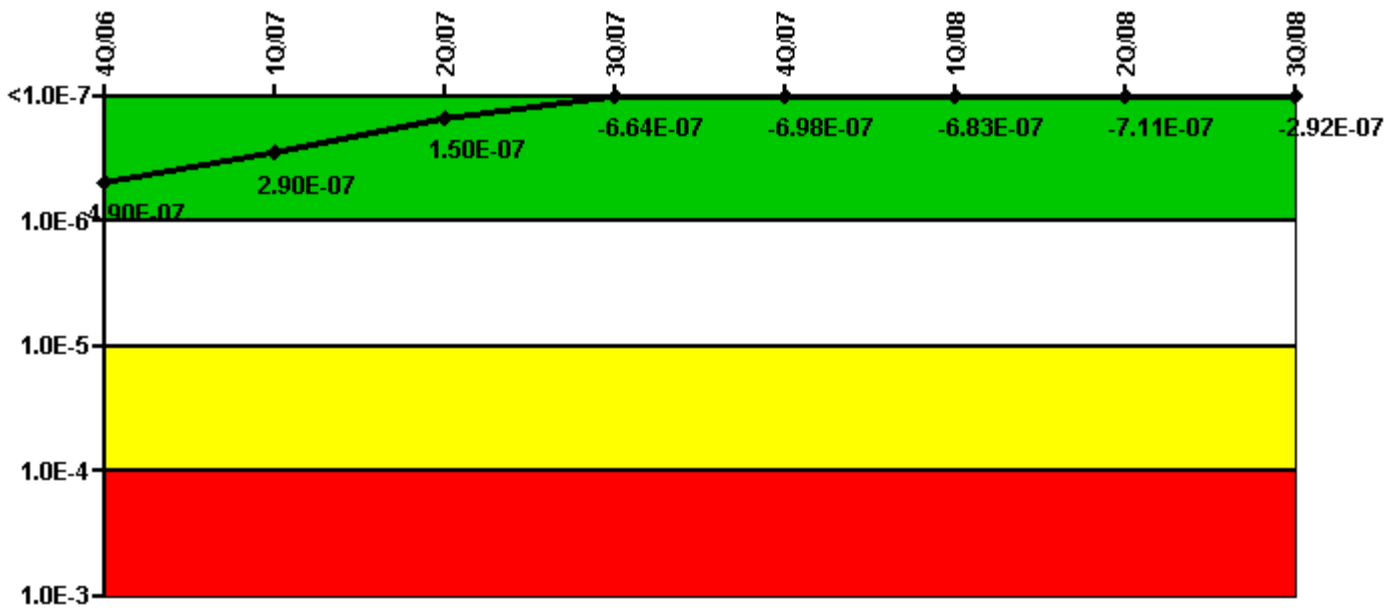
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
UAI (ΔCDF)	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	9.10E-08	2.60E-07	3.10E-07
URI (ΔCDF)	-1.50E-07	-1.40E-07	-1.50E-07	-1.50E-07	-1.60E-07	-1.60E-07	-1.60E-07	-1.20E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.93E-07	-1.83E-07	-1.93E-07	-1.93E-07	-2.03E-07	-6.90E-08	1.00E-07	1.90E-07

Licensee Comments:

3Q/08: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

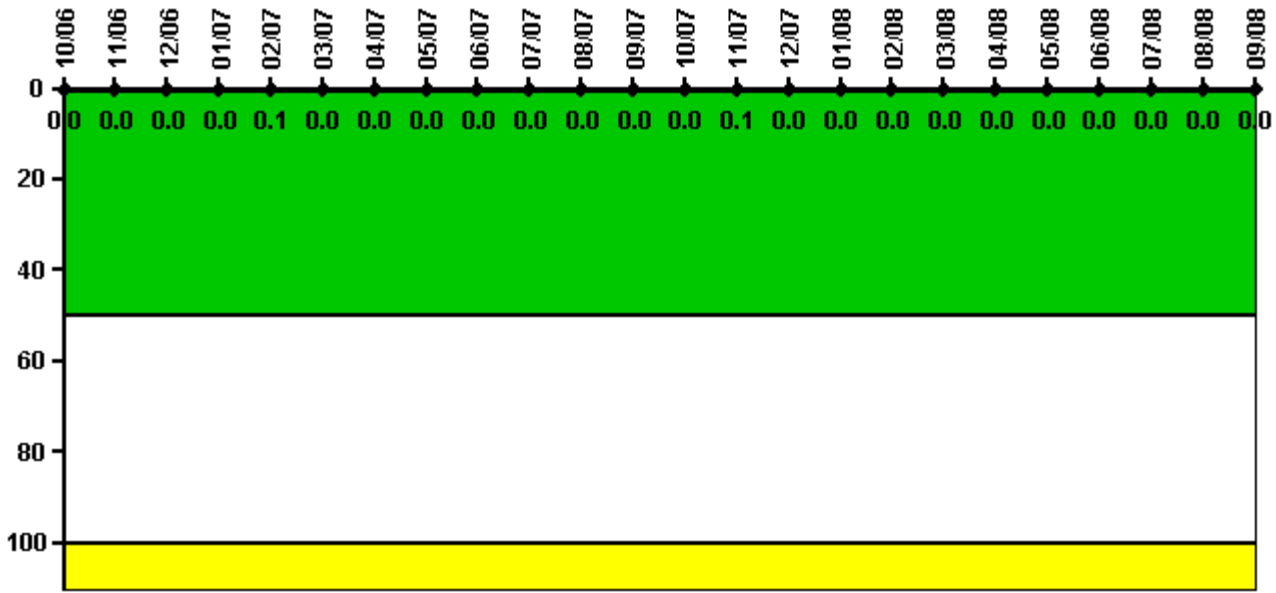
Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
UAI (ΔCDF)	1.20E-06	1.00E-06	8.70E-07	4.60E-08	2.20E-08	3.70E-08	9.10E-09	7.90E-09
URI (ΔCDF)	-7.10E-07	-7.10E-07	-7.20E-07	-7.10E-07	-7.20E-07	-7.20E-07	-7.20E-07	-3.00E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	4.90E-07	2.90E-07	1.50E-07	-6.64E-07	-6.98E-07	-6.83E-07	-7.11E-07	-2.92E-07

Licensee Comments:

3Q/08: Changed PRA Parameter(s).

Reactor Coolant System Activity



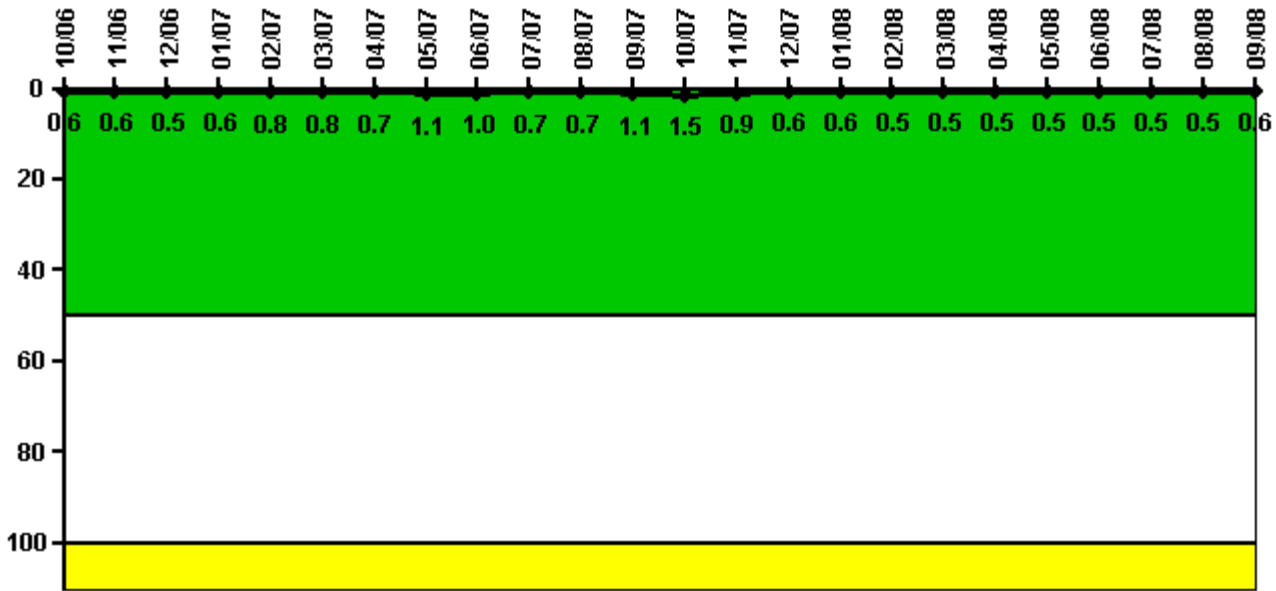
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07
Maximum activity	0.000295	0.000307	0.000308	0.000315	0.000854	0.000371	0.000273	0.000313	0.000318	0.000323	0.000317	0.000315
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0.1	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08
Maximum activity	0.000315	0.000618	0.000339	0.000352	0.000370	0.000381	0.000383	0.000383	0.000399	0.000405	0.000405	0.000419
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



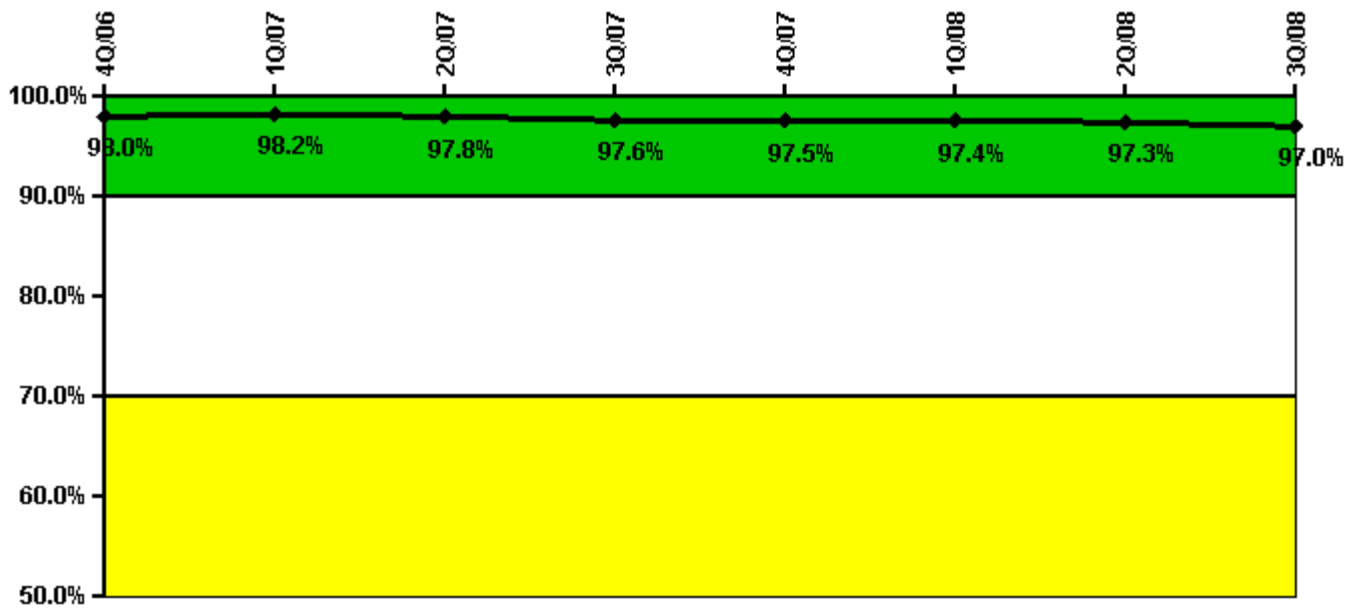
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/06	11/06	12/06	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07
Maximum leakage	0.061	0.059	0.054	0.061	0.078	0.076	0.072	0.109	0.096	0.066	0.072	0.106
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.6	0.5	0.6	0.8	0.8	0.7	1.1	1.0	0.7	0.7	1.1
Reactor Coolant System Leakage	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08
Maximum leakage	0.153	0.088	0.060	0.061	0.054	0.050	0.049	0.046	0.047	0.047	0.054	0.058
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.5	0.9	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6

Licensee Comments: none

Drill/Exercise Performance



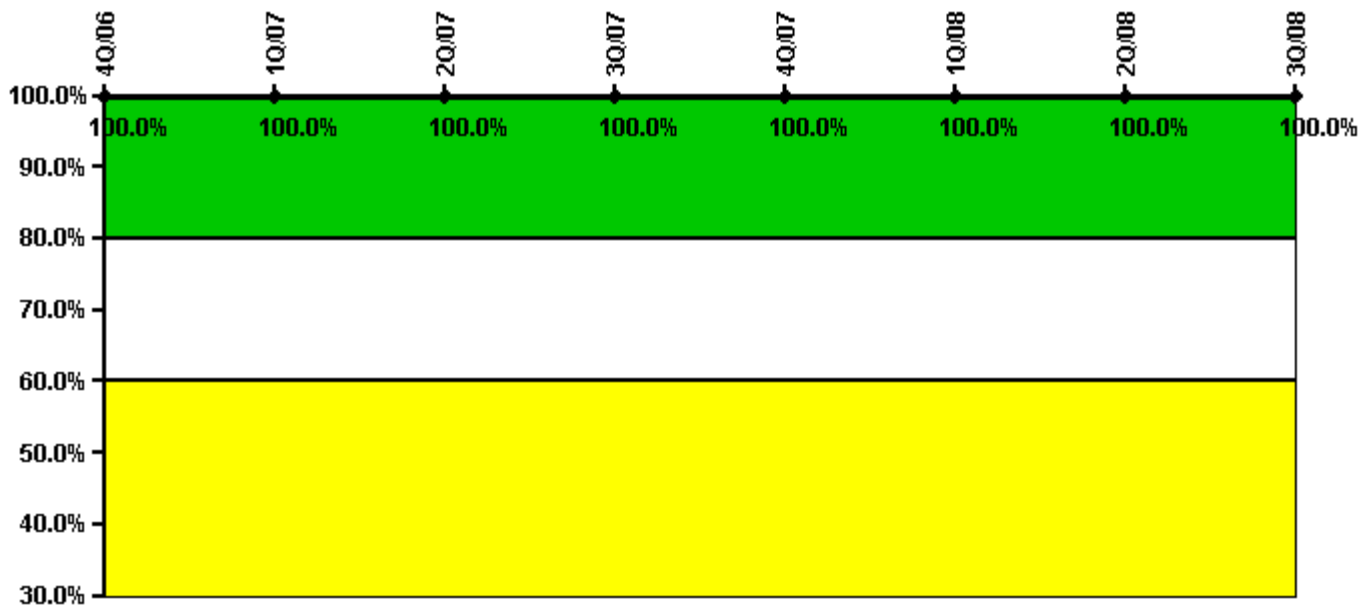
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
Successful opportunities	40.0	10.0	45.0	43.0	88.0	4.0	27.0	62.0
Total opportunities	40.0	10.0	49.0	44.0	90.0	4.0	28.0	64.0
Indicator value	98.0%	98.2%	97.8%	97.6%	97.5%	97.4%	97.3%	97.0%

Licensee Comments: none

ERO Drill Participation



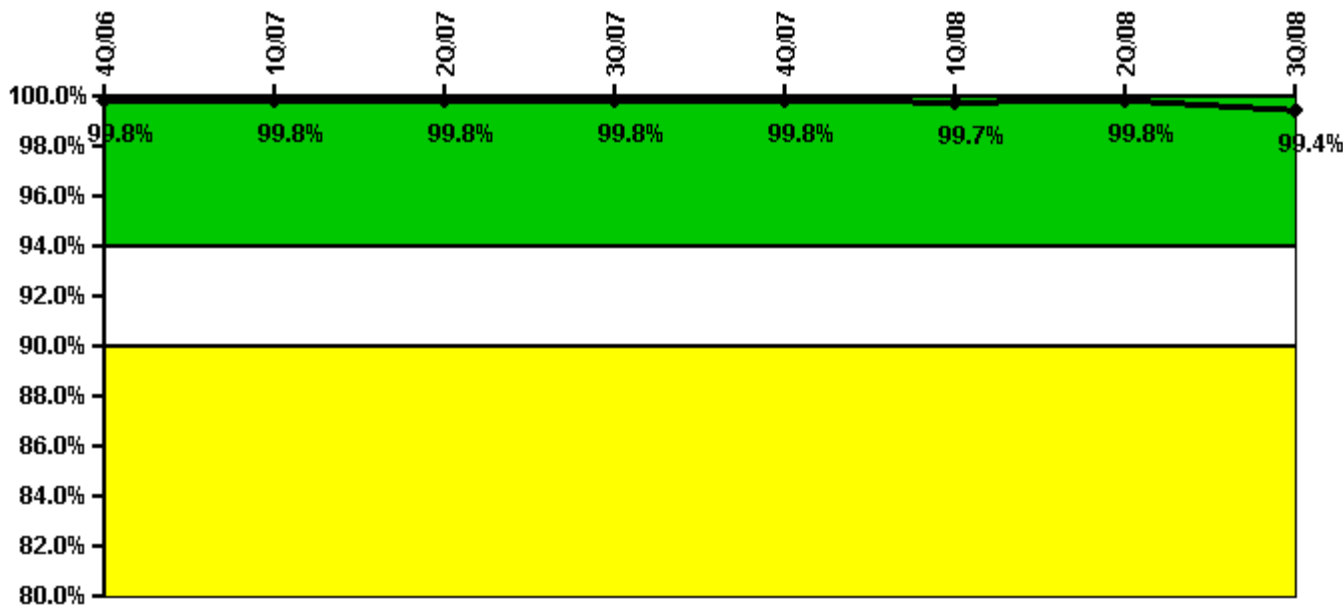
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
Participating Key personnel	76.0	71.0	66.0	75.0	75.0	73.0	81.0	83.0
Total Key personnel	76.0	71.0	66.0	75.0	75.0	73.0	81.0	83.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



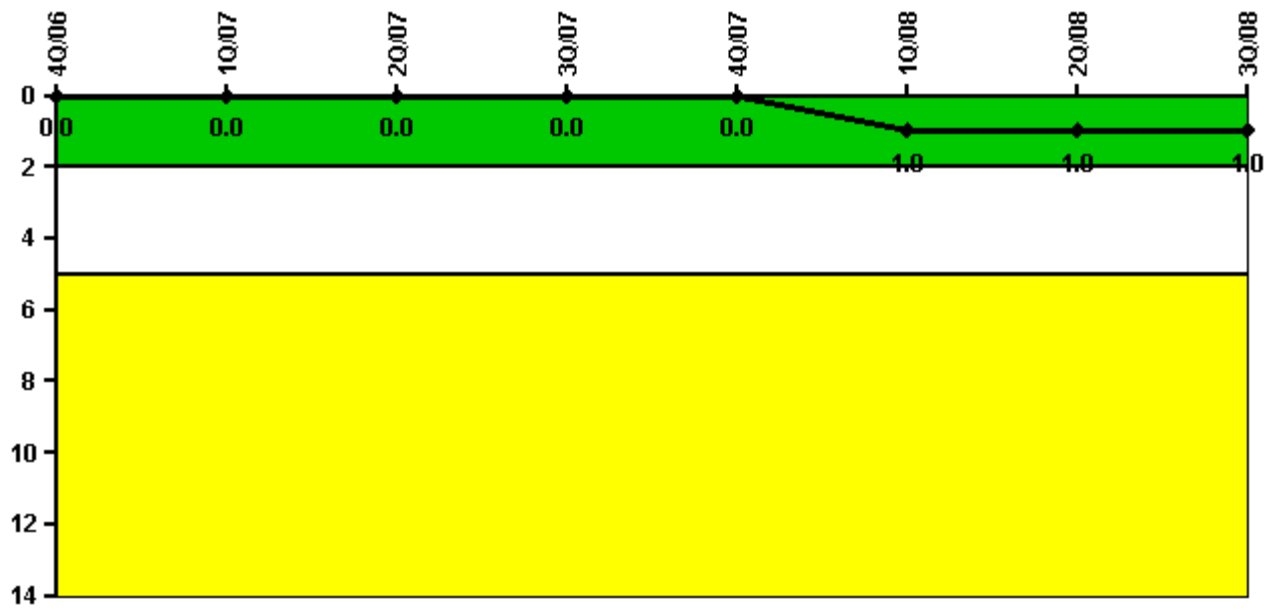
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
Successful siren-tests	5915	6008	5985	5988	5997	5996	6003	6006
Total sirens-tests	5922	6016	6005	6009	6007	6011	6016	6108
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.4%

Licensee Comments: none

Occupational Exposure Control Effectiveness



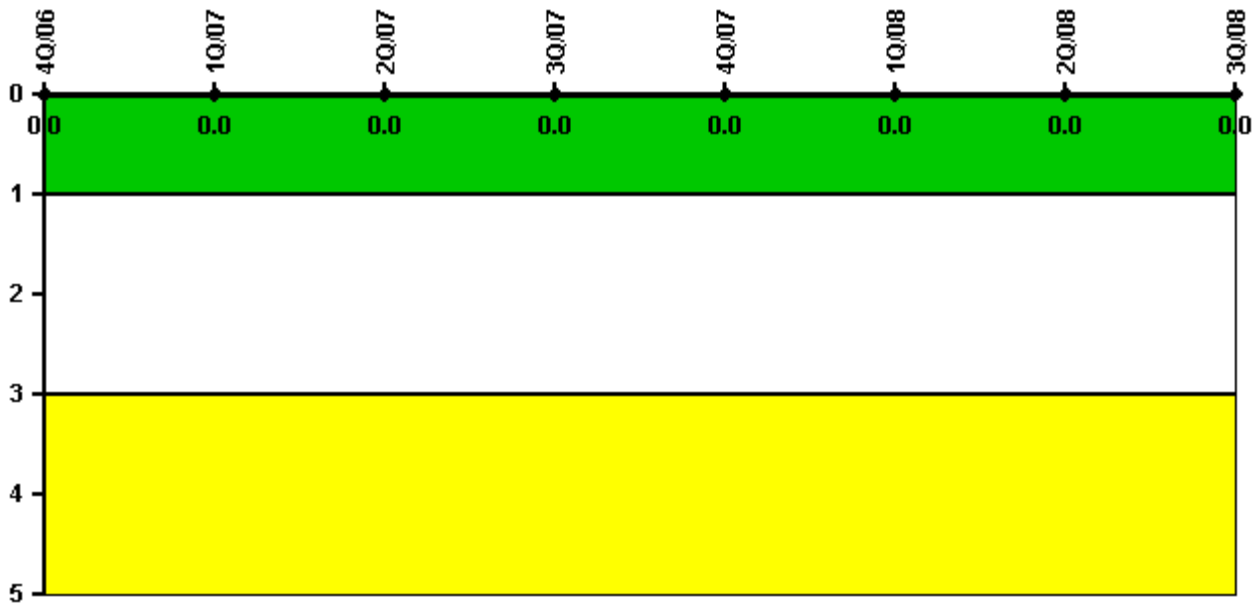
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
High radiation area occurrences	0	0	0	0	0	1	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	1	1	1

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

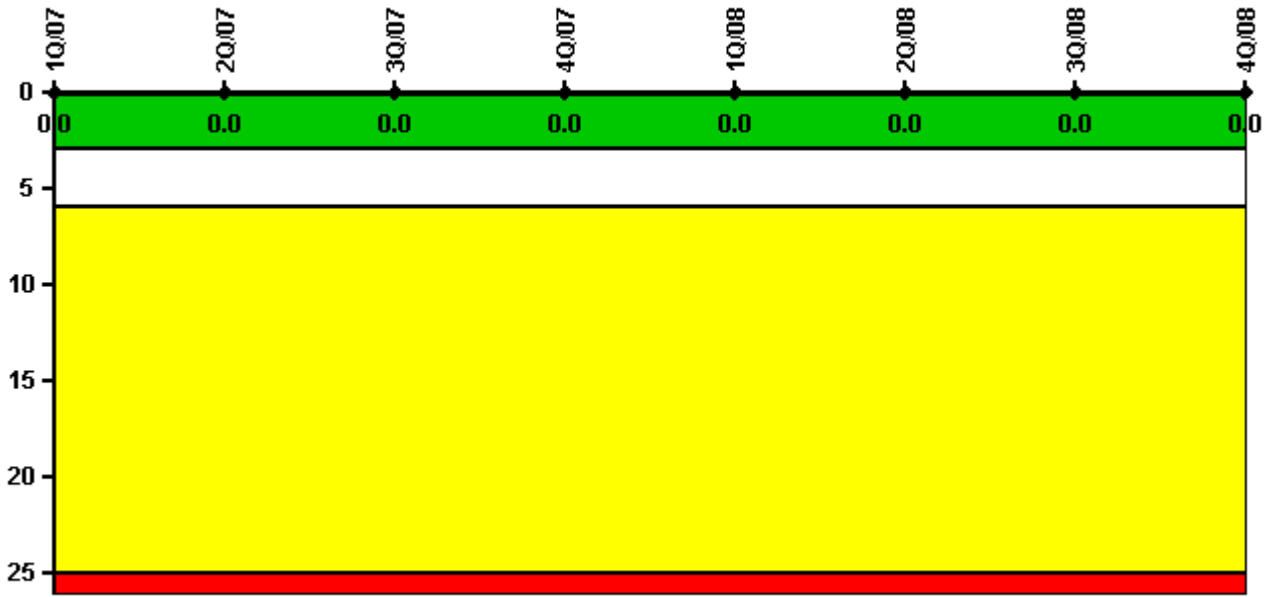
[Security](#) information not publicly available.

Byron 2

4Q/2008 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



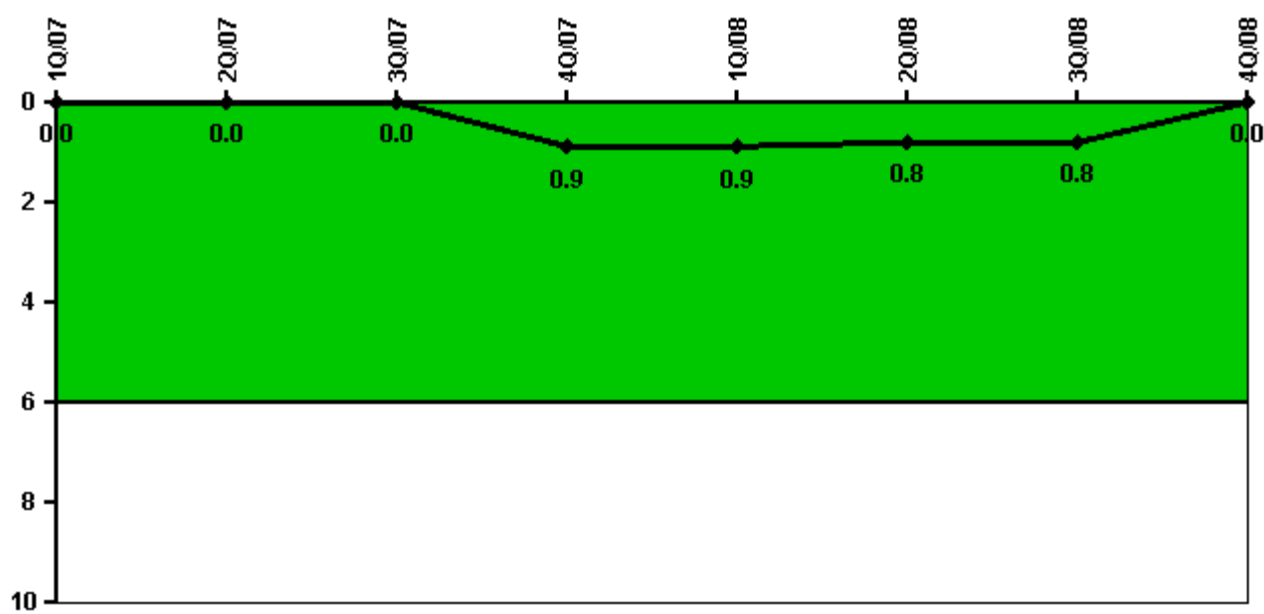
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2159.0	1441.6	2208.0	1949.4	2183.0	2184.0	2208.0	1774.2
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



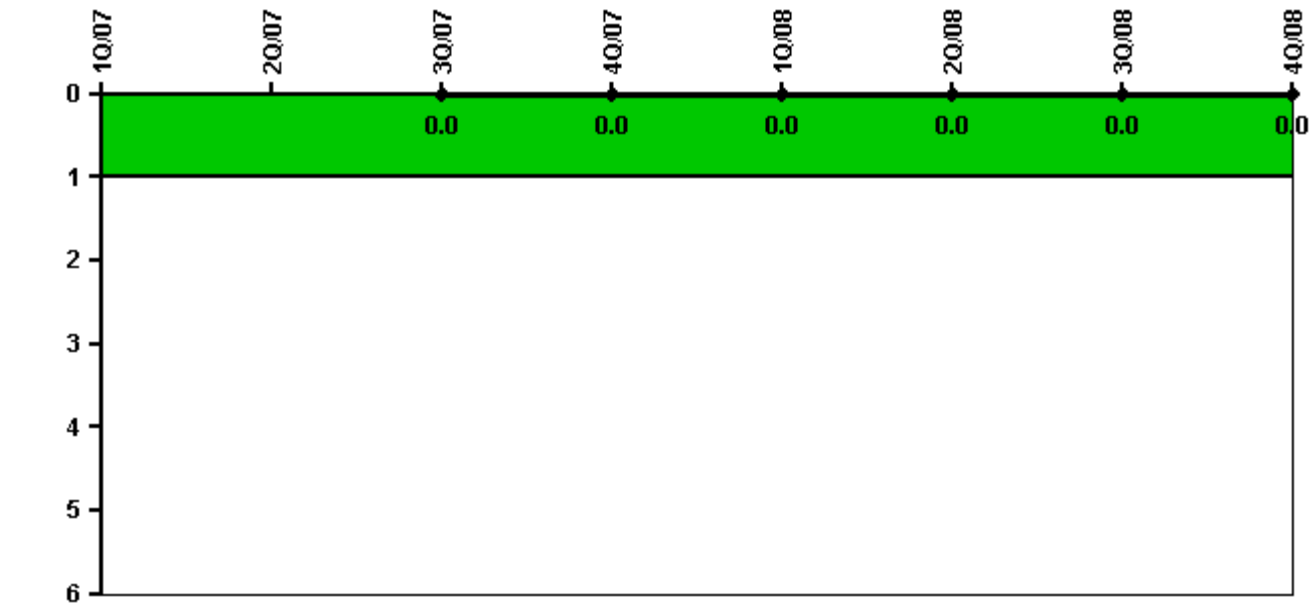
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Unplanned power changes	0	0	0	1.0	0	0	0	0
Critical hours	2159.0	1441.6	2208.0	1949.4	2183.0	2184.0	2208.0	1774.2
Indicator value	0	0	0	0.9	0.9	0.8	0.8	0

Licensee Comments: none

Unplanned Scrams with Complications



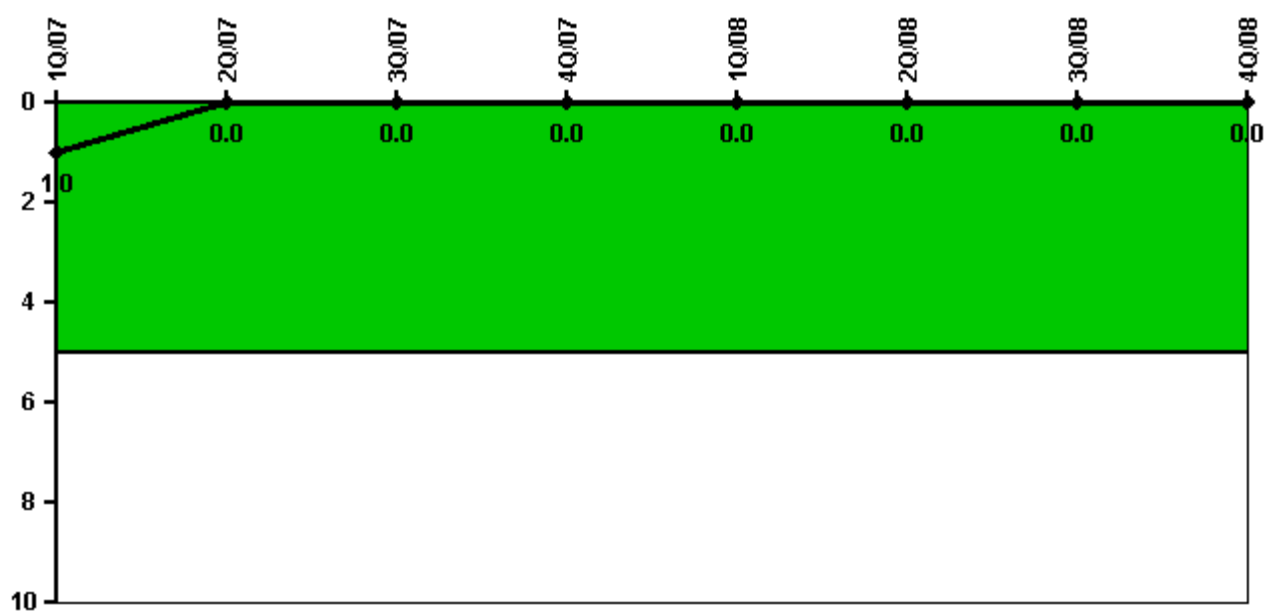
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value			0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)

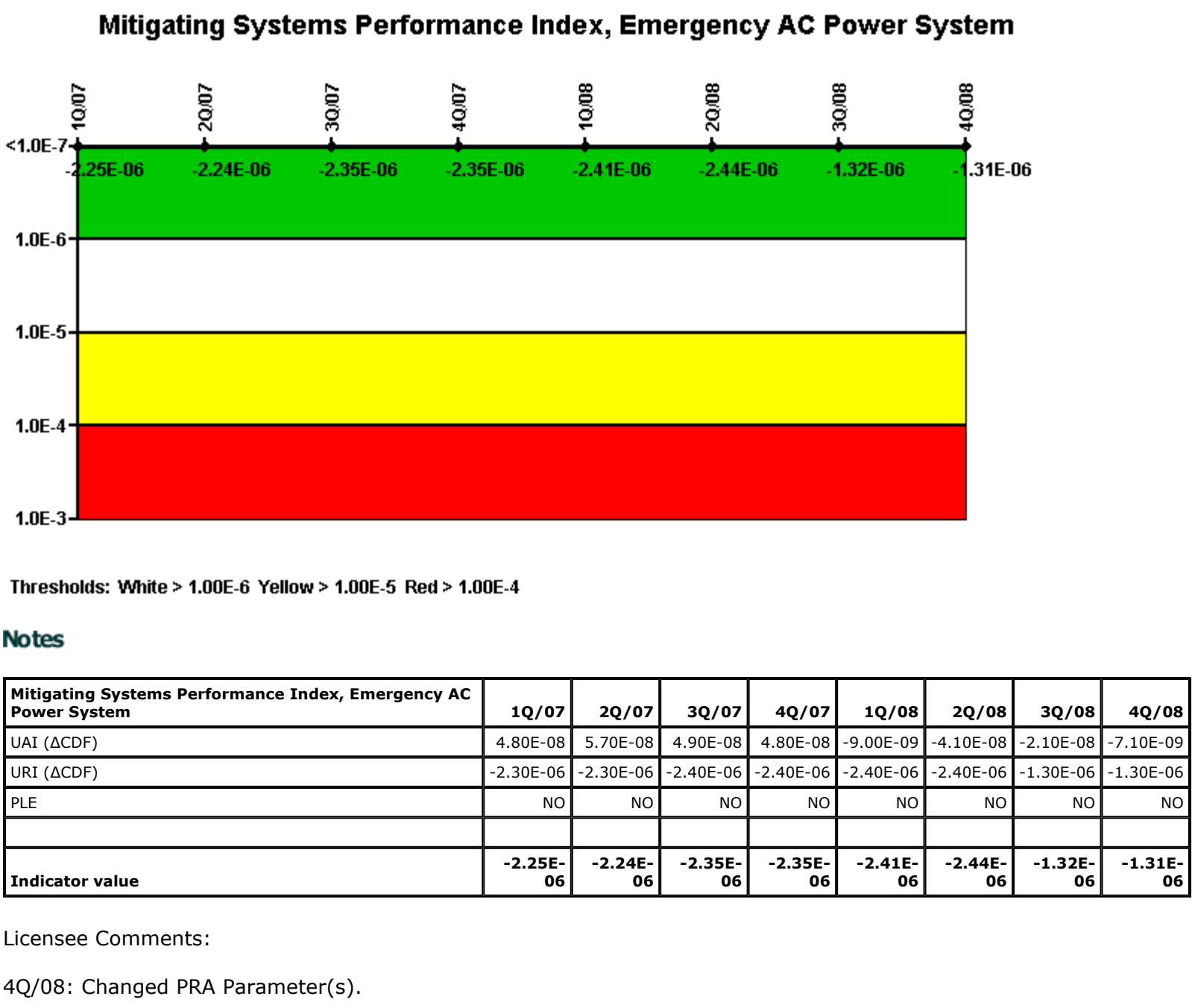


Thresholds: White > 5.0

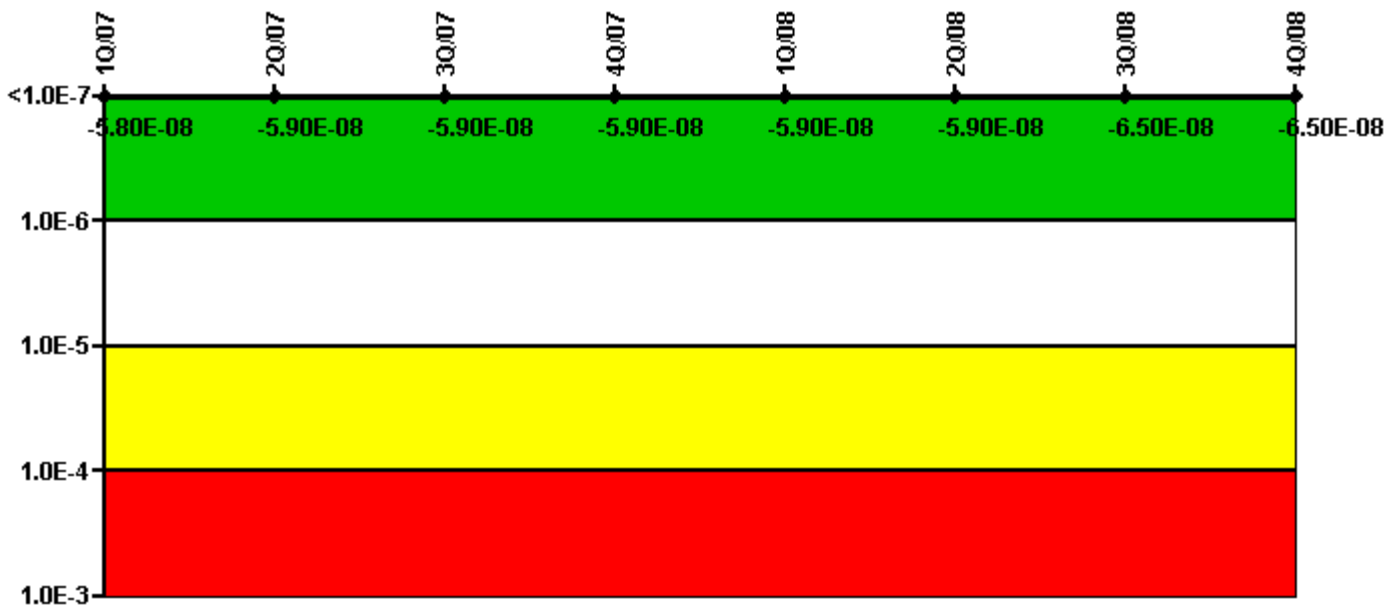
Notes

Safety System Functional Failures (PWR)	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	1	0	0	0	0	0	0	0

Licensee Comments: none



Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

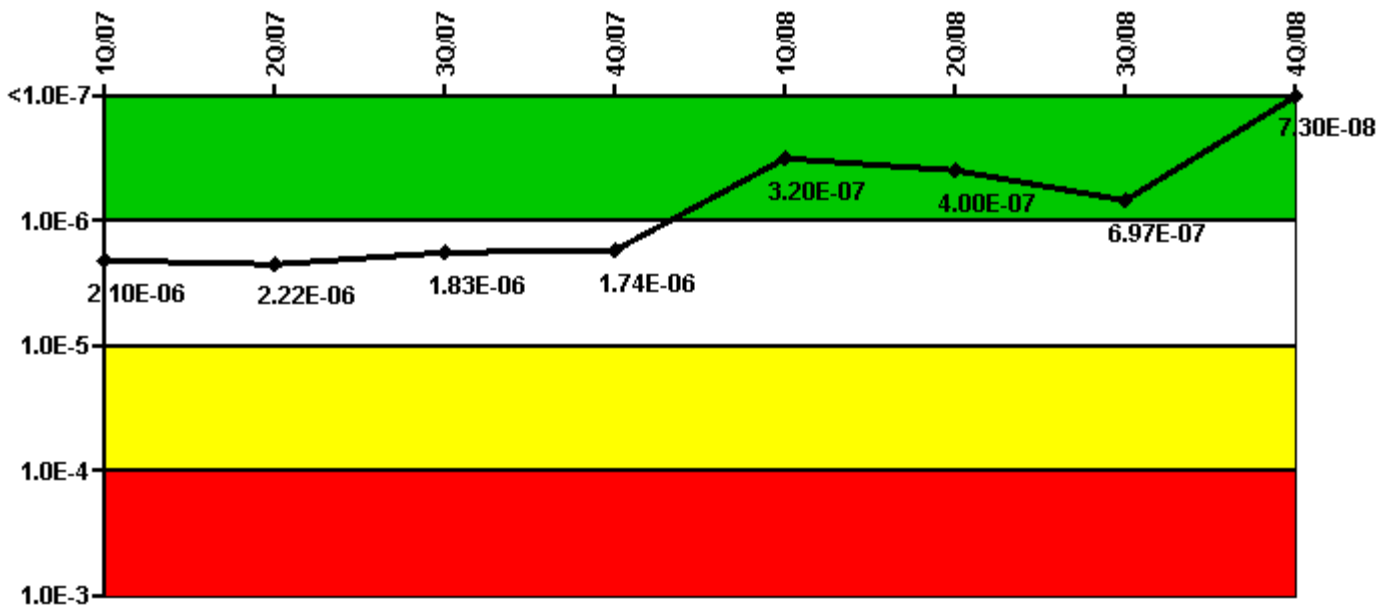
Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-5.40E-08	-5.40E-08
URI (ΔCDF)	-1.60E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.10E-08	-1.10E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.80E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08	-6.50E-08	-6.50E-08

Licensee Comments:

4Q/08: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

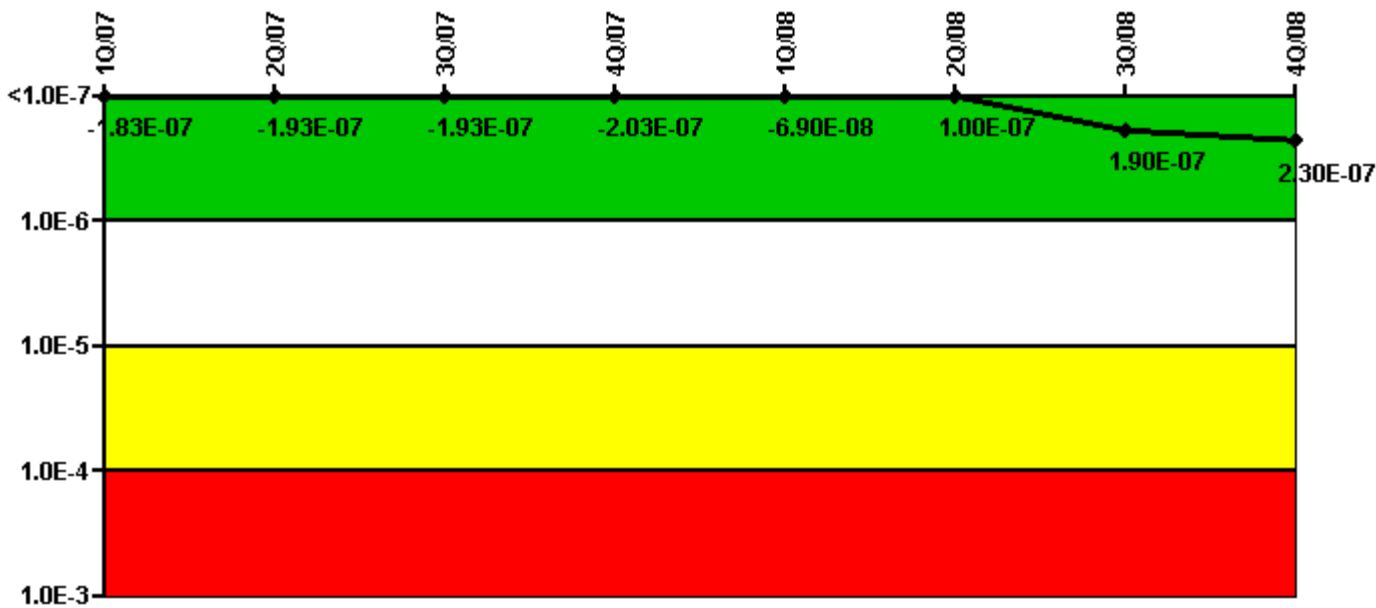
Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	2.00E-07	2.20E-07	-1.70E-07	-1.60E-07	-3.10E-07	-3.10E-07	-6.30E-08	-6.70E-08
URI (ΔCDF)	1.90E-06	2.00E-06	2.00E-06	1.90E-06	6.30E-07	7.10E-07	7.60E-07	1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.10E-06	2.22E-06	1.83E-06	1.74E-06	3.20E-07	4.00E-07	6.97E-07	7.30E-08

Licensee Comments:

4Q/08: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

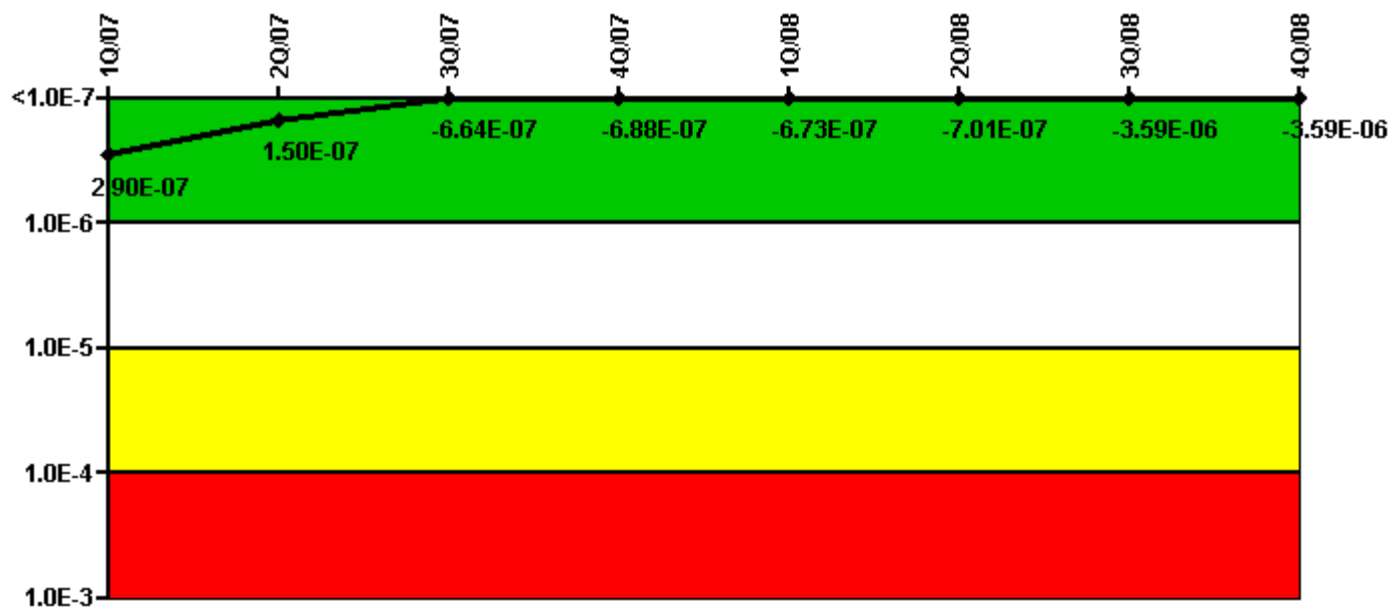
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	9.10E-08	2.60E-07	3.10E-07	3.70E-07
URI (ΔCDF)	-1.40E-07	-1.50E-07	-1.50E-07	-1.60E-07	-1.60E-07	-1.60E-07	-1.20E-07	-1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.83E-07	-1.93E-07	-1.93E-07	-2.03E-07	-6.90E-08	1.00E-07	1.90E-07	2.30E-07

Licensee Comments:

4Q/08: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	1.00E-06	8.70E-07	4.60E-08	2.20E-08	3.70E-08	9.10E-09	7.90E-09	8.00E-09
URI (ΔCDF)	-7.10E-07	-7.20E-07	-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07	-3.60E-06	-3.60E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.90E-07	1.50E-07	-6.64E-07	-6.88E-07	-6.73E-07	-7.01E-07	-3.59E-06	-3.59E-06

Licensee Comments:

4Q/08: Changed PRA Parameter(s). Corrected erroneous FV and URPC values for CC and SX from last PRA Model Update (Ref. IR 841513)

3Q/08: Changed PRA Parameter(s).

2Q/08: Changed PRA Parameter(s).

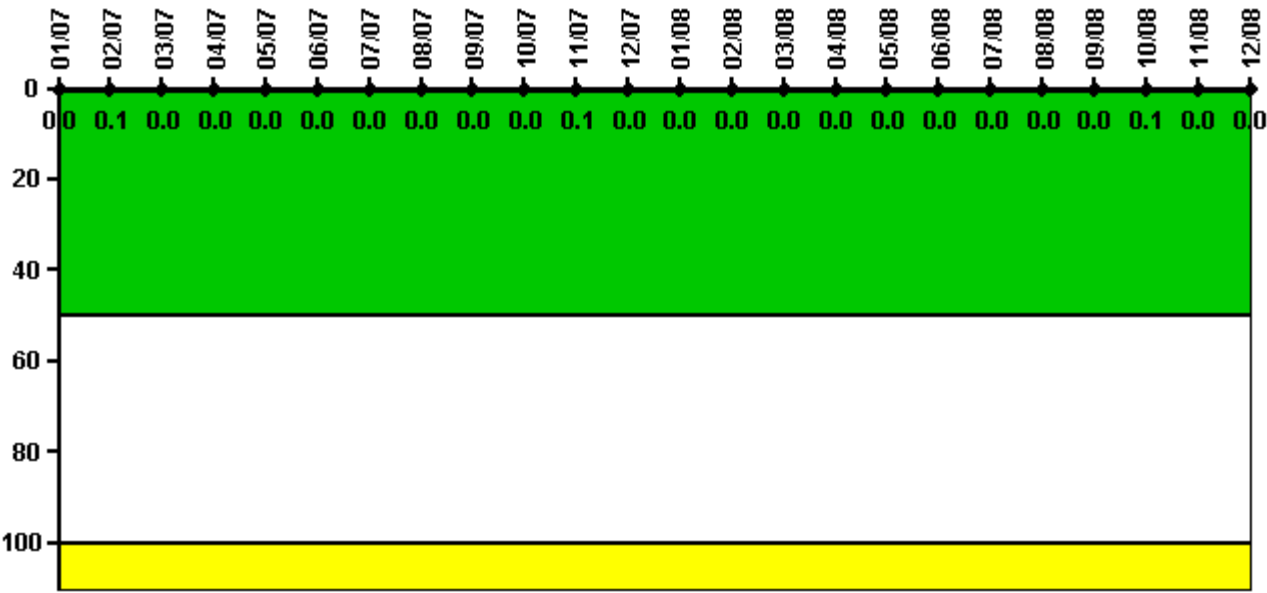
1Q/08: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).

2Q/06: Corrected erroneous FV and URPC values for CC and SX from last PRA Model Update (Ref. IR #841513)

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

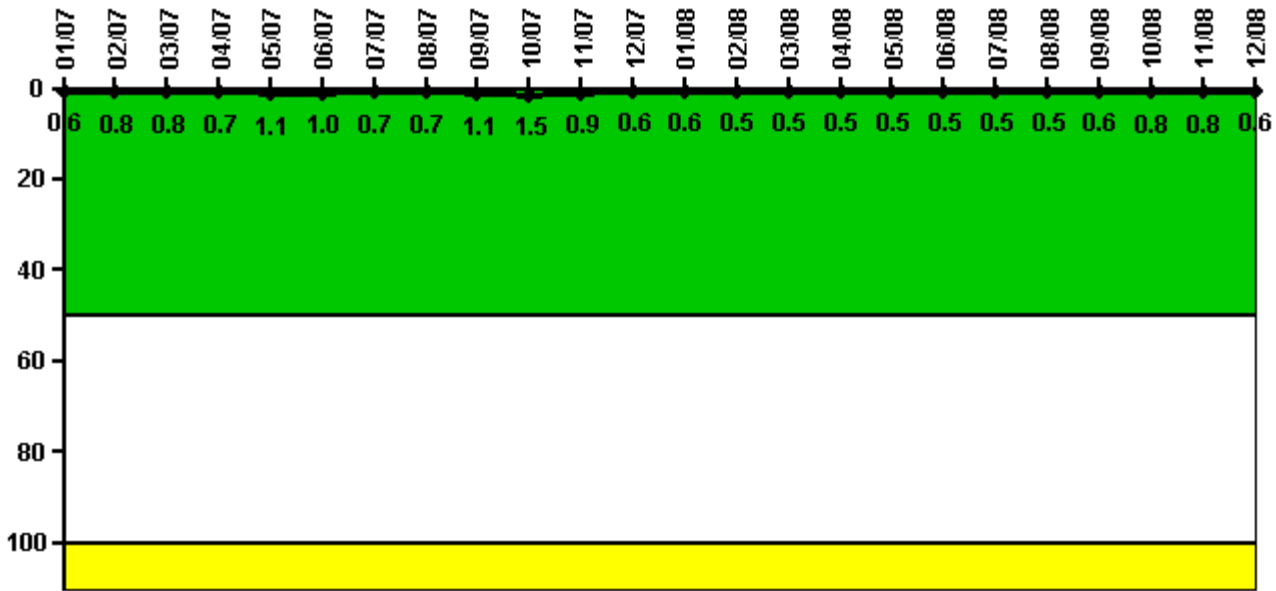
Notes

Reactor Coolant System Activity	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum activity	0.000315	0.000854	0.000371	0.000273	0.000313	0.000318	0.000323	0.000317	0.000315	0.000315	0.000618	0.000339
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0	0	0	0	0	0	0	0	0.1	0

Reactor Coolant System Activity	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum activity	0.000352	0.000370	0.000381	0.000383	0.000383	0.000399	0.000405	0.000405	0.000419	0.000635	0.000373	0.000315
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0.1	0	0

Licensee Comments: none

Reactor Coolant System Leakage



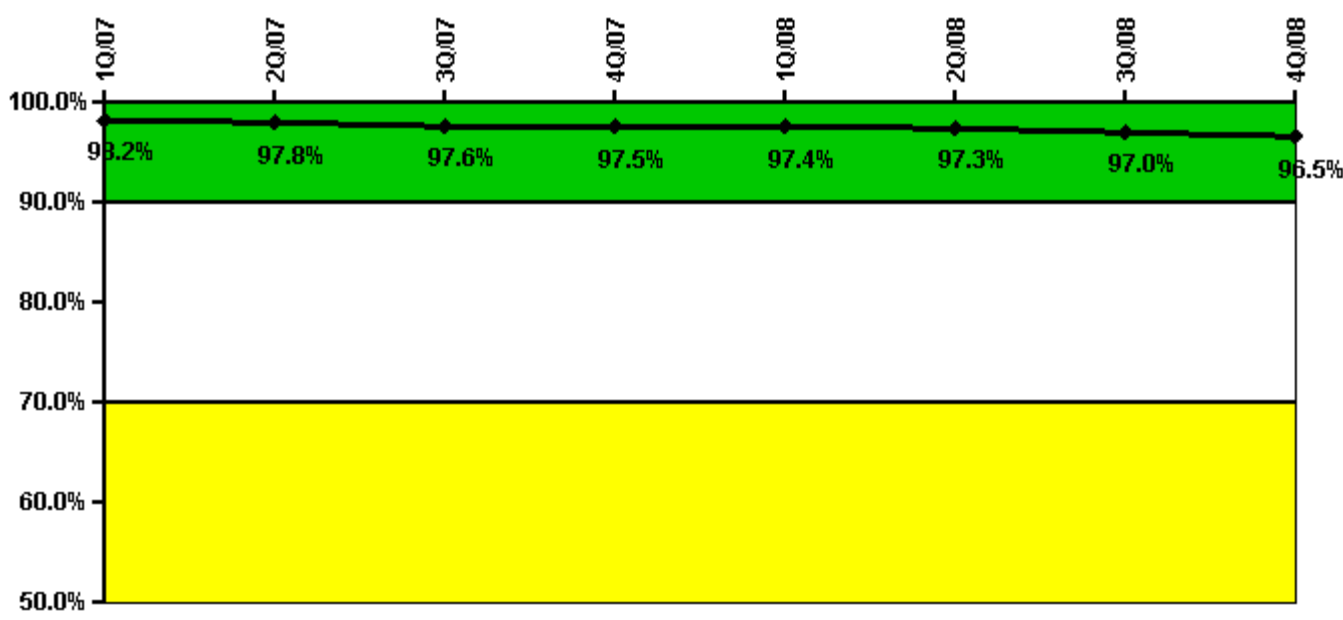
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum leakage	0.061	0.078	0.076	0.072	0.109	0.096	0.066	0.072	0.106	0.153	0.088	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.8	0.8	0.7	1.1	1.0	0.7	0.7	1.1	1.5	0.9	0.6
Reactor Coolant System Leakage	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum leakage	0.061	0.054	0.050	0.049	0.046	0.047	0.047	0.054	0.058	0.078	0.076	0.059
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.6

Licensee Comments: none

Drill/Exercise Performance



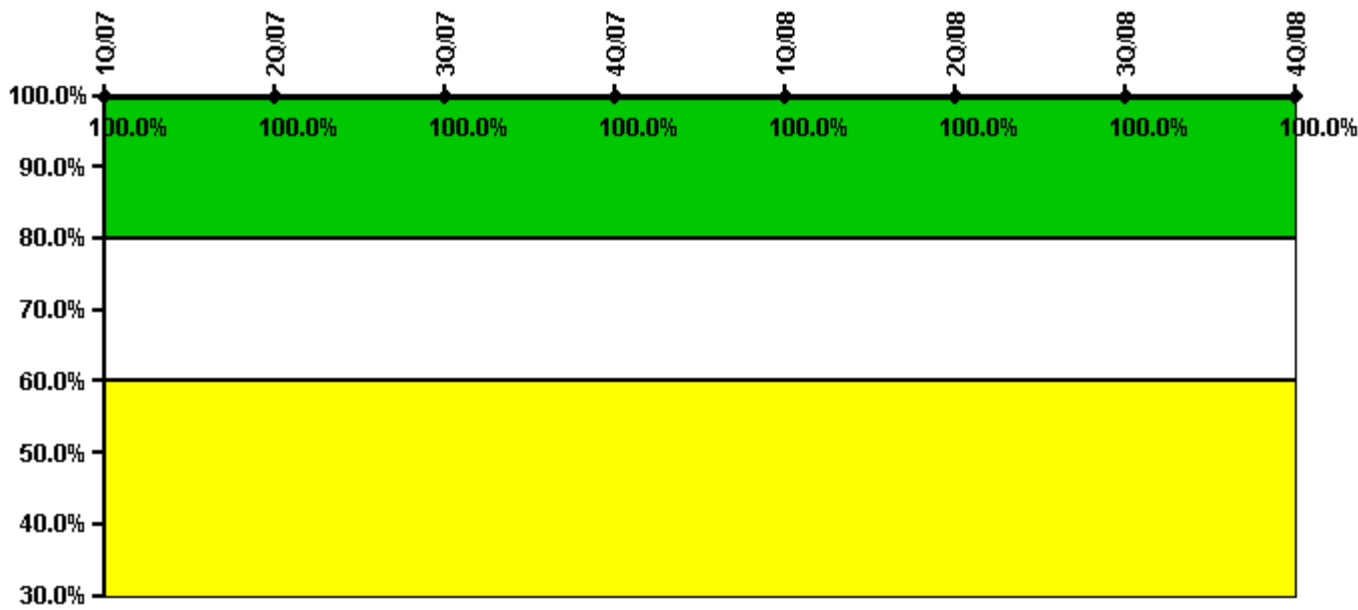
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Successful opportunities	10.0	45.0	43.0	88.0	4.0	27.0	62.0	53.0
Total opportunities	10.0	49.0	44.0	90.0	4.0	28.0	64.0	55.0
Indicator value	98.2%	97.8%	97.6%	97.5%	97.4%	97.3%	97.0%	96.5%

Licensee Comments: none

ERO Drill Participation



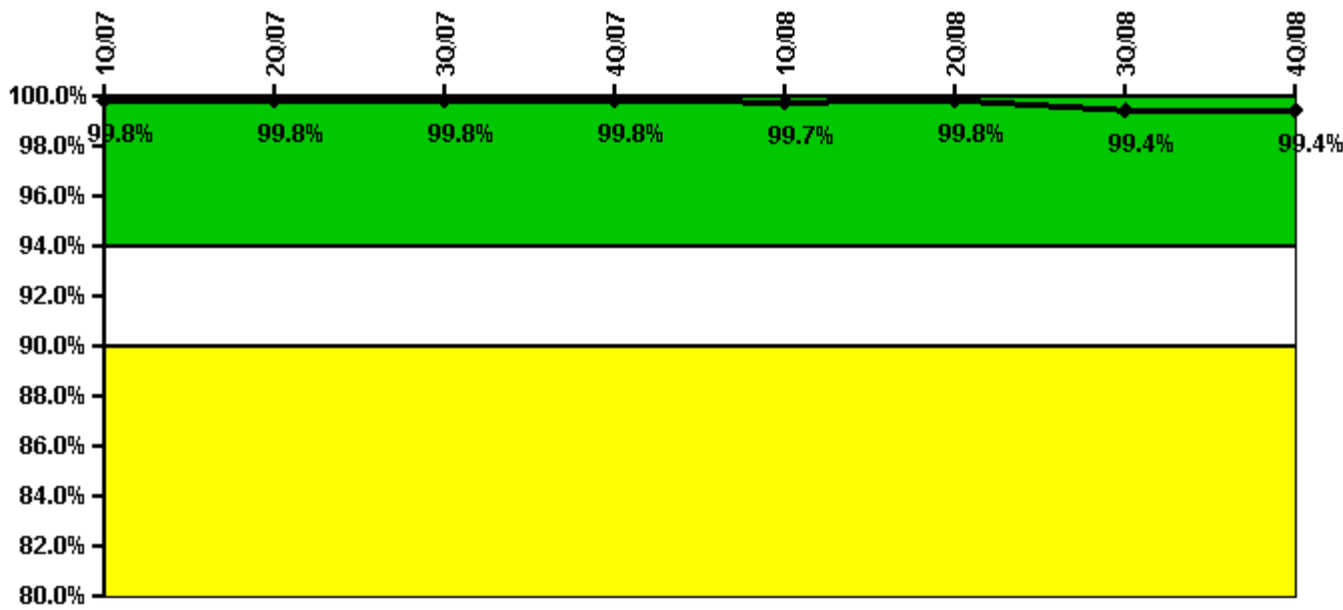
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Participating Key personnel	71.0	66.0	75.0	75.0	73.0	81.0	83.0	82.0
Total Key personnel	71.0	66.0	75.0	75.0	73.0	81.0	83.0	82.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



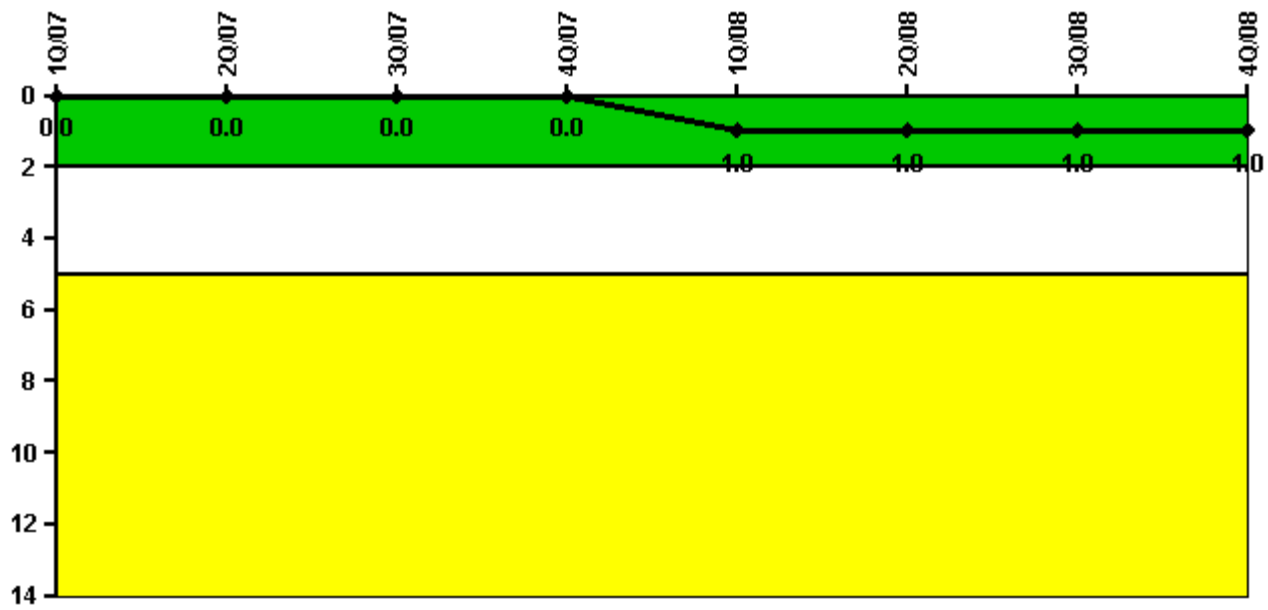
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Successful siren-tests	6008	5985	5988	5997	5996	6003	6006	5995
Total sirens-tests	6016	6005	6009	6007	6011	6016	6108	6016
Indicator value	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.4%	99.4%

Licensee Comments: none

Occupational Exposure Control Effectiveness



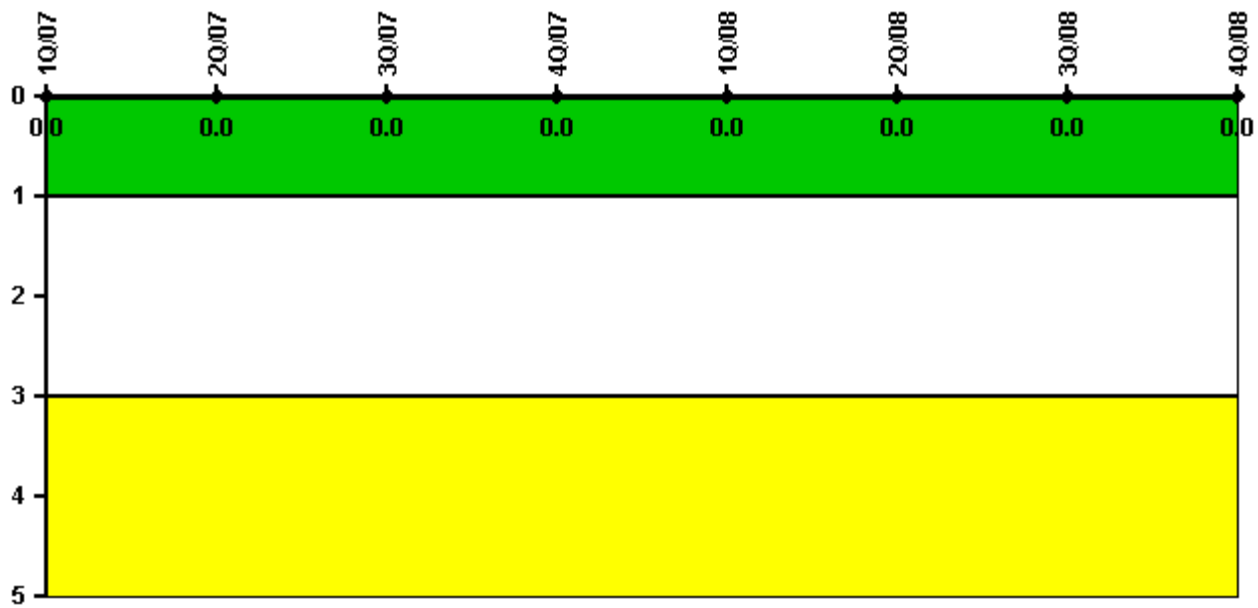
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
High radiation area occurrences	0	0	0	0	1	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	1	1	1	1

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

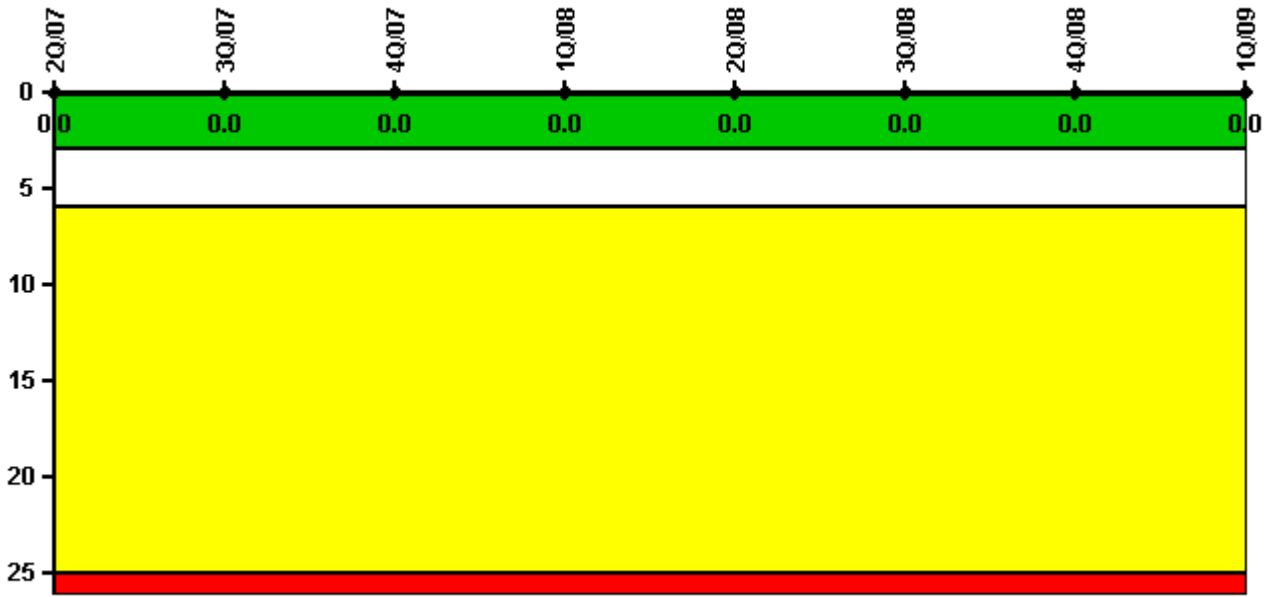
[Security](#) information not publicly available.

Byron 2

1Q/2009 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



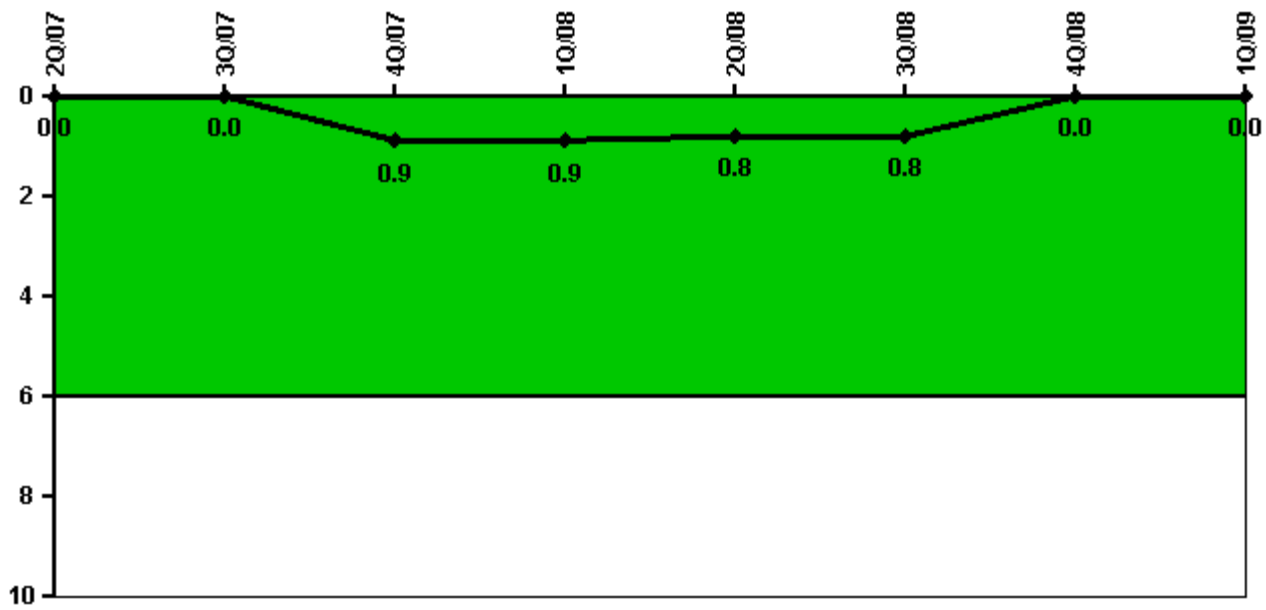
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1441.6	2208.0	1949.4	2183.0	2184.0	2208.0	1774.2	2159.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



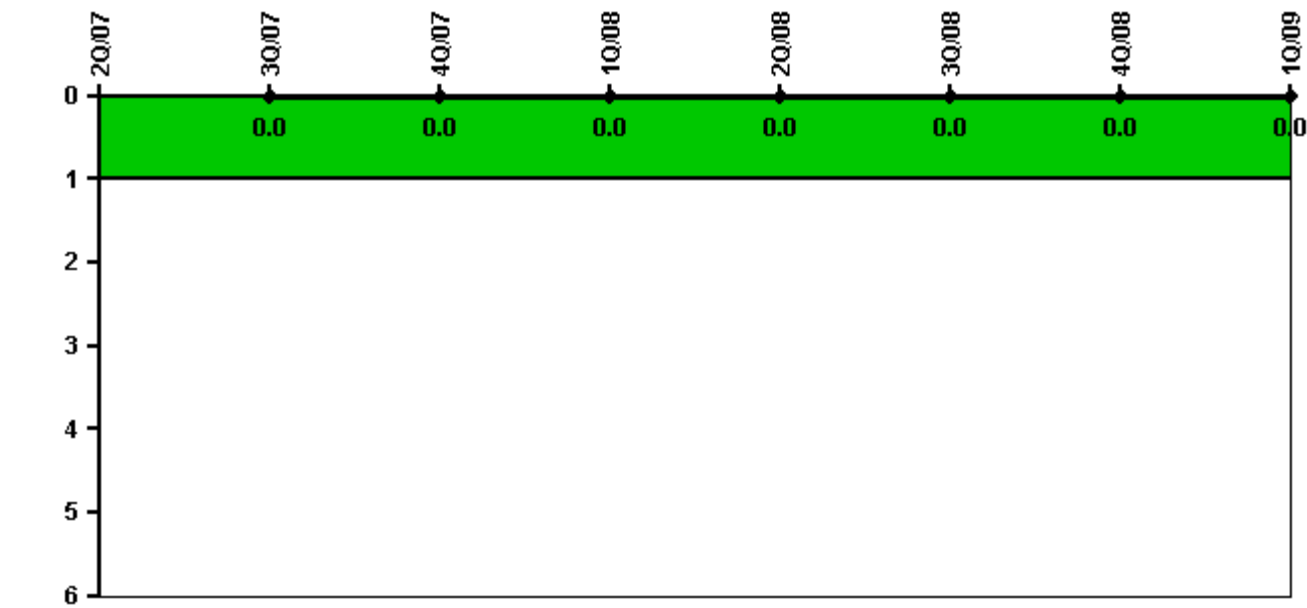
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	1441.6	2208.0	1949.4	2183.0	2184.0	2208.0	1774.2	2159.0
Indicator value	0	0	0.9	0.9	0.8	0.8	0	0

Licensee Comments: none

Unplanned Scrams with Complications



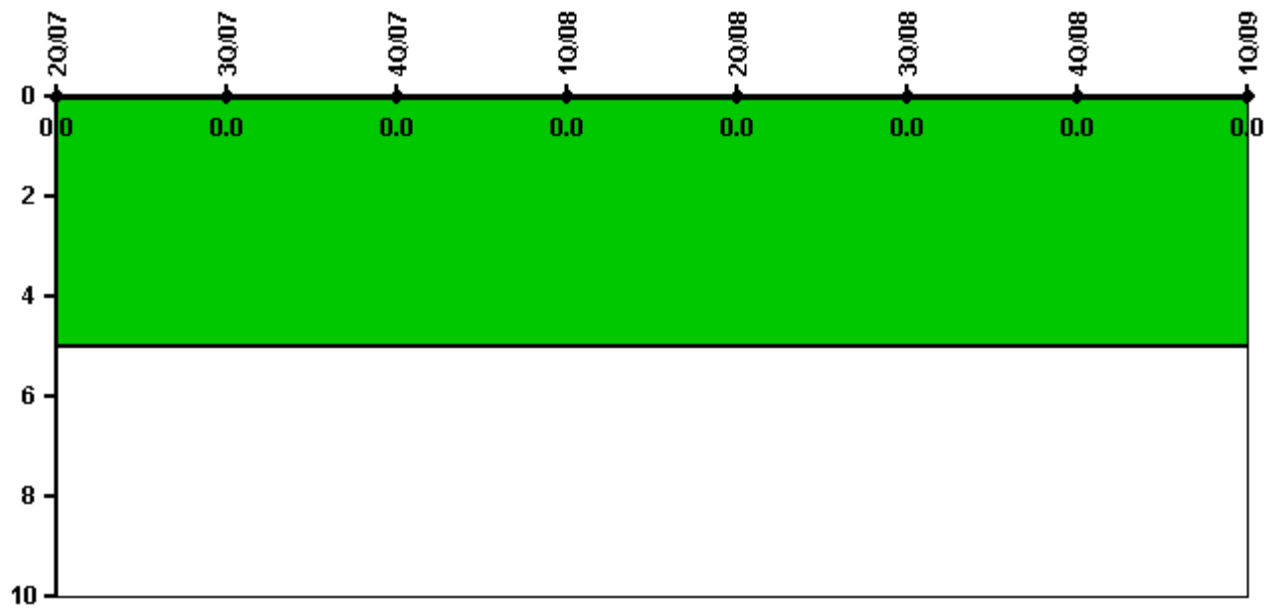
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value		0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



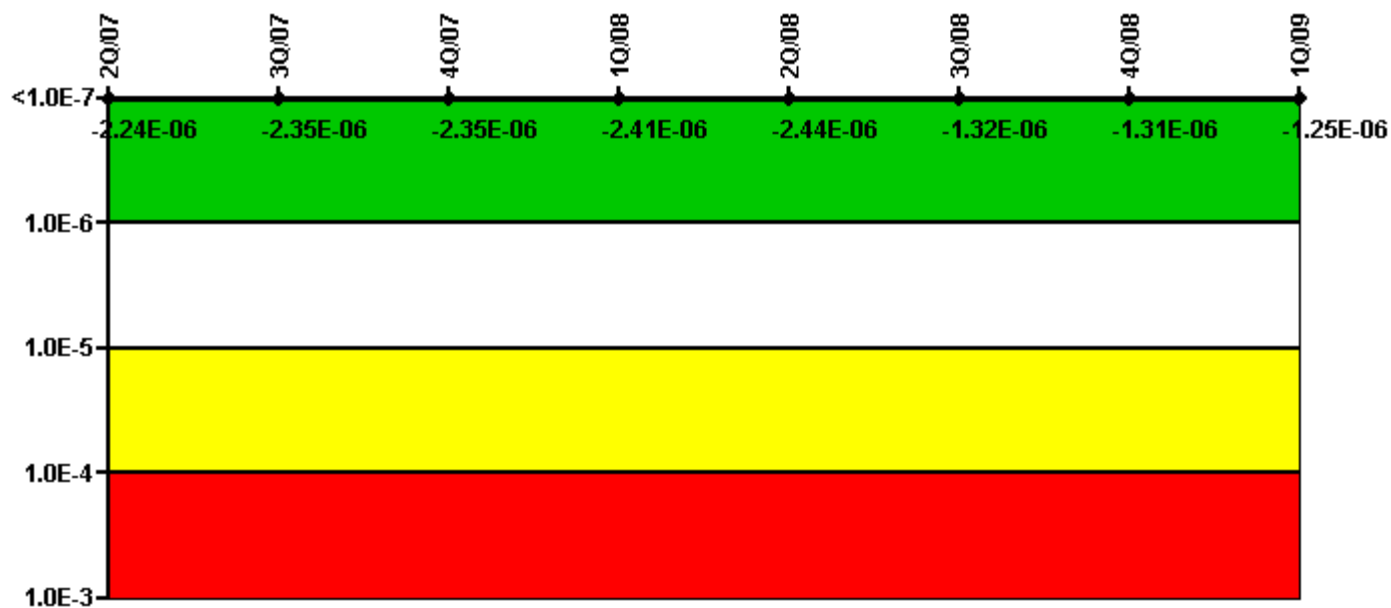
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

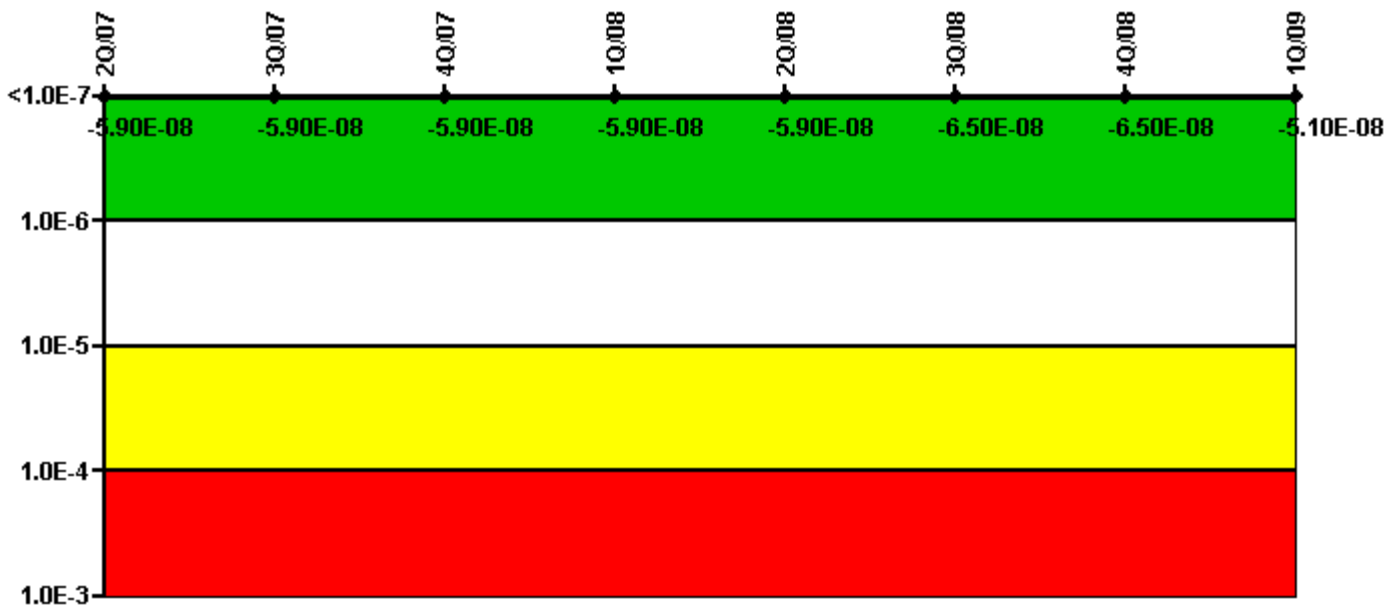
Mitigating Systems Performance Index, Emergency AC Power System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (Δ CDF)	5.70E-08	4.90E-08	4.80E-08	-9.00E-09	-4.10E-08	-2.10E-08	-7.10E-09	5.30E-08
URI (Δ CDF)	-2.30E-06	-2.40E-06	-2.40E-06	-2.40E-06	-2.40E-06	-1.30E-06	-1.30E-06	-1.30E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.24E-06	-2.35E-06	-2.35E-06	-2.41E-06	-2.44E-06	-1.32E-06	-1.31E-06	-1.25E-06

Licensee Comments:

1Q/09: Changed PRA Parameter(s). Demand / Run Time reporting for Reliability changed from actuals to estimated!

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

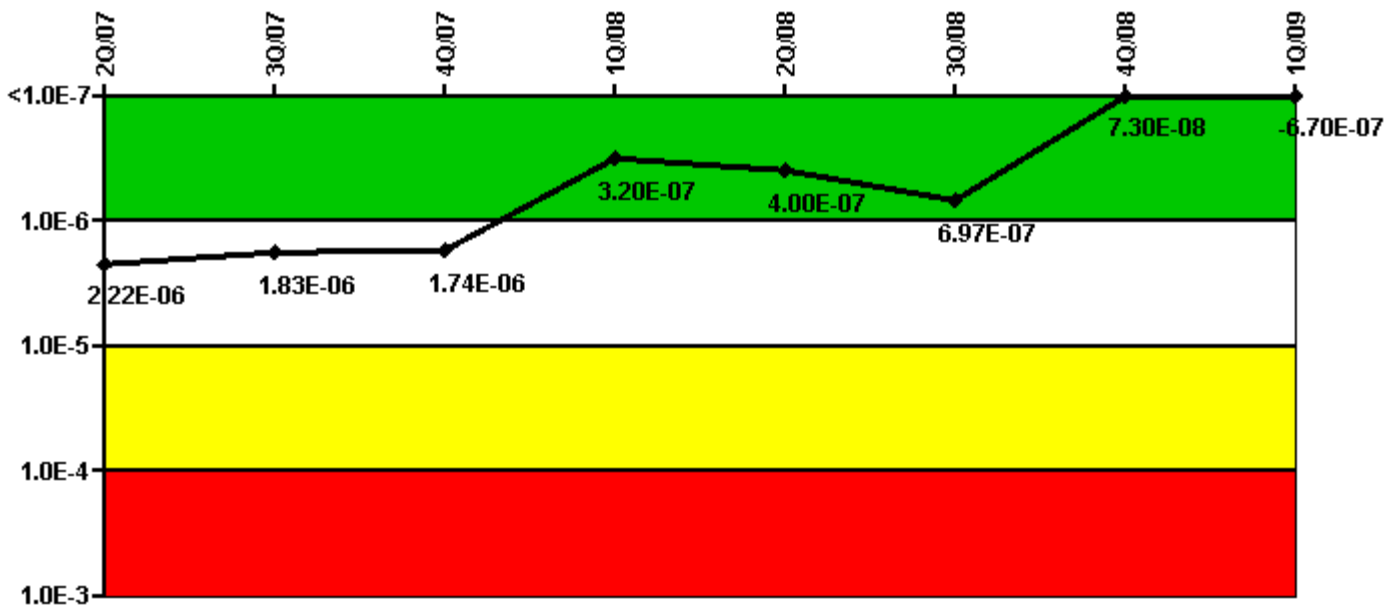
Mitigating Systems Performance Index, High Pressure Injection System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-5.40E-08	-5.40E-08	-4.10E-08
URI (ΔCDF)	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.10E-08	-1.10E-08	-1.00E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08	-6.50E-08	-6.50E-08	-5.10E-08

Licensee Comments:

1Q/09: Changed PRA Parameter(s). Demand / Run Time reporting for Reliability changed from actuals to estimated!

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

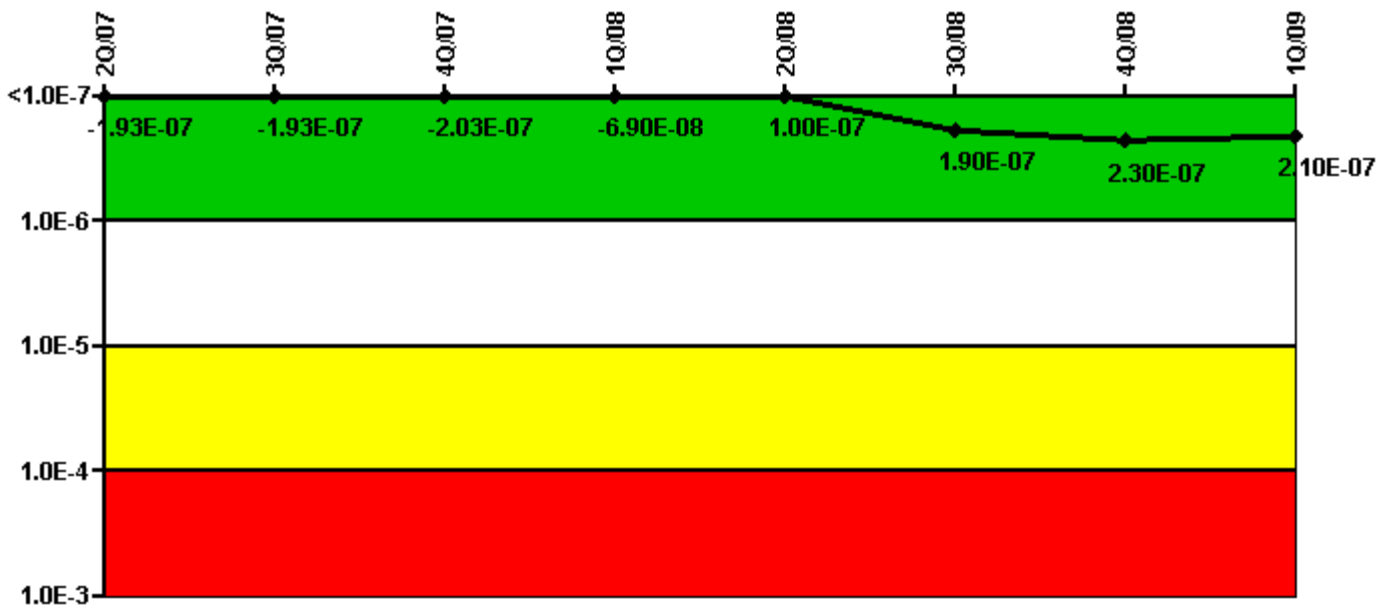
Mitigating Systems Performance Index, Heat Removal System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	2.20E-07	-1.70E-07	-1.60E-07	-3.10E-07	-3.10E-07	-6.30E-08	-6.70E-08	-1.60E-07
URI (ΔCDF)	2.00E-06	2.00E-06	1.90E-06	6.30E-07	7.10E-07	7.60E-07	1.40E-07	-5.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.22E-06	1.83E-06	1.74E-06	3.20E-07	4.00E-07	6.97E-07	7.30E-08	-6.70E-07

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

2Q/06: Risk Cap Invoked. Revised PRA parameters per PRA revision 6D.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

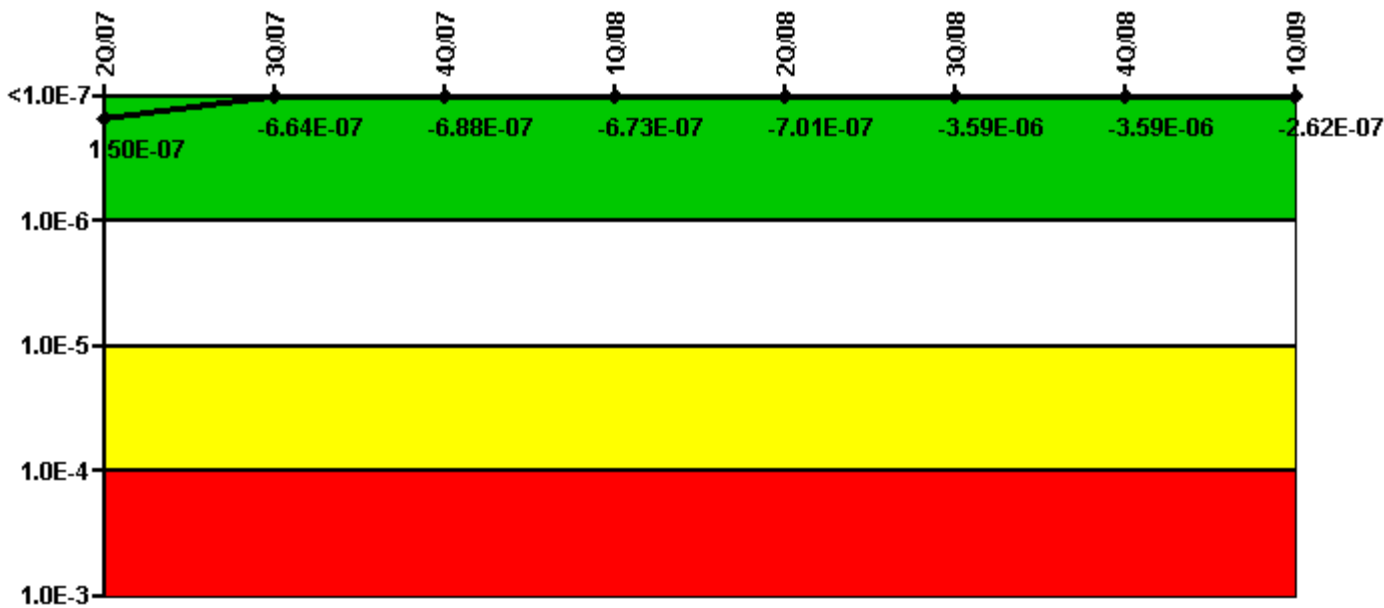
Mitigating Systems Performance Index, Residual Heat Removal System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	-4.30E-08	-4.30E-08	-4.30E-08	9.10E-08	2.60E-07	3.10E-07	3.70E-07	3.50E-07
URI (ΔCDF)	-1.50E-07	-1.50E-07	-1.60E-07	-1.60E-07	-1.60E-07	-1.20E-07	-1.40E-07	-1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.93E-07	-1.93E-07	-2.03E-07	-6.90E-08	1.00E-07	1.90E-07	2.30E-07	2.10E-07

Licensee Comments:

1Q/09: Changed PRA Parameter(s). Demand / Run Time reporting for Reliability changed from actuals to estimated!

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

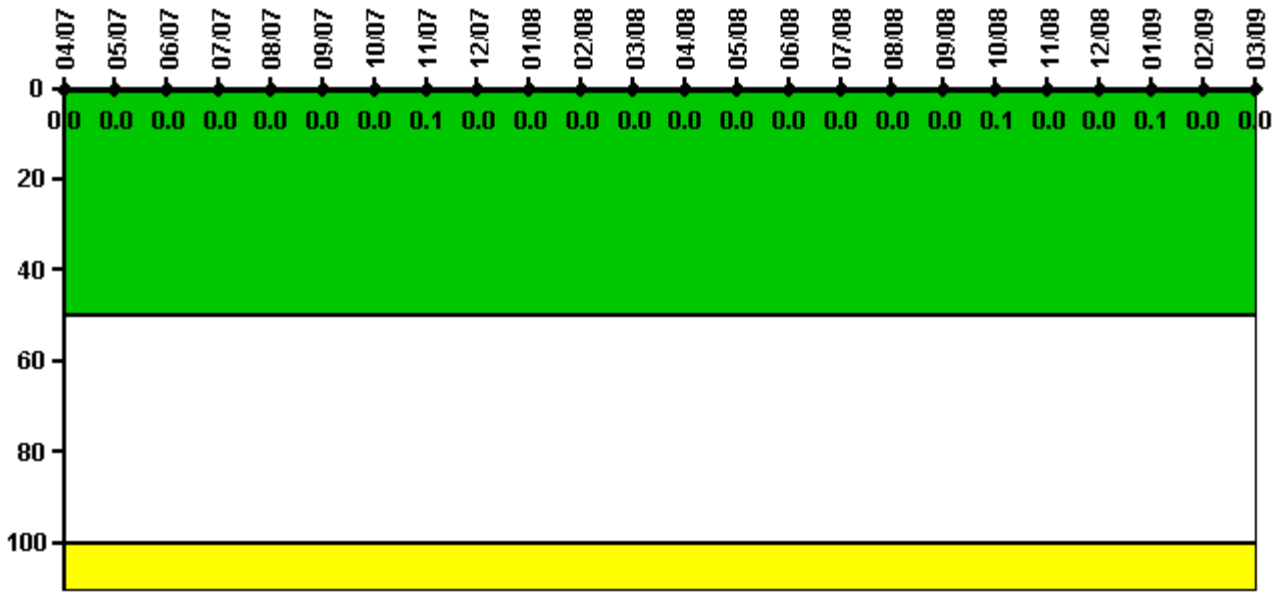
Mitigating Systems Performance Index, Cooling Water Systems	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	8.70E-07	4.60E-08	2.20E-08	3.70E-08	9.10E-09	7.90E-09	8.00E-09	7.80E-09
URI (ΔCDF)	-7.20E-07	-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07	-3.60E-06	-3.60E-06	-2.70E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.50E-07	-6.64E-07	-6.88E-07	-6.73E-07	-7.01E-07	-3.59E-06	-3.59E-06	-2.62E-07

Licensee Comments:

1Q/09: Changed PRA Parameter(s). Demand / Run Time reporting for Reliability changed from actuals to estimated!

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

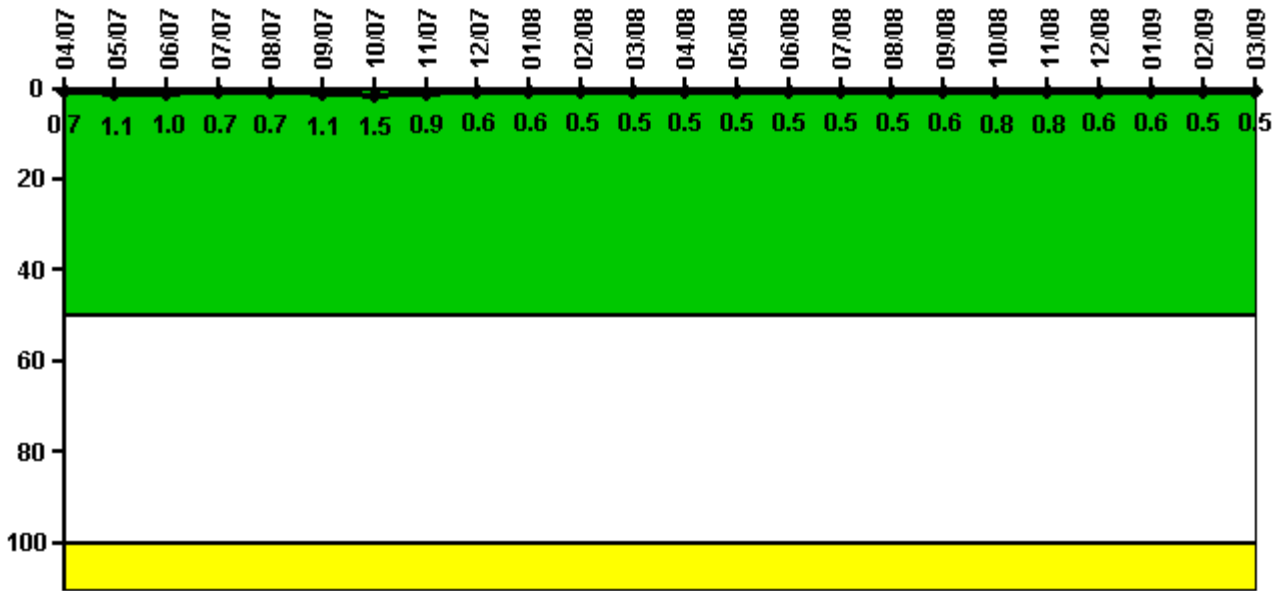
Notes

Reactor Coolant System Activity	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum activity	0.000273	0.000313	0.000318	0.000323	0.000317	0.000315	0.000315	0.000618	0.000339	0.000352	0.000370	0.000381
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0.1	0	0	0	0

Reactor Coolant System Activity	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09
Maximum activity	0.000383	0.000383	0.000399	0.000405	0.000405	0.000419	0.000635	0.000373	0.000315	0.000558	0.000334	0.000343
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0.1	0	0	0.1	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

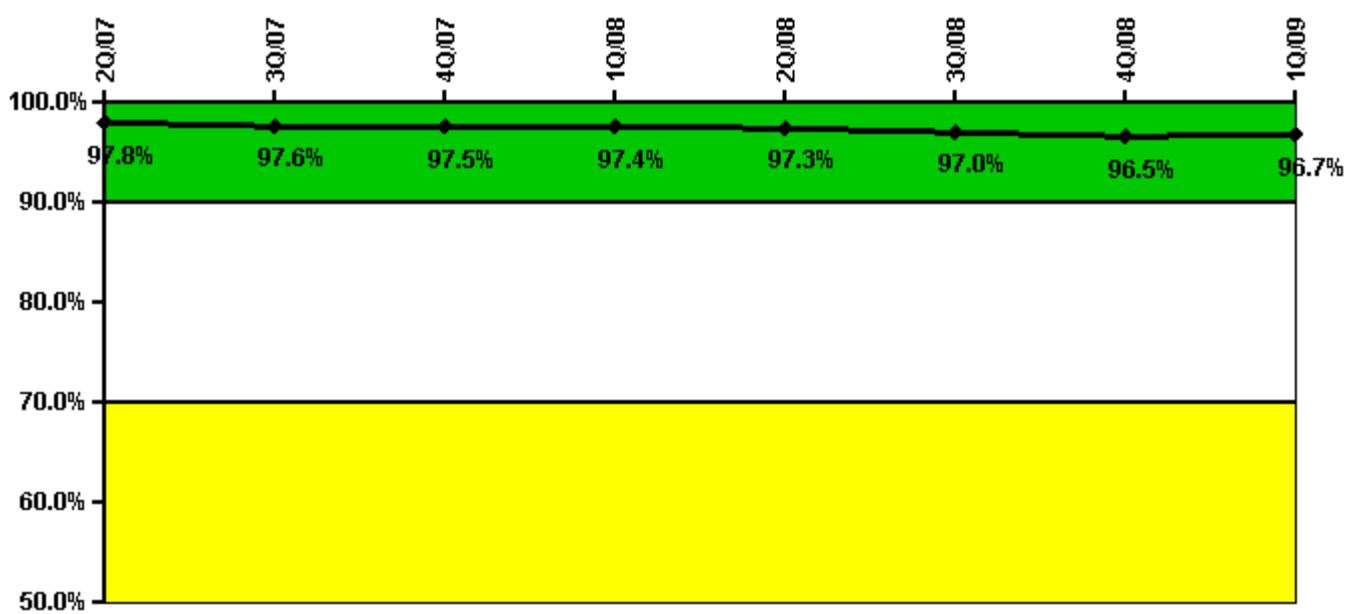
Notes

Reactor Coolant System Leakage	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum leakage	0.072	0.109	0.096	0.066	0.072	0.106	0.153	0.088	0.060	0.061	0.054	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	1.1	1.0	0.7	0.7	1.1	1.5	0.9	0.6	0.6	0.5	0.5

Reactor Coolant System Leakage	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09
Maximum leakage	0.049	0.046	0.047	0.047	0.054	0.058	0.078	0.076	0.059	0.062	0.052	0.046
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.6	0.6	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



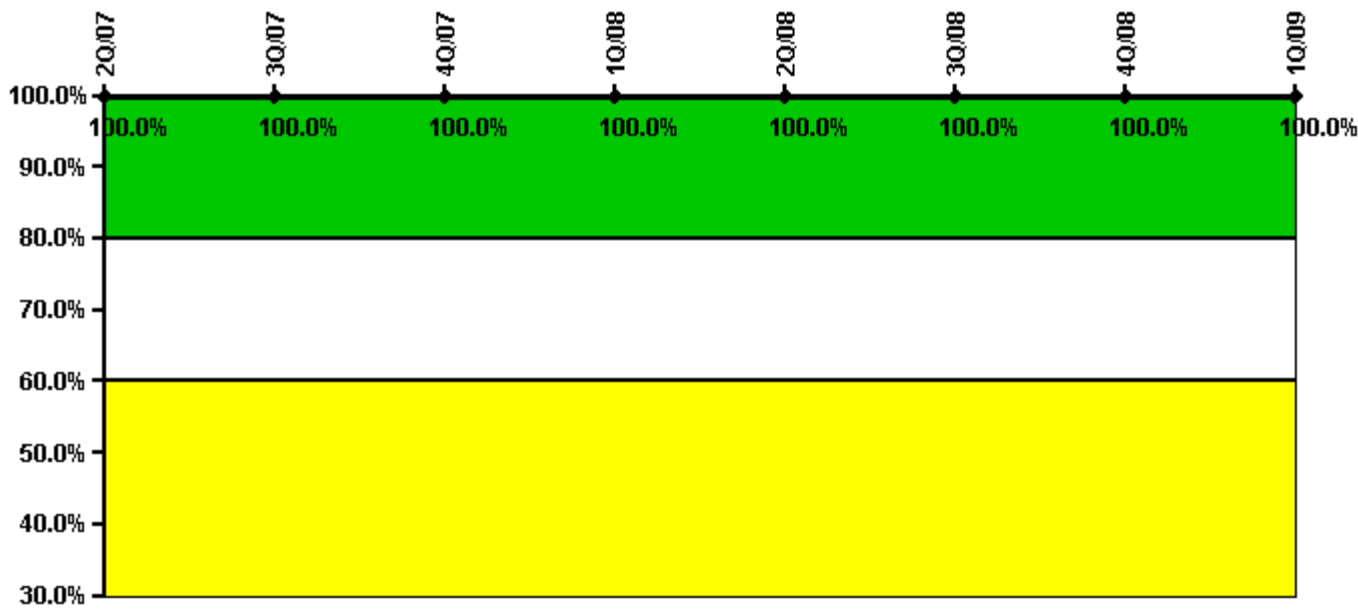
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Successful opportunities	45.0	43.0	88.0	4.0	27.0	62.0	53.0	30.0
Total opportunities	49.0	44.0	90.0	4.0	28.0	64.0	55.0	30.0
Indicator value	97.8%	97.6%	97.5%	97.4%	97.3%	97.0%	96.5%	96.7%

Licensee Comments: none

ERO Drill Participation



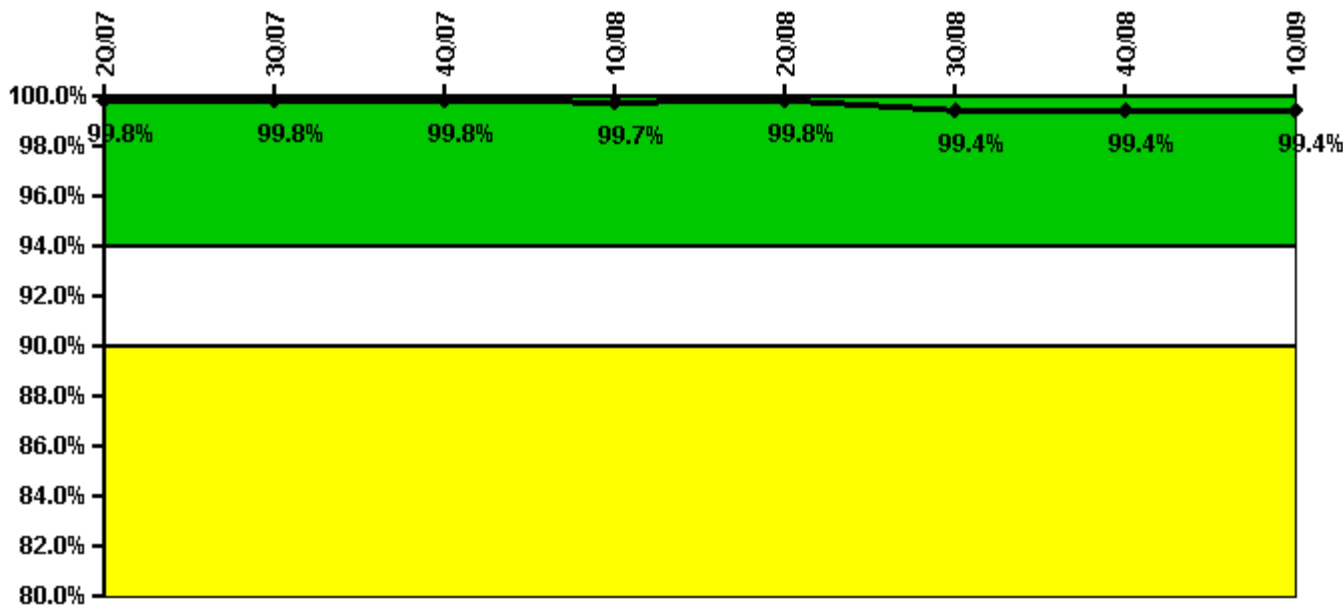
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Participating Key personnel	66.0	75.0	75.0	73.0	81.0	83.0	82.0	78.0
Total Key personnel	66.0	75.0	75.0	73.0	81.0	83.0	82.0	78.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



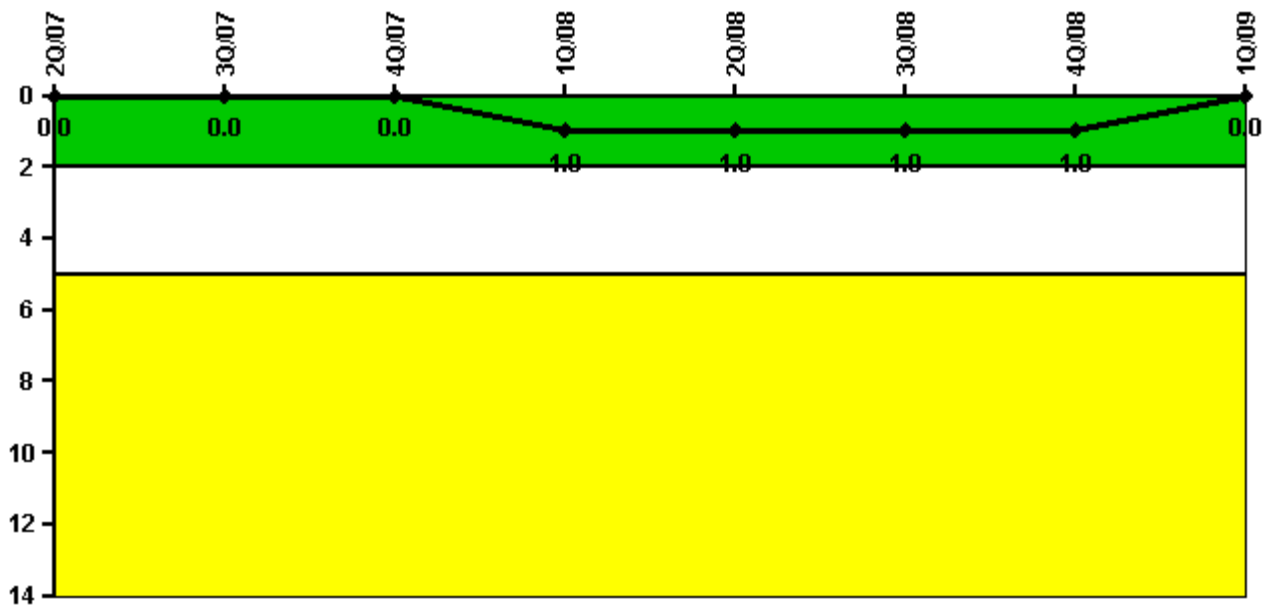
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Successful siren-tests	5985	5988	5997	5996	6003	6006	5995	5915
Total sirens-tests	6005	6009	6007	6011	6016	6108	6016	5922
Indicator value	99.8%	99.8%	99.8%	99.7%	99.8%	99.4%	99.4%	99.4%

Licensee Comments: none

Occupational Exposure Control Effectiveness



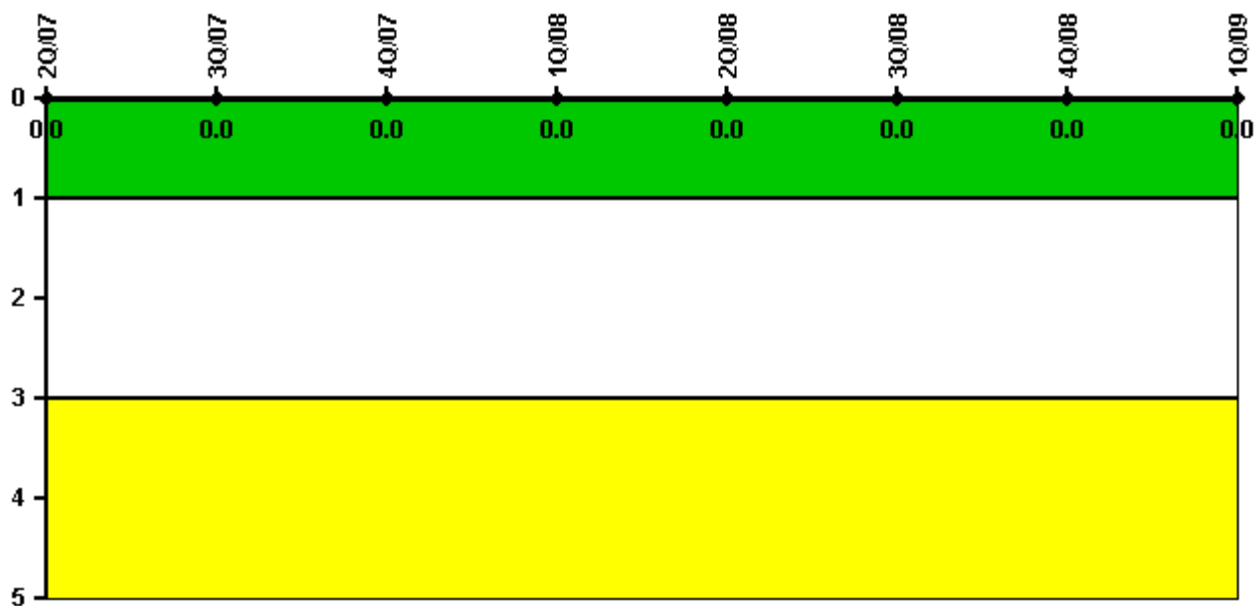
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
High radiation area occurrences	0	0	0	1	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	1	1	1	1	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

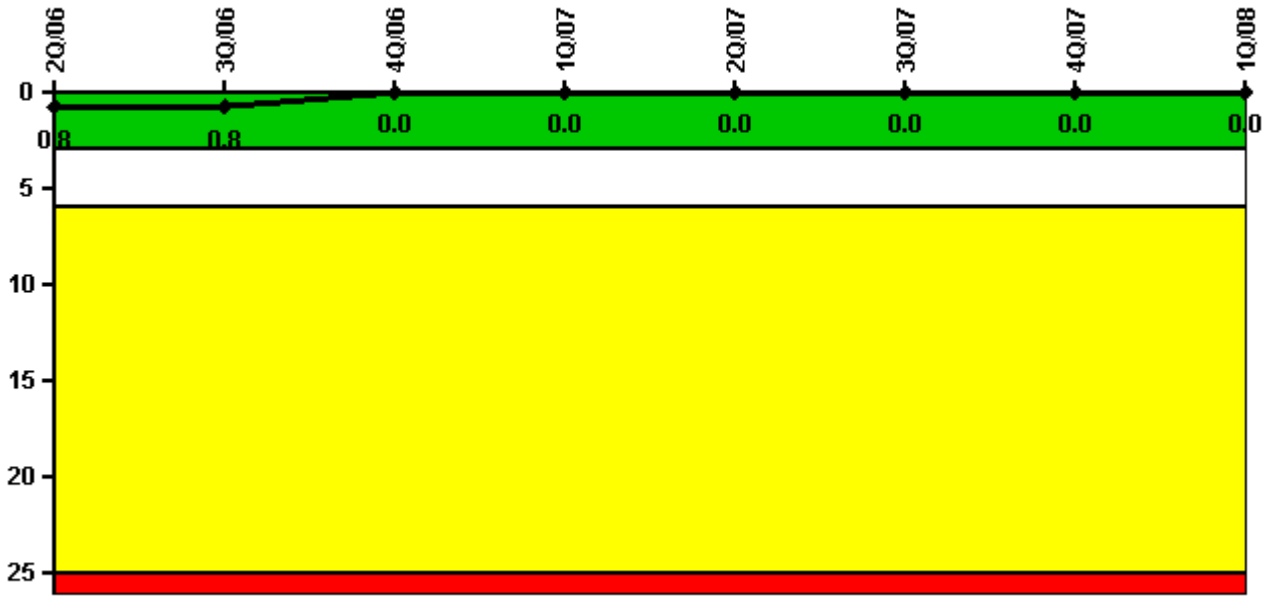
[Security](#) information not publicly available.

Byron 2

1Q/2008 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



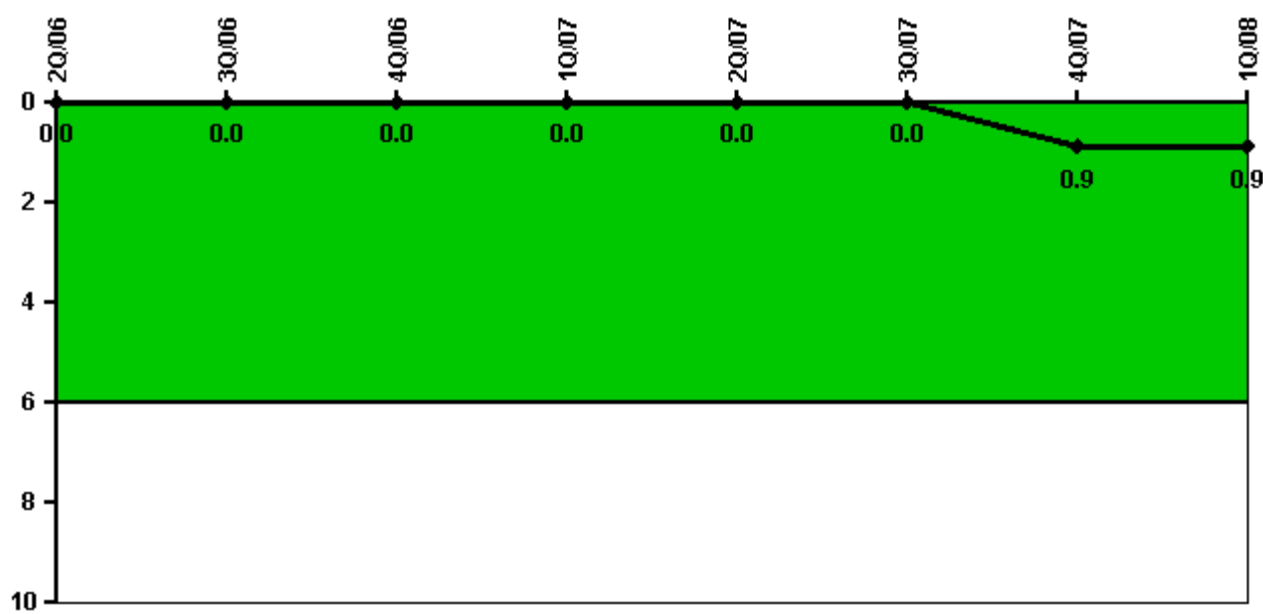
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0
Indicator value	0.8	0.8	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



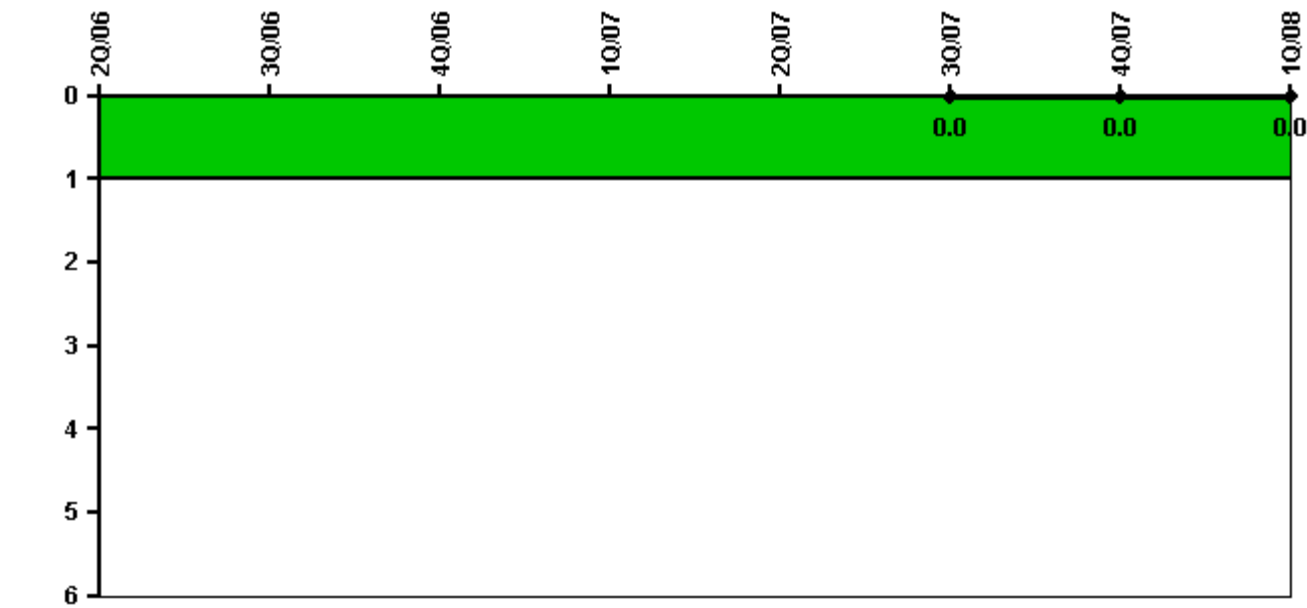
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2183.0	2208.0	2209.0	2159.0	1441.6	2208.0	1949.4	2183.0
Indicator value	0	0	0	0	0	0	0.9	0.9

Licensee Comments: none

Unplanned Scrams with Complications



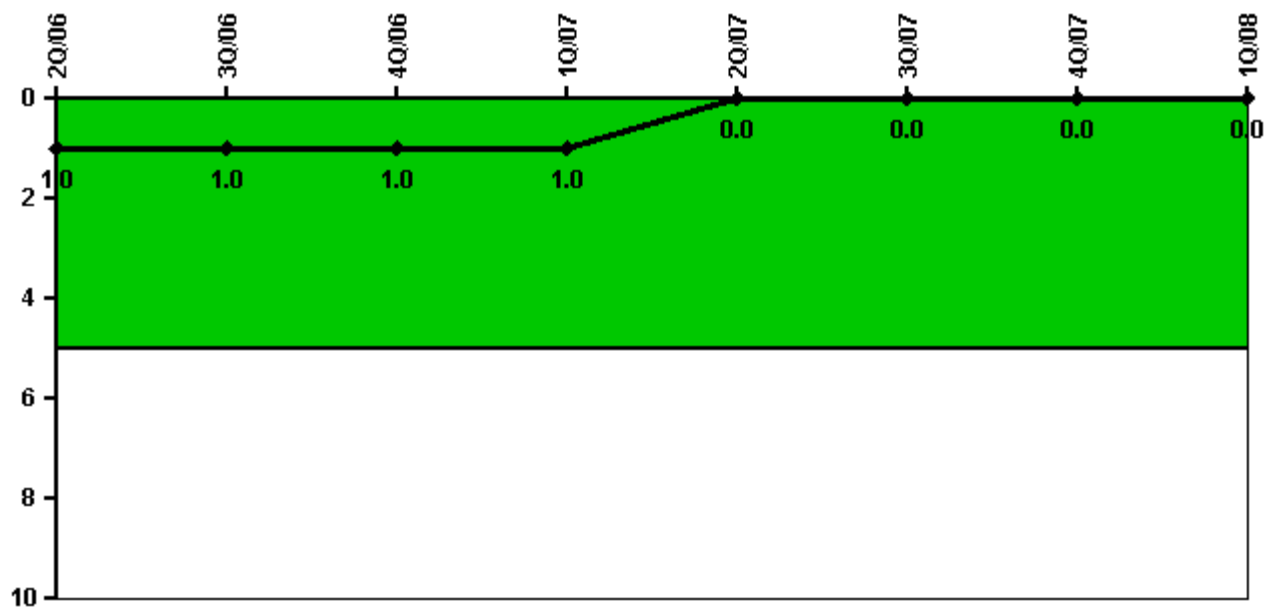
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Scrams with complications			0	0	0	0	0	0
Indicator value						0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)

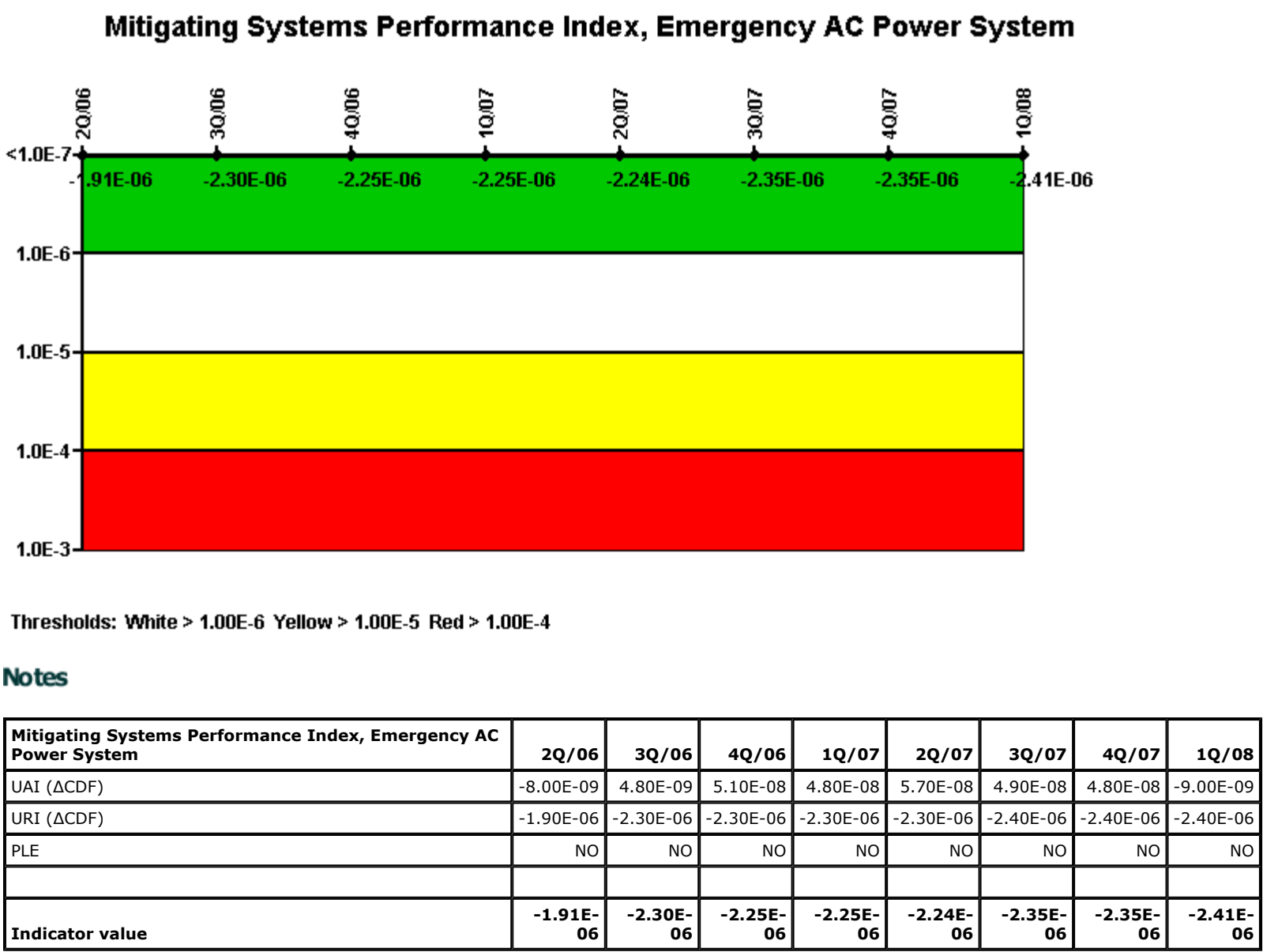


Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Safety System Functional Failures	1	0	0	0	0	0	0	0
Indicator value	1	1	1	1	0	0	0	0

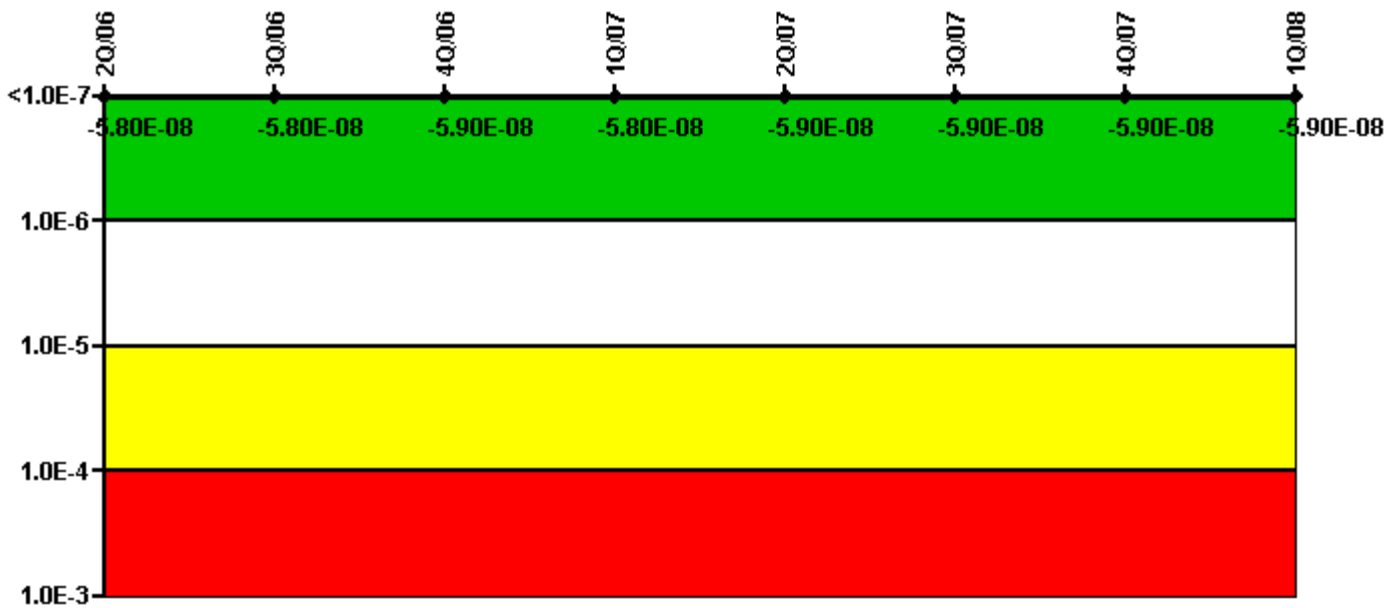
Licensee Comments: none



Licensee Comments:

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

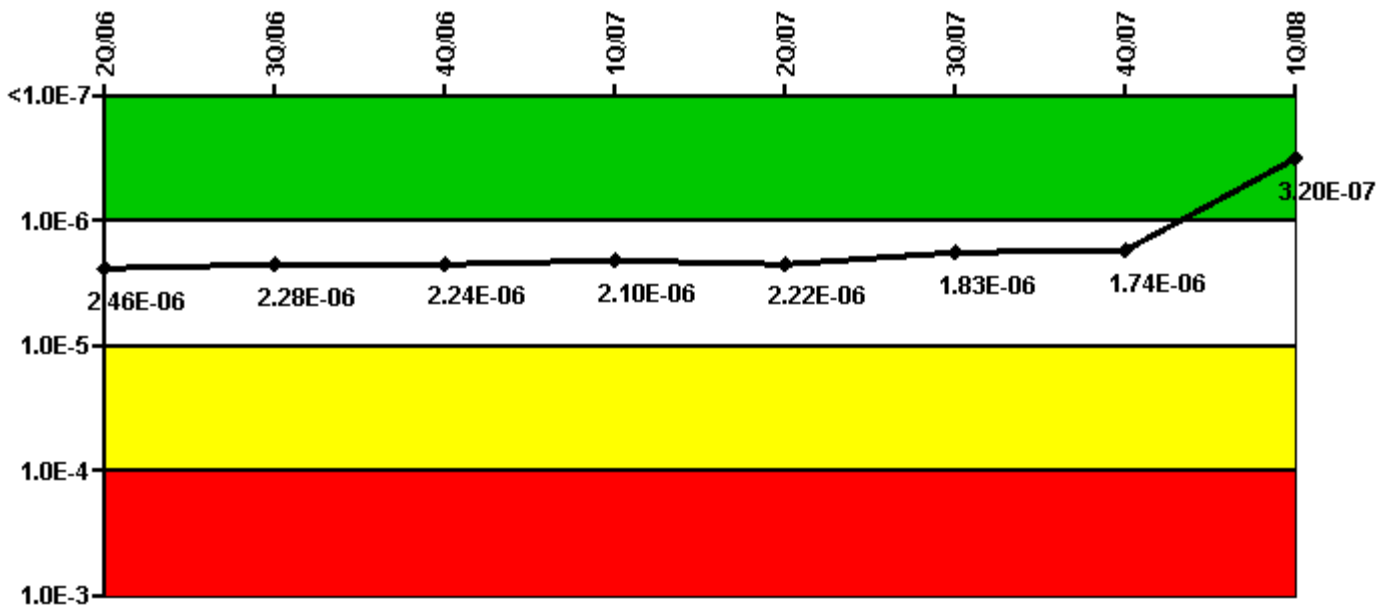
Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (ΔCDF)	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08	-4.20E-08
URI (ΔCDF)	-1.60E-08	-1.60E-08	-1.70E-08	-1.60E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.70E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.80E-08	-5.80E-08	-5.90E-08	-5.80E-08	-5.90E-08	-5.90E-08	-5.90E-08	-5.90E-08

Licensee Comments:

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (ΔCDF)	8.60E-07	6.80E-07	5.40E-07	2.00E-07	2.20E-07	-1.70E-07	-1.60E-07	-3.10E-07
URI (ΔCDF)	1.60E-06	1.60E-06	1.70E-06	1.90E-06	2.00E-06	2.00E-06	1.90E-06	6.30E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.46E-06	2.28E-06	2.24E-06	2.10E-06	2.22E-06	1.83E-06	1.74E-06	3.20E-07

Licensee Comments:

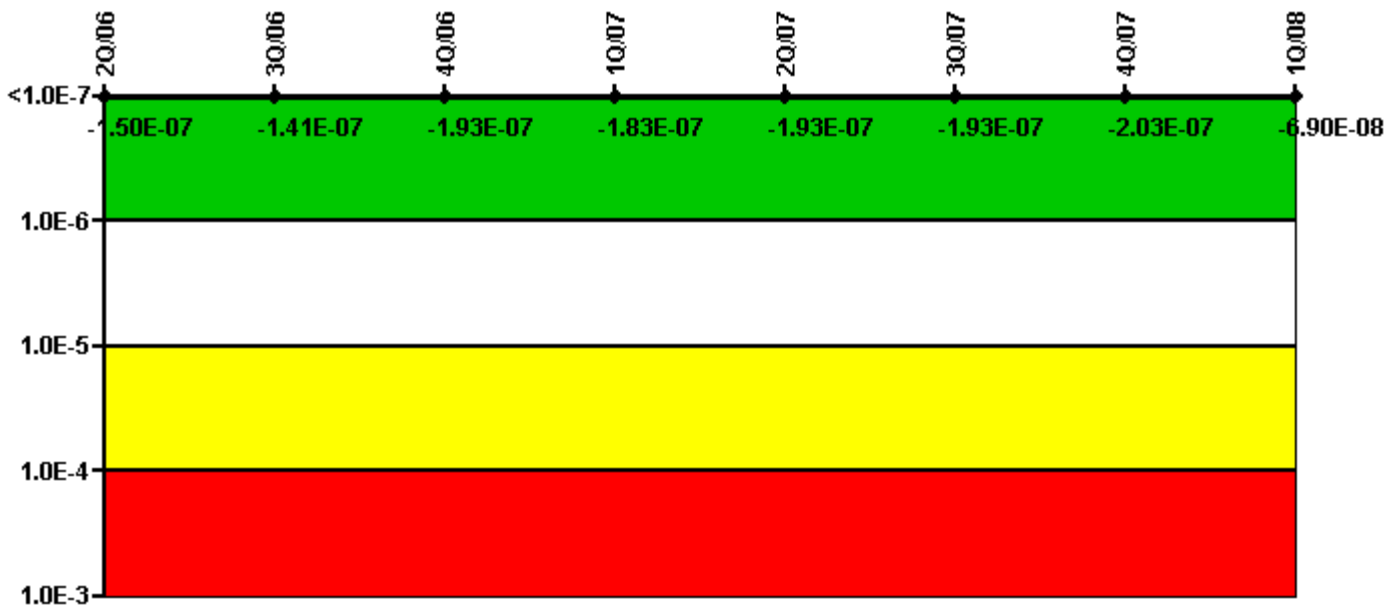
1Q/08: Risk Cap Invoked.

3Q/06: Risk Cap Invoked.

2Q/06: Risk Cap Invoked. Revised PRA parameters per PRA revision 6D.

2Q/06: Risk Cap Invoked.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

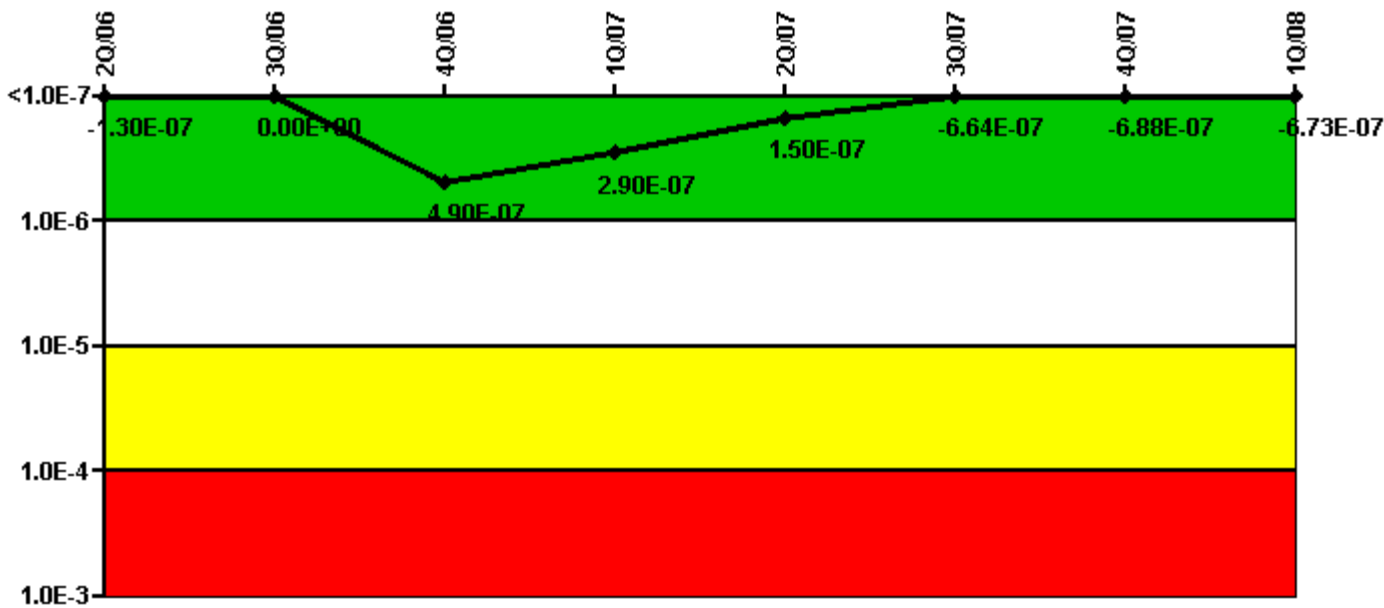
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (ΔCDF)	6.60E-11	9.50E-09	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	-4.30E-08	9.10E-08
URI (ΔCDF)	-1.50E-07	-1.50E-07	-1.50E-07	-1.40E-07	-1.50E-07	-1.50E-07	-1.60E-07	-1.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-07	-1.41E-07	-1.93E-07	-1.83E-07	-1.93E-07	-1.93E-07	-2.03E-07	-6.90E-08

Licensee Comments:

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
UAI (ΔCDF)	5.80E-07	7.10E-07	1.20E-06	1.00E-06	8.70E-07	4.60E-08	2.20E-08	3.70E-08
URI (ΔCDF)	-7.10E-07	-7.10E-07	-7.10E-07	-7.10E-07	-7.20E-07	-7.10E-07	-7.10E-07	-7.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	0.00E+00	4.90E-07	2.90E-07	1.50E-07	-6.64E-07	-6.88E-07	-6.73E-07

Licensee Comments:

1Q/08: Changed PRA Parameter(s).

1Q/08: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).

2Q/07: Changed PRA Parameter(s).

1Q/07: Changed PRA Parameter(s).

4Q/06: Changed PRA Parameter(s).

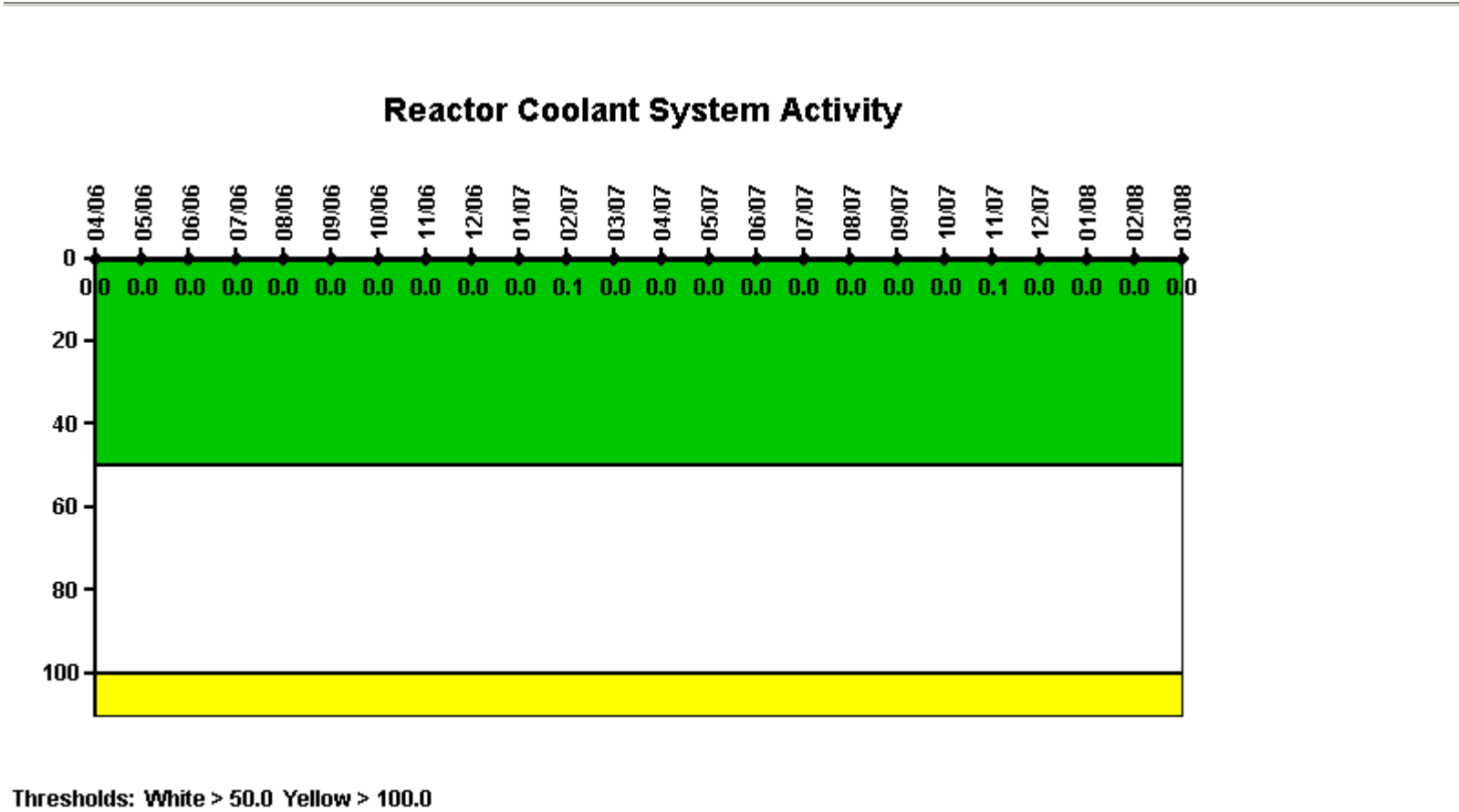
3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s). Revised PRA parameters per PRA revision 6D. Changed demand and run time

reporting from monthly actuals to estimated.

2Q/06: Corrected erroneous FV and URPC values for CC and SX from last PRA Model Update (Ref. IR #841513)

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.



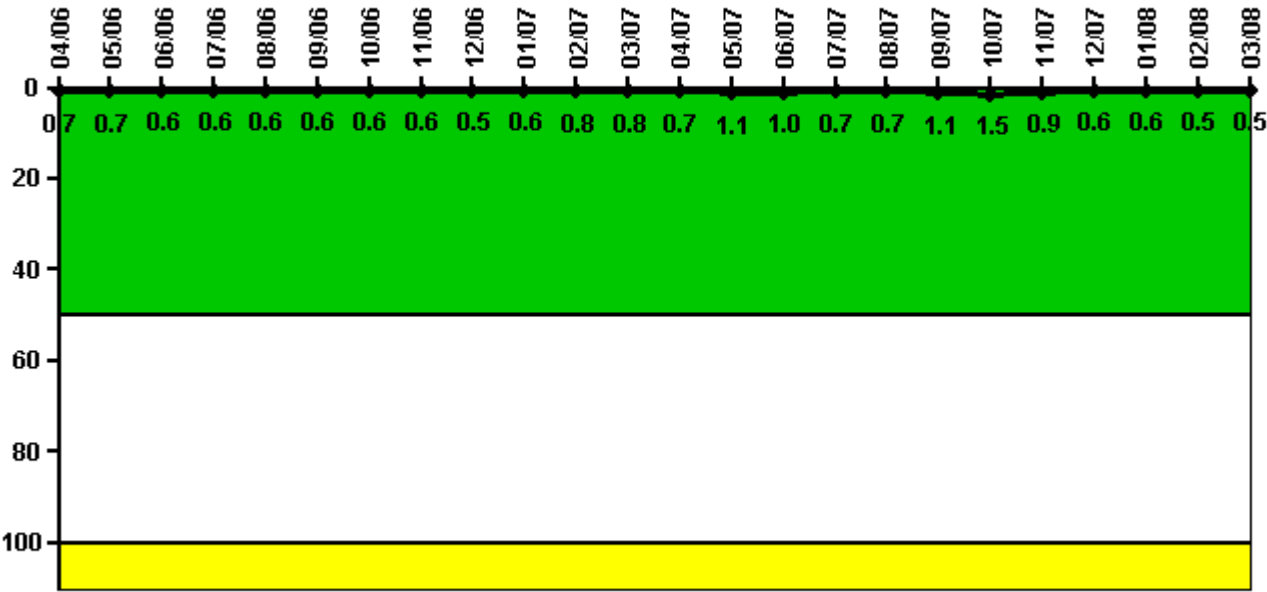
Notes

Reactor Coolant System Activity	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07
Maximum activity	0.000271	0.000266	0.000267	0.000294	0.000306	0.000292	0.000295	0.000307	0.000308	0.000315	0.000854	0.000371
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0.1	0

Reactor Coolant System Activity	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum activity	0.000273	0.000313	0.000318	0.000323	0.000317	0.000315	0.000315	0.000618	0.000339	0.000352	0.000370	0.000381
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0.1	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

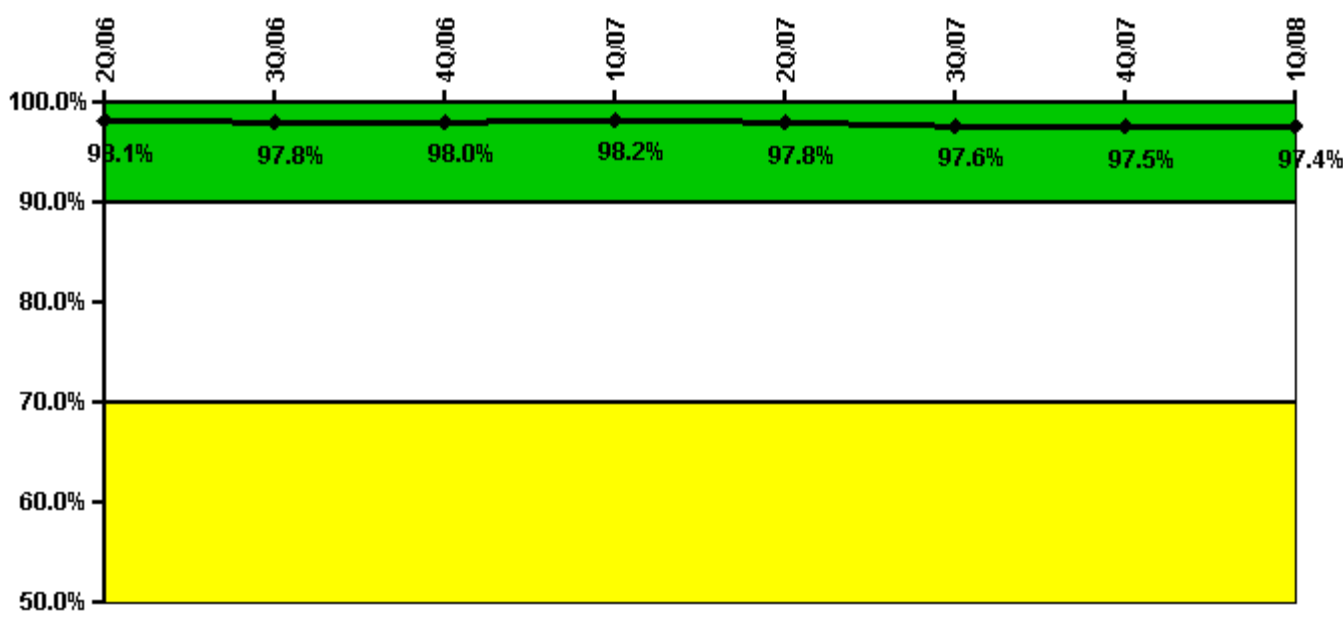
Notes

Reactor Coolant System Leakage	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06	1/07	2/07	3/07
Maximum leakage	0.071	0.068	0.061	0.063	0.058	0.062	0.061	0.059	0.054	0.061	0.078	0.076
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.8	0.8

Reactor Coolant System Leakage	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum leakage	0.072	0.109	0.096	0.066	0.072	0.106	0.153	0.088	0.060	0.061	0.054	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	1.1	1.0	0.7	0.7	1.1	1.5	0.9	0.6	0.6	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



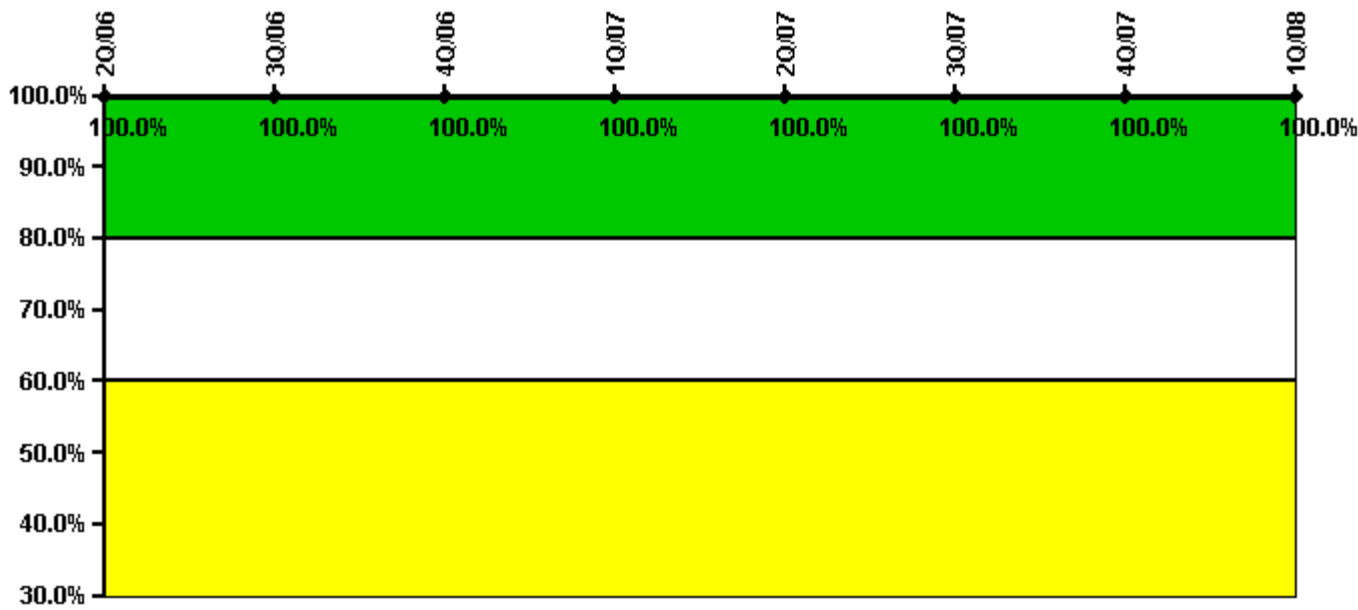
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Successful opportunities	12.0	136.0	40.0	10.0	45.0	43.0	88.0	4.0
Total opportunities	12.0	139.0	40.0	10.0	49.0	44.0	90.0	4.0
Indicator value	98.1%	97.8%	98.0%	98.2%	97.8%	97.6%	97.5%	97.4%

Licensee Comments: none

ERO Drill Participation



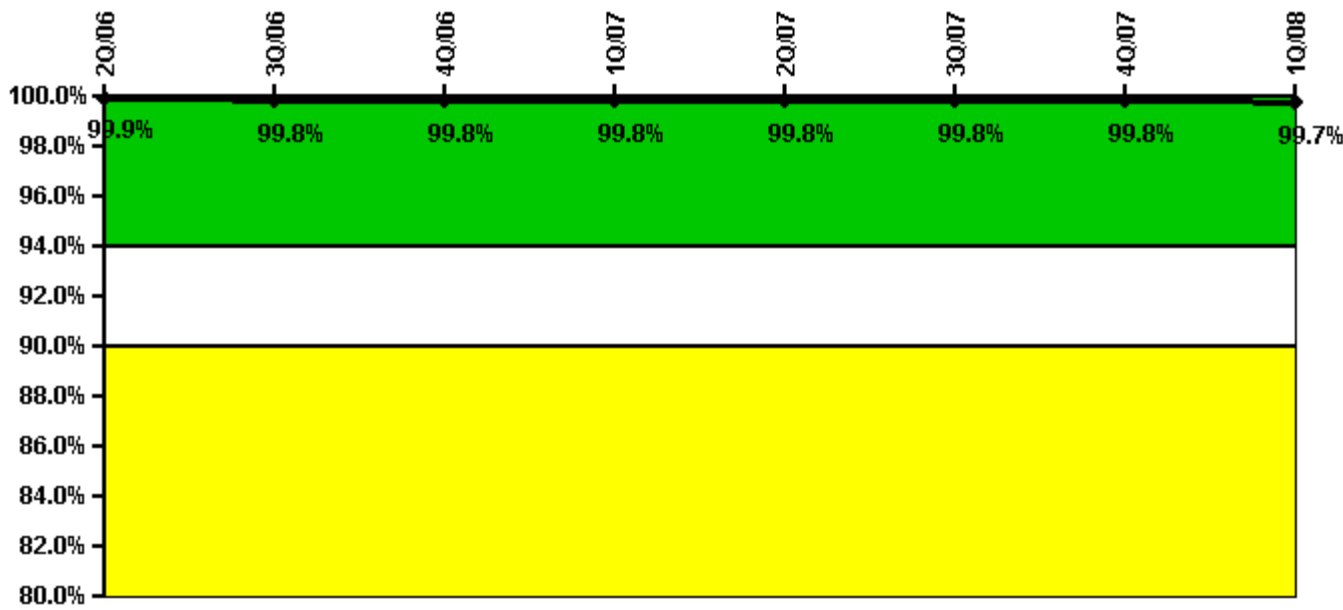
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Participating Key personnel	78.0	76.0	76.0	71.0	66.0	75.0	75.0	74.0
Total Key personnel	78.0	76.0	76.0	71.0	66.0	75.0	75.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



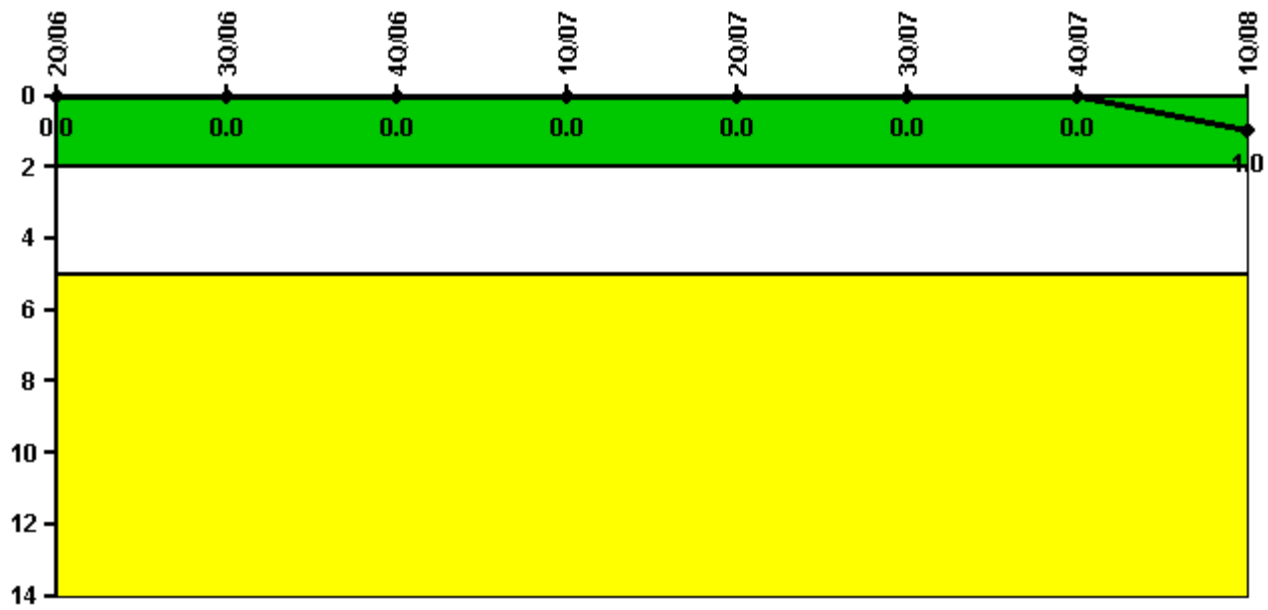
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
Successful siren-tests	6005	5988	5915	6008	5985	5988	5997	5996
Total sirens-tests	6012	6012	5922	6016	6005	6009	6007	6011
Indicator value	99.9%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%

Licensee Comments: none

Occupational Exposure Control Effectiveness



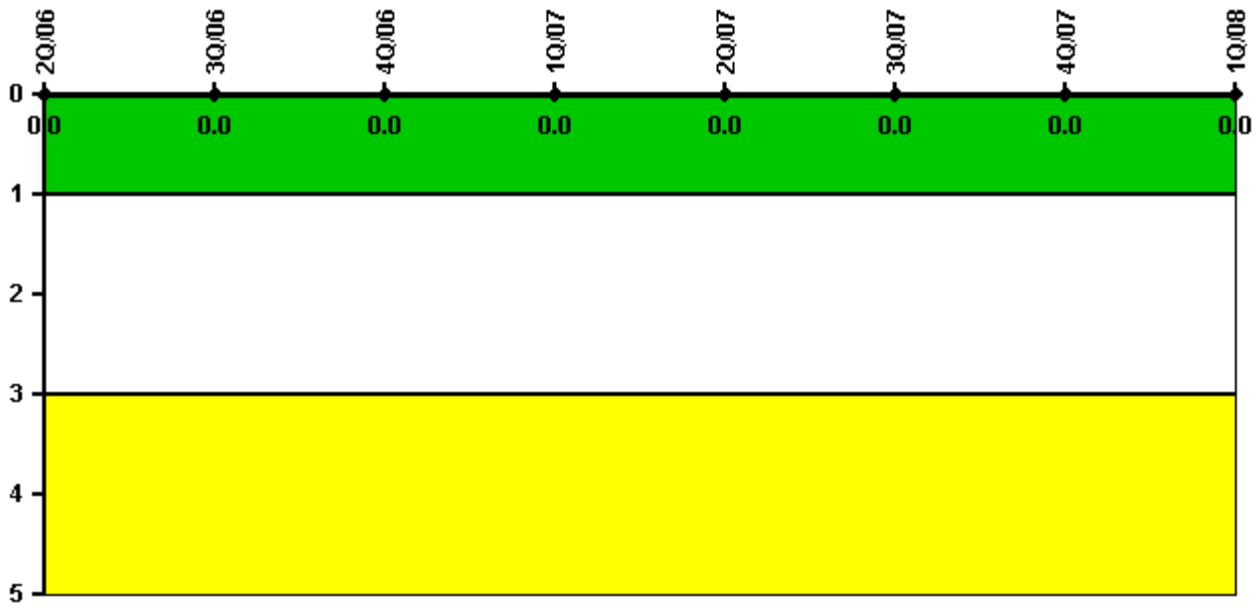
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
High radiation area occurrences	0	0	0	0	0	0	0	1
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	1

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

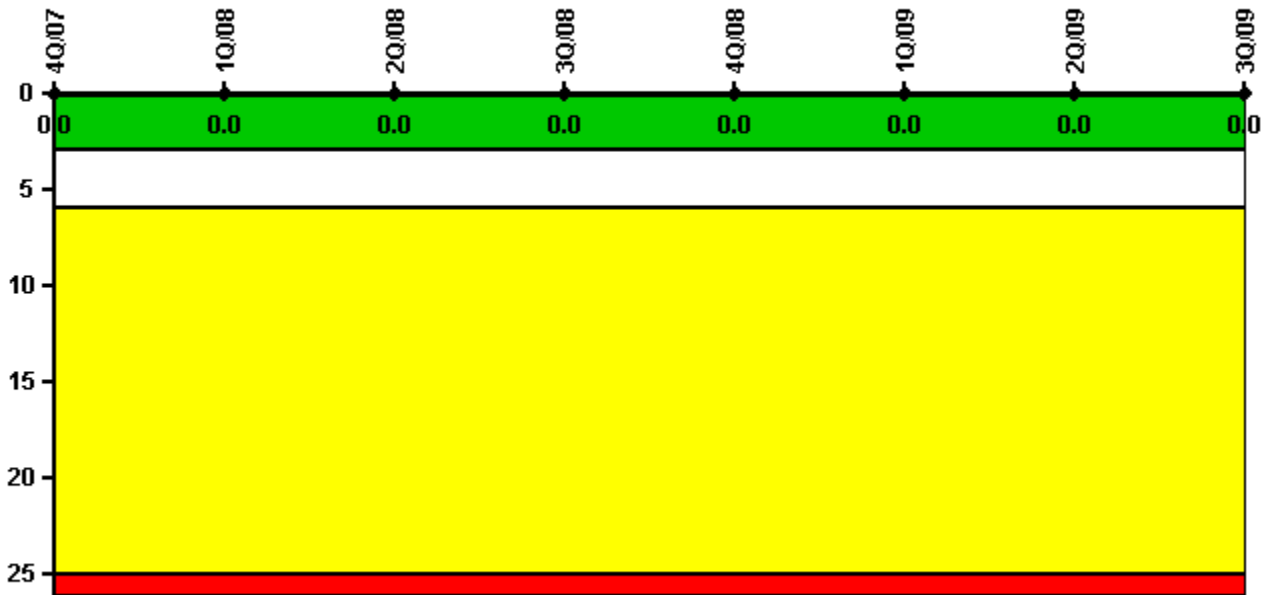
[Security](#) information not publicly available.

Byron 2

3Q/2009 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



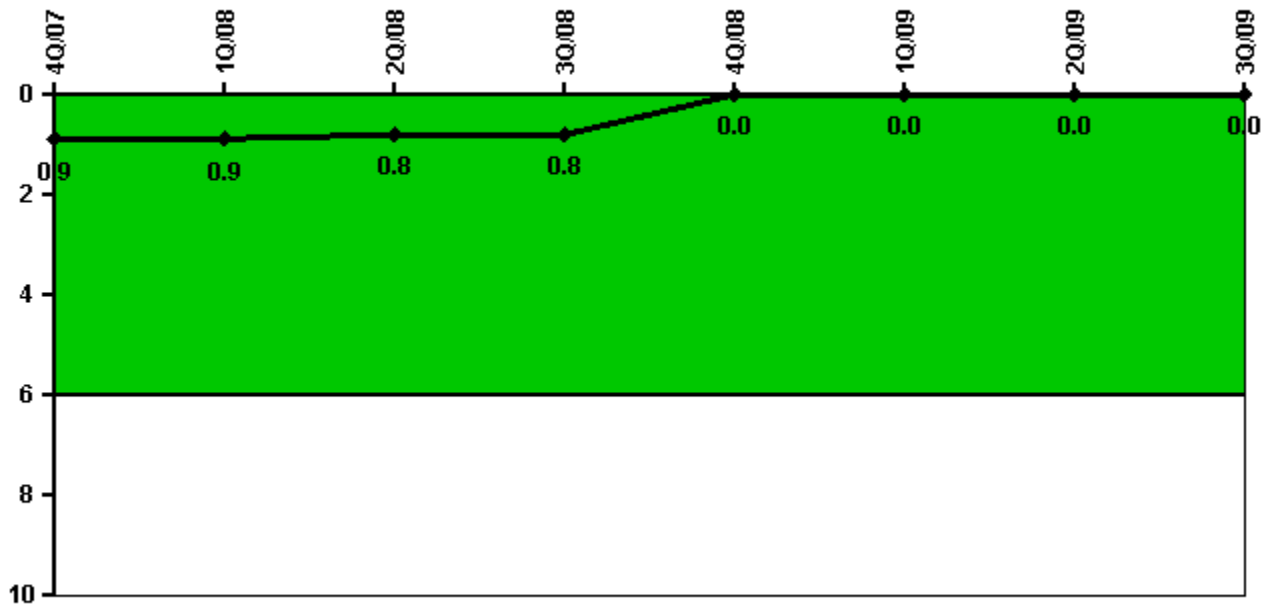
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1949.4	2183.0	2184.0	2208.0	1774.2	2159.0	2184.0	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



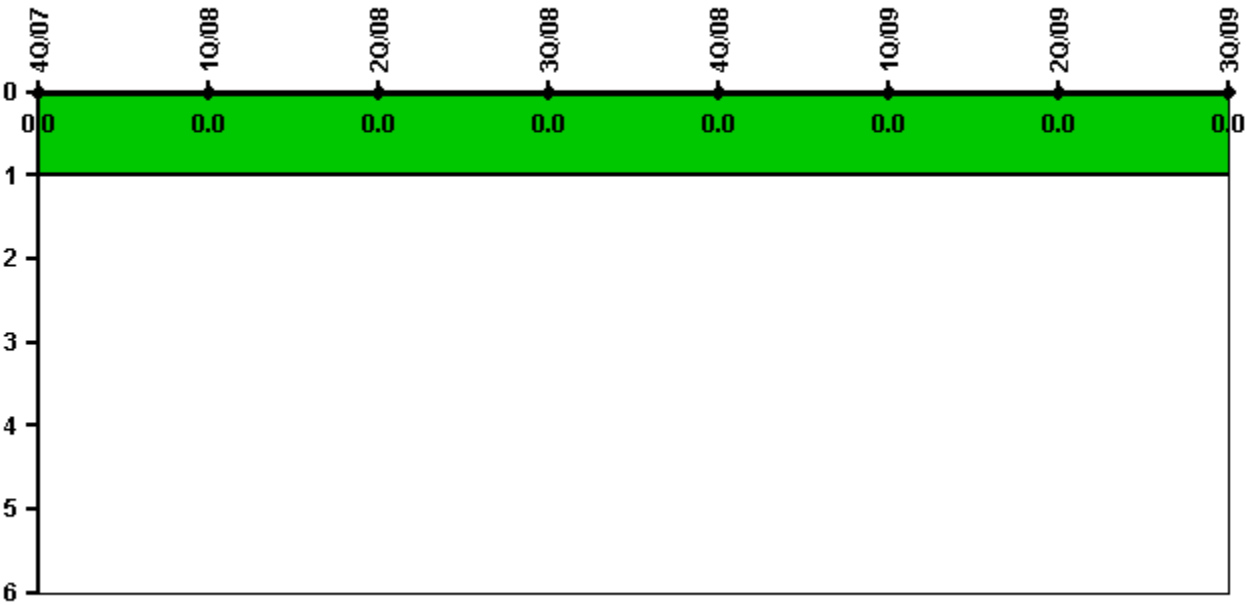
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	1949.4	2183.0	2184.0	2208.0	1774.2	2159.0	2184.0	2208.0
Indicator value	0.9	0.9	0.8	0.8	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



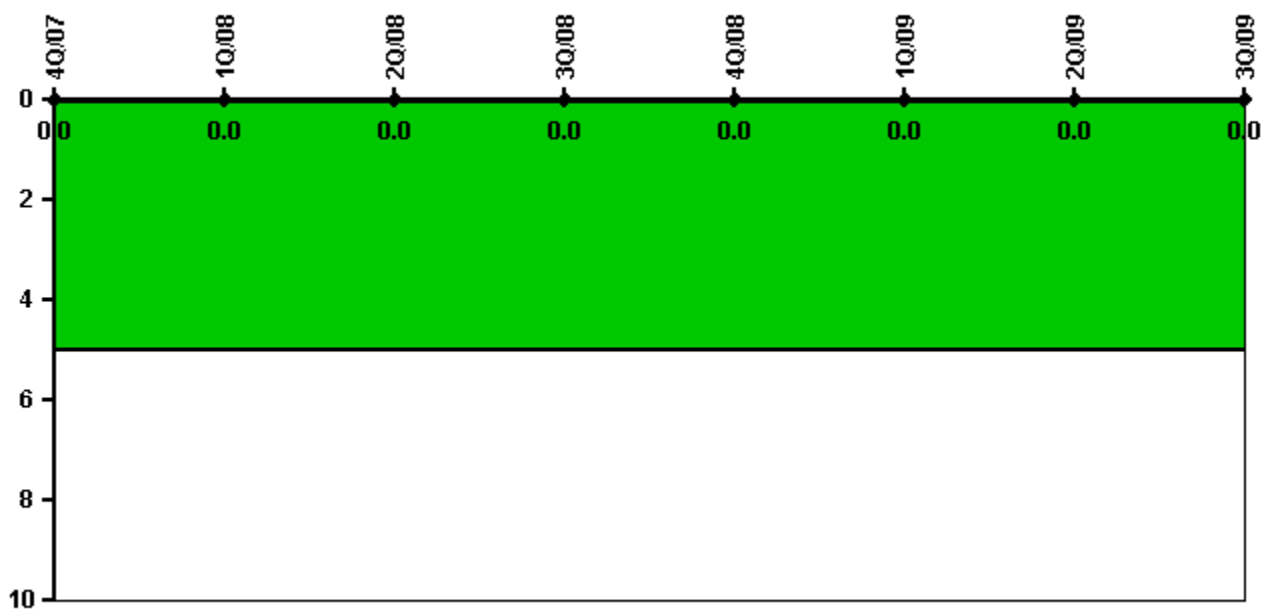
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



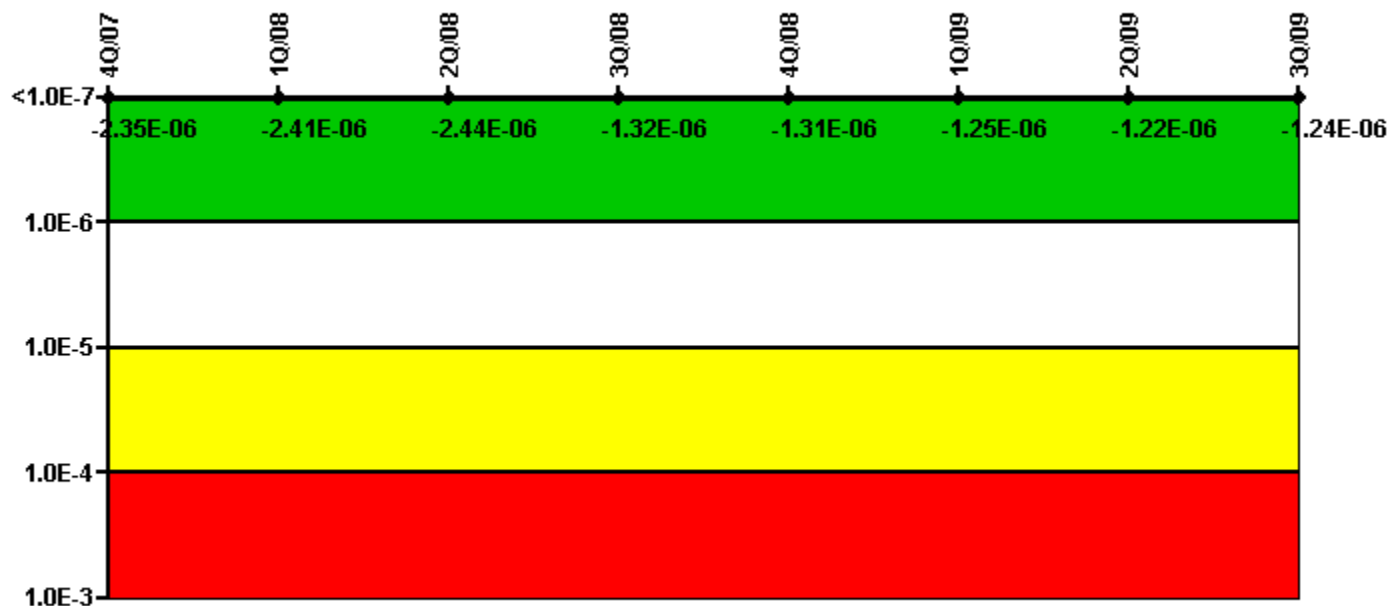
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



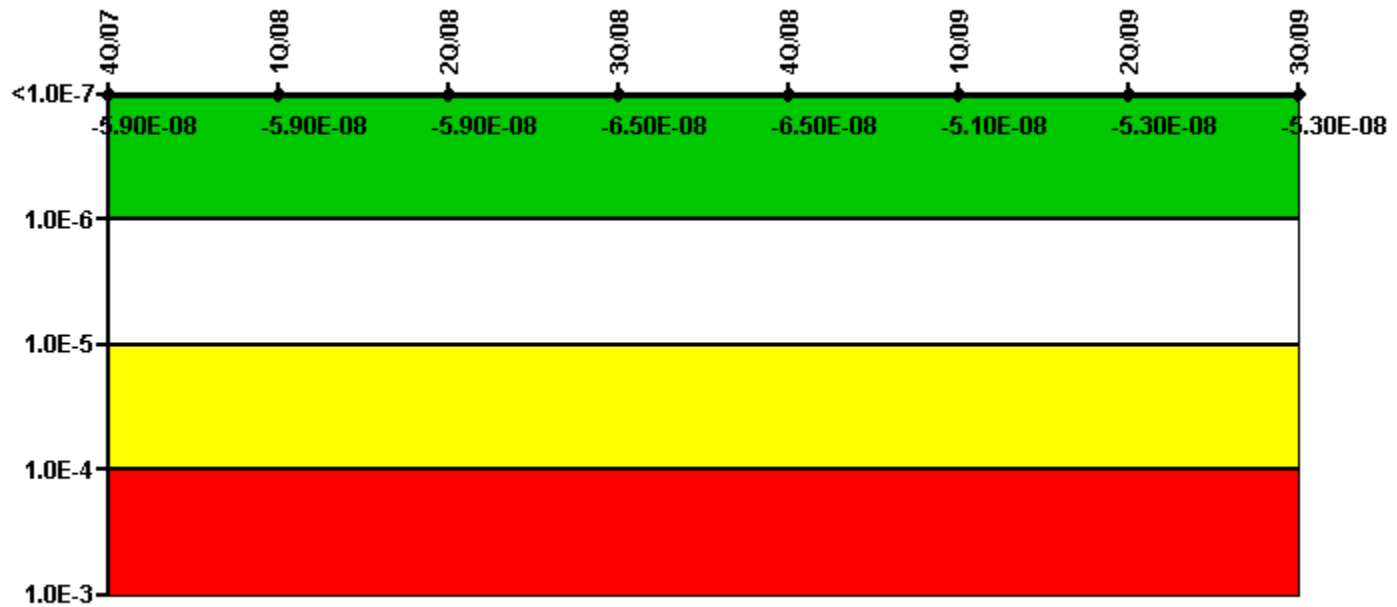
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI (Δ CDF)	4.80E-08	-9.00E-09	-4.10E-08	-2.10E-08	-7.10E-09	5.30E-08	7.70E-08	6.50E-08
URI (Δ CDF)	-2.40E-06	-2.40E-06	-2.40E-06	-1.30E-06	-1.30E-06	-1.30E-06	-1.30E-06	-1.30E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.35E-06	-2.41E-06	-2.44E-06	-1.32E-06	-1.31E-06	-1.25E-06	-1.22E-06	-1.24E-06

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



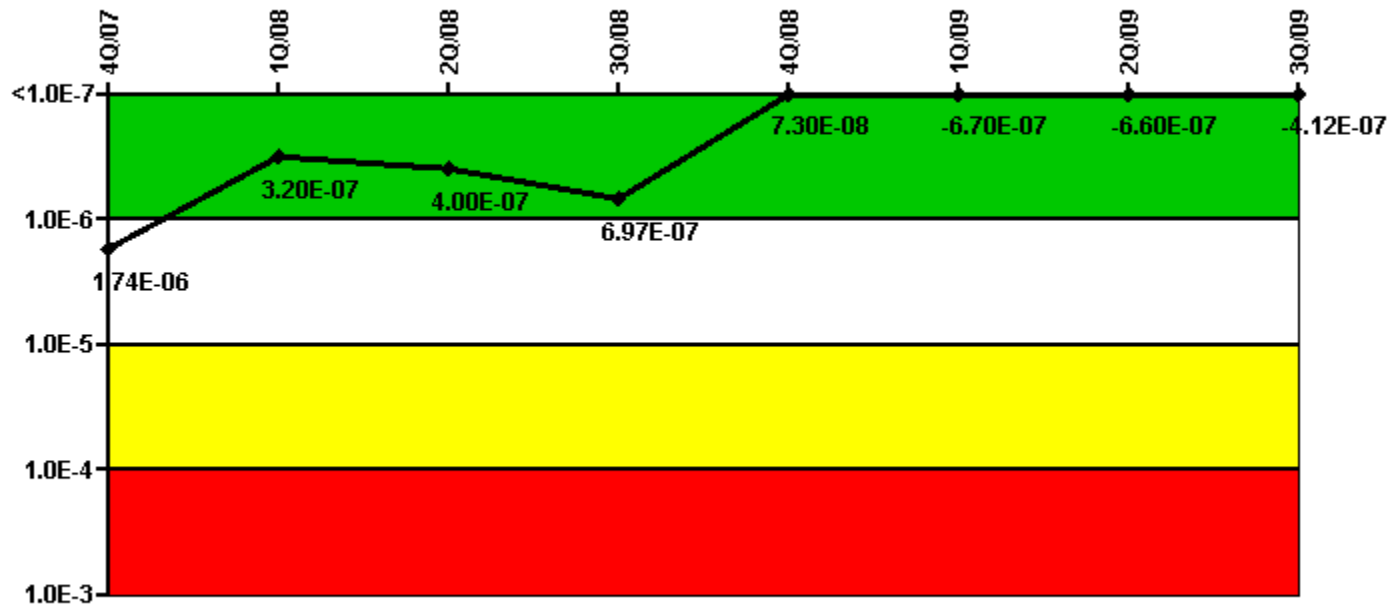
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI (Δ CDF)	-4.20E-08	-4.20E-08	-4.20E-08	-5.40E-08	-5.40E-08	-4.10E-08	-4.30E-08	-4.30E-08
URI (Δ CDF)	-1.70E-08	-1.70E-08	-1.70E-08	-1.10E-08	-1.10E-08	-1.00E-08	-1.00E-08	-1.00E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.90E-08	-5.90E-08	-5.90E-08	-6.50E-08	-6.50E-08	-5.10E-08	-5.30E-08	-5.30E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



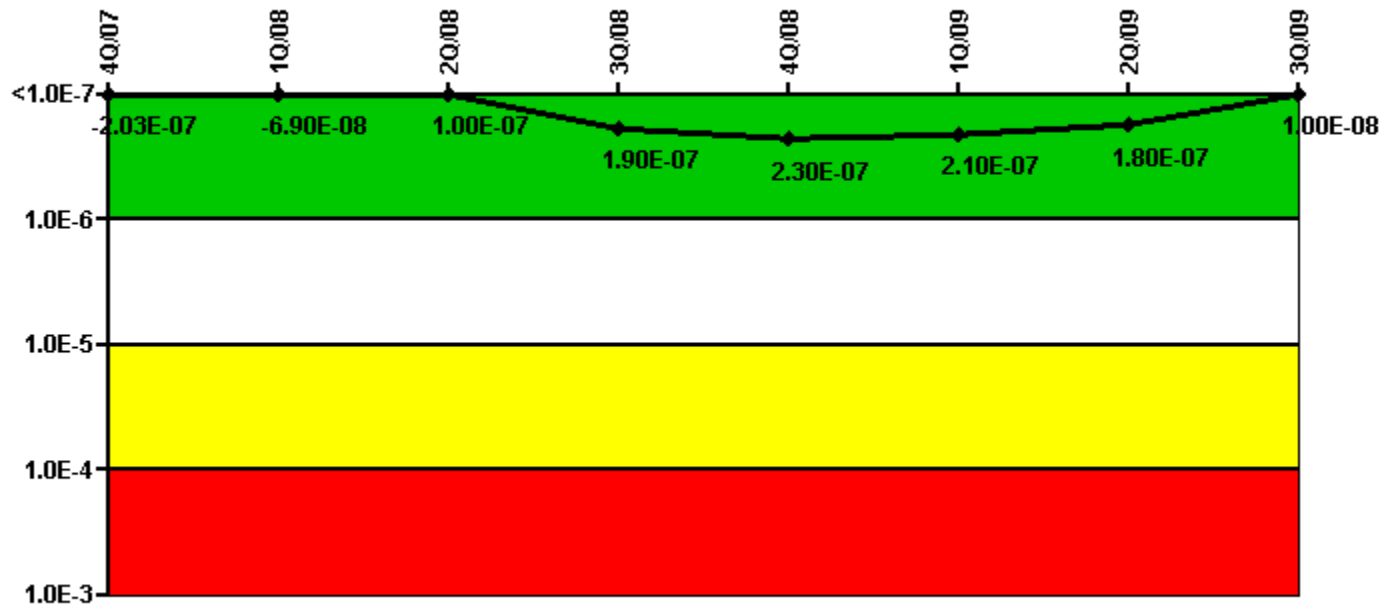
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI (Δ CDF)	-1.60E-07	-3.10E-07	-3.10E-07	-6.30E-08	-6.70E-08	-1.60E-07	-1.60E-07	9.80E-08
URI (Δ CDF)	1.90E-06	6.30E-07	7.10E-07	7.60E-07	1.40E-07	-5.10E-07	-5.00E-07	-5.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.74E-06	3.20E-07	4.00E-07	6.97E-07	7.30E-08	-6.70E-07	-6.60E-07	-4.12E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



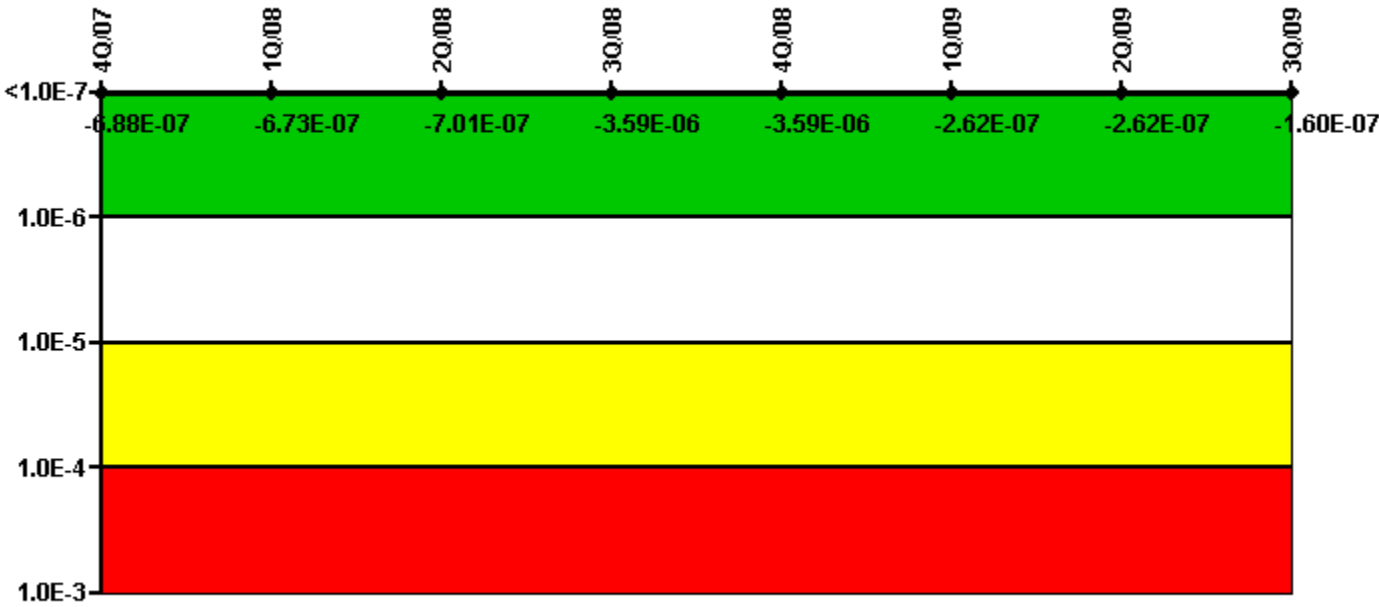
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI (Δ CDF)	-4.30E-08	9.10E-08	2.60E-07	3.10E-07	3.70E-07	3.50E-07	3.20E-07	1.50E-07
URI (Δ CDF)	-1.60E-07	-1.60E-07	-1.60E-07	-1.20E-07	-1.40E-07	-1.40E-07	-1.40E-07	-1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.03E-07	-6.90E-08	1.00E-07	1.90E-07	2.30E-07	2.10E-07	1.80E-07	1.00E-08

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



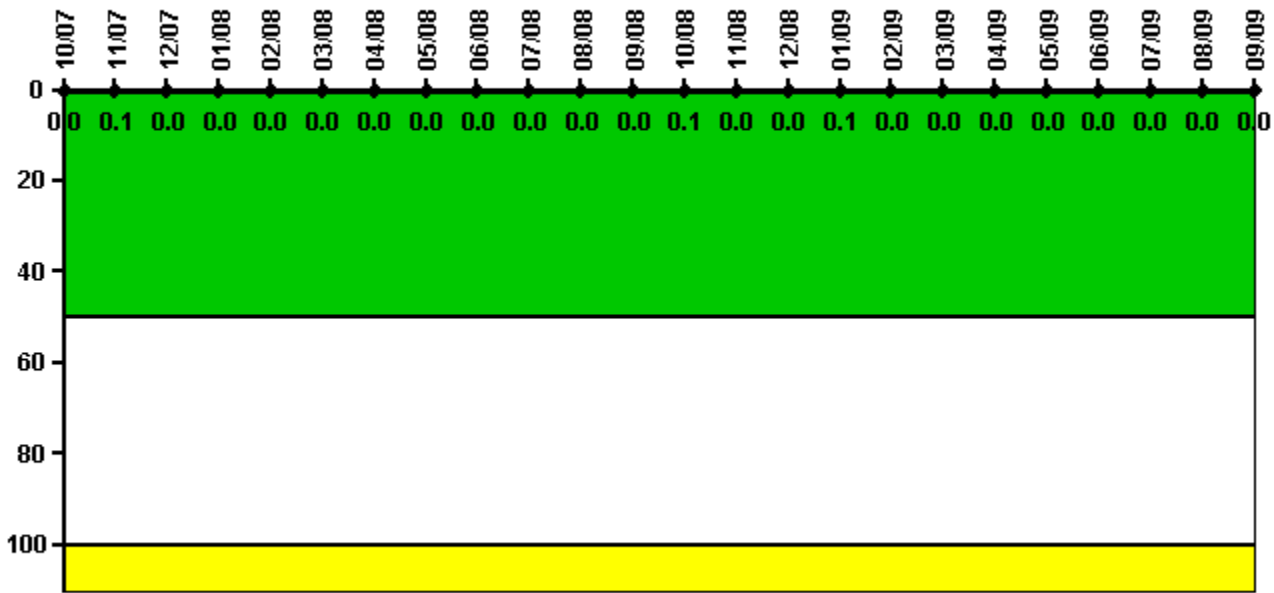
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI (ΔCDF)	2.20E-08	3.70E-08	9.10E-09	7.90E-09	8.00E-09	7.80E-09	7.80E-09	1.10E-07
URI (ΔCDF)	-7.10E-07	-7.10E-07	-7.10E-07	-3.60E-06	-3.60E-06	-2.70E-07	-2.70E-07	-2.70E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.88E-07	-6.73E-07	-7.01E-07	-3.59E-06	-3.59E-06	-2.62E-07	-2.62E-07	-1.60E-07

Licensee Comments: none

Reactor Coolant System Activity



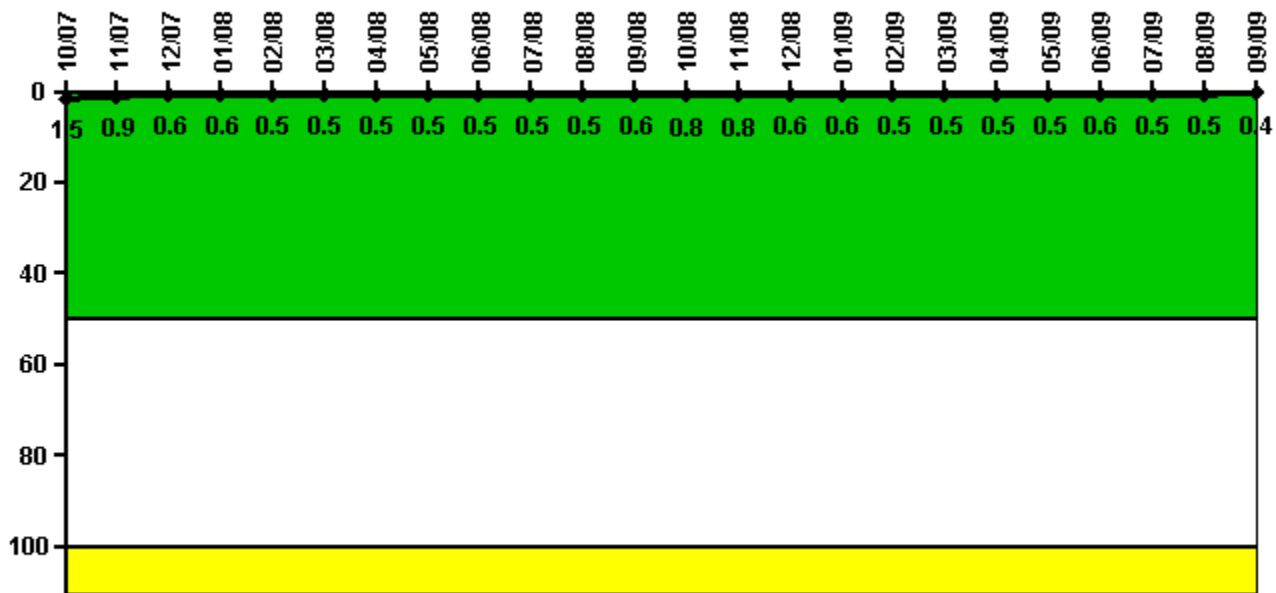
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08
Maximum activity	0.000315	0.000618	0.000339	0.000352	0.000370	0.000381	0.000383	0.000383	0.000399	0.000405	0.000405	0.000419
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09
Maximum activity	0.000635	0.000373	0.000315	0.000558	0.000334	0.000343	0.000347	0.000369	0.000385	0.000406	0.000420	0.000443
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0.1	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



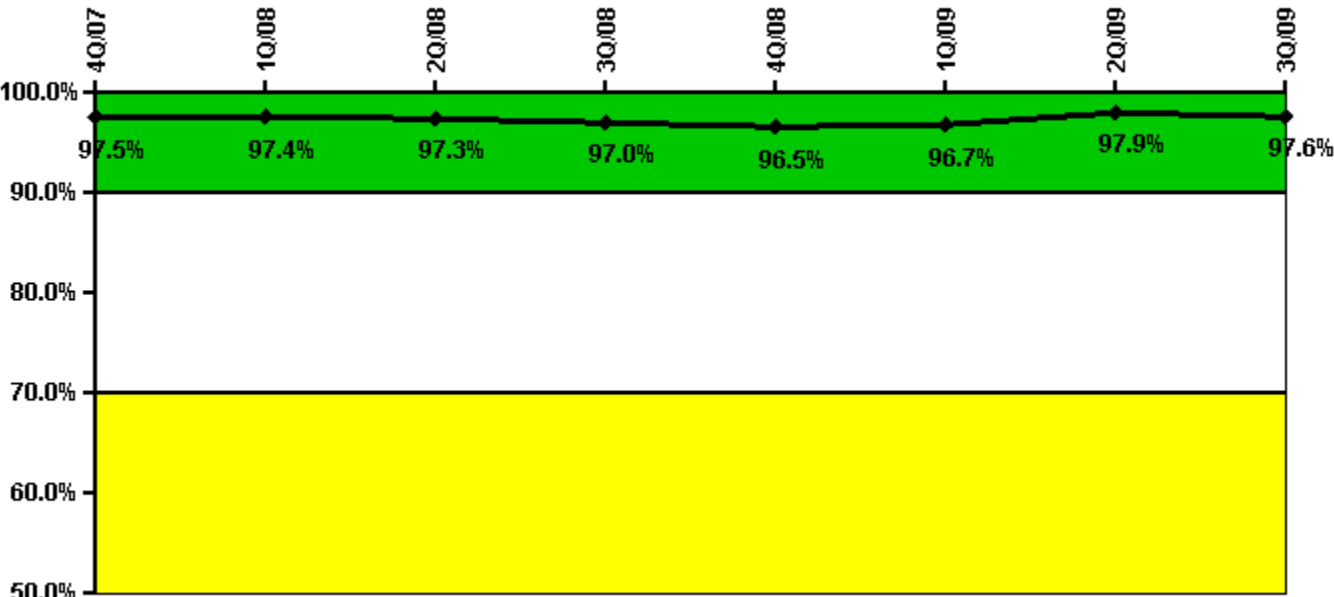
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08
Maximum leakage	0.153	0.088	0.060	0.061	0.054	0.050	0.049	0.046	0.047	0.047	0.054	0.058
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.5	0.9	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
Reactor Coolant System Leakage	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09
Maximum leakage	0.078	0.076	0.059	0.062	0.052	0.046	0.051	0.048	0.055	0.048	0.047	0.040
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4

Licensee Comments: none

Drill/Exercise Performance



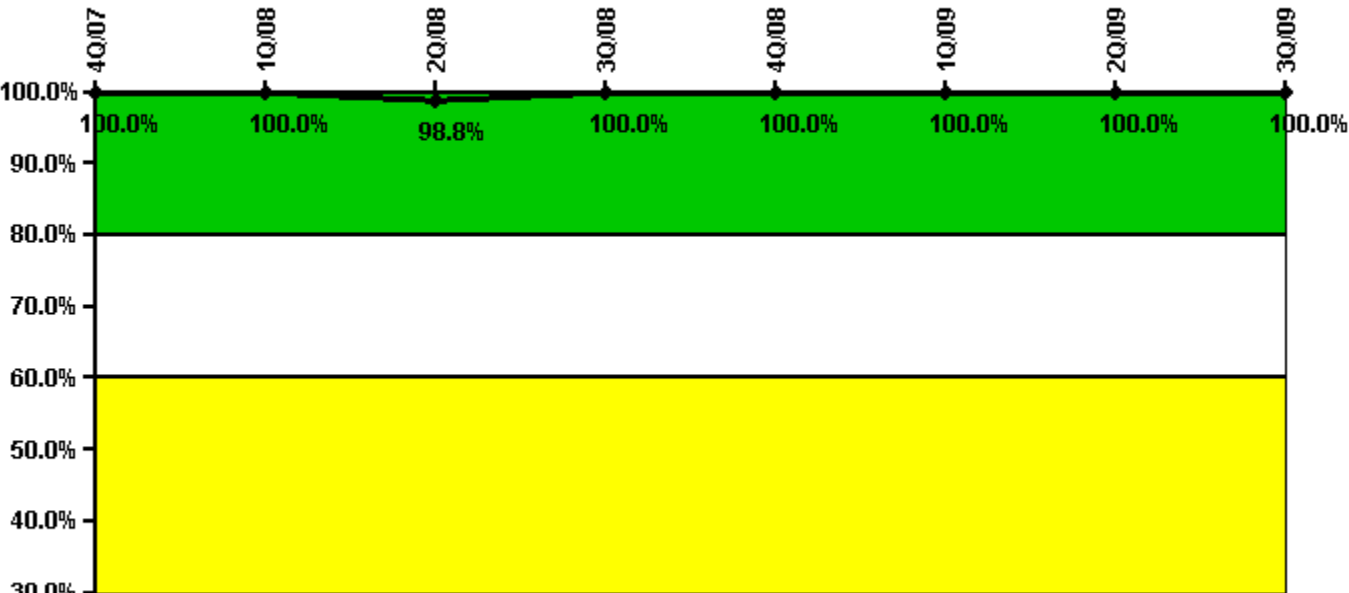
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Successful opportunities	88.0	4.0	27.0	62.0	53.0	30.0	62.0	40.0
Total opportunities	90.0	4.0	28.0	64.0	55.0	30.0	62.0	42.0
Indicator value	97.5%	97.4%	97.3%	97.0%	96.5%	96.7%	97.9%	97.6%

Licensee Comments: none

ERO Drill Participation



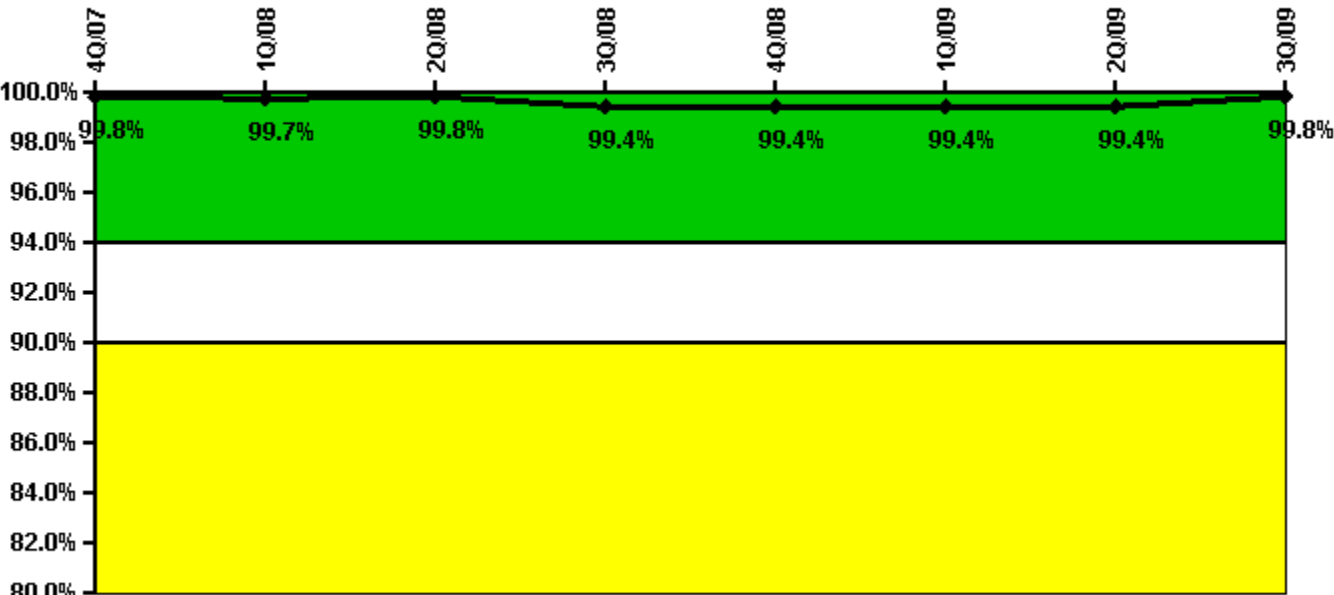
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Participating Key personnel	75.0	74.0	80.0	83.0	82.0	78.0	77.0	76.0
Total Key personnel	75.0	74.0	81.0	83.0	82.0	78.0	77.0	76.0
Indicator value	100.0%	100.0%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



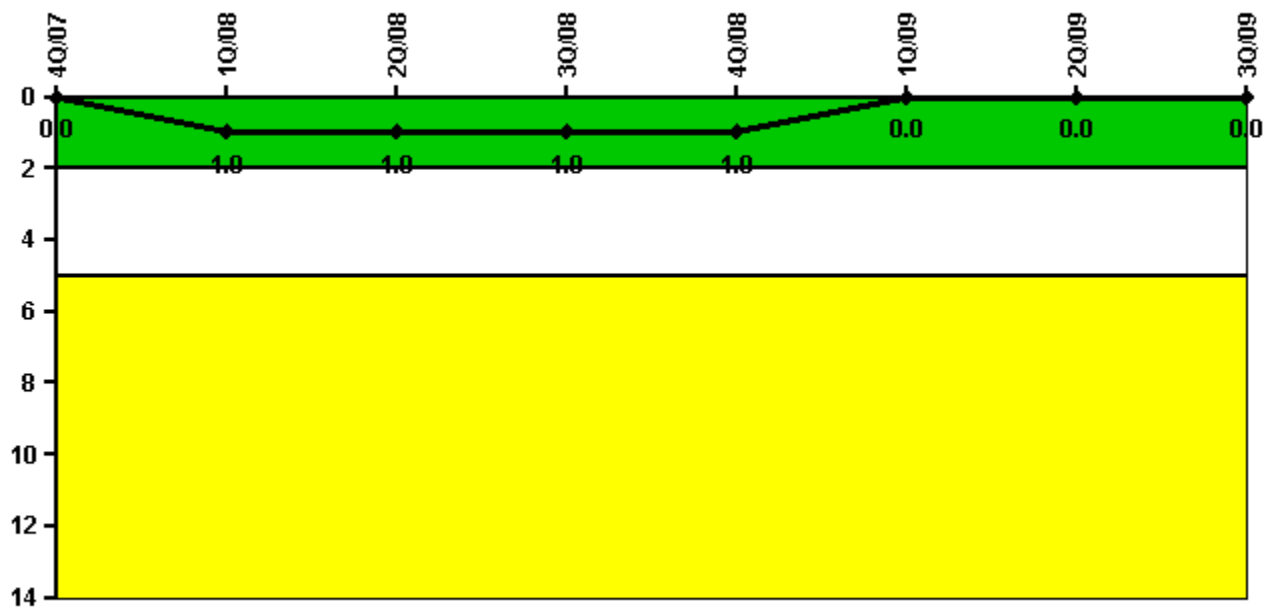
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Successful siren-tests	5997	5996	6003	6006	5995	5915	6006	6106
Total sirens-tests	6007	6011	6016	6108	6016	5922	6016	6110
Indicator value	99.8%	99.7%	99.8%	99.4%	99.4%	99.4%	99.4%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



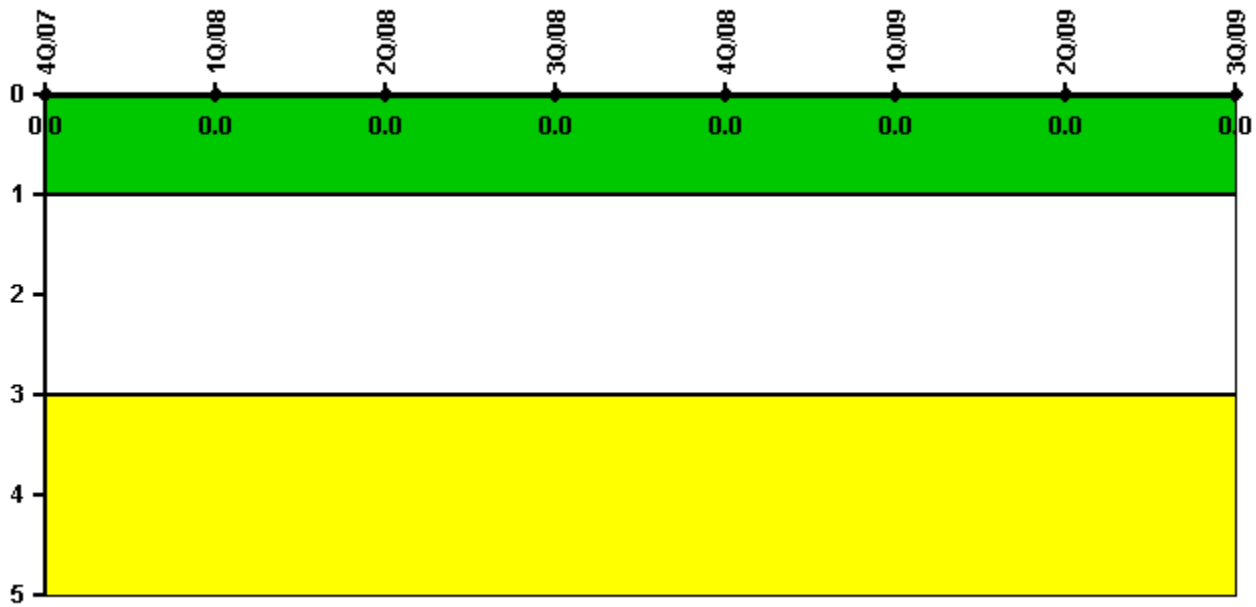
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
High radiation area occurrences	0	1	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	1	1	1	1	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

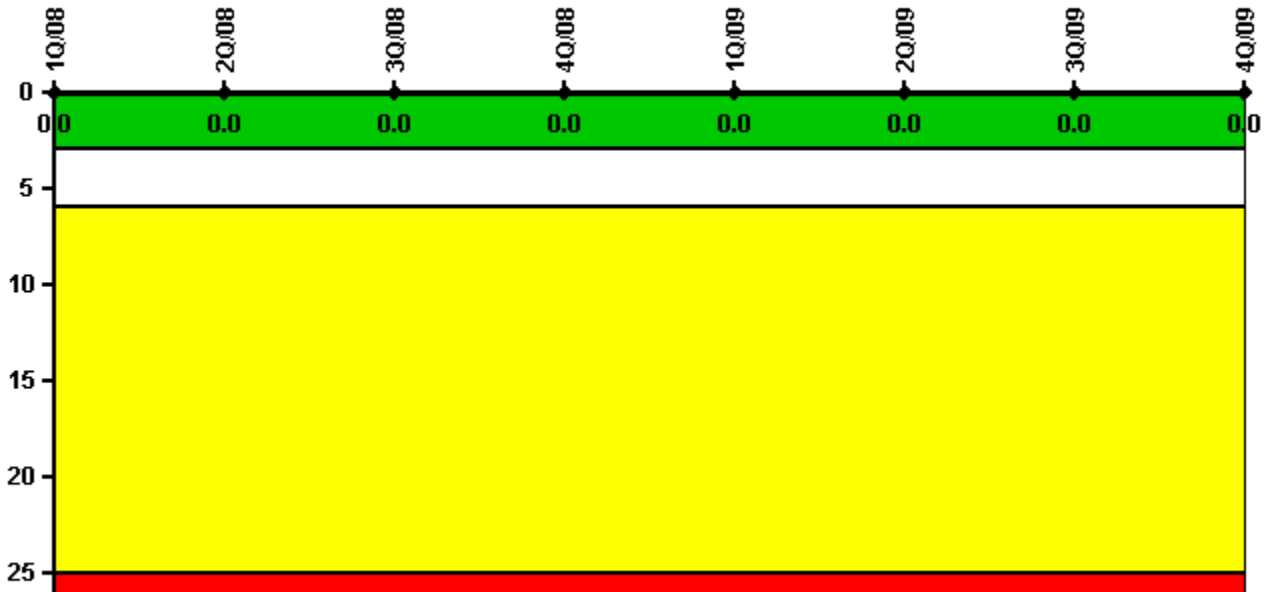
[Security](#) information not publicly available.

Byron 2

4Q/2009 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



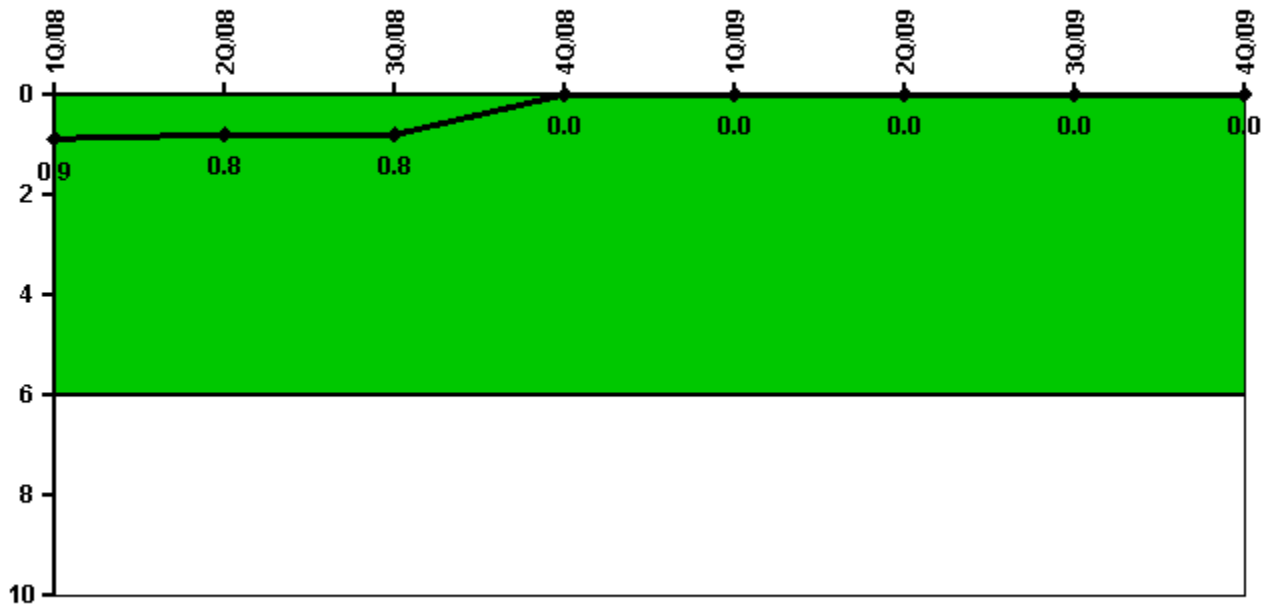
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2184.0	2208.0	1774.2	2159.0	2184.0	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



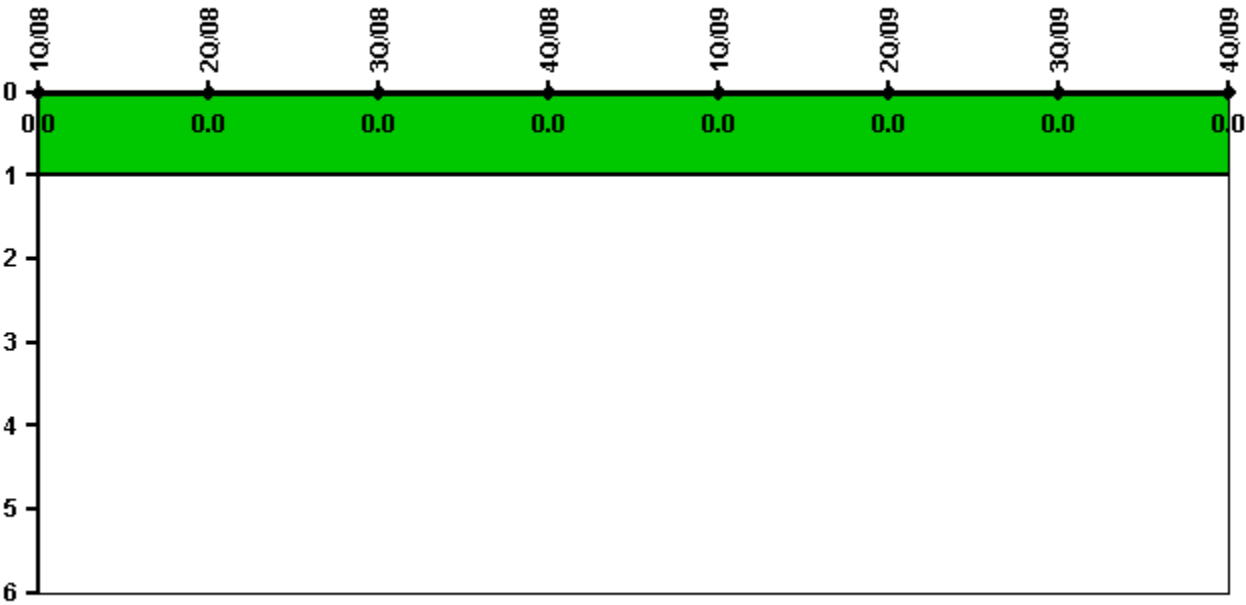
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2183.0	2184.0	2208.0	1774.2	2159.0	2184.0	2208.0	2209.0
Indicator value	0.9	0.8	0.8	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



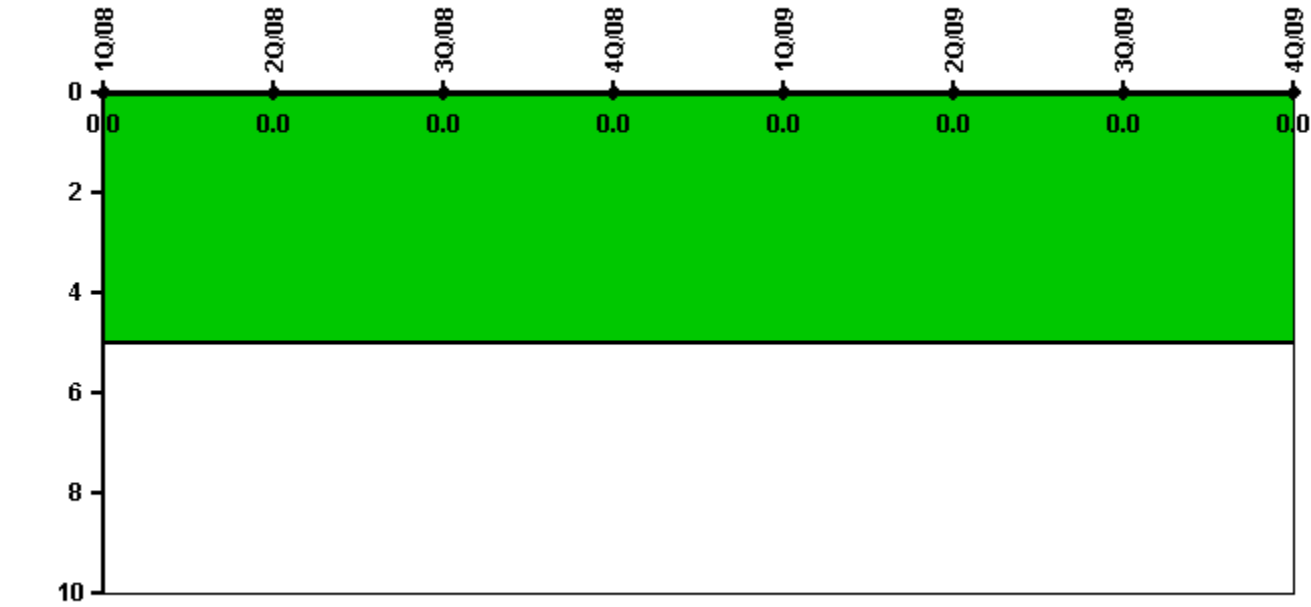
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



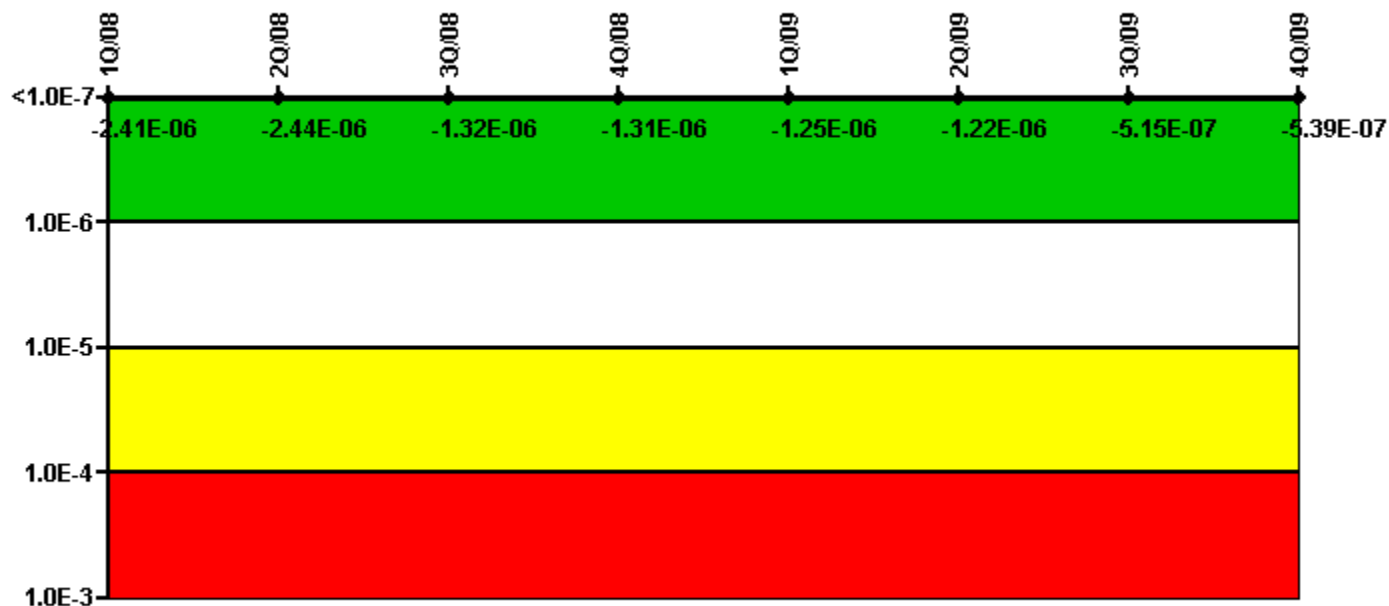
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

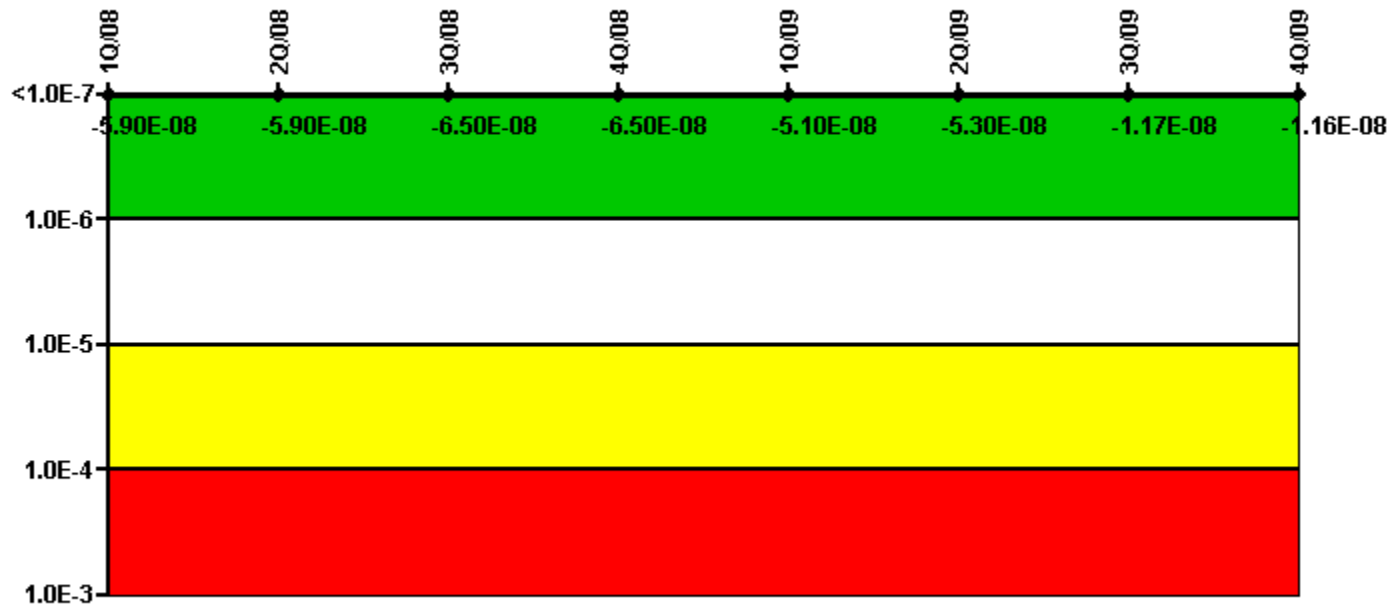
Mitigating Systems Performance Index, Emergency AC Power System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (Δ CDF)	-9.00E-09	-4.10E-08	-2.10E-08	-7.10E-09	5.30E-08	7.70E-08	5.50E-08	3.10E-08
URI (Δ CDF)	-2.40E-06	-2.40E-06	-1.30E-06	-1.30E-06	-1.30E-06	-1.30E-06	-5.70E-07	-5.70E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.41E-06	-2.44E-06	-1.32E-06	-1.31E-06	-1.25E-06	-1.22E-06	-5.15E-07	-5.39E-07

Licensee Comments:

4Q/09: Changed PRA Parameter(s).

3Q/09: Changed PRA Parameter(s). Incorporated Basis Doc Revision 4 changes resulting from PRA Model revision 6e which incorporated a change to DG mission time and addition of A Train AF cross-tie.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

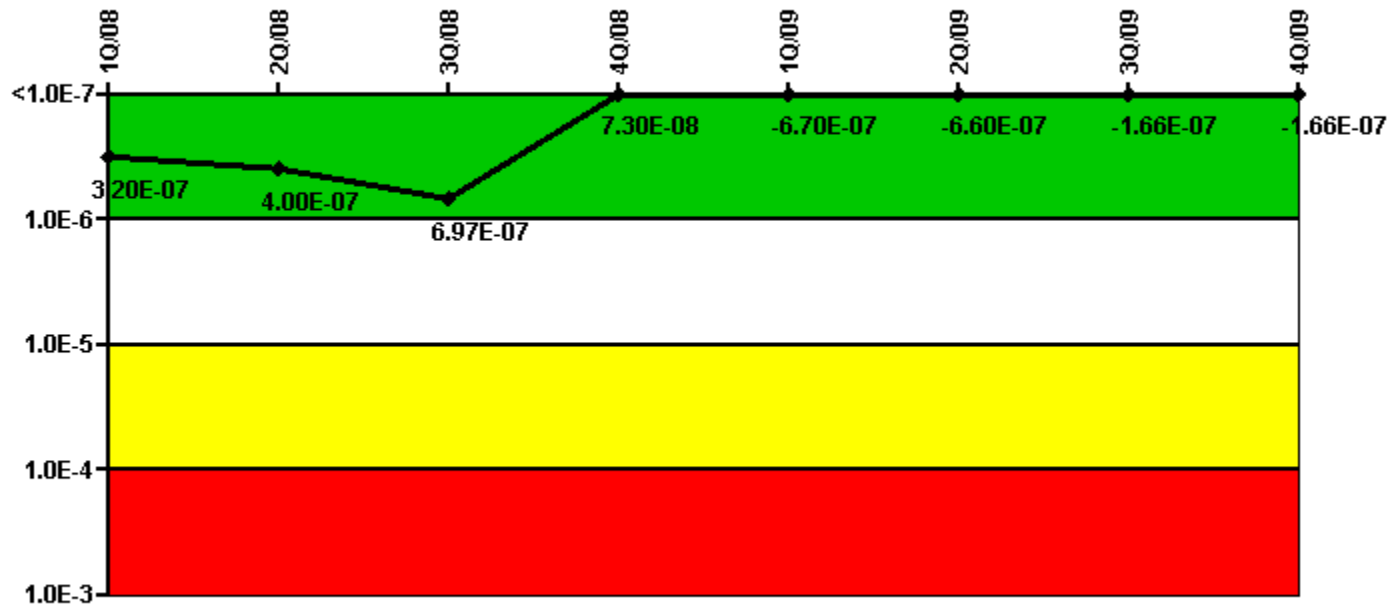
Mitigating Systems Performance Index, High Pressure Injection System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	-4.20E-08	-4.20E-08	-5.40E-08	-5.40E-08	-4.10E-08	-4.30E-08	-9.20E-09	-9.20E-09
URI (ΔCDF)	-1.70E-08	-1.70E-08	-1.10E-08	-1.10E-08	-1.00E-08	-1.00E-08	-2.50E-09	-2.40E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.90E-08	-5.90E-08	-6.50E-08	-6.50E-08	-5.10E-08	-5.30E-08	-1.17E-08	-1.16E-08

Licensee Comments:

4Q/09: Changed PRA Parameter(s).

3Q/09: Changed PRA Parameter(s). Incorporated Basis Doc Revision 4 changes resulting from PRA Model revision 6e which incorporated a change to DG mission time and addition of A Train AF cross-tie.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

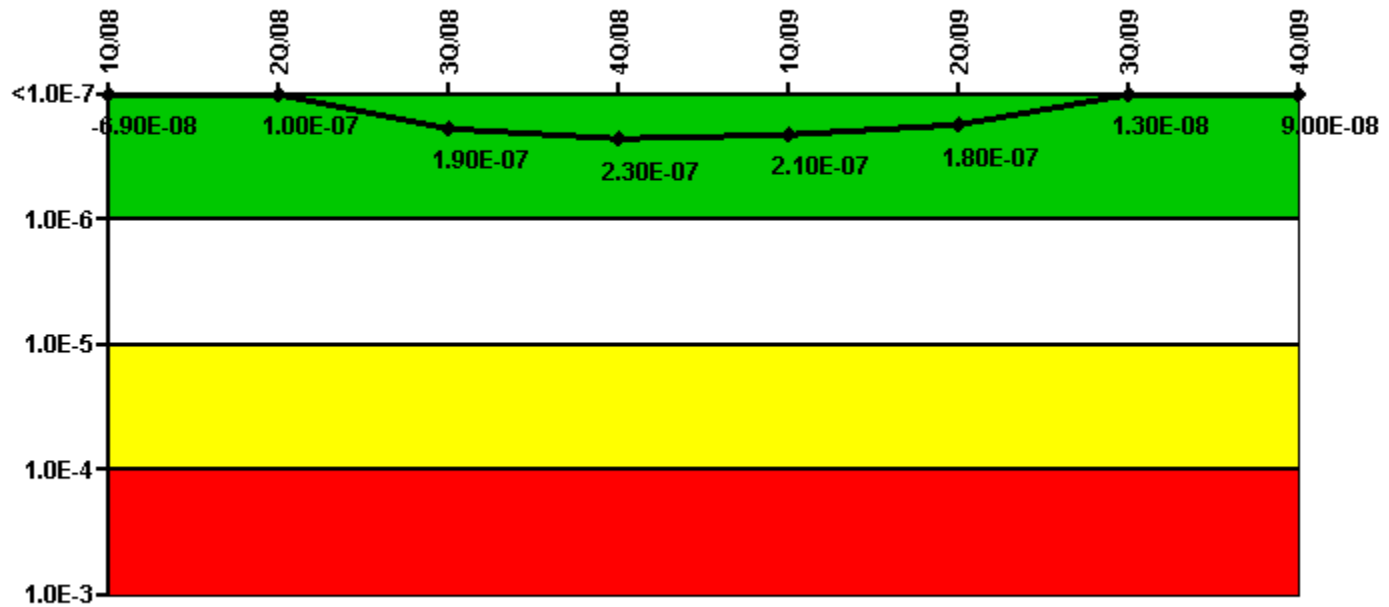
Mitigating Systems Performance Index, Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (Δ CDF)	-3.10E-07	-3.10E-07	-6.30E-08	-6.70E-08	-1.60E-07	-1.60E-07	7.40E-08	7.40E-08
URI (Δ CDF)	6.30E-07	7.10E-07	7.60E-07	1.40E-07	-5.10E-07	-5.00E-07	-2.40E-07	-2.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.20E-07	4.00E-07	6.97E-07	7.30E-08	-6.70E-07	-6.60E-07	-1.66E-07	-1.66E-07

Licensee Comments:

4Q/09: Changed PRA Parameter(s).

3Q/09: Changed PRA Parameter(s). Incorporated Basis Doc Revision 4 changes resulting from PRA Model revision 6e which incorporated a change to DG mission time and addition of A Train AF cross-tie.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

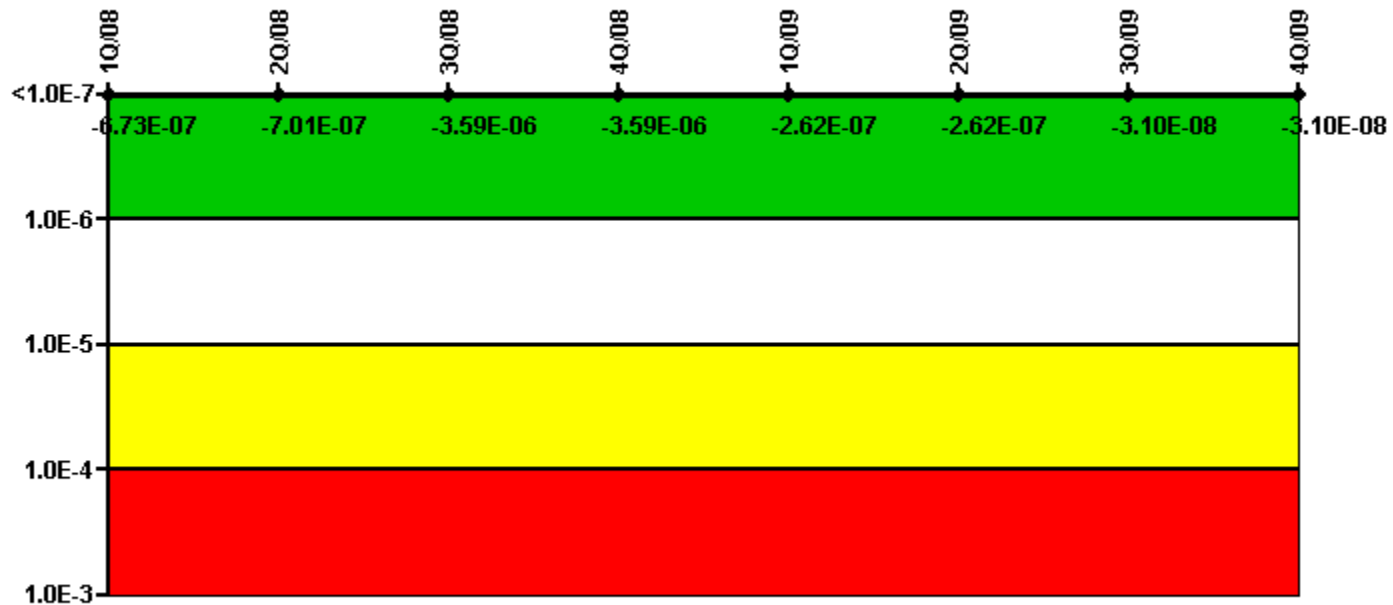
Mitigating Systems Performance Index, Residual Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	9.10E-08	2.60E-07	3.10E-07	3.70E-07	3.50E-07	3.20E-07	1.10E-07	1.90E-07
URI (ΔCDF)	-1.60E-07	-1.60E-07	-1.20E-07	-1.40E-07	-1.40E-07	-1.40E-07	-9.70E-08	-1.00E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.90E-08	1.00E-07	1.90E-07	2.30E-07	2.10E-07	1.80E-07	1.30E-08	9.00E-08

Licensee Comments:

4Q/09: Changed PRA Parameter(s).

3Q/09: Changed PRA Parameter(s). Incorporated Basis Doc Revision 4 changes resulting from PRA Model revision 6e which incorporated a change to DG mission time and addition of A Train AF cross-tie.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

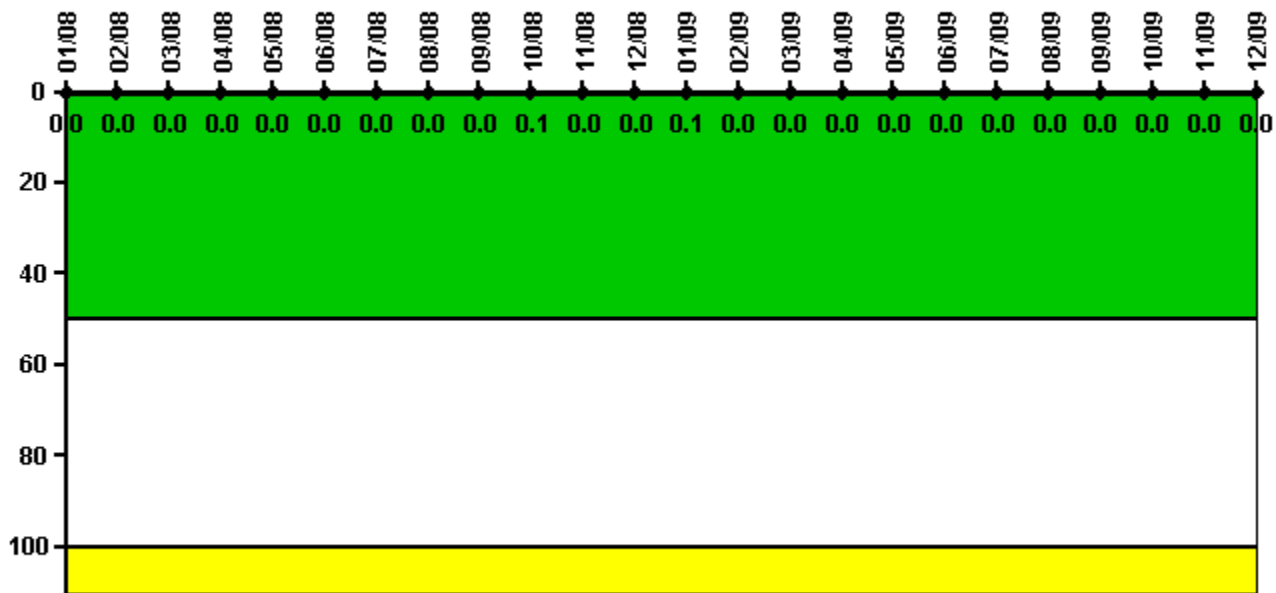
Mitigating Systems Performance Index, Cooling Water Systems	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	3.70E-08	9.10E-09	7.90E-09	8.00E-09	7.80E-09	7.80E-09	7.90E-08	7.90E-08
URI (ΔCDF)	-7.10E-07	-7.10E-07	-3.60E-06	-3.60E-06	-2.70E-07	-2.70E-07	-1.10E-07	-1.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.73E-07	-7.01E-07	-3.59E-06	-3.59E-06	-2.62E-07	-2.62E-07	-3.10E-08	-3.10E-08

Licensee Comments:

4Q/09: Changed PRA Parameter(s).

3Q/09: Changed PRA Parameter(s). Incorporated Basis Doc Revision 4 changes resulting from PRA Model revision 6e which incorporated a change to DG mission time and addition of A Train AF cross-tie.

Reactor Coolant System Activity



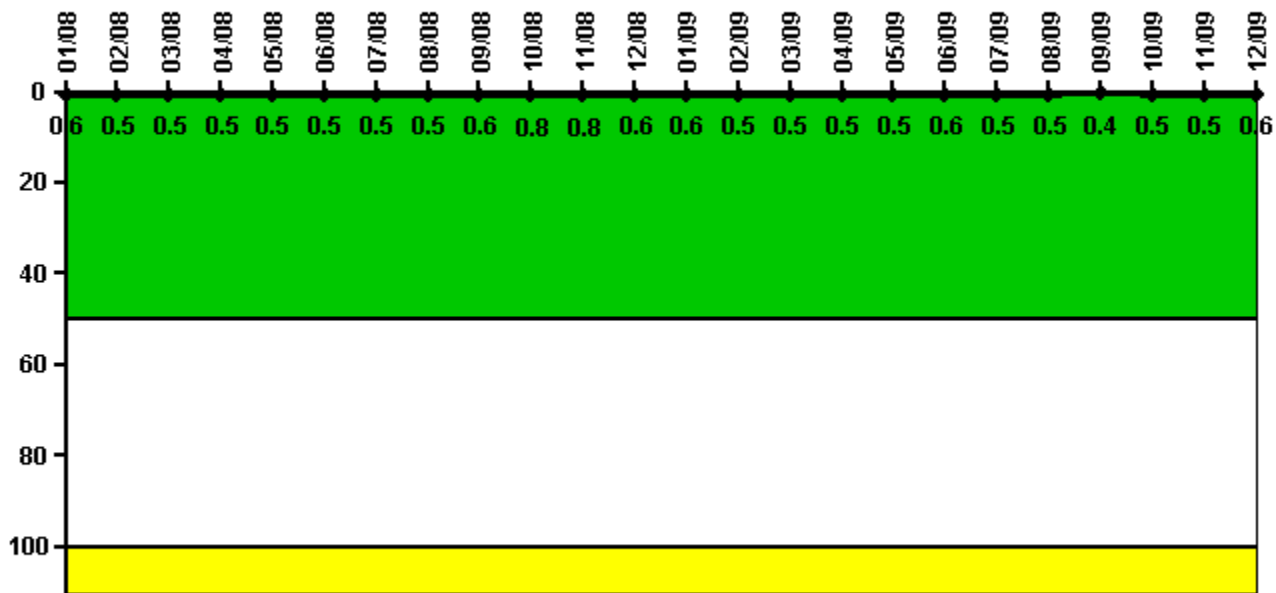
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum activity	0.000352	0.000370	0.000381	0.000383	0.000383	0.000399	0.000405	0.000405	0.000419	0.000635	0.000373	0.000315
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0.1	0	0
Reactor Coolant System Activity	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum activity	0.000558	0.000334	0.000343	0.000347	0.000369	0.000385	0.000406	0.000420	0.000443	0.000434	0.000443	0.000450
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



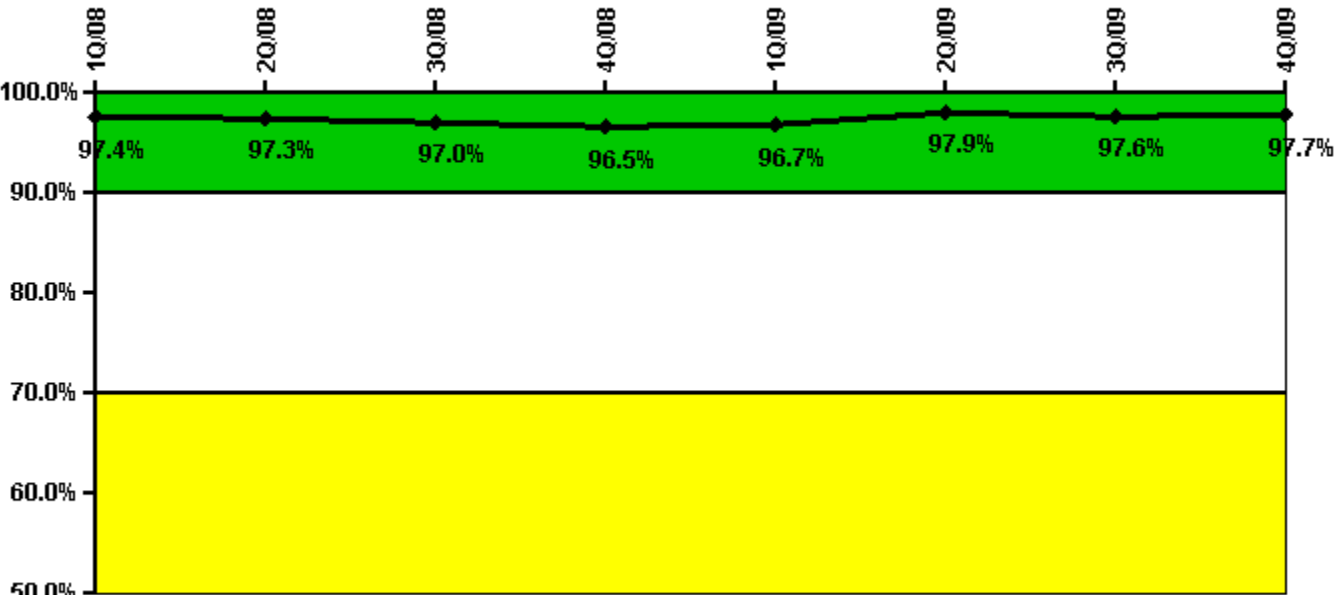
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum leakage	0.061	0.054	0.050	0.049	0.046	0.047	0.047	0.054	0.058	0.078	0.076	0.059
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.6
Reactor Coolant System Leakage	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum leakage	0.062	0.052	0.046	0.051	0.048	0.055	0.048	0.047	0.040	0.050	0.050	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.6

Licensee Comments: none

Drill/Exercise Performance



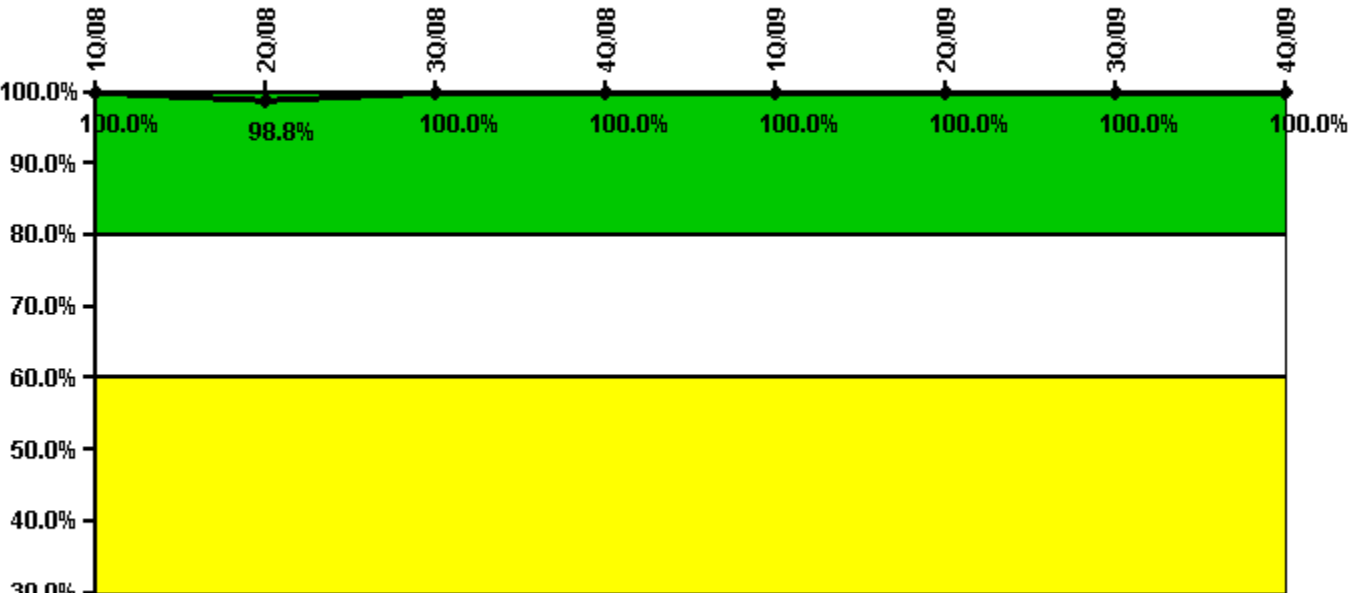
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful opportunities	4.0	27.0	62.0	51.0	30.0	62.0	40.0	64.0
Total opportunities	4.0	28.0	64.0	53.0	30.0	62.0	42.0	65.0
Indicator value	97.4%	97.3%	97.0%	96.5%	96.7%	97.9%	97.6%	97.7%

Licensee Comments: none

ERO Drill Participation



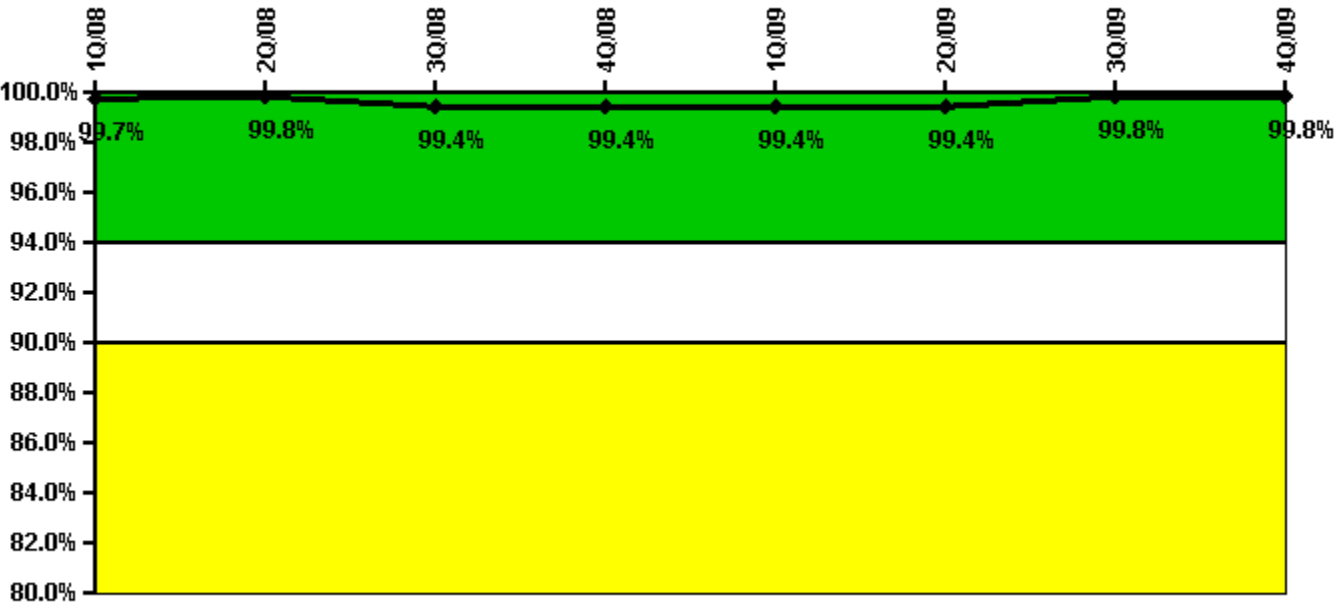
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Participating Key personnel	74.0	80.0	83.0	82.0	78.0	77.0	76.0	72.0
Total Key personnel	74.0	81.0	83.0	82.0	78.0	77.0	76.0	72.0
Indicator value	100.0%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



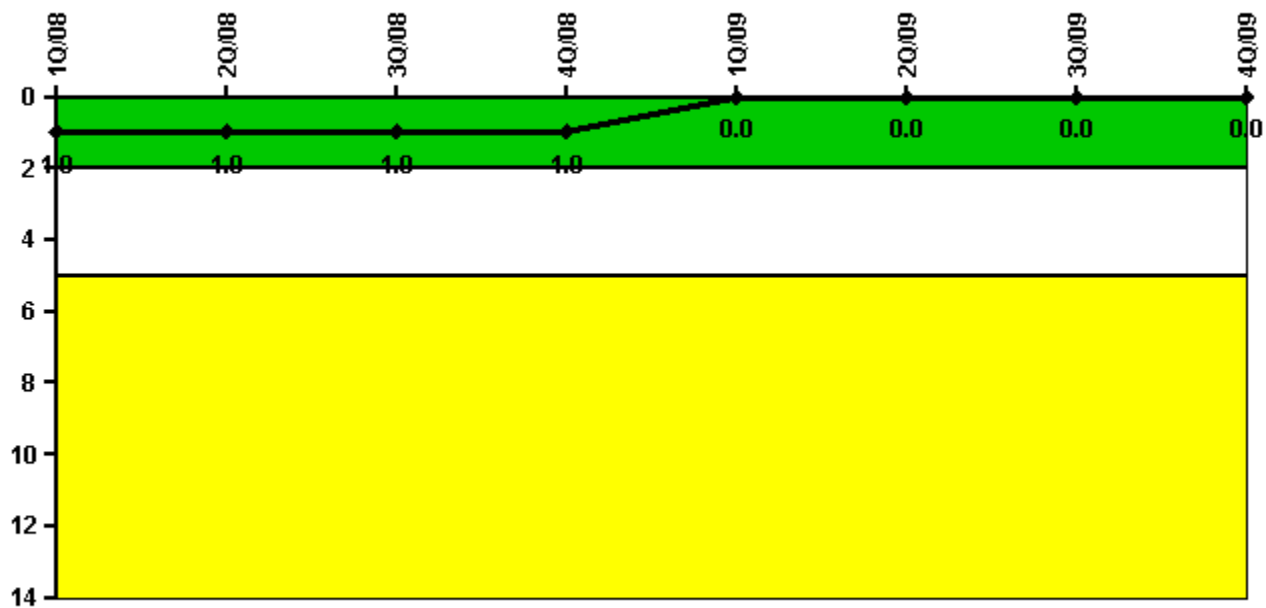
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful siren-tests	5996	6003	6006	5995	5915	6006	6106	5998
Total sirens-tests	6011	6016	6108	6016	5922	6016	6110	6016
Indicator value	99.7%	99.8%	99.4%	99.4%	99.4%	99.4%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



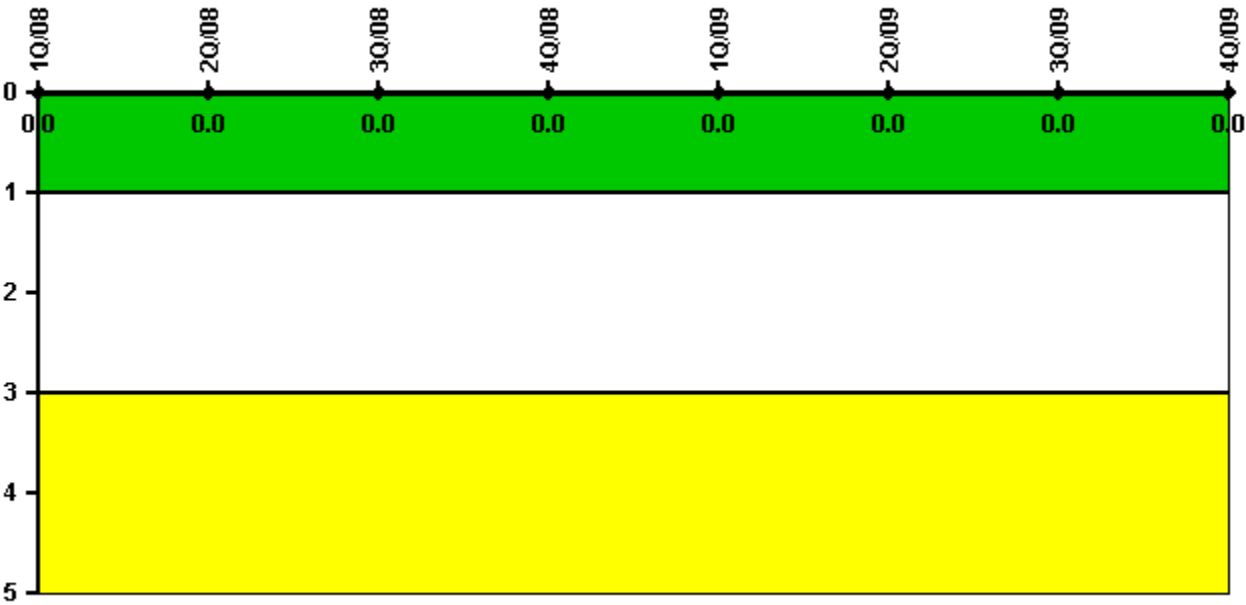
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
High radiation area occurrences	1	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	1	1	1	1	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

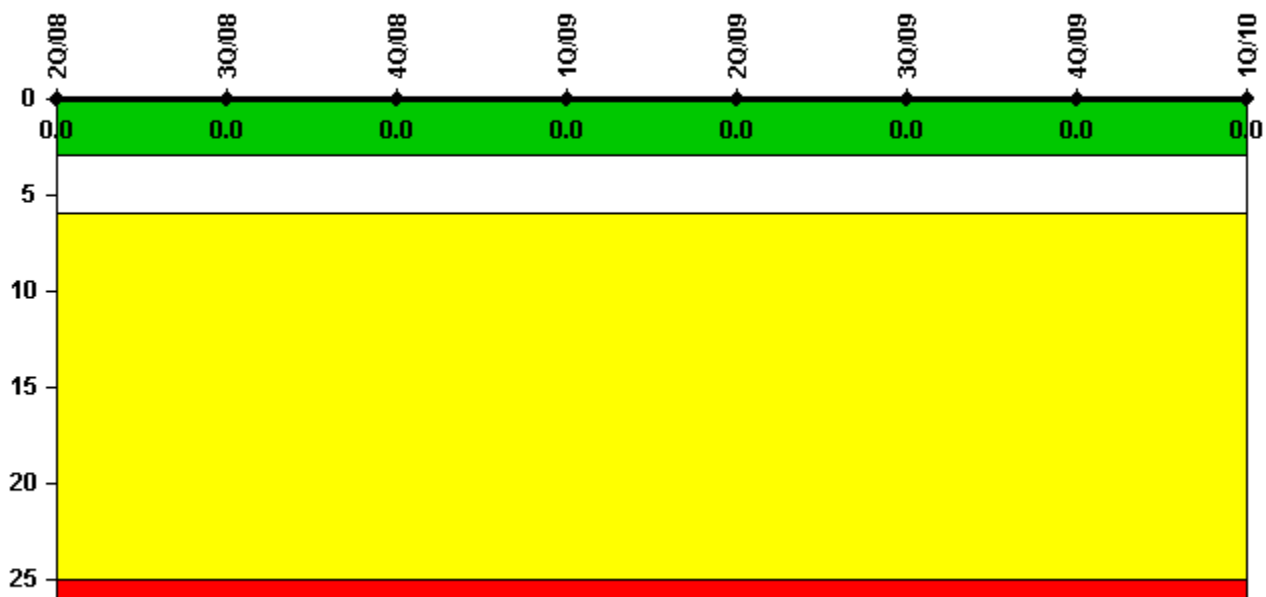
[Security](#) information not publicly available.

Byron 2

1Q/2010 Performance Indicators

Licensee's General Comments: The NRC identified where an SSFF was reported but did not actually occur for: Unit 1 - Jun, Sept and Nov 2003 and for Unit 2 - Jun and Sept 2003. In June of 2006, the SSFF data field was incorrectly changed from "0" to "1". The data is now corrected.

Unplanned Scrams per 7000 Critical Hrs



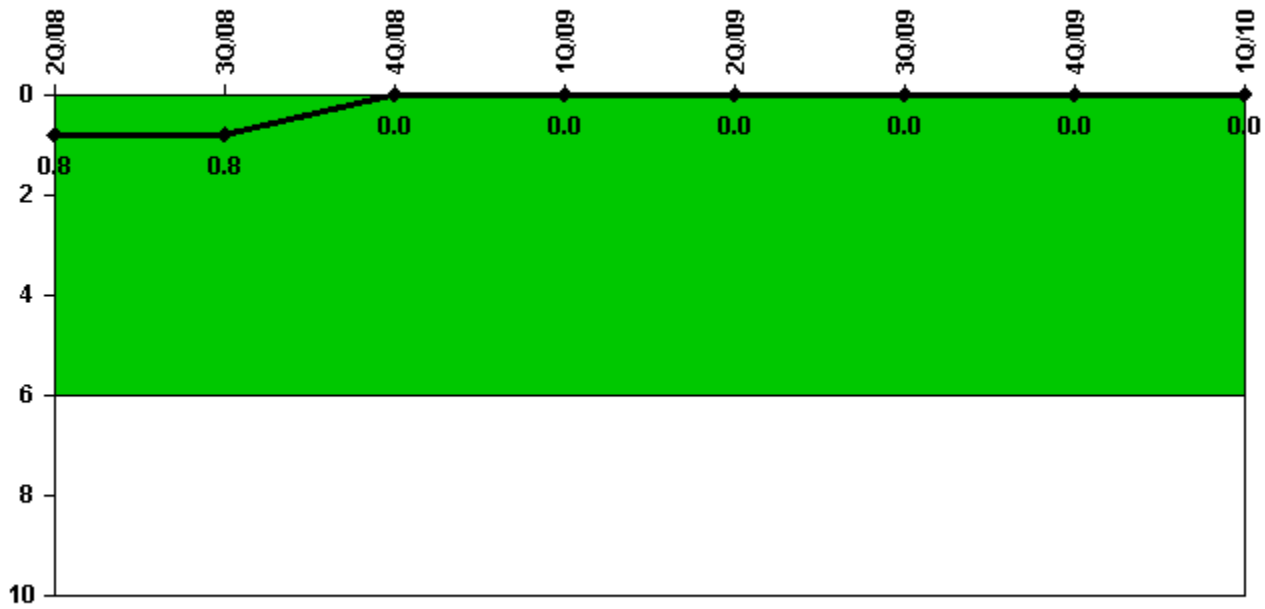
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	1774.2	2159.0	2184.0	2208.0	2209.0	2159.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



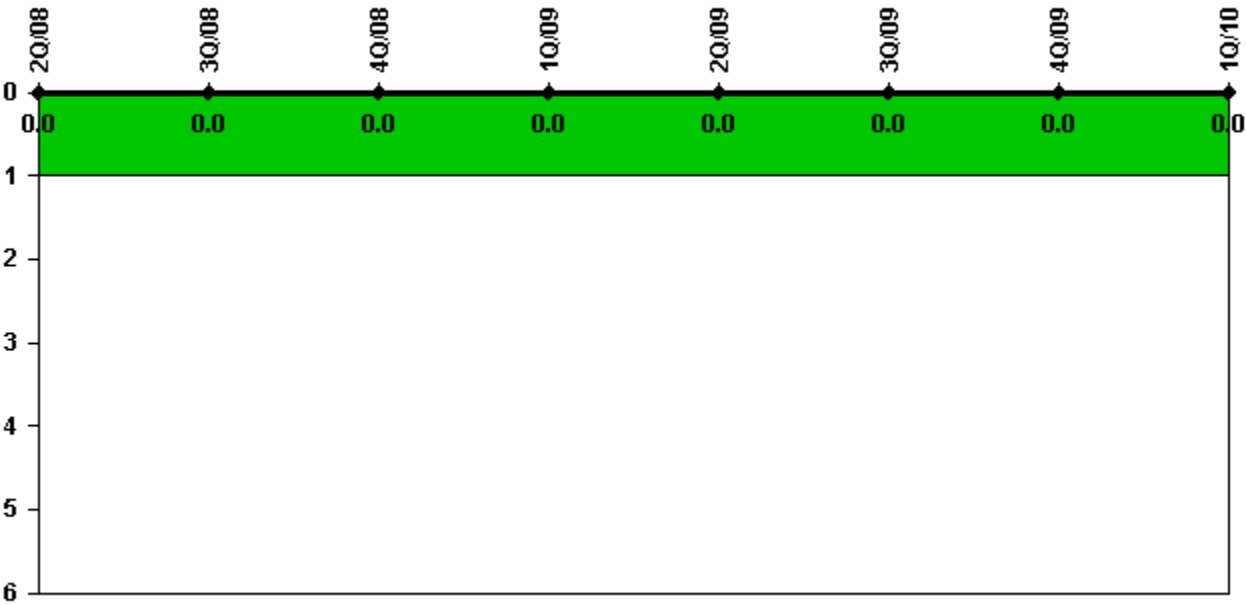
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	1774.2	2159.0	2184.0	2208.0	2209.0	2159.0
Indicator value	0.8	0.8	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



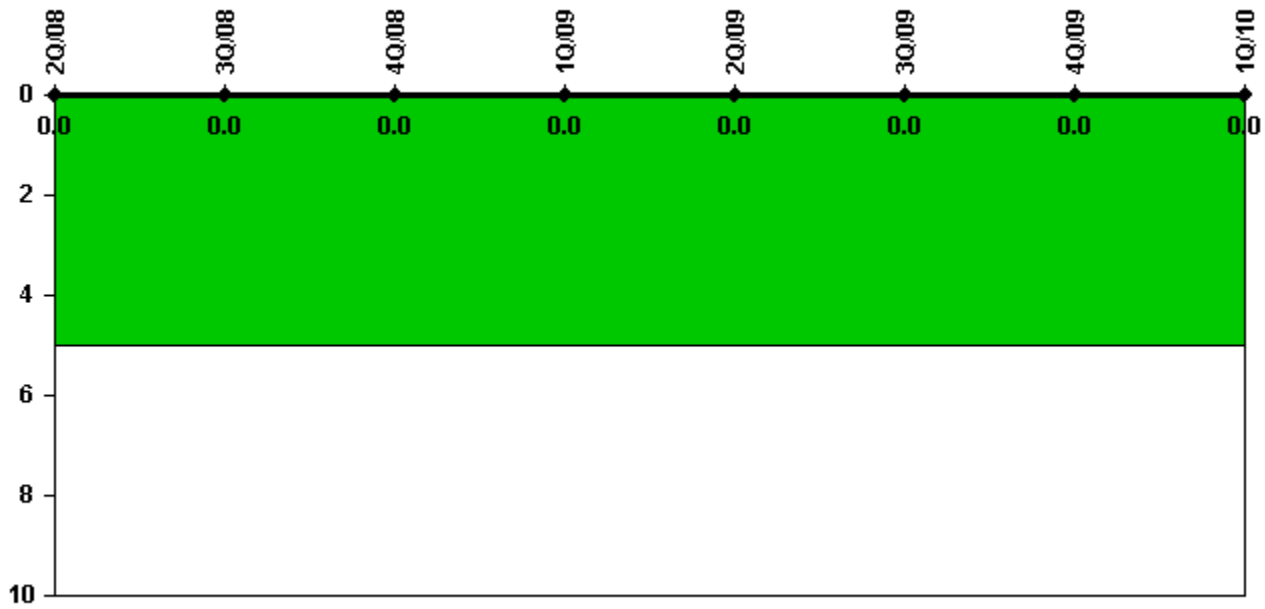
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



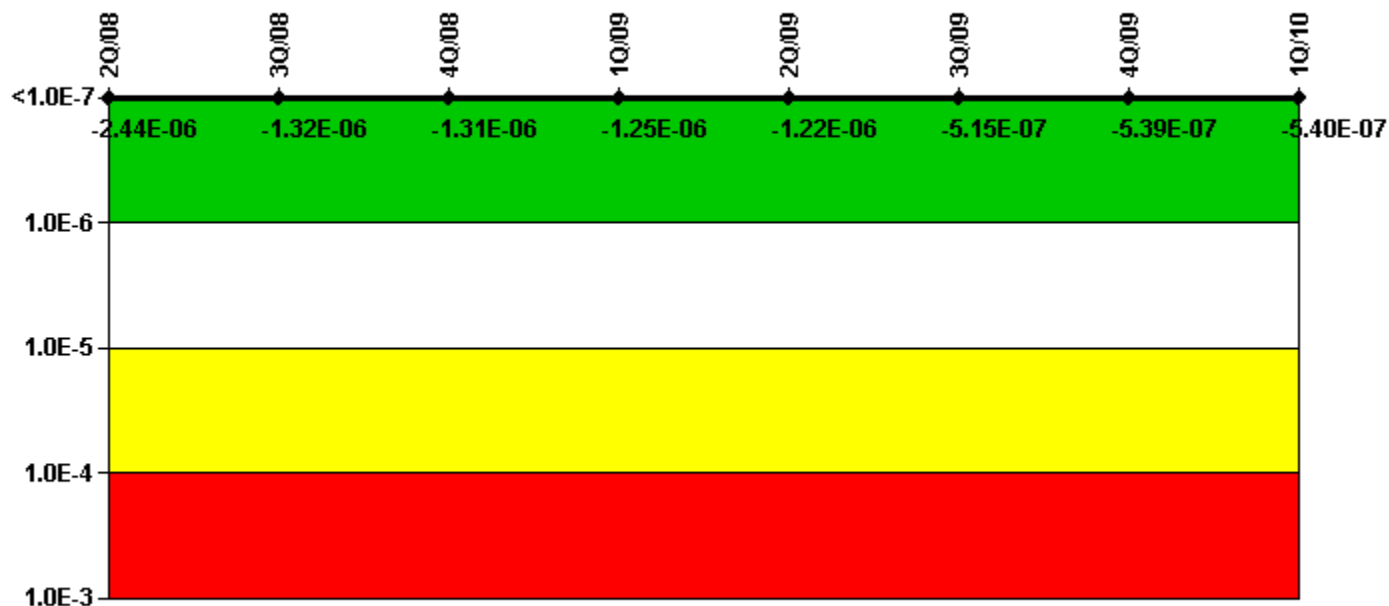
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



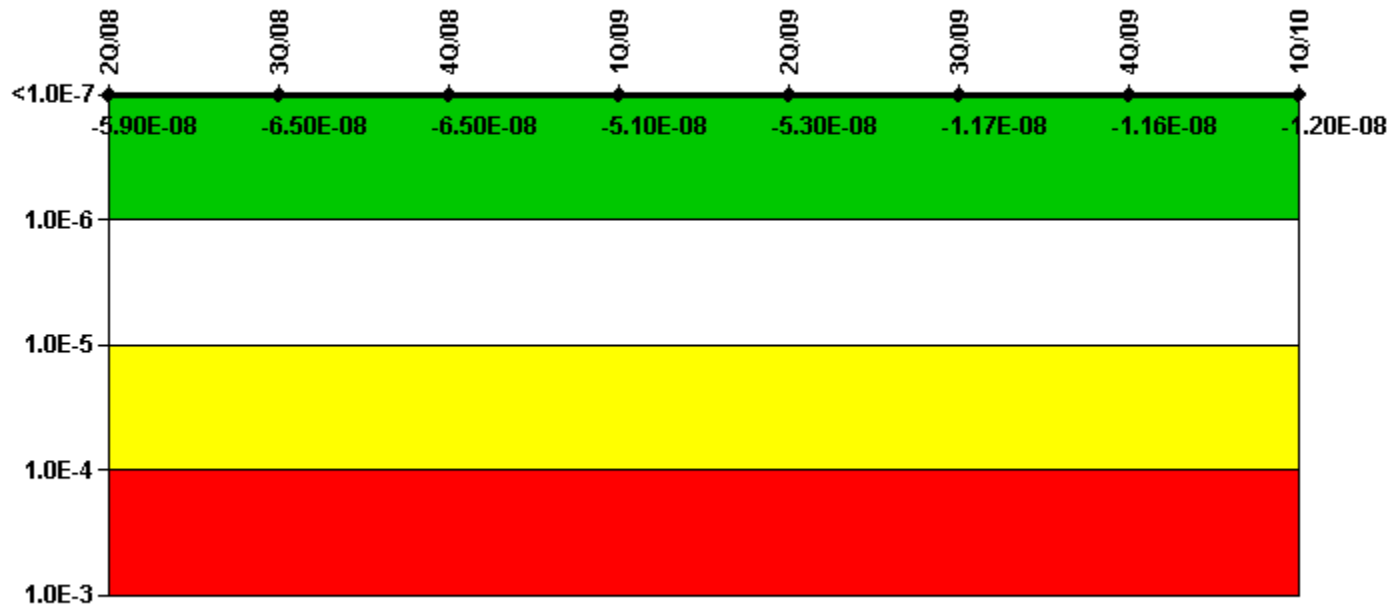
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
UAI (Δ CDF)	-4.10E-08	-2.10E-08	-7.10E-09	5.30E-08	7.70E-08	5.50E-08	3.10E-08	2.95E-08
URI (Δ CDF)	-2.40E-06	-1.30E-06	-1.30E-06	-1.30E-06	-1.30E-06	-5.70E-07	-5.70E-07	-5.70E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.44E-06	-1.32E-06	-1.31E-06	-1.25E-06	-1.22E-06	-5.15E-07	-5.39E-07	-5.40E-07

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



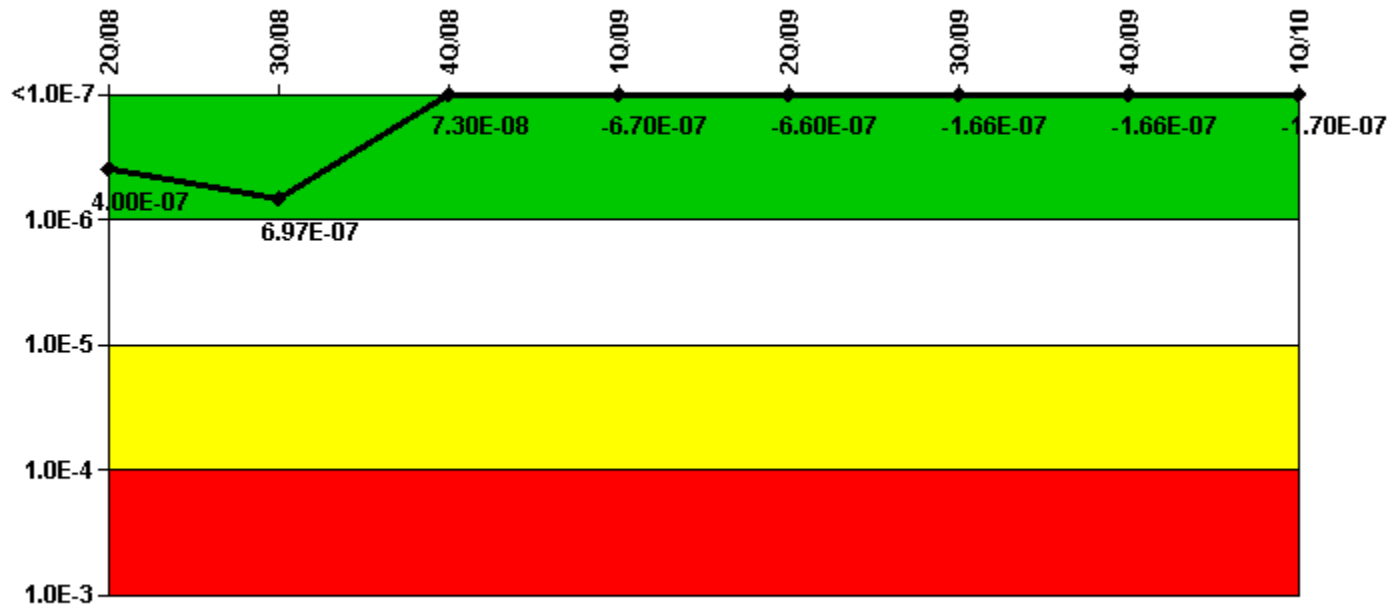
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
UAI (Δ CDF)	-4.20E-08	-5.40E-08	-5.40E-08	-4.10E-08	-4.30E-08	-9.20E-09	-9.20E-09	-9.17E-09
URI (Δ CDF)	-1.70E-08	-1.10E-08	-1.10E-08	-1.00E-08	-1.00E-08	-2.50E-09	-2.40E-09	-2.44E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.90E-08	-6.50E-08	-6.50E-08	-5.10E-08	-5.30E-08	-1.17E-08	-1.16E-08	-1.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



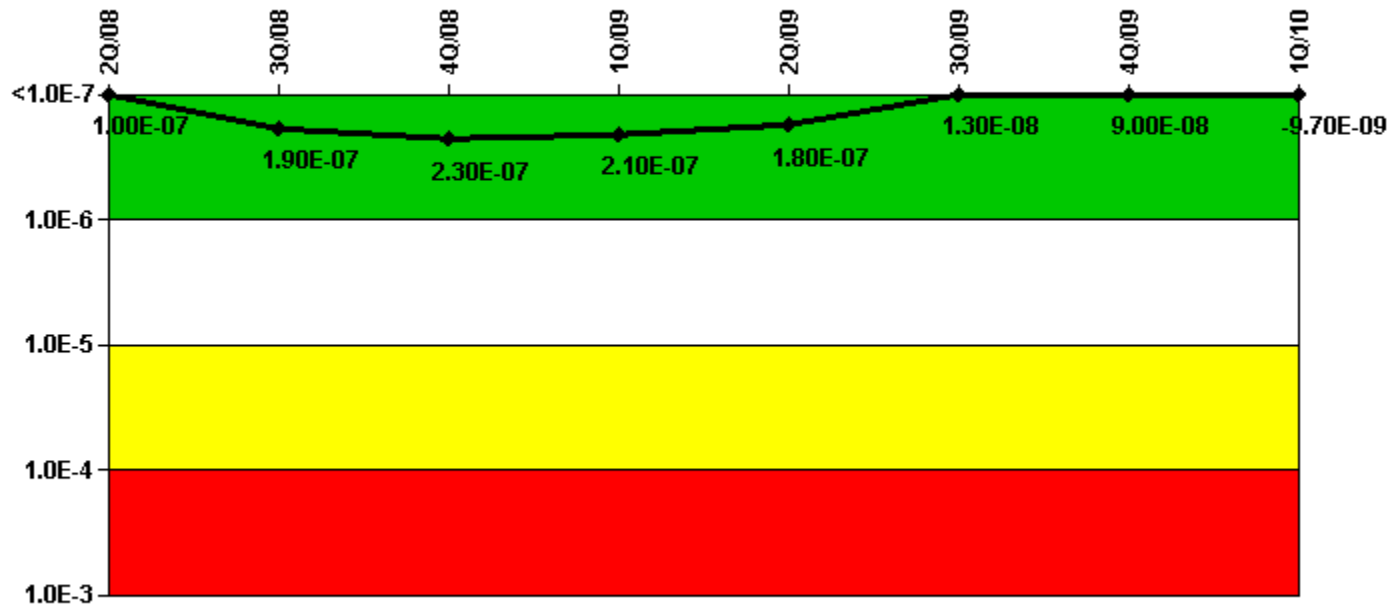
Thresholds: White > $1.00E-6$ Yellow > $1.00E-5$ Red > $1.00E-4$

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
UAI (Δ CDF)	$-3.10E-07$	$-6.30E-08$	$-6.70E-08$	$-1.60E-07$	$-1.60E-07$	$7.40E-08$	$7.40E-08$	$7.37E-08$
URI (Δ CDF)	$7.10E-07$	$7.60E-07$	$1.40E-07$	$-5.10E-07$	$-5.00E-07$	$-2.40E-07$	$-2.40E-07$	$-2.41E-07$
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	$4.00E-07$	$6.97E-07$	$7.30E-08$	$-6.70E-07$	$-6.60E-07$	$-1.66E-07$	$-1.66E-07$	$-1.70E-07$

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



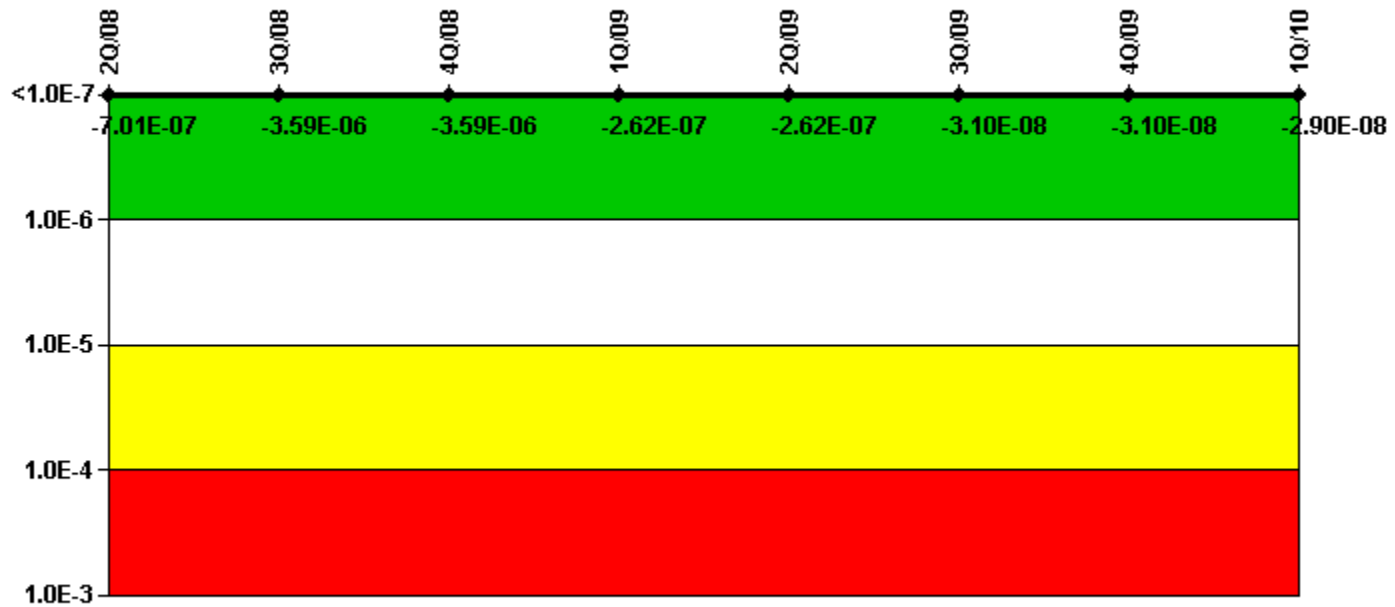
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
UAI (ΔCDF)	2.60E-07	3.10E-07	3.70E-07	3.50E-07	3.20E-07	1.10E-07	1.90E-07	9.26E-08
URI (ΔCDF)	-1.60E-07	-1.20E-07	-1.40E-07	-1.40E-07	-1.40E-07	-9.70E-08	-1.00E-07	-1.02E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.00E-07	1.90E-07	2.30E-07	2.10E-07	1.80E-07	1.30E-08	9.00E-08	-9.70E-09

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



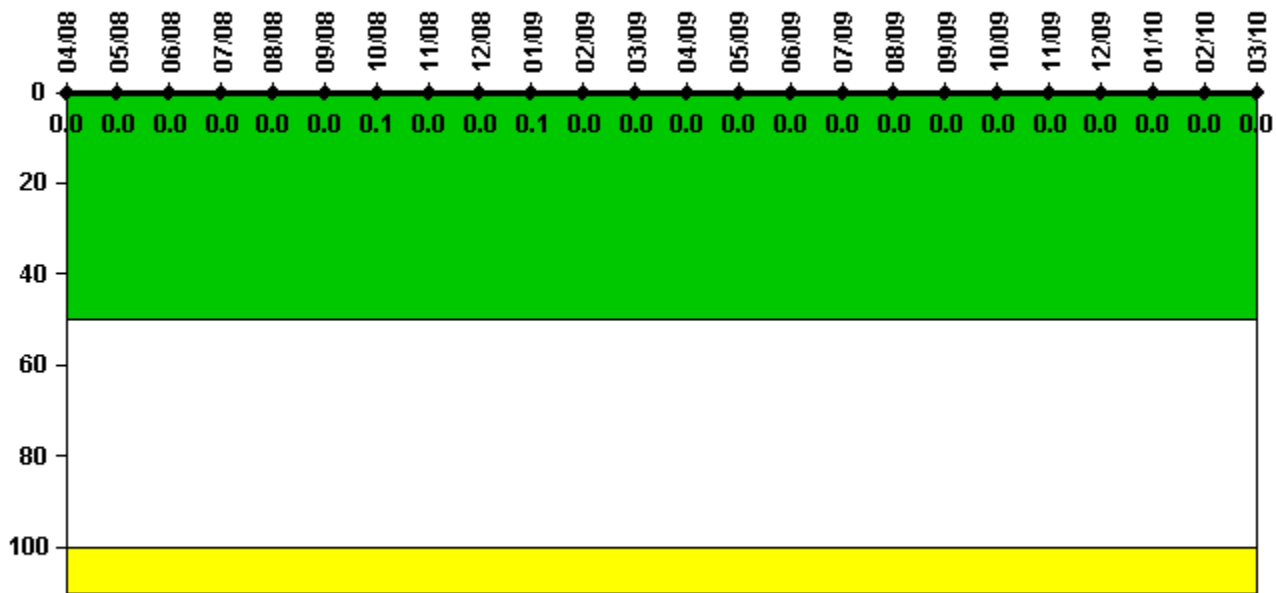
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
UAI (ΔCDF)	9.10E-09	7.90E-09	8.00E-09	7.80E-09	7.80E-09	7.90E-08	7.90E-08	7.95E-08
URI (ΔCDF)	-7.10E-07	-3.60E-06	-3.60E-06	-2.70E-07	-2.70E-07	-1.10E-07	-1.10E-07	-1.09E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.01E-07	-3.59E-06	-3.59E-06	-2.62E-07	-2.62E-07	-3.10E-08	-3.10E-08	-2.90E-08

Licensee Comments: none

Reactor Coolant System Activity



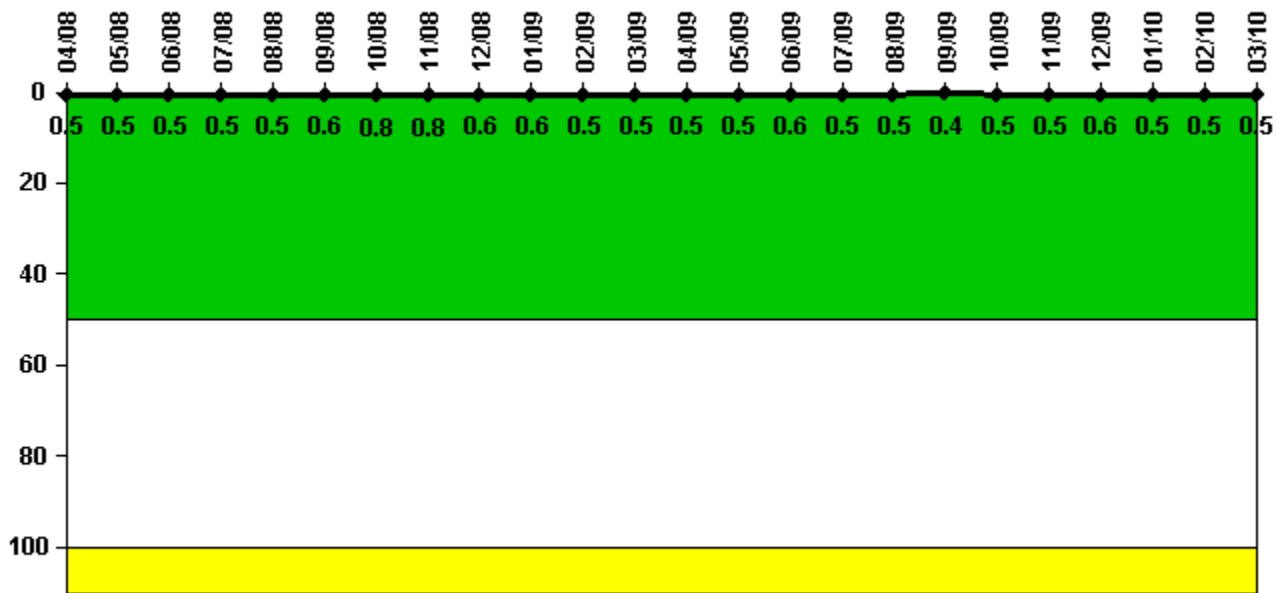
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09
Maximum activity	0.000383	0.000383	0.000399	0.000405	0.000405	0.000419	0.000635	0.000373	0.000315	0.000558	0.000334	0.000343
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0.1	0	0	0.1	0	0
Reactor Coolant System Activity	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10
Maximum activity	0.000347	0.000369	0.000385	0.000406	0.000420	0.000443	0.000434	0.000443	0.000450	0.000459	0.000474	0.000276
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



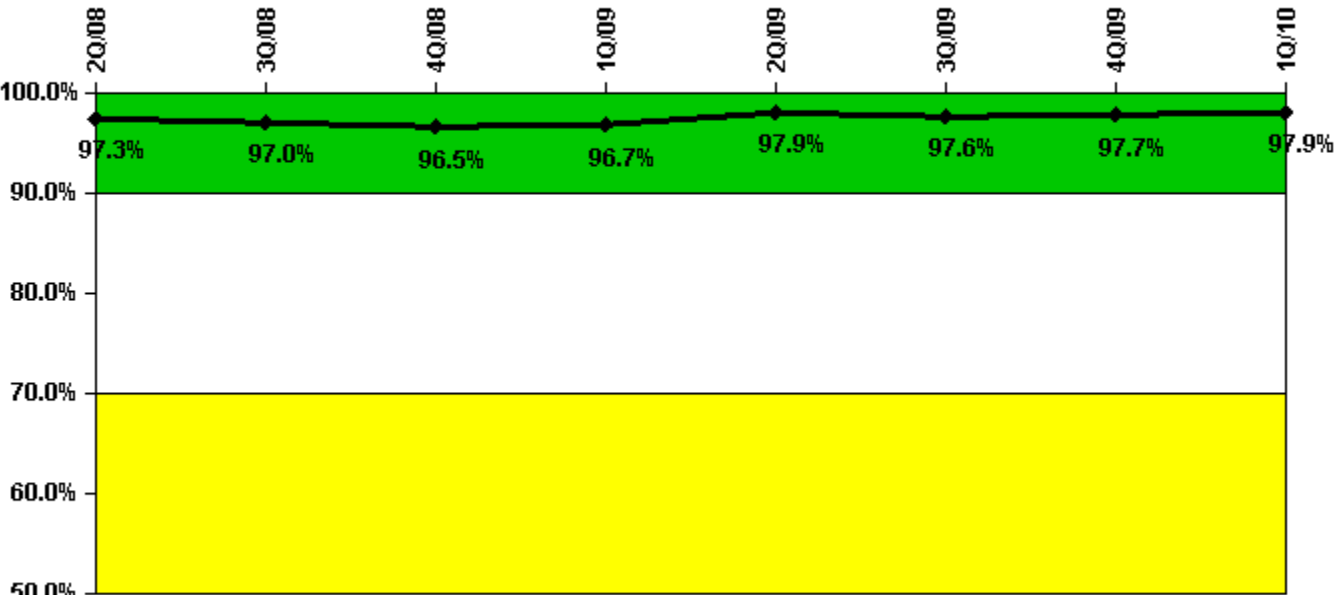
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09
Maximum leakage	0.049	0.046	0.047	0.047	0.054	0.058	0.078	0.076	0.059	0.062	0.052	0.046
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.6	0.6	0.5	0.5
Reactor Coolant System Leakage	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10
Maximum leakage	0.051	0.048	0.055	0.048	0.047	0.040	0.050	0.050	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.6	0.5	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



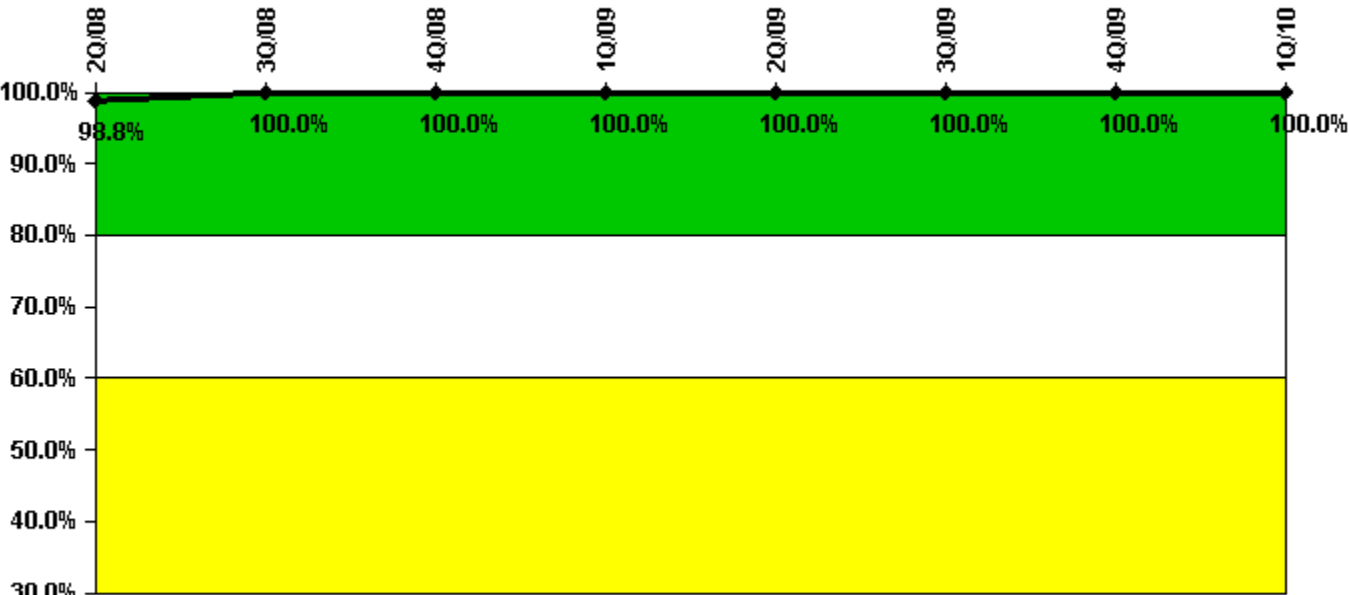
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
Successful opportunities	27.0	62.0	51.0	30.0	62.0	40.0	64.0	34.0
Total opportunities	28.0	64.0	53.0	30.0	62.0	42.0	65.0	34.0
Indicator value	97.3%	97.0%	96.5%	96.7%	97.9%	97.6%	97.7%	97.9%

Licensee Comments: none

ERO Drill Participation



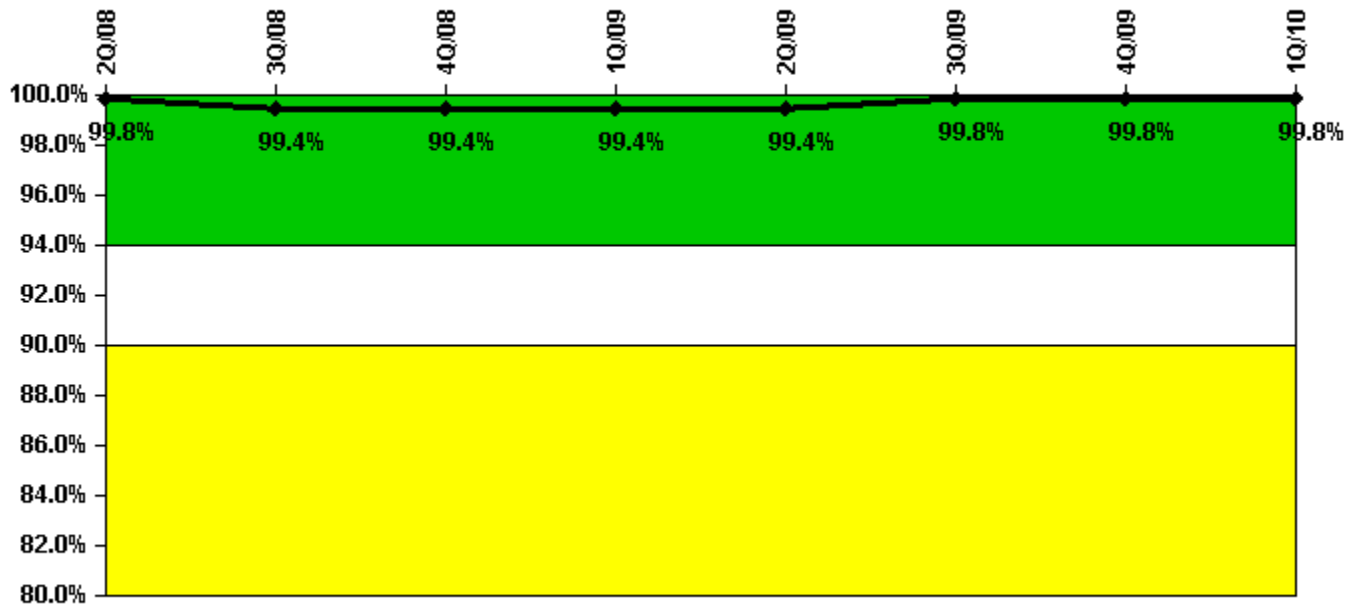
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
Participating Key personnel	80.0	83.0	82.0	78.0	77.0	76.0	72.0	74.0
Total Key personnel	81.0	83.0	82.0	78.0	77.0	76.0	72.0	74.0
Indicator value	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

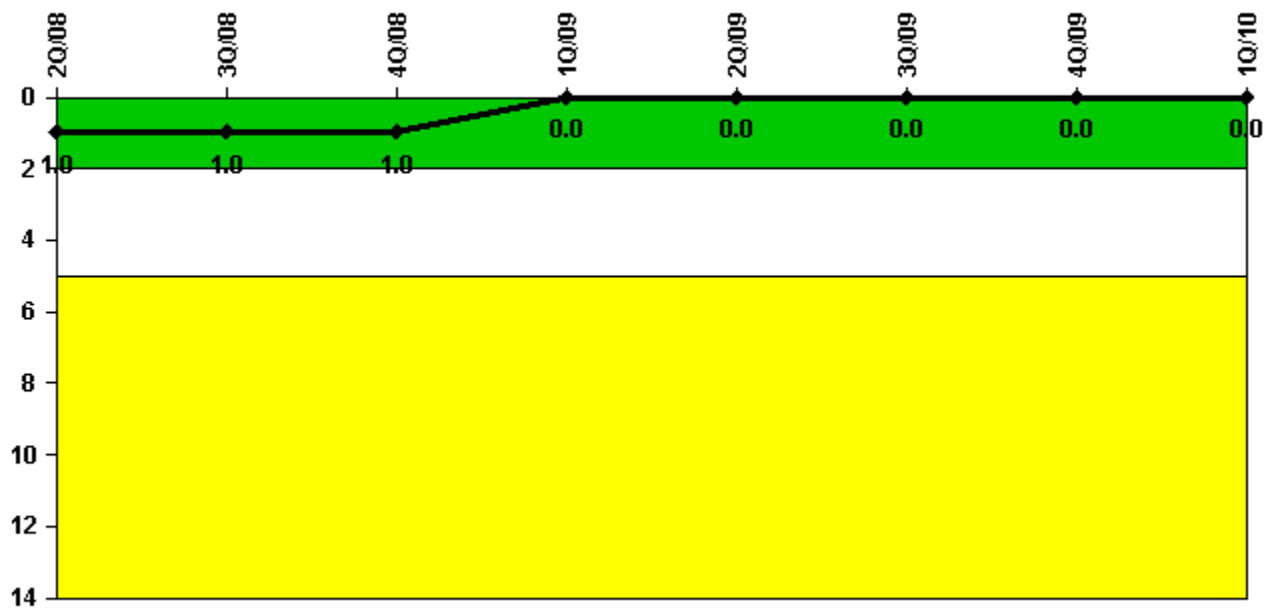
Notes

Alert & Notification System	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
Successful siren-tests	6003	6006	5995	5915	6006	6106	5998	3841
Total sirens-tests	6016	6108	6016	5922	6016	6110	6016	3843
Indicator value	99.8%	99.4%	99.4%	99.4%	99.4%	99.8%	99.8%	99.8%

Licensee Comments:

1Q/10: The number of siren tests has been reduced compared to data in previous months due to a reduction of total sirens in the system. This upgrade was implemented in January 2010.

Occupational Exposure Control Effectiveness



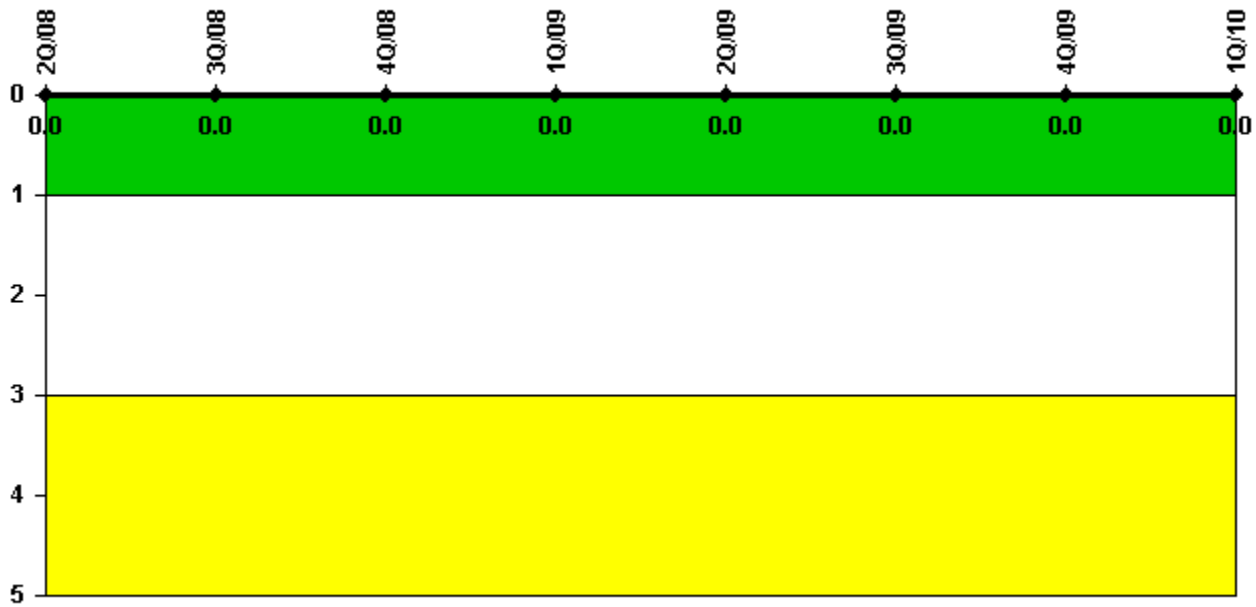
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	1	1	1	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

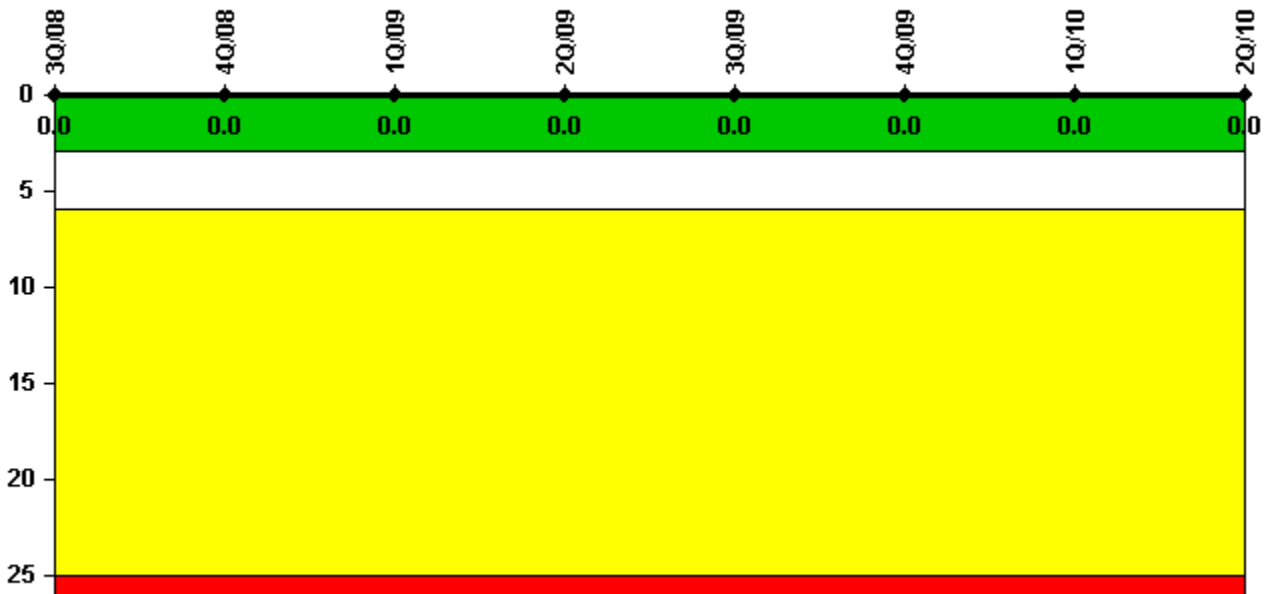
[Security](#) information not publicly available.

Byron 2

2Q/2010 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



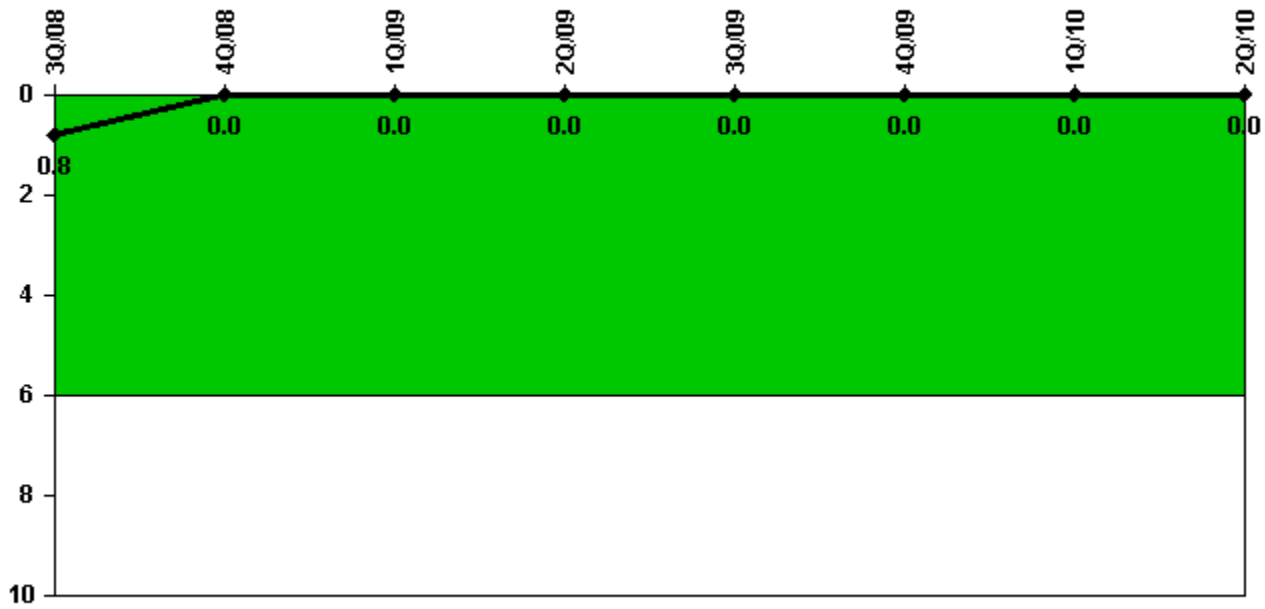
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	1774.2	2159.0	2184.0	2208.0	2209.0	2159.0	1735.2
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



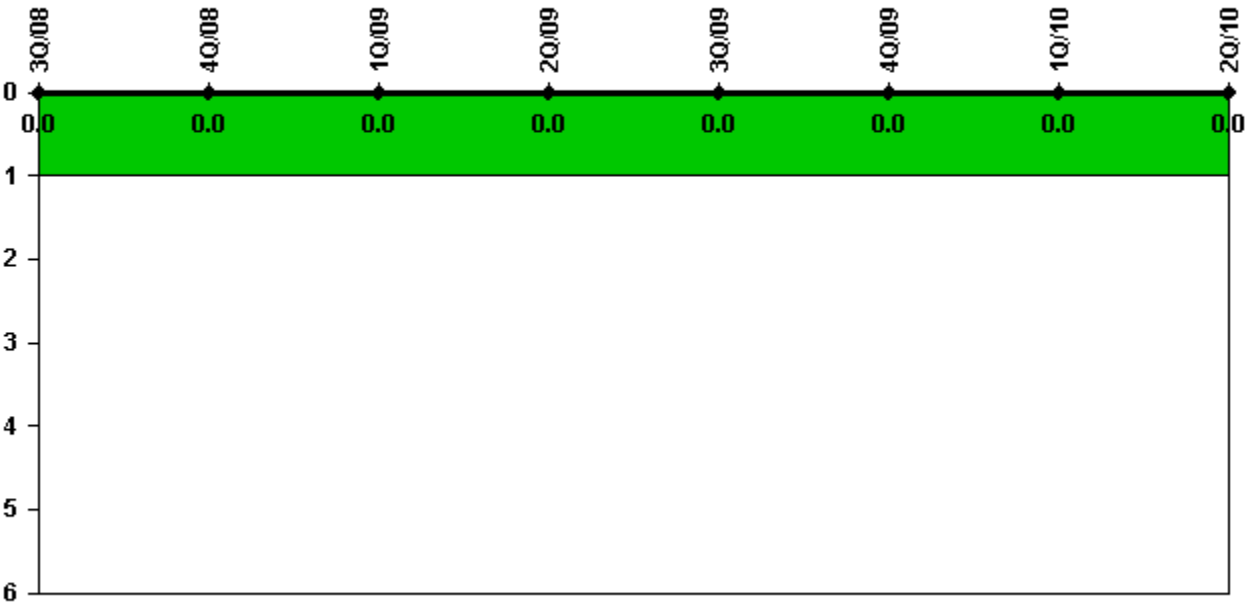
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2208.0	1774.2	2159.0	2184.0	2208.0	2209.0	2159.0	1735.2
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



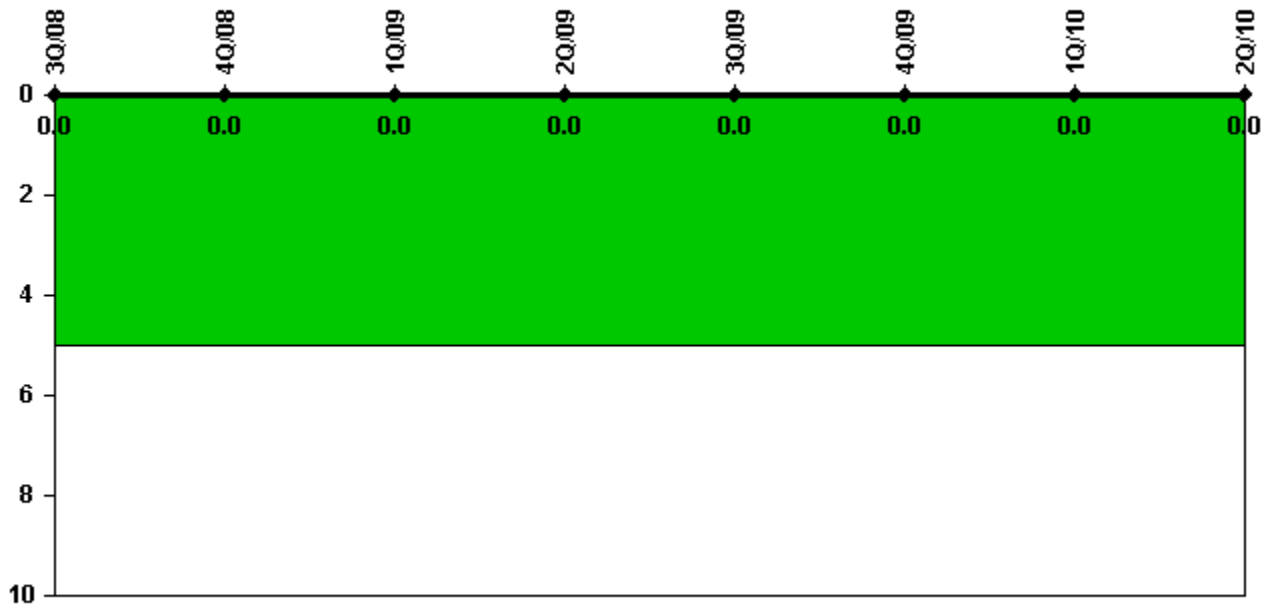
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



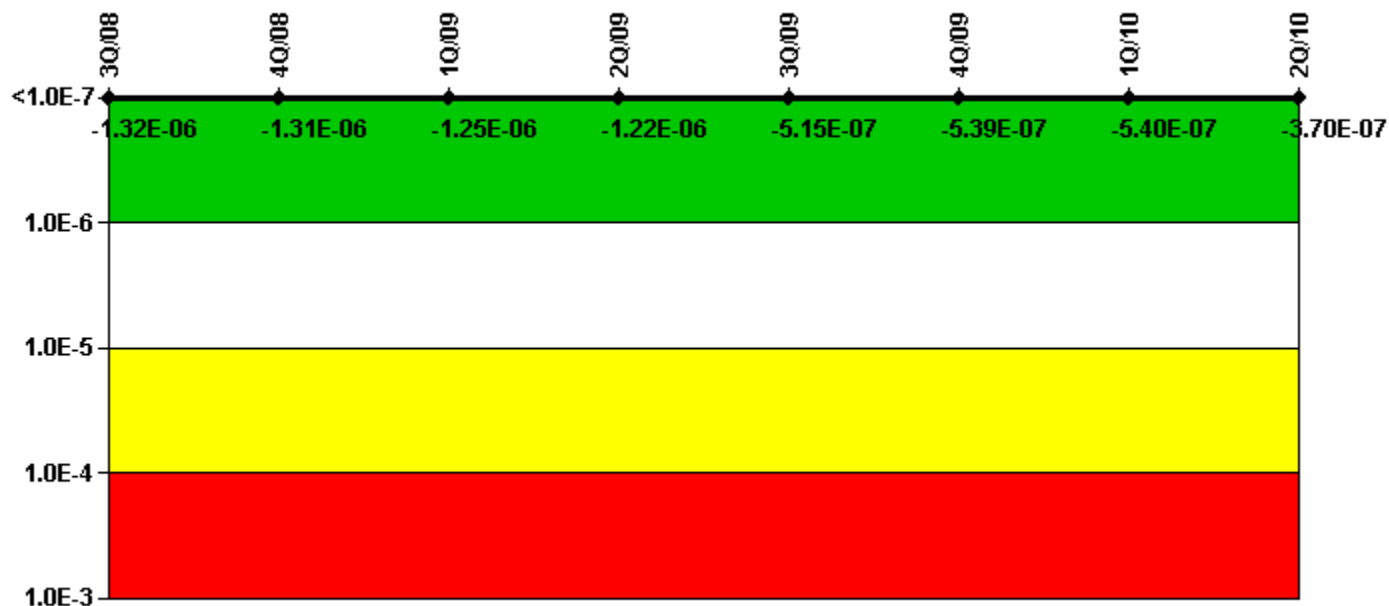
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



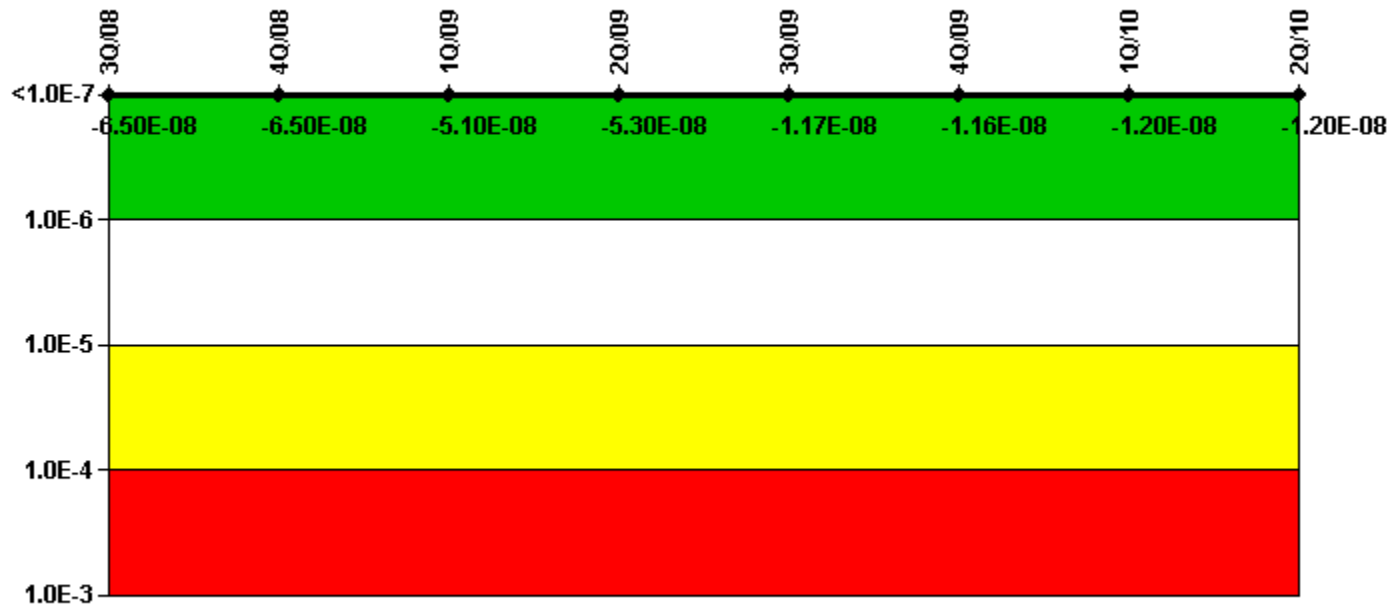
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI (Δ CDF)	-2.10E-08	-7.10E-09	5.30E-08	7.70E-08	5.50E-08	3.10E-08	2.95E-08	3.31E-08
URI (Δ CDF)	-1.30E-06	-1.30E-06	-1.30E-06	-1.30E-06	-5.70E-07	-5.70E-07	-5.70E-07	-4.08E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.32E-06	-1.31E-06	-1.25E-06	-1.22E-06	-5.15E-07	-5.39E-07	-5.40E-07	-3.70E-07

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



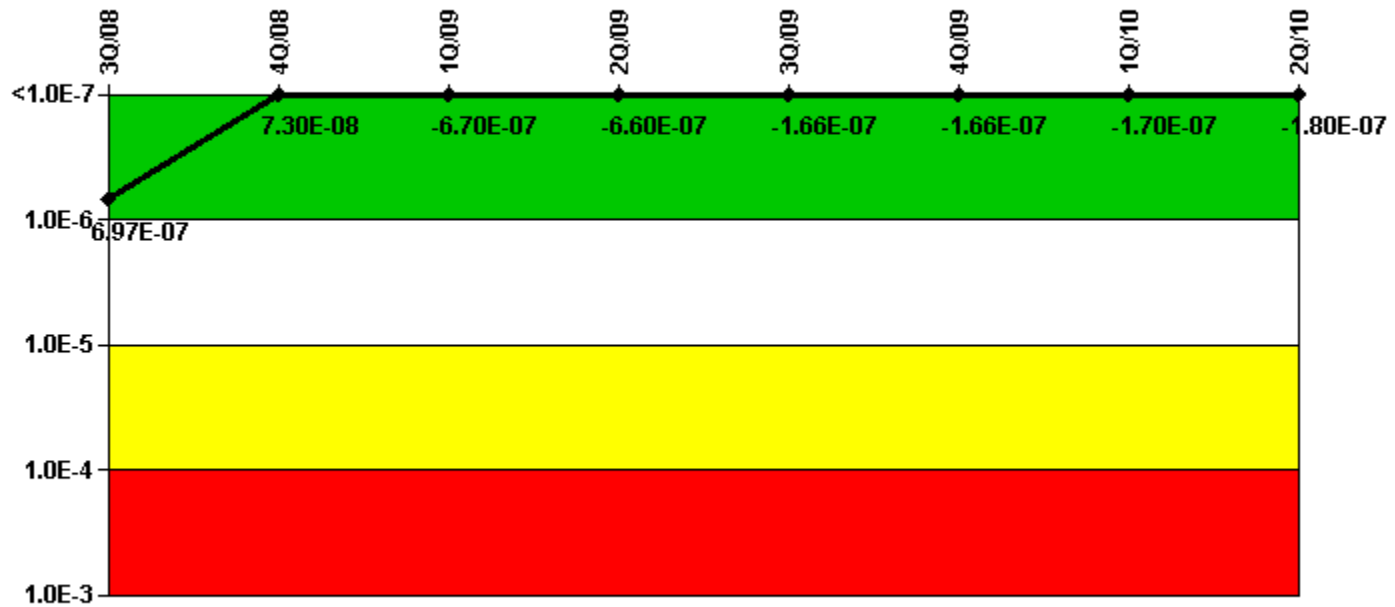
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI (ΔCDF)	-5.40E-08	-5.40E-08	-4.10E-08	-4.30E-08	-9.20E-09	-9.20E-09	-9.17E-09	-9.41E-09
URI (ΔCDF)	-1.10E-08	-1.10E-08	-1.00E-08	-1.00E-08	-2.50E-09	-2.40E-09	-2.44E-09	-2.39E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.50E-08	-6.50E-08	-5.10E-08	-5.30E-08	-1.17E-08	-1.16E-08	-1.20E-08	-1.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



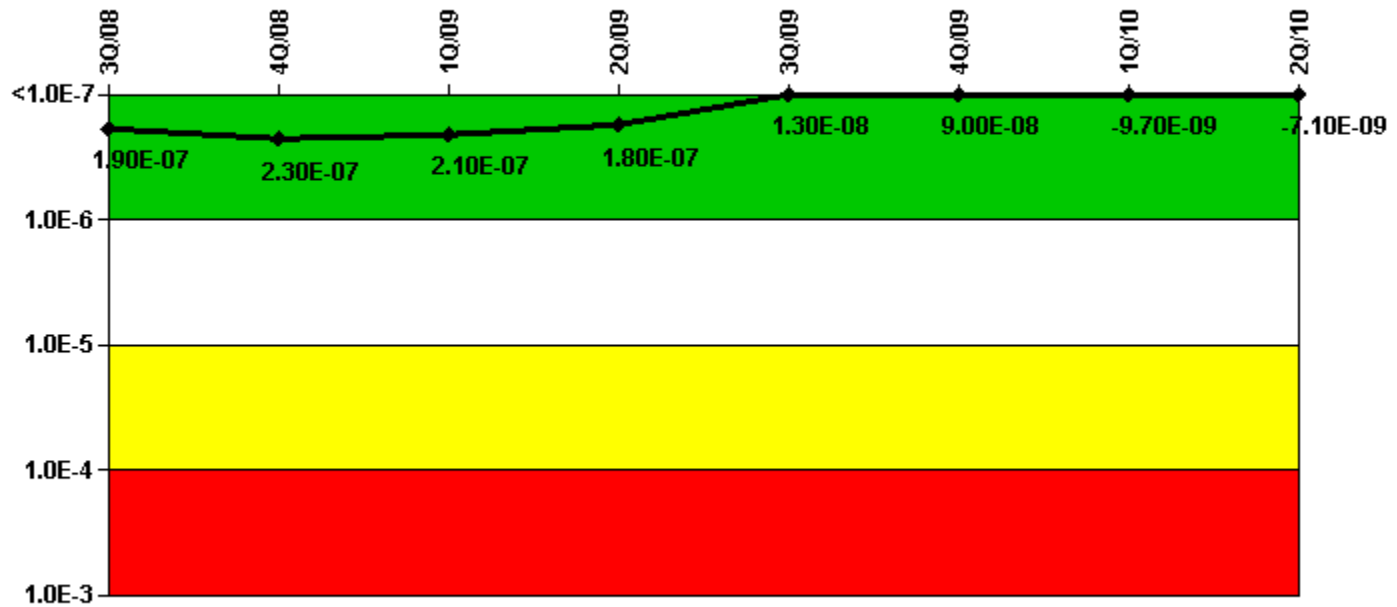
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI (Δ CDF)	-6.30E-08	-6.70E-08	-1.60E-07	-1.60E-07	7.40E-08	7.40E-08	7.37E-08	7.17E-08
URI (Δ CDF)	7.60E-07	1.40E-07	-5.10E-07	-5.00E-07	-2.40E-07	-2.40E-07	-2.41E-07	-2.47E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.97E-07	7.30E-08	-6.70E-07	-6.60E-07	-1.66E-07	-1.66E-07	-1.70E-07	-1.80E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



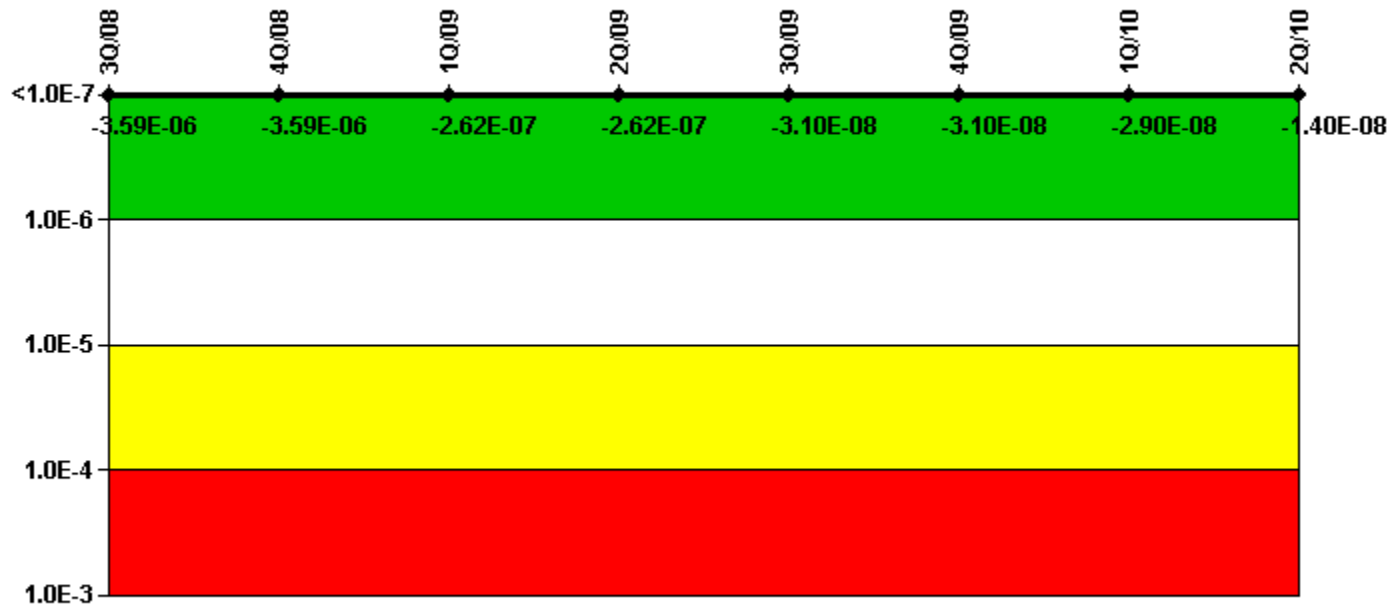
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI (ΔCDF)	3.10E-07	3.70E-07	3.50E-07	3.20E-07	1.10E-07	1.90E-07	9.26E-08	7.92E-08
URI (ΔCDF)	-1.20E-07	-1.40E-07	-1.40E-07	-1.40E-07	-9.70E-08	-1.00E-07	-1.02E-07	-8.63E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.90E-07	2.30E-07	2.10E-07	1.80E-07	1.30E-08	9.00E-08	-9.70E-09	-7.10E-09

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



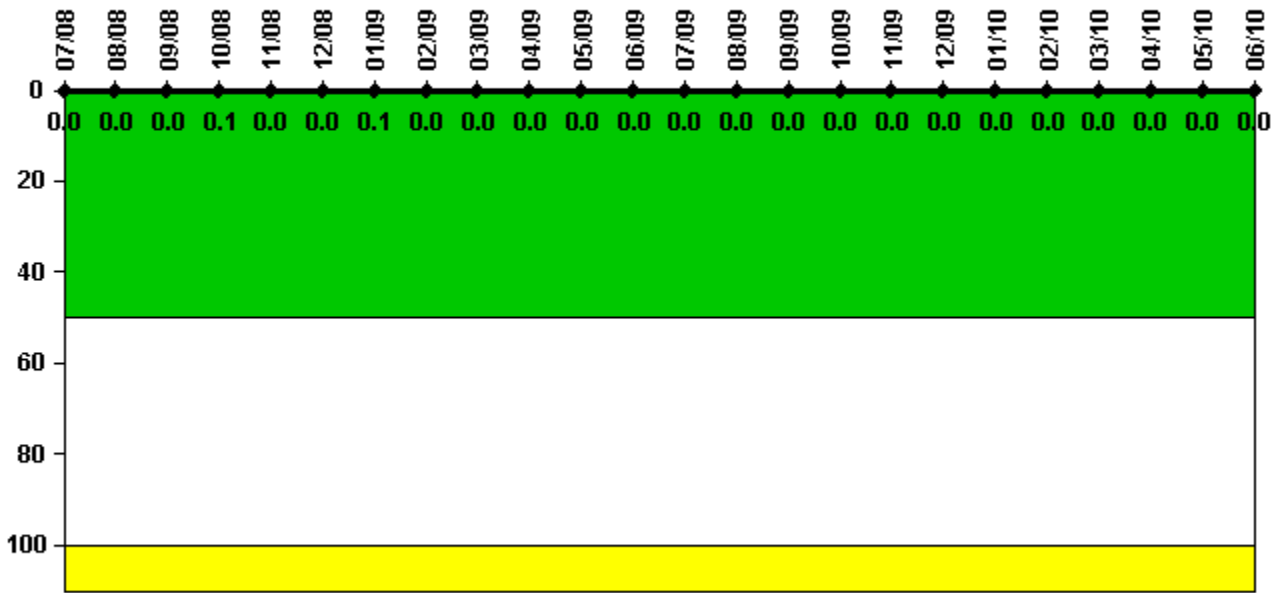
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI (ΔCDF)	7.90E-09	8.00E-09	7.80E-09	7.80E-09	7.90E-08	7.90E-08	7.95E-08	9.48E-08
URI (ΔCDF)	-3.60E-06	-3.60E-06	-2.70E-07	-2.70E-07	-1.10E-07	-1.10E-07	-1.09E-07	-1.08E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.59E-06	-3.59E-06	-2.62E-07	-2.62E-07	-3.10E-08	-3.10E-08	-2.90E-08	-1.40E-08

Licensee Comments: none

Reactor Coolant System Activity



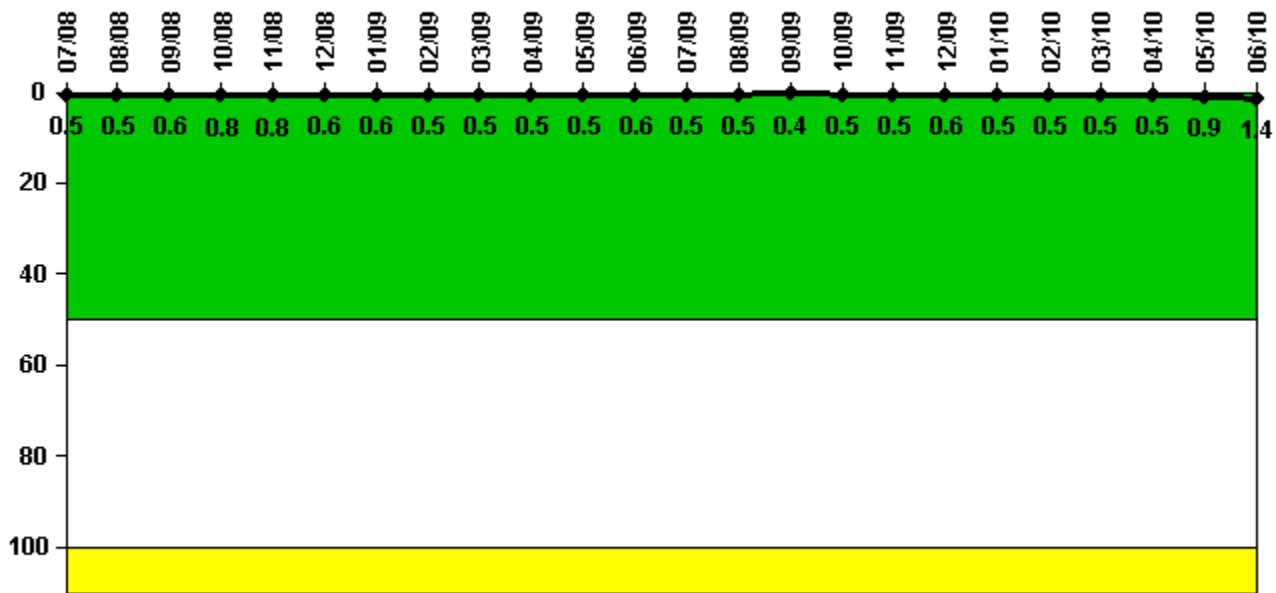
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09
Maximum activity	0.000405	0.000405	0.000419	0.000635	0.000373	0.000315	0.000558	0.000334	0.000343	0.000347	0.000369	0.000385
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0.1	0	0	0.1	0	0	0	0	0
Reactor Coolant System Activity	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum activity	0.000406	0.000420	0.000443	0.000434	0.000443	0.000450	0.000459	0.000474	0.000276	0.000272	0.000096	0.000096
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



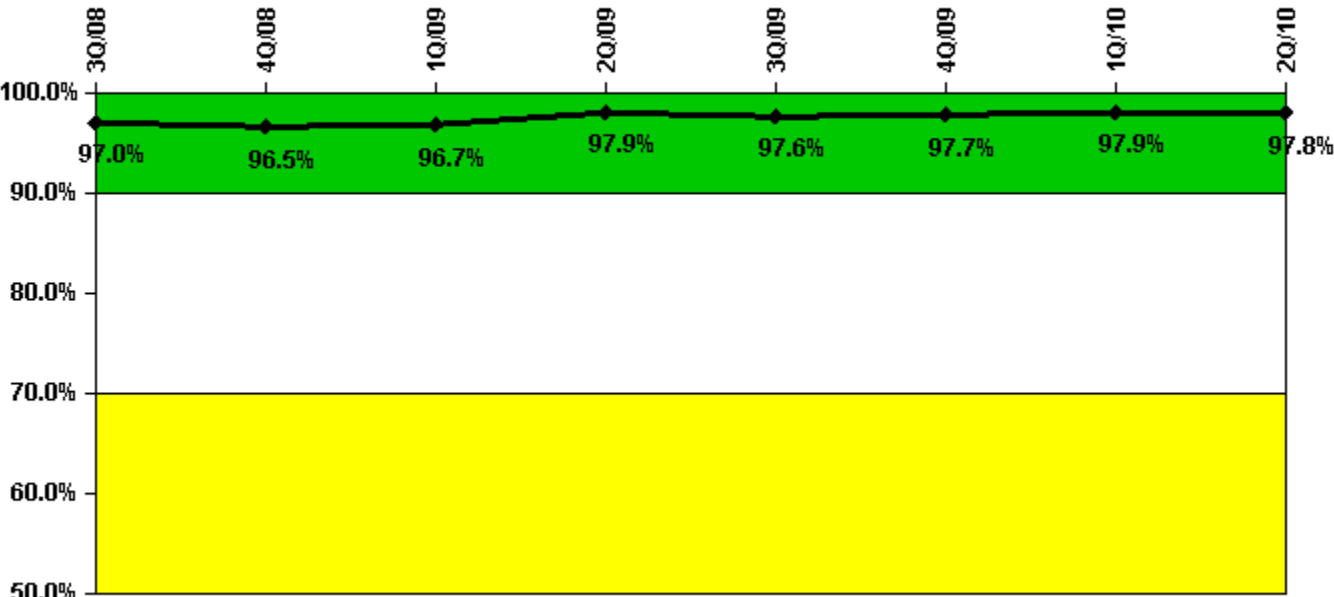
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09
Maximum leakage	0.047	0.054	0.058	0.078	0.076	0.059	0.062	0.052	0.046	0.051	0.048	0.055
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.6	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.5	0.6
Reactor Coolant System Leakage	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum leakage	0.048	0.047	0.040	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.090	0.140
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.9	1.4

Licensee Comments: none

Drill/Exercise Performance



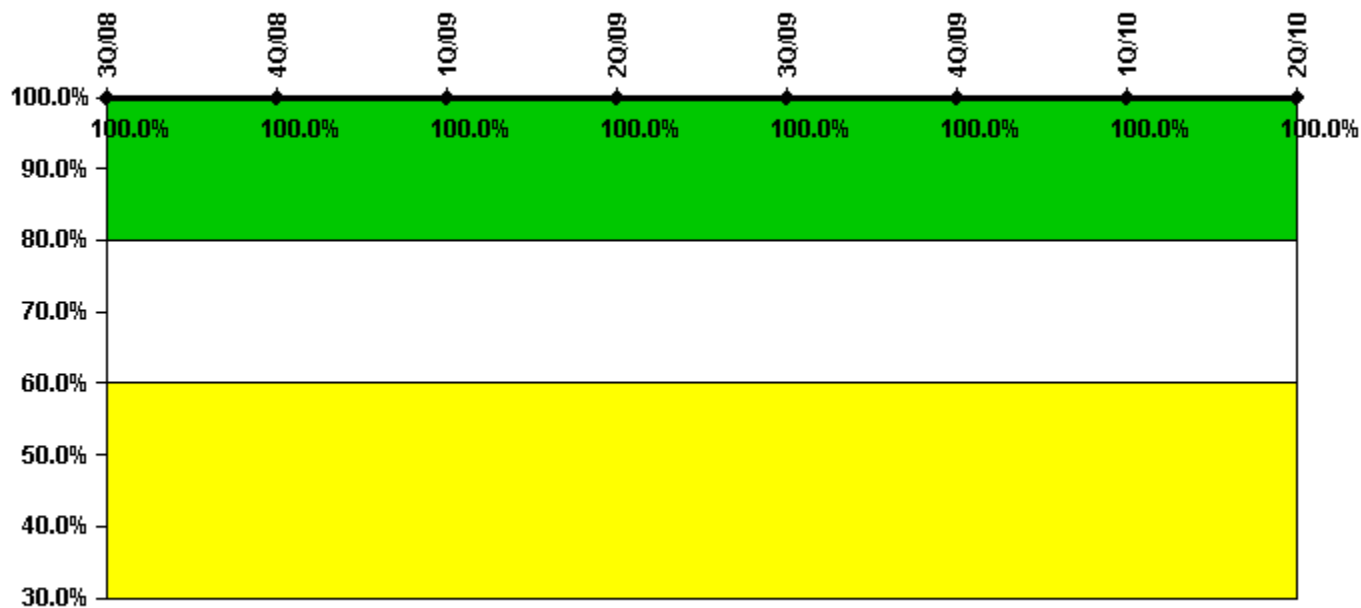
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Successful opportunities	62.0	51.0	30.0	62.0	40.0	64.0	34.0	9.0
Total opportunities	64.0	53.0	30.0	62.0	42.0	65.0	34.0	10.0
Indicator value	97.0%	96.5%	96.7%	97.9%	97.6%	97.7%	97.9%	97.8%

Licensee Comments: none

ERO Drill Participation



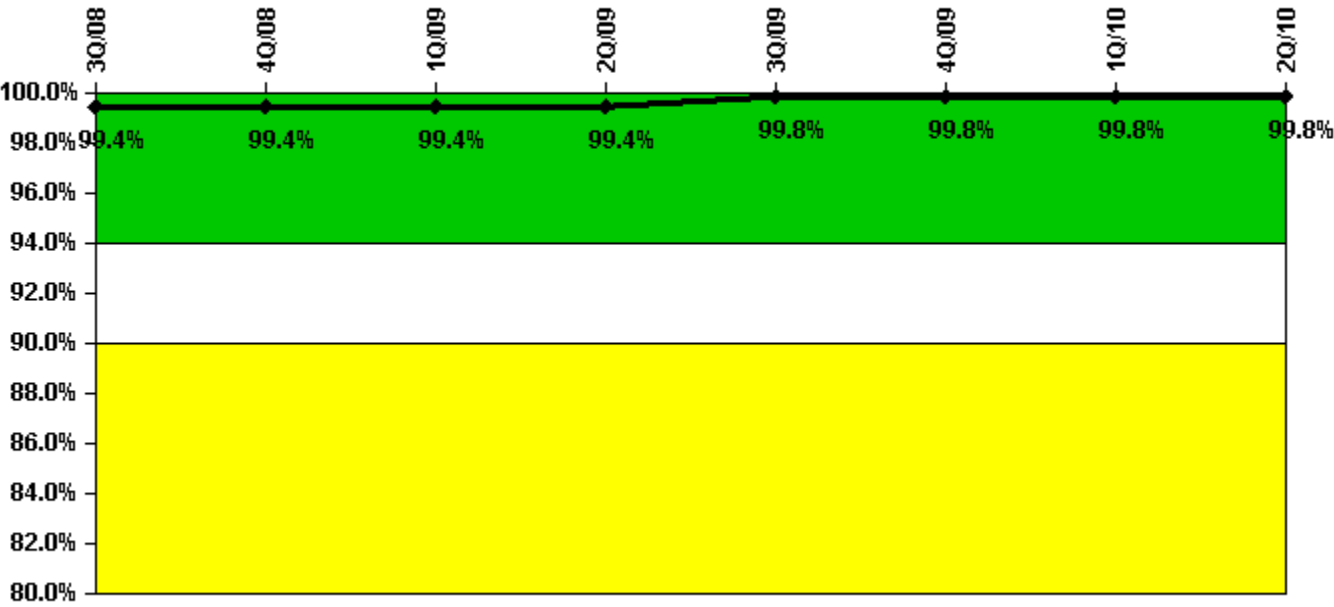
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Participating Key personnel	83.0	82.0	78.0	77.0	74.0	72.0	74.0	74.0
Total Key personnel	83.0	82.0	78.0	77.0	74.0	72.0	74.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



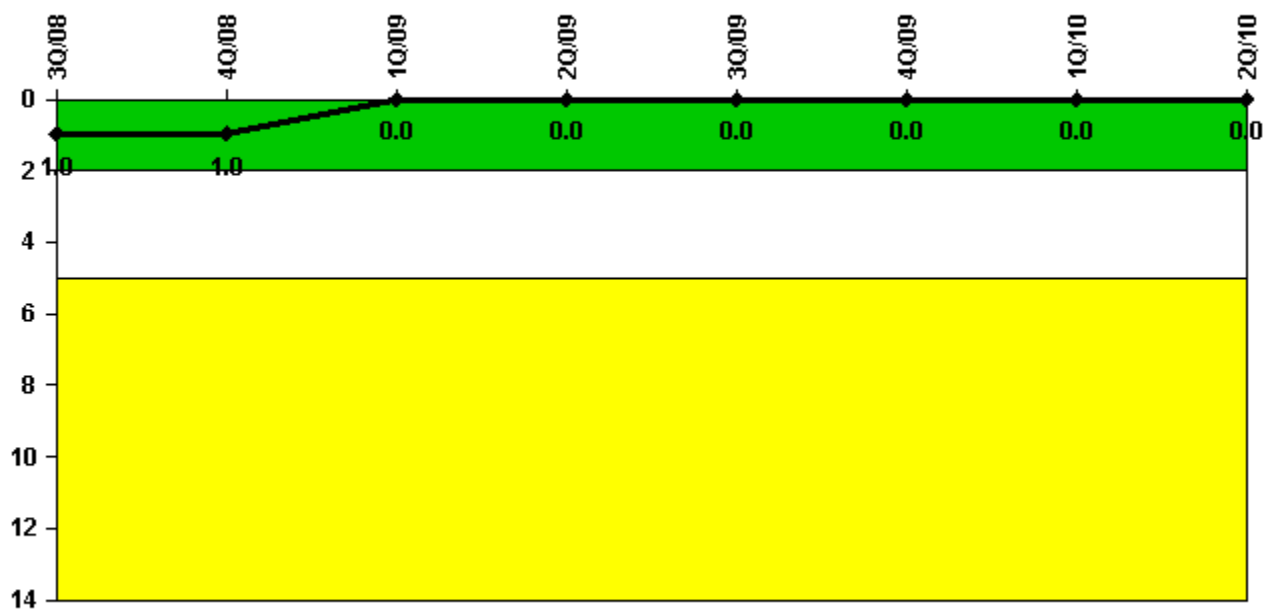
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Successful siren-tests	6006	5995	5915	6006	6106	5998	3841	3890
Total sirens-tests	6108	6016	5922	6016	6110	6016	3843	3904
Indicator value	99.4%	99.4%	99.4%	99.4%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



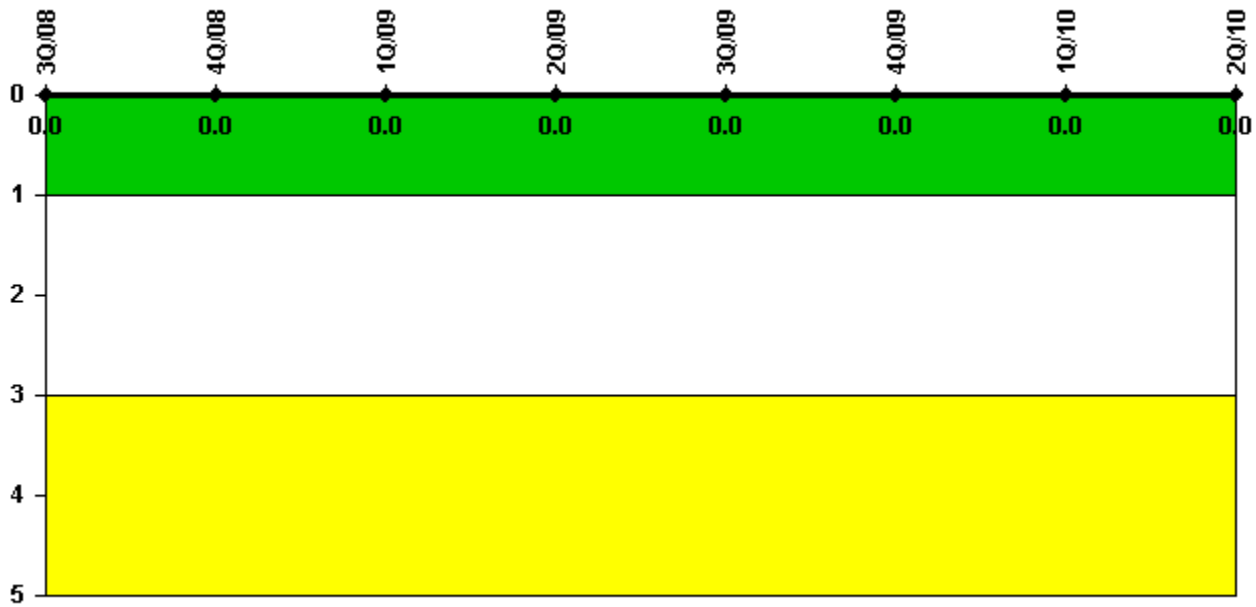
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	1	1	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.

Byron 2

3Q/2010 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



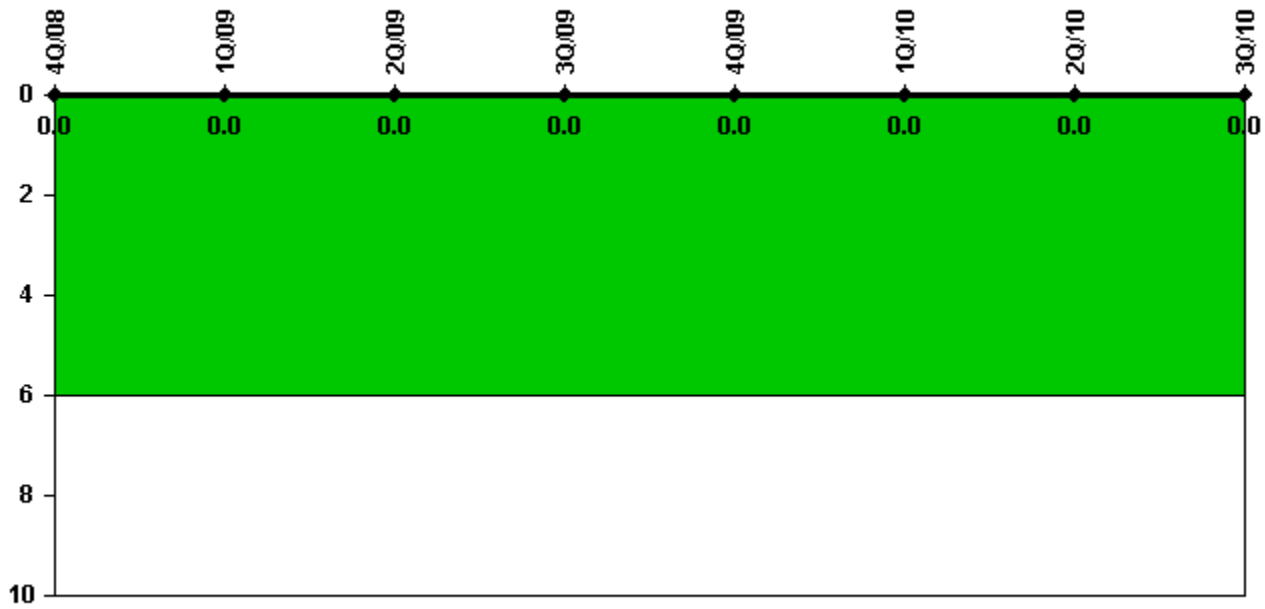
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1774.2	2159.0	2184.0	2208.0	2209.0	2159.0	1735.2	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



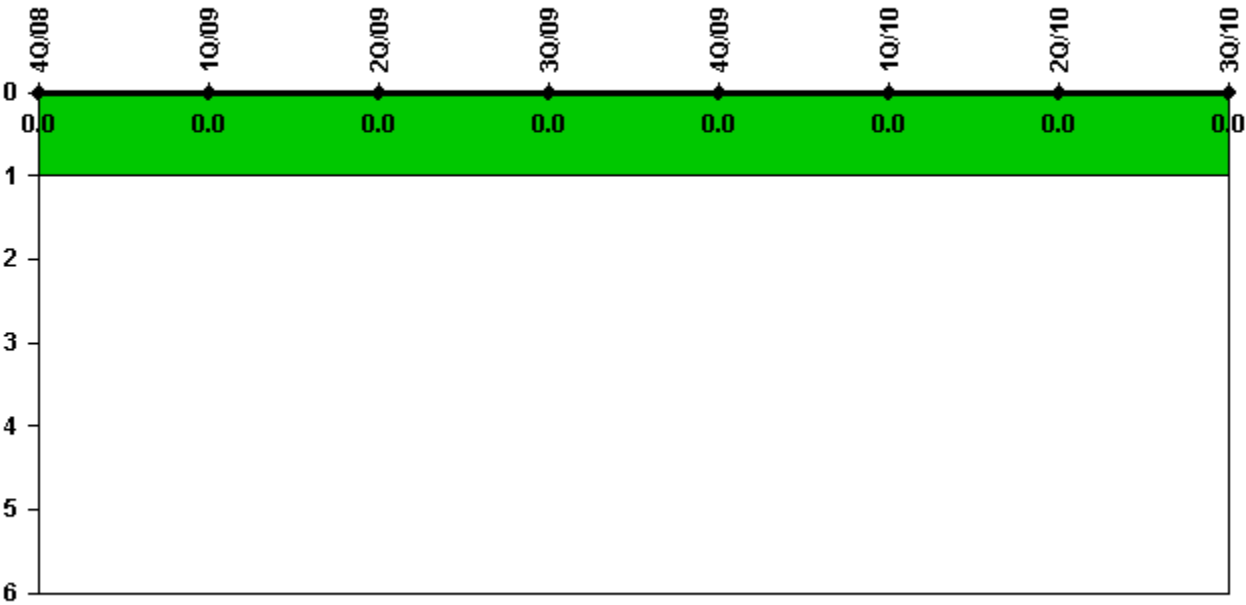
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	1774.2	2159.0	2184.0	2208.0	2209.0	2159.0	1735.2	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



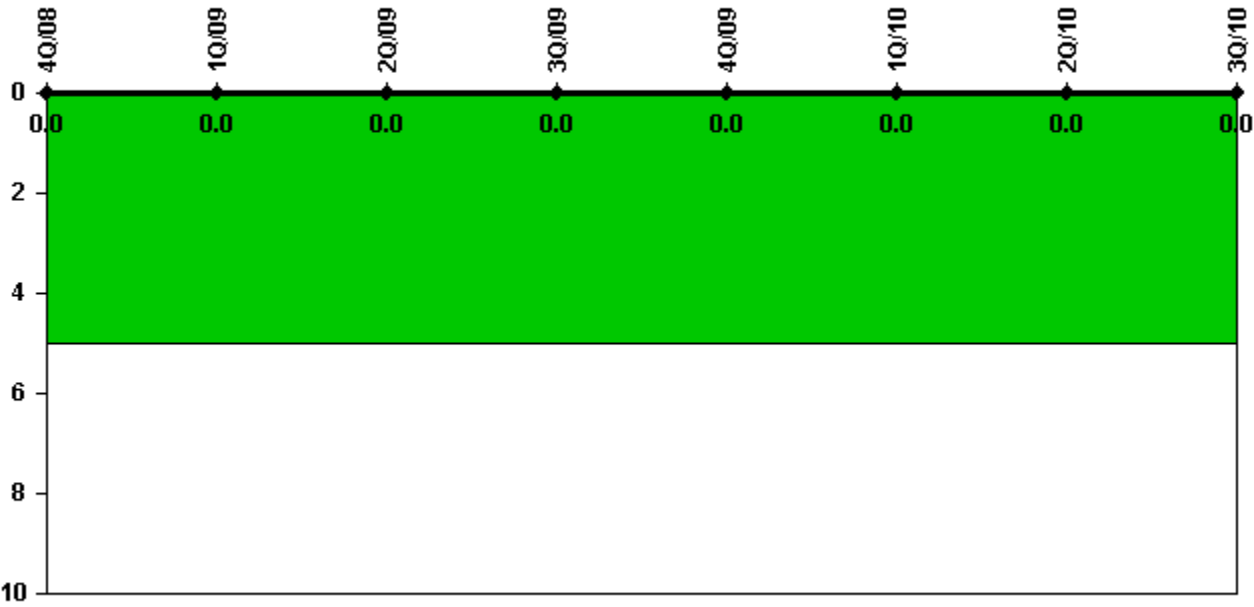
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



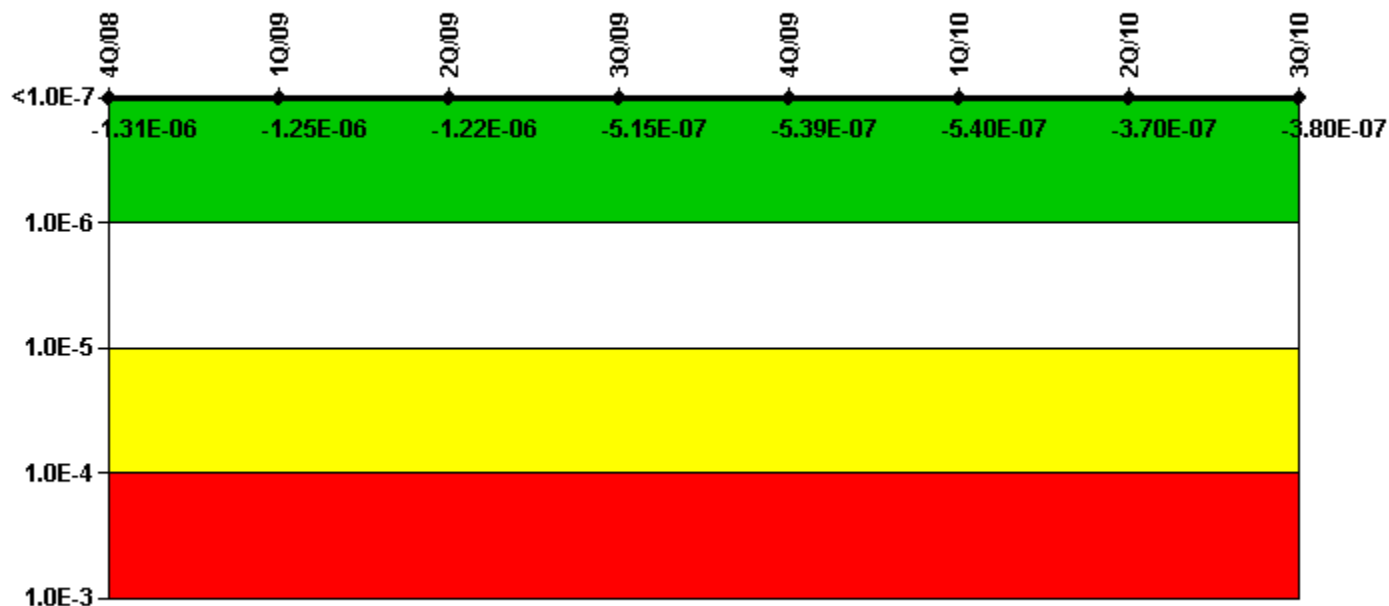
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



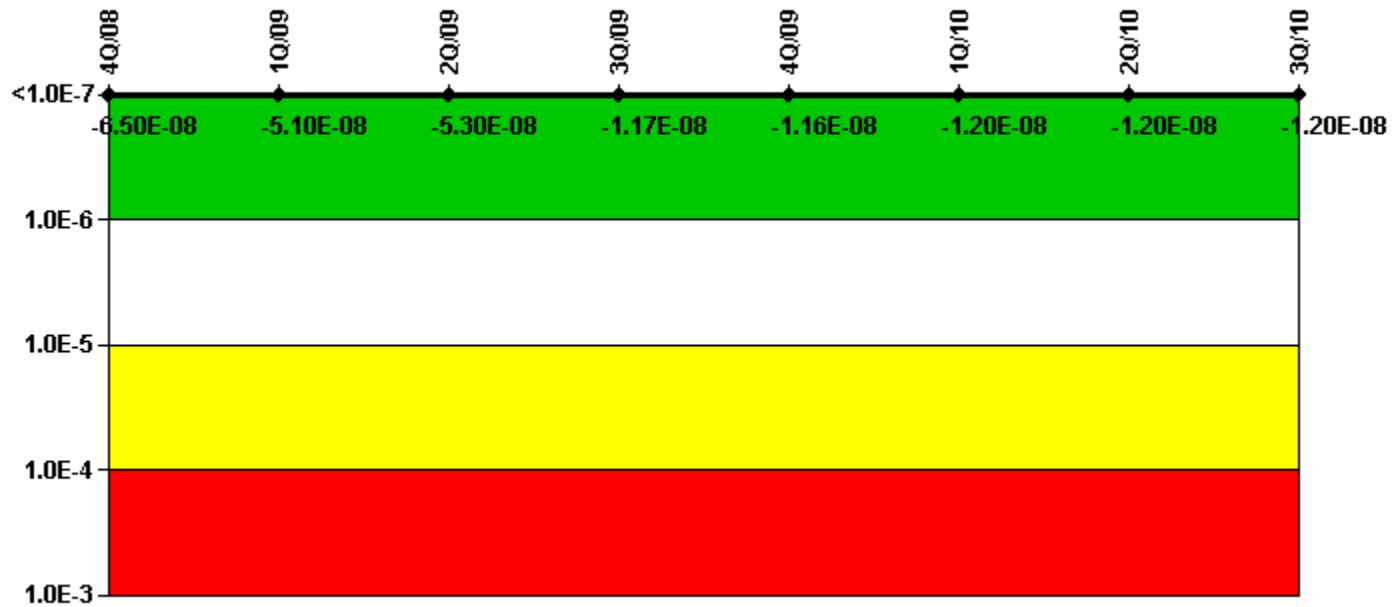
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
UAI (Δ CDF)	-7.10E-09	5.30E-08	7.70E-08	5.50E-08	3.10E-08	2.95E-08	3.31E-08	2.93E-08
URI (Δ CDF)	-1.30E-06	-1.30E-06	-1.30E-06	-5.70E-07	-5.70E-07	-5.70E-07	-4.08E-07	-4.07E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.31E-06	-1.25E-06	-1.22E-06	-5.15E-07	-5.39E-07	-5.40E-07	-3.70E-07	-3.80E-07

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
UAI (Δ CDF)	-5.40E-08	-4.10E-08	-4.30E-08	-9.20E-09	-9.20E-09	-9.17E-09	-9.41E-09	-9.41E-09
URI (Δ CDF)	-1.10E-08	-1.00E-08	-1.00E-08	-2.50E-09	-2.40E-09	-2.44E-09	-2.39E-09	-2.41E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.50E-08	-5.10E-08	-5.30E-08	-1.17E-08	-1.16E-08	-1.20E-08	-1.20E-08	-1.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



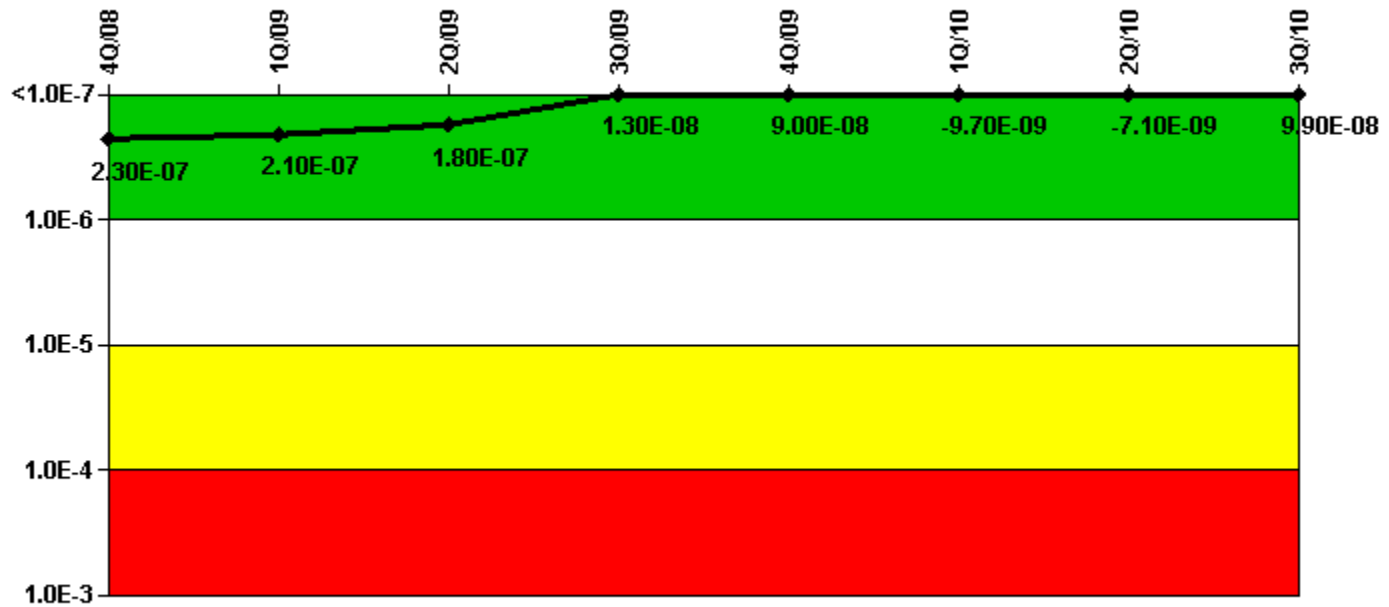
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
UAI (ΔCDF)	-6.70E-08	-1.60E-07	-1.60E-07	7.40E-08	7.40E-08	7.37E-08	7.17E-08	1.65E-07
URI (ΔCDF)	1.40E-07	-5.10E-07	-5.00E-07	-2.40E-07	-2.40E-07	-2.41E-07	-2.47E-07	-2.48E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	7.30E-08	-6.70E-07	-6.60E-07	-1.66E-07	-1.66E-07	-1.70E-07	-1.80E-07	-8.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



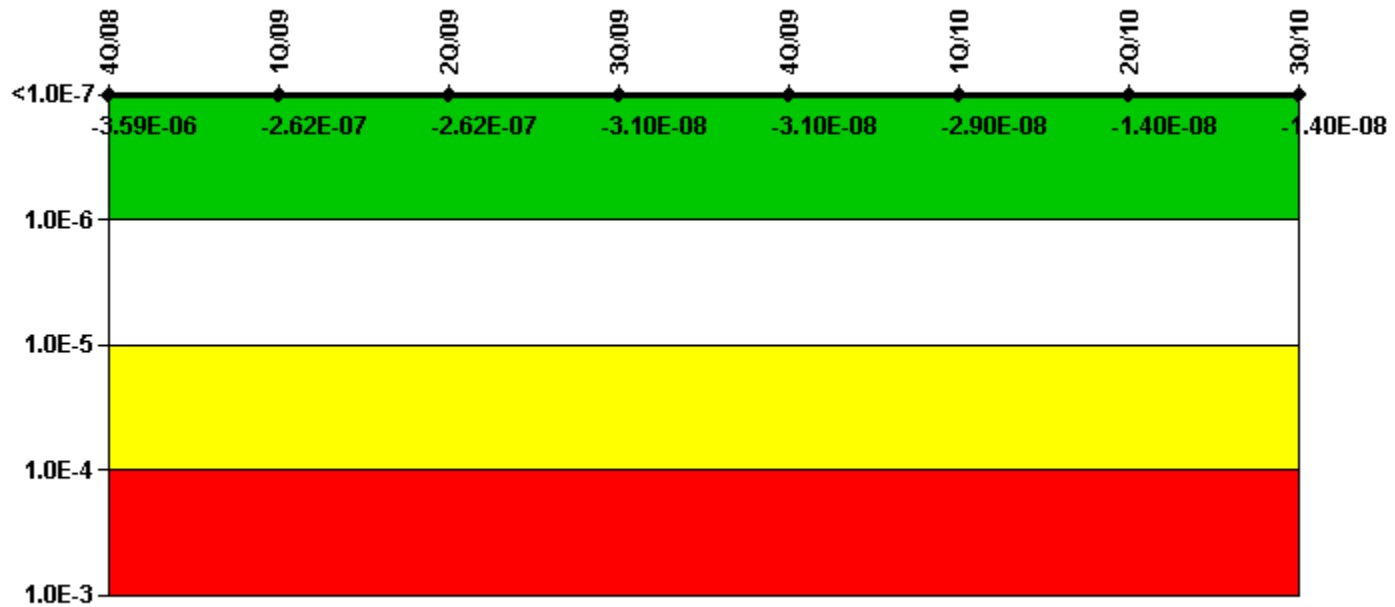
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
UAI (ΔCDF)	3.70E-07	3.50E-07	3.20E-07	1.10E-07	1.90E-07	9.26E-08	7.92E-08	1.88E-07
URI (ΔCDF)	-1.40E-07	-1.40E-07	-1.40E-07	-9.70E-08	-1.00E-07	-1.02E-07	-8.63E-08	-8.90E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.30E-07	2.10E-07	1.80E-07	1.30E-08	9.00E-08	-9.70E-09	-7.10E-09	9.90E-08

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



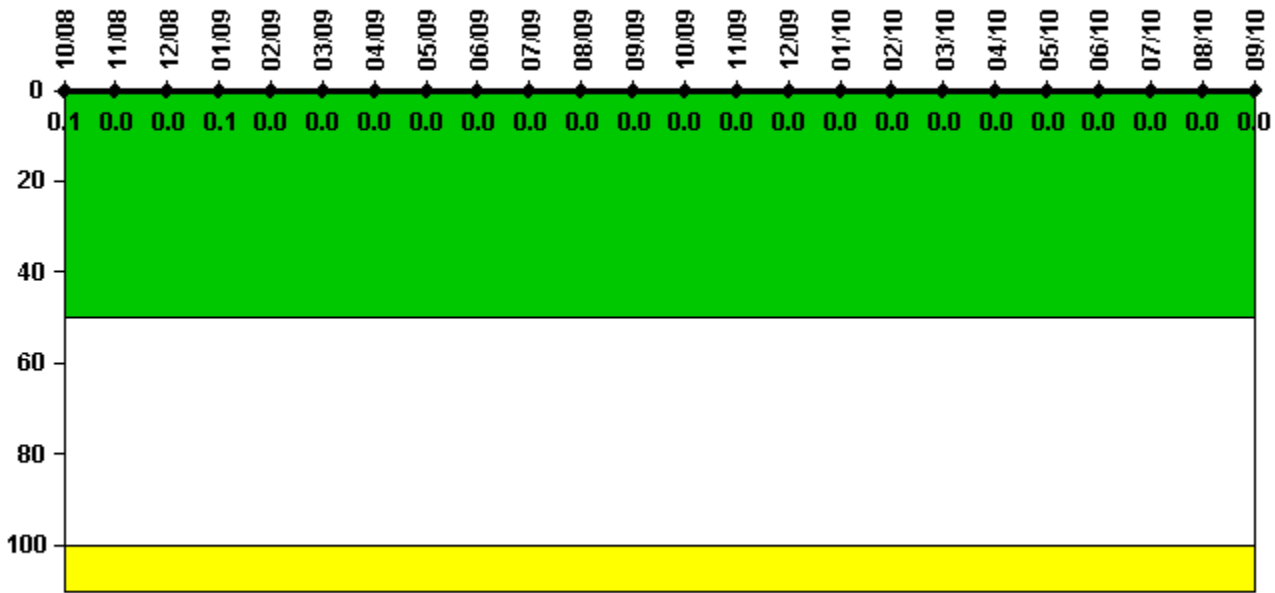
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
UAI (ΔCDF)	8.00E-09	7.80E-09	7.80E-09	7.90E-08	7.90E-08	7.95E-08	9.48E-08	9.48E-08
URI (ΔCDF)	-3.60E-06	-2.70E-07	-2.70E-07	-1.10E-07	-1.10E-07	-1.09E-07	-1.08E-07	-1.09E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.59E-06	-2.62E-07	-2.62E-07	-3.10E-08	-3.10E-08	-2.90E-08	-1.40E-08	-1.40E-08

Licensee Comments: none

Reactor Coolant System Activity



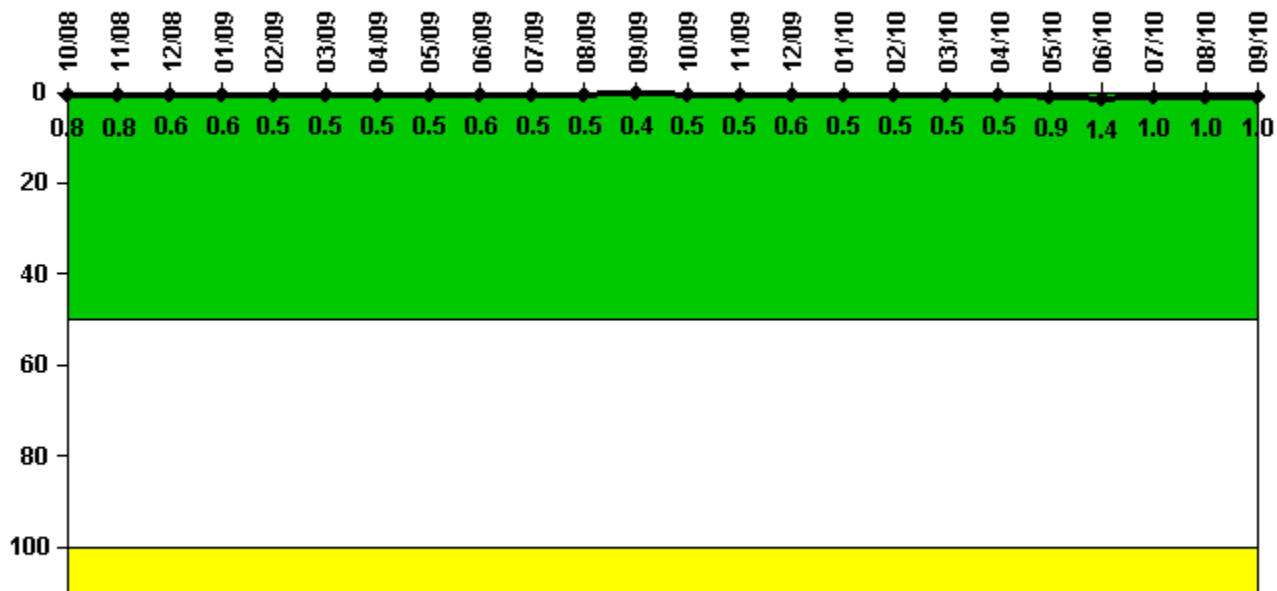
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09
Maximum activity	0.000635	0.000373	0.000315	0.000558	0.000334	0.000343	0.000347	0.000369	0.000385	0.000406	0.000420	0.000443
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0.1	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Maximum activity	0.000434	0.000443	0.000450	0.000459	0.000474	0.000276	0.000272	0.000096	0.000096	0.000099	0.000103	0.000106
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



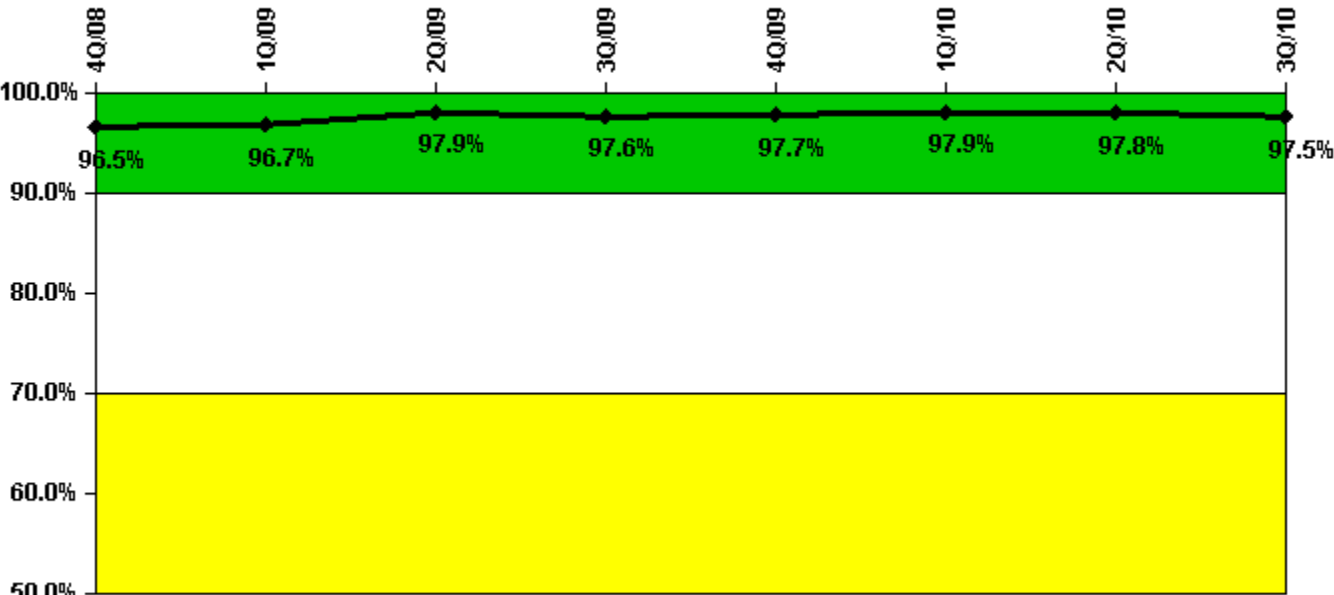
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09
Maximum leakage	0.078	0.076	0.059	0.062	0.052	0.046	0.051	0.048	0.055	0.048	0.047	0.040
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4
Reactor Coolant System Leakage	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Maximum leakage	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.090	0.140	0.100	0.100	0.100
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.9	1.4	1.0	1.0	1.0

Licensee Comments: none

Drill/Exercise Performance



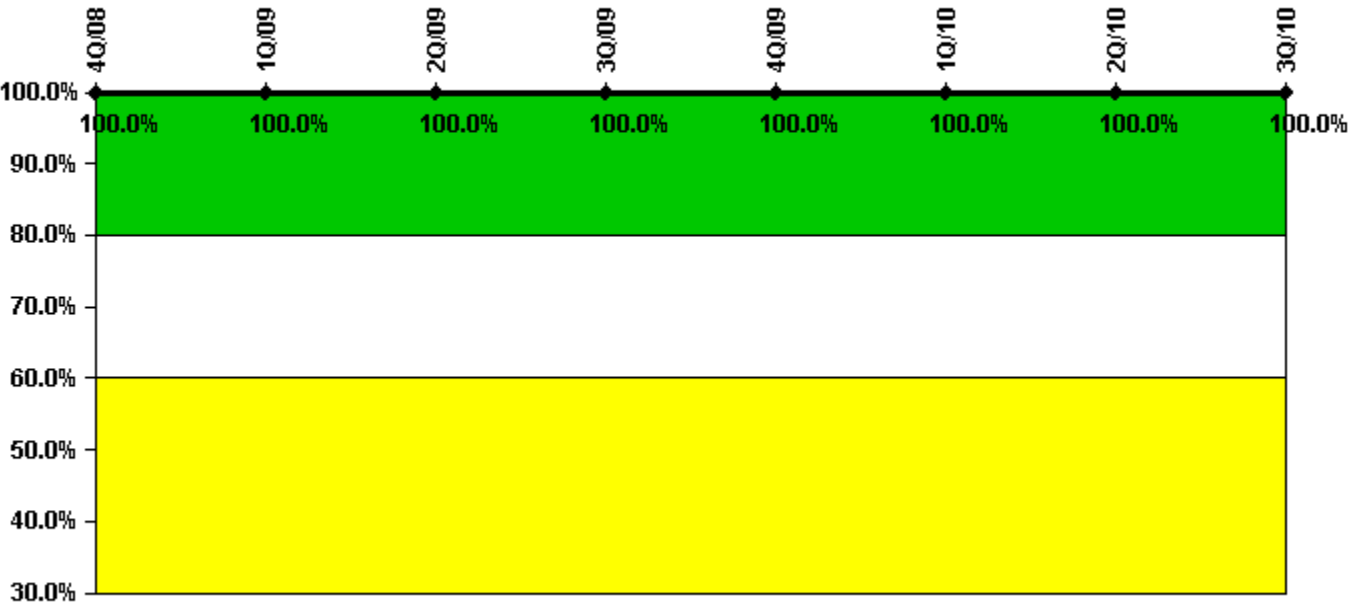
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
Successful opportunities	51.0	30.0	62.0	40.0	64.0	34.0	9.0	58.0
Total opportunities	53.0	30.0	62.0	42.0	65.0	34.0	10.0	61.0
Indicator value	96.5%	96.7%	97.9%	97.6%	97.7%	97.9%	97.8%	97.5%

Licensee Comments: none

ERO Drill Participation



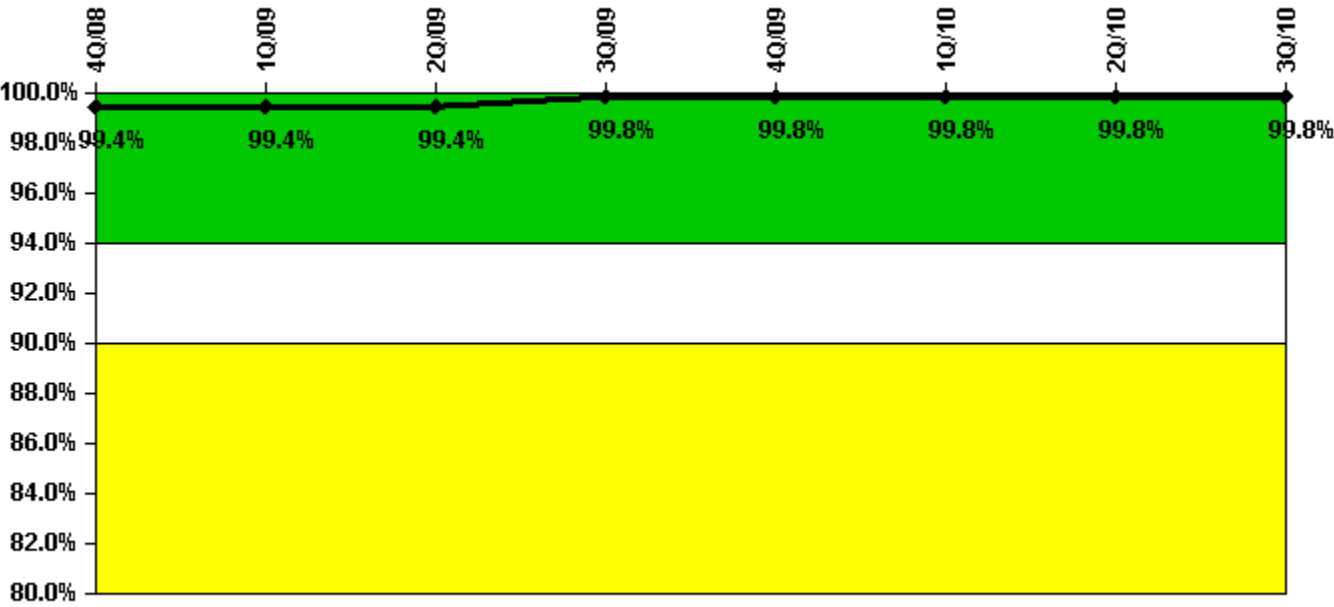
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
Participating Key personnel	82.0	78.0	77.0	74.0	72.0	74.0	74.0	72.0
Total Key personnel	82.0	78.0	77.0	74.0	72.0	74.0	74.0	72.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



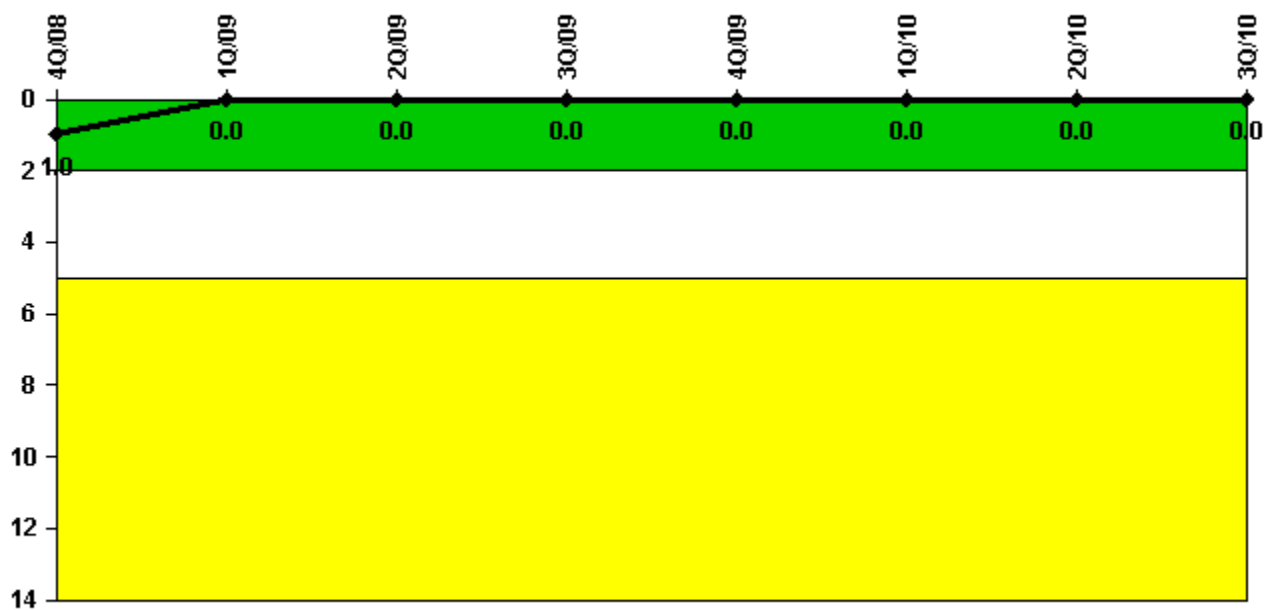
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
Successful siren-tests	5995	5915	6006	6106	5998	3841	3890	3959
Total sirens-tests	6016	5922	6016	6110	6016	3843	3904	3965
Indicator value	99.4%	99.4%	99.4%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



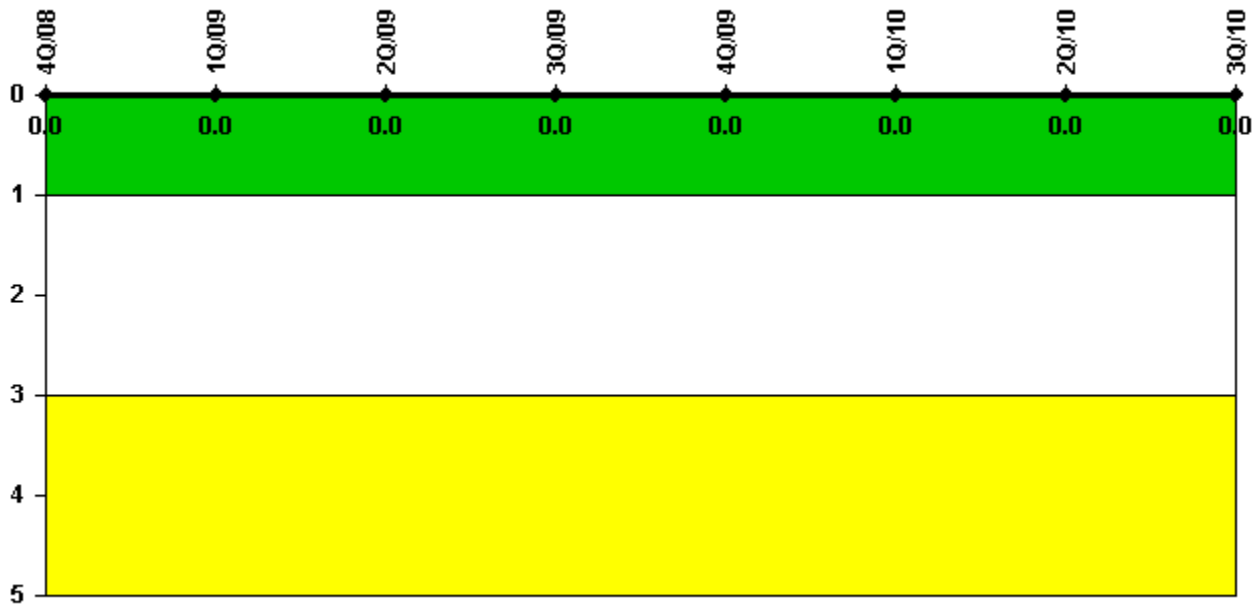
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	1	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.

Byron 2

4Q/2010 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



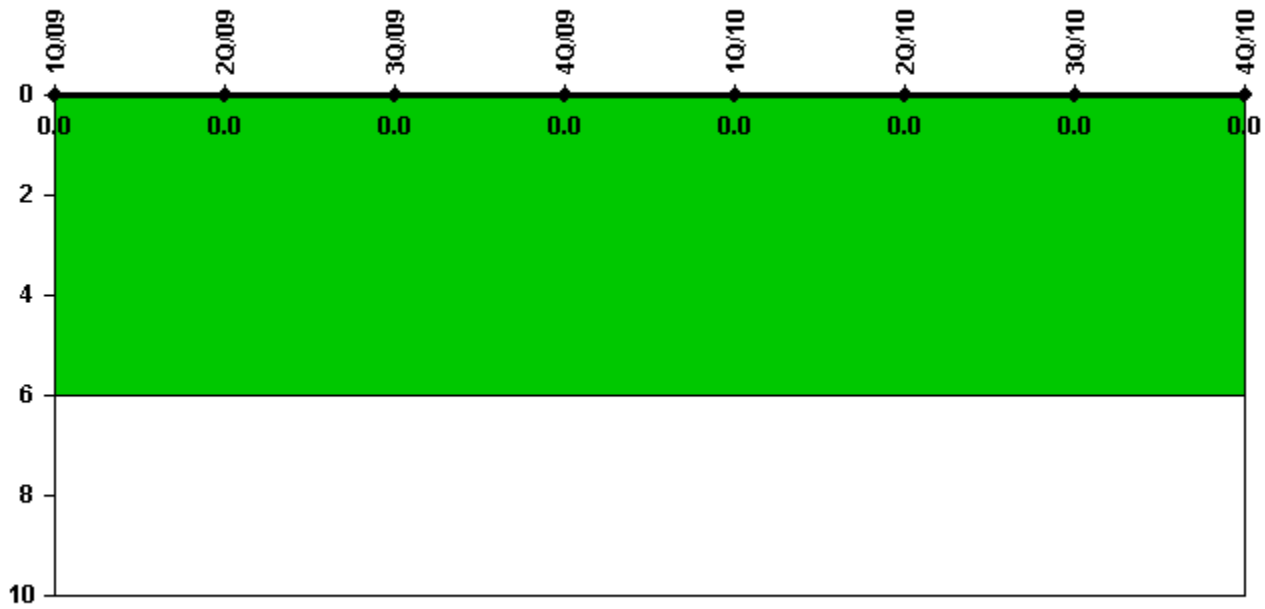
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2159.0	2184.0	2208.0	2209.0	2159.0	1735.2	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



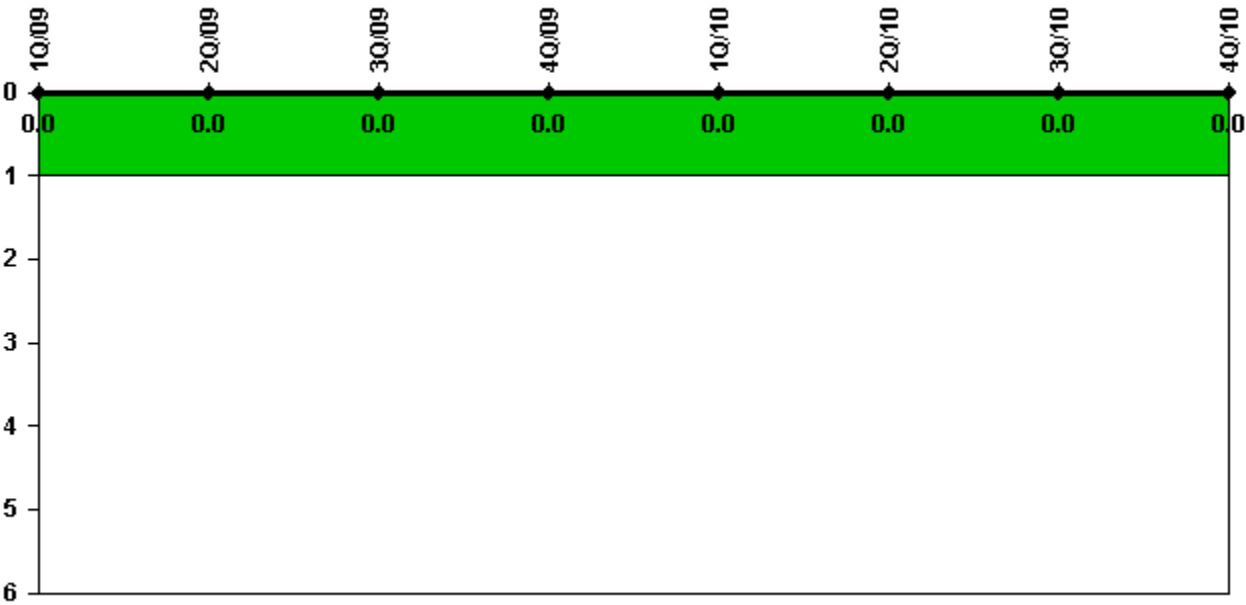
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2159.0	2184.0	2208.0	2209.0	2159.0	1735.2	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



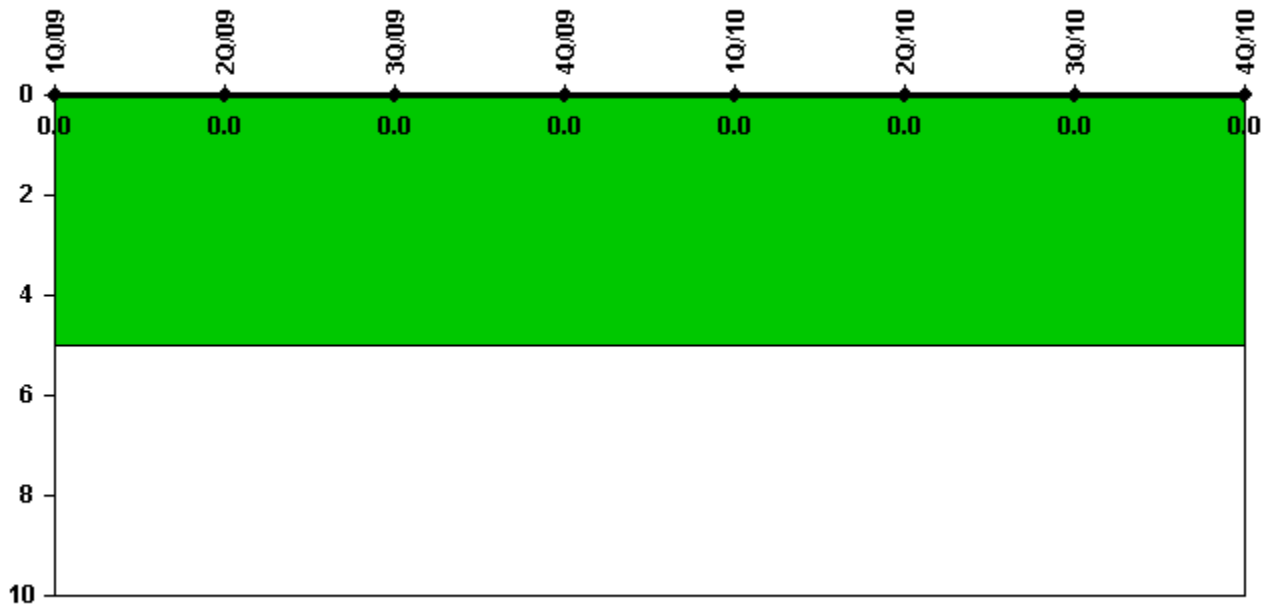
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



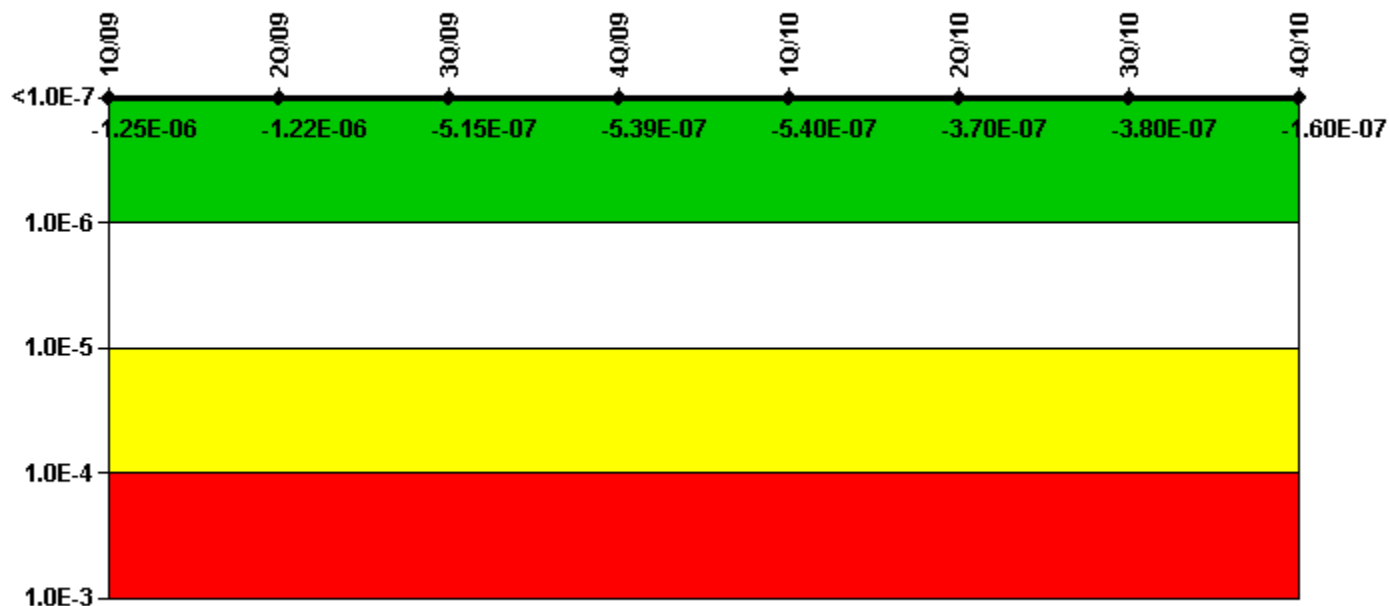
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



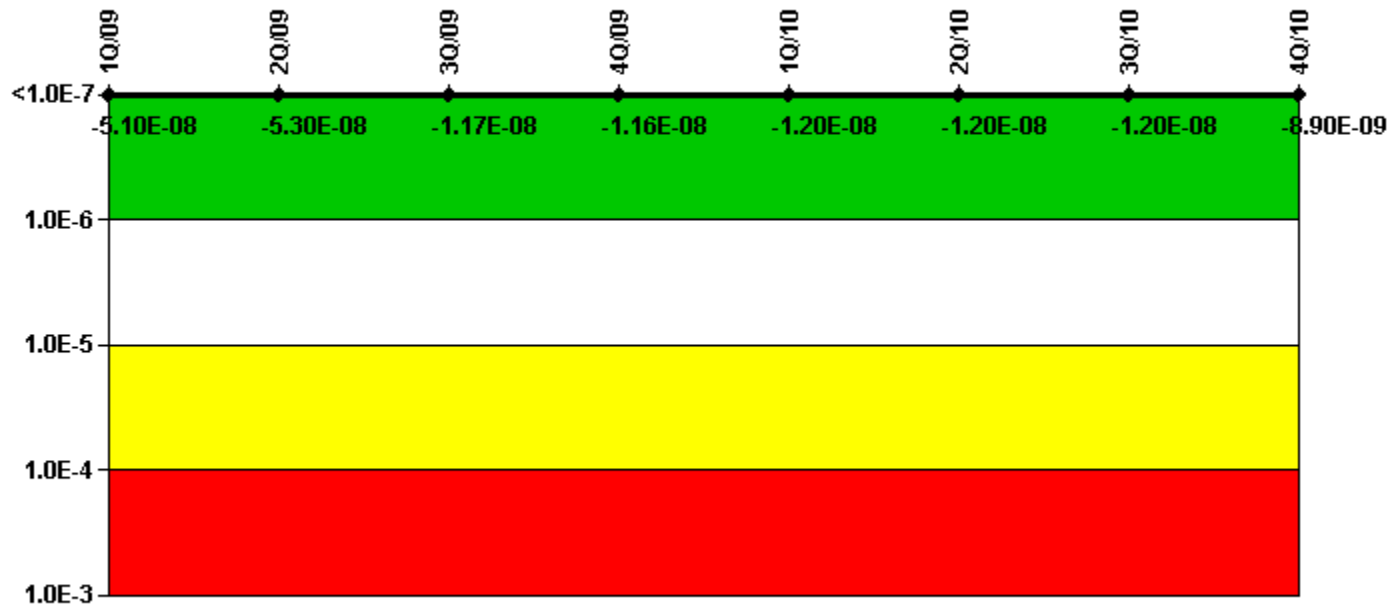
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	5.30E-08	7.70E-08	5.50E-08	3.10E-08	2.95E-08	3.31E-08	2.93E-08	7.83E-08
URI (ΔCDF)	-1.30E-06	-1.30E-06	-5.70E-07	-5.70E-07	-5.70E-07	-4.08E-07	-4.07E-07	-2.41E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.25E-06	-1.22E-06	-5.15E-07	-5.39E-07	-5.40E-07	-3.70E-07	-3.80E-07	-1.60E-07

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	-4.10E-08	-4.30E-08	-9.20E-09	-9.20E-09	-9.17E-09	-9.41E-09	-9.41E-09	-6.51E-09
URI (ΔCDF)	-1.00E-08	-1.00E-08	-2.50E-09	-2.40E-09	-2.44E-09	-2.39E-09	-2.41E-09	-2.40E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.10E-08	-5.30E-08	-1.17E-08	-1.16E-08	-1.20E-08	-1.20E-08	-1.20E-08	-8.90E-09

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



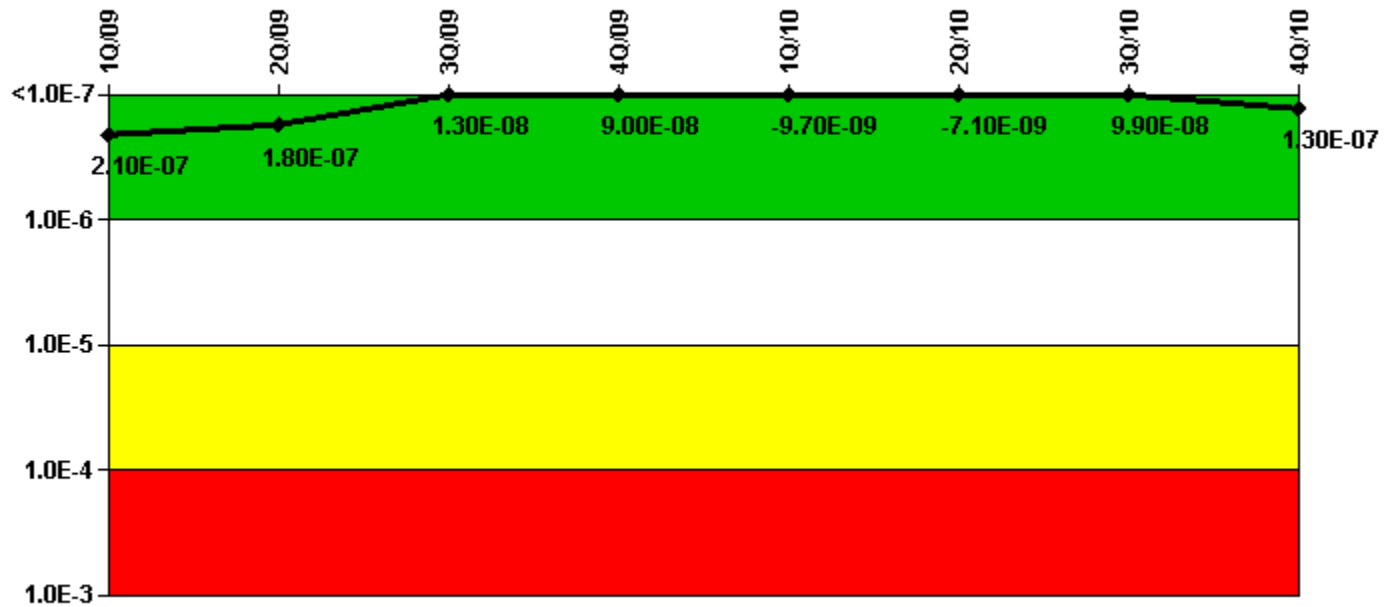
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (Δ CDF)	-1.60E-07	-1.60E-07	7.40E-08	7.40E-08	7.37E-08	7.17E-08	1.65E-07	1.63E-07
URI (Δ CDF)	-5.10E-07	-5.00E-07	-2.40E-07	-2.40E-07	-2.41E-07	-2.47E-07	-2.48E-07	-2.45E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.70E-07	-6.60E-07	-1.66E-07	-1.66E-07	-1.70E-07	-1.80E-07	-8.20E-08	-8.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



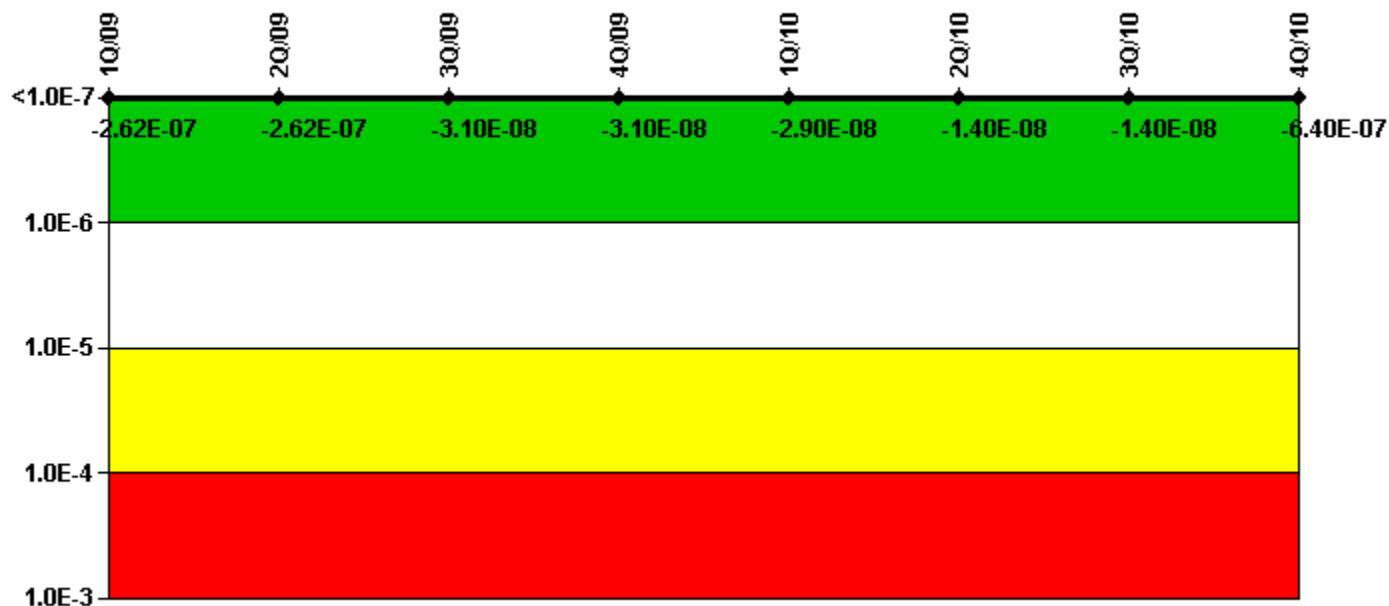
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	3.50E-07	3.20E-07	1.10E-07	1.90E-07	9.26E-08	7.92E-08	1.88E-07	2.16E-07
URI (ΔCDF)	-1.40E-07	-1.40E-07	-9.70E-08	-1.00E-07	-1.02E-07	-8.63E-08	-8.90E-08	-8.67E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.10E-07	1.80E-07	1.30E-08	9.00E-08	-9.70E-09	-7.10E-09	9.90E-08	1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

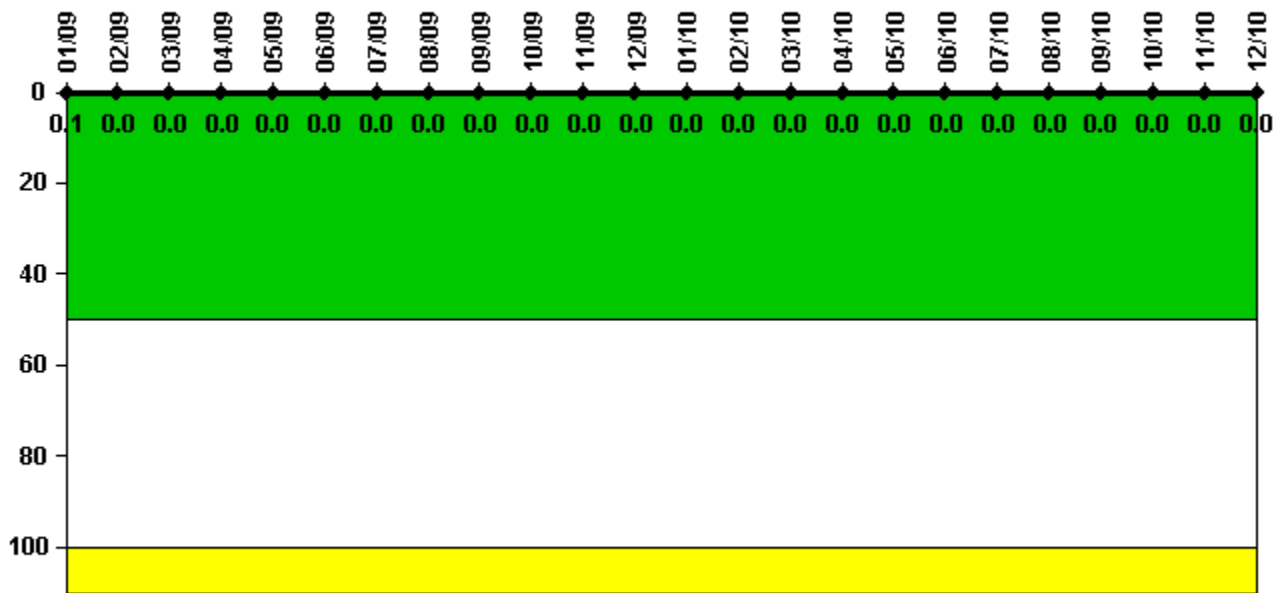
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	7.80E-09	7.80E-09	7.90E-08	7.90E-08	7.95E-08	9.48E-08	9.48E-08	2.51E-07
URI (ΔCDF)	-2.70E-07	-2.70E-07	-1.10E-07	-1.10E-07	-1.09E-07	-1.08E-07	-1.09E-07	-8.89E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.62E-07	-2.62E-07	-3.10E-08	-3.10E-08	-2.90E-08	-1.40E-08	-1.40E-08	-6.40E-07

Licensee Comments:

4Q/10: Changed PRA Parameter(s).

Reactor Coolant System Activity



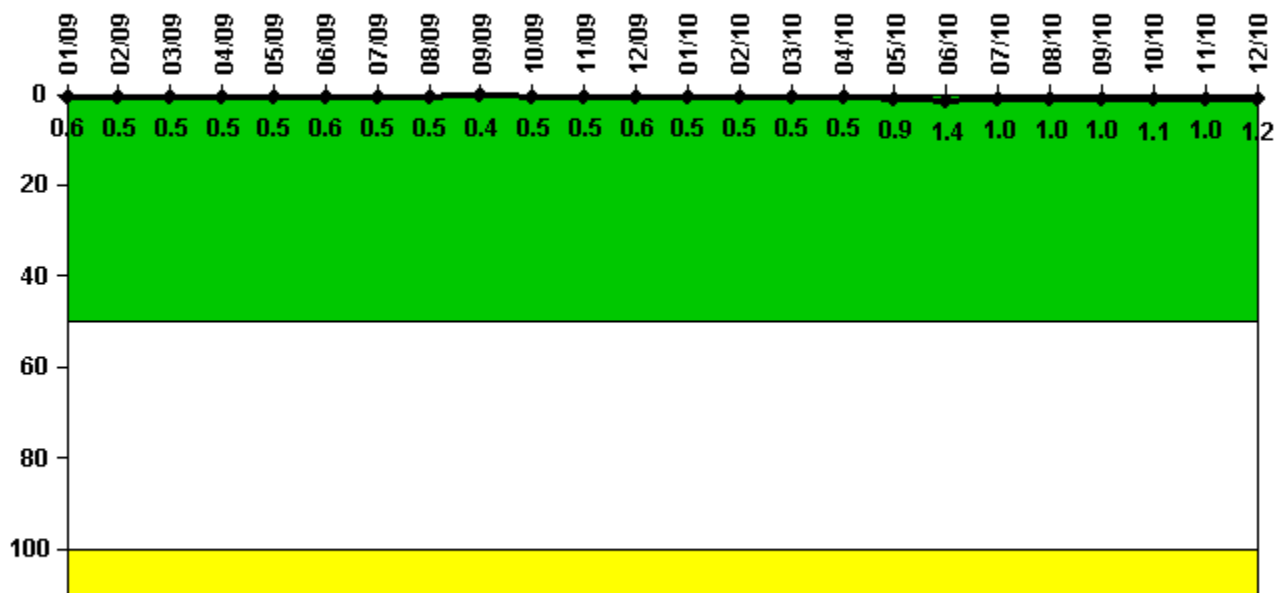
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum activity	0.000558	0.000334	0.000343	0.000347	0.000369	0.000385	0.000406	0.000420	0.000443	0.000434	0.000443	0.000450
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Maximum activity	0.000459	0.000474	0.000276	0.000272	0.000096	0.000096	0.000099	0.000103	0.000106	0.000118	0.000120	0.000124
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



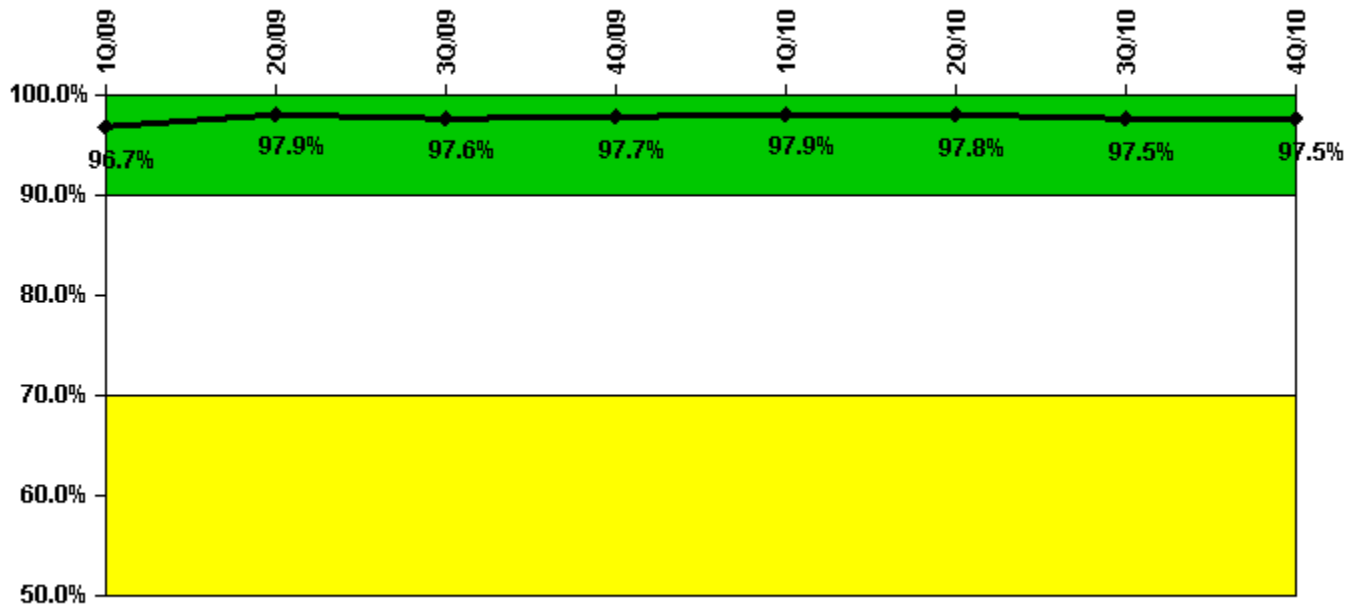
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum leakage	0.062	0.052	0.046	0.051	0.048	0.055	0.048	0.047	0.040	0.050	0.050	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.6
Reactor Coolant System Leakage	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Maximum leakage	0.050	0.050	0.050	0.050	0.090	0.140	0.100	0.100	0.100	0.110	0.100	0.120
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.5	0.9	1.4	1.0	1.0	1.0	1.1	1.0	1.2

Licensee Comments: none

Drill/Exercise Performance



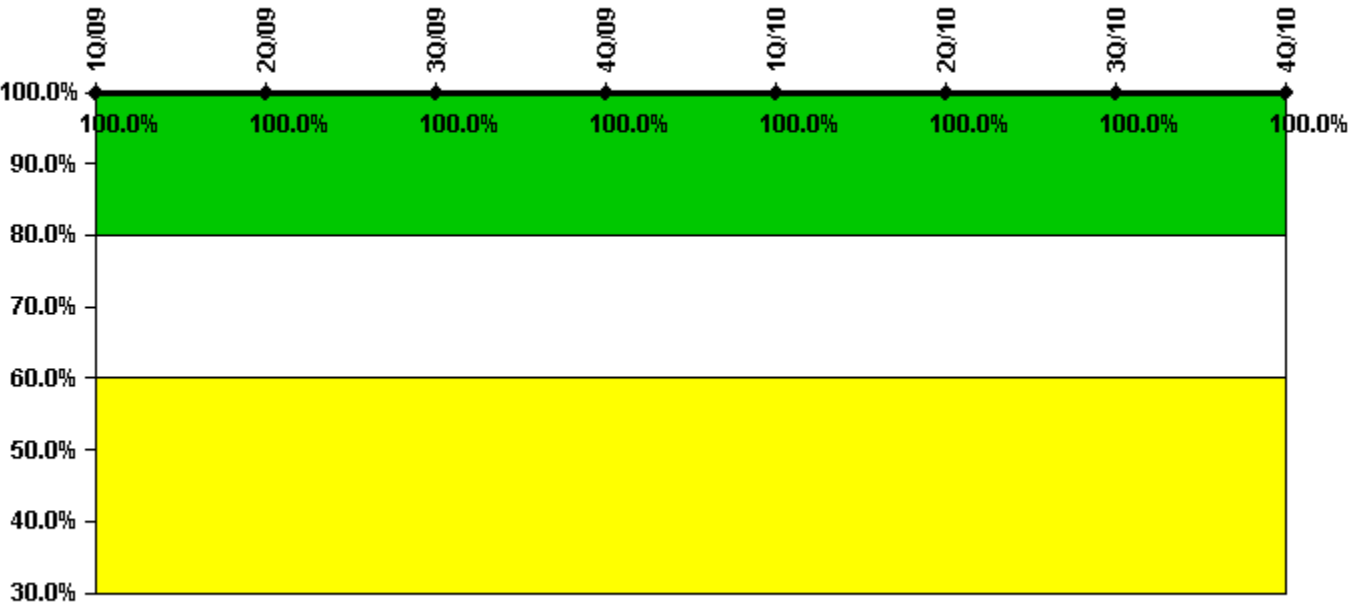
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Successful opportunities	30.0	62.0	40.0	64.0	34.0	9.0	58.0	12.0
Total opportunities	30.0	62.0	42.0	65.0	34.0	10.0	61.0	13.0
Indicator value	96.7%	97.9%	97.6%	97.7%	97.9%	97.8%	97.5%	97.5%

Licensee Comments: none

ERO Drill Participation



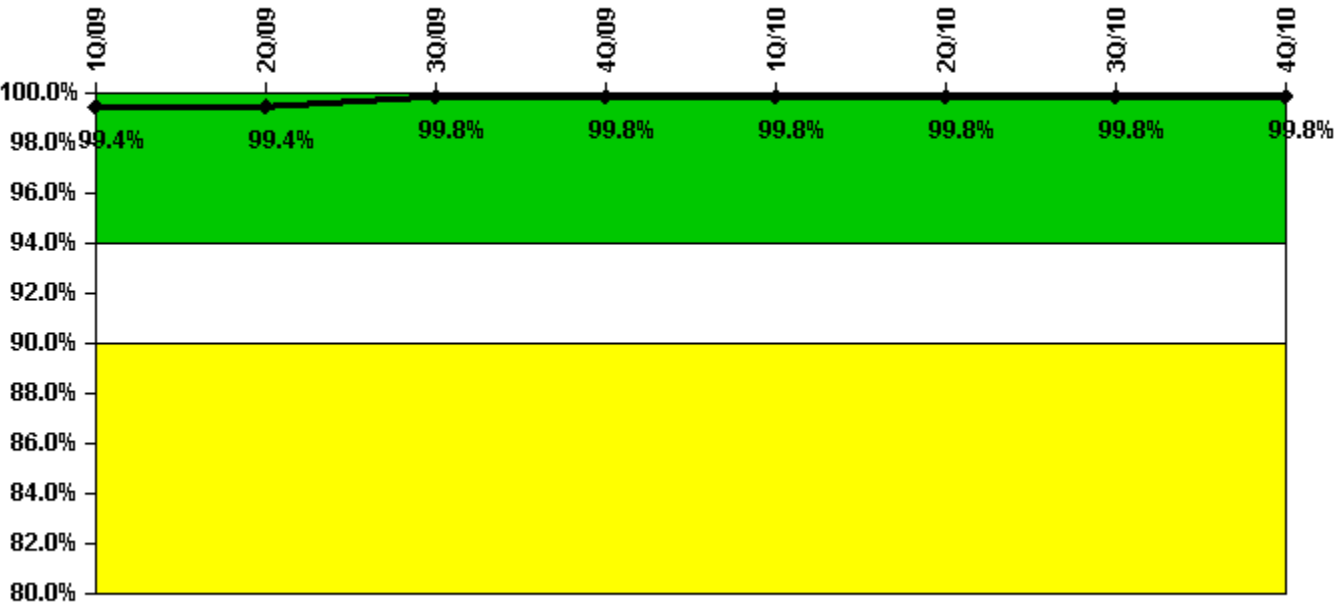
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Participating Key personnel	78.0	77.0	74.0	72.0	74.0	74.0	72.0	74.0
Total Key personnel	78.0	77.0	74.0	72.0	74.0	74.0	72.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



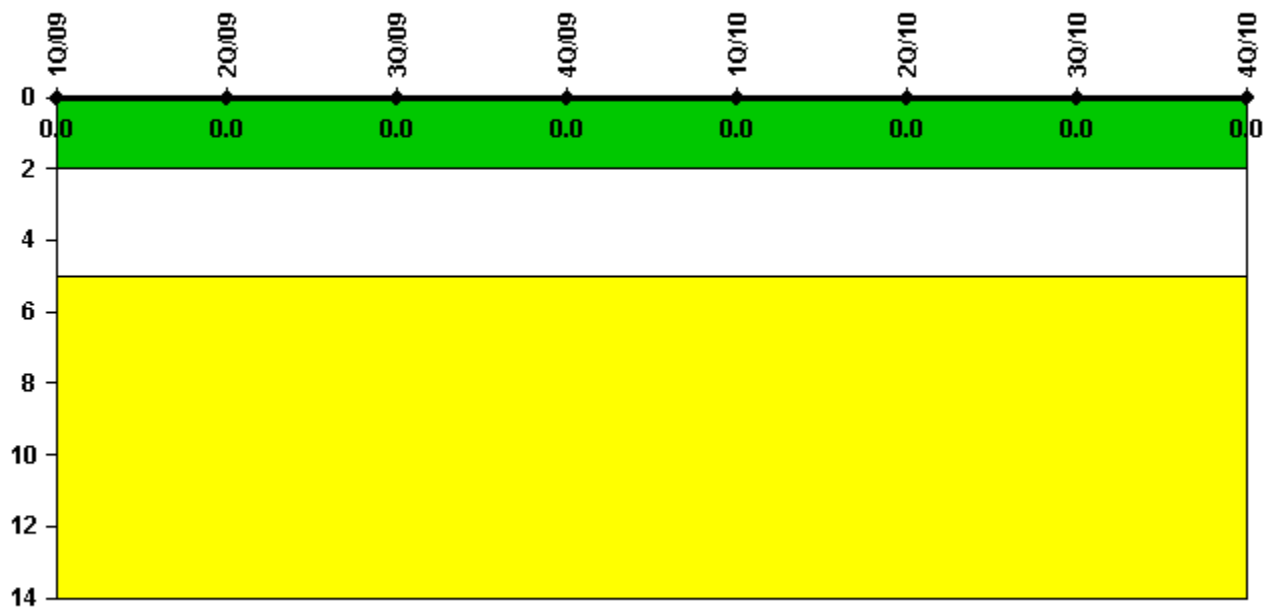
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Successful siren-tests	5915	6006	6106	5998	3841	3890	3959	3956
Total sirens-tests	5922	6016	6110	6016	3843	3904	3965	3965
Indicator value	99.4%	99.4%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



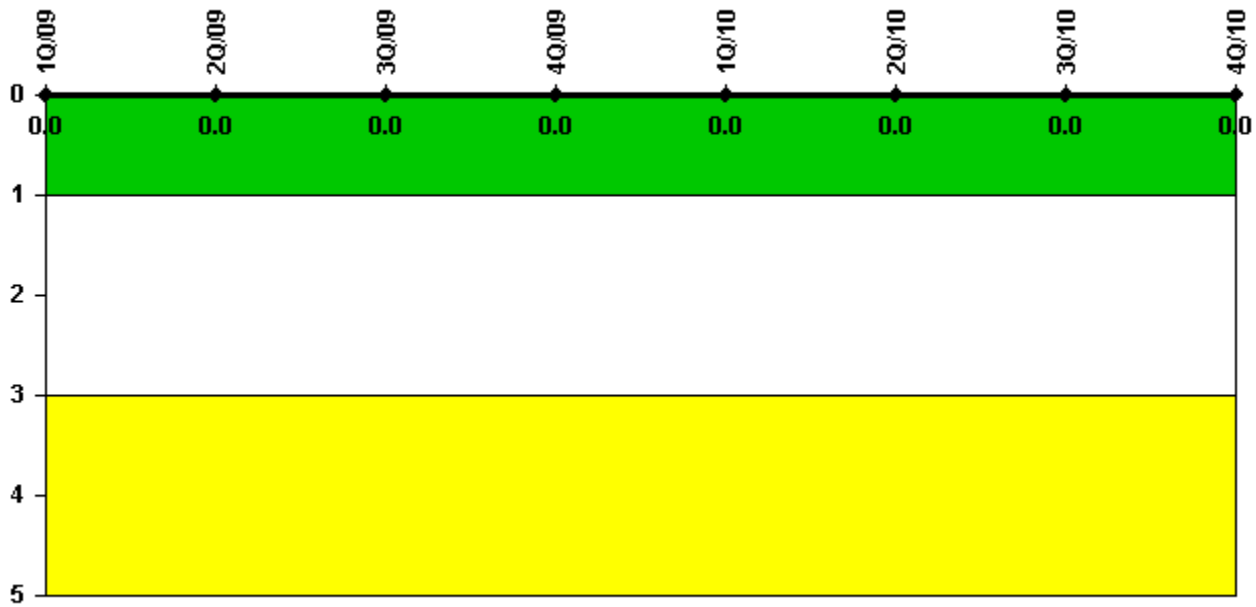
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.

Byron 2

1Q/2011 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



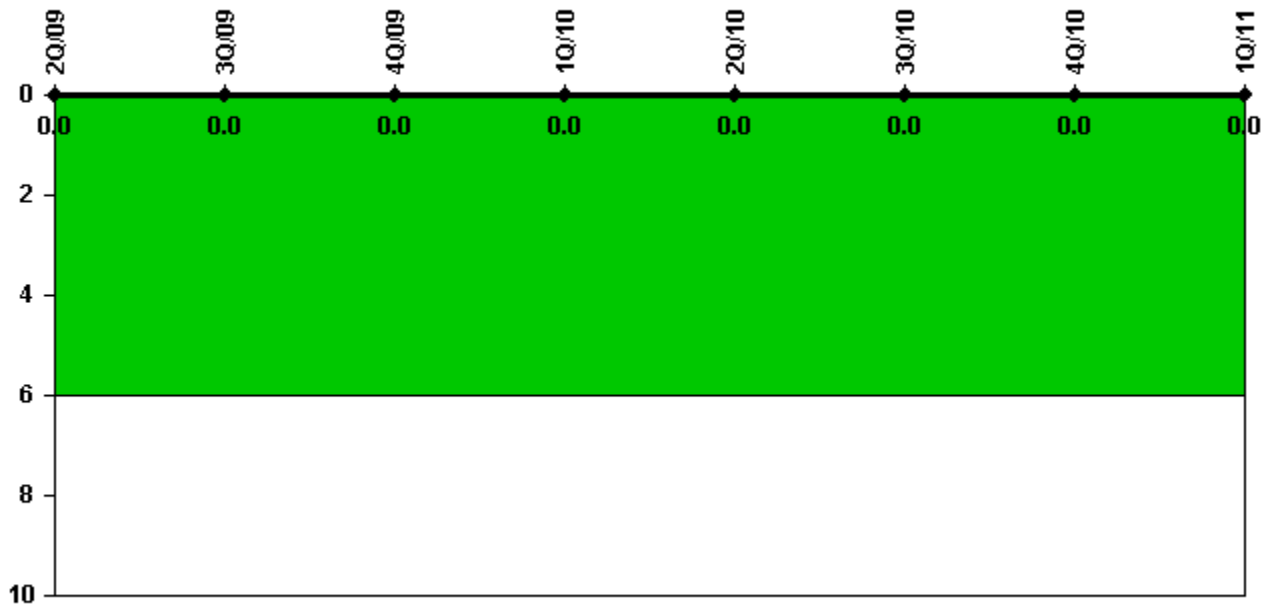
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	2159.0	1735.2	2208.0	2209.0	2159.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



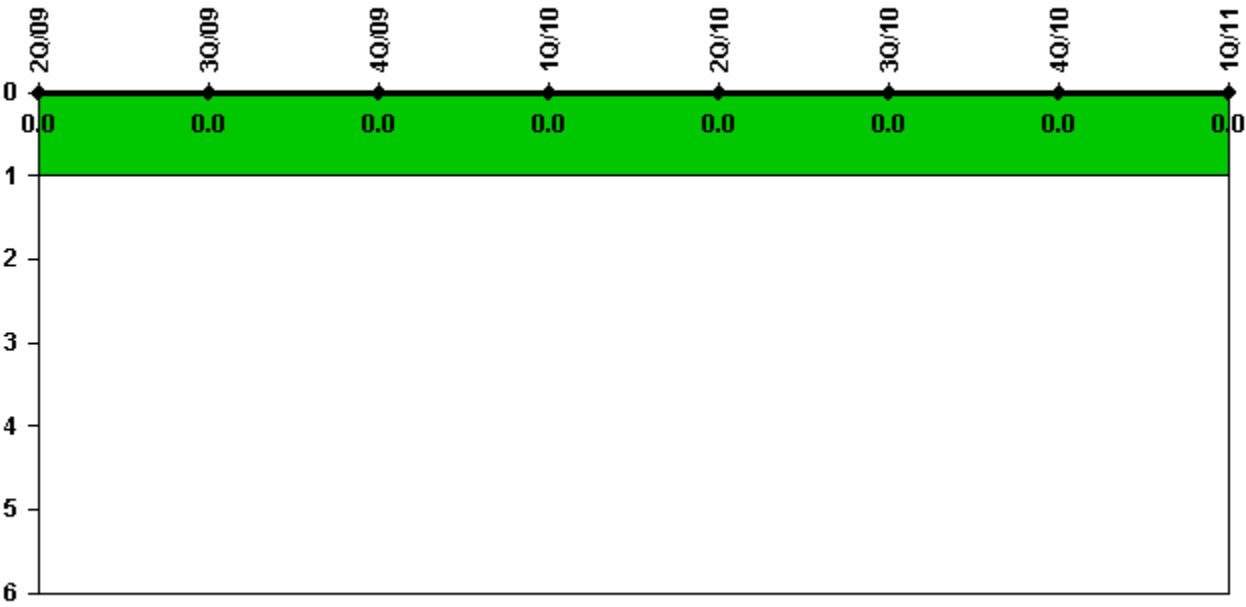
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	2159.0	1735.2	2208.0	2209.0	2159.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



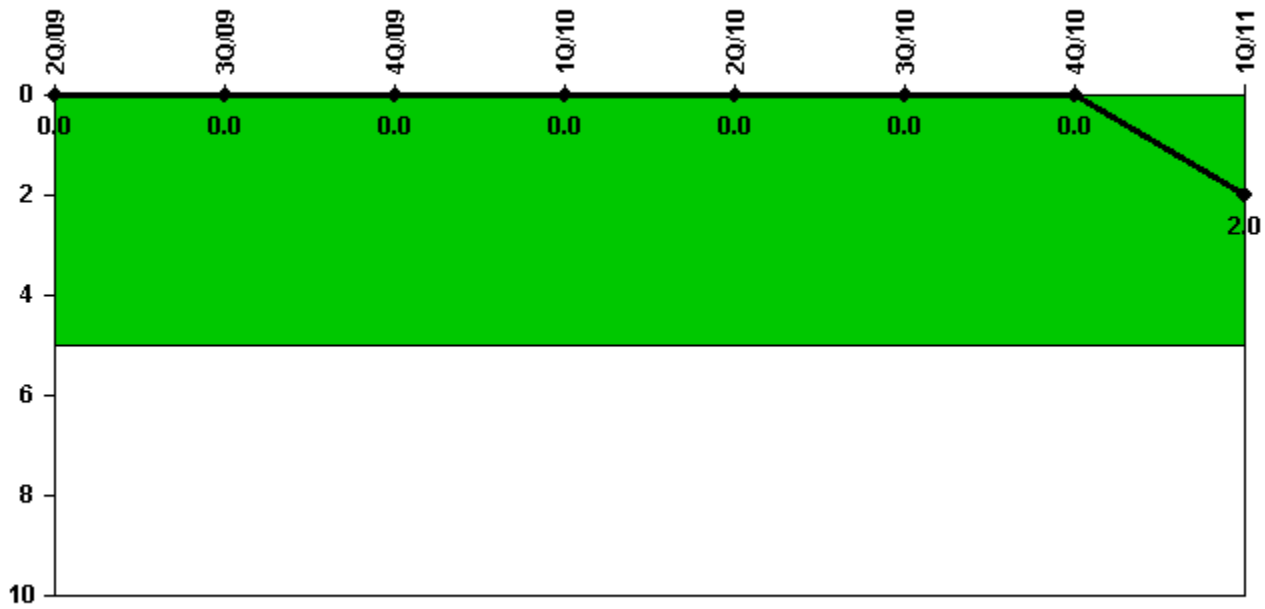
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



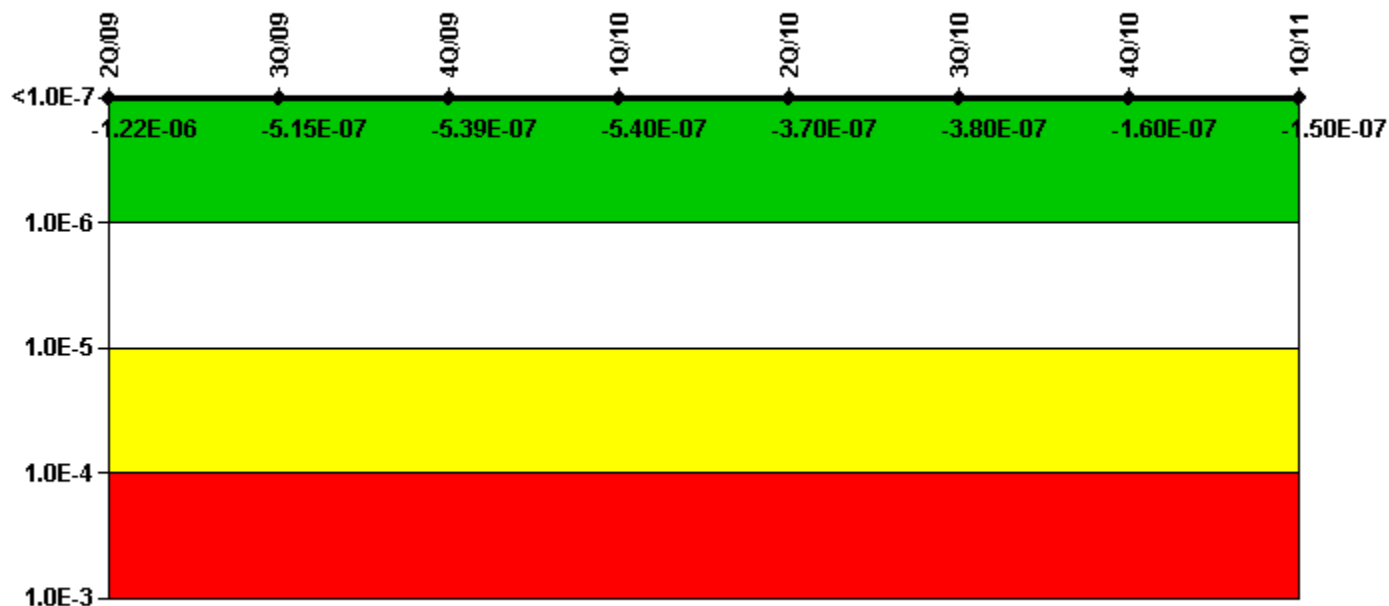
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
Safety System Functional Failures	0	0	0	0	0	0	0	2
Indicator value	0	0	0	0	0	0	0	2

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

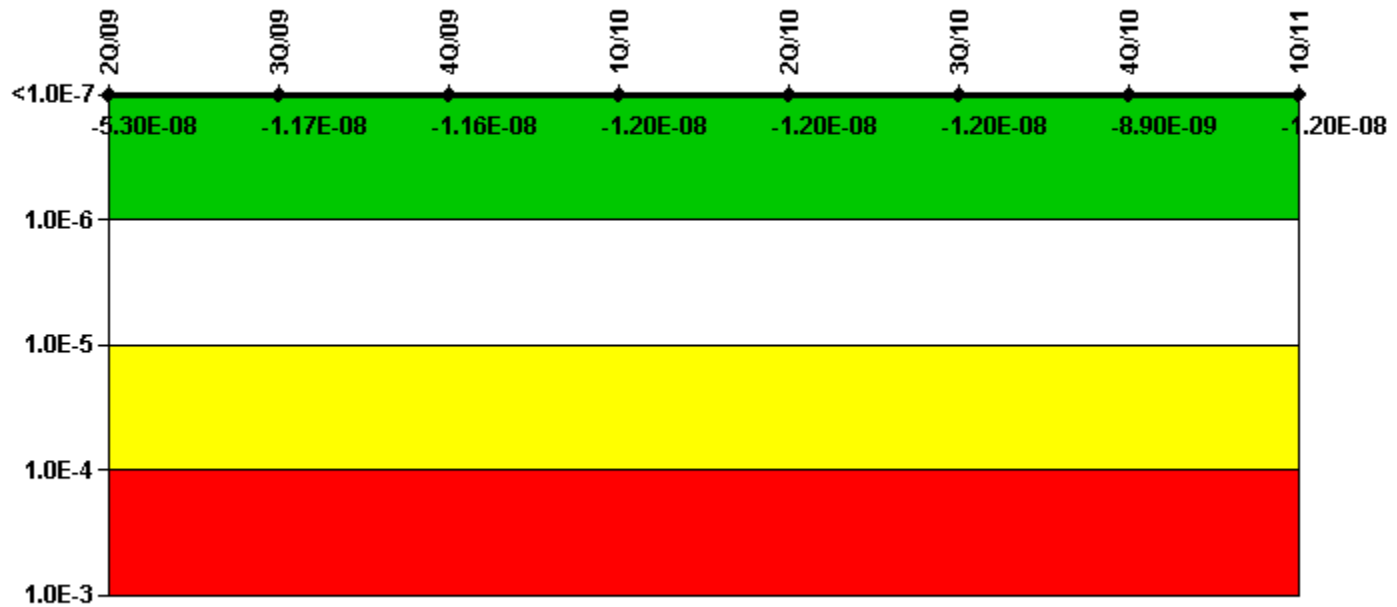
Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
UAI (ΔCDF)	7.70E-08	5.50E-08	3.10E-08	2.95E-08	3.31E-08	2.93E-08	7.83E-08	9.92E-08
URI (ΔCDF)	-1.30E-06	-5.70E-07	-5.70E-07	-5.70E-07	-4.08E-07	-4.07E-07	-2.41E-07	-2.45E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.22E-06	-5.15E-07	-5.39E-07	-5.40E-07	-3.70E-07	-3.80E-07	-1.60E-07	-1.50E-07

Licensee Comments:

1Q/11: Due to typo on paperwork, UA for 1A DG was listed for 1B. This has been corrected.

Mitigating Systems Performance Index, High Pressure Injection System



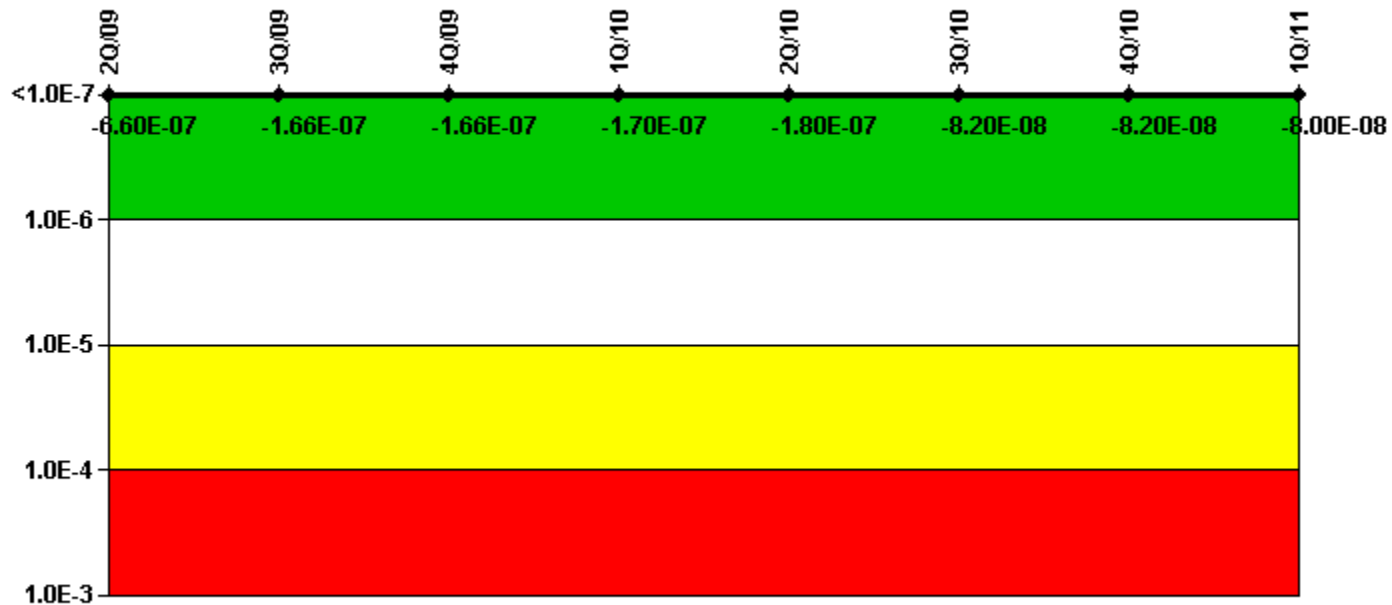
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
UAI (Δ CDF)	-4.30E-08	-9.20E-09	-9.20E-09	-9.17E-09	-9.41E-09	-9.41E-09	-6.51E-09	-1.00E-08
URI (Δ CDF)	-1.00E-08	-2.50E-09	-2.40E-09	-2.44E-09	-2.39E-09	-2.41E-09	-2.40E-09	-2.40E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.30E-08	-1.17E-08	-1.16E-08	-1.20E-08	-1.20E-08	-1.20E-08	-8.90E-09	-1.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



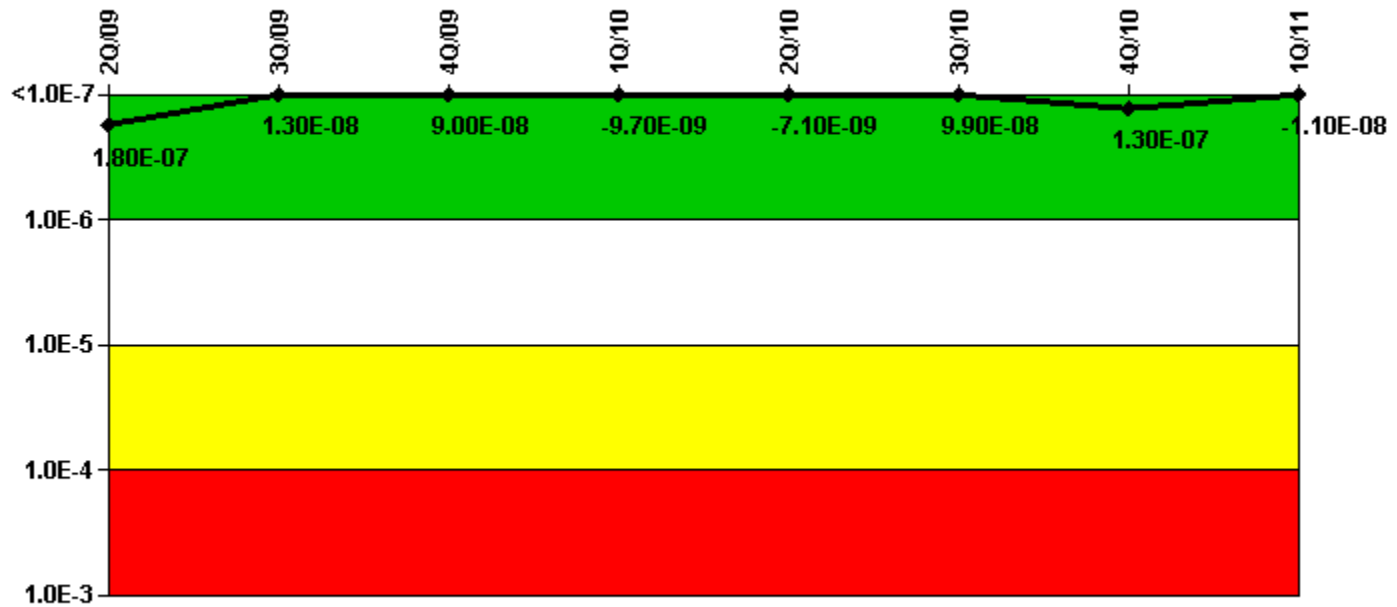
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
UAI (Δ CDF)	-1.60E-07	7.40E-08	7.40E-08	7.37E-08	7.17E-08	1.65E-07	1.63E-07	1.63E-07
URI (Δ CDF)	-5.00E-07	-2.40E-07	-2.40E-07	-2.41E-07	-2.47E-07	-2.48E-07	-2.45E-07	-2.43E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.60E-07	-1.66E-07	-1.66E-07	-1.70E-07	-1.80E-07	-8.20E-08	-8.20E-08	-8.00E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



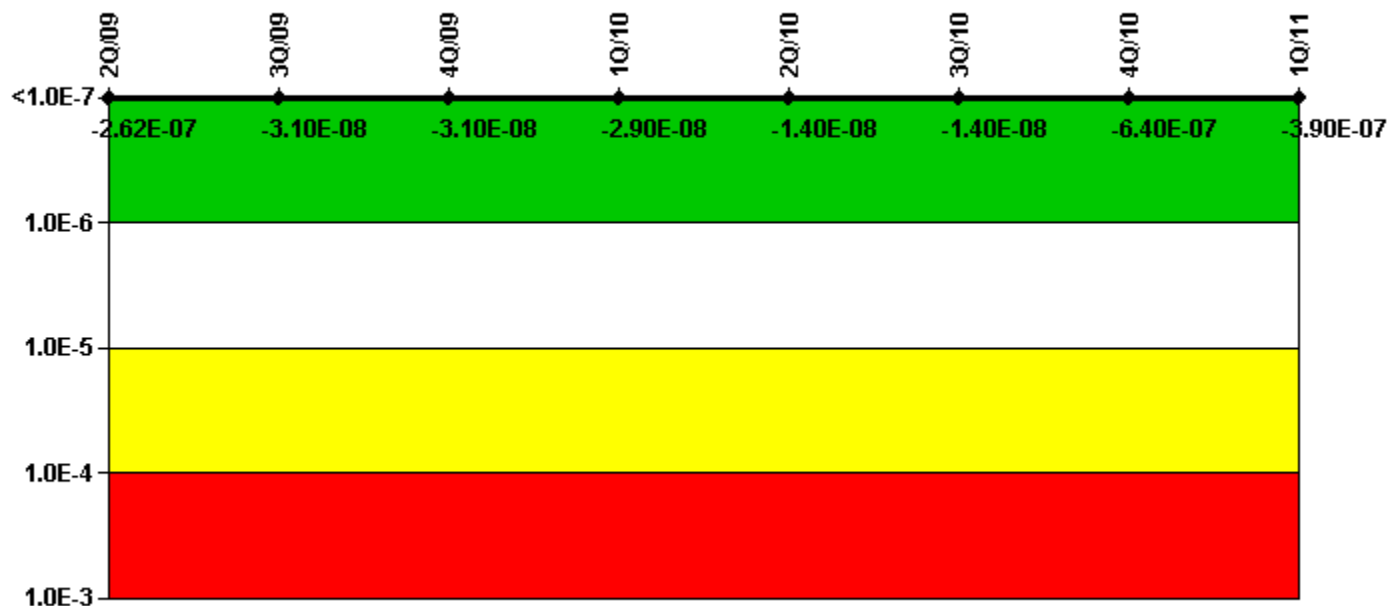
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
UAI (ΔCDF)	3.20E-07	1.10E-07	1.90E-07	9.26E-08	7.92E-08	1.88E-07	2.16E-07	7.97E-08
URI (ΔCDF)	-1.40E-07	-9.70E-08	-1.00E-07	-1.02E-07	-8.63E-08	-8.90E-08	-8.67E-08	-9.03E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.80E-07	1.30E-08	9.00E-08	-9.70E-09	-7.10E-09	9.90E-08	1.30E-07	-1.10E-08

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



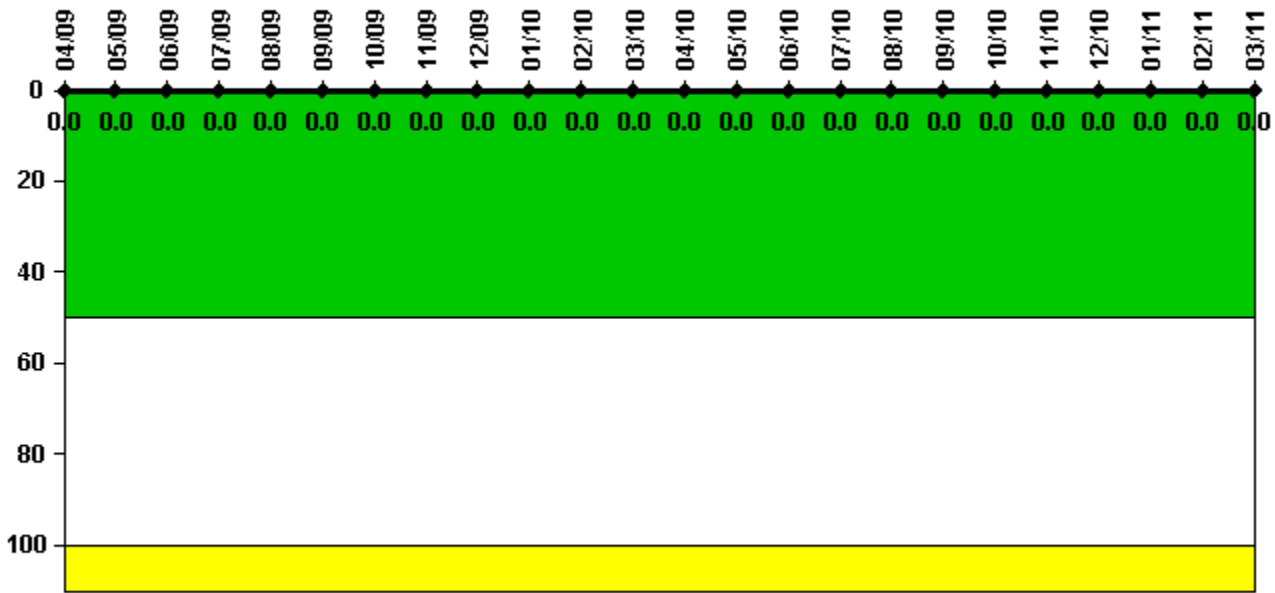
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
UAI (ΔCDF)	7.80E-09	7.90E-08	7.90E-08	7.95E-08	9.48E-08	9.48E-08	2.51E-07	4.91E-07
URI (ΔCDF)	-2.70E-07	-1.10E-07	-1.10E-07	-1.09E-07	-1.08E-07	-1.09E-07	-8.89E-07	-8.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.62E-07	-3.10E-08	-3.10E-08	-2.90E-08	-1.40E-08	-1.40E-08	-6.40E-07	-3.90E-07

Licensee Comments: none

Reactor Coolant System Activity



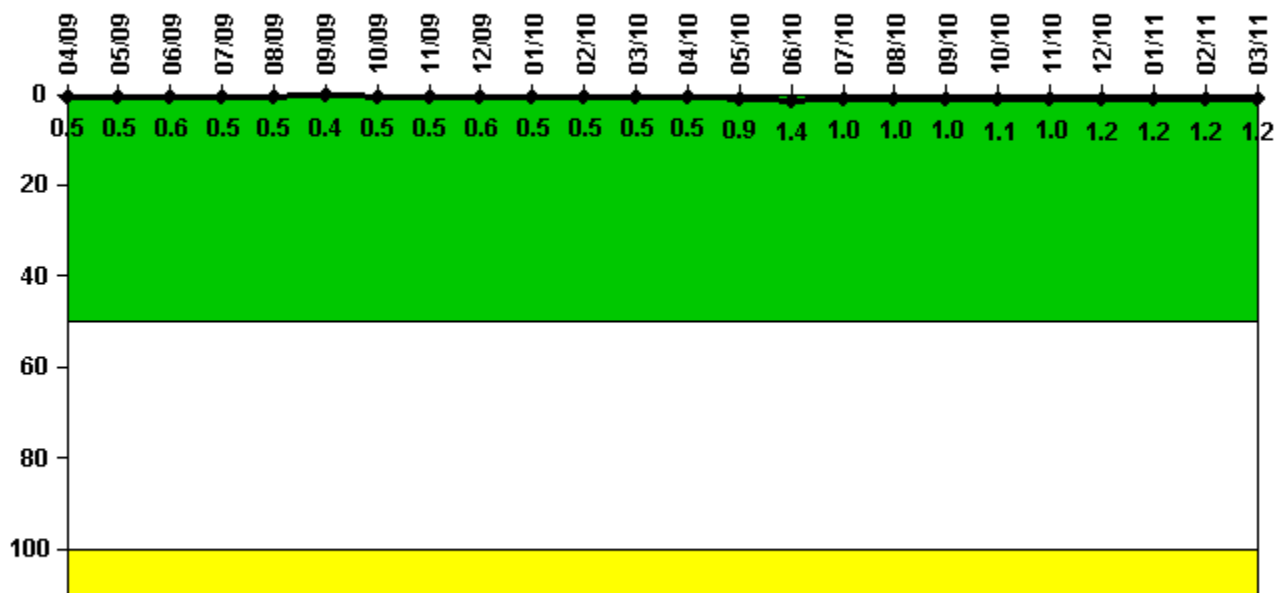
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10
Maximum activity	0.000347	0.000369	0.000385	0.000406	0.000420	0.000443	0.000434	0.000443	0.000450	0.000459	0.000474	0.000276
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum activity	0.000272	0.000096	0.000096	0.000099	0.000103	0.000106	0.000118	0.000120	0.000124	0.000142	0.000136	0.000140
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



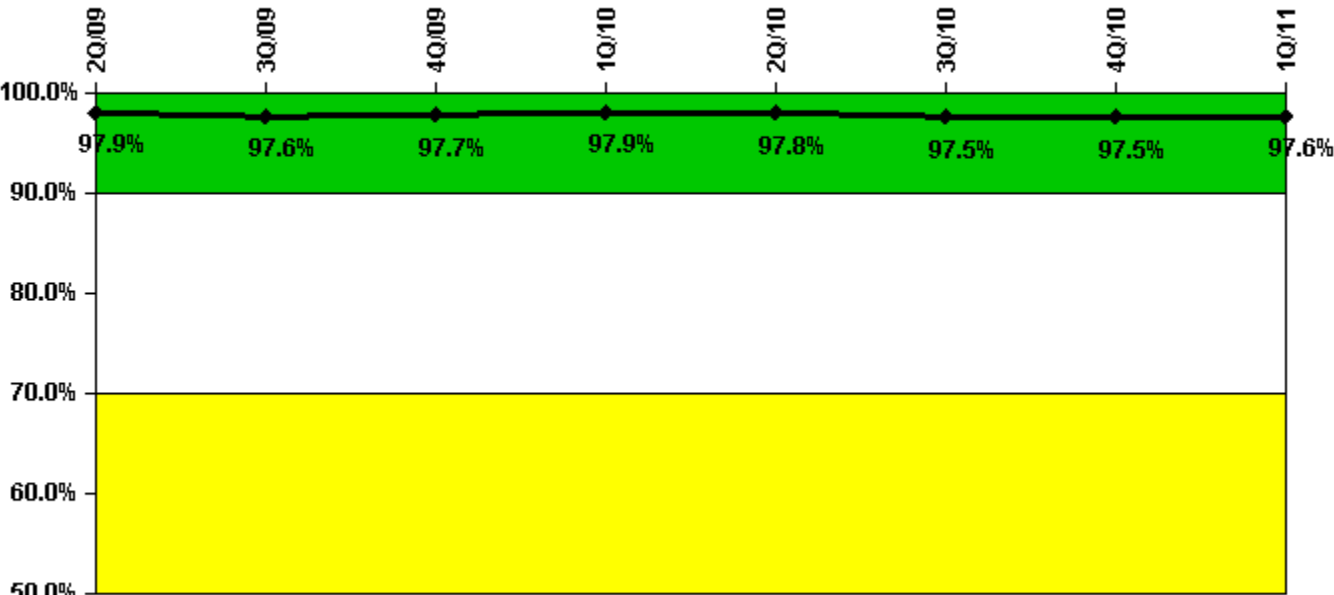
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10
Maximum leakage	0.051	0.048	0.055	0.048	0.047	0.040	0.050	0.050	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.6	0.5	0.5	0.5
Reactor Coolant System Leakage	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum leakage	0.050	0.090	0.140	0.100	0.100	0.100	0.110	0.100	0.120	0.120	0.120	0.120
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.9	1.4	1.0	1.0	1.0	1.1	1.0	1.2	1.2	1.2	1.2

Licensee Comments: none

Drill/Exercise Performance



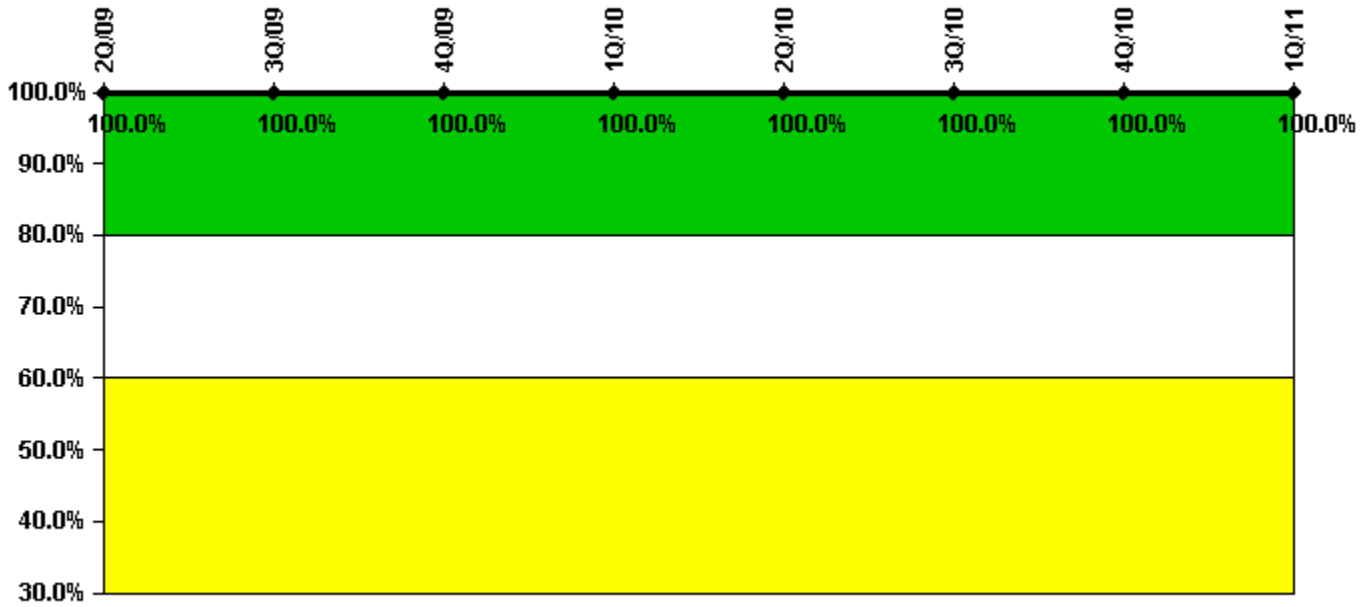
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
Successful opportunities	62.0	40.0	64.0	34.0	9.0	58.0	12.0	51.0
Total opportunities	62.0	42.0	65.0	34.0	10.0	61.0	13.0	51.0
Indicator value	97.9%	97.6%	97.7%	97.9%	97.8%	97.5%	97.5%	97.6%

Licensee Comments: none

ERO Drill Participation



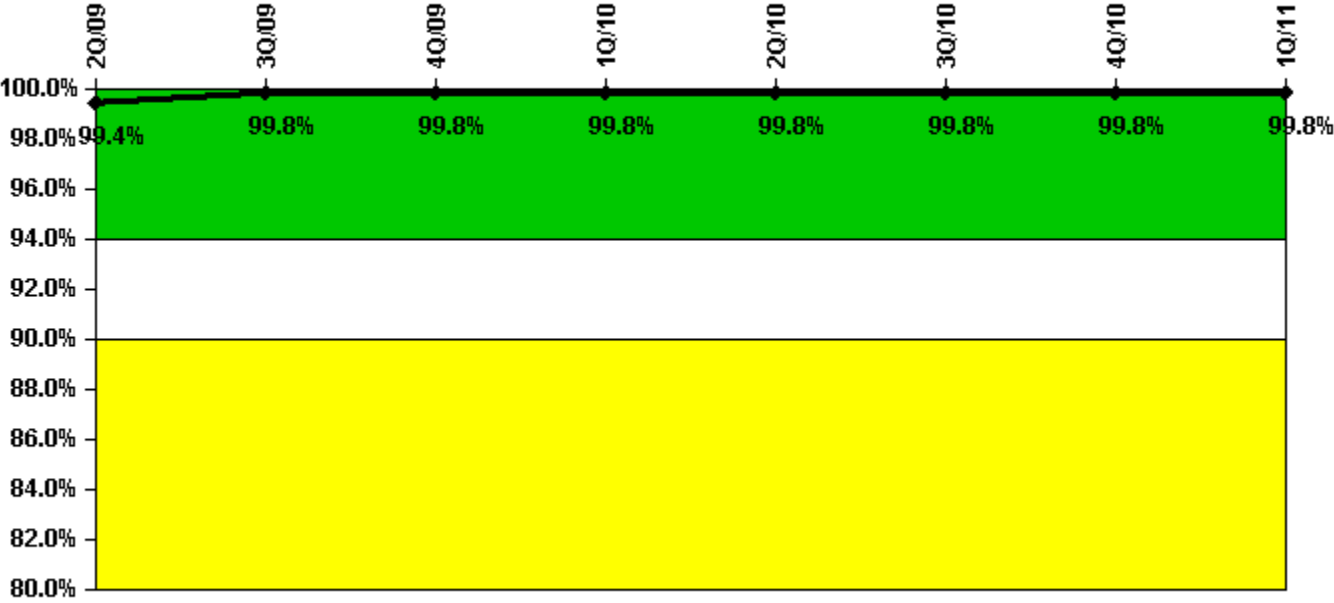
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
Participating Key personnel	77.0	74.0	72.0	74.0	74.0	72.0	74.0	76.0
Total Key personnel	77.0	74.0	72.0	74.0	74.0	72.0	74.0	76.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



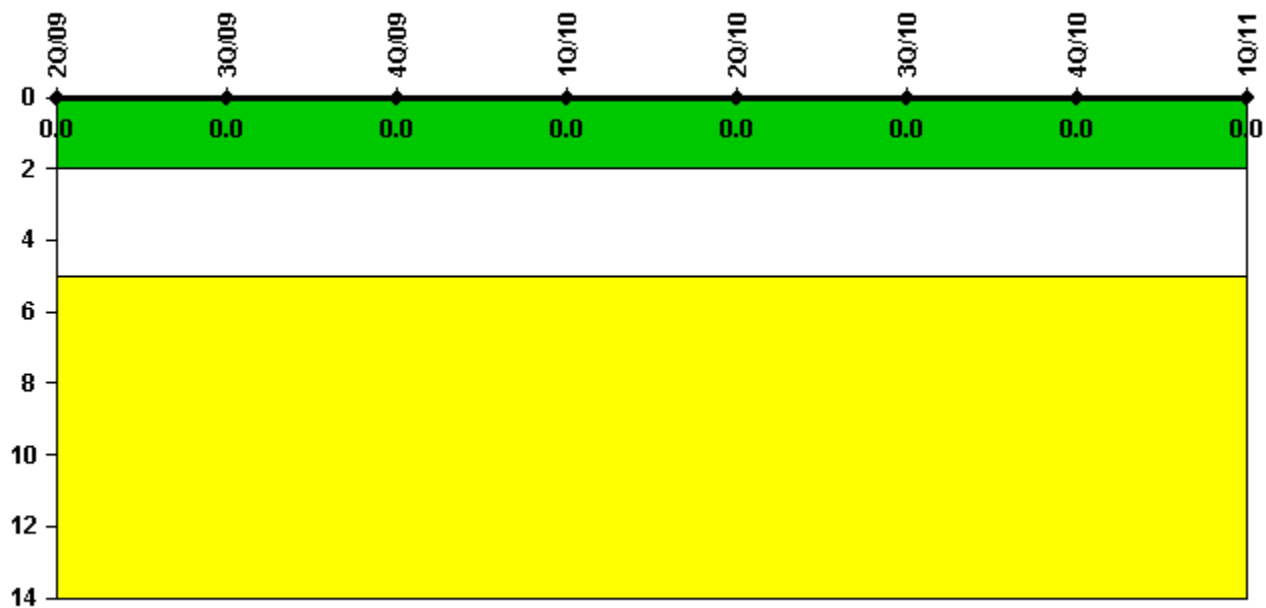
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
Successful siren-tests	6006	6106	5998	3841	3890	3959	3956	3902
Total sirens-tests	6016	6110	6016	3843	3904	3965	3965	3904
Indicator value	99.4%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



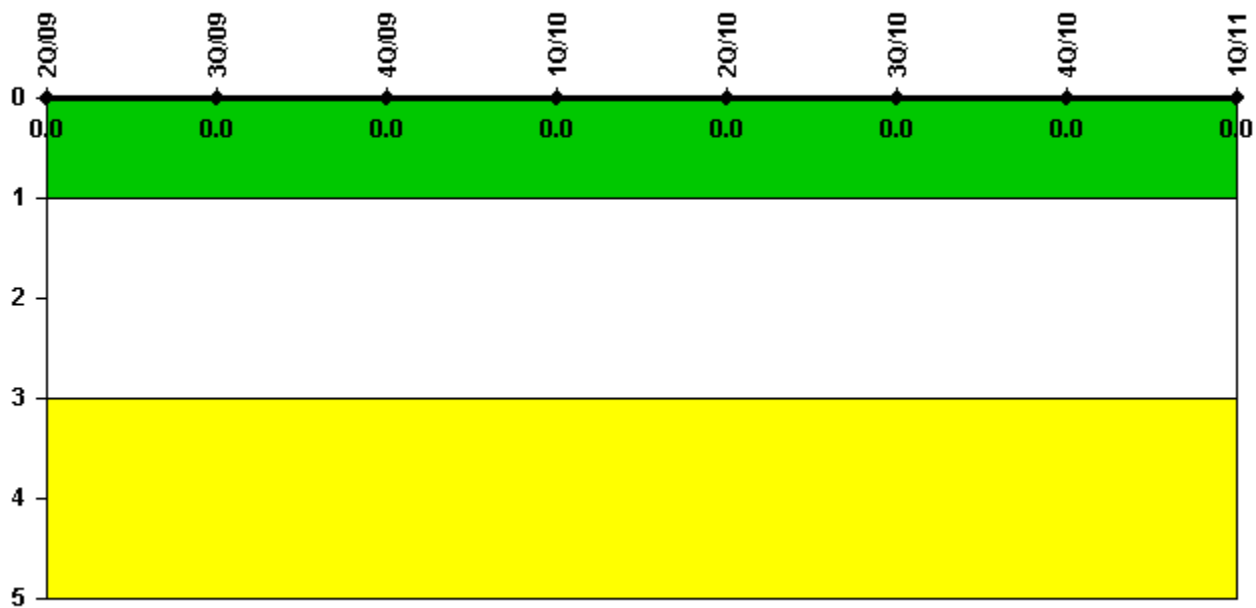
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.

Byron 2

2Q/2011 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



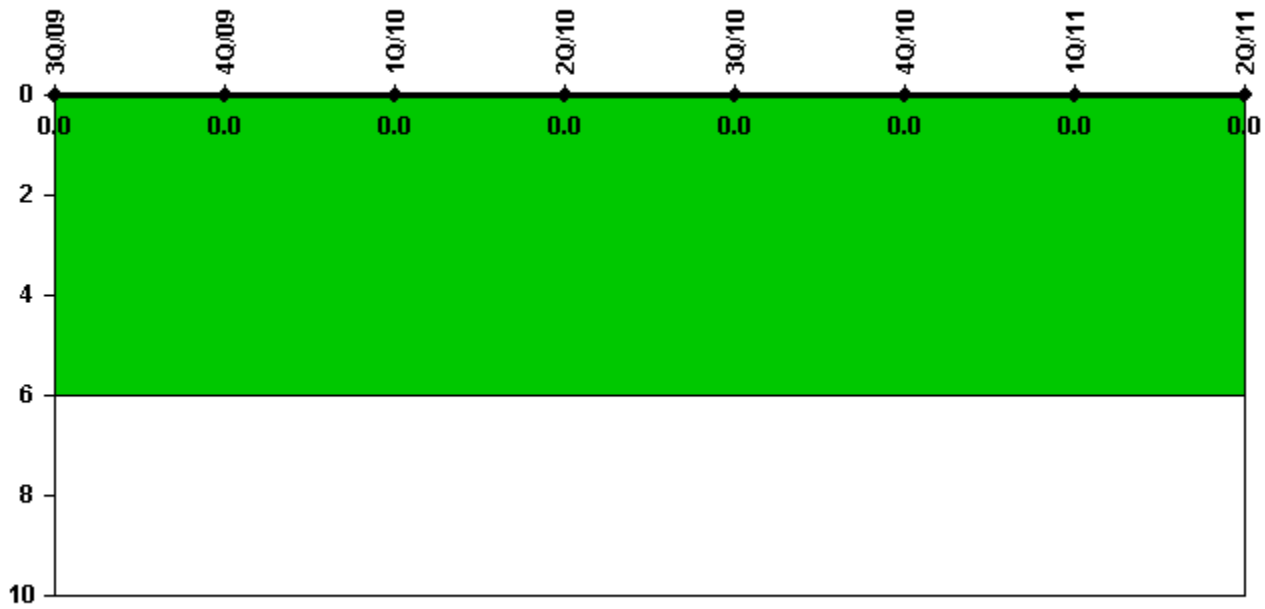
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2159.0	1735.2	2208.0	2209.0	2159.0	2071.5
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



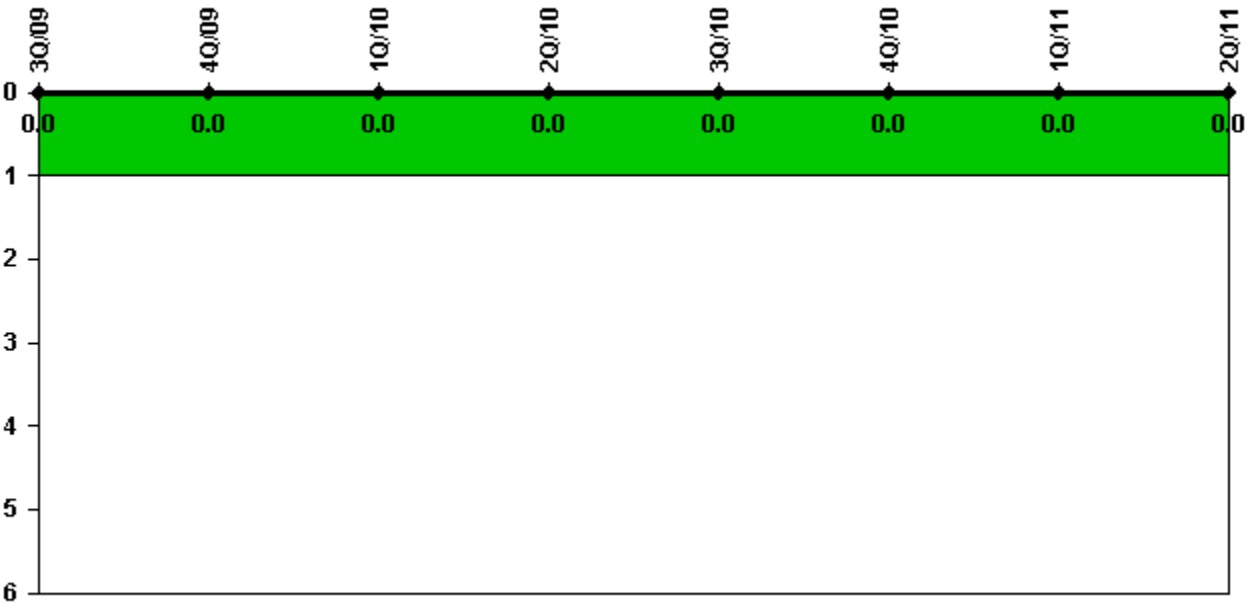
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2159.0	1735.2	2208.0	2209.0	2159.0	2071.5
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



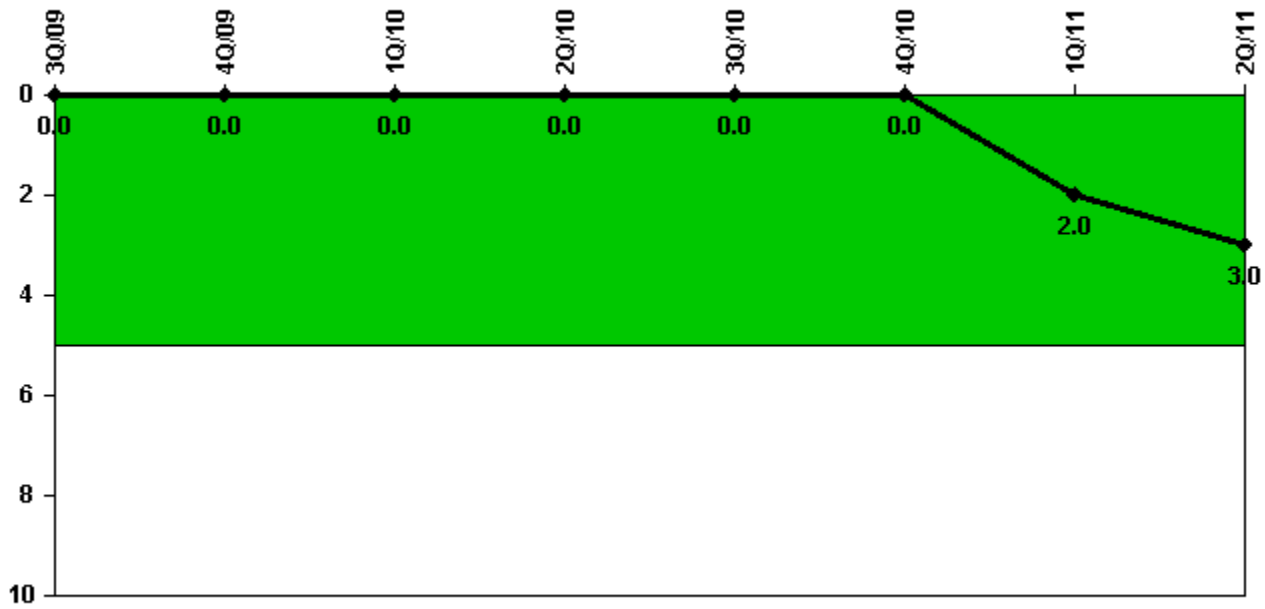
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



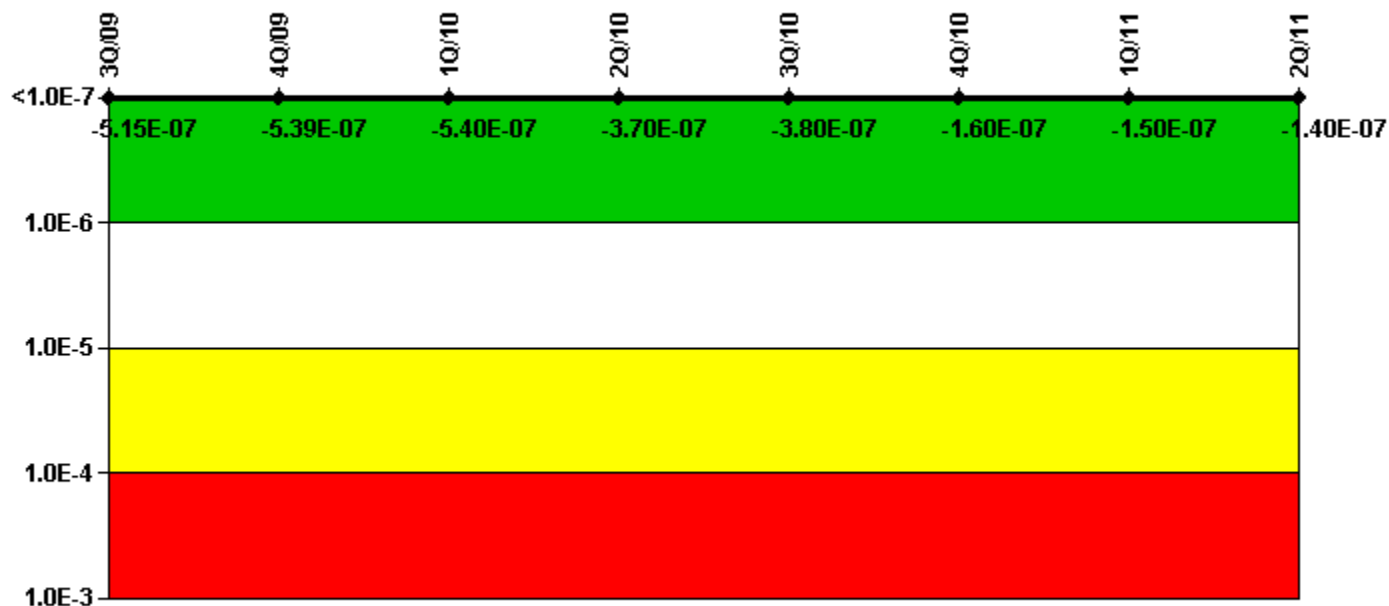
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Safety System Functional Failures	0	0	0	0	0	0	2	1
Indicator value	0	0	0	0	0	0	2	3

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



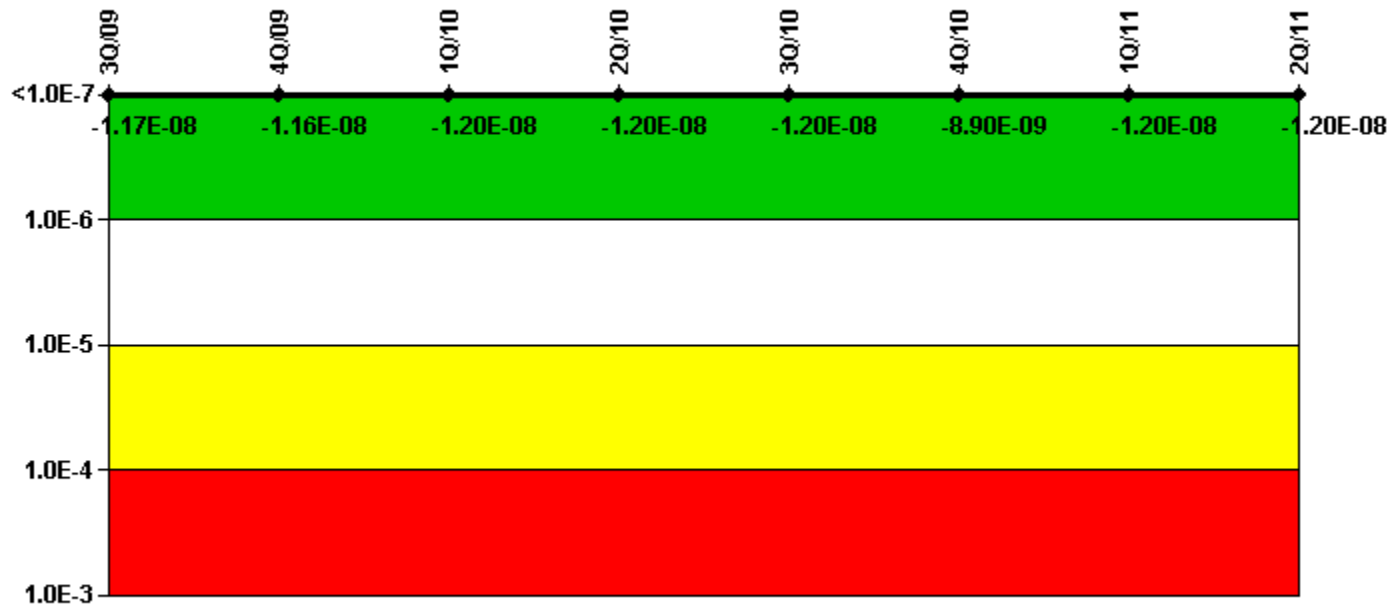
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI (ΔCDF)	5.50E-08	3.10E-08	2.95E-08	3.31E-08	2.93E-08	7.83E-08	9.92E-08	9.47E-08
URI (ΔCDF)	-5.70E-07	-5.70E-07	-5.70E-07	-4.08E-07	-4.07E-07	-2.41E-07	-2.45E-07	-2.30E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.15E-07	-5.39E-07	-5.40E-07	-3.70E-07	-3.80E-07	-1.60E-07	-1.50E-07	-1.40E-07

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



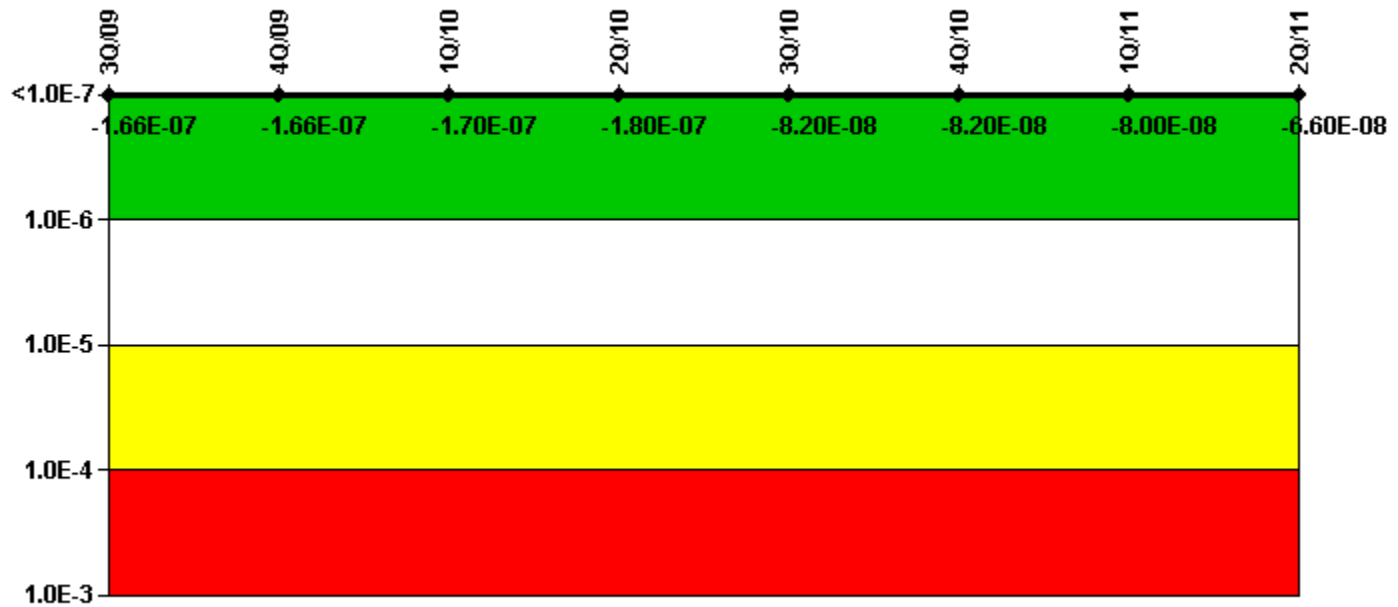
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI (Δ CDF)	-9.20E-09	-9.20E-09	-9.17E-09	-9.41E-09	-9.41E-09	-6.51E-09	-1.00E-08	-9.86E-09
URI (Δ CDF)	-2.50E-09	-2.40E-09	-2.44E-09	-2.39E-09	-2.41E-09	-2.40E-09	-2.40E-09	-2.41E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.17E-08	-1.16E-08	-1.20E-08	-1.20E-08	-1.20E-08	-8.90E-09	-1.20E-08	-1.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



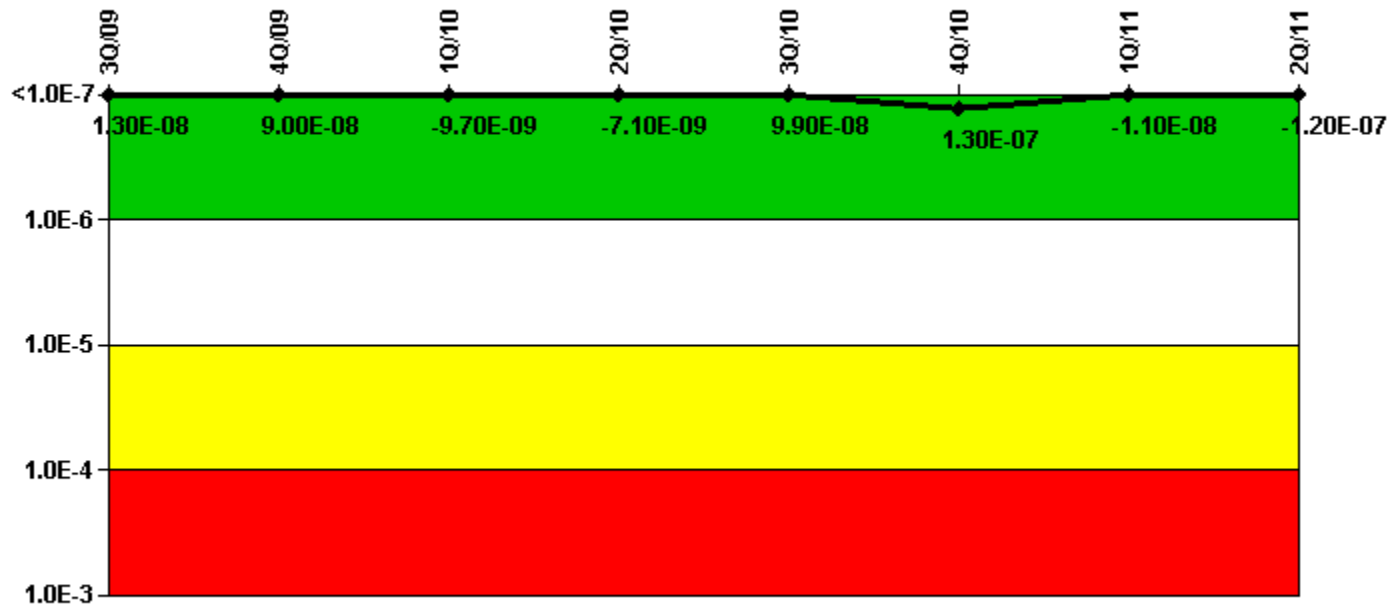
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI (ΔCDF)	7.40E-08	7.40E-08	7.37E-08	7.17E-08	1.65E-07	1.63E-07	1.63E-07	1.77E-07
URI (ΔCDF)	-2.40E-07	-2.40E-07	-2.41E-07	-2.47E-07	-2.48E-07	-2.45E-07	-2.43E-07	-2.43E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.66E-07	-1.66E-07	-1.70E-07	-1.80E-07	-8.20E-08	-8.20E-08	-8.00E-08	-6.60E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



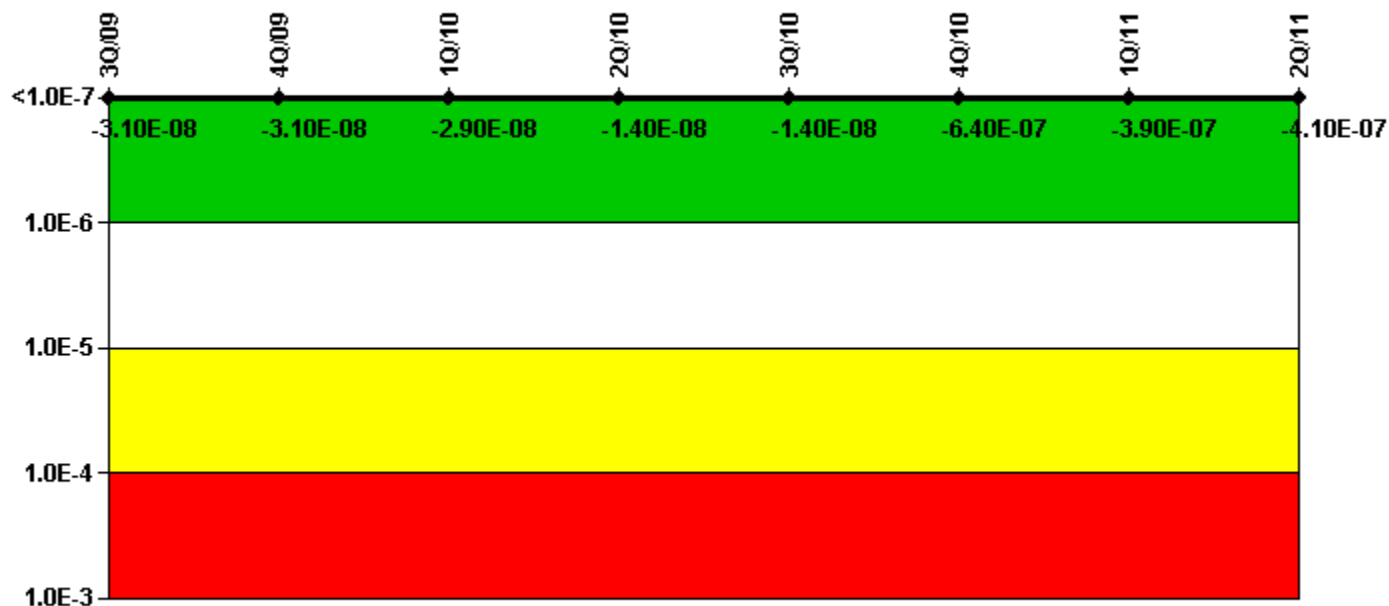
Thresholds: White $> 1.00E-6$ Yellow $> 1.00E-5$ Red $> 1.00E-4$

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI (Δ CDF)	1.10E-07	1.90E-07	9.26E-08	7.92E-08	1.88E-07	2.16E-07	7.97E-08	-2.87E-08
URI (Δ CDF)	-9.70E-08	-1.00E-07	-1.02E-07	-8.63E-08	-8.90E-08	-8.67E-08	-9.03E-08	-9.29E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.30E-08	9.00E-08	-9.70E-09	-7.10E-09	9.90E-08	1.30E-07	-1.10E-08	-1.20E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



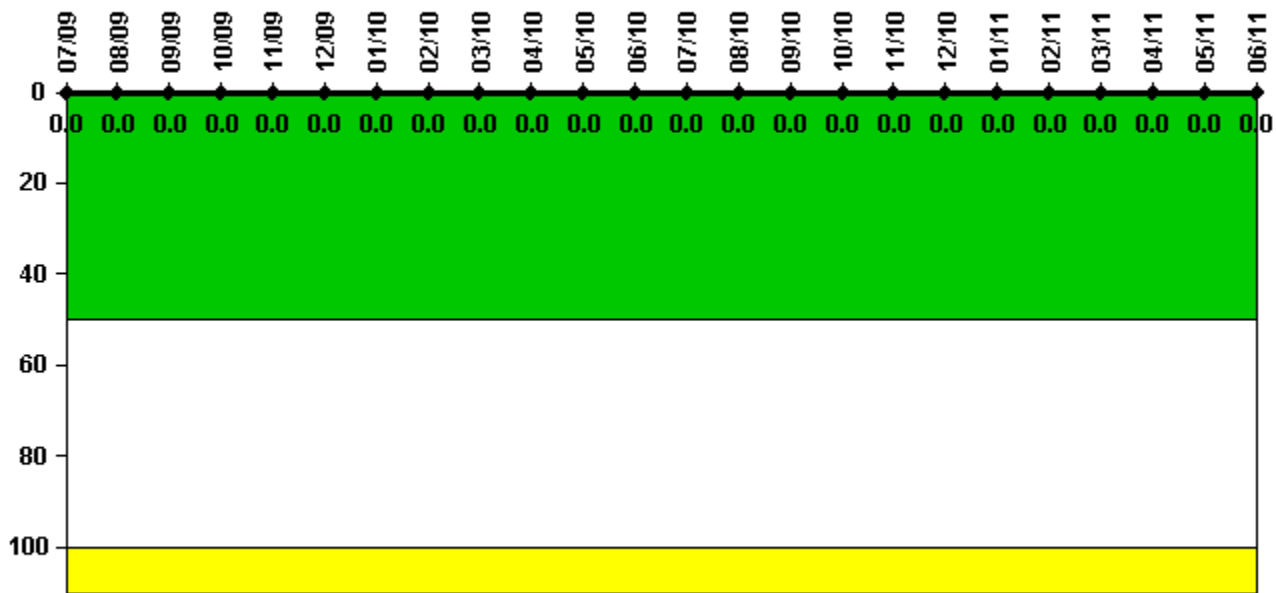
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI (ΔCDF)	7.90E-08	7.90E-08	7.95E-08	9.48E-08	9.48E-08	2.51E-07	4.91E-07	4.72E-07
URI (ΔCDF)	-1.10E-07	-1.10E-07	-1.09E-07	-1.08E-07	-1.09E-07	-8.89E-07	-8.85E-07	-8.87E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-08	-3.10E-08	-2.90E-08	-1.40E-08	-1.40E-08	-6.40E-07	-3.90E-07	-4.10E-07

Licensee Comments: none

Reactor Coolant System Activity



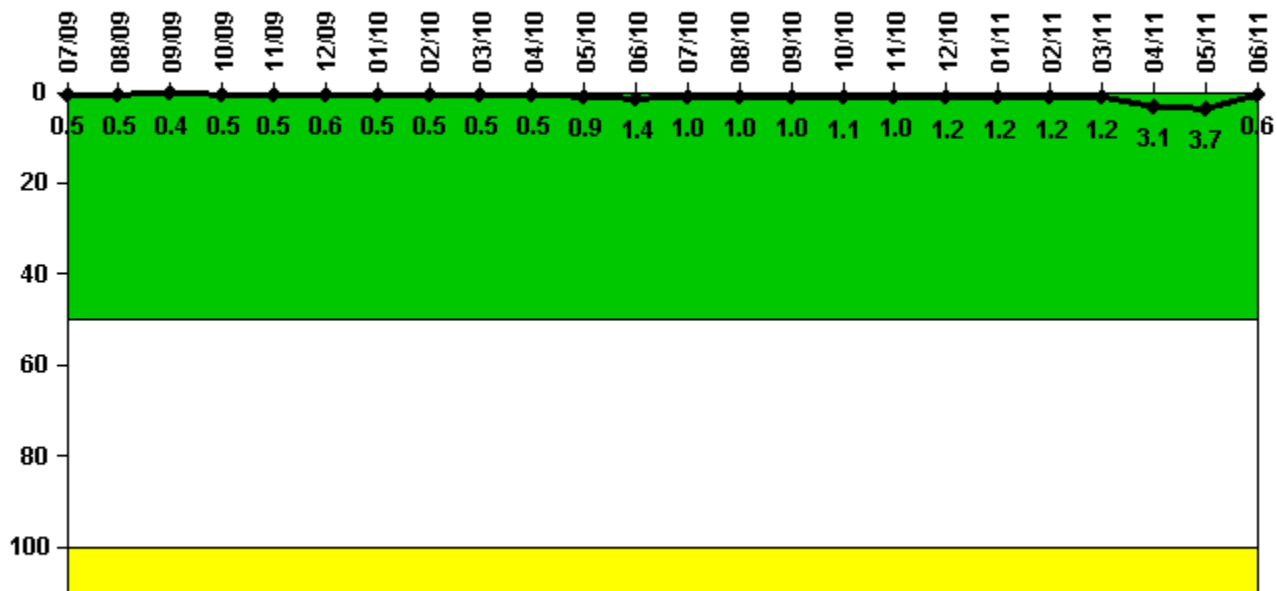
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum activity	0.000406	0.000420	0.000443	0.000434	0.000443	0.000450	0.000459	0.000474	0.000276	0.000272	0.000096	0.000096
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum activity	0.000099	0.000103	0.000106	0.000118	0.000120	0.000124	0.000142	0.000136	0.000140	0.000161	0.000324	0.000477
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



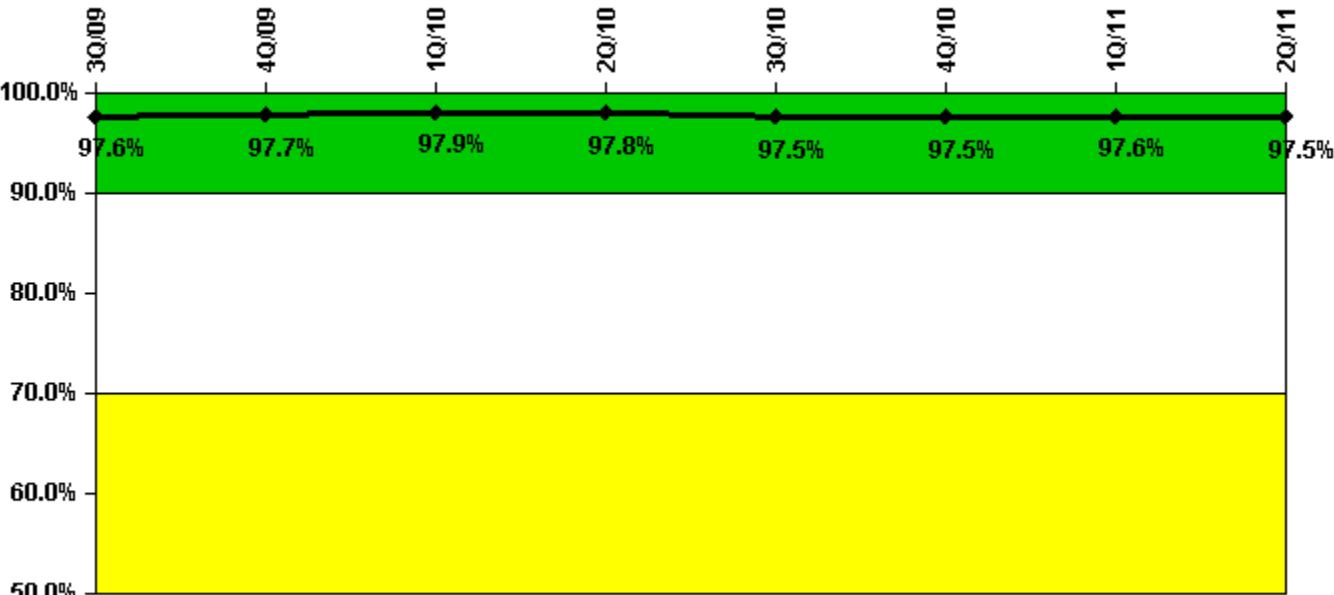
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum leakage	0.048	0.047	0.040	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.090	0.140
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.9	1.4
Reactor Coolant System Leakage	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum leakage	0.100	0.100	0.100	0.110	0.100	0.120	0.120	0.120	0.120	0.310	0.370	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.0	1.0	1.0	1.1	1.0	1.2	1.2	1.2	1.2	3.1	3.7	0.6

Licensee Comments: none

Drill/Exercise Performance



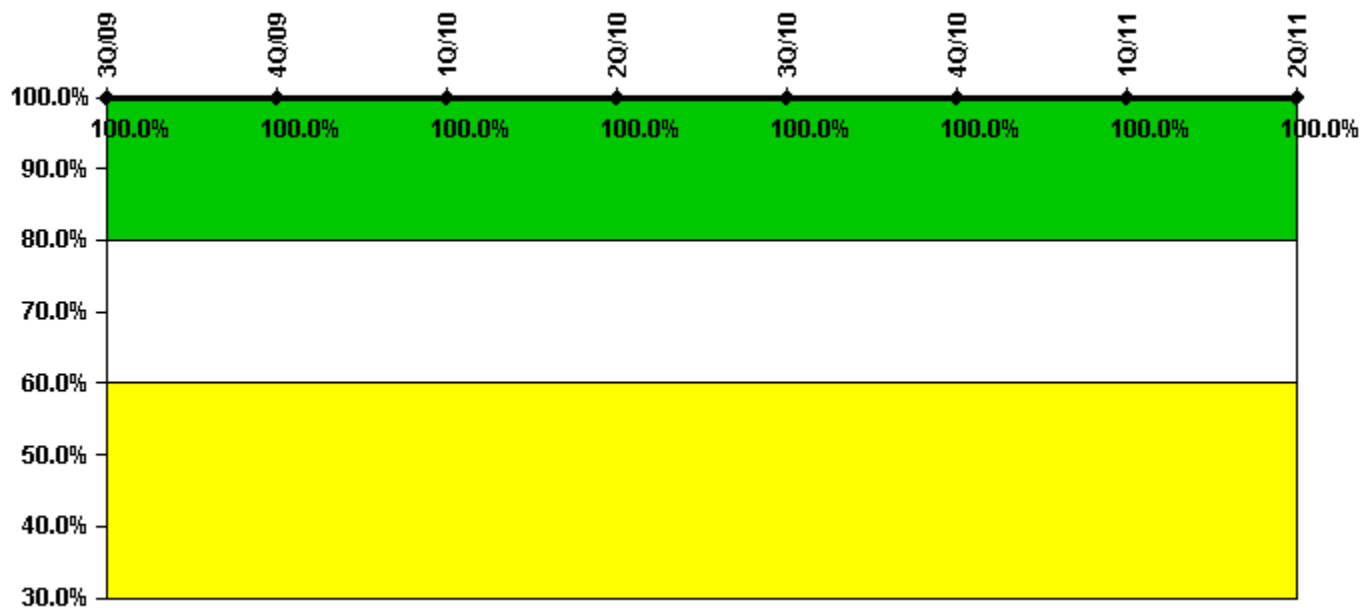
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful opportunities	40.0	64.0	34.0	9.0	58.0	12.0	51.0	77.0
Total opportunities	42.0	65.0	34.0	10.0	61.0	13.0	51.0	78.0
Indicator value	97.6%	97.7%	97.9%	97.8%	97.5%	97.5%	97.6%	97.5%

Licensee Comments: none

ERO Drill Participation



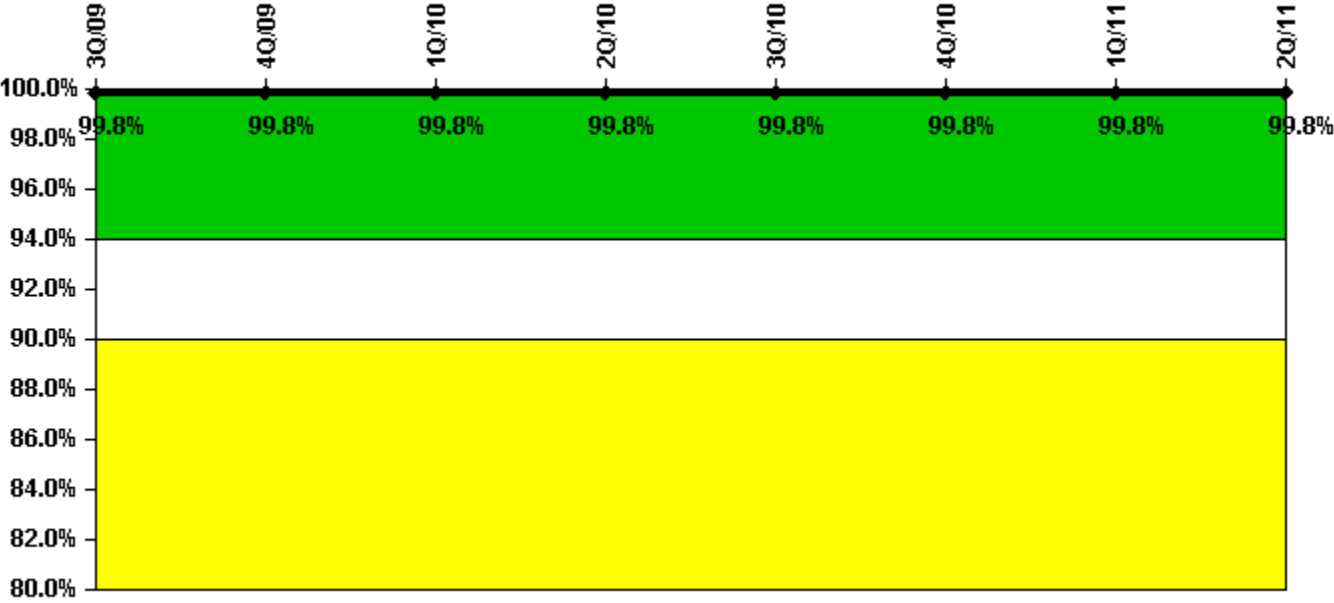
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Participating Key personnel	74.0	72.0	74.0	74.0	72.0	74.0	76.0	74.0
Total Key personnel	74.0	72.0	74.0	74.0	72.0	74.0	76.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



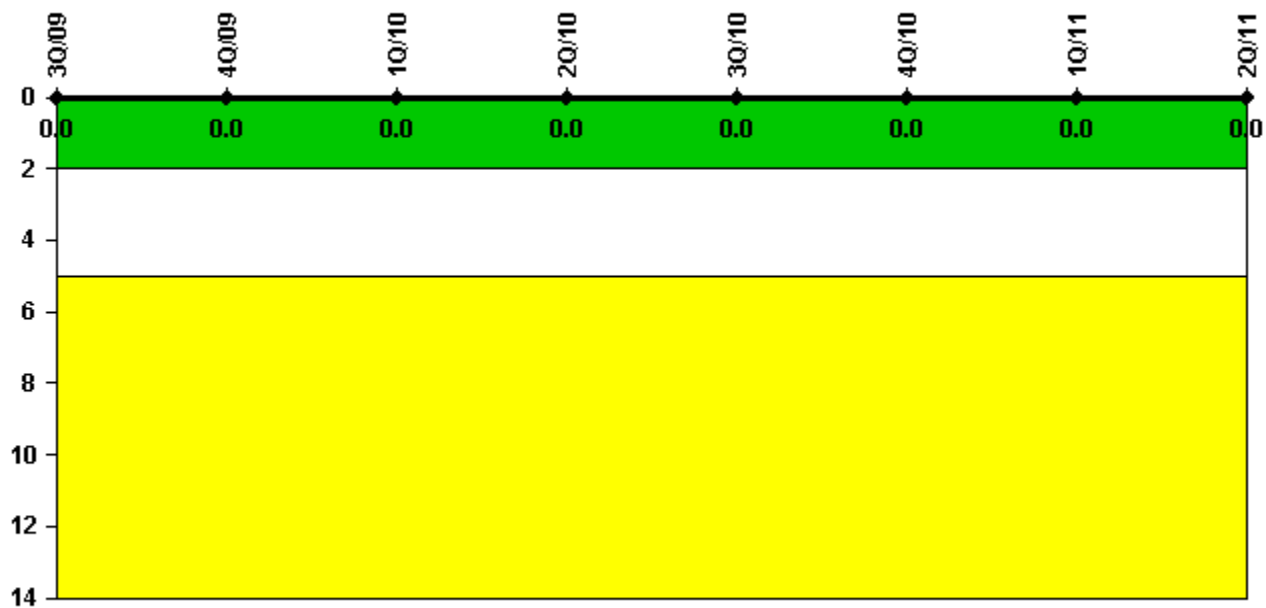
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful siren-tests	6106	5998	3841	3890	3959	3956	3902	3893
Total sirens-tests	6110	6016	3843	3904	3965	3965	3904	3904
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



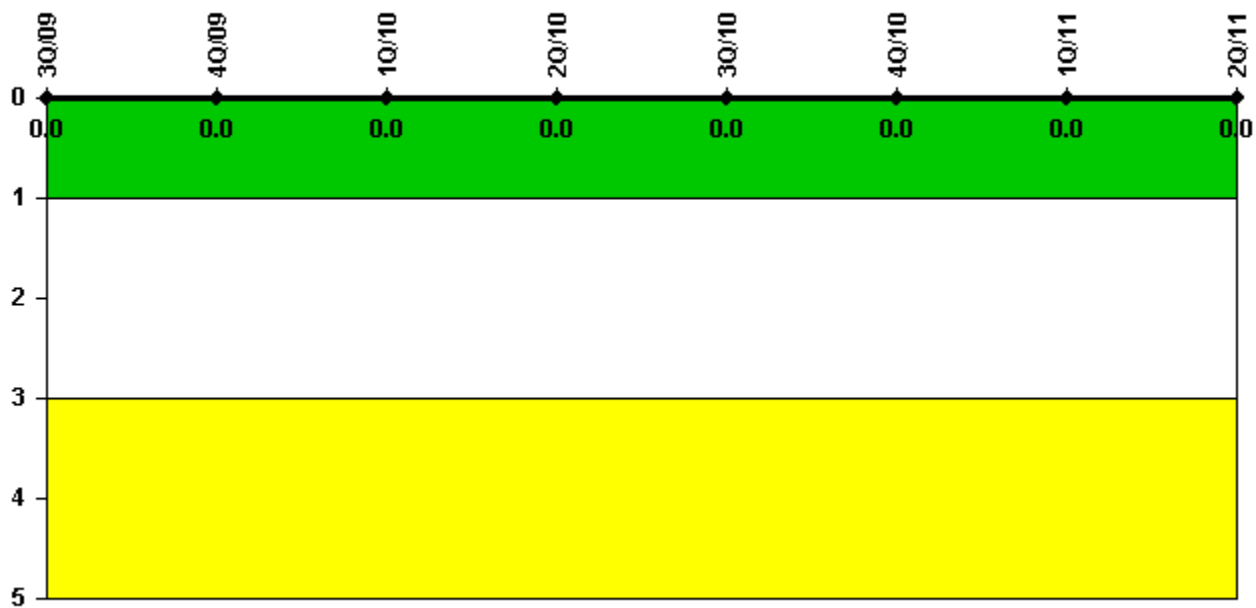
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.

Byron 2

3Q/2011 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



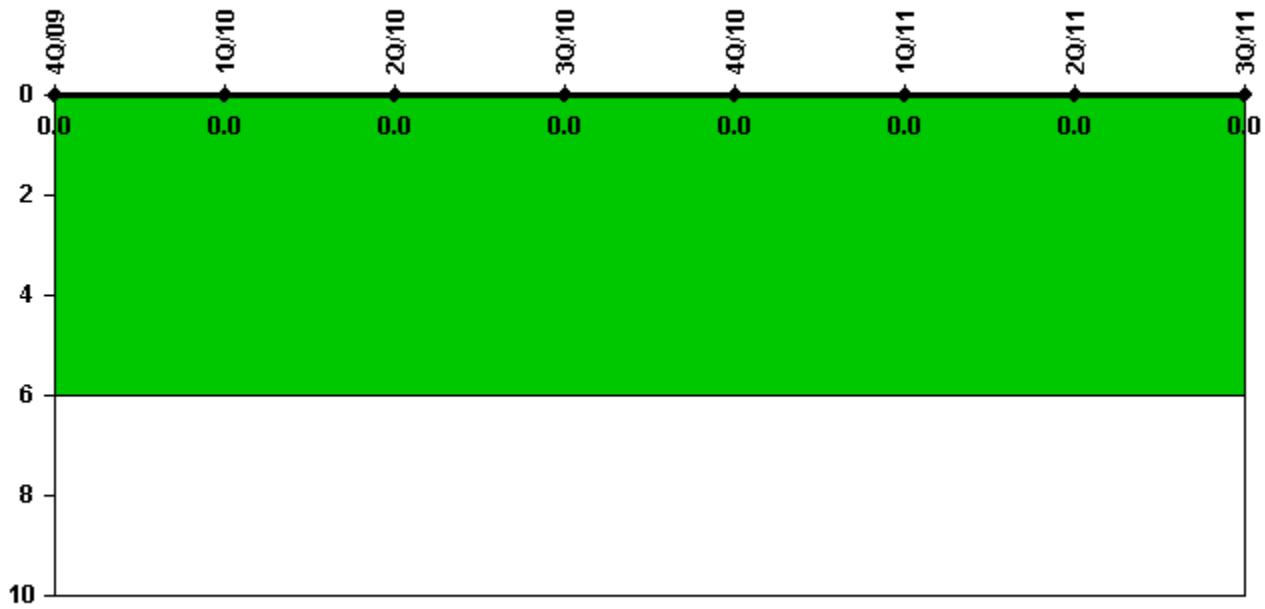
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2209.0	2159.0	1735.2	2208.0	2209.0	2159.0	2071.5	1919.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



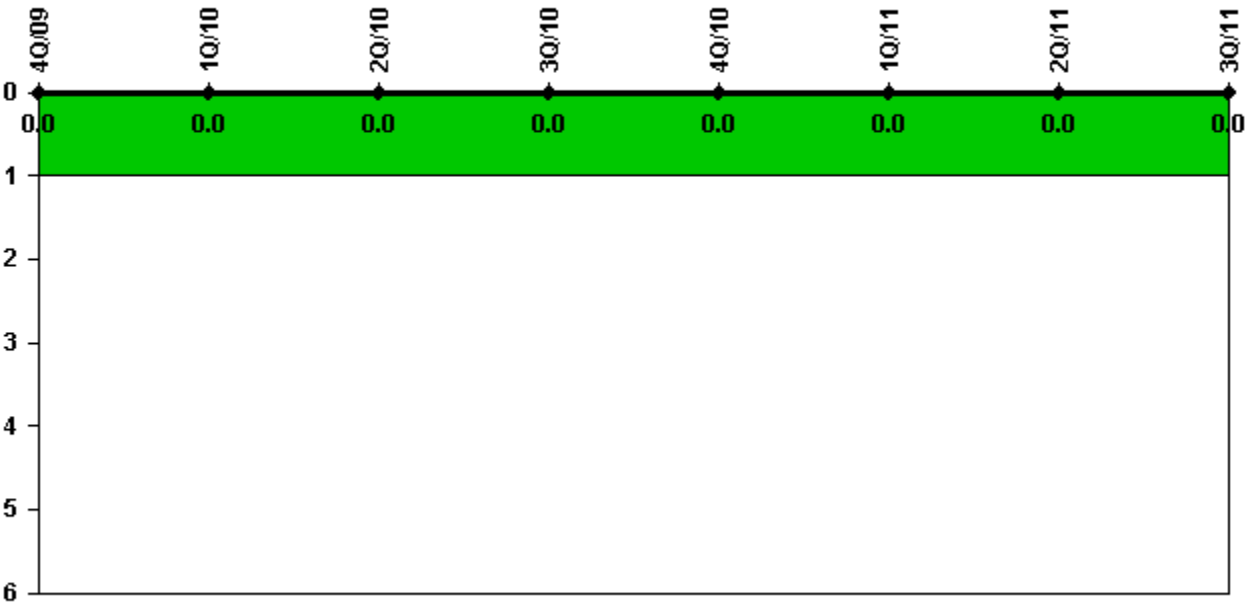
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2209.0	2159.0	1735.2	2208.0	2209.0	2159.0	2071.5	1919.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



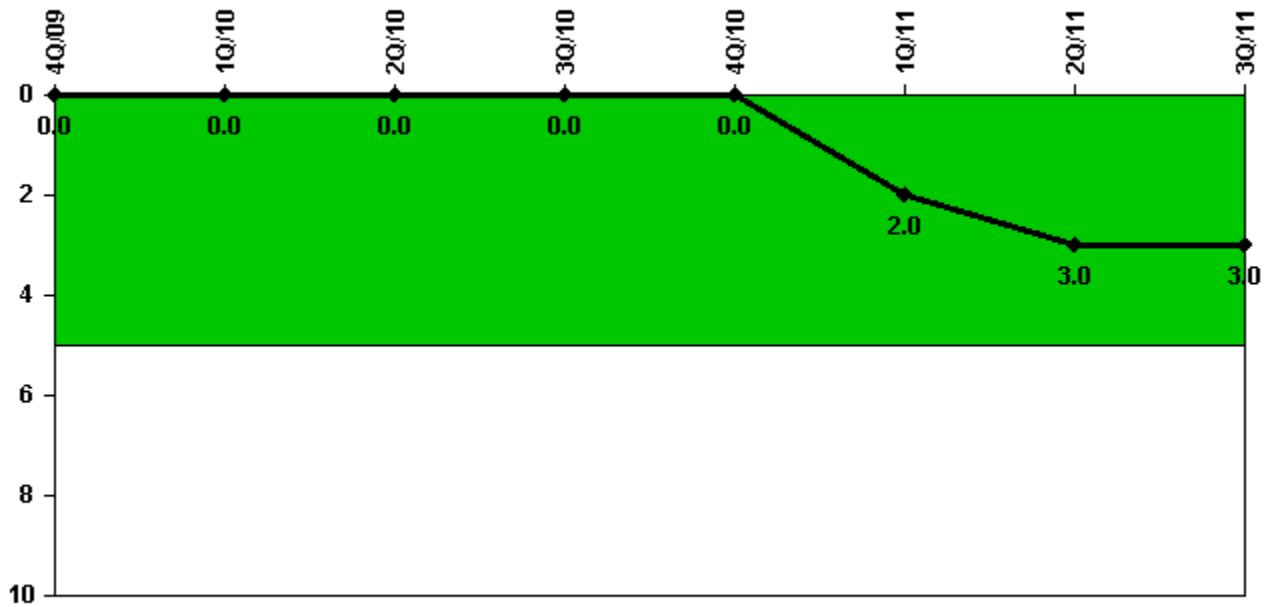
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

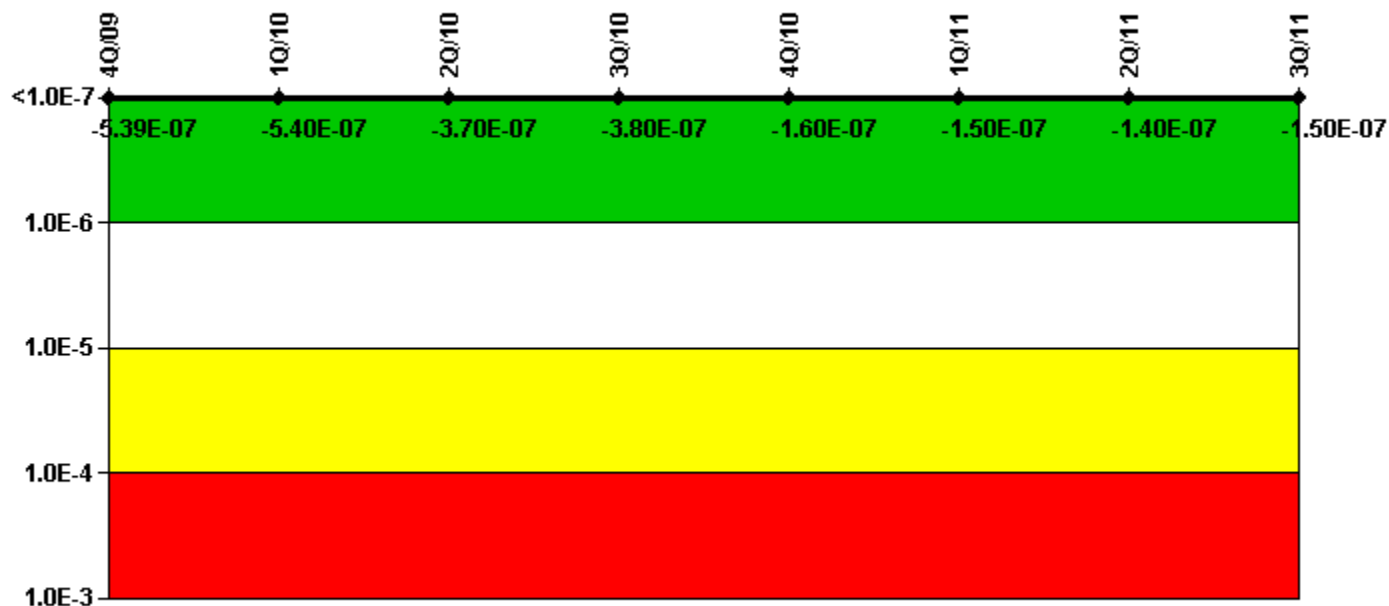
Notes

Safety System Functional Failures (PWR)	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
Safety System Functional Failures	0	0	0	0	0	2	1	0
Indicator value	0	0	0	0	0	2	3	3

Licensee Comments:

2Q/11: May LER 454-2011-003-00: Drained Sections of Piping in AF Suction Lines Result on Sys Inop Due to Inadequate Tech Eval LER retracted, SSFF removed June Supplemental LER 455-2011 -001 -01 "Unit 2 Emergency Diesel Generator Inoperable for Longer than Allowed by Technical Specifications Due to Inadequate Work" confirms SSFF previously reported.

Mitigating Systems Performance Index, Emergency AC Power System



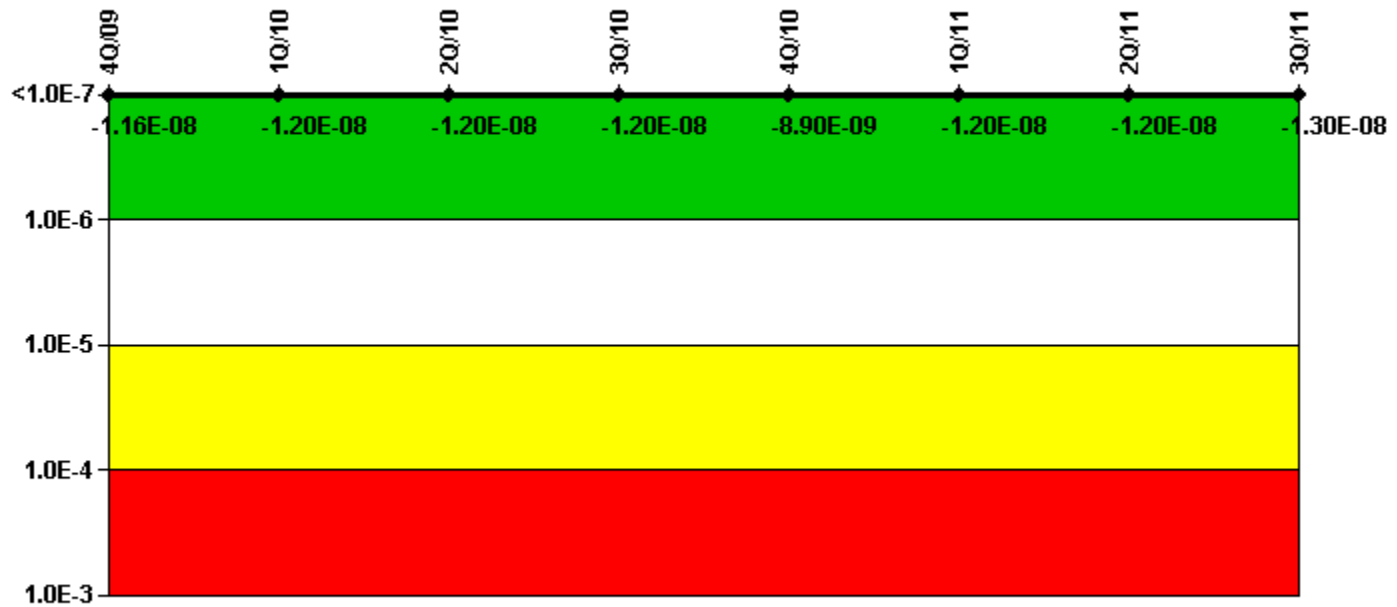
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
UAI (ΔCDF)	3.10E-08	2.95E-08	3.31E-08	2.93E-08	7.83E-08	9.92E-08	9.47E-08	9.49E-08
URI (ΔCDF)	-5.70E-07	-5.70E-07	-4.08E-07	-4.07E-07	-2.41E-07	-2.45E-07	-2.30E-07	-2.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.39E-07	-5.40E-07	-3.70E-07	-3.80E-07	-1.60E-07	-1.50E-07	-1.40E-07	-1.50E-07

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



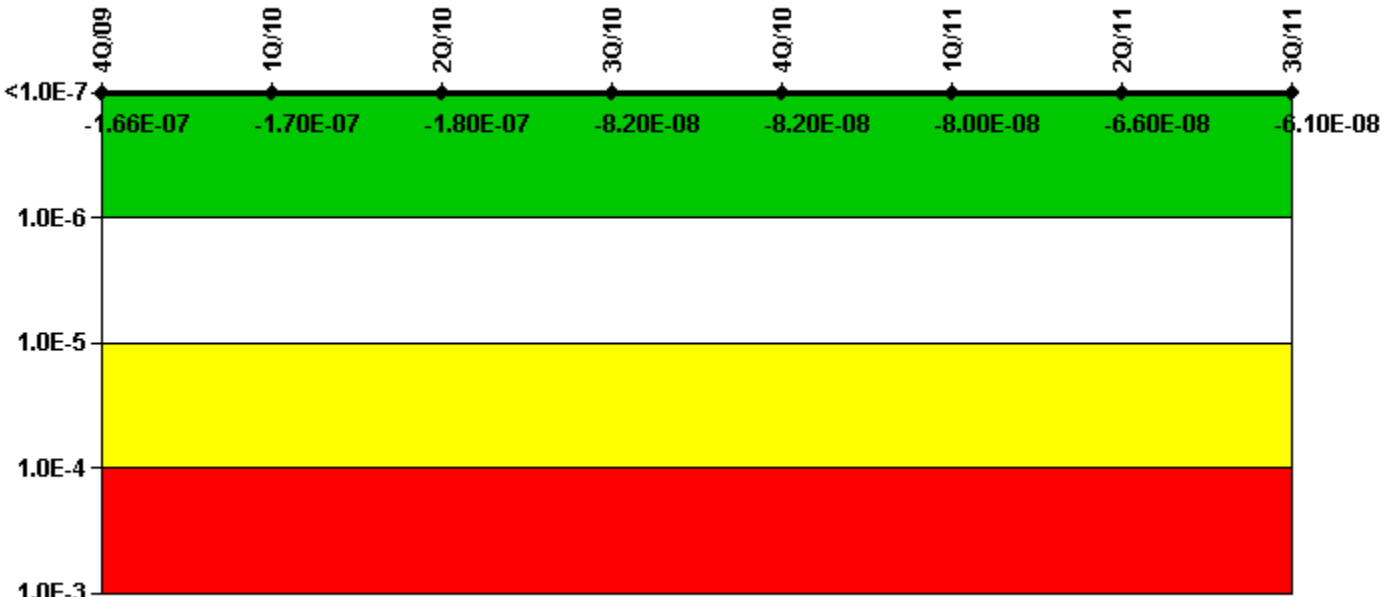
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
UAI (Δ CDF)	-9.20E-09	-9.17E-09	-9.41E-09	-9.41E-09	-6.51E-09	-1.00E-08	-9.86E-09	-1.09E-08
URI (Δ CDF)	-2.40E-09	-2.44E-09	-2.39E-09	-2.41E-09	-2.40E-09	-2.40E-09	-2.41E-09	-2.42E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.16E-08	-1.20E-08	-1.20E-08	-1.20E-08	-8.90E-09	-1.20E-08	-1.20E-08	-1.30E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



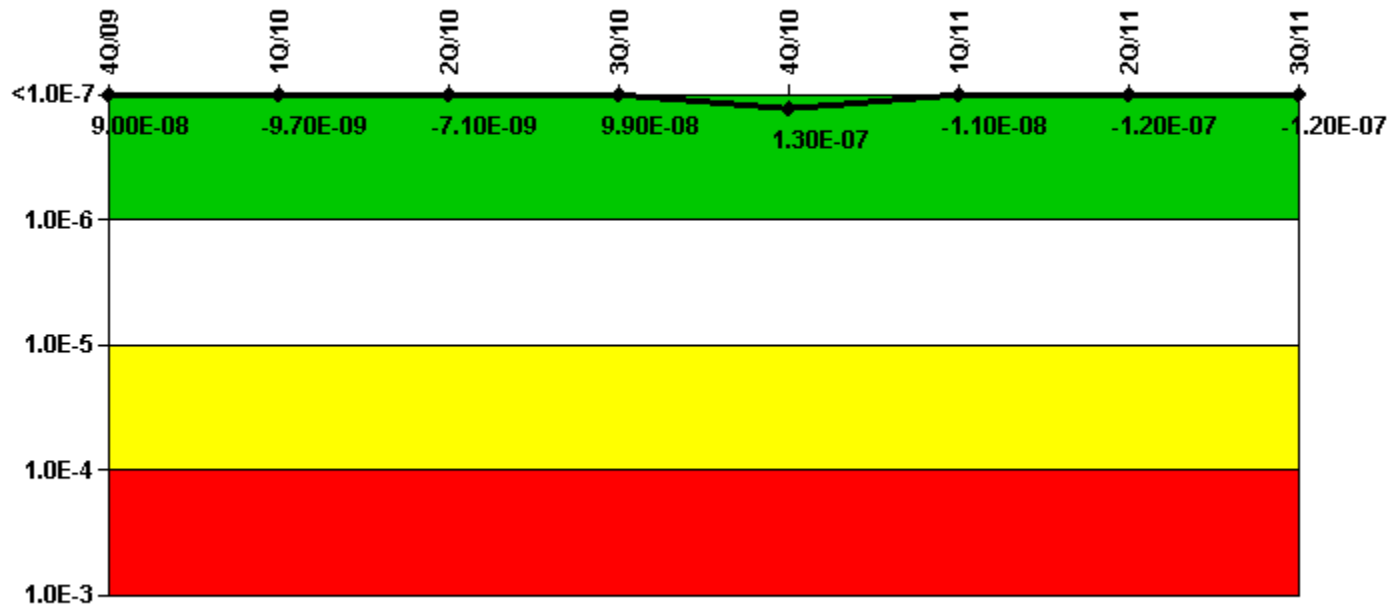
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
UAI (ΔCDF)	7.40E-08	7.37E-08	7.17E-08	1.65E-07	1.63E-07	1.63E-07	1.77E-07	1.86E-07
URI (ΔCDF)	-2.40E-07	-2.41E-07	-2.47E-07	-2.48E-07	-2.45E-07	-2.43E-07	-2.43E-07	-2.46E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.66E-07	-1.70E-07	-1.80E-07	-8.20E-08	-8.20E-08	-8.00E-08	-6.60E-08	-6.10E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



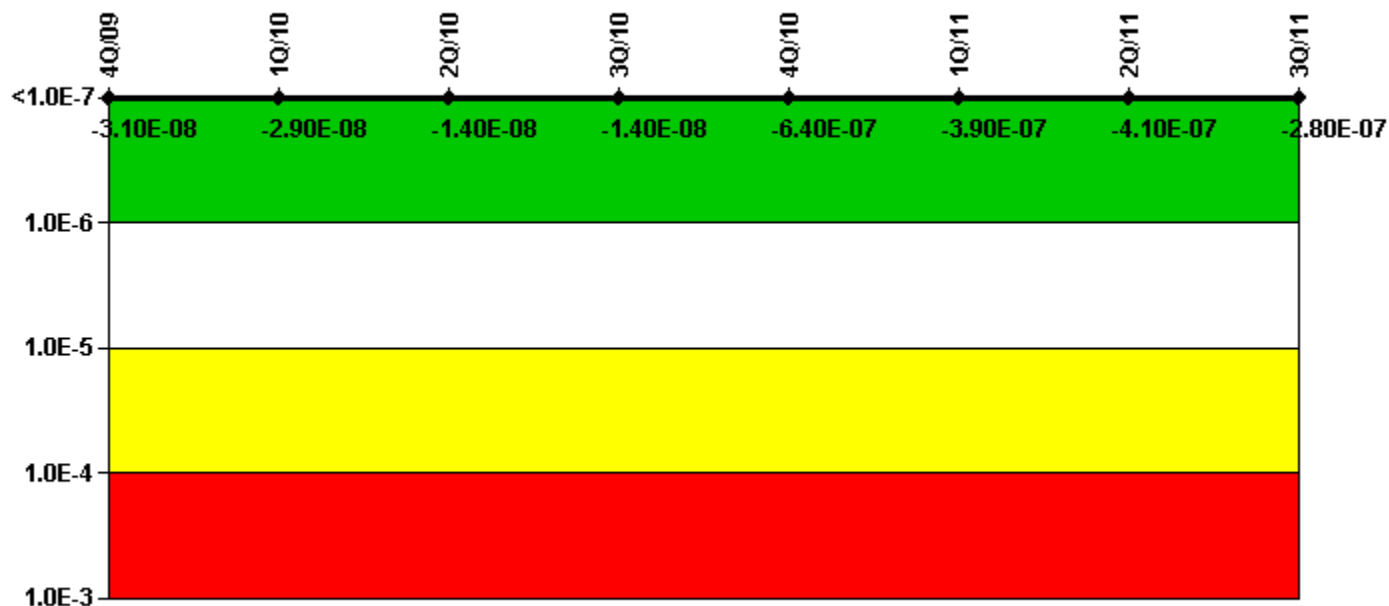
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
UAI (Δ CDF)	1.90E-07	9.26E-08	7.92E-08	1.88E-07	2.16E-07	7.97E-08	-2.87E-08	-2.87E-08
URI (Δ CDF)	-1.00E-07	-1.02E-07	-8.63E-08	-8.90E-08	-8.67E-08	-9.03E-08	-9.29E-08	-9.54E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.00E-08	-9.70E-09	-7.10E-09	9.90E-08	1.30E-07	-1.10E-08	-1.20E-07	-1.20E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



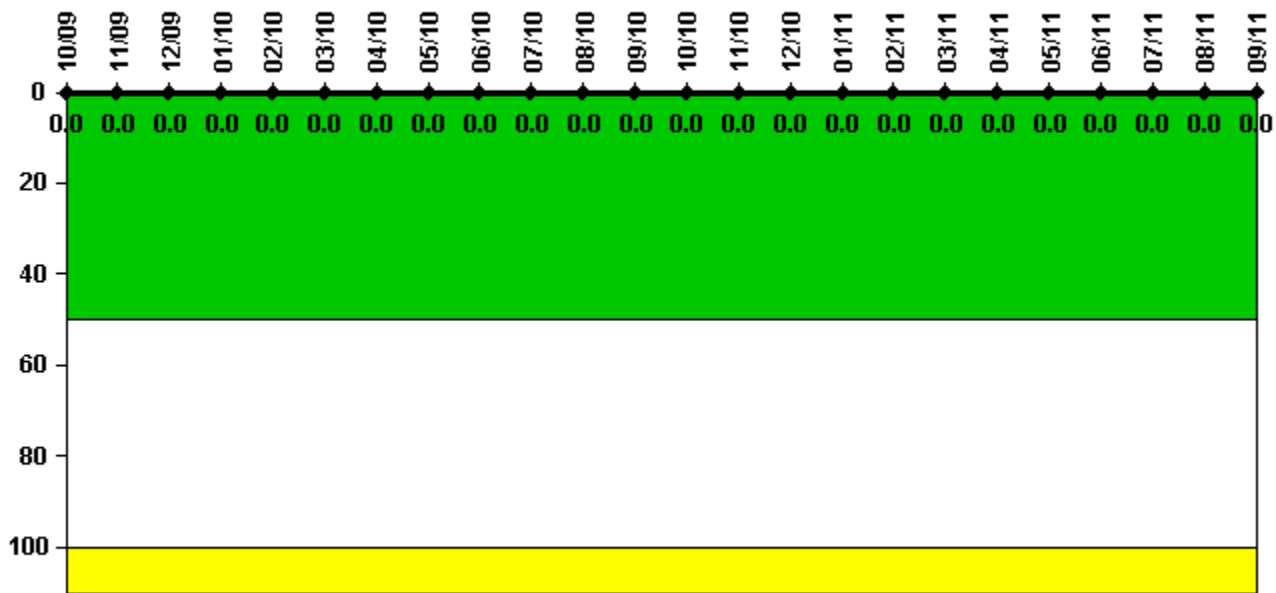
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
UAI (ΔCDF)	7.90E-08	7.95E-08	9.48E-08	9.48E-08	2.51E-07	4.91E-07	4.72E-07	6.12E-07
URI (ΔCDF)	-1.10E-07	-1.09E-07	-1.08E-07	-1.09E-07	-8.89E-07	-8.85E-07	-8.87E-07	-8.92E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-08	-2.90E-08	-1.40E-08	-1.40E-08	-6.40E-07	-3.90E-07	-4.10E-07	-2.80E-07

Licensee Comments: none

Reactor Coolant System Activity



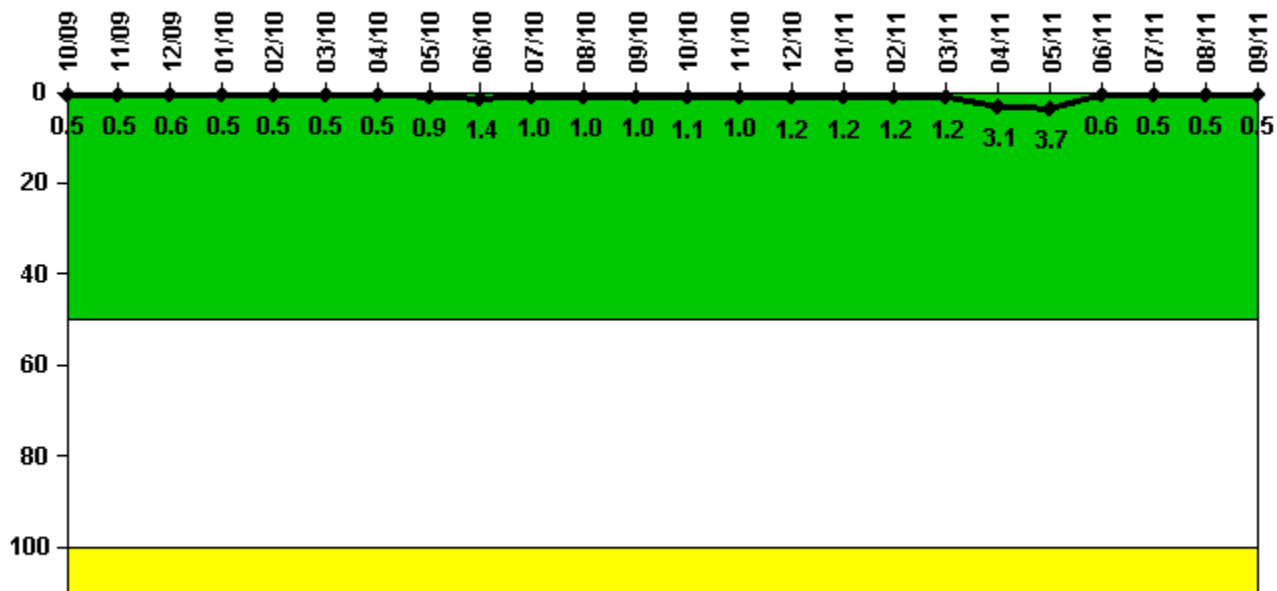
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Maximum activity	0.000434	0.000443	0.000450	0.000459	0.000474	0.000276	0.000272	0.000096	0.000096	0.000099	0.000103	0.000106
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11
Maximum activity	0.000118	0.000120	0.000124	0.000142	0.000136	0.000140	0.000161	0.000324	0.000477	0.000222	0.000153	0.000224
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



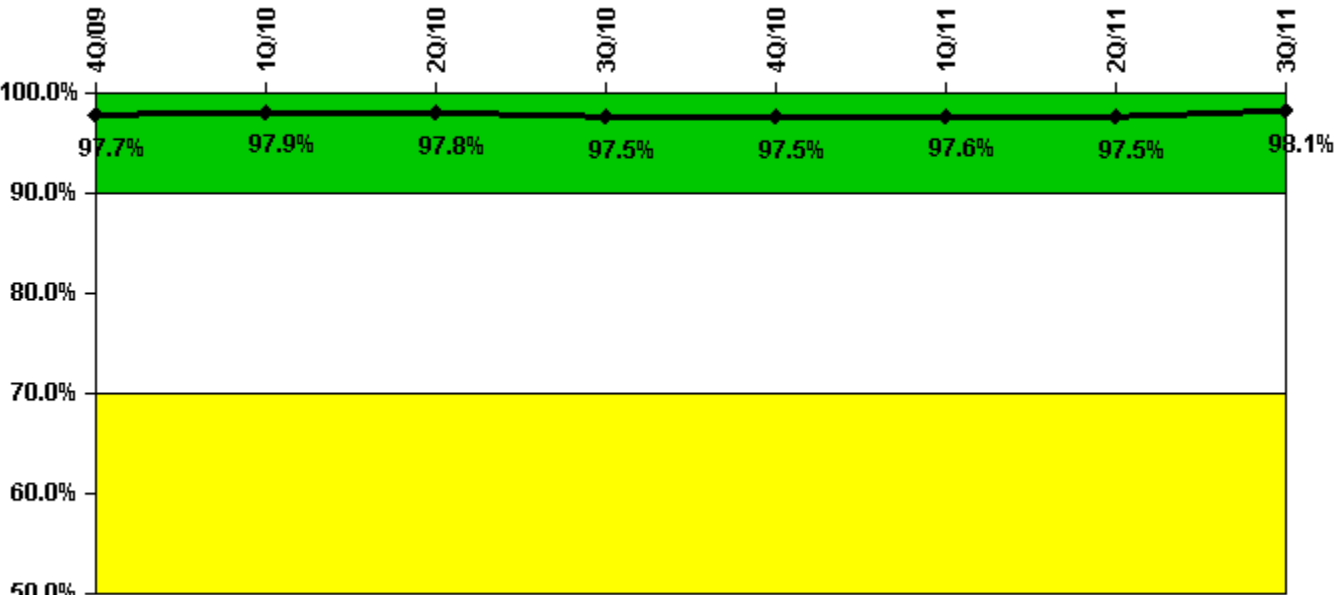
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Maximum leakage	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.090	0.140	0.100	0.100	0.100
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.9	1.4	1.0	1.0	1.0
Reactor Coolant System Leakage	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11
Maximum leakage	0.110	0.100	0.120	0.120	0.120	0.120	0.310	0.370	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.1	1.0	1.2	1.2	1.2	1.2	3.1	3.7	0.6	0.5	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



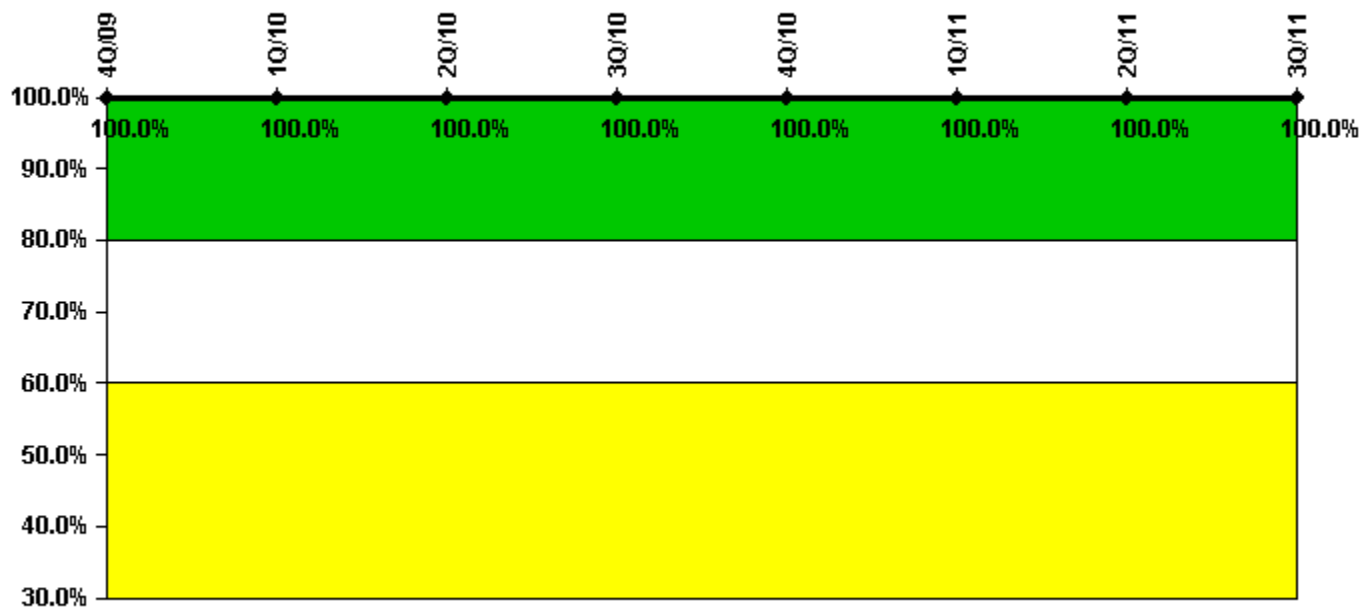
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
Successful opportunities	64.0	34.0	9.0	58.0	12.0	51.0	77.0	62.0
Total opportunities	65.0	34.0	10.0	61.0	13.0	51.0	78.0	62.0
Indicator value	97.7%	97.9%	97.8%	97.5%	97.5%	97.6%	97.5%	98.1%

Licensee Comments: none

ERO Drill Participation



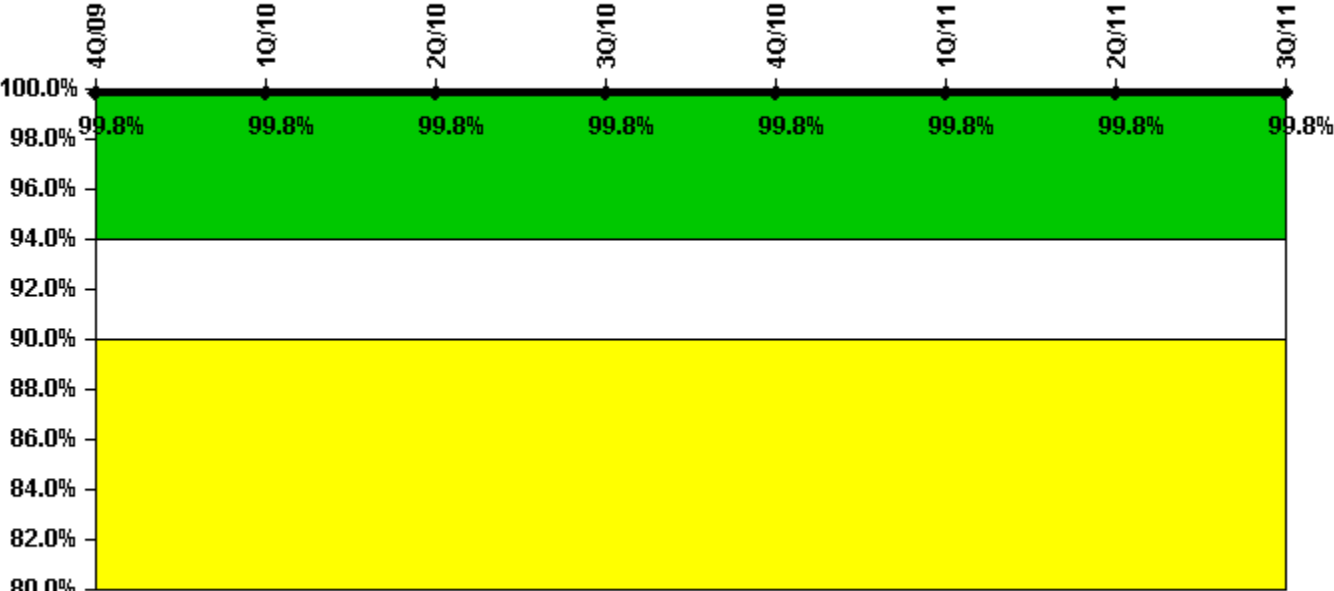
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
Participating Key personnel	72.0	74.0	74.0	72.0	74.0	76.0	74.0	75.0
Total Key personnel	72.0	74.0	74.0	72.0	74.0	76.0	74.0	75.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



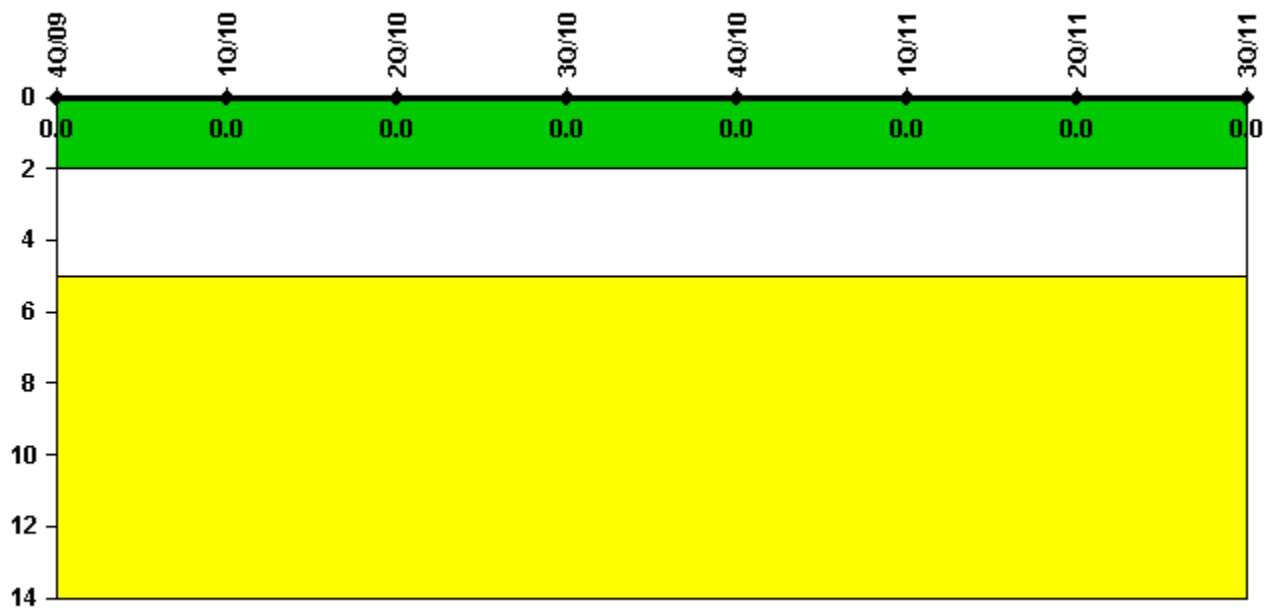
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
Successful siren-tests	5998	3841	3890	3959	3956	3902	3893	3893
Total sirens-tests	6016	3843	3904	3965	3965	3904	3904	3904
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



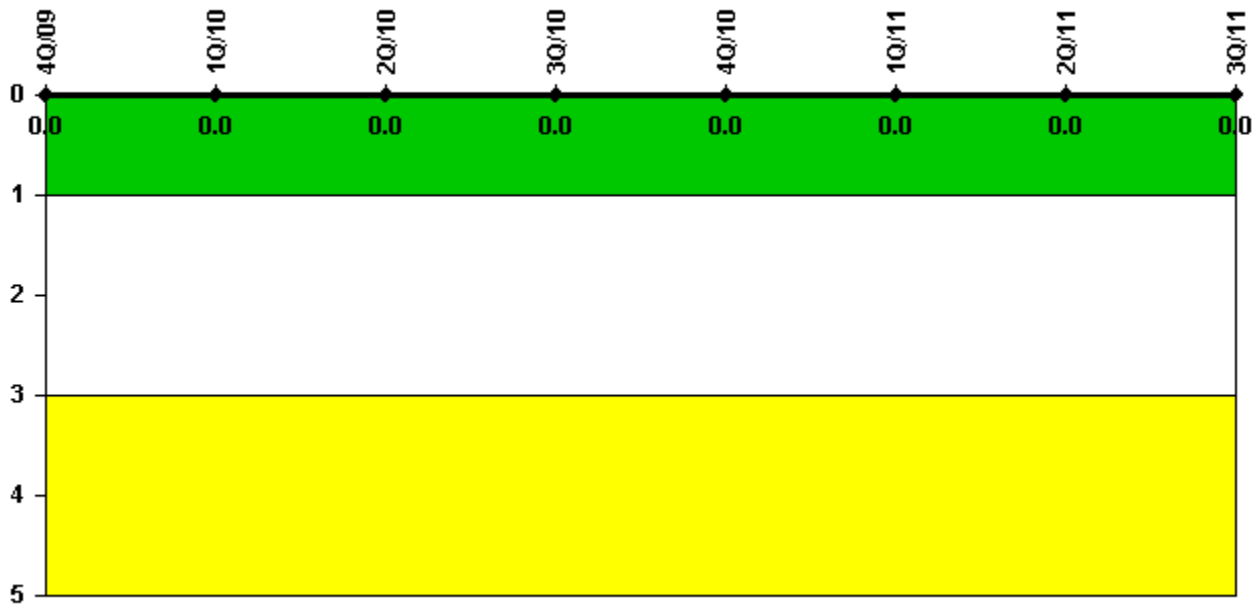
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.

Byron 2

4Q/2011 Performance Indicators

Licensee's General Comments: 4th Quarter 2011 Byron Unit 2

Unplanned Scrams per 7000 Critical Hrs



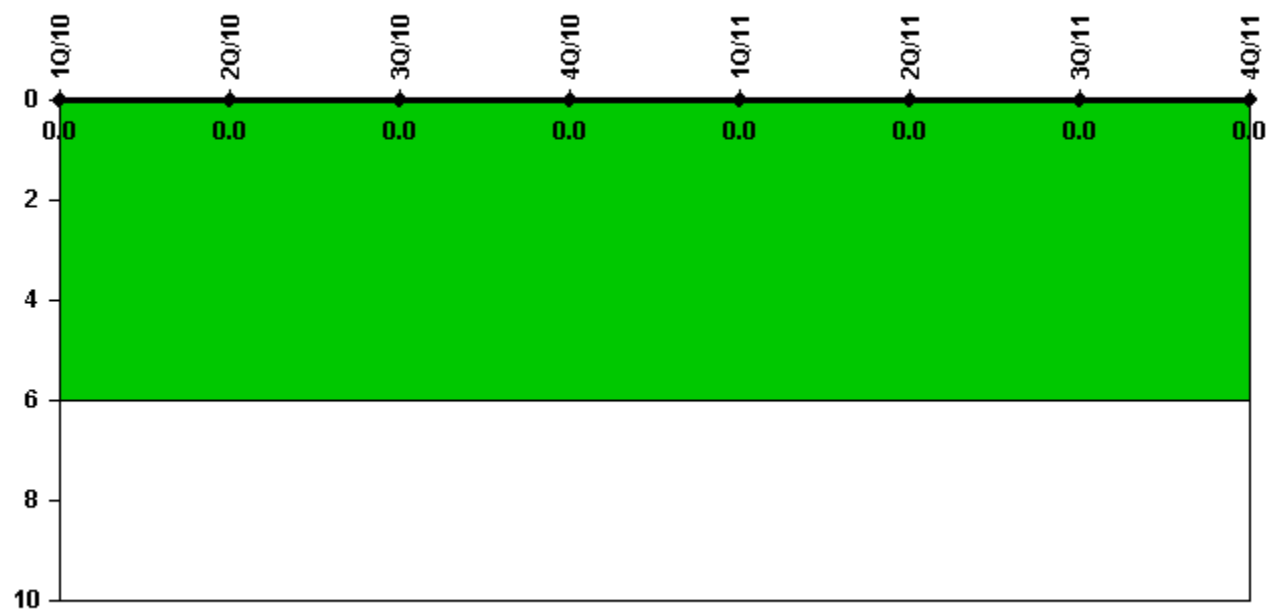
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2159.0	1735.2	2208.0	2209.0	2159.0	2071.5	1919.0	2004.4
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



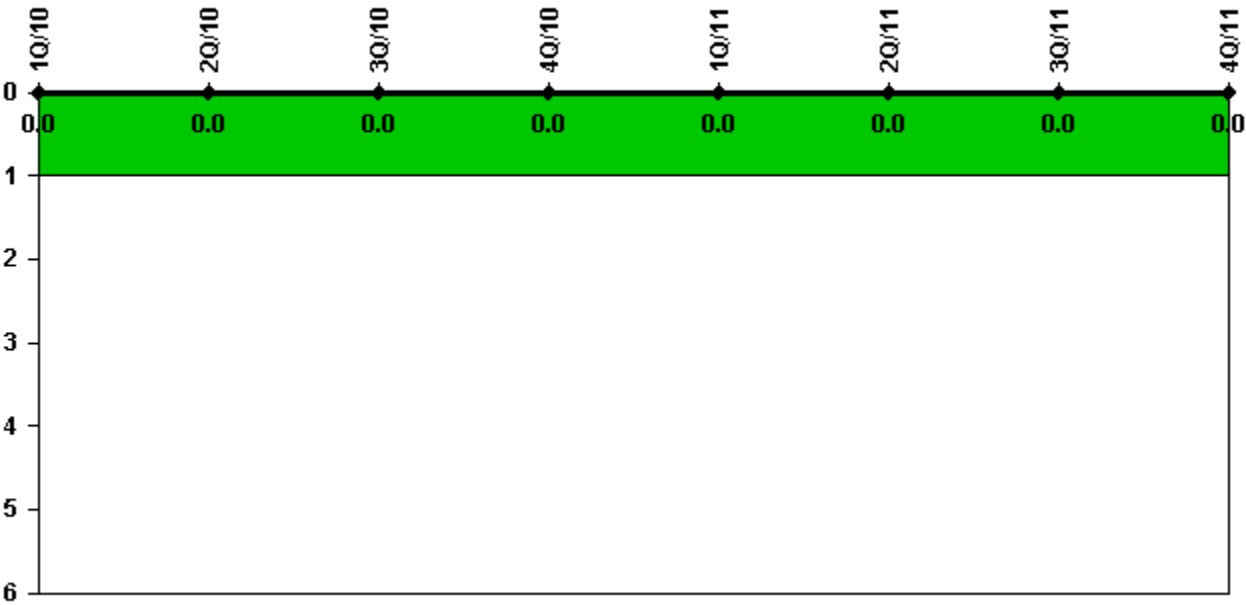
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2159.0	1735.2	2208.0	2209.0	2159.0	2071.5	1919.0	2004.4
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



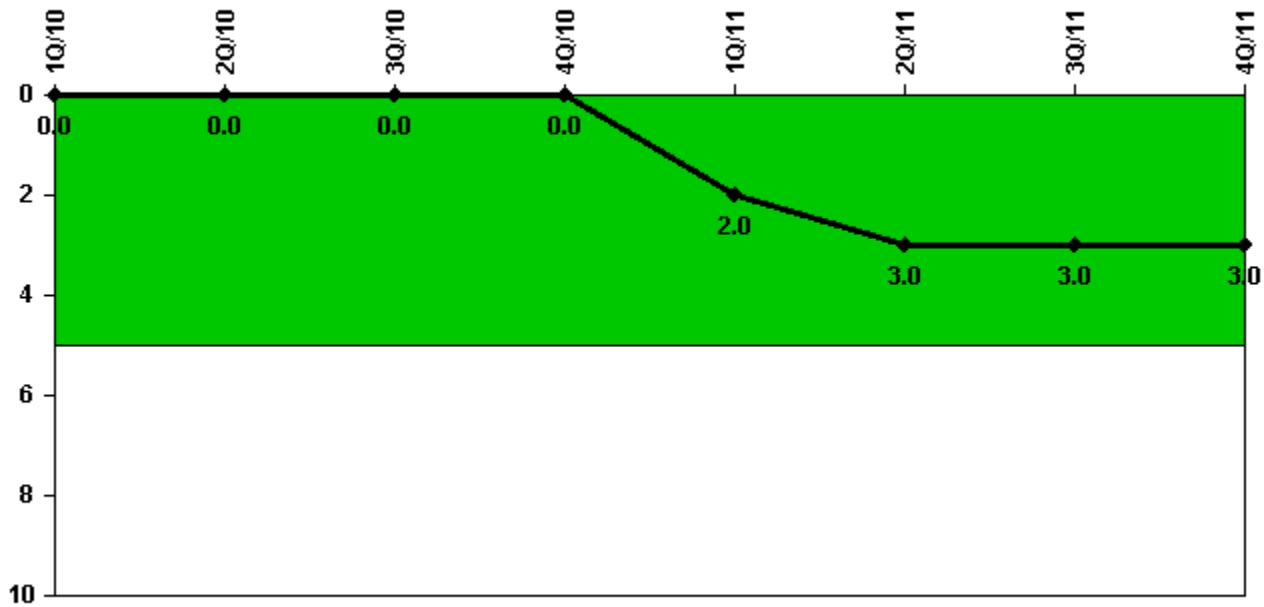
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Safety System Functional Failures	0	0	0	0	2	1	0	0
Indicator value	0	0	0	0	2	3	3	3

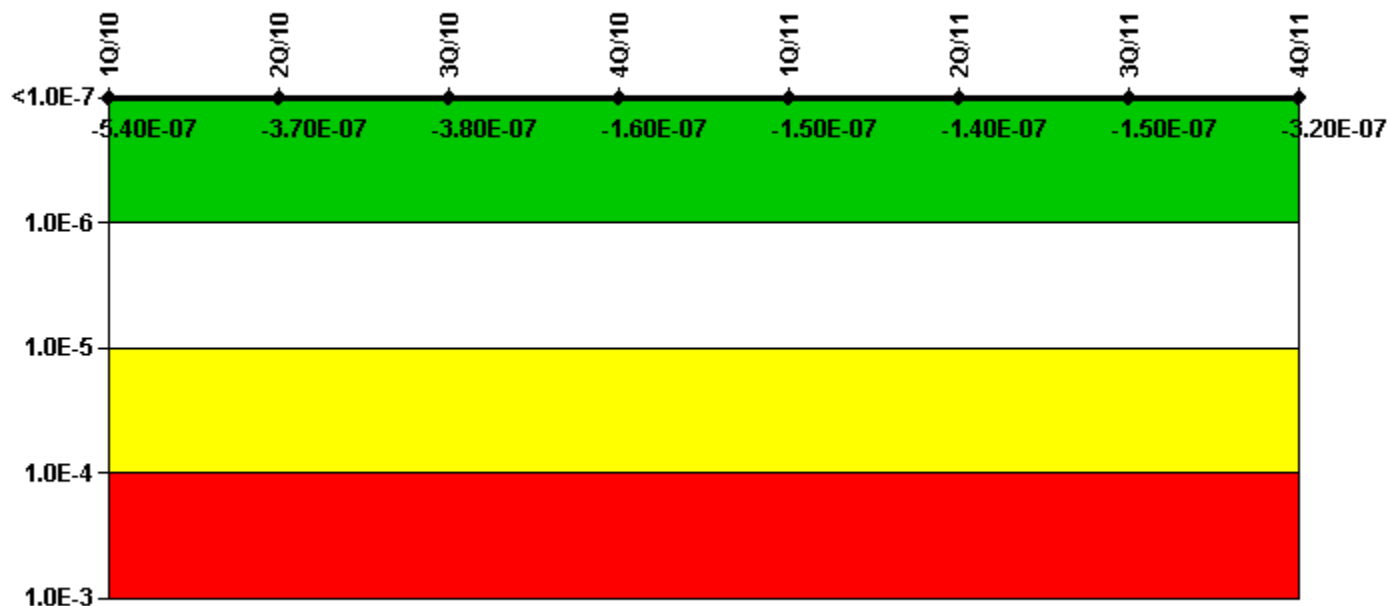
Licensee Comments:

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

3Q/10: LER 454-2010-001-00 UG Cable Vaults not vital - No SSFF. LER 455-2010-002-00 "Failed T.S. Ventilation Surv Rqmts During Surv Rqmt 3.0.3 Delay Period". The potential safety significance of the condition is still being evaluated and the results will be updated with the supplement to this LER.

2Q/08: LER 455-2008-001-00, "Loss of Off-site Power due to Failed Insulator." All safety equipment responded as designed

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

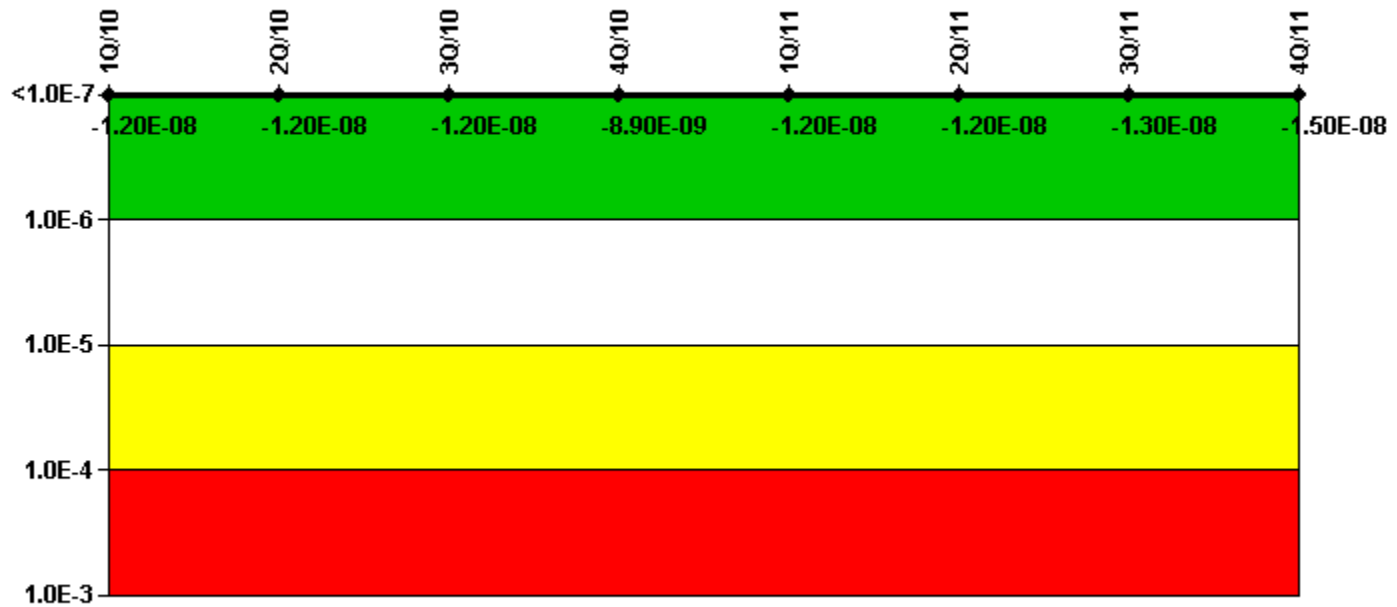
Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	2.95E-08	3.31E-08	2.93E-08	7.83E-08	9.92E-08	9.47E-08	9.49E-08	1.15E-07
URI (ΔCDF)	-5.70E-07	-4.08E-07	-4.07E-07	-2.41E-07	-2.45E-07	-2.30E-07	-2.40E-07	-4.36E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.40E-07	-3.70E-07	-3.80E-07	-1.60E-07	-1.50E-07	-1.40E-07	-1.50E-07	-3.20E-07

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

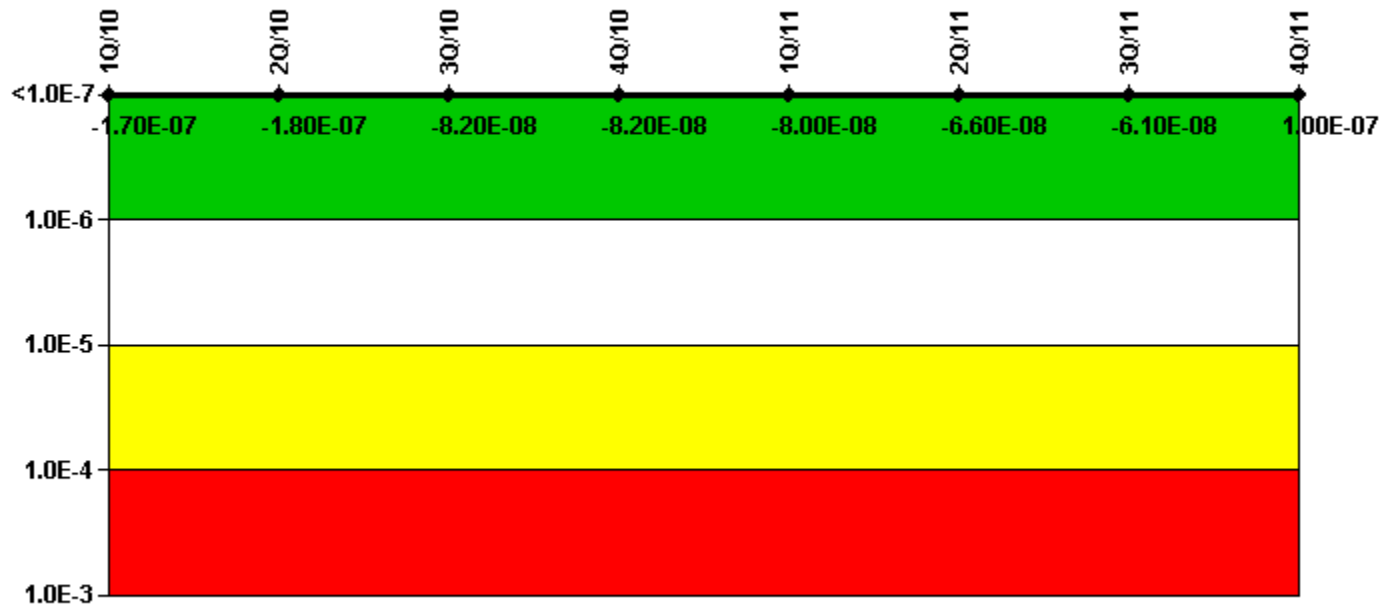
Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (Δ CDF)	-9.17E-09	-9.41E-09	-9.41E-09	-6.51E-09	-1.00E-08	-9.86E-09	-1.09E-08	-1.30E-08
URI (Δ CDF)	-2.44E-09	-2.39E-09	-2.41E-09	-2.40E-09	-2.40E-09	-2.41E-09	-2.42E-09	-1.94E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-1.20E-08	-1.20E-08	-8.90E-09	-1.20E-08	-1.20E-08	-1.30E-08	-1.50E-08

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

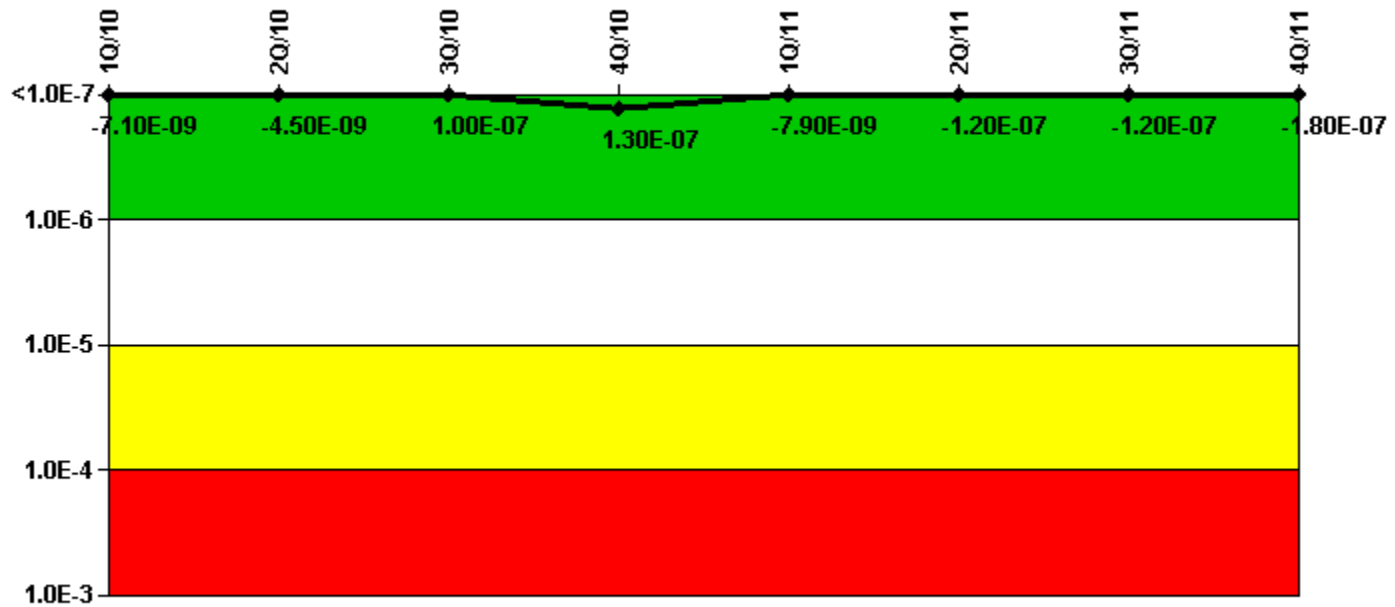
Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	7.37E-08	7.17E-08	1.65E-07	1.63E-07	1.63E-07	1.77E-07	1.86E-07	4.14E-07
URI (ΔCDF)	-2.41E-07	-2.47E-07	-2.48E-07	-2.45E-07	-2.43E-07	-2.43E-07	-2.46E-07	-3.14E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.70E-07	-1.80E-07	-8.20E-08	-8.20E-08	-8.00E-08	-6.60E-08	-6.10E-08	1.00E-07

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (Δ CDF)	9.26E-08	7.92E-08	1.88E-07	2.16E-07	7.97E-08	-2.87E-08	-2.87E-08	-3.45E-08
URI (Δ CDF)	-9.97E-08	-8.36E-08	-8.63E-08	-8.41E-08	-8.77E-08	-9.02E-08	-9.28E-08	-1.43E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.10E-09	-4.50E-09	1.00E-07	1.30E-07	-7.90E-09	-1.20E-07	-1.20E-07	-1.80E-07

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

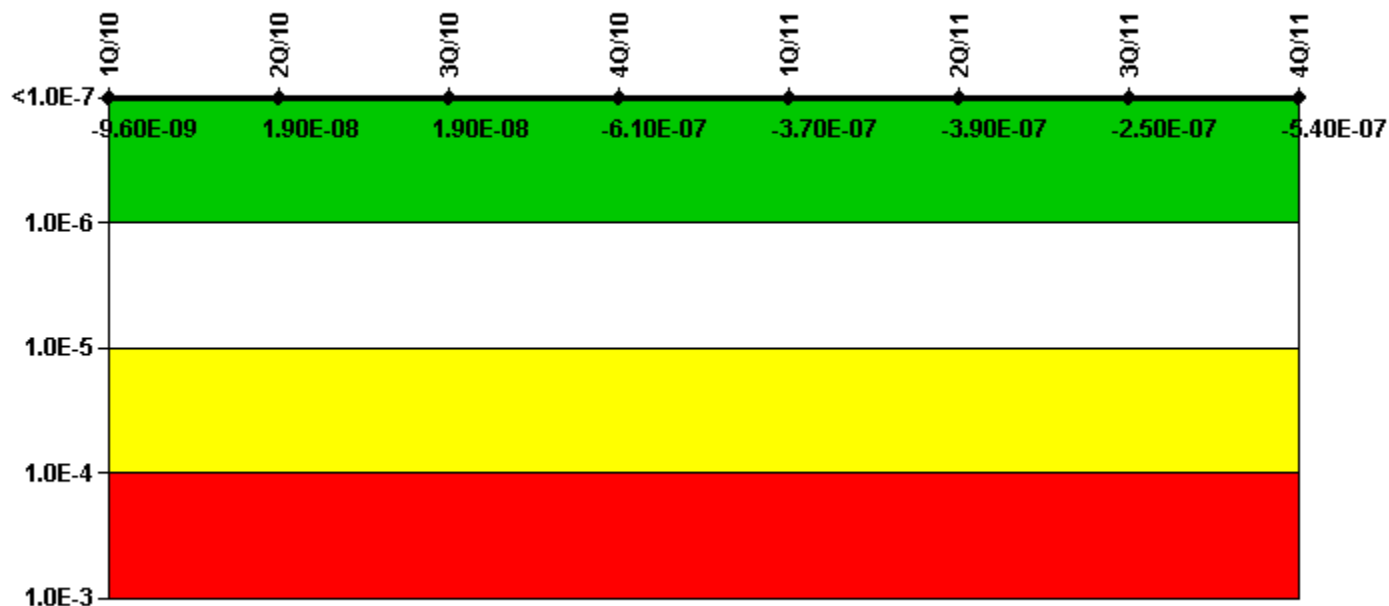
3Q/09: Incorporated Basis Doc Revision 4 changes resulting from PRA Model revision 6e which incorporated a change to DG mission time and addition of A Train AF cross-tie.

1Q/09: Demand / Run Time reporting for Reliability changed from actuals to estimated!

4Q/06: Corrections made to historical actual UA and Baseline UA

2Q/06: Revised PRA parameters per PRA revision 6D. Changed demand and run time reporting from monthly actuals to estimated.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	9.94E-08	1.27E-07	1.28E-07	2.84E-07	5.12E-07	4.93E-07	6.38E-07	3.97E-07
URI (ΔCDF)	-1.09E-07	-1.08E-07	-1.09E-07	-8.89E-07	-8.85E-07	-8.87E-07	-8.92E-07	-9.35E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.60E-09	1.90E-08	1.90E-08	-6.10E-07	-3.70E-07	-3.90E-07	-2.50E-07	-5.40E-07

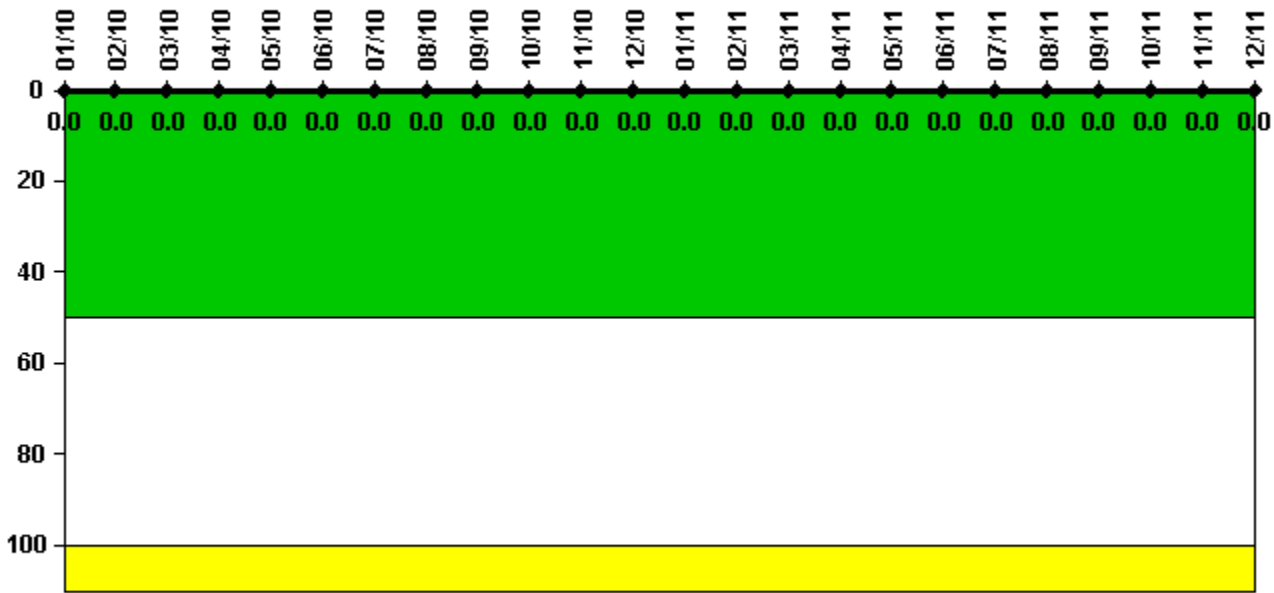
Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

3Q/09: Incorporated Basis Doc Revision 4 changes resulting from PRA Model revision 6e which incorporated a change to DG mission time and addition of A Train AF cross-tie.

1Q/09: Demand / Run Time reporting for Reliability changed from actuals to estimated!

Reactor Coolant System Activity



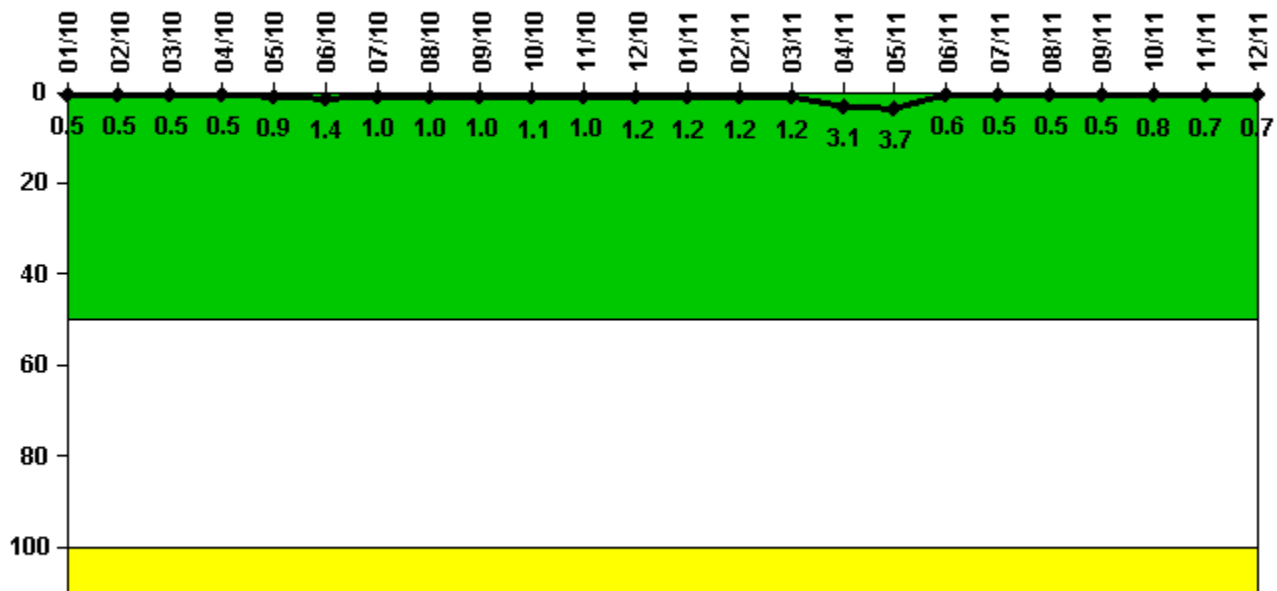
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Maximum activity	0.000459	0.000474	0.000276	0.000272	0.000096	0.000096	0.000099	0.000103	0.000106	0.000118	0.000120	0.000124
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum activity	0.000142	0.000136	0.000140	0.000161	0.000324	0.000477	0.000222	0.000153	0.000224	0.000055	0.000064	0.000065
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



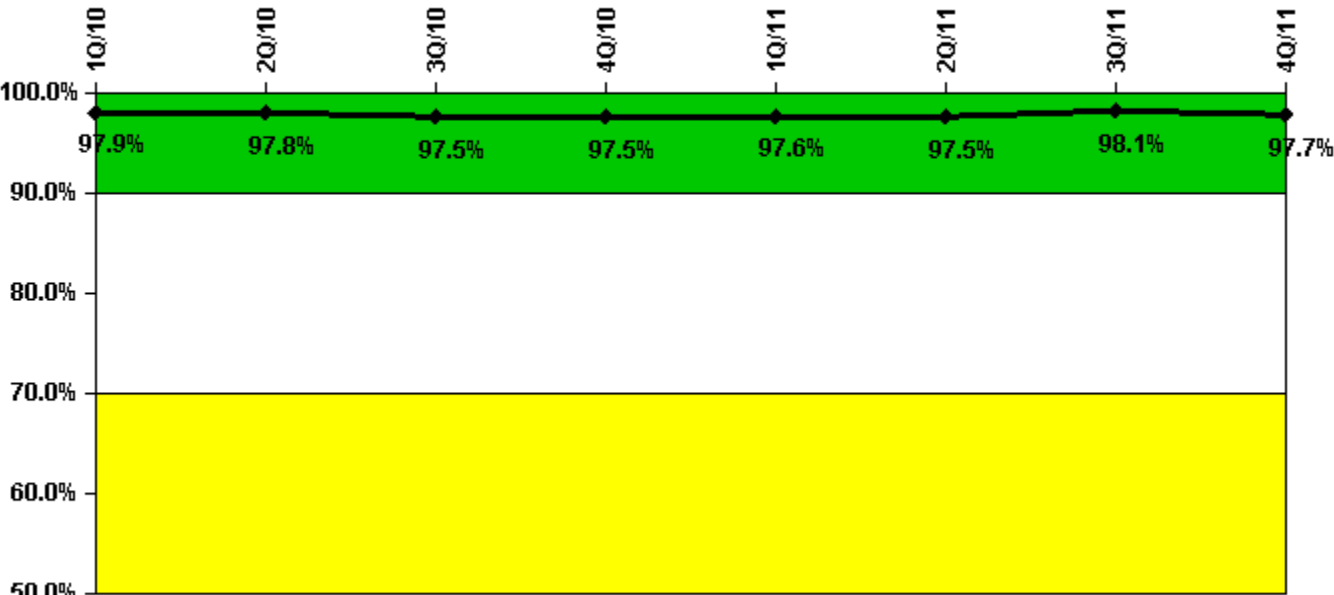
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Maximum leakage	0.050	0.050	0.050	0.050	0.090	0.140	0.100	0.100	0.100	0.110	0.100	0.120
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.5	0.9	1.4	1.0	1.0	1.0	1.1	1.0	1.2
Reactor Coolant System Leakage	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum leakage	0.120	0.120	0.120	0.310	0.370	0.060	0.050	0.050	0.050	0.080	0.070	0.070
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.2	1.2	1.2	3.1	3.7	0.6	0.5	0.5	0.5	0.8	0.7	0.7

Licensee Comments: none

Drill/Exercise Performance



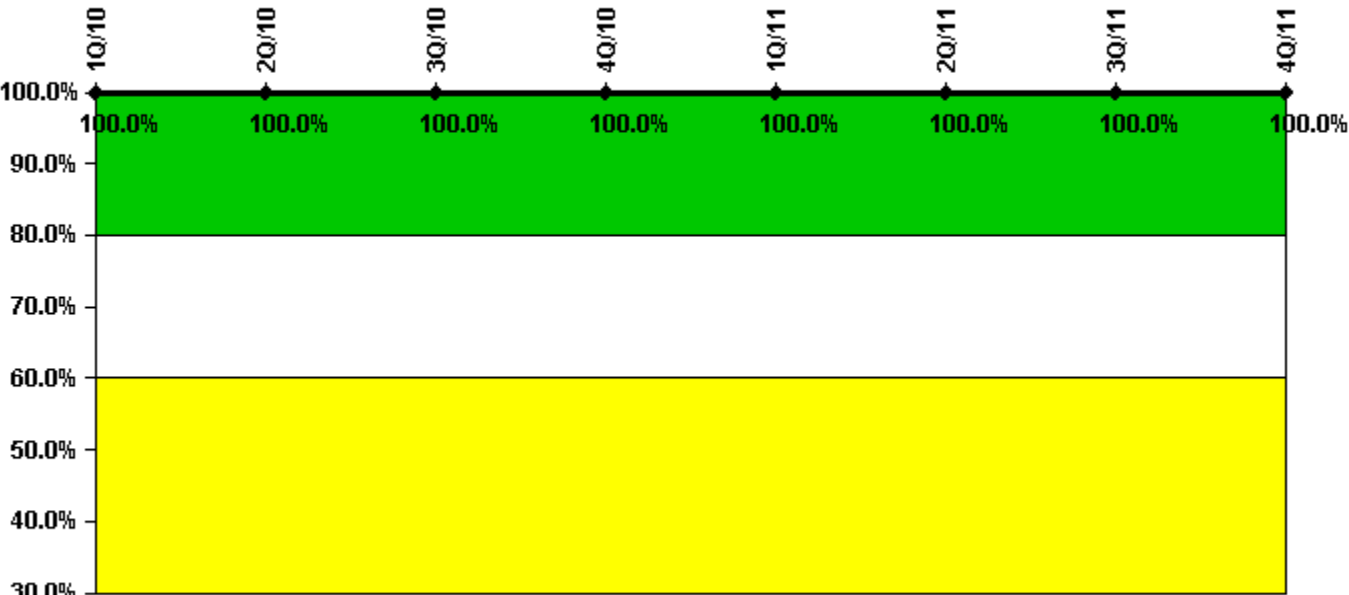
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Successful opportunities	34.0	9.0	58.0	12.0	51.0	77.0	62.0	35.0
Total opportunities	34.0	10.0	61.0	13.0	51.0	78.0	62.0	37.0
Indicator value	97.9%	97.8%	97.5%	97.5%	97.6%	97.5%	98.1%	97.7%

Licensee Comments: none

ERO Drill Participation



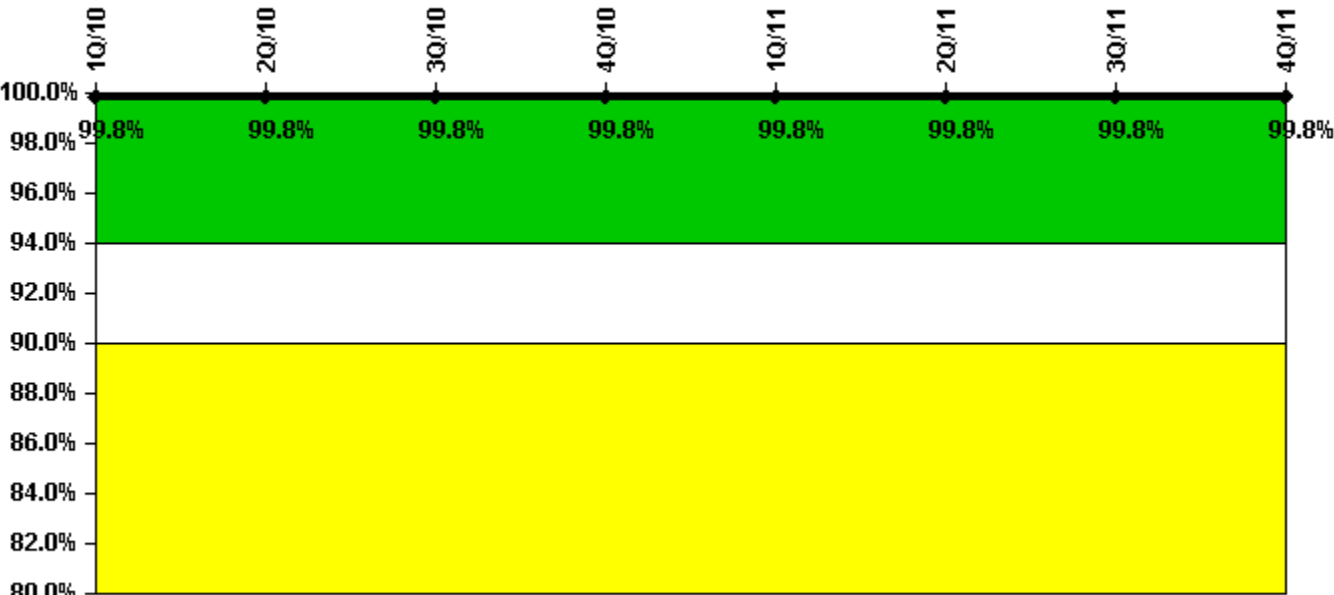
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Participating Key personnel	74.0	74.0	72.0	74.0	76.0	74.0	75.0	74.0
Total Key personnel	74.0	74.0	72.0	74.0	76.0	74.0	75.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



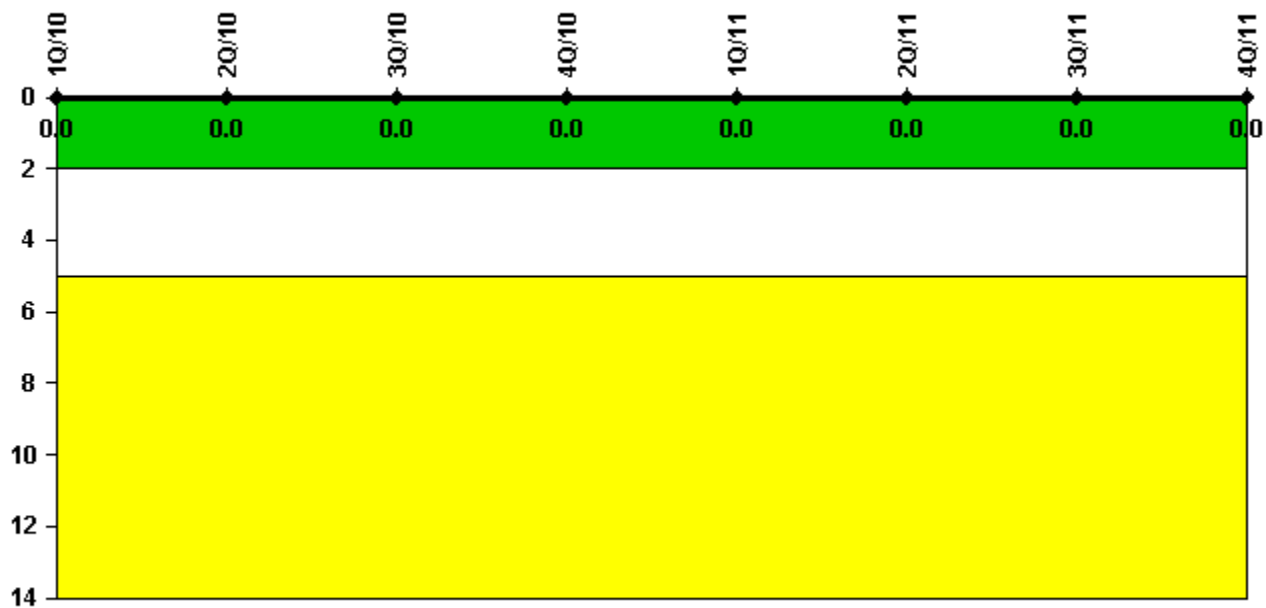
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Successful siren-tests	3841	3890	3959	3956	3902	3893	3893	3903
Total sirens-tests	3843	3904	3965	3965	3904	3904	3904	3904
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



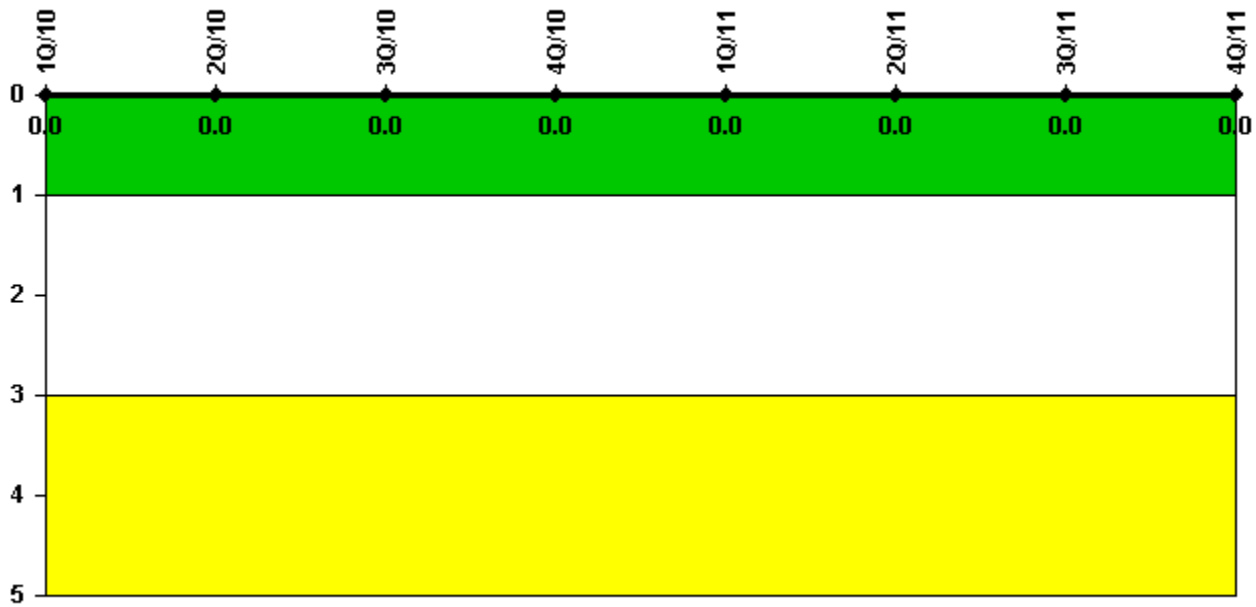
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.

Byron 2

1Q/2012 Performance Indicators

Licensee's General Comments: Byron Station ROP Change Files created April 23, 2012

Unplanned Scrams per 7000 Critical Hrs



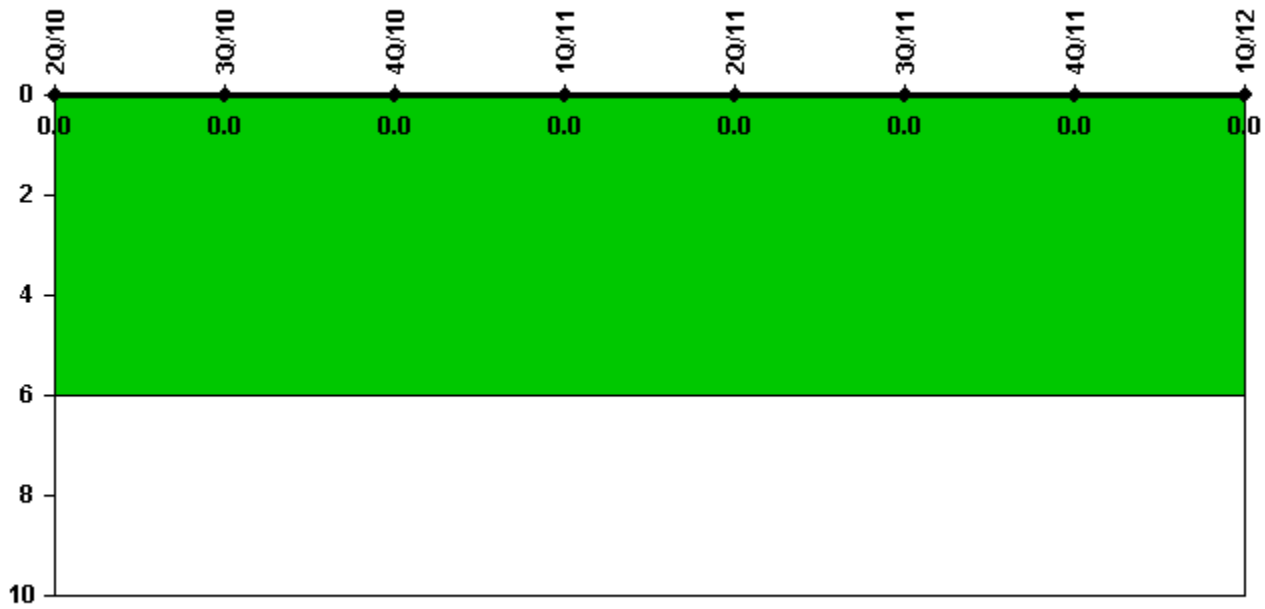
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned scrams	0	0	0	0	0	0	0	2.0
Critical hours	1735.2	2208.0	2209.0	2159.0	2071.5	1919.0	2004.4	2004.4
Indicator value	0	0	0	0	0	0	0	1.8

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



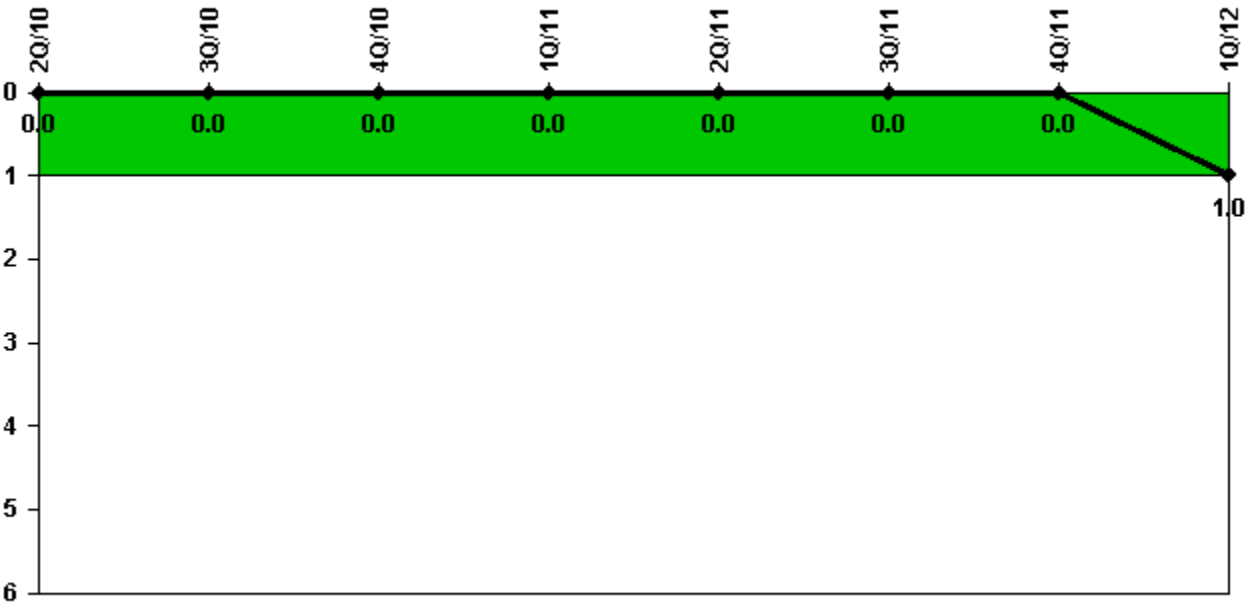
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	1735.2	2208.0	2209.0	2159.0	2071.5	1919.0	2004.4	2004.4
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



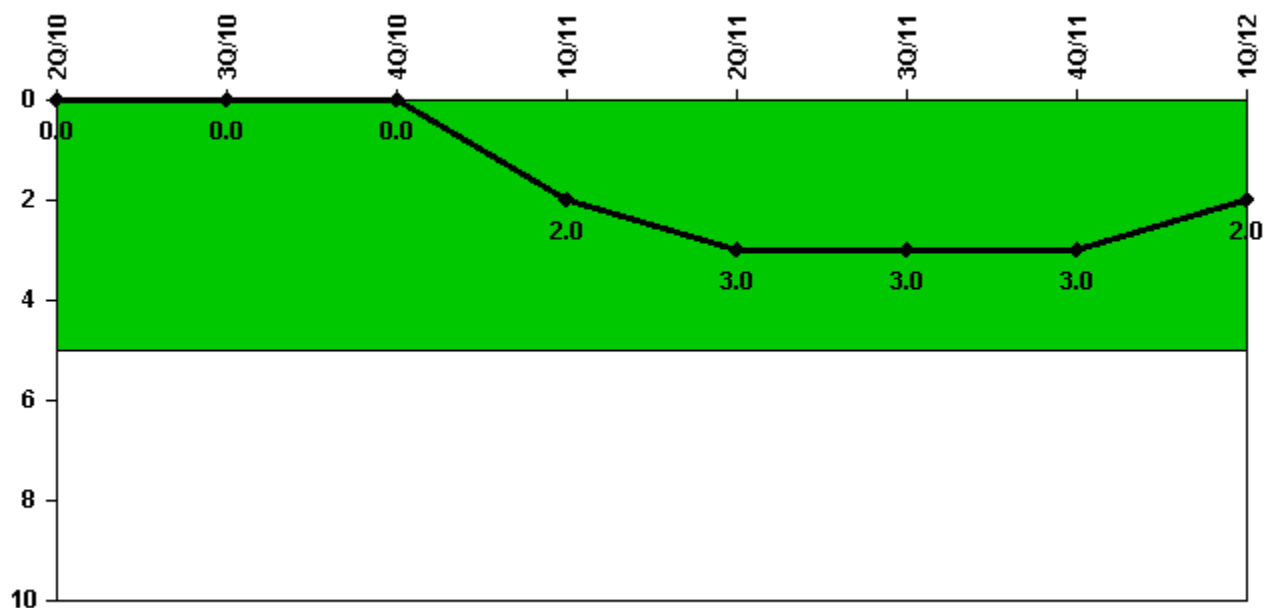
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Scrams with complications	0	0	0	0	0	0	0	1.0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Safety System Functional Failures	0	0	0	2	1	0	0	1
Indicator value	0	0	0	2	3	3	3	2

Licensee Comments:

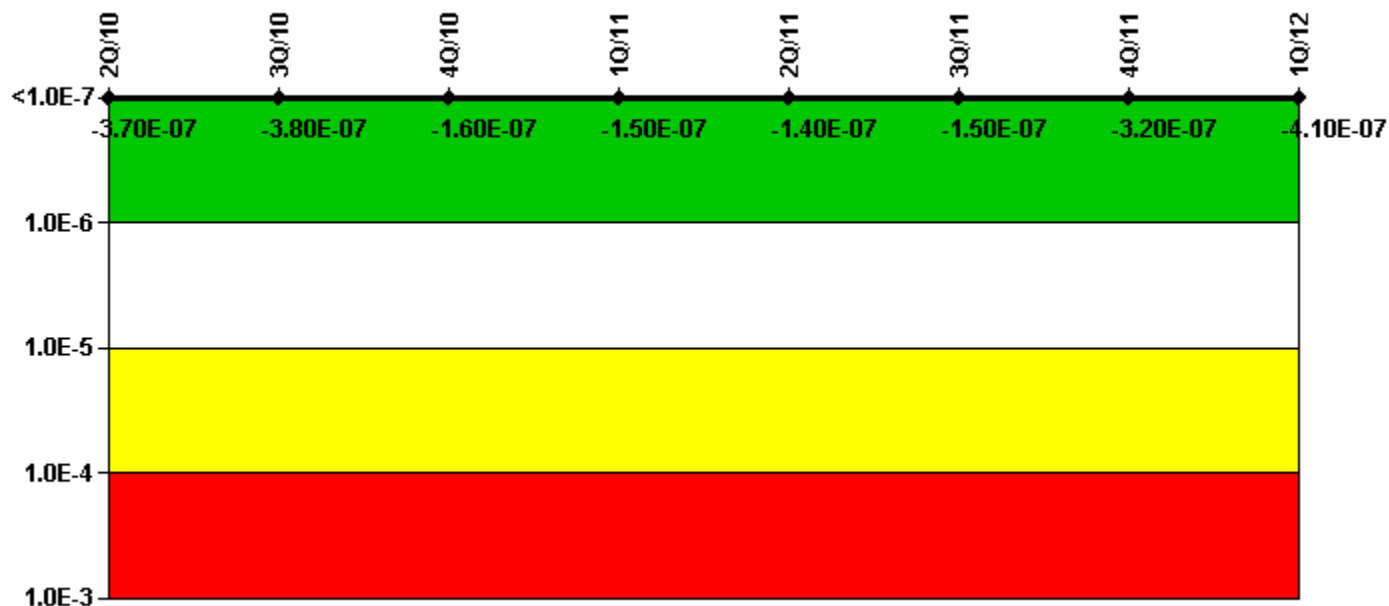
1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

2Q/11: May LER 454-2011-003-00: Drained Sections of Piping in AF Suction Lines Result on Sys Inop Due to Inadequate Tech Eval LER retracted, SSFF removed June Supplemental LER 455-2011 -001 -01 "Unit 2 Emergency Diesel Generator Inoperable for Longer than Allowed by Technical Specifications Due to Inadequate Work" confirms SSFF previously reported.

3Q/10: LER 454-2010-001-00 UG Cable Vaults not vital - No SSFF. LER 455-2010-002-00 "Failed T.S. Ventilation Surv Rqmts During Surv Rqmt 3.0.3 Delay Period". The potential safety significance of the condition is still being evaluated and the results will be updated with the supplement to this LER.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

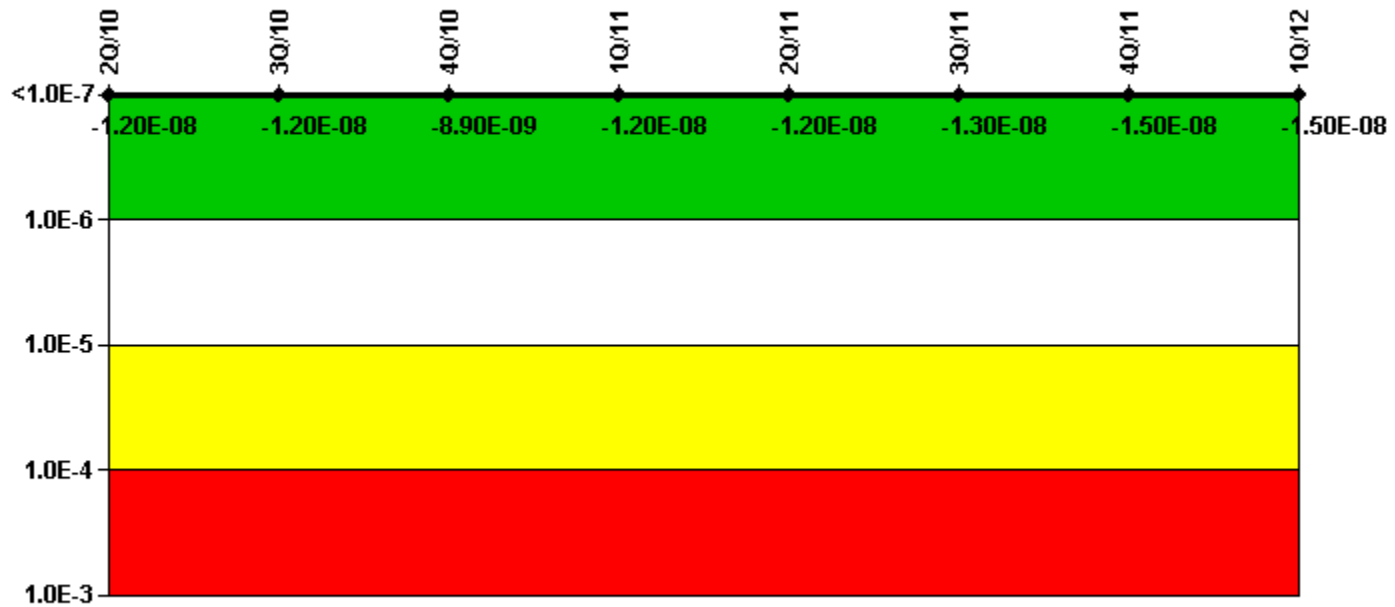
Mitigating Systems Performance Index, Emergency AC Power System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (ΔCDF)	3.31E-08	2.93E-08	7.83E-08	9.92E-08	9.47E-08	9.49E-08	1.15E-07	5.69E-08
URI (ΔCDF)	-4.08E-07	-4.07E-07	-2.41E-07	-2.45E-07	-2.30E-07	-2.40E-07	-4.36E-07	-4.65E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.70E-07	-3.80E-07	-1.60E-07	-1.50E-07	-1.40E-07	-1.50E-07	-3.20E-07	-4.10E-07

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

1Q/11: Due to typo on paperwork, UA for 1A DG was listed for 1B. This has been corrected.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

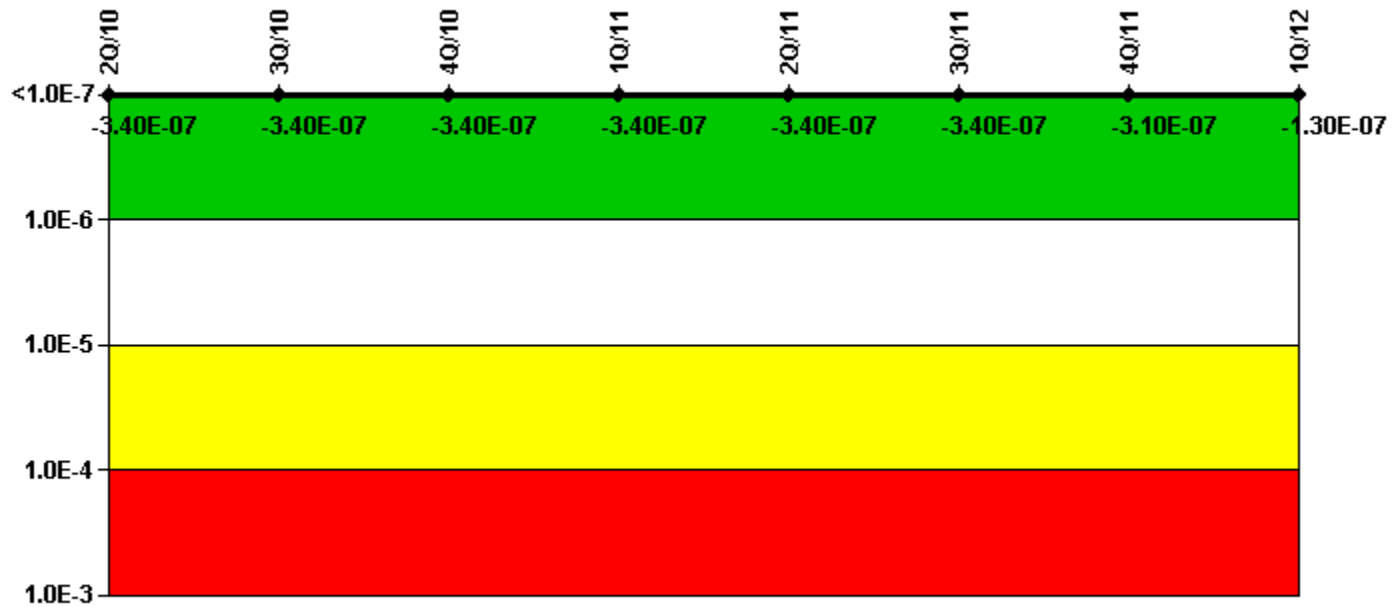
Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (Δ CDF)	-9.41E-09	-9.41E-09	-6.51E-09	-1.00E-08	-9.86E-09	-1.09E-08	-1.30E-08	-1.30E-08
URI (Δ CDF)	-2.39E-09	-2.41E-09	-2.40E-09	-2.40E-09	-2.41E-09	-2.42E-09	-1.94E-09	-1.96E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-1.20E-08	-8.90E-09	-1.20E-08	-1.20E-08	-1.30E-08	-1.50E-08	-1.50E-08

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (ΔCDF)	-9.66E-08	-9.66E-08	-9.66E-08	-9.66E-08	-9.66E-08	-9.65E-08	1.11E-09	1.33E-07
URI (ΔCDF)	-2.47E-07	-2.48E-07	-2.45E-07	-2.43E-07	-2.43E-07	-2.46E-07	-3.14E-07	-2.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-3.40E-07	-3.40E-07	-3.40E-07	-3.40E-07	-3.40E-07	-3.10E-07	-1.30E-07

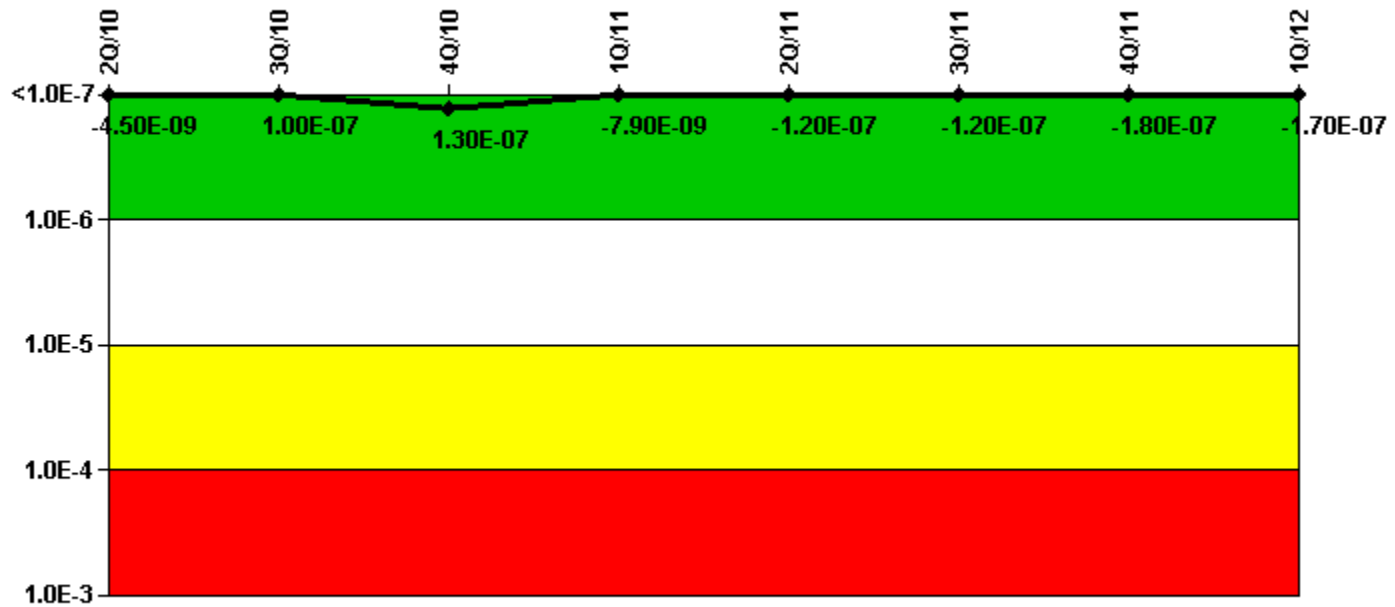
Licensee Comments:

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made and are reflected in this quarter's reporting.

4Q/11: Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

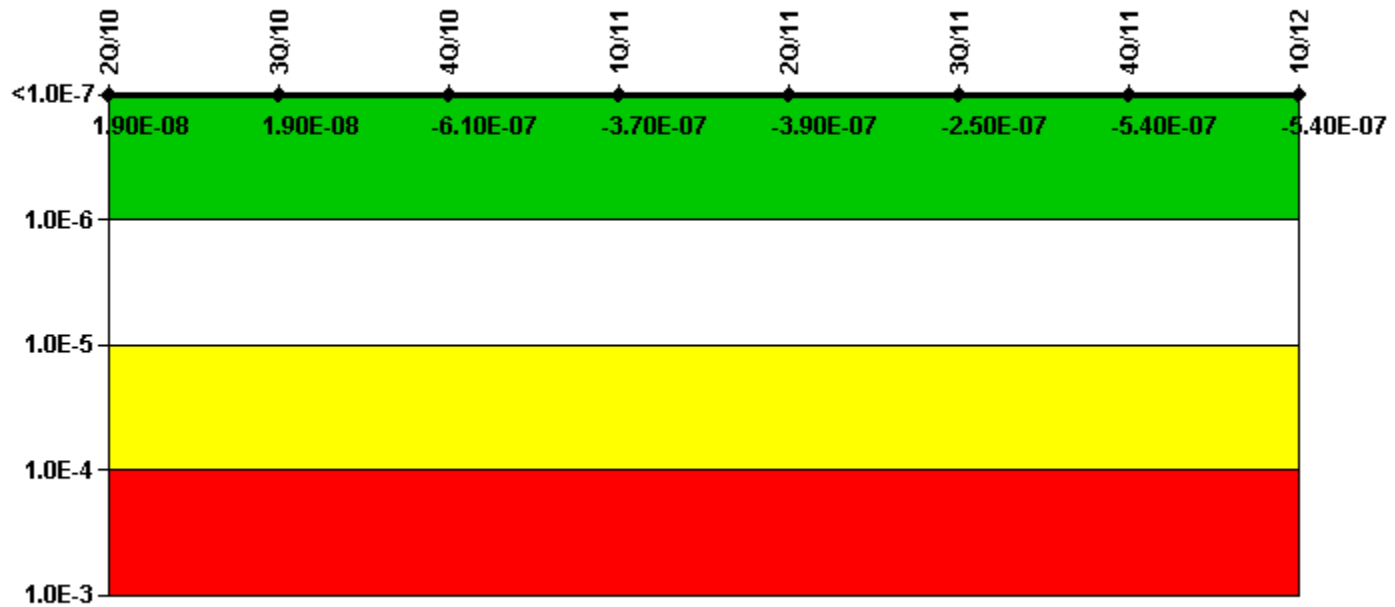
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (Δ CDF)	7.92E-08	1.88E-07	2.16E-07	7.97E-08	-2.87E-08	-2.87E-08	-3.45E-08	-3.45E-08
URI (Δ CDF)	-8.36E-08	-8.63E-08	-8.41E-08	-8.77E-08	-9.02E-08	-9.28E-08	-1.43E-07	-1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.50E-09	1.00E-07	1.30E-07	-7.90E-09	-1.20E-07	-1.20E-07	-1.80E-07	-1.70E-07

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

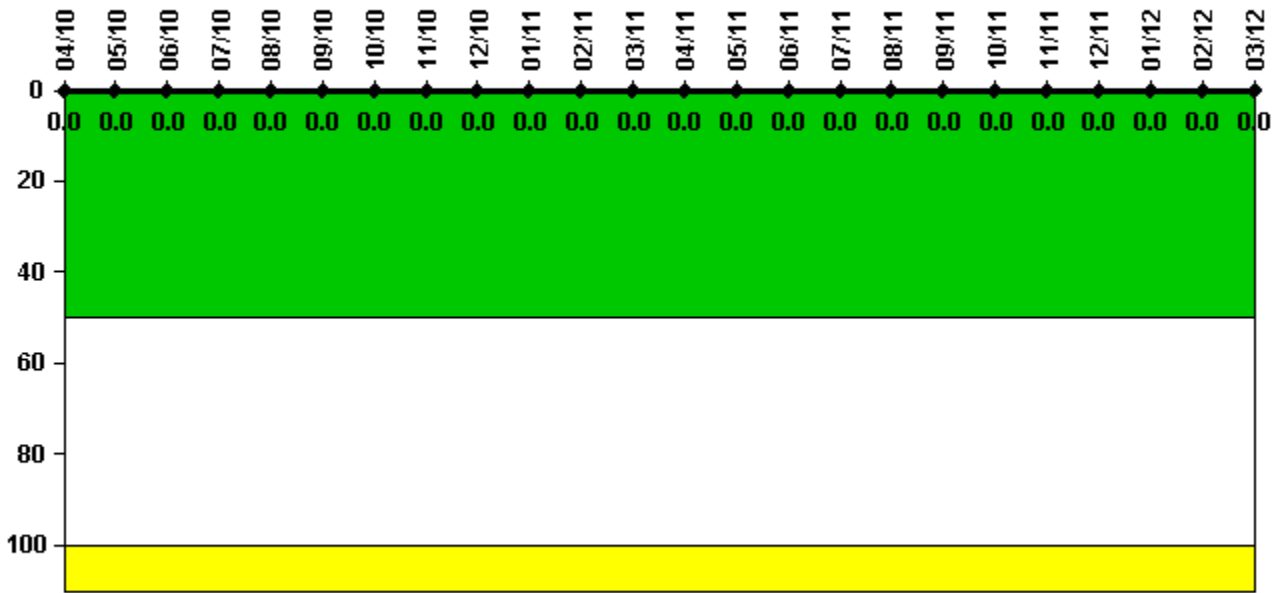
Mitigating Systems Performance Index, Cooling Water Systems	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (ΔCDF)	1.27E-07	1.28E-07	2.84E-07	5.12E-07	4.93E-07	6.38E-07	3.97E-07	3.95E-07
URI (ΔCDF)	-1.08E-07	-1.09E-07	-8.89E-07	-8.85E-07	-8.87E-07	-8.92E-07	-9.35E-07	-9.37E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.90E-08	1.90E-08	-6.10E-07	-3.70E-07	-3.90E-07	-2.50E-07	-5.40E-07	-5.40E-07

Licensee Comments:

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

4Q/10: Changed PRA Parameter(s).

Reactor Coolant System Activity



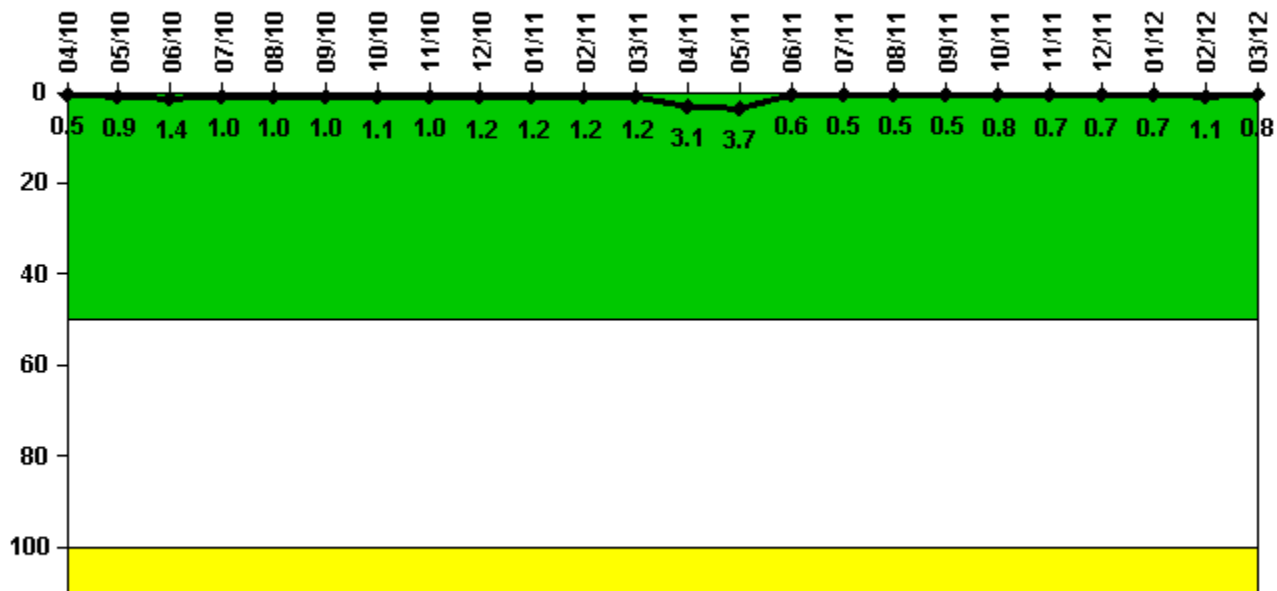
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum activity	0.000272	0.000096	0.000096	0.000099	0.000103	0.000106	0.000118	0.000120	0.000124	0.000142	0.000136	0.000140
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.000161	0.000324	0.000477	0.000222	0.000153	0.000224	0.000055	0.000064	0.000065	0.000071	0.000069	0.000081
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



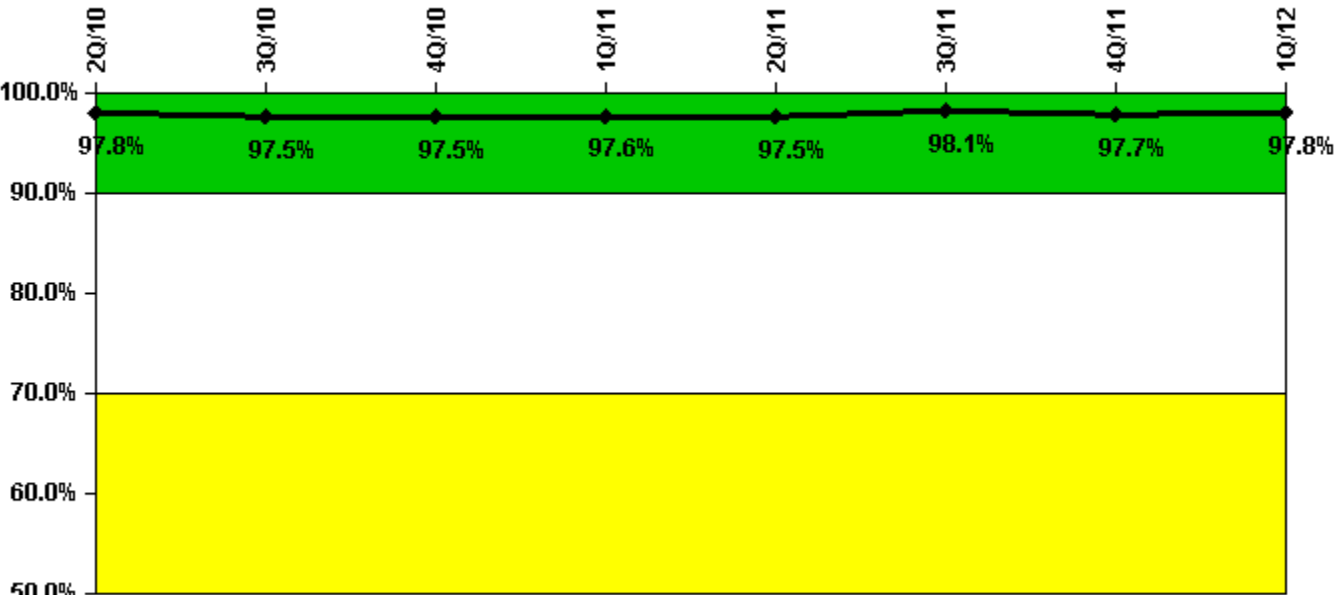
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum leakage	0.050	0.090	0.140	0.100	0.100	0.100	0.110	0.100	0.120	0.120	0.120	0.120
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.9	1.4	1.0	1.0	1.0	1.1	1.0	1.2	1.2	1.2	1.2
Reactor Coolant System Leakage	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum leakage	0.310	0.370	0.060	0.050	0.050	0.050	0.080	0.070	0.070	0.070	0.110	0.080
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	3.1	3.7	0.6	0.5	0.5	0.5	0.8	0.7	0.7	0.7	1.1	0.8

Licensee Comments: none

Drill/Exercise Performance



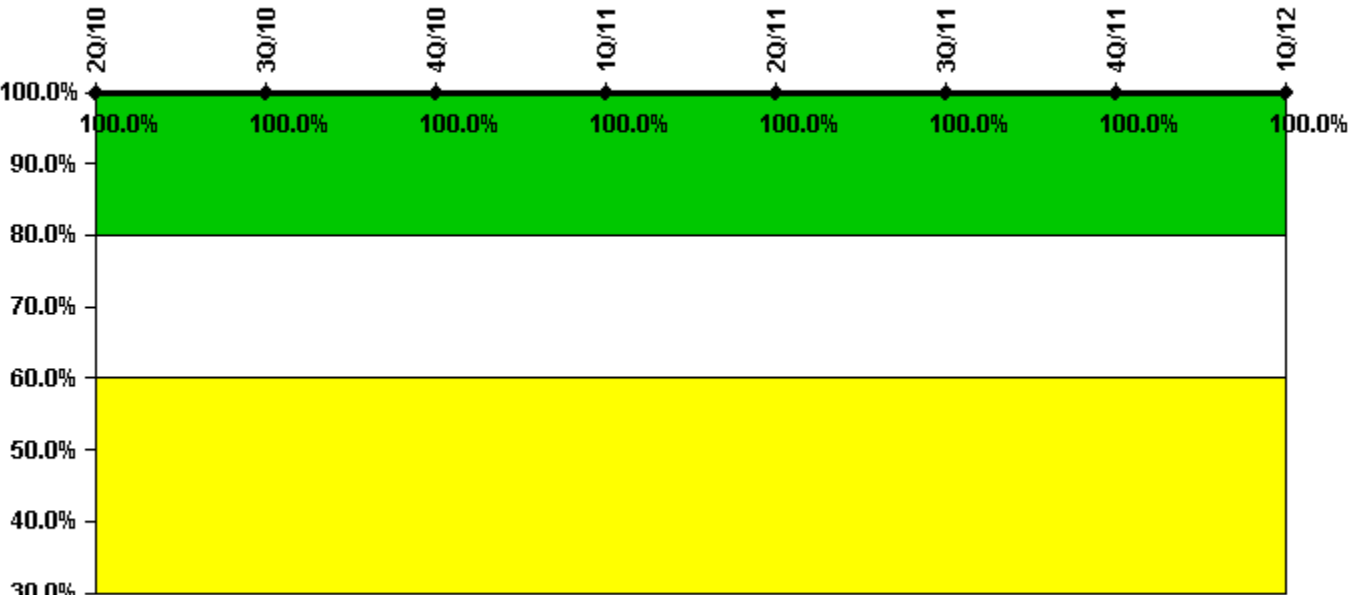
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful opportunities	9.0	58.0	12.0	51.0	77.0	62.0	35.0	96.0
Total opportunities	10.0	61.0	13.0	51.0	78.0	62.0	37.0	97.0
Indicator value	97.8%	97.5%	97.5%	97.6%	97.5%	98.1%	97.7%	97.8%

Licensee Comments: none

ERO Drill Participation



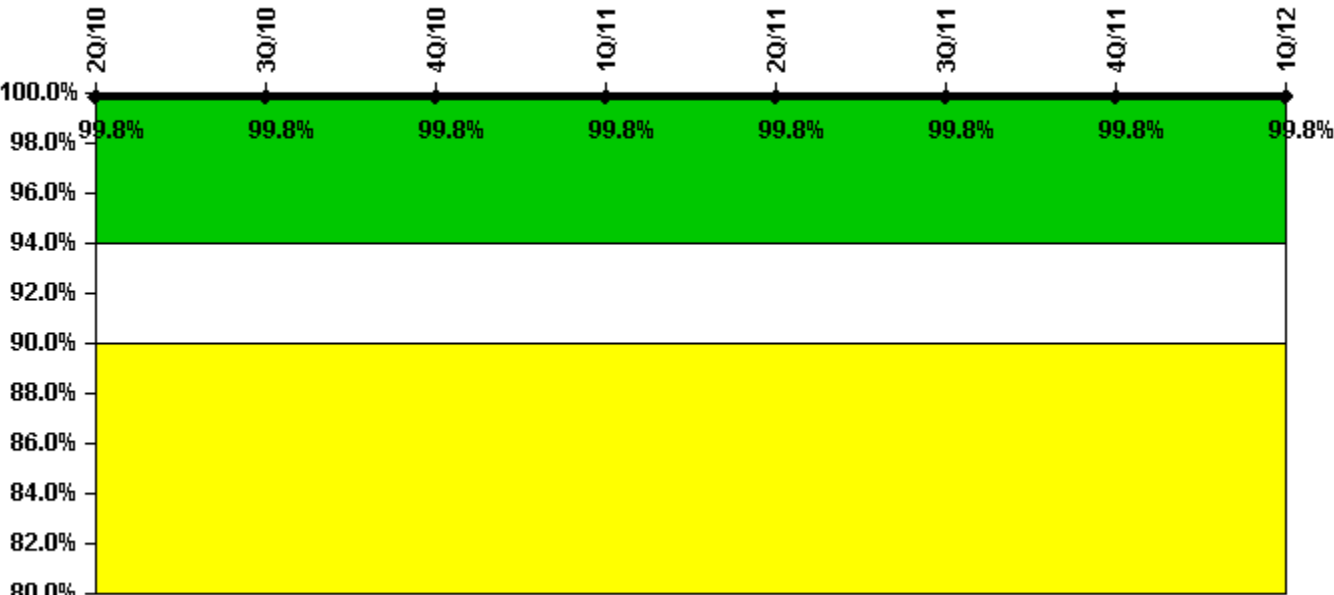
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Participating Key personnel	74.0	72.0	74.0	76.0	74.0	75.0	74.0	74.0
Total Key personnel	74.0	72.0	74.0	76.0	74.0	75.0	74.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



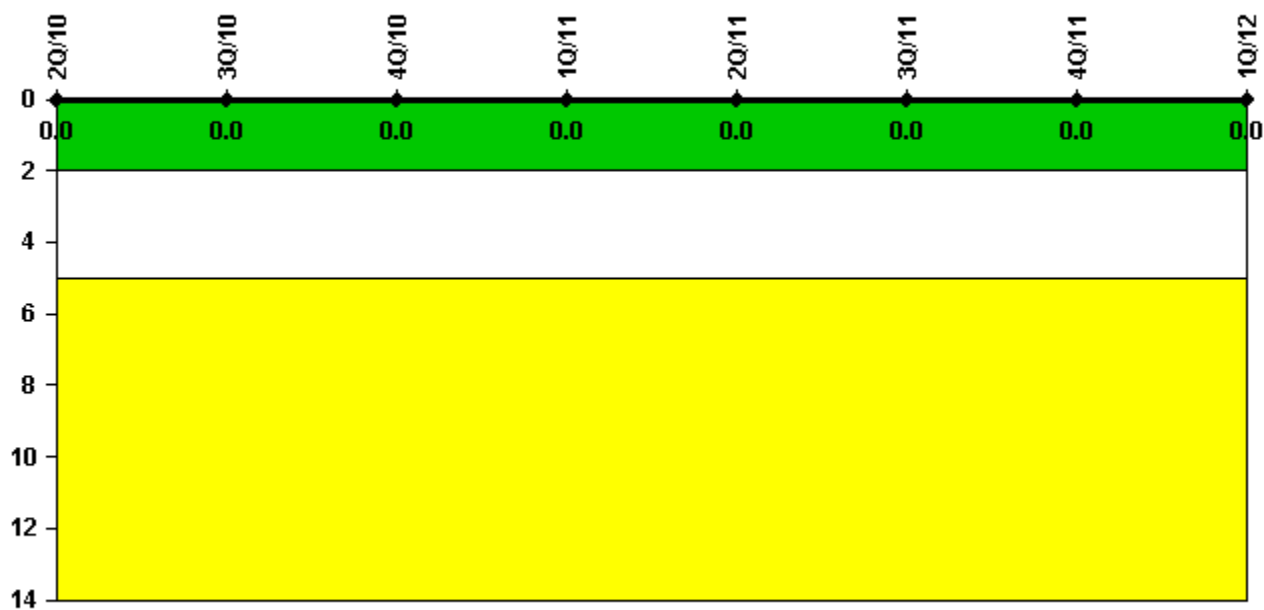
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful siren-tests	3890	3959	3956	3902	3893	3893	3903	3962
Total sirens-tests	3904	3965	3965	3904	3904	3904	3904	3965
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



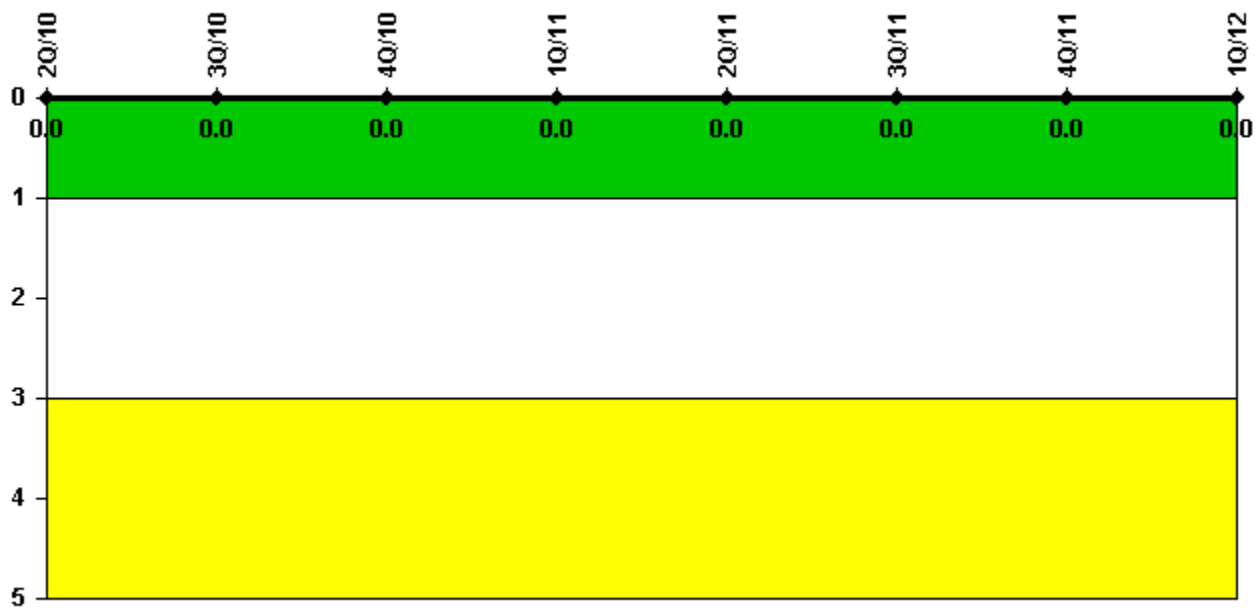
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

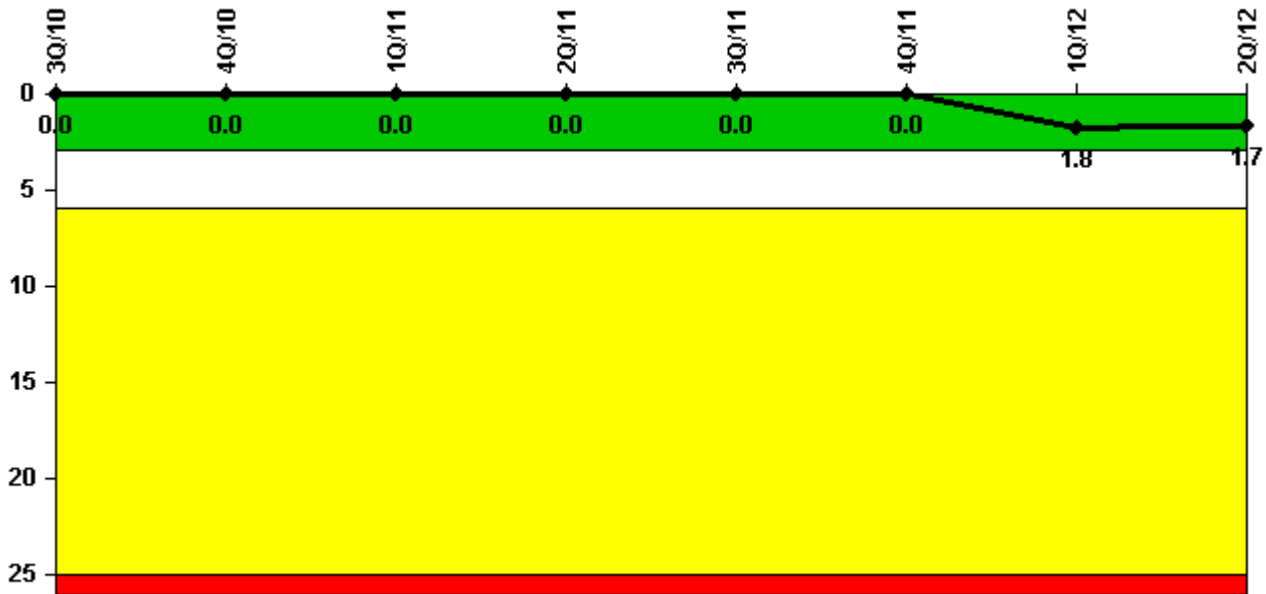
[Security](#) information not publicly available.

Byron 2

2Q/2012 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



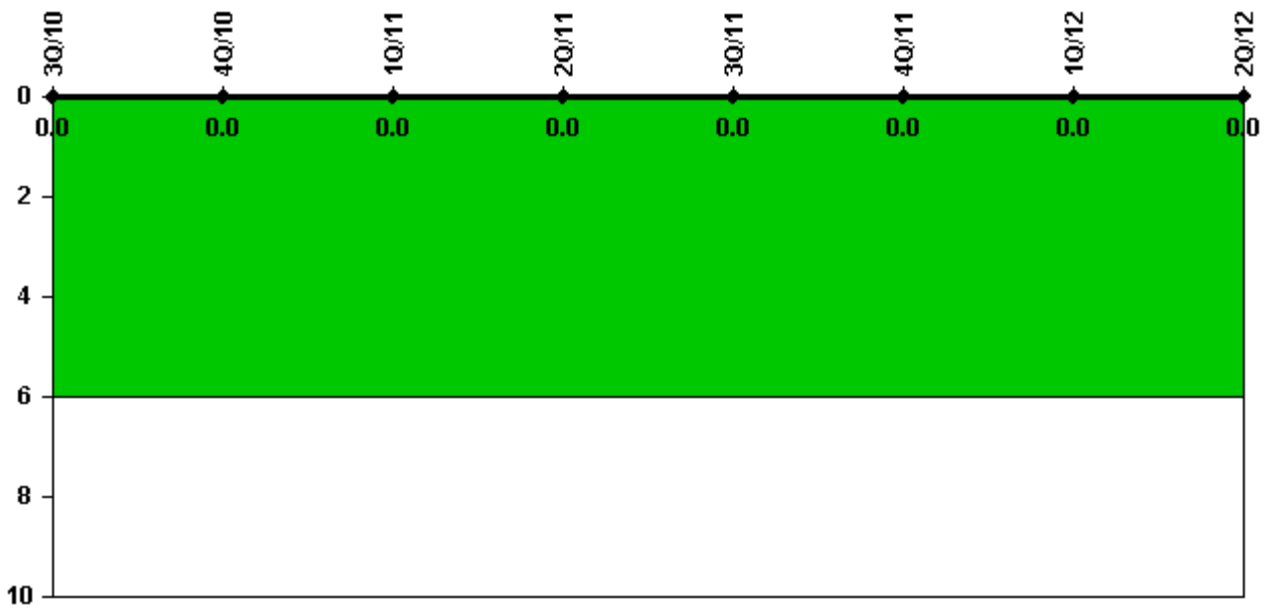
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
Unplanned scrams	0	0	0	0	0	0	2.0	0
Critical hours	2208.0	2209.0	2159.0	2071.5	1919.0	2004.4	2004.4	2184.0
Indicator value	0	0	0	0	0	0	1.8	1.7

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



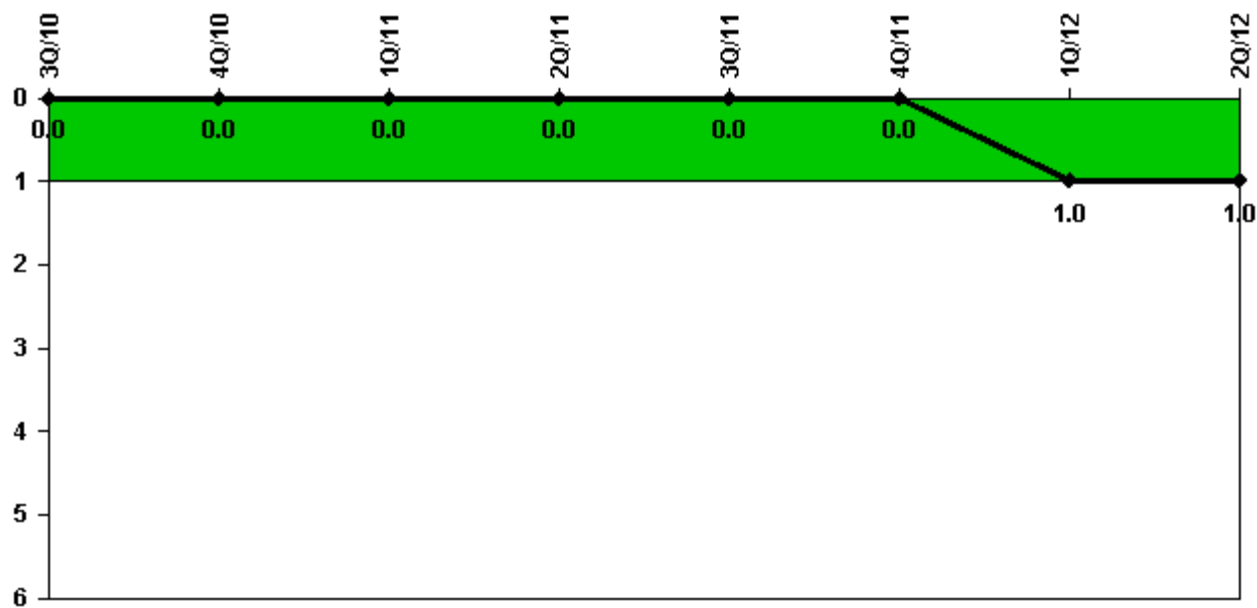
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2159.0	2071.5	1919.0	2004.4	2004.4	2184.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



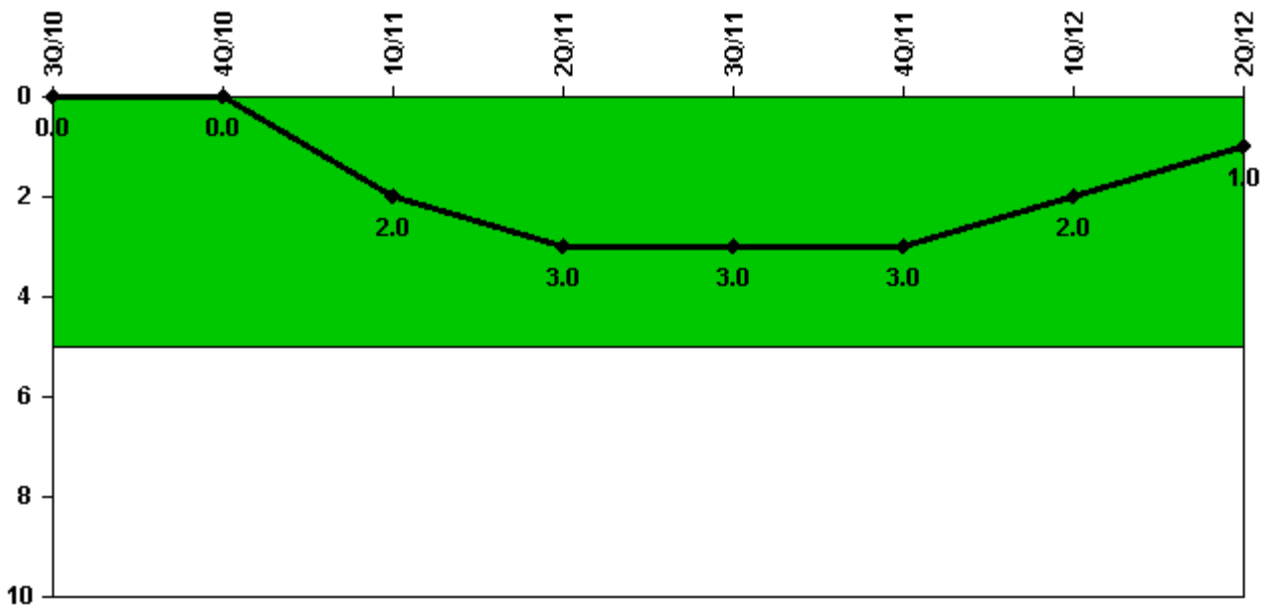
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
Scrams with complications	0	0	0	0	0	0	1.0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
Safety System Functional Failures	0	0	2	1	0	0	1	0
Indicator value	0	0	2	3	3	3	2	1

Licensee Comments:

2Q/12: LER 2012-001-00 - No SSFF

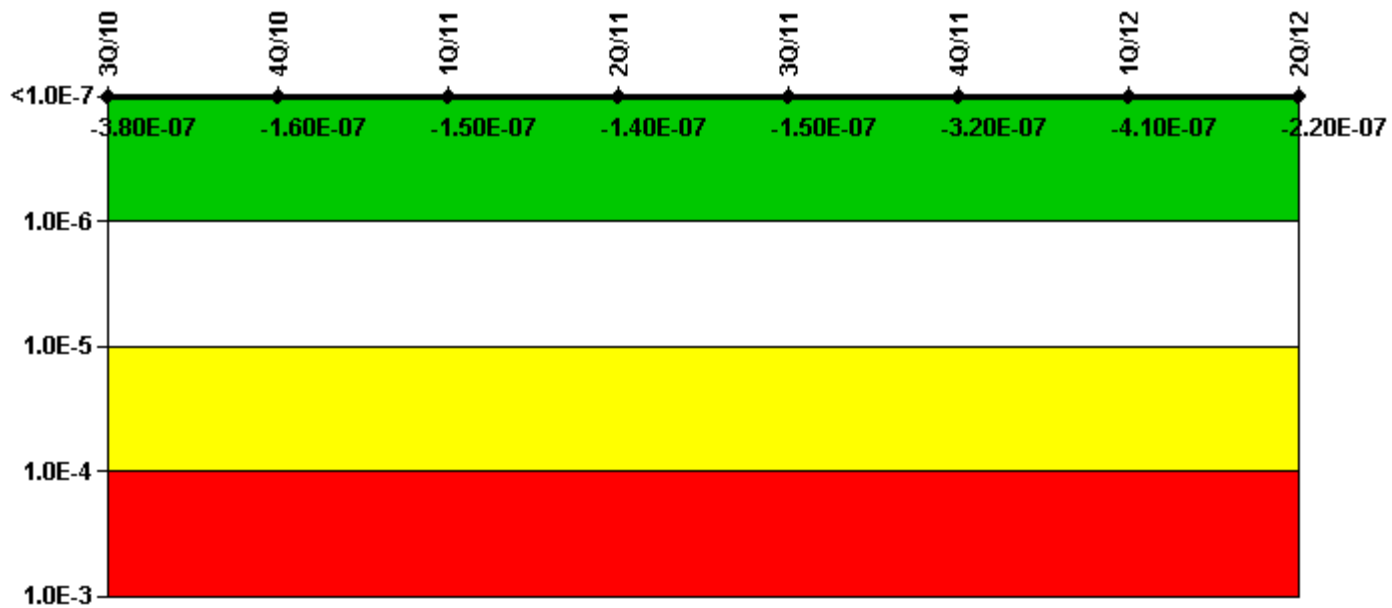
1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

2Q/11: May LER 454-2011-003-00: Drained Sections of Piping in AF Suction Lines Result on Sys Inop Due to Inadequate Tech Eval LER retracted, SSFF removed June Supplemental LER 455-2011 -001 -01 "Unit 2 Emergency Diesel Generator Inoperable for Longer than Allowed by Technical Specifications Due to Inadequate Work" confirms SSFF previously reported.

3Q/10: LER 454-2010-001-00 UG Cable Vaults not vital - No SSFF. LER 455-2010-002-00 "Failed T.S. Ventilation Surv Rqmts During Surv Rqmt 3.0.3 Delay Period". The potential safety significance of the condition is still being evaluated and the results will be updated with the supplement to this LER.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
UAI (ΔCDF)	2.93E-08	7.83E-08	9.92E-08	9.47E-08	9.49E-08	1.15E-07	5.69E-08	4.09E-08
URI (ΔCDF)	-4.07E-07	-2.41E-07	-2.45E-07	-2.30E-07	-2.40E-07	-4.36E-07	-4.65E-07	-2.64E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-07	-1.60E-07	-1.50E-07	-1.40E-07	-1.50E-07	-3.20E-07	-4.10E-07	-2.20E-07

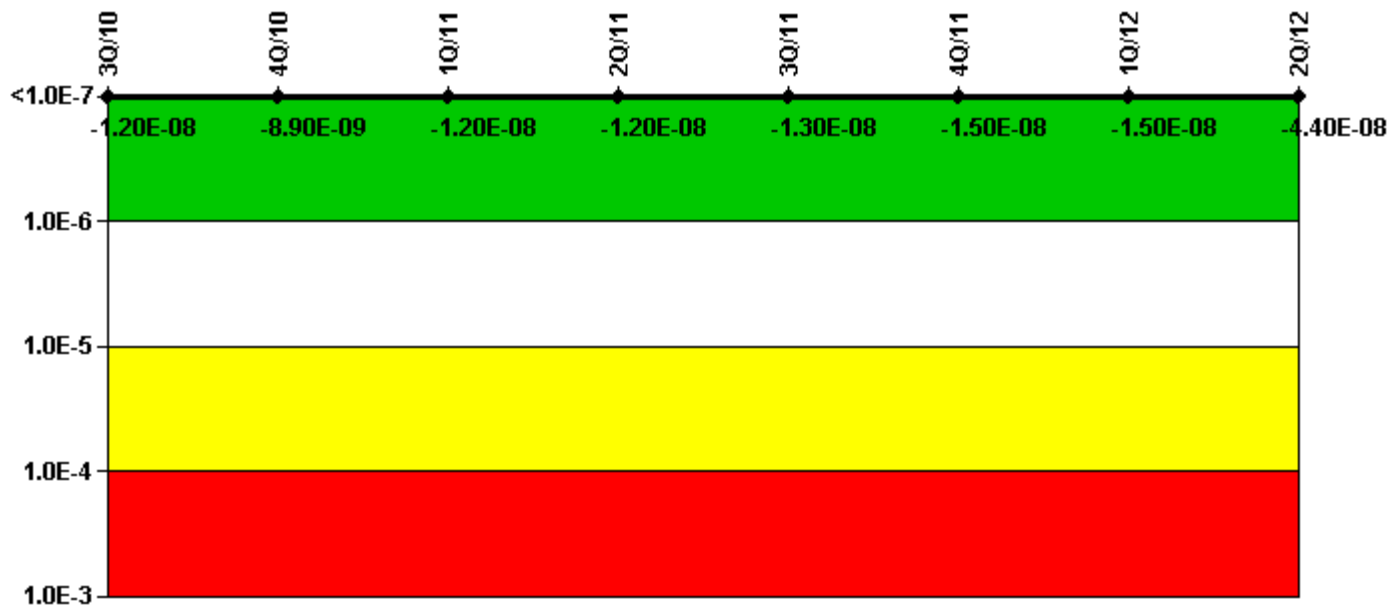
Licensee Comments:

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

1Q/11: Due to typo on paperwork, UA for 1A DG was listed for 1B. This has been corrected.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

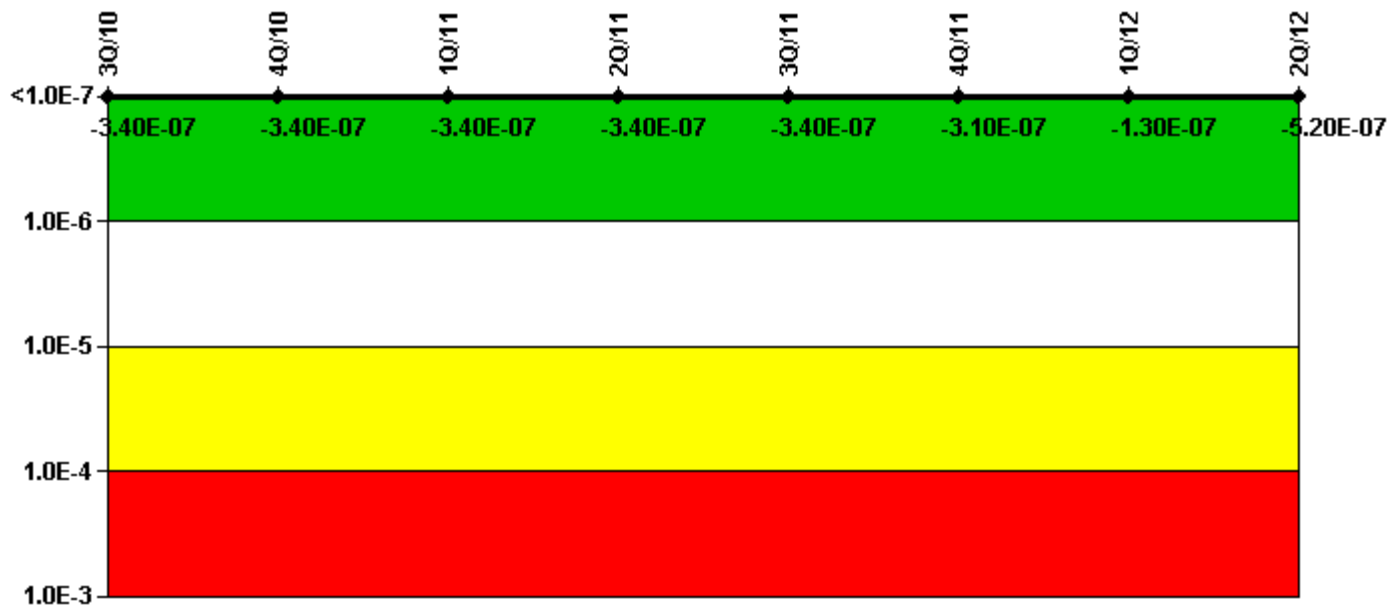
Mitigating Systems Performance Index, High Pressure Injection System	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
UAI (Δ CDF)	-9.41E-09	-6.51E-09	-1.00E-08	-9.86E-09	-1.09E-08	-1.30E-08	-1.30E-08	-3.85E-08
URI (Δ CDF)	-2.41E-09	-2.40E-09	-2.40E-09	-2.41E-09	-2.42E-09	-1.94E-09	-1.96E-09	-5.83E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-8.90E-09	-1.20E-08	-1.20E-08	-1.30E-08	-1.50E-08	-1.50E-08	-4.40E-08

Licensee Comments:

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
UAI (Δ CDF)	-9.66E-08	-9.66E-08	-9.66E-08	-9.66E-08	-9.65E-08	1.11E-09	1.33E-07	-9.81E-08
URI (Δ CDF)	-2.48E-07	-2.45E-07	-2.43E-07	-2.43E-07	-2.46E-07	-3.14E-07	-2.60E-07	-4.26E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-3.40E-07	-3.40E-07	-3.40E-07	-3.40E-07	-3.10E-07	-1.30E-07	-5.20E-07

Licensee Comments:

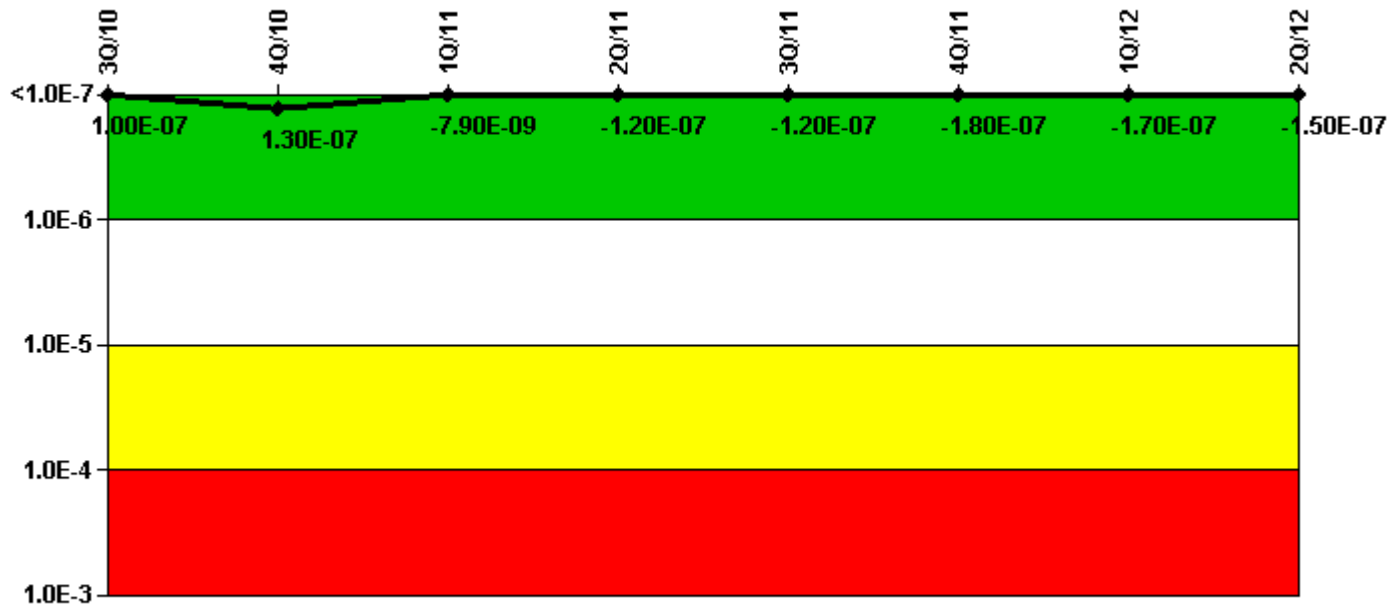
2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made are reflected in this quarters reporting.

4Q/11: Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

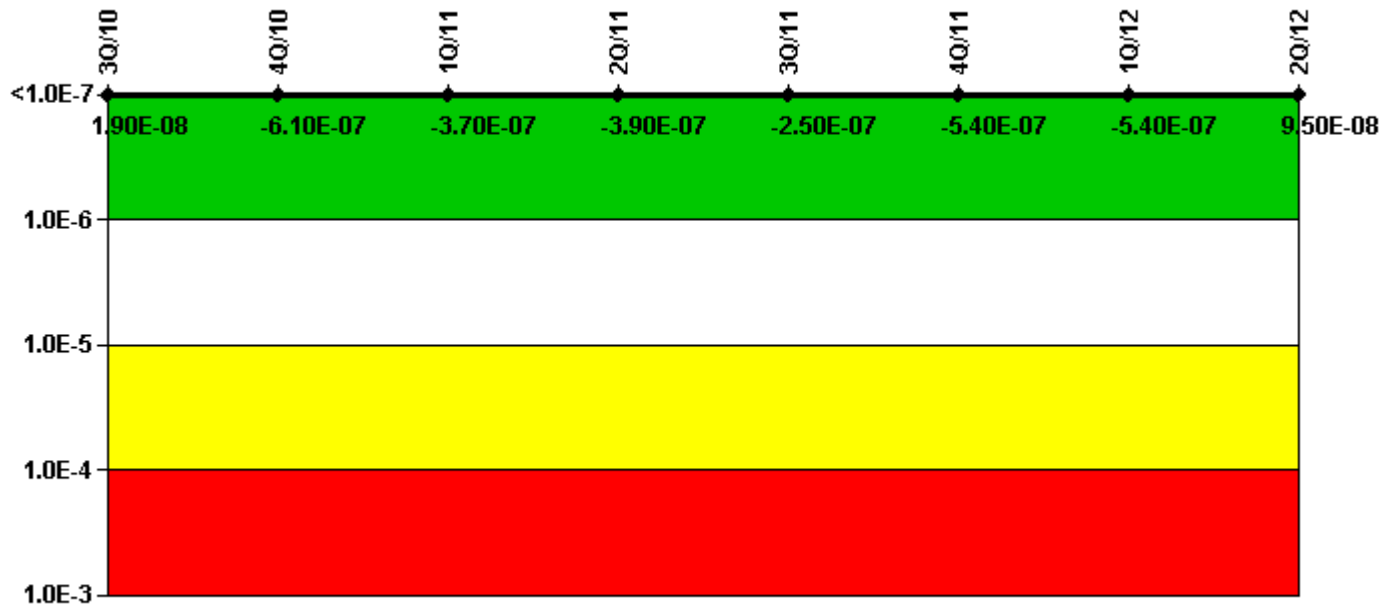
Mitigating Systems Performance Index, Residual Heat Removal System	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
UAI (Δ CDF)	1.88E-07	2.16E-07	7.97E-08	-2.87E-08	-2.87E-08	-3.45E-08	-3.45E-08	-3.42E-08
URI (Δ CDF)	-8.63E-08	-8.41E-08	-8.77E-08	-9.02E-08	-9.28E-08	-1.43E-07	-1.40E-07	-1.20E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.00E-07	1.30E-07	-7.90E-09	-1.20E-07	-1.20E-07	-1.80E-07	-1.70E-07	-1.50E-07

Licensee Comments:

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
UAI (ΔCDF)	1.28E-07	2.84E-07	5.12E-07	4.93E-07	6.38E-07	3.97E-07	3.95E-07	4.41E-07
URI (ΔCDF)	-1.09E-07	-8.89E-07	-8.85E-07	-8.87E-07	-8.92E-07	-9.35E-07	-9.37E-07	-3.46E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.90E-08	-6.10E-07	-3.70E-07	-3.90E-07	-2.50E-07	-5.40E-07	-5.40E-07	9.50E-08

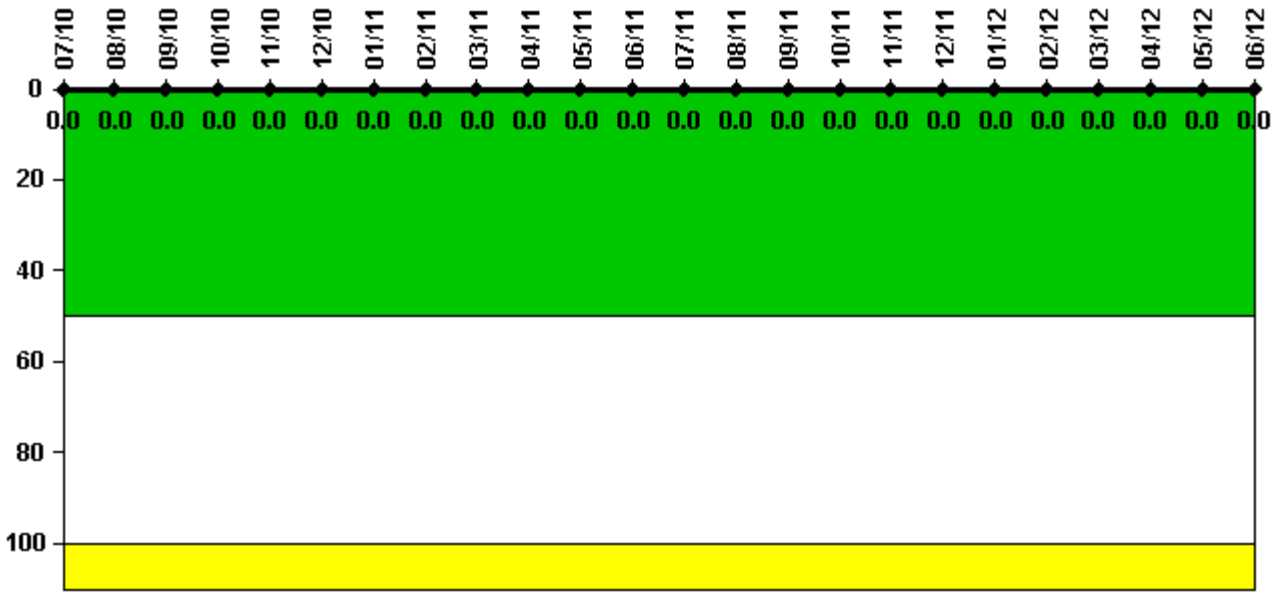
Licensee Comments:

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

4Q/10: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

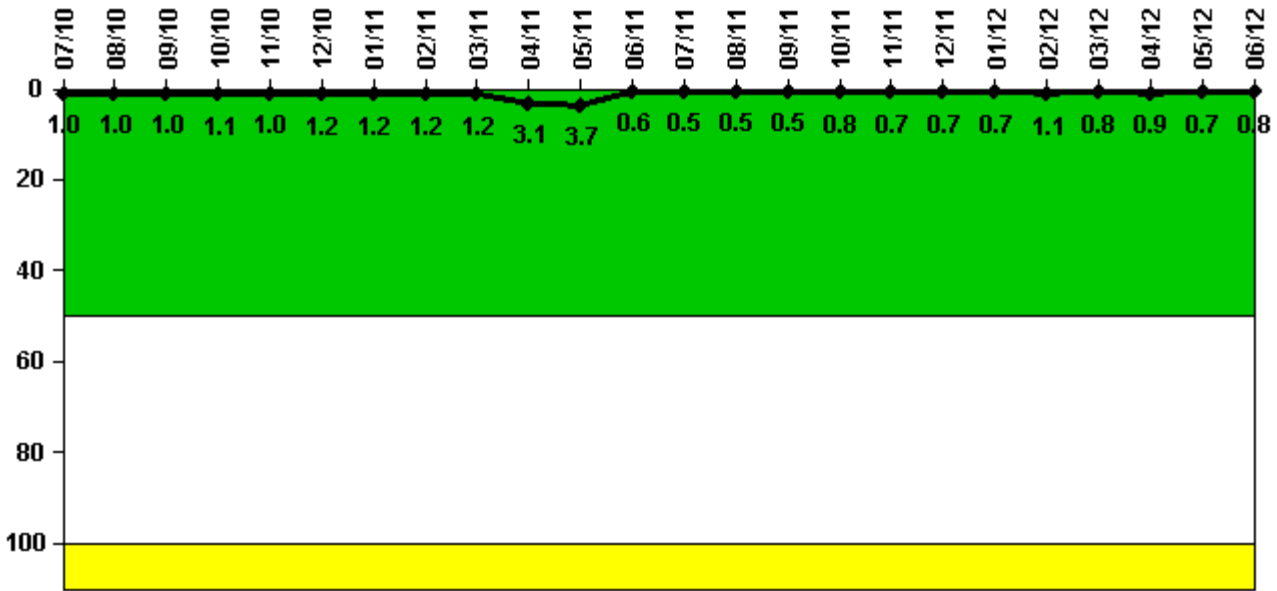
Notes

Reactor Coolant System Activity	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum activity	0.000099	0.000103	0.000106	0.000118	0.000120	0.000124	0.000142	0.000136	0.000140	0.000161	0.000324	0.000477
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum activity	0.000222	0.000153	0.000224	0.000055	0.000064	0.000065	0.000071	0.000069	0.000081	0.000075	0.000076	0.000126
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



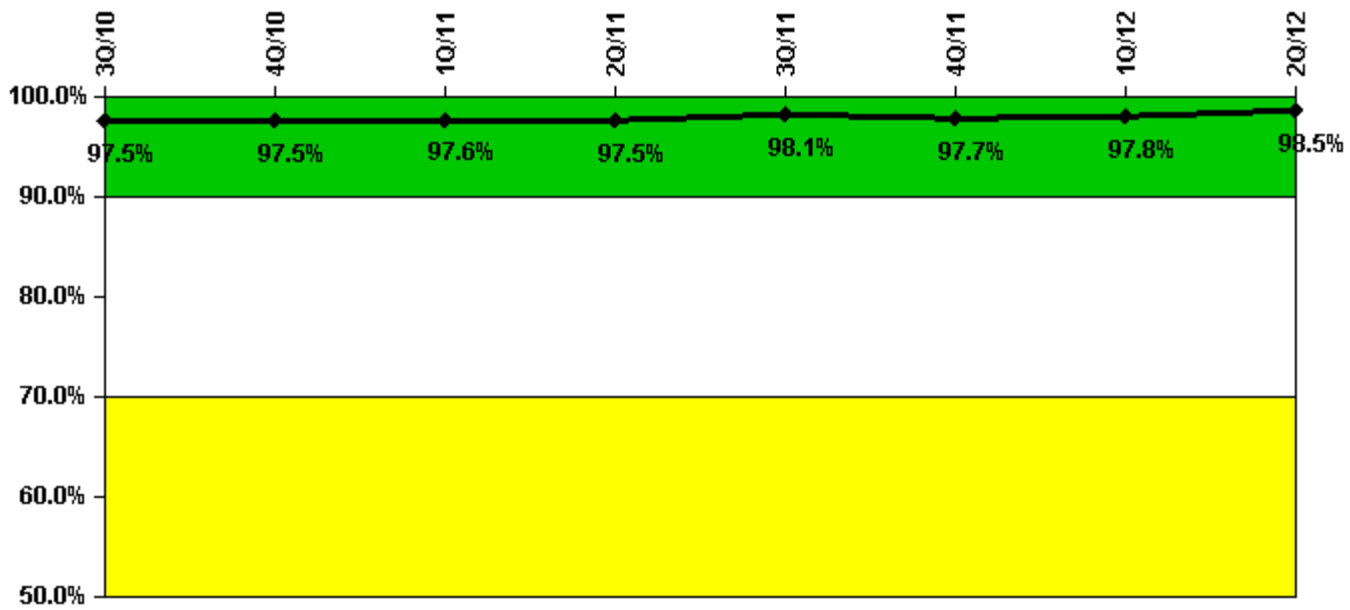
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum leakage	0.100	0.100	0.100	0.110	0.100	0.120	0.120	0.120	0.120	0.310	0.370	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.0	1.0	1.0	1.1	1.0	1.2	1.2	1.2	1.2	3.1	3.7	0.6
Reactor Coolant System Leakage	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum leakage	0.050	0.050	0.050	0.080	0.070	0.070	0.070	0.110	0.080	0.090	0.070	0.080
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.8	0.7	0.7	0.7	1.1	0.8	0.9	0.7	0.8

Licensee Comments: none

Drill/Exercise Performance



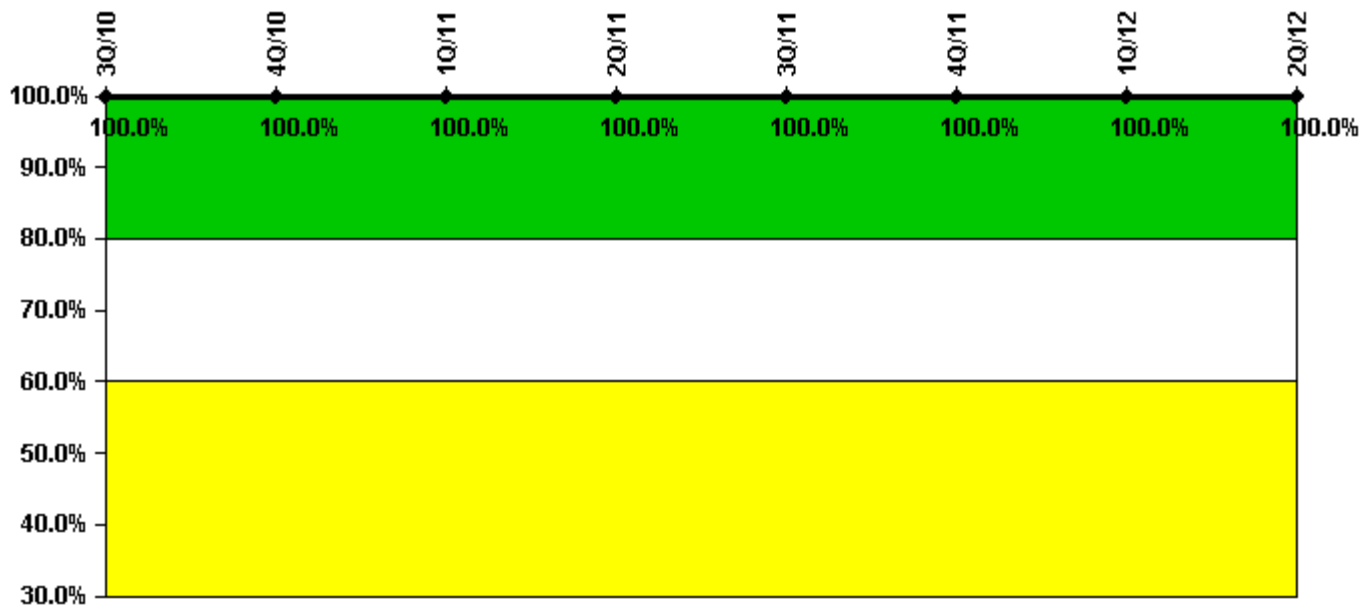
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
Successful opportunities	58.0	12.0	51.0	77.0	62.0	35.0	96.0	126.0
Total opportunities	61.0	13.0	51.0	78.0	62.0	37.0	97.0	126.0
Indicator value	97.5%	97.5%	97.6%	97.5%	98.1%	97.7%	97.8%	98.5%

Licensee Comments: none

ERO Drill Participation



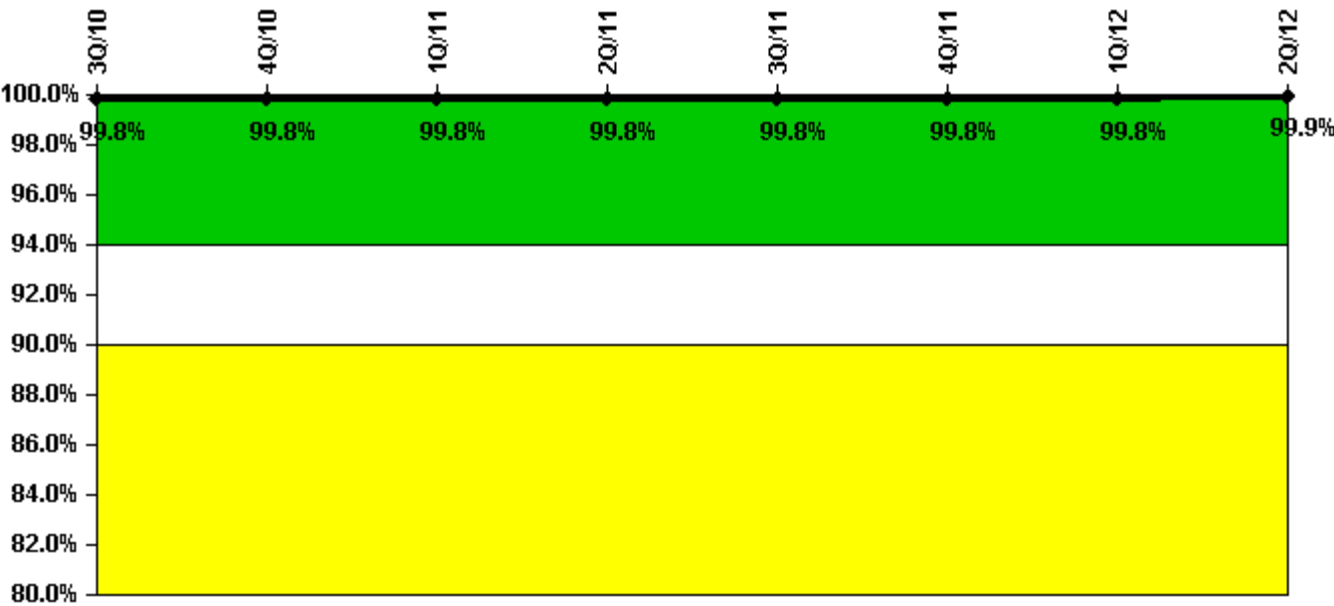
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
Participating Key personnel	72.0	74.0	76.0	74.0	75.0	74.0	74.0	77.0
Total Key personnel	72.0	74.0	76.0	74.0	75.0	74.0	74.0	77.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



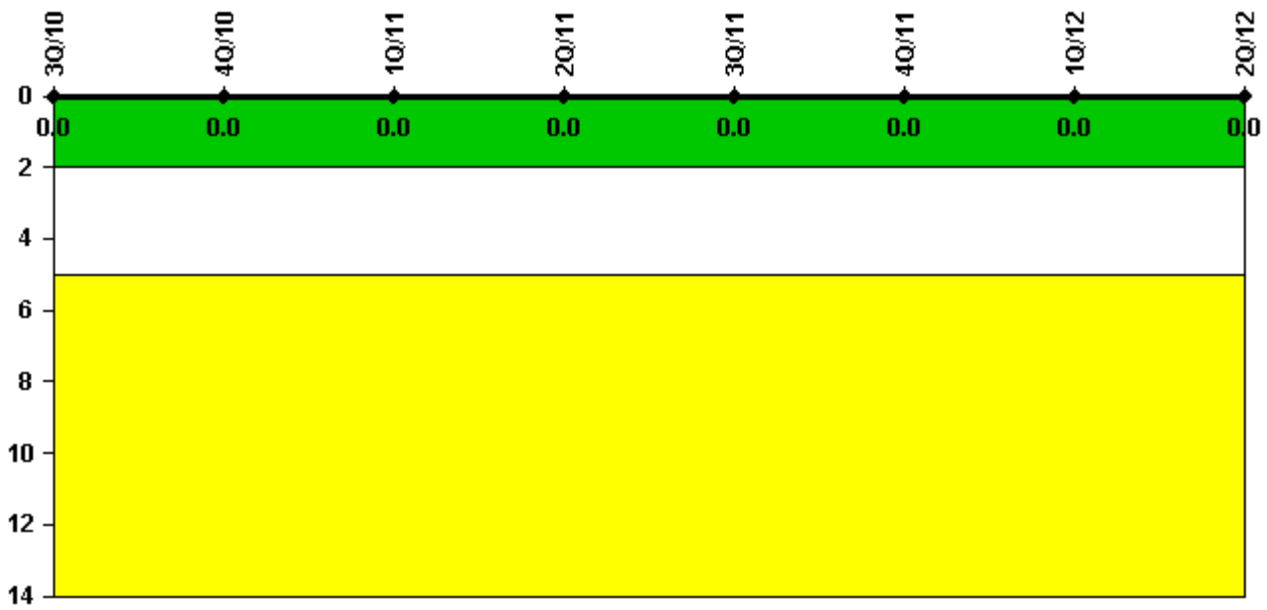
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
Successful siren-tests	3959	3956	3902	3893	3893	3903	3962	3903
Total sirens-tests	3965	3965	3904	3904	3904	3904	3965	3904
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



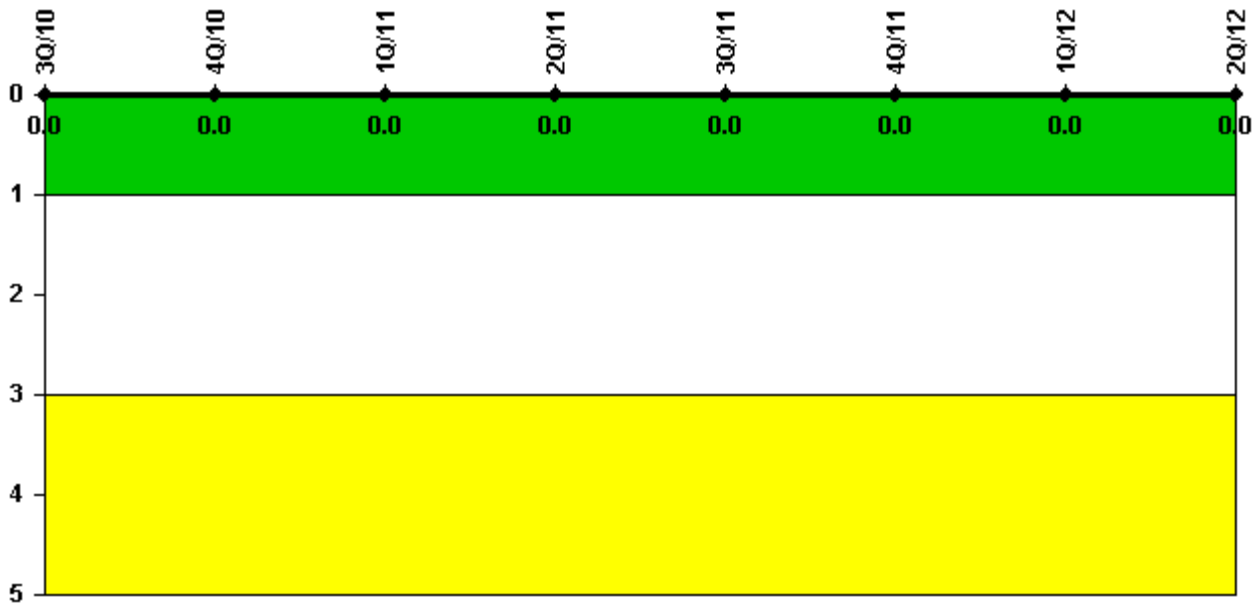
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

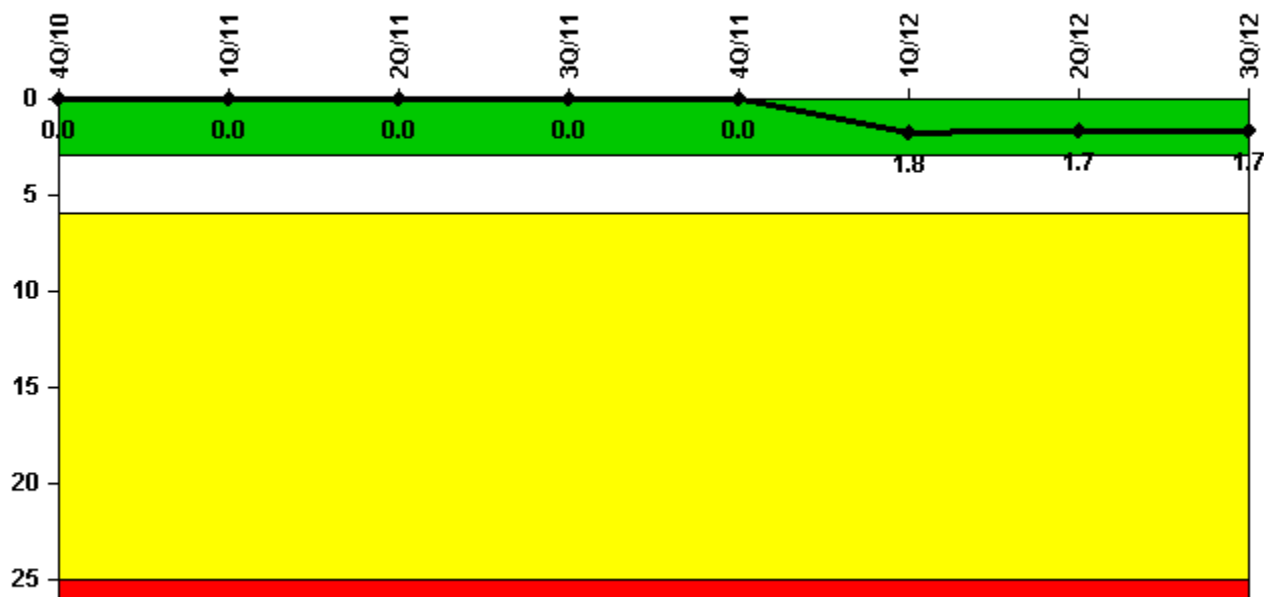


Byron 2

3Q/2012 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



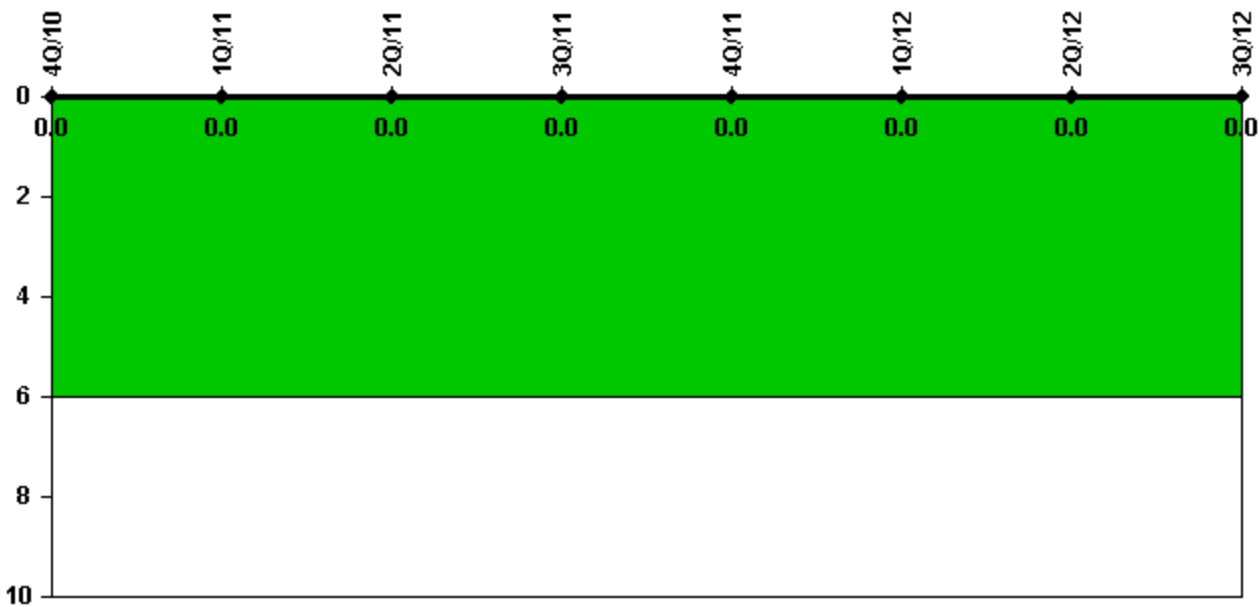
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
Unplanned scrams	0	0	0	0	0	2.0	0	0
Critical hours	2209.0	2159.0	2071.5	1919.0	2004.4	2004.4	2184.0	2208.0
Indicator value	0	0	0	0	0	1.8	1.7	1.7

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



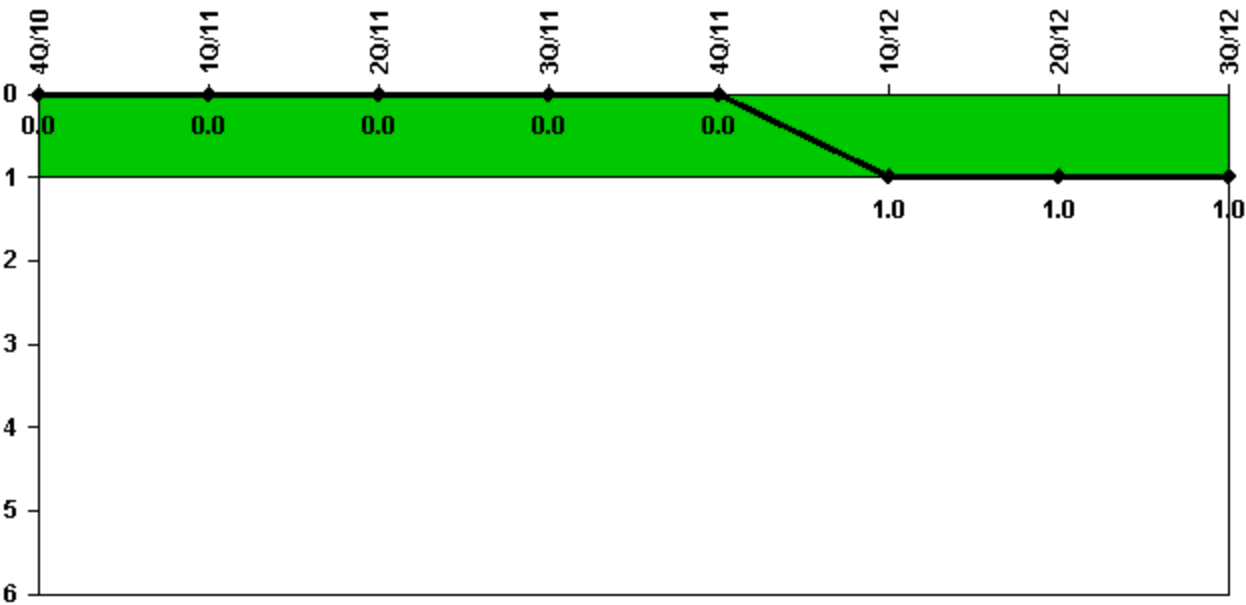
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2209.0	2159.0	2071.5	1919.0	2004.4	2004.4	2184.0	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



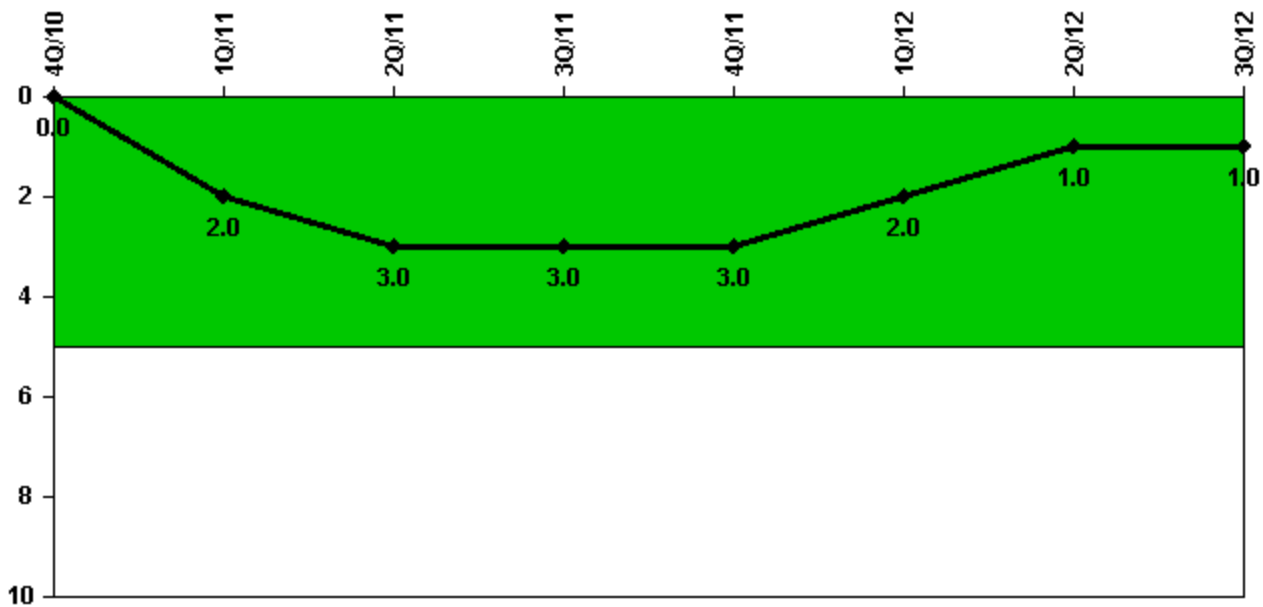
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
Scrams with complications	0	0	0	0	0	1.0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
Safety System Functional Failures	0	2	1	0	0	1	0	0
Indicator value	0	2	3	3	3	2	1	1

Licensee Comments:

3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

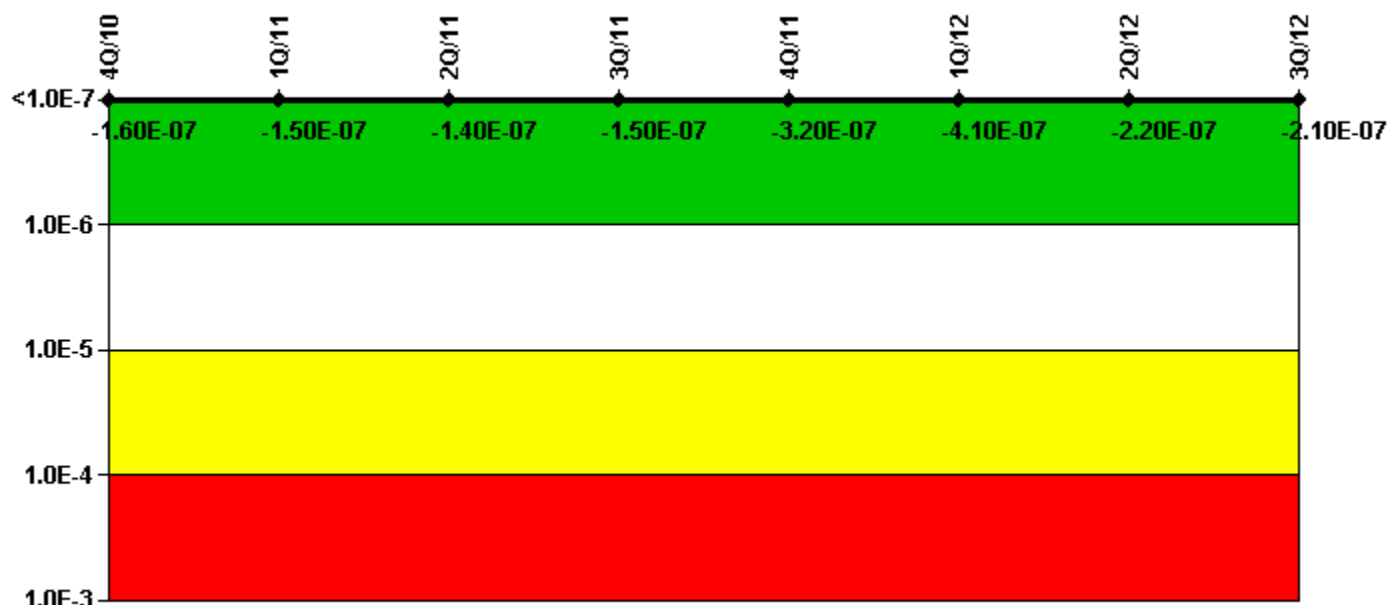
2Q/12: LER 2012-001-00 - No SSFF

1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

2Q/11: May LER 454-2011-003-00: Drained Sections of Piping in AF Suction Lines Result on Sys Inop Due to Inadequate Tech Eval LER retracted, SSFF removed June Supplemental LER 455-2011 -001 -01 "Unit 2 Emergency Diesel Generator Inoperable for Longer than Allowed by Technical Specifications Due to Inadequate Work" confirms SSFF previously reported.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
UAI (Δ CDF)	7.83E-08	9.92E-08	9.47E-08	9.49E-08	1.15E-07	5.69E-08	4.09E-08	3.62E-08
URI (Δ CDF)	-2.41E-07	-2.45E-07	-2.30E-07	-2.40E-07	-4.36E-07	-4.65E-07	-2.64E-07	-2.42E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.60E-07	-1.50E-07	-1.40E-07	-1.50E-07	-3.20E-07	-4.10E-07	-2.20E-07	-2.10E-07

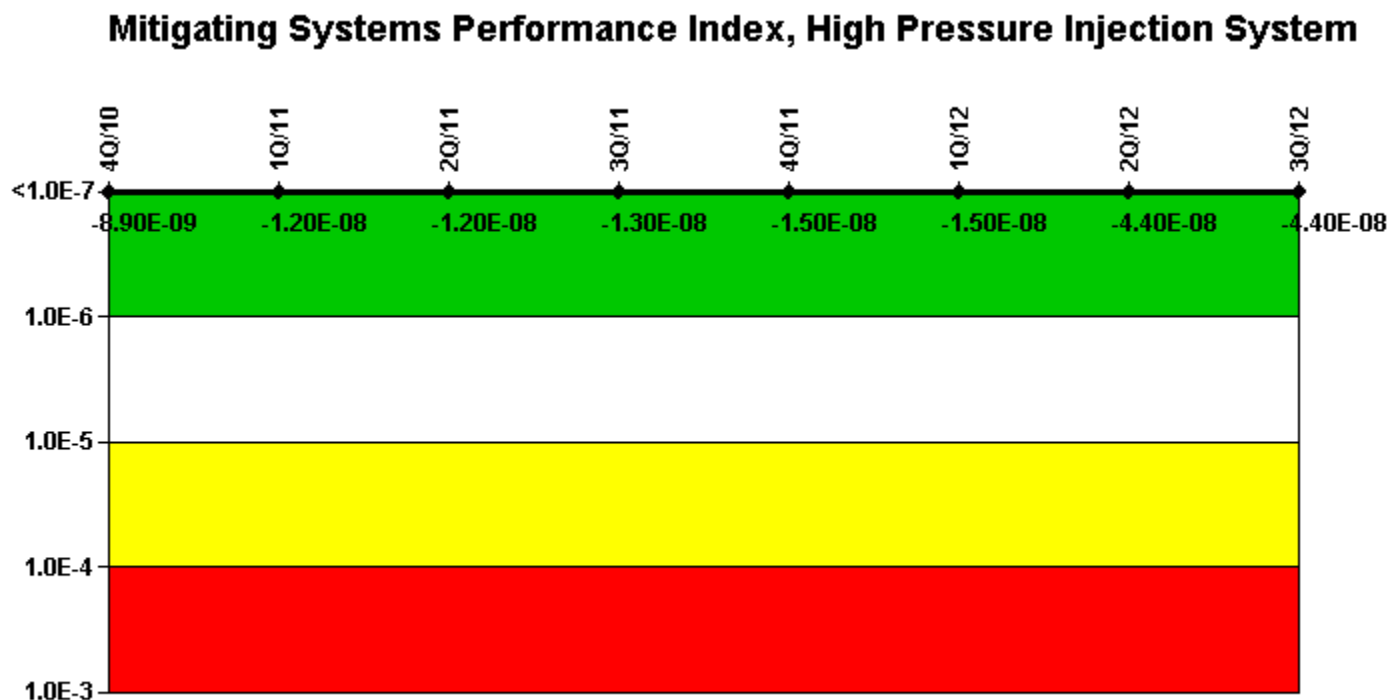
Licensee Comments:

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

1Q/11: Due to typo on paperwork, UA for 1A DG was listed for 1B. This has been corrected.



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
UAI (ΔCDF)	-6.51E-09	-1.00E-08	-9.86E-09	-1.09E-08	-1.30E-08	-1.30E-08	-3.85E-08	-3.81E-08
URI (ΔCDF)	-2.40E-09	-2.40E-09	-2.41E-09	-2.42E-09	-1.94E-09	-1.96E-09	-5.83E-09	-5.89E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-8.90E-09	-1.20E-08	-1.20E-08	-1.30E-08	-1.50E-08	-1.50E-08	-4.40E-08	-4.40E-08

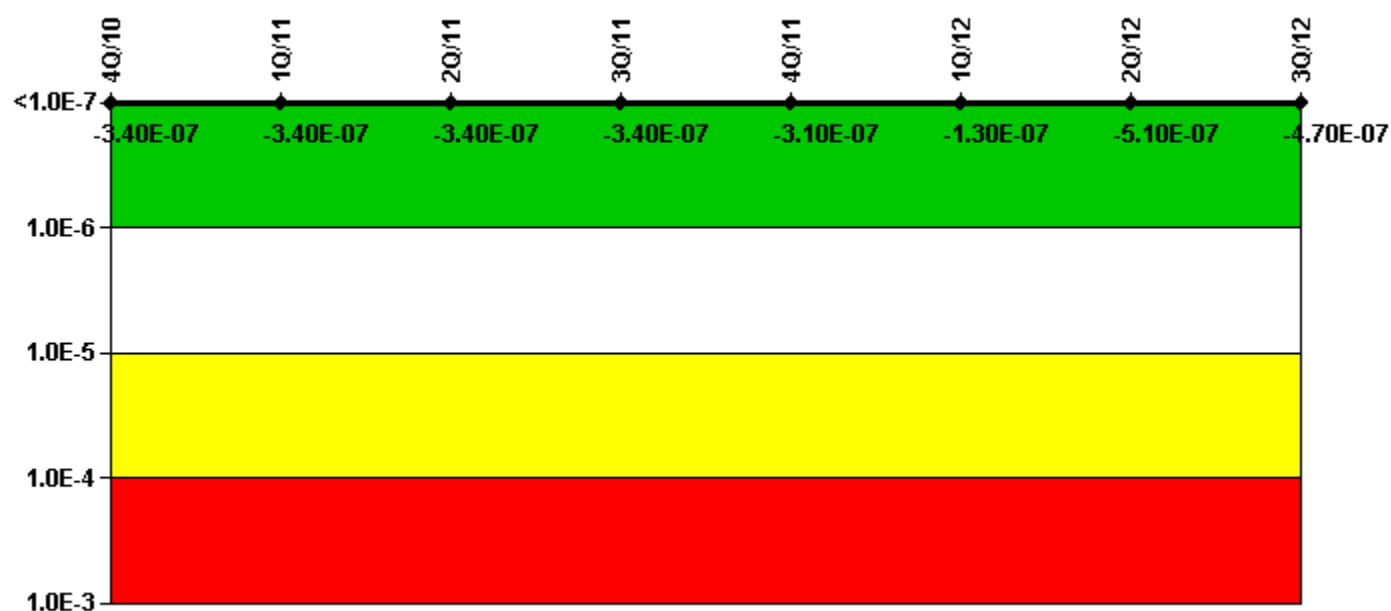
Licensee Comments:

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
UAI (ΔCDF)	-9.66E-08	-9.66E-08	-9.66E-08	-9.65E-08	1.11E-09	1.33E-07	-8.33E-08	-4.75E-08
URI (ΔCDF)	-2.45E-07	-2.43E-07	-2.43E-07	-2.46E-07	-3.14E-07	-2.60E-07	-4.26E-07	-4.25E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-3.40E-07	-3.40E-07	-3.40E-07	-3.10E-07	-1.30E-07	-5.10E-07	-4.70E-07

Licensee Comments:

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie

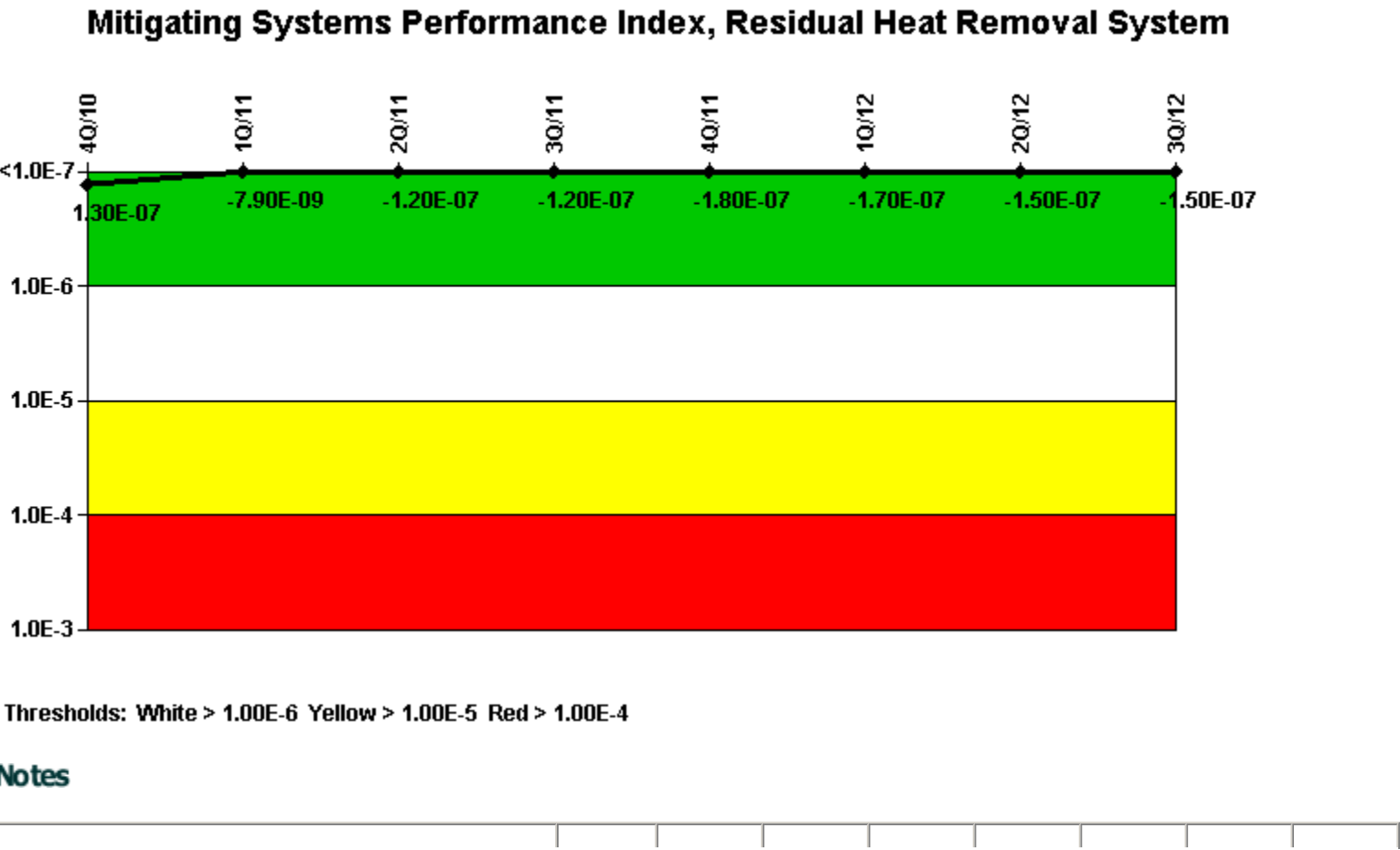
AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

2Q/12: Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made are reflected in this quarters reporting.

4Q/11: Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.



Mitigating Systems Performance Index, Residual Heat Removal System	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
UAI (Δ CDF)	2.16E-07	7.97E-08	-2.87E-08	-2.87E-08	-3.45E-08	-3.45E-08	-3.42E-08	-3.42E-08
URI (Δ CDF)	-8.41E-08	-8.77E-08	-9.02E-08	-9.28E-08	-1.43E-07	-1.40E-07	-1.20E-07	-1.20E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.30E-07	-7.90E-09	-1.20E-07	-1.20E-07	-1.80E-07	-1.70E-07	-1.50E-07	-1.50E-07

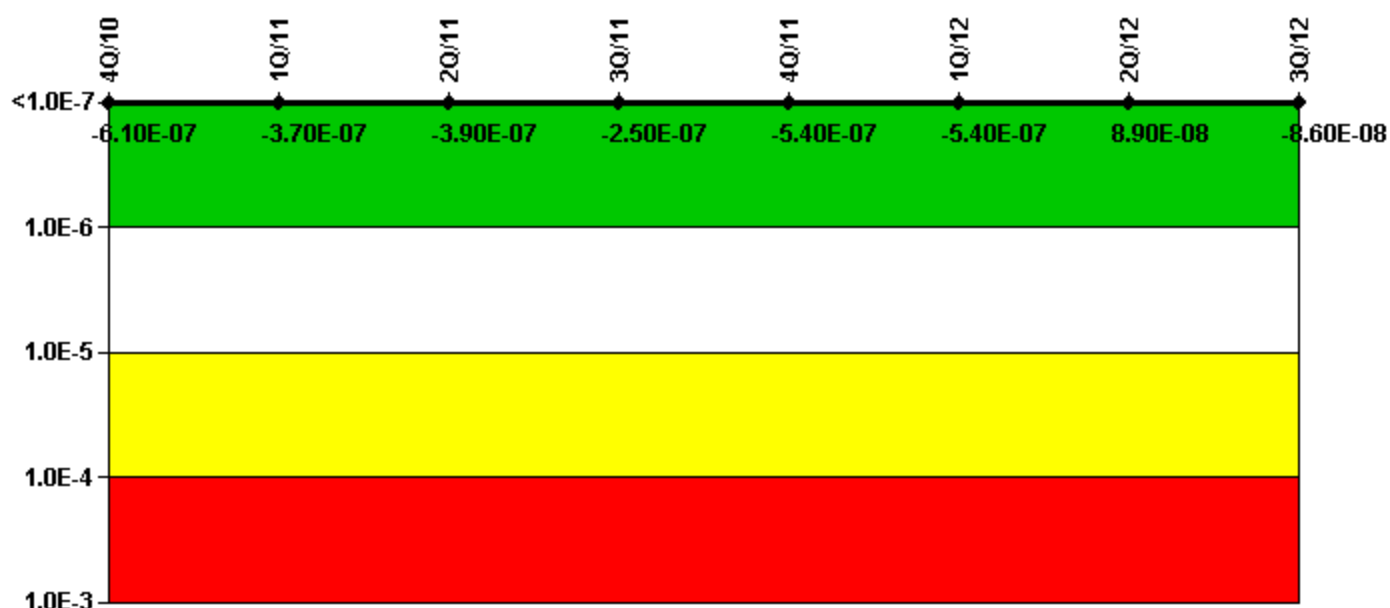
Licensee Comments:

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
UAI (ΔCDF)	2.84E-07	5.12E-07	4.93E-07	6.38E-07	3.97E-07	3.95E-07	4.41E-07	2.58E-07
URI (ΔCDF)	-8.89E-07	-8.85E-07	-8.87E-07	-8.92E-07	-9.35E-07	-9.37E-07	-3.52E-07	-3.44E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.10E-07	-3.70E-07	-3.90E-07	-2.50E-07	-5.40E-07	-5.40E-07	8.90E-08	-8.60E-08

Licensee Comments:

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

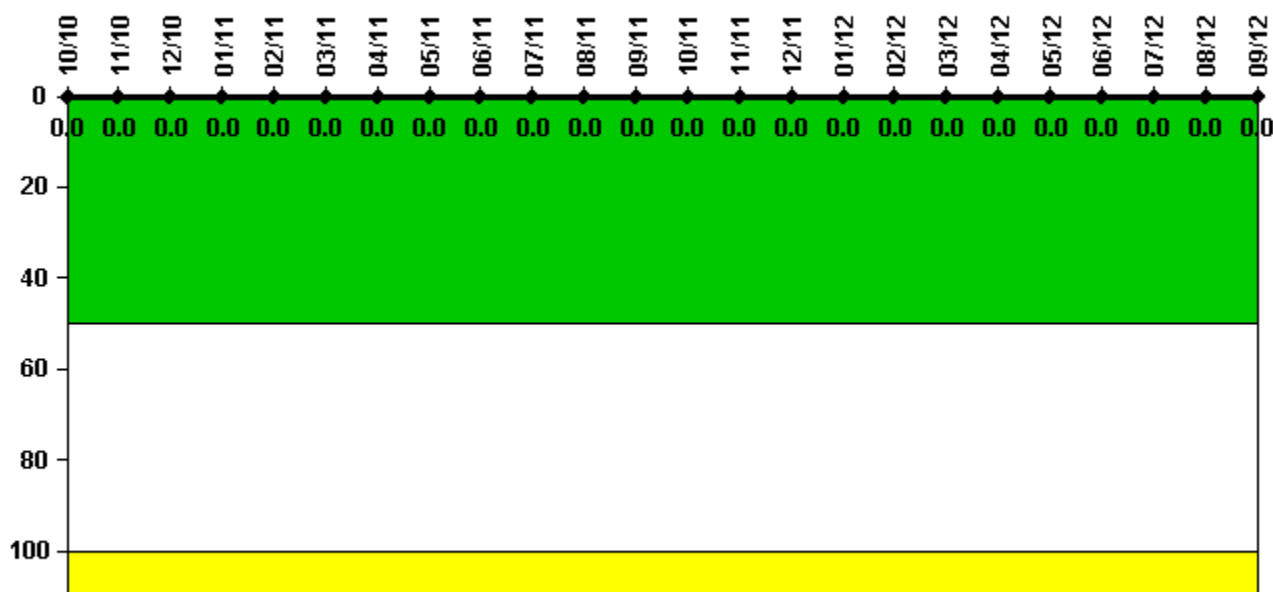
2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised

Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

4Q/10: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

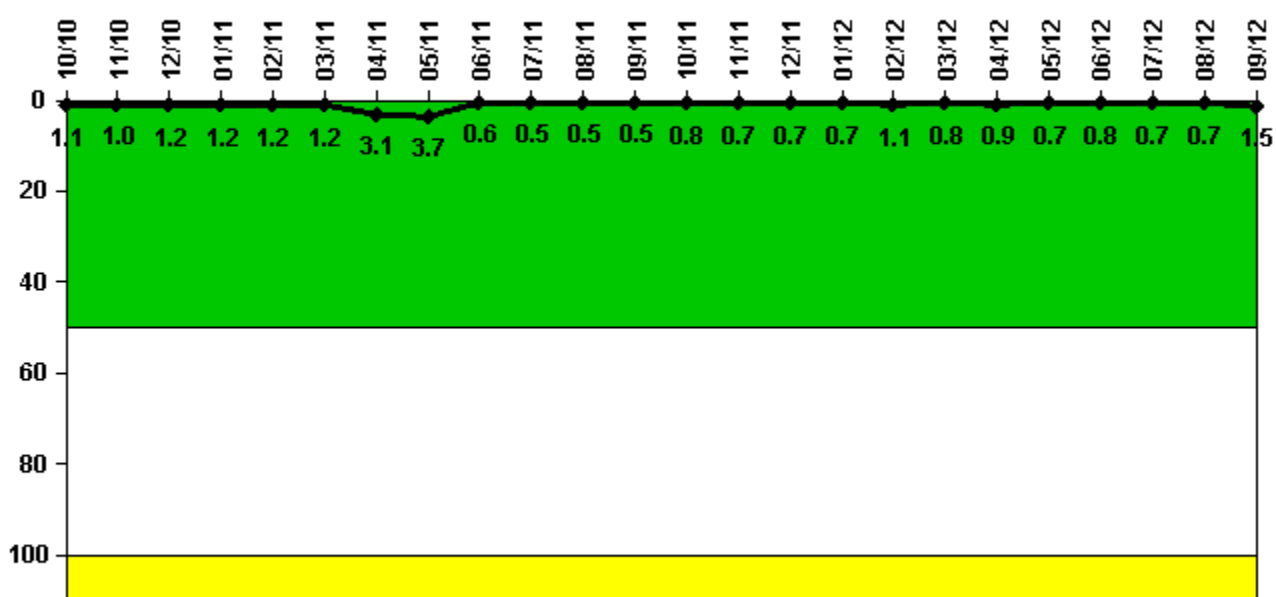
Notes

Reactor Coolant System Activity	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11
Maximum activity	0.000118	0.000120	0.000124	0.000142	0.000136	0.000140	0.000161	0.000324	0.000477	0.000222	0.000153	0.000224
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12
Maximum												

activity	0.000055	0.000064	0.000065	0.000071	0.000069	0.000081	0.000075	0.000076	0.000126	0.000129	0.000224	0.000090
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

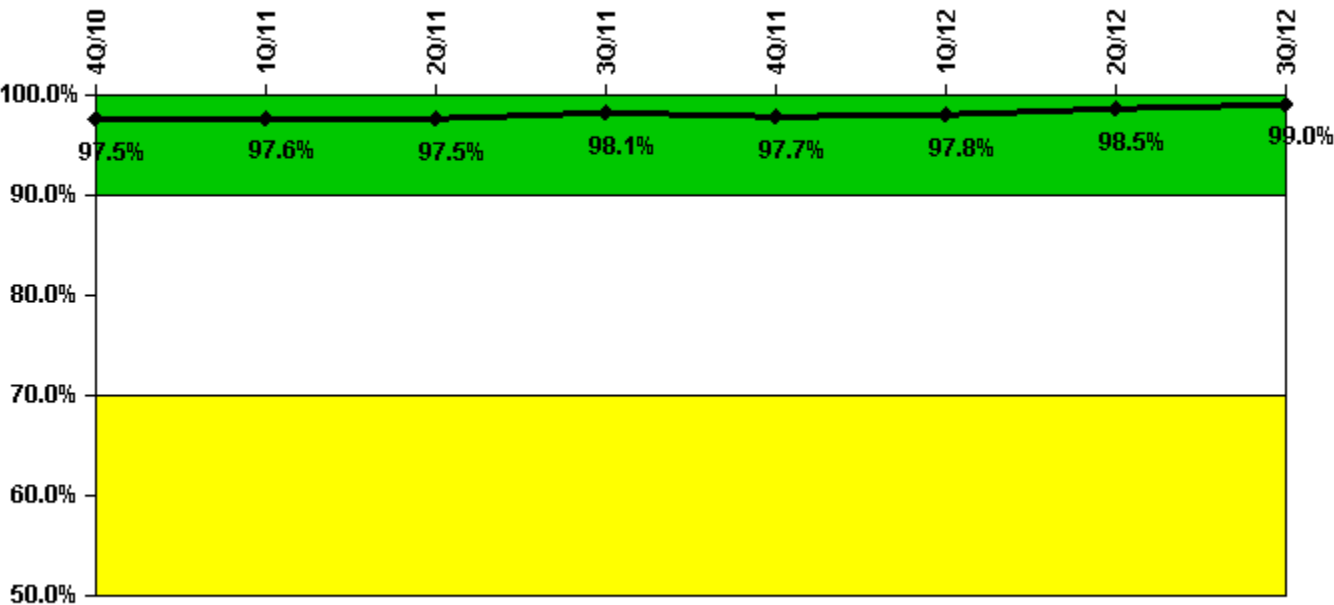
Notes

Reactor Coolant System Leakage	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11
Maximum leakage	0.110	0.100	0.120	0.120	0.120	0.120	0.310	0.370	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.1	1.0	1.2	1.2	1.2	1.2	3.1	3.7	0.6	0.5	0.5	0.5
Reactor Coolant System Leakage	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12
Maximum leakage	0.080	0.070	0.070	0.070	0.110	0.080	0.090	0.070	0.080	0.070	0.070	0.150
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Indicator value	0.8	0.7	0.7	0.7	1.1	0.8	0.9	0.7	0.8	0.7	0.7	1.5

Licensee Comments: none

Drill/Exercise Performance



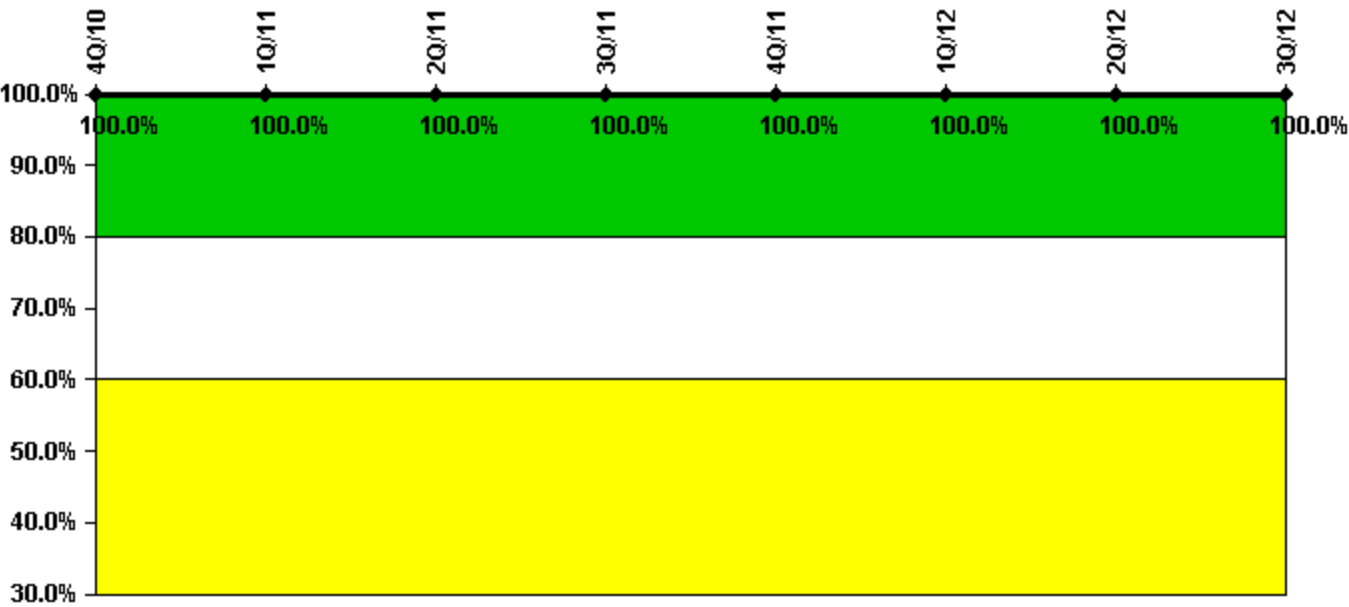
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
Successful opportunities	12.0	51.0	77.0	62.0	35.0	96.0	126.0	24.0
Total opportunities	13.0	51.0	78.0	62.0	37.0	97.0	126.0	24.0
Indicator value	97.5%	97.6%	97.5%	98.1%	97.7%	97.8%	98.5%	99.0%

Licensee Comments: none

ERO Drill Participation



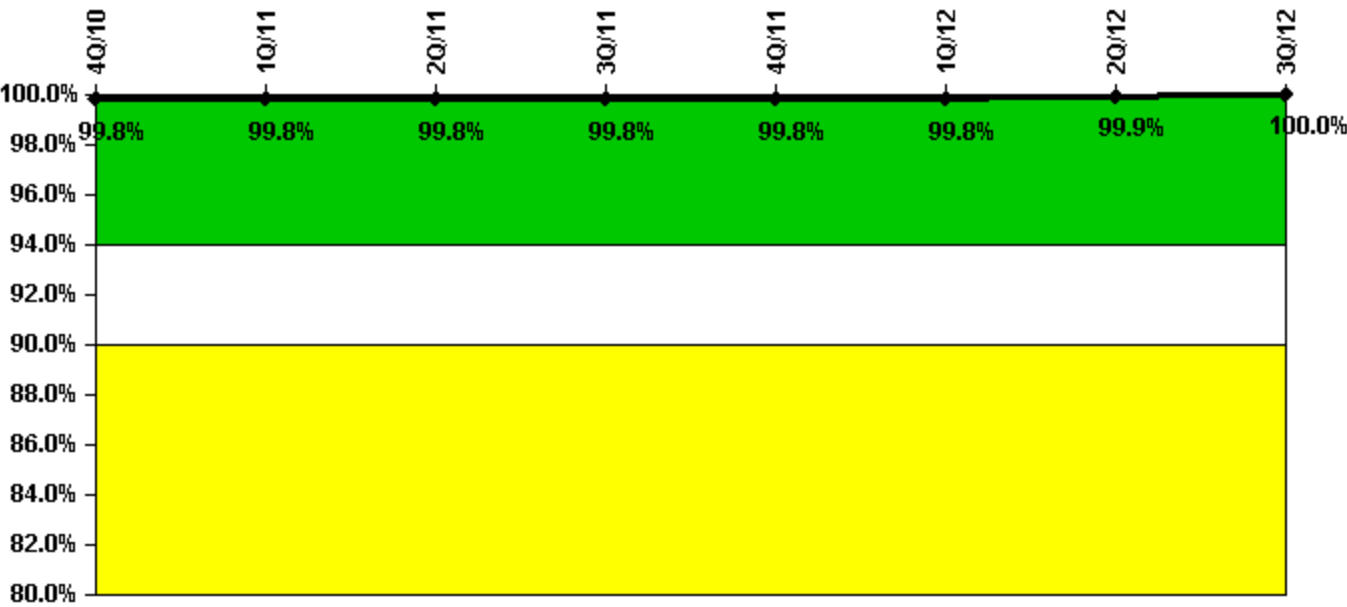
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
Participating Key personnel	74.0	76.0	74.0	75.0	74.0	74.0	77.0	78.0
Total Key personnel	74.0	76.0	74.0	75.0	74.0	74.0	77.0	78.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



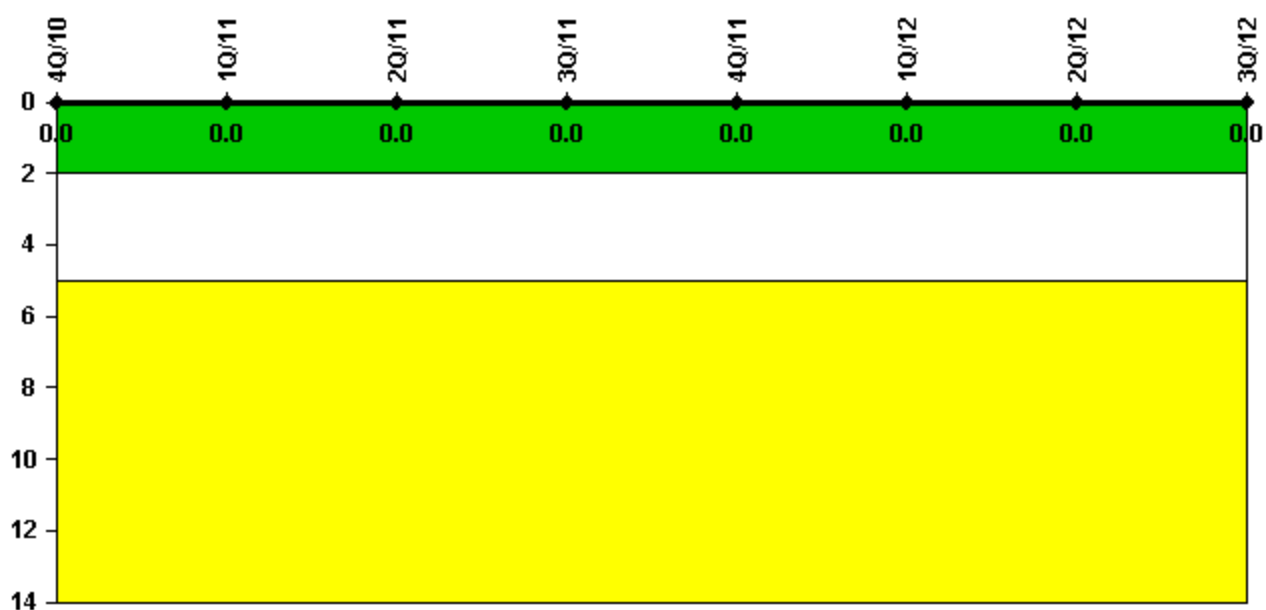
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
Successful siren-tests	3956	3902	3893	3893	3903	3962	3903	3841
Total sirens-tests	3965	3904	3904	3904	3904	3965	3904	3843
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	100.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



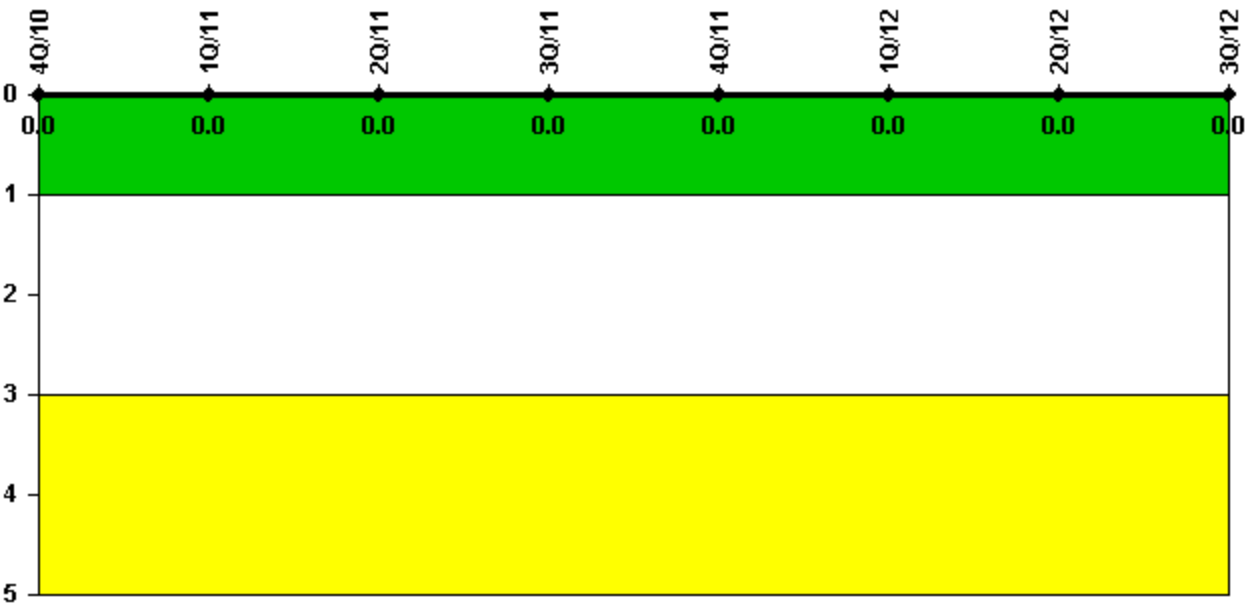
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

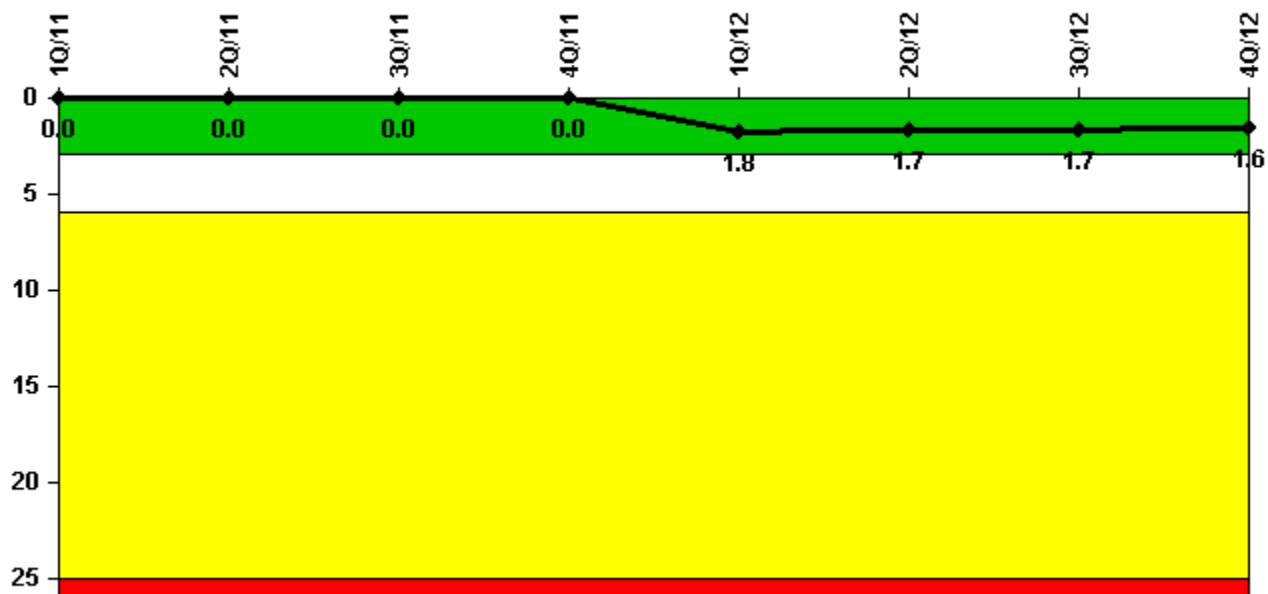
Last Modified: October 24, 2012

Byron 2

4Q/2012 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



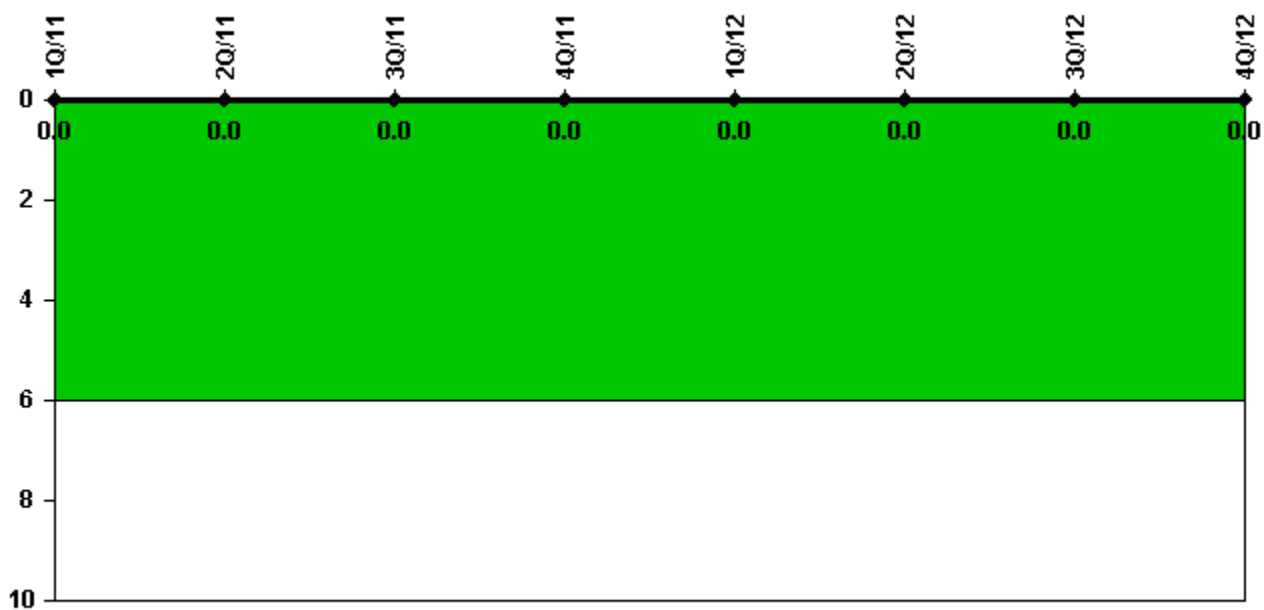
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Unplanned scrams	0	0	0	0	2.0	0	0	0
Critical hours	2159.0	2071.5	1919.0	2004.4	2004.4	2184.0	2208.0	2209.0
Indicator value	0	0	0	0	1.8	1.7	1.7	1.6

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



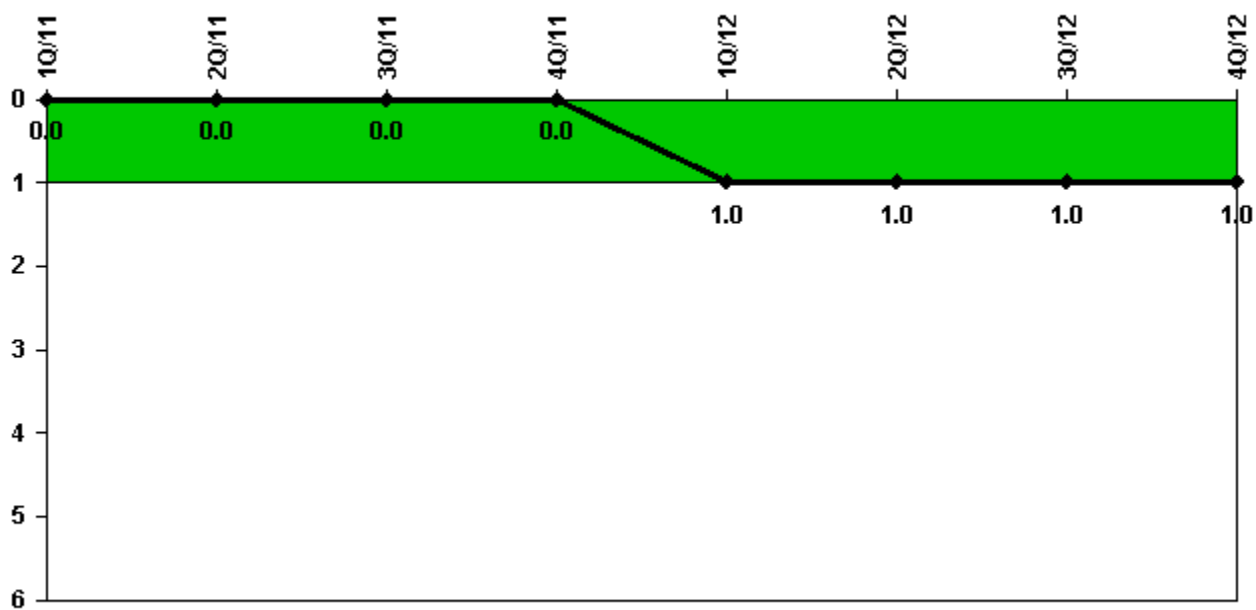
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2159.0	2071.5	1919.0	2004.4	2004.4	2184.0	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



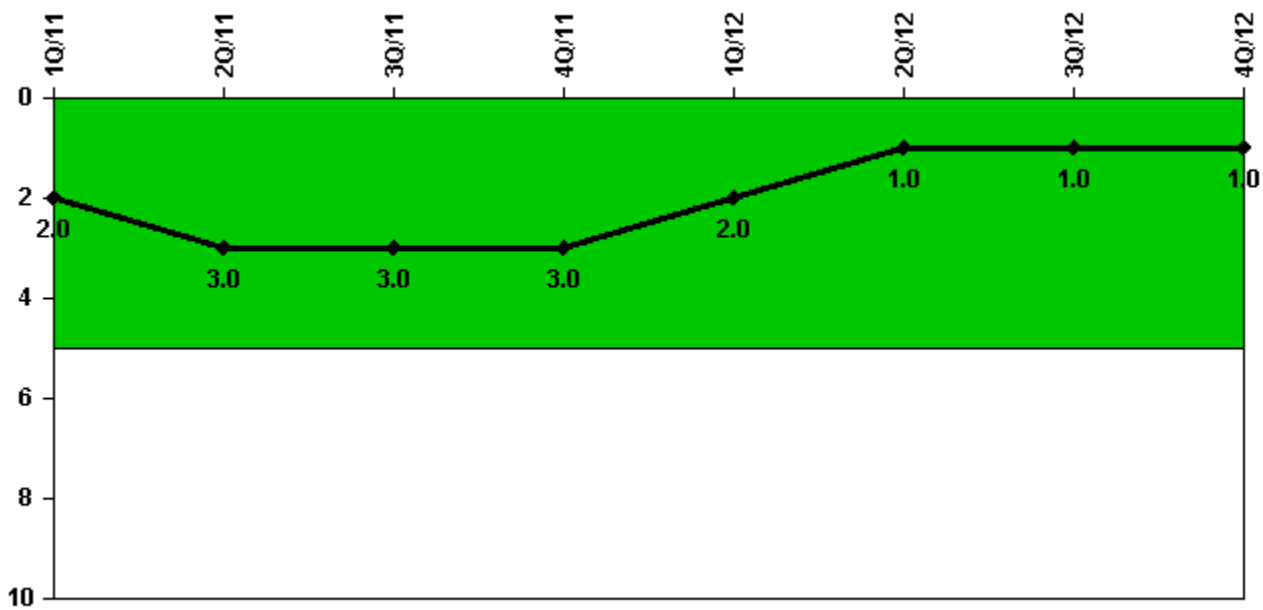
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Scrams with complications	0	0	0	0	1.0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Safety System Functional Failures	2	1	0	0	1	0	0	0
Indicator value	2	3	3	3	2	1	1	1

Licensee Comments:

3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

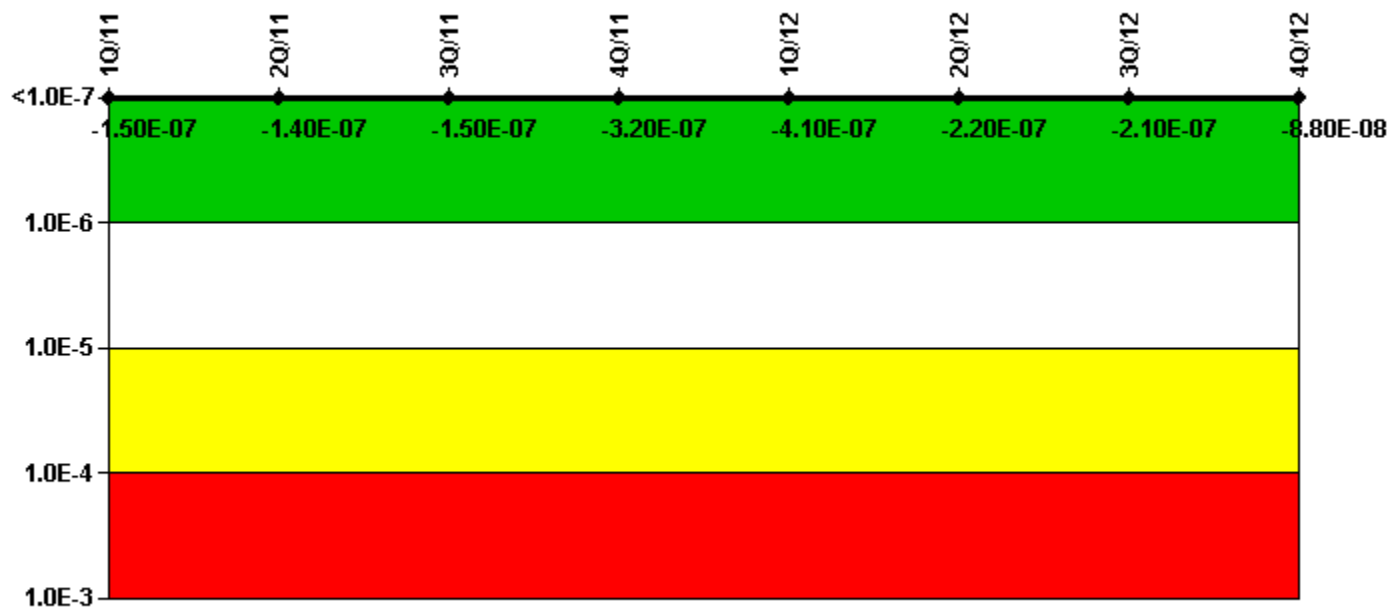
2Q/12: LER 2012-001-00 - No SSFF

1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

2Q/11: May LER 454-2011-003-00: Drained Sections of Piping in AF Suction Lines Result on Sys Inop Due to Inadequate Tech Eval LER retracted, SSFF removed June Supplemental LER 455-2011 -001 -01 "Unit 2 Emergency Diesel Generator Inoperable for Longer than Allowed by Technical Specifications Due to Inadequate Work" confirms SSFF previously reported.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI (Δ CDF)	9.92E-08	9.47E-08	9.49E-08	1.15E-07	5.69E-08	4.09E-08	3.62E-08	4.26E-08
URI (Δ CDF)	-2.45E-07	-2.30E-07	-2.40E-07	-4.36E-07	-4.65E-07	-2.64E-07	-2.42E-07	-1.30E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-07	-1.40E-07	-1.50E-07	-3.20E-07	-4.10E-07	-2.20E-07	-2.10E-07	-8.80E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

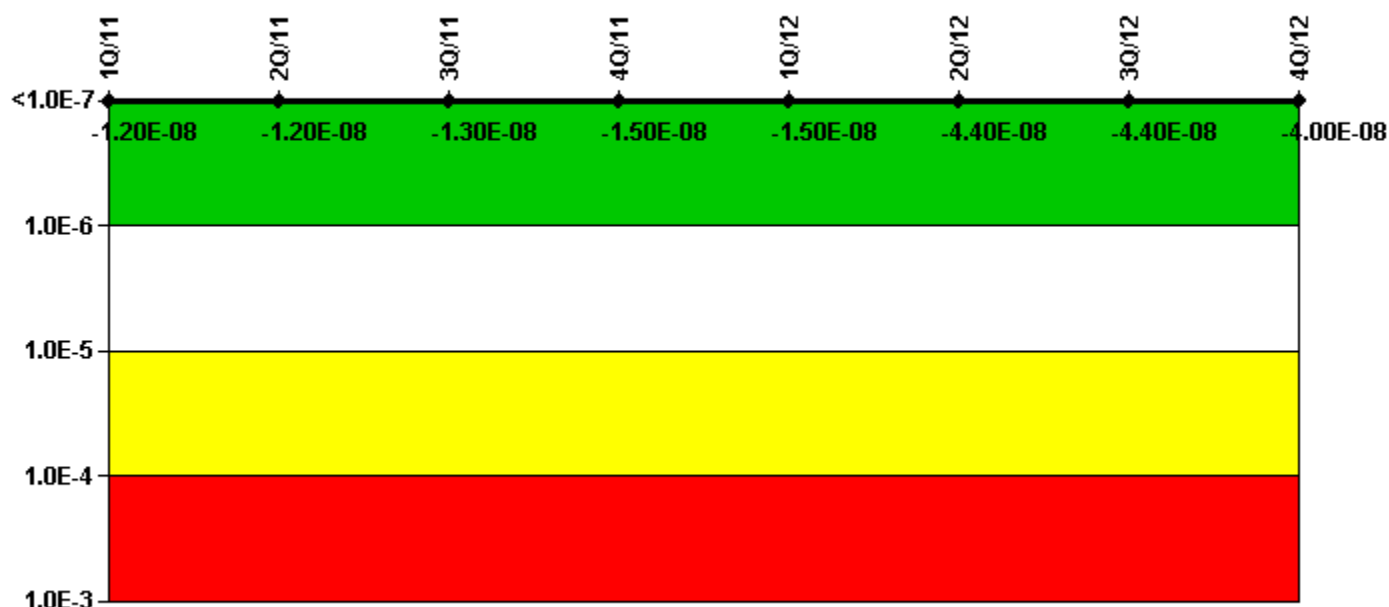
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

1Q/11: Due to typo on paperwork, UA for 1A DG was listed for 1B. This has been corrected.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI (Δ CDF)	-1.00E-08	-9.86E-09	-1.09E-08	-1.30E-08	-1.30E-08	-3.85E-08	-3.81E-08	-3.08E-08
URI (Δ CDF)	-2.40E-09	-2.41E-09	-2.42E-09	-1.94E-09	-1.96E-09	-5.83E-09	-5.89E-09	-9.26E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-1.20E-08	-1.30E-08	-1.50E-08	-1.50E-08	-4.40E-08	-4.40E-08	-4.00E-08

Licensee Comments:

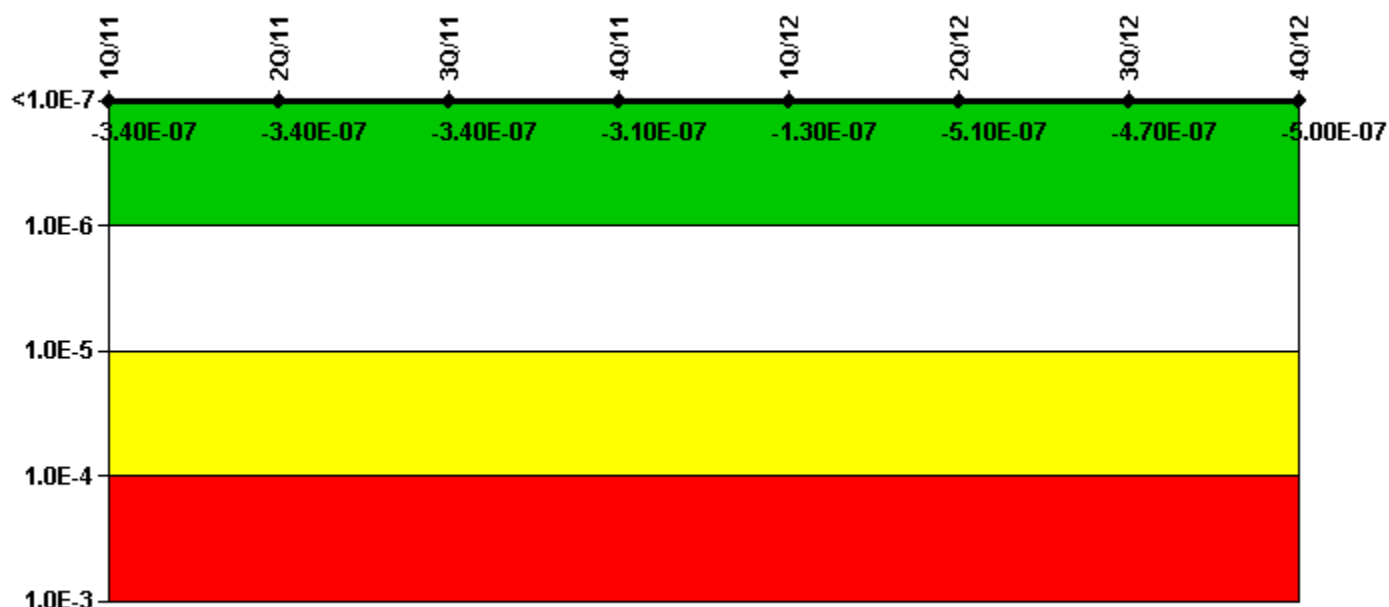
4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI (Δ CDF)	-9.66E-08	-9.66E-08	-9.65E-08	1.11E-09	1.33E-07	-8.33E-08	-4.75E-08	-8.34E-08
URI (Δ CDF)	-2.43E-07	-2.43E-07	-2.46E-07	-3.14E-07	-2.60E-07	-4.26E-07	-4.25E-07	-4.18E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-3.40E-07	-3.40E-07	-3.10E-07	-1.30E-07	-5.10E-07	-4.70E-07	-5.00E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

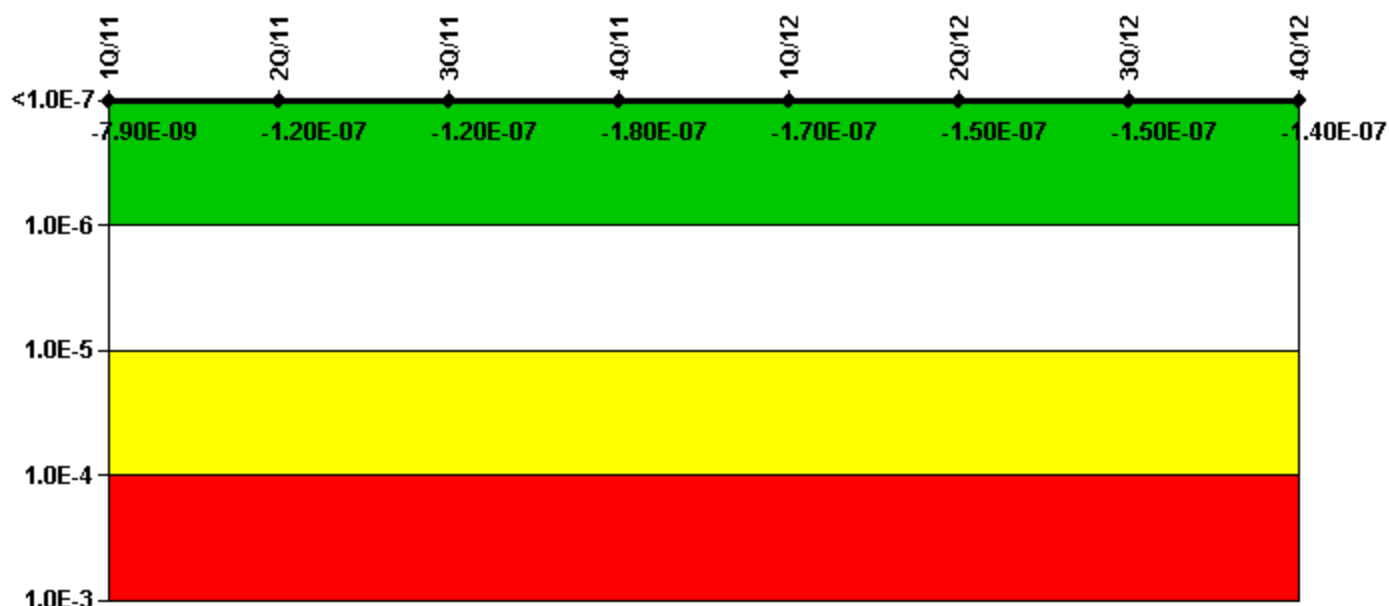
2Q/12: Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made are reflected in this quarters reporting.

4Q/11: Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI (Δ CDF)	7.97E-08	-2.87E-08	-2.87E-08	-3.45E-08	-3.45E-08	-3.42E-08	-3.42E-08	-3.55E-08
URI (Δ CDF)	-8.77E-08	-9.02E-08	-9.28E-08	-1.43E-07	-1.40E-07	-1.20E-07	-1.20E-07	-1.04E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.90E-09	-1.20E-07	-1.20E-07	-1.80E-07	-1.70E-07	-1.50E-07	-1.50E-07	-1.40E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

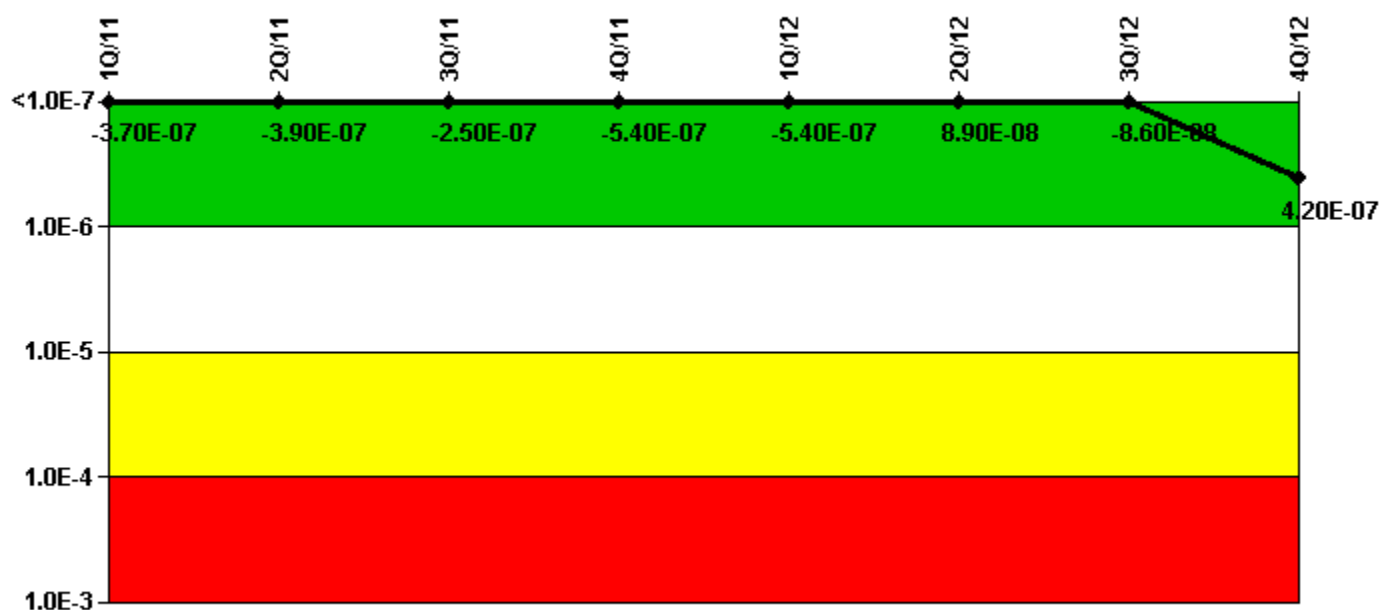
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised

Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI (ΔCDF)	5.12E-07	4.93E-07	6.38E-07	3.97E-07	3.95E-07	4.41E-07	2.58E-07	5.55E-07
URI (ΔCDF)	-8.85E-07	-8.87E-07	-8.92E-07	-9.35E-07	-9.37E-07	-3.52E-07	-3.44E-07	-1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.70E-07	-3.90E-07	-2.50E-07	-5.40E-07	-5.40E-07	8.90E-08	-8.60E-08	4.20E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

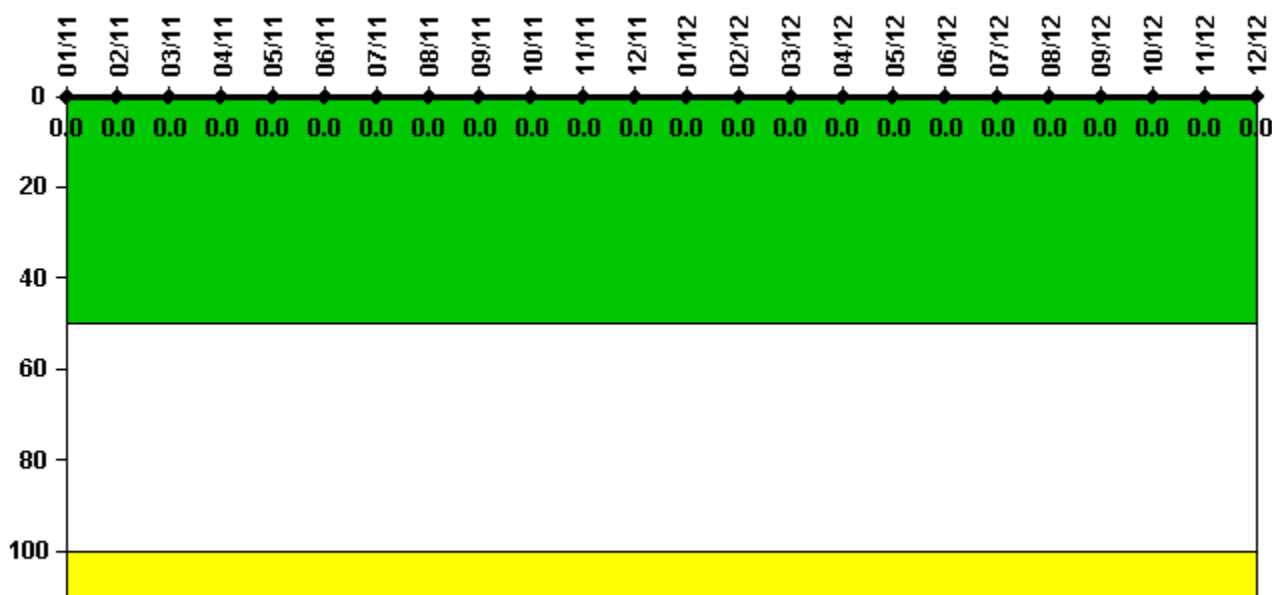
2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised

Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

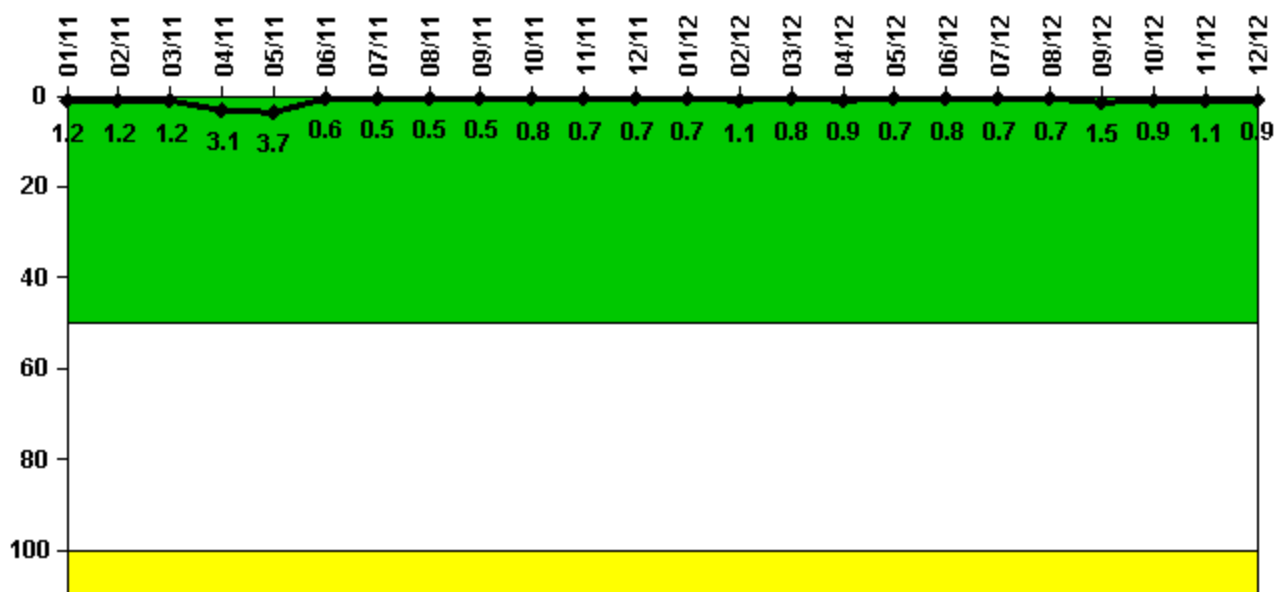
Notes

Reactor Coolant System Activity	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum activity	0.000142	0.000136	0.000140	0.000161	0.000324	0.000477	0.000222	0.000153	0.000224	0.000055	0.000064	0.000065
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum activity	0.000071	0.000069	0.000081	0.000075	0.000076	0.000126	0.000129	0.000224	0.000090	0.000118	0.000091	0.000095
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



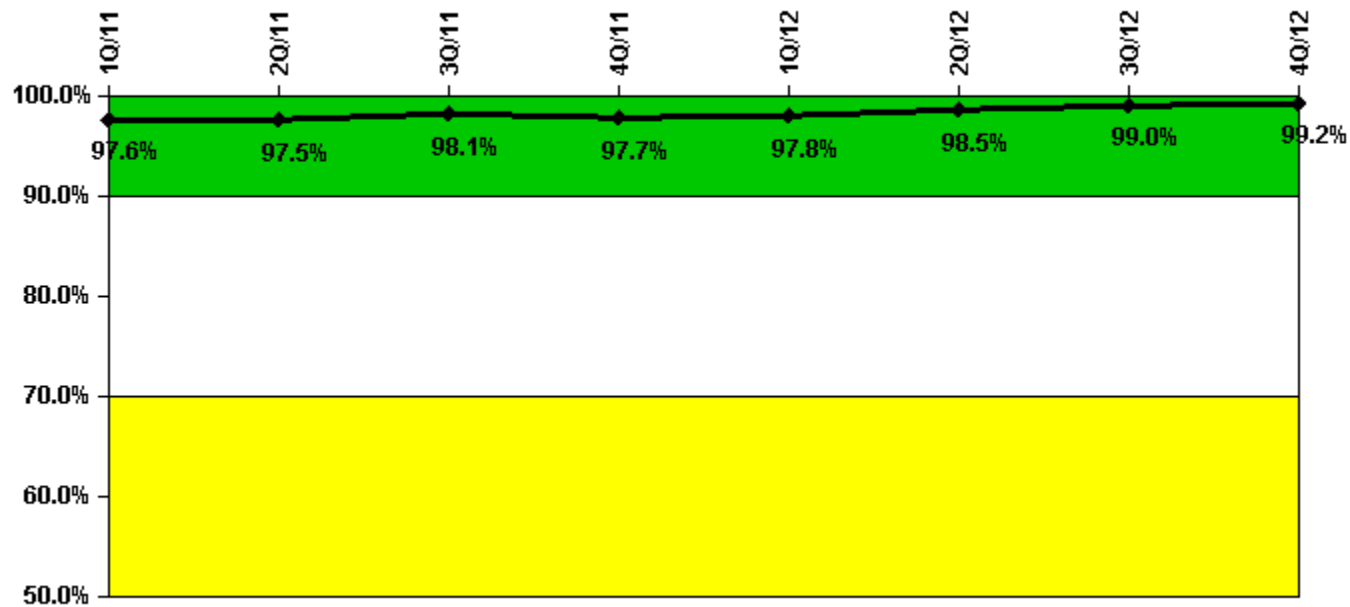
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum leakage	0.120	0.120	0.120	0.310	0.370	0.060	0.050	0.050	0.050	0.080	0.070	0.070
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.2	1.2	1.2	3.1	3.7	0.6	0.5	0.5	0.5	0.8	0.7	0.7
Reactor Coolant System Leakage	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum leakage	0.070	0.110	0.080	0.090	0.070	0.080	0.070	0.070	0.150	0.090	0.110	0.090
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	1.1	0.8	0.9	0.7	0.8	0.7	0.7	1.5	0.9	1.1	0.9

Licensee Comments: none

Drill/Exercise Performance

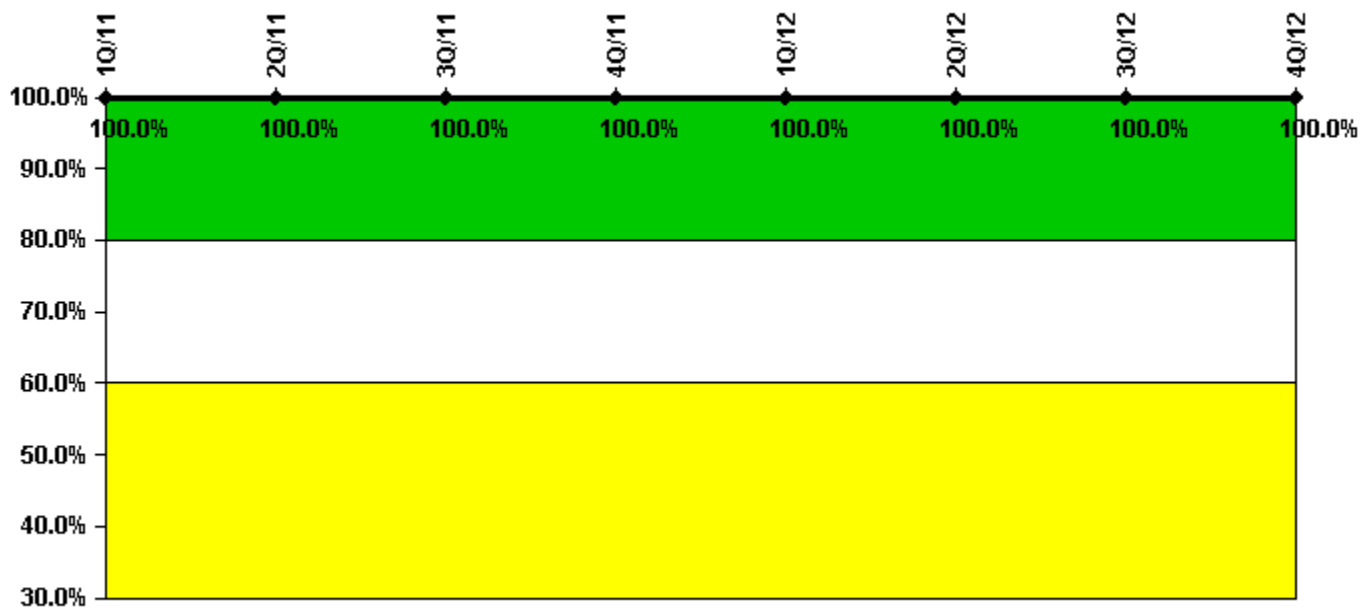


Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful opportunities	51.0	77.0	62.0	35.0	96.0	126.0	24.0	3.0
Total opportunities	51.0	78.0	62.0	37.0	97.0	126.0	24.0	3.0
Indicator value	97.6%	97.5%	98.1%	97.7%	97.8%	98.5%	99.0%	99.2%

Licensee Comments: none

ERO Drill Participation

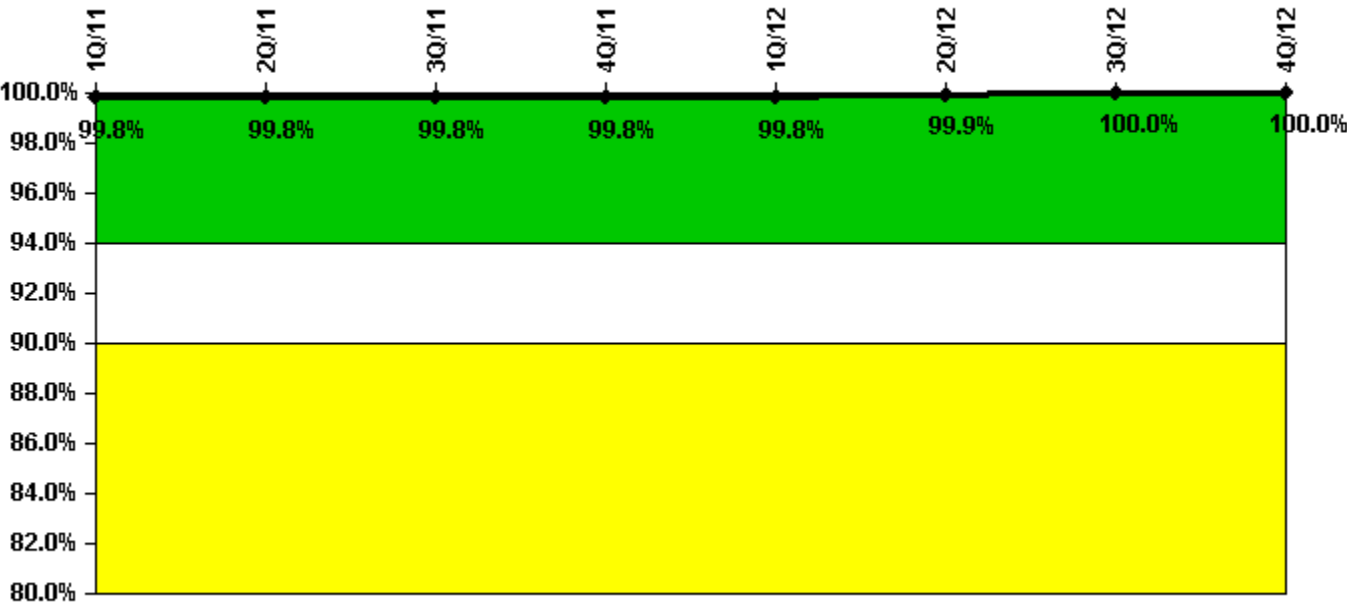
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Participating Key personnel	76.0	74.0	75.0	74.0	74.0	77.0	78.0	78.0
Total Key personnel	76.0	74.0	75.0	74.0	74.0	77.0	78.0	78.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



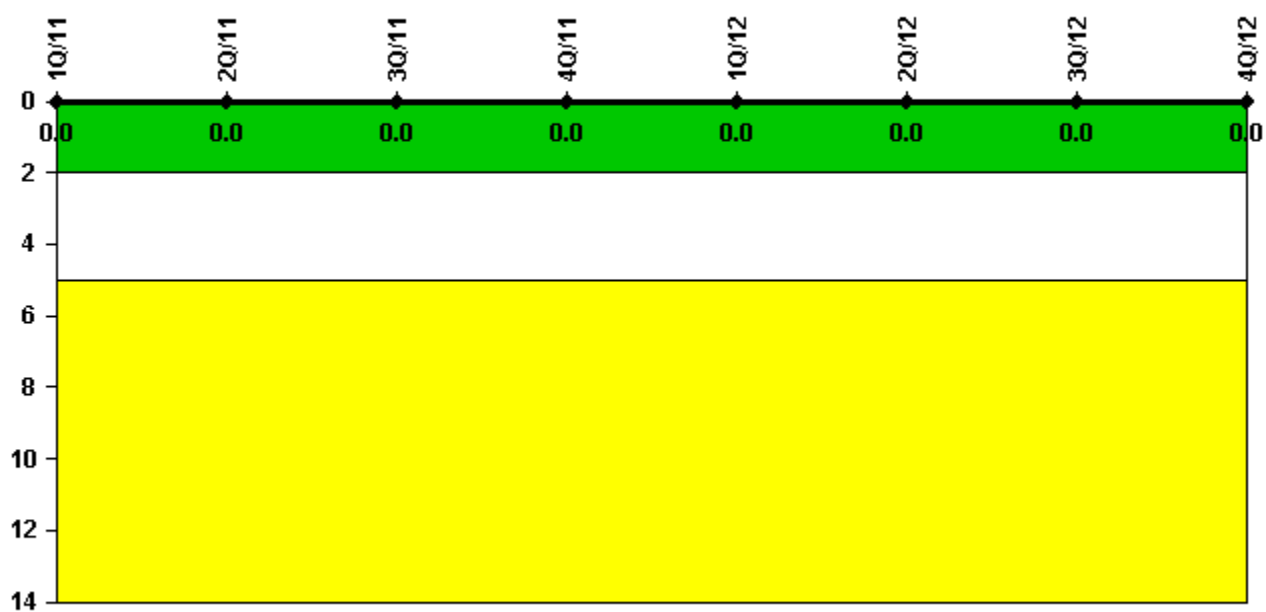
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful siren-tests	3902	3893	3893	3903	3962	3903	3841	3904
Total sirens-tests	3904	3904	3904	3904	3965	3904	3843	3904
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	100.0%	100.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness

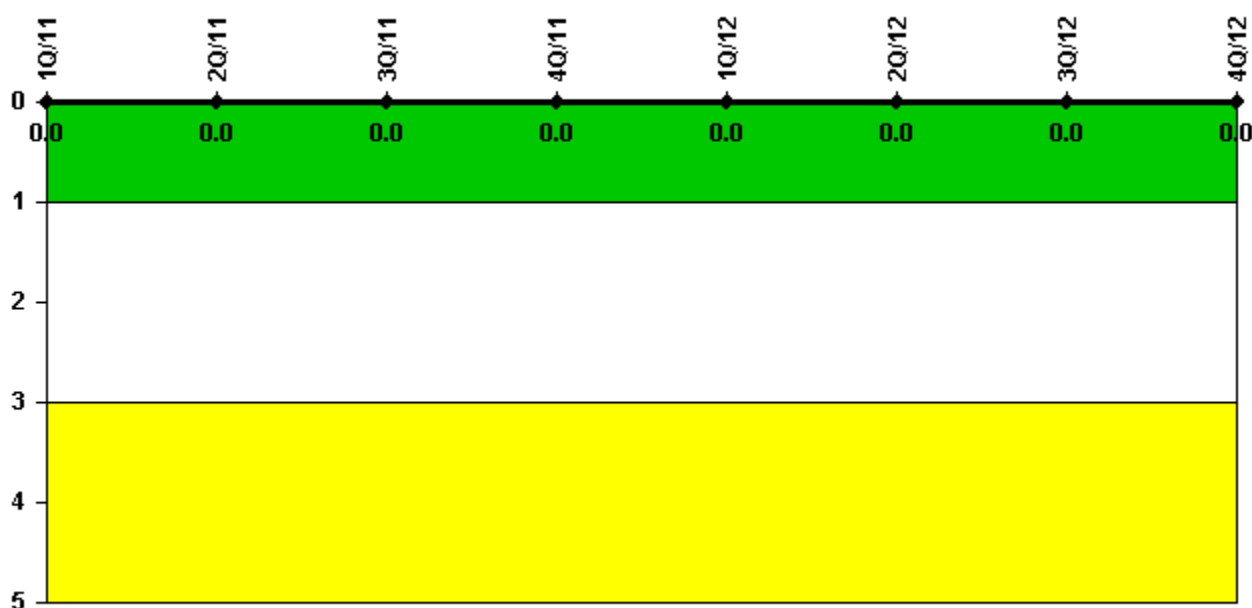


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent

Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

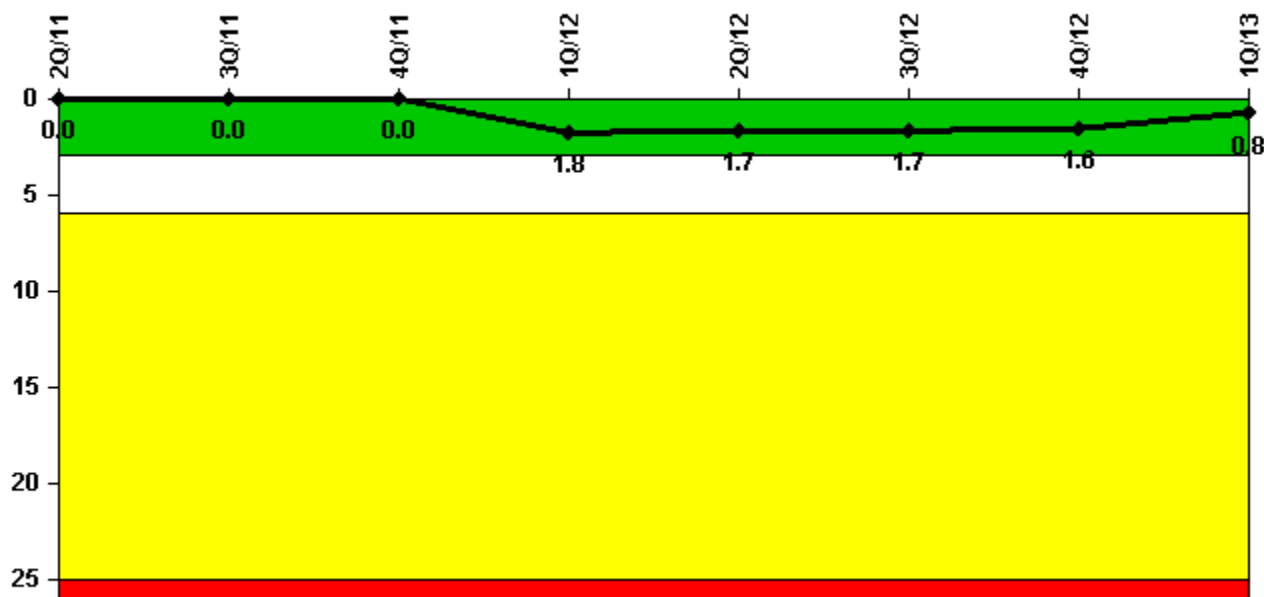
Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

Byron 2

1Q/2013 Performance Indicators

Licensee's General Comments: Byron Unti 2

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

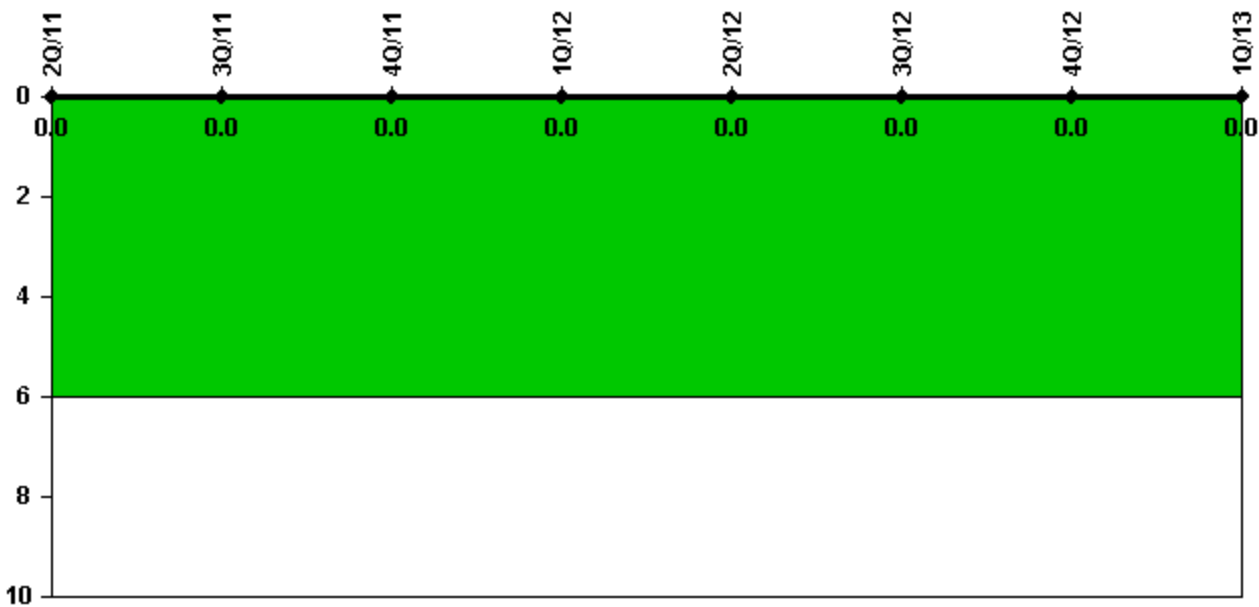
Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned scrams	0	0	0	2.0	0	0	0	1.0
Critical hours	2071.5	1919.0	2004.4	2004.4	2184.0	2208.0	2209.0	2129.6
Indicator value	0	0	0	1.8	1.7	1.7	1.6	0.8

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



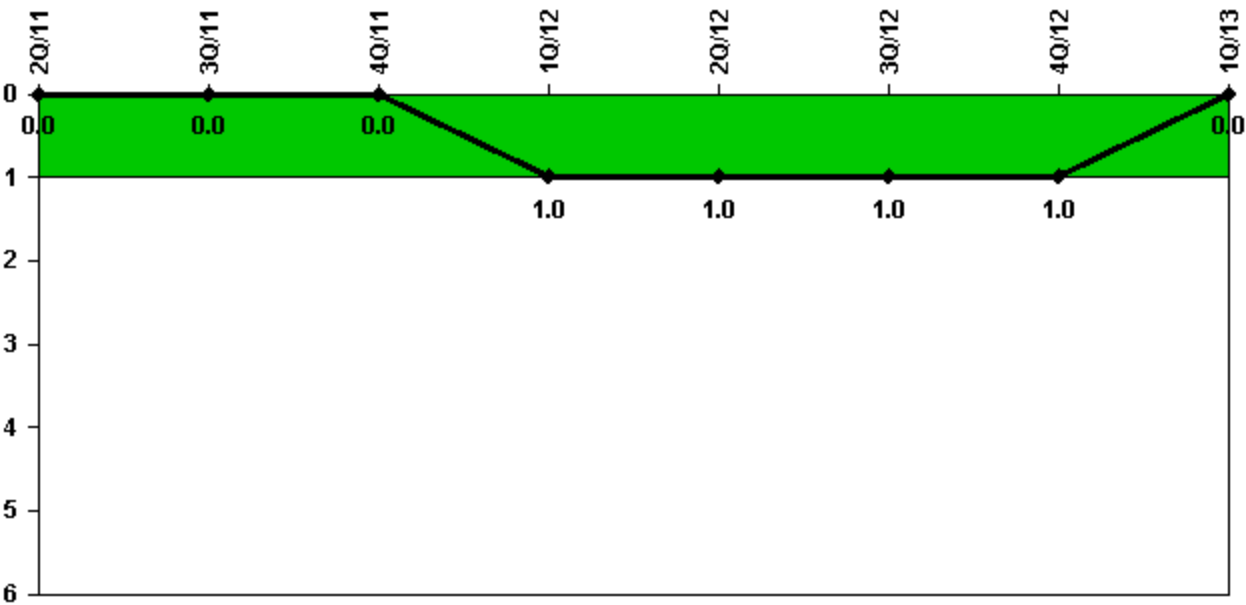
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2071.5	1919.0	2004.4	2004.4	2184.0	2208.0	2209.0	2129.6
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

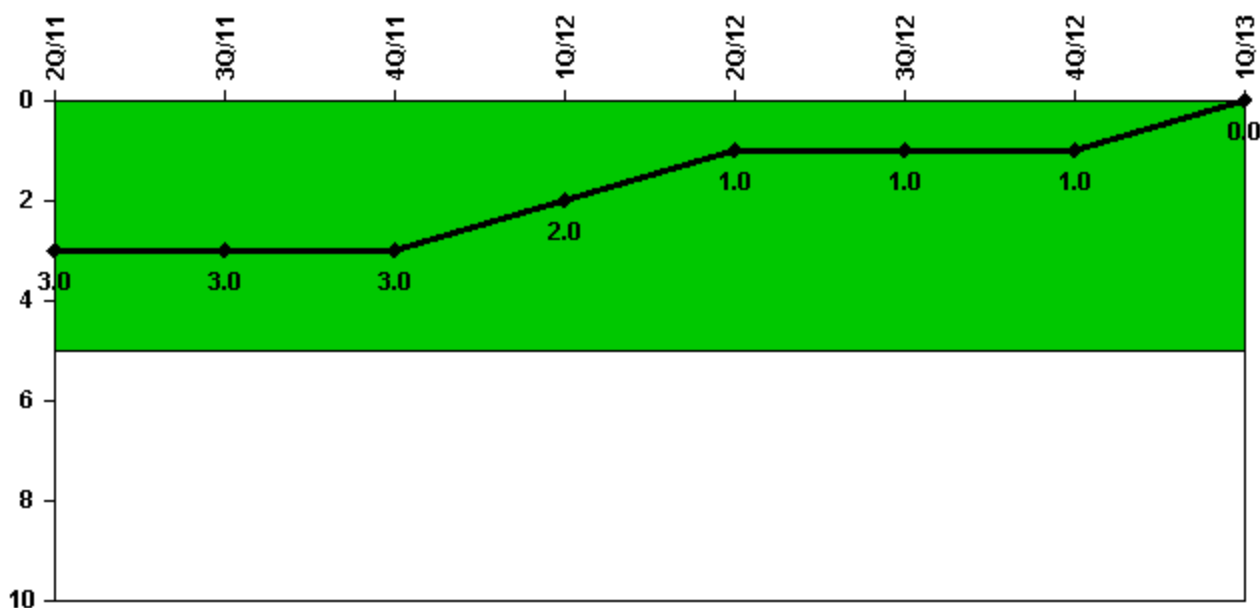
Notes

Unplanned Scrams with Complications	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Scrams with complications	0	0	0	1.0	0	0	0	0
Indicator value	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Safety System Functional Failures	1	0	0	1	0	0	0	0
Indicator value	3	3	3	2	1	1	1	0

Licensee Comments:

1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

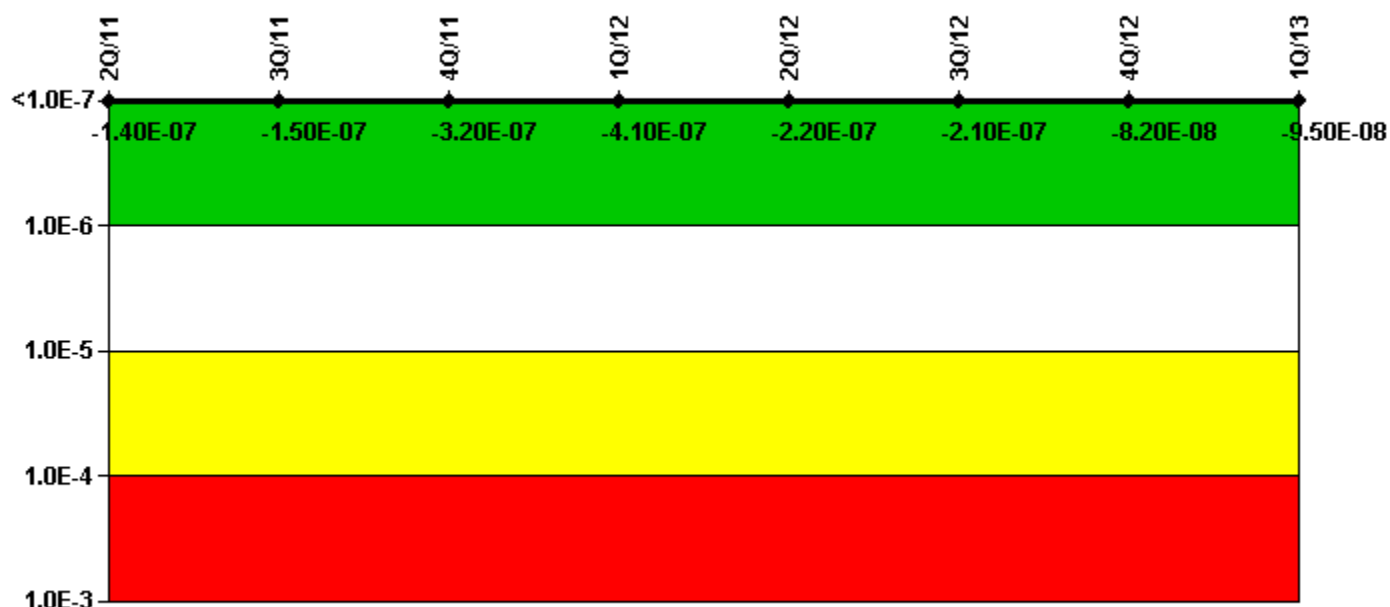
2Q/12: LER 2012-001-00 - No SSFF

1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

2Q/11: May LER 454-2011-003-00: Drained Sections of Piping in AF Suction Lines Result on Sys Inop Due to Inadequate Tech Eval LER retracted, SSFF removed June Supplemental LER 455-2011 -001 -01 "Unit 2 Emergency Diesel Generator Inoperable for Longer than Allowed by Technical Specifications Due to Inadequate Work" confirms SSFF previously reported.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI (ΔCDF)	9.47E-08	9.49E-08	1.15E-07	5.69E-08	4.09E-08	3.62E-08	4.00E-08	1.42E-08
URI (ΔCDF)	-2.30E-07	-2.40E-07	-4.36E-07	-4.65E-07	-2.64E-07	-2.42E-07	-1.22E-07	-1.09E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-1.50E-07	-3.20E-07	-4.10E-07	-2.20E-07	-2.10E-07	-8.20E-08	-9.50E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

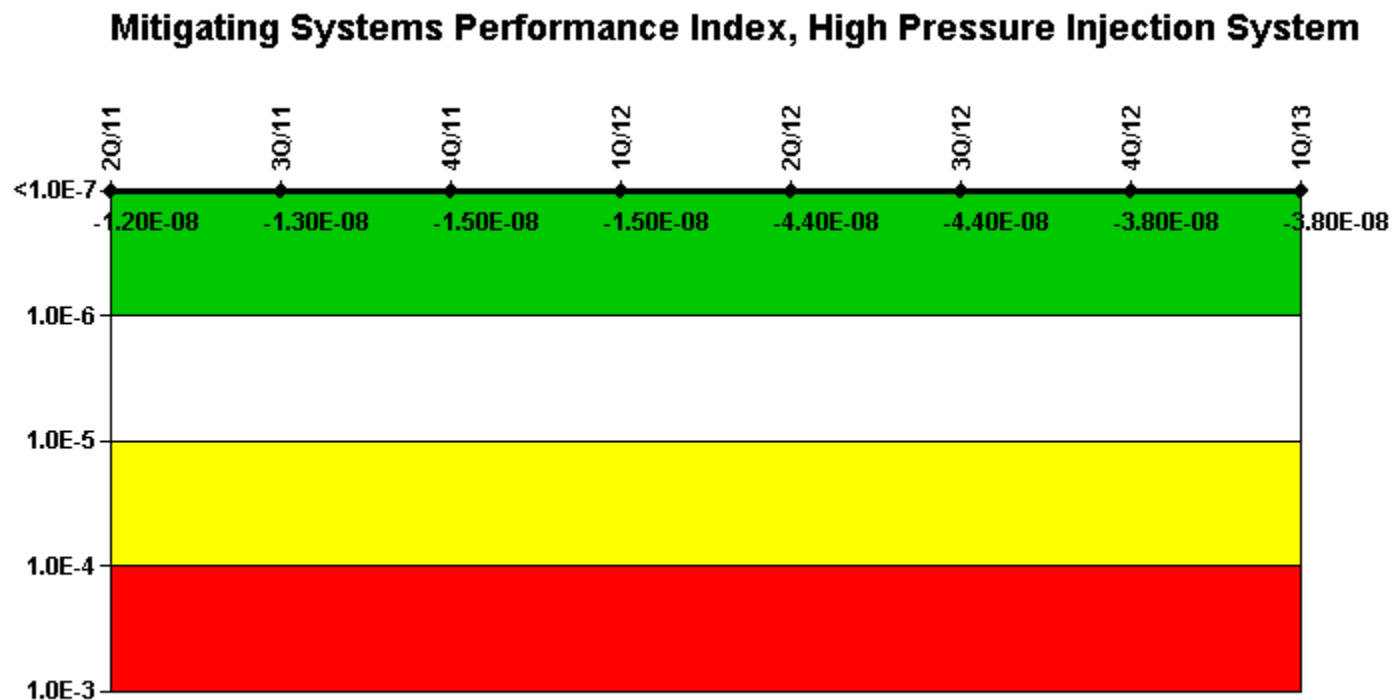
4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX

systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI (ΔCDF)	-9.86E-09	-1.09E-08	-1.30E-08	-1.30E-08	-3.85E-08	-3.81E-08	-2.89E-08	-2.89E-08
URI (ΔCDF)	-2.41E-09	-2.42E-09	-1.94E-09	-1.96E-09	-5.83E-09	-5.89E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-1.30E-08	-1.50E-08	-1.50E-08	-4.40E-08	-4.40E-08	-3.80E-08	-3.80E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

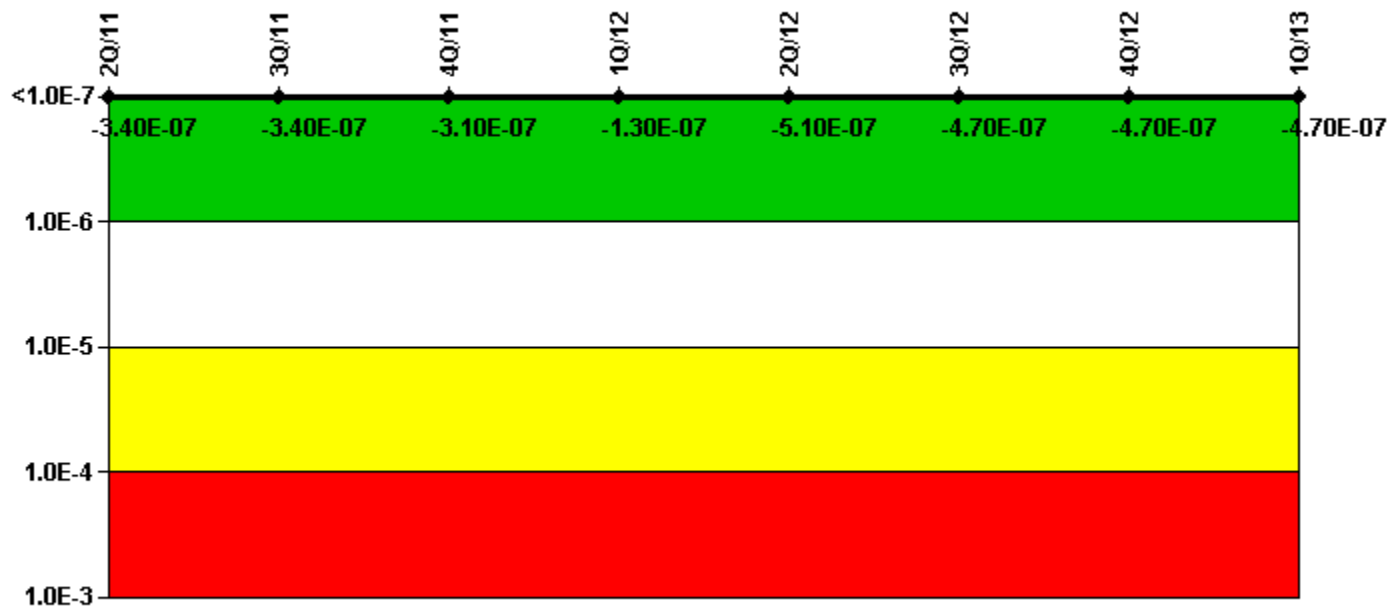
4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI (Δ CDF)	-9.66E-08	-9.65E-08	1.11E-09	1.33E-07	-8.33E-08	-4.75E-08	-7.83E-08	-7.73E-08
URI (Δ CDF)	-2.43E-07	-2.46E-07	-3.14E-07	-2.60E-07	-4.26E-07	-4.25E-07	-3.93E-07	-3.93E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-3.40E-07	-3.10E-07	-1.30E-07	-5.10E-07	-4.70E-07	-4.70E-07	-4.70E-07

Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

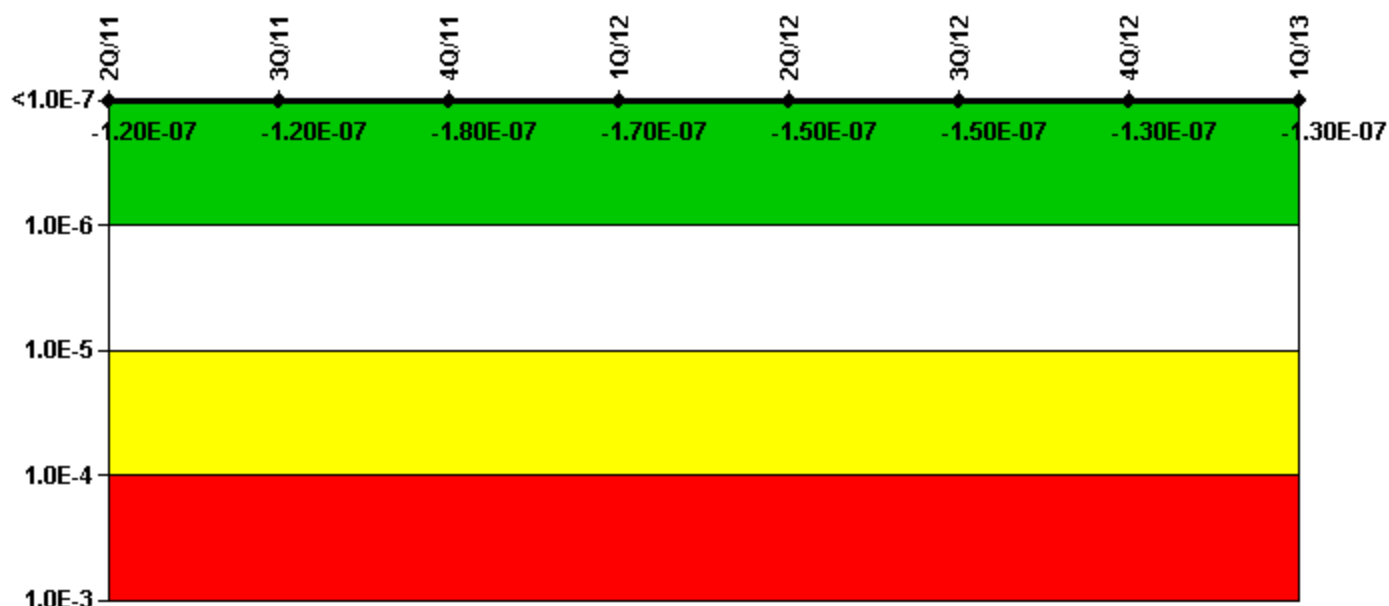
2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made are reflected in this quarters reporting.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

4Q/11: Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI (Δ CDF)	-2.87E-08	-2.87E-08	-3.45E-08	-3.45E-08	-3.42E-08	-3.42E-08	-3.33E-08	-3.33E-08
URI (Δ CDF)	-9.02E-08	-9.28E-08	-1.43E-07	-1.40E-07	-1.20E-07	-1.20E-07	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-07	-1.20E-07	-1.80E-07	-1.70E-07	-1.50E-07	-1.50E-07	-1.30E-07	-1.30E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

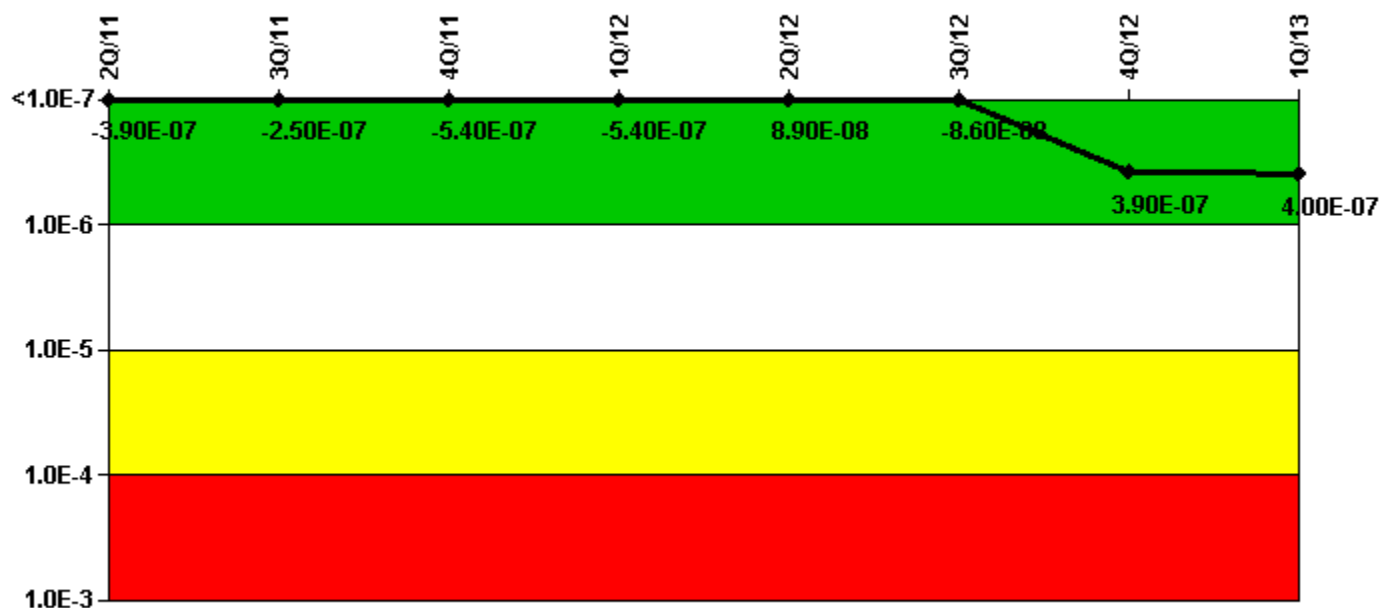
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC

trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than $1.0\text{E-}06$.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > $1.00\text{E-}6$ Yellow > $1.00\text{E-}5$ Red > $1.00\text{E-}4$

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI (ΔCDF)	4.93E-07	6.38E-07	3.97E-07	3.95E-07	4.41E-07	2.58E-07	5.21E-07	5.23E-07
URI (ΔCDF)	-8.87E-07	-8.92E-07	-9.35E-07	-9.37E-07	-3.52E-07	-3.44E-07	-1.31E-07	-1.28E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.90E-07	-2.50E-07	-5.40E-07	-5.40E-07	8.90E-08	-8.60E-08	3.90E-07	4.00E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

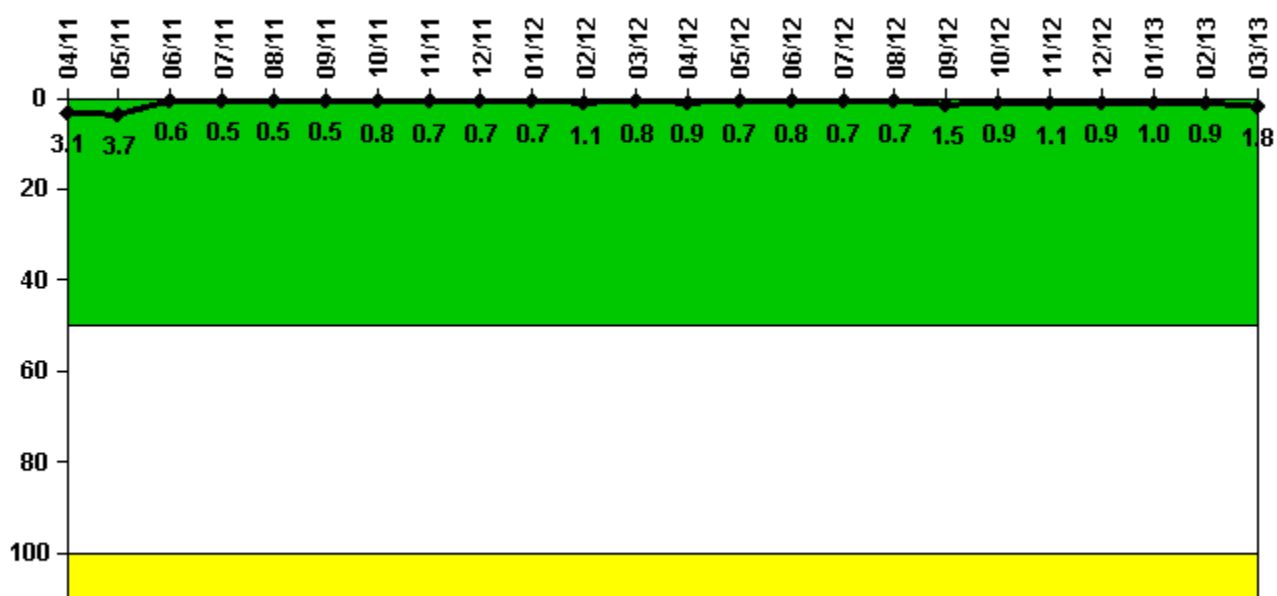
4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

Activity	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.000161	0.000324	0.000477	0.000222	0.000153	0.000224	0.000055	0.000064	0.000065	0.000071	0.000069	0.000081
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum activity	0.000075	0.000076	0.000126	0.000129	0.000224	0.000090	0.000118	0.000091	0.000095	0.000099	0.000102	0.000104
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



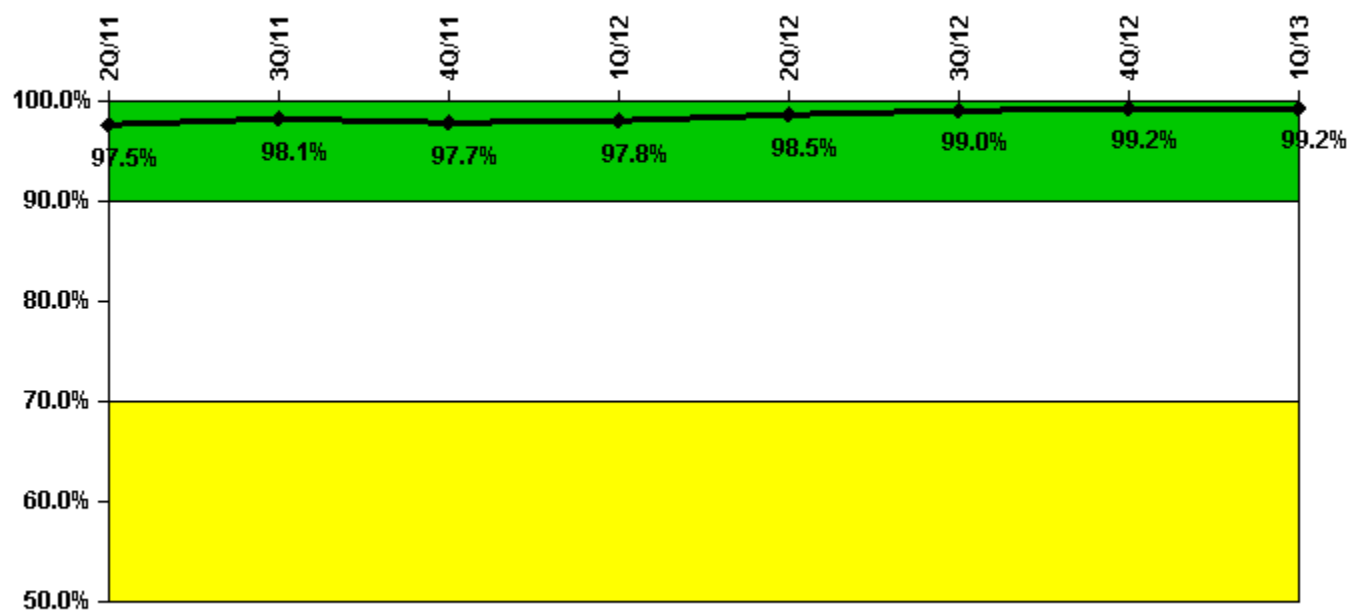
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum leakage	0.310	0.370	0.060	0.050	0.050	0.050	0.080	0.070	0.070	0.070	0.110	0.080
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	3.1	3.7	0.6	0.5	0.5	0.5	0.8	0.7	0.7	0.7	1.1	0.8
Reactor Coolant System Leakage	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum leakage	0.090	0.070	0.080	0.070	0.070	0.150	0.090	0.110	0.090	0.100	0.090	0.180
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	0.7	0.8	0.7	0.7	1.5	0.9	1.1	0.9	1.0	0.9	1.8

Licensee Comments: none

Drill/Exercise Performance



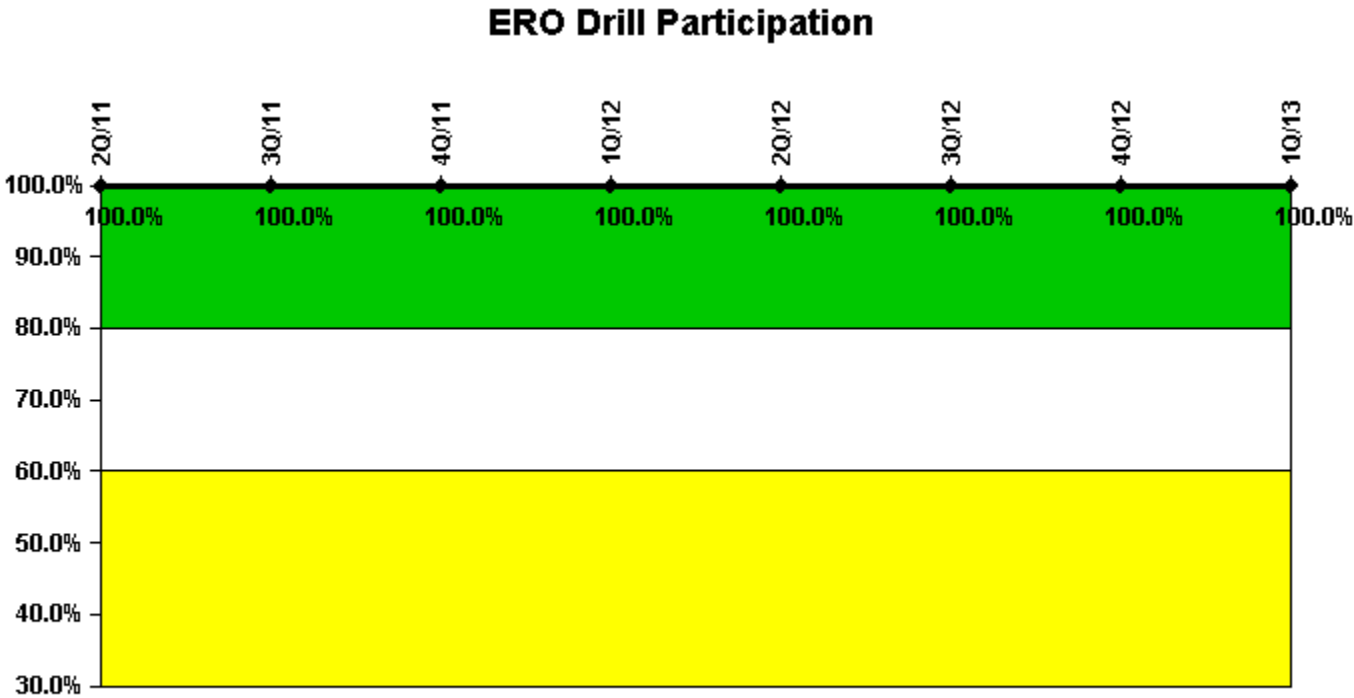
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful opportunities	77.0	62.0	35.0	96.0	126.0	24.0	3.0	104.0
Total opportunities	78.0	62.0	37.0	97.0	126.0	24.0	3.0	104.0

Indicator value	97.5%	98.1%	97.7%	97.8%	98.5%	99.0%	99.2%	99.2%

Licensee Comments: none



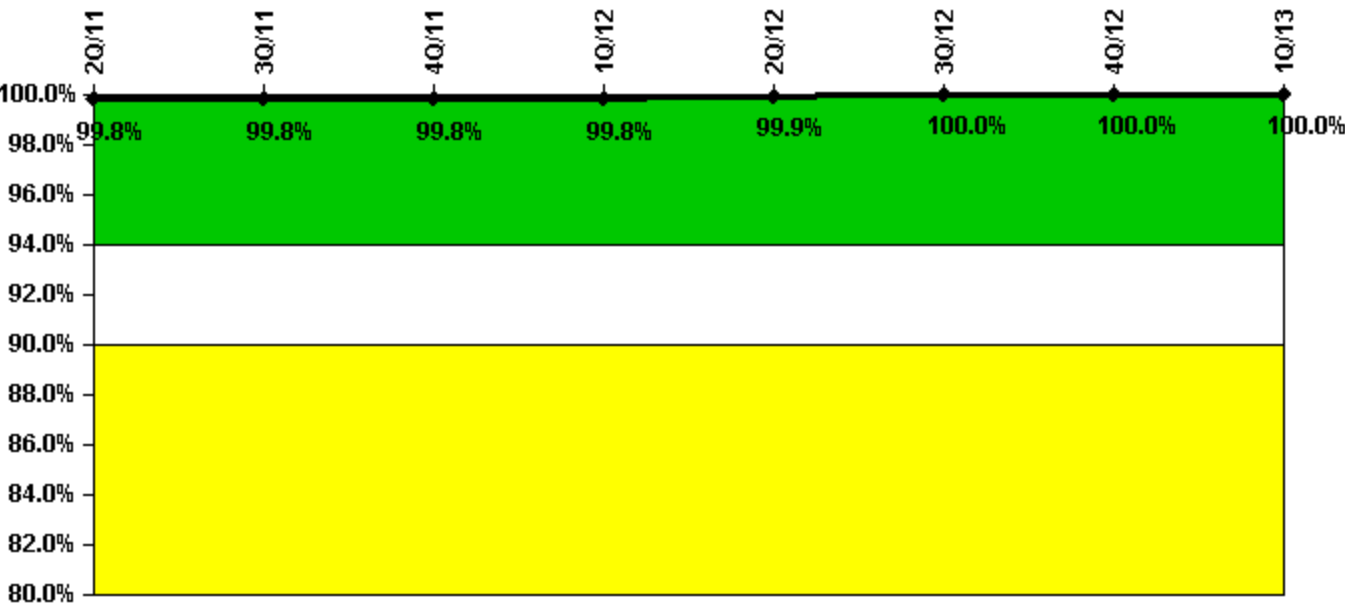
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Participating Key personnel	74.0	75.0	74.0	74.0	77.0	78.0	78.0	78.0
Total Key personnel	74.0	75.0	74.0	74.0	77.0	78.0	78.0	78.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



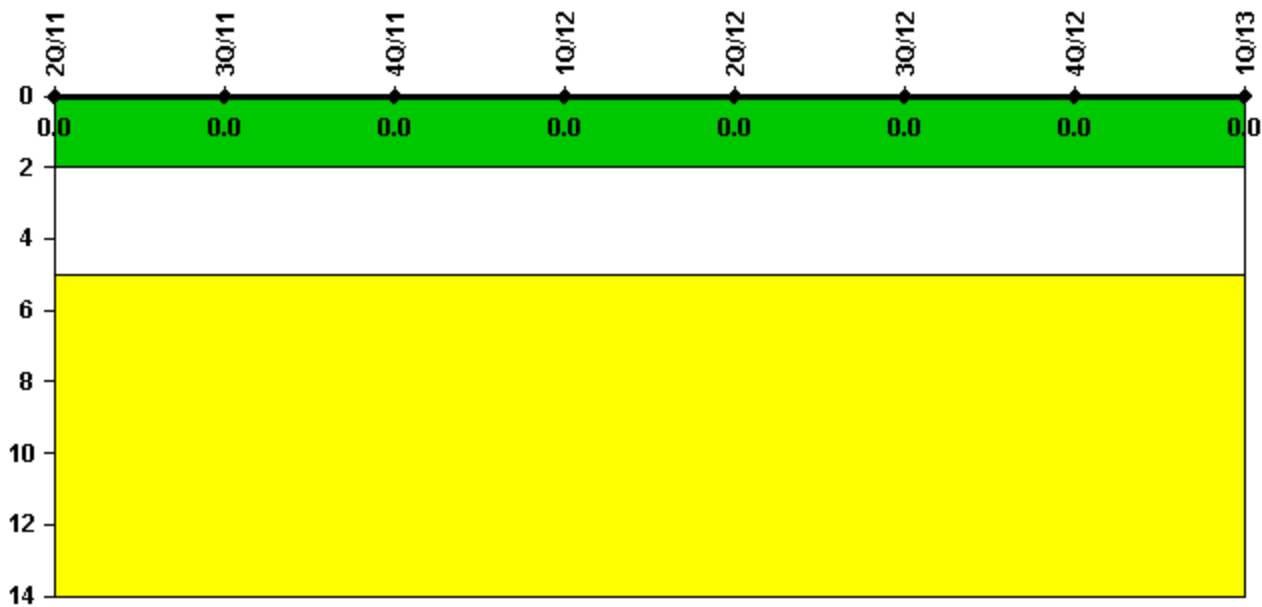
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful siren-tests	3893	3893	3903	3962	3903	3841	3904	3902
Total sirens-tests	3904	3904	3904	3965	3904	3843	3904	3904
Indicator value	99.8%	99.8%	99.8%	99.8%	99.9%	100.0%	100.0%	100.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



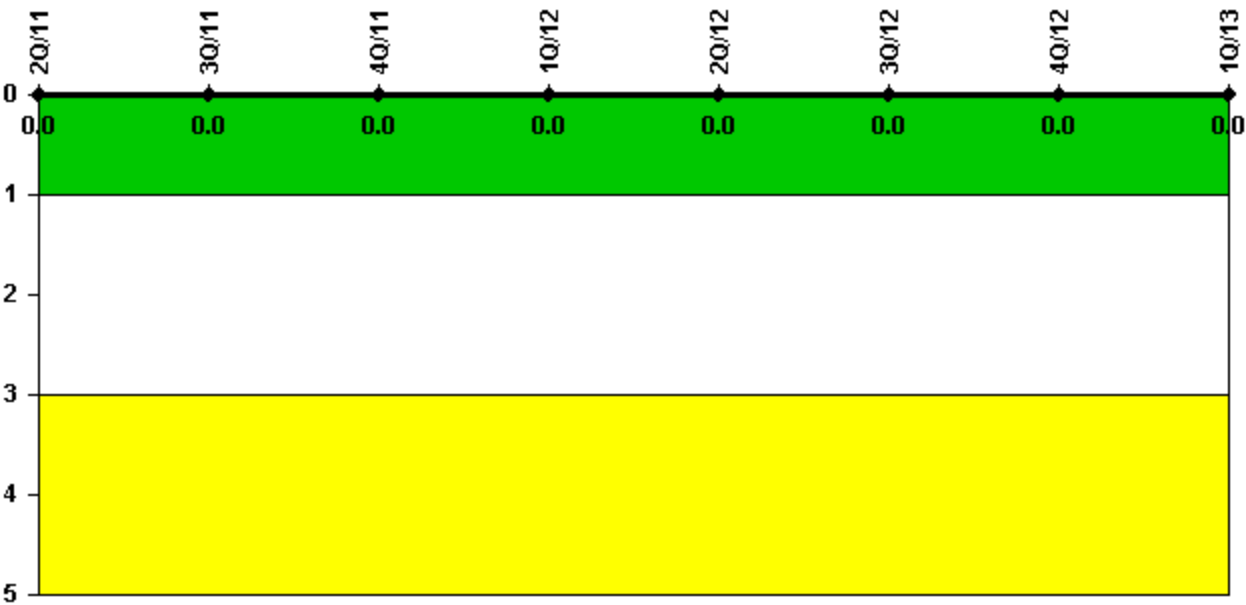
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: April 23, 2013

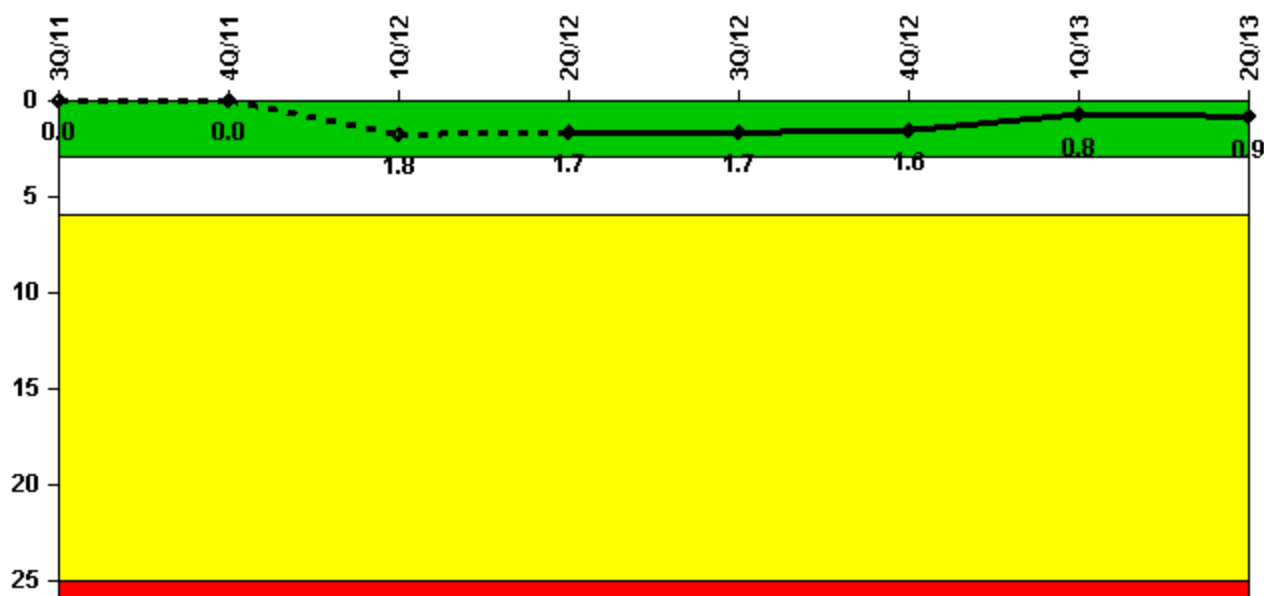
Byron 2

2Q/2013 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Station 2nd Quarter 2013 Unit 2

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

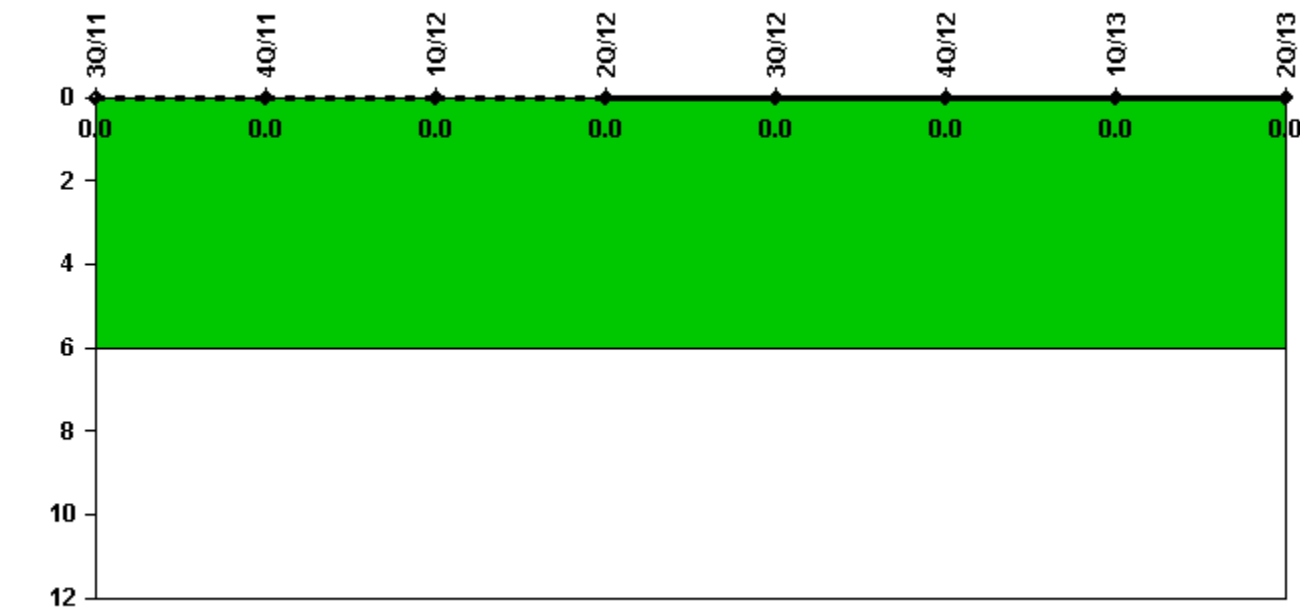
Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Unplanned scrams	0	0	2.0	0	0	0	1.0	0
Critical hours	1919.0	2004.4	2004.4	2184.0	2208.0	2209.0	2129.6	1653.7
Indicator value	0	0	1.8	1.7	1.7	1.6	0.8	0.9

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



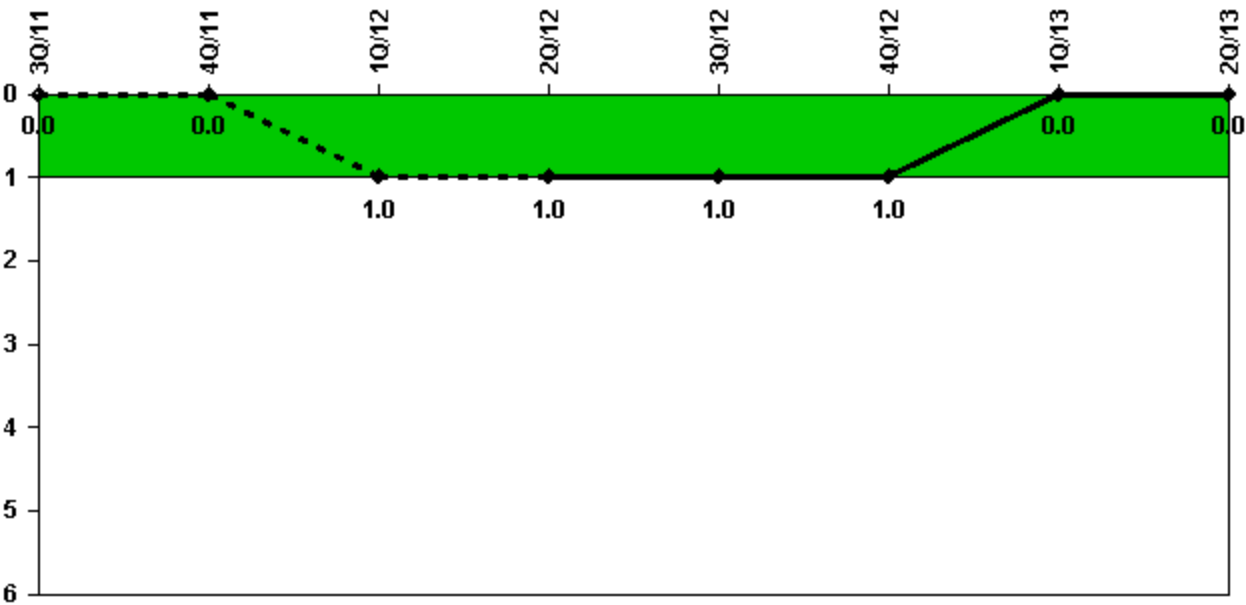
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	1919.0	2004.4	2004.4	2184.0	2208.0	2209.0	2129.6	1653.7
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

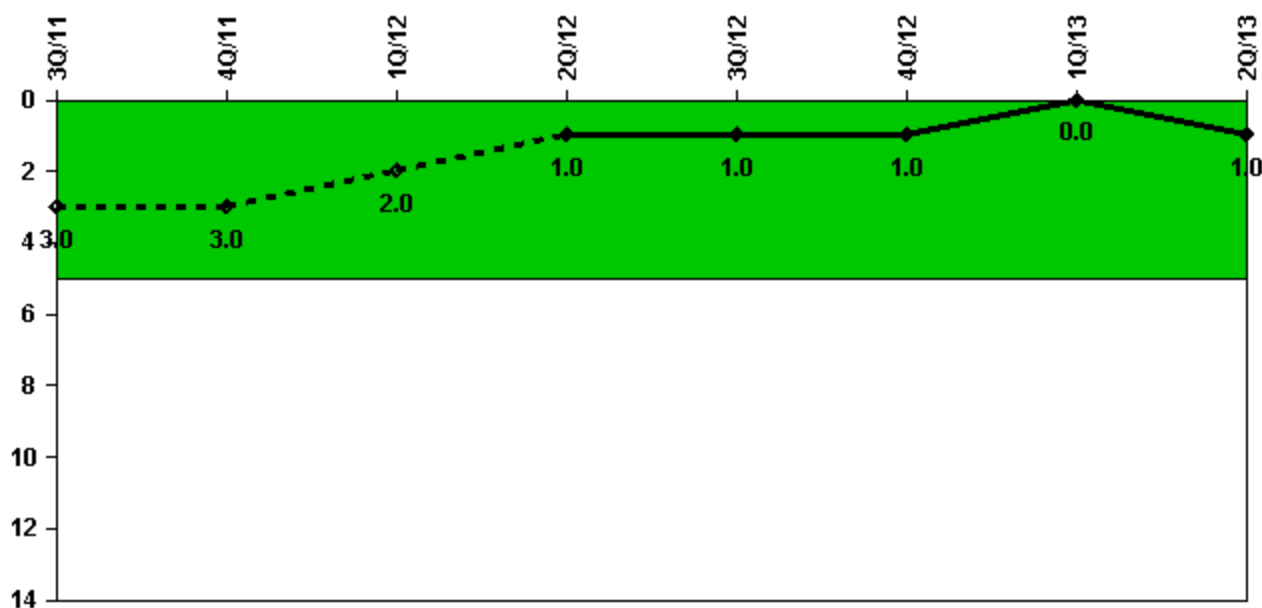
Notes

Unplanned Scrams with Complications	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Scrams with complications	0	0	1.0	0	0	0	0	0
Indicator value	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Safety System Functional Failures	0	0	1	0	0	0	0	1
Indicator value	3	3	2	1	1	1	0	1

Licensee Comments:

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

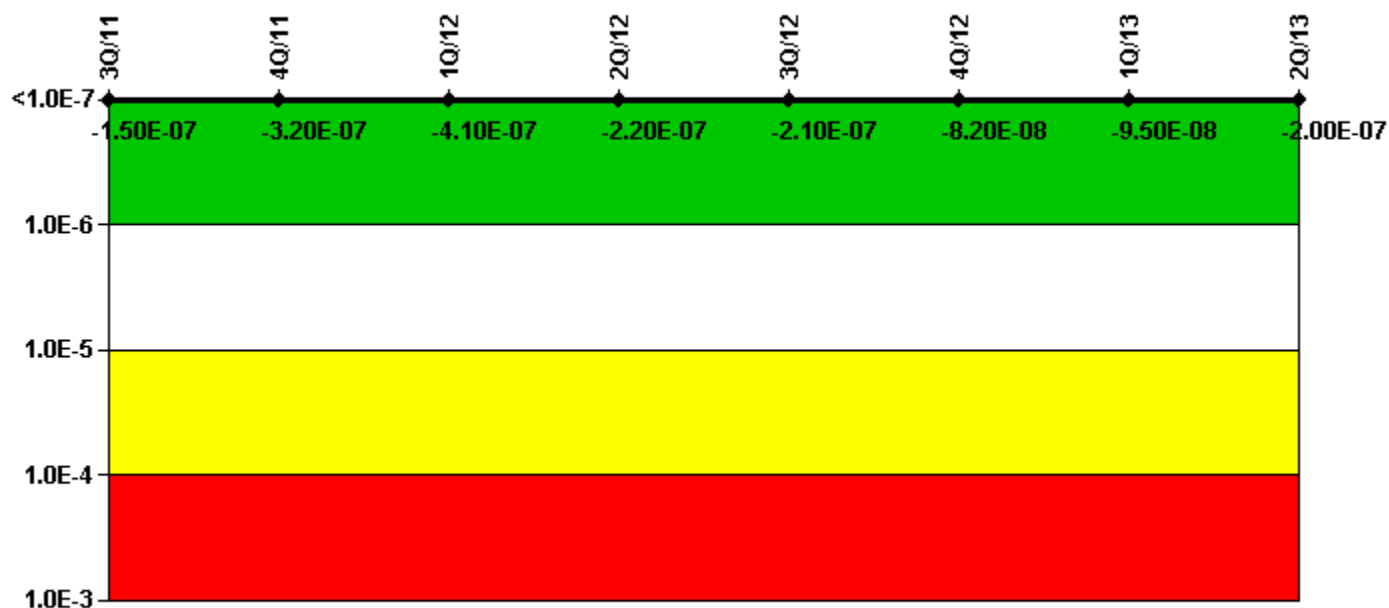
3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

2Q/12: LER 2012-001-00 - No SSFF

1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (Δ CDF)	9.49E-08	1.15E-07	5.69E-08	4.09E-08	3.62E-08	4.00E-08	1.42E-08	9.68E-09
URI (Δ CDF)	-2.40E-07	-4.36E-07	-4.65E-07	-2.64E-07	-2.42E-07	-1.22E-07	-1.09E-07	-2.14E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-07	-3.20E-07	-4.10E-07	-2.20E-07	-2.10E-07	-8.20E-08	-9.50E-08	-2.00E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

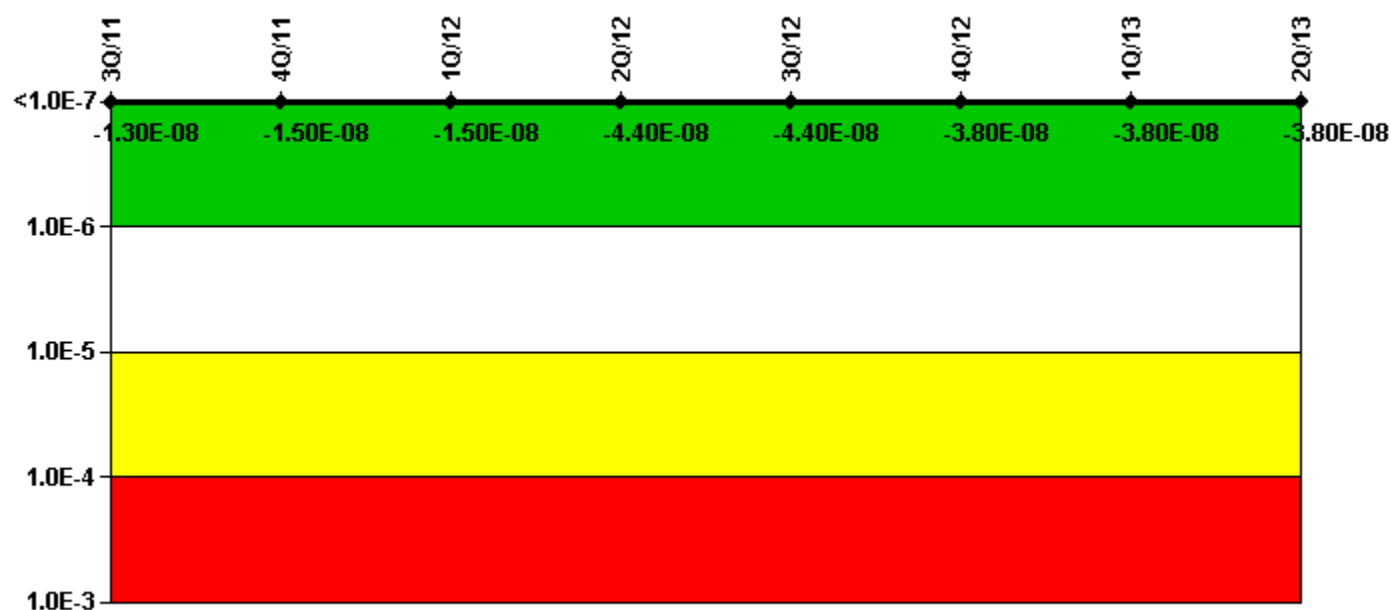
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised

Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (ΔCDF)	-1.09E-08	-1.30E-08	-1.30E-08	-3.85E-08	-3.81E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (ΔCDF)	-2.42E-09	-1.94E-09	-1.96E-09	-5.83E-09	-5.89E-09	-8.70E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-08	-1.50E-08	-1.50E-08	-4.40E-08	-4.40E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

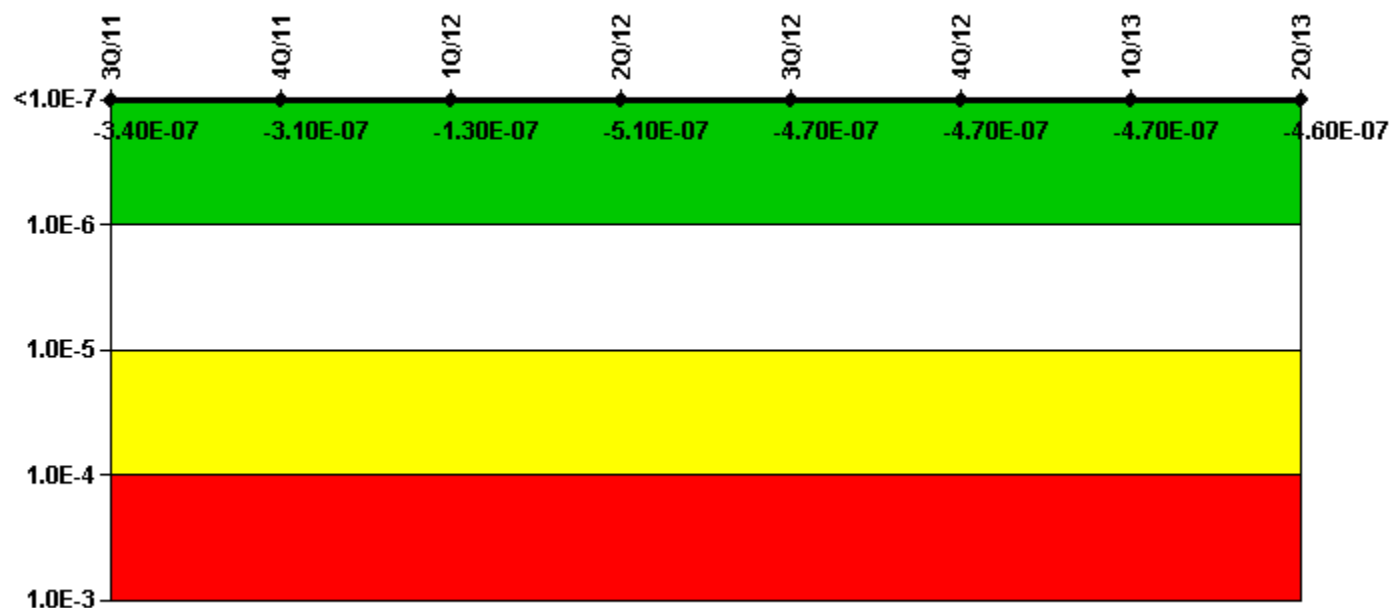
4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (Δ CDF)	-9.65E-08	1.11E-09	1.33E-07	-8.33E-08	-4.75E-08	-7.83E-08	-7.73E-08	-7.81E-08
URI (Δ CDF)	-2.46E-07	-3.14E-07	-2.60E-07	-4.26E-07	-4.25E-07	-3.93E-07	-3.93E-07	-3.87E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-3.10E-07	-1.30E-07	-5.10E-07	-4.70E-07	-4.70E-07	-4.70E-07	-4.60E-07

Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

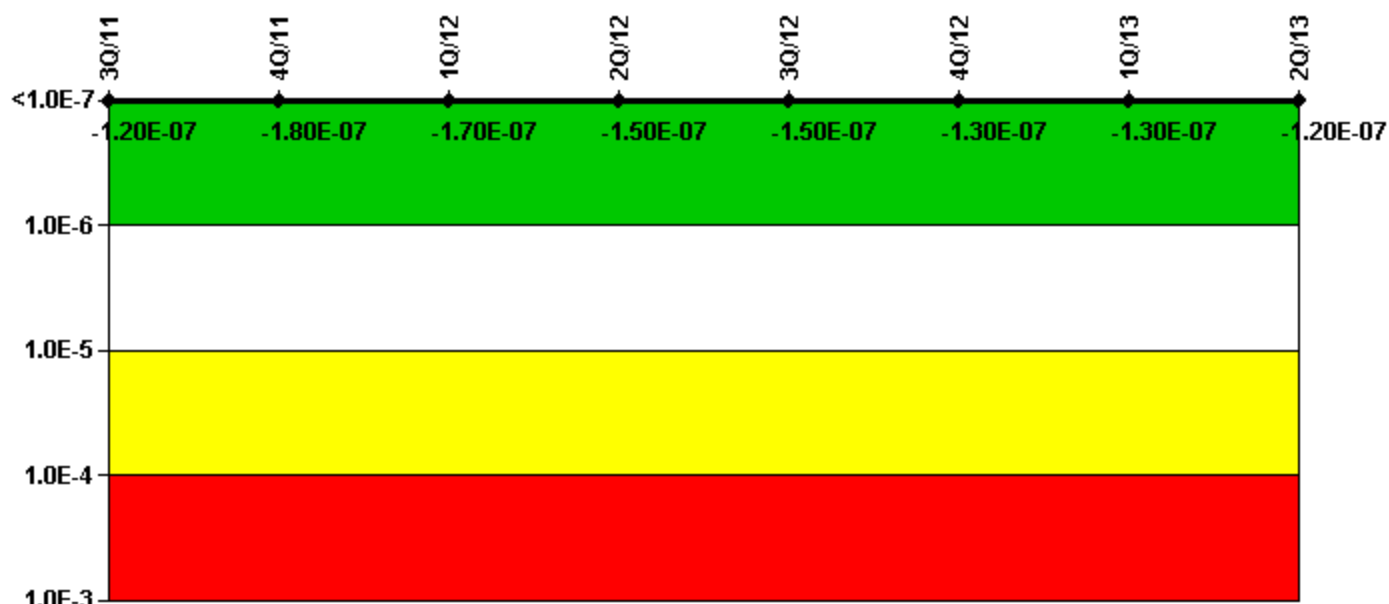
2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made are reflected in this quarters reporting.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

4Q/11: Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (Δ CDF)	-2.87E-08	-3.45E-08	-3.45E-08	-3.42E-08	-3.42E-08	-3.33E-08	-3.33E-08	-2.41E-08
URI (Δ CDF)	-9.28E-08	-1.43E-07	-1.40E-07	-1.20E-07	-1.20E-07	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-07	-1.80E-07	-1.70E-07	-1.50E-07	-1.50E-07	-1.30E-07	-1.30E-07	-1.20E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

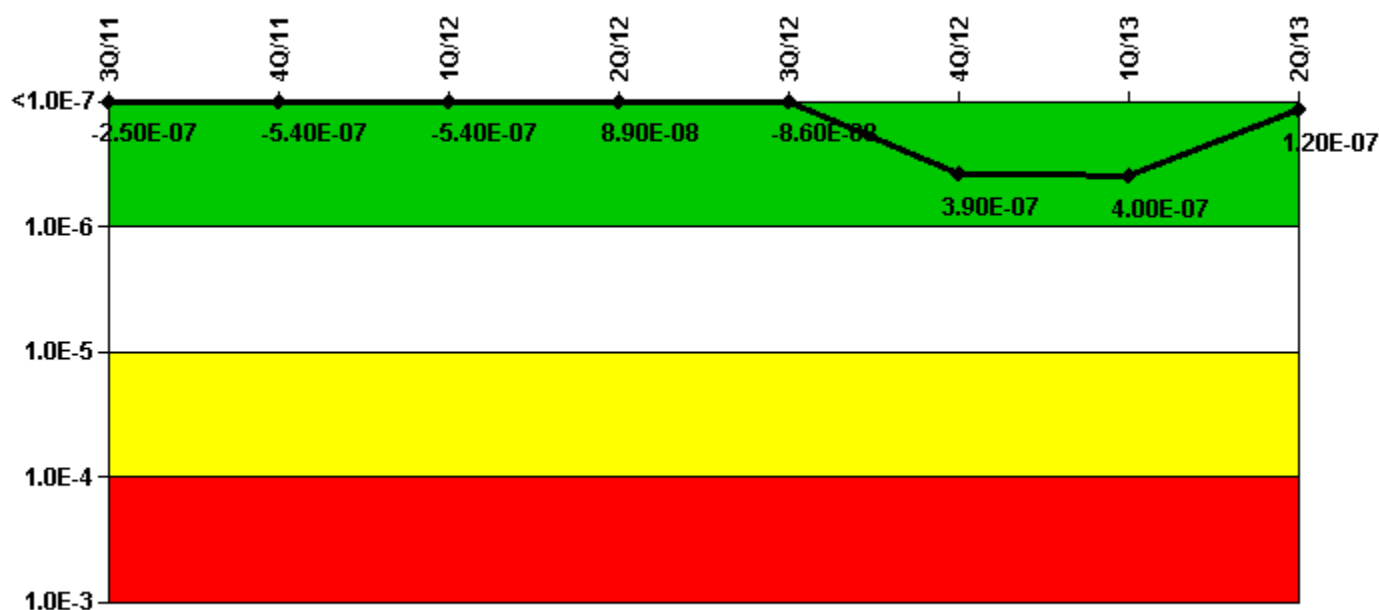
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC

trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than $1.0\text{E-}06$.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > $1.00\text{E-}6$ Yellow > $1.00\text{E-}5$ Red > $1.00\text{E-}4$

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (ΔCDF)	6.38E-07	3.97E-07	3.95E-07	4.41E-07	2.58E-07	5.21E-07	5.23E-07	2.44E-07
URI (ΔCDF)	-8.92E-07	-9.35E-07	-9.37E-07	-3.52E-07	-3.44E-07	-1.31E-07	-1.28E-07	-1.24E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.50E-07	-5.40E-07	-5.40E-07	8.90E-08	-8.60E-08	3.90E-07	4.00E-07	1.20E-07

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: IR#1414688 1B SX pp tripped unexpectedly. Data was actually entered in October due to INPO implementation of ICES it was unavailable to enter data in Sept.

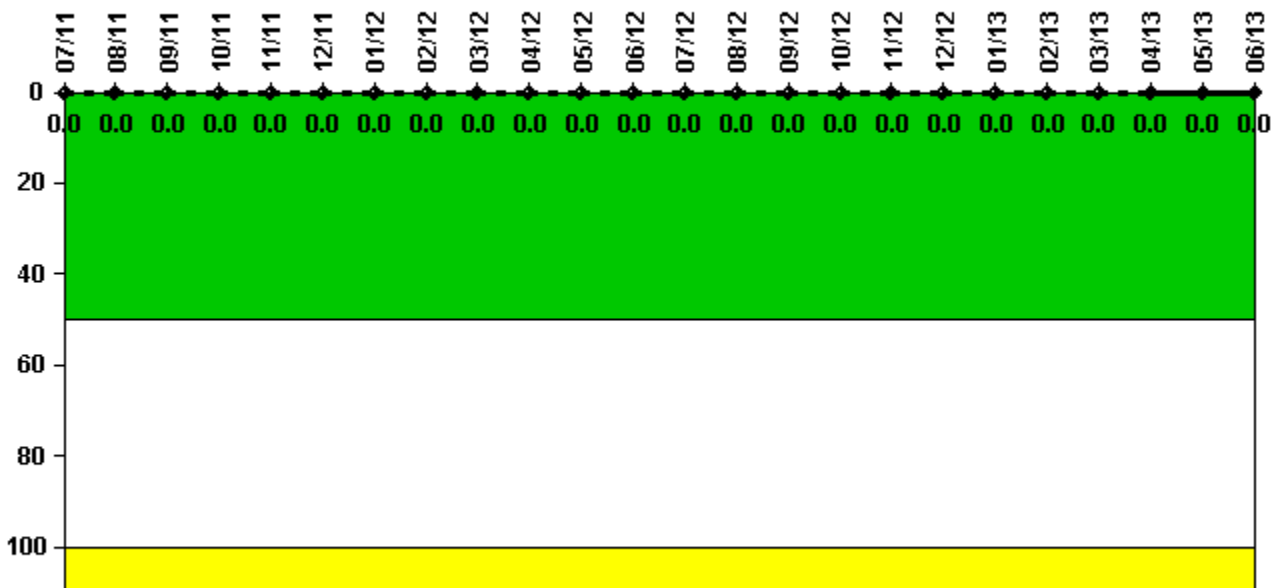
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

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Reactor Coolant System Activity



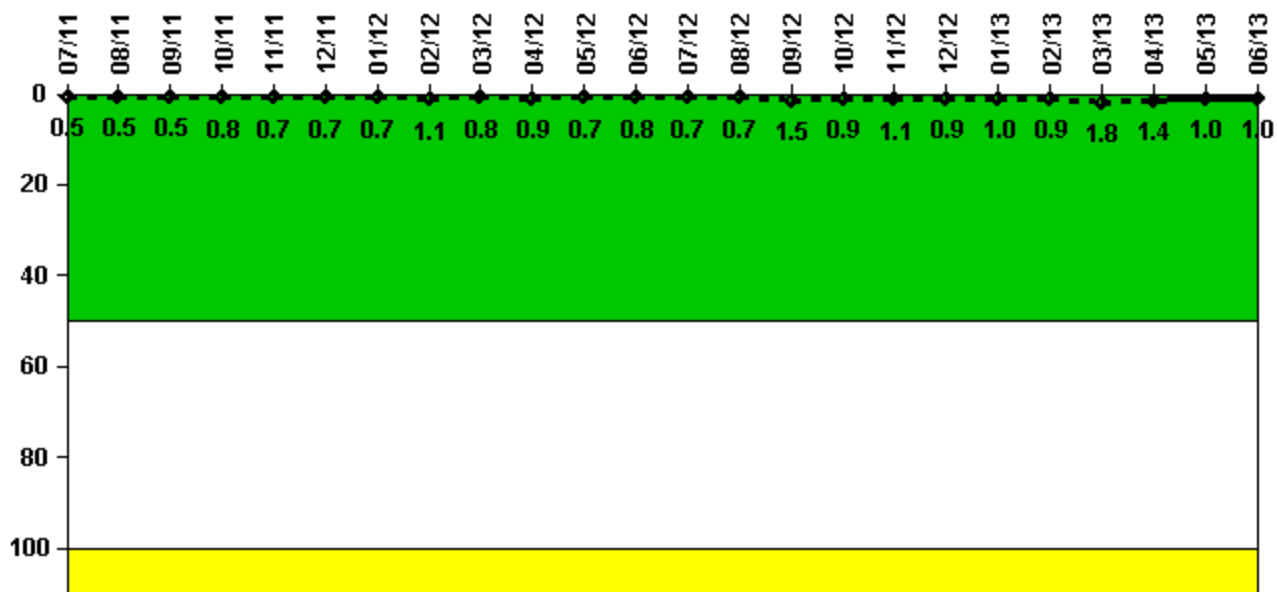
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum activity	0.000222	0.000153	0.000224	0.000055	0.000064	0.000065	0.000071	0.000069	0.000081	0.000075	0.000076	0.000126
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum activity	0.000129	0.000224	0.000090	0.000118	0.000091	0.000095	0.000099	0.000102	0.000104	0.000176	0.000049	0.000049
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



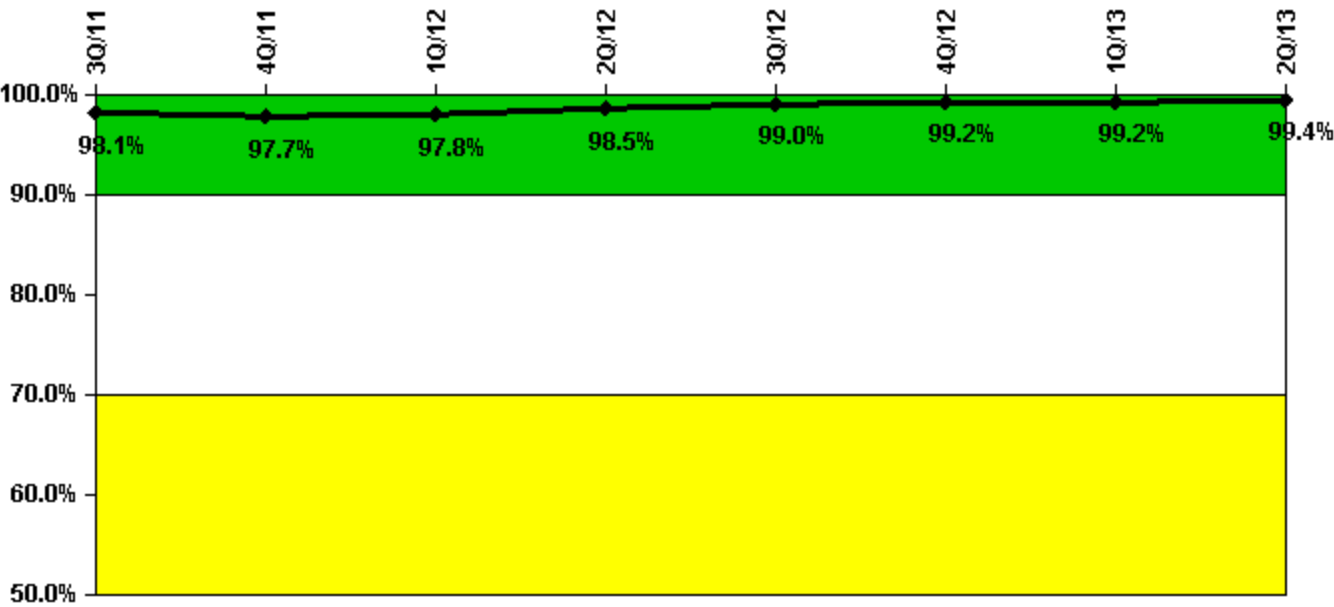
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum leakage	0.050	0.050	0.050	0.080	0.070	0.070	0.070	0.110	0.080	0.090	0.070	0.080
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.8	0.7	0.7	0.7	1.1	0.8	0.9	0.7	0.8
Reactor Coolant System Leakage	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum leakage	0.070	0.070	0.150	0.090	0.110	0.090	0.100	0.090	0.180	0.140	0.100	0.100
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.7	1.5	0.9	1.1	0.9	1.0	0.9	1.8	1.4	1.0	1.0

Licensee Comments: none

Drill/Exercise Performance



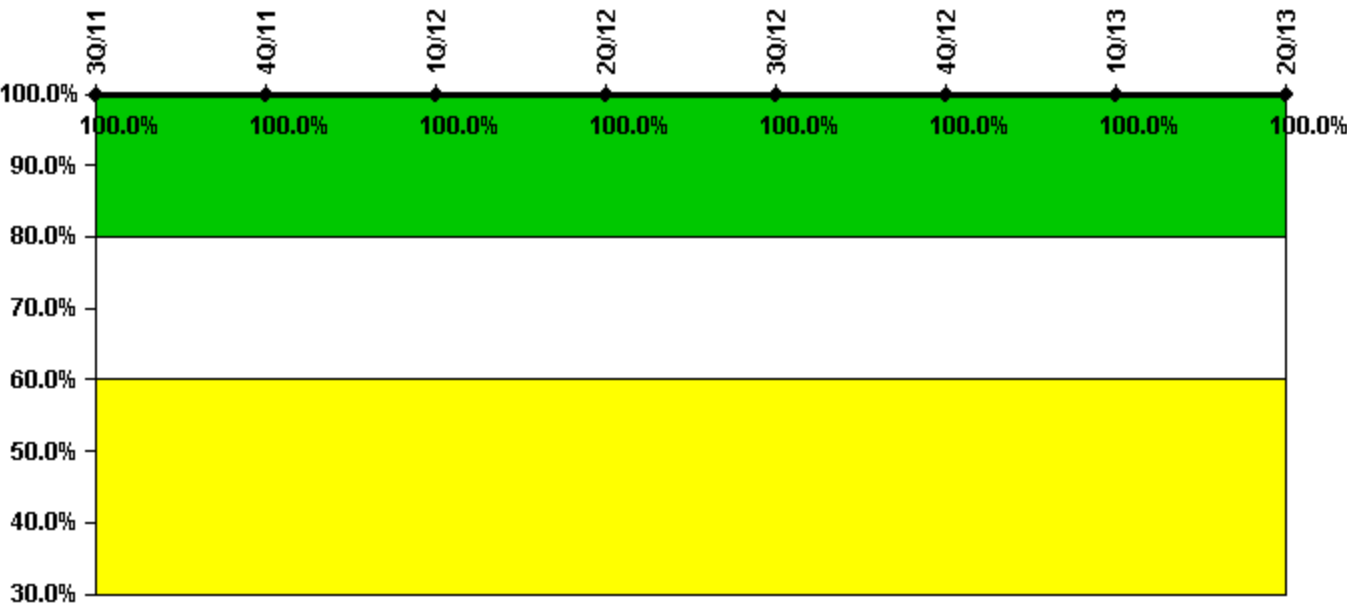
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Successful opportunities	62.0	35.0	96.0	126.0	24.0	3.0	104.0	12.0
Total opportunities	62.0	37.0	97.0	126.0	24.0	3.0	104.0	12.0
Indicator value	98.1%	97.7%	97.8%	98.5%	99.0%	99.2%	99.2%	99.4%

Licensee Comments: none

ERO Drill Participation



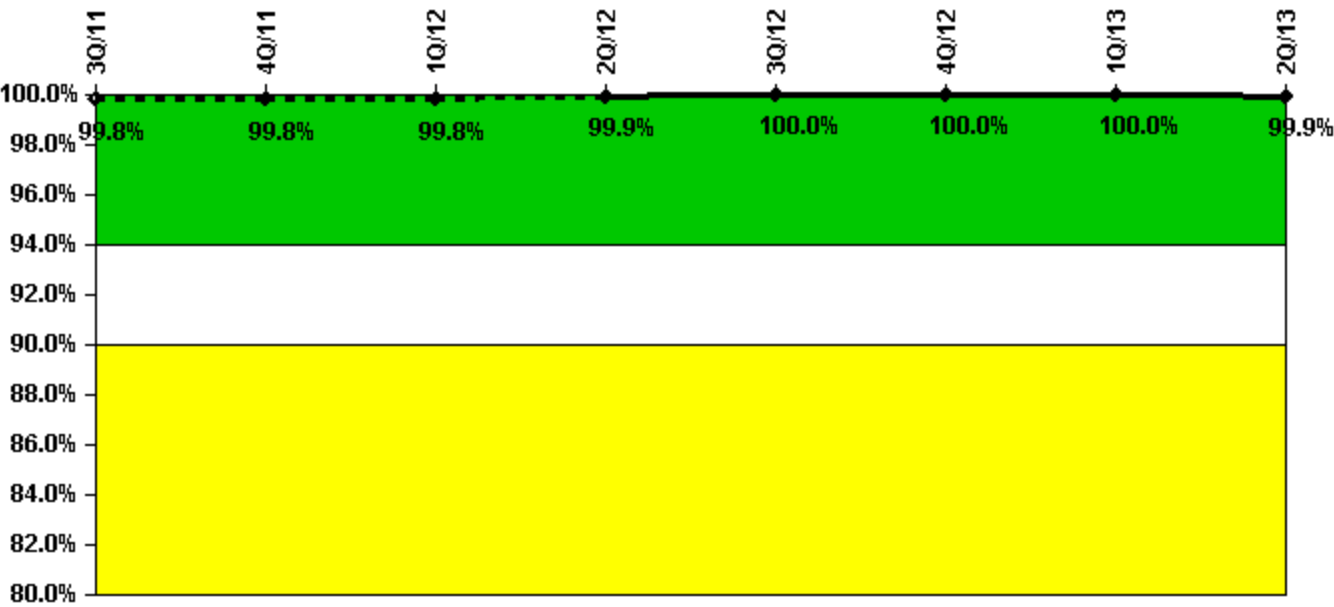
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Participating Key personnel	75.0	74.0	74.0	77.0	78.0	78.0	78.0	76.0
Total Key personnel	75.0	74.0	74.0	77.0	78.0	78.0	78.0	76.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



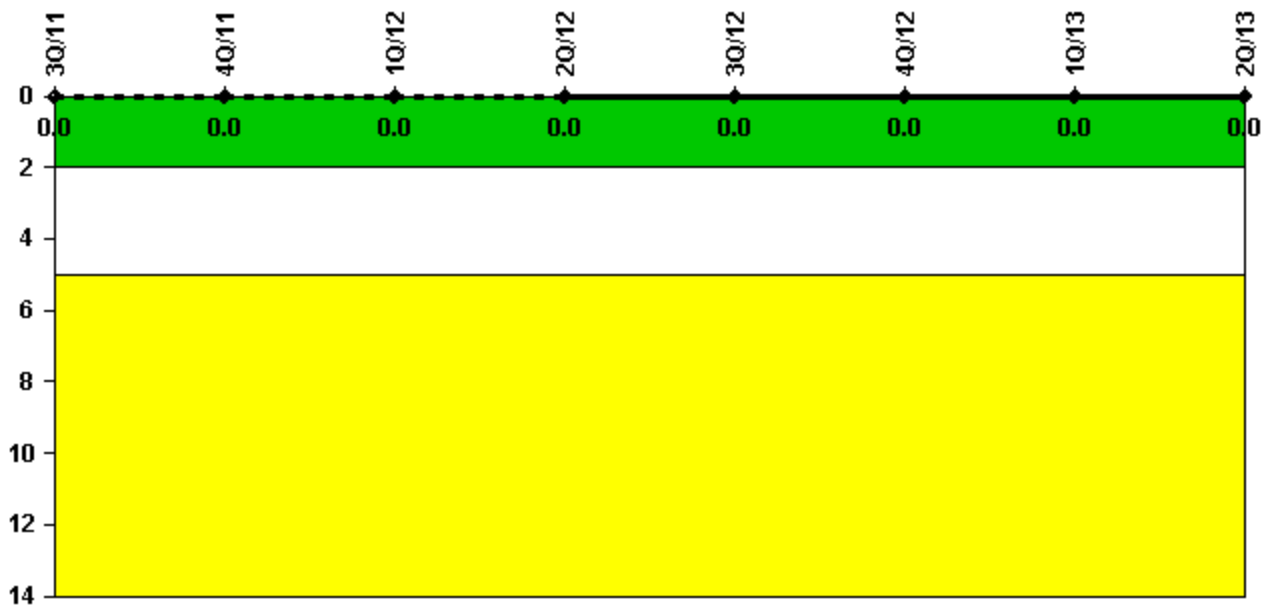
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Successful siren-tests	3893	3903	3962	3903	3841	3904	3902	3900
Total sirens-tests	3904	3904	3965	3904	3843	3904	3904	3904
Indicator value	99.8%	99.8%	99.8%	99.9%	100.0%	100.0%	100.0%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



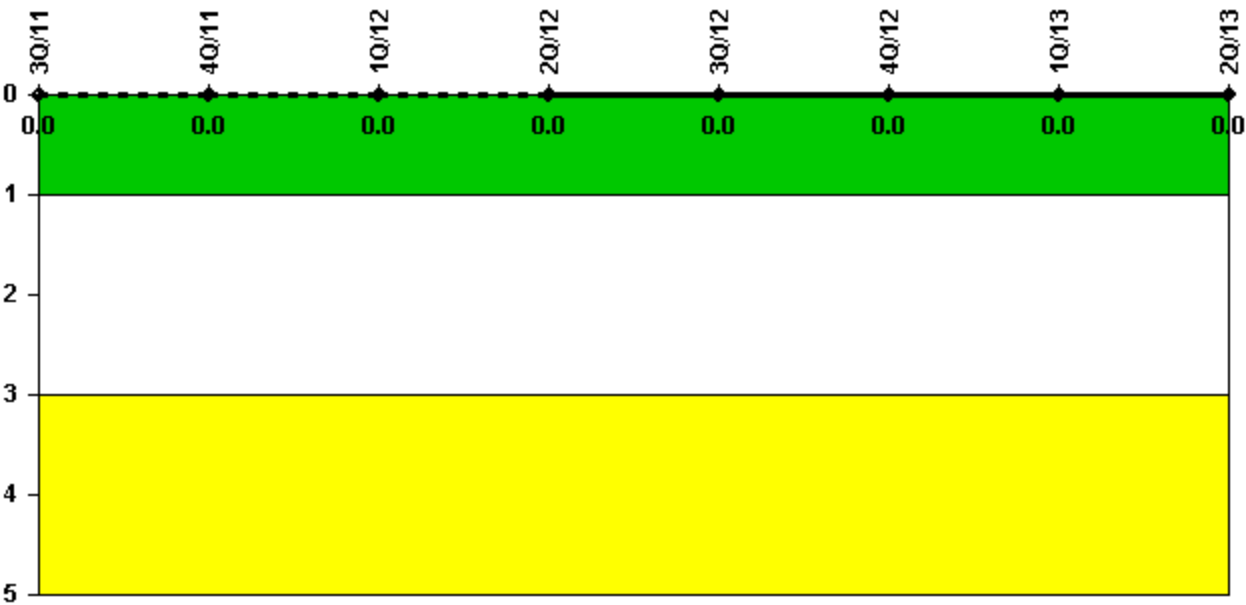
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: August 19, 2013

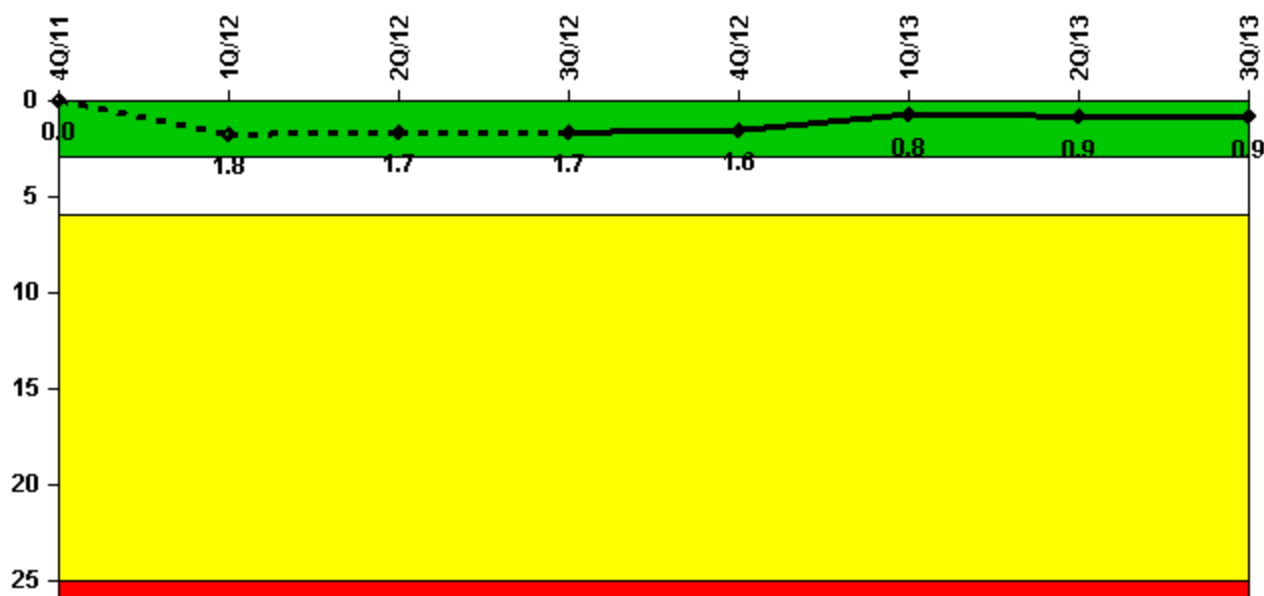
Byron 2

3Q/2013 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Station Unit 2 3Q2013

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

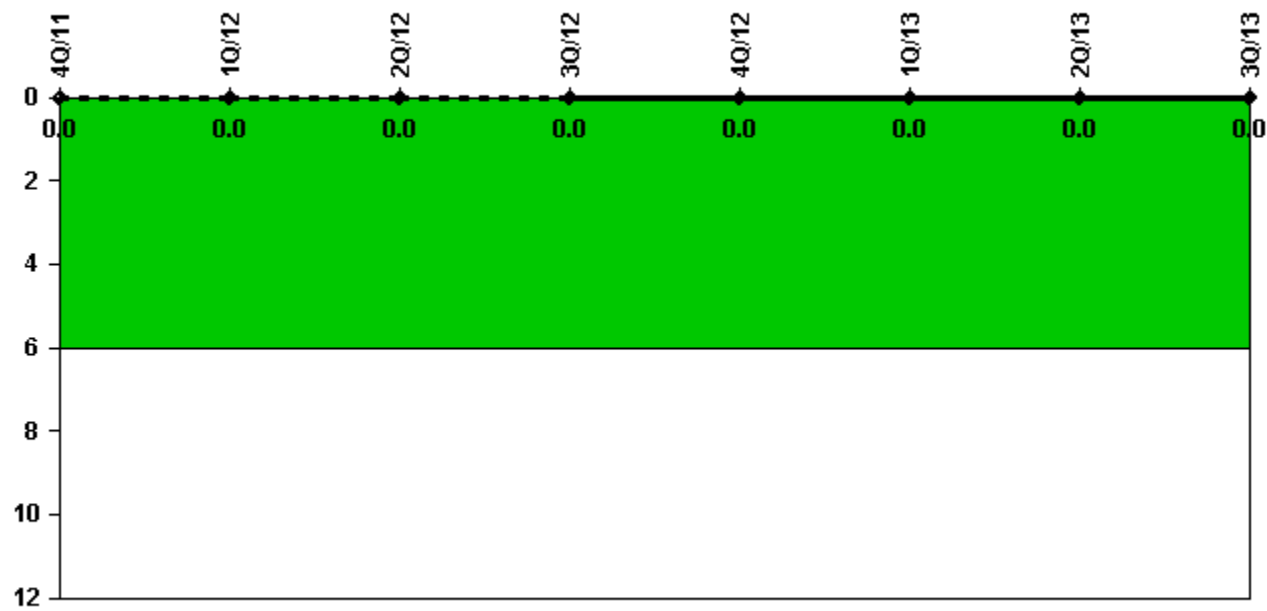
Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Unplanned scrams	0	2.0	0	0	0	1.0	0	0
Critical hours	2004.4	2004.4	2184.0	2208.0	2209.0	2129.6	1653.7	2208.0
Indicator value	0	1.8	1.7	1.7	1.6	0.8	0.9	0.9

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



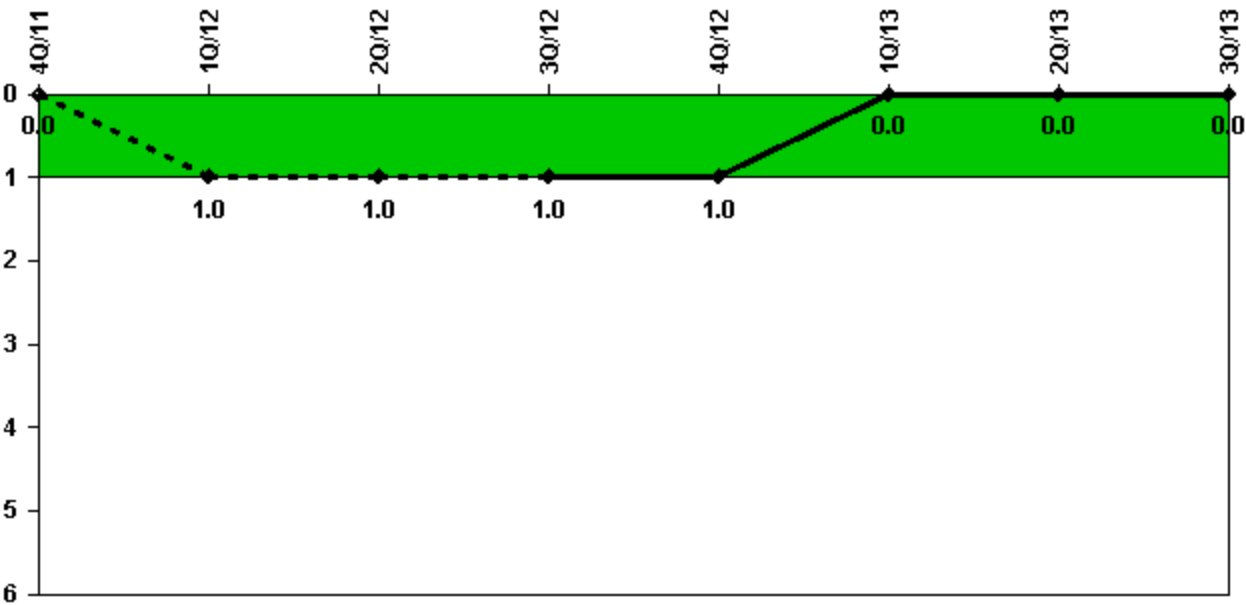
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2004.4	2004.4	2184.0	2208.0	2209.0	2129.6	1653.7	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

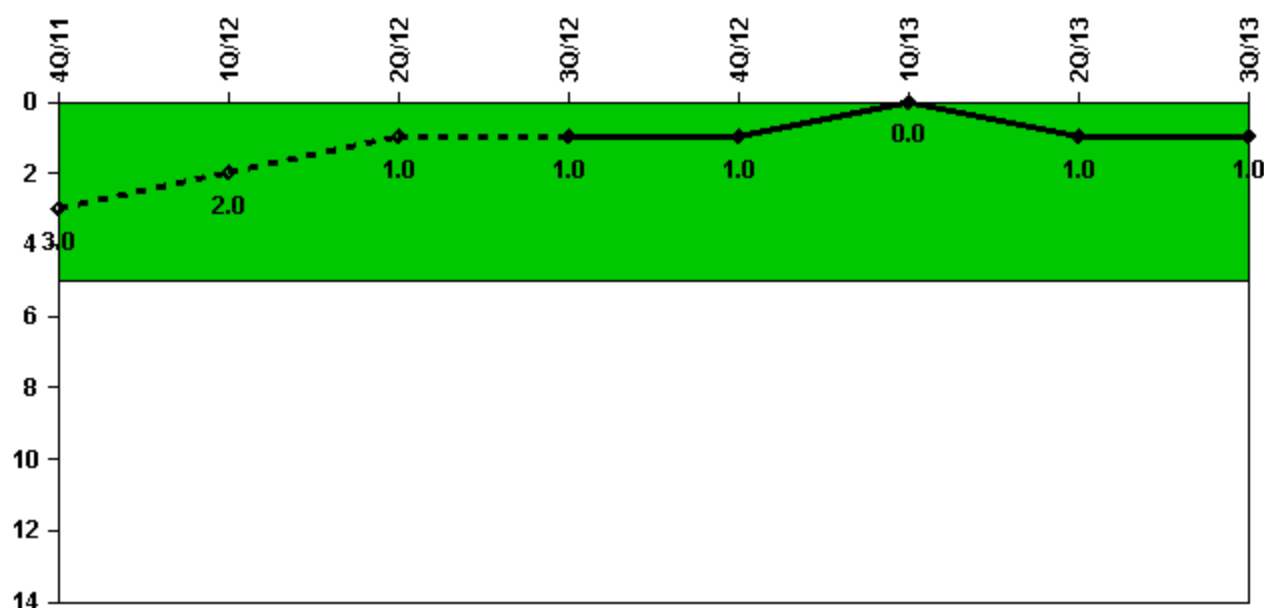
Notes

Unplanned Scrams with Complications	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Scrams with complications	0	1.0	0	0	0	0	0	0
Indicator value	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Safety System Functional Failures	0	1	0	0	0	0	1	0
Indicator value	3	2	1	1	1	0	1	1

Licensee Comments:

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

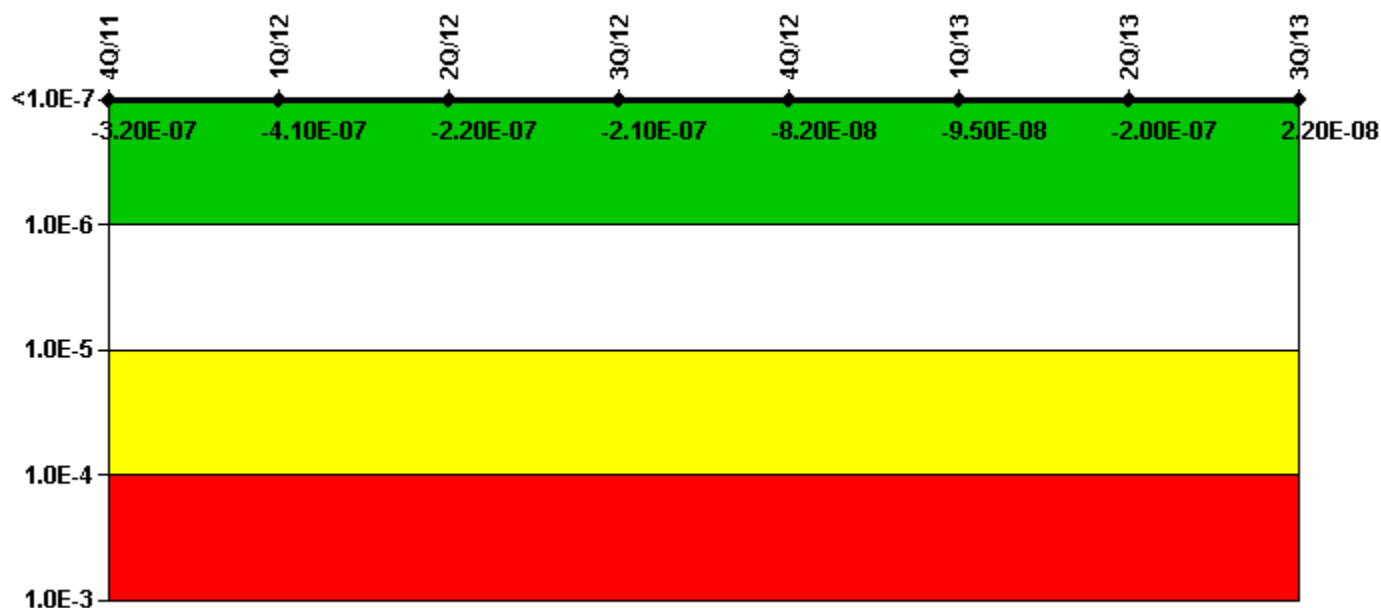
3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

2Q/12: LER 2012-001-00 - No SSFF

1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

4Q/11: LER 2011-002-00, "Containment Pressure Not Within Limits Longer than Allowed by Technical Specifications Due to Personnel Error"

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI (Δ CDF)	1.15E-07	5.69E-08	4.09E-08	3.62E-08	4.00E-08	1.42E-08	9.68E-09	1.52E-08
URI (Δ CDF)	-4.36E-07	-4.65E-07	-2.64E-07	-2.42E-07	-1.22E-07	-1.09E-07	-2.14E-07	7.27E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.20E-07	-4.10E-07	-2.20E-07	-2.10E-07	-8.20E-08	-9.50E-08	-2.00E-07	2.20E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

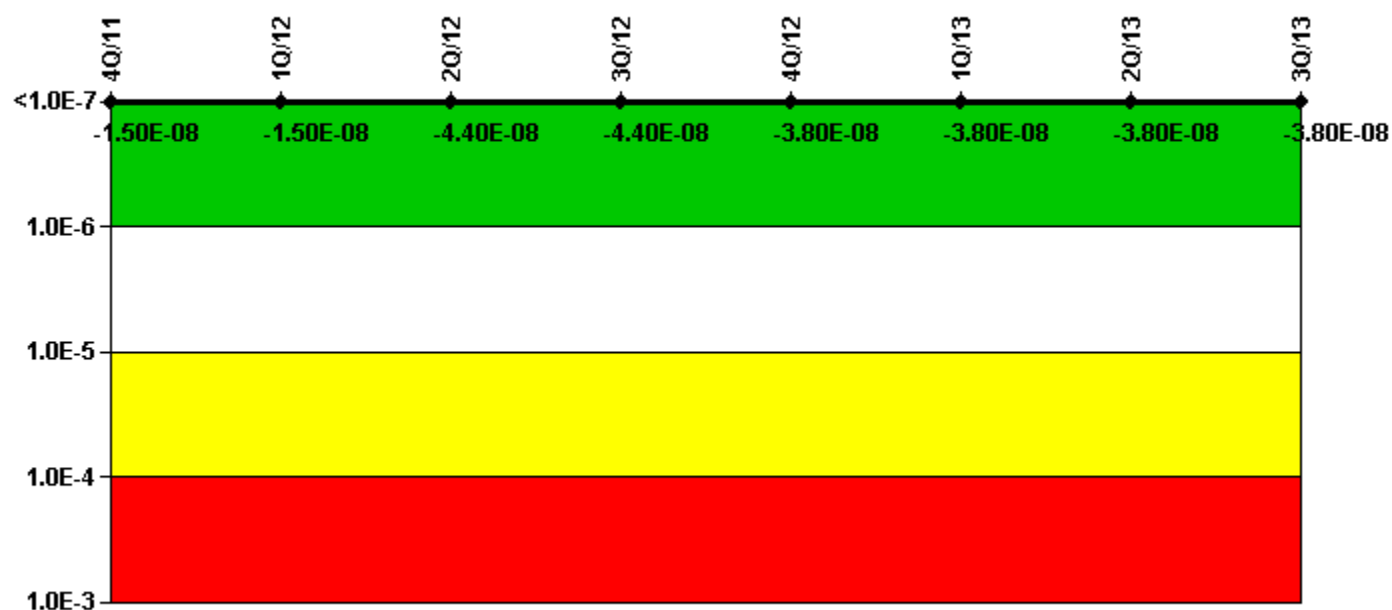
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised

Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI (Δ CDF)	-1.30E-08	-1.30E-08	-3.85E-08	-3.81E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (Δ CDF)	-1.94E-09	-1.96E-09	-5.83E-09	-5.89E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-08	-1.50E-08	-4.40E-08	-4.40E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

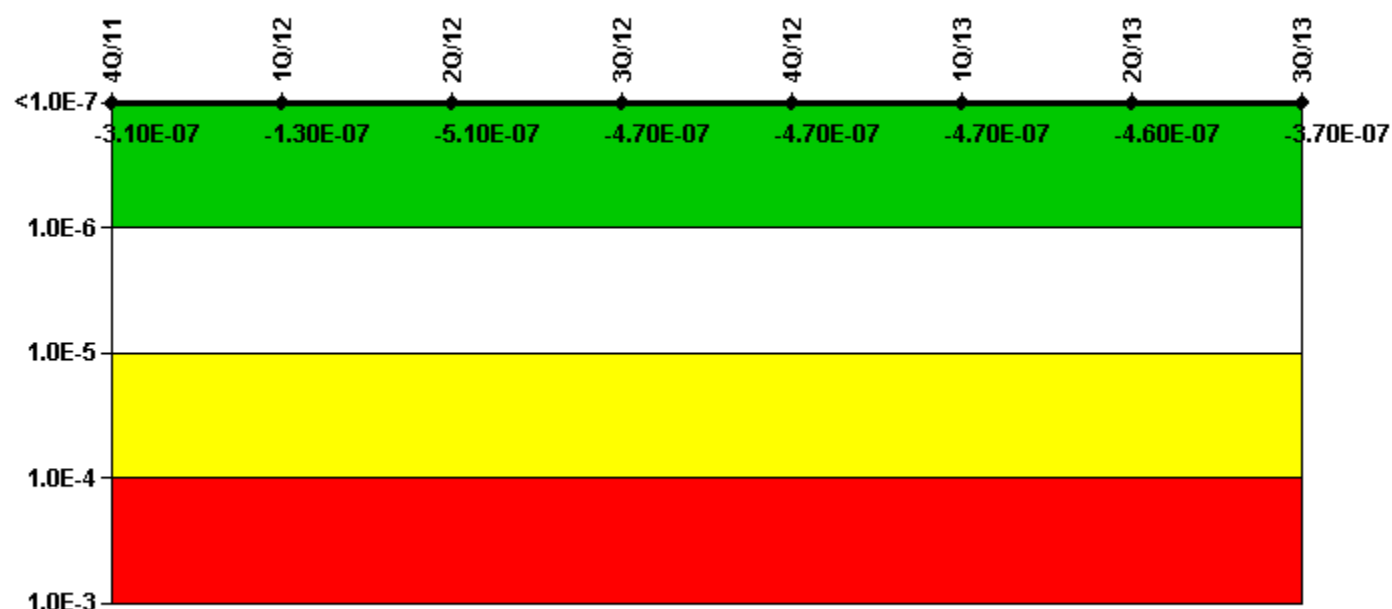
4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI (Δ CDF)	1.11E-09	1.33E-07	-8.33E-08	-4.75E-08	-7.83E-08	-7.73E-08	-7.81E-08	1.36E-08
URI (Δ CDF)	-3.14E-07	-2.60E-07	-4.26E-07	-4.25E-07	-3.93E-07	-3.93E-07	-3.87E-07	-3.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-07	-1.30E-07	-5.10E-07	-4.70E-07	-4.70E-07	-4.70E-07	-4.60E-07	-3.70E-07

Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

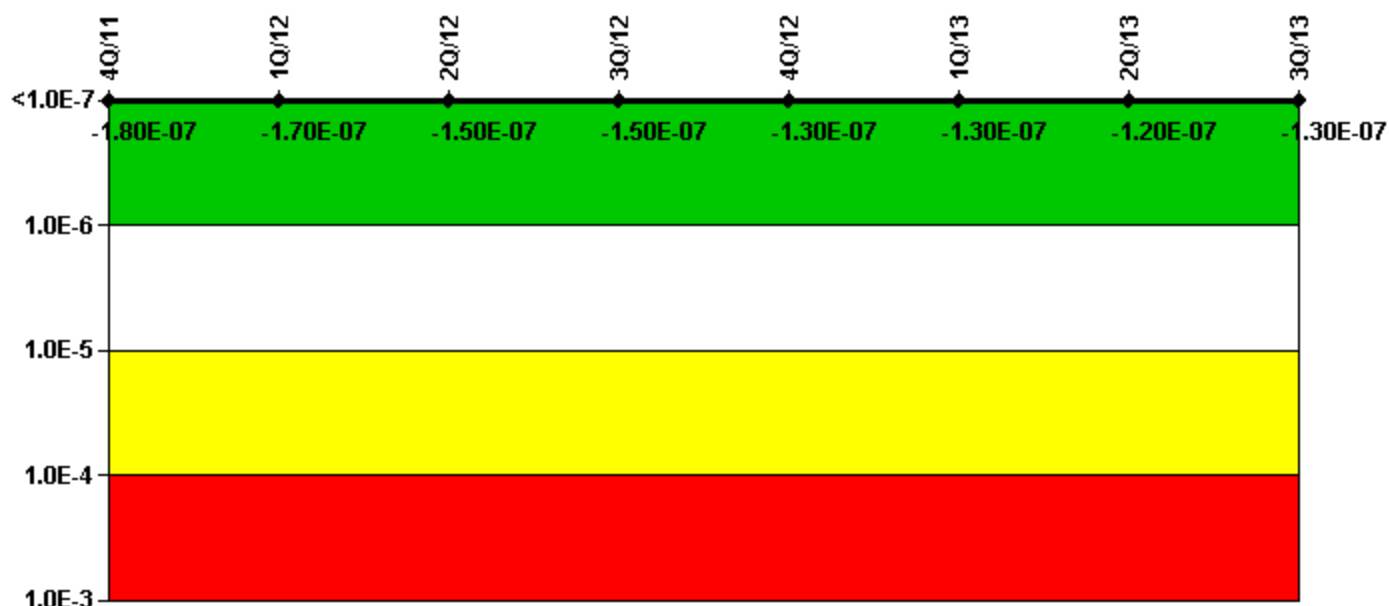
2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made are reflected in this quarters reporting.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

4Q/11: Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI (Δ CDF)	-3.45E-08	-3.45E-08	-3.42E-08	-3.42E-08	-3.33E-08	-3.33E-08	-2.41E-08	-3.33E-08
URI (Δ CDF)	-1.43E-07	-1.40E-07	-1.20E-07	-1.20E-07	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.80E-07	-1.70E-07	-1.50E-07	-1.50E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

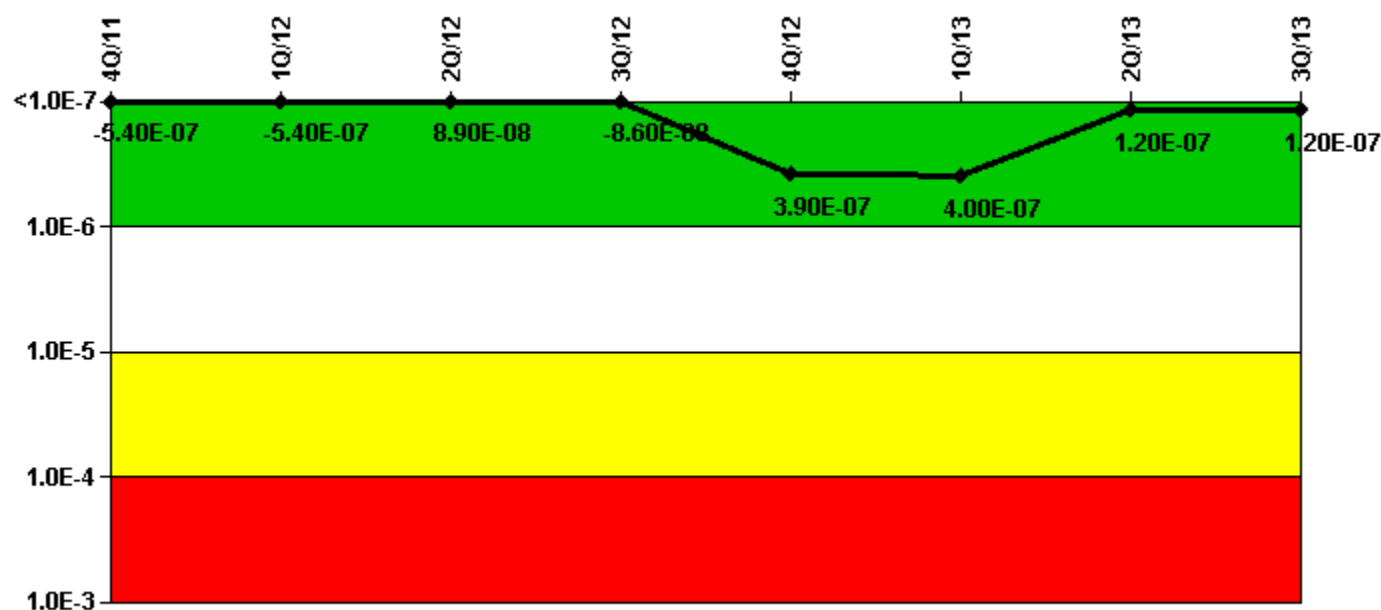
3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC

trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than $1.0\text{E-}06$.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > $1.00\text{E-}6$ Yellow > $1.00\text{E-}5$ Red > $1.00\text{E-}4$

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI (ΔCDF)	3.97E-07	3.95E-07	4.41E-07	2.58E-07	5.21E-07	5.23E-07	2.44E-07	2.45E-07
URI (ΔCDF)	-9.35E-07	-9.37E-07	-3.52E-07	-3.44E-07	-1.31E-07	-1.28E-07	-1.24E-07	-1.20E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.40E-07	-5.40E-07	8.90E-08	-8.60E-08	3.90E-07	4.00E-07	1.20E-07	1.20E-07

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

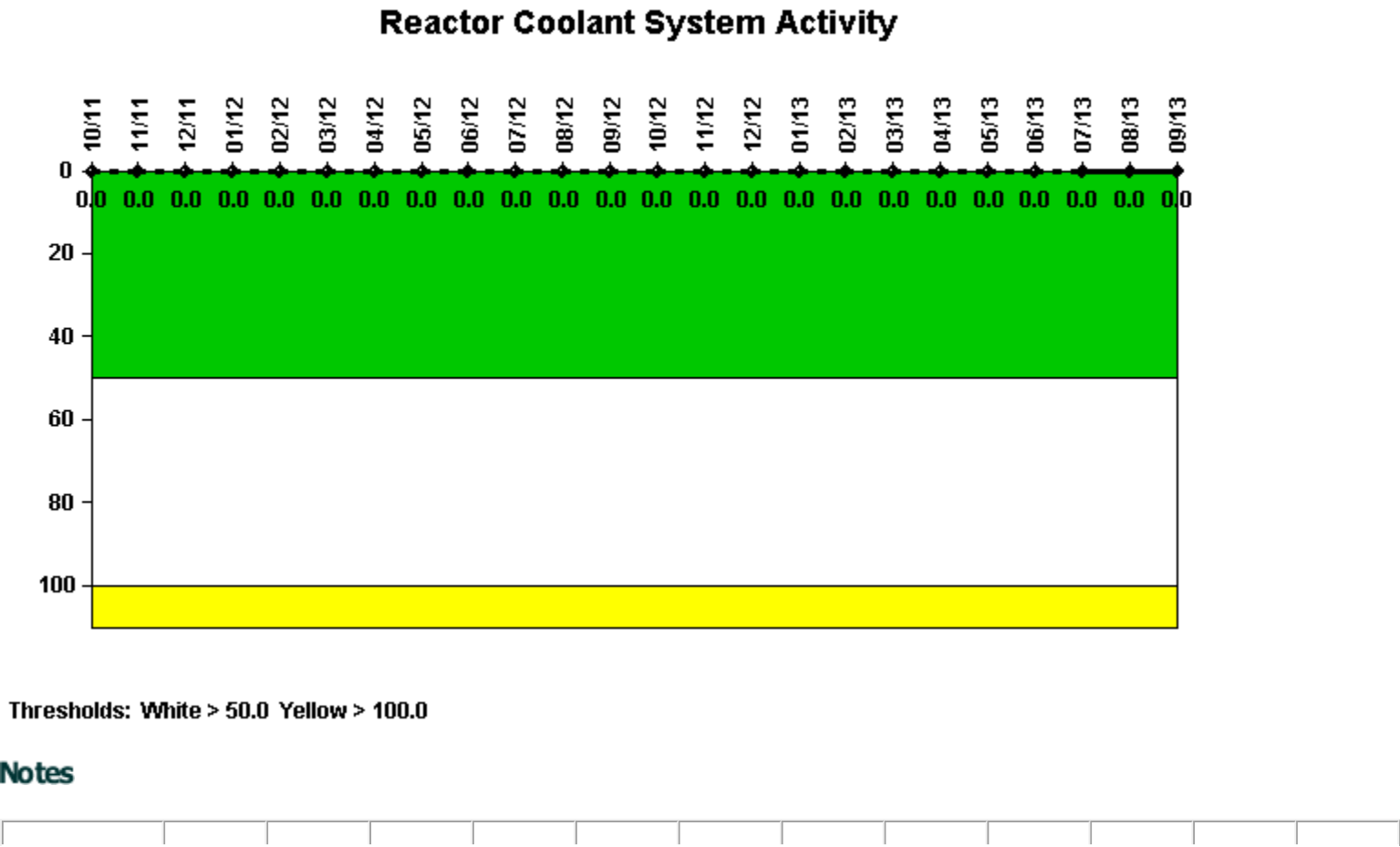
3Q/12: IR#1414688 1B SX pp tripped unexpectedly. Data was actually entered in October due to INPO implemetation of ICES it was unavailable to enter data in Sept.

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

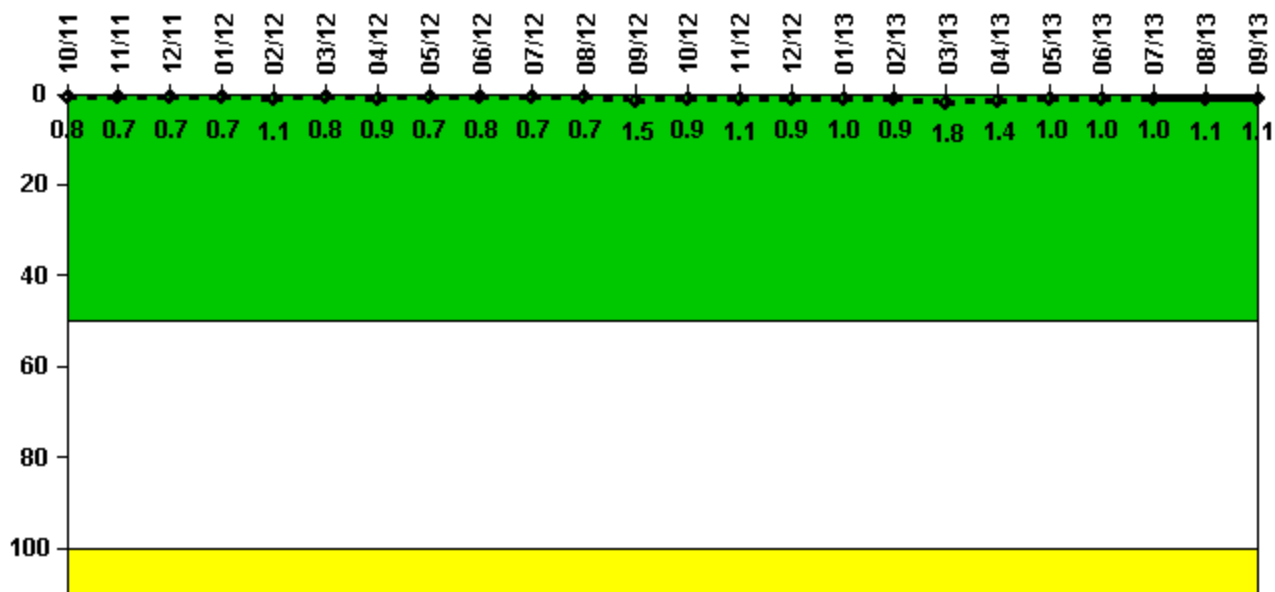
4Q/11: Changed PRA Parameter(s). Byron PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. 1/2RH8716A/B were removed from MSPI scoping due to Birnbaum value less than 1.0E-06.



Reactor Coolant System Activity	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12
Maximum activity	0.000055	0.000064	0.000065	0.000071	0.000069	0.000081	0.000075	0.000076	0.000126	0.000129	0.000224	0.000090
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum activity	0.000118	0.000091	0.000095	0.000099	0.000102	0.000104	0.000176	0.000049	0.000049	0.000049	0.000053	0.000054
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



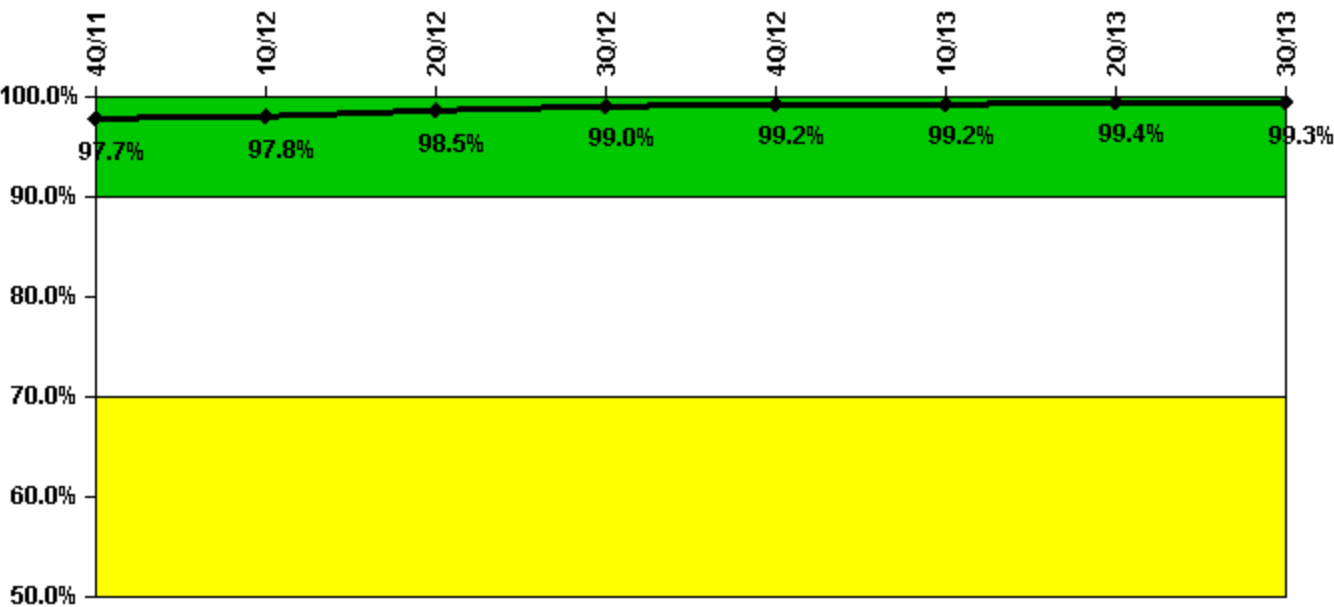
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12
Maximum leakage	0.080	0.070	0.070	0.070	0.110	0.080	0.090	0.070	0.080	0.070	0.070	0.150
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	0.7	0.7	0.7	1.1	0.8	0.9	0.7	0.8	0.7	0.7	1.5
Reactor Coolant System Leakage	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum leakage	0.090	0.110	0.090	0.100	0.090	0.180	0.140	0.100	0.100	0.100	0.110	0.110
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	1.1	0.9	1.0	0.9	1.8	1.4	1.0	1.0	1.0	1.1	1.1

Licensee Comments: none

Drill/Exercise Performance



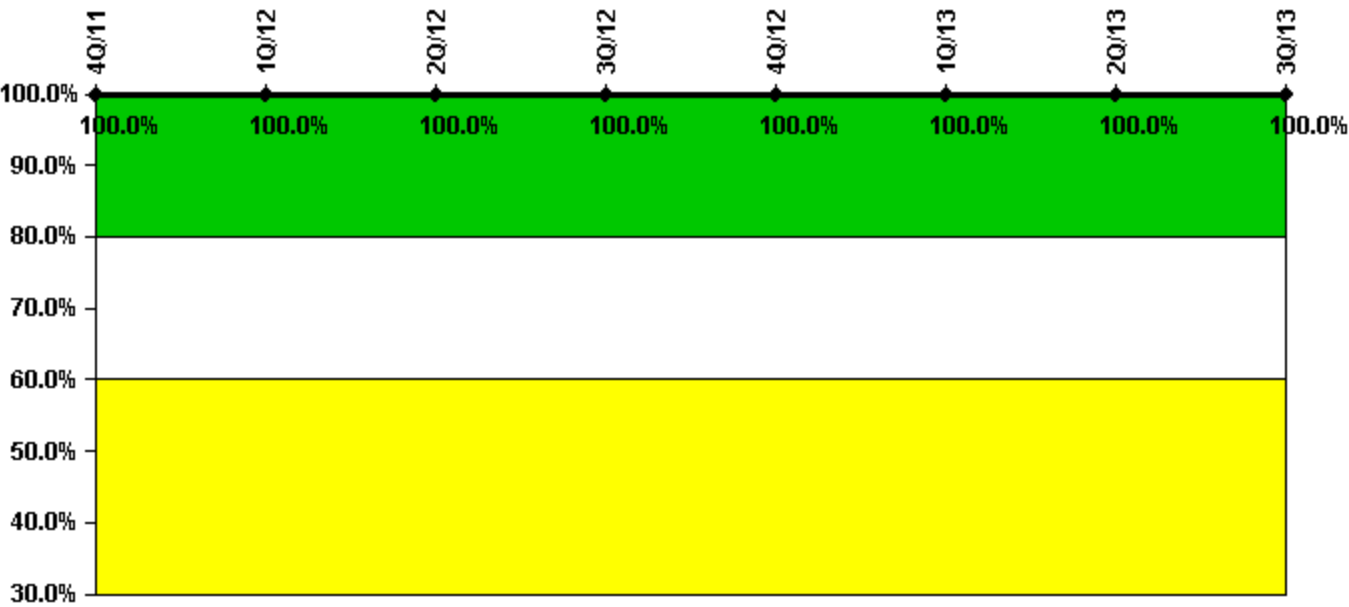
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Successful opportunities	35.0	96.0	126.0	24.0	3.0	104.0	12.0	55.0
Total opportunities	37.0	97.0	126.0	24.0	3.0	104.0	12.0	55.0
Indicator value	97.7%	97.8%	98.5%	99.0%	99.2%	99.2%	99.4%	99.3%

Licensee Comments: none

ERO Drill Participation



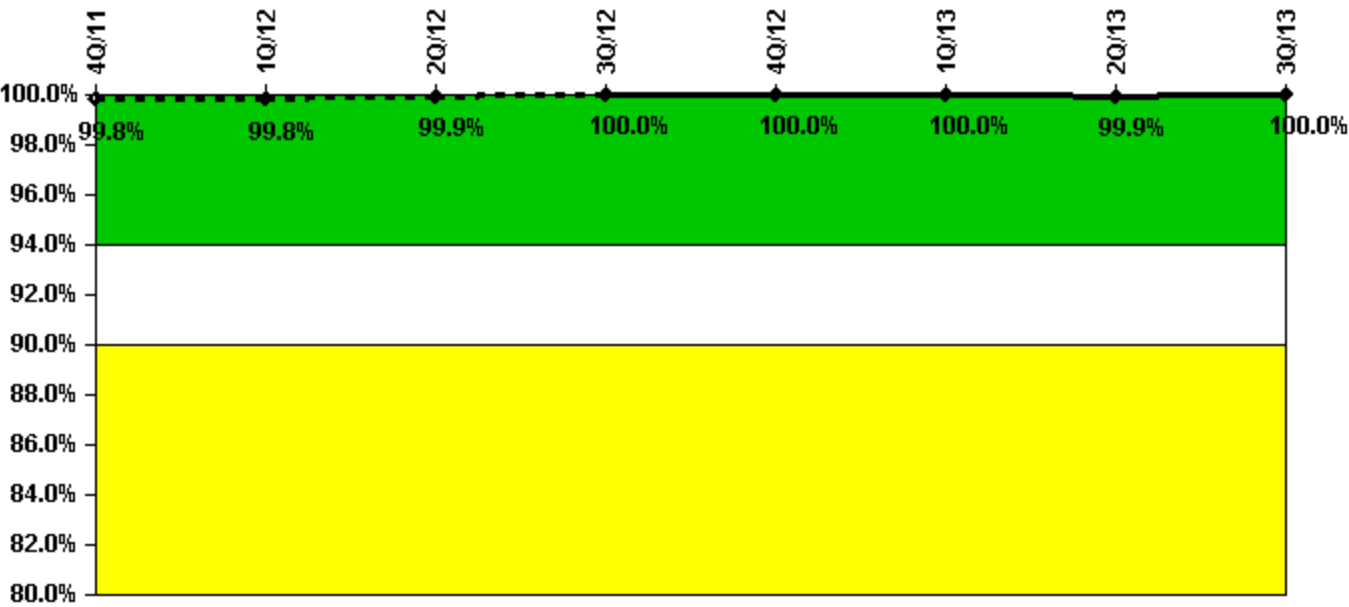
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Participating Key personnel	74.0	74.0	77.0	78.0	78.0	78.0	76.0	71.0
Total Key personnel	74.0	74.0	77.0	78.0	78.0	78.0	76.0	71.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



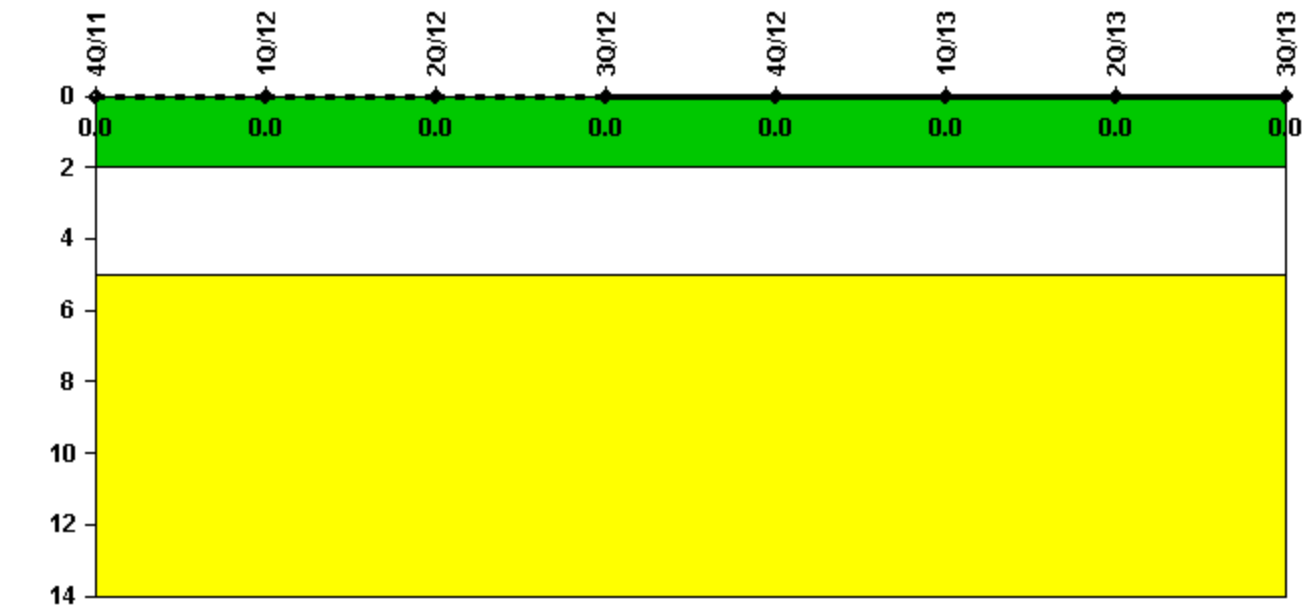
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Successful siren-tests	3903	3962	3903	3841	3904	3902	3900	3903
Total sirens-tests	3904	3965	3904	3843	3904	3904	3904	3904
Indicator value	99.8%	99.8%	99.9%	100.0%	100.0%	100.0%	99.9%	100.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



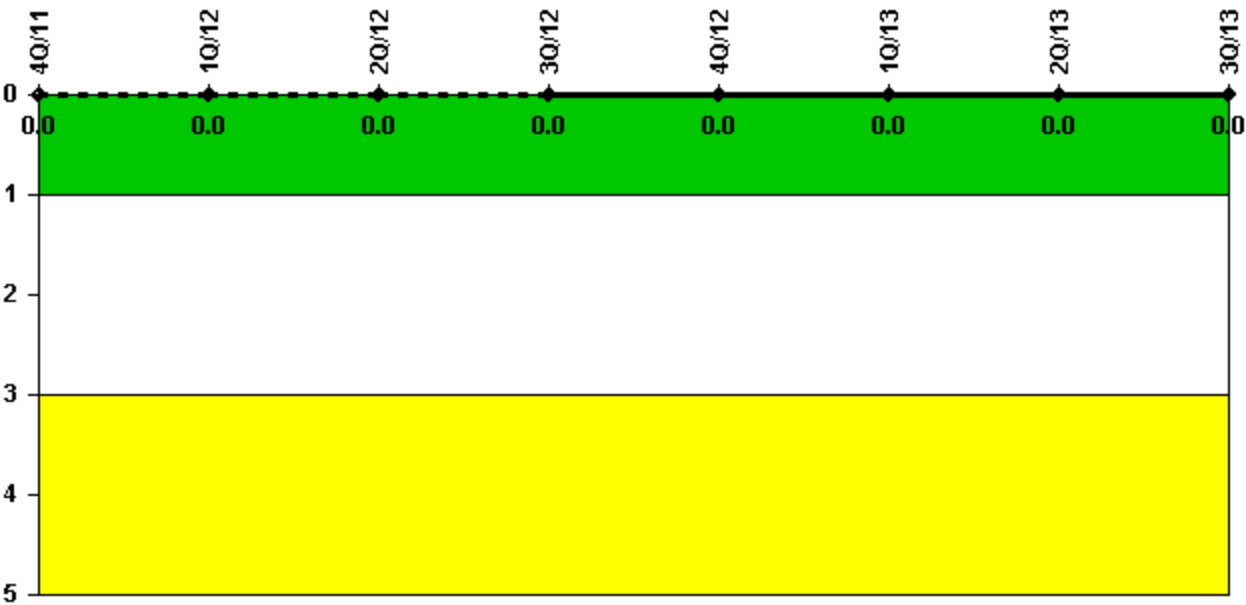
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: October 22, 2013

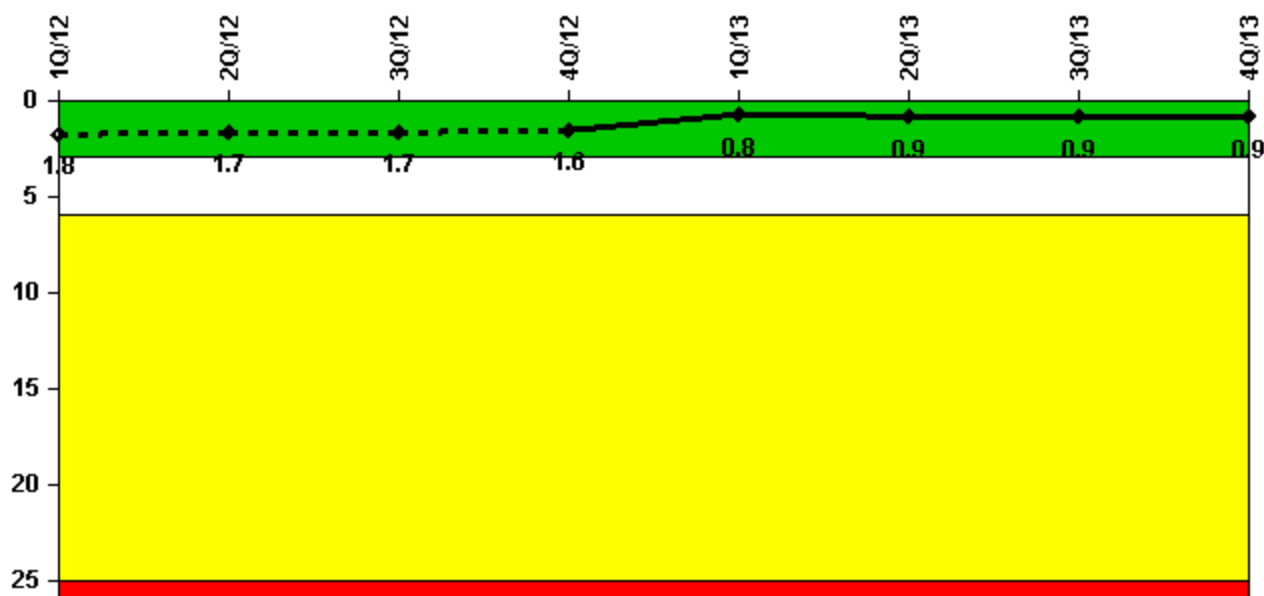
Byron 2

4Q/2013 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

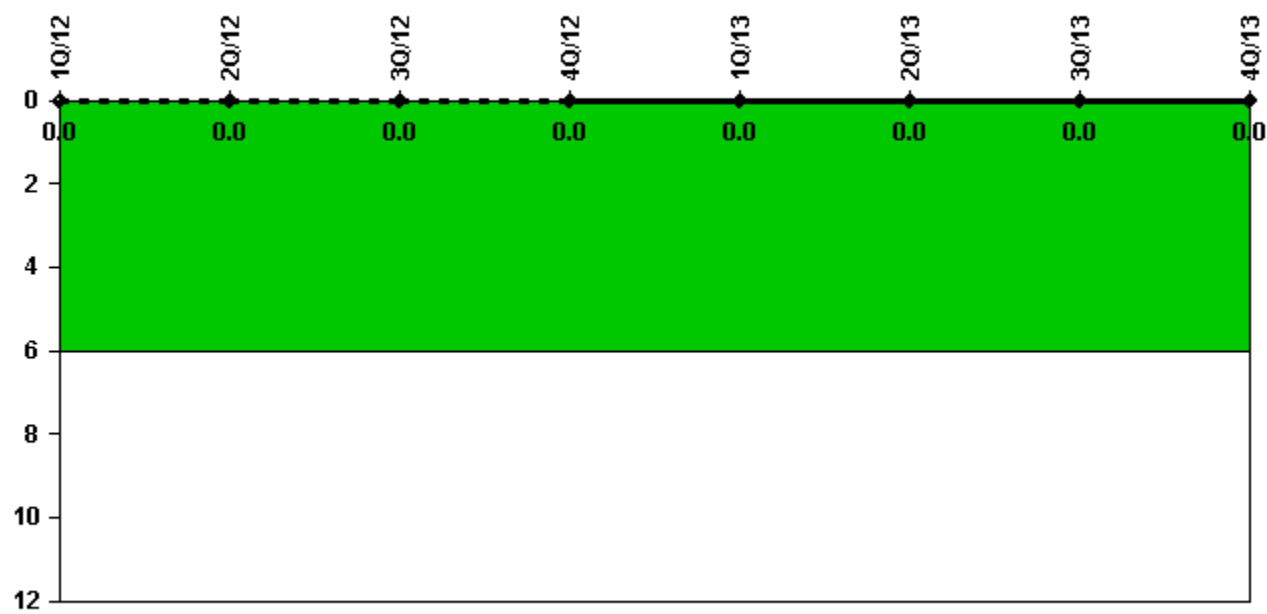
Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Unplanned scrams	2.0	0	0	0	1.0	0	0	0
Critical hours	2004.4	2184.0	2208.0	2209.0	2129.6	1653.7	2208.0	2209.0
Indicator value	1.8	1.7	1.7	1.6	0.8	0.9	0.9	0.9

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



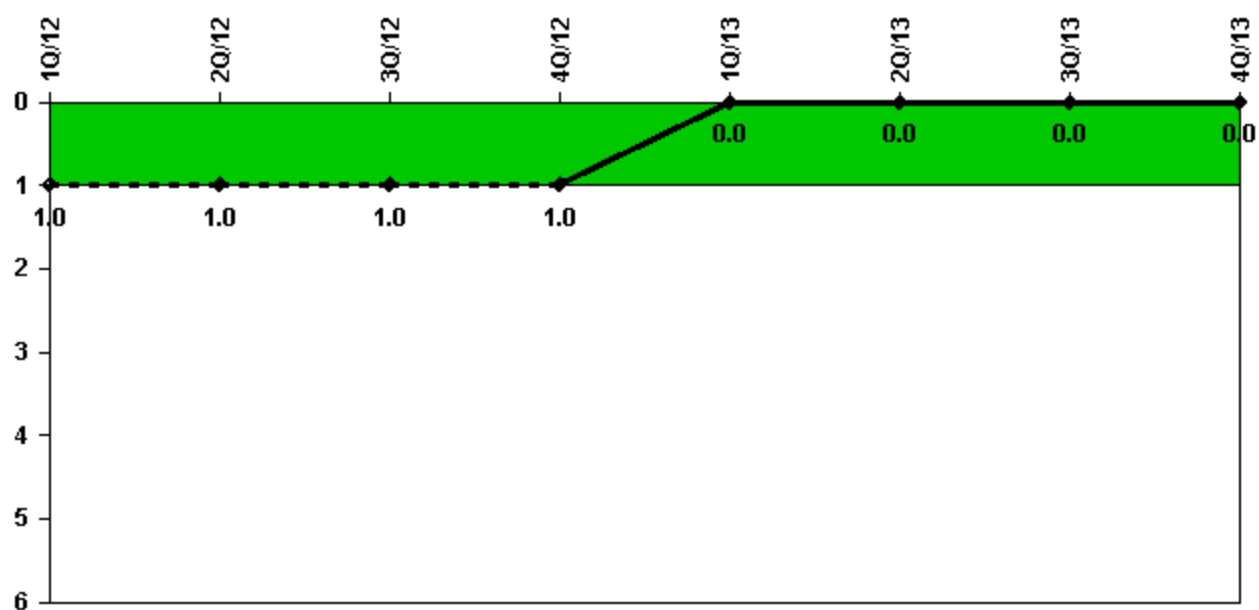
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2004.4	2184.0	2208.0	2209.0	2129.6	1653.7	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

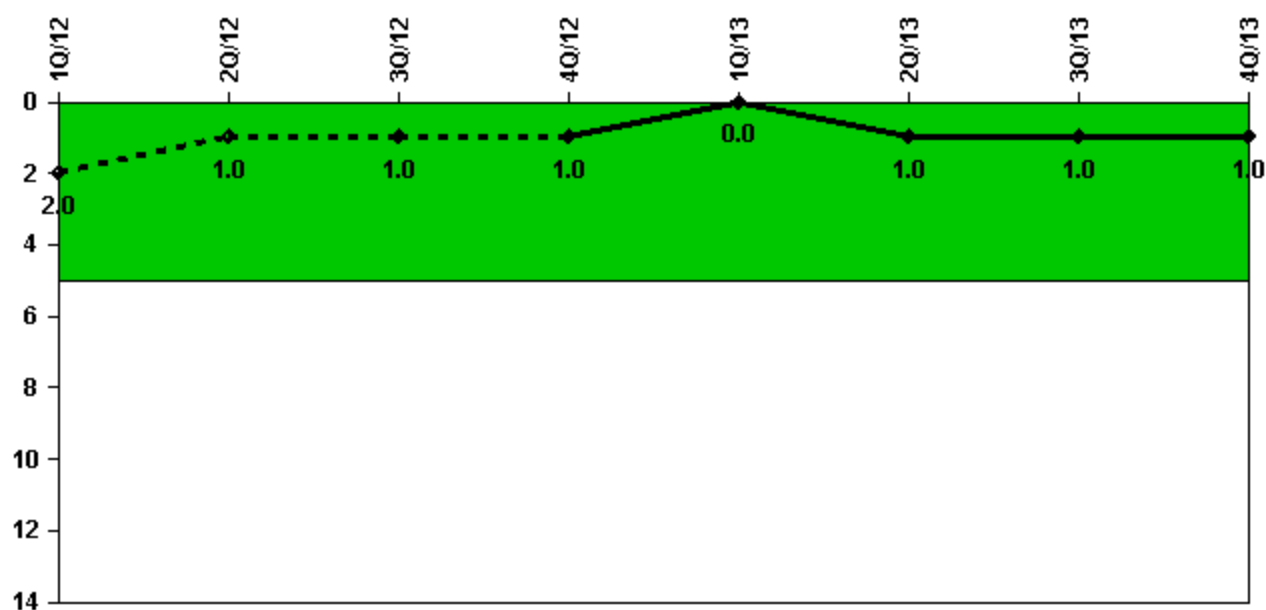
Notes

Unplanned Scrams with Complications	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Scrams with complications	1.0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Safety System Functional Failures	1	0	0	0	0	1	0	0
Indicator value	2	1	1	1	0	1	1	1

Licensee Comments:

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

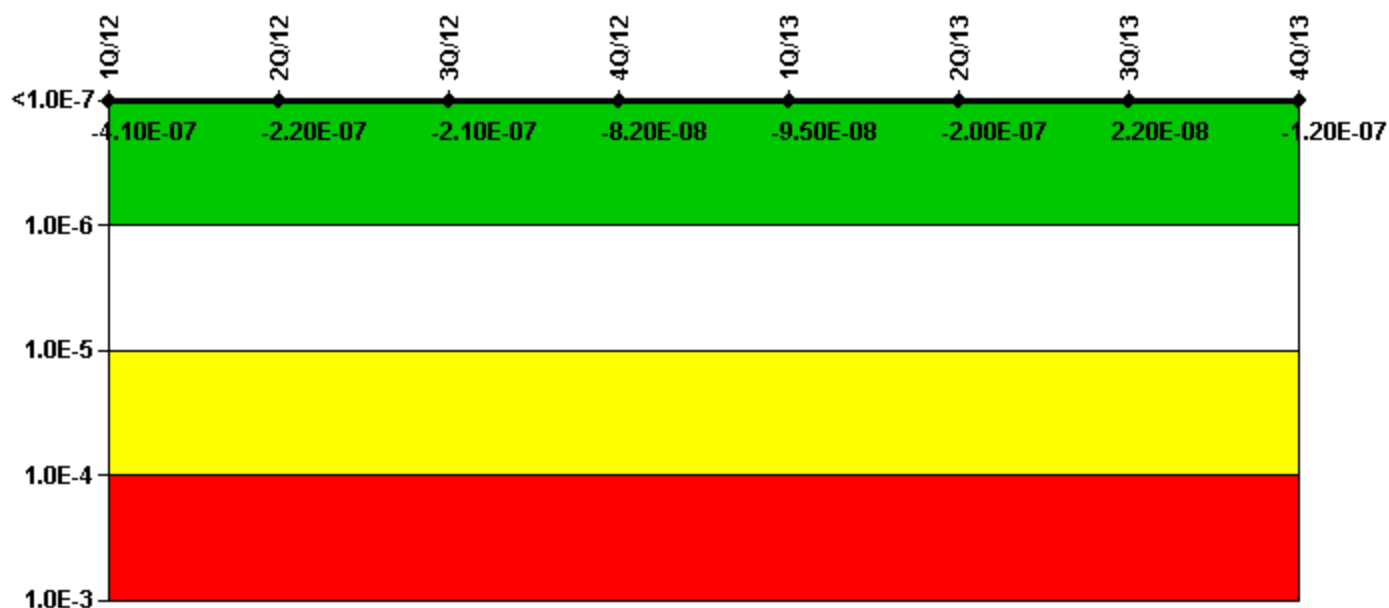
1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

2Q/12: LER 2012-001-00 - No SSFF

1Q/12: Licensee Event Report 2012-001-00, "Unit 2 Loss of Normal Offsite Power and Reactor Trip and Unit 1 Loss of Normal Offsite Power Due to Failure of System Auxiliary Transformer Inverted Insulators" The LER identifies the U2 LOOP as an SSFF.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI (Δ CDF)	5.69E-08	4.09E-08	3.62E-08	4.00E-08	1.42E-08	9.68E-09	1.52E-08	-1.56E-08
URI (Δ CDF)	-4.65E-07	-2.64E-07	-2.42E-07	-1.22E-07	-1.09E-07	-2.14E-07	7.27E-09	-1.03E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.10E-07	-2.20E-07	-2.10E-07	-8.20E-08	-9.50E-08	-2.00E-07	2.20E-08	-1.20E-07

Licensee Comments:

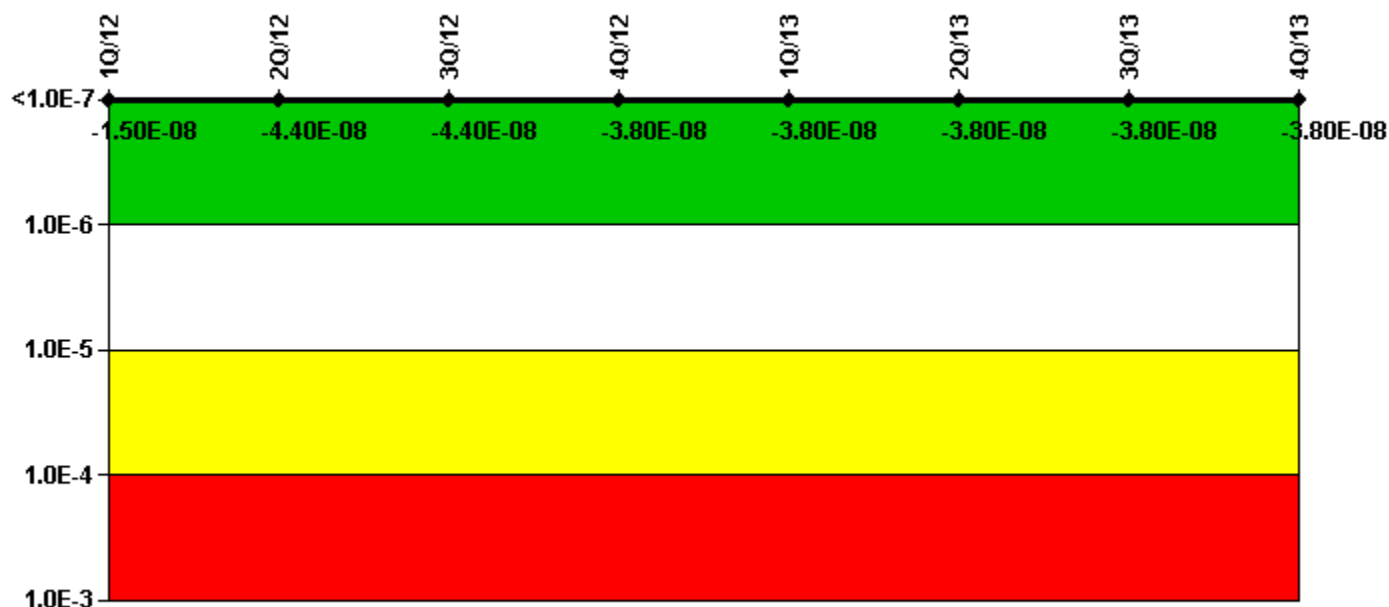
4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI (Δ CDF)	-1.30E-08	-3.85E-08	-3.81E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (Δ CDF)	-1.96E-09	-5.83E-09	-5.89E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-08	-4.40E-08	-4.40E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments:

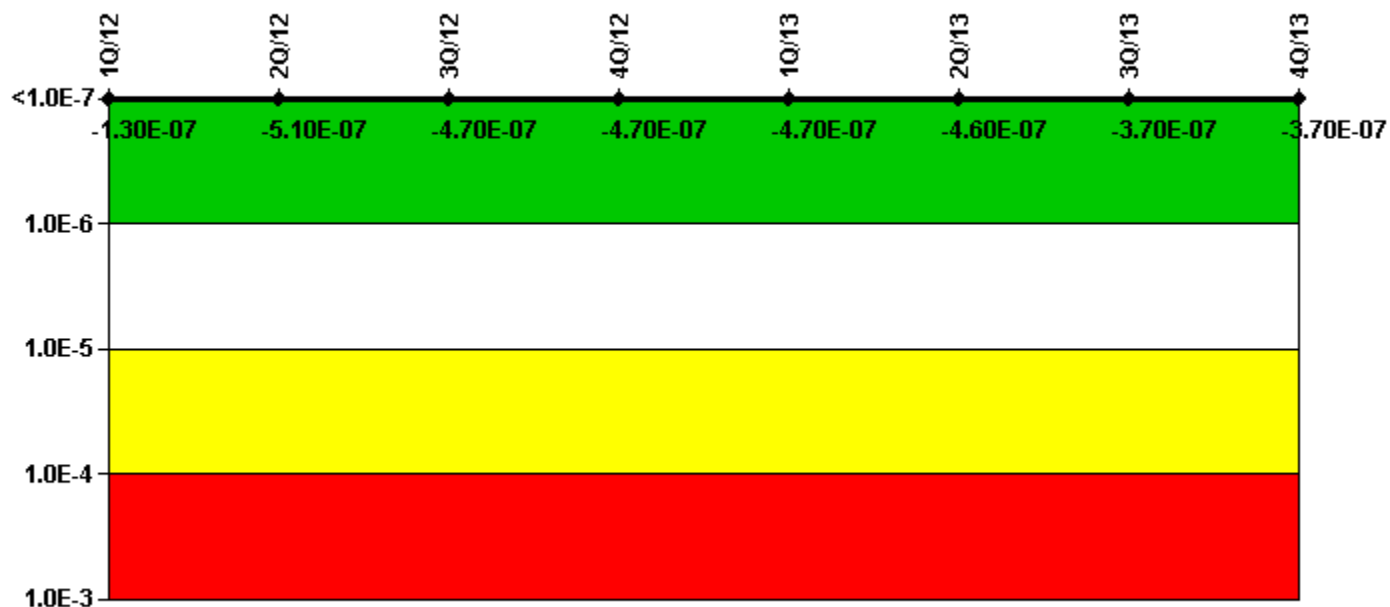
4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI (Δ CDF)	1.33E-07	-8.33E-08	-4.75E-08	-7.83E-08	-7.73E-08	-7.81E-08	1.36E-08	1.28E-08
URI (Δ CDF)	-2.60E-07	-4.26E-07	-4.25E-07	-3.93E-07	-3.93E-07	-3.87E-07	-3.85E-07	-3.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-5.10E-07	-4.70E-07	-4.70E-07	-4.70E-07	-4.60E-07	-3.70E-07	-3.70E-07

Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

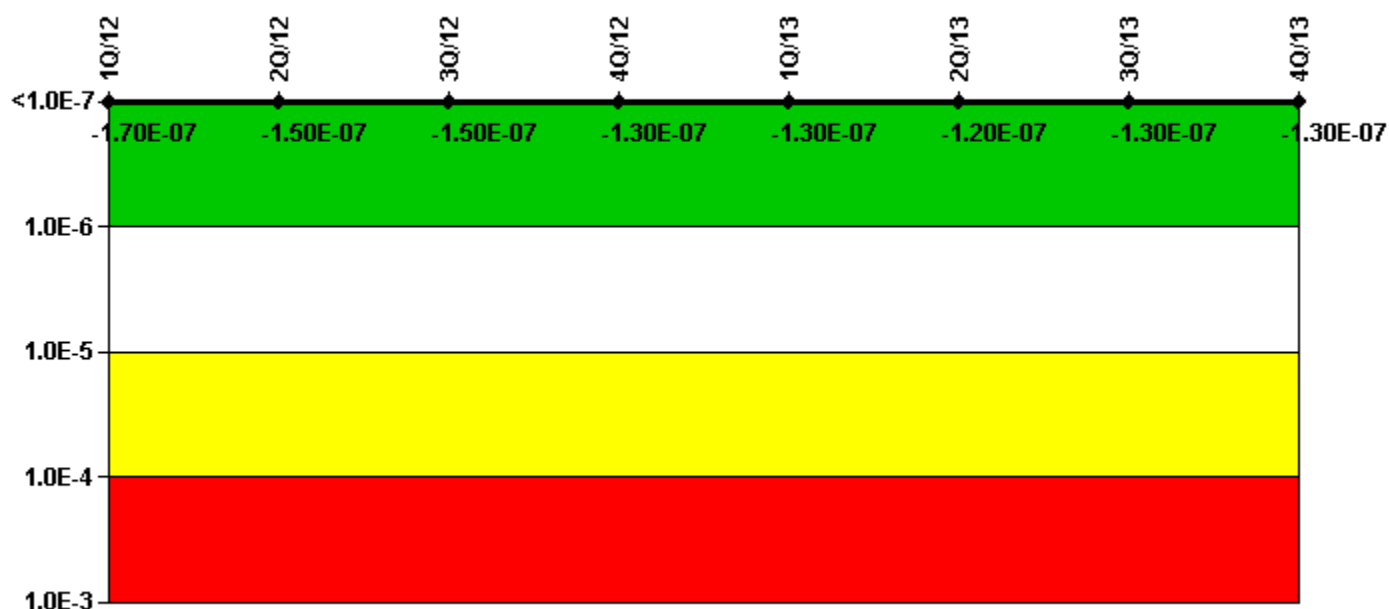
3Q/12: Changed PRA Parameter(s).

2Q/12: Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

1Q/12: Prior to this quarter, planned and unplanned unavailability was counted against an AF train whenever the safety-related suction source was unavailable. After discussions with Braidwood and the corporate PRA SME, it was determined that the unavailability should not be counted if the non-safety-related suction source is available. This issue was documented in IR #1334924. Corrections to historical data for the last three years have been made are reflected in this quarters reporting.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI (Δ CDF)	-3.45E-08	-3.42E-08	-3.42E-08	-3.33E-08	-3.33E-08	-2.41E-08	-3.33E-08	-3.33E-08
	-1.40E-	-1.20E-	-1.20E-	-9.77E-	-9.77E-	-9.77E-	-9.77E-	-9.77E-

URI (ΔCDF)	07	07	07	08	08	08	08	08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.70E-07	-1.50E-07	-1.50E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07

Licensee Comments:

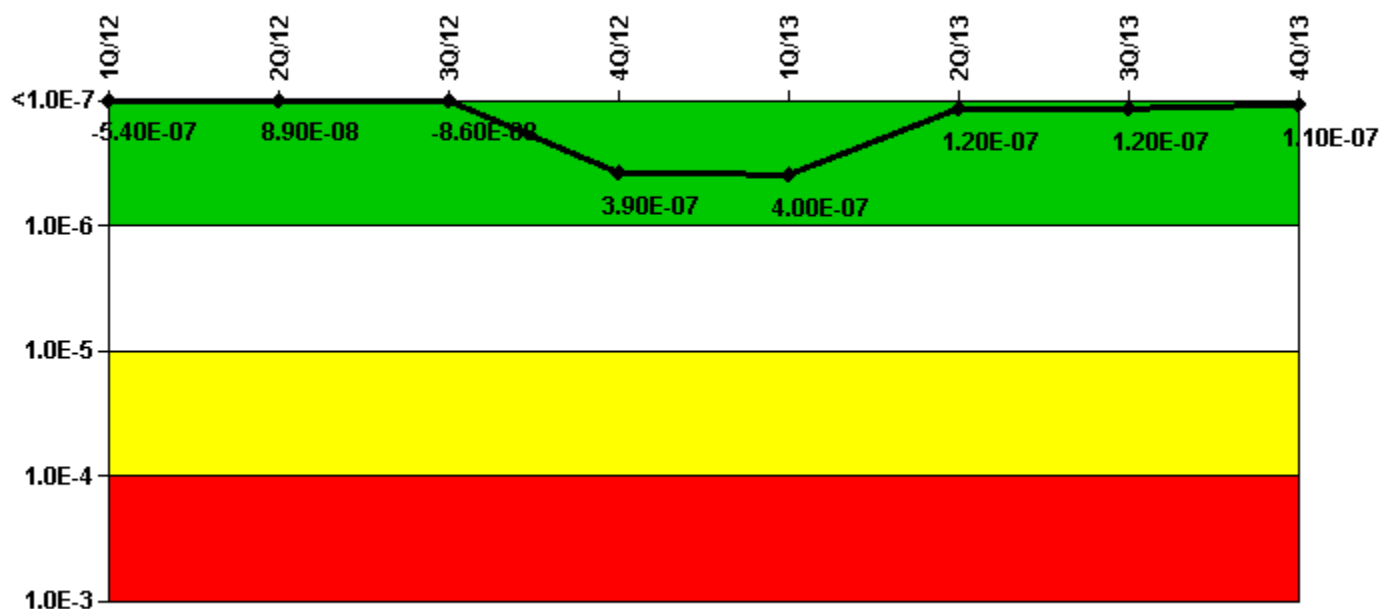
4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling								

Water Systems	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI (ΔCDF)	3.95E-07	4.41E-07	2.58E-07	5.21E-07	5.23E-07	2.44E-07	2.45E-07	2.28E-07
URI (ΔCDF)	-9.37E-07	-3.52E-07	-3.44E-07	-1.31E-07	-1.28E-07	-1.24E-07	-1.20E-07	-1.16E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.40E-07	8.90E-08	-8.60E-08	3.90E-07	4.00E-07	1.20E-07	1.20E-07	1.10E-07

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

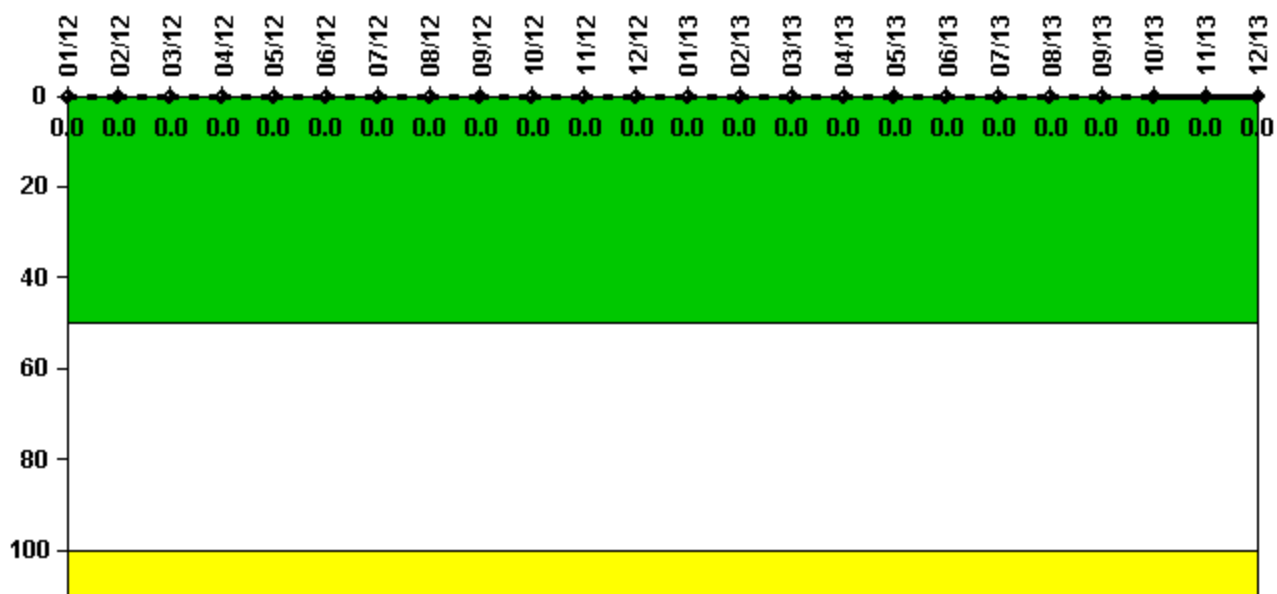
3Q/12: IR#1414688 1B SX pp tripped unexpectedly. Data was actually entered in October due to INPO implementation of ICES it was unavailable to enter data in Sept.

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Reactor Coolant System Activity



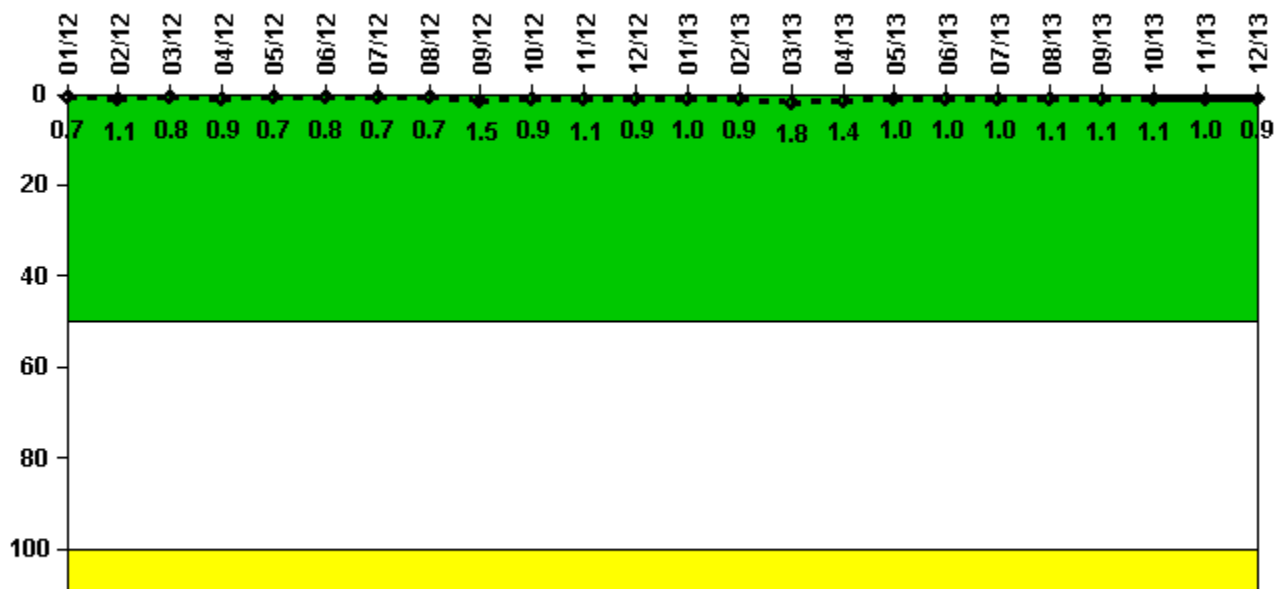
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum activity	0.000071	0.000069	0.000081	0.000075	0.000076	0.000126	0.000129	0.000224	0.000090	0.000118	0.000091	0.000095
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum activity	0.000099	0.000102	0.000104	0.000176	0.000049	0.000049	0.000049	0.000053	0.000054	0.000062	0.000061	0.000069
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



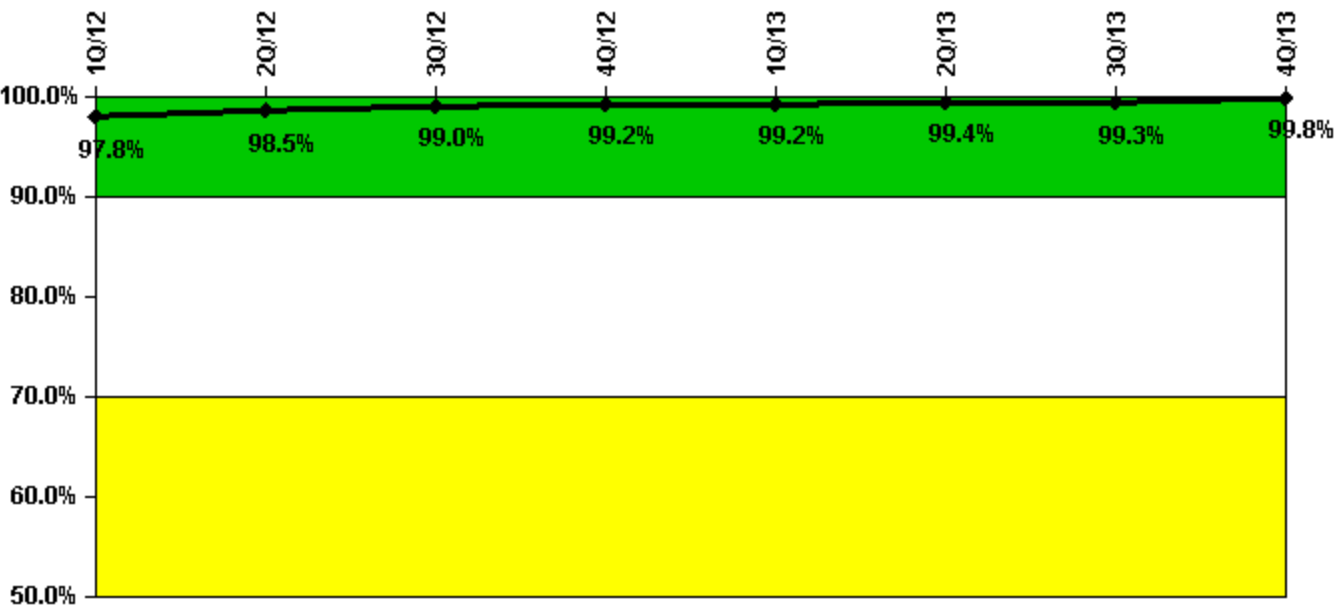
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum leakage	0.070	0.110	0.080	0.090	0.070	0.080	0.070	0.070	0.150	0.090	0.110	0.090
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	1.1	0.8	0.9	0.7	0.8	0.7	0.7	1.5	0.9	1.1	0.9
Reactor Coolant System Leakage	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum leakage	0.100	0.090	0.180	0.140	0.100	0.100	0.100	0.110	0.110	0.110	0.100	0.090
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.0	0.9	1.8	1.4	1.0	1.0	1.0	1.1	1.1	1.1	1.0	0.9

Licensee Comments: none

Drill/Exercise Performance



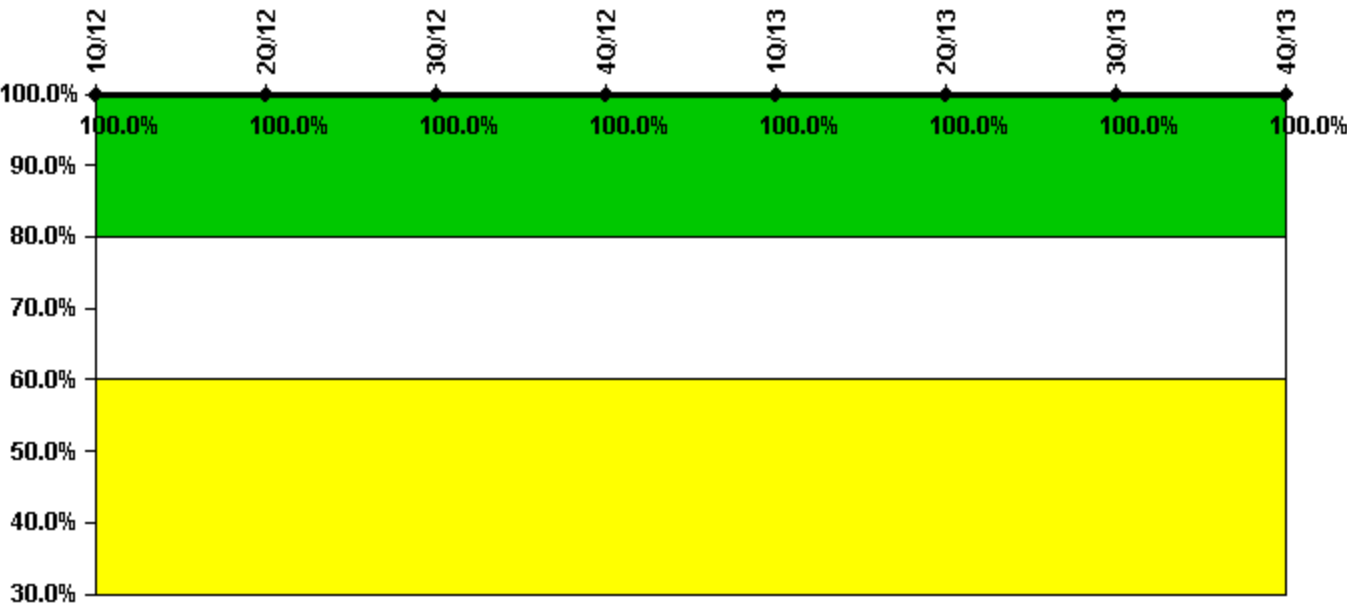
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Successful opportunities	96.0	126.0	24.0	3.0	104.0	12.0	55.0	32.0
Total opportunities	97.0	126.0	24.0	3.0	104.0	12.0	55.0	32.0
Indicator value	97.8%	98.5%	99.0%	99.2%	99.2%	99.4%	99.3%	99.8%

Licensee Comments: none

ERO Drill Participation



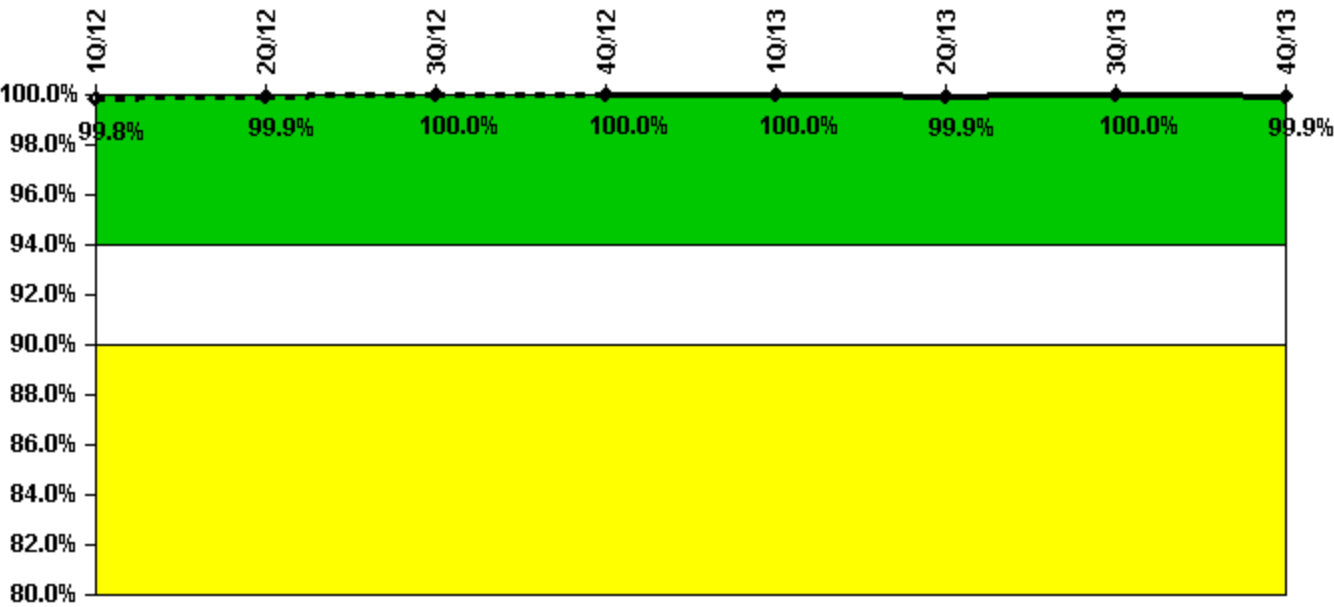
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Participating Key personnel	74.0	77.0	78.0	78.0	78.0	76.0	71.0	74.0
Total Key personnel	74.0	77.0	78.0	78.0	78.0	76.0	71.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



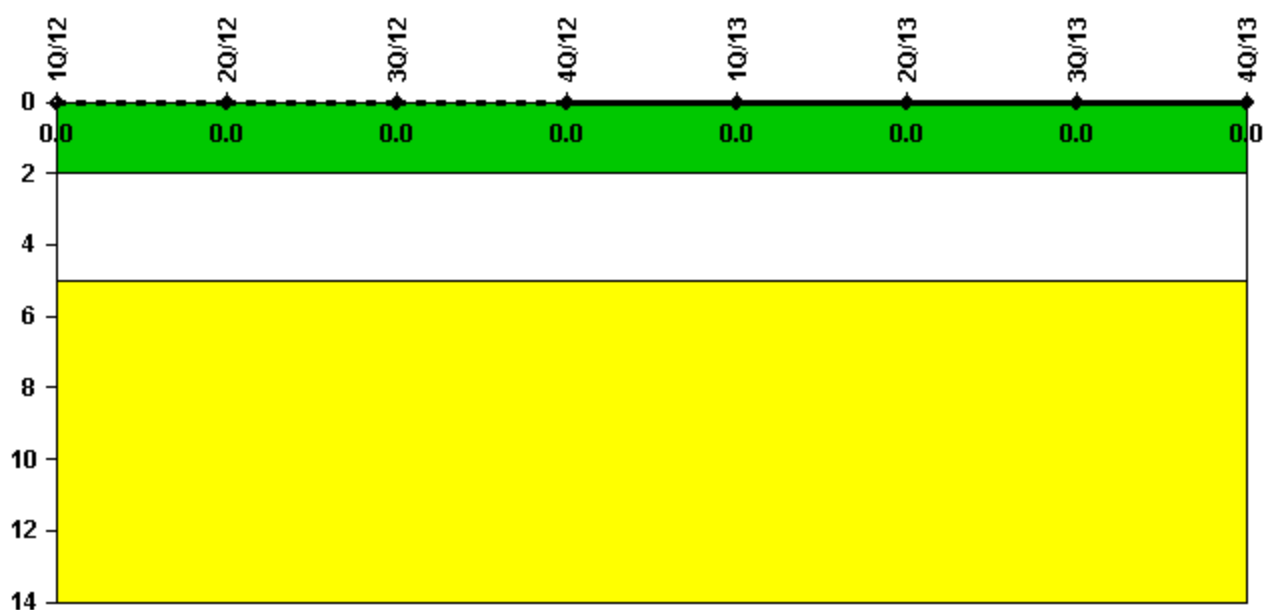
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Successful siren-tests	3962	3903	3841	3904	3902	3900	3903	3900
Total sirens-tests	3965	3904	3843	3904	3904	3904	3904	3904
Indicator value	99.8%	99.9%	100.0%	100.0%	100.0%	99.9%	100.0%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



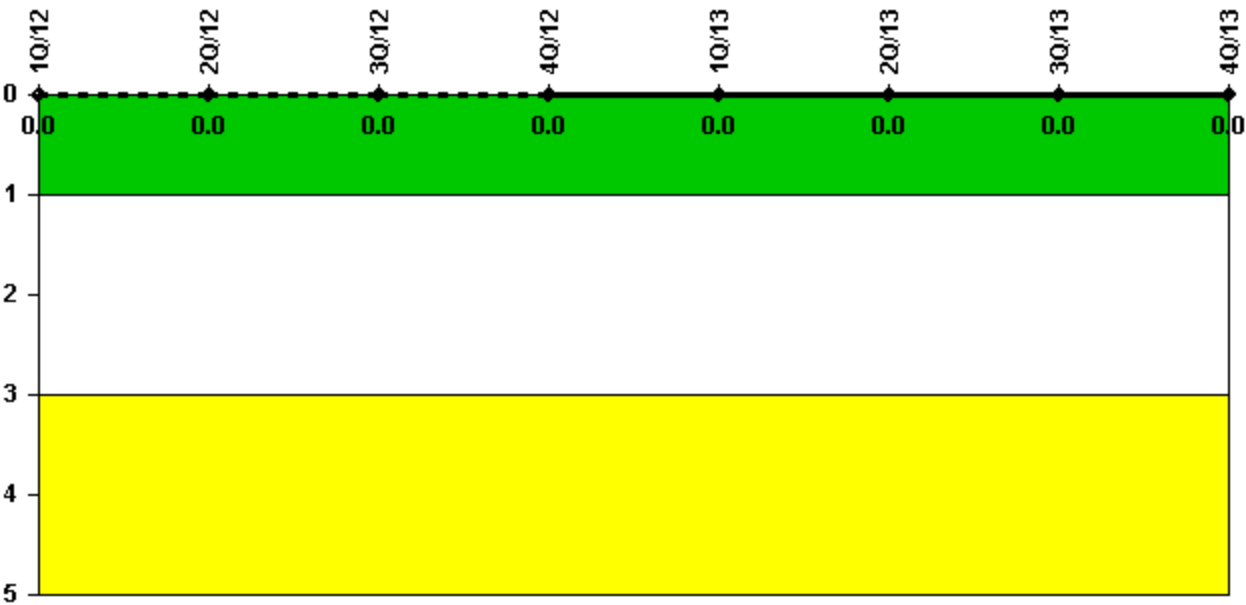
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: January 22, 2014

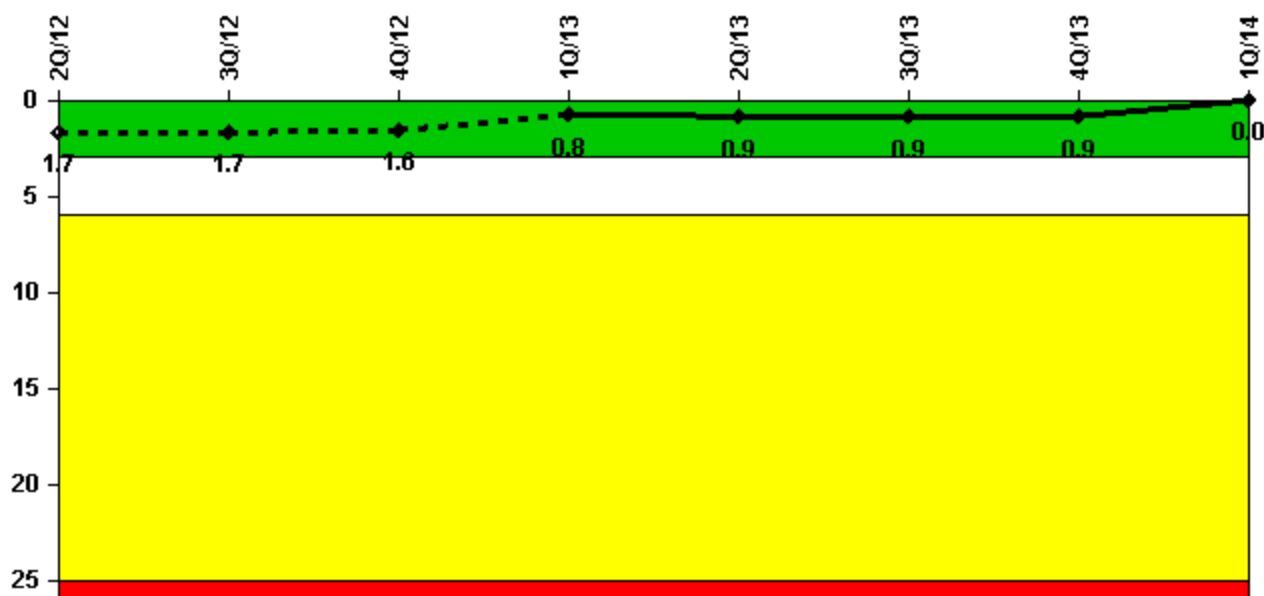
Byron 2

1Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: 1Q2014 BYRON STATION UNIT 2

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

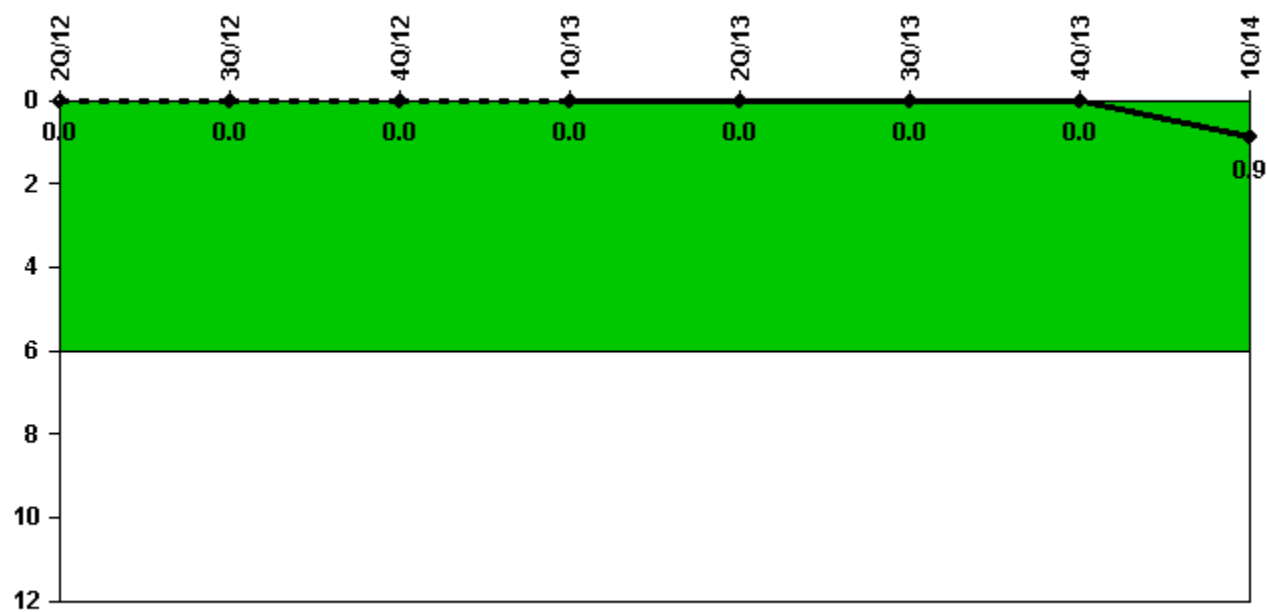
Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Unplanned scrams	0	0	0	1.0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	2129.6	1653.7	2208.0	2209.0	2159.0
Indicator value	1.7	1.7	1.6	0.8	0.9	0.9	0.9	0

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

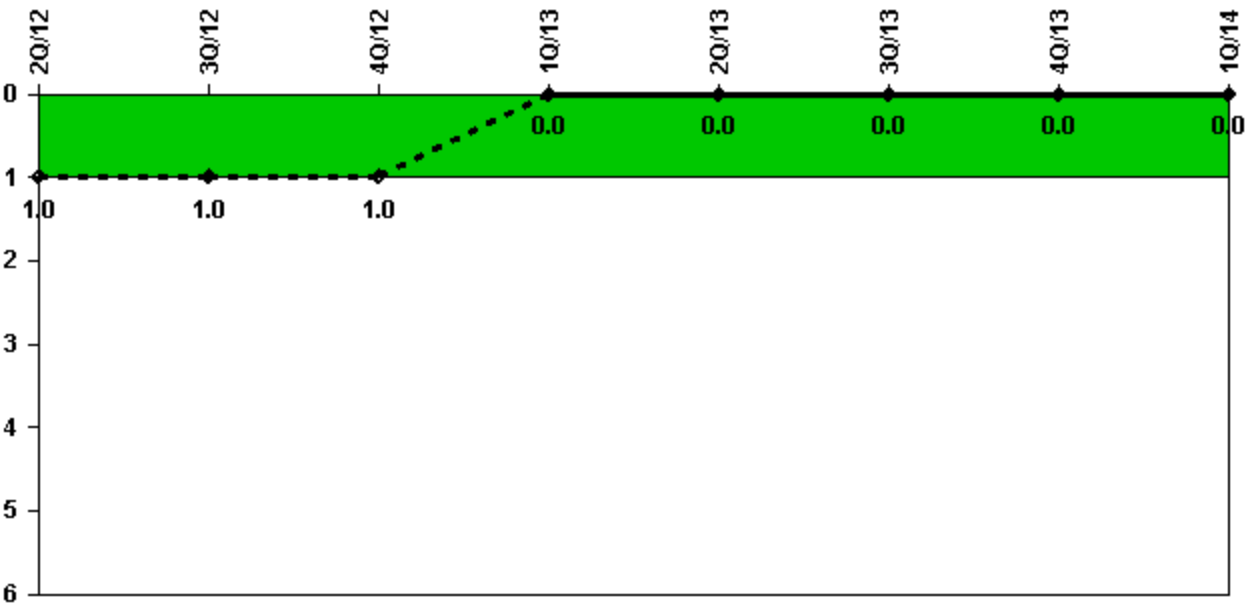
Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Unplanned power changes	0	0	0	0	0	0	0	1.0
Critical hours	2184.0	2208.0	2209.0	2129.6	1653.7	2208.0	2209.0	2159.0
Indicator value	0	0	0	0	0	0	0	0.9

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



Thresholds: White > 1.0

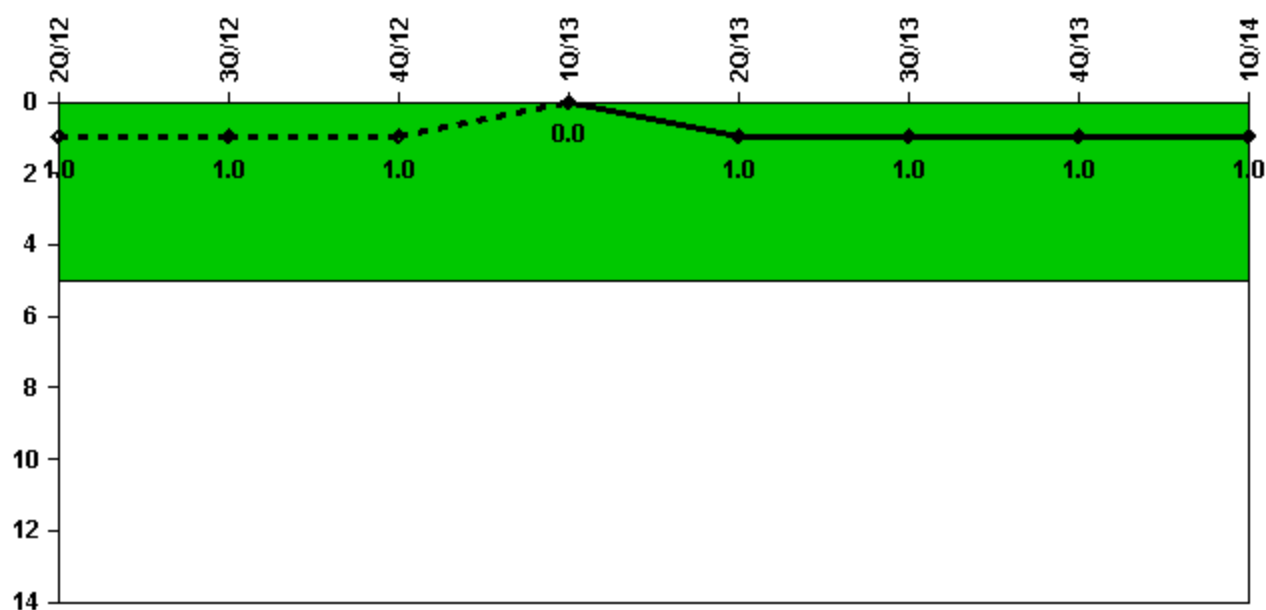
Notes

Unplanned Scrams with Complications	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Safety System Functional Failures	0	0	0	0	1	0	0	0
Indicator value	1	1	1	0	1	1	1	1

Licensee Comments:

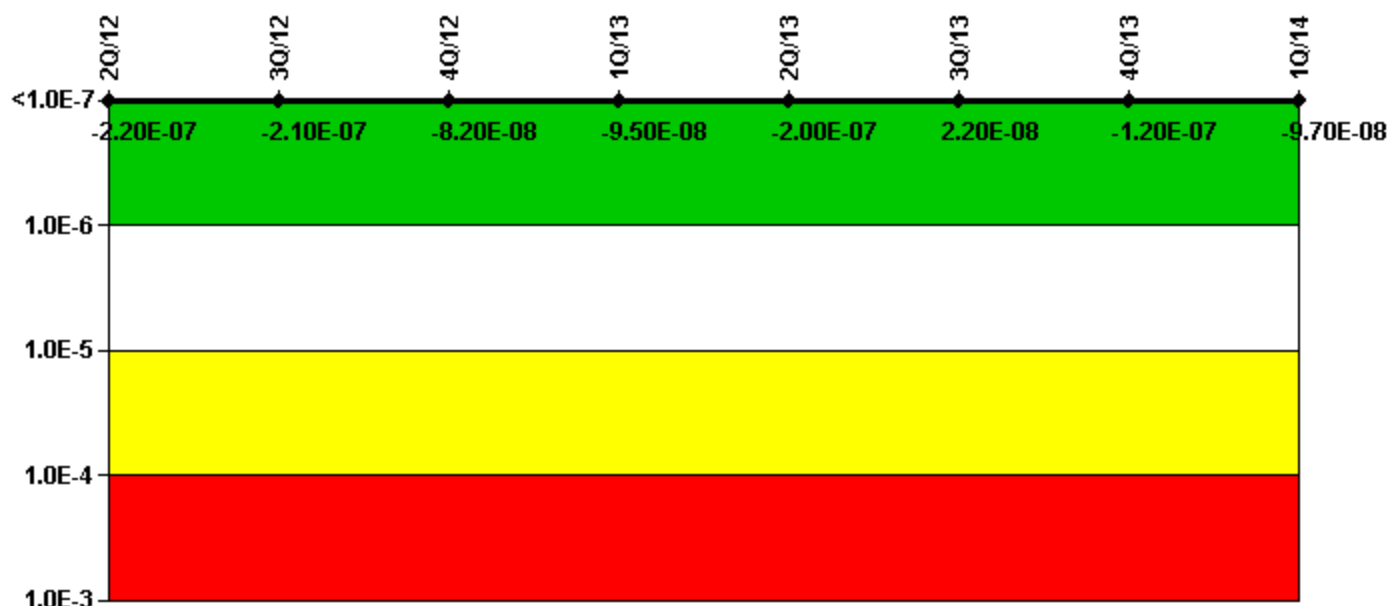
2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

2Q/12: LER 2012-001-00 - No SSFF

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (Δ CDF)	4.09E-08	3.62E-08	4.00E-08	1.42E-08	9.68E-09	1.52E-08	-1.56E-08	-7.87E-09
URI (Δ CDF)	-2.64E-07	-2.42E-07	-1.22E-07	-1.09E-07	-2.14E-07	7.27E-09	-1.03E-07	-8.96E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.20E-07	-2.10E-07	-8.20E-08	-9.50E-08	-2.00E-07	2.20E-08	-1.20E-07	-9.70E-08

Licensee Comments:

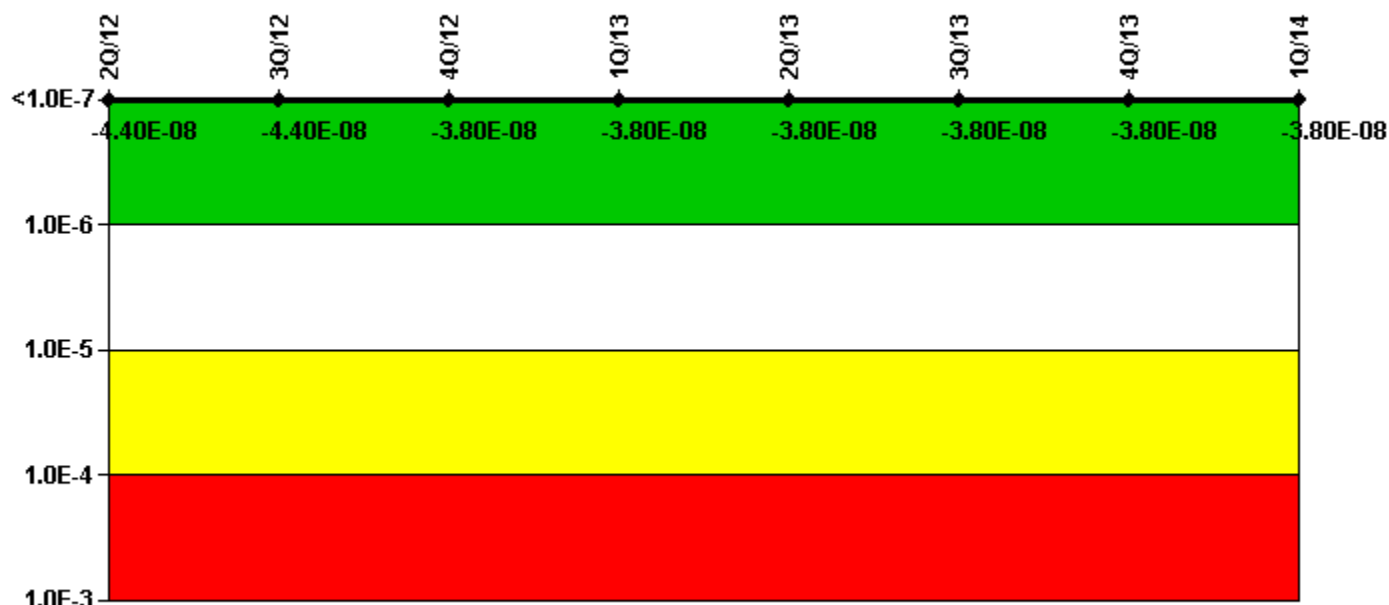
4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (Δ CDF)	-3.85E-08	-3.81E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (Δ CDF)	-5.83E-09	-5.89E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.40E-08	-4.40E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments:

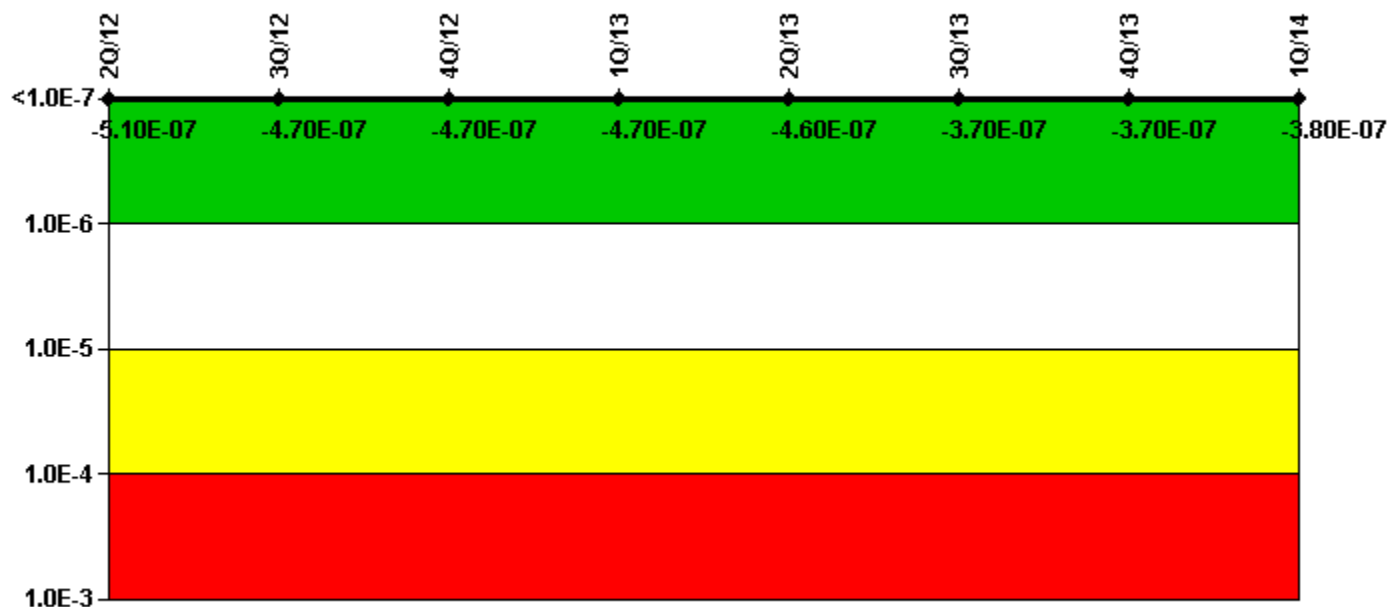
4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (Δ CDF)	-8.33E-08	-4.75E-08	-7.83E-08	-7.73E-08	-7.81E-08	1.36E-08	1.28E-08	9.26E-09
URI (Δ CDF)	-4.26E-07	-4.25E-07	-3.93E-07	-3.93E-07	-3.87E-07	-3.85E-07	-3.85E-07	-3.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.10E-07	-4.70E-07	-4.70E-07	-4.70E-07	-4.60E-07	-3.70E-07	-3.70E-07	-3.80E-07

Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

4Q/12: Changed PRA Parameter(s).

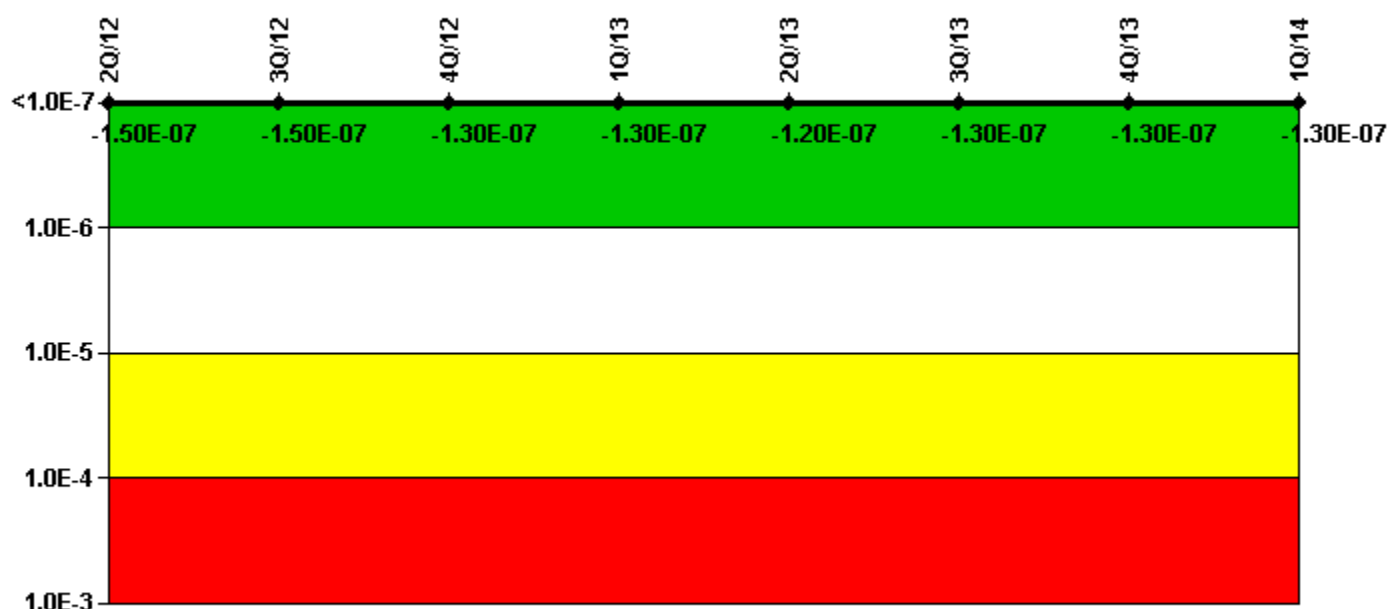
4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (Δ CDF)	-3.42E-08	-3.42E-08	-3.33E-08	-3.33E-08	-2.41E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (Δ CDF)	-1.20E-07	-1.20E-07	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-07	-1.50E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07

Licensee Comments:

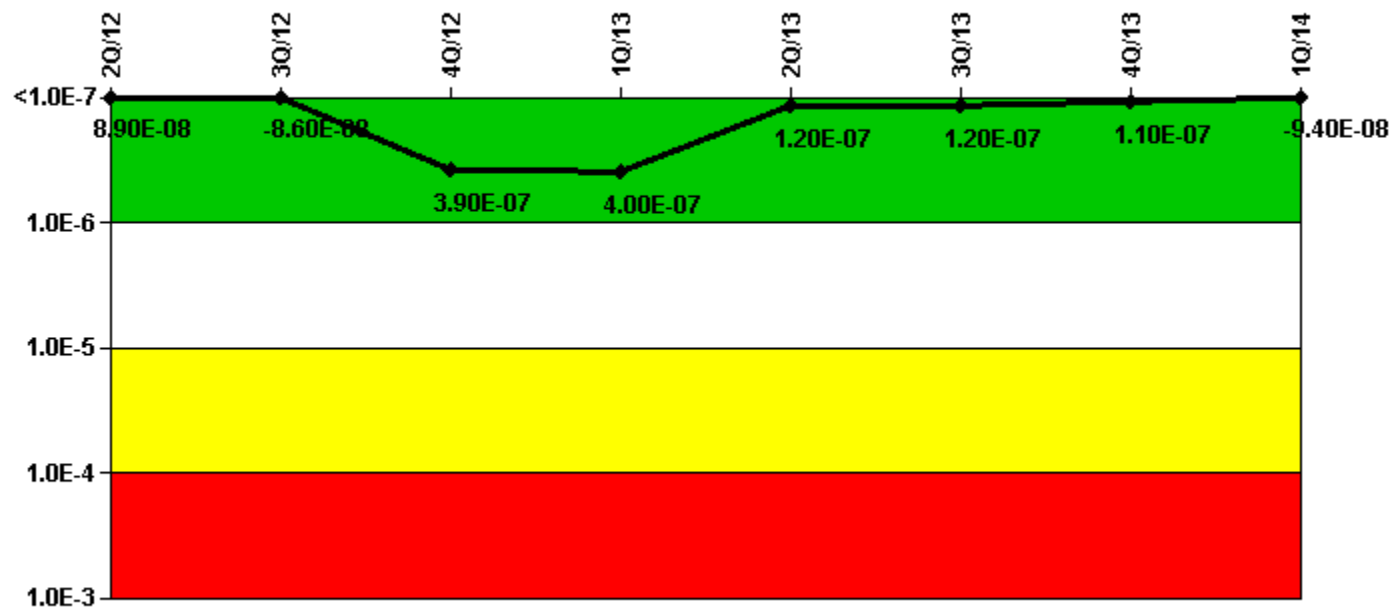
4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (ΔCDF)	4.41E-07	2.58E-07	5.21E-07	5.23E-07	2.44E-07	2.45E-07	2.28E-07	1.79E-08
URI (ΔCDF)	-3.52E-07	-3.44E-07	-1.31E-07	-1.28E-07	-1.24E-07	-1.20E-07	-1.16E-07	-1.12E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO

Indicator value	8.90E-08	-8.60E-08	3.90E-07	4.00E-07	1.20E-07	1.20E-07	1.10E-07	-9.40E-08

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

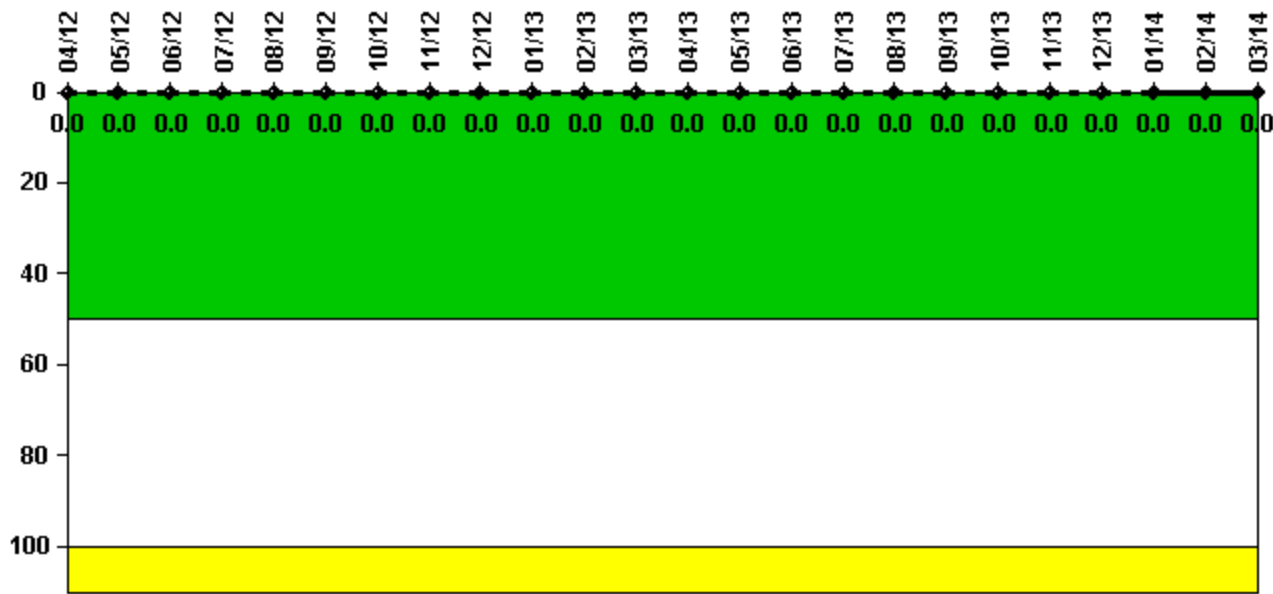
3Q/12: IR#1414688 1B SX pp tripped unexpectedly. Data was actually entered in October due to INPO implementation of ICES it was unavailable to enter data in Sept.

3Q/12: Changed PRA Parameter(s).

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

2Q/12: Changed PRA Parameter(s). Byron PRA Model Revision No: 6BB011a approved March 29, 2012, revised Unit 1 and Unit 2 PRA inputs due to a periodic PRA model update. This included new data analysis, new HRA dependency analysis, and new pre-initiator HRA. This update also removed credit for operator action to crosstie AFW. Based on the previous change to the station operating procedures credit for opposite unit DG, CC and SX systems was removed.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

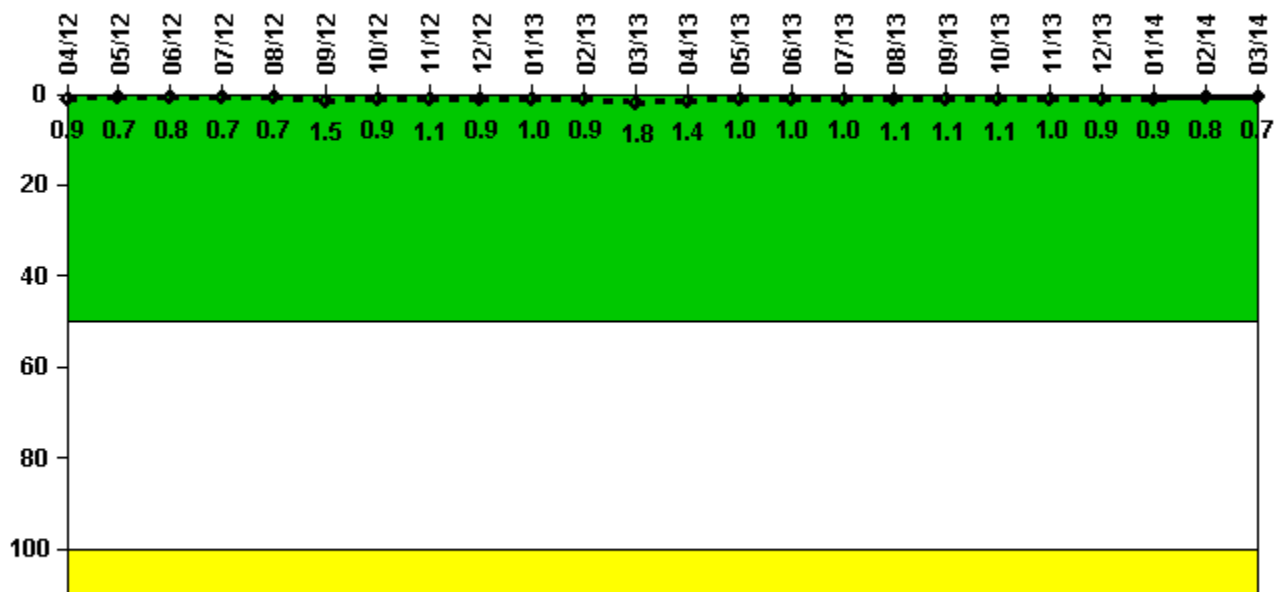
Notes

Reactor Coolant System Activity	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum activity	0.000075	0.000076	0.000126	0.000129	0.000224	0.000090	0.000118	0.000091	0.000095	0.000099	0.000102	0.000104
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum activity	0.000176	0.000049	0.000049	0.000049	0.000053	0.000054	0.000062	0.000061	0.000069	0.000069	0.000072	0.000073
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



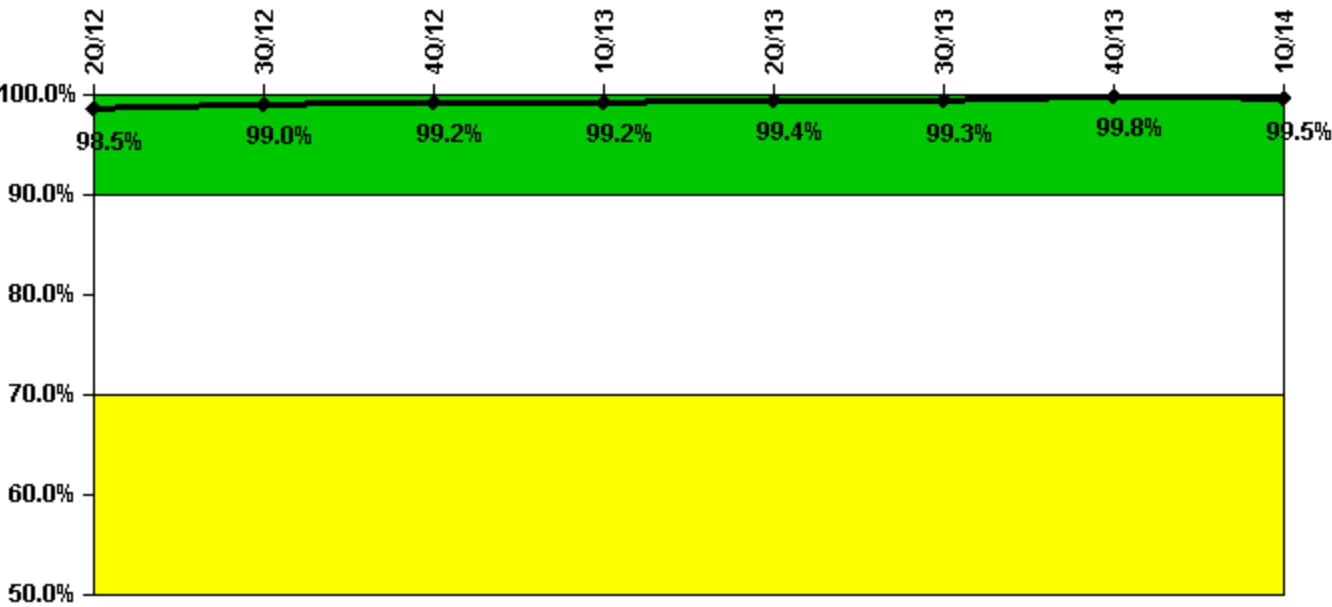
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum leakage	0.090	0.070	0.080	0.070	0.070	0.150	0.090	0.110	0.090	0.100	0.090	0.180
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	0.7	0.8	0.7	0.7	1.5	0.9	1.1	0.9	1.0	0.9	1.8
Reactor Coolant System Leakage	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum leakage	0.140	0.100	0.100	0.100	0.110	0.110	0.110	0.100	0.090	0.090	0.080	0.070
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.4	1.0	1.0	1.0	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.7

Licensee Comments: none

Drill/Exercise Performance



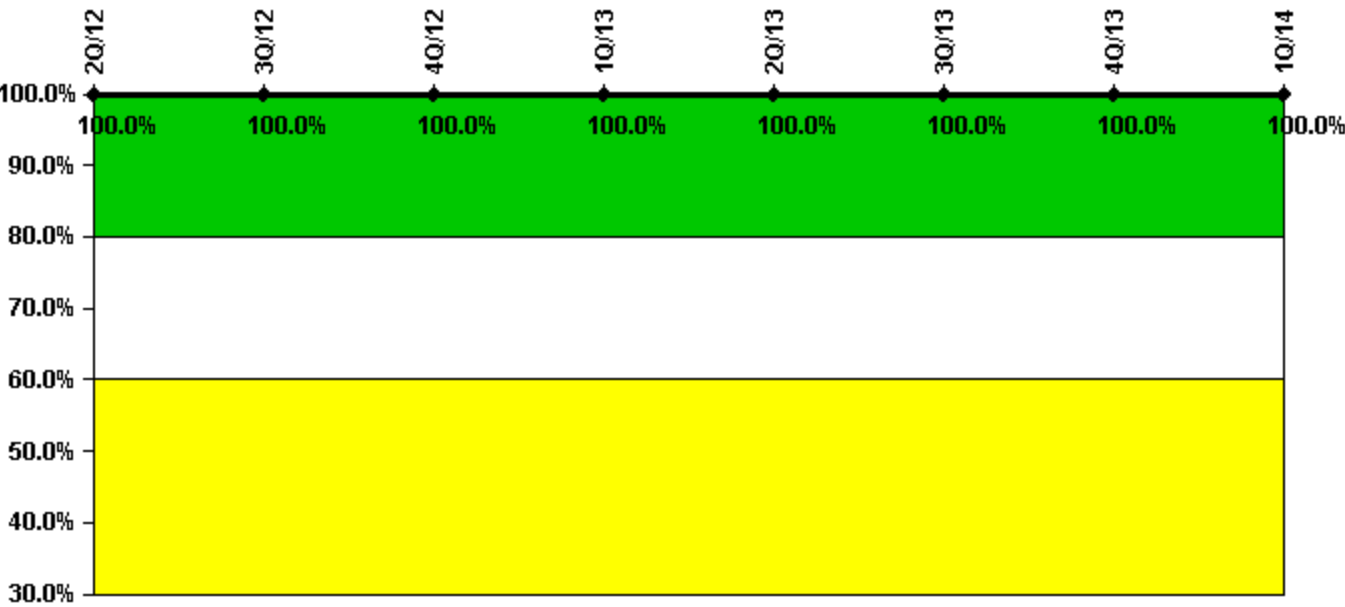
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Successful opportunities	126.0	24.0	3.0	104.0	12.0	55.0	32.0	62.0
Total opportunities	126.0	24.0	3.0	104.0	12.0	55.0	32.0	64.0
Indicator value	98.5%	99.0%	99.2%	99.2%	99.4%	99.3%	99.8%	99.5%

Licensee Comments: none

ERO Drill Participation



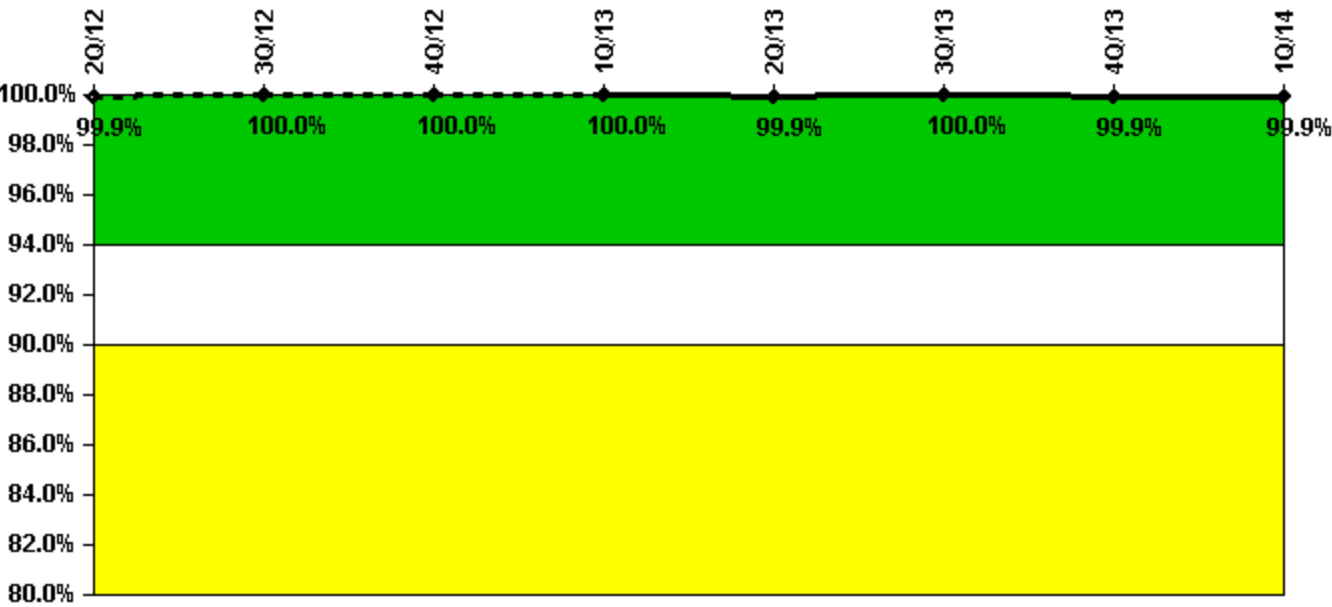
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Participating Key personnel	77.0	78.0	78.0	78.0	76.0	71.0	74.0	77.0
Total Key personnel	77.0	78.0	78.0	78.0	76.0	71.0	74.0	77.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



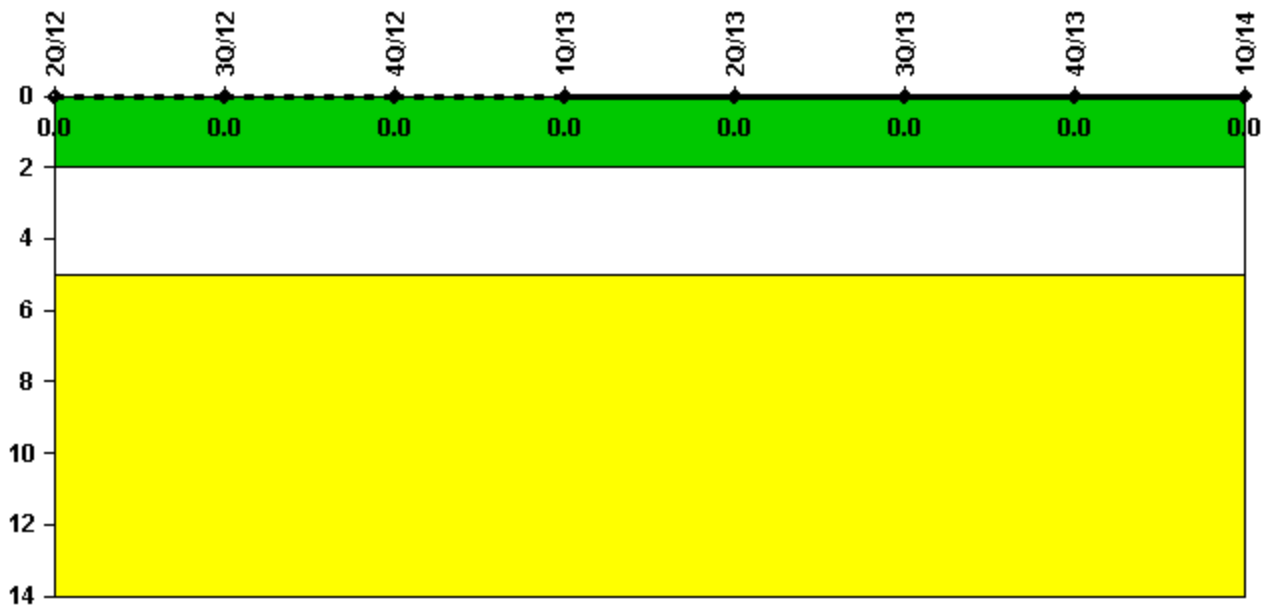
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Successful siren-tests	3903	3841	3904	3902	3900	3903	3900	3841
Total sirens-tests	3904	3843	3904	3904	3904	3904	3904	3843
Indicator value	99.9%	100.0%	100.0%	100.0%	99.9%	100.0%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



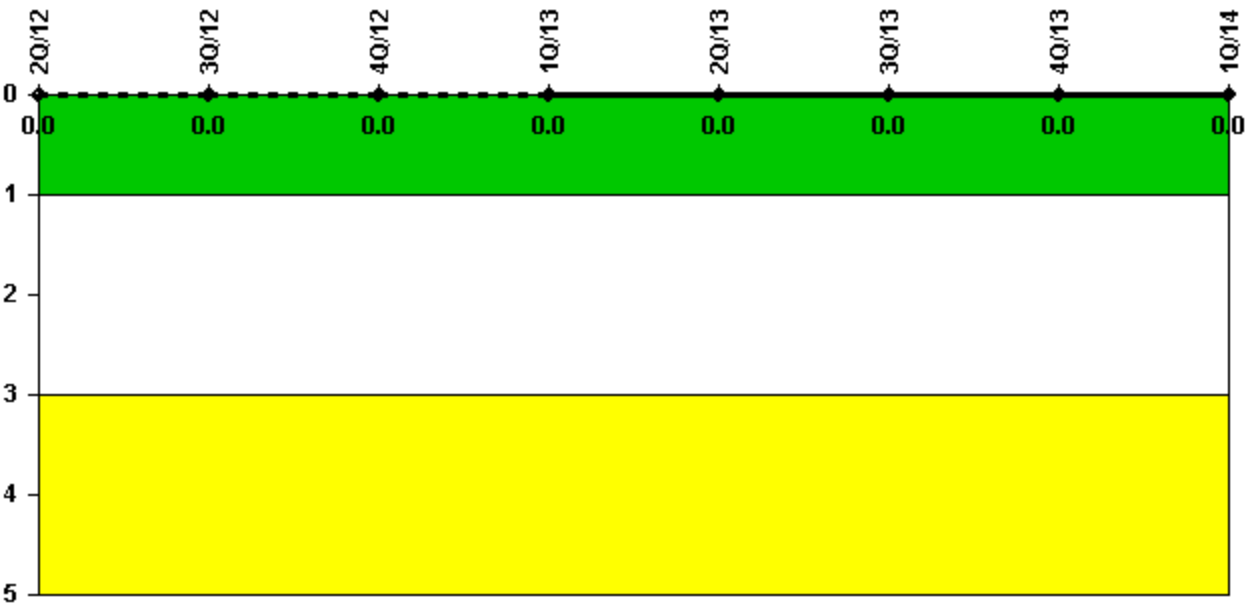
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: April 23, 2014

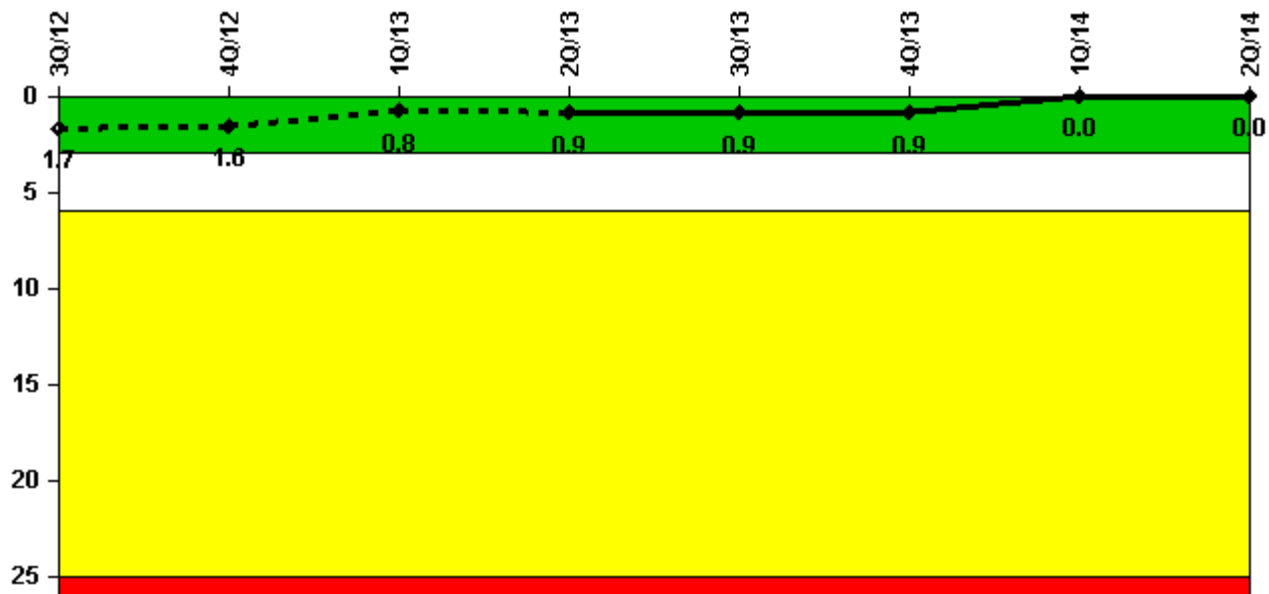
Byron 2

2Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

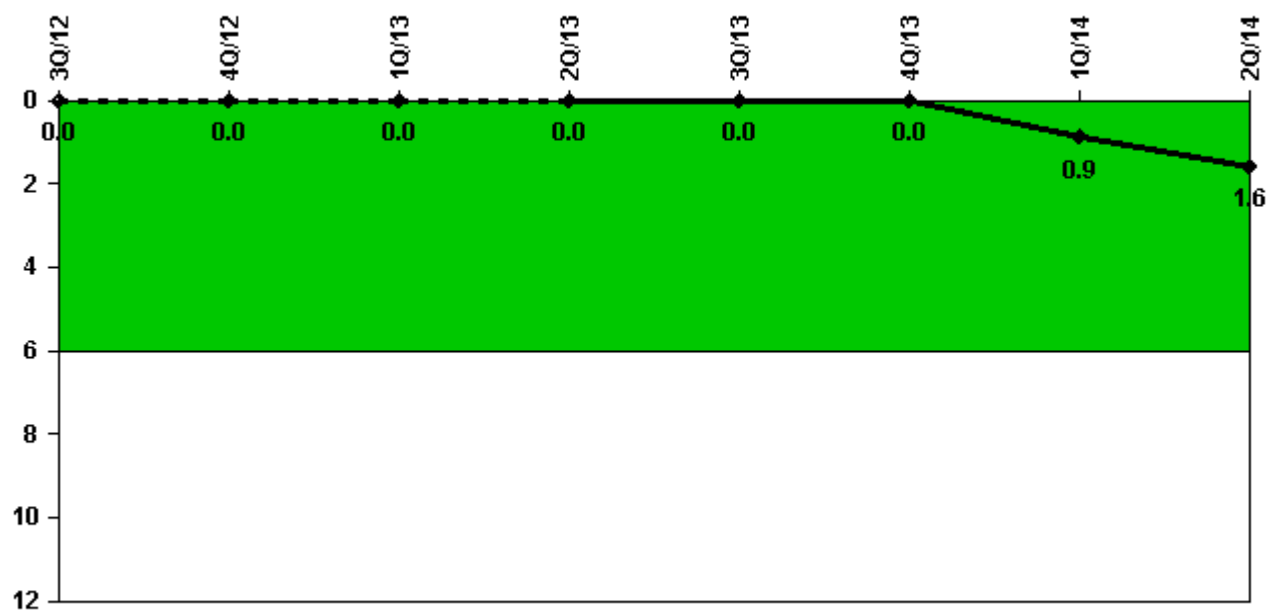
Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Unplanned scrams	0	0	1.0	0	0	0	0	0
Critical hours	2208.0	2209.0	2129.6	1653.7	2208.0	2209.0	2159.0	2184.0
Indicator value	1.7	1.6	0.8	0.9	0.9	0.9	0	0

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

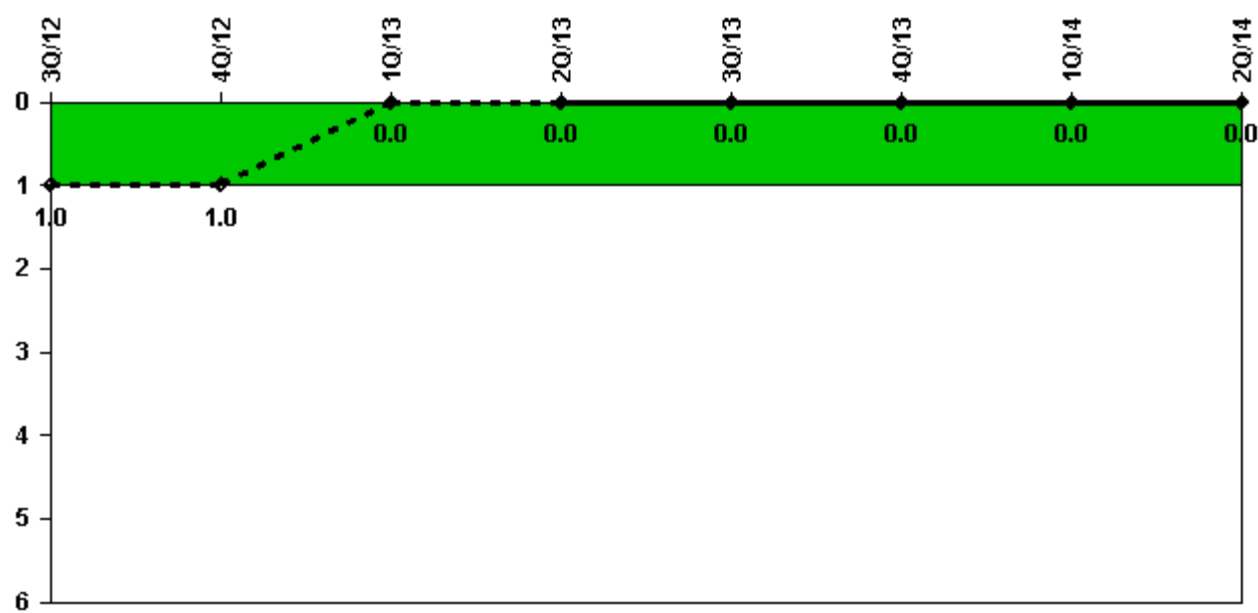
Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Unplanned power changes	0	0	0	0	0	0	1.0	1.0
Critical hours	2208.0	2209.0	2129.6	1653.7	2208.0	2209.0	2159.0	2184.0
Indicator value	0	0	0	0	0	0	0.9	1.6

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



Thresholds: White > 1.0

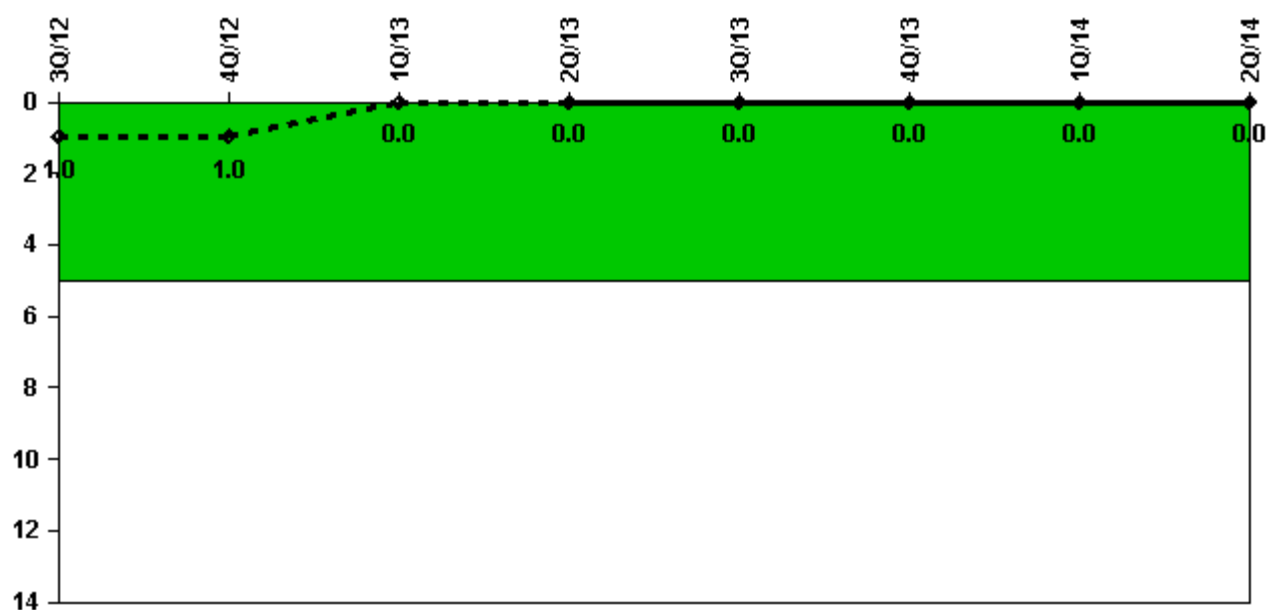
Notes

Unplanned Scrams with Complications	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	1	1	0	0	0	0	0	0

Licensee Comments:

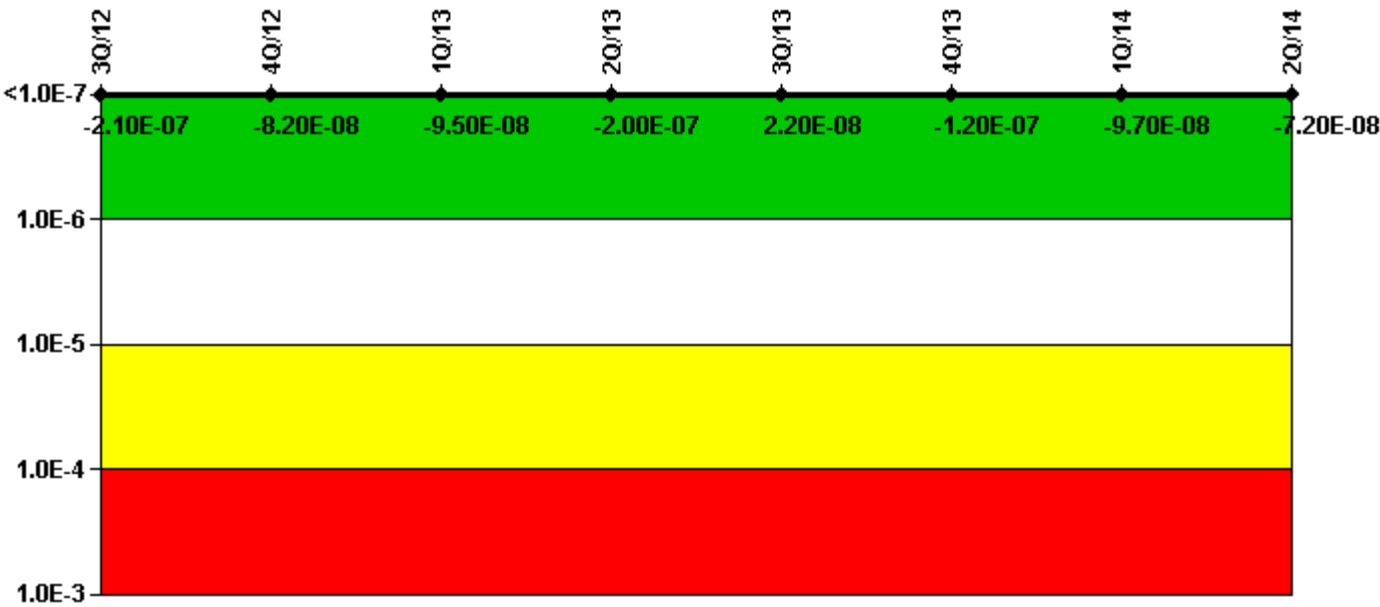
2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water was originally counted as an SSFF, but was retracted based on the definition of an SSFF in LS-AA-2080 on 5/13/14.

1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

3Q/12: LER 2012-001-01 issued for U2 LOOP and Rx Trip and U1 LOOP due to SAT inverted insulators. Determined to NOT be an event or condition that could prevent fulfillment of a safety function

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (ΔCDF)	3.62E-08	4.00E-08	1.42E-08	9.68E-09	1.52E-08	-1.56E-08	-7.87E-09	3.98E-09
URI (ΔCDF)	-2.42E-07	-1.22E-07	-1.09E-07	-2.14E-07	7.27E-09	-1.03E-07	-8.96E-08	-7.56E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.10E-07	-8.20E-08	-9.50E-08	-2.00E-07	2.20E-08	-1.20E-07	-9.70E-08	-7.20E-08

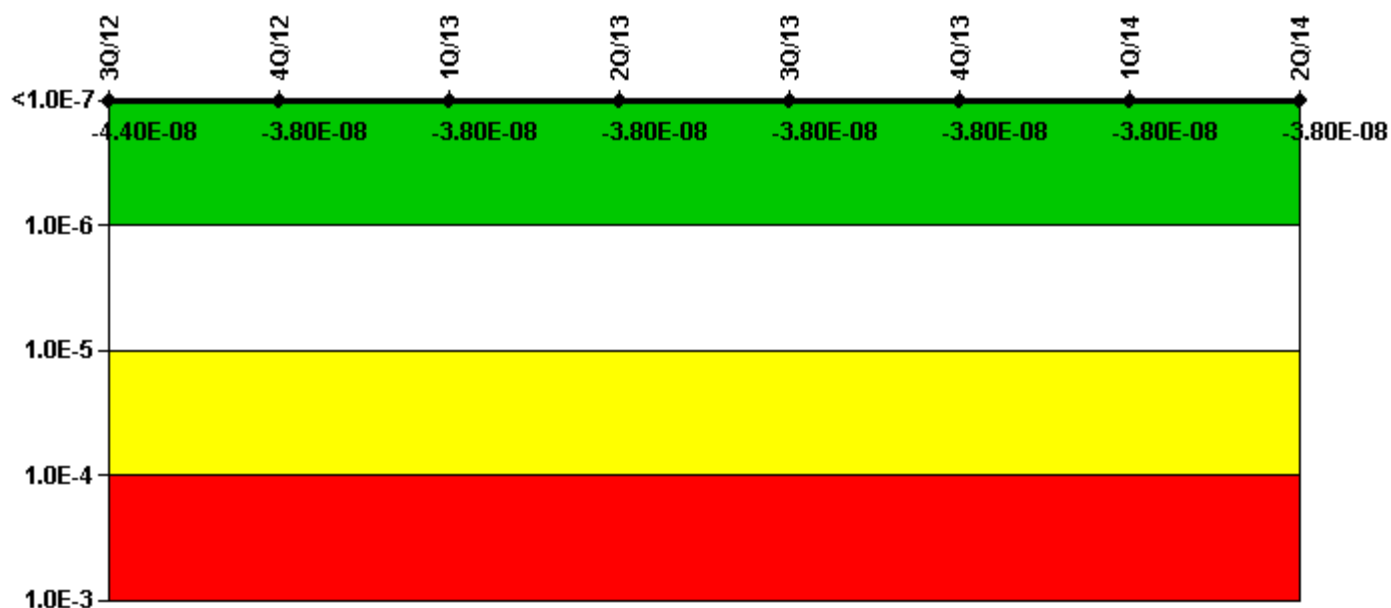
Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (Δ CDF)	-3.81E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (Δ CDF)	-5.89E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.40E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

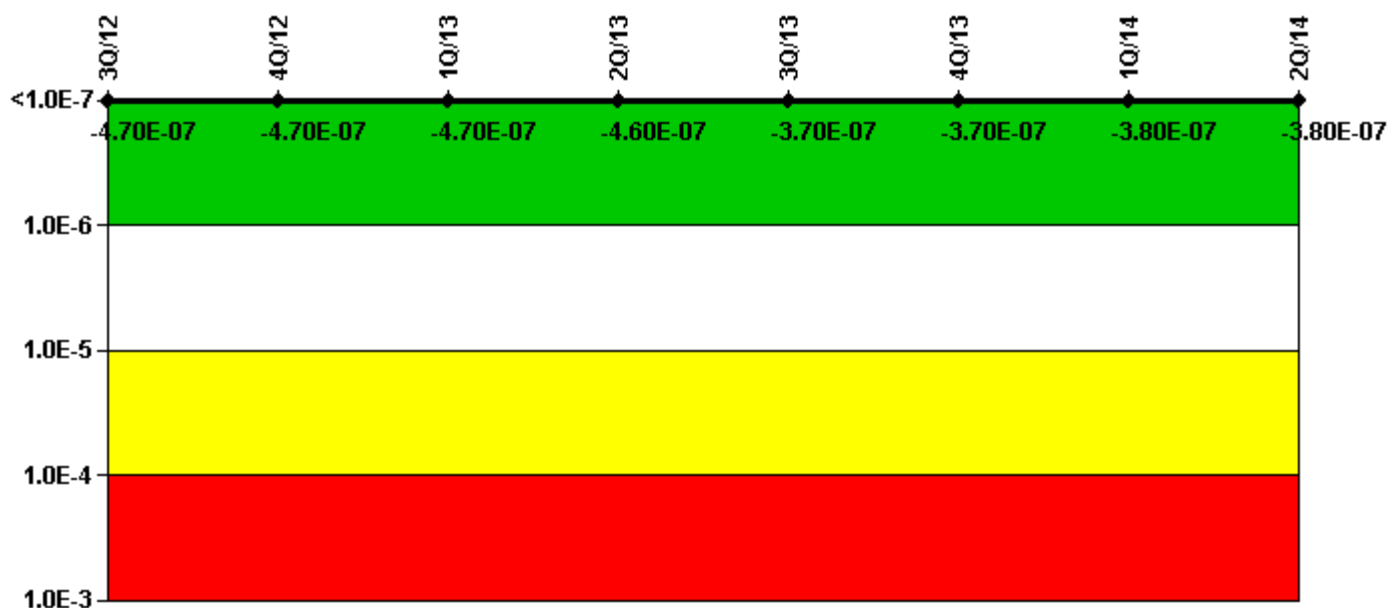
Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (Δ CDF)	-4.75E-08	-7.83E-08	-7.73E-08	-7.81E-08	1.36E-08	1.28E-08	9.26E-09	6.48E-09
URI (Δ CDF)	-4.25E-07	-3.93E-07	-3.93E-07	-3.87E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.70E-07	-4.70E-07	-4.70E-07	-4.60E-07	-3.70E-07	-3.70E-07	-3.80E-07	-3.80E-07

Licensee Comments:

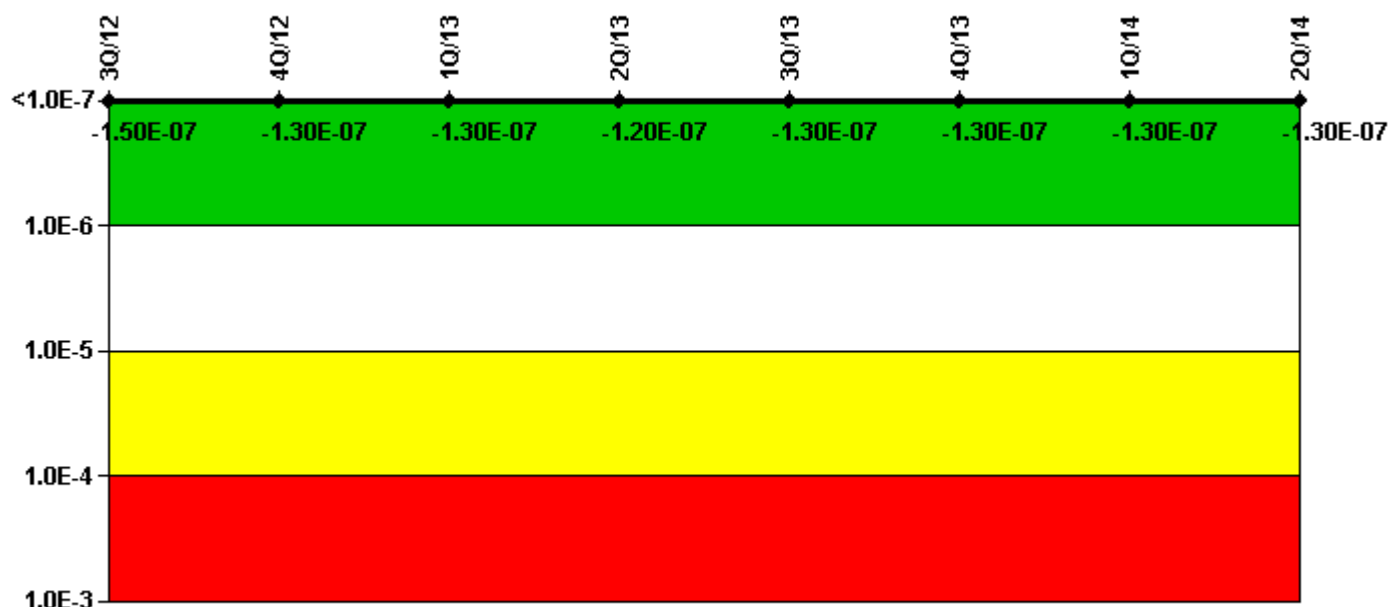
1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (Δ CDF)	-3.42E-08	-3.33E-08	-3.33E-08	-2.41E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (Δ CDF)	-1.20E-07	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07

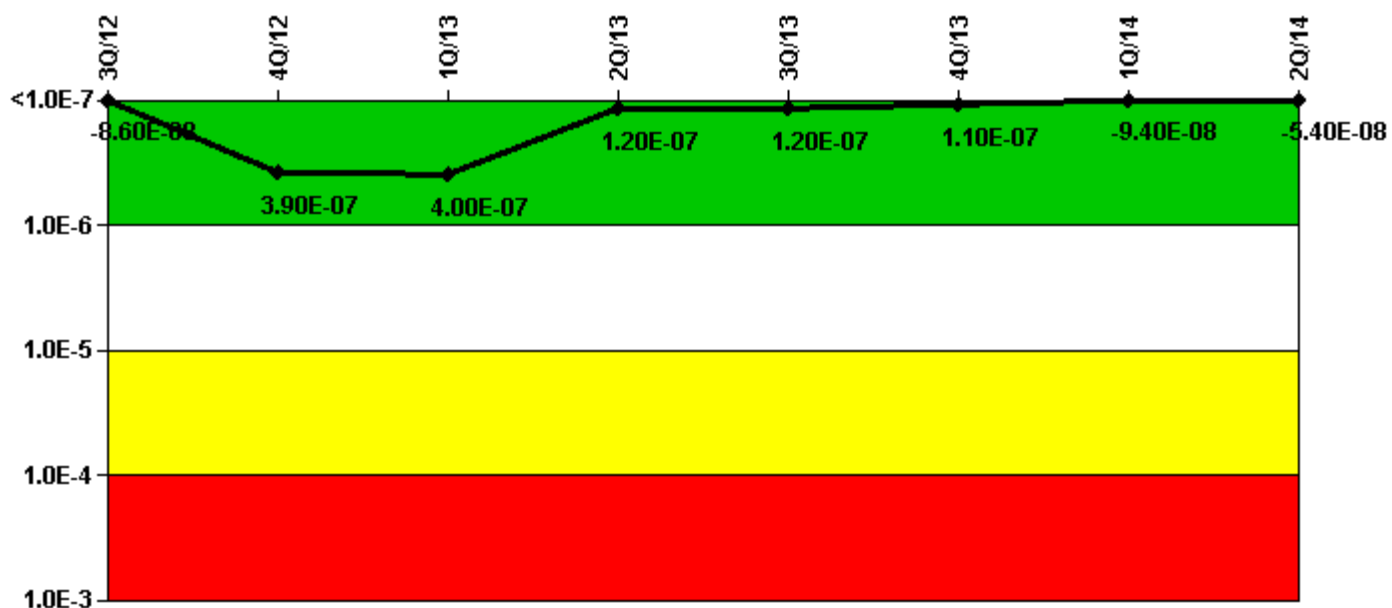
Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (ΔCDF)	2.58E-07	5.21E-07	5.23E-07	2.44E-07	2.45E-07	2.28E-07	1.79E-08	5.32E-08
URI (ΔCDF)	-3.44E-07	-1.31E-07	-1.28E-07	-1.24E-07	-1.20E-07	-1.16E-07	-1.12E-07	-1.07E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-8.60E-08	3.90E-07	4.00E-07	1.20E-07	1.20E-07	1.10E-07	-9.40E-08	-5.40E-08

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

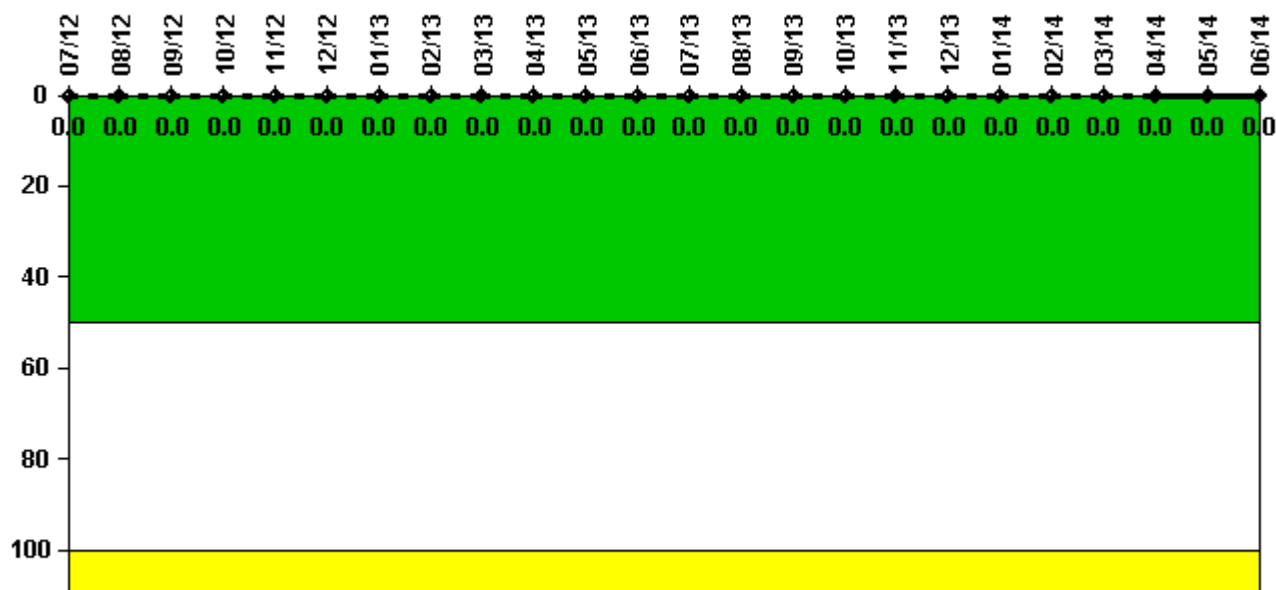
4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

3Q/12: IR#1414688 1B SX pp tripped unexpectedly. Data was actually entered in October due to INPO implemetation of ICES it was unavailable to enter data in Sept.

3Q/12: Changed PRA Parameter(s).

Reactor Coolant System Activity



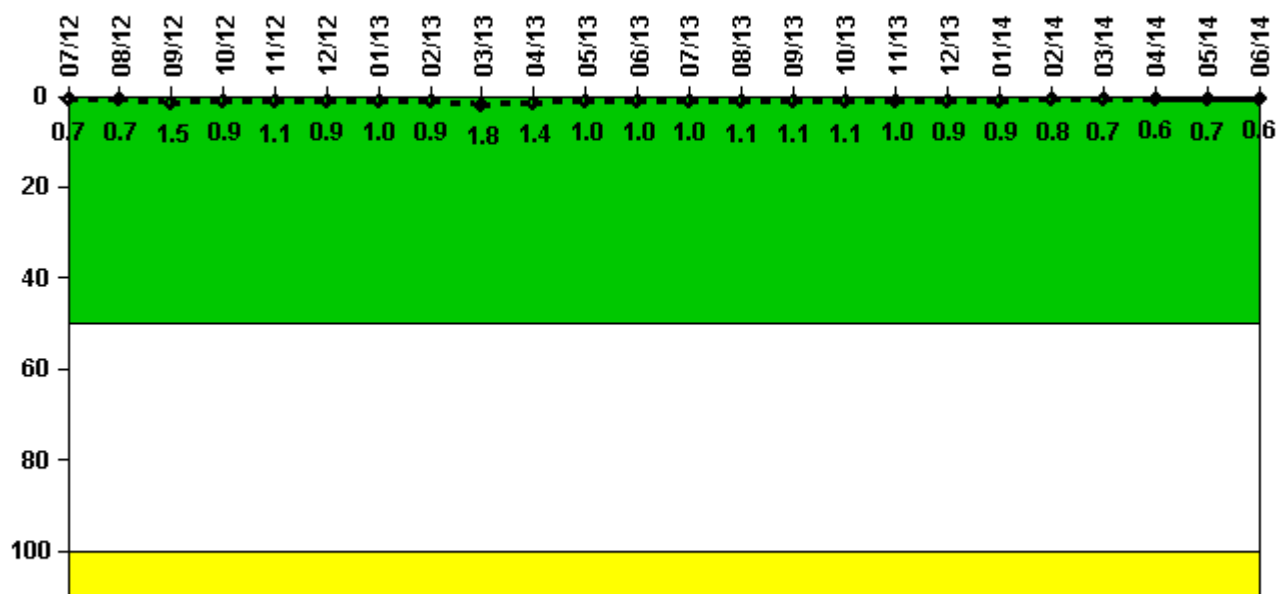
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum activity	0.000129	0.000224	0.000090	0.000118	0.000091	0.000095	0.000099	0.000102	0.000104	0.000176	0.000049	0.000049
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum activity	0.000049	0.000053	0.000054	0.000062	0.000061	0.000069	0.000069	0.000072	0.000073	0.000076	0.000087	0.000078
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



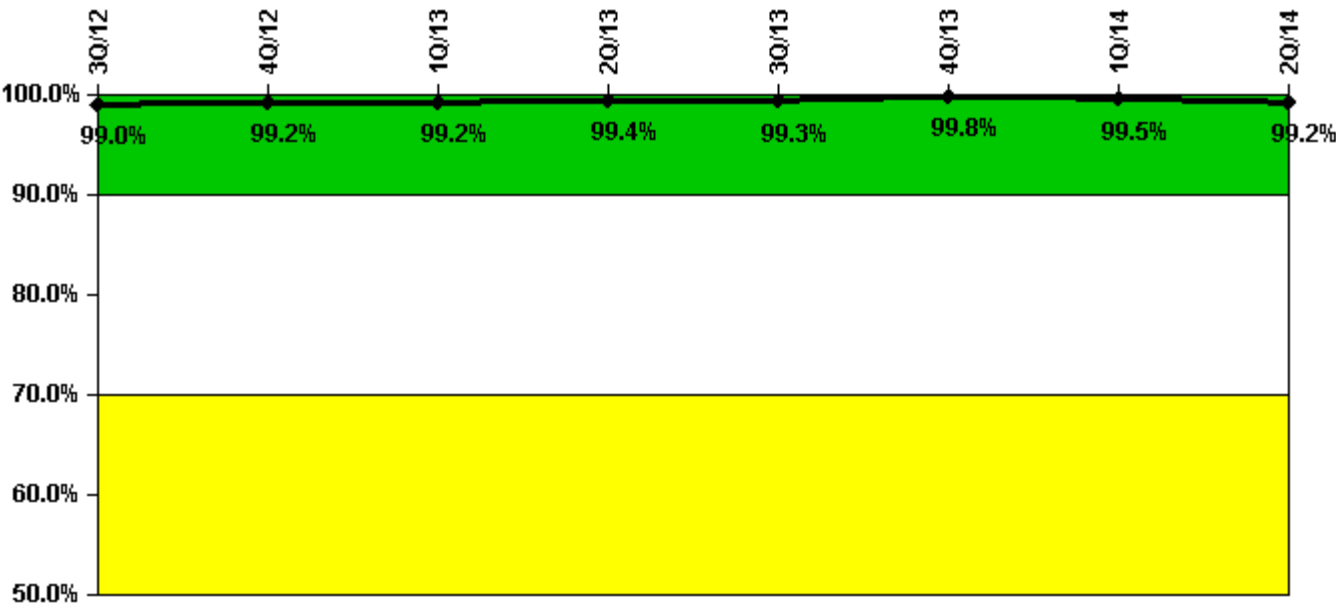
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum leakage	0.070	0.070	0.150	0.090	0.110	0.090	0.100	0.090	0.180	0.140	0.100	0.100
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.7	0.7	1.5	0.9	1.1	0.9	1.0	0.9	1.8	1.4	1.0	1.0
Reactor Coolant System Leakage	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum leakage	0.100	0.110	0.110	0.110	0.100	0.090	0.090	0.080	0.070	0.060	0.070	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.0	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.7	0.6	0.7	0.6

Licensee Comments: none

Drill/Exercise Performance



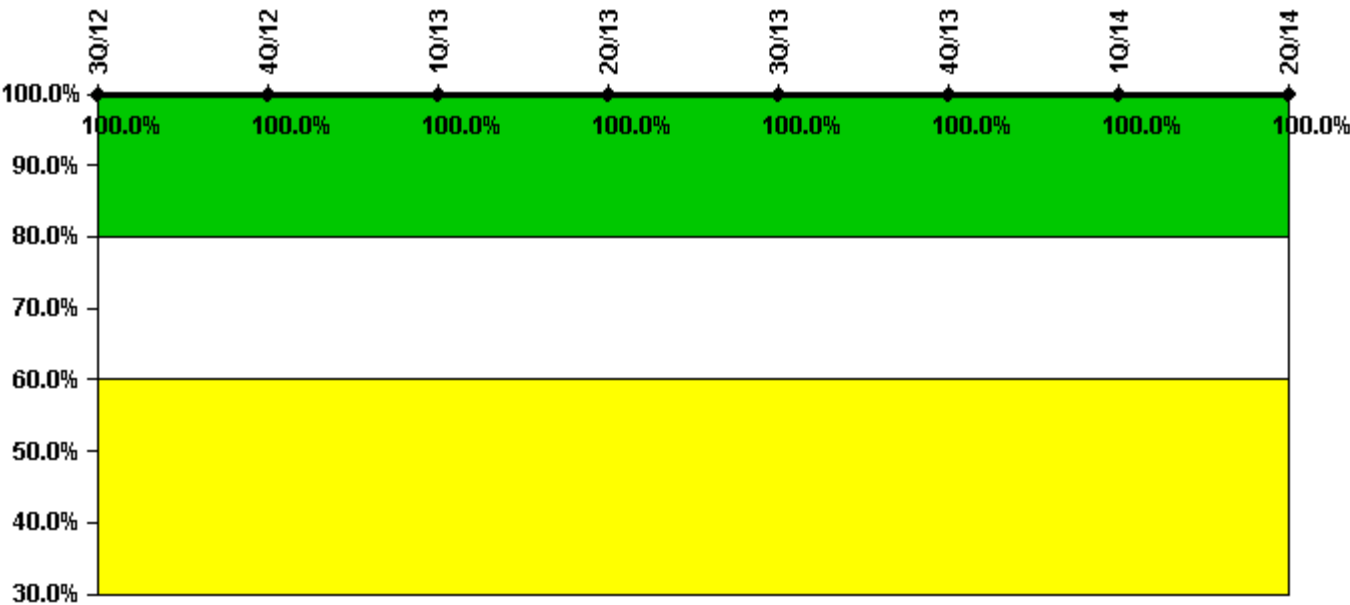
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful opportunities	24.0	3.0	104.0	12.0	55.0	32.0	62.0	58.0
Total opportunities	24.0	3.0	104.0	12.0	55.0	32.0	64.0	59.0
Indicator value	99.0%	99.2%	99.2%	99.4%	99.3%	99.8%	99.5%	99.2%

Licensee Comments: none

ERO Drill Participation



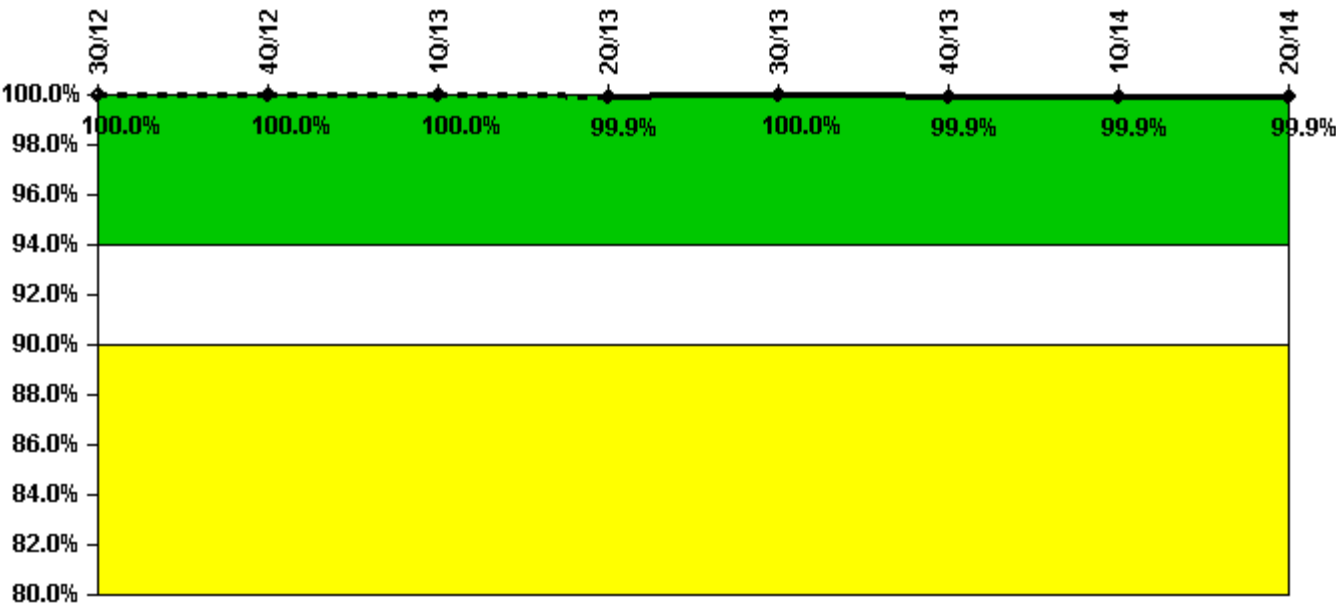
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Participating Key personnel	78.0	78.0	78.0	76.0	71.0	74.0	77.0	79.0
Total Key personnel	78.0	78.0	78.0	76.0	71.0	74.0	77.0	79.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



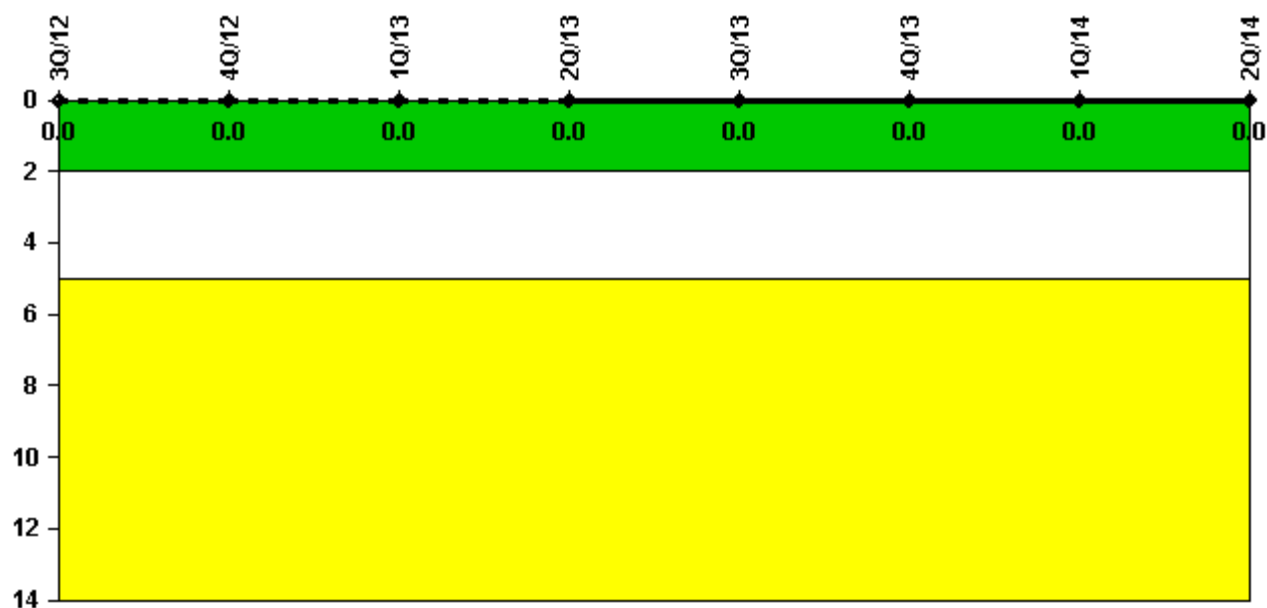
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful siren-tests	3841	3904	3902	3900	3903	3900	3841	3898
Total sirens-tests	3843	3904	3904	3904	3904	3904	3843	3904
Indicator value	100.0%	100.0%	100.0%	99.9%	100.0%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness

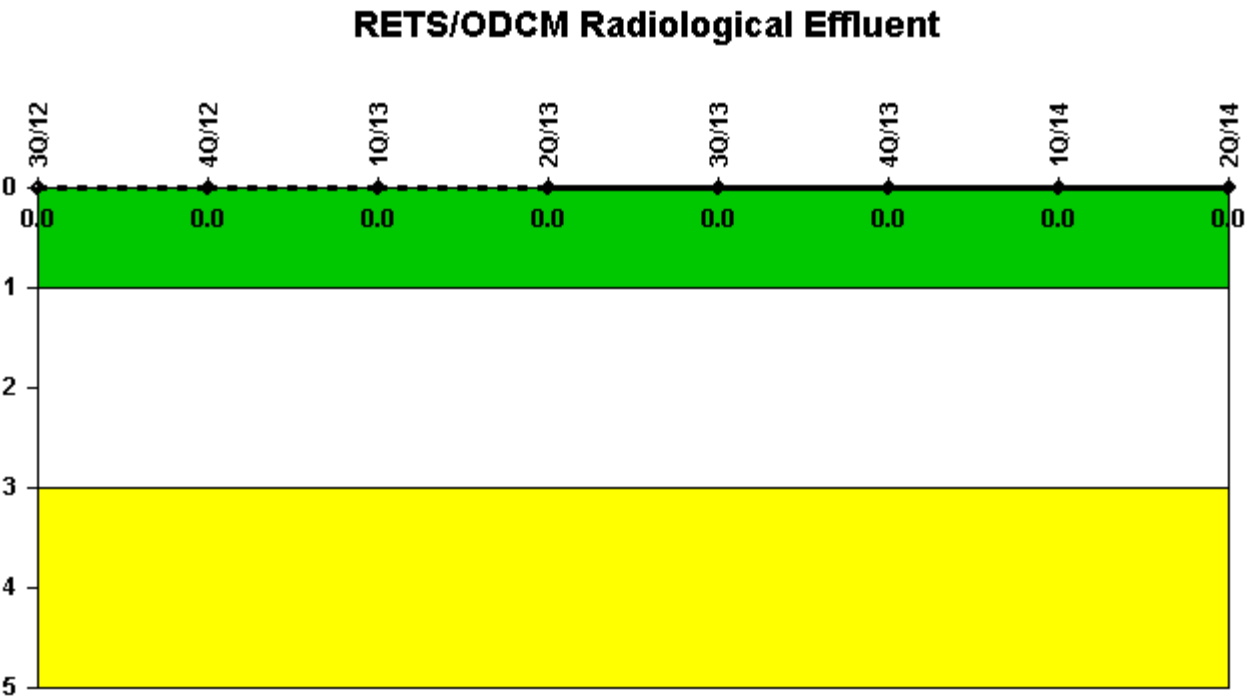


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



[Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: July 31, 2014

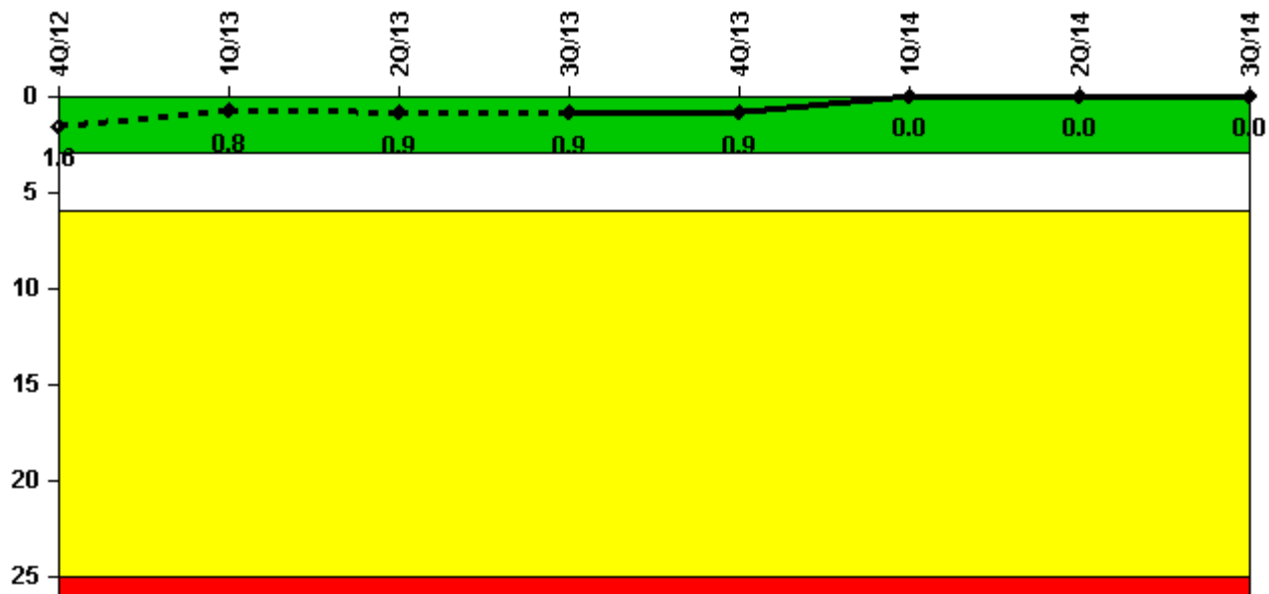
Byron 2

3Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: BYRON STATION 3Q2014C UNIT 2

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

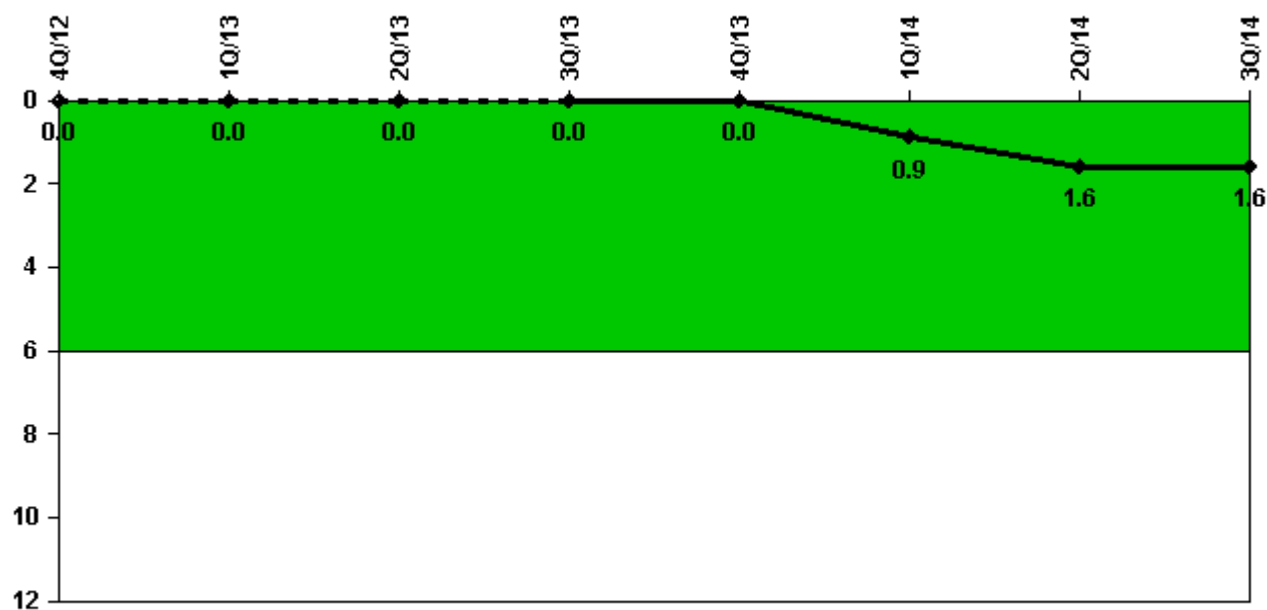
Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Unplanned scrams	0	1.0	0	0	0	0	0	0
Critical hours	2209.0	2129.6	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0
Indicator value	1.6	0.8	0.9	0.9	0.9	0	0	0

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

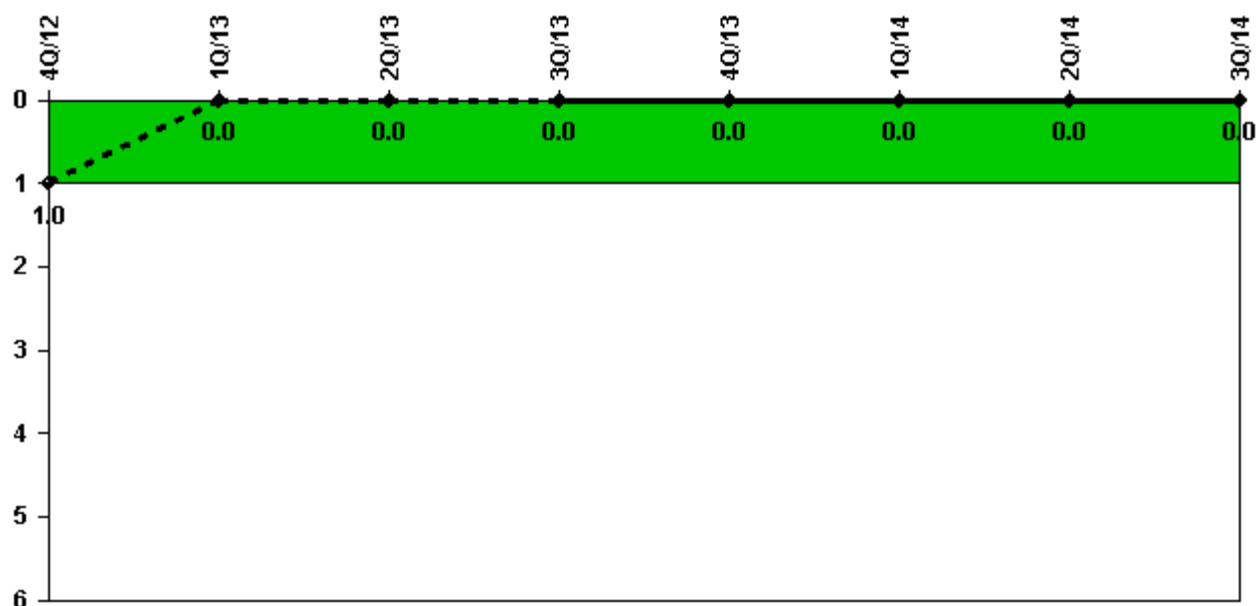
Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Unplanned power changes	0	0	0	0	0	1.0	1.0	0
Critical hours	2209.0	2129.6	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0
Indicator value	0	0	0	0	0	0.9	1.6	1.6

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



Thresholds: White > 1.0

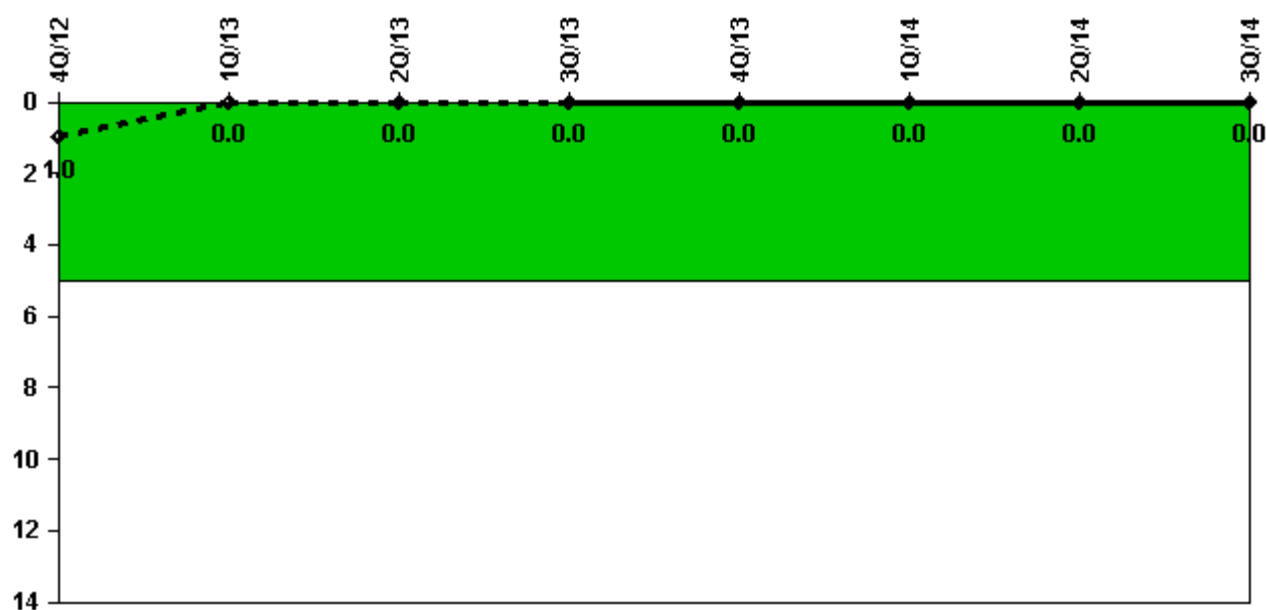
Notes

Unplanned Scrams with Complications	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	1	0	0	0	0	0	0	0

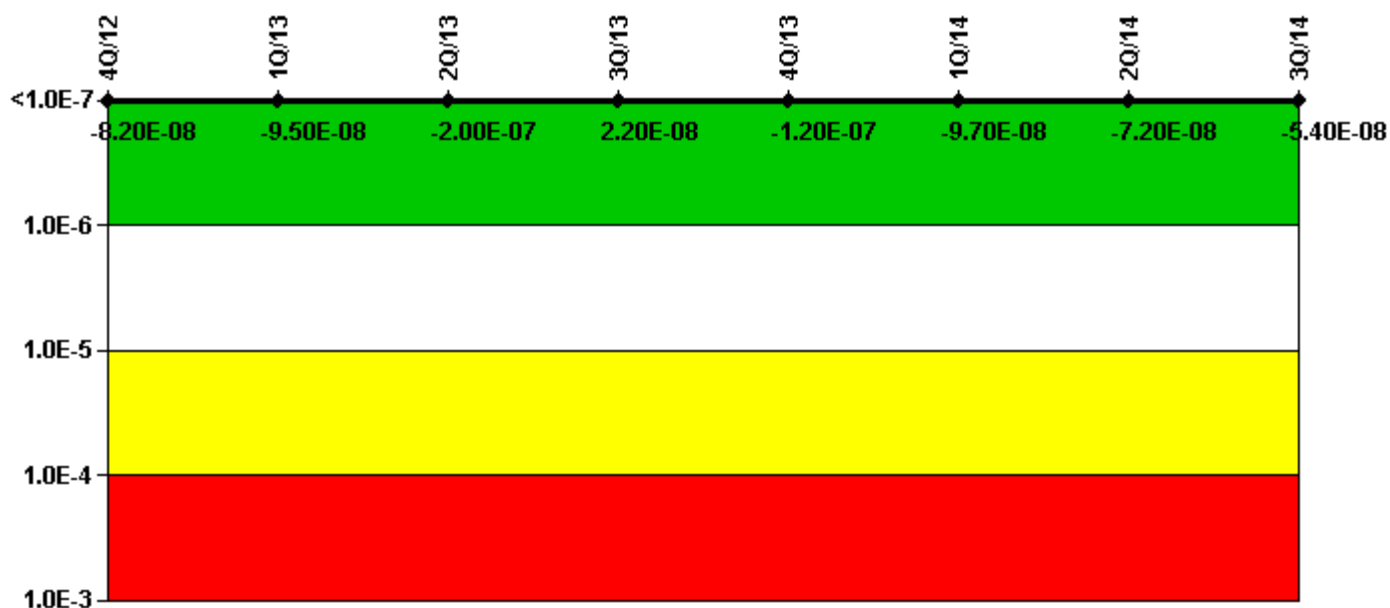
Licensee Comments:

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water was originally counted as an SSFF, but was retracted based on the definition of an SSFF in LS-AA-2080 on 5/13/14.

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

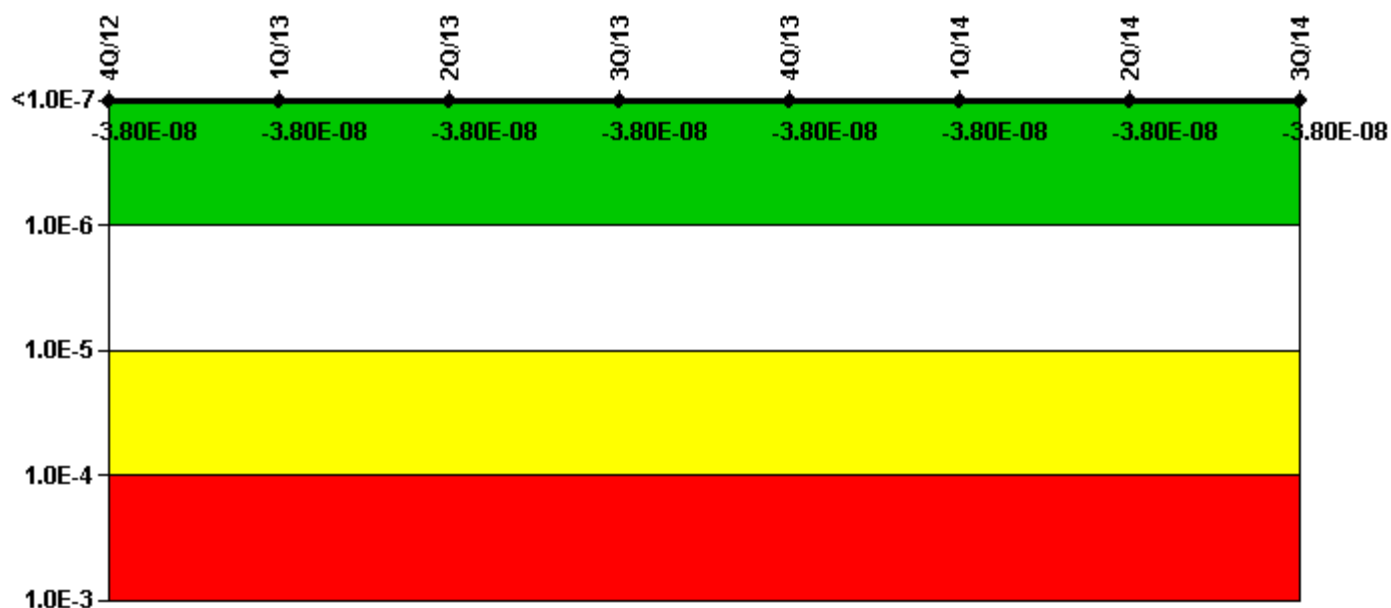
Mitigating Systems Performance Index, Emergency AC Power System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	4.00E-08	1.42E-08	9.68E-09	1.52E-08	-1.56E-08	-7.87E-09	3.98E-09	6.35E-09
URI (Δ CDF)	-1.22E-07	-1.09E-07	-2.14E-07	7.27E-09	-1.03E-07	-8.96E-08	-7.56E-08	-6.07E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-8.20E-08	-9.50E-08	-2.00E-07	2.20E-08	-1.20E-07	-9.70E-08	-7.20E-08	-5.40E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

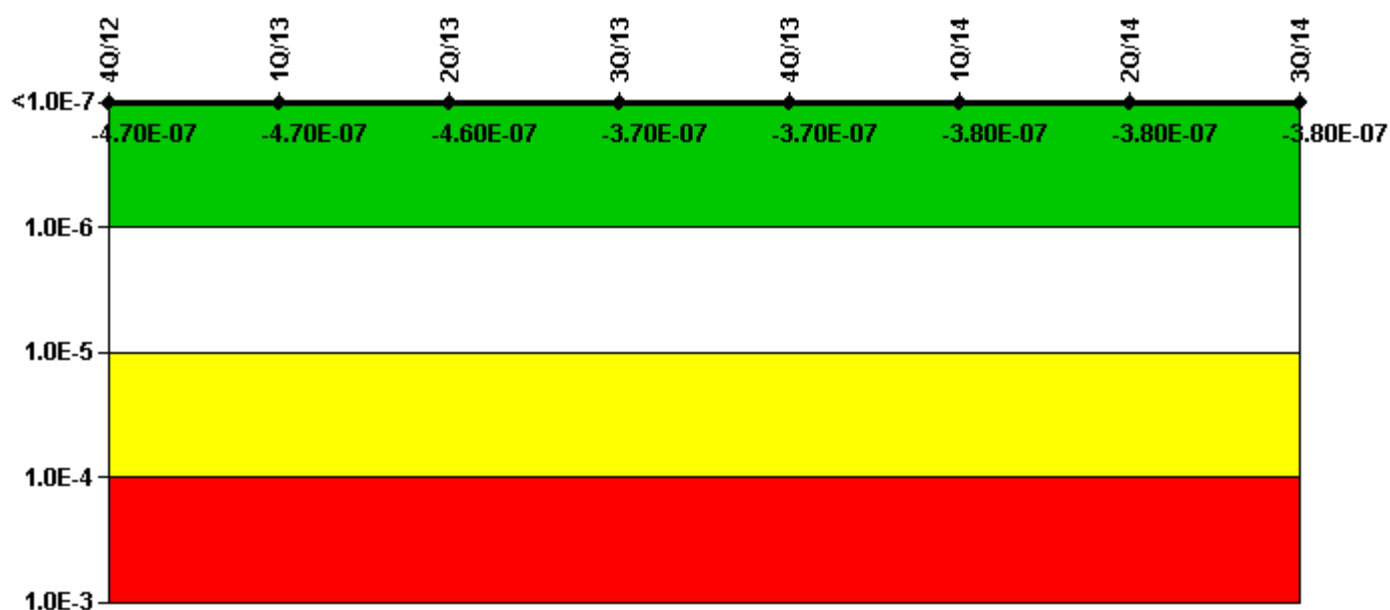
Mitigating Systems Performance Index, High Pressure Injection System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (Δ CDF)	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	-7.83E-08	-7.73E-08	-7.81E-08	1.36E-08	1.28E-08	9.26E-09	6.48E-09	4.63E-09
URI (Δ CDF)	-3.93E-07	-3.93E-07	-3.87E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.87E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.70E-07	-4.70E-07	-4.60E-07	-3.70E-07	-3.70E-07	-3.80E-07	-3.80E-07	-3.80E-07

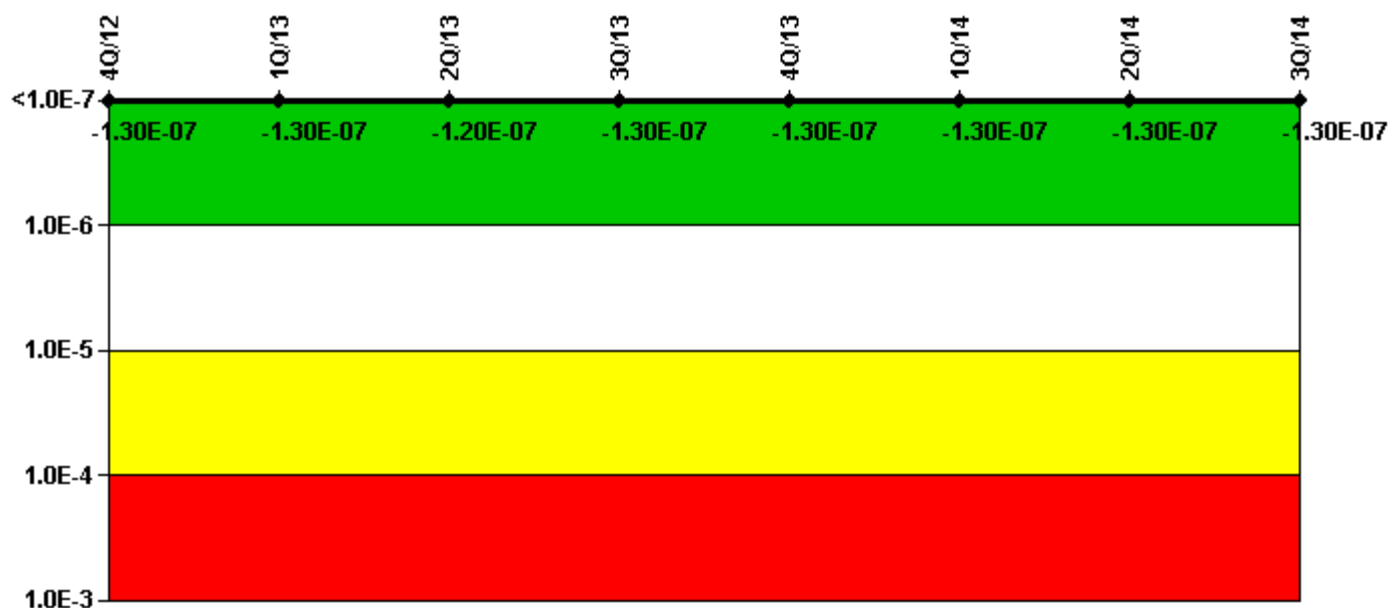
Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

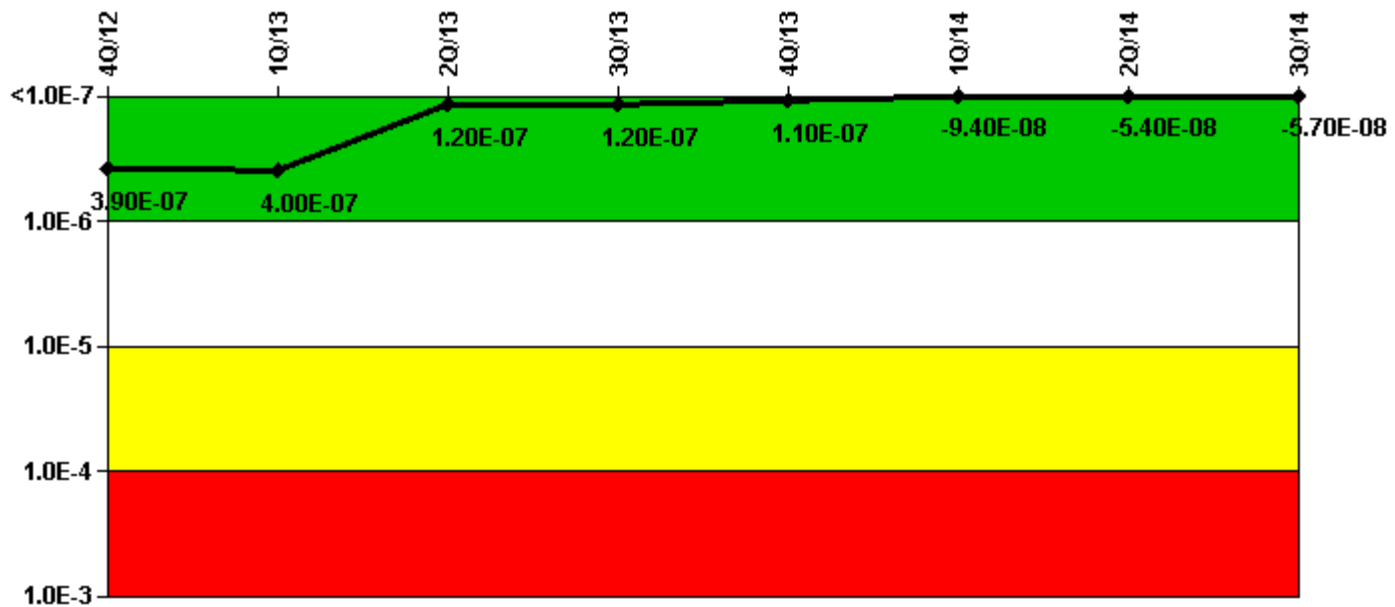
Mitigating Systems Performance Index, Residual Heat Removal System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	-3.33E-08	-3.33E-08	-2.41E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (Δ CDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	5.21E-07	5.23E-07	2.44E-07	2.45E-07	2.28E-07	1.79E-08	5.32E-08	4.59E-08
URI (Δ CDF)	-1.31E-07	-1.28E-07	-1.24E-07	-1.20E-07	-1.16E-07	-1.12E-07	-1.07E-07	-1.03E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.90E-07	4.00E-07	1.20E-07	1.20E-07	1.10E-07	-9.40E-08	-5.40E-08	-5.70E-08

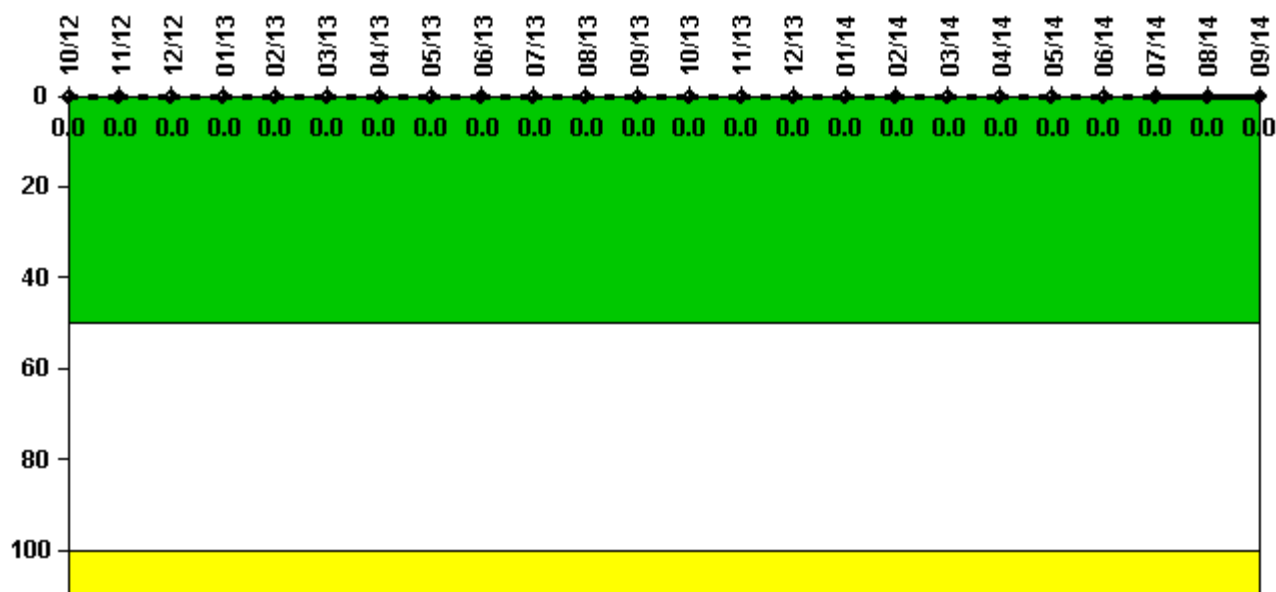
Licensee Comments:

2Q/13: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

Reactor Coolant System Activity



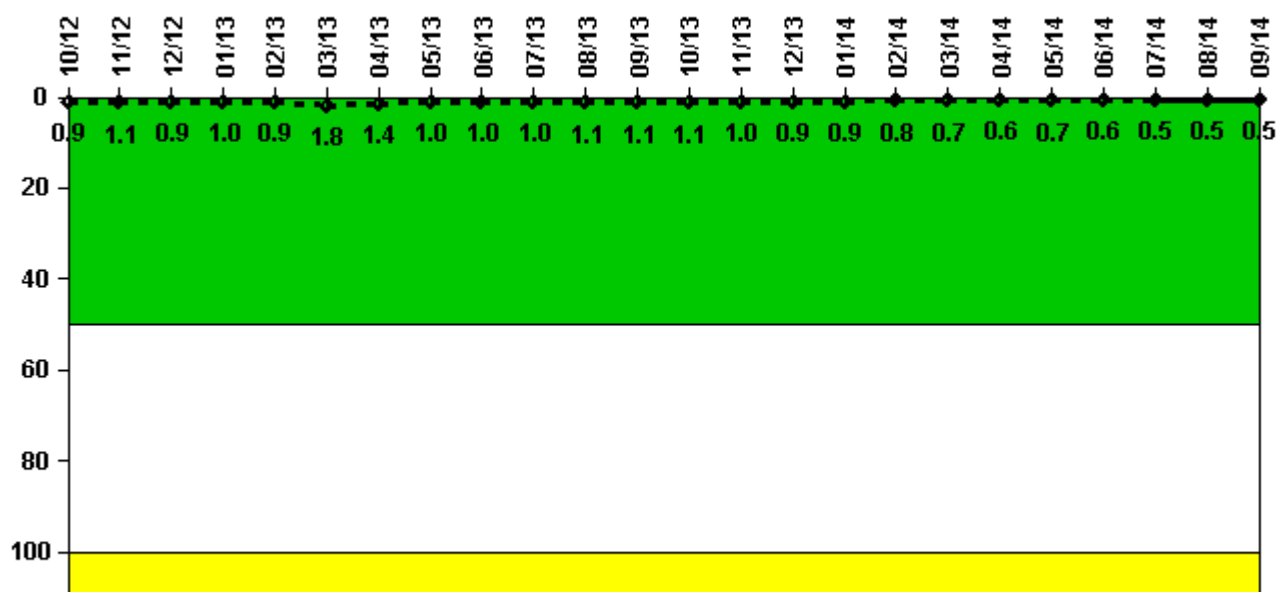
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum activity	0.000118	0.000091	0.000095	0.000099	0.000102	0.000104	0.000176	0.000049	0.000049	0.000049	0.000053	0.000054
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum activity	0.000062	0.000061	0.000069	0.000069	0.000072	0.000073	0.000076	0.000087	0.000078	0.000082	0.000085	0.000084
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



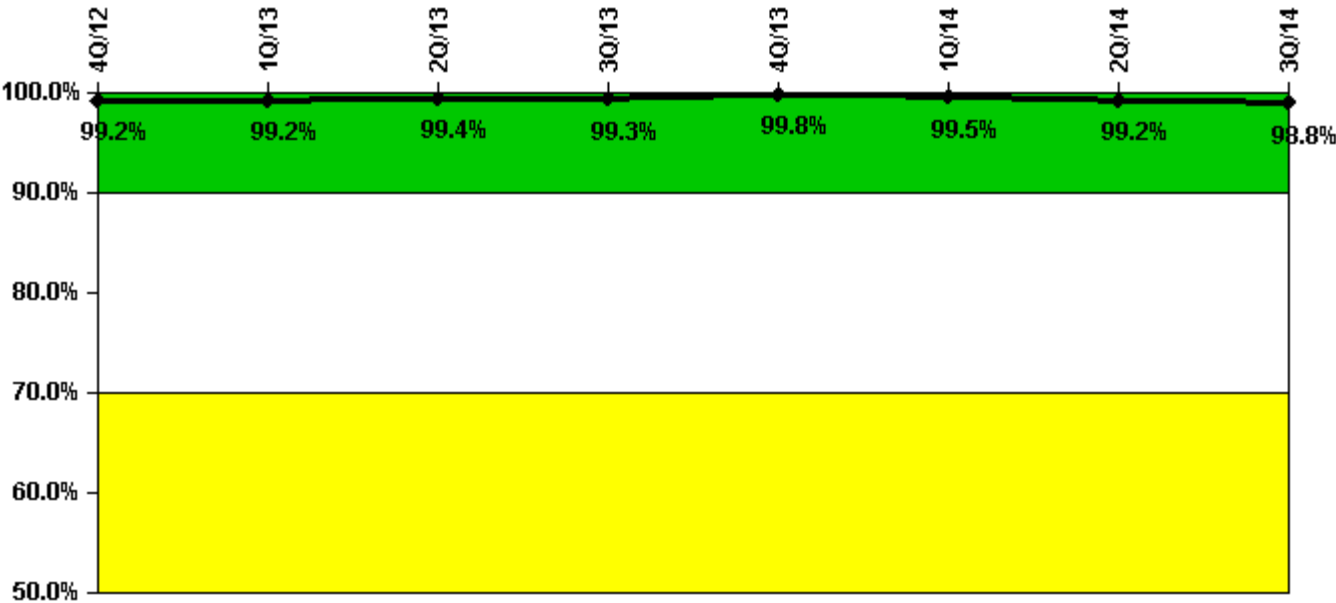
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum leakage	0.090	0.110	0.090	0.100	0.090	0.180	0.140	0.100	0.100	0.100	0.110	0.110
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	1.1	0.9	1.0	0.9	1.8	1.4	1.0	1.0	1.0	1.1	1.1
Reactor Coolant System Leakage	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum leakage	0.110	0.100	0.090	0.090	0.080	0.070	0.060	0.070	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.1	1.0	0.9	0.9	0.8	0.7	0.6	0.7	0.6	0.5	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



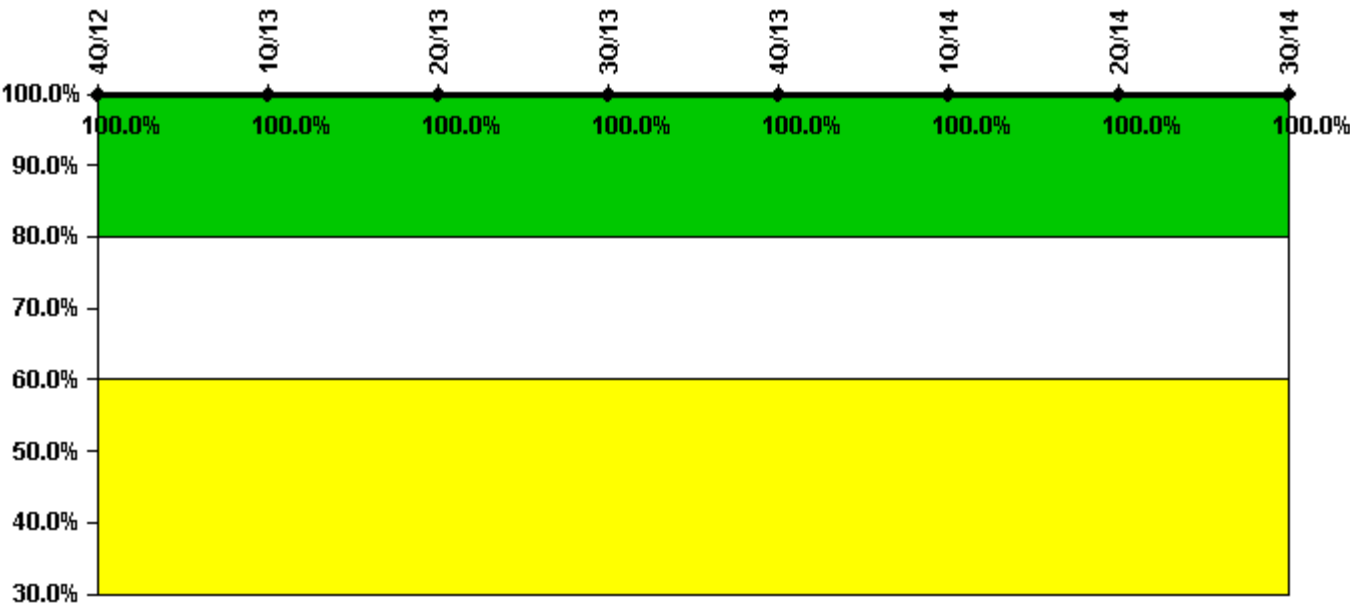
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Successful opportunities	3.0	104.0	12.0	55.0	32.0	62.0	70.0	90.0
Total opportunities	3.0	104.0	12.0	55.0	32.0	64.0	71.0	92.0
Indicator value	99.2%	99.2%	99.4%	99.3%	99.8%	99.5%	99.2%	98.8%

Licensee Comments: none

ERO Drill Participation



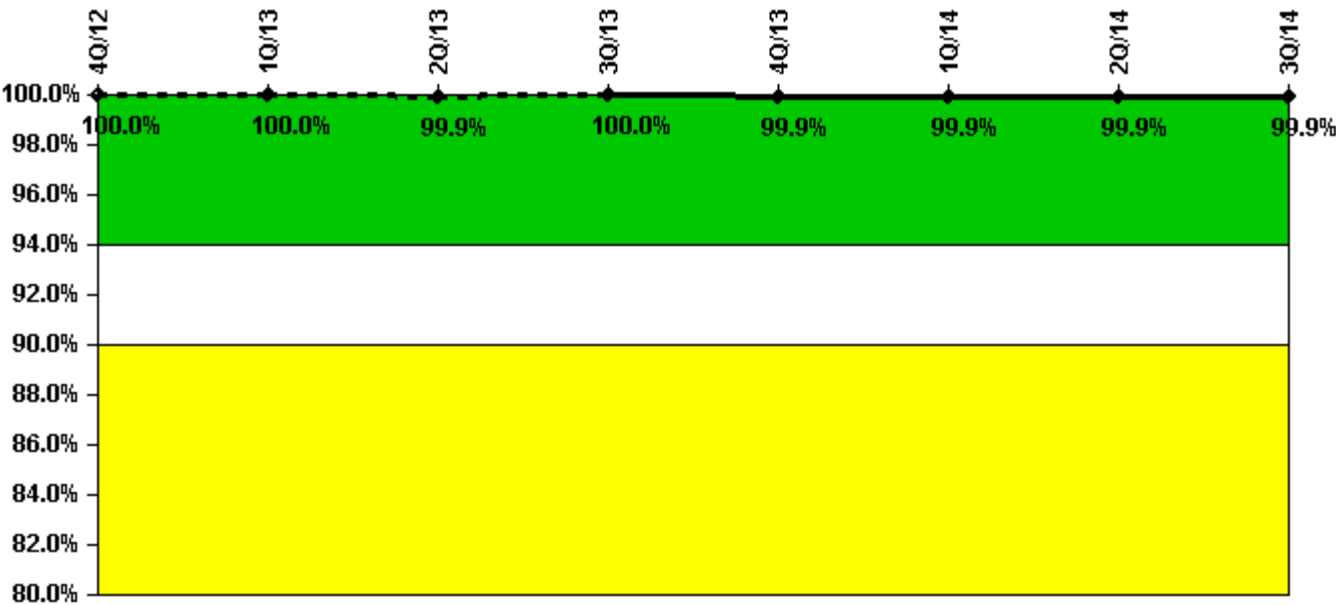
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Participating Key personnel	78.0	78.0	76.0	71.0	74.0	77.0	79.0	78.0
Total Key personnel	78.0	78.0	76.0	71.0	74.0	77.0	79.0	78.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



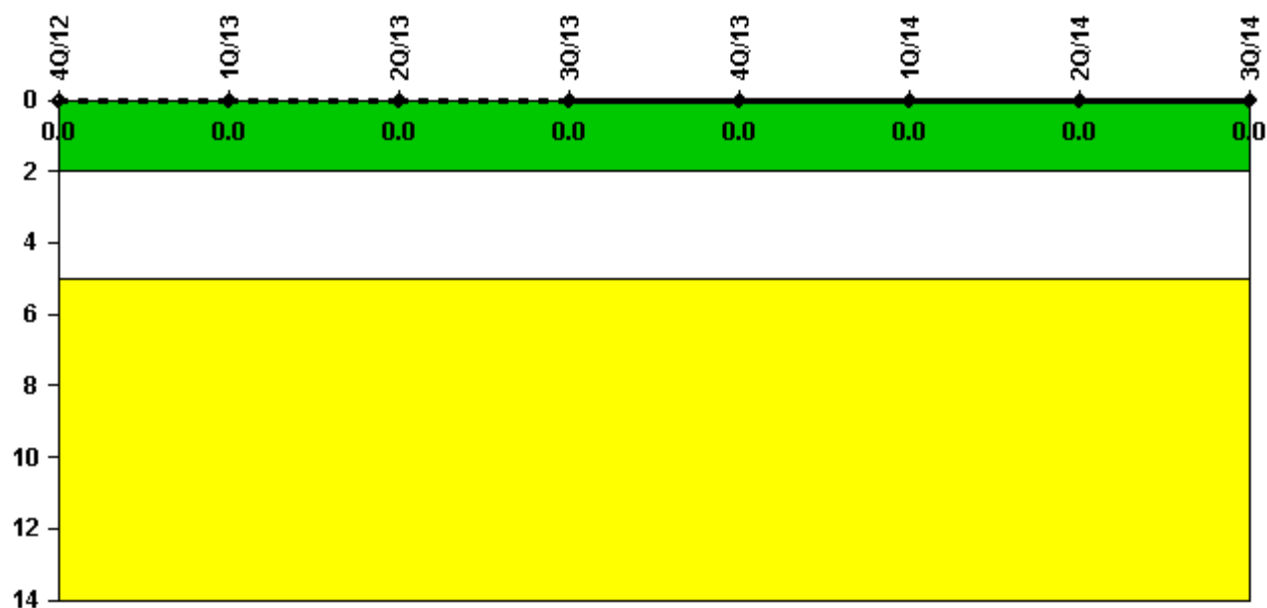
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Successful siren-tests	3904	3902	3900	3903	3900	3841	3898	3896
Total sirens-tests	3904	3904	3904	3904	3904	3843	3904	3904
Indicator value	100.0%	100.0%	99.9%	100.0%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness

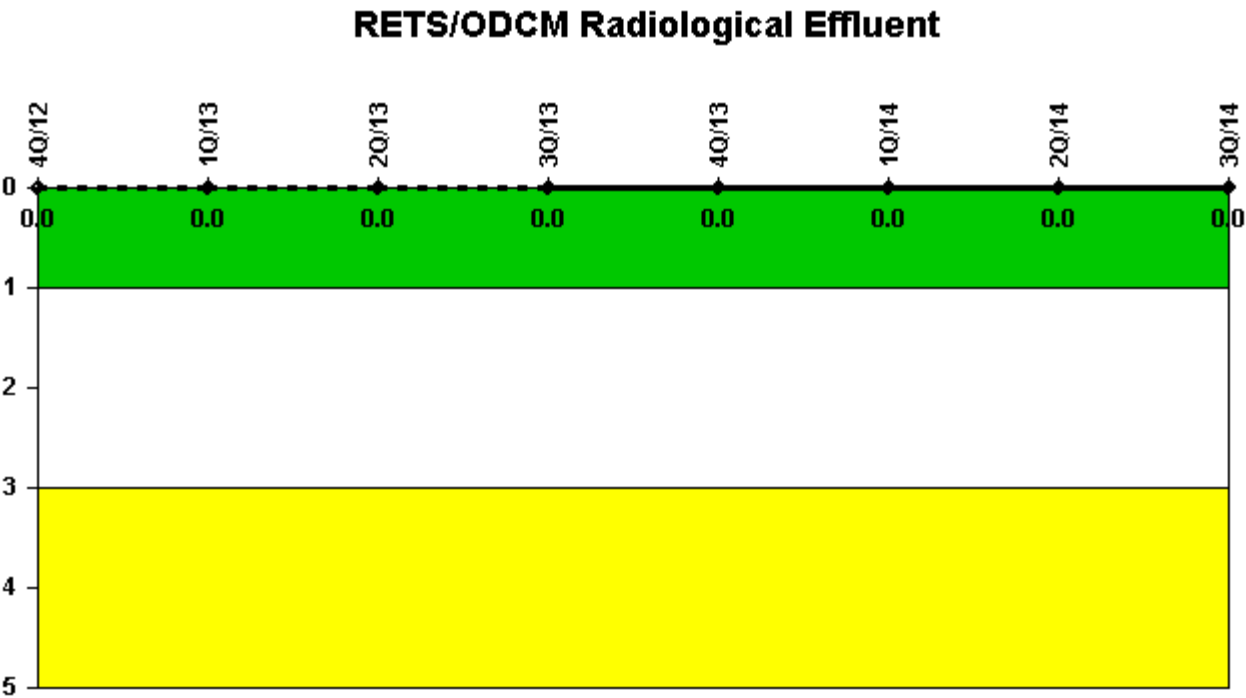


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



[Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: November 3, 2014

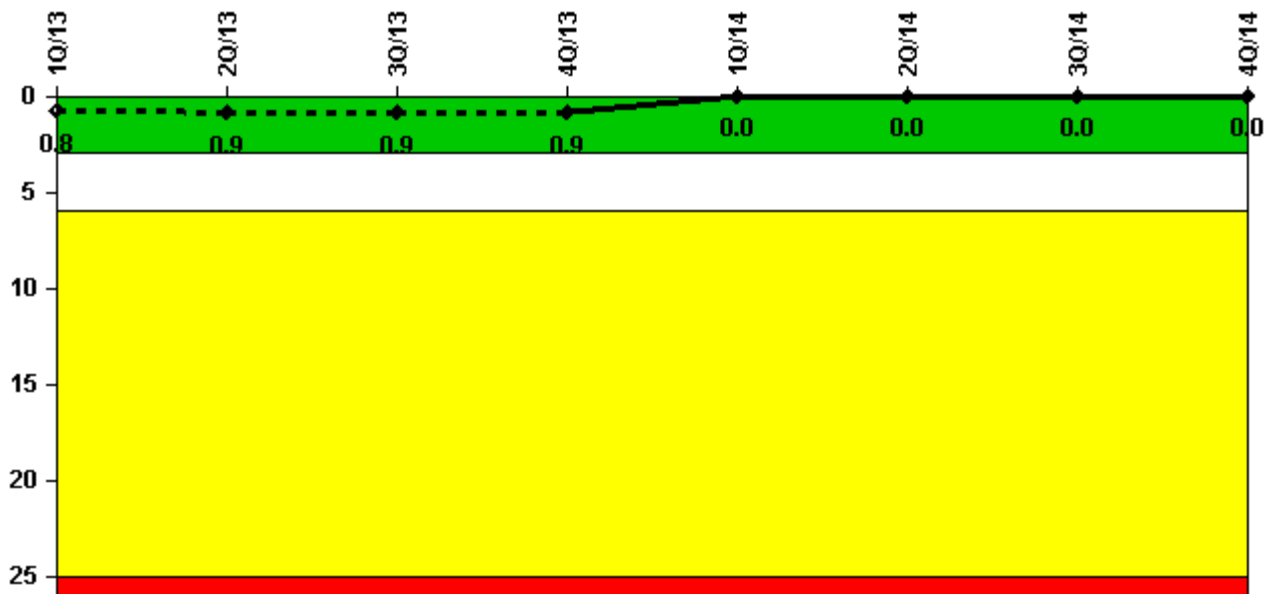
Byron 2

4Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Station Unit 2 4Q2014

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

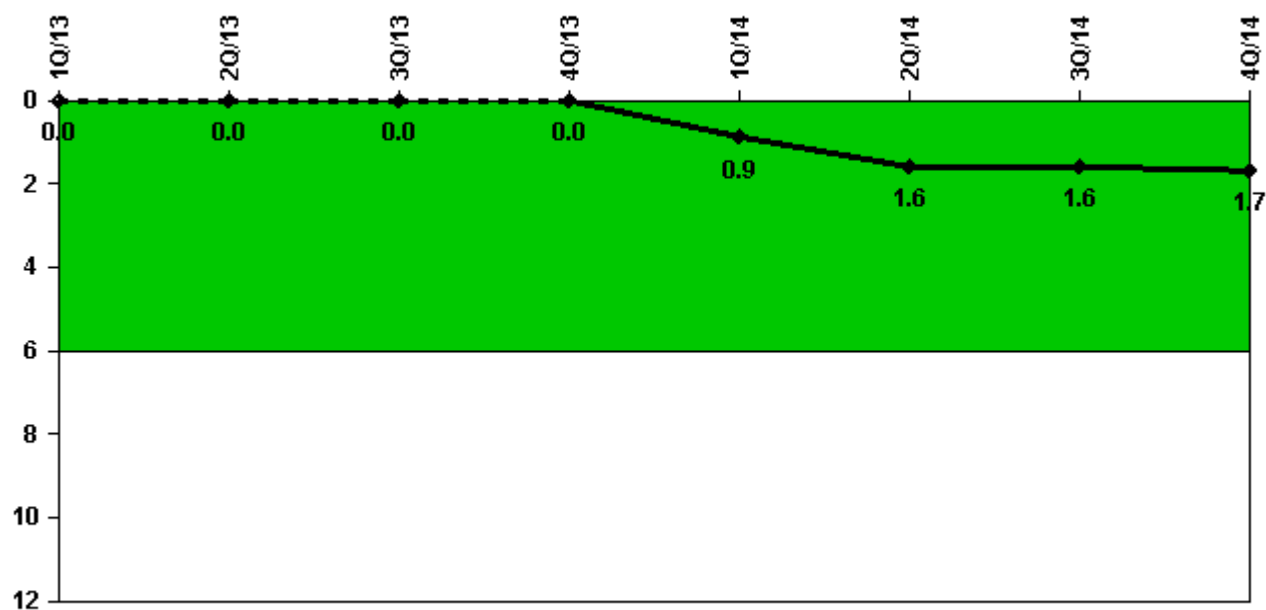
Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Unplanned scrams	1.0	0	0	0	0	0	0	0
Critical hours	2129.6	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2
Indicator value	0.8	0.9	0.9	0.9	0	0	0	0

Licensee Comments:

1Q/13: U-2 Reactor was manually tripped 3/20/2013 @ 7:51 PM. 2A GC Pump tripped with 2B GC pump unavailable. A root cause investigation and corrective actions are tracked in IR 01490315

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

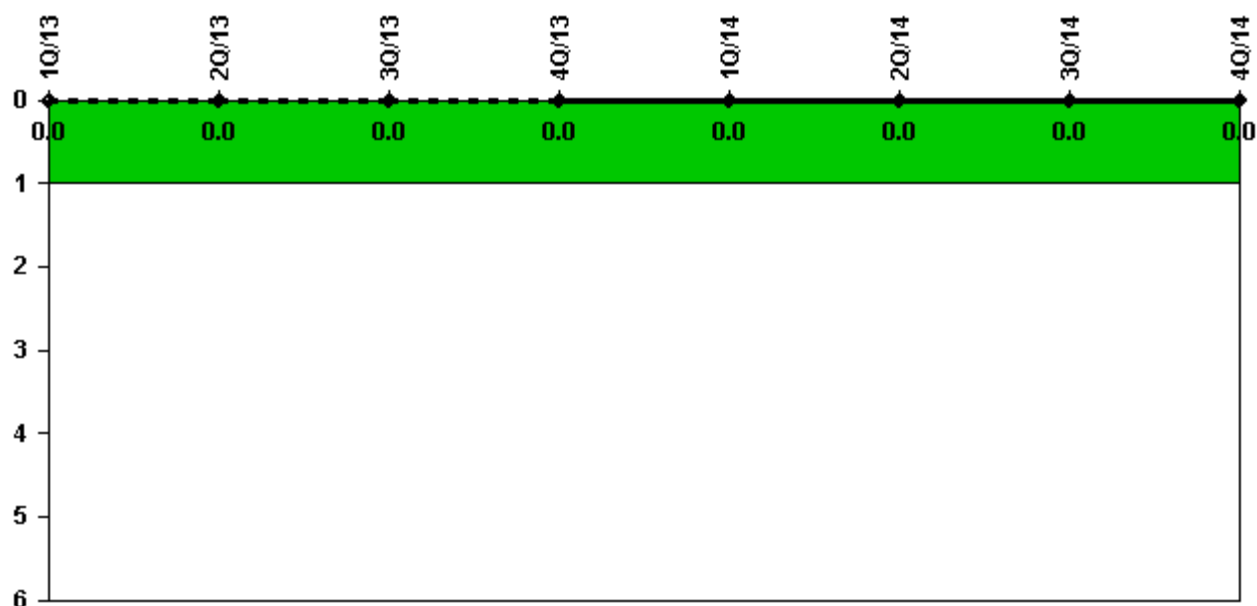
Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Unplanned power changes	0	0	0	0	1.0	1.0	0	0
Critical hours	2129.6	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2
Indicator value	0	0	0	0	0.9	1.6	1.6	1.7

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods, power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



Thresholds: White > 1.0

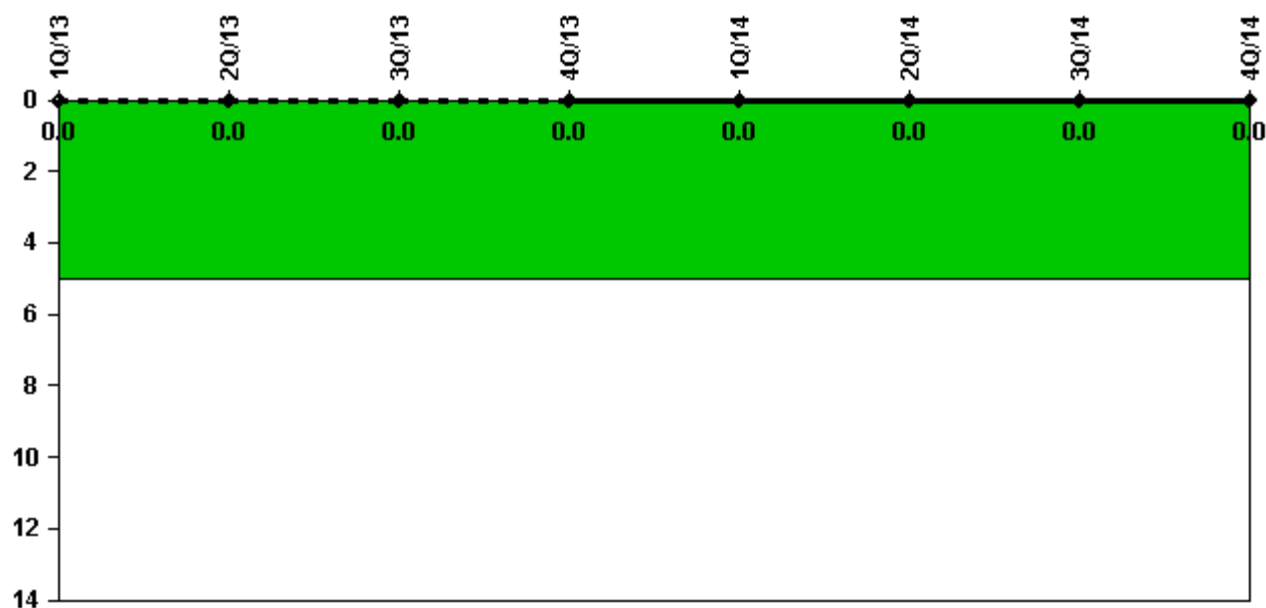
Notes

Unplanned Scrams with Complications	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments:

1Q/13: February 2012 Unit 2 experienced a manual reactor trip. (IR 1323547). This event rolled off.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

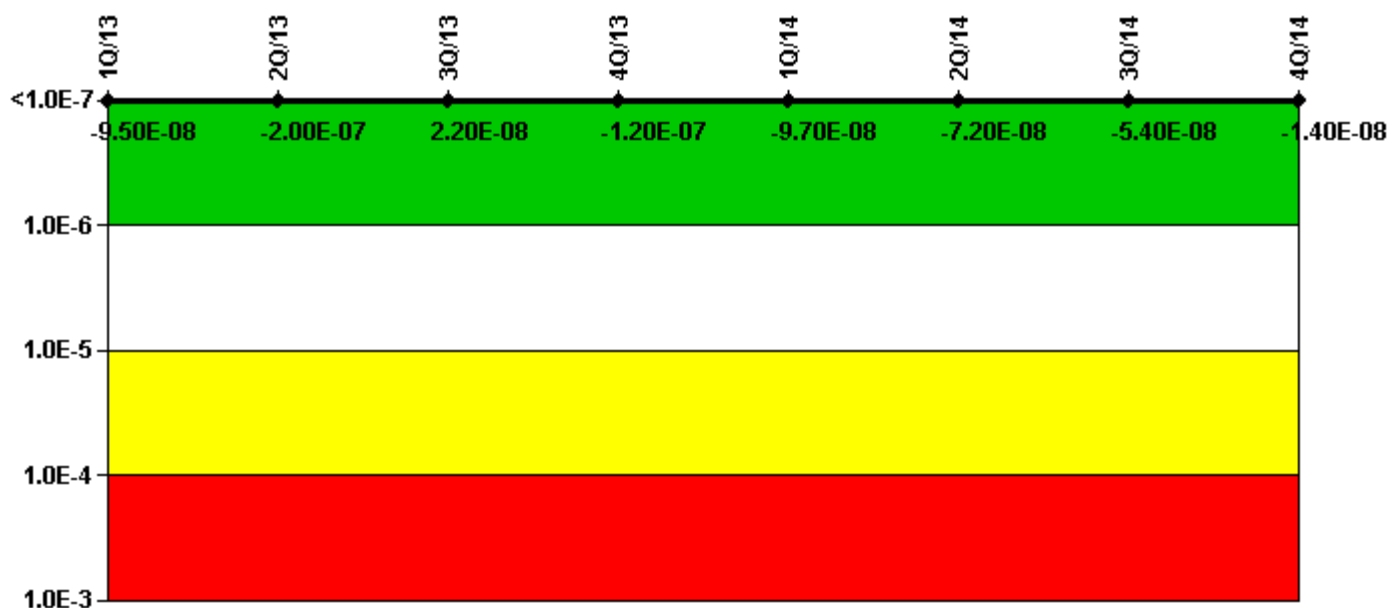
Licensee Comments:

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water was originally counted as an SSFF, but was retracted based on the definition of an SSFF in LS-AA-2080 on 5/13/14.

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

1Q/13: March 2012, LER 454-2012-001, Unit 2 Loss of Offsite Power drops off.

Mitigating Systems Performance Index, Emergency AC Power System



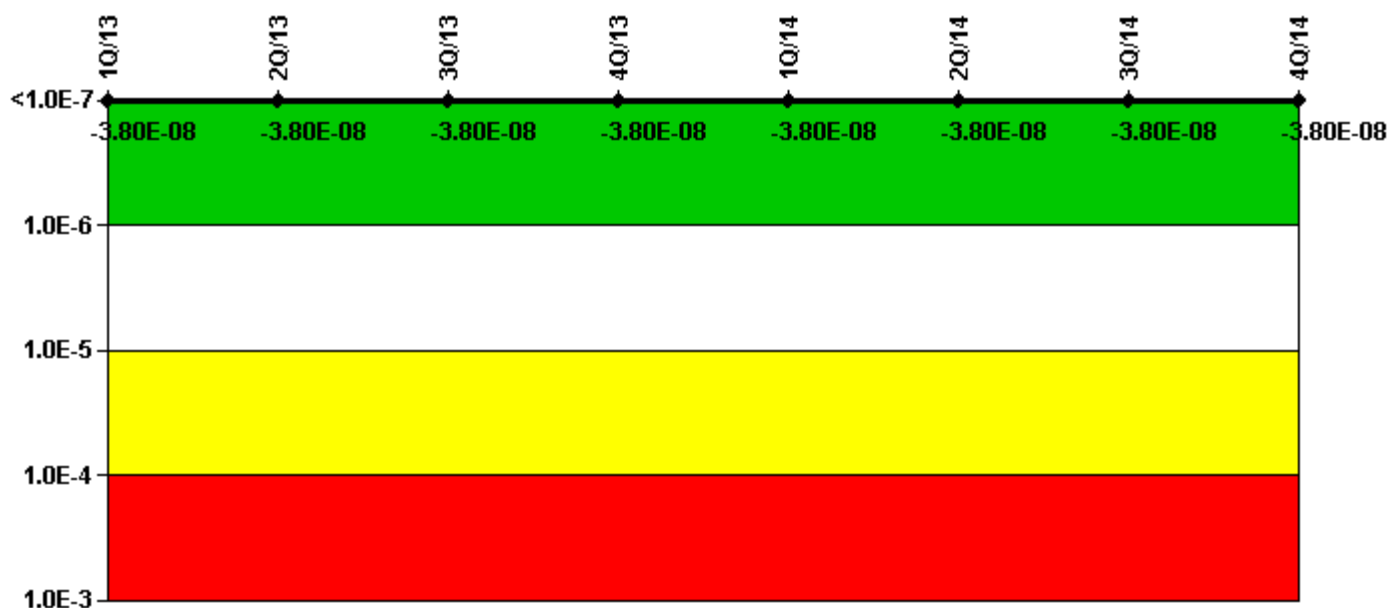
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	1.42E-08	9.68E-09	1.52E-08	-1.56E-08	-7.87E-09	3.98E-09	6.35E-09	3.04E-08
URI (Δ CDF)	-1.09E-07	-2.14E-07	7.27E-09	-1.03E-07	-8.96E-08	-7.56E-08	-6.07E-08	-4.47E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.50E-08	-2.00E-07	2.20E-08	-1.20E-07	-9.70E-08	-7.20E-08	-5.40E-08	-1.40E-08

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



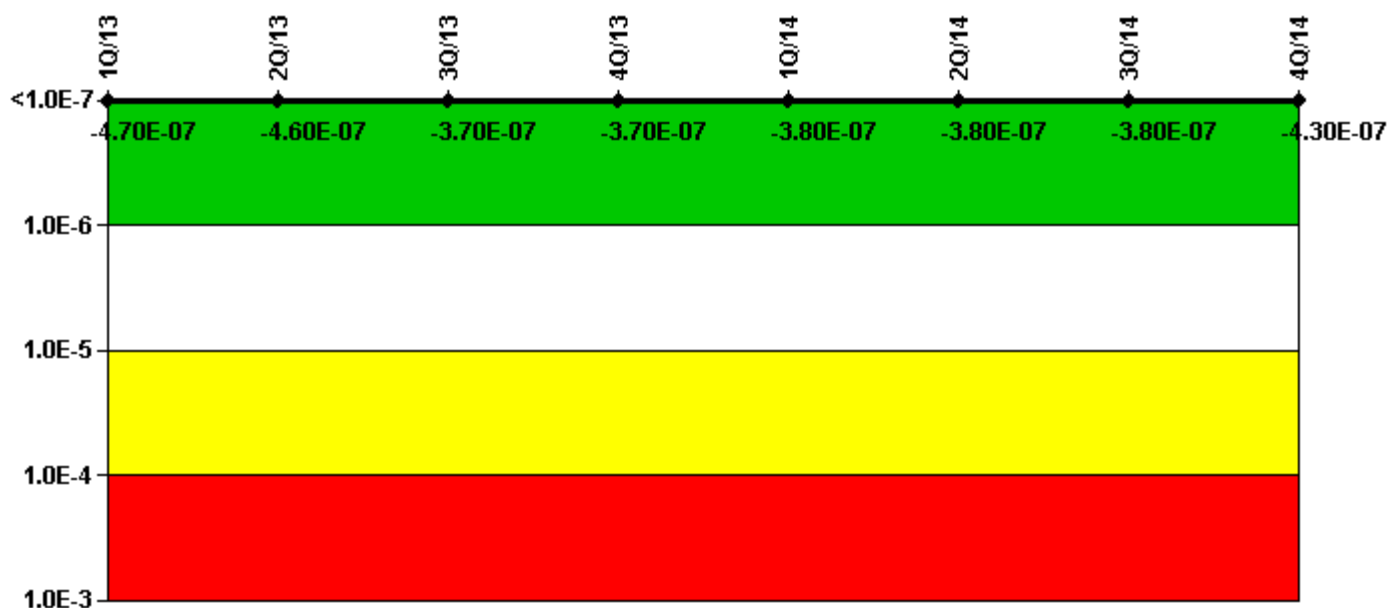
Thresholds: White $> 1.00E-6$ Yellow $> 1.00E-5$ Red $> 1.00E-4$

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (Δ CDF)	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

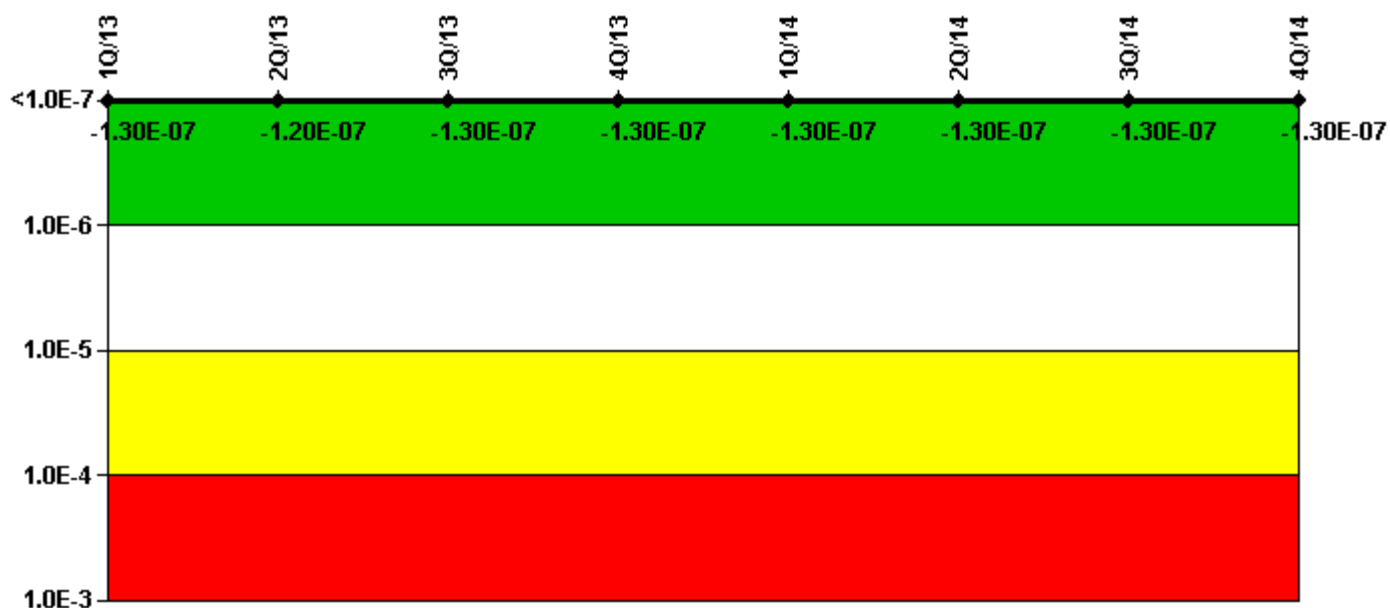
Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	-7.73E-08	-7.81E-08	1.36E-08	1.28E-08	9.26E-09	6.48E-09	4.63E-09	-6.01E-08
URI (Δ CDF)	-3.93E-07	-3.87E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.87E-07	-3.73E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.70E-07	-4.60E-07	-3.70E-07	-3.70E-07	-3.80E-07	-3.80E-07	-3.80E-07	-4.30E-07

Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908. ICES record #304960

Mitigating Systems Performance Index, Residual Heat Removal System



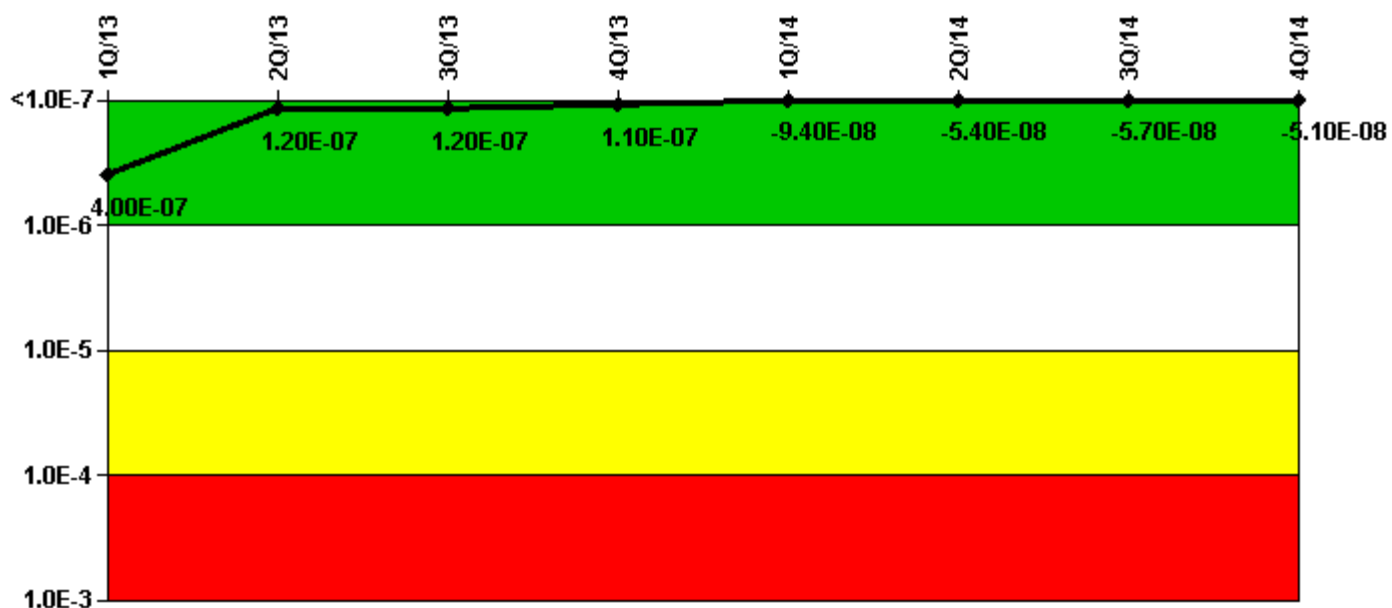
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	-3.33E-08	-2.41E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (Δ CDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

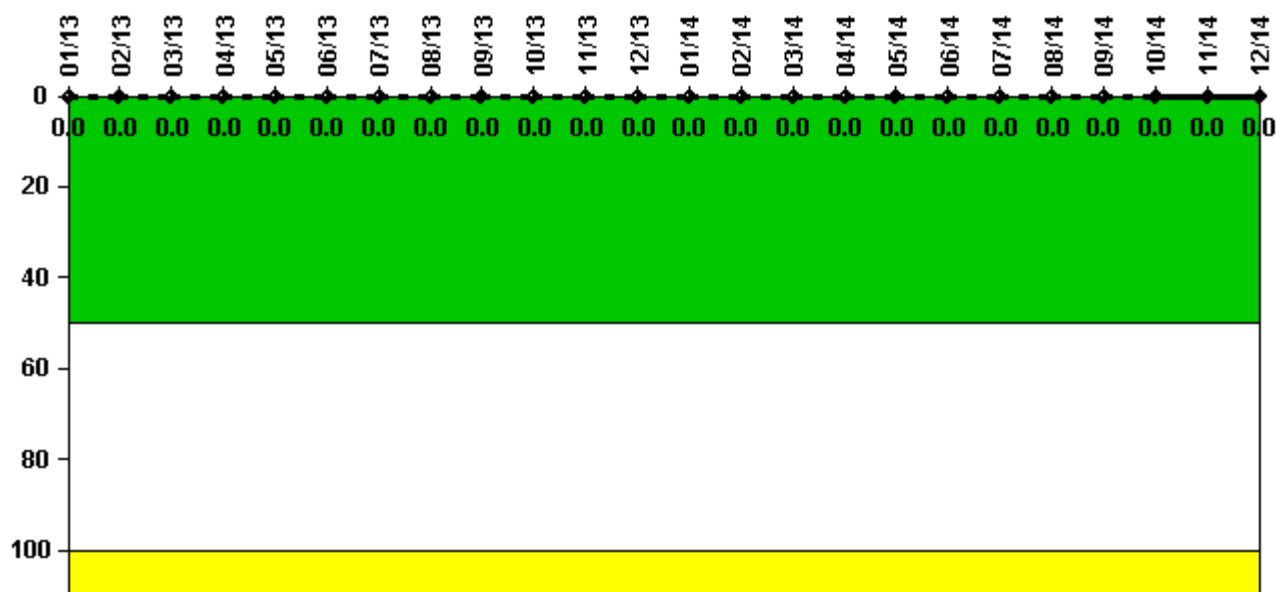
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	5.23E-07	2.44E-07	2.45E-07	2.28E-07	1.79E-08	5.32E-08	4.59E-08	4.73E-08
URI (Δ CDF)	-1.28E-07	-1.24E-07	-1.20E-07	-1.16E-07	-1.12E-07	-1.07E-07	-1.03E-07	-9.81E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	4.00E-07	1.20E-07	1.20E-07	1.10E-07	-9.40E-08	-5.40E-08	-5.70E-08	-5.10E-08

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

Reactor Coolant System Activity



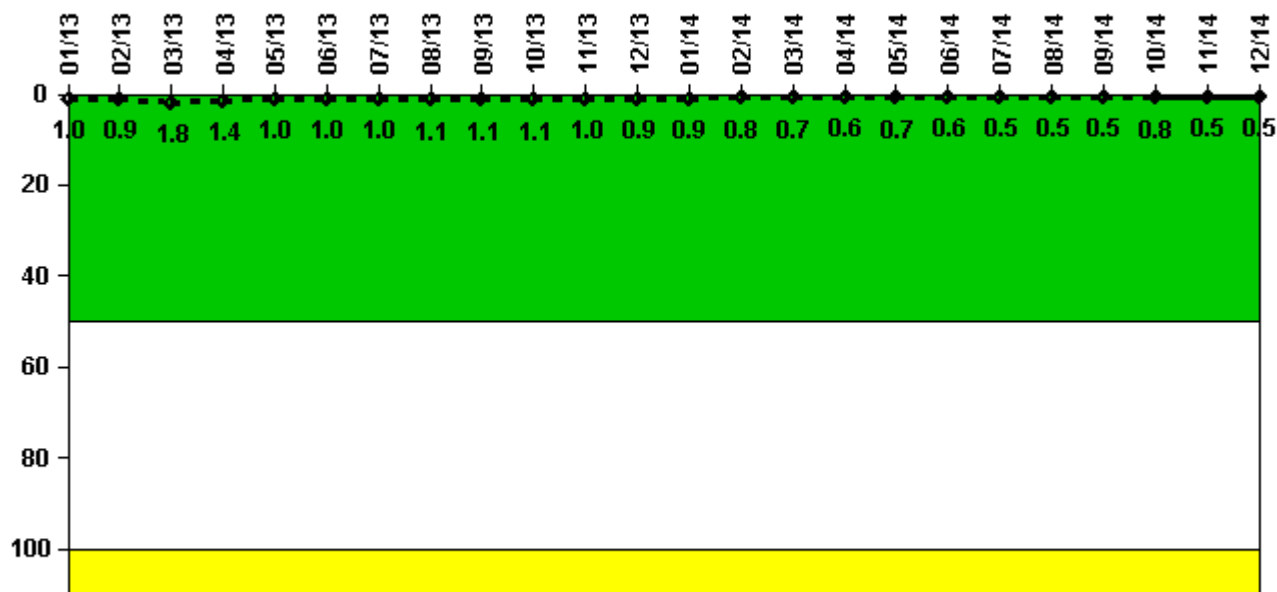
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum activity	0.000099	0.000102	0.000104	0.000176	0.000049	0.000049	0.000049	0.000053	0.000054	0.000062	0.000061	0.000069
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum activity	0.000069	0.000072	0.000073	0.000076	0.000087	0.000078	0.000082	0.000085	0.000084	0.000045	0.000050	0.000054
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage

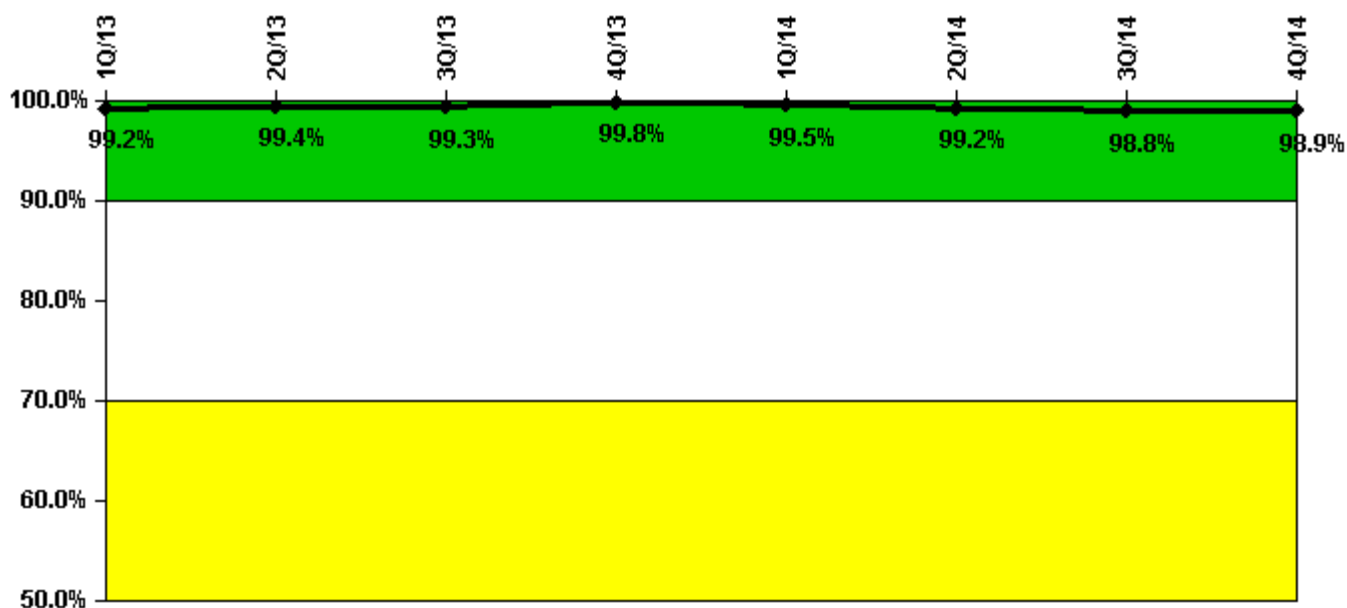


Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum leakage	0.100	0.090	0.180	0.140	0.100	0.100	0.100	0.110	0.110	0.110	0.100	0.090
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.0	0.9	1.8	1.4	1.0	1.0	1.0	1.1	1.1	1.1	1.0	0.9
Reactor Coolant System Leakage	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum leakage	0.090	0.080	0.070	0.060	0.070	0.060	0.050	0.050	0.050	0.080	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	0.8	0.7	0.6	0.7	0.6	0.5	0.5	0.5	0.8	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance

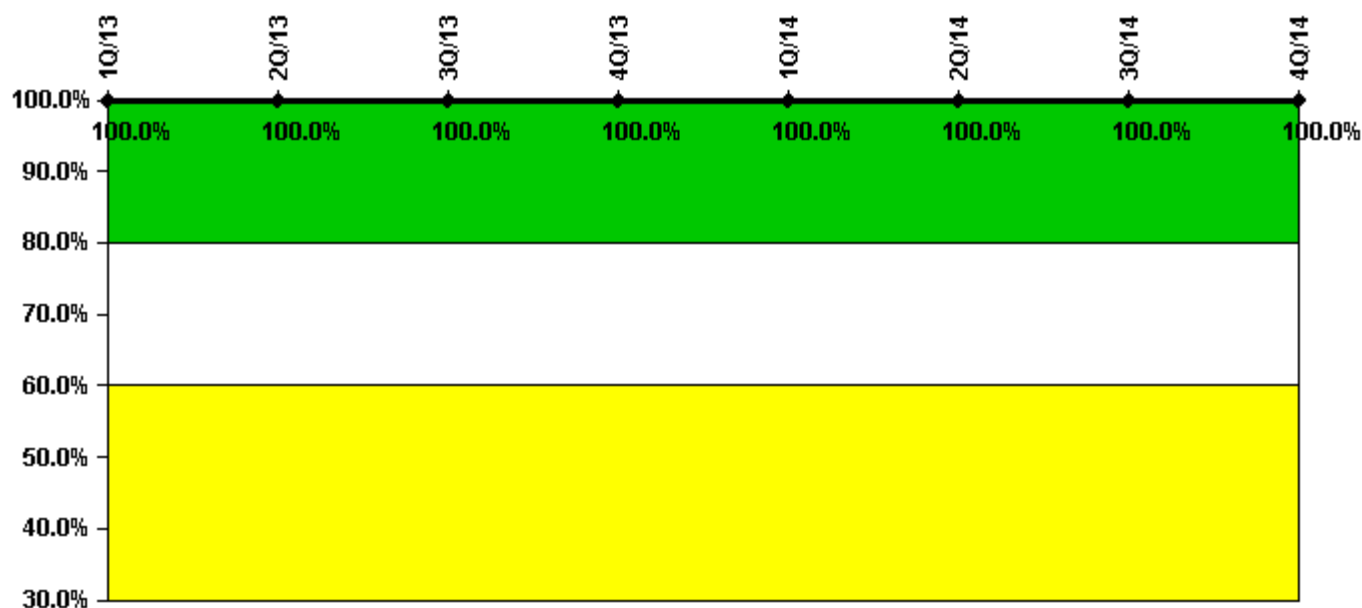
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Successful opportunities	104.0	12.0	55.0	32.0	62.0	70.0	90.0	14.0
Total opportunities	104.0	12.0	55.0	32.0	64.0	71.0	92.0	14.0
Indicator value	99.2%	99.4%	99.3%	99.8%	99.5%	99.2%	98.8%	98.9%

Licensee Comments: none

ERO Drill Participation



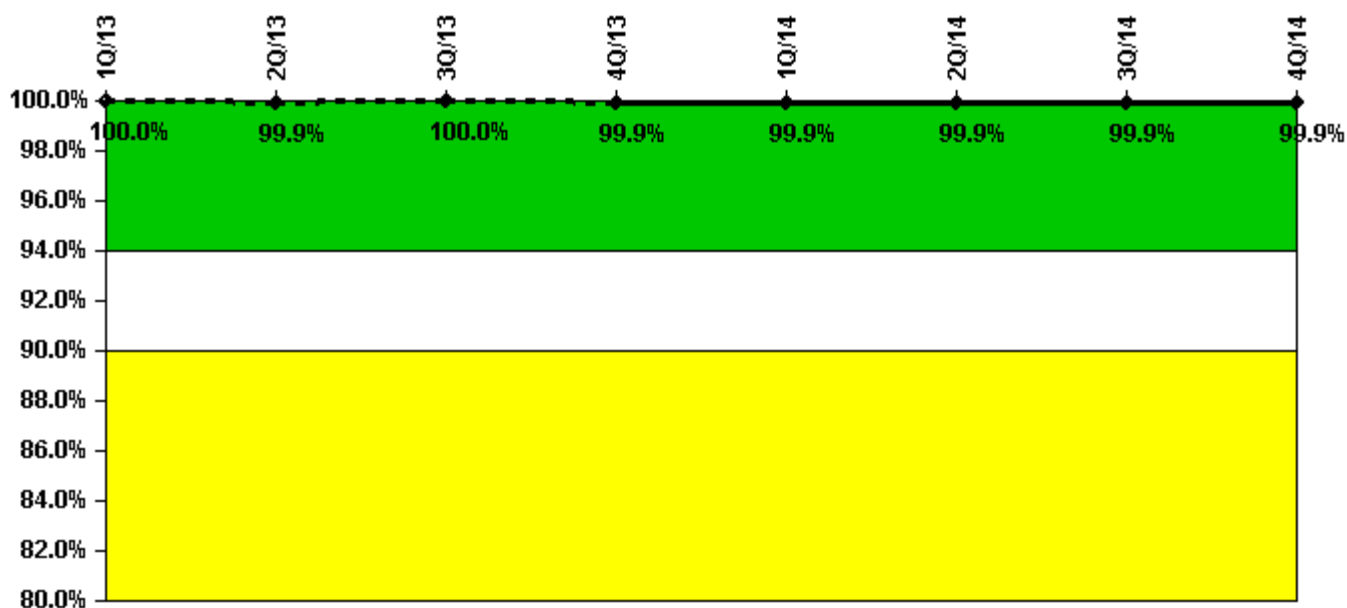
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Participating Key personnel	78.0	76.0	71.0	74.0	77.0	79.0	78.0	77.0
Total Key personnel	78.0	76.0	71.0	74.0	77.0	79.0	78.0	77.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



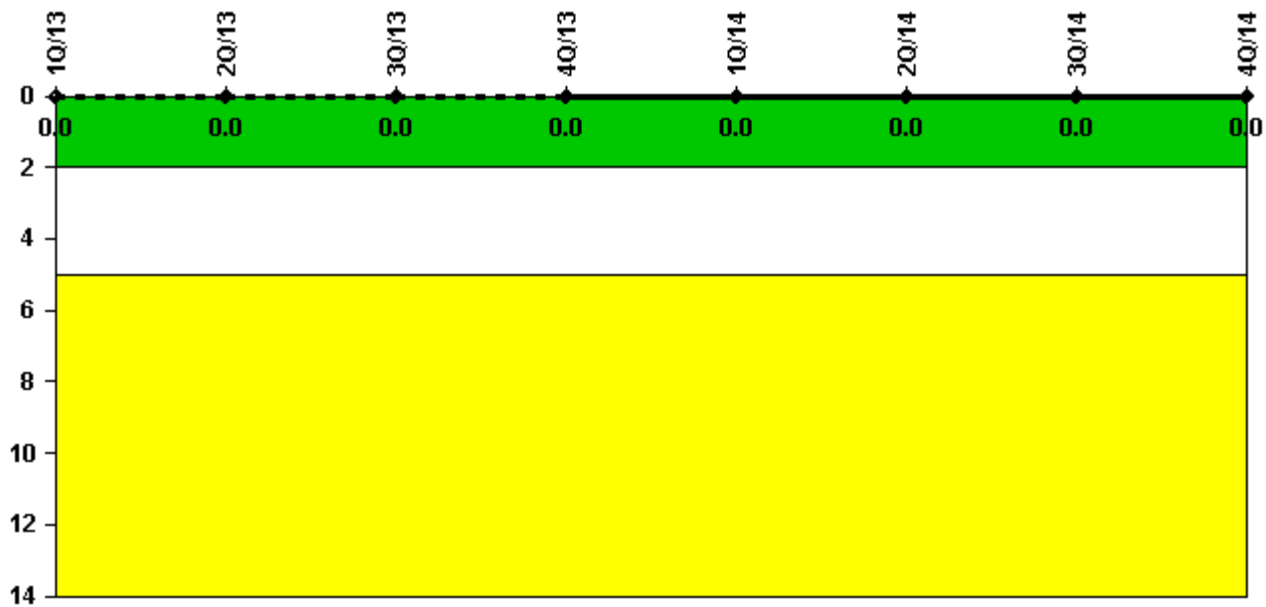
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Successful siren-tests	3902	3900	3903	3900	3841	3898	3896	3901
Total sirens-tests	3904	3904	3904	3904	3843	3904	3904	3904
Indicator value	100.0%	99.9%	100.0%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness

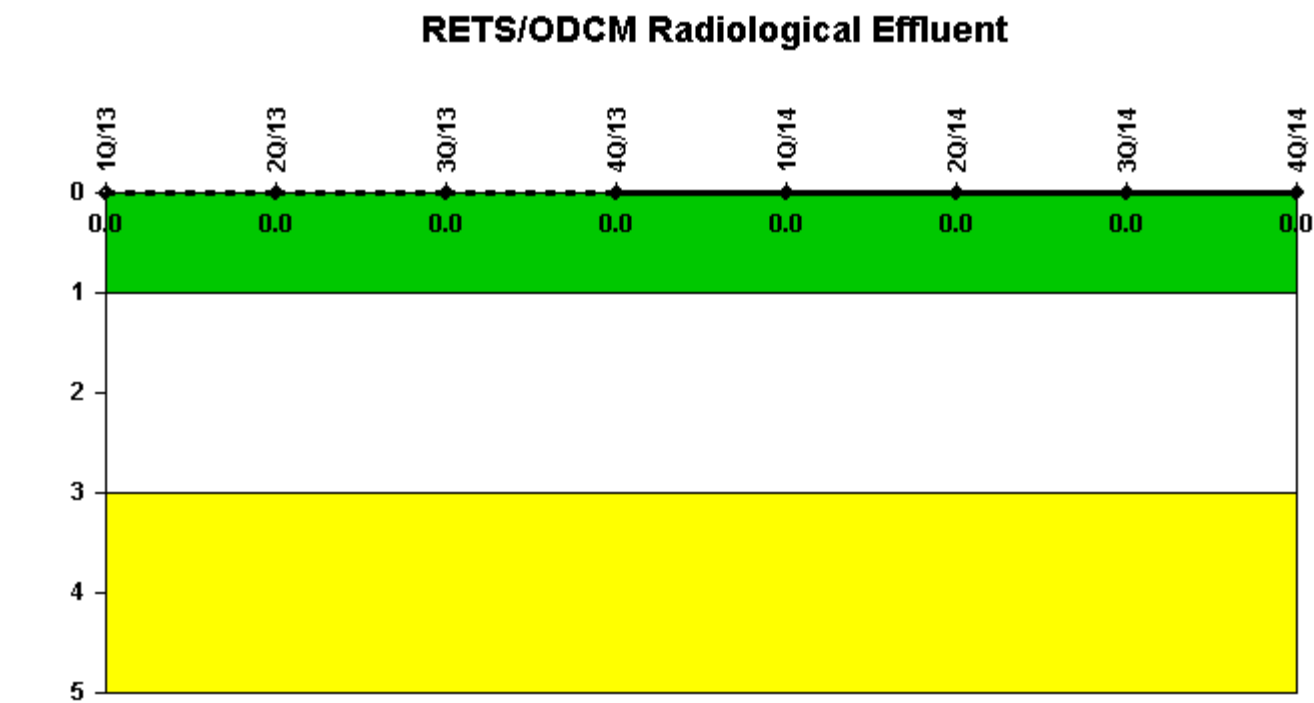


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



[Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: February 3, 2015

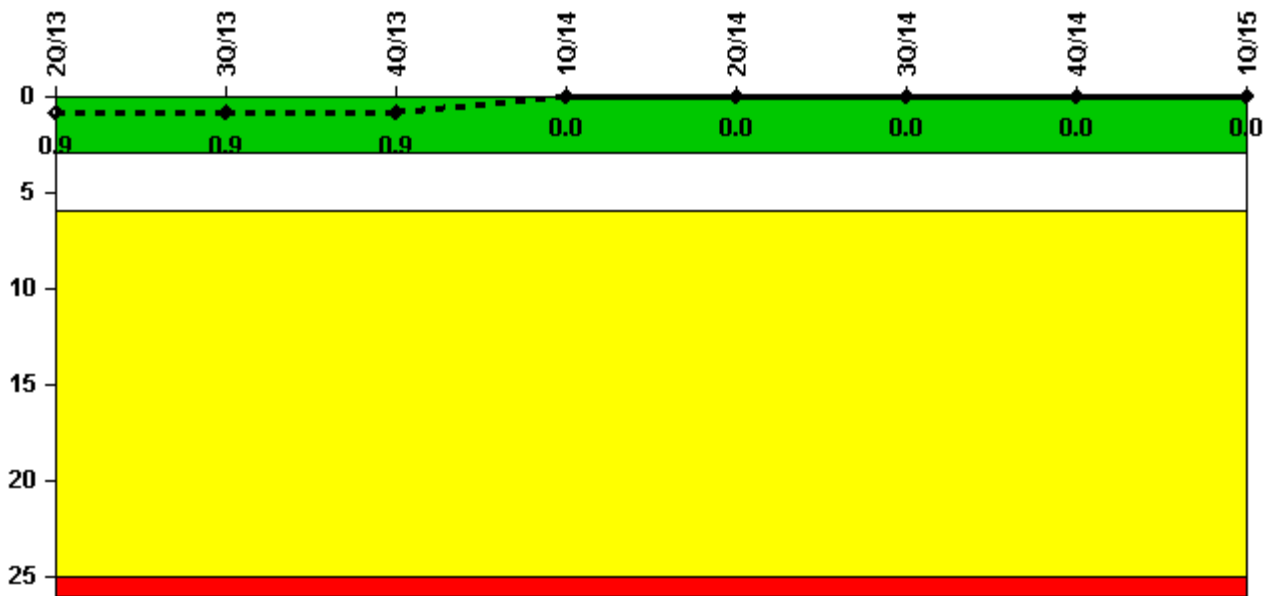
Byron 2

1Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: 1Q2015 Byron Station Unit 2

Unplanned Scrams per 7000 Critical Hrs



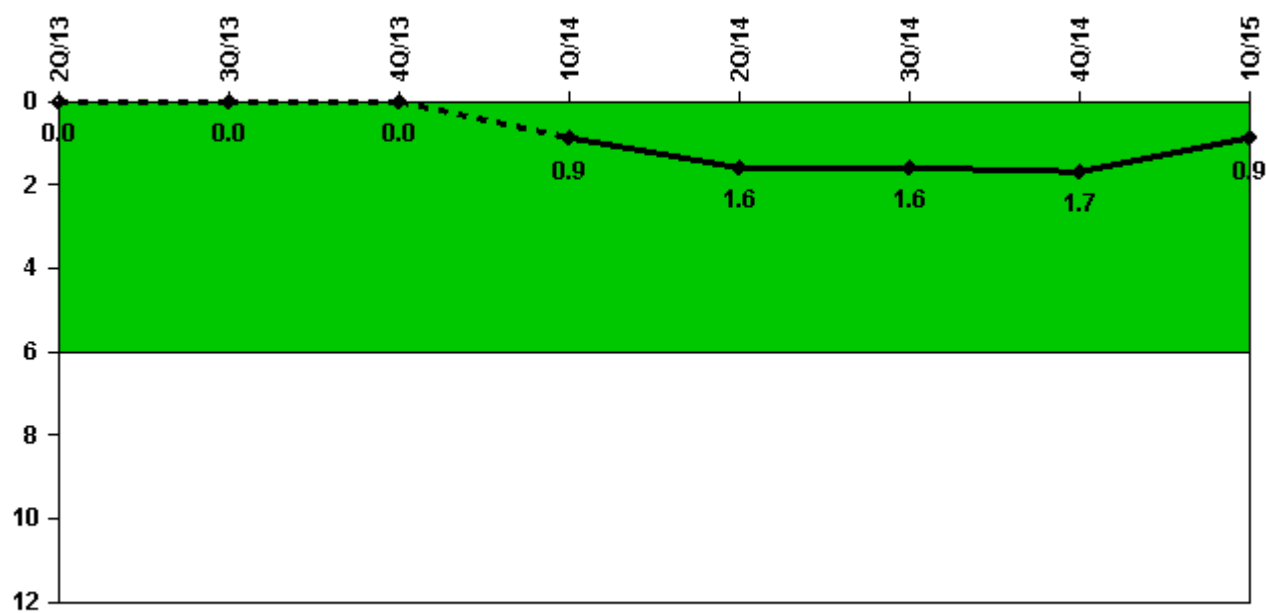
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0
Indicator value	0.9	0.9	0.9	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

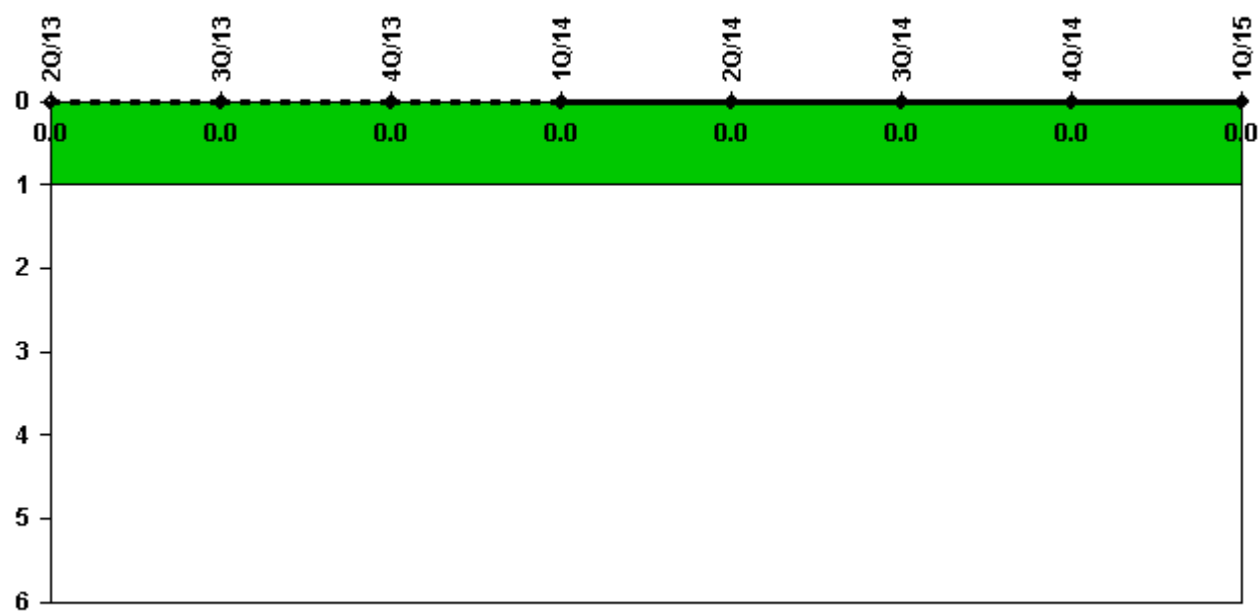
Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned power changes	0	0	0	1.0	1.0	0	0	0
Critical hours	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0
Indicator value	0	0	0	0.9	1.6	1.6	1.7	0.9

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



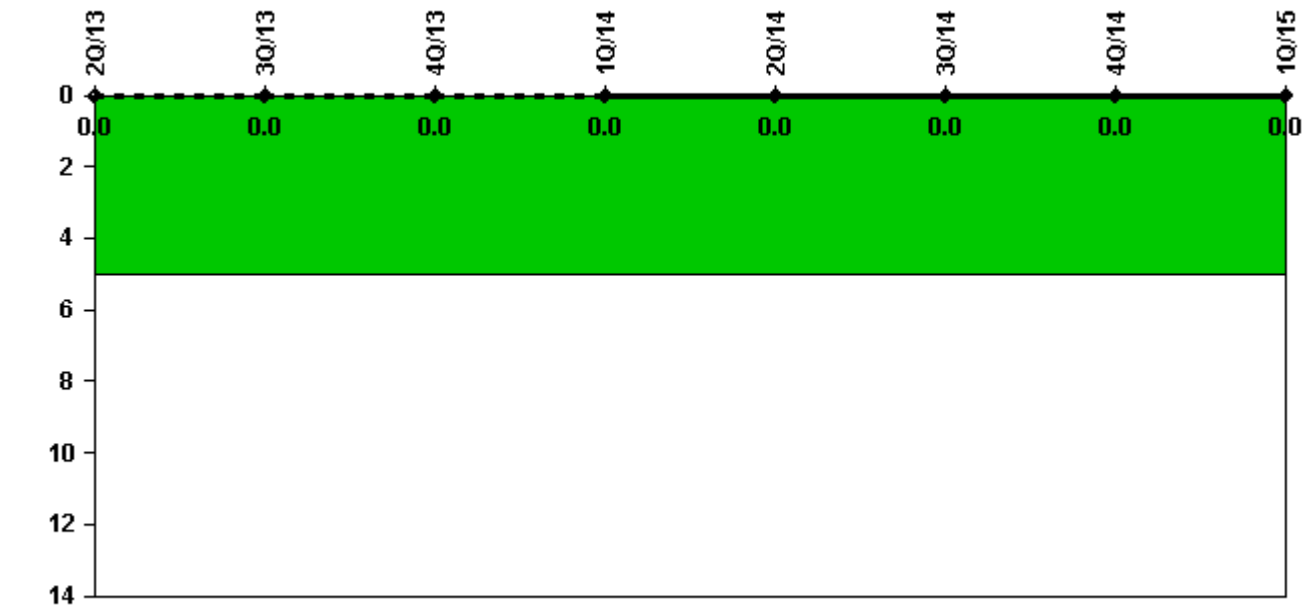
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

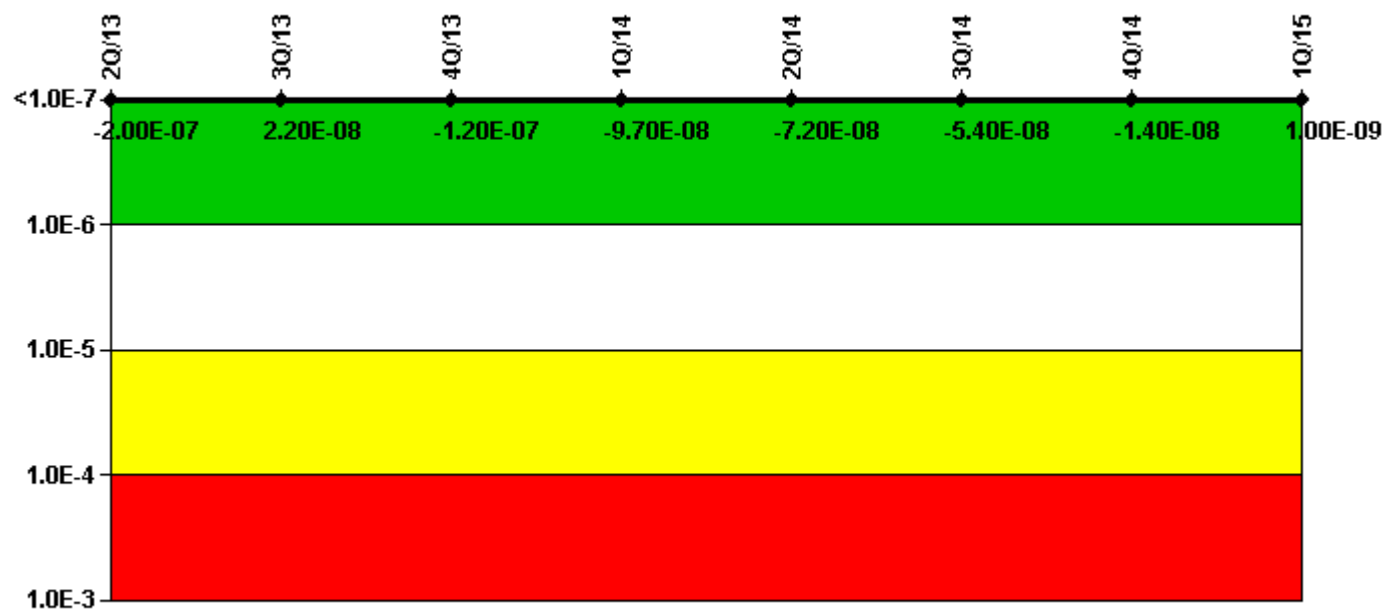
Safety System Functional Failures (PWR)	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments:

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water was originally counted as an SSFF, but was retracted based on the definition of an SSFF in LS-AA-2080 on 5/13/14.

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

Mitigating Systems Performance Index, Emergency AC Power System

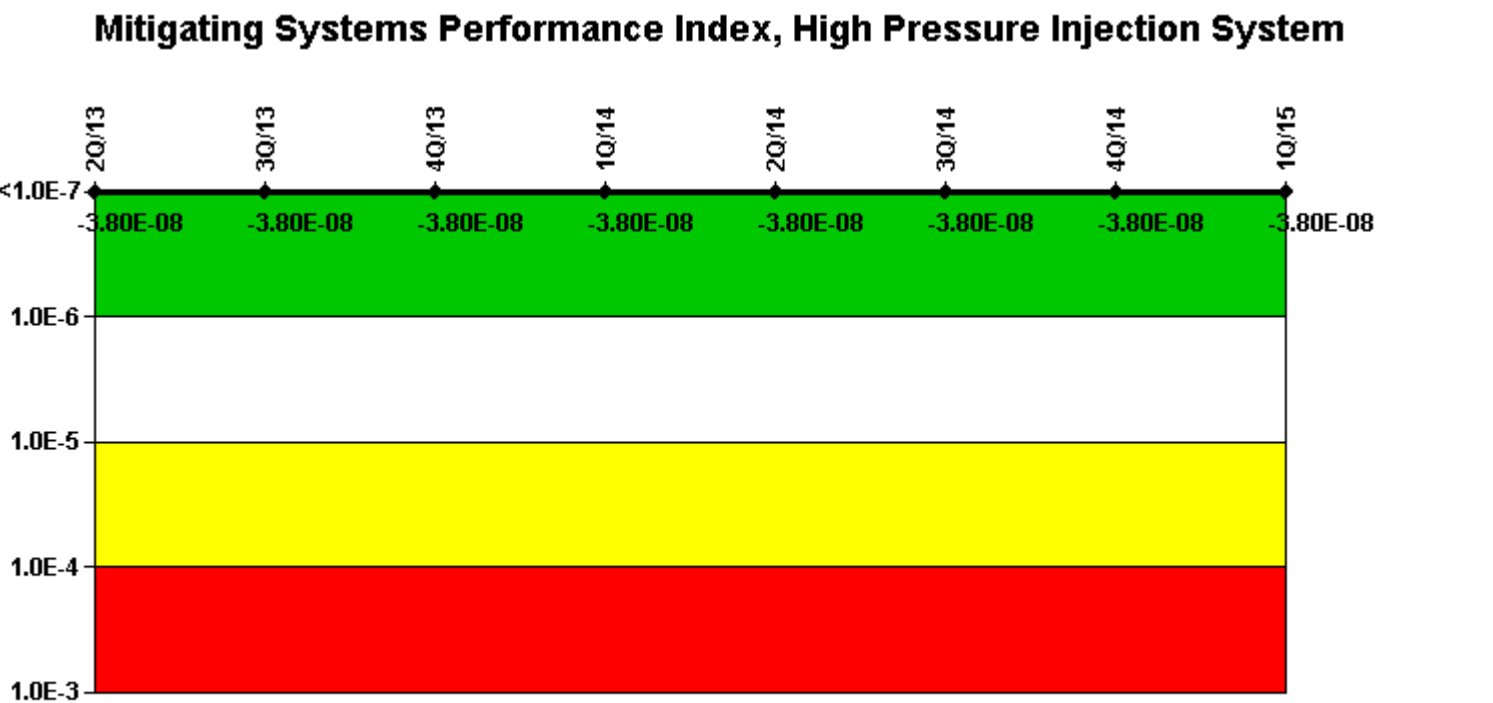


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	9.68E-09	1.52E-08	-1.56E-08	-7.87E-09	3.98E-09	6.35E-09	3.04E-08	3.77E-09
URI (ΔCDF)	-2.14E-07	7.27E-09	-1.03E-07	-8.96E-08	-7.56E-08	-6.07E-08	-4.47E-08	-2.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.00E-07	2.20E-08	-1.20E-07	-9.70E-08	-7.20E-08	-5.40E-08	-1.40E-08	1.00E-09

Licensee Comments: none



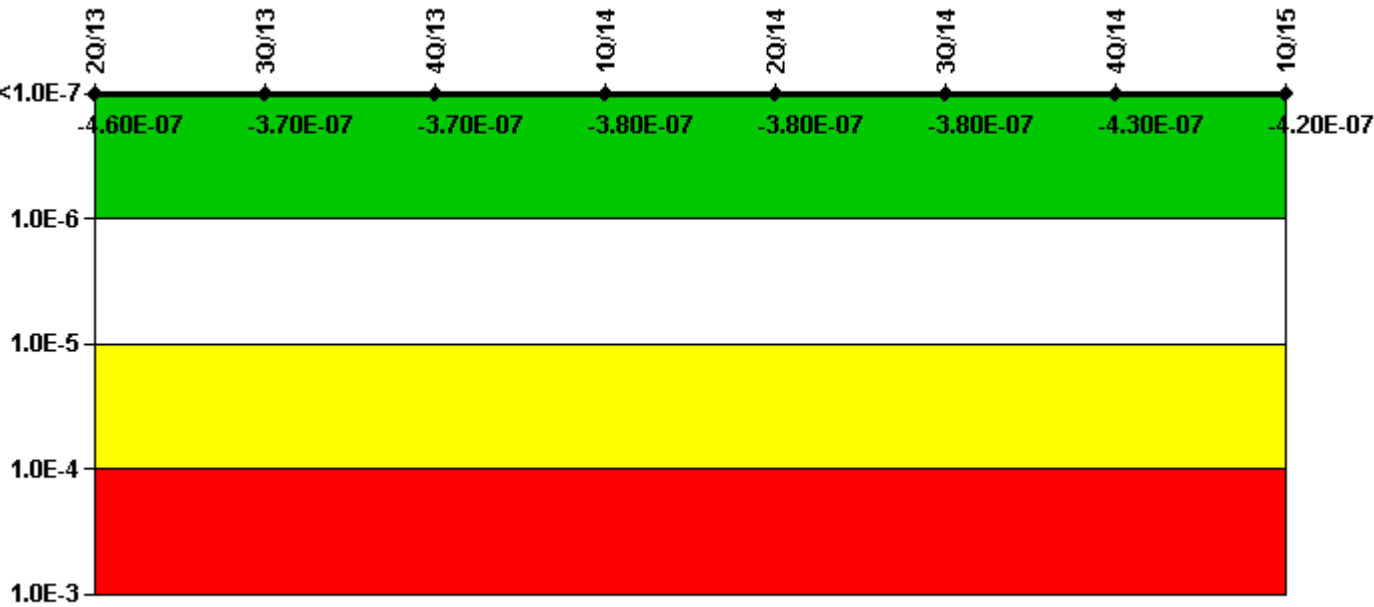
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (ΔCDF)	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.61E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System

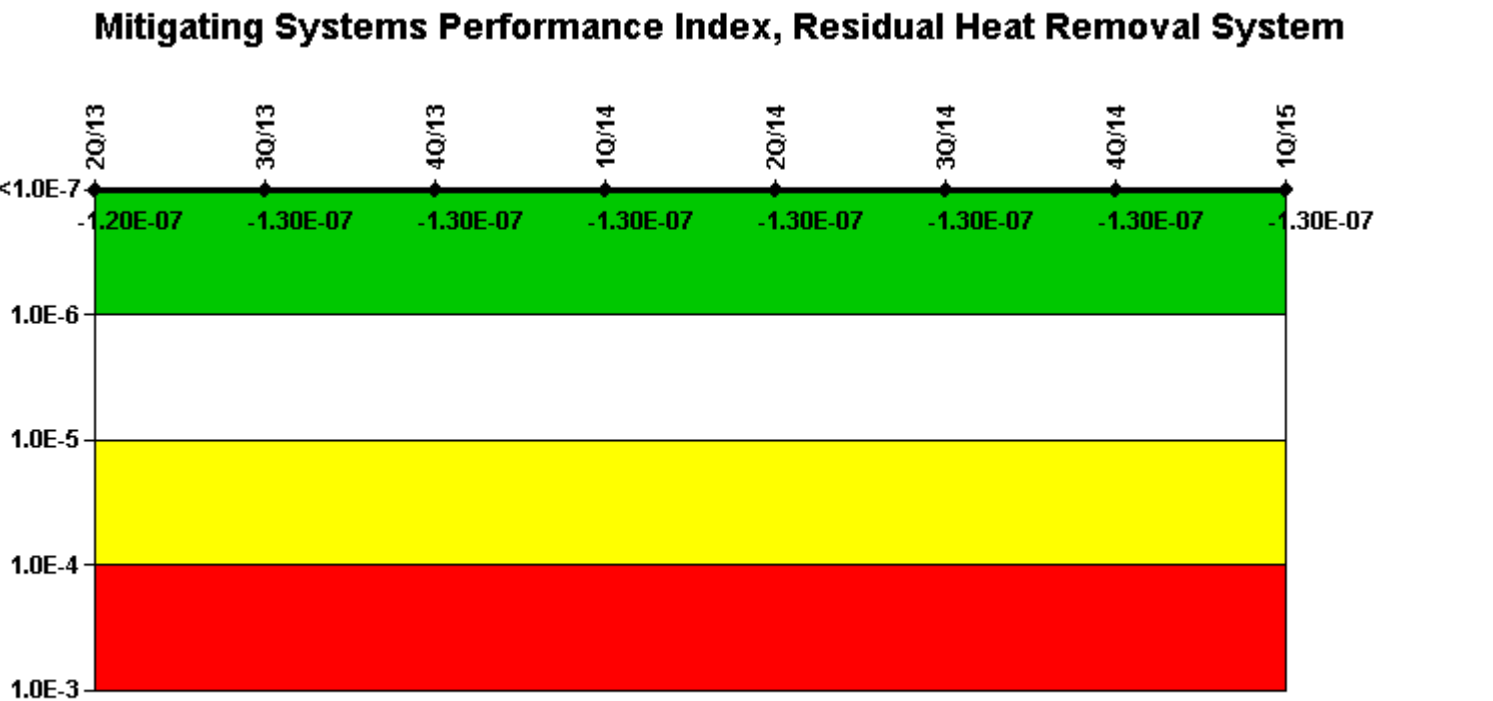


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	-7.81E-08	1.36E-08	1.28E-08	9.26E-09	6.48E-09	4.63E-09	-6.01E-08	-5.79E-08
URI (ΔCDF)	-3.87E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.87E-07	-3.73E-07	-3.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.60E-07	-3.70E-07	-3.70E-07	-3.80E-07	-3.80E-07	-3.80E-07	-4.30E-07	-4.20E-07

Licensee Comments: none



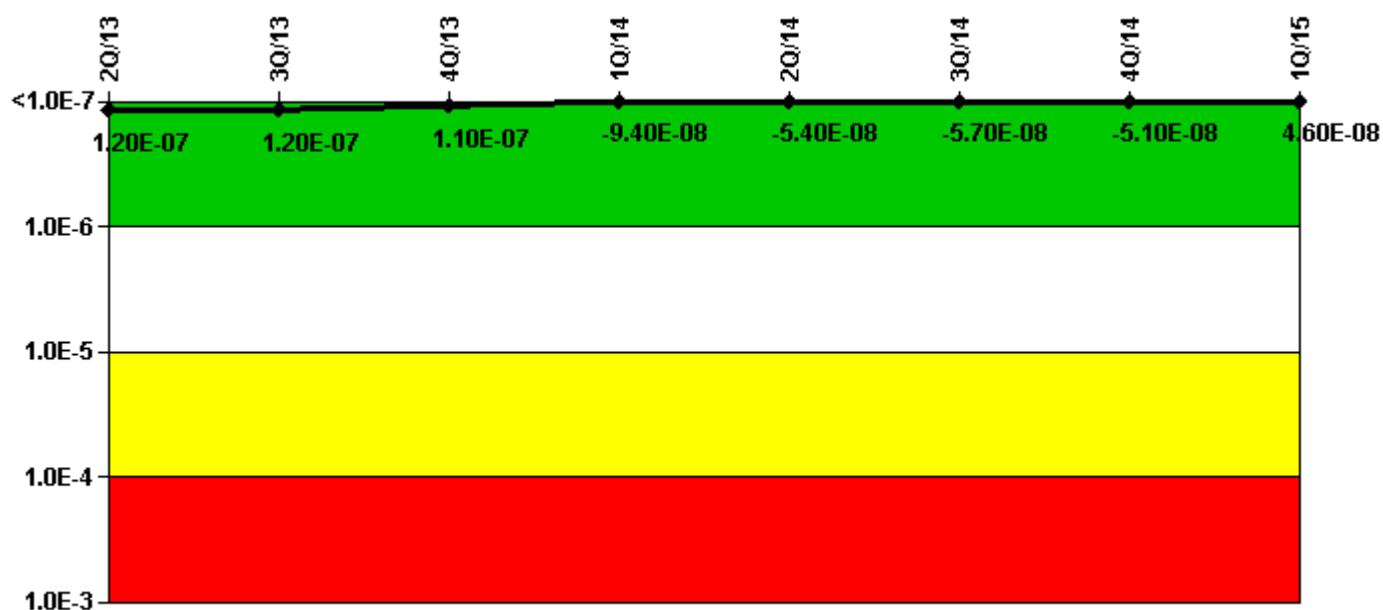
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	-2.41E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

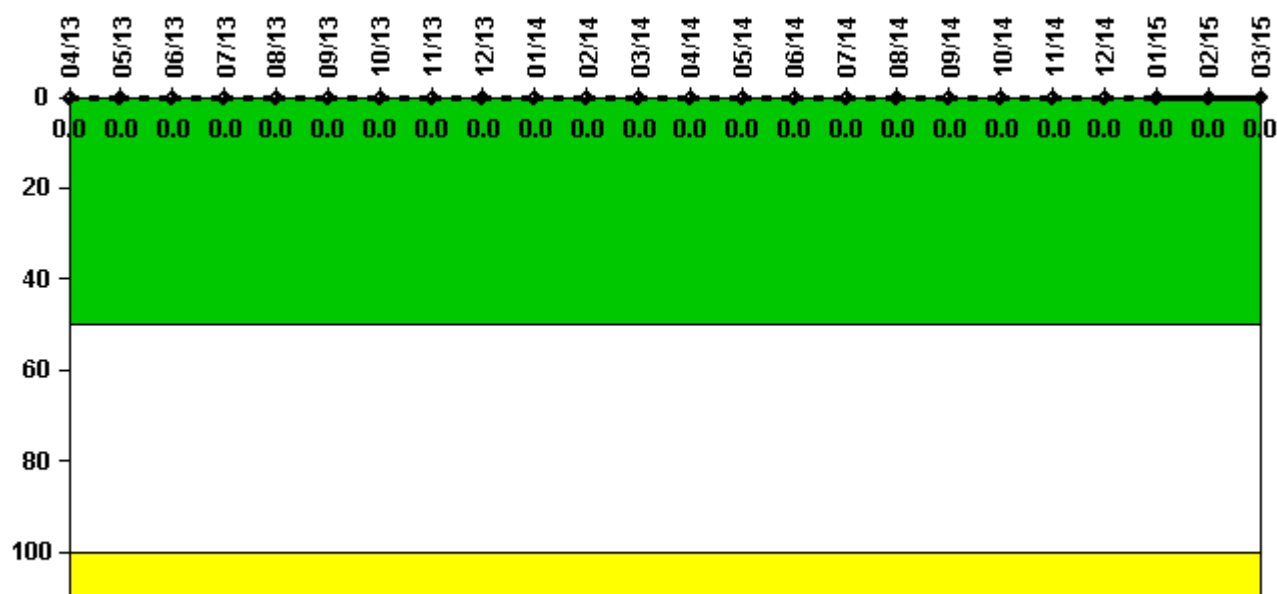
Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	2.44E-07	2.45E-07	2.28E-07	1.79E-08	5.32E-08	4.59E-08	4.73E-08	1.38E-07
URI (ΔCDF)	-1.24E-07	-1.20E-07	-1.16E-07	-1.12E-07	-1.07E-07	-1.03E-07	-9.81E-08	-9.23E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.20E-07	1.20E-07	1.10E-07	-9.40E-08	-5.40E-08	-5.70E-08	-5.10E-08	4.60E-08

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

Reactor Coolant System Activity



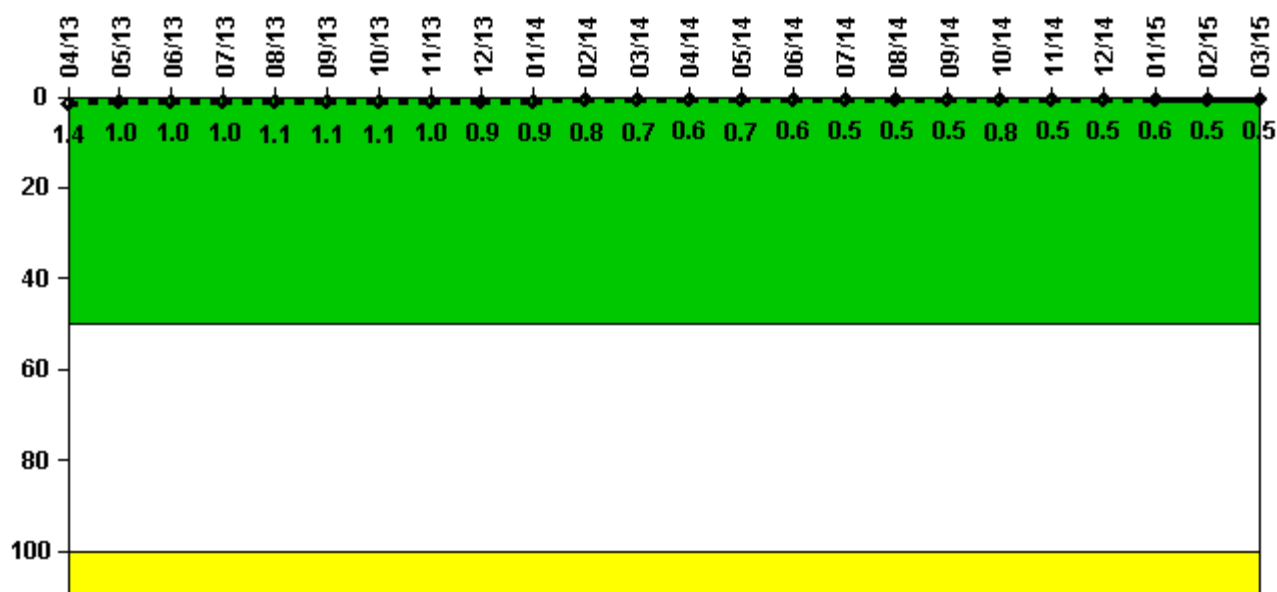
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum activity	0.000176	0.000049	0.000049	0.000049	0.000053	0.000054	0.000062	0.000061	0.000069	0.000069	0.000072	0.000073
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0.000076	0.000087	0.000078	0.000082	0.000085	0.000084	0.000045	0.000050	0.000054	0.000056	0.000056	0.000063
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



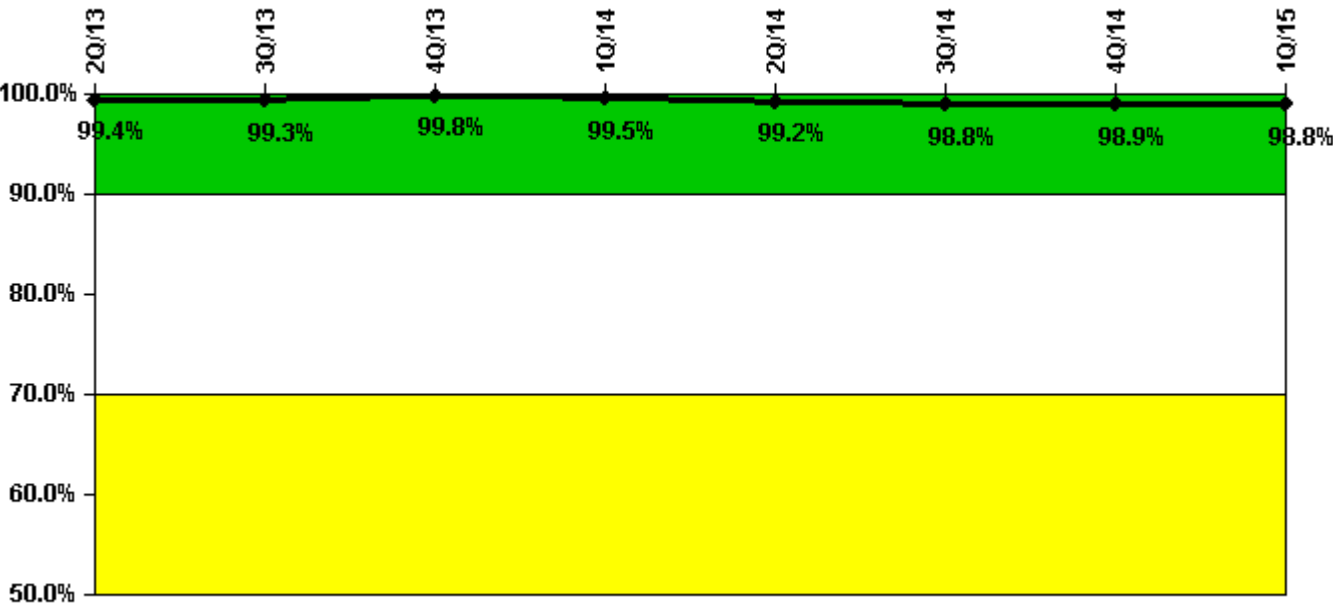
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum leakage	0.140	0.100	0.100	0.100	0.110	0.110	0.110	0.100	0.090	0.090	0.080	0.070
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.4	1.0	1.0	1.0	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.7
Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	0.060	0.070	0.060	0.050	0.050	0.050	0.080	0.050	0.050	0.060	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.7	0.6	0.5	0.5	0.5	0.8	0.5	0.5	0.6	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



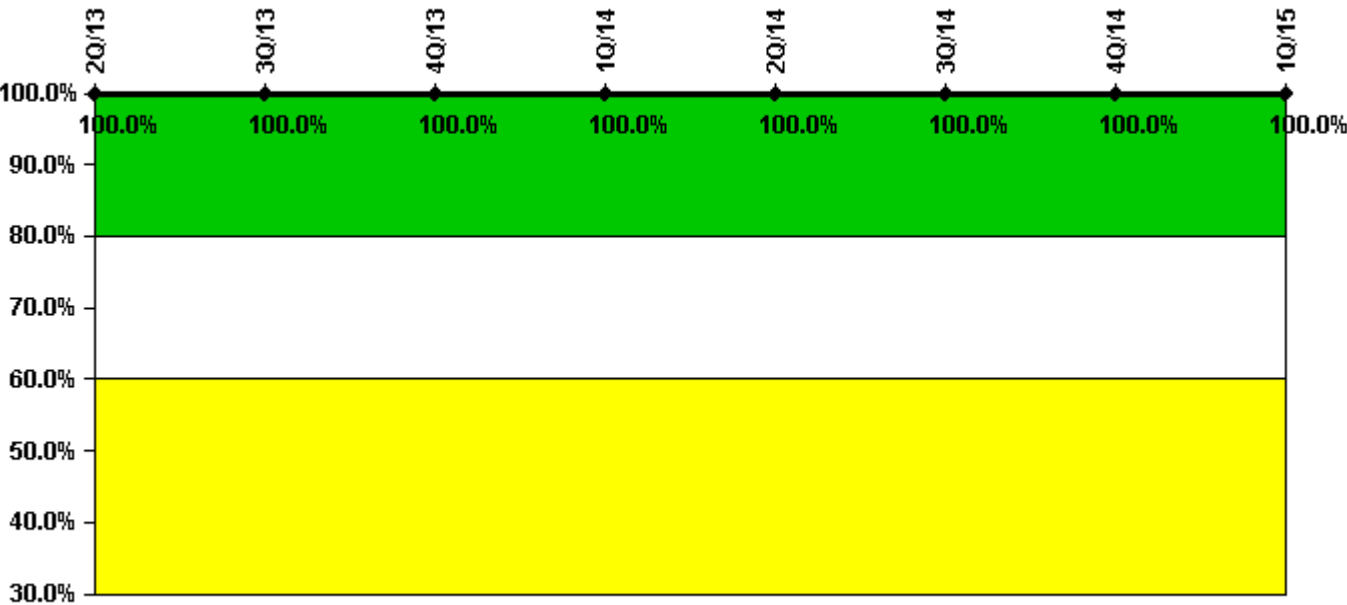
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful opportunities	12.0	55.0	32.0	62.0	70.0	90.0	14.0	74.0
Total opportunities	12.0	55.0	32.0	64.0	71.0	92.0	14.0	74.0
Indicator value	99.4%	99.3%	99.8%	99.5%	99.2%	98.8%	98.9%	98.8%

Licensee Comments: none

ERO Drill Participation



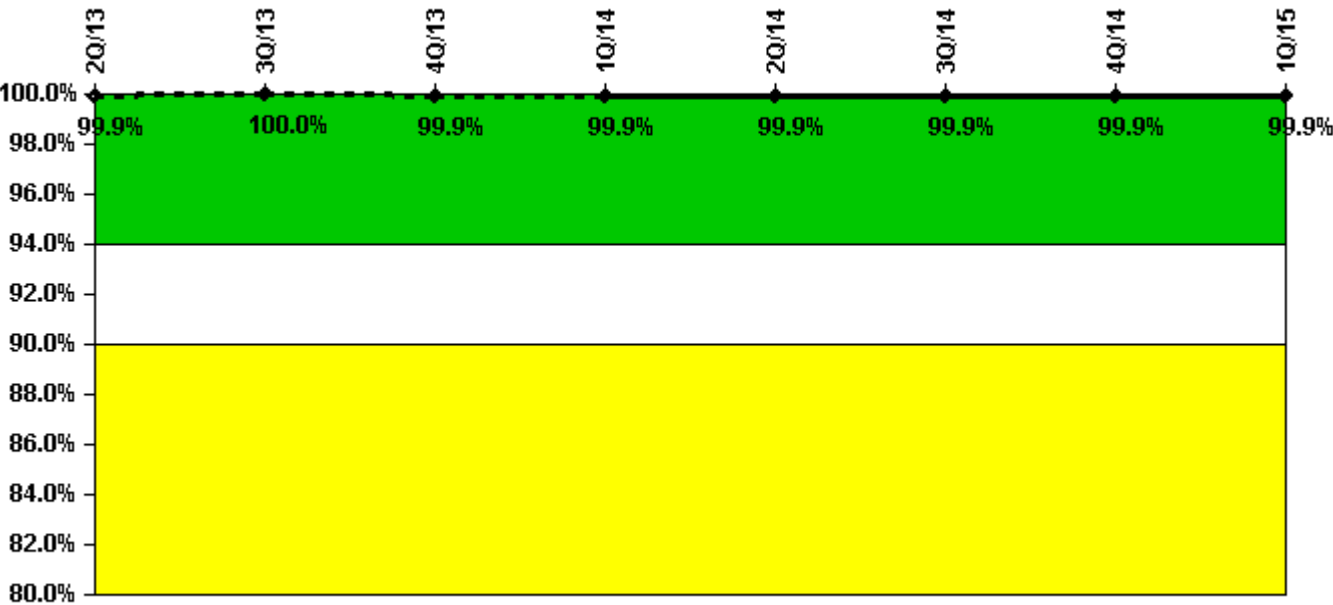
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Participating Key personnel	76.0	71.0	74.0	77.0	79.0	78.0	77.0	74.0
Total Key personnel	76.0	71.0	74.0	77.0	79.0	78.0	77.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



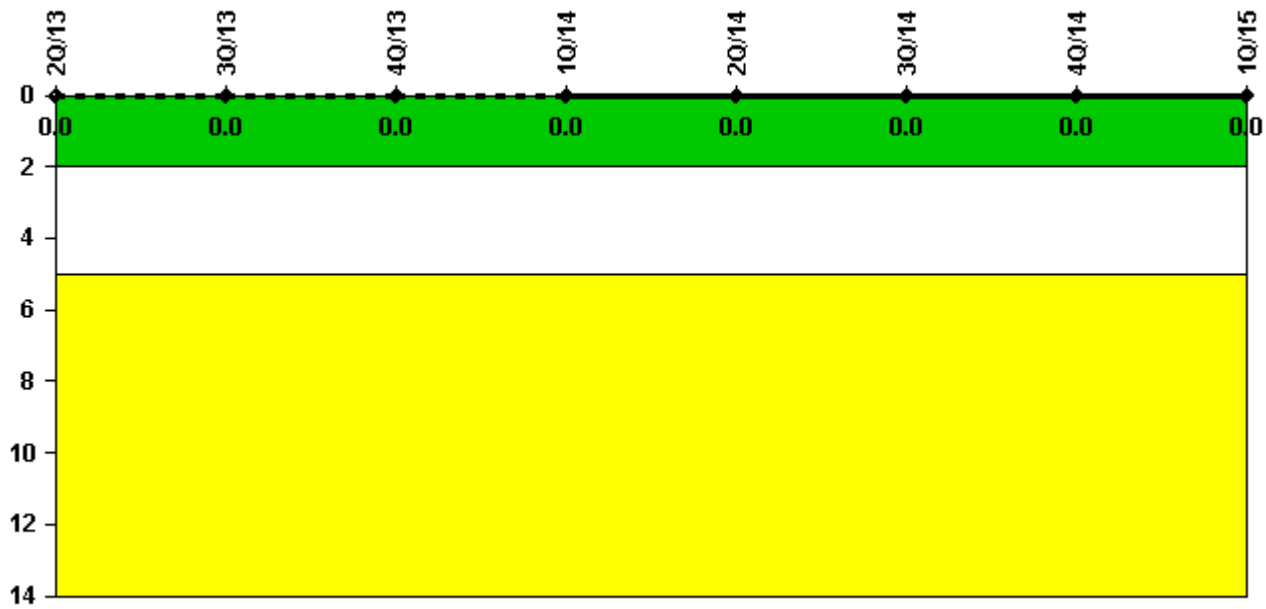
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful siren-tests	3900	3903	3900	3841	3898	3896	3901	3834
Total sirens-tests	3904	3904	3904	3843	3904	3904	3904	3840
Indicator value	99.9%	100.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness

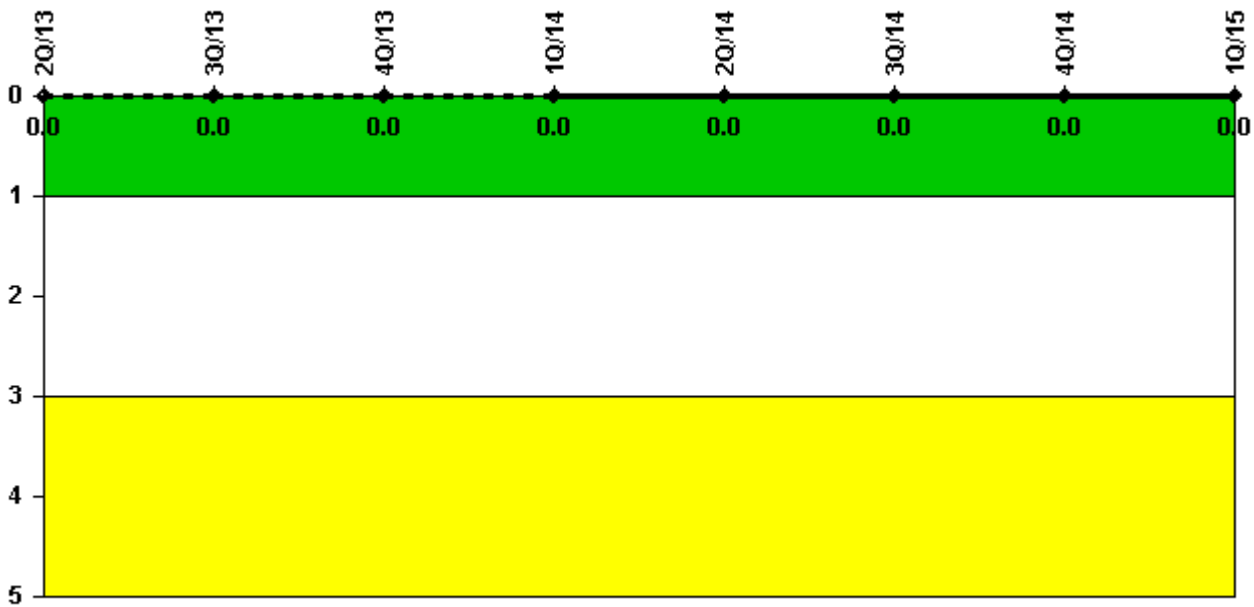


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none



Thresholds: White > 1.0 Yellow > 3.0

Notes

[illegible]

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



[Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: April 23, 2015

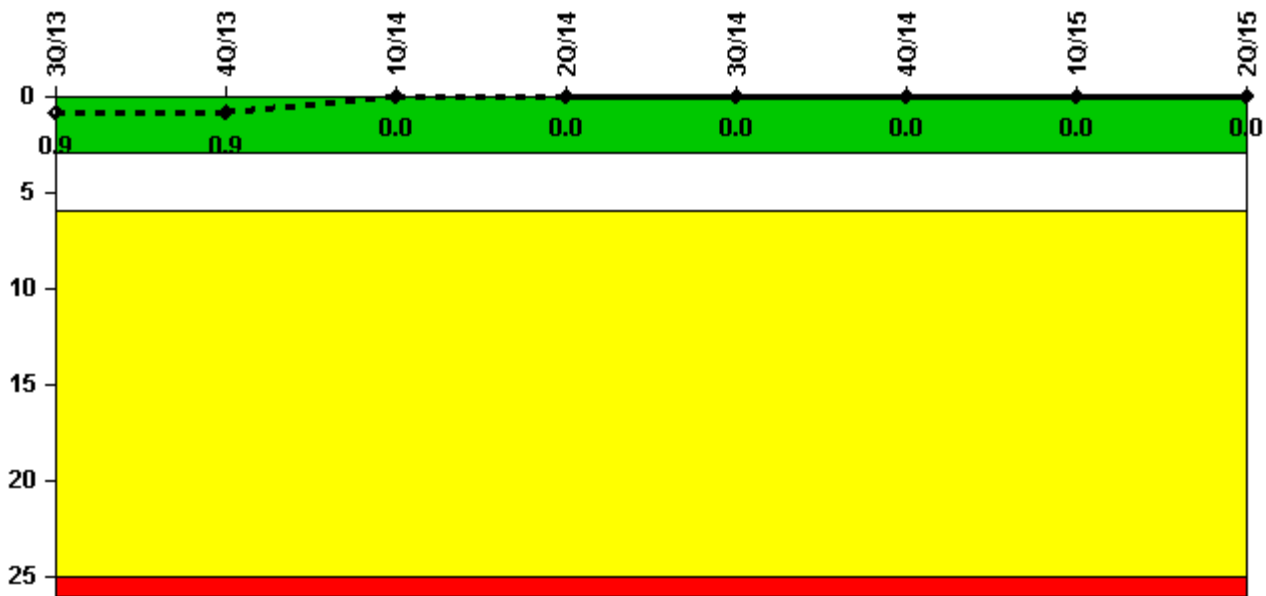
Byron 2

2Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron 2Q2015 Unit 2

Unplanned Scrams per 7000 Critical Hrs



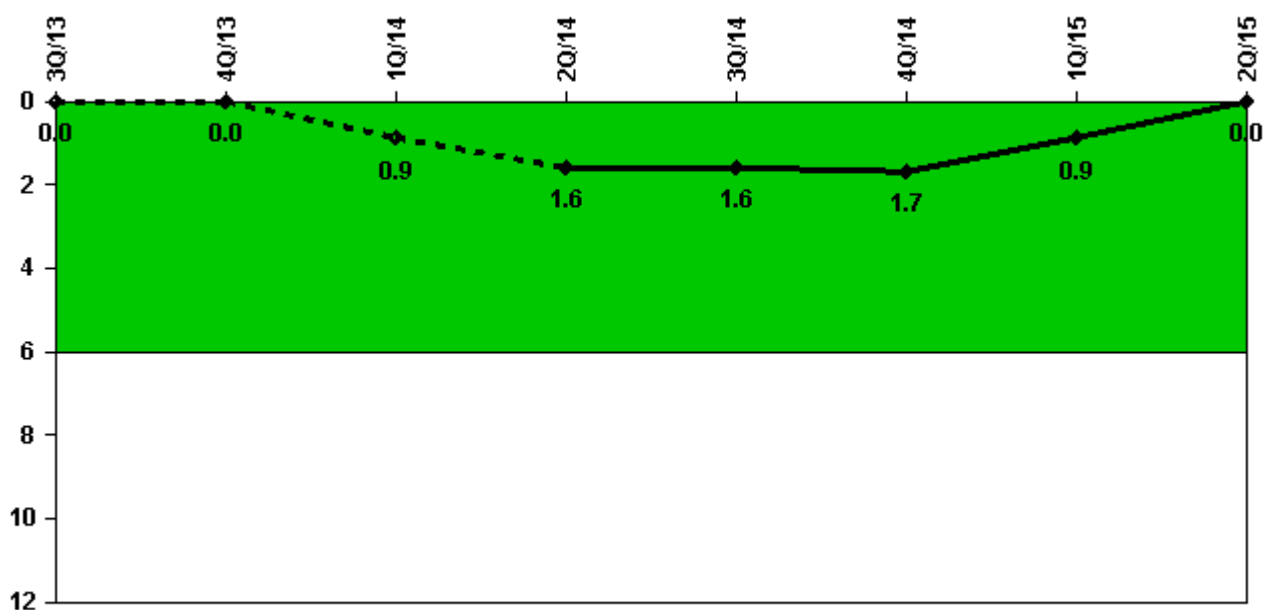
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0	2184.0
Indicator value	0.9	0.9	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

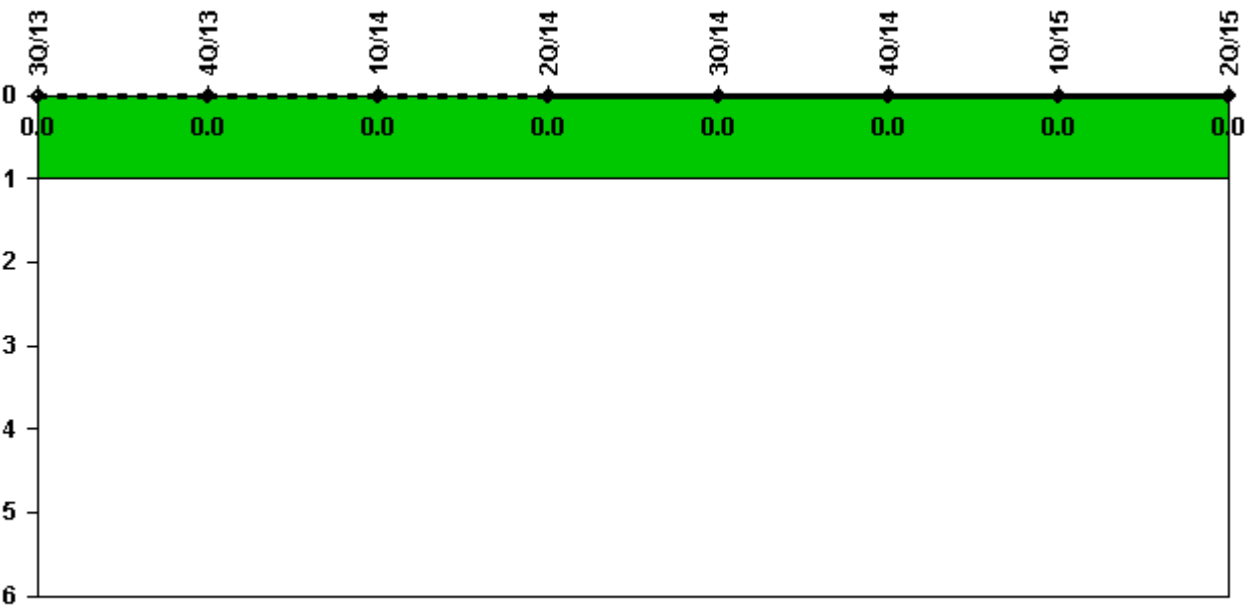
Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
Unplanned power changes	0	0	1.0	1.0	0	0	0	0
Critical hours	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0	2184.0
Indicator value	0	0	0.9	1.6	1.6	1.7	0.9	0

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



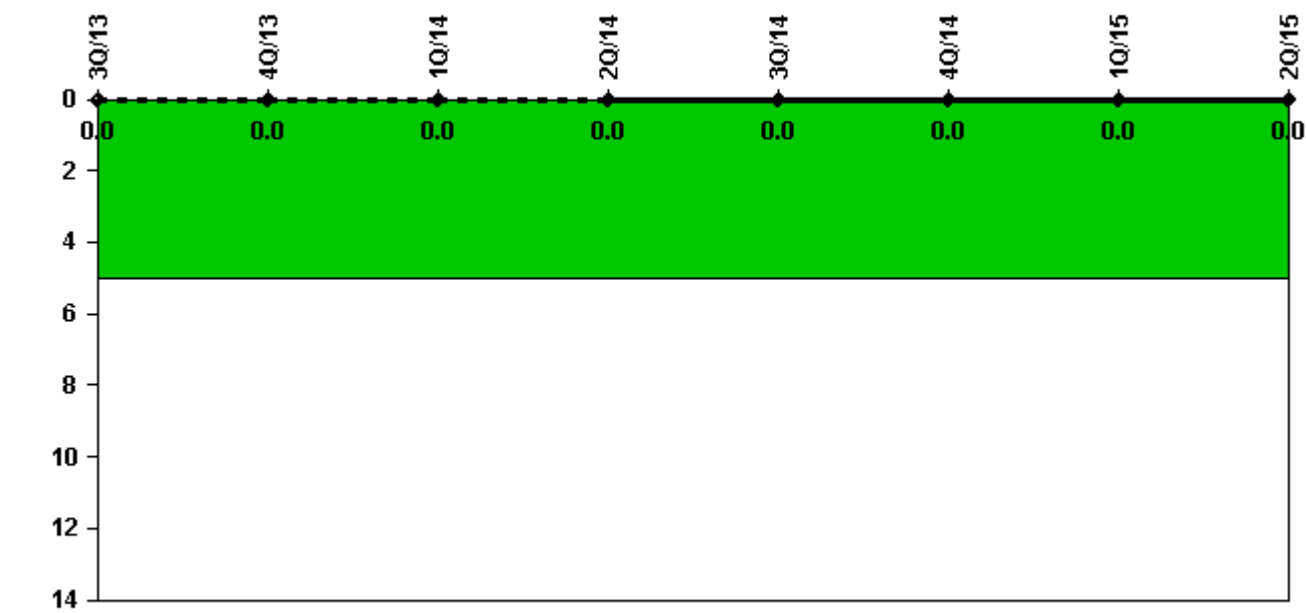
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



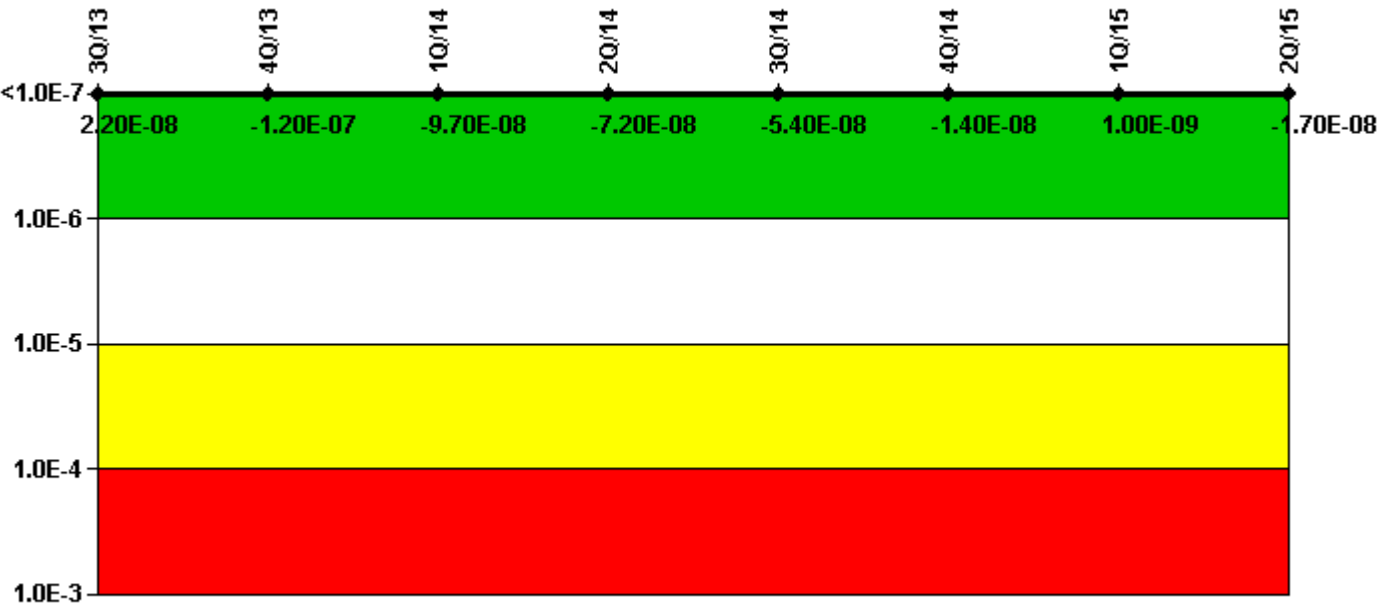
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System

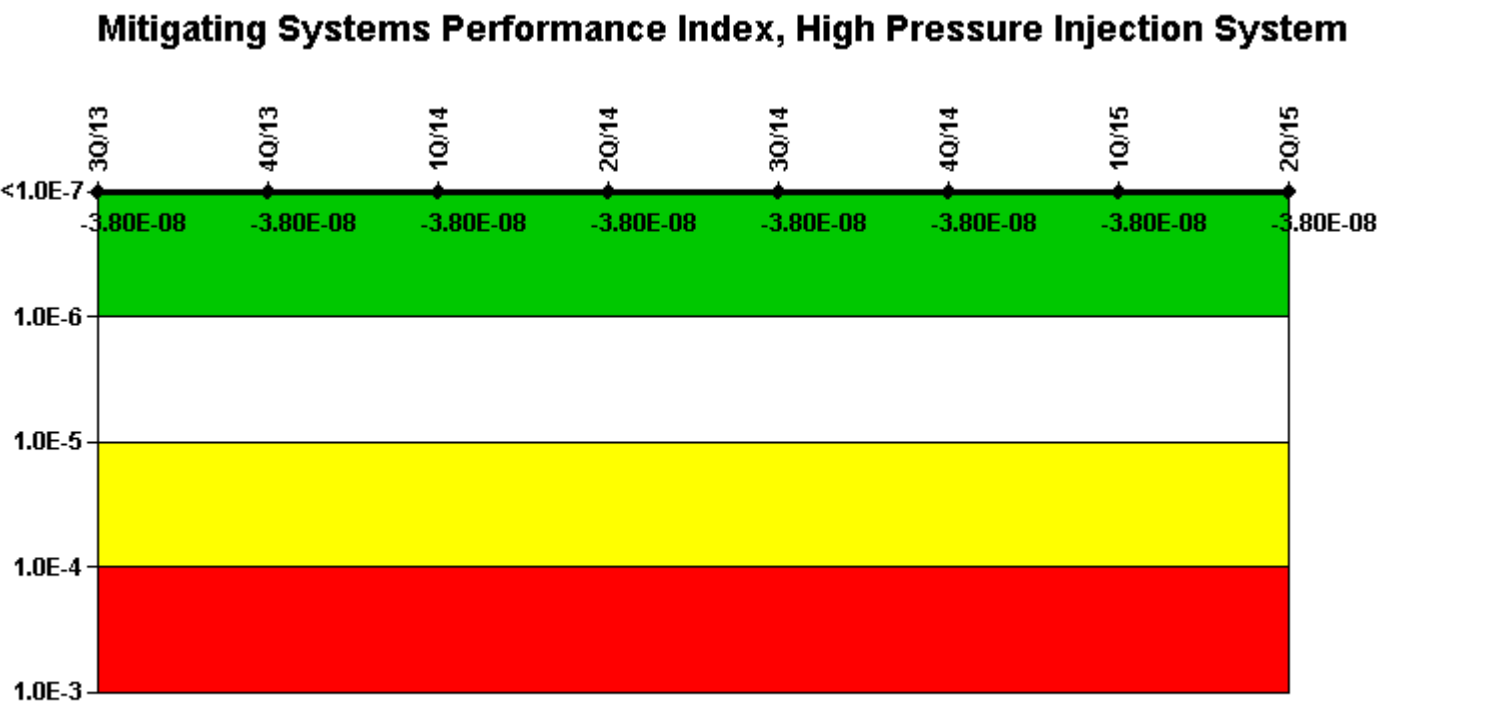


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
UAI (ΔCDF)	1.52E-08	-1.56E-08	-7.87E-09	3.98E-09	6.35E-09	3.04E-08	3.77E-09	-1.44E-08
URI (ΔCDF)	7.27E-09	-1.03E-07	-8.96E-08	-7.56E-08	-6.07E-08	-4.47E-08	-2.75E-09	-2.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.20E-08	-1.20E-07	-9.70E-08	-7.20E-08	-5.40E-08	-1.40E-08	1.00E-09	-1.70E-08

Licensee Comments: none



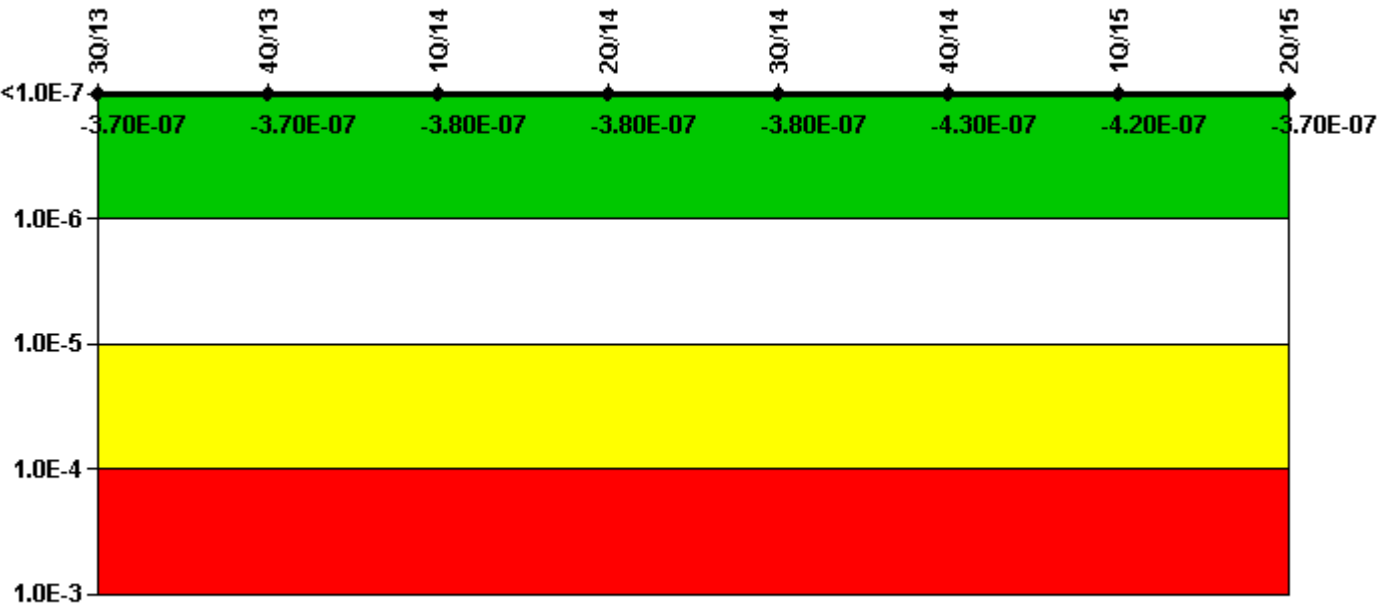
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
UAI (ΔCDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (ΔCDF)	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.61E-09	-8.61E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System

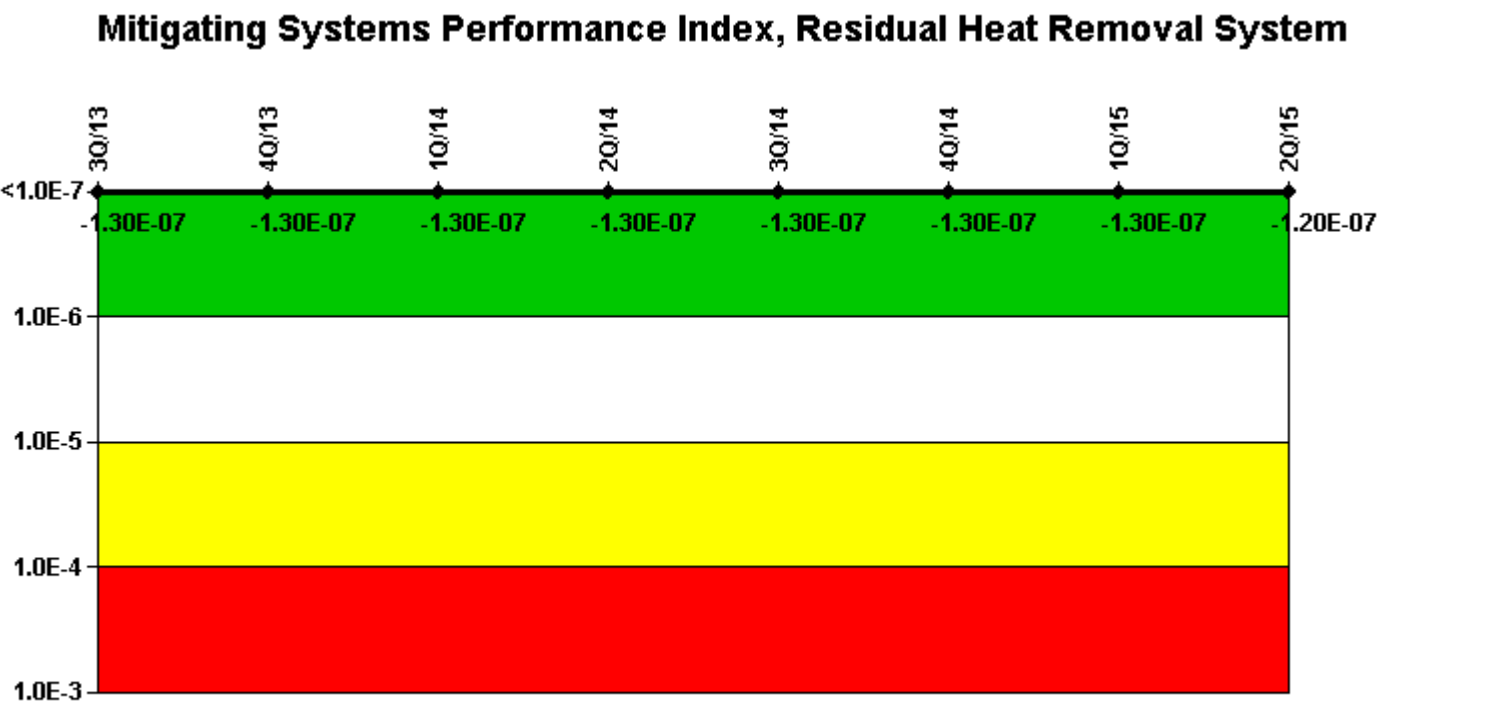


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
UAI (ΔCDF)	1.36E-08	1.28E-08	9.26E-09	6.48E-09	4.63E-09	-6.01E-08	-5.79E-08	-1.06E-08
URI (ΔCDF)	-3.85E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.87E-07	-3.73E-07	-3.60E-07	-3.55E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.70E-07	-3.70E-07	-3.80E-07	-3.80E-07	-3.80E-07	-4.30E-07	-4.20E-07	-3.70E-07

Licensee Comments: none



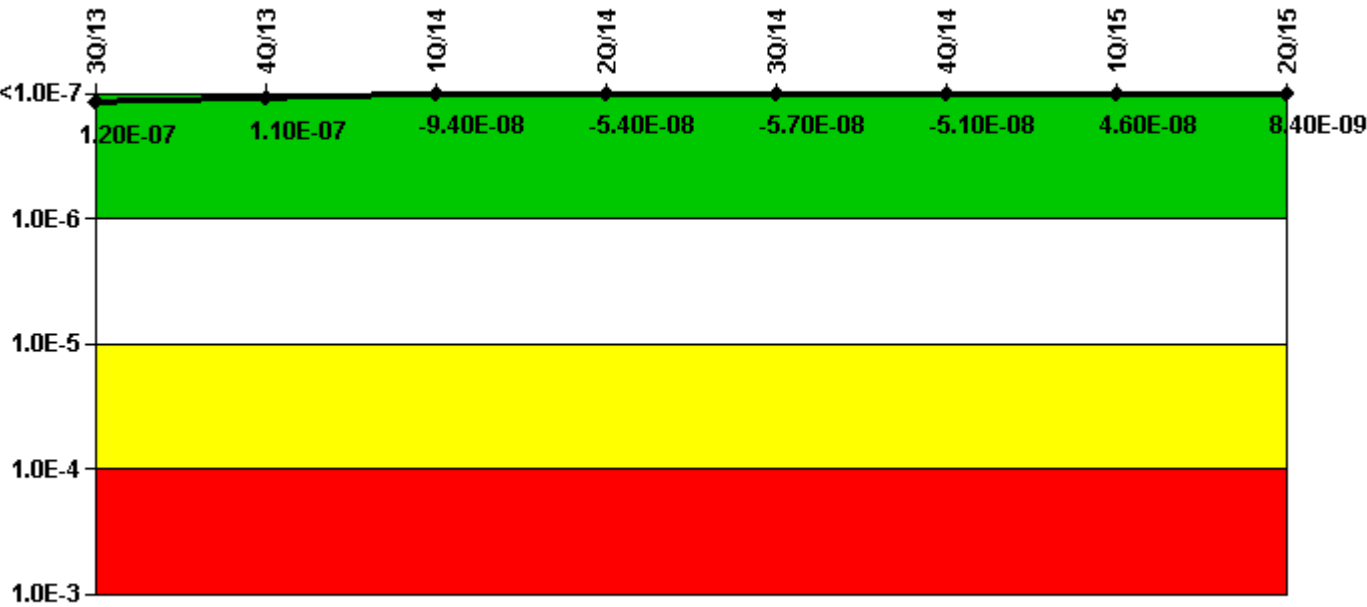
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.47E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.20E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



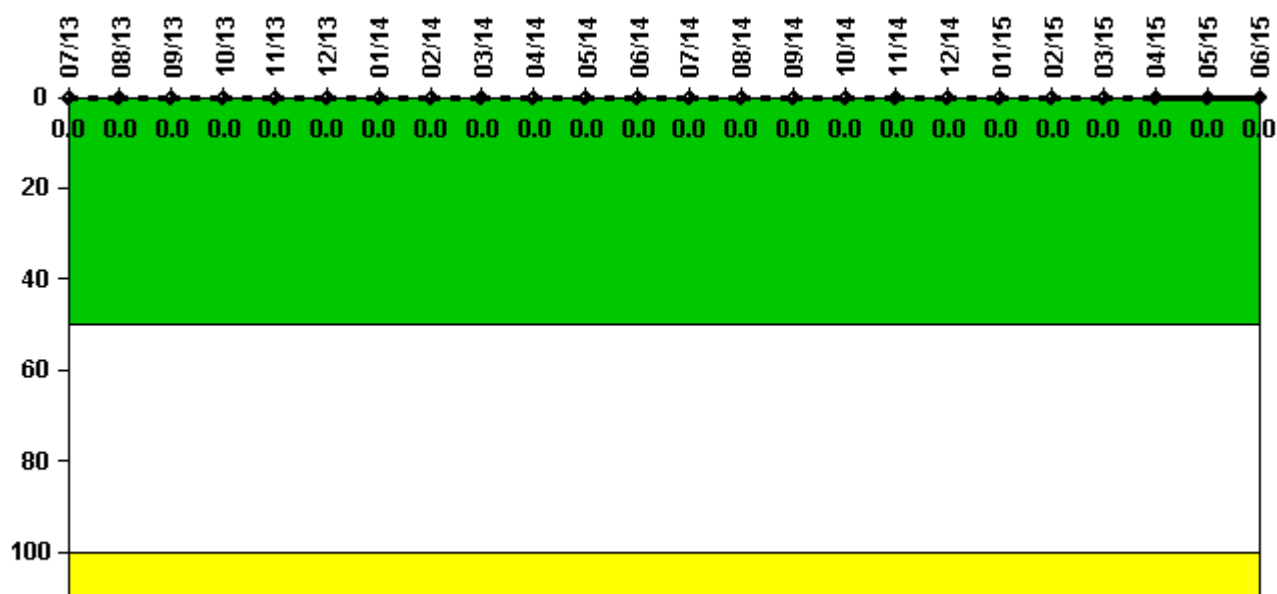
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
UAI (ΔCDF)	2.45E-07	2.28E-07	1.79E-08	5.32E-08	4.59E-08	4.73E-08	1.38E-07	1.01E-07
URI (ΔCDF)	-1.20E-07	-1.16E-07	-1.12E-07	-1.07E-07	-1.03E-07	-9.81E-08	-9.23E-08	-9.23E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.20E-07	1.10E-07	-9.40E-08	-5.40E-08	-5.70E-08	-5.10E-08	4.60E-08	8.40E-09

Licensee Comments: none

Reactor Coolant System Activity



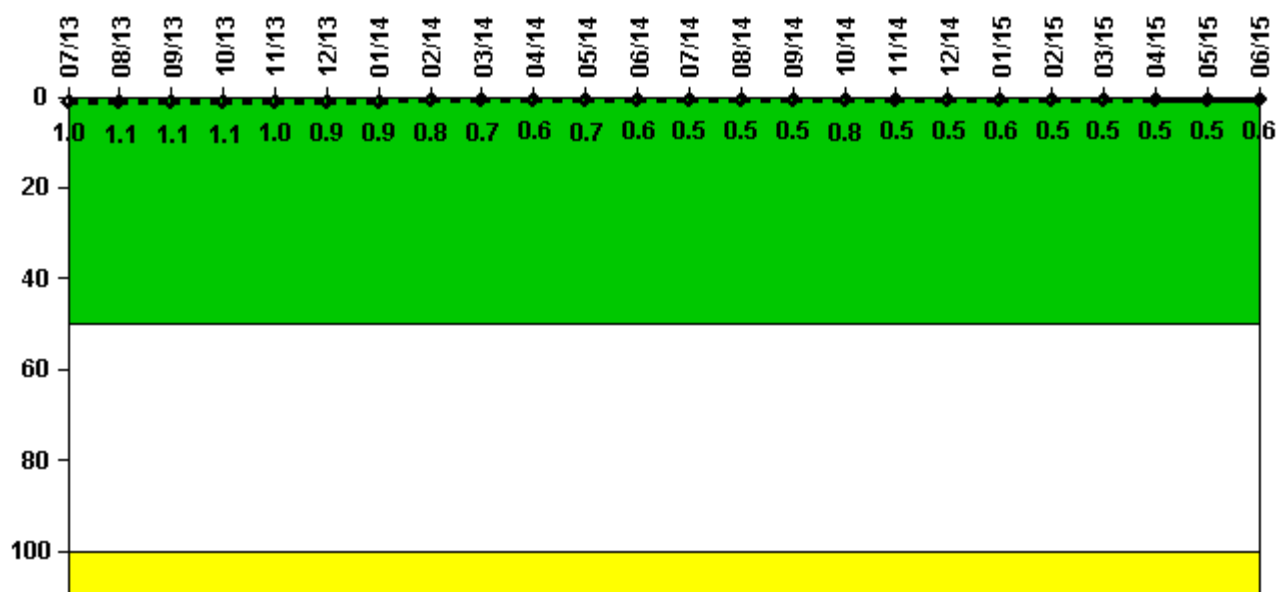
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum activity	0.000049	0.000053	0.000054	0.000062	0.000061	0.000069	0.000069	0.000072	0.000073	0.000076	0.000087	0.000078
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum activity	0.000082	0.000085	0.000084	0.000045	0.000050	0.000054	0.000056	0.000056	0.000063	0.000067	0.000065	0.000069
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



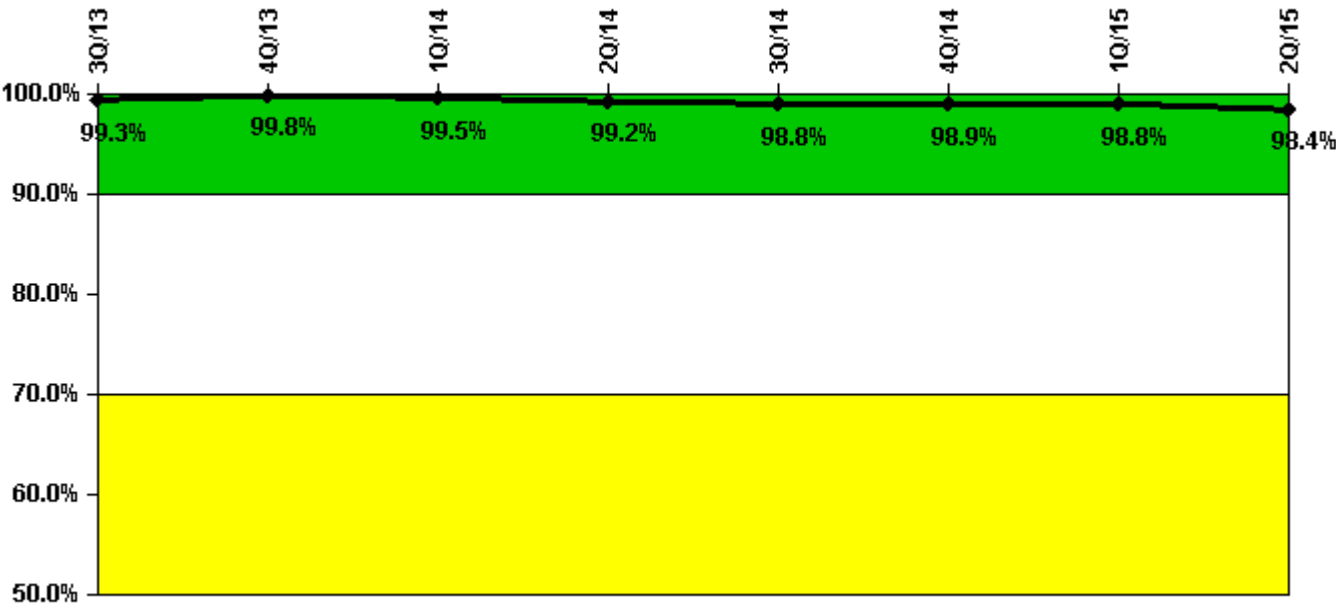
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum leakage	0.100	0.110	0.110	0.110	0.100	0.090	0.090	0.080	0.070	0.060	0.070	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.0	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.7	0.6	0.7	0.6
Reactor Coolant System Leakage	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum leakage	0.050	0.050	0.050	0.080	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.8	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6

Licensee Comments: none

Drill/Exercise Performance



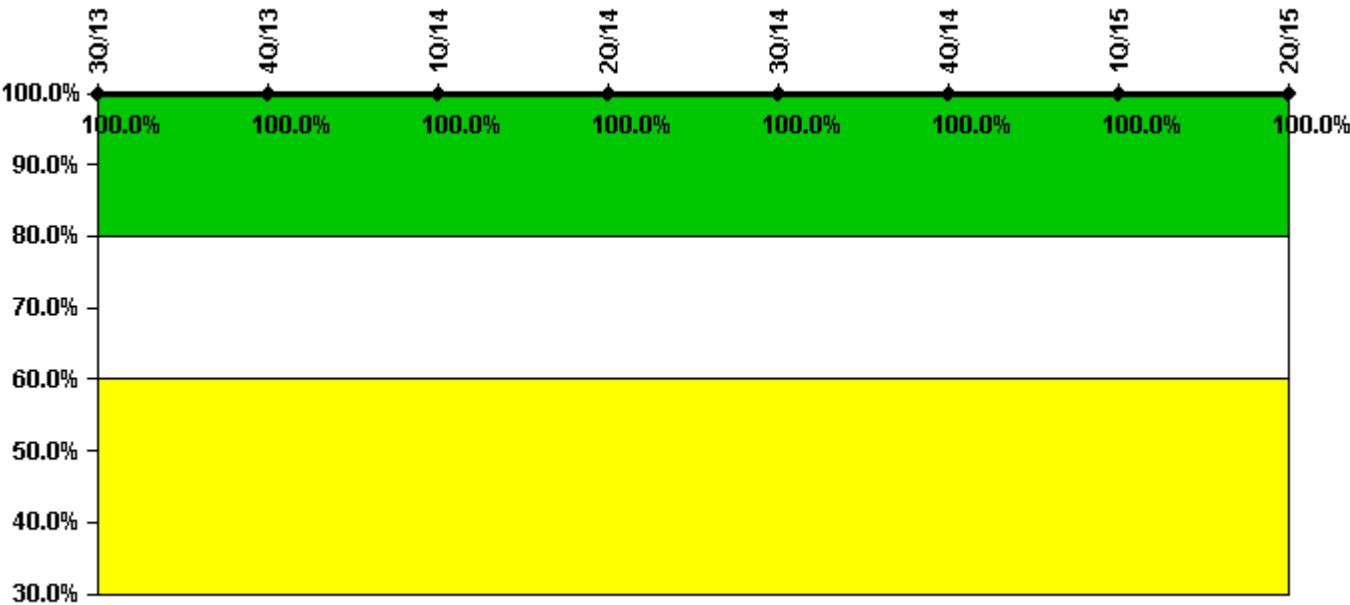
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
Successful opportunities	55.0	32.0	62.0	70.0	90.0	14.0	74.0	41.0
Total opportunities	55.0	32.0	64.0	71.0	92.0	14.0	74.0	43.0
Indicator value	99.3%	99.8%	99.5%	99.2%	98.8%	98.9%	98.8%	98.4%

Licensee Comments: none

ERO Drill Participation



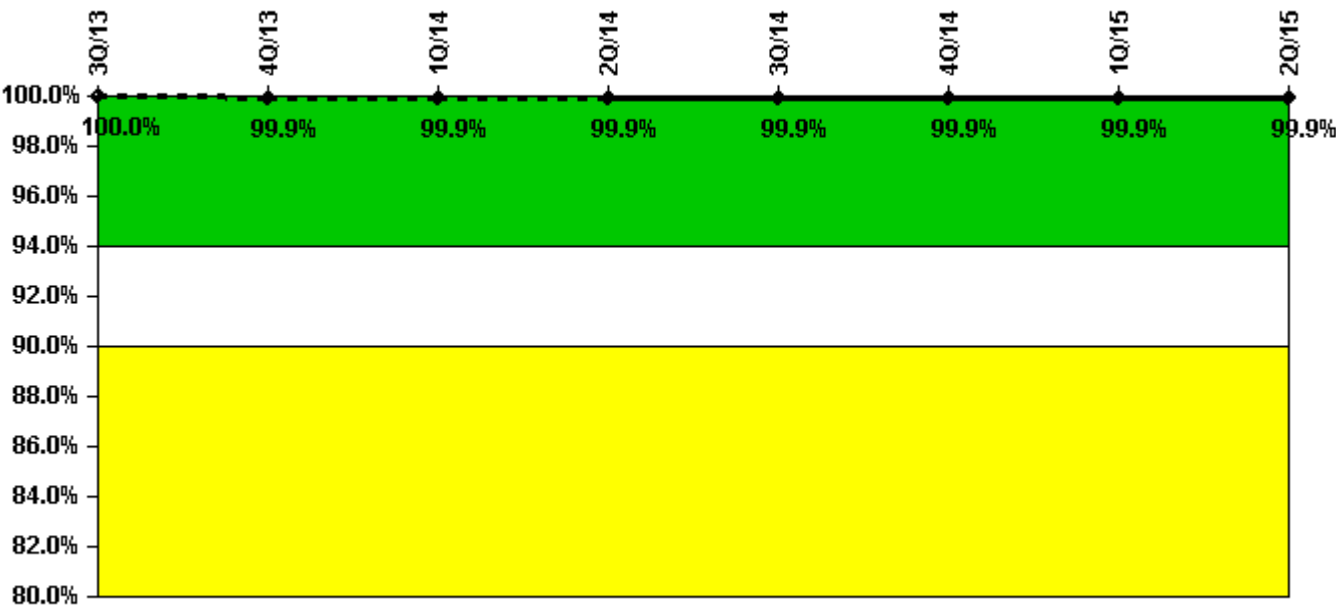
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
Participating Key personnel	71.0	74.0	77.0	79.0	78.0	77.0	74.0	74.0
Total Key personnel	71.0	74.0	77.0	79.0	78.0	77.0	74.0	74.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



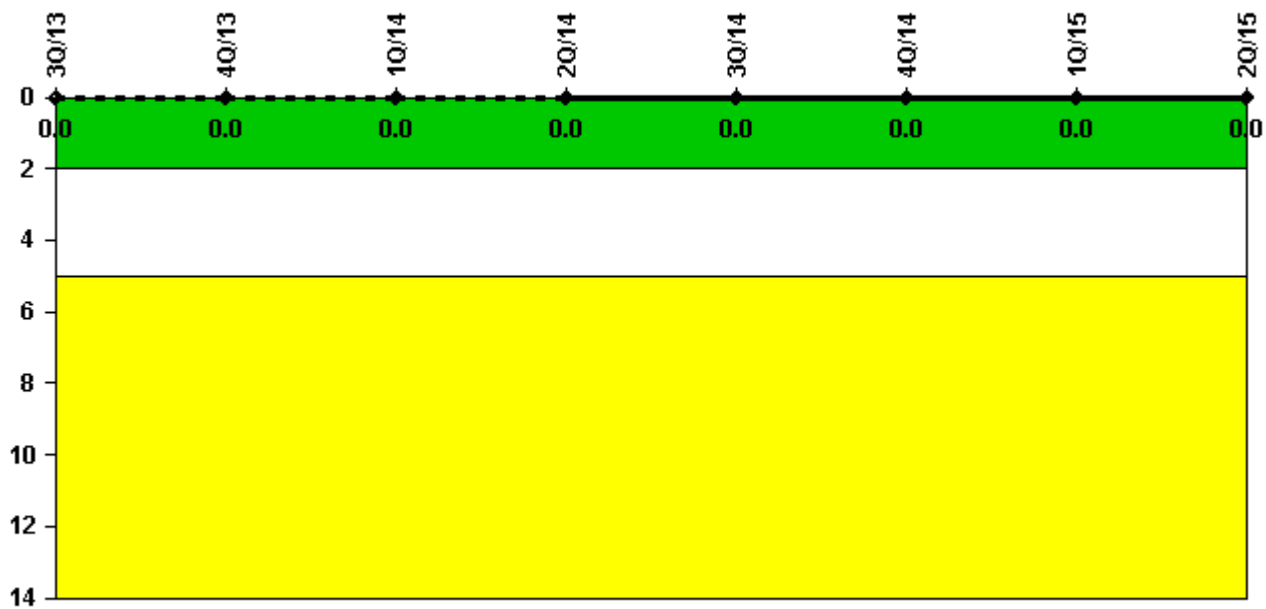
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
Successful siren-tests	3903	3900	3841	3898	3896	3901	3834	3902
Total sirens-tests	3904	3904	3843	3904	3904	3904	3840	3904
Indicator value	100.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness

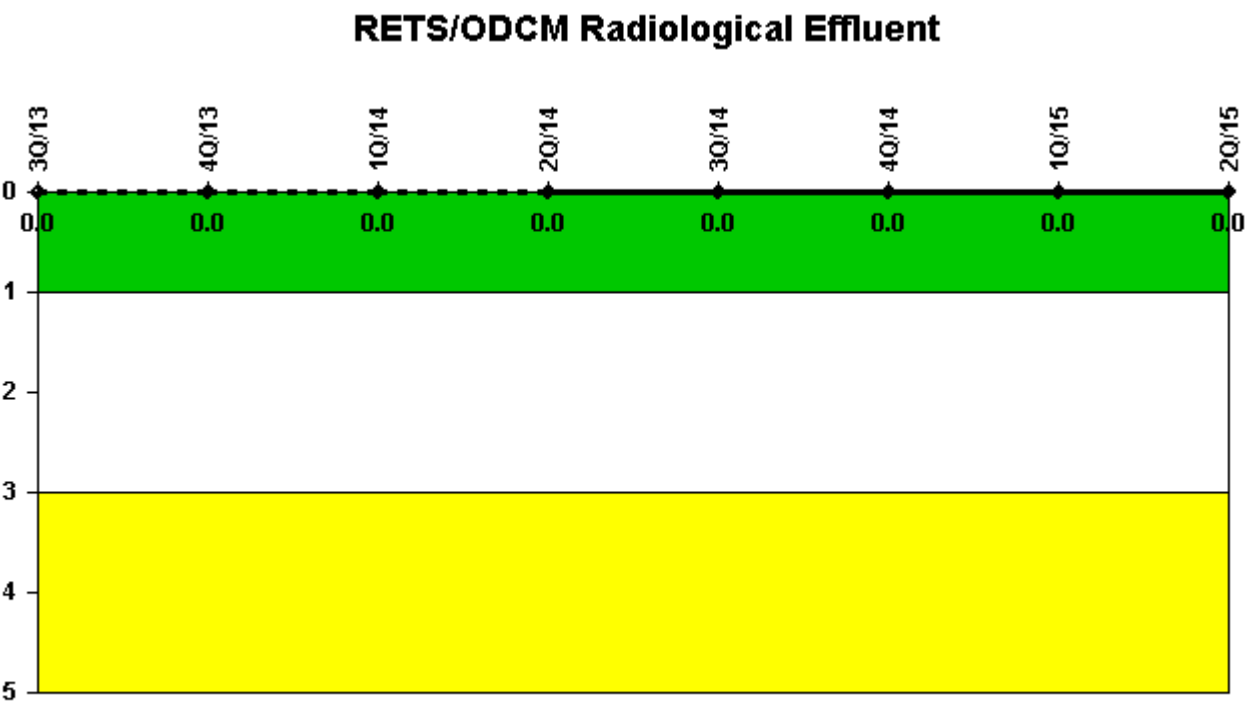


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



[Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: July 24, 2015

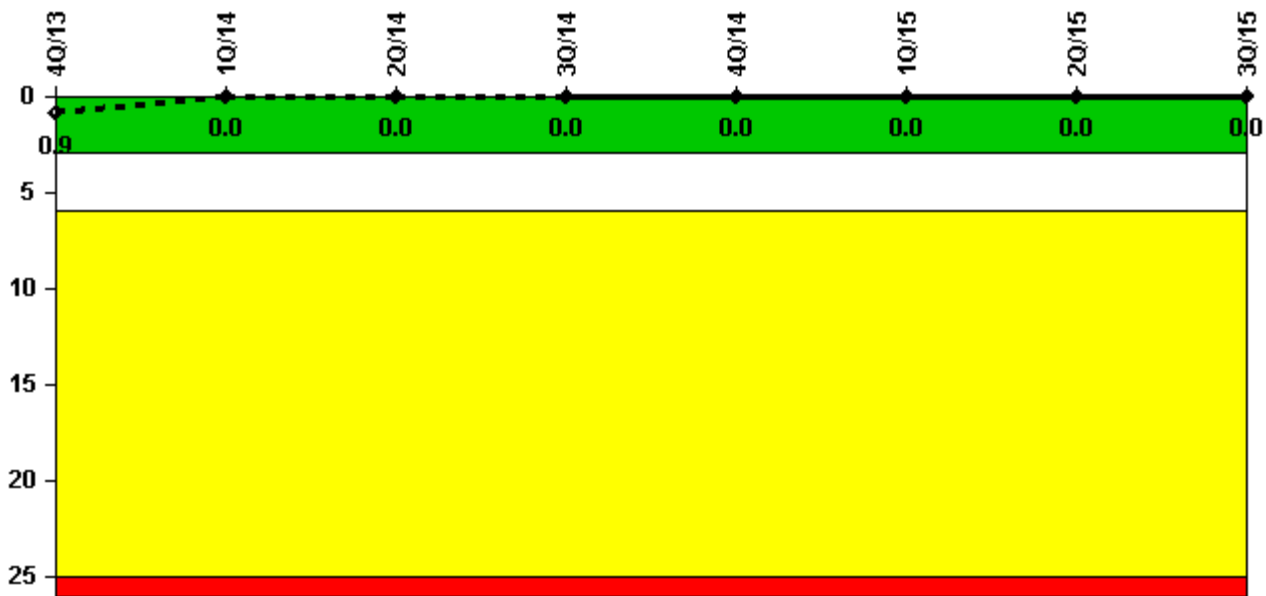
Byron 2

3Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Station Unit 2 3Q2015

Unplanned Scrams per 7000 Critical Hrs



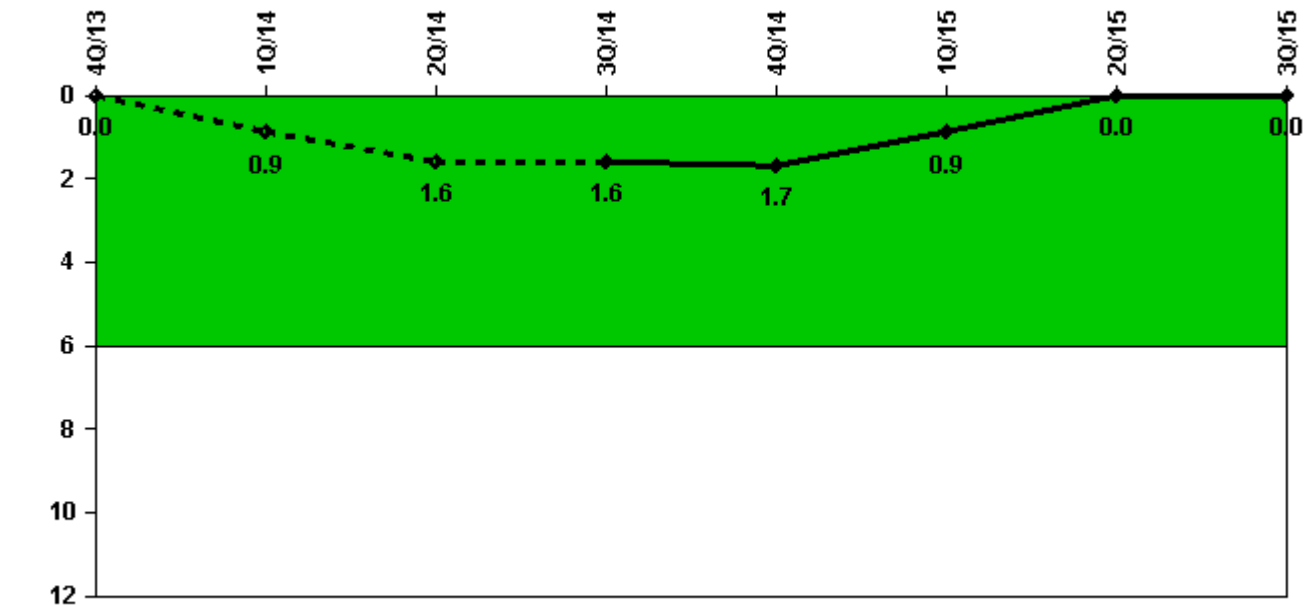
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0	2184.0	2208.0
Indicator value	0.9	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

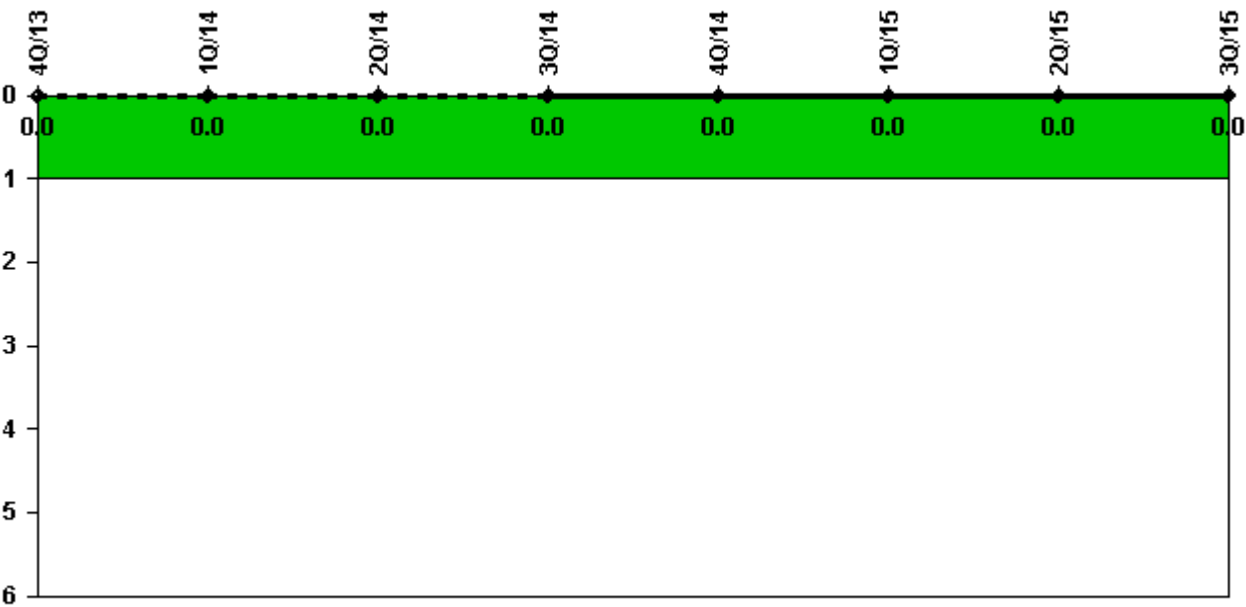
Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
Unplanned power changes	0	1.0	1.0	0	0	0	0	0
Critical hours	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0	2184.0	2208.0
Indicator value	0	0.9	1.6	1.6	1.7	0.9	0	0

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



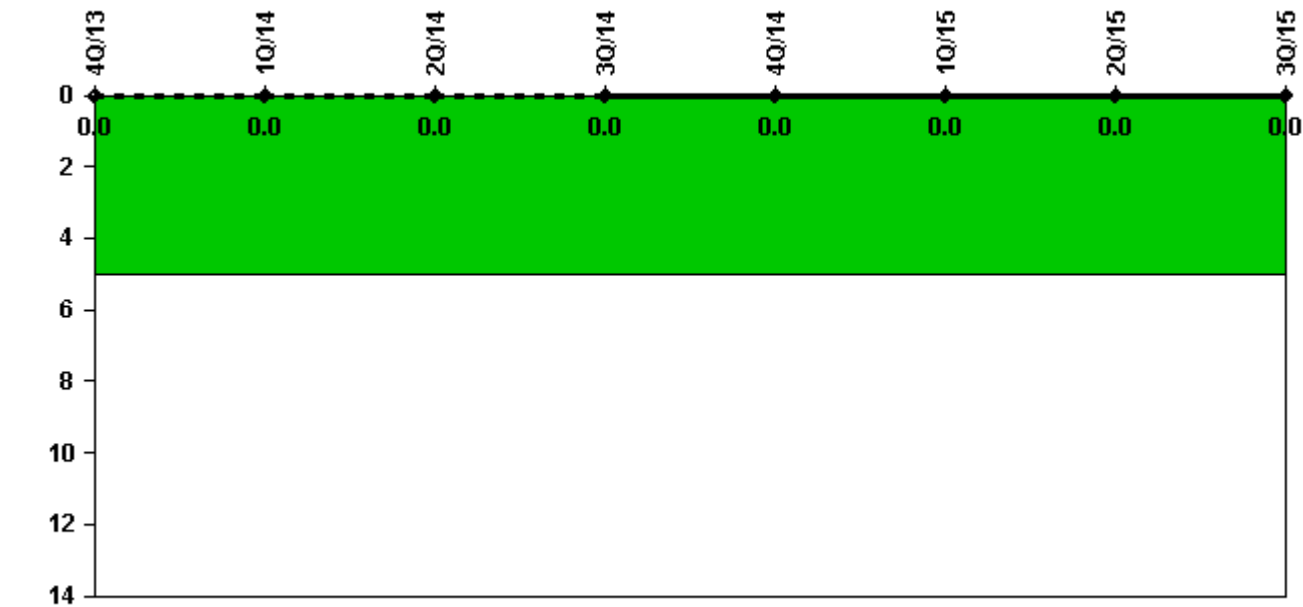
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



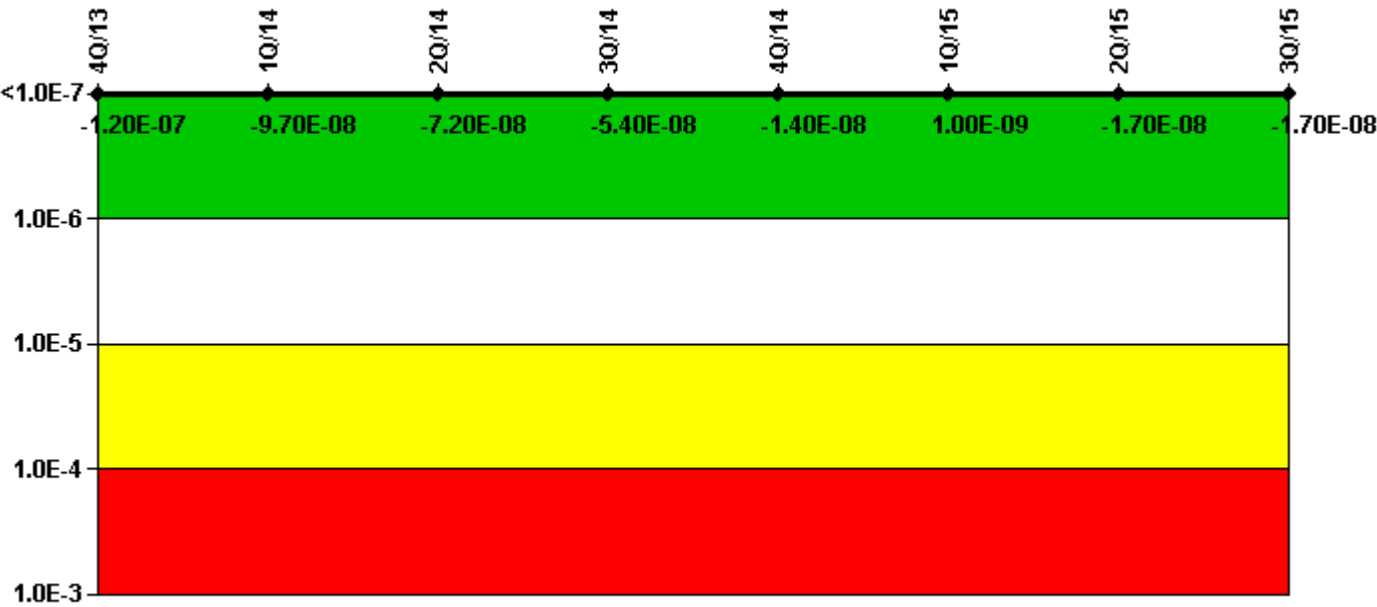
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



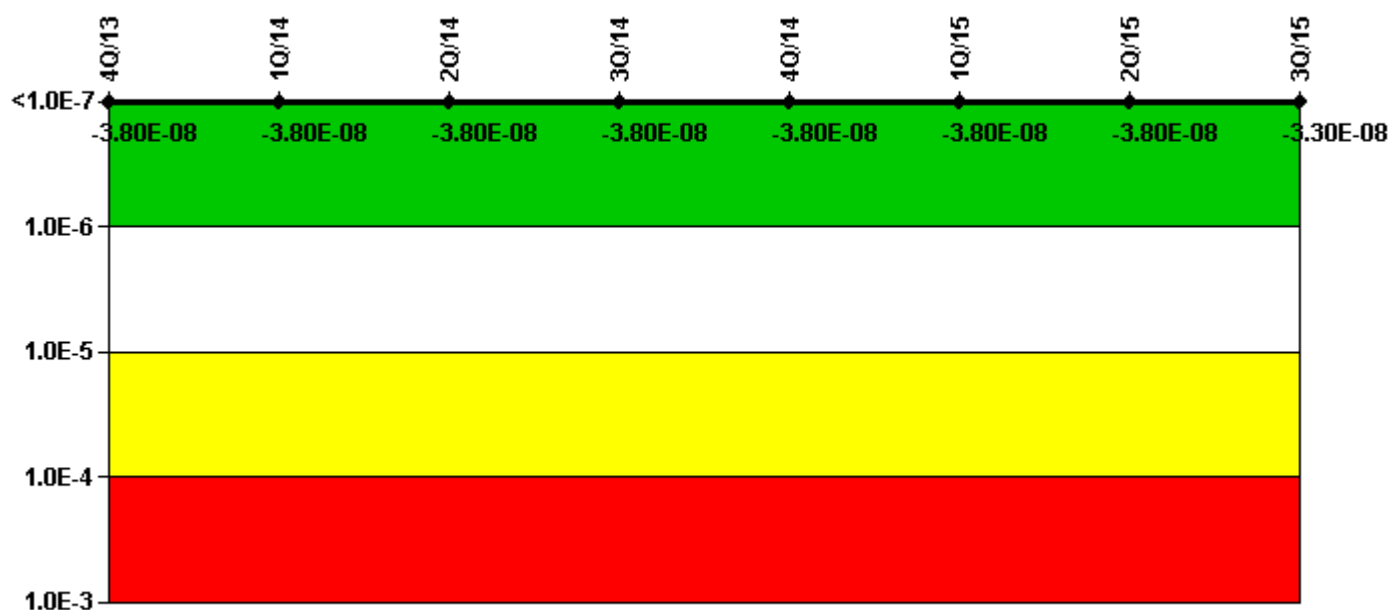
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
UAI (ΔCDF)	-1.56E-08	-7.87E-09	3.98E-09	6.35E-09	3.04E-08	3.77E-09	-1.44E-08	-1.44E-08
URI (ΔCDF)	-1.03E-07	-8.96E-08	-7.56E-08	-6.07E-08	-4.47E-08	-2.75E-09	-2.75E-09	-2.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-07	-9.70E-08	-7.20E-08	-5.40E-08	-1.40E-08	1.00E-09	-1.70E-08	-1.70E-08

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



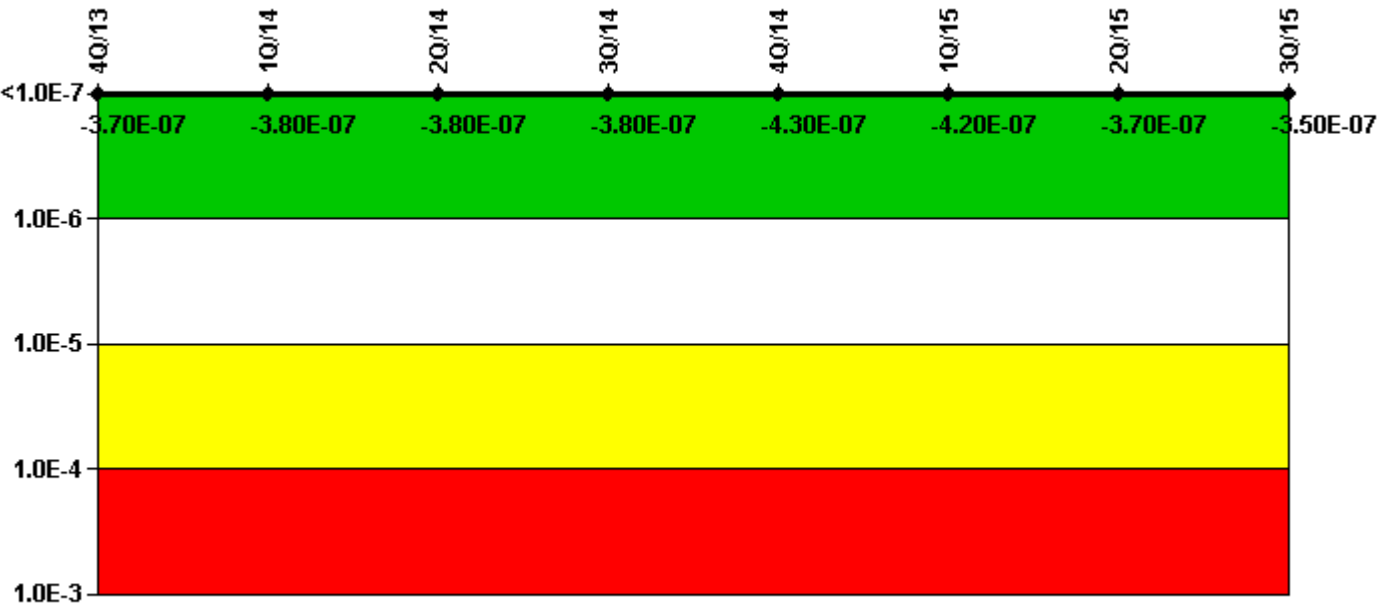
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
UAI (Δ CDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.44E-08
URI (Δ CDF)	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.61E-09	-8.61E-09	-8.61E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.30E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



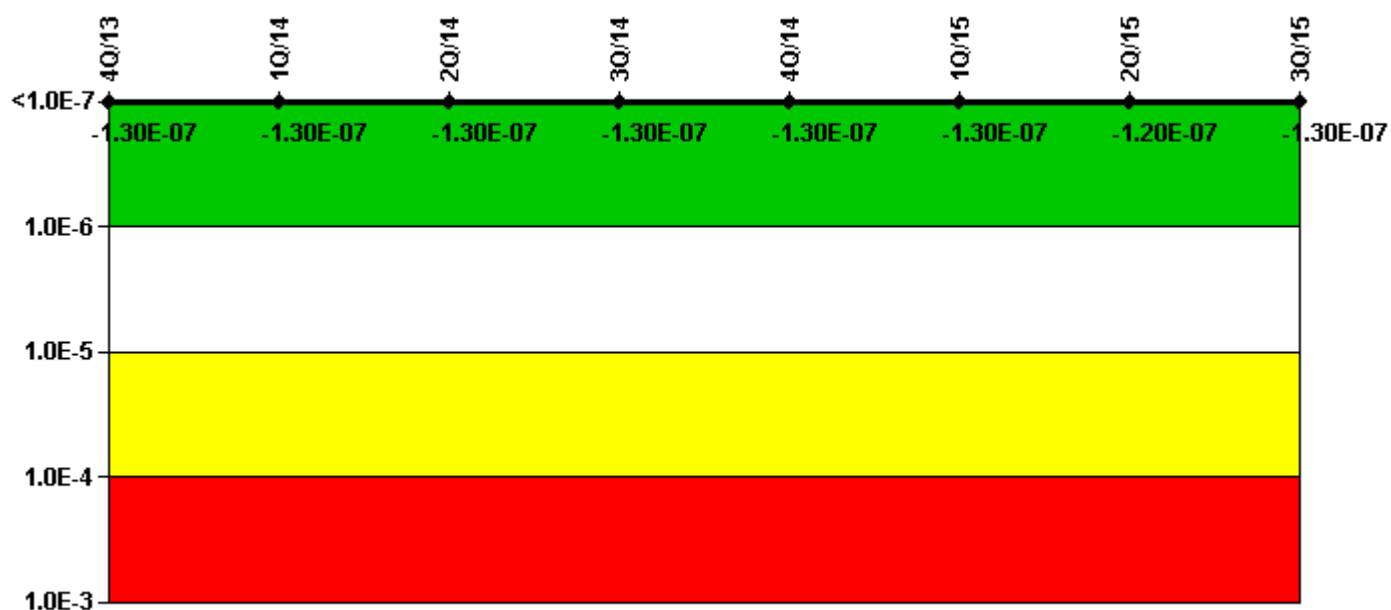
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
UAI (ΔCDF)	1.28E-08	9.26E-09	6.48E-09	4.63E-09	-6.01E-08	-5.79E-08	-1.06E-08	5.42E-09
URI (ΔCDF)	-3.85E-07	-3.85E-07	-3.85E-07	-3.87E-07	-3.73E-07	-3.60E-07	-3.55E-07	-3.57E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.70E-07	-3.80E-07	-3.80E-07	-3.80E-07	-4.30E-07	-4.20E-07	-3.70E-07	-3.50E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



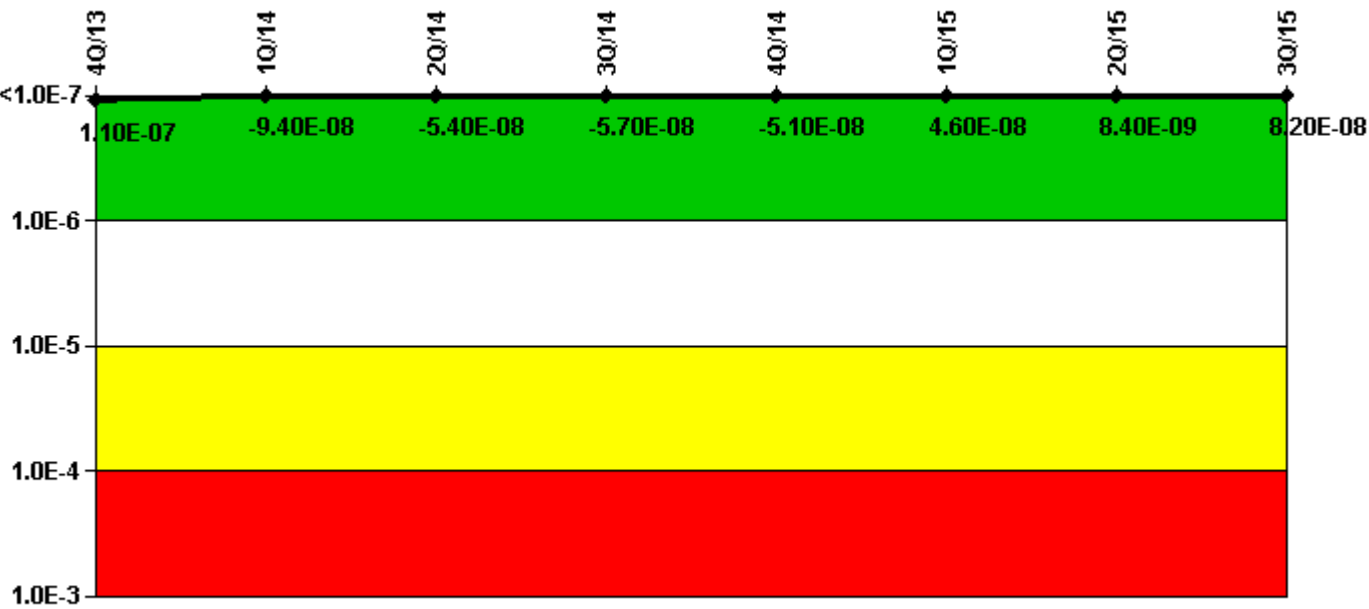
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
UAI (Δ CDF)	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.47E-08	-3.33E-08
URI (Δ CDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



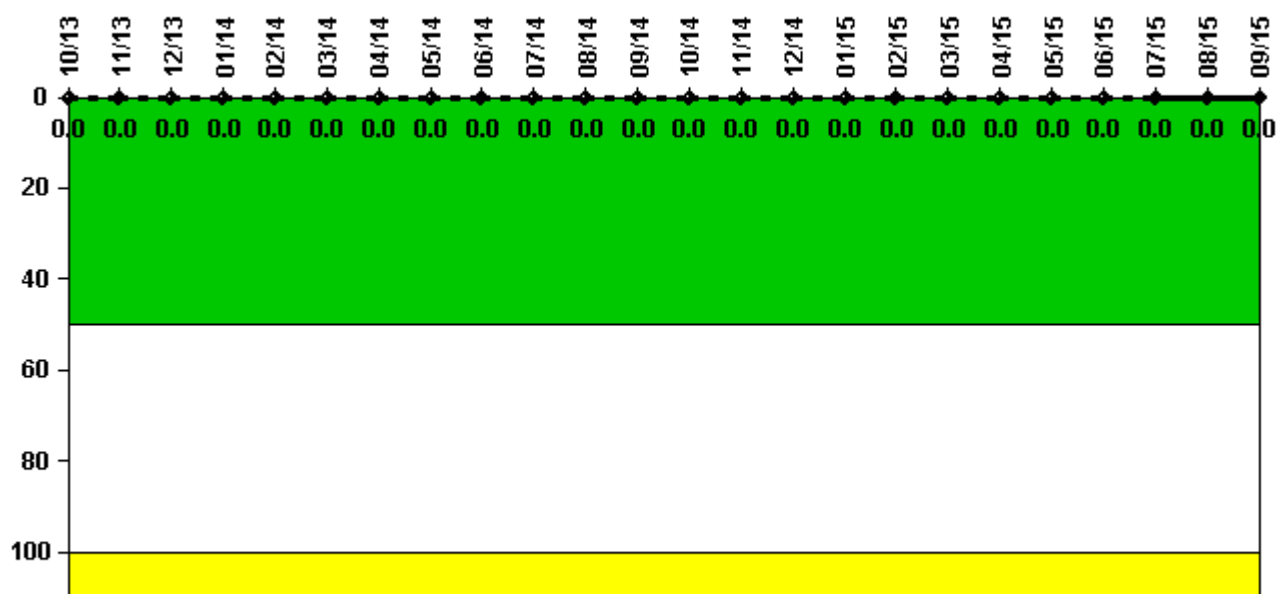
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
UAI (ΔCDF)	2.28E-07	1.79E-08	5.32E-08	4.59E-08	4.73E-08	1.38E-07	1.01E-07	1.74E-07
URI (ΔCDF)	-1.16E-07	-1.12E-07	-1.07E-07	-1.03E-07	-9.81E-08	-9.23E-08	-9.23E-08	-9.23E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.10E-07	-9.40E-08	-5.40E-08	-5.70E-08	-5.10E-08	4.60E-08	8.40E-09	8.20E-08

Licensee Comments: none

Reactor Coolant System Activity



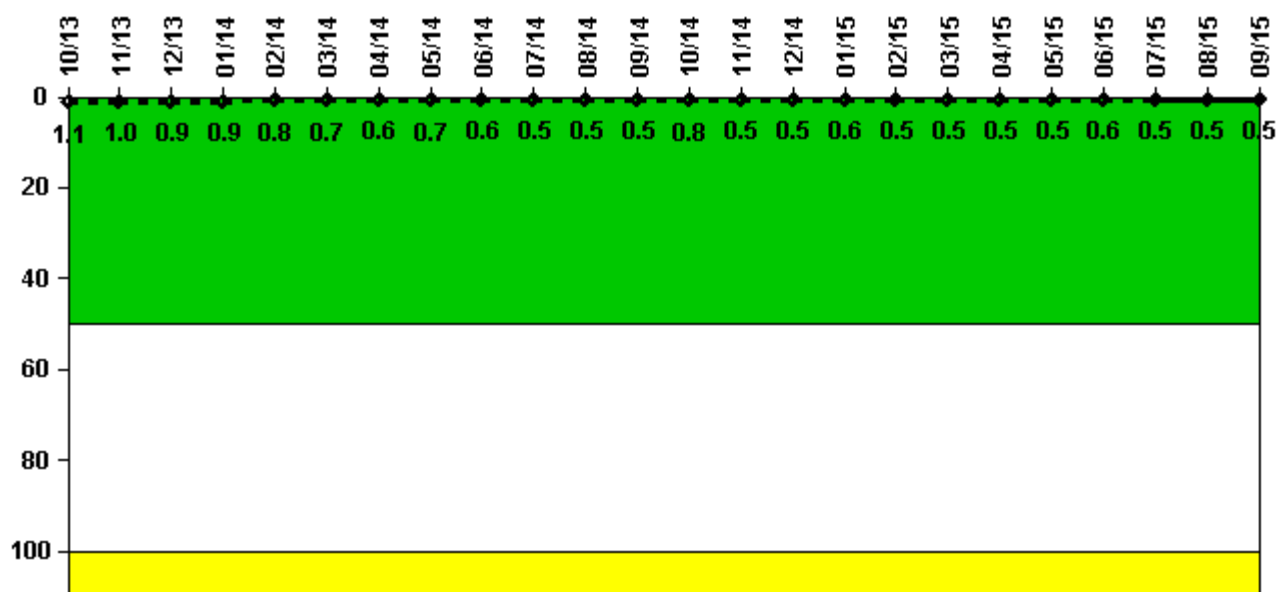
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum activity	0.000062	0.000061	0.000069	0.000069	0.000072	0.000073	0.000076	0.000087	0.000078	0.000082	0.000085	0.000084
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum activity	0.000045	0.000050	0.000054	0.000056	0.000056	0.000063	0.000067	0.000065	0.000069	0.000076	0.000070	0.000071
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



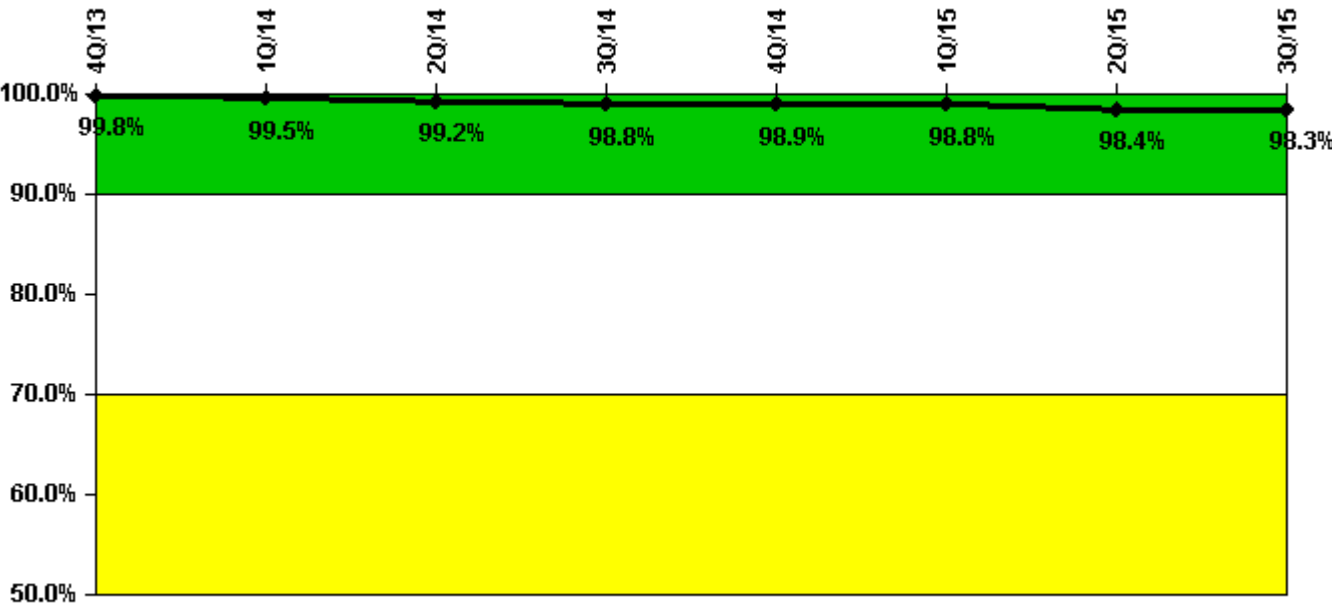
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum leakage	0.110	0.100	0.090	0.090	0.080	0.070	0.060	0.070	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.1	1.0	0.9	0.9	0.8	0.7	0.6	0.7	0.6	0.5	0.5	0.5
Reactor Coolant System Leakage	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum leakage	0.080	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



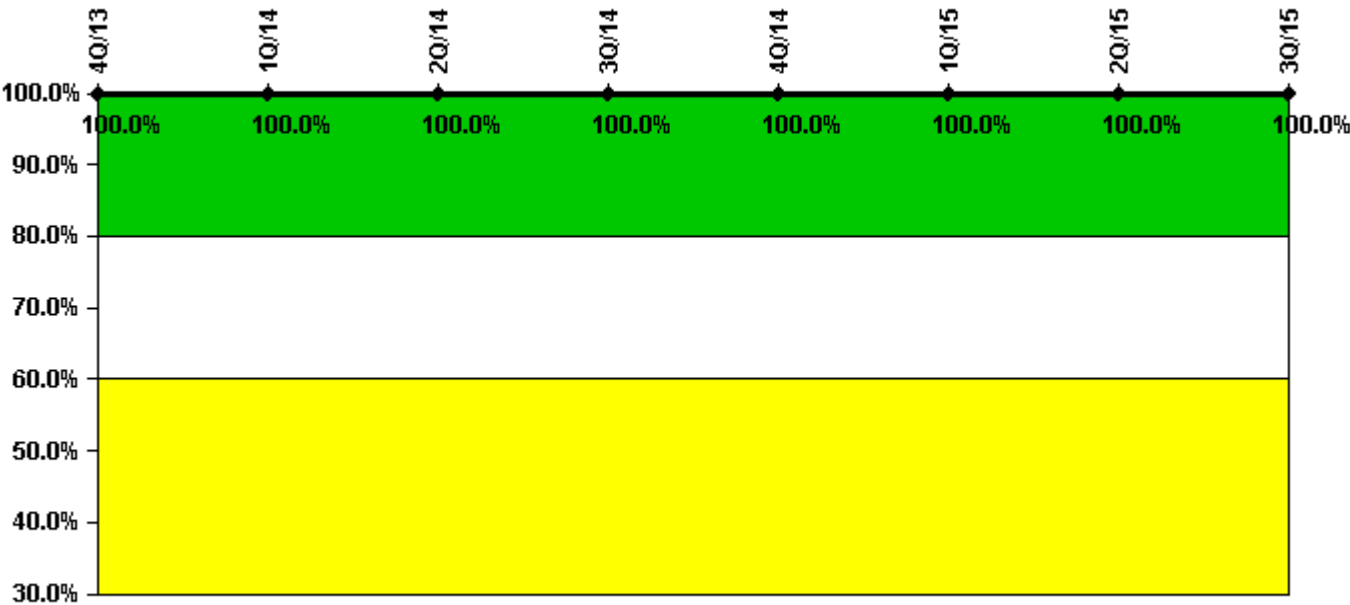
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
Successful opportunities	32.0	62.0	70.0	90.0	14.0	74.0	41.0	27.0
Total opportunities	32.0	64.0	71.0	92.0	14.0	74.0	43.0	27.0
Indicator value	99.8%	99.5%	99.2%	98.8%	98.9%	98.8%	98.4%	98.3%

Licensee Comments: none

ERO Drill Participation



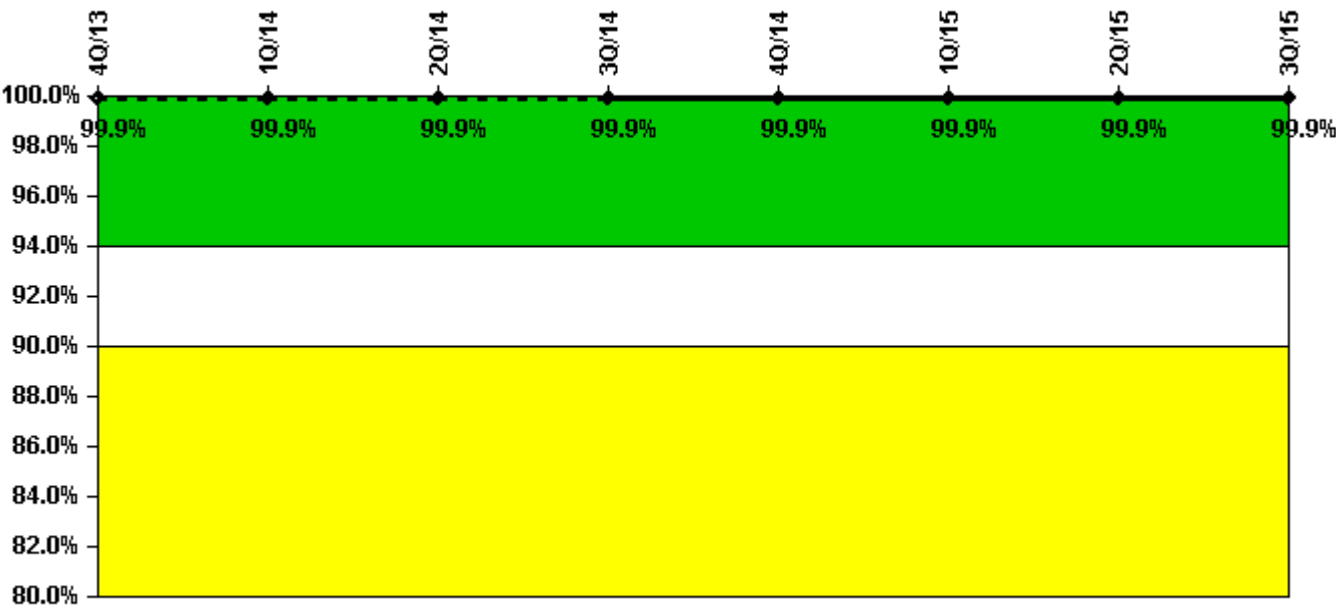
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
Participating Key personnel	74.0	77.0	79.0	78.0	77.0	74.0	74.0	72.0
Total Key personnel	74.0	77.0	79.0	78.0	77.0	74.0	74.0	72.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



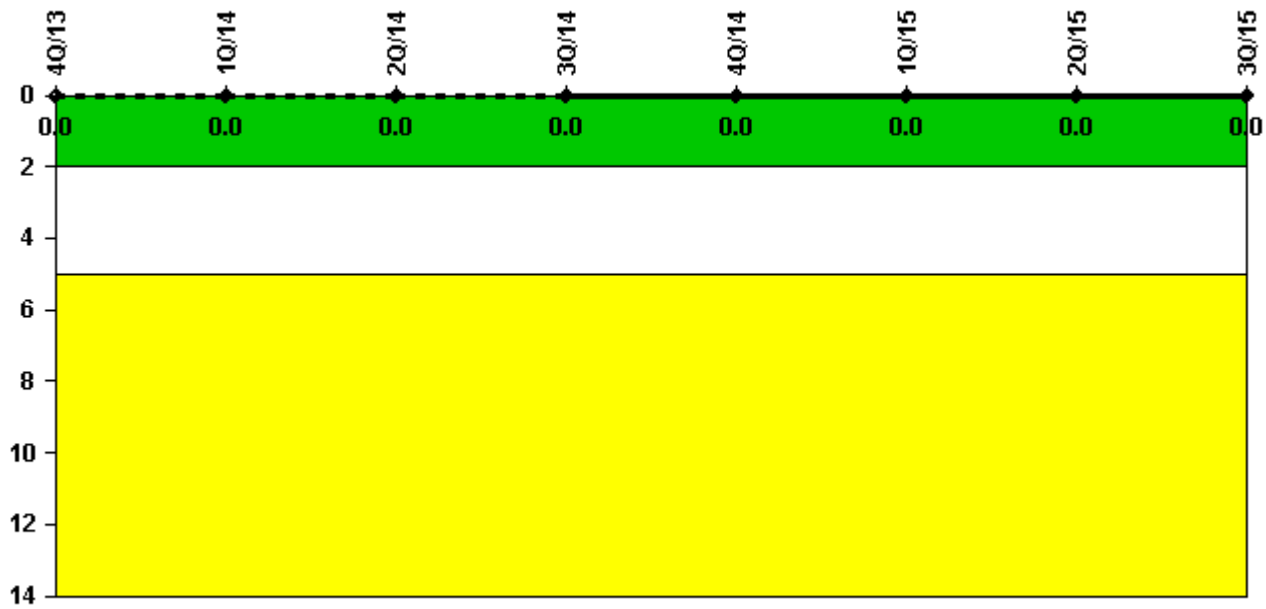
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
Successful siren-tests	3900	3841	3898	3896	3901	3834	3902	3962
Total sirens-tests	3904	3843	3904	3904	3904	3840	3904	3965
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



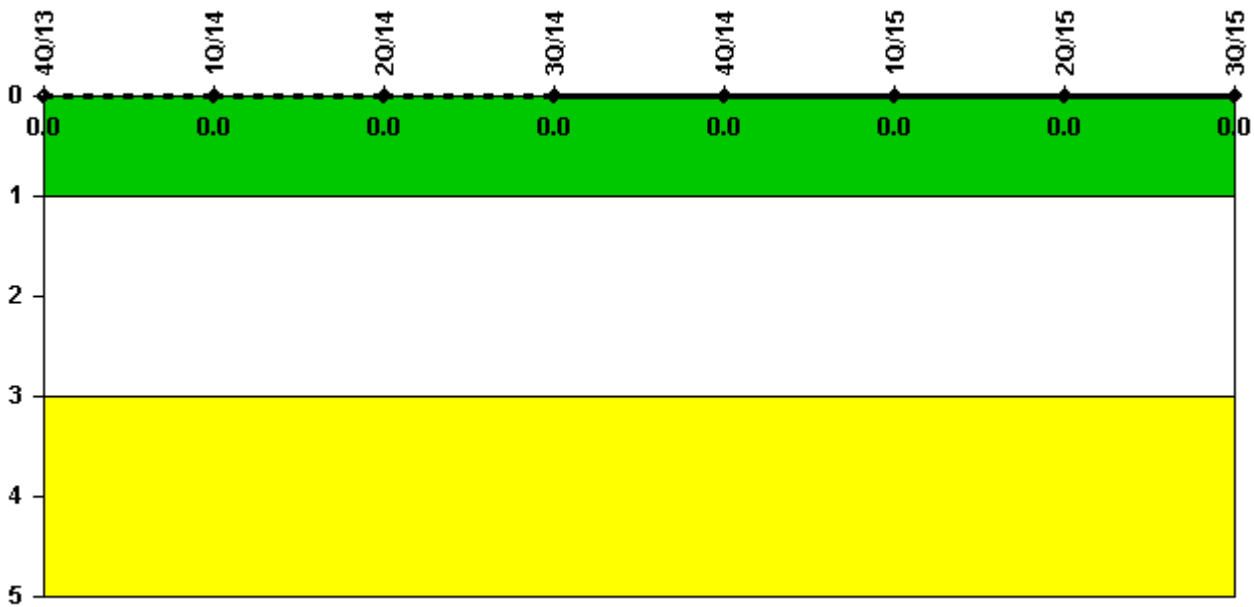
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

[illegible]

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: December 15, 2015

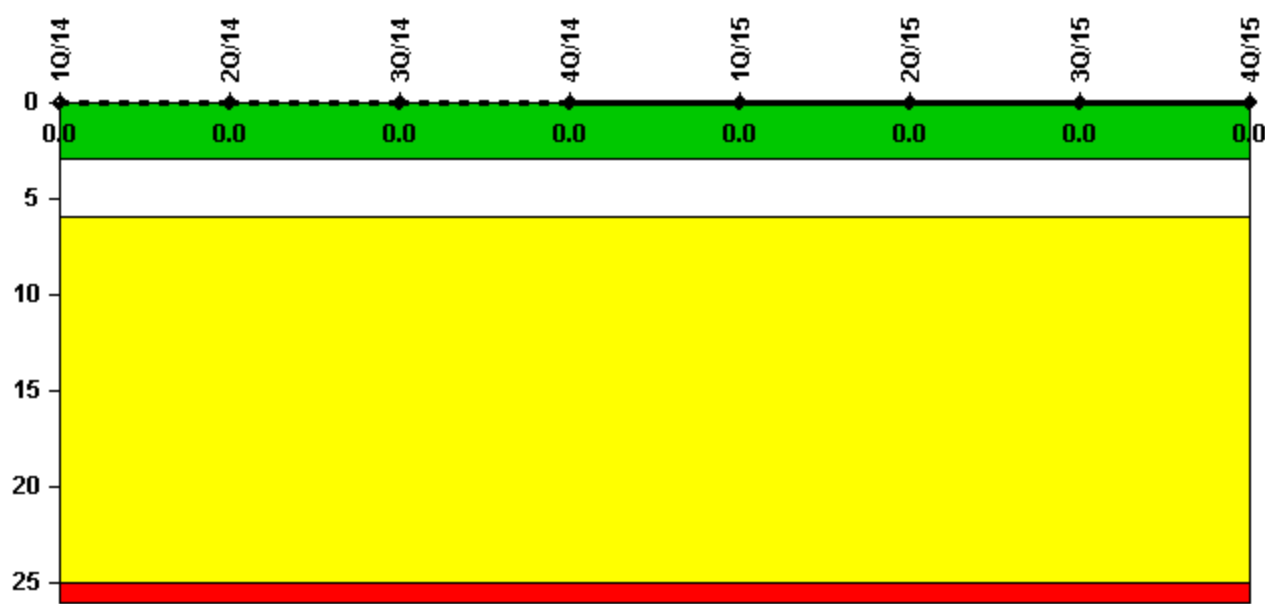
Byron 2

4Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Unit 2 4Q2015

Unplanned Scrams per 7000 Critical Hrs



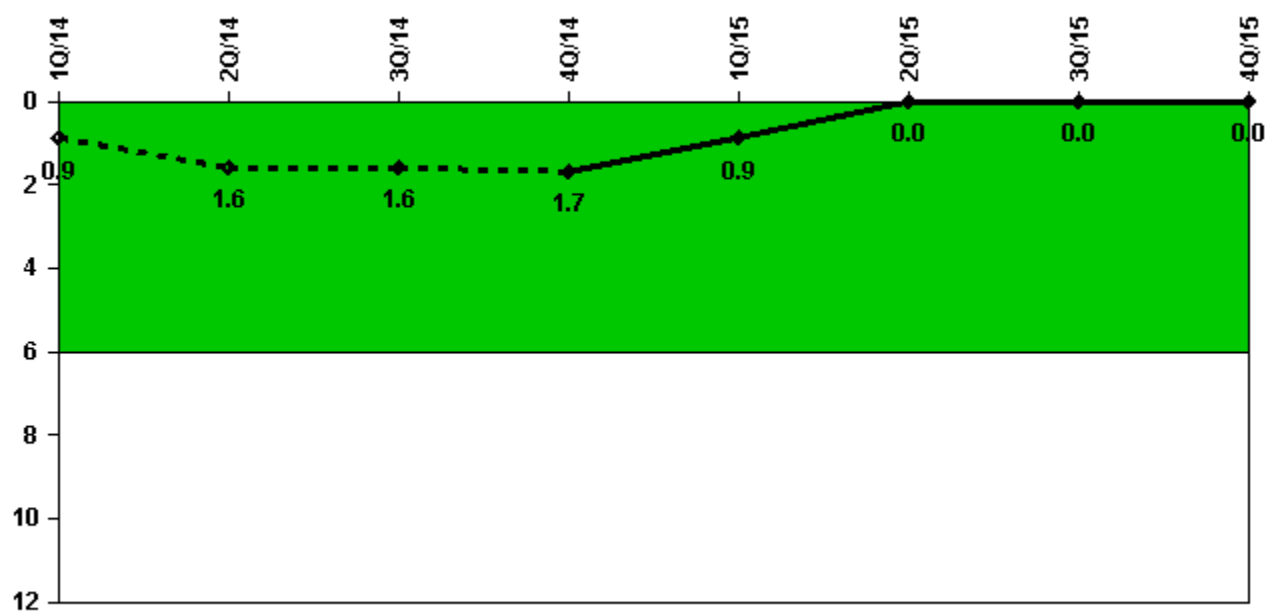
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2159.0	2184.0	2160.0	1664.2	2159.0	2184.0	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

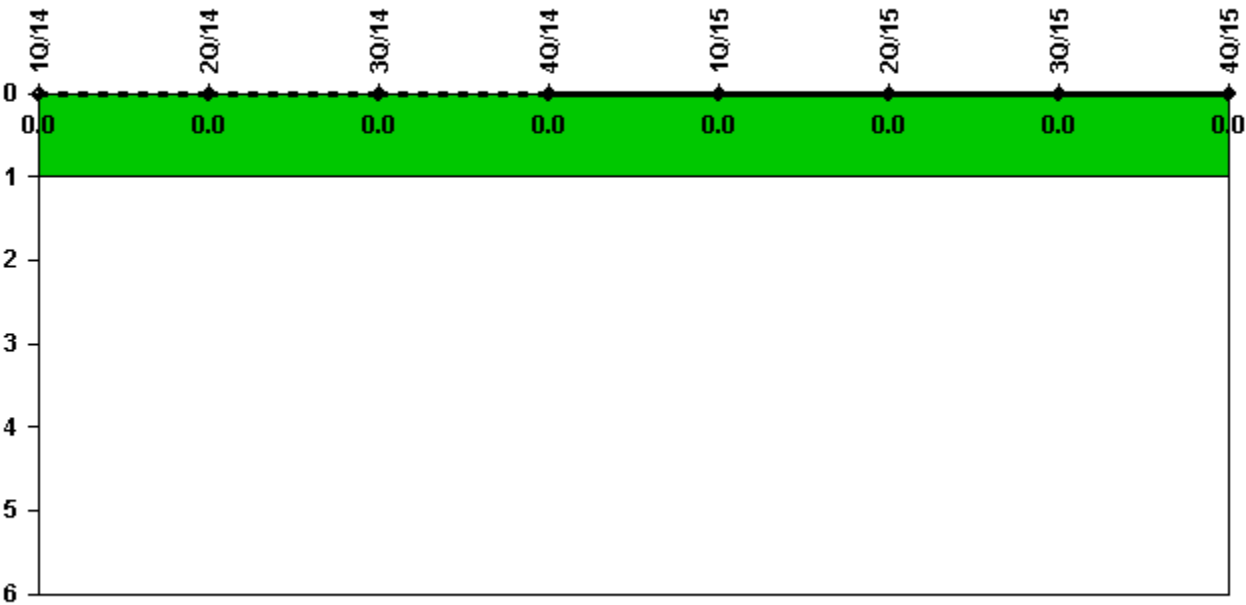
Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Unplanned power changes	1.0	1.0	0	0	0	0	0	0
Critical hours	2159.0	2184.0	2160.0	1664.2	2159.0	2184.0	2208.0	2209.0
Indicator value	0.9	1.6	1.6	1.7	0.9	0	0	0

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



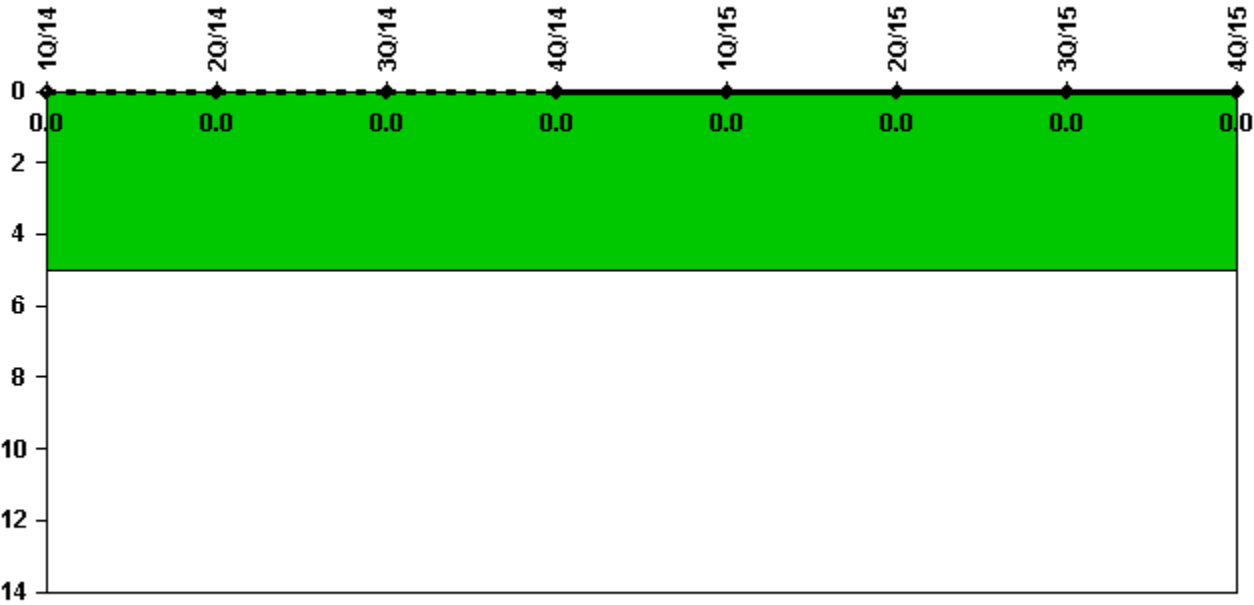
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



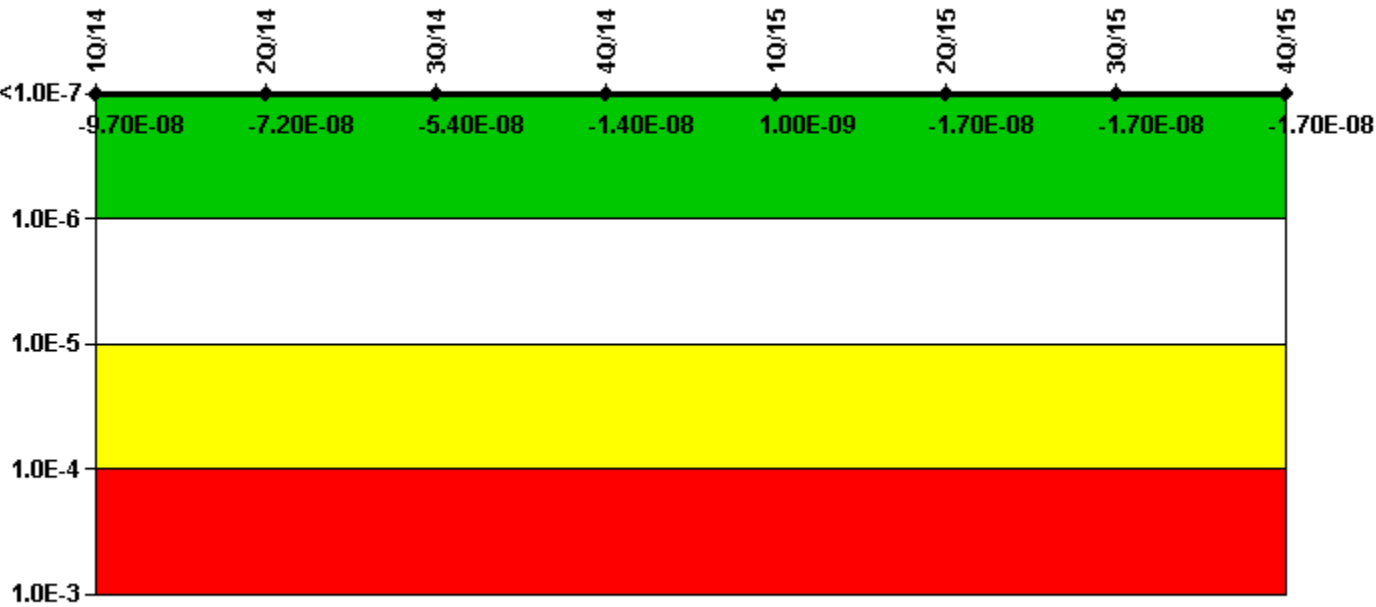
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System

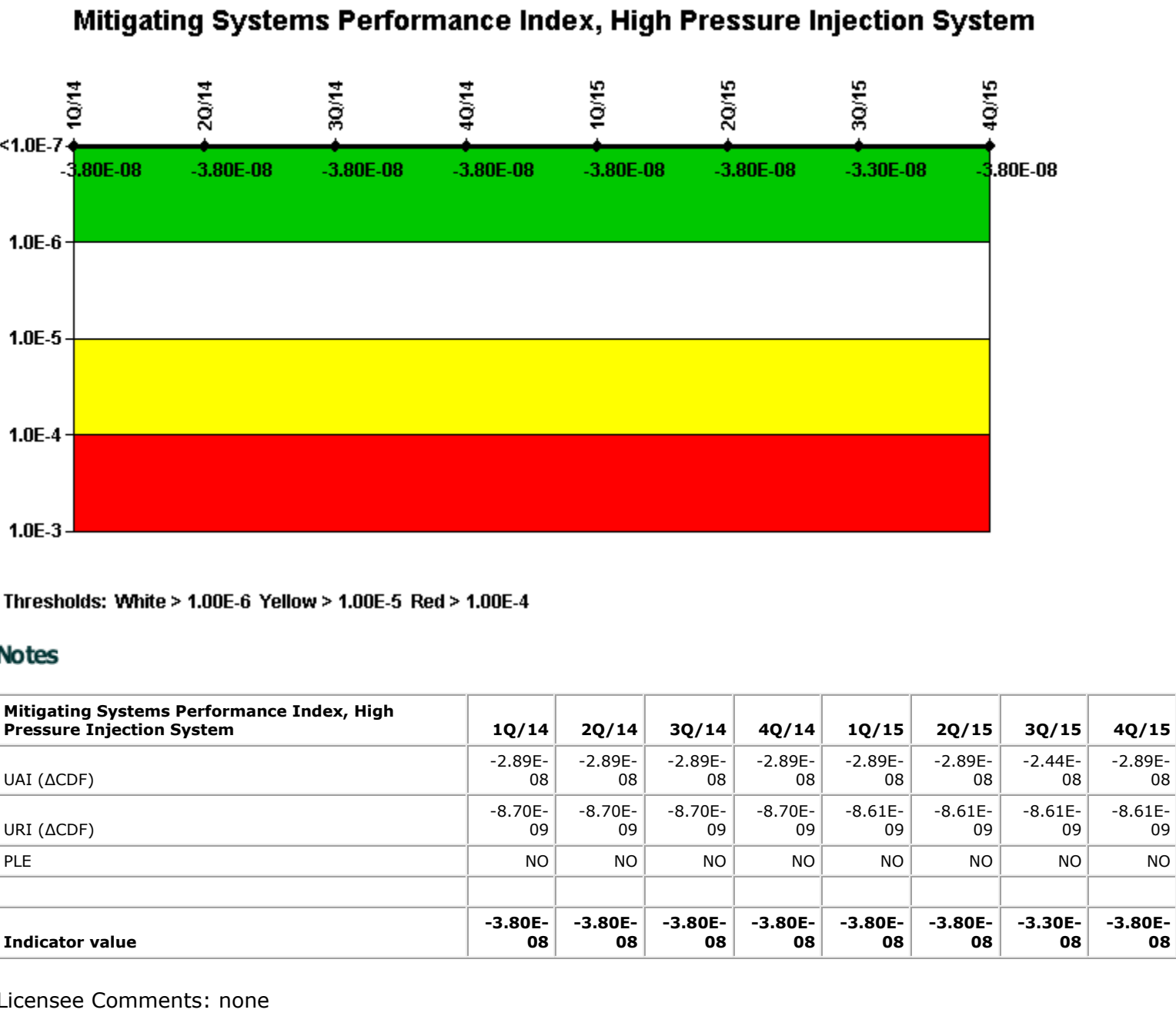


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

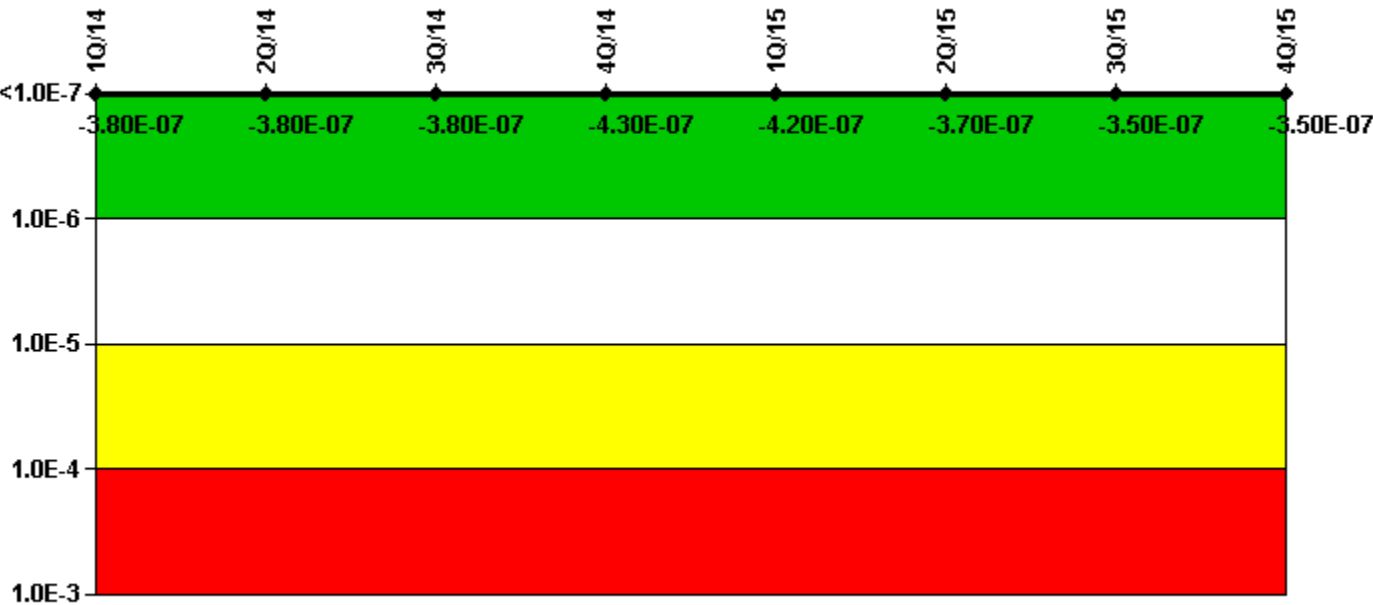
Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (ΔCDF)	-7.87E-09	3.98E-09	6.35E-09	3.04E-08	3.77E-09	-1.44E-08	-1.44E-08	-1.44E-08
URI (ΔCDF)	-8.96E-08	-7.56E-08	-6.07E-08	-4.47E-08	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.70E-08	-7.20E-08	-5.40E-08	-1.40E-08	1.00E-09	-1.70E-08	-1.70E-08	-1.70E-08

Licensee Comments: none



Mitigating Systems Performance Index, Heat Removal System



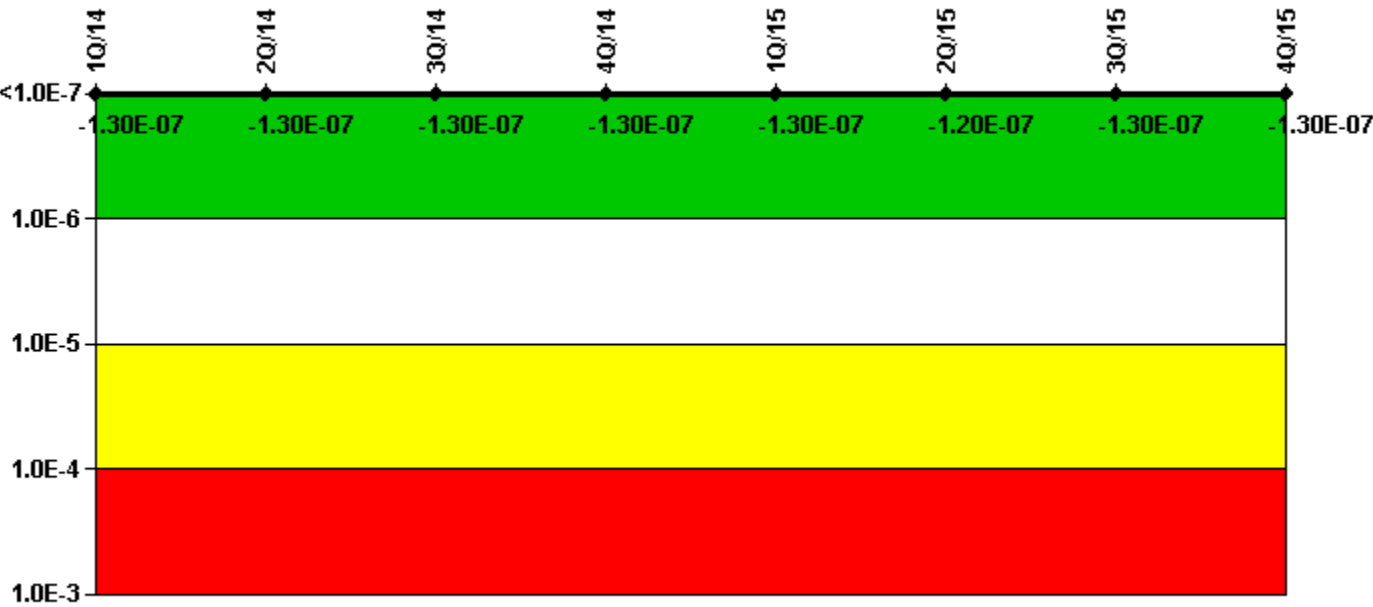
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (ΔCDF)	9.26E-09	6.48E-09	4.63E-09	-6.01E-08	-5.79E-08	-1.06E-08	5.42E-09	4.62E-09
URI (ΔCDF)	-3.85E-07	-3.85E-07	-3.87E-07	-3.73E-07	-3.60E-07	-3.55E-07	-3.57E-07	-3.57E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-07	-3.80E-07	-3.80E-07	-4.30E-07	-4.20E-07	-3.70E-07	-3.50E-07	-3.50E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



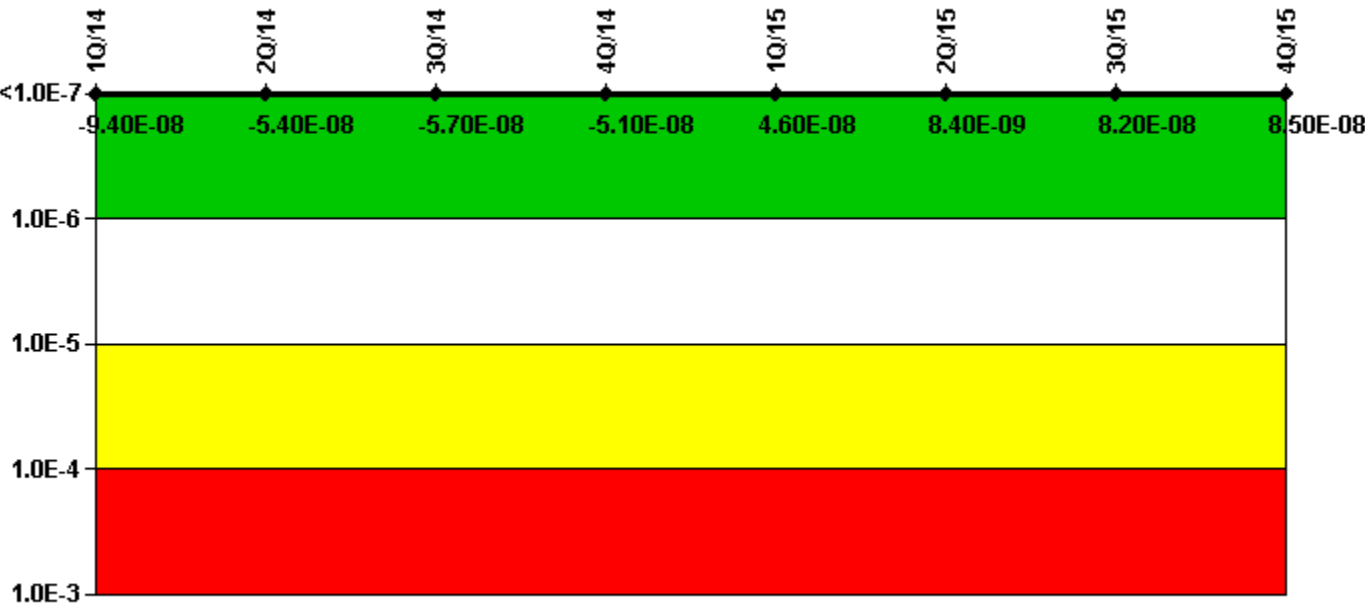
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.47E-08	-3.33E-08	-3.33E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



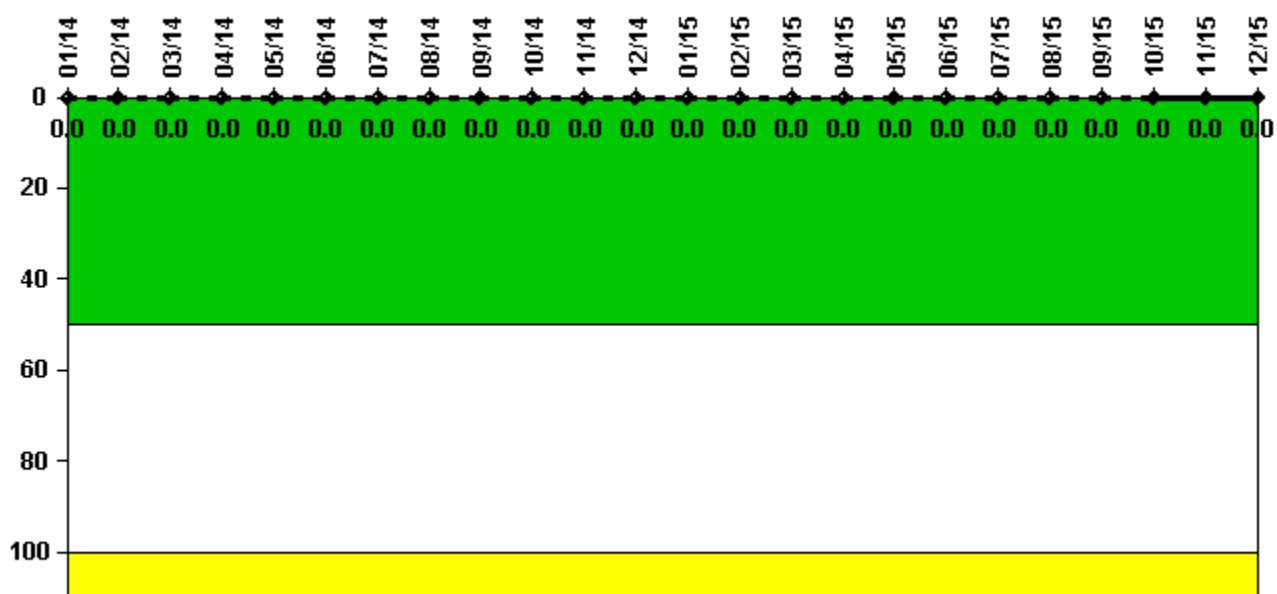
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (ΔCDF)	1.79E-08	5.32E-08	4.59E-08	4.73E-08	1.38E-07	1.01E-07	1.74E-07	1.78E-07
URI (ΔCDF)	-1.12E-07	-1.07E-07	-1.03E-07	-9.81E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.40E-08	-5.40E-08	-5.70E-08	-5.10E-08	4.60E-08	8.40E-09	8.20E-08	8.50E-08

Licensee Comments: none

Reactor Coolant System Activity



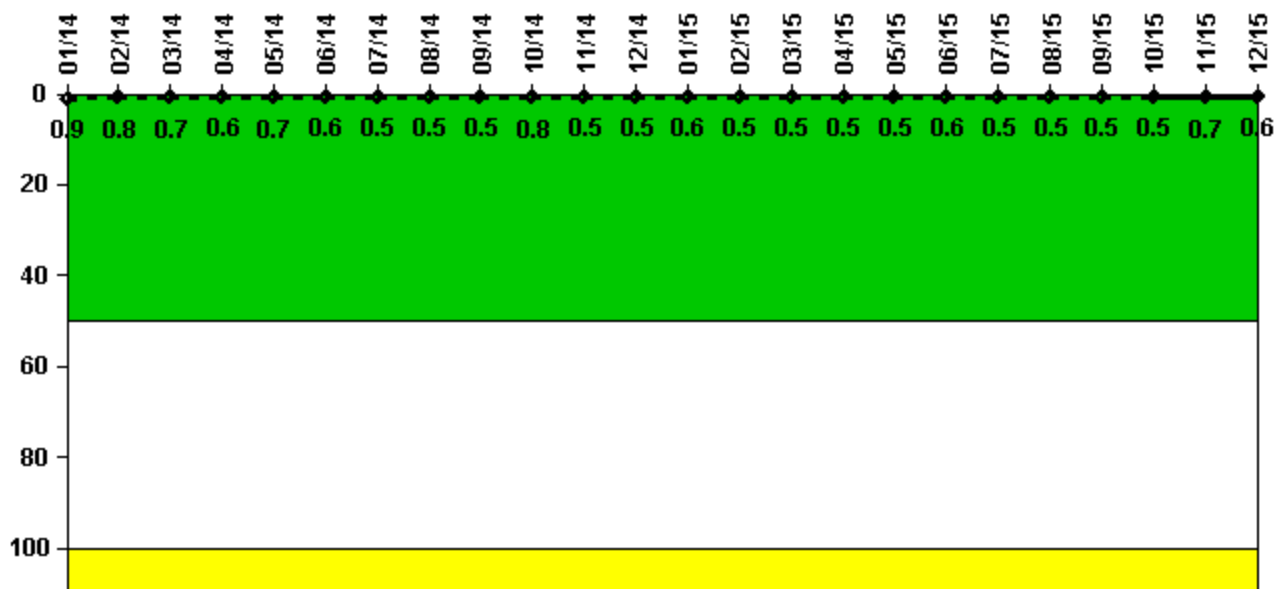
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum activity	0.000069	0.000072	0.000073	0.000076	0.000087	0.000078	0.000082	0.000085	0.000084	0.000045	0.000050	0.000054
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum activity	0.000056	0.000056	0.000063	0.000067	0.000065	0.000069	0.000076	0.000070	0.000071	0.000073	0.000070	0.000078
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



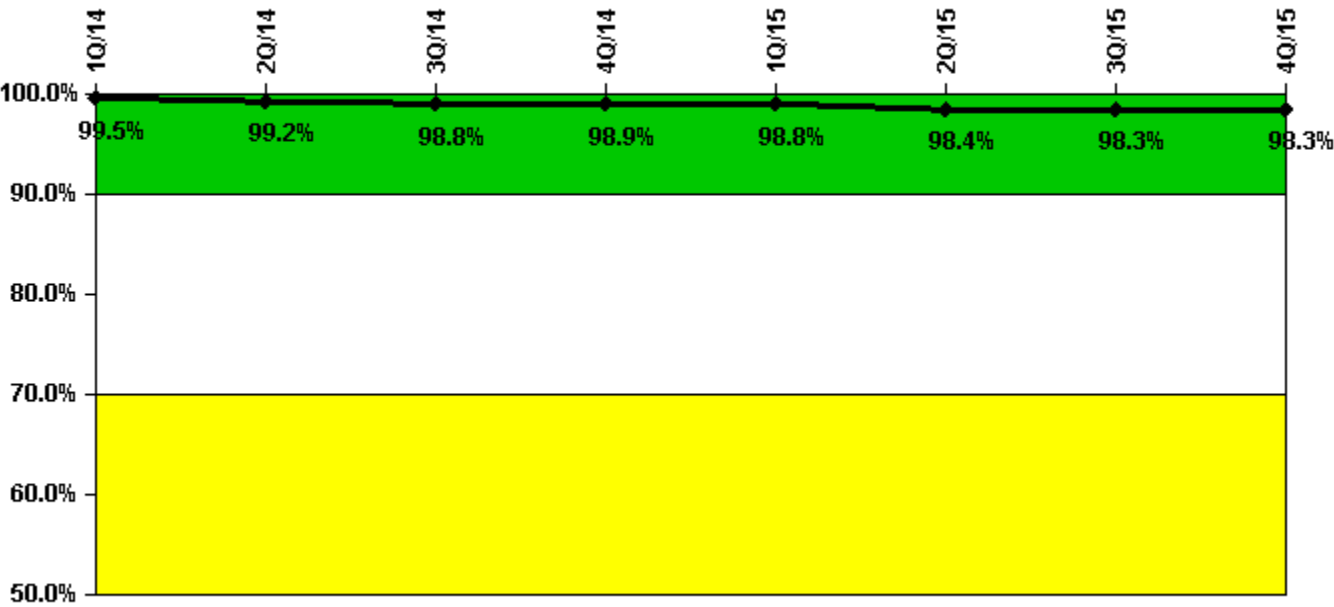
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum leakage	0.090	0.080	0.070	0.060	0.070	0.060	0.050	0.050	0.050	0.080	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.9	0.8	0.7	0.6	0.7	0.6	0.5	0.5	0.5	0.8	0.5	0.5
Reactor Coolant System Leakage	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum leakage	0.060	0.050	0.050	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.070	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.7	0.6

Licensee Comments: none

Drill/Exercise Performance



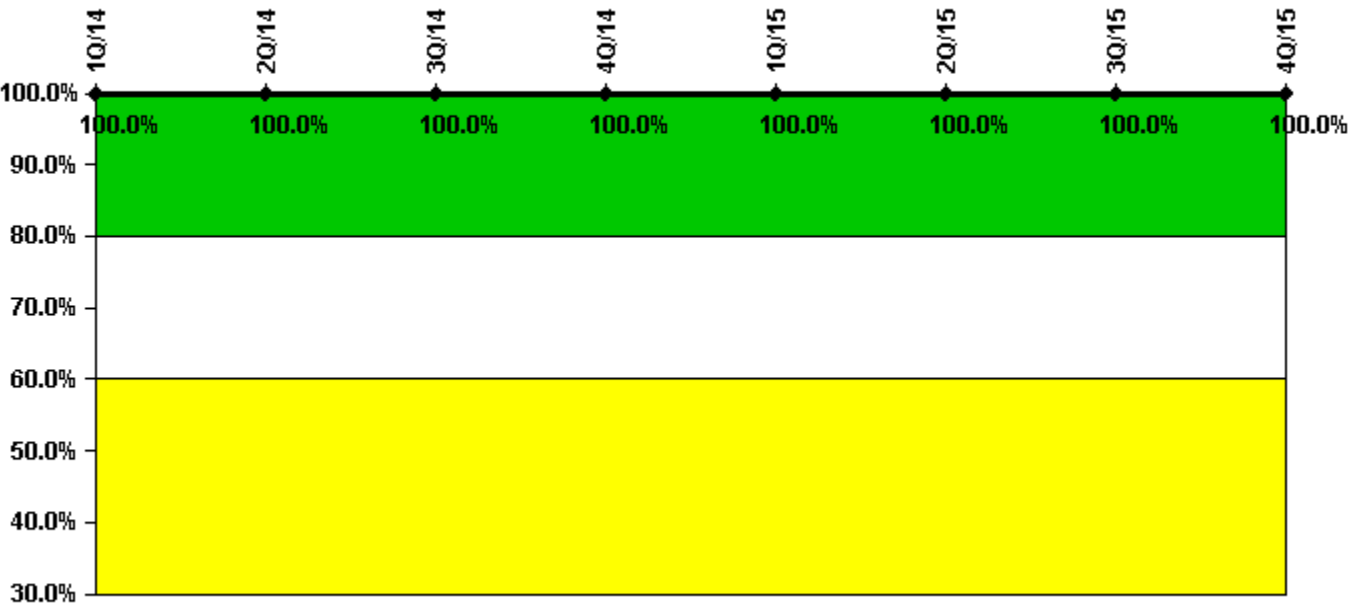
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful opportunities	62.0	70.0	90.0	14.0	74.0	41.0	27.0	32.0
Total opportunities	64.0	71.0	92.0	14.0	74.0	43.0	27.0	32.0
Indicator value	99.5%	99.2%	98.8%	98.9%	98.8%	98.4%	98.3%	98.3%

Licensee Comments: none

ERO Drill Participation



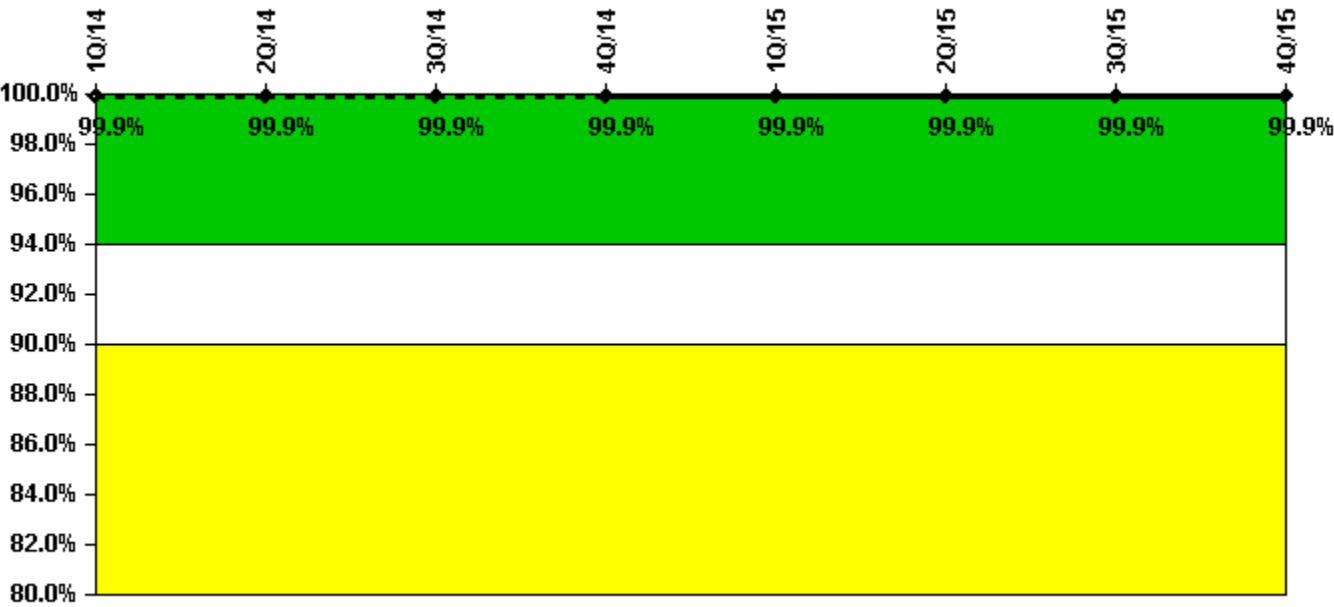
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Participating Key personnel	77.0	79.0	78.0	77.0	74.0	74.0	72.0	75.0
Total Key personnel	77.0	79.0	78.0	77.0	74.0	74.0	72.0	75.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



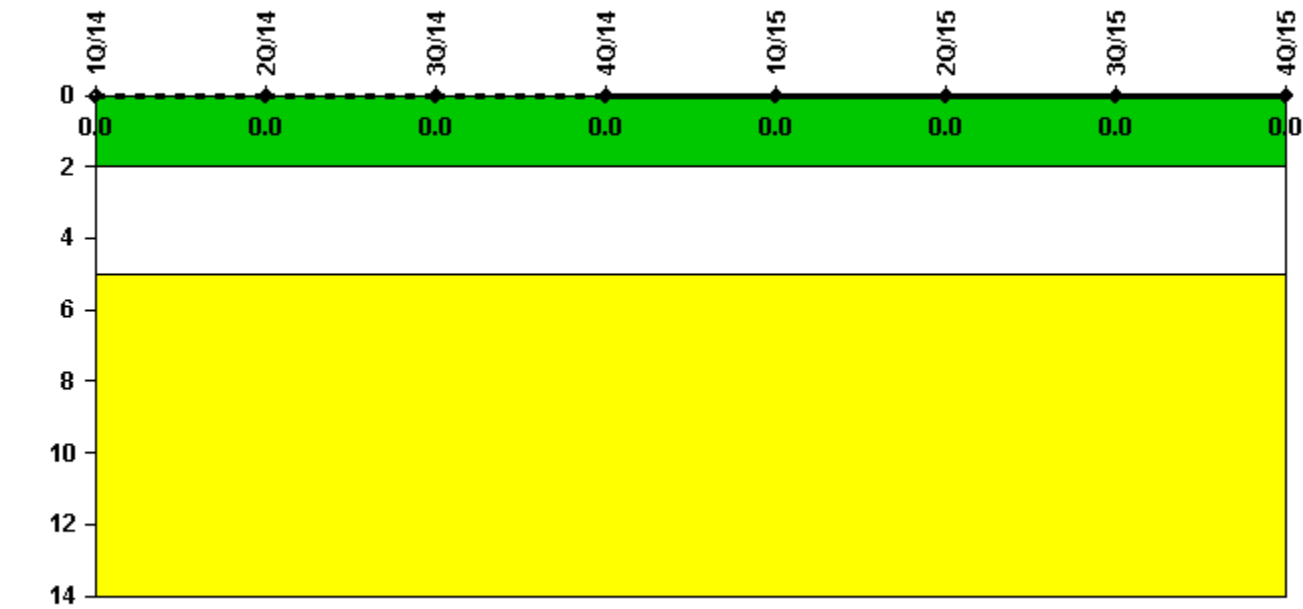
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful siren-tests	3841	3898	3896	3901	3834	3902	3962	3903
Total sirens-tests	3843	3904	3904	3904	3840	3904	3965	3904
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



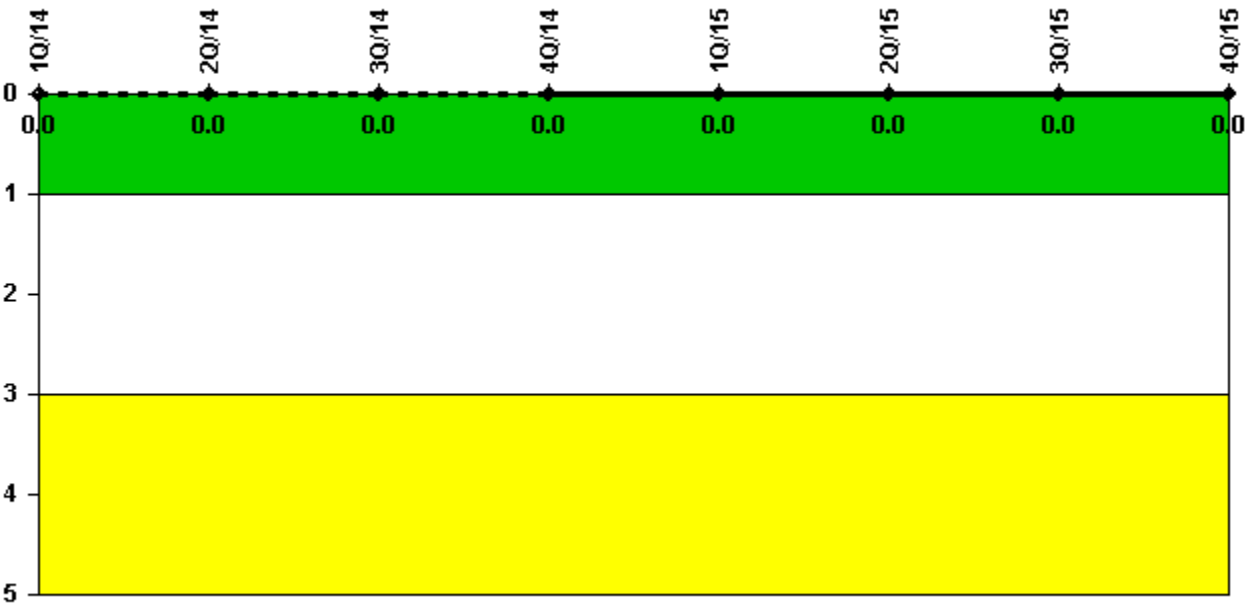
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: March 1, 2016

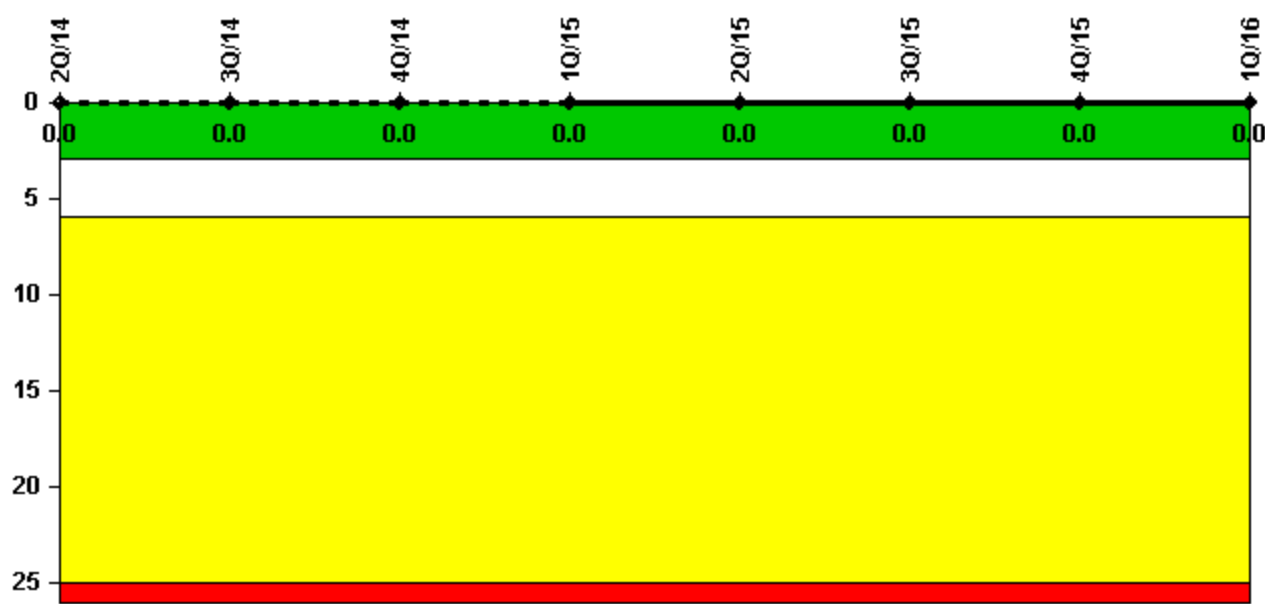
Byron 2

1Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron 1Q2016 Unit 2

Unplanned Scrams per 7000 Critical Hrs



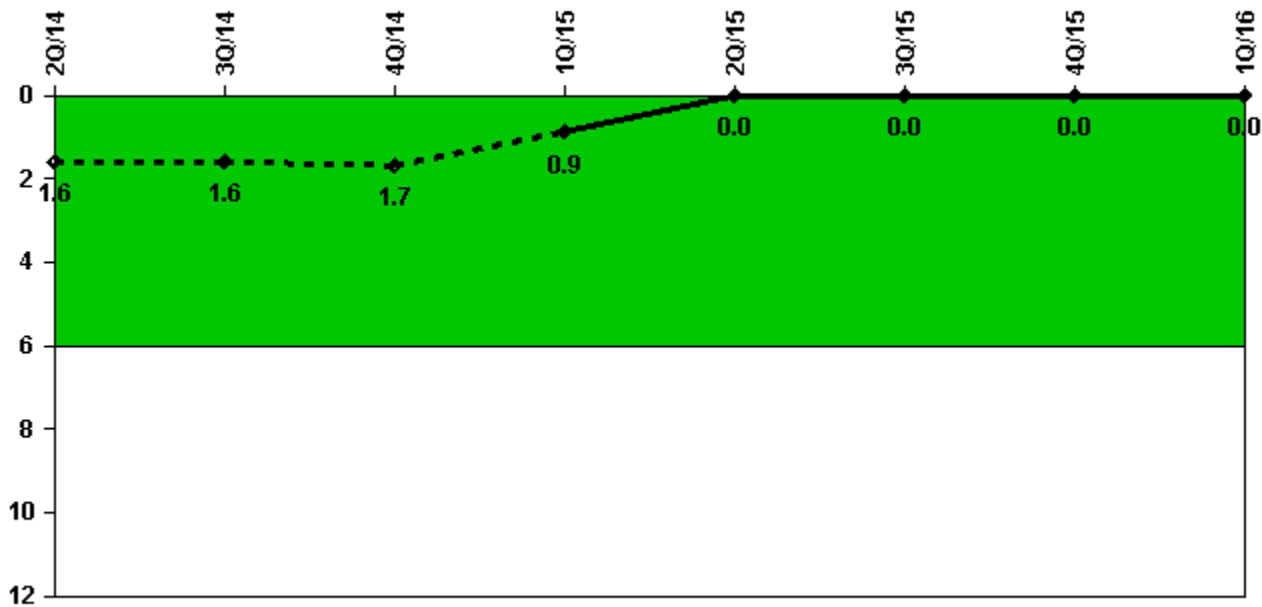
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	2160.0	1664.2	2159.0	2184.0	2208.0	2209.0	2183.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



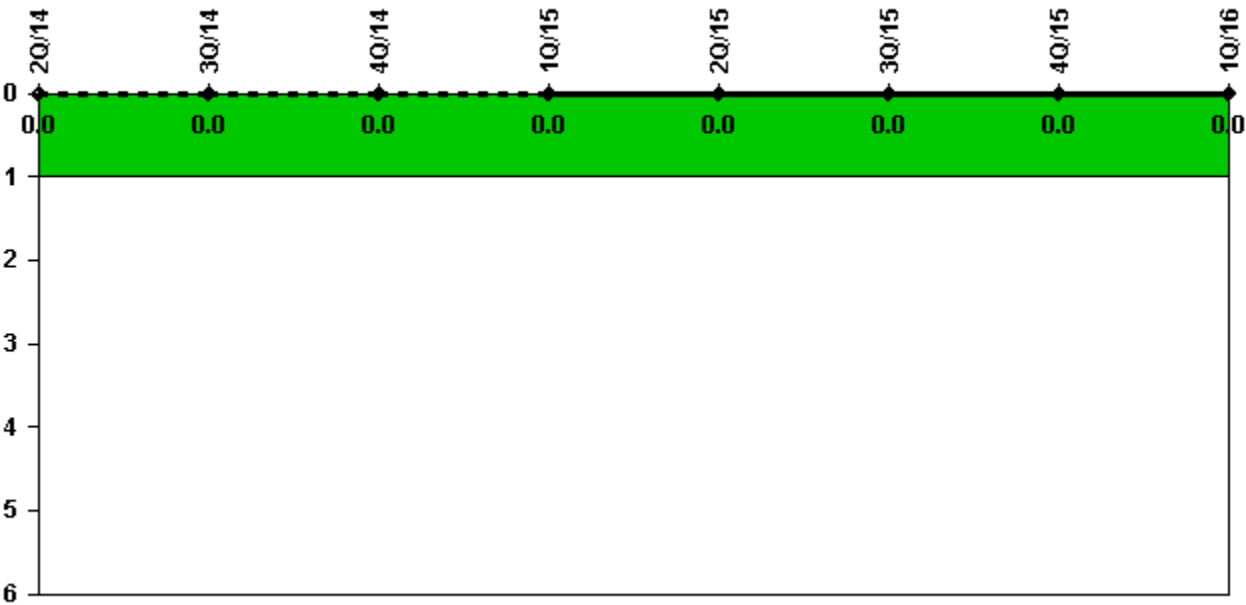
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	2184.0	2160.0	1664.2	2159.0	2184.0	2208.0	2209.0	2183.0
Indicator value	1.6	1.6	1.7	0.9	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



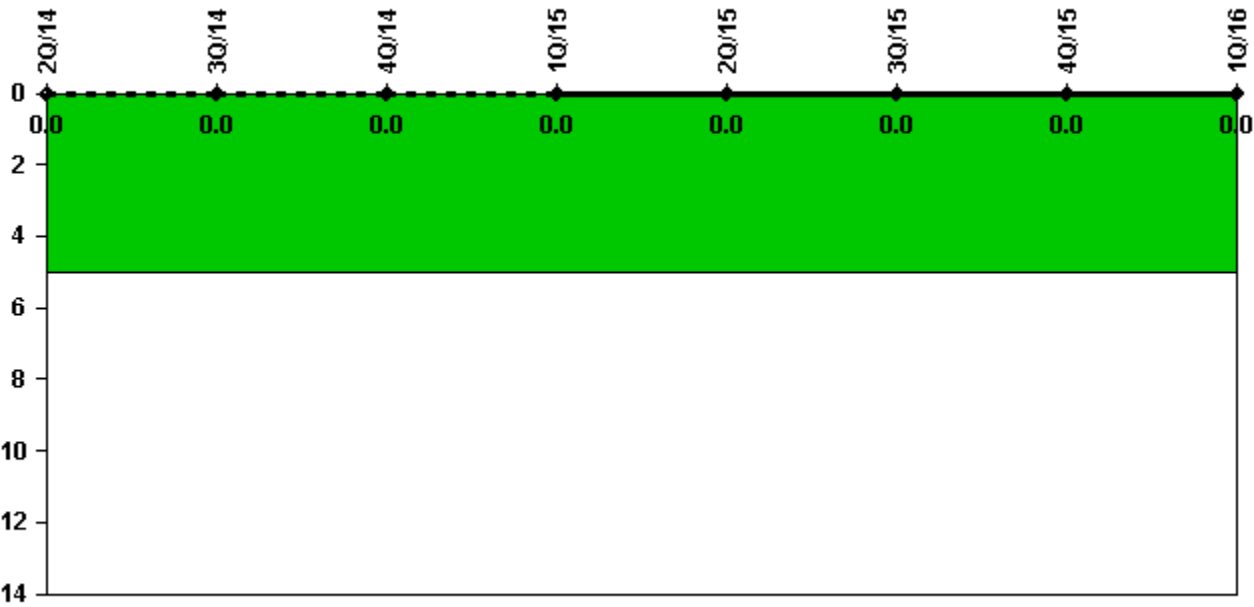
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



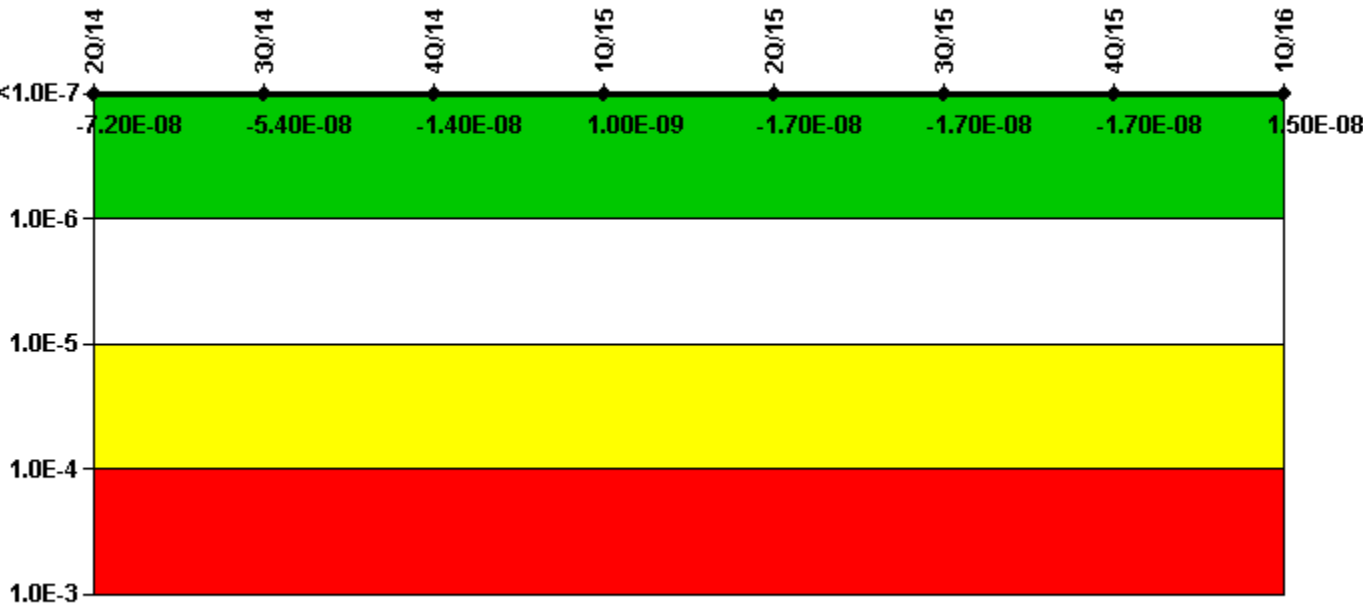
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System

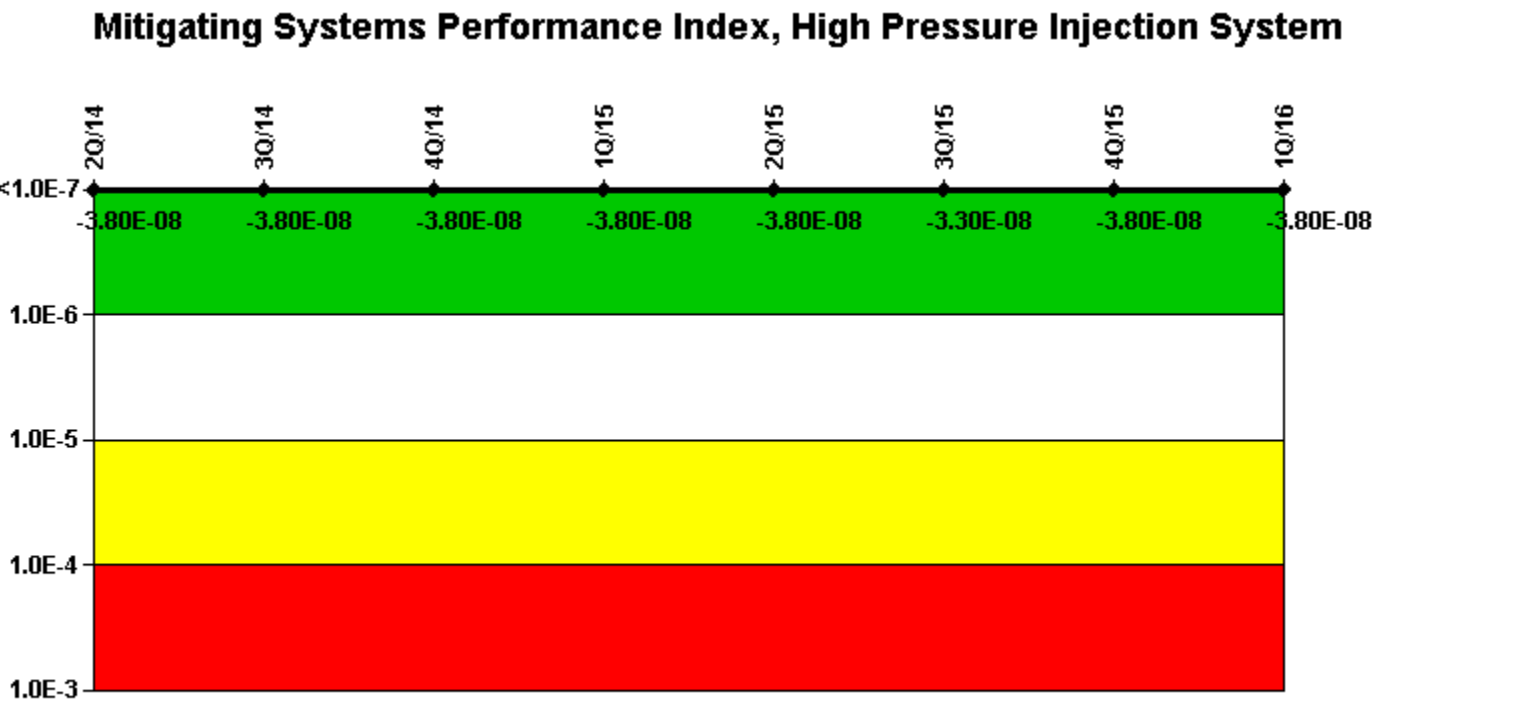


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	3.98E-09	6.35E-09	3.04E-08	3.77E-09	-1.44E-08	-1.44E-08	-1.44E-08	1.73E-08
URI (ΔCDF)	-7.56E-08	-6.07E-08	-4.47E-08	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.20E-08	-5.40E-08	-1.40E-08	1.00E-09	-1.70E-08	-1.70E-08	-1.70E-08	1.50E-08

Licensee Comments: none



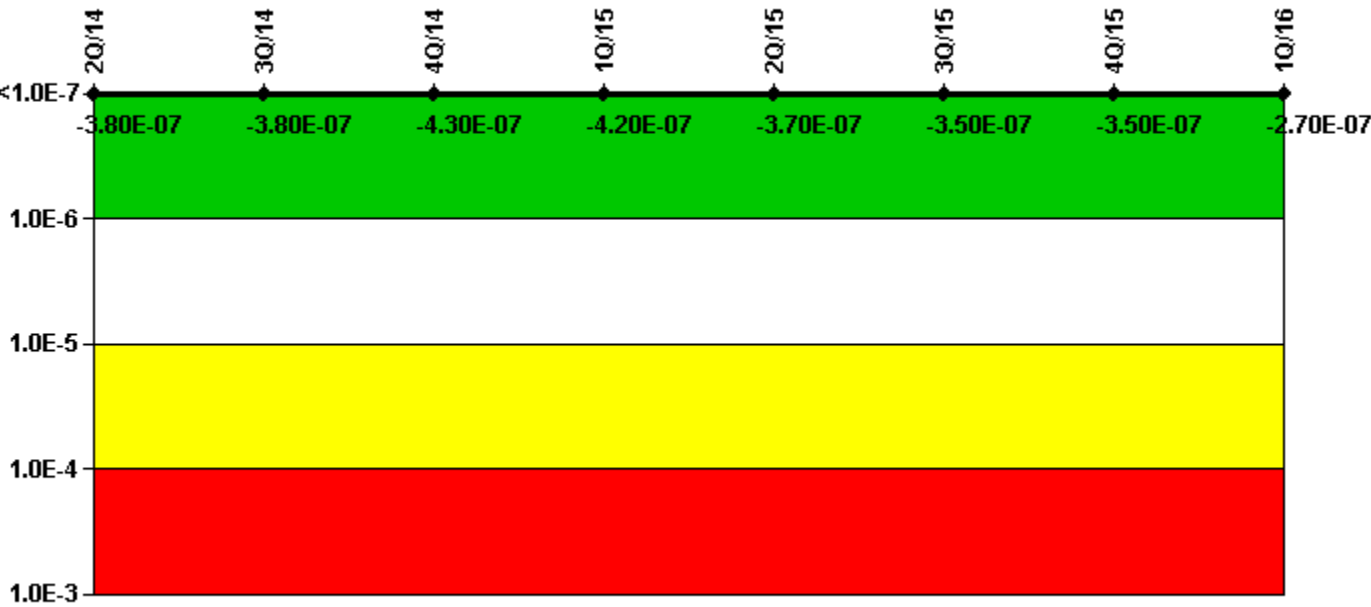
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.44E-08	-2.89E-08	-2.89E-08
URI (ΔCDF)	-8.70E-09	-8.70E-09	-8.70E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.30E-08	-3.80E-08	-3.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



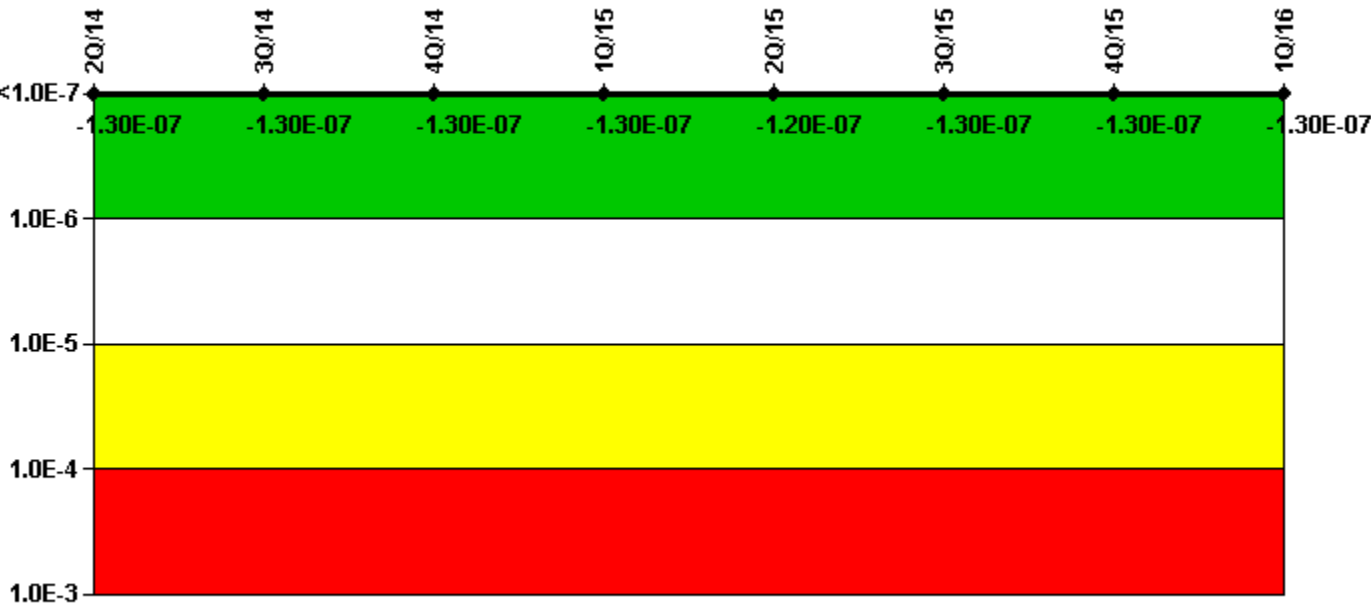
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	6.48E-09	4.63E-09	-6.01E-08	-5.79E-08	-1.06E-08	5.42E-09	4.62E-09	8.53E-08
URI (ΔCDF)	-3.85E-07	-3.87E-07	-3.73E-07	-3.60E-07	-3.55E-07	-3.57E-07	-3.57E-07	-3.54E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-07	-3.80E-07	-4.30E-07	-4.20E-07	-3.70E-07	-3.50E-07	-3.50E-07	-2.70E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



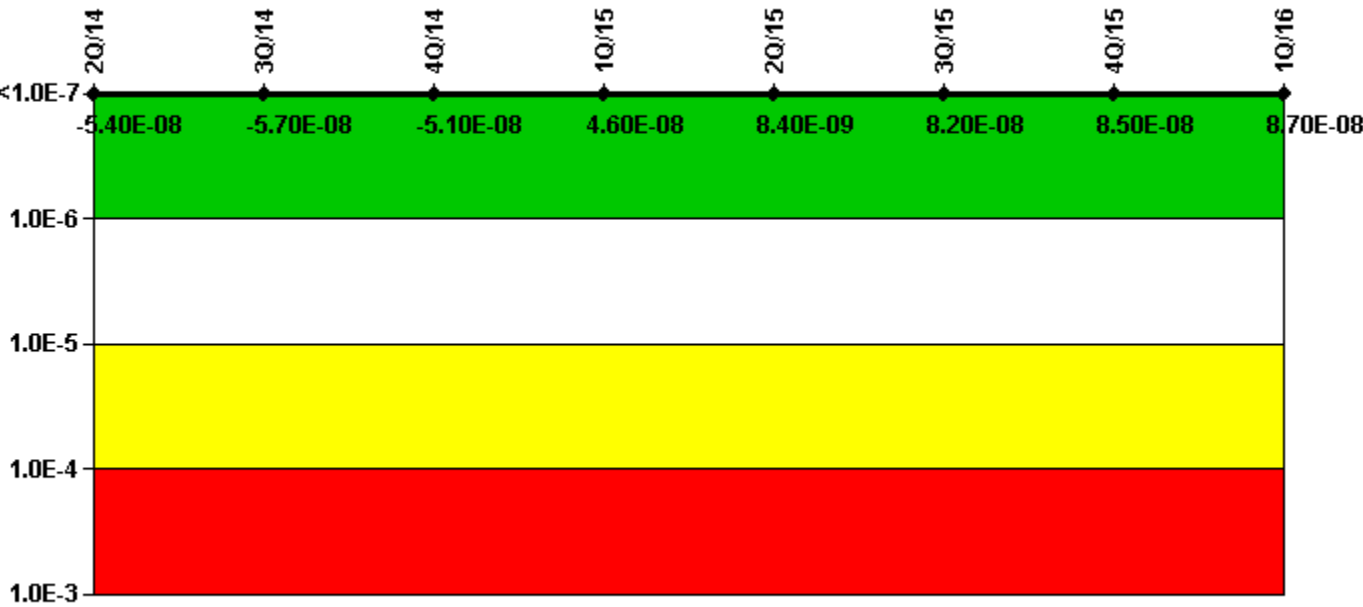
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.47E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



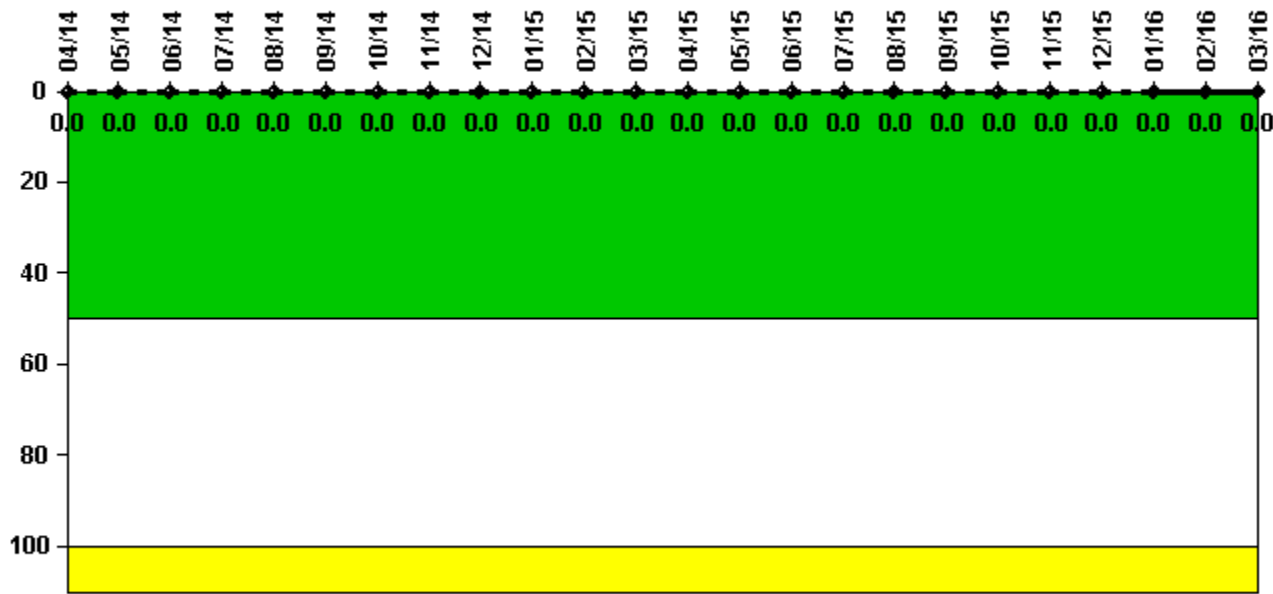
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	5.32E-08	4.59E-08	4.73E-08	1.38E-07	1.01E-07	1.74E-07	1.78E-07	1.80E-07
URI (ΔCDF)	-1.07E-07	-1.03E-07	-9.81E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.40E-08	-5.70E-08	-5.10E-08	4.60E-08	8.40E-09	8.20E-08	8.50E-08	8.70E-08

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

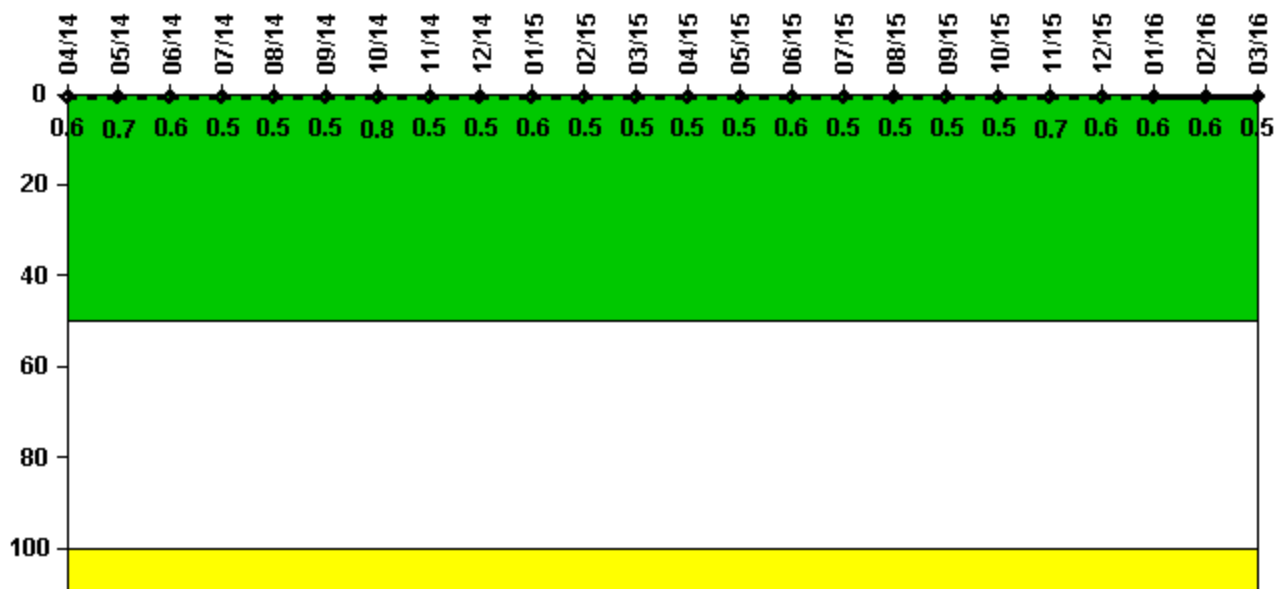
Notes

Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0.000076	0.000087	0.000078	0.000082	0.000085	0.000084	0.000045	0.000050	0.000054	0.000056	0.000056	0.000063
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0.000067	0.000065	0.000069	0.000076	0.000070	0.000071	0.000073	0.000070	0.000078	0.000080	0.000078	0.000092
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



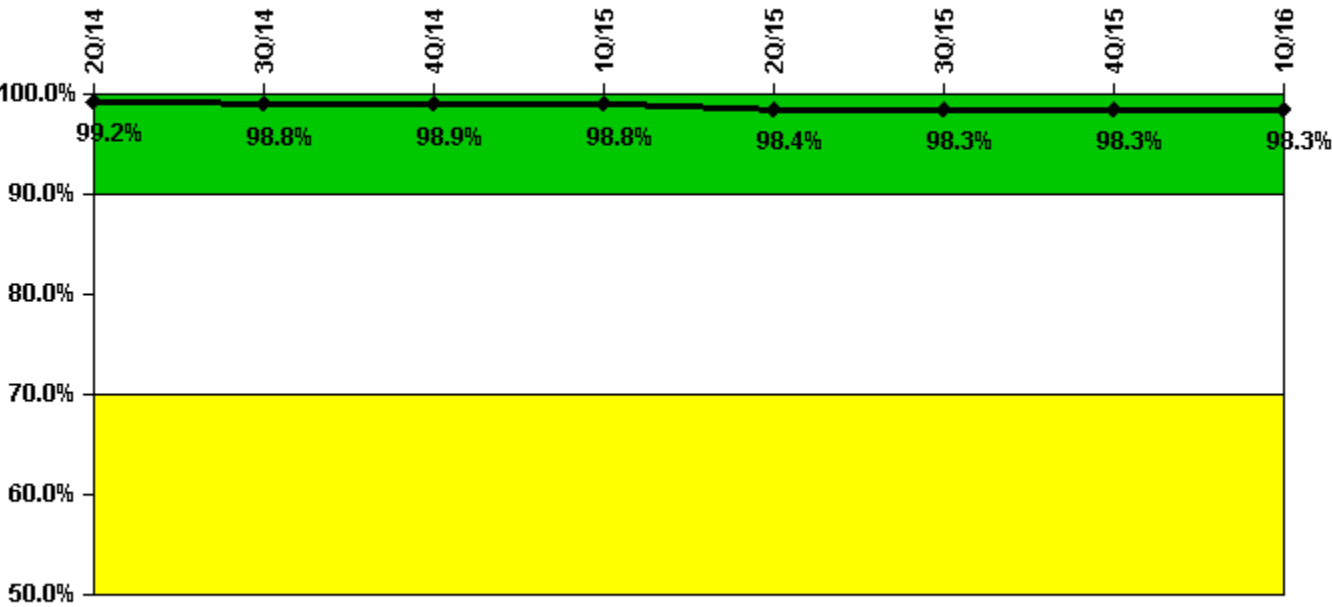
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	0.060	0.070	0.060	0.050	0.050	0.050	0.080	0.050	0.050	0.060	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.7	0.6	0.5	0.5	0.5	0.8	0.5	0.5	0.6	0.5	0.5
Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.070	0.060	0.060	0.060	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.7	0.6	0.6	0.6	0.5

Licensee Comments: none

Drill/Exercise Performance



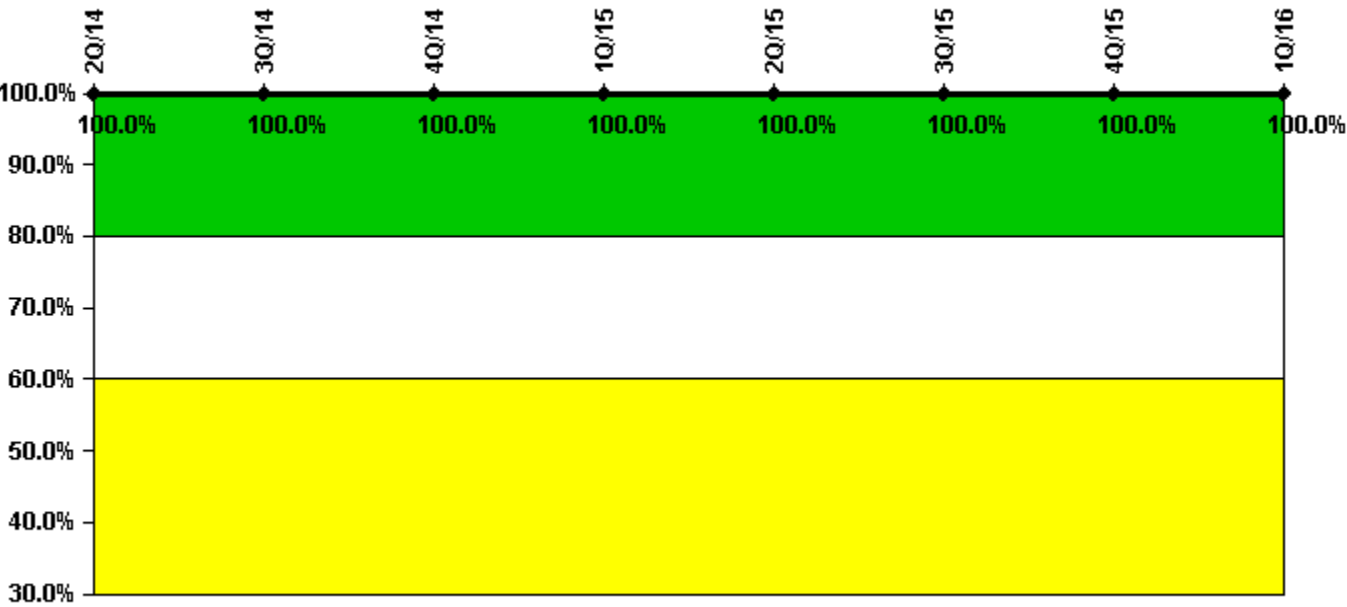
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful opportunities	70.0	90.0	14.0	74.0	41.0	27.0	32.0	106.0
Total opportunities	71.0	92.0	14.0	74.0	43.0	27.0	32.0	109.0
Indicator value	99.2%	98.8%	98.9%	98.8%	98.4%	98.3%	98.3%	98.3%

Licensee Comments: none

ERO Drill Participation



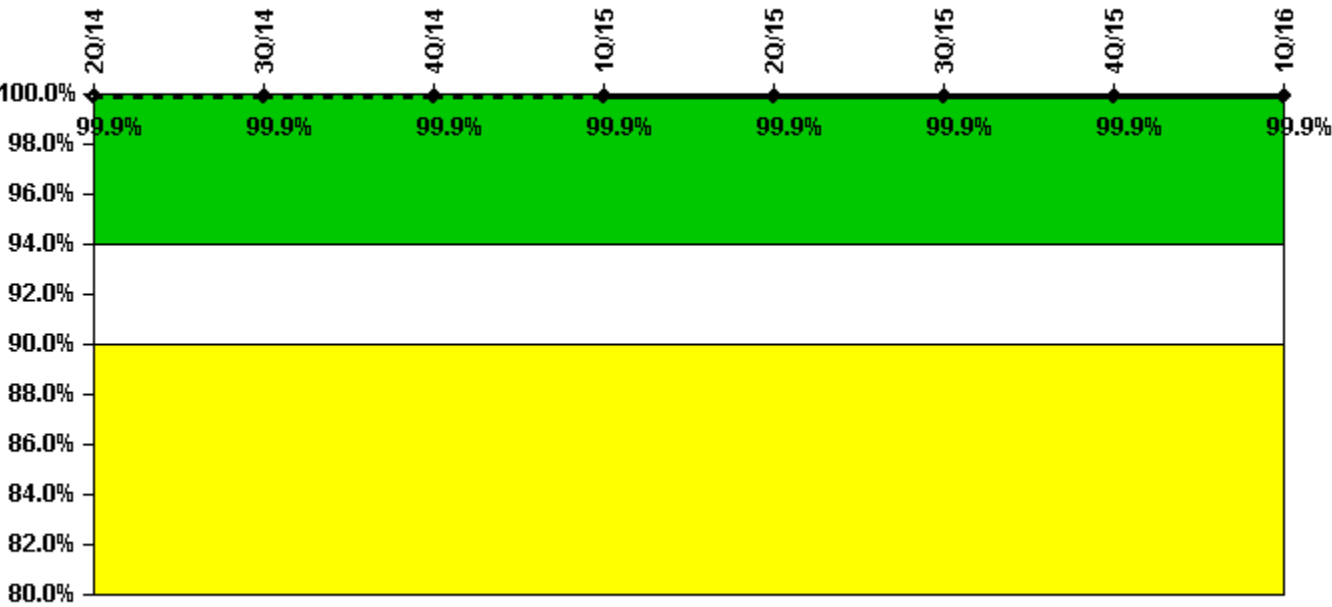
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Participating Key personnel	79.0	78.0	77.0	74.0	74.0	72.0	75.0	76.0
Total Key personnel	79.0	78.0	77.0	74.0	74.0	72.0	75.0	76.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



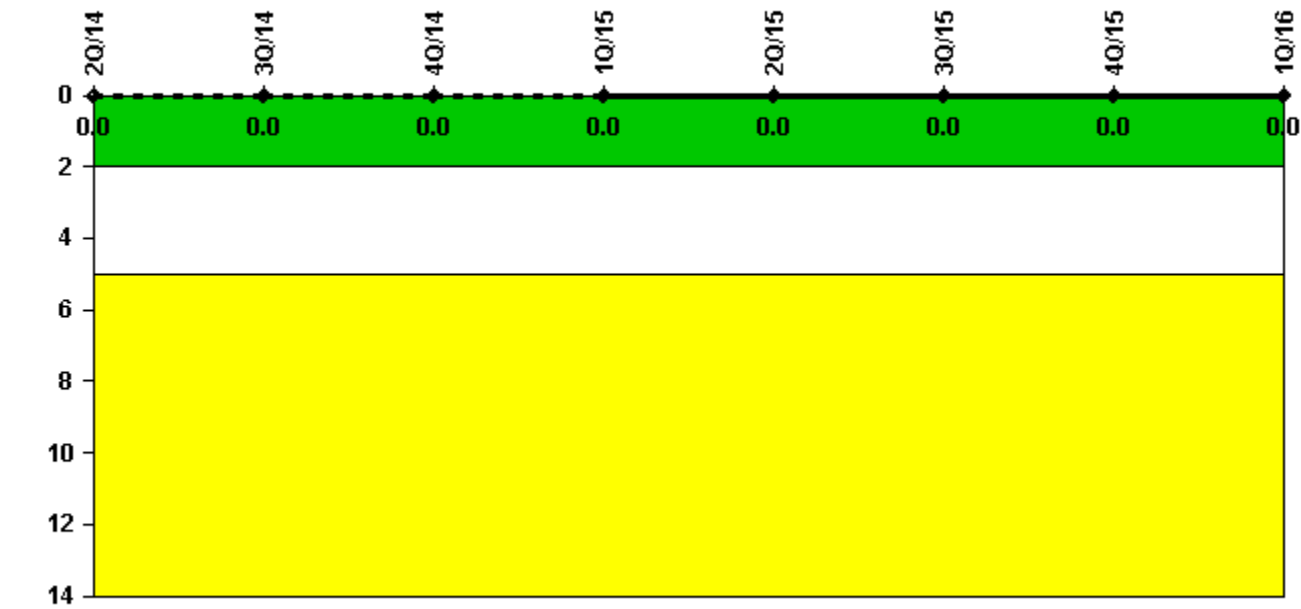
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful siren-tests	3898	3896	3901	3834	3902	3962	3903	3897
Total sirens-tests	3904	3904	3904	3840	3904	3965	3904	3904
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



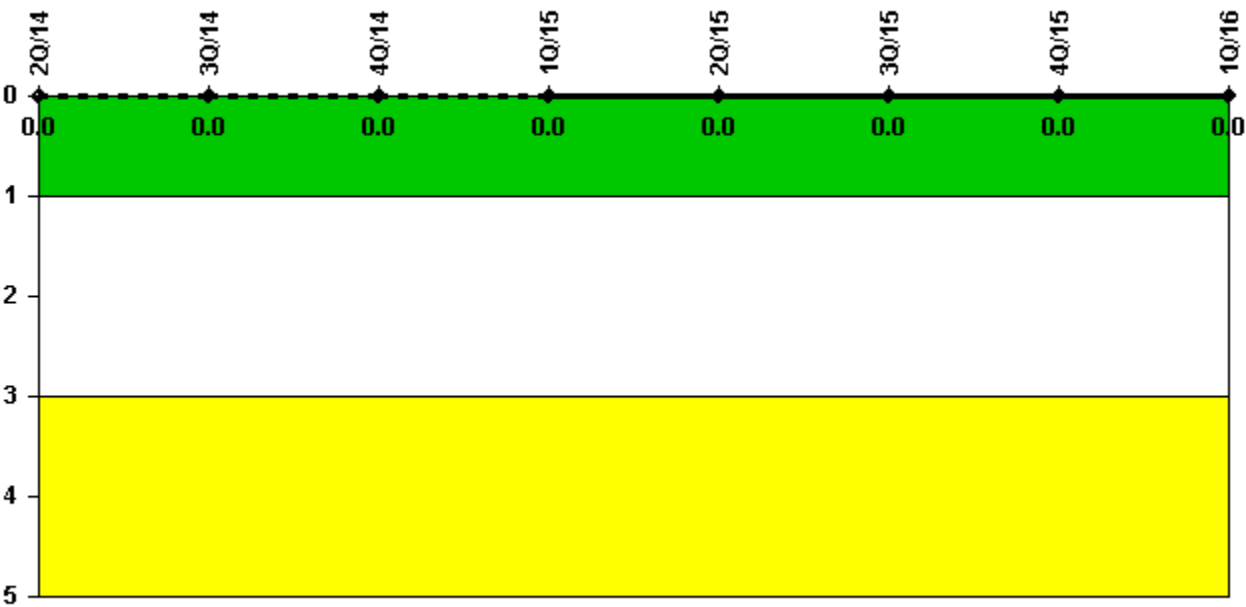
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: April 23, 2016

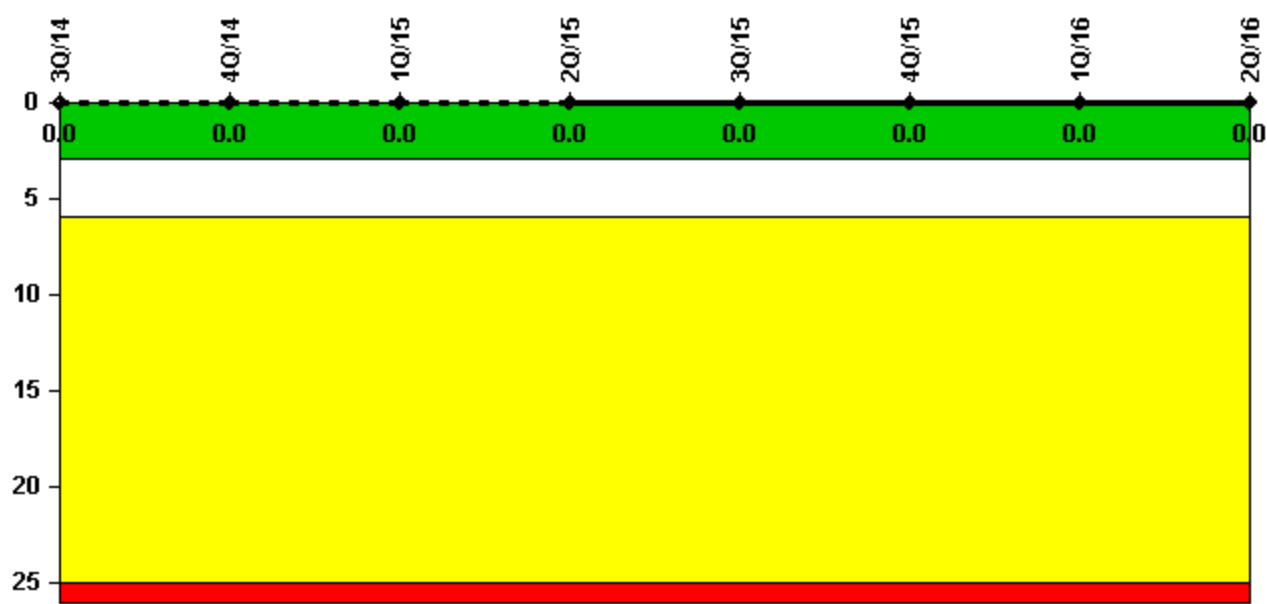
Byron 2

2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: 2Q2016 Byron Station Unit 2

Unplanned Scrams per 7000 Critical Hrs



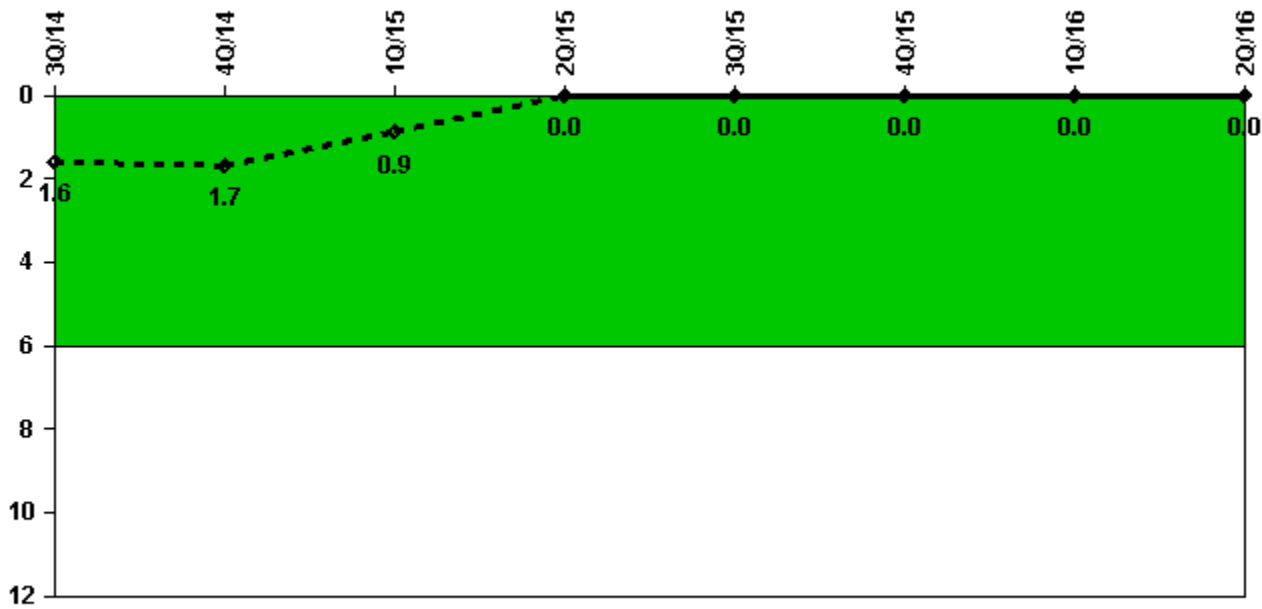
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2160.0	1664.2	2159.0	2184.0	2208.0	2209.0	2183.0	1492.7
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



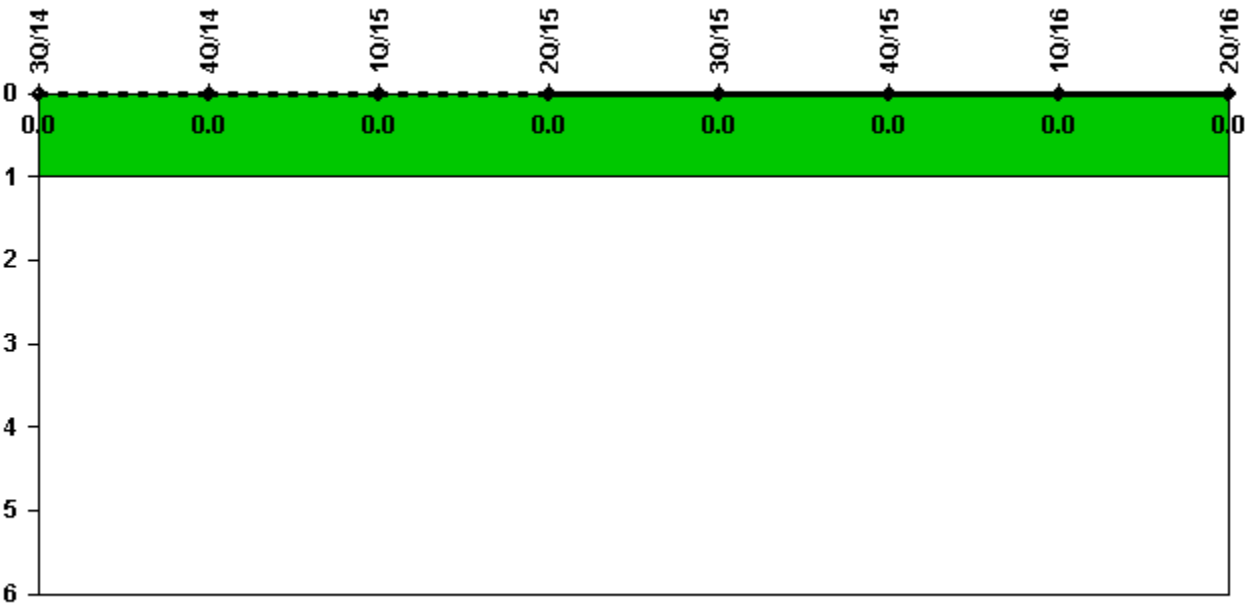
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2160.0	1664.2	2159.0	2184.0	2208.0	2209.0	2183.0	1492.7
Indicator value	1.6	1.7	0.9	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



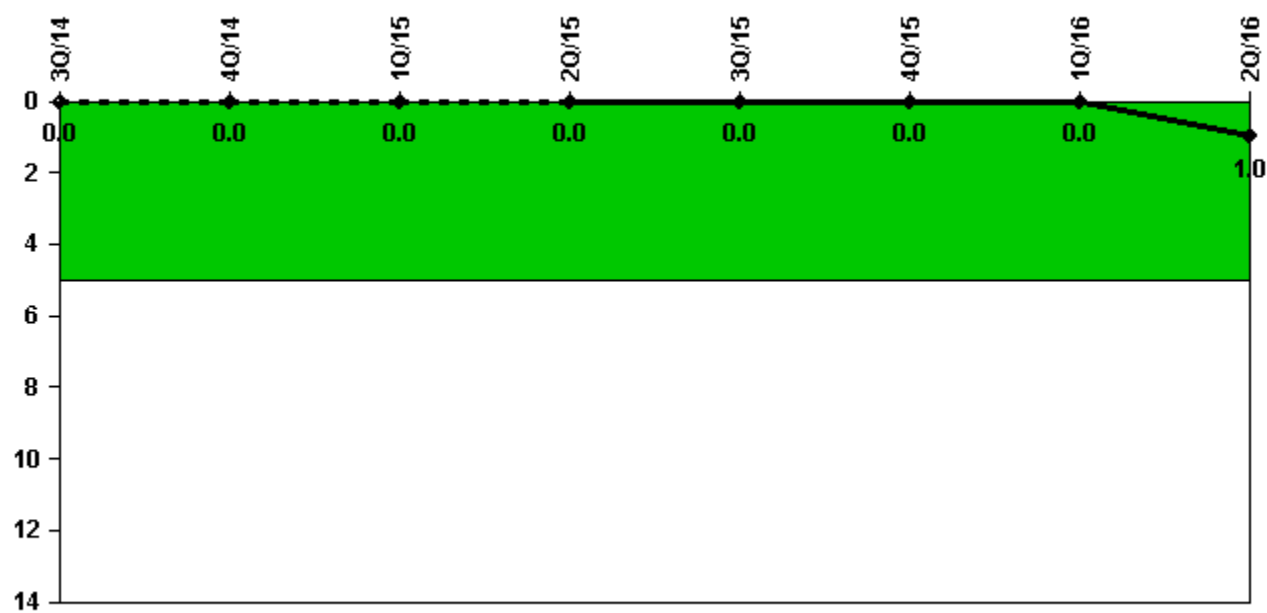
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



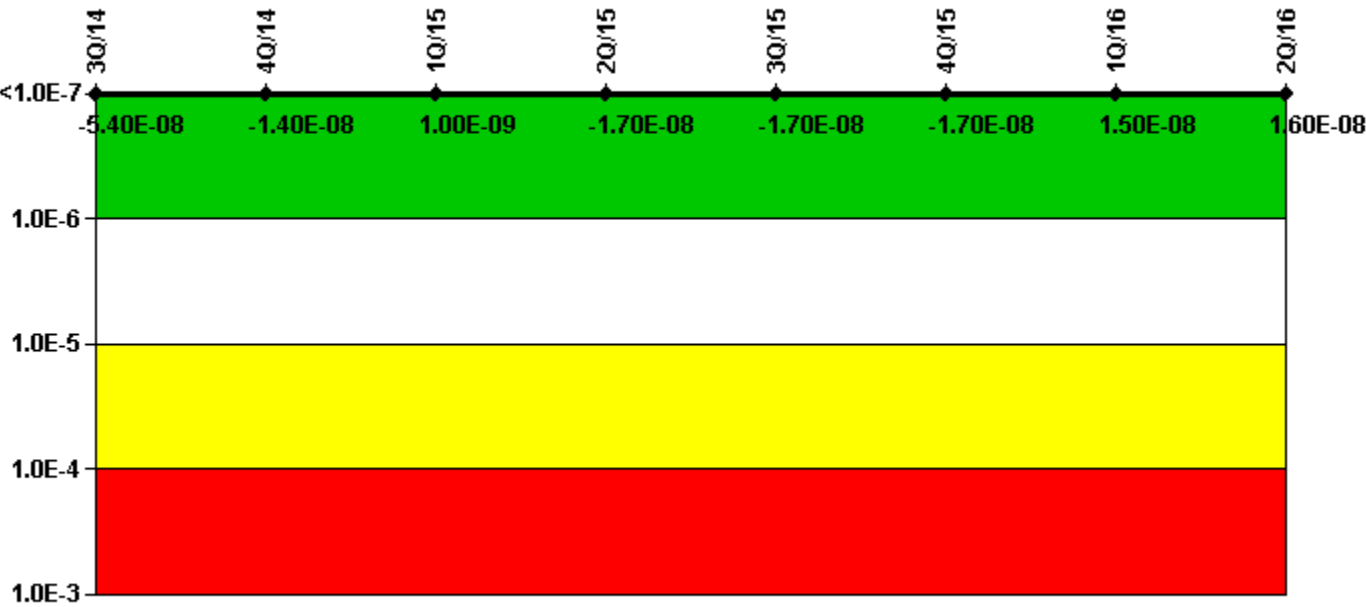
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Safety System Functional Failures	0	0	0	0	0	0	0	1
Indicator value	0	0	0	0	0	0	0	1

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



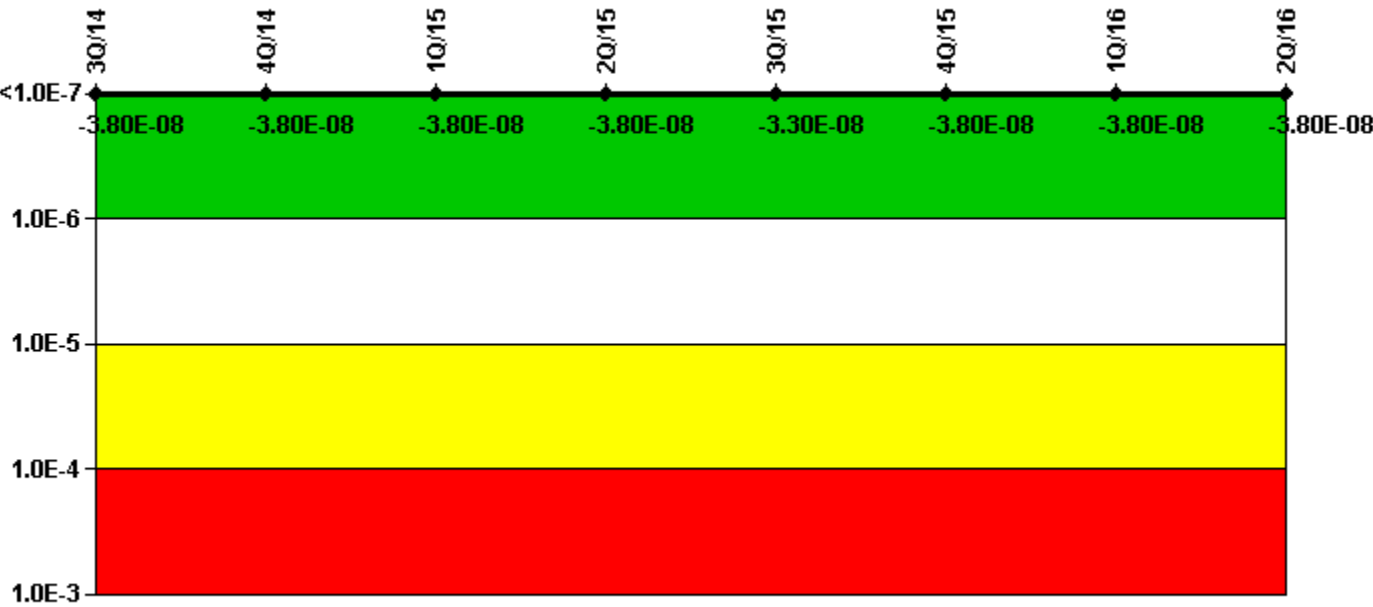
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	6.35E-09	3.04E-08	3.77E-09	-1.44E-08	-1.44E-08	-1.44E-08	1.73E-08	1.85E-08
URI (ΔCDF)	-6.07E-08	-4.47E-08	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.40E-08	-1.40E-08	1.00E-09	-1.70E-08	-1.70E-08	-1.70E-08	1.50E-08	1.60E-08

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



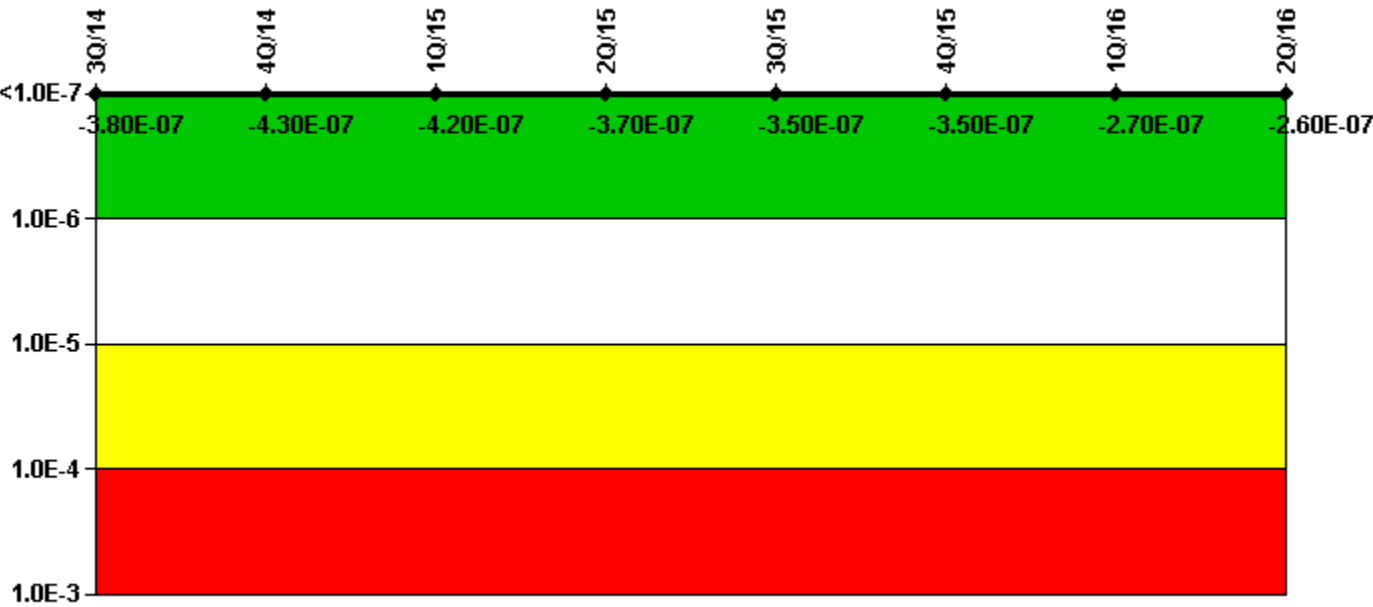
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.44E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (ΔCDF)	-8.70E-09	-8.70E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.30E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



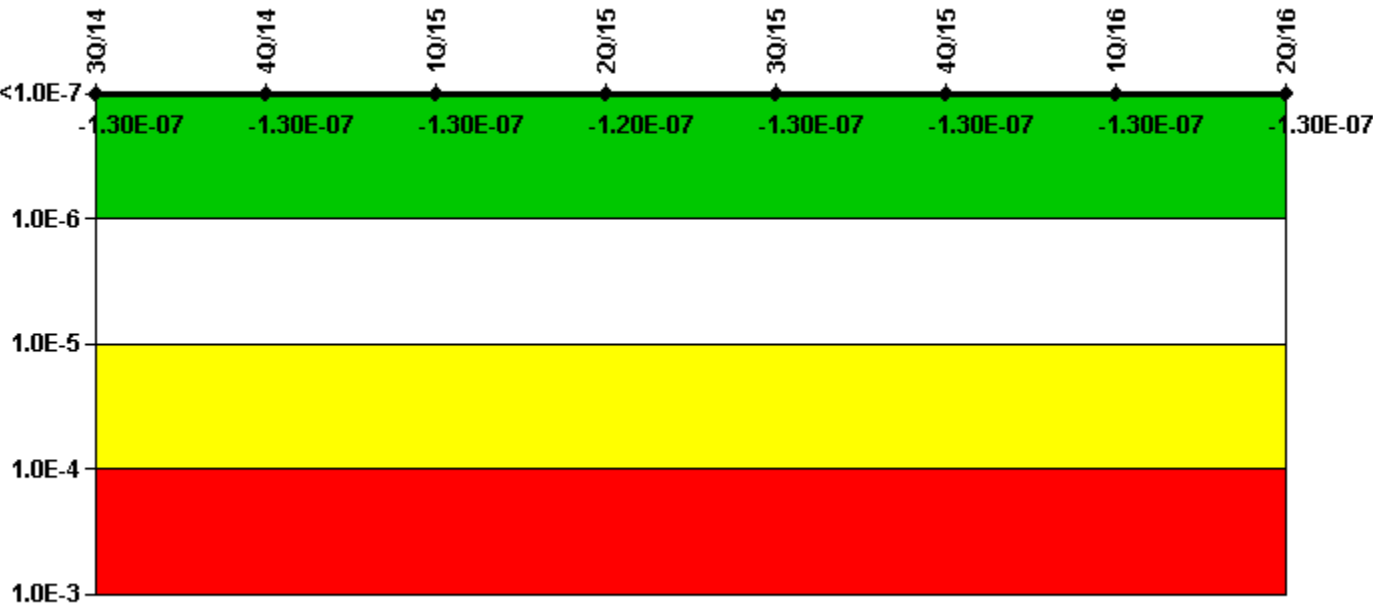
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	4.63E-09	-6.01E-08	-5.79E-08	-1.06E-08	5.42E-09	4.62E-09	8.53E-08	8.41E-08
URI (ΔCDF)	-3.87E-07	-3.73E-07	-3.60E-07	-3.55E-07	-3.57E-07	-3.57E-07	-3.54E-07	-3.45E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-07	-4.30E-07	-4.20E-07	-3.70E-07	-3.50E-07	-3.50E-07	-2.70E-07	-2.60E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



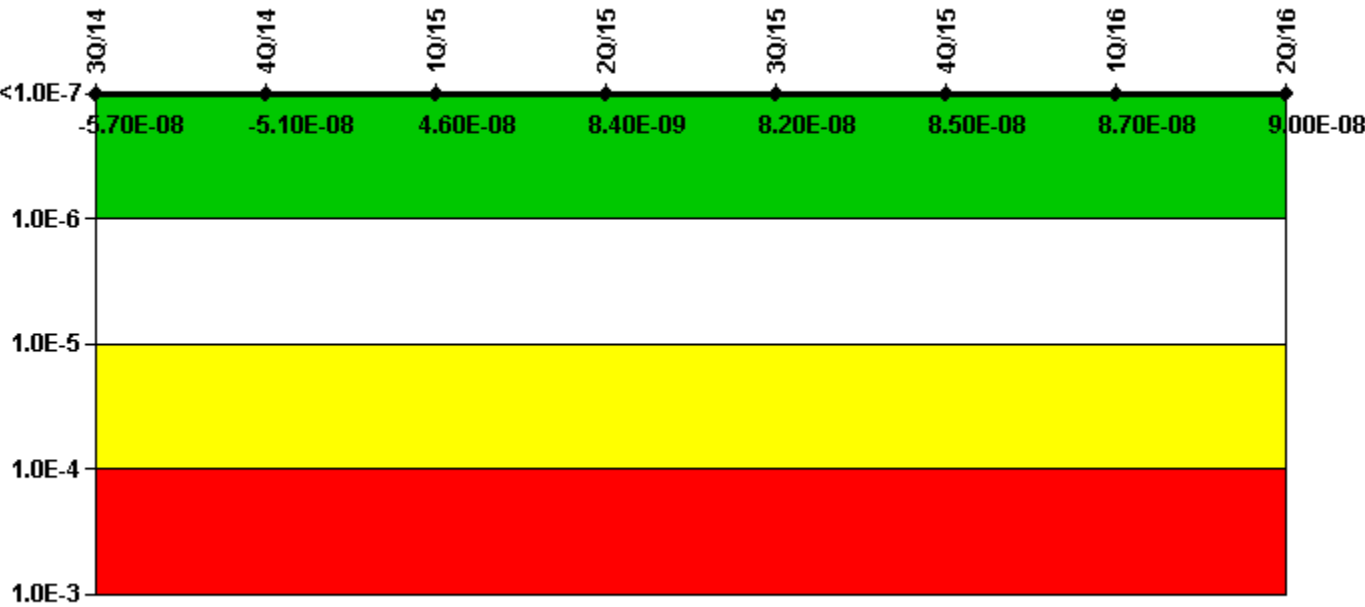
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-3.33E-08	-2.47E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



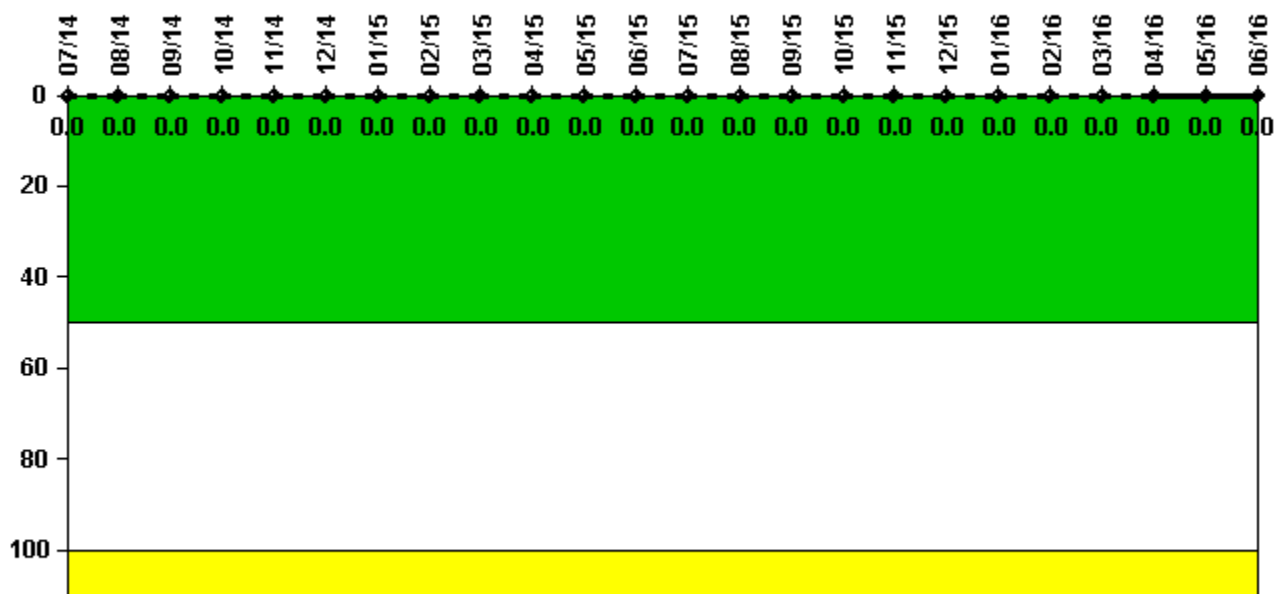
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	4.59E-08	4.73E-08	1.38E-07	1.01E-07	1.74E-07	1.78E-07	1.80E-07	1.82E-07
URI (ΔCDF)	-1.03E-07	-9.81E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.70E-08	-5.10E-08	4.60E-08	8.40E-09	8.20E-08	8.50E-08	8.70E-08	9.00E-08

Licensee Comments: none

Reactor Coolant System Activity



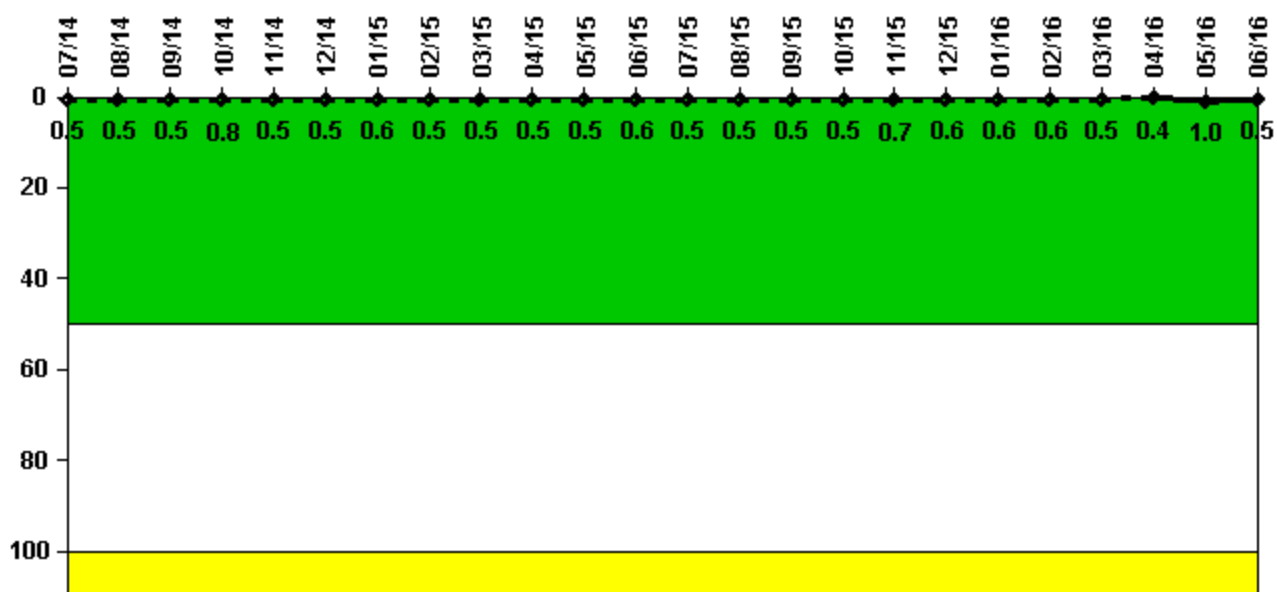
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum activity	0.000082	0.000085	0.000084	0.000045	0.000050	0.000054	0.000056	0.000056	0.000063	0.000067	0.000065	0.000069
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum activity	0.000076	0.000070	0.000071	0.000073	0.000070	0.000078	0.000080	0.000078	0.000092	0.000079	0.000058	0.000050
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



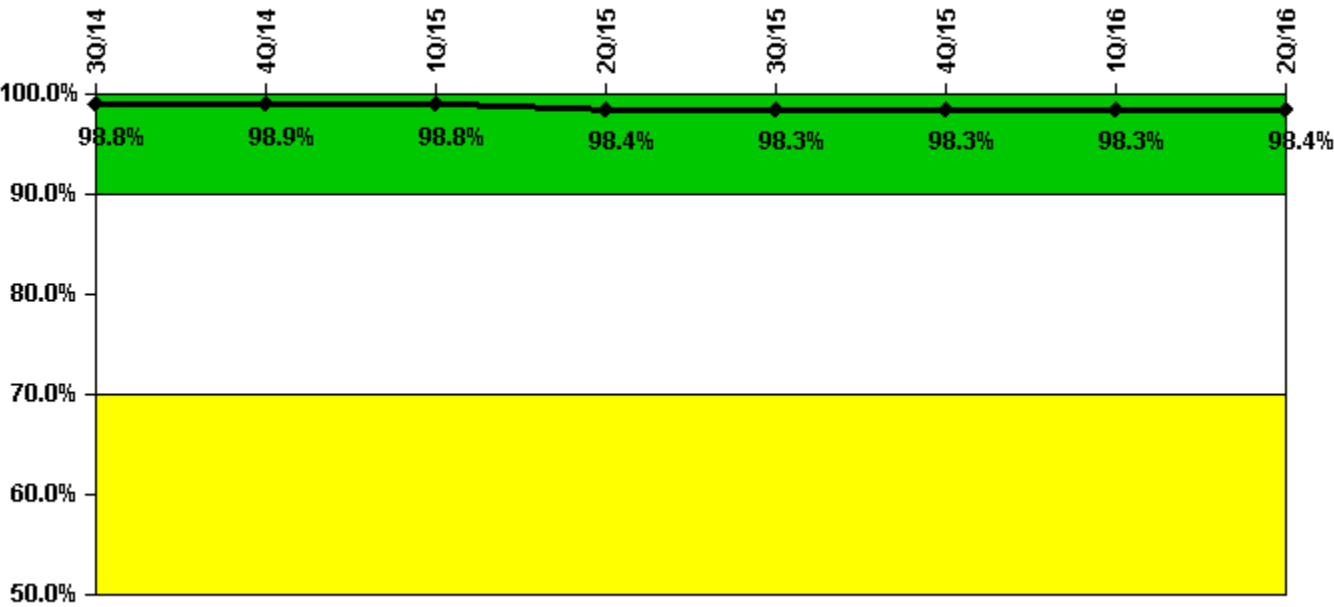
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum leakage	0.050	0.050	0.050	0.080	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.8	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6
Reactor Coolant System Leakage	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum leakage	0.050	0.050	0.050	0.050	0.070	0.060	0.060	0.060	0.050	0.040	0.100	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.5	0.5	0.7	0.6	0.6	0.6	0.5	0.4	1.0	0.5

Licensee Comments: none

Drill/Exercise Performance



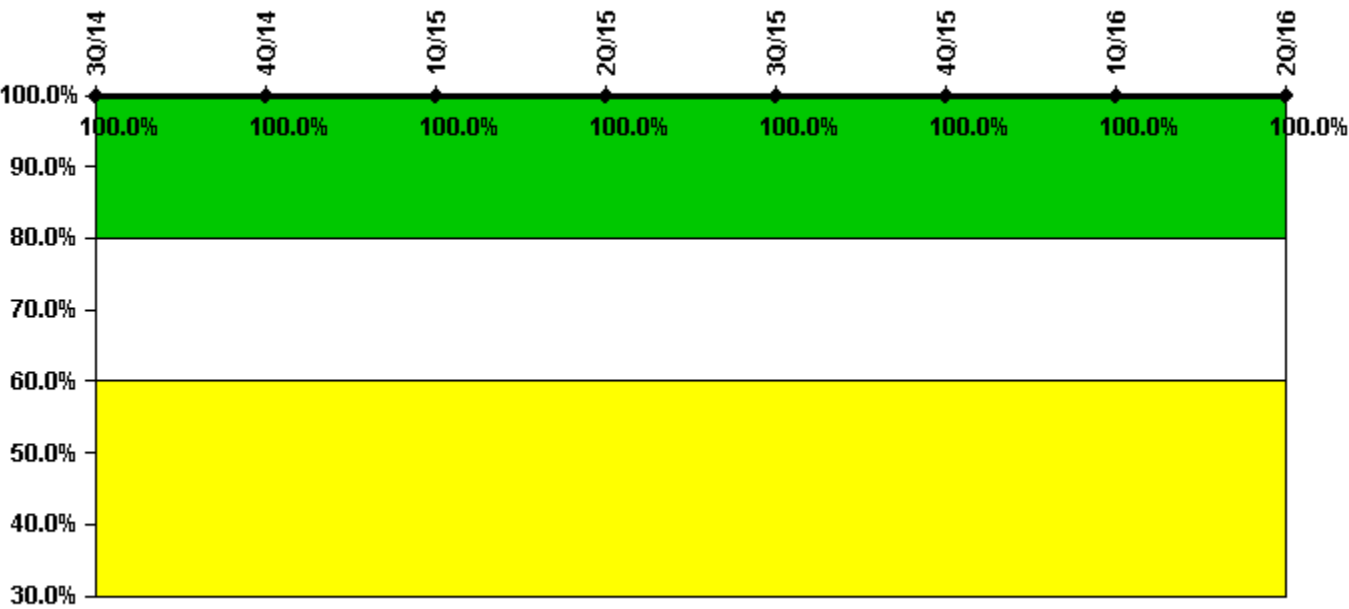
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	90.0	14.0	74.0	41.0	27.0	32.0	106.0	44.0
Total opportunities	92.0	14.0	74.0	43.0	27.0	32.0	109.0	44.0
Indicator value	98.8%	98.9%	98.8%	98.4%	98.3%	98.3%	98.3%	98.4%

Licensee Comments: none

ERO Drill Participation



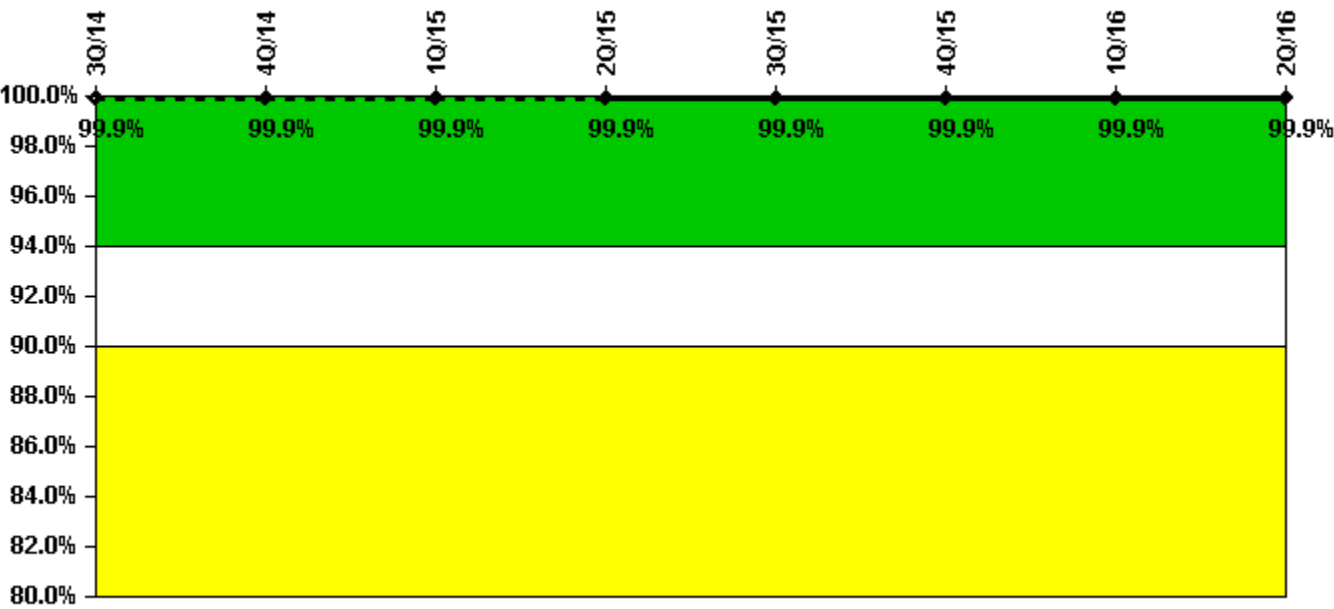
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Participating Key personnel	78.0	77.0	74.0	74.0	72.0	75.0	76.0	78.0
Total Key personnel	78.0	77.0	74.0	74.0	72.0	75.0	76.0	78.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



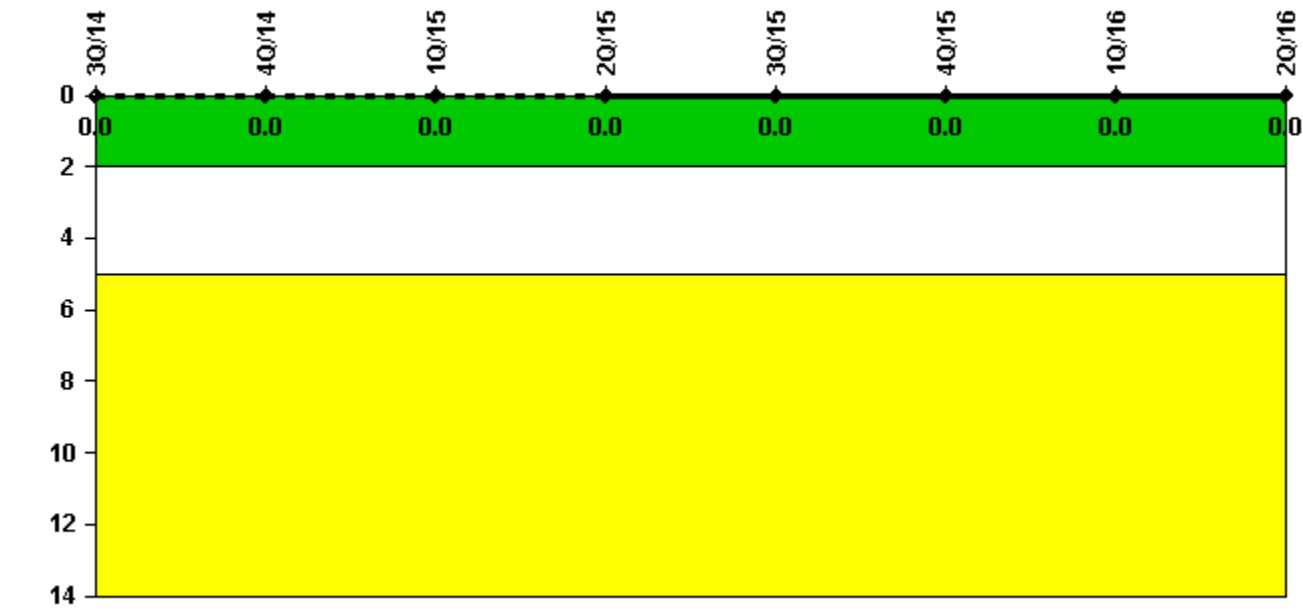
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	3896	3901	3834	3902	3962	3903	3897	3902
Total sirens-tests	3904	3904	3840	3904	3965	3904	3904	3904
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



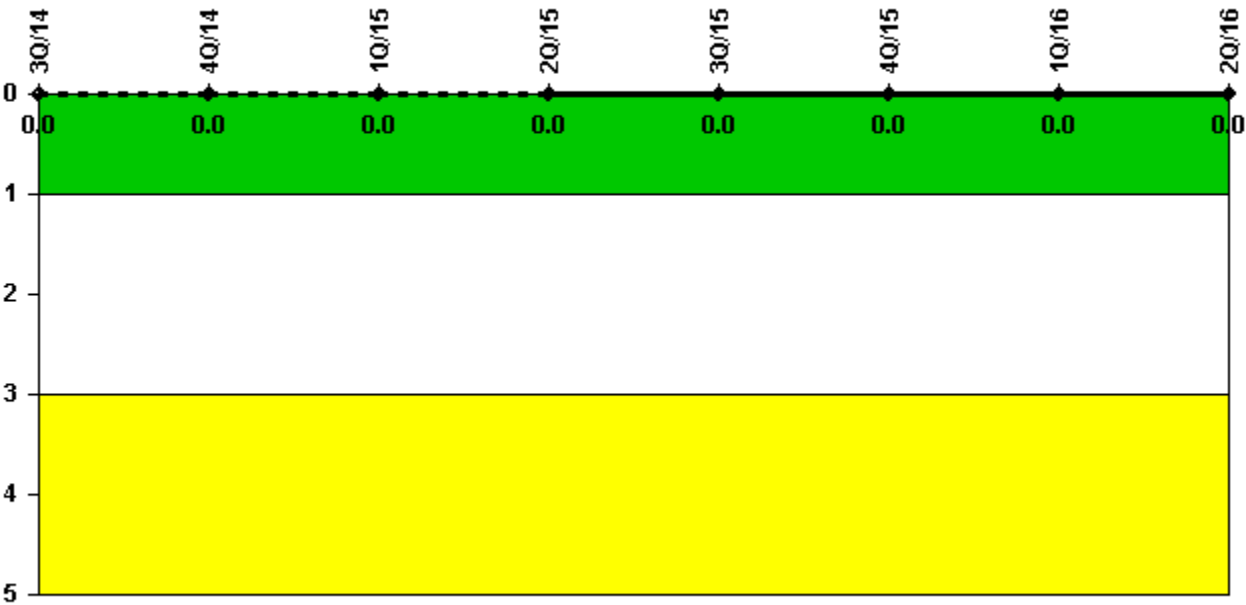
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



[Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: July 25, 2016

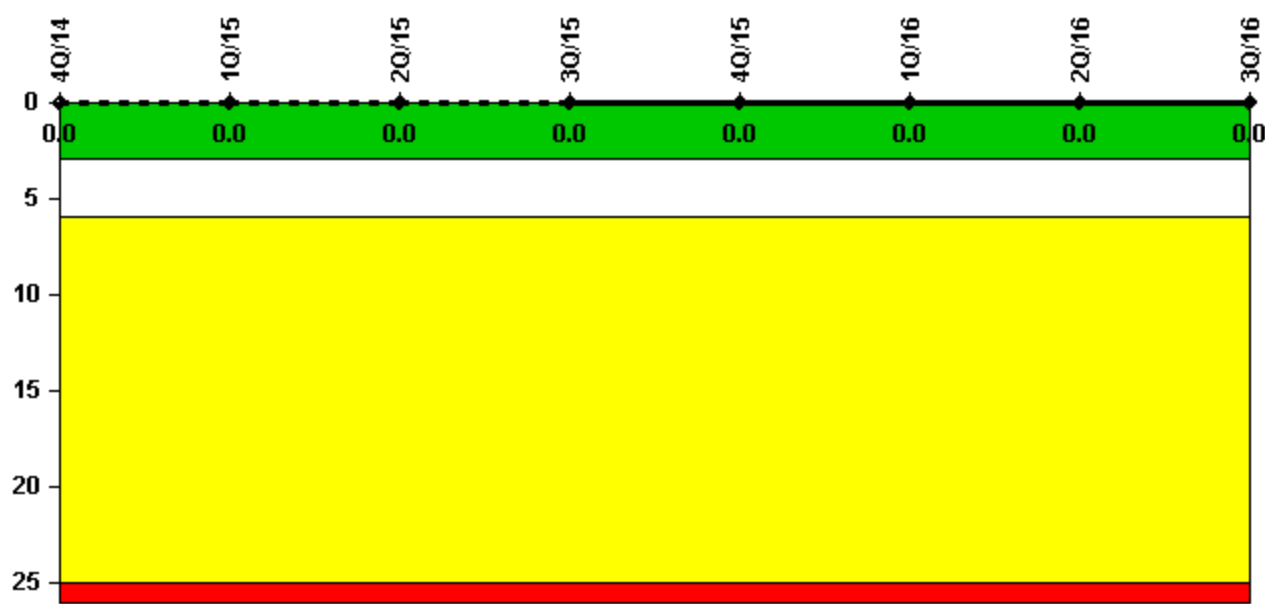
Byron 2

3Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: 3Q2016 Byron Unit 2

Unplanned Scrams per 7000 Critical Hrs



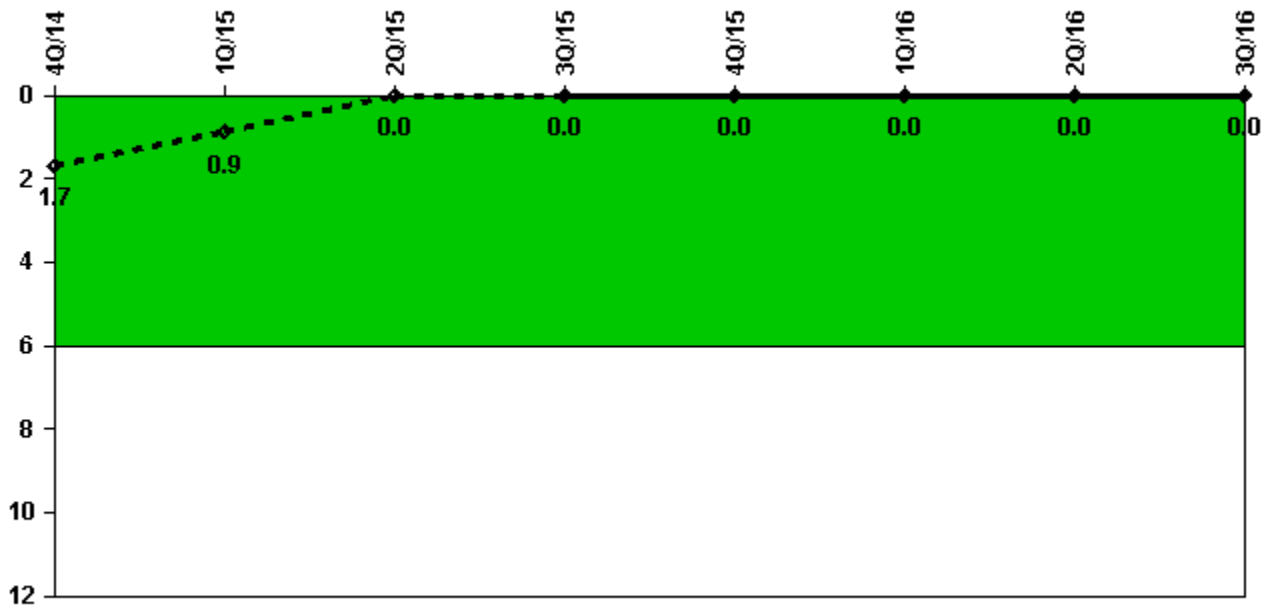
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1664.2	2159.0	2184.0	2208.0	2209.0	2183.0	1492.7	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



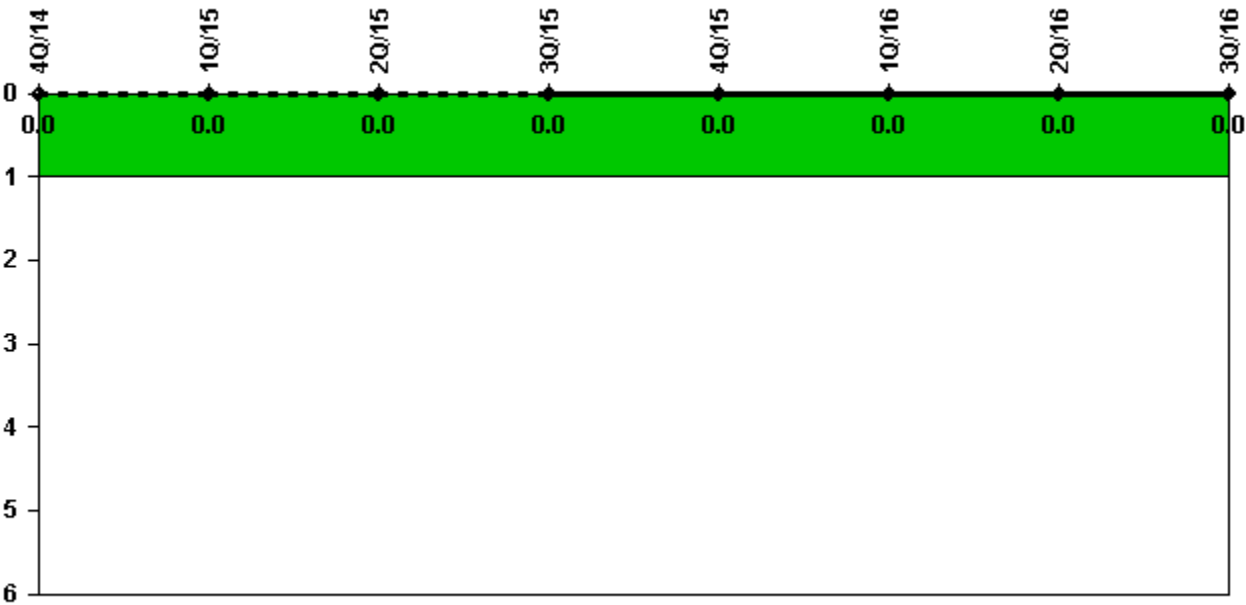
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	1664.2	2159.0	2184.0	2208.0	2209.0	2183.0	1492.7	2208.0
Indicator value	1.7	0.9	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



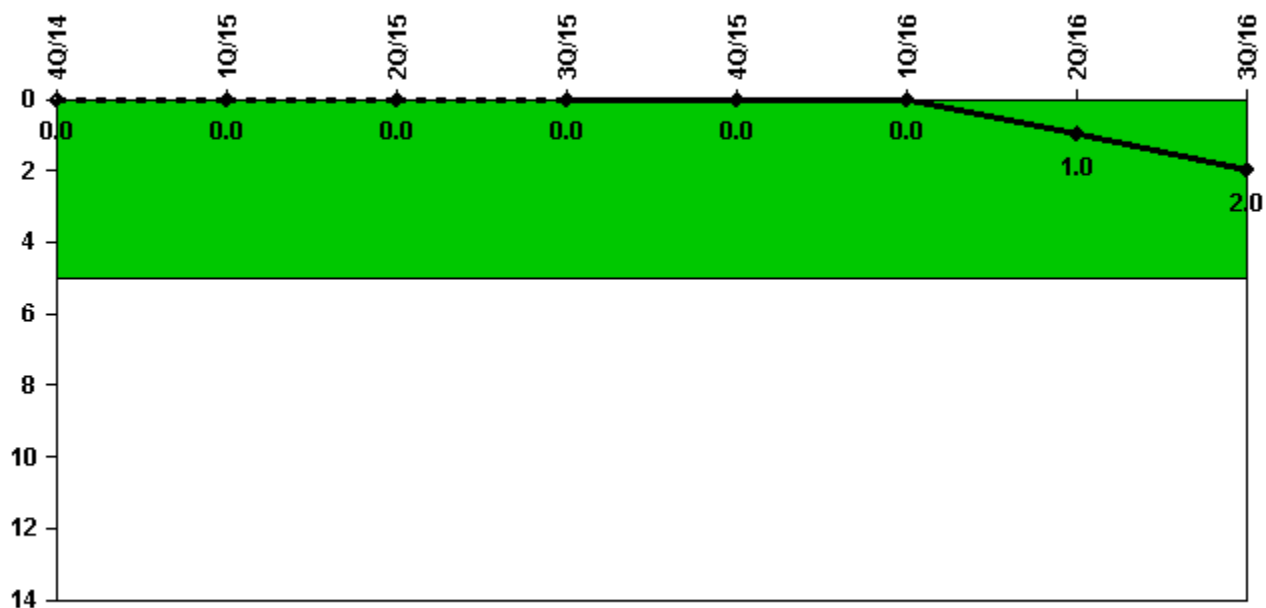
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

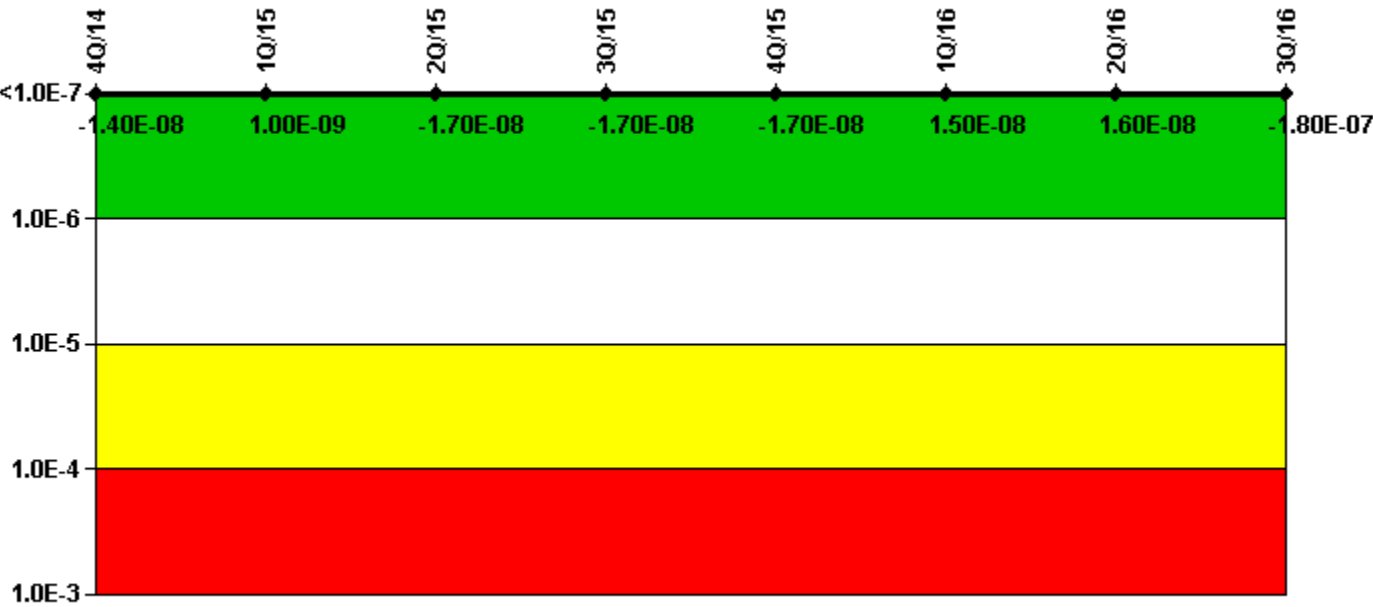
Notes

Safety System Functional Failures (PWR)	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Safety System Functional Failures	0	0	0	0	0	0	1	1
Indicator value	0	0	0	0	0	0	1	2

Licensee Comments:

3Q/16: LER 2016-001-00, May 2016 AF Diesel Intake Design Deficiency Due to High Energy Line Break (HELB) Concerns. LER 2016-002-00 was issued 7/21/16, for Inadequate protection from Tornado Missiles Due to Non-conforming Design Conditions. 3Q16 U2 CDF and MSPI result were updated using the application specific model BB011b4, which takes credit for the Generation III Westinghouse RCP shutdown seals. The corresponding BY-MSPI-001 Rev 18 was approved in June 2016.

Mitigating Systems Performance Index, Emergency AC Power System



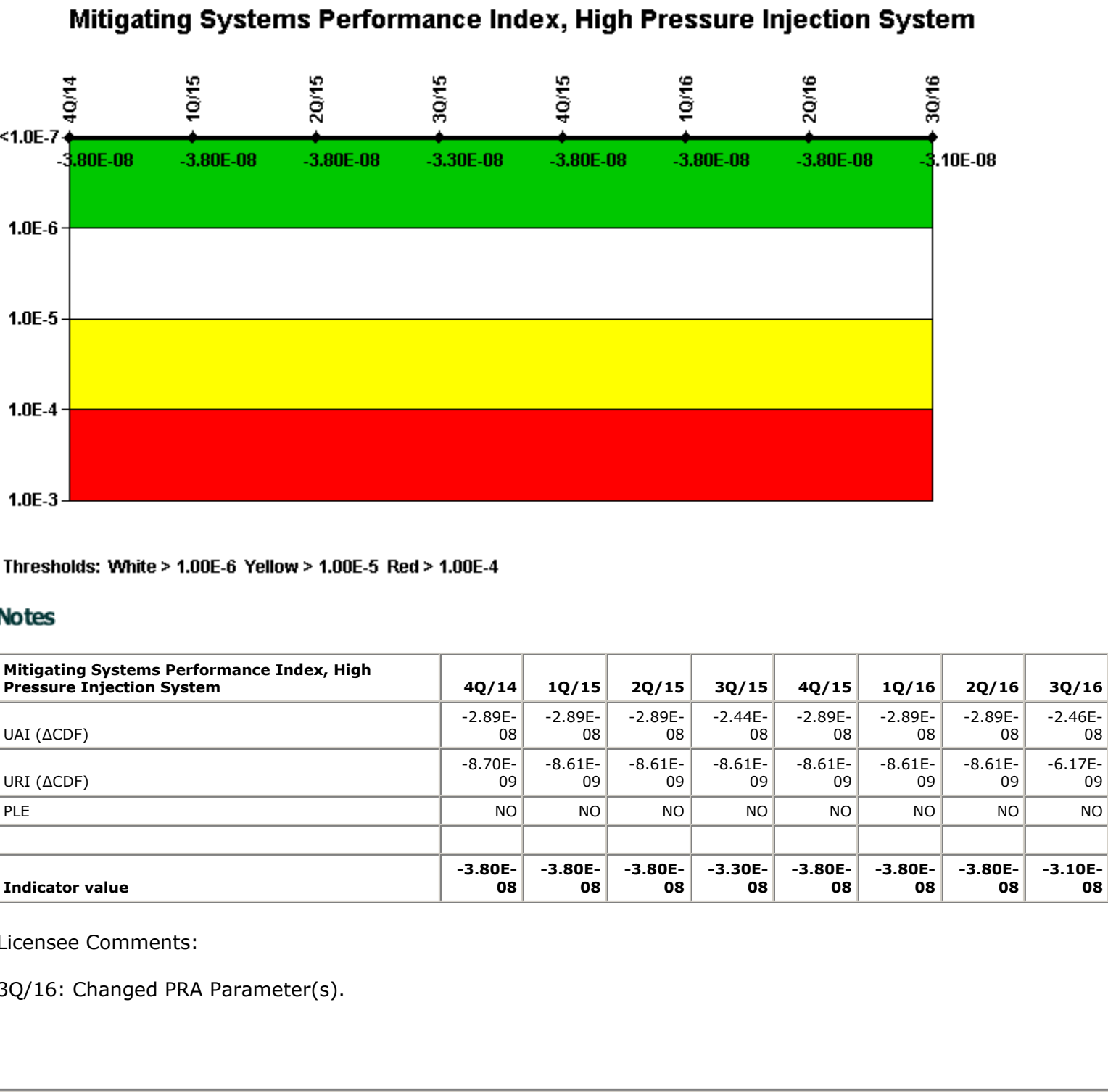
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

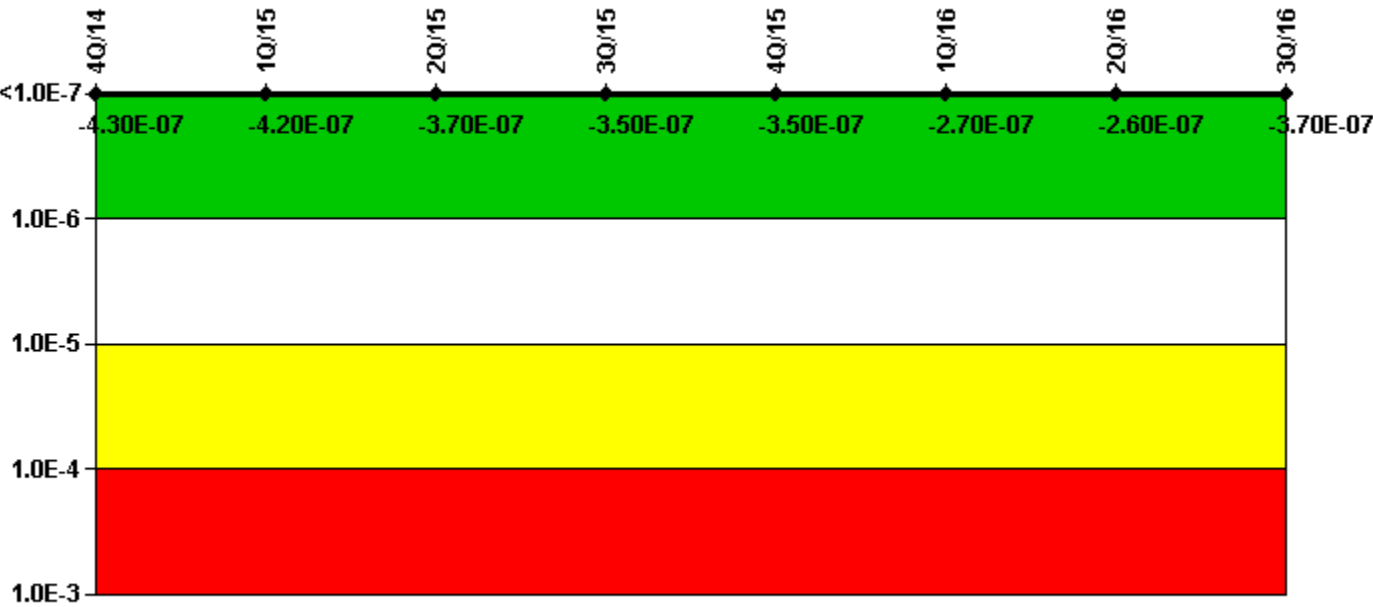
Mitigating Systems Performance Index, Emergency AC Power System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	3.04E-08	3.77E-09	-1.44E-08	-1.44E-08	-1.44E-08	1.73E-08	1.85E-08	6.70E-10
URI (ΔCDF)	-4.47E-08	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-1.81E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-08	1.00E-09	-1.70E-08	-1.70E-08	-1.70E-08	1.50E-08	1.60E-08	-1.80E-07

Licensee Comments:

3Q/16: Changed PRA Parameter(s).



Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

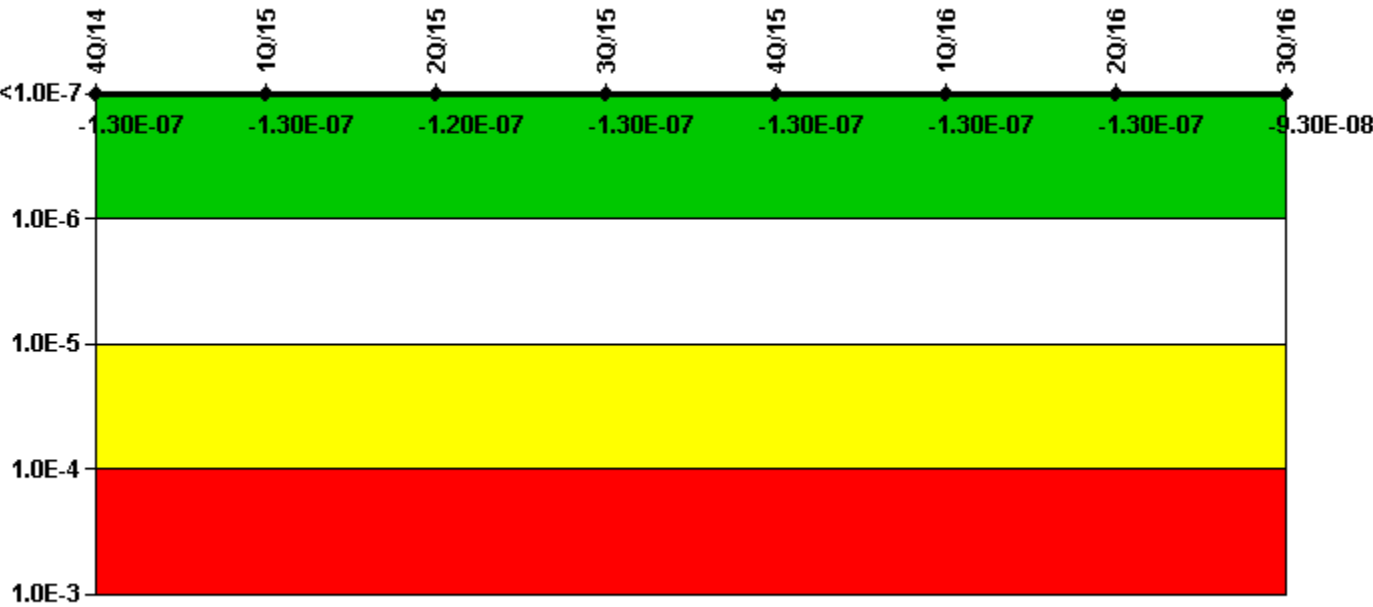
Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	-6.01E-08	-5.79E-08	-1.06E-08	5.42E-09	4.62E-09	8.53E-08	8.41E-08	-1.04E-08
URI (ΔCDF)	-3.73E-07	-3.60E-07	-3.55E-07	-3.57E-07	-3.57E-07	-3.54E-07	-3.45E-07	-3.59E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.30E-07	-4.20E-07	-3.70E-07	-3.50E-07	-3.50E-07	-2.70E-07	-2.60E-07	-3.70E-07

Licensee Comments:

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

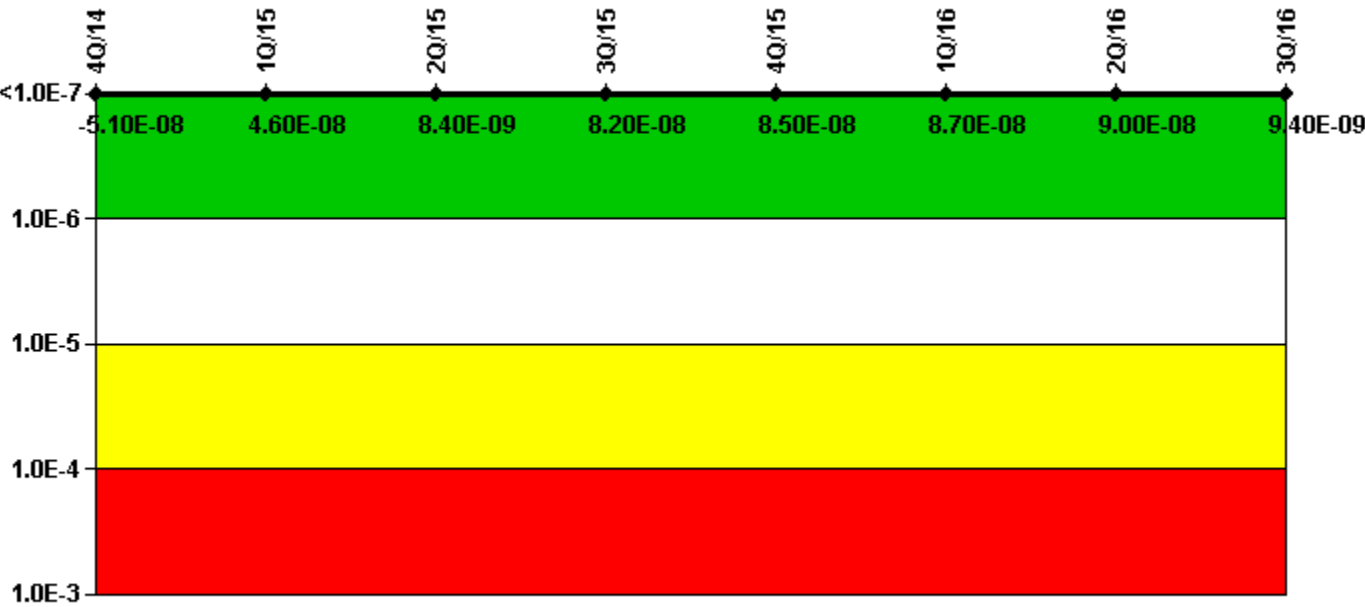
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-2.47E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.38E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-6.92E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-9.30E-08

Licensee Comments:

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

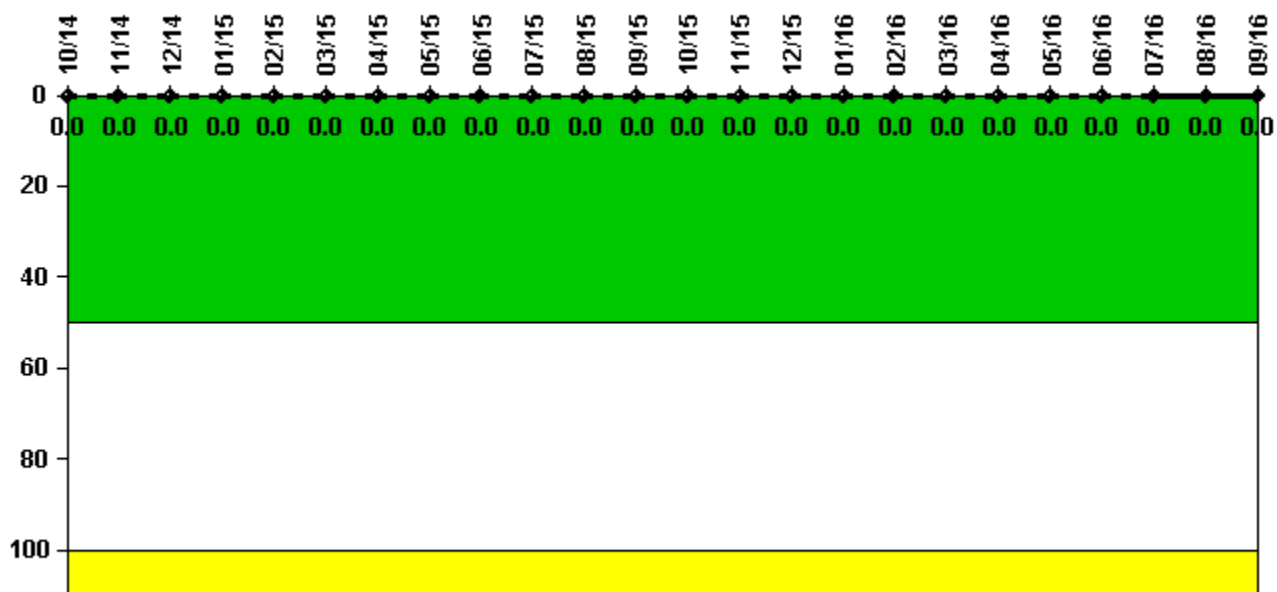
Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	4.73E-08	1.38E-07	1.01E-07	1.74E-07	1.78E-07	1.80E-07	1.82E-07	6.13E-08
URI (ΔCDF)	-9.81E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-5.20E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.10E-08	4.60E-08	8.40E-09	8.20E-08	8.50E-08	8.70E-08	9.00E-08	9.40E-09

Licensee Comments:

3Q/16: Changed PRA Parameter(s).

Reactor Coolant System Activity



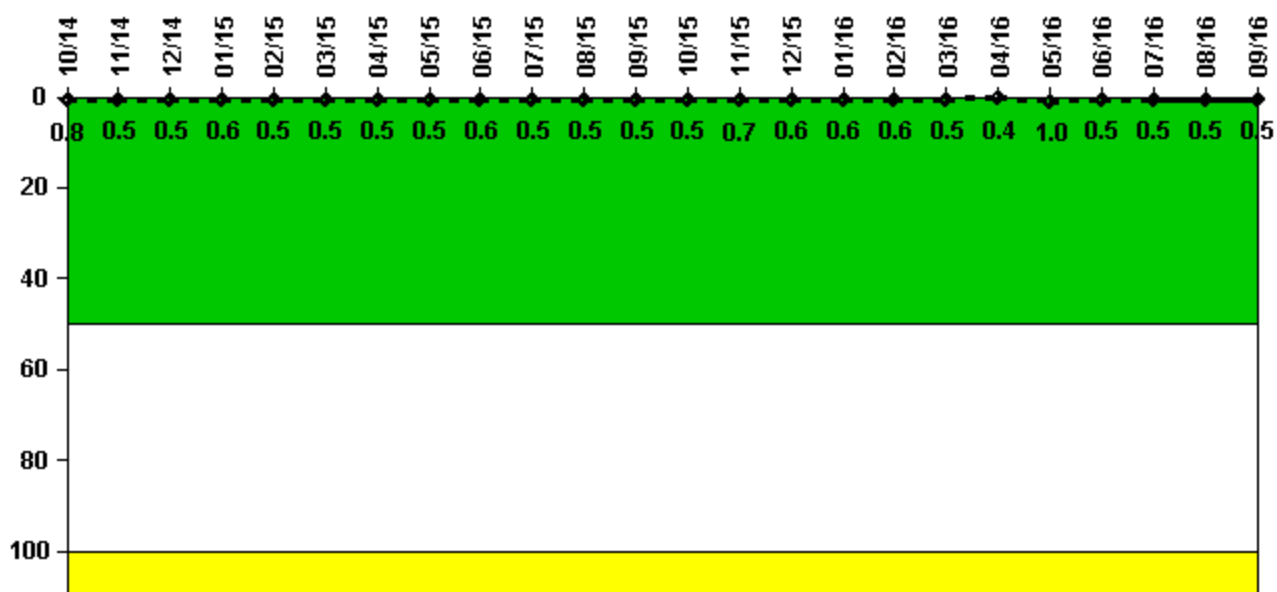
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum activity	0.000045	0.000050	0.000054	0.000056	0.000056	0.000063	0.000067	0.000065	0.000069	0.000076	0.000070	0.000071
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum activity	0.000073	0.000070	0.000078	0.000080	0.000078	0.000092	0.000079	0.000058	0.000050	0.000074	0.000049	0.000055
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



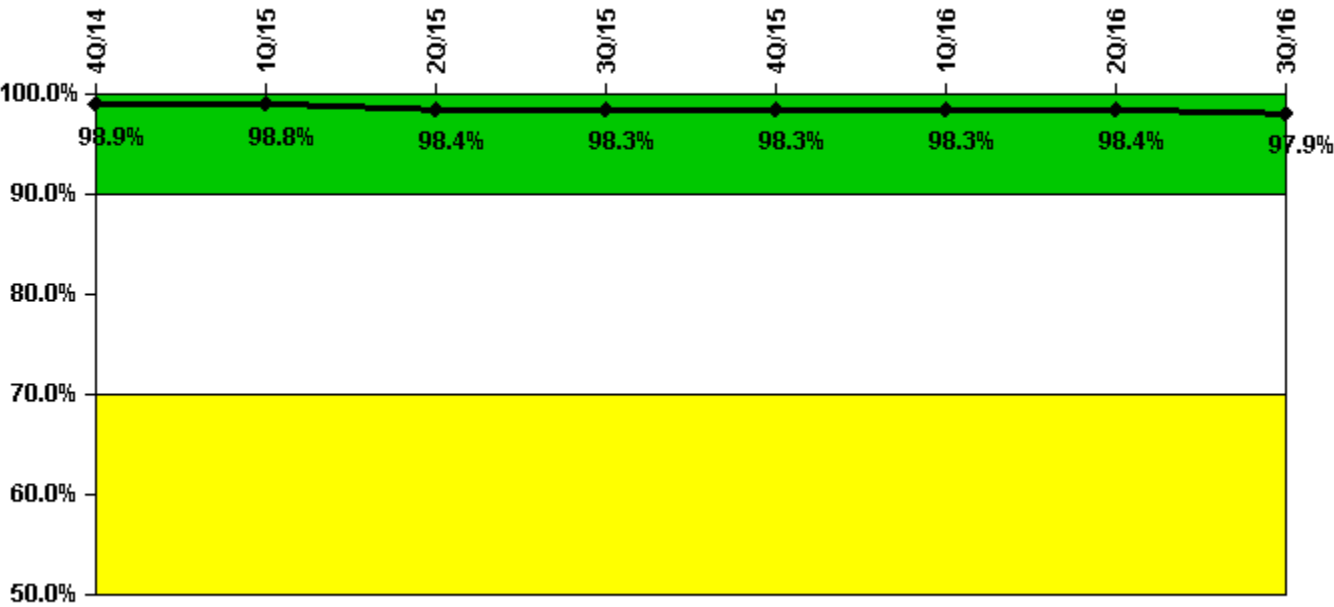
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum leakage	0.080	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.060	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5
Reactor Coolant System Leakage	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum leakage	0.050	0.070	0.060	0.060	0.060	0.050	0.040	0.100	0.050	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.7	0.6	0.6	0.6	0.5	0.4	1.0	0.5	0.5	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



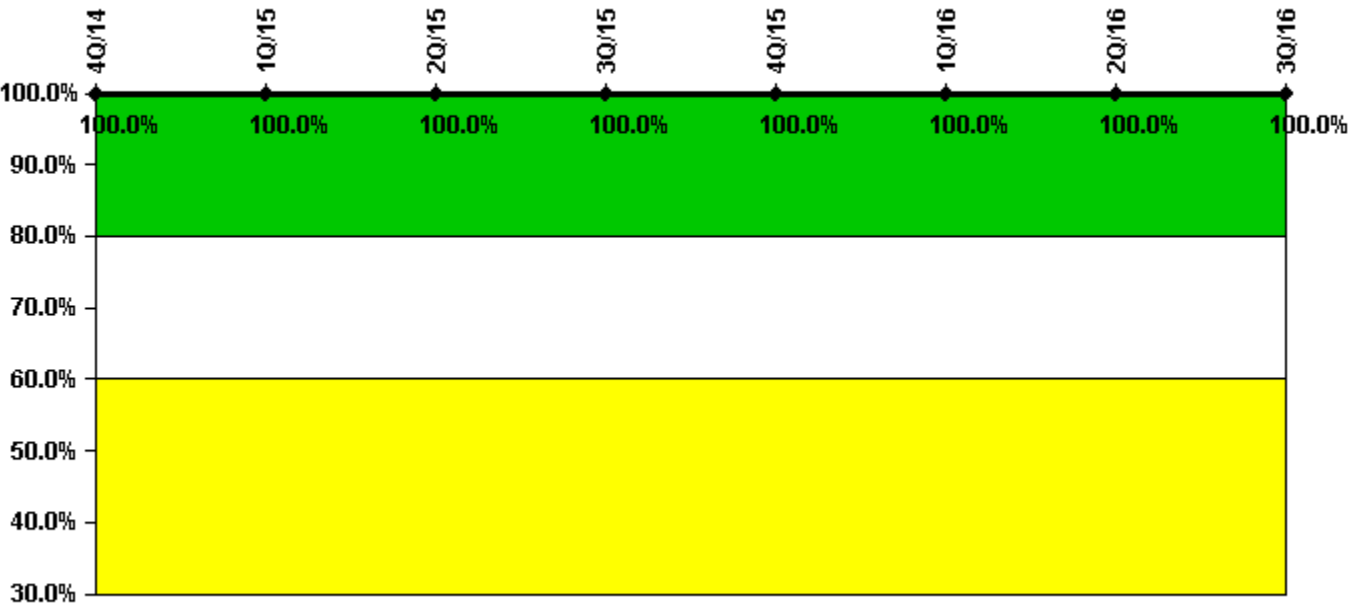
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful opportunities	14.0	74.0	41.0	27.0	32.0	106.0	44.0	29.0
Total opportunities	14.0	74.0	43.0	27.0	32.0	109.0	44.0	32.0
Indicator value	98.9%	98.8%	98.4%	98.3%	98.3%	98.3%	98.4%	97.9%

Licensee Comments: none

ERO Drill Participation



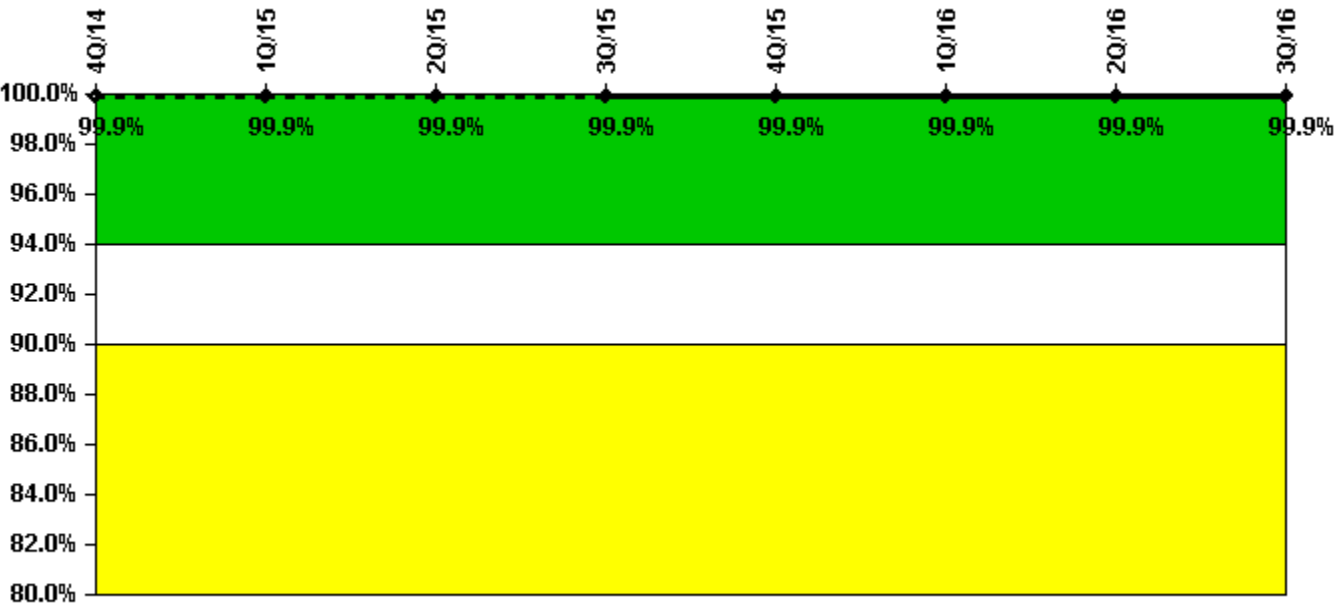
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Participating Key personnel	77.0	74.0	74.0	72.0	75.0	76.0	78.0	77.0
Total Key personnel	77.0	74.0	74.0	72.0	75.0	76.0	78.0	77.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



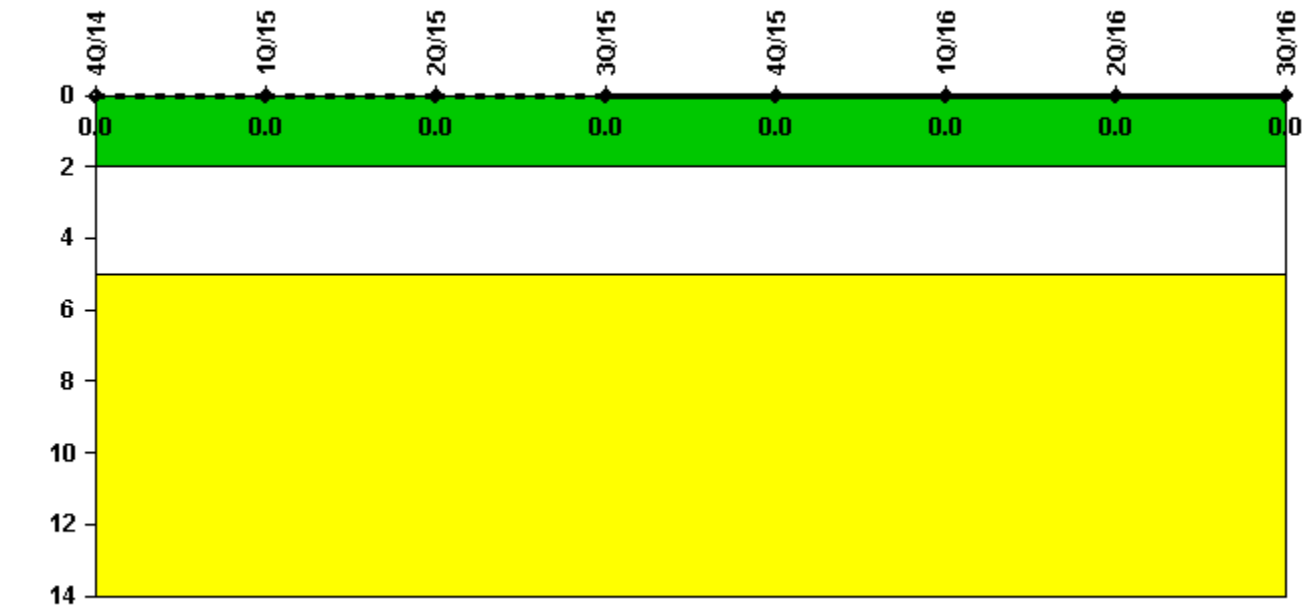
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful siren-tests	3901	3834	3902	3962	3903	3897	3902	3900
Total sirens-tests	3904	3840	3904	3965	3904	3904	3904	3904
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



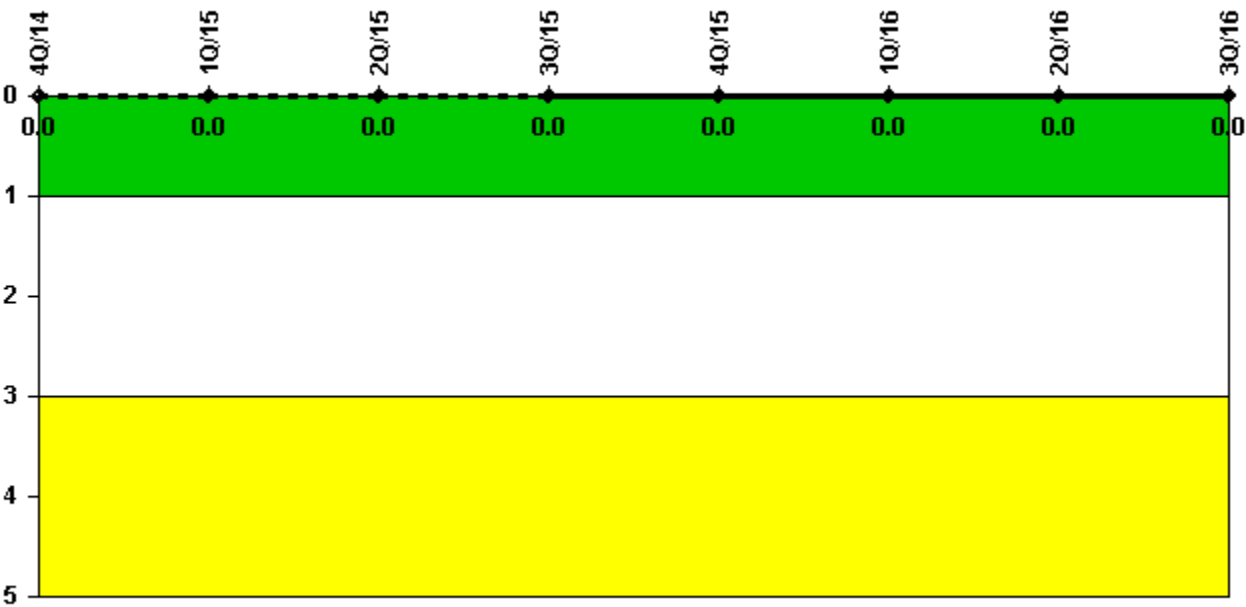
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: October 23, 2016

Byron 2

4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Station 4Q2016 Indicator Data

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

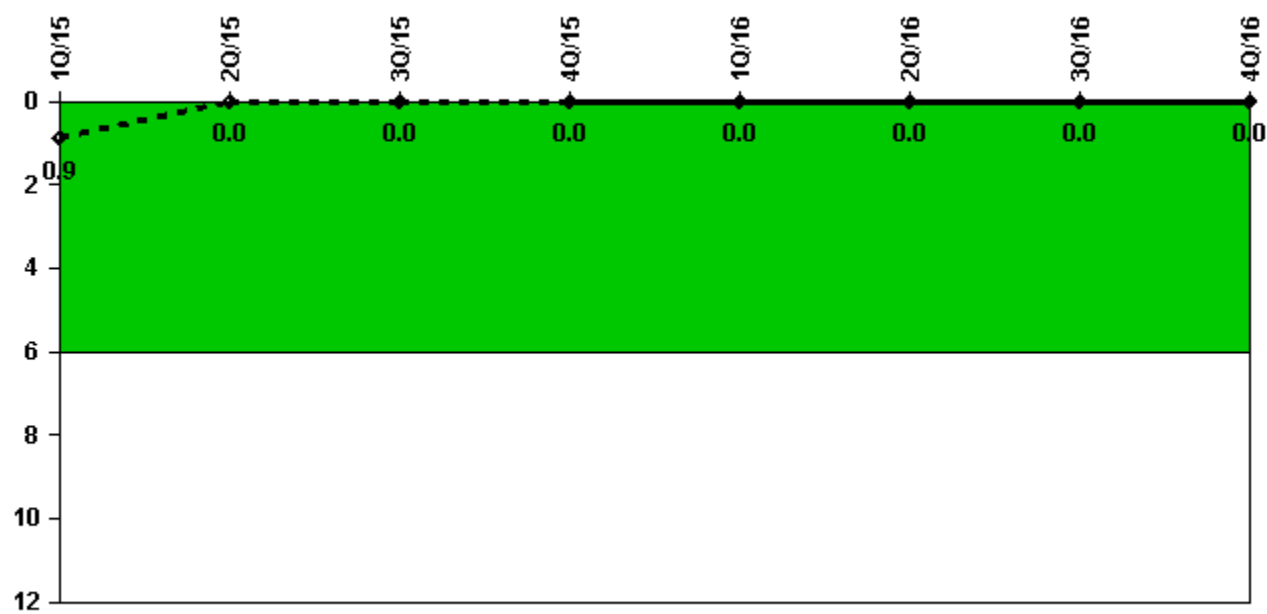
Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Unplanned scrams	0	0	0	0	0	0	0	1.0
Critical hours	2159.0	2184.0	2208.0	2209.0	2183.0	1492.7	2208.0	2194.7
Indicator value	0	0	0	0	0	0	0	0.9

Licensee Comments:

4Q/16: U2 Reactor was manually tripped due to a loss of FW to the 'B' and 'C' steam generators. The loss of FW was caused by a water hammer prevention system (WHPS) actuation, which occurred when MCC 234V4 de-energized. MCC 234V4 feed breaker was replaced. ICES#324765

Unplanned Power Changes per 7000 Critical Hrs



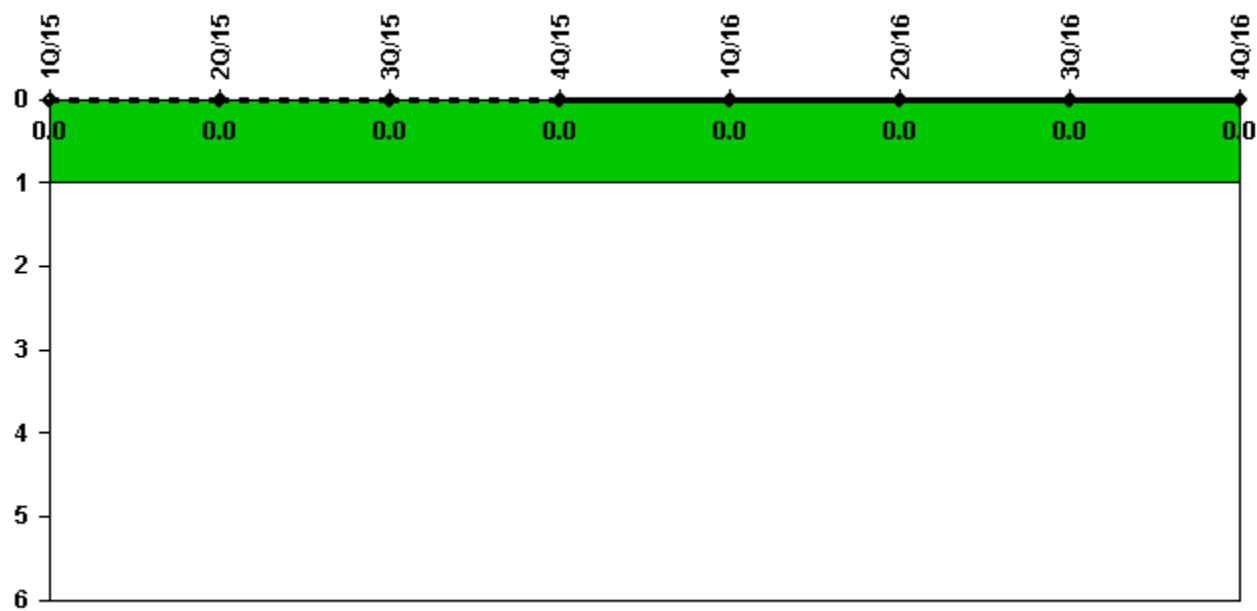
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2159.0	2184.0	2208.0	2209.0	2183.0	1492.7	2208.0	2194.7
Indicator value	0.9	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



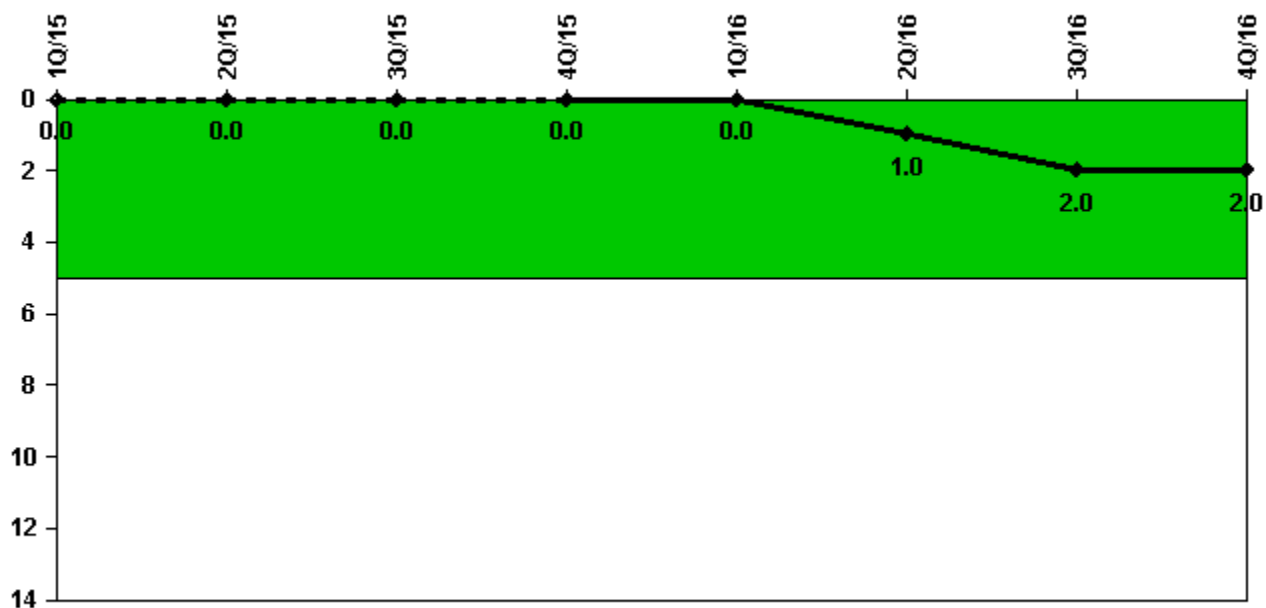
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

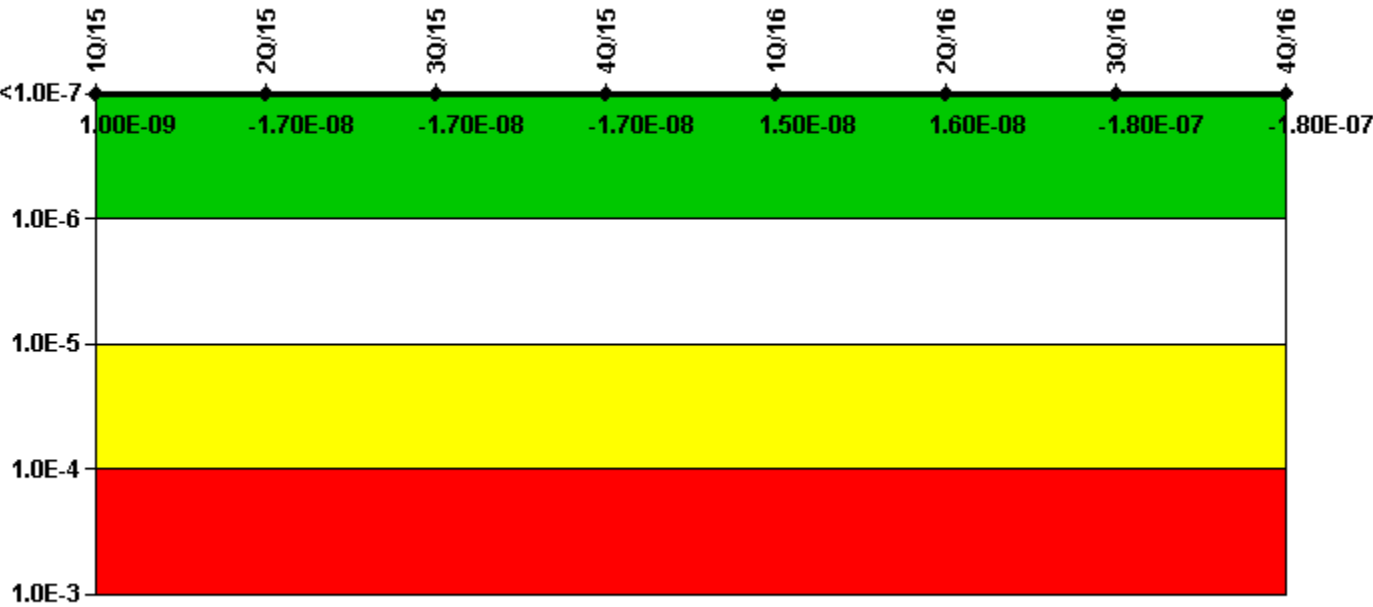
Notes

Safety System Functional Failures (PWR)	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Safety System Functional Failures	0	0	0	0	0	1	1	0
Indicator value	0	0	0	0	0	1	2	2

Licensee Comments:

3Q/16: LER 2016-001-00, May 2016 AF Diesel Intake Design Deficiency Due to High Energy Line Break (HELB) Concerns. LER 2016-002-00 was issued 7/21/16, for Inadequate protection from Tornado Missiles Due to Non-conforming Design Conditions. 3Q16 U2 CDF and MSPI result were updated using the application specific model BB011b4, which takes credit for the Generation III Westinghouse RCP shutdown seals. The corresponding BY-MSPI-001 Rev 18 was approved in June 2016.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	3.77E-09	-1.44E-08	-1.44E-08	-1.44E-08	1.73E-08	1.85E-08	6.70E-10	7.06E-10
URI (ΔCDF)	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-1.81E-07	-1.81E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.00E-09	-1.70E-08	-1.70E-08	-1.70E-08	1.50E-08	1.60E-08	-1.80E-07	-1.80E-07

Licensee Comments:

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

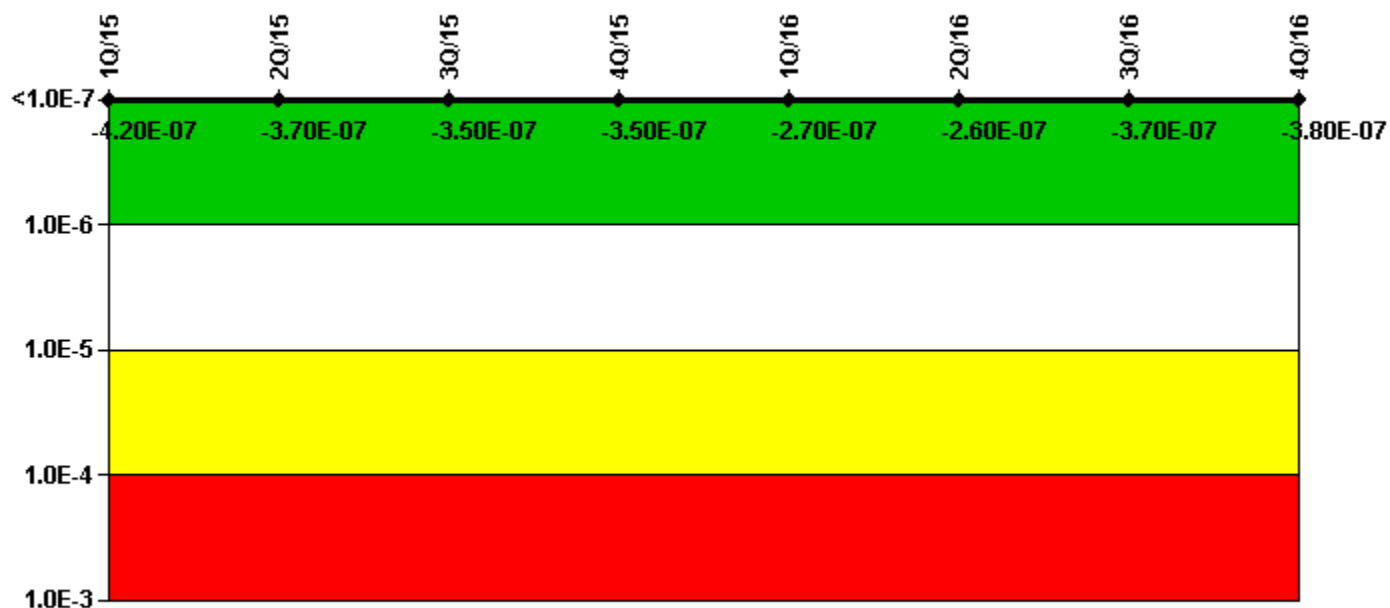
Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	-2.89E-08	-2.89E-08	-2.44E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.46E-08	-2.71E-08
URI (Δ CDF)	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-6.17E-09	-6.17E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.30E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.10E-08	-3.30E-08

Licensee Comments:

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

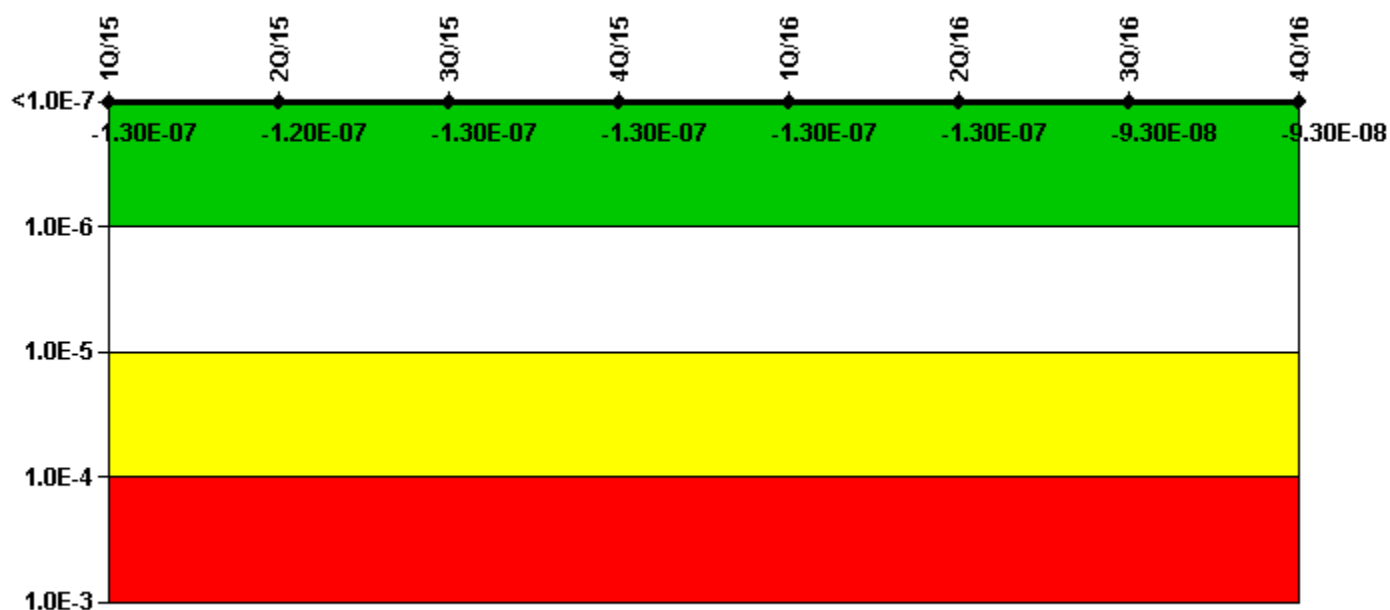
Mitigating Systems Performance Index, Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	-5.79E-08	-1.06E-08	5.42E-09	4.62E-09	8.53E-08	8.41E-08	-1.04E-08	-1.29E-08
URI (Δ CDF)	-3.60E-07	-3.55E-07	-3.57E-07	-3.57E-07	-3.54E-07	-3.45E-07	-3.59E-07	-3.67E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.20E-07	-3.70E-07	-3.50E-07	-3.50E-07	-2.70E-07	-2.60E-07	-3.70E-07	-3.80E-07

Licensee Comments:

4Q/16: U1-U2 Train A crosstie considered unavailable starting 10/28/11 when standing order 11-057 and 1/2BFRH.1 procedure revisions were issued to remove procedural guidance on use of crosstie modification pending NRC approval. Reference IR 1257908

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

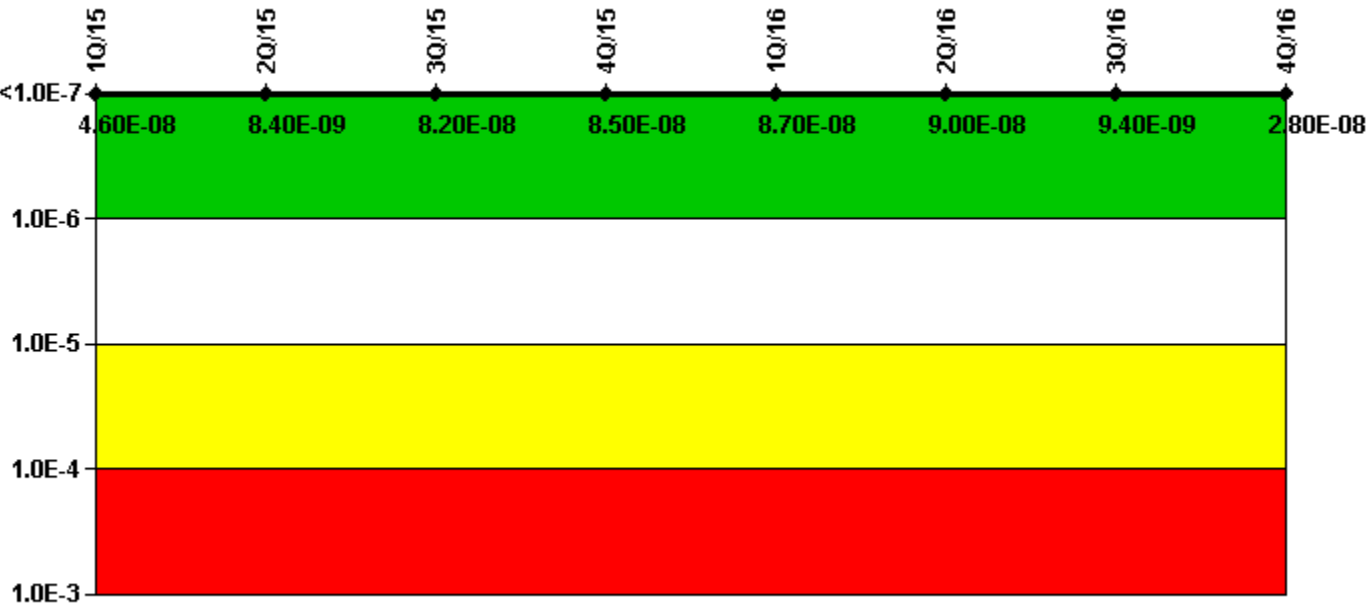
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	-3.33E-08	-2.47E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.38E-08	-2.38E-08
URI (Δ CDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-6.92E-08	-6.92E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-9.30E-08	-9.30E-08

Licensee Comments:

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

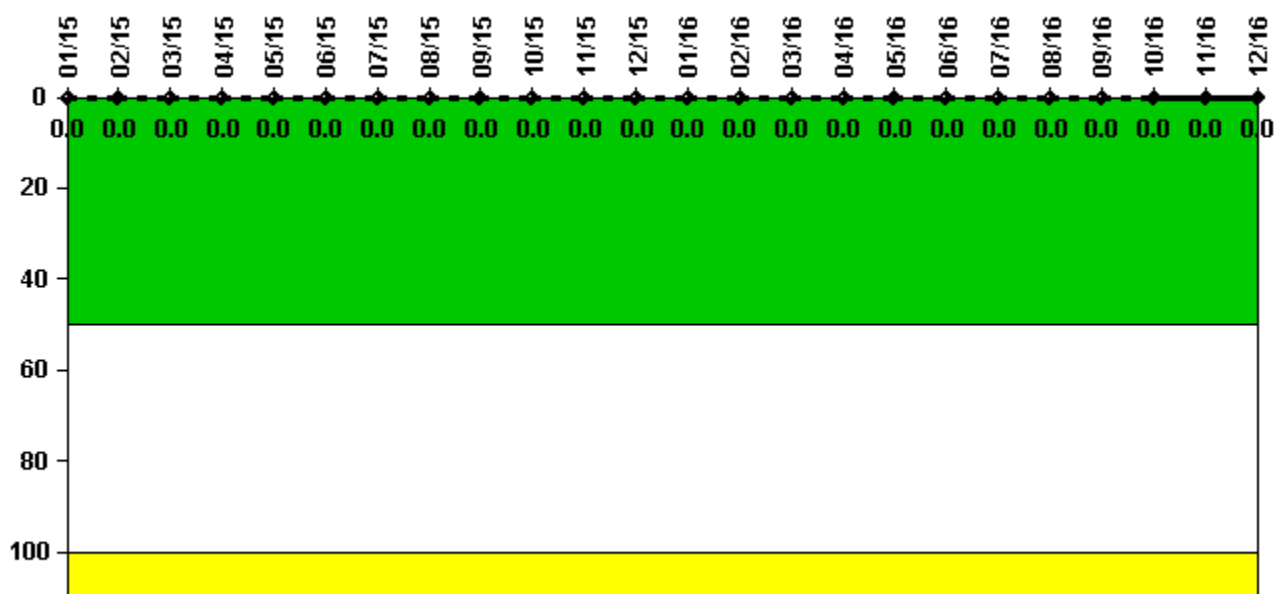
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	1.38E-07	1.01E-07	1.74E-07	1.78E-07	1.80E-07	1.82E-07	6.13E-08	7.98E-08
URI (ΔCDF)	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-5.20E-08	-5.20E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	4.60E-08	8.40E-09	8.20E-08	8.50E-08	8.70E-08	9.00E-08	9.40E-09	2.80E-08

Licensee Comments:

3Q/16: Changed PRA Parameter(s).

Reactor Coolant System Activity



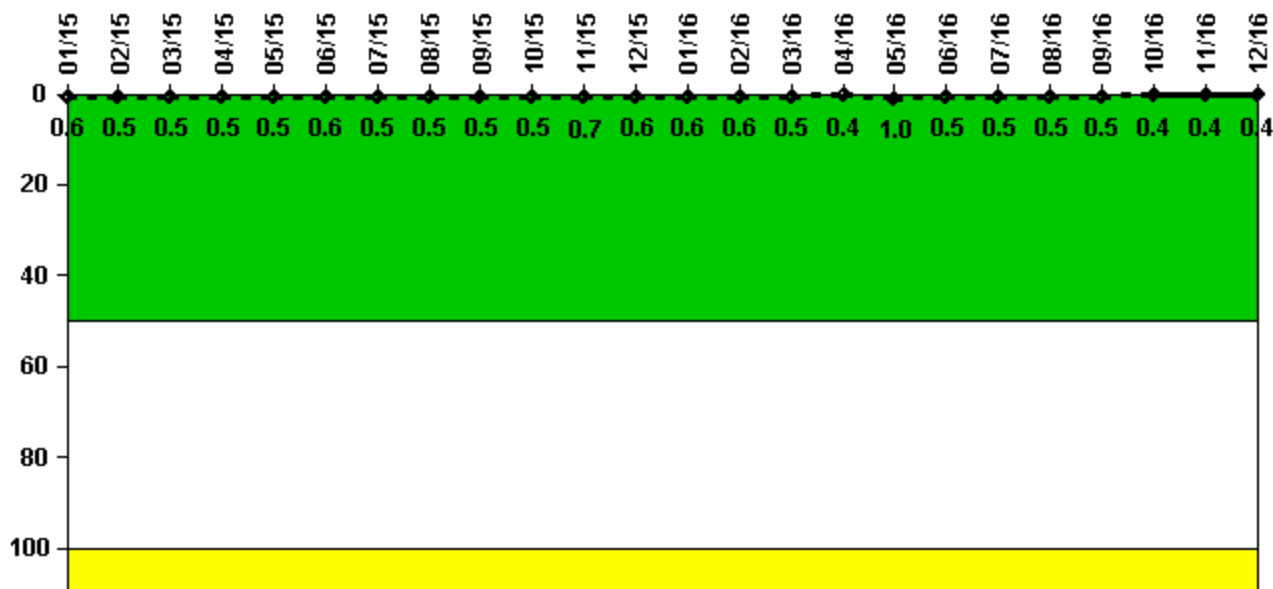
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum activity	0.000056	0.000056	0.000063	0.000067	0.000065	0.000069	0.000076	0.000070	0.000071	0.000073	0.000070	0.000078
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum activity	0.000080	0.000078	0.000092	0.000079	0.000058	0.000050	0.000074	0.000049	0.000055	0.000054	0.000057	0.000061
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



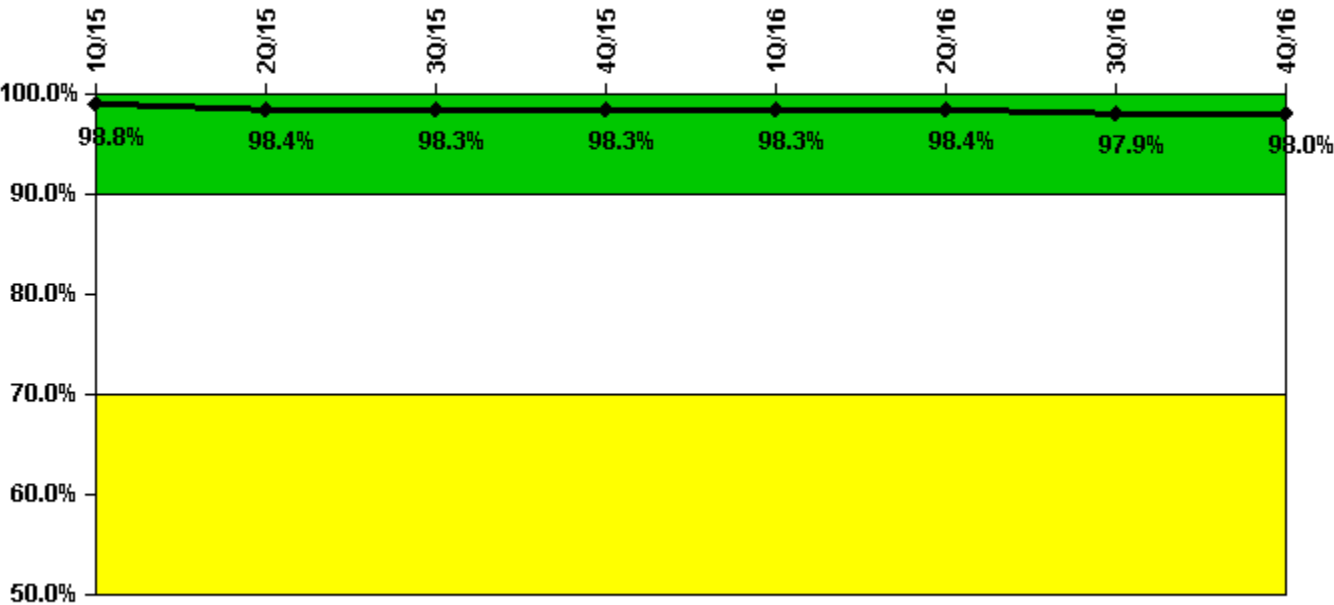
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum leakage	0.060	0.050	0.050	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.070	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.7	0.6
Reactor Coolant System Leakage	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum leakage	0.060	0.060	0.050	0.040	0.100	0.050	0.050	0.050	0.050	0.040	0.040	0.040
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.6	0.6	0.5	0.4	1.0	0.5	0.5	0.5	0.5	0.4	0.4	0.4

Licensee Comments: none

Drill/Exercise Performance



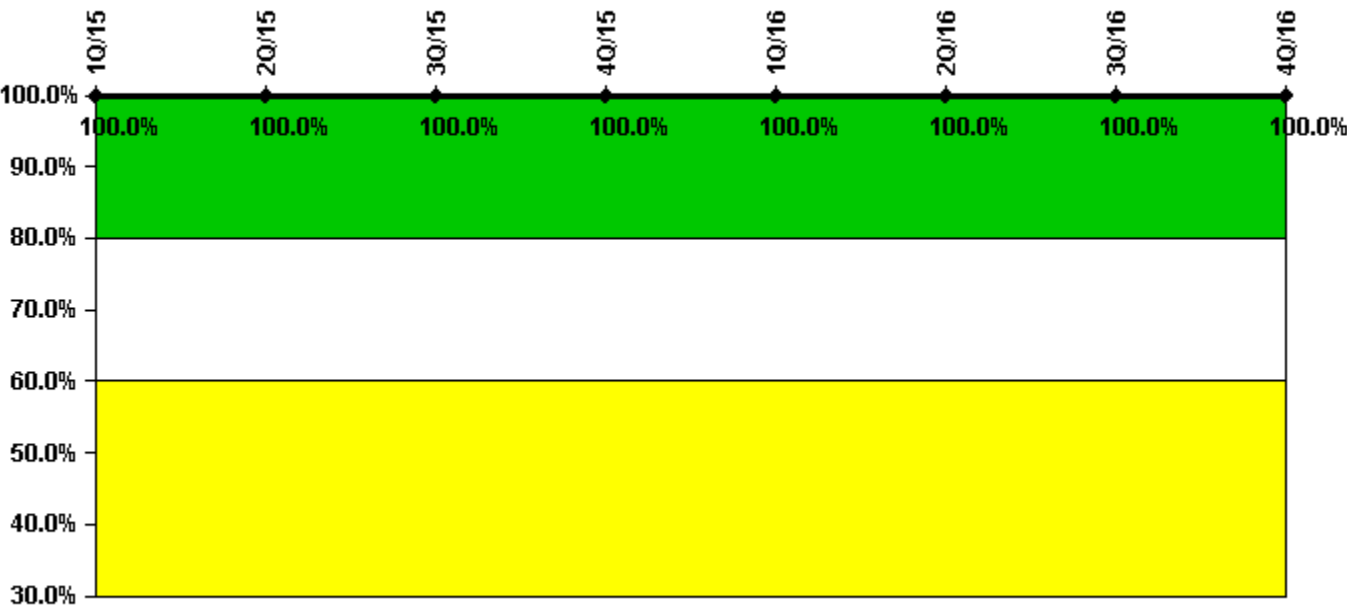
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful opportunities	74.0	41.0	27.0	32.0	106.0	44.0	29.0	34.0
Total opportunities	74.0	43.0	27.0	32.0	109.0	44.0	32.0	34.0
Indicator value	98.8%	98.4%	98.3%	98.3%	98.3%	98.4%	97.9%	98.0%

Licensee Comments: none

ERO Drill Participation



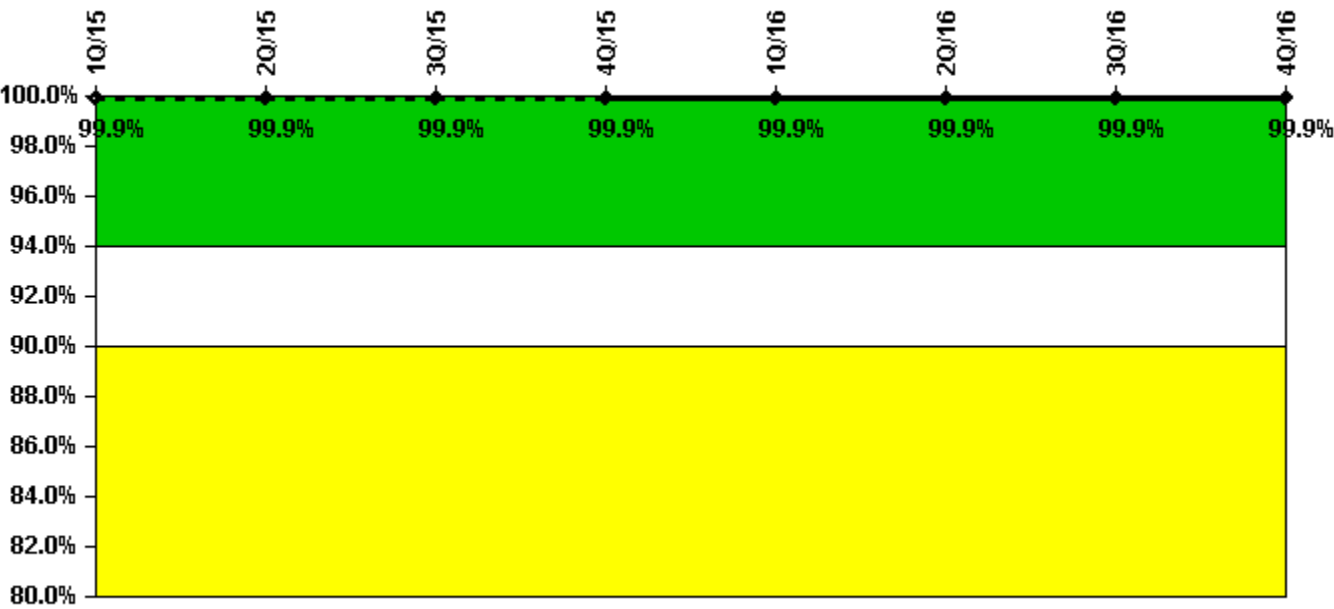
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	74.0	74.0	72.0	75.0	76.0	78.0	77.0	77.0
Total Key personnel	74.0	74.0	72.0	75.0	76.0	78.0	77.0	77.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



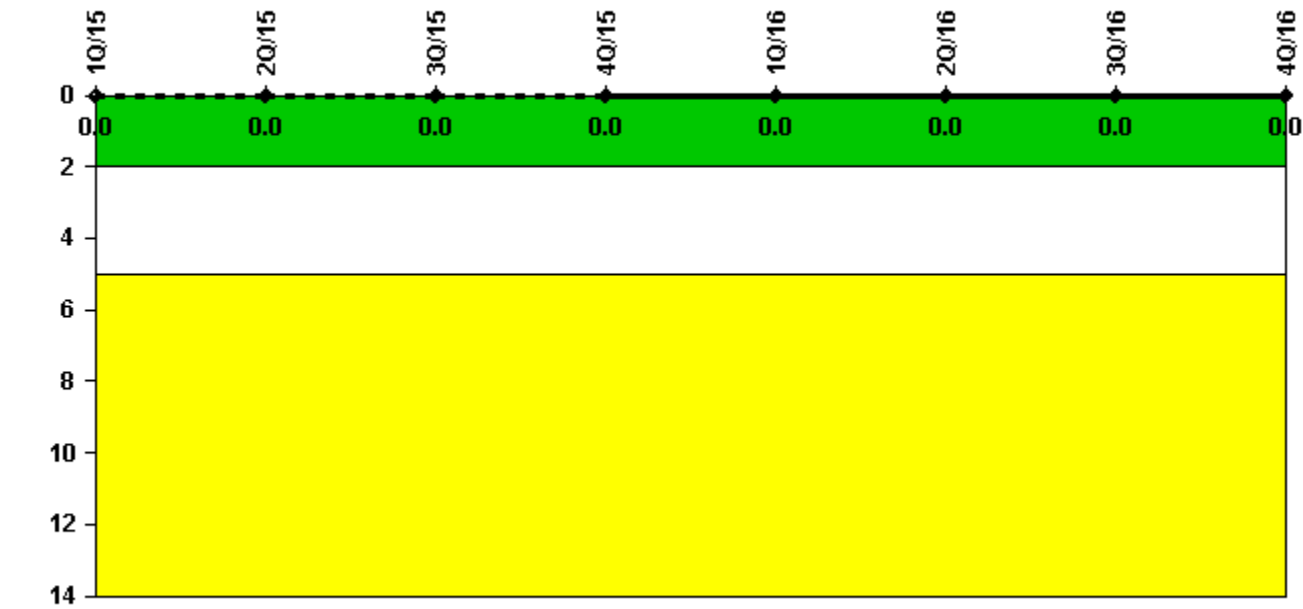
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful siren-tests	3834	3902	3962	3903	3897	3902	3900	3780
Total sirens-tests	3840	3904	3965	3904	3904	3904	3904	3782
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



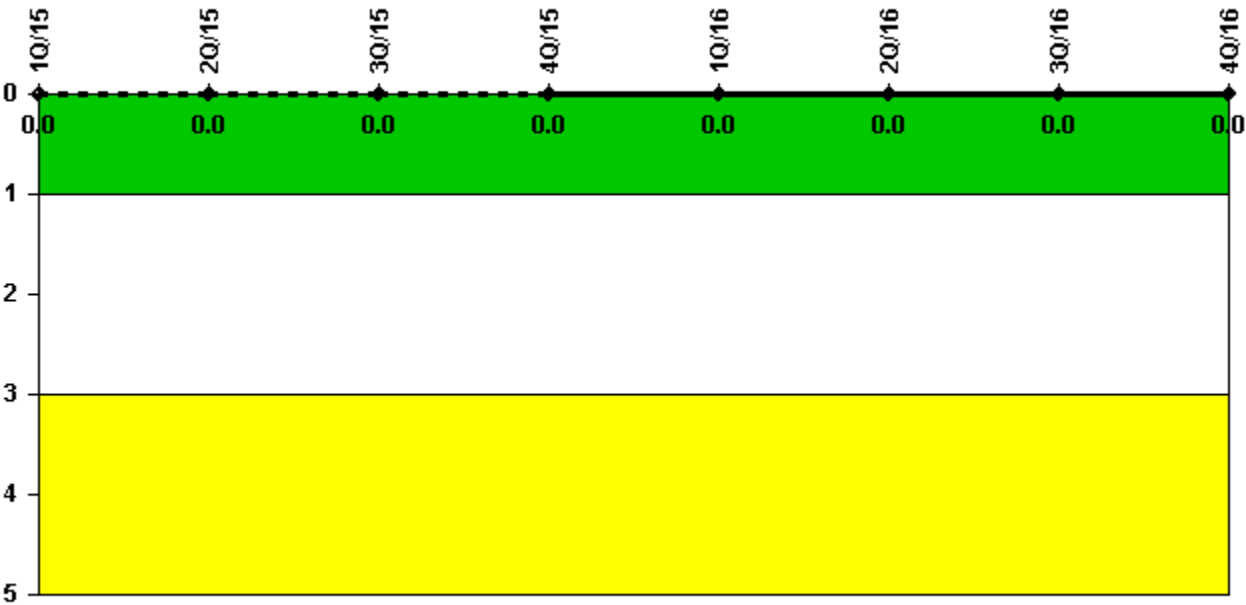
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: January 24, 2017



[Home](#) > [Nuclear Reactors](#) > [Operating Reactors](#) > [Reactor Oversight Process](#) > [Plant Summaries](#)> [Byron 2](#) > [Quarterly Plant Inspection Findings](#)

Byron 2 – Quarterly Performance Indicators

1Q/2017 Performance Indicators

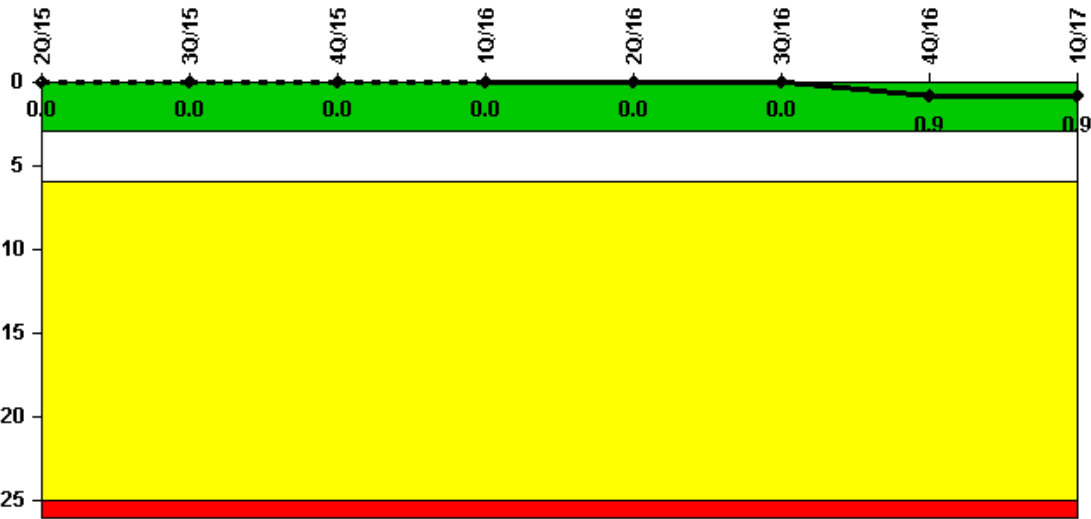
The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Unit 2 1Q2017

On this page:

- [Unplanned Scrams \(IE01\)](#)
- [Unplanned Power Changes per 7000 Critical Hours \(IE03\)](#)
- [Unplanned Scrams with Complications \(IE04\)](#)
- [Safety System Functional Failures \(MS05\)](#)
- [Emergency AC Power Systems \(MS06\)](#)
- [High Pressure Injection Systems \(MS07\)](#)
- [Heat Removal Systems \(MS08\)](#)
- [Residual Heat Removal Systems \(MS09\)](#)
- [Cooling Water Systems \(MS10\)](#)
- [Reactor Coolant System Activity \(BI01\)](#)
- [Reactor Coolant System Leakage \(BI02\)](#)
- [Drill/Exercise Performance \(EP01\)](#)
- [Emergency Response Organization Drill Participation \(EP02\)](#)
- [Alert and Notification System Reliability \(EP03\)](#)
- [Occupational Exposure Control Effectiveness \(OR01\)](#)
- [RETS/OCDM Radiological Effluent Occurrence \(PR01\)](#)
- [Protected Area Equipment \(PP01\)](#)

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

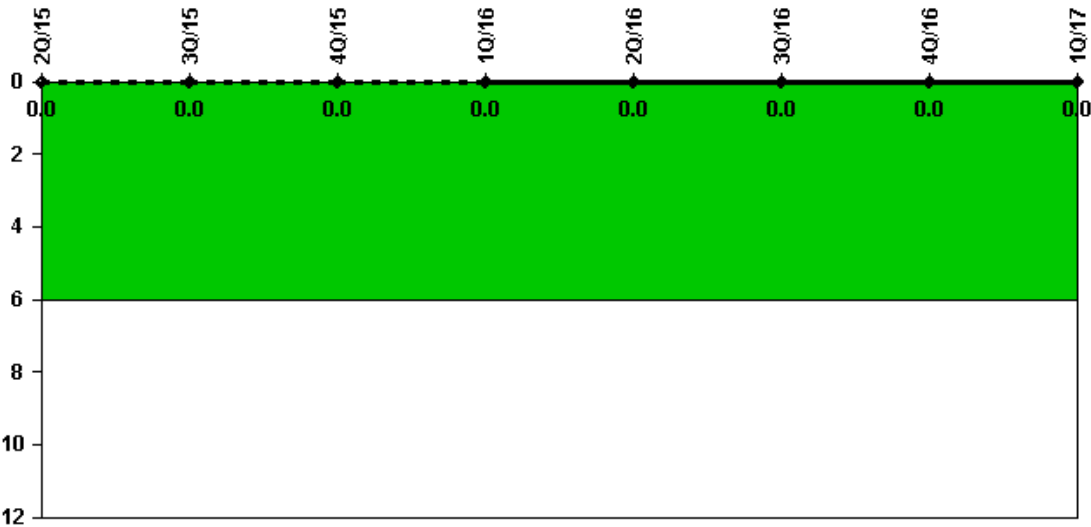
Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Unplanned scrams	0	0	0	0	0	0	1.0	0
Critical hours	2184.0	2208.0	2209.0	2183.0	1492.7	2208.0	2194.7	2159.0
Indicator value	0	0	0	0	0	0	0.9	0.9

TOP

Licensee Comments:
4Q/16: U2 Reactor was manually tripped due to a loss of FW to the 'B' and 'C' steam generators. The loss of FW was caused by a water hammer prevention system (WHPS) actuation, which occurred when MCC 234V4 de-energized. MCC 234V4 feed breaker was replaced. ICES#324765

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

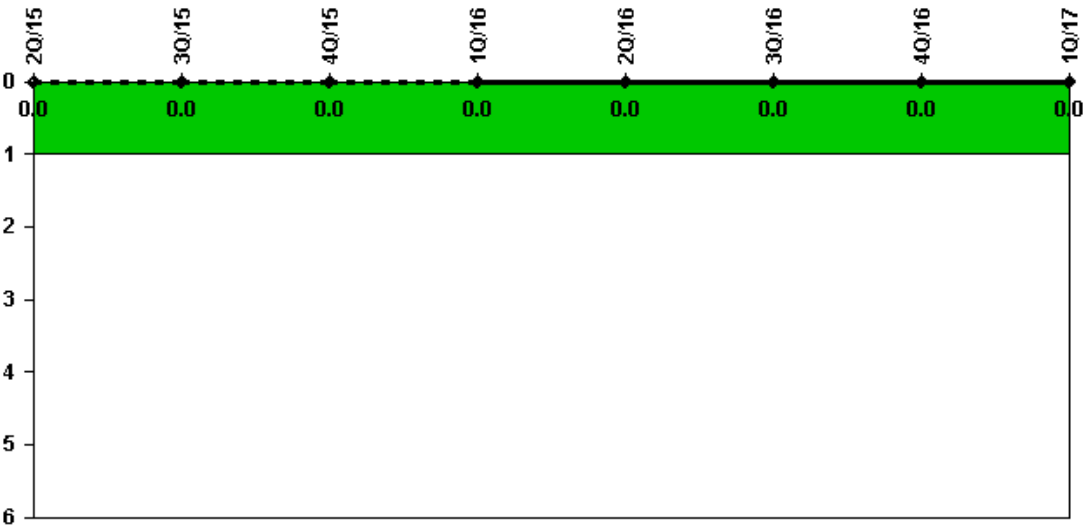
Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	2183.0	1492.7	2208.0	2194.7	2159.0
Indicator value	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

Notes

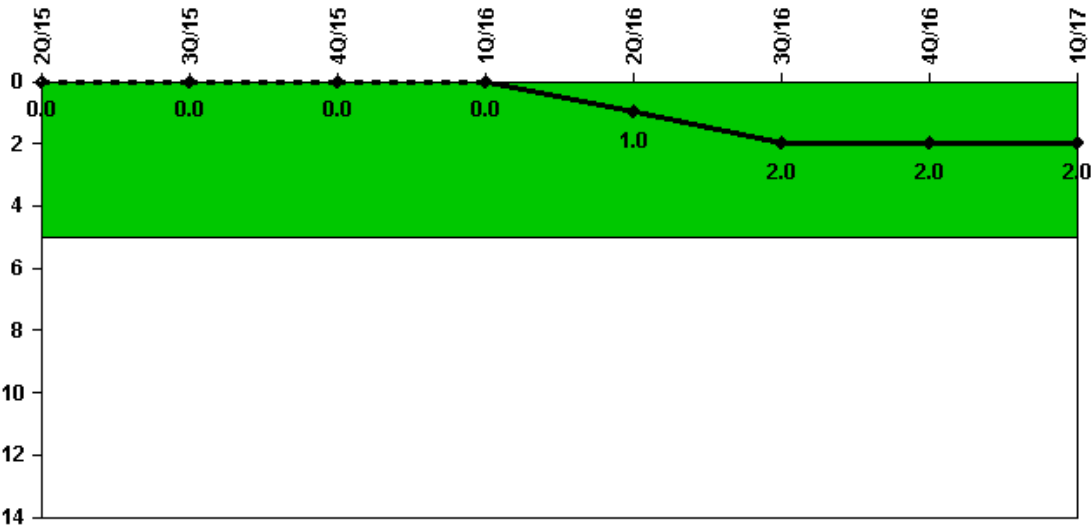
Unplanned Scrams with Complications	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Scrams with complications	0	0	0	0	0	0	0	0

Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TOP

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

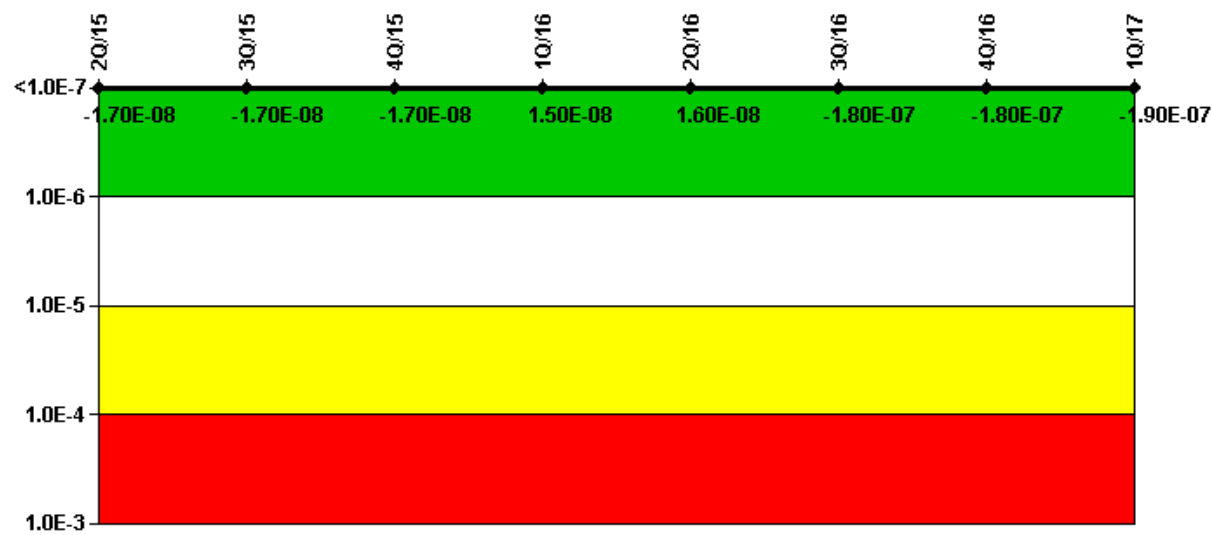
Safety System Functional Failures (PWR)	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Safety System Functional Failures	0	0	0	0	1	1	0	0

Indicator value	0	0	0	0	1	2	2	2

TOP

Licensee Comments:
3Q/16: LER 2016-001-00, May 2016 AF Diesel Intake Design Deficiency Due to High Energy Line Break (HELB) Concerns. LER 2016-002-00 was issued 7/21/16, for Inadequate protection from Tornado Missiles Due to Non-conforming Design Conditions. 3Q16 U2 CDF and MSPI result were updated using the application specific model BB011b4, which takes credit for the Generation III Westinghouse RCP shutdown seals. The corresponding BY-MSPI-001 Rev 18 was approved in June 2016.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

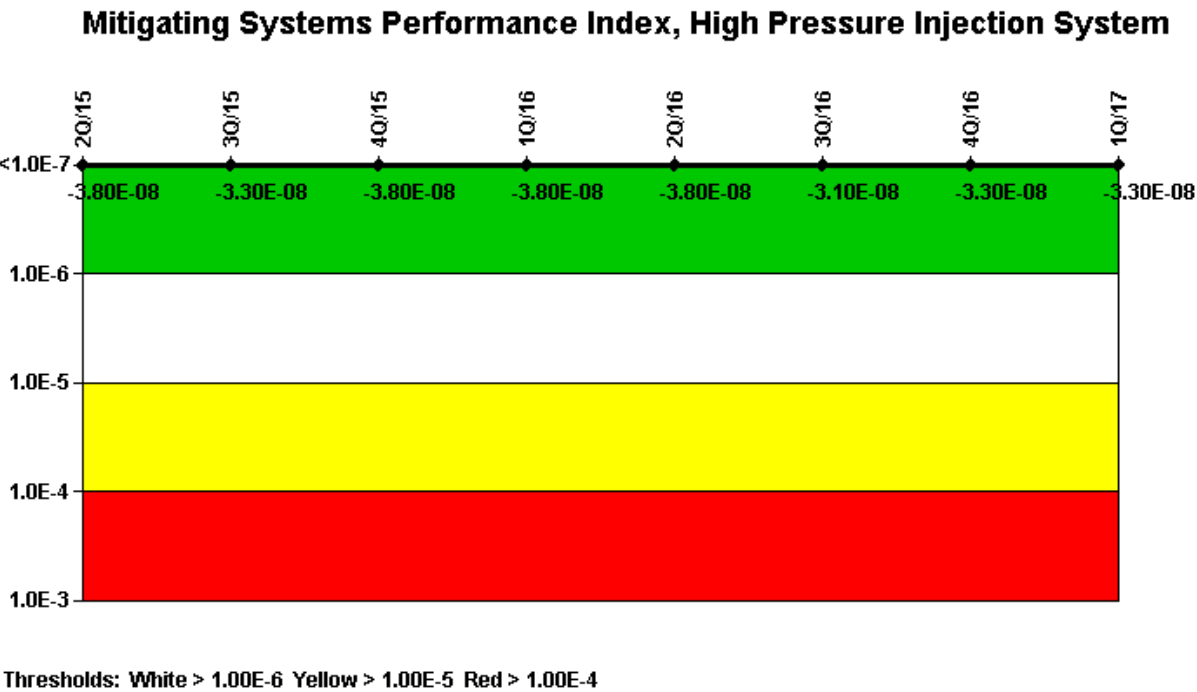
Notes

Mitigating Systems Performance Index, Emergency AC Power System

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	-1.44E-08	-1.44E-08	-1.44E-08	1.73E-08	1.85E-08	6.70E-10	7.06E-10	-1.33E-08
URI (ΔCDF)	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-1.81E-07	-1.81E-07	-1.81E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.70E-08	-1.70E-08	-1.70E-08	1.50E-08	1.60E-08	-1.80E-07	-1.80E-07	-1.90E-07

TOP

Licensee Comments:
3Q/16: Changed PRA Parameter(s).



Notes

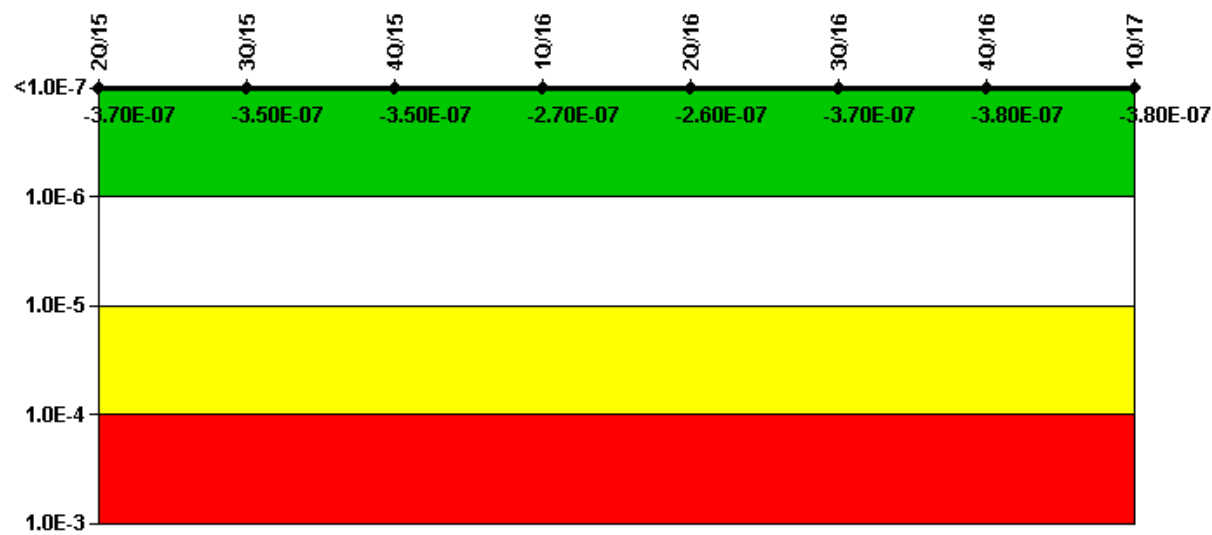
Mitigating Systems Performance Index, High Pressure Injection System

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	-2.89E-08	-2.44E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.46E-08	-2.71E-08	-2.71E-08
URI (ΔCDF)	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-6.17E-09	-6.17E-09	-6.17E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.30E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.10E-08	-3.30E-08	-3.30E-08

TOP

Licensee Comments:
3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

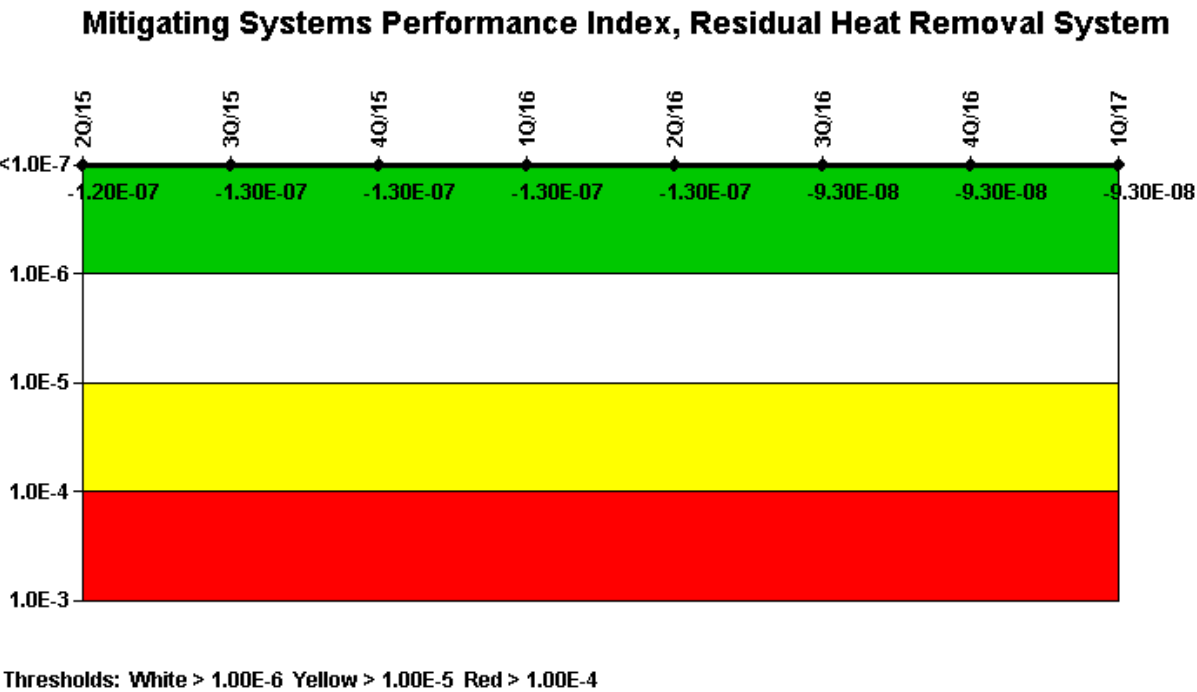
Mitigating Systems Performance Index, Heat Removal System

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	-1.06E-08	5.42E-09	4.62E-09	8.53E-08	8.41E-08	-1.04E-08	-1.29E-08	-1.33E-08
URI (ΔCDF)	-3.55E-07	-3.57E-07	-3.57E-07	-3.54E-07	-3.45E-07	-3.59E-07	-3.67E-07	-3.67E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.70E-07	-3.50E-07	-3.50E-07	-2.70E-07	-2.60E-07	-3.70E-07	-3.80E-07	-3.80E-07

TOP

Licensee Comments:

4Q/16: U1-U2 Train A crosstie considered unavailable starting 10/28/11 when standing order 11-057 and 1/2BFRH.1 procedure revisions were issued to remove procedural guidance on use of crosstie modification pending NRC approval. Reference IR 1257908
3Q/16: Changed PRA Parameter(s).



Notes

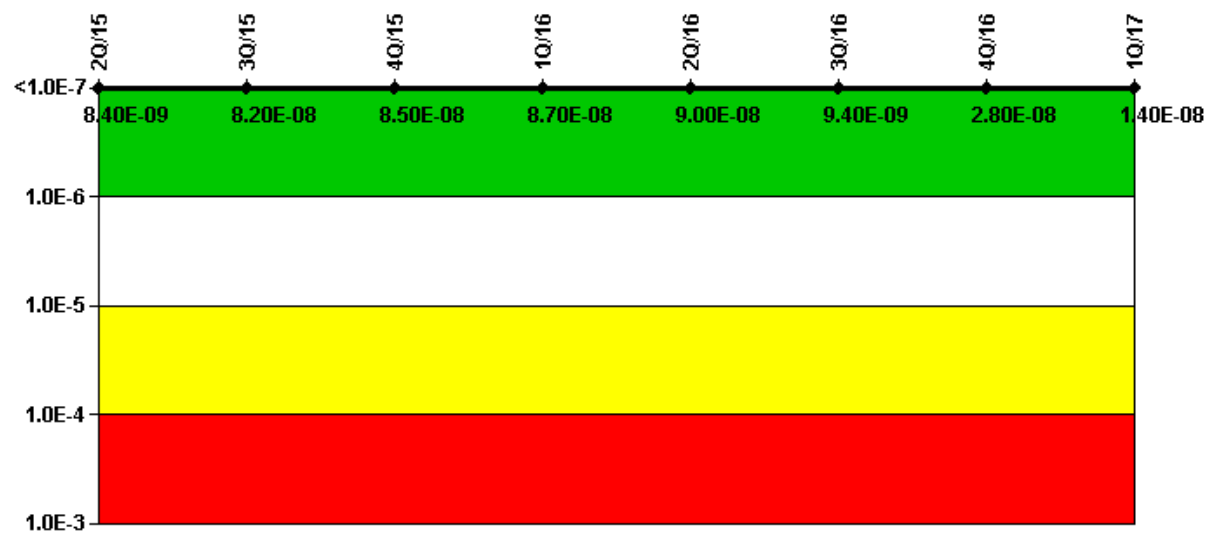
Mitigating Systems Performance Index, Residual Heat Removal System

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	-2.47E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.38E-08	-2.38E-08	-2.38E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-6.92E-08	-6.92E-08	-6.92E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-9.30E-08	-9.30E-08	-9.30E-08

TOP

Licensee Comments:
3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

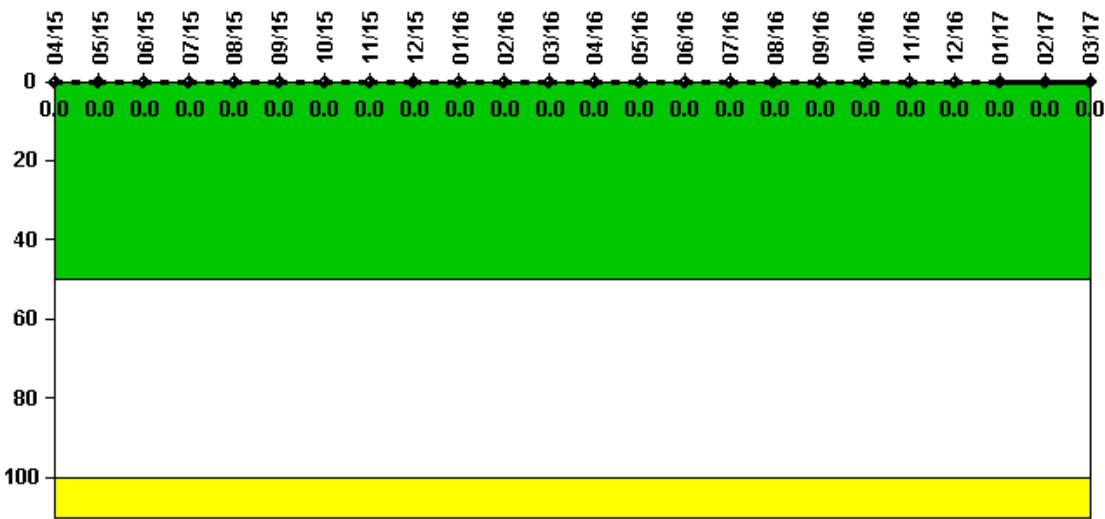
Mitigating Systems Performance Index, Cooling Water Systems

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	1.01E-07	1.74E-07	1.78E-07	1.80E-07	1.82E-07	6.13E-08	7.98E-08	6.63E-08
URI (ΔCDF)	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-5.20E-08	-5.20E-08	-5.20E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	8.40E-09	8.20E-08	8.50E-08	8.70E-08	9.00E-08	9.40E-09	2.80E-08	1.40E-08

TOP

Licensee Comments:
3Q/16: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

Notes

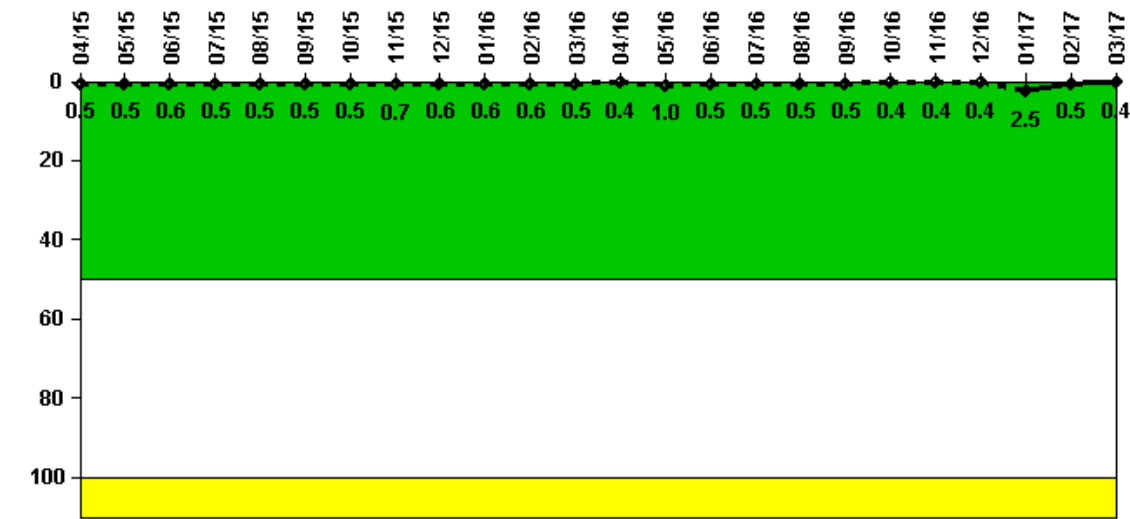
Reactor Coolant System Activity	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0.000067	0.000065	0.000069	0.000076	0.000070	0.000071	0.000073	0.000070	0.000078	0.000080	0.000078	0.000092
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17
Maximum activity	0.000079	0.000058	0.000050	0.000074	0.000049	0.000055	0.000054	0.000057	0.000061	0.000065	0.000063	0.000066
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

Notes

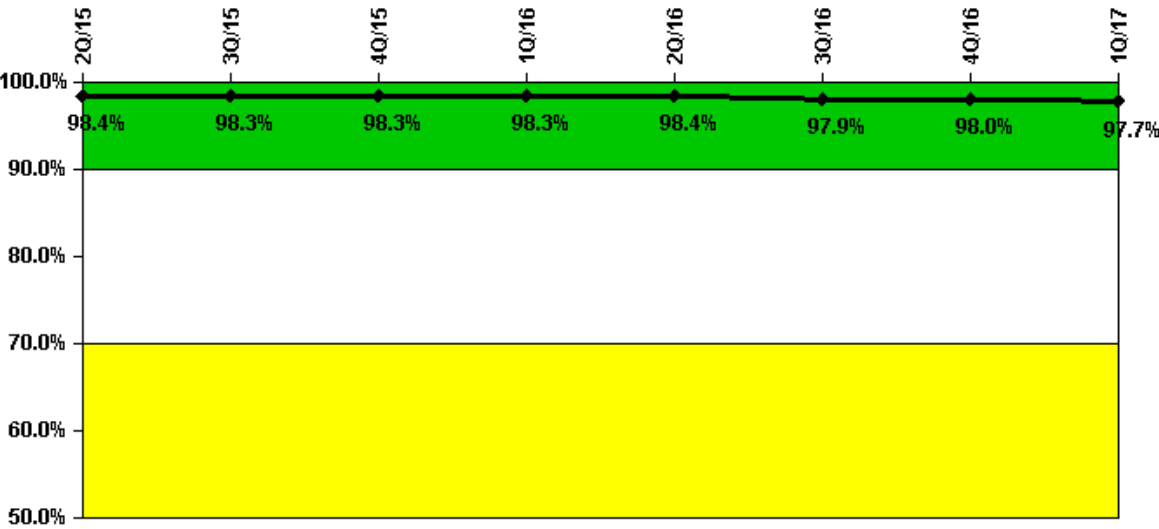
Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	0.050	0.050	0.060	0.050	0.050	0.050	0.050	0.070	0.060	0.060	0.060	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.7	0.6	0.6	0.6	0.5

Reactor Coolant System Leakage	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17
Maximum leakage	0.040	0.100	0.050	0.050	0.050	0.050	0.040	0.040	0.040	0.250	0.050	0.040
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.4	1.0	0.5	0.5	0.5	0.5	0.4	0.4	0.4	2.5	0.5	0.4

TOP

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

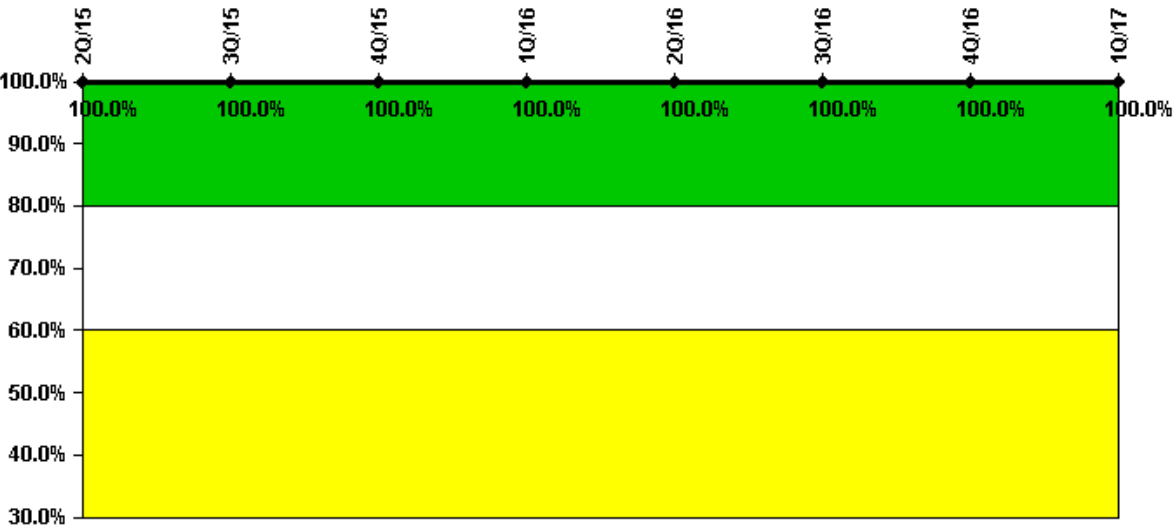
Drill/Exercise Performance	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Successful opportunities	41.0	27.0	32.0	106.0	44.0	29.0	34.0	28.0
Total opportunities	43.0	27.0	32.0	109.0	44.0	32.0	34.0	28.0

Indicator value 98.4% 98.3% 98.3% 98.3% 98.4% 97.9% 98.0% 97.7%

TOP

Licensee Comments: none

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

Notes

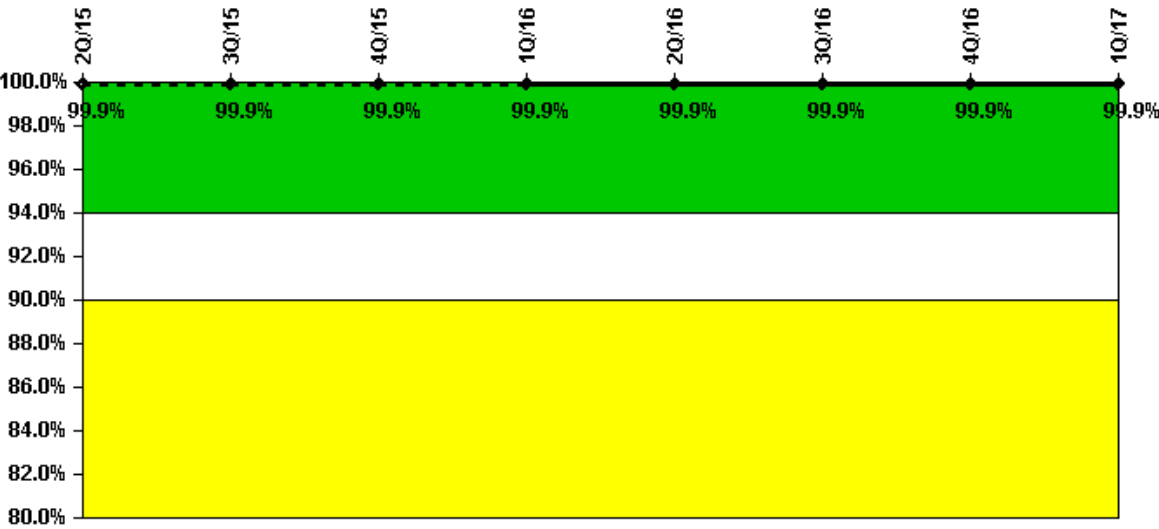
ERO Drill Participation	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Participating Key personnel	74.0	72.0	75.0	76.0	78.0	77.0	77.0	78.0
Total Key personnel	74.0	72.0	75.0	76.0	78.0	77.0	77.0	78.0

Indicator value 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%

TOP

Licensee Comments: none

Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

Notes

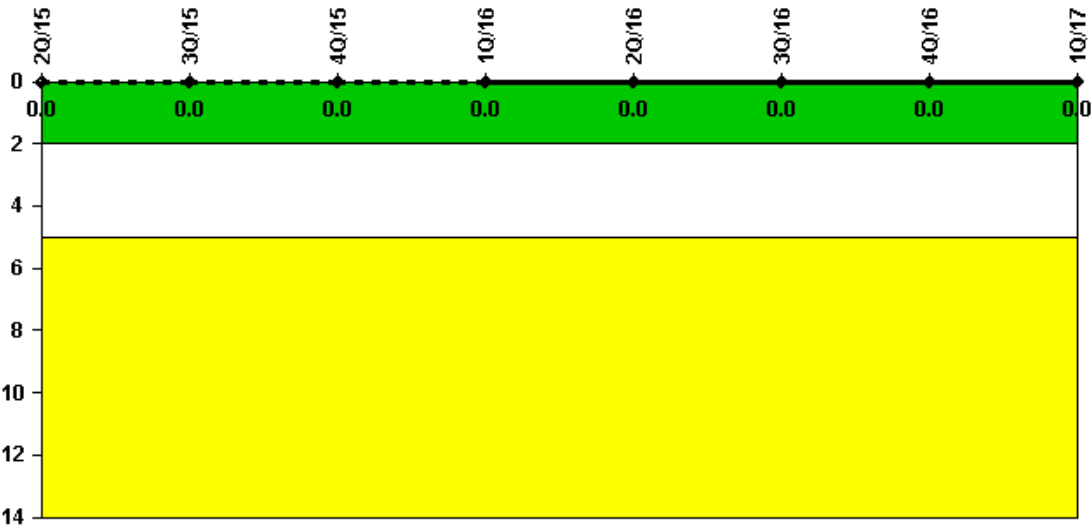
Alert & Notification System	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Successful siren-tests	3902	3962	3903	3897	3902	3900	3780	3964
Total sirens-tests	3904	3965	3904	3904	3904	3904	3782	3965

Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

TOP

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

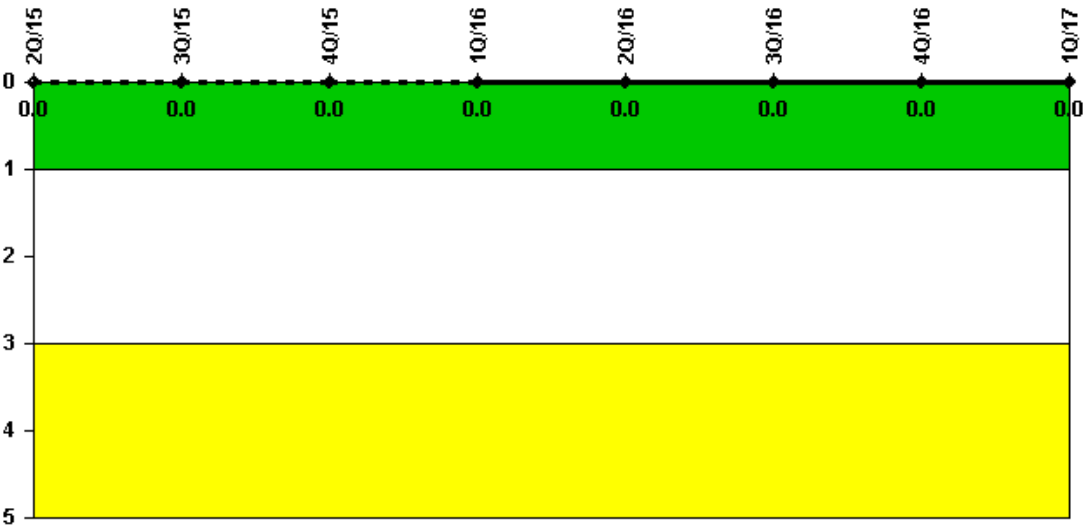
Notes

Occupational Exposure Control Effectiveness	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent2Q/153Q/154Q/151Q/162Q/163Q/164Q/161Q/17

RETS/ODCM occurrences000000000

Indicator value000000000

TOP

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

Current data as of: May 5, 2017

Page Last Reviewed/Updated Wednesday, June 07, 2017



Home > Nuclear Reactors > Operating Reactors > Reactor Oversight Process > Plant Summaries> Byron 2 > Quarterly Plant Inspection Findings

Byron 2 – Quarterly Performance Indicators

2Q/2017 Performance Indicators

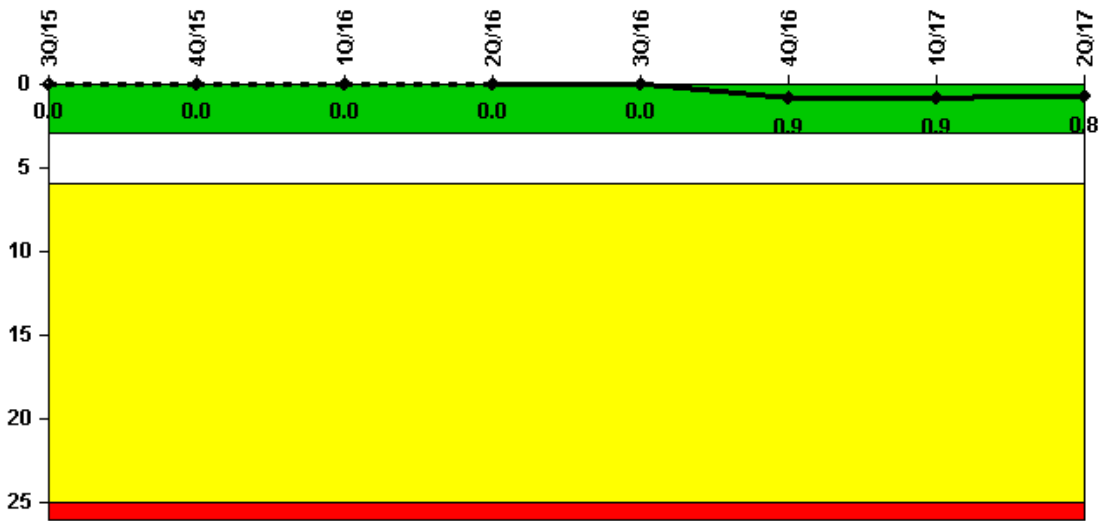
The solid trend line represents the current reporting period.

Licensee's General Comments: none

On this page:

- Unplanned Scrams (IE01)
- Unplanned Power Changes per 7000 Critical Hours (IE03)
- Unplanned Scrams with Complications (IE04)
- Safety System Functional Failures (MS05)
- Emergency AC Power Systems (MS06)
- High Pressure Injection Systems (MS07)
- Heat Removal Systems (MS08)
- Residual Heat Removal Systems (MS09)
- Cooling Water Systems (MS10)
- Reactor Coolant System Activity (BI01)
- Reactor Coolant System Leakage (BI02)
- Drill/Exercise Performance (EP01)
- Emergency Response Organization Drill Participation (EP02)
- Alert and Notification System Reliability (EP03)
- Occupational Exposure Control Effectiveness (OR01)
- RETS/OCDE Radiological Effluent Occurrence (PR01)
- Protected Area Equipment (PP01)

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

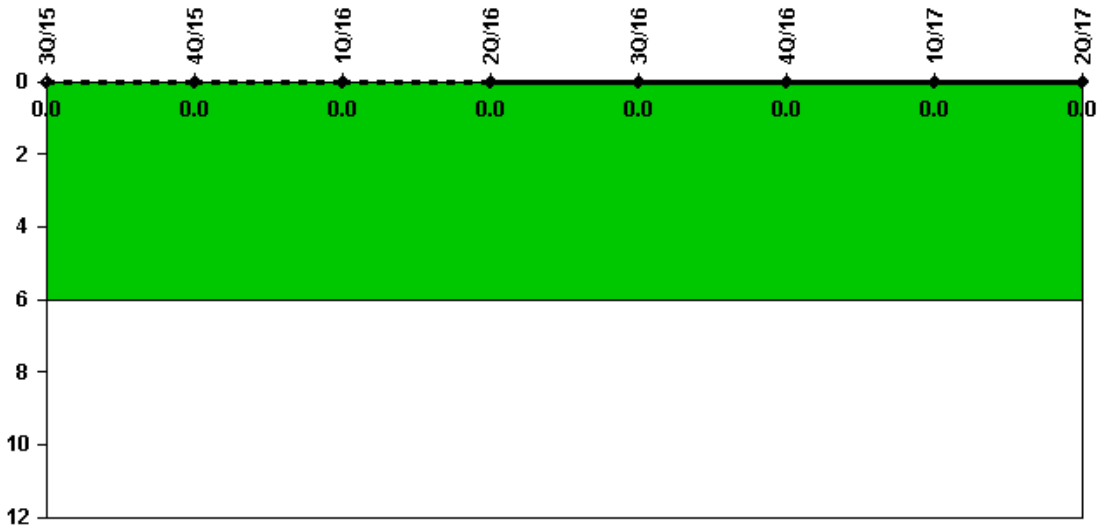
Unplanned Scrams per 7000 Critical Hrs	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Unplanned scrams	0	0	0	0	0	1.0	0	0
Critical hours	2208.0	2209.0	2183.0	1492.7	2208.0	2194.7	2159.0	2184.0
Indicator value	0	0	0	0	0	0.9	0.9	0.8

TOP

Licensee Comments:

4Q/16: U2 Reactor was manually tripped due to a loss of FW to the 'B' and 'C' steam generators. The loss of FW was caused by a water hammer prevention system (WHPS) actuation, which occurred when MCC 234V4 de-energized. MCC 234V4 feed breaker was replaced. ICES#324765

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

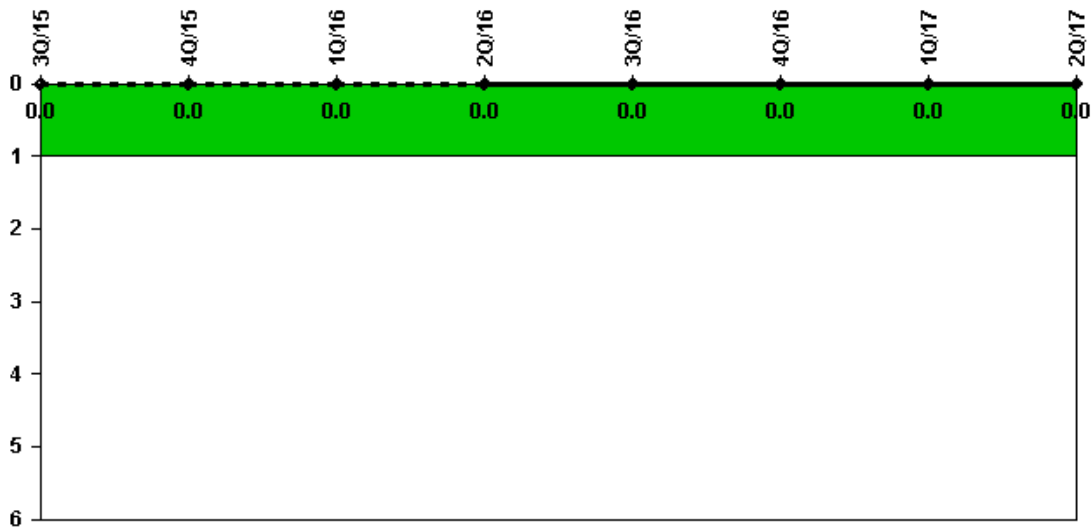
Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2183.0	1492.7	2208.0	2194.7	2159.0	2184.0
Indicator value	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

Notes

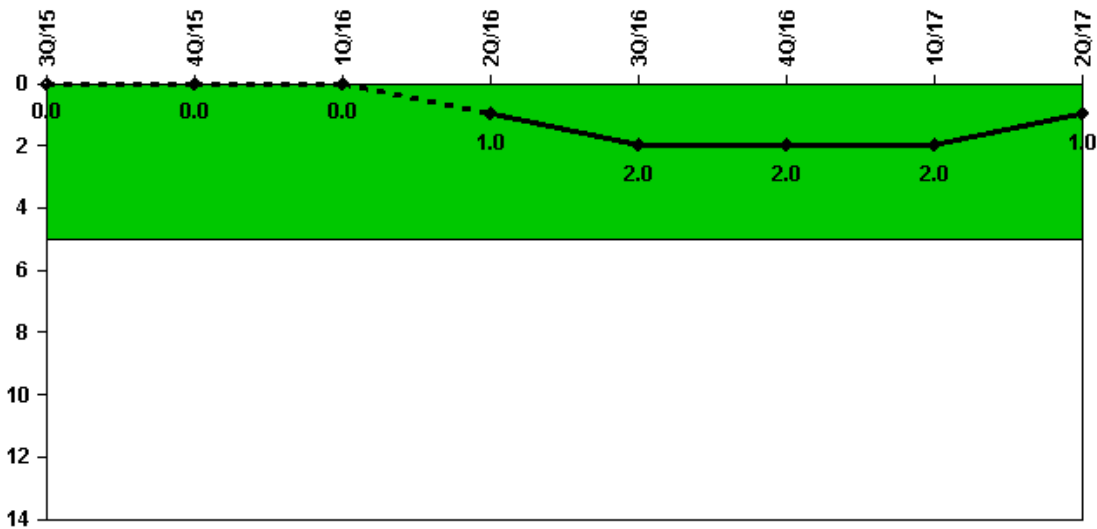
Unplanned Scrams with Complications 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17
 Scrms with complications 0 0 0 0 0 0 0 0

Indicator value 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

TOP

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)3Q/154Q/151Q/162Q/163Q/164Q/161Q/172Q/17

Safety System Functional Failures 0 0 0 1 1 0 0 0

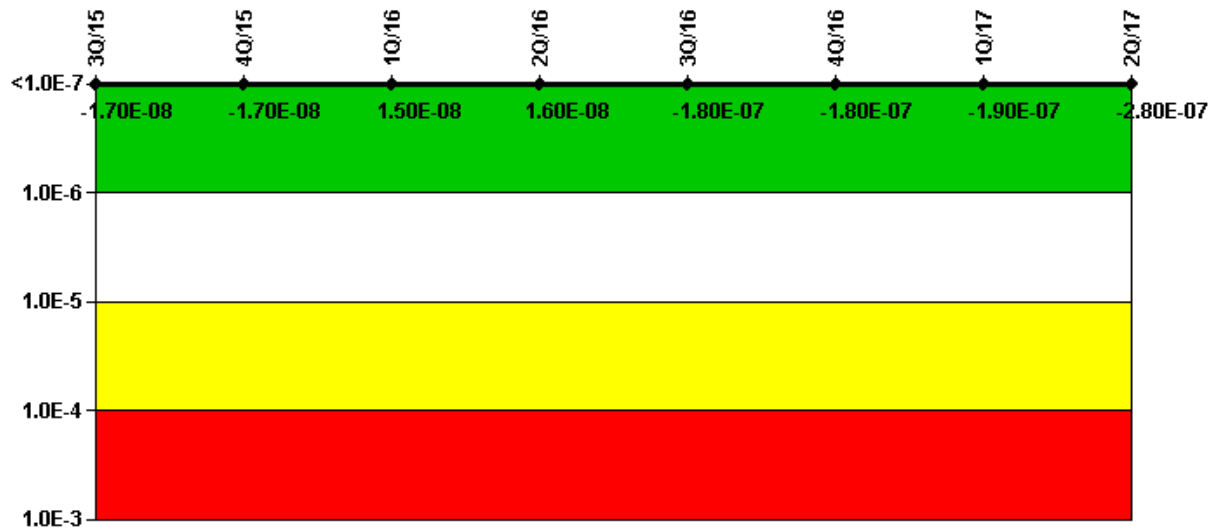
Indicator value 0 0 0 1 2 2 2 1

TOP

Licensee Comments:

3Q/16: LER 2016-001-00, May 2016 AF Diesel Intake Design Deficiency Due to High Energy Line Break (HELB) Concerns. LER 2016-002-00 was issued 7/21/16, for Inadequate protection from Tornado Missiles Due to Non-conforming Design Conditions. 3Q16 U2 CDF and MSPI result were updated using the application specific model BB011b4, which takes credit for the Generation III Westinghouse RCP shutdown seals. The corresponding BY-MSPI-001 Rev 18 was approved in June 2016.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	-1.44E-08	-1.44E-08	1.73E-08	1.85E-08	6.70E-10	7.06E-10	-1.33E-08	-1.89E-08
URI (ΔCDF)	-2.75E-09	-2.75E-09	-2.75E-09	-2.75E-09	-1.81E-07	-1.81E-07	-1.81E-07	-2.59E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.70E-08	-1.70E-08	1.50E-08	1.60E-08	-1.80E-07	-1.80E-07	-1.90E-07	-2.80E-07

▲ TOP

Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	-2.44E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.46E-08	-2.71E-08	-2.71E-08	-1.39E-08
URI (ΔCDF)	-8.61E-09	-8.61E-09	-8.61E-09	-8.61E-09	-6.17E-09	-6.17E-09	-6.17E-09	-6.00E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.30E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.10E-08	-3.30E-08	-3.30E-08	-2.00E-08

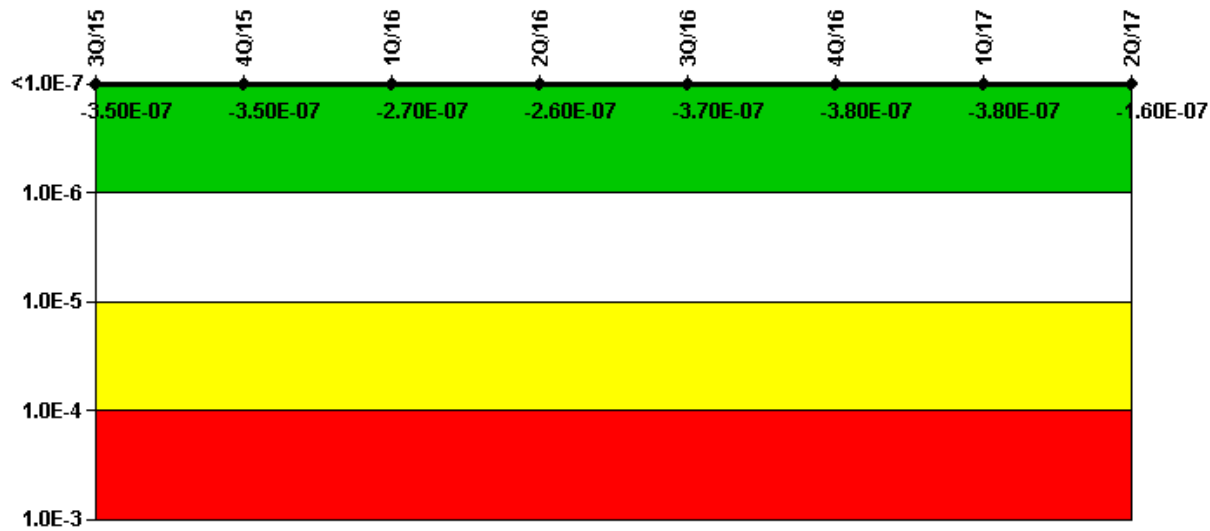
▲ TOP

Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	5.42E-09	4.62E-09	8.53E-08	8.41E-08	-1.04E-08	-1.29E-08	-1.33E-08	2.26E-08
URI (ΔCDF)	-3.57E-07	-3.57E-07	-3.54E-07	-3.45E-07	-3.59E-07	-3.67E-07	-3.67E-07	-1.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.50E-07	-3.50E-07	-2.70E-07	-2.60E-07	-3.70E-07	-3.80E-07	-3.80E-07	-1.60E-07

TOP

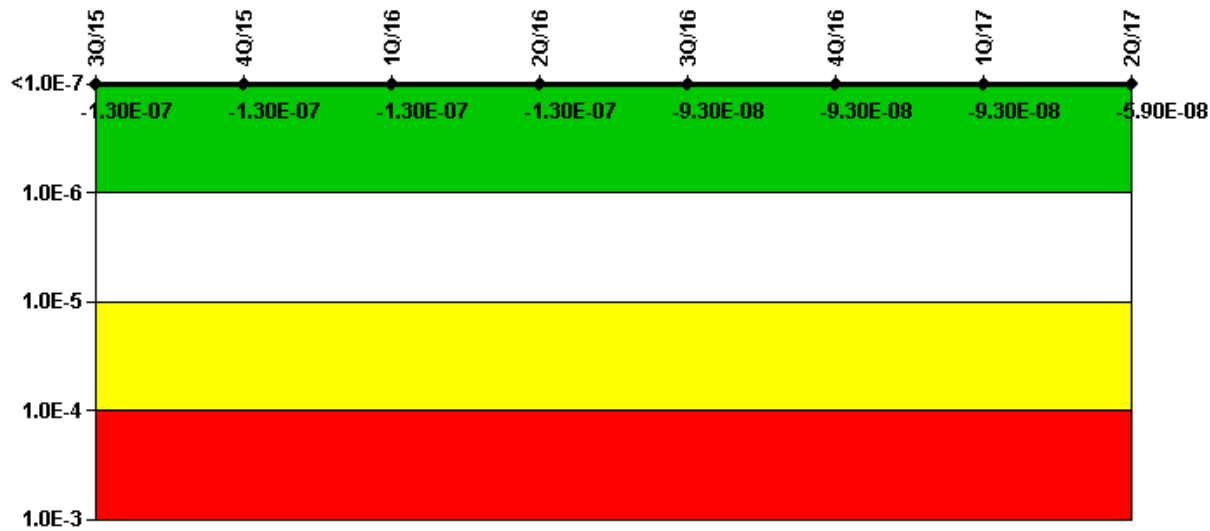
Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

4Q/16: U1-U2 Train A crosstie considered unavailable starting 10/28/11 when standing order 11-057 and 1/2BFRH.1 procedure revisions were issued to remove procedural guidance on use of crosstie modification pending NRC approval. Reference IR 1257908

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-2.38E-08	-2.38E-08	-2.38E-08	-1.42E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-6.92E-08	-6.92E-08	-6.92E-08	-4.45E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-9.30E-08	-9.30E-08	-9.30E-08	-5.90E-08

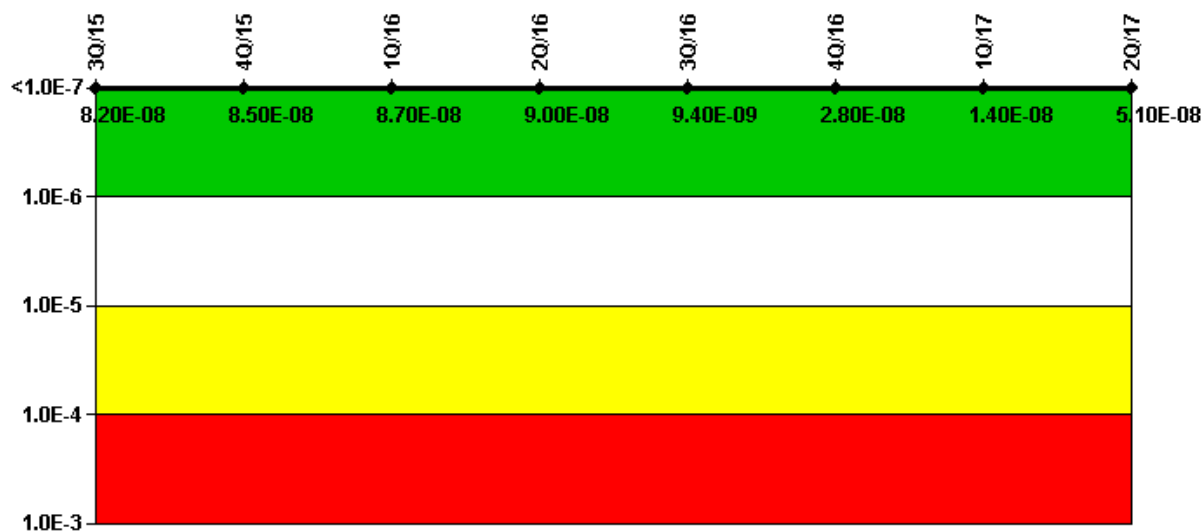
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Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	1.74E-07	1.78E-07	1.80E-07	1.82E-07	6.13E-08	7.98E-08	6.63E-08	1.43E-07
URI (ΔCDF)	-9.23E-08	-9.23E-08	-9.23E-08	-9.23E-08	-5.20E-08	-5.20E-08	-5.20E-08	-9.17E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO

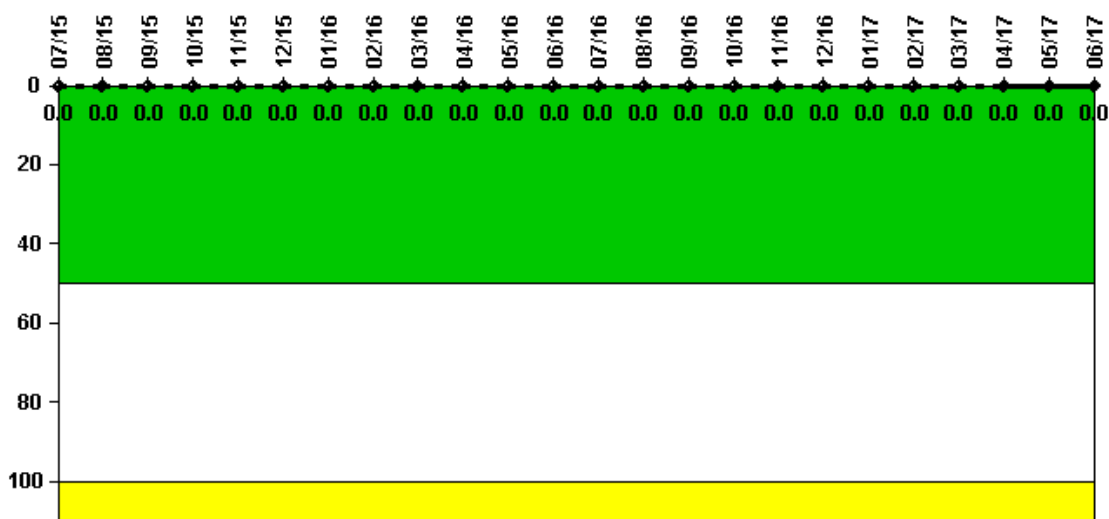
Indicator value 8.20E-08 8.50E-08 8.70E-08 9.00E-08 9.40E-09 2.80E-08 1.40E-08 5.10E-08

▲ TOP

Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Reactor Coolant System Activity

Thresholds: White > 50.0 Yellow > 100.0

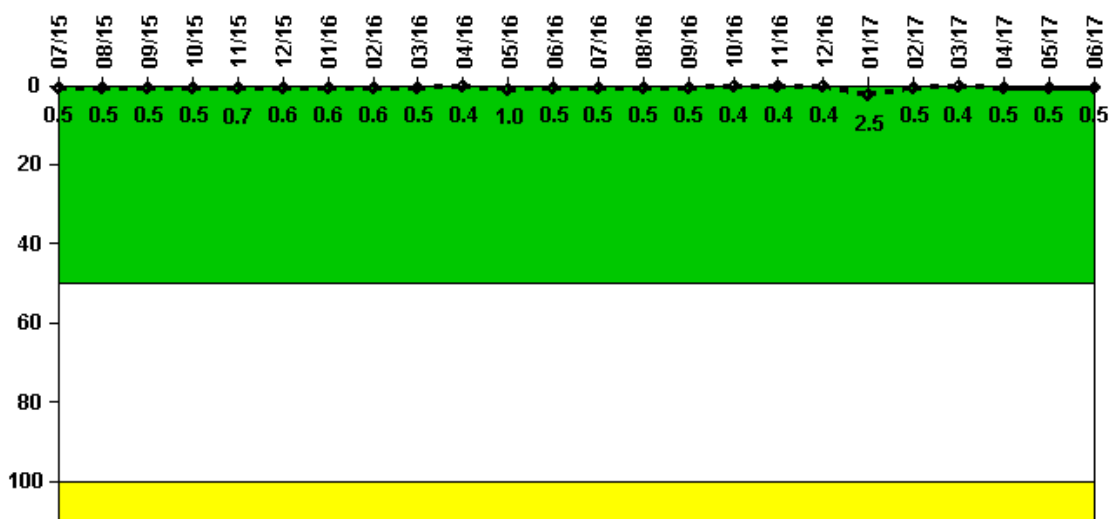
Notes

Reactor Coolant System Activity	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum activity	0.000076	0.000070	0.000071	0.000073	0.000070	0.000078	0.000080	0.000078	0.000092	0.000079	0.000058	0.000050
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17
Maximum activity	0.000074	0.000049	0.000055	0.000054	0.000057	0.000061	0.000065	0.000063	0.000066	0.000067	0.000068	0.000069
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

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Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

Notes

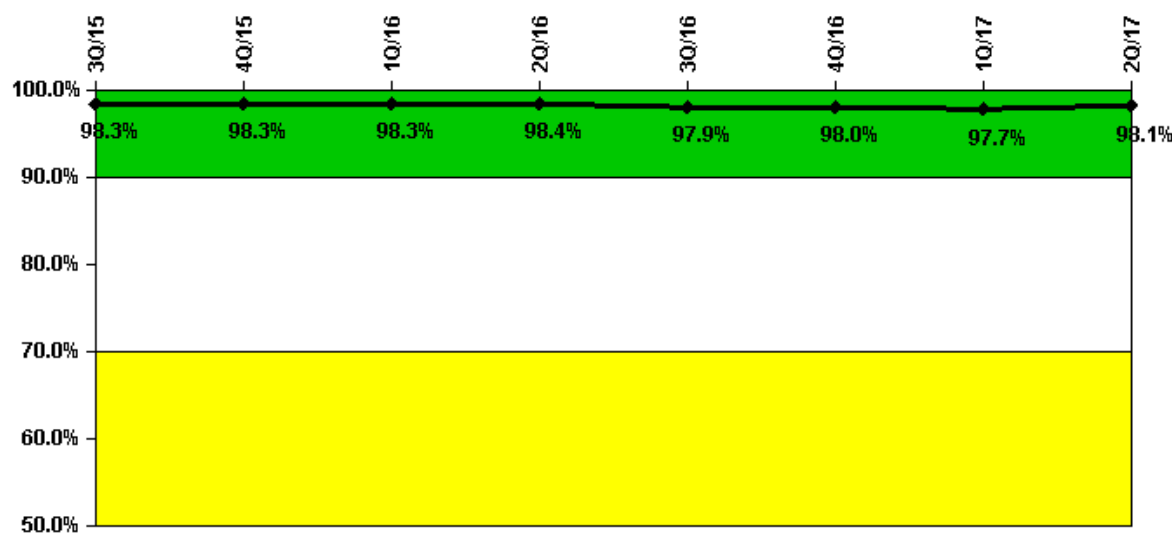
Reactor Coolant System Leakage	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum leakage	0.050	0.050	0.050	0.050	0.070	0.060	0.060	0.060	0.050	0.040	0.100	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Indicator value	0.5	0.5	0.5	0.5	0.7	0.6	0.6	0.6	0.5	0.4	1.0	0.5
Reactor Coolant System Leakage	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17
Maximum leakage	0.050	0.050	0.050	0.040	0.040	0.040	0.250	0.050	0.040	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Indicator value	0.5	0.5	0.5	0.4	0.4	0.4	2.5	0.5	0.4	0.5	0.5	0.5

TOP

Licensee Comments: none

Drill/Exercise Performance

Thresholds: White < 90.0% Yellow < 70.0%

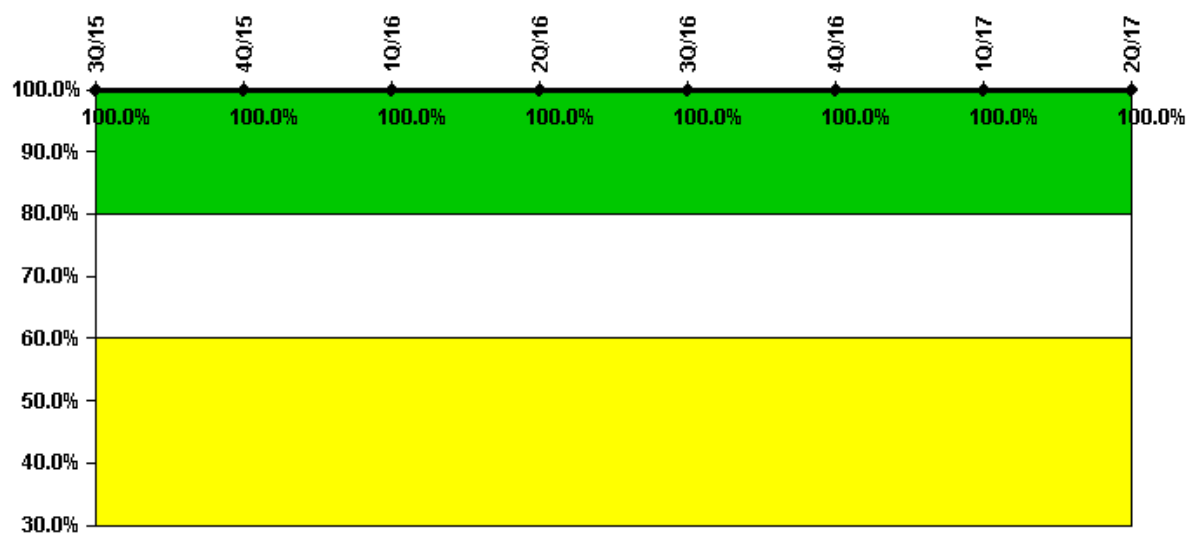
Notes

Drill/Exercise Performance	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Successful opportunities	27.0	32.0	106.0	44.0	29.0	34.0	28.0	55.0
Total opportunities	27.0	32.0	109.0	44.0	32.0	34.0	28.0	56.0

Indicator value **98.3% 98.3% 98.3% 98.4% 97.9% 98.0% 97.7% 98.1%**

▲ TOP

Licensee Comments: none

ERO Drill Participation

Thresholds: White < 80.0% Yellow < 60.0%

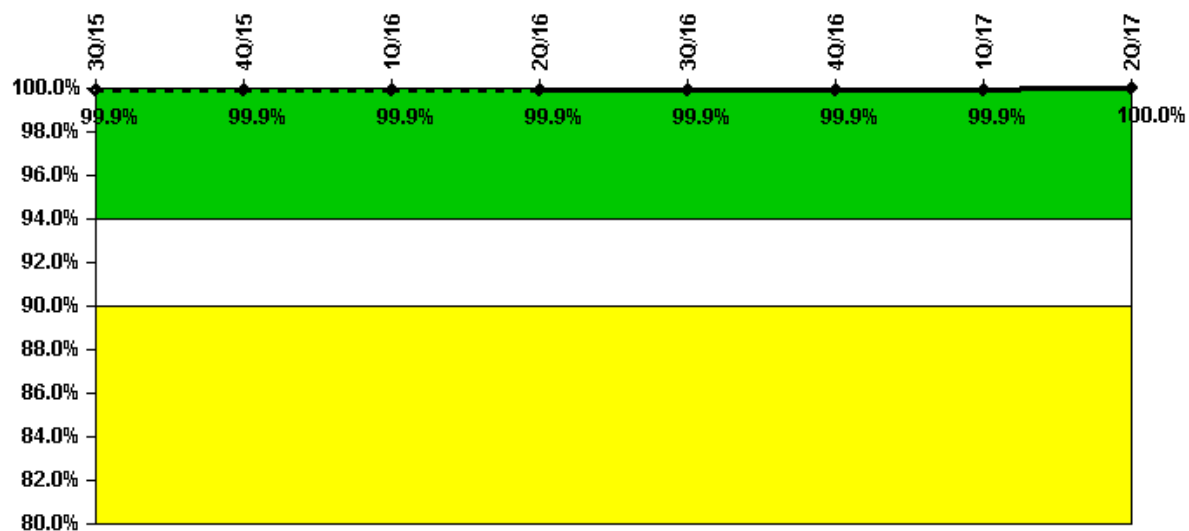
Notes

ERO Drill Participation	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Participating Key personnel	72.0	75.0	76.0	78.0	77.0	77.0	78.0	66.0
Total Key personnel	72.0	75.0	76.0	78.0	77.0	77.0	78.0	66.0

Indicator value **100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%**

▲ TOP

Licensee Comments: none

Alert & Notification System

Thresholds: White < 94.0% Yellow < 90.0%

Notes

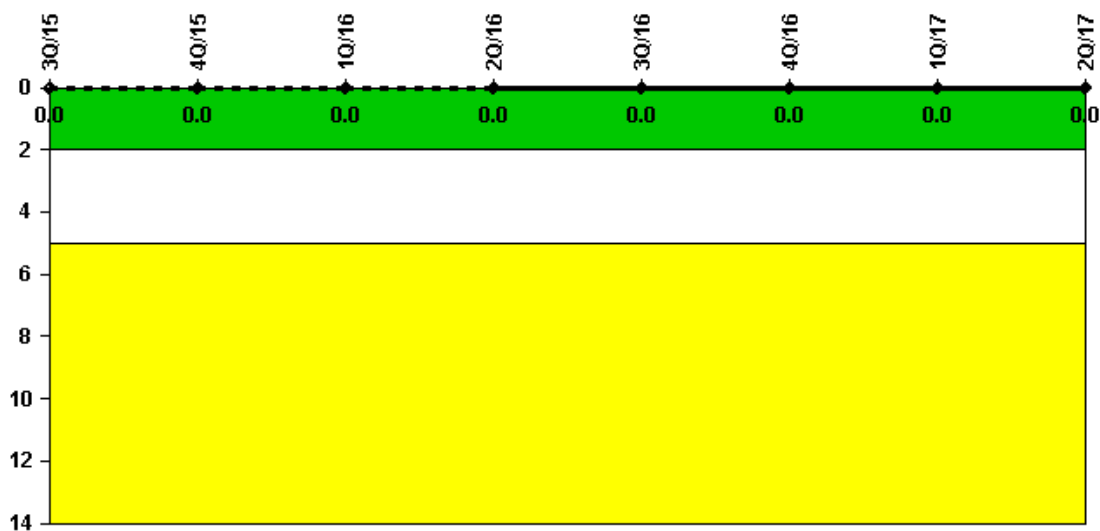
Alert & Notification System	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Successful siren-tests	3962	3903	3897	3902	3900	3780	3964	3904
Total sirens-tests	3965	3904	3904	3904	3904	3782	3965	3904

Indicator value 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 100.0%

▲ TOP

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

Notes

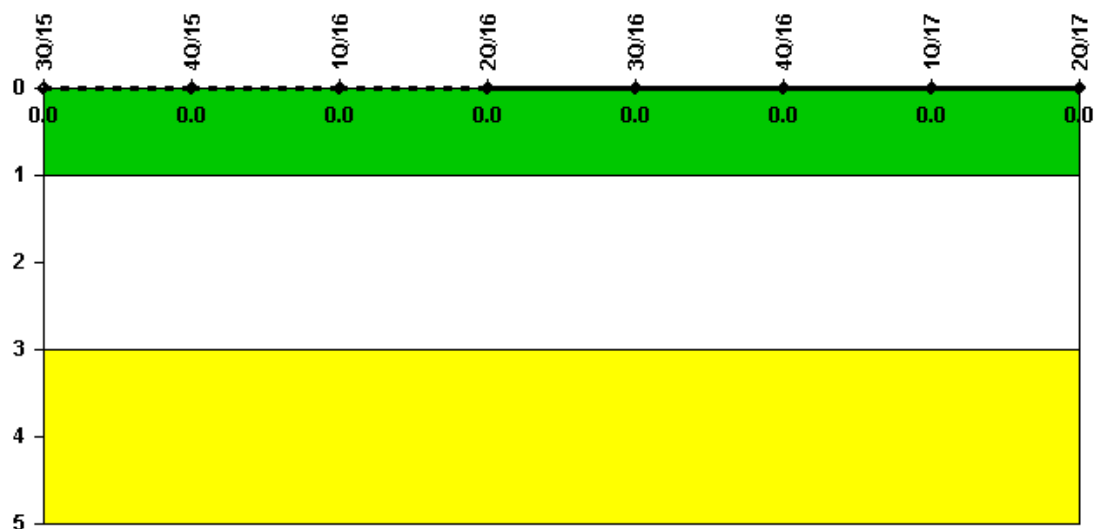
Occupational Exposure Control Effectiveness 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17

High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

▲ TOP

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17

RETS/ODCM occurrences 0 0 0 0 0 0 0 0

Indicator value 0 0 0 0 0 0 0 0

TOP

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

Current data as of: July 26, 2017

Page Last Reviewed/Updated Wednesday, June 07, 2017



[Home](#) > [Nuclear Reactors](#) > [Operating Reactors](#) > [Reactor Oversight Process](#) > [Plant Summaries](#) > [Byron 2](#) > [Quarterly Plant Inspection Findings](#)

Byron 2 – Quarterly Performance Indicators

3Q/2017 Performance Indicators

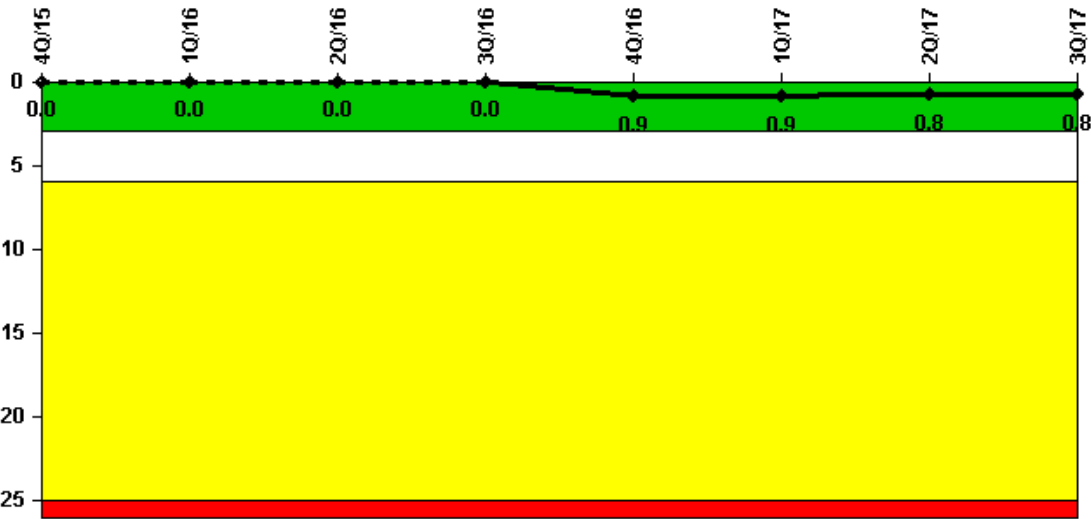
The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Unit 2 Change file Jan 2017

On this page:

- [Unplanned Scrams \(IE01\)](#)
- [Unplanned Power Changes per 7000 Critical Hours \(IE03\)](#)
- [Unplanned Scrams with Complications \(IE04\)](#)
- [Safety System Functional Failures \(MS05\)](#)
- [Emergency AC Power Systems \(MS06\)](#)
- [High Pressure Injection Systems \(MS07\)](#)
- [Heat Removal Systems \(MS08\)](#)
- [Residual Heat Removal Systems \(MS09\)](#)
- [Cooling Water Systems \(MS10\)](#)
- [Reactor Coolant System Activity \(BI01\)](#)
- [Reactor Coolant System Leakage \(BI02\)](#)
- [Drill/Exercise Performance \(EP01\)](#)
- [Emergency Response Organization Drill Participation \(EP02\)](#)
- [Alert and Notification System Reliability \(EP03\)](#)
- [Occupational Exposure Control Effectiveness \(OR01\)](#)
- [RETS/OCDEU Radiological Effluent Occurrence \(PR01\)](#)
- [Protected Area Equipment \(PP01\)](#)

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

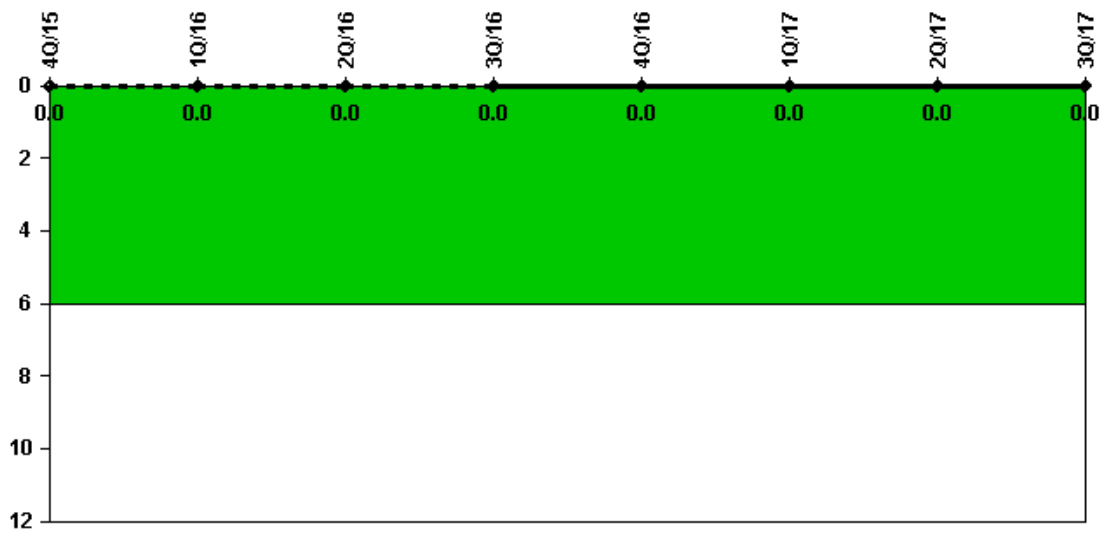
Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Unplanned scrams	0	0	0	0	1.0	0	0	0
Critical hours	2209.0	2183.0	1492.7	2208.0	2194.7	2159.0	2184.0	2208.0
Indicator value	0	0	0	0	0.9	0.9	0.8	0.8

TOP

Licensee Comments:
4Q/16: U2 Reactor was manually tripped due to a loss of FW to the 'B' and 'C' steam generators. The loss of FW was caused by a water hammer prevention system (WHPS) actuation, which occurred when MCC 234V4 de-energized. MCC 234V4 feed breaker was replaced. ICES#324765

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

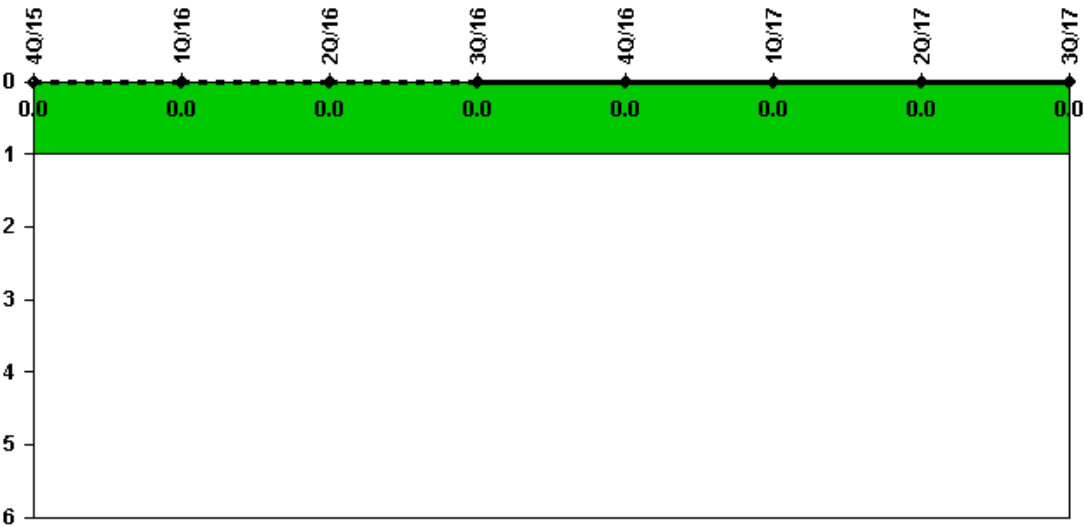
Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2209.0	2183.0	1492.7	2208.0	2194.7	2159.0	2184.0	2208.0
Indicator value	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

Notes

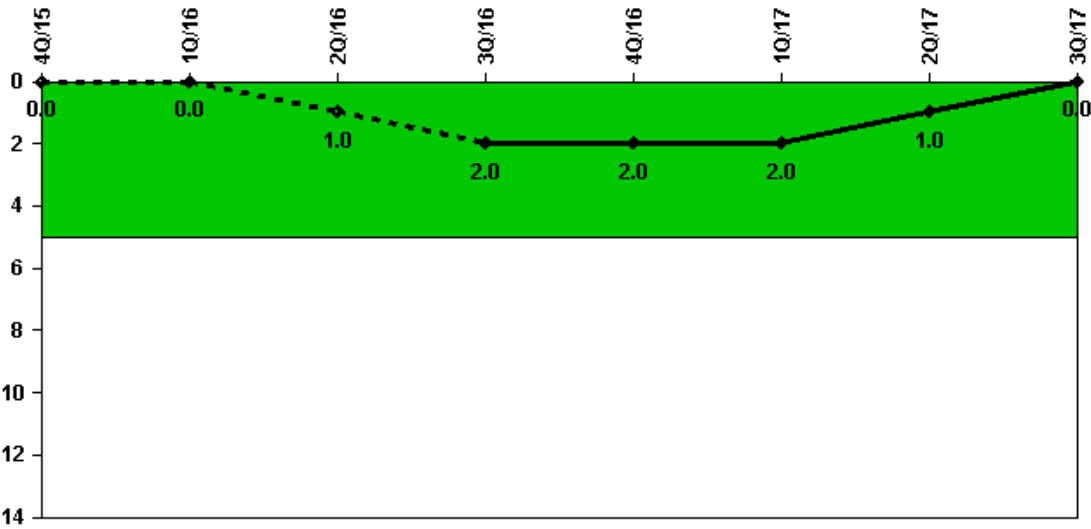
Unplanned Scrams with Complications	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Scrams with complications	0	0	0	0	0	0	0	0

Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TOP

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

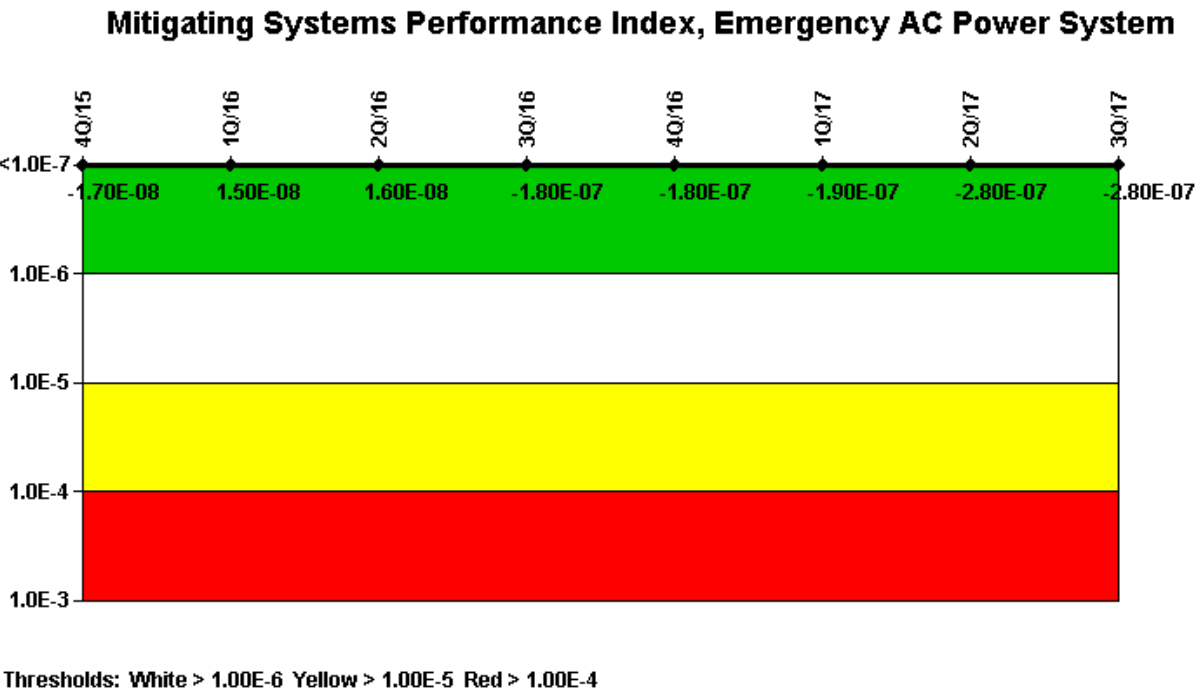
Notes

Safety System Functional Failures (PWR)	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Safety System Functional Failures	0	0	1	1	0	0	0	0

Indicator value	0	0	1	2	2	2	1	0

TOP

Licensee Comments:
3Q/16: LER 2016-001-00, May 2016 AF Diesel Intake Design Deficiency Due to High Energy Line Break (HELB) Concerns. LER 2016-002-00 was issued 7/21/16, for Inadequate protection from Tornado Missiles Due to Non-conforming Design Conditions. 3Q16 U2 CDF and MSPI result were updated using the application specific model BB011b4, which takes credit for the Generation III Westinghouse RCP shutdown seals. The corresponding BY-MSPI-001 Rev 18 was approved in June 2016.

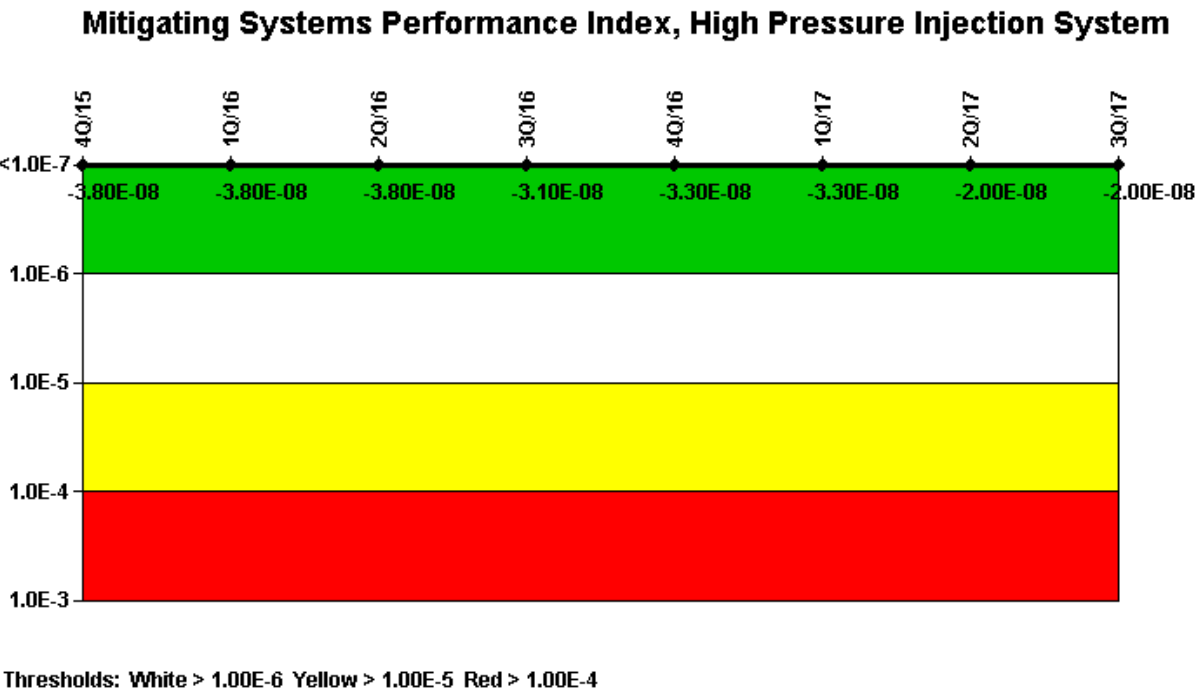


Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	-1.44E-08	1.73E-08	1.85E-08	6.70E-10	7.06E-10	-1.33E-08	-1.89E-08	-1.95E-08
URI (ΔCDF)	-2.75E-09	-2.75E-09	-2.75E-09	-1.81E-07	-1.81E-07	-1.81E-07	-2.59E-07	-2.59E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.70E-08	1.50E-08	1.60E-08	-1.80E-07	-1.80E-07	-1.90E-07	-2.80E-07	-2.80E-07

TOP

Licensee Comments:
2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).
3Q/16: Changed PRA Parameter(s).



Notes

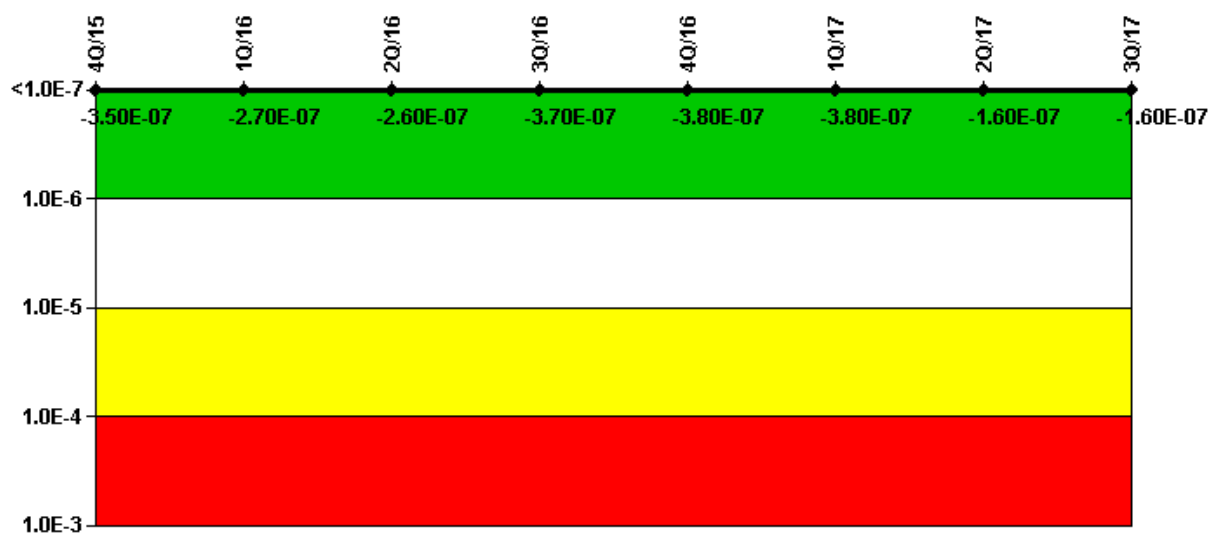
Mitigating Systems Performance Index, High Pressure Injection System

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.46E-08	-2.71E-08	-2.71E-08	-1.39E-08	-1.39E-08
URI (ΔCDF)	-8.61E-09	-8.61E-09	-8.61E-09	-6.17E-09	-6.17E-09	-6.17E-09	-6.00E-09	-6.00E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.10E-08	-3.30E-08	-3.30E-08	-2.00E-08	-2.00E-08

TOP

Licensee Comments:
2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).
3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	4.62E-09	8.53E-08	8.41E-08	-1.04E-08	-1.29E-08	-1.33E-08	2.26E-08	1.80E-08
URI (ΔCDF)	-3.57E-07	-3.54E-07	-3.45E-07	-3.59E-07	-3.67E-07	-3.67E-07	-1.85E-07	-1.83E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.50E-07	-2.70E-07	-2.60E-07	-3.70E-07	-3.80E-07	-3.80E-07	-1.60E-07	-1.60E-07

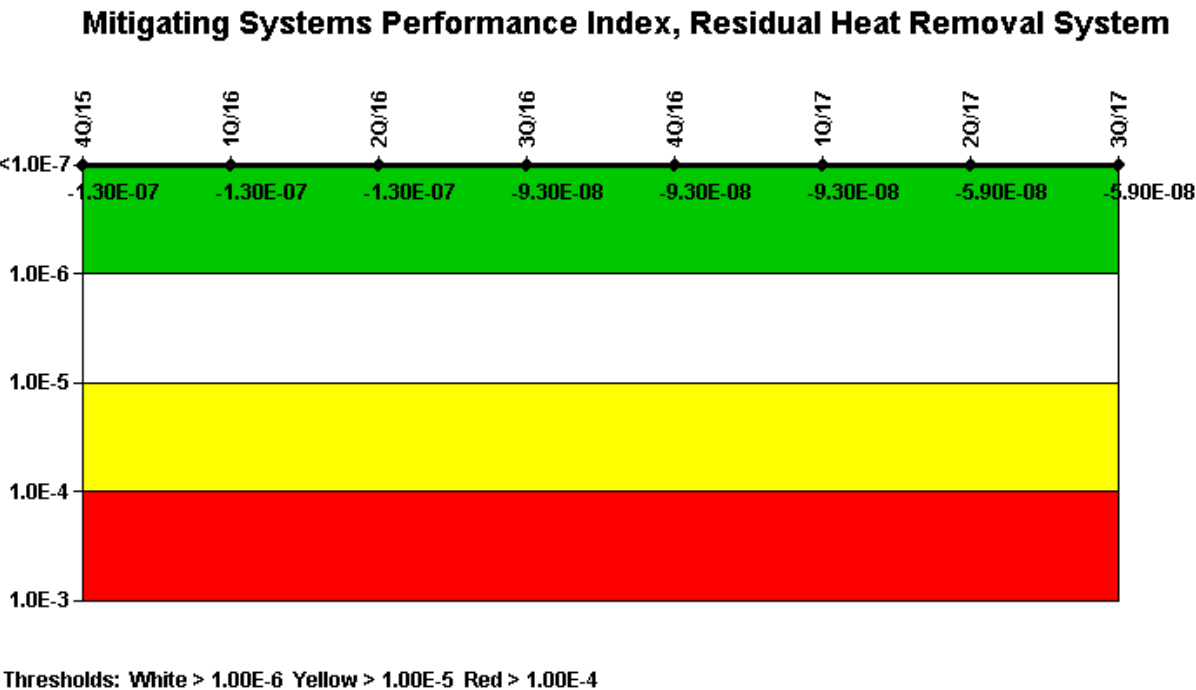
▲ TOP

Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

4Q/16: U1-U2 Train A crosstie considered unavailable starting 10/28/11 when standing order 11-057 and 1/2BFRH.1 procedure revisions were issued to remove procedural guidance on use of crosstie modification pending NRC approval. Reference IR 1257908

3Q/16: Changed PRA Parameter(s).



Notes

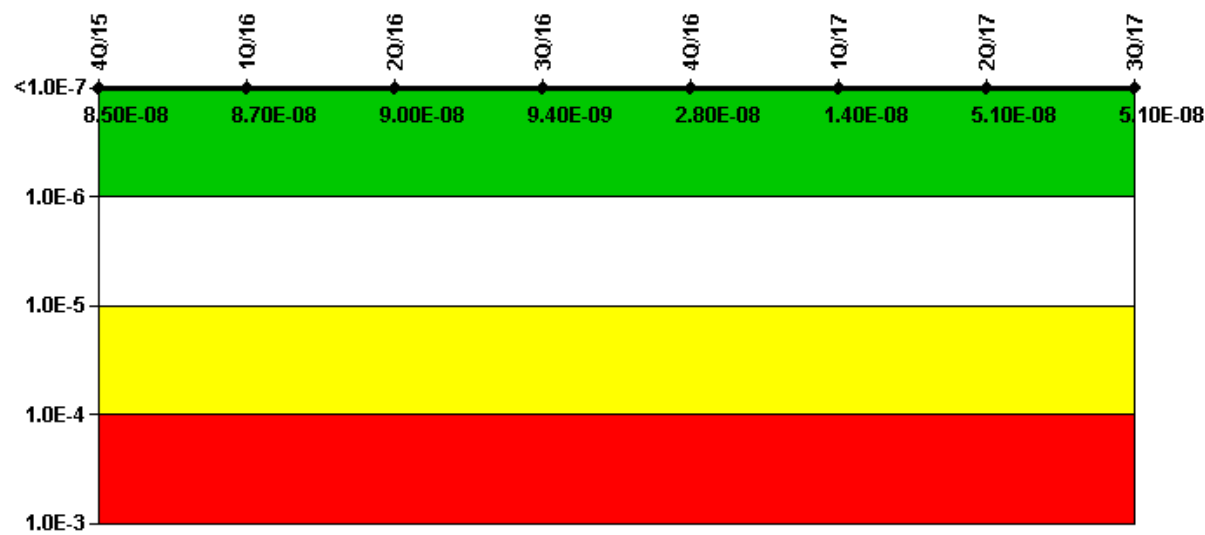
Mitigating Systems Performance Index, Residual Heat Removal System

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-3.33E-08	-2.38E-08	-2.38E-08	-2.38E-08	-1.42E-08	-1.42E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-9.77E-08	-6.92E-08	-6.92E-08	-6.92E-08	-4.45E-08	-4.45E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-9.30E-08	-9.30E-08	-9.30E-08	-5.90E-08	-5.90E-08

TOP

Licensee Comments:
2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).
3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

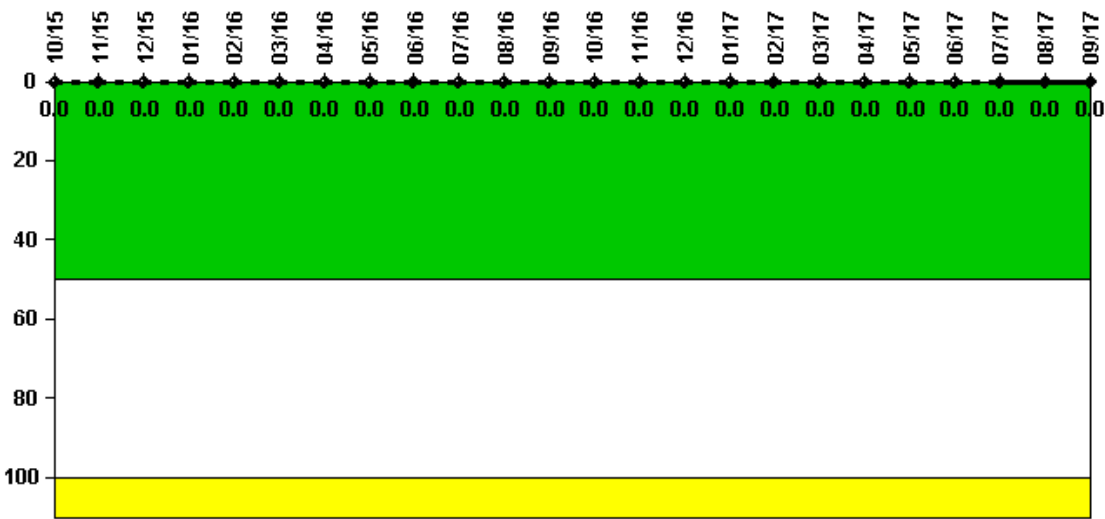
Mitigating Systems Performance Index, Cooling Water Systems

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	1.78E-07	1.80E-07	1.82E-07	6.13E-08	7.98E-08	6.63E-08	1.43E-07	1.43E-07
URI (ΔCDF)	-9.23E-08	-9.23E-08	-9.23E-08	-5.20E-08	-5.20E-08	-5.20E-08	-9.17E-08	-9.17E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	8.50E-08	8.70E-08	9.00E-08	9.40E-09	2.80E-08	1.40E-08	5.10E-08	5.10E-08

TOP

Licensee Comments:
2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).
3Q/16: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

Notes

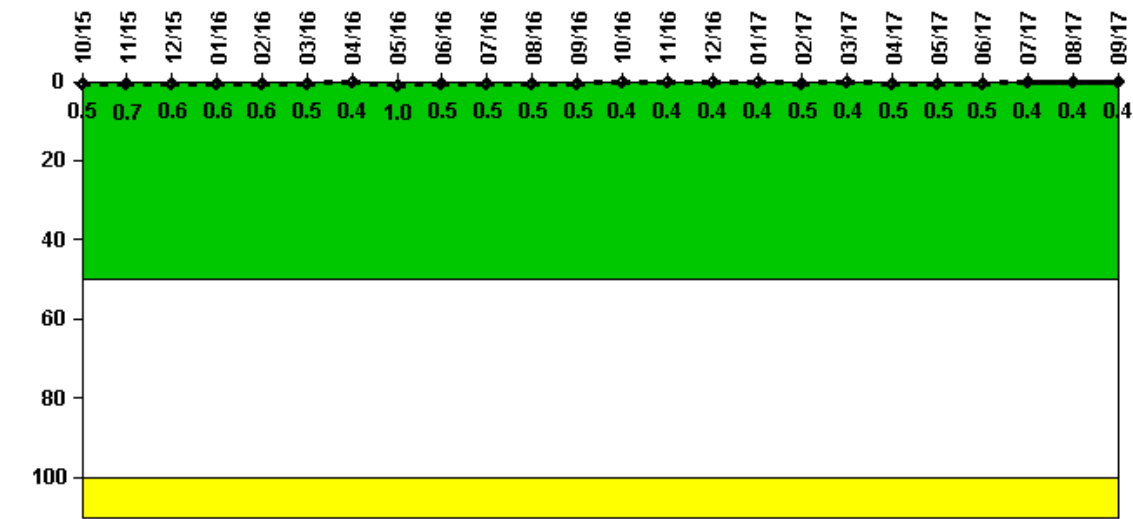
Reactor Coolant System Activity	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum activity	0.000073	0.000070	0.000078	0.000080	0.000078	0.000092	0.000079	0.000058	0.000050	0.000074	0.000049	0.000055
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17
Maximum activity	0.000054	0.000057	0.000061	0.000065	0.000063	0.000066	0.000067	0.000068	0.000069	0.000070	0.000081	0.000112
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

Notes

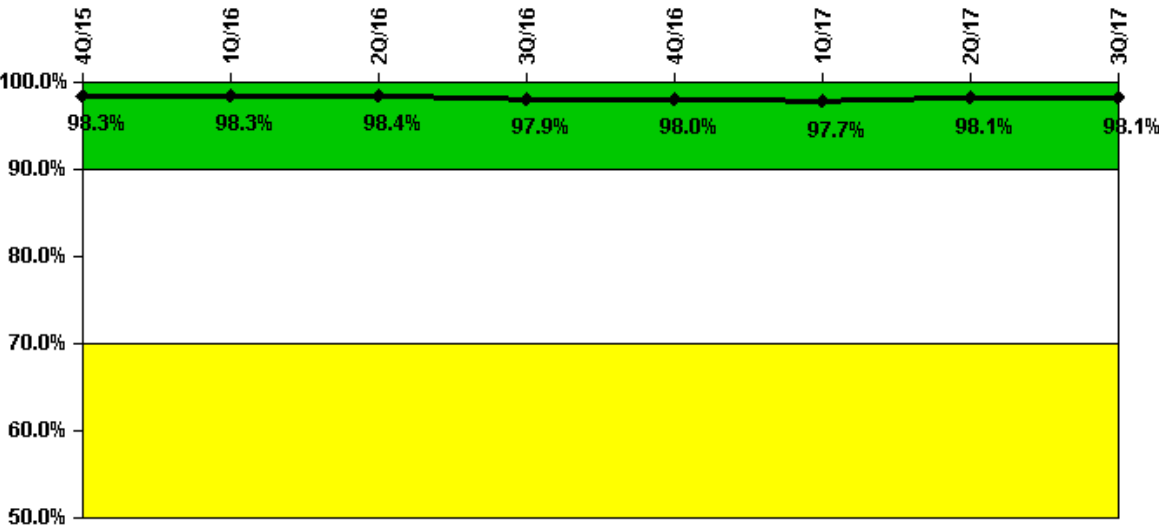
Reactor Coolant System Leakage	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum leakage	0.050	0.070	0.060	0.060	0.060	0.050	0.040	0.100	0.050	0.050	0.050	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	0.7	0.6	0.6	0.6	0.5	0.4	1.0	0.5	0.5	0.5	0.5

Reactor Coolant System Leakage	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17
Maximum leakage	0.040	0.040	0.040	0.040	0.050	0.040	0.050	0.050	0.050	0.040	0.040	0.040
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4

TOP

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

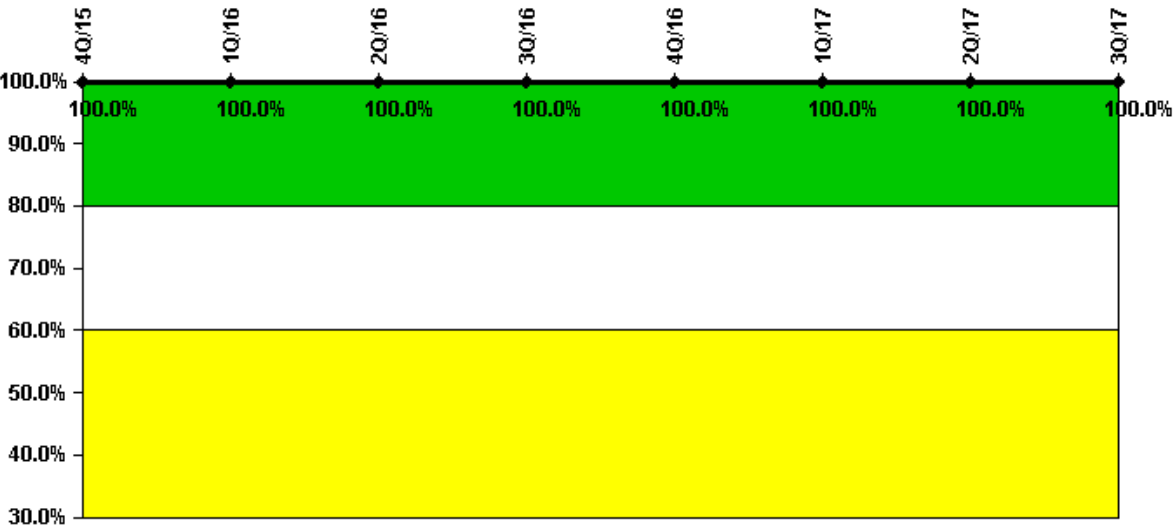
Drill/Exercise Performance	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Successful opportunities	32.0	106.0	44.0	29.0	34.0	28.0	55.0	40.0
Total opportunities	32.0	109.0	44.0	32.0	34.0	28.0	56.0	40.0

Indicator value 98.3% 98.3% 98.4% 97.9% 98.0% 97.7% 98.1% 98.1%

TOP

Licensee Comments: none

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

Notes

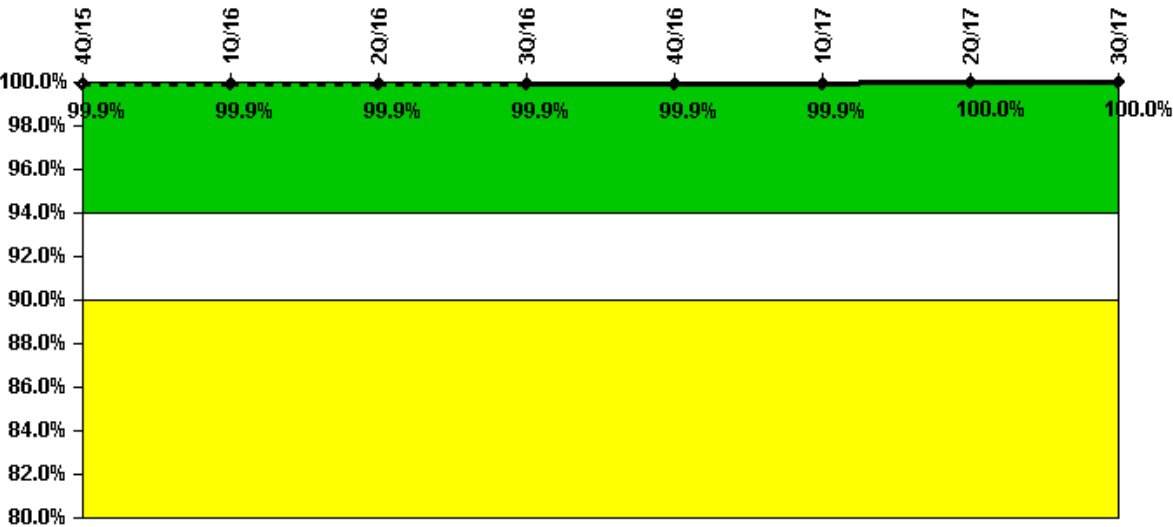
ERO Drill Participation	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Participating Key personnel	75.0	76.0	78.0	77.0	77.0	78.0	66.0	70.0
Total Key personnel	75.0	76.0	78.0	77.0	77.0	78.0	66.0	70.0

Indicator value 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%

TOP

Licensee Comments: none

Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

Notes

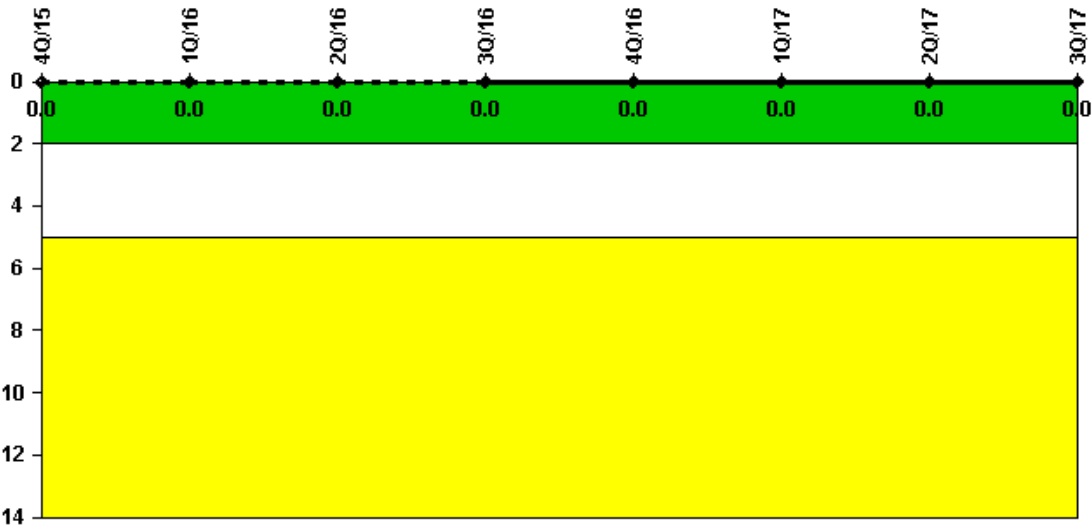
Alert & Notification System	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Successful siren-tests	3903	3897	3902	3900	3780	3964	3904	3842
Total sirens-tests	3904	3904	3904	3904	3782	3965	3904	3843

Indicator value 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 100.0% 100.0%

TOP

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

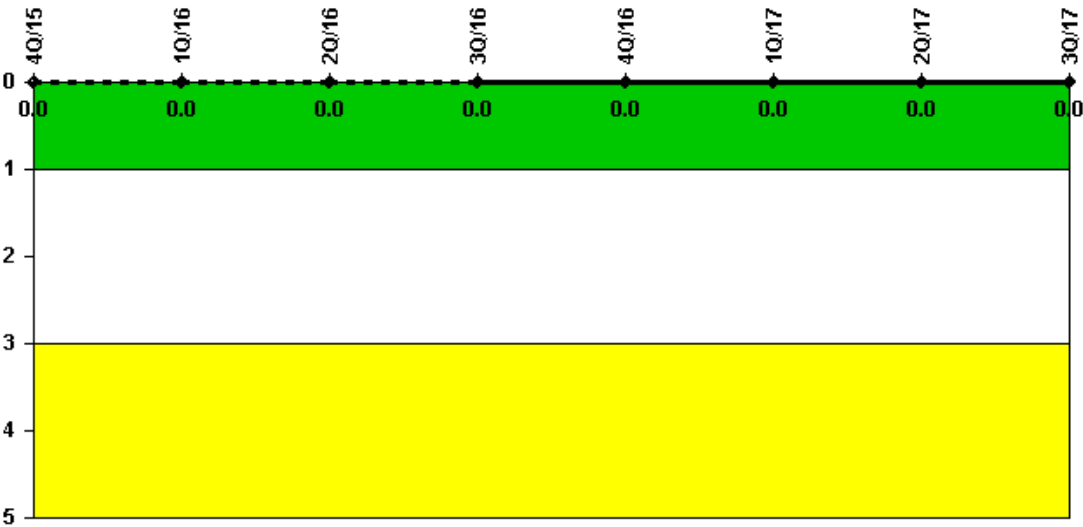
Notes

Occupational Exposure Control Effectiveness	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent4Q/151Q/162Q/163Q/164Q/161Q/172Q/173Q/17

RETS/ODCM occurrences000000000

Indicator value000000000

TOP

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

Current data as of: October 31, 2017

Page Last Reviewed/Updated Monday, November 06, 2017



Home > Nuclear Reactors > Operating Reactors > Reactor Oversight Process > Plant Summaries> Byron 2 > Quarterly Plant Inspection Findings

Byron 2 – Quarterly Performance Indicators

4Q/2017 Performance Indicators

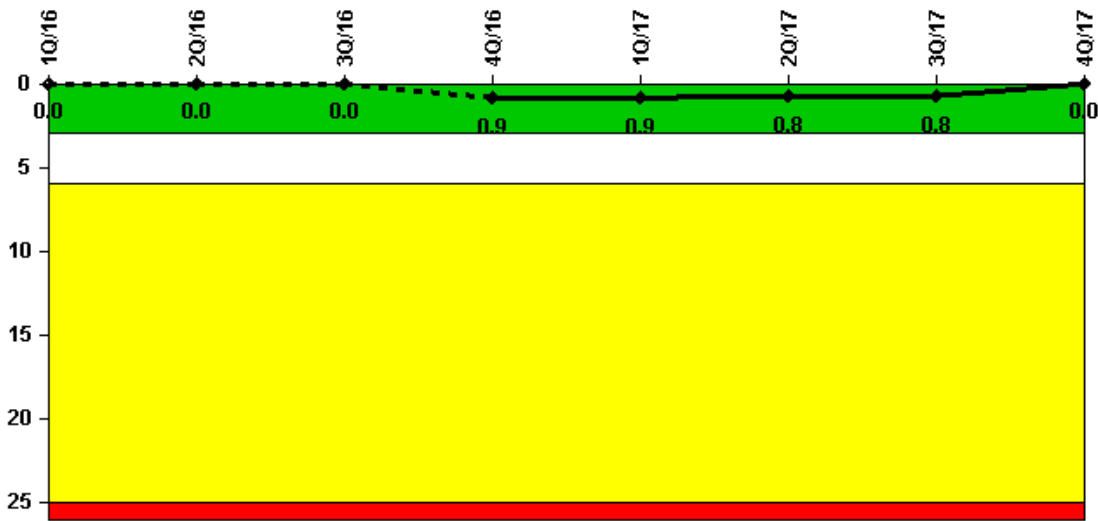
The solid trend line represents the current reporting period.

Licensee's General Comments: Byron Station 4Q2017 U2

On this page:

- Unplanned Scrams (IE01)
- Unplanned Power Changes per 7000 Critical Hours (IE03)
- Unplanned Scrams with Complications (IE04)
- Safety System Functional Failures (MS05)
- Emergency AC Power Systems (MS06)
- High Pressure Injection Systems (MS07)
- Heat Removal Systems (MS08)
- Residual Heat Removal Systems (MS09)
- Cooling Water Systems (MS10)
- Reactor Coolant System Activity (BI01)
- Reactor Coolant System Leakage (BI02)
- Drill/Exercise Performance (EP01)
- Emergency Response Organization Drill Participation (EP02)
- Alert and Notification System Reliability (EP03)
- Occupational Exposure Control Effectiveness (OR01)
- RETS/OCDE Radiological Effluent Occurrence (PR01)
- Protected Area Equipment (PP01)

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

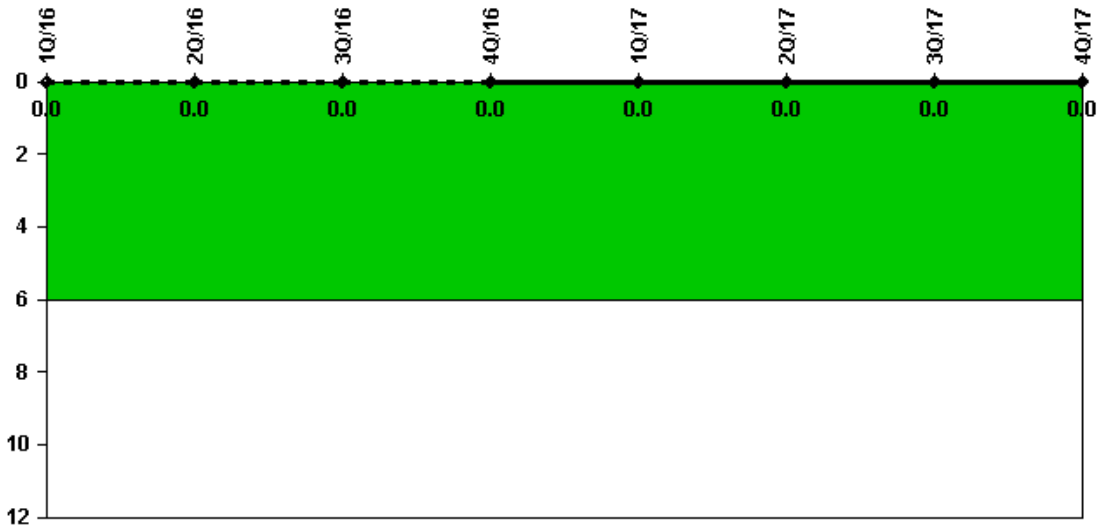
Unplanned Scrams per 7000 Critical Hrs	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Unplanned scrams	0	0	0	1.0	0	0	0	0
Critical hours	2183.0	1492.7	2208.0	2194.7	2159.0	2184.0	2208.0	1751.9
Indicator value	0	0	0	0.9	0.9	0.8	0.8	0

TOP

Licensee Comments:

4Q/16: U2 Reactor was manually tripped due to a loss of FW to the 'B' and 'C' steam generators. The loss of FW was caused by a water hammer prevention system (WHPS) actuation, which occurred when MCC 234V4 de-energized. MCC 234V4 feed breaker was replaced. ICES#324765

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

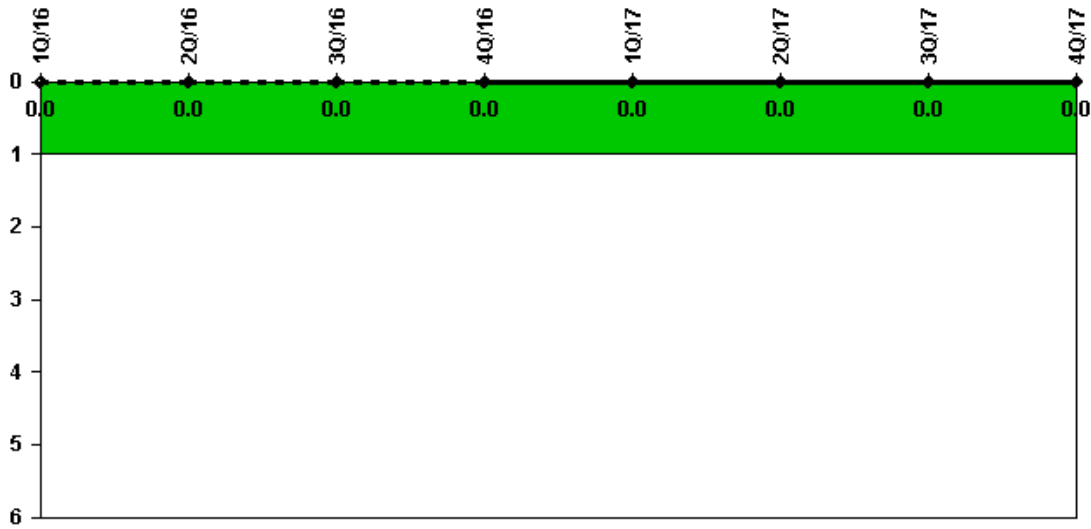
Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2183.0	1492.7	2208.0	2194.7	2159.0	2184.0	2208.0	1751.9
Indicator value	0	0	0	0	0	0	0	0

[TOP](#)

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

Notes

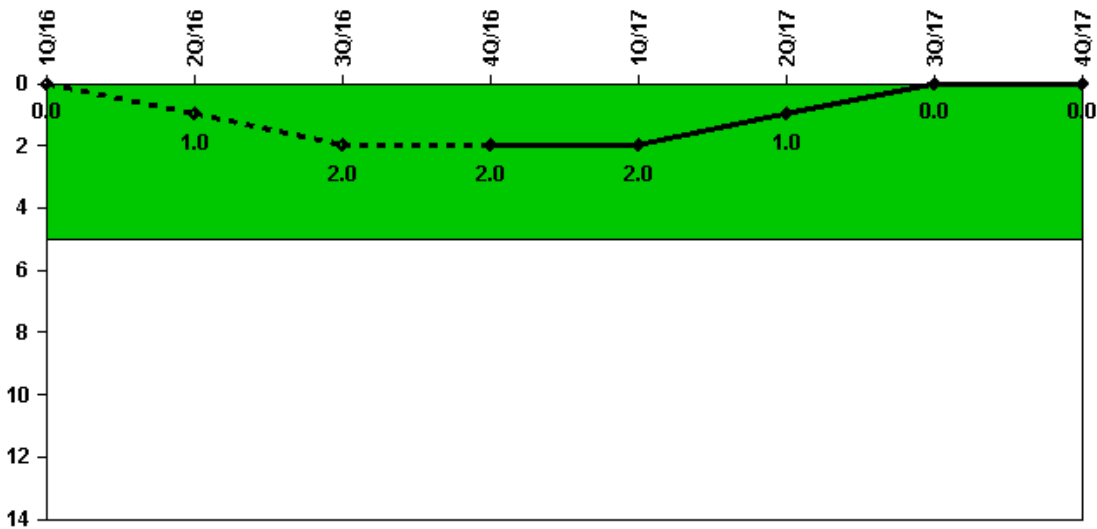
Unplanned Scrams with Complications 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17 4Q/17
 Scrms with complications 0 0 0 0 0 0 0 0

Indicator value 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

TOP

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)1Q/162Q/163Q/164Q/161Q/172Q/173Q/174Q/17

Safety System Functional Failures 0 1 1 0 0 0 0 0

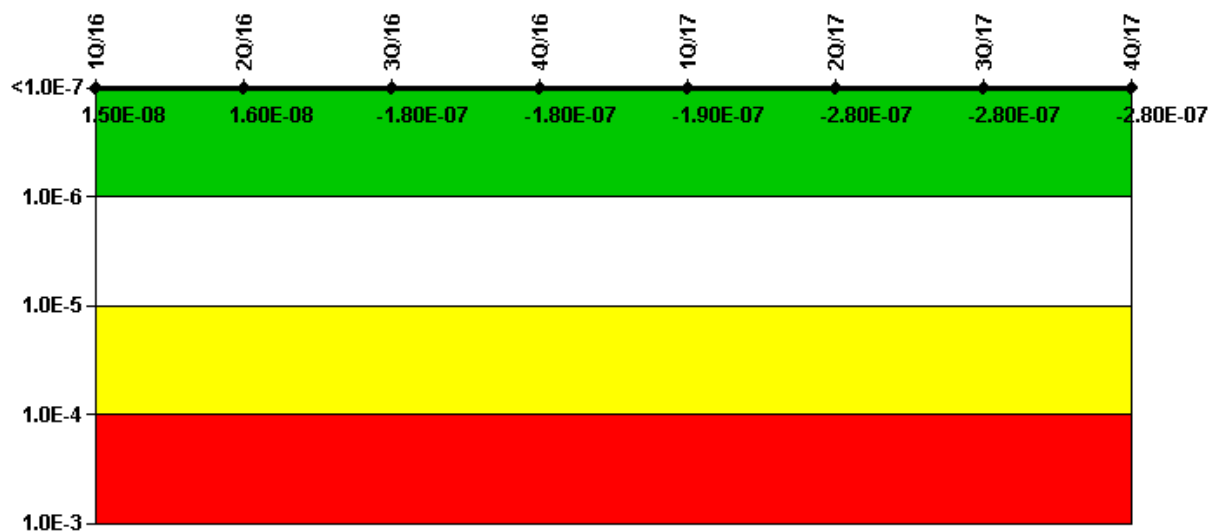
Indicator value 0 1 2 2 2 1 0 0

TOP

Licensee Comments:

3Q/16: LER 2016-001-00, May 2016 AF Diesel Intake Design Deficiency Due to High Energy Line Break (HELB) Concerns. LER 2016-002-00 was issued 7/21/16, for Inadequate protection from Tornado Missiles Due to Non-conforming Design Conditions. 3Q16 U2 CDF and MSPI result were updated using the application specific model BB011b4, which takes credit for the Generation III Westinghouse RCP shutdown seals. The corresponding BY-MSPI-001 Rev 18 was approved in June 2016.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	1.73E-08	1.85E-08	6.70E-10	7.06E-10	-1.33E-08	-1.89E-08	-1.95E-08	-1.95E-08
URI (ΔCDF)	-2.75E-09	-2.75E-09	-1.81E-07	-1.81E-07	-1.81E-07	-2.59E-07	-2.59E-07	-2.59E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.50E-08	1.60E-08	-1.80E-07	-1.80E-07	-1.90E-07	-2.80E-07	-2.80E-07	-2.80E-07

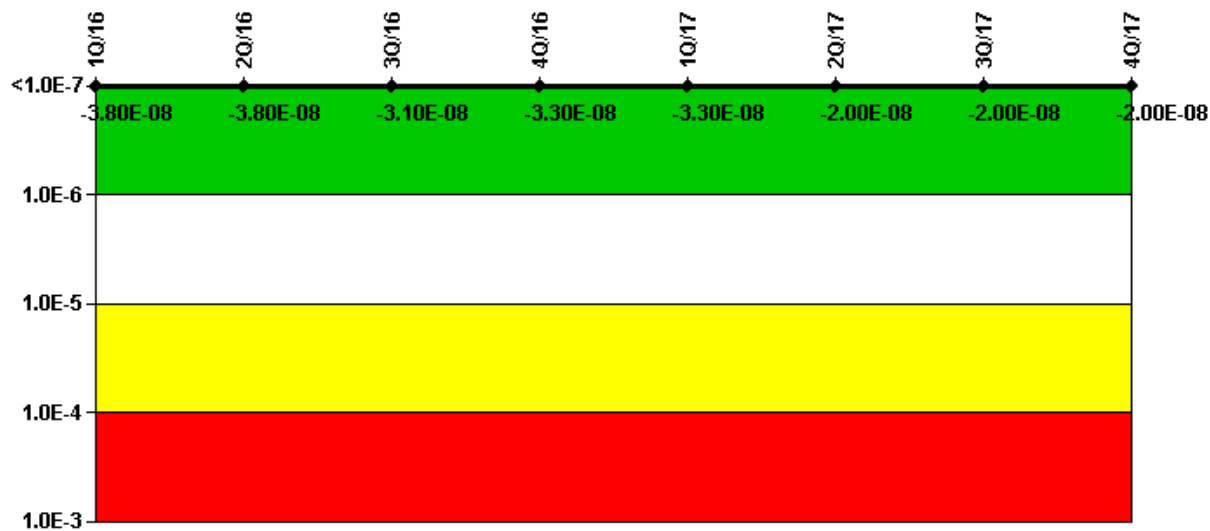
▲ TOP

Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	-2.89E-08	-2.89E-08	-2.46E-08	-2.71E-08	-2.71E-08	-1.39E-08	-1.39E-08	-1.39E-08
URI (ΔCDF)	-8.61E-09	-8.61E-09	-6.17E-09	-6.17E-09	-6.17E-09	-6.00E-09	-6.00E-09	-6.00E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.10E-08	-3.30E-08	-3.30E-08	-2.00E-08	-2.00E-08	-2.00E-08

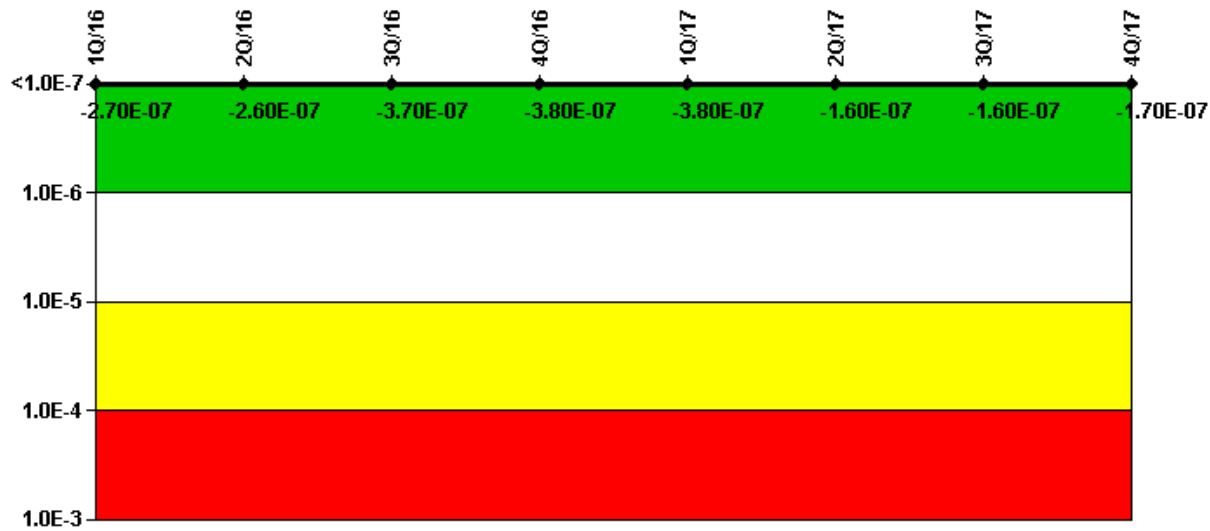
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Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	8.53E-08	8.41E-08	-1.04E-08	-1.29E-08	-1.33E-08	2.26E-08	1.80E-08	1.28E-08
URI (ΔCDF)	-3.54E-07	-3.45E-07	-3.59E-07	-3.67E-07	-3.67E-07	-1.85E-07	-1.83E-07	-1.87E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.70E-07	-2.60E-07	-3.70E-07	-3.80E-07	-3.80E-07	-1.60E-07	-1.60E-07	-1.70E-07

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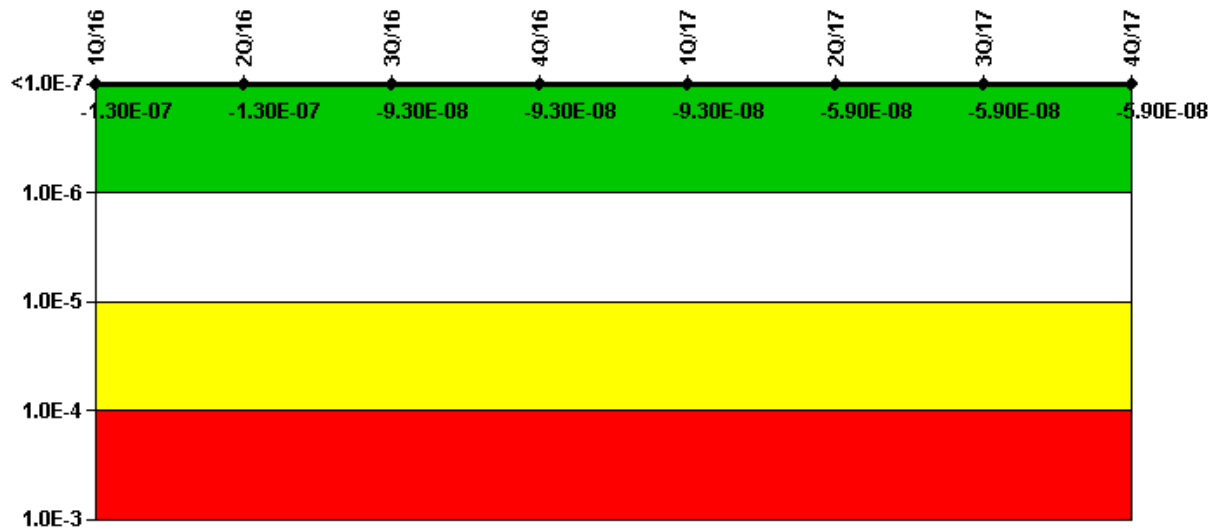
Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

4Q/16: U1-U2 Train A crosstie considered unavailable starting 10/28/11 when standing order 11-057 and 1/2BFRH.1 procedure revisions were issued to remove procedural guidance on use of crosstie modification pending NRC approval. Reference IR 1257908

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	-3.33E-08	-3.33E-08	-2.38E-08	-2.38E-08	-2.38E-08	-1.42E-08	-1.42E-08	-1.42E-08
URI (ΔCDF)	-9.77E-08	-9.77E-08	-6.92E-08	-6.92E-08	-6.92E-08	-4.45E-08	-4.45E-08	-4.45E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-9.30E-08	-9.30E-08	-9.30E-08	-5.90E-08	-5.90E-08	-5.90E-08

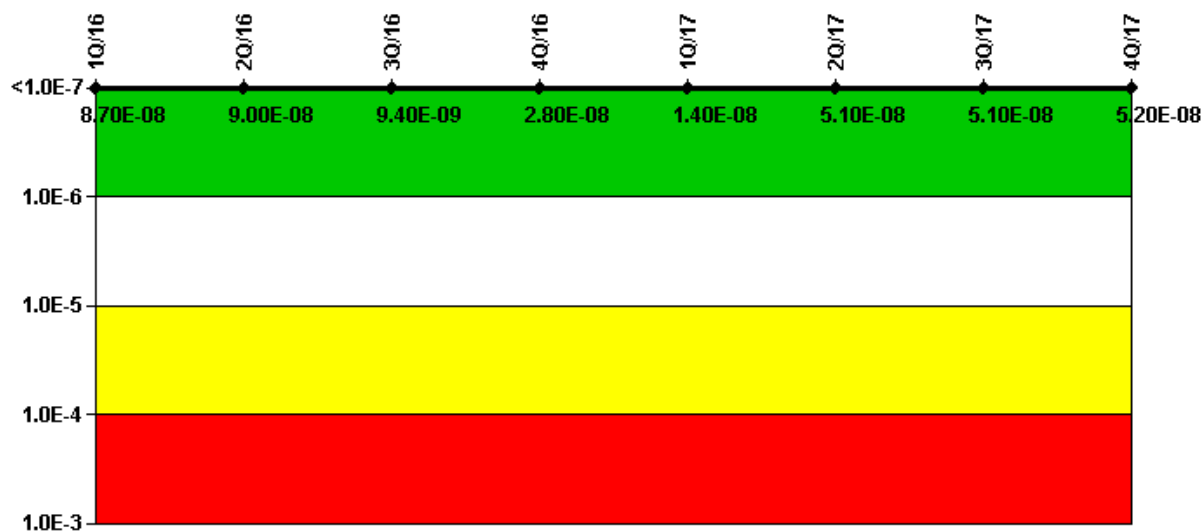
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Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems

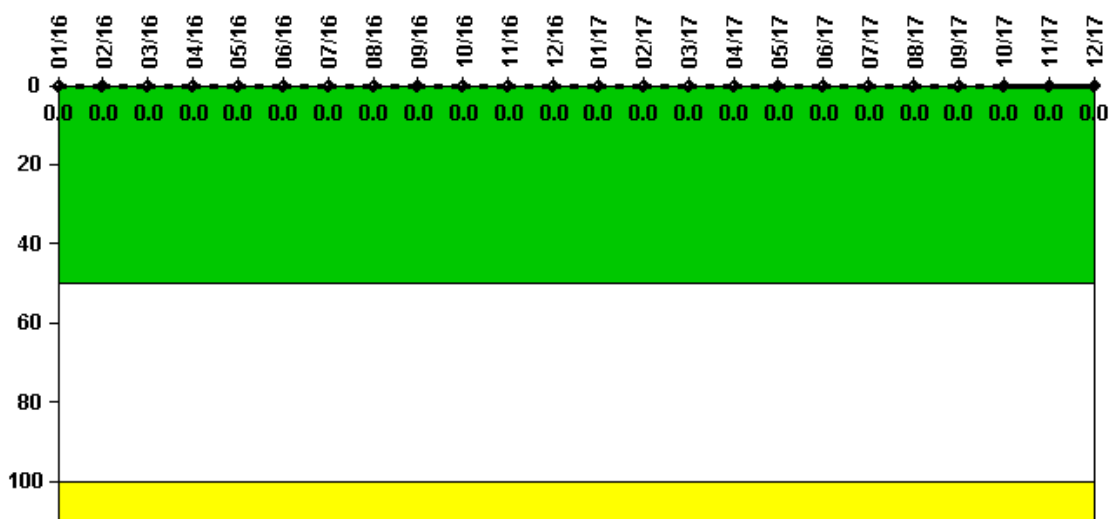
	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	1.80E-07	1.82E-07	6.13E-08	7.98E-08	6.63E-08	1.43E-07	1.43E-07	1.43E-07
URI (ΔCDF)	-9.23E-08	-9.23E-08	-5.20E-08	-5.20E-08	-5.20E-08	-9.17E-08	-9.17E-08	-9.17E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	8.70E-08	9.00E-08	9.40E-09	2.80E-08	1.40E-08	5.10E-08	5.10E-08	5.20E-08

▲ TOP

Licensee Comments:

2Q/17: Changed PRA Parameter(s). Changed PRA Parameter(s).

3Q/16: Changed PRA Parameter(s).

Reactor Coolant System Activity

Thresholds: White > 50.0 Yellow > 100.0

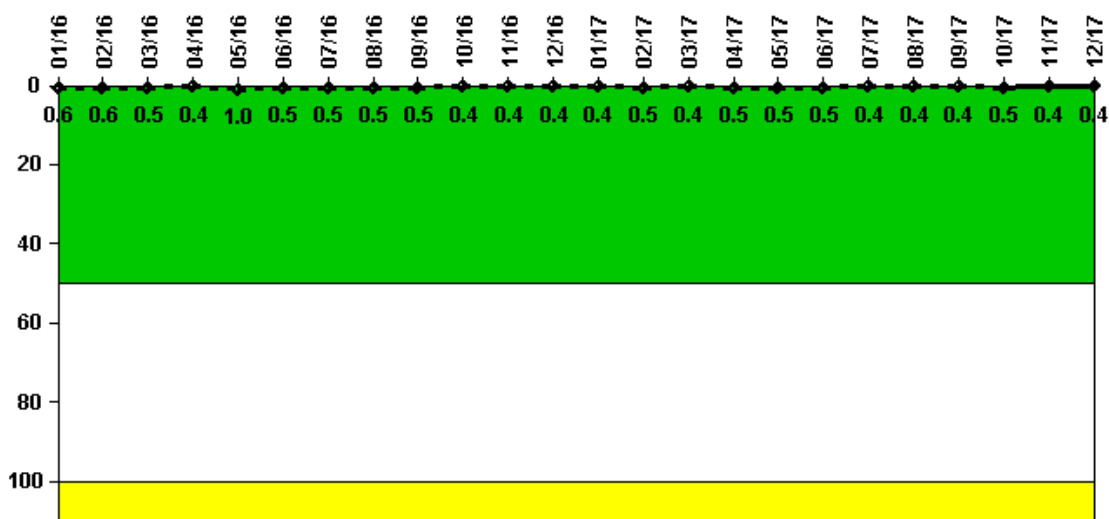
Notes

Reactor Coolant System Activity												
Maximum activity	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity												
Maximum activity	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17	10/17	11/17	12/17
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

TOP

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

Notes

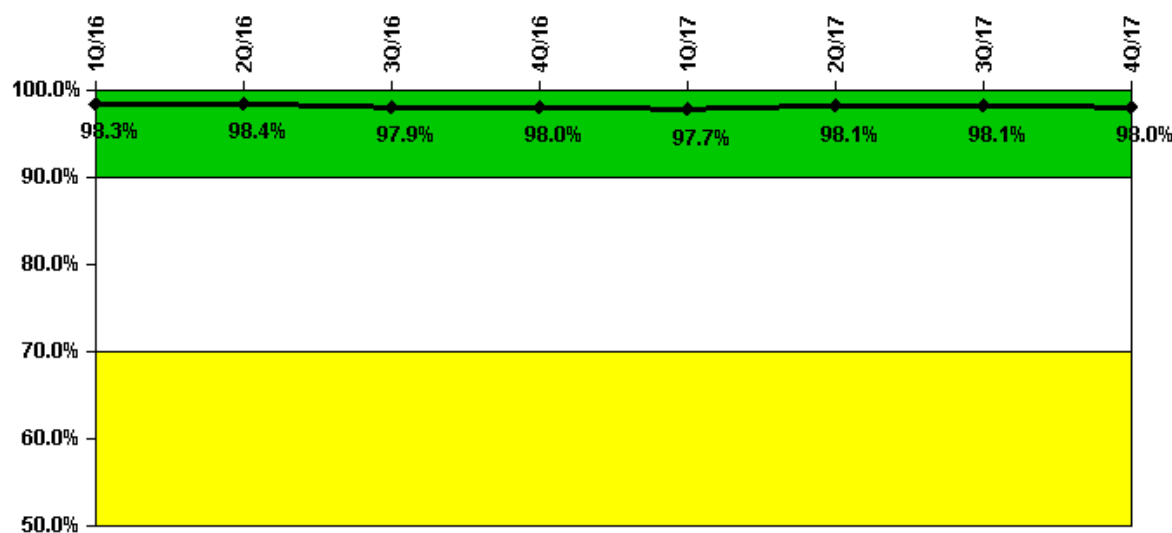
Reactor Coolant System Leakage	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum leakage	0.060	0.060	0.050	0.040	0.100	0.050	0.050	0.050	0.050	0.040	0.040	0.040
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Indicator value	0.6	0.6	0.5	0.4	1.0	0.5	0.5	0.5	0.5	0.4	0.4	0.4
Reactor Coolant System Leakage	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17	10/17	11/17	12/17
Maximum leakage	0.040	0.050	0.040	0.050	0.050	0.050	0.040	0.040	0.040	0.050	0.040	0.040
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Indicator value	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4

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Licensee Comments: none

Drill/Exercise Performance

Thresholds: White < 90.0% Yellow < 70.0%

Notes

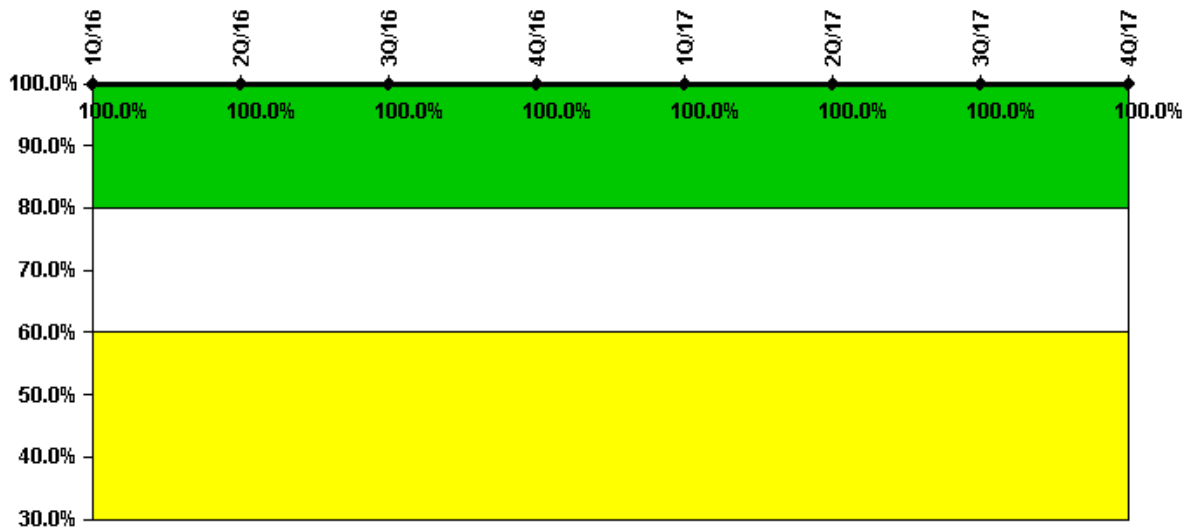
Drill/Exercise Performance	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Successful opportunities	106.0	44.0	29.0	34.0	28.0	55.0	40.0	12.0
Total opportunities	109.0	44.0	32.0	34.0	28.0	56.0	40.0	12.0

Indicator value **98.3% 98.4% 97.9% 98.0% 97.7% 98.1% 98.1% 98.0%**

▲ TOP

Licensee Comments: none

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

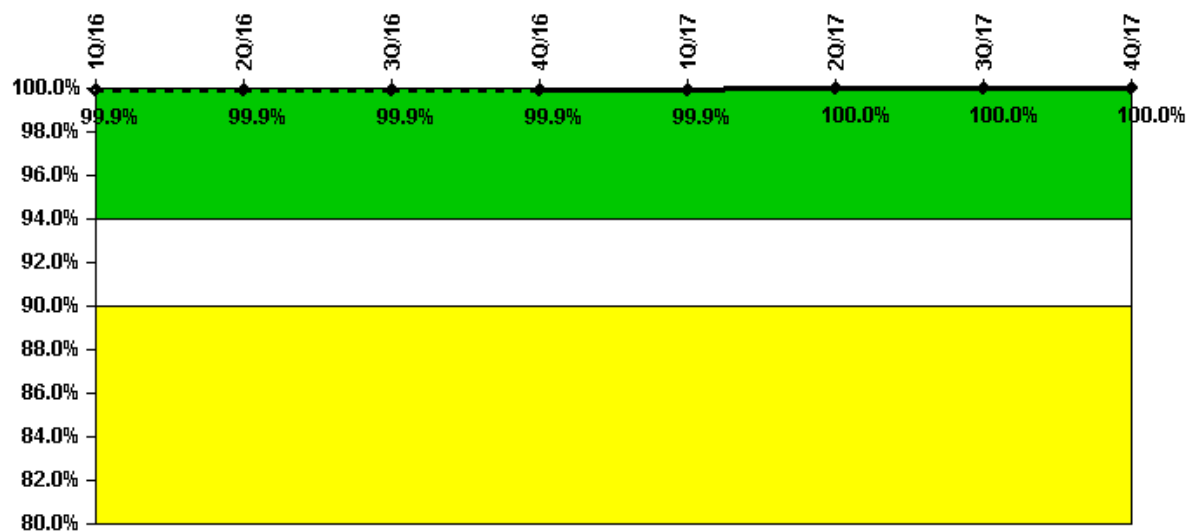
Notes

ERO Drill Participation	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Participating Key personnel	76.0	78.0	77.0	77.0	78.0	66.0	70.0	72.0
Total Key personnel	76.0	78.0	77.0	77.0	78.0	66.0	70.0	72.0

Indicator value 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%

▲ TOP

Licensee Comments: none

Alert & Notification System

Thresholds: White < 94.0% Yellow < 90.0%

Notes

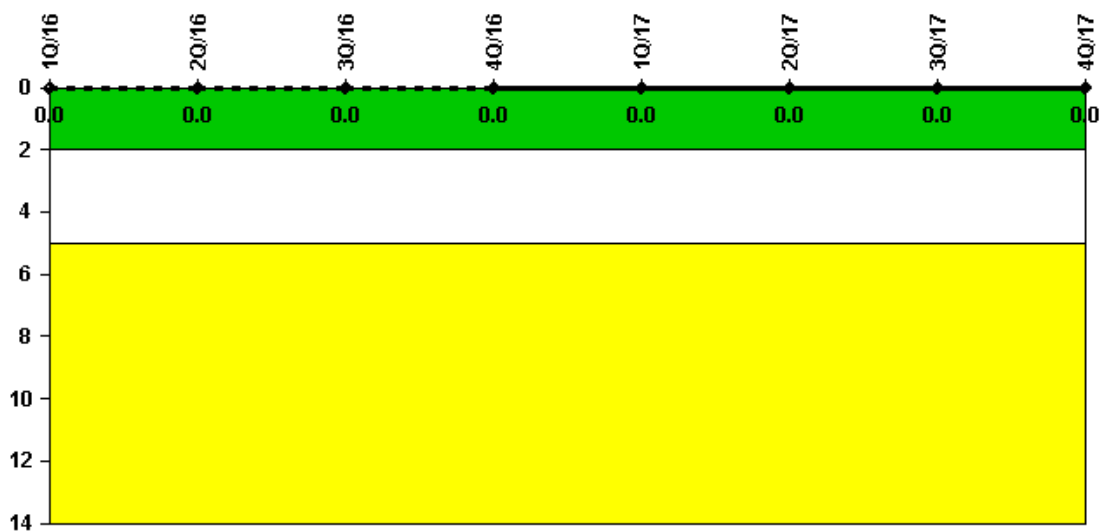
Alert & Notification System	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Successful siren-tests	3897	3902	3900	3780	3964	3904	3842	3842
Total sirens-tests	3904	3904	3904	3782	3965	3904	3843	3843

Indicator value 99.9% 99.9% 99.9% 99.9% 99.9% 100.0% 100.0% 100.0%

▲ TOP

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

Notes

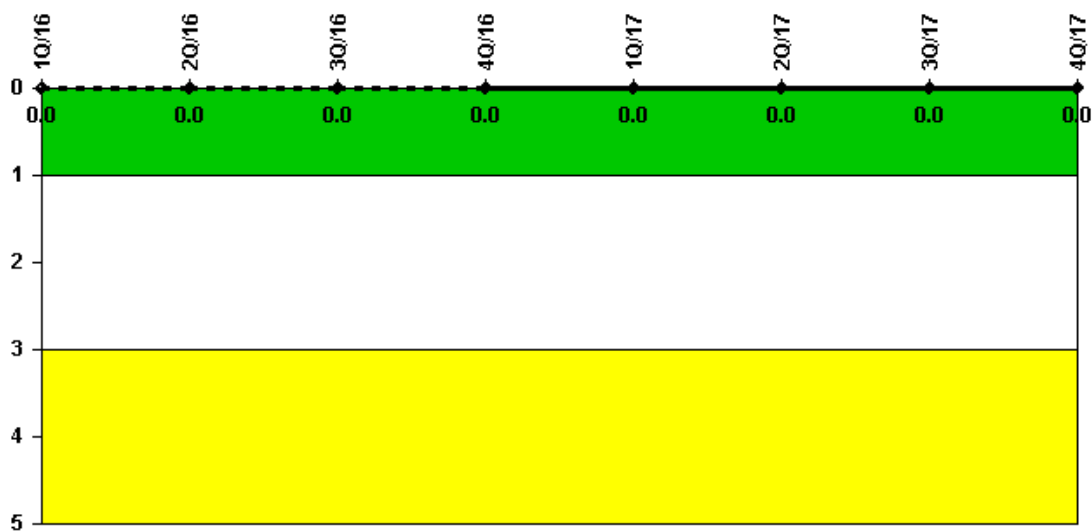
Occupational Exposure Control Effectiveness1Q/162Q/163Q/164Q/161Q/172Q/173Q/174Q/17

High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

▲ TOP

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17 4Q/17

RETS/ODCM occurrences 0 0 0 0 0 0 0 0

Indicator value 0 0 0 0 0 0 0 0

TOP

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

Current data as of: February 1, 2018

Page Last Reviewed/Updated Monday, November 06, 2017