

### Watts Bar 1

#### 2Q/2001 Performance Indicators

Licensee's General Comments: Change Report includes changes to MS01 for 2Q2000, 3Q2000, 4Q2000, 1Q2001 and to MS03 for 3Q2000.

#### Unplanned Scrams per 7000 Critical Hrs



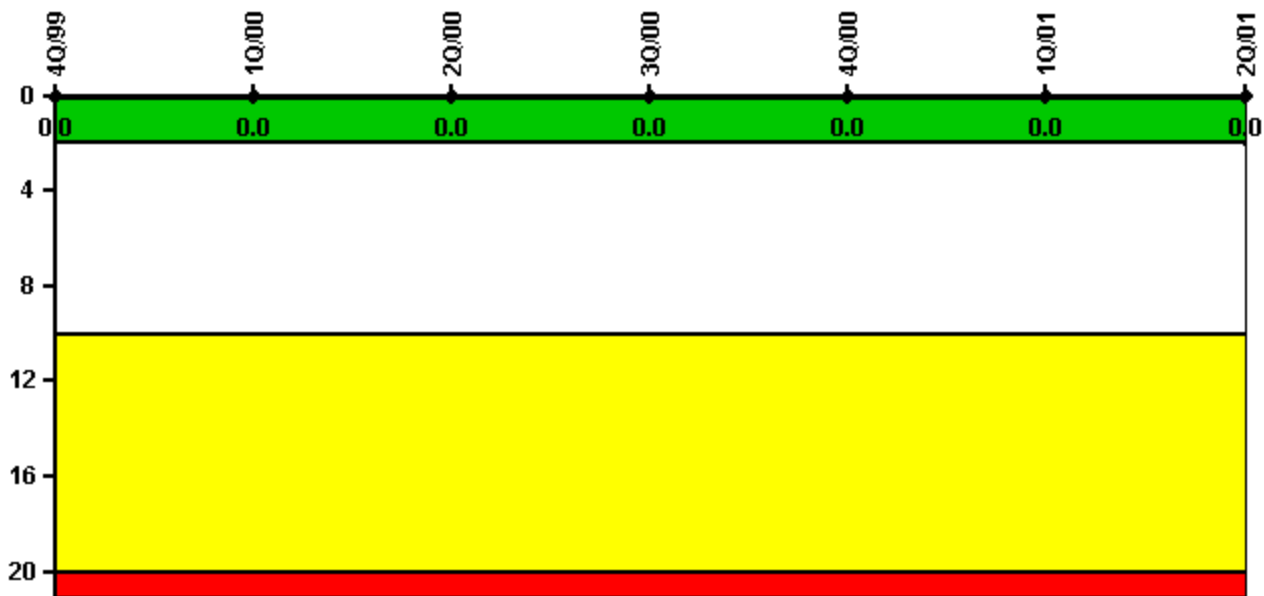
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Unplanned scrams	0	0	0	0	0	0	1.0
Critical hours	2209.0	2184.0	2183.0	1704.0	2084.3	2160.0	2152.5
Indicator value	0	0	0	0	0	0	0.9

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



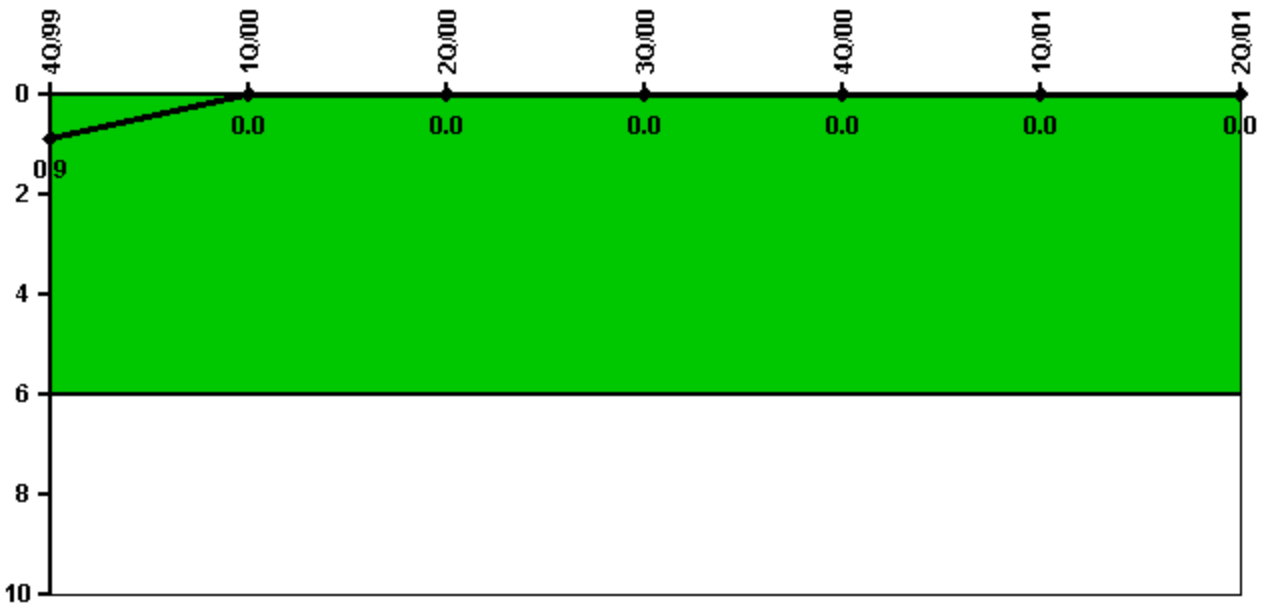
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	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



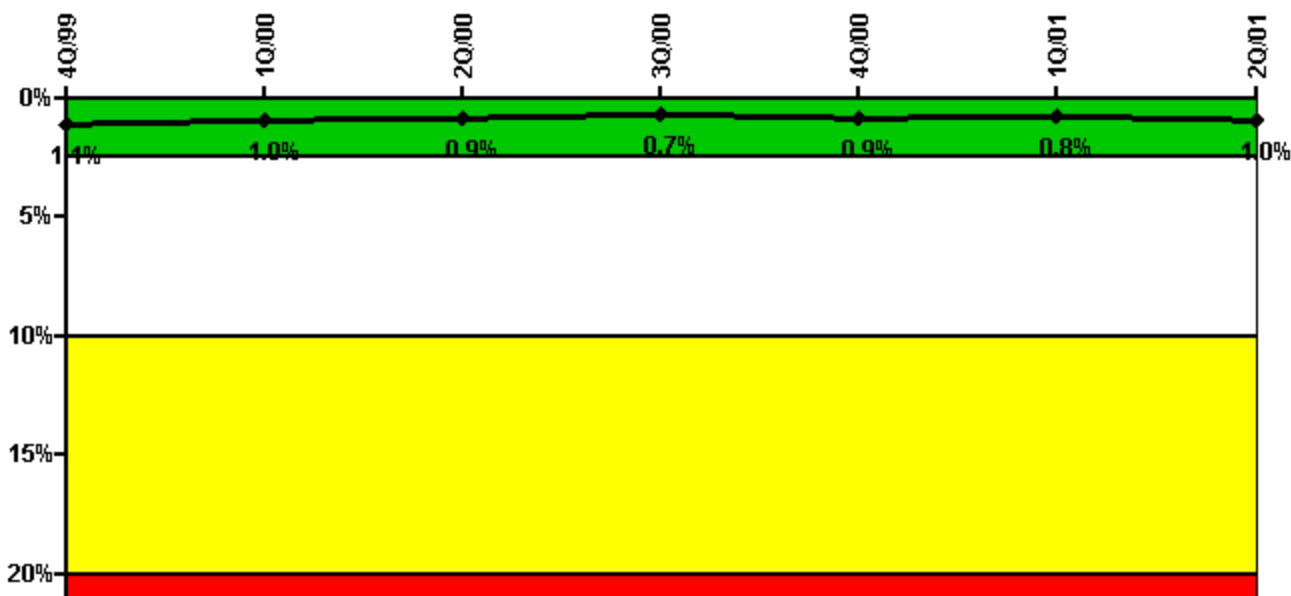
Thresholds: White > 6.0

#### 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	2209.0	2184.0	2183.0	1704.0	2084.3	2160.0	2152.5
Indicator value	0.9	0	0	0	0	0	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power, >2EDG



Thresholds: White > 2.5% Yellow > 10.0% Red > 20.0%

#### Notes

Safety System Unavailability, Emergency AC Power, >2EDG	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
<b>Train 1</b>							
Planned unavailable hours	11.50	20.91	40.21	1.70	44.64	2.24	30.21
Unplanned unavailable hours	0	0	0	0	0	0	8.52
Fault exposure hours	0	0	0	0	0	0	1.75
Effective Reset hours	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2086.48	2209.00	2160.00	2183.00
<b>Train 2</b>							
Planned unavailable hours	2.08	2.00	42.32	1.84	149.95	3.44	59.69
Unplanned unavailable hours	0	0	0	0	0	0	0
Fault exposure hours	0	0	25.08	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	1867.37	2209.00	2160.00	2183.00
<b>Train 3</b>							
Planned unavailable hours	2.48	44.23	4.70	2.04	26.27	2.80	47.37
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	2086.48	2209.00	2160.00	2183.00
<b>Train 4</b>							
Planned unavailable hours	17.13	42.04	6.13	16.98	31.78	2.84	40.30
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	1867.37	2209.00	2160.00	2183.00
<b>Indicator value</b>	<b>1.1%</b>	<b>1.0%</b>	<b>0.9%</b>	<b>0.7%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>1.0%</b>

Licensee Comments:

1Q/01: CHANGE JUSTIFICATION FOR Q1 2001: Several changes were made to data for this quarter due to unavailability acquired during performances of the DG fuel oil pump quarterly tests and other minor calculation discrepancies that were previously not counted, these changes are as follows: Train 2 for Jan. changed from 1.72 hours to 1.71 hours and train 4 for Jan. changed from 1.23 hours to 1.24 hours. Reference PER 01-07976-000. This change does not affect the color of the indicator.

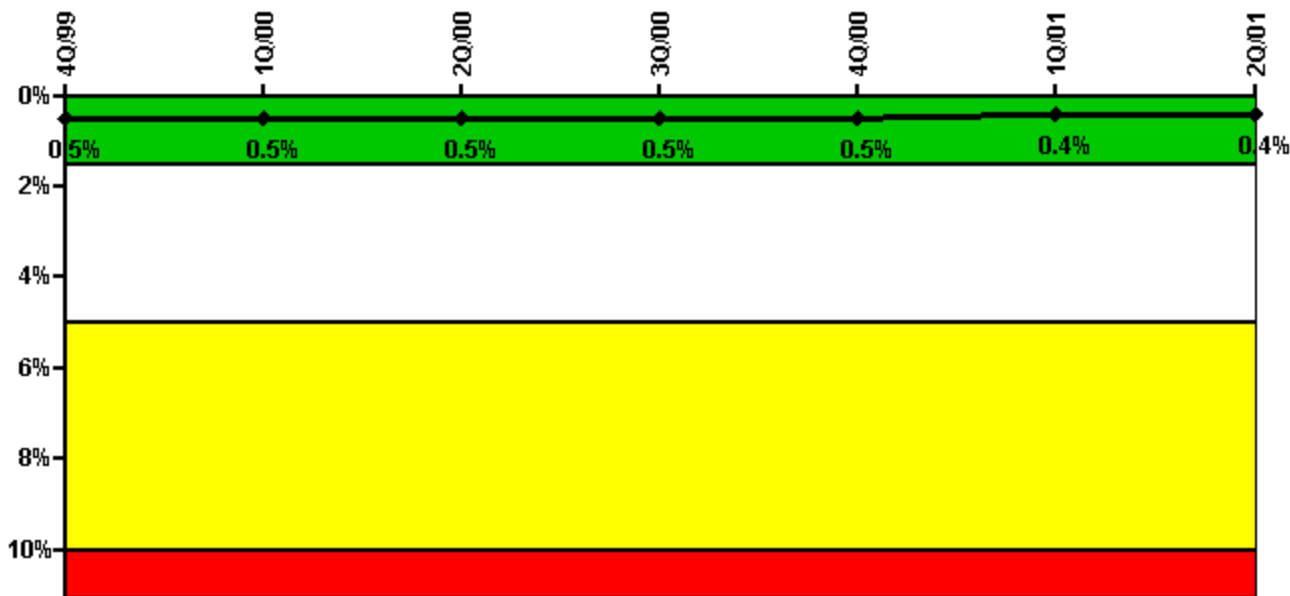
4Q/00: 12/00 - Train 2 - DG 1B-B generator replacement: Unavailability time counted from time of initial tag-out until time of initial loading for the 24 hour test run. Not counted as overhaul, although no functional failure occurred. As a result of an EDG performance indicator data review, .98 hours of unavailability was added to 2A-A EDG and .42 hours of unavailability was added to 1B-B EDG for October. CHANGE JUSTIFICATION FOR Q4 2000: Several changes were made to data for this quarter due to unavailability acquired during performances of the DF fuel oil pump quarterly tests and other minor calculation discrepancies that were previously not counted, these changes are as follows: Train 1 for Oct. changed from 24.25 hours to 24.67 hours, train 1 for Dec. changed from .17 hours to .55 hours, train 2 for Oct. changed from .85 hours to 1.85 hours, train 2 for Nov. changed from 38.12 hours to 37.87 hours, train 3 for Oct. changed from 1.28 hours to .95 hours, and train 4 for Dec. changed from .83 hours to 5.47 hours. Reference PER 01-07976-000. This change does not affect the color of the indicator.

3Q/00: CHANGE JUSTIFICATION FOR Q3 2000: Several changes were made to data for this quarter due to unavailability acquired during performances of the DG fuel oil pump quarterly tests and other minor calculation discrepancies that were previously not counted, these changes are as follows: Train 1 for July changed from .23 hours to .91 hours, train 2 for July changed from .45 hours to 1.1 hours, train 2 for August changed from .73 hours to .74 hours, train 3 for July changed from .28 hours to 1.06 hours, train 4 for August changed from 13.9 hours to 15.56 hours. Reference PER 01-07976-000. This change does not affect the color of the indicator.

2Q/00: 4/2000 - Train 1 and Train 2 had 38.58 and 42.45 hours of unavailability due to DG battery outage. These hours were not counted against NEI-99-02 availability criteria based on on-line planned overhaul maintenance exemption. (27-2). CHANGE JUSTIFICATION FOR Q2 2000: The number of hours of fault exposure reported for EDG train 2 in June has been changed from 0 to 25.08. It was discovered after the data submittal that fault exposure should have been reported due to inability of the DG 1B-B room exhaust fans to start. The fans wouldn't start after operations testing of the CO2 system the previous day. An interlock relay was verified by the procedure to be unlatched and reset. However, the relay was found the next day to be latched during the monthly diesel start and load testing. The latched relay which inhibited the start logic on the fans would not reset. After placing the fans bypass switch in bypass, the fans immediately started. These fault exposure hours were not reported previously due to a misinterpretation of the NEI 99-02 guidelines by the system engineer with respect to unavailability associated with what was originally considered to be a human performance error. Reference PER 00-012449-000. CHANGE JUSTIFICATION FOR Q2 2000: The number of hours for train 1 and train 2 in April changed from 0 to 38.51(train 1) & from 0 to 39.97(train 2) due to unavailability that was not counted previously based on an interpretation of the NEI 99-02 overhaul rule. Review of this data now supports that it should be counted for the type of maintenance performed. Several changes were made to data for this quarter due to unavailability acquired during performances of the DG fuel oil pump quarterly tests and other minor calculation discrepancies that were previously not counted, these changes are as follows: Train 2 for May changed from 1.35 hours to 1.45 hours, Train 3 for April changed from .22 hours to 3.55 hours, Train 4 for April changed from 3.15 to 3.48, Train 4 for May changed from .95 to 2.37 and Train 4 for June changed from .29 hours to .28 hours. Reference PER 01-07976-000. This change does not affect the color of the indicator.

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### Safety System Unavailability, High Pressure Injection System (HPSI)



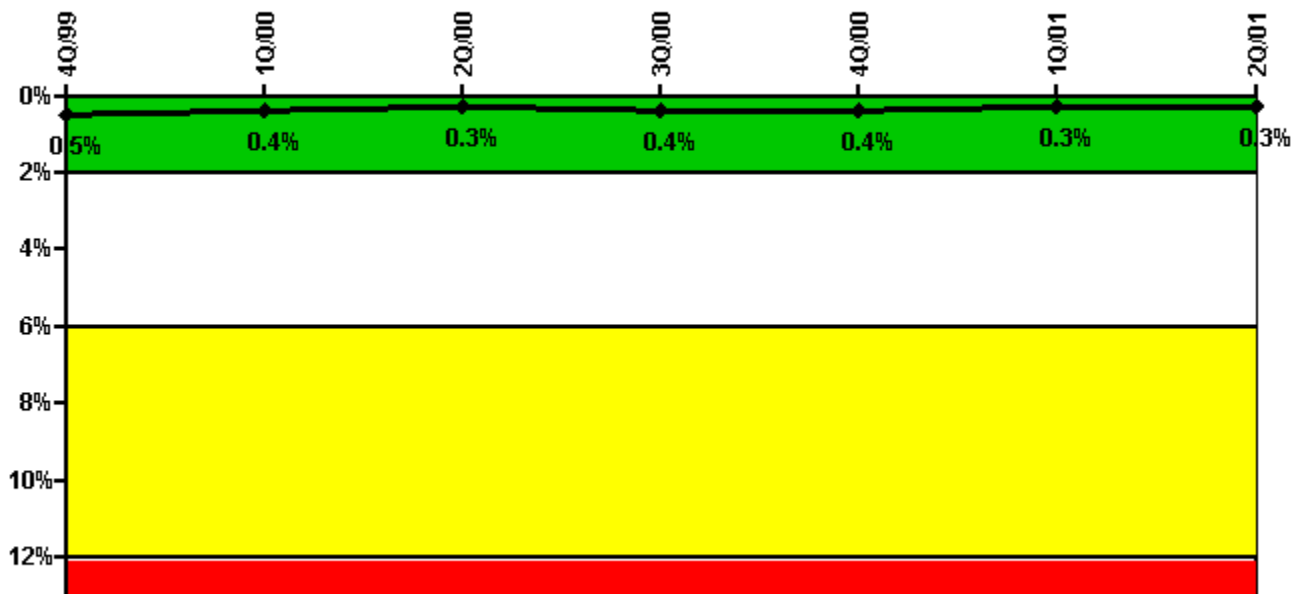
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
<b>Train 1</b>							
Planned unavailable hours	6.50	27.90	6.90	7.90	0.40	21.00	0.10
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	1715.10	2145.00	2160.00	2183.00
<b>Train 2</b>							
Planned unavailable hours	0	0	10.30	0	0	0	13.70
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	1711.10	2147.00	2160.00	2183.00
<b>Train 3</b>							
Planned unavailable hours	16.00	1.00	23.50	0.50	2.10	1.60	1.30
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	1711.10	2137.80	2160.00	2183.00
<b>Train 4</b>							
Planned unavailable hours	28.20	0.50	39.70	0.60	2.70	0.50	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	1711.10	2137.80	2160.00	2183.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.4%</b>

Licensee Comments: none

### Safety System Unavailability, Heat Removal System (AFW)



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

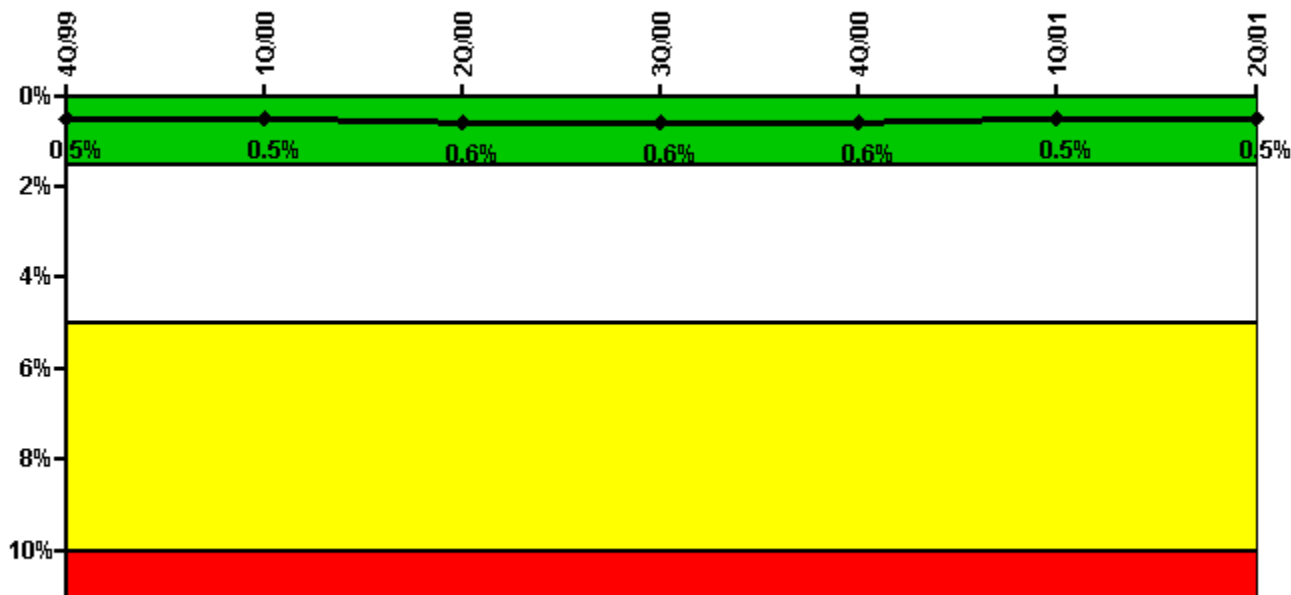
#### Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
<b>Train 1</b>							
Planned unavailable hours	0.30	0.10	30.50	0	0.80	0.10	0.02
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	1714.10	2113.80	2160.00	2183.00
<b>Train 2</b>							
Planned unavailable hours	1.10	24.80	0	25.70	6.10	0.50	29.40
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	1714.10	2113.80	2160.00	2183.00
<b>Train 3</b>							
Planned unavailable hours	1.10	2.10	2.70	18.50	11.65	6.40	0.70
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	1711.10	2113.80	2160.00	2183.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.3%</b>

Licensee Comments:

3Q/00: An additional 18.4 hours of unavailability was added to AFW train 2 (versus train 1) for July 2000 due to the emergency water source (ERCW) being unavailable. This change does not affect the color of the indicator.

### Safety System Unavailability, Residual Heat Removal System



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

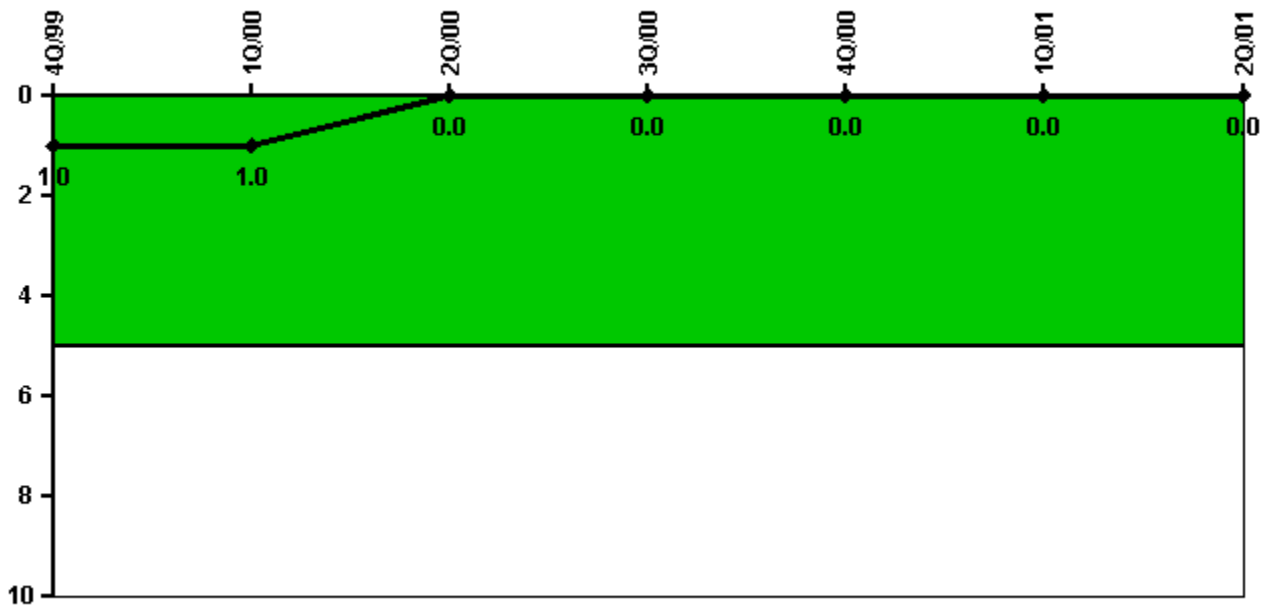
#### Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
<b>Train 1</b>							
Planned unavailable hours	1.90	1.70	41.00	1.60	2.45	2.30	2.35
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	2144.10	2209.00	2160.00	2183.00
<b>Train 2</b>							
Planned unavailable hours	10.10	1.40	47.70	1.50	1.10	1.70	2.90
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	2144.10	2209.00	2160.00	2183.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments: none



### Safety System Functional Failures (PWR)



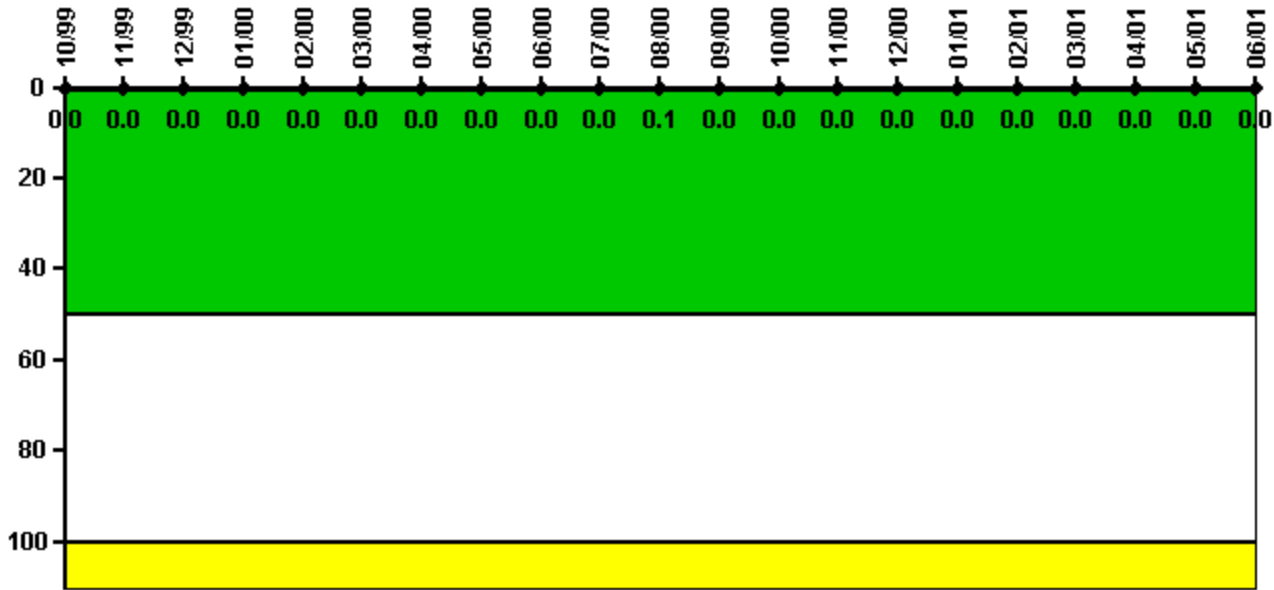
Thresholds: White > 5.0

#### 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	1	1	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

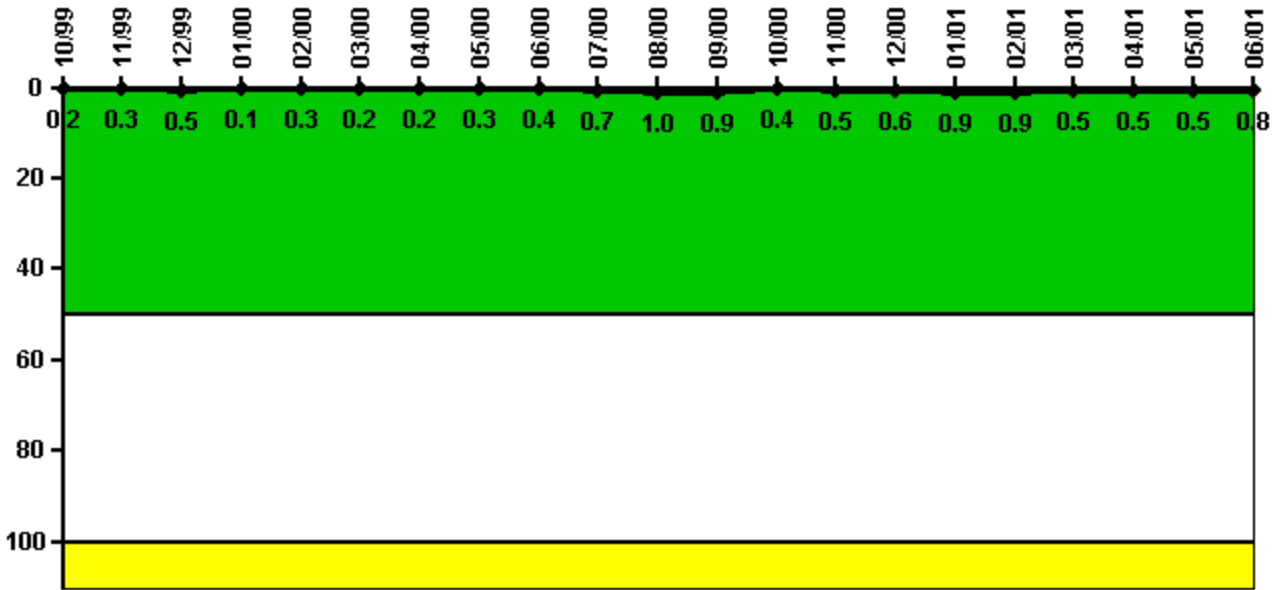
Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.000280	0.000336	0.000290	0.000320	0.000300	0.000300	0.000325	0.000310	0.000330	0.000490	0.000564	0.000270
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0.1	0

Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01
Maximum activity	0.000204	0.000231	0.000230	0.000233	0.000242	0.000248	0.000250	0.000250	0.000274
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

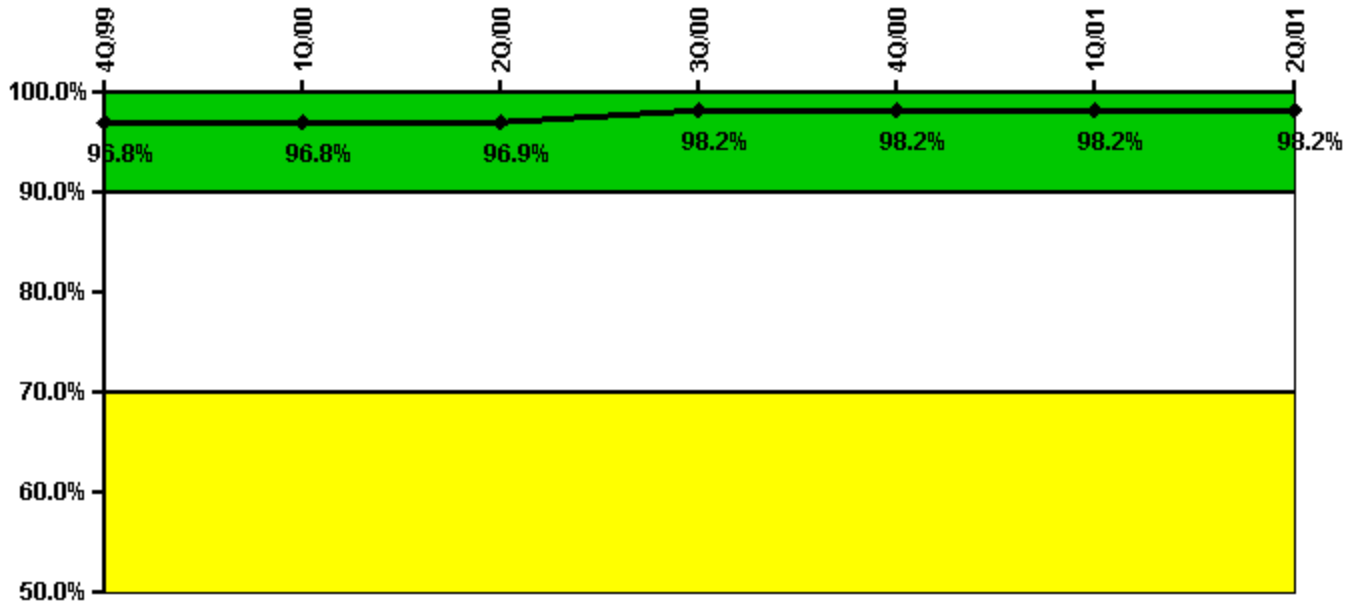
#### Notes

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	0.020	0.030	0.050	0.010	0.030	0.020	0.020	0.030	0.040	0.070	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	0.2	0.3	0.5	0.1	0.3	0.2	0.2	0.3	0.4	0.7	1.0	0.9

Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01
Maximum leakage	0.040	0.050	0.060	0.090	0.090	0.050	0.050	0.050	0.080
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.4	0.5	0.6	0.9	0.9	0.5	0.5	0.5	0.8

Licensee Comments: none

### Drill/Exercise Performance



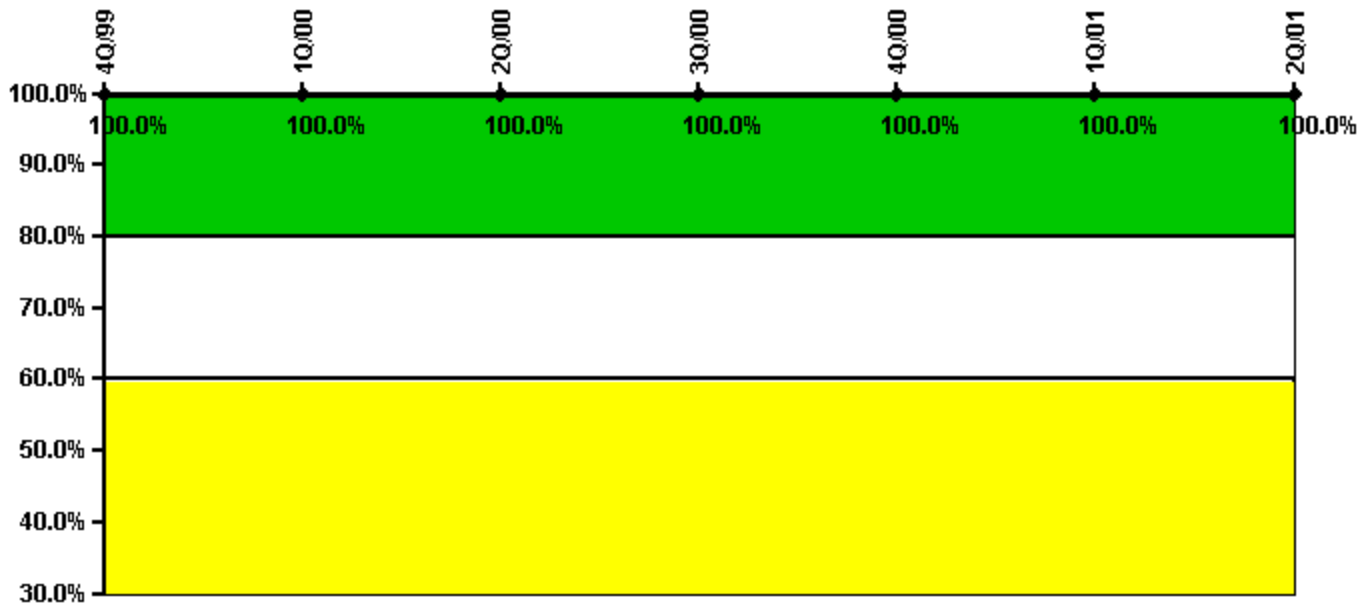
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Successful opportunities	26.0	0	6.0	24.0	6.0	2.0	0
Total opportunities	28.0	0	6.0	24.0	6.0	2.0	0
Indicator value	96.8%	96.8%	96.9%	98.2%	98.2%	98.2%	98.2%

Licensee Comments: none

### ERO Drill Participation



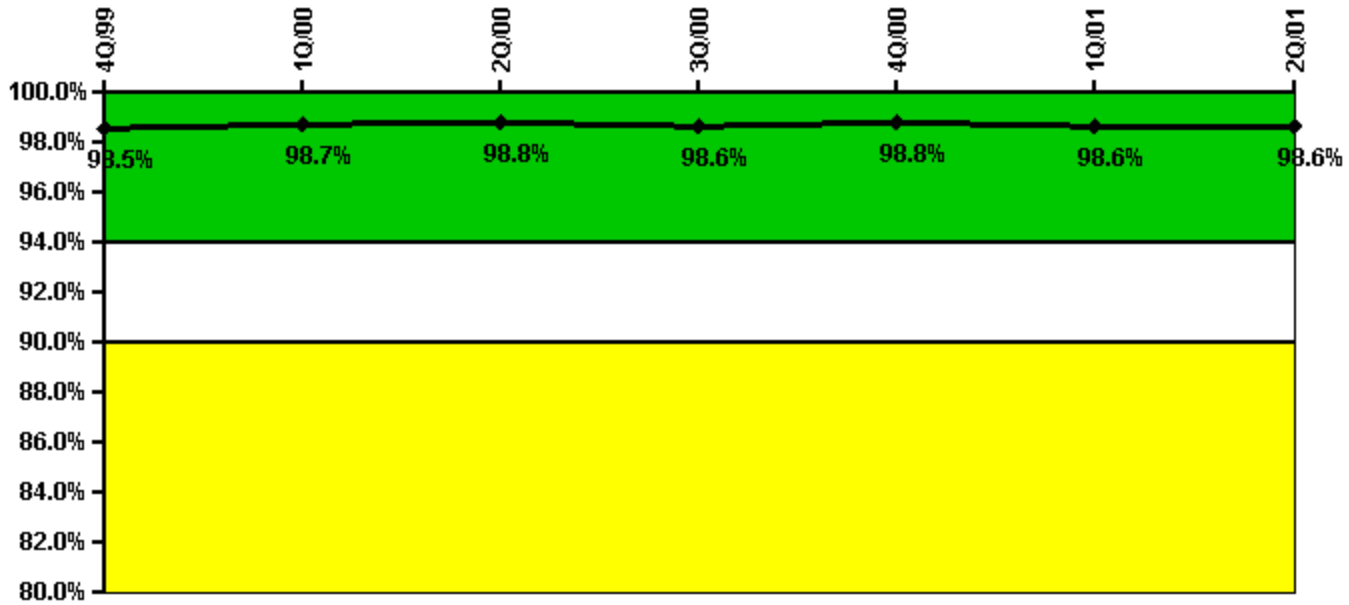
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Participating Key personnel	50.0	49.0	48.0	48.0	46.0	49.0	48.0
Total Key personnel	50.0	49.0	48.0	48.0	46.0	49.0	48.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



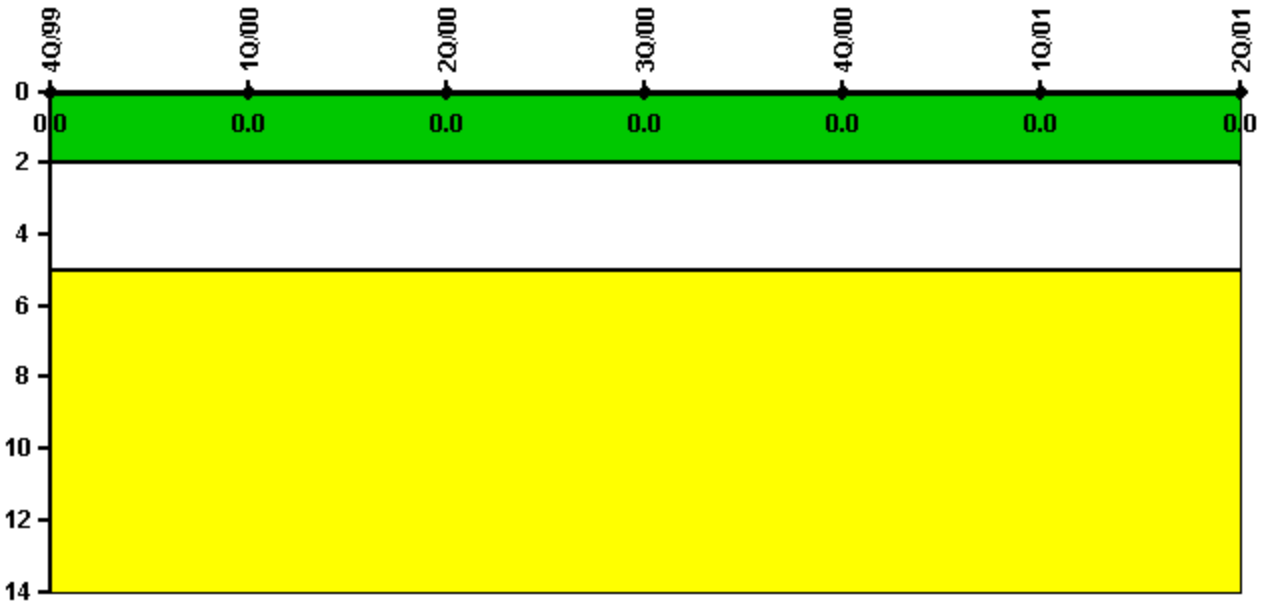
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
Successful siren-tests	681	881	880	779	784	681	782
Total sirens-tests	693	891	891	792	792	693	792
Indicator value	98.5%	98.7%	98.8%	98.6%	98.8%	98.6%	98.6%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



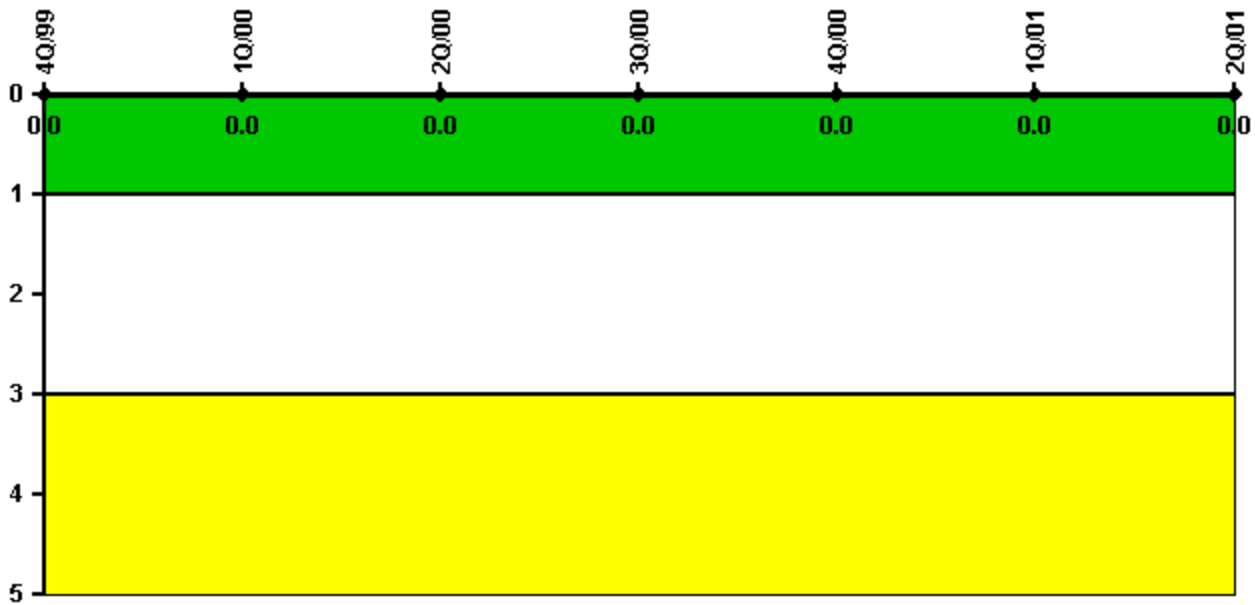
Thresholds: White > 2.0 Yellow > 5.0

#### 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
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

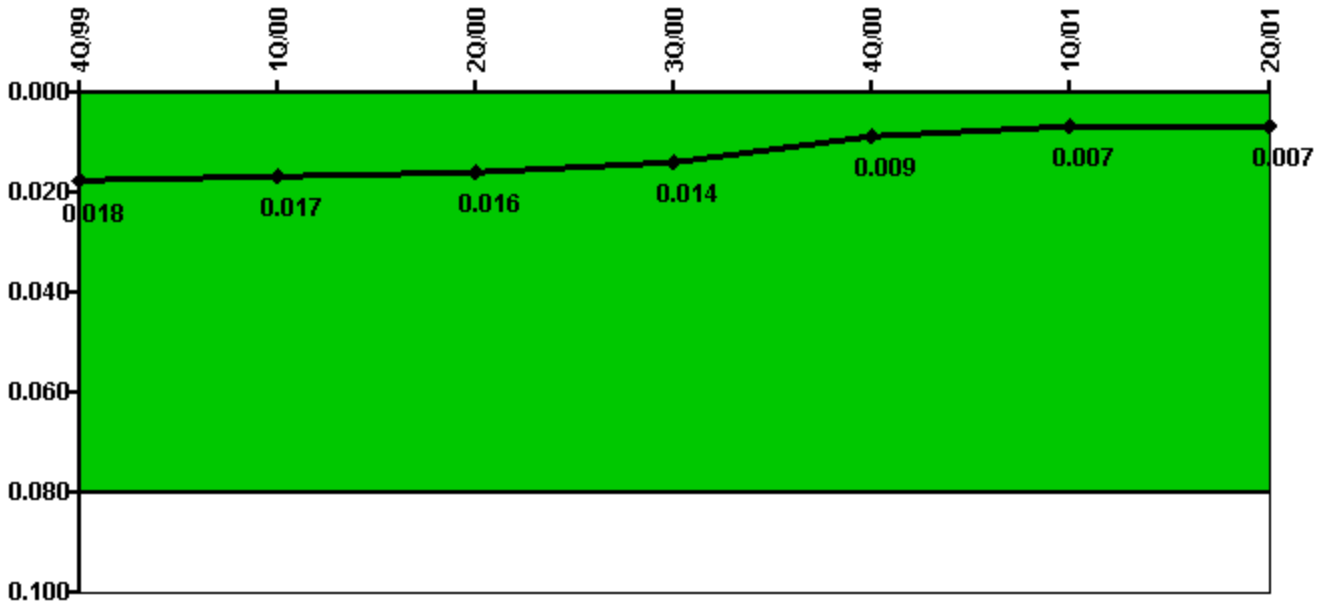
#### Notes

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

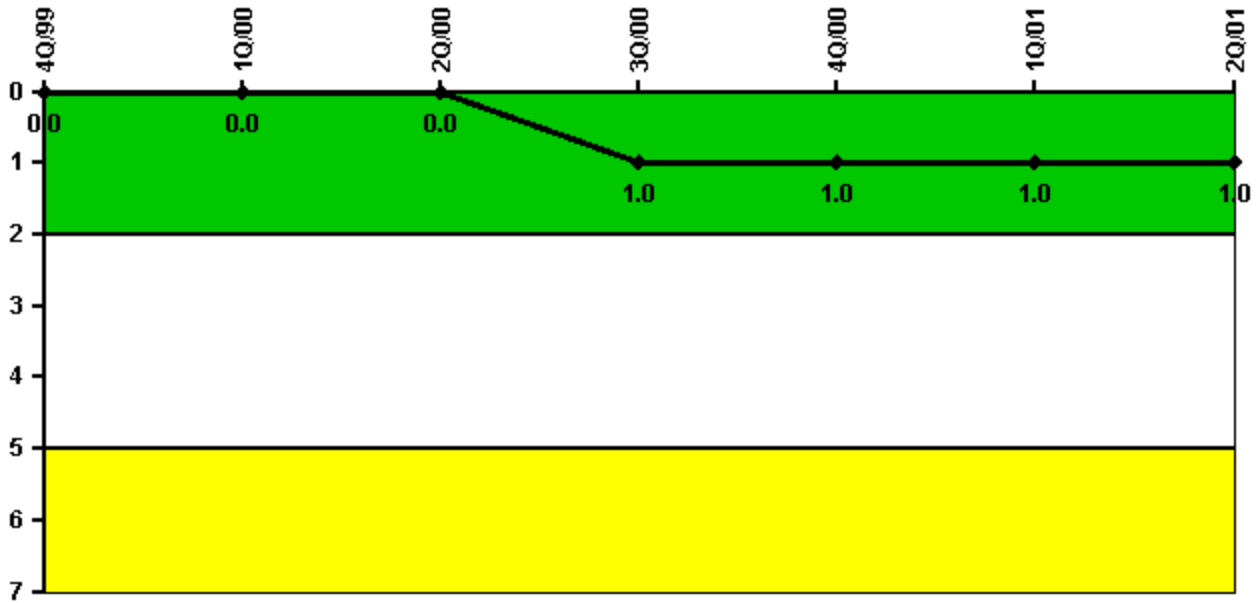
#### Notes

Protected Area Security Performance Index	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01
IDS compensatory hours	274.40	100.70	93.10	77.80	49.50	30.60	81.30
CCTV compensatory hours	0	1.8	4.5	24.9	13.4	4.3	2.6
IDS normalization factor	2.40	2.40	2.40	2.40	2.40	2.40	2.40
CCTV normalization factor	2.1	2.1	2.1	2.1	2.1	2.1	2.1
<b>Index Value</b>	<b>0.018</b>	<b>0.017</b>	<b>0.016</b>	<b>0.014</b>	<b>0.009</b>	<b>0.007</b>	<b>0.007</b>

#### Licensee Comments:

1Q/01: 1Q/2001: CHANGE REPORT COMMENTS. Data submitted for the month of February 2001 indicated 0 hours on CCTV. During a review of documentation on October 17 it was found that SGER 01-01-030 had the wrong event code. This error prevented the data collection system from recording this information as PI hours. PI hours for February should have been 4.3 hours. This change does not affect the color of the indicator.

### Personnel Screening Program



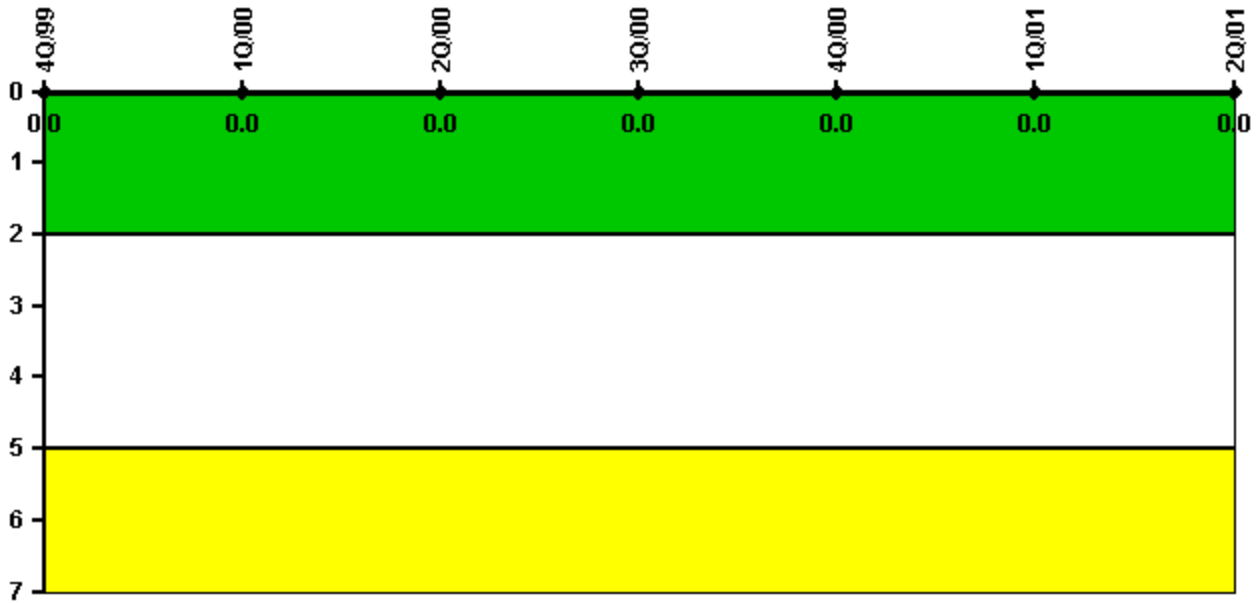
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

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