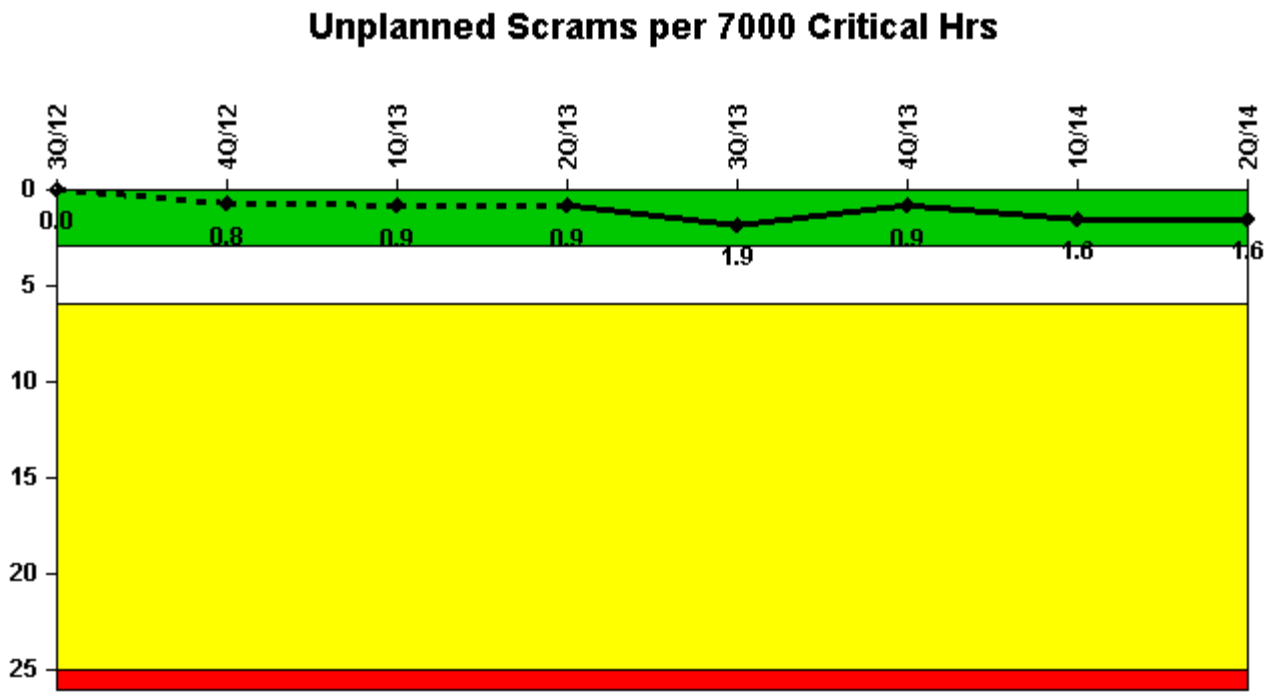
Diablo Canyon 2

2Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none



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	1.0	0	0	1.0	0	1.0	0
Critical hours	2208.0	2114.5	1041.1	2184.0	2130.0	2209.0	2033.1	2184.0
Indicator value	**0**	**0.8**	**0.9**	**0.9**	**1.9**	**0.9**	**1.6**	**1.6**

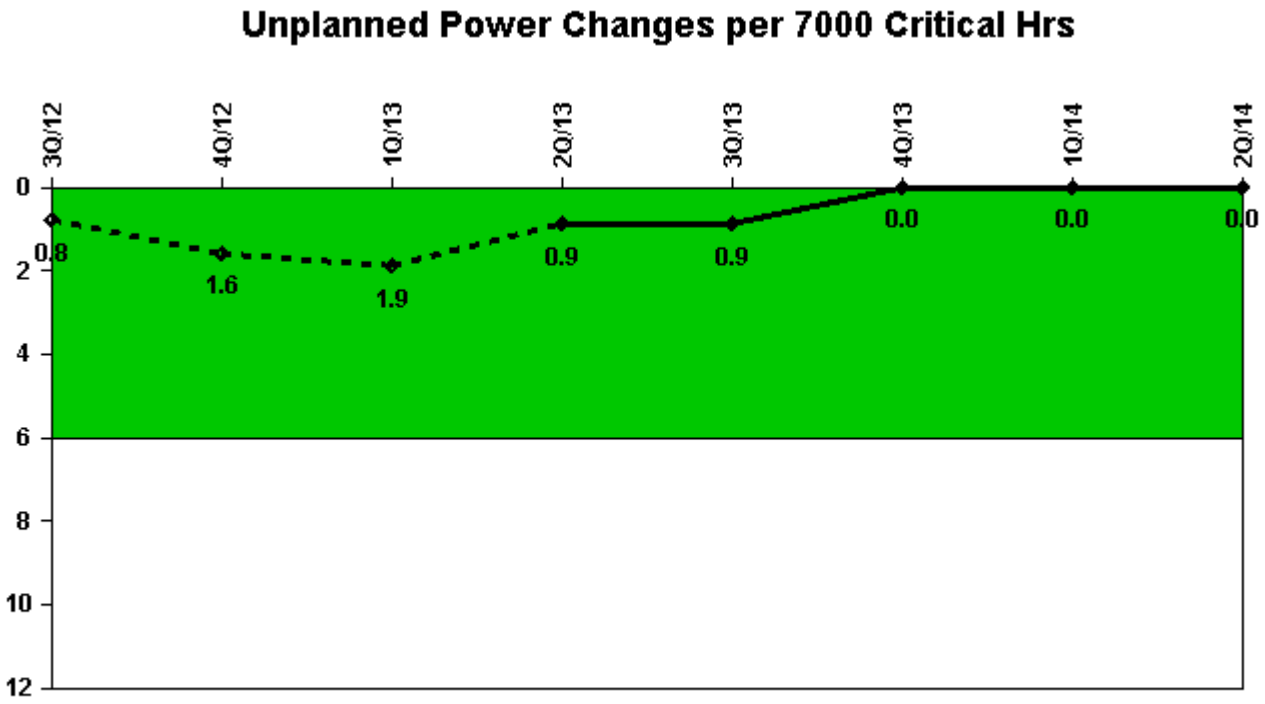
Licensee Comments:

1Q/14: A Unit 2 reactor trip due to a lightning arrestor failure occurred on February 2. This event is counted as an unplanned scram per NEI 99-02.

1Q/13: There were no initiating events for Unit 2 during the first quarter of 2013.

4Q/12: Diablo Canyon Unit 2 began the month of October in Mode 1 (Power Operation) at approximately 100

percent reactor power. On October 11th, an apparent electrical arc near the plant transformers resulted in an automatic shutdown. Preliminary investigation suggests that the electrical disturbance was caused by recent rain in the area coming into contact with material that may have built up on a bushing that connects to the Capacitive Coupled Voltage Transformer, which is used to transmit generation data to the Independent System Operator (ISO). These conditions may have caused the flashover event, providing a path to ground and Unit Trip signal. On October 17, 2012 , the unit returned to approximately 100 percent reactor power.



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	1.0	0	0	0	0	0	0
Critical hours	2208.0	2114.5	1041.1	2184.0	2130.0	2209.0	2033.1	2184.0
Indicator value	**0.8**	**1.6**	**1.9**	**0.9**	**0.9**	**0**	**0**	**0**

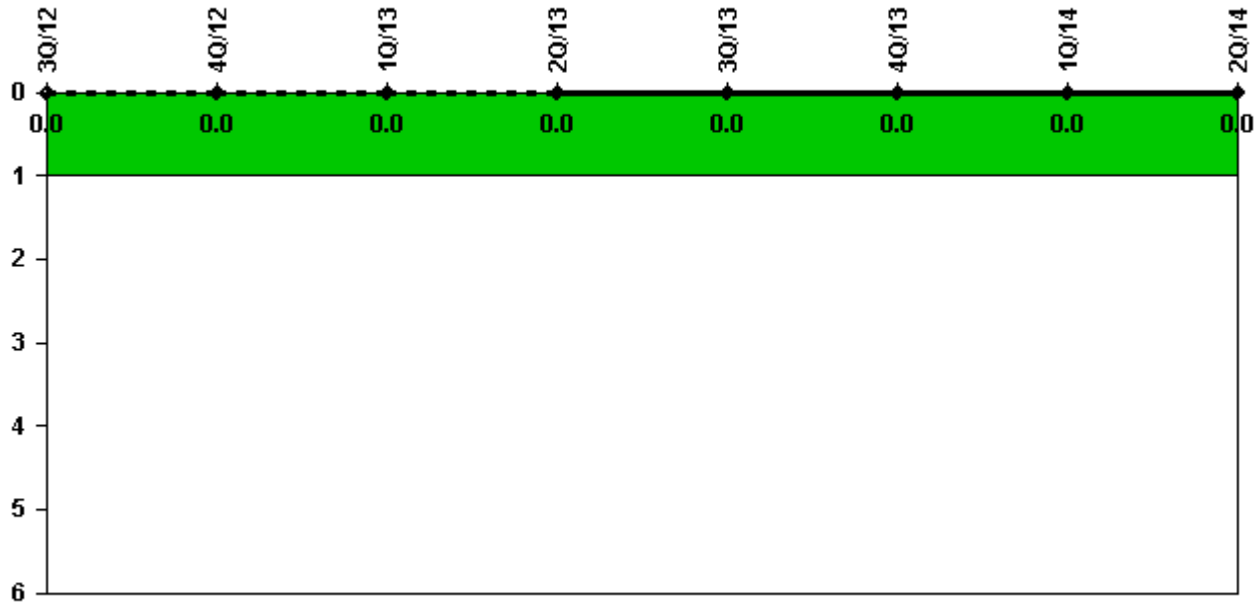
Licensee Comments:

1Q/14: Diablo Canyon Unit 2 operated at approximately 100 percent power with the following exceptions: 1) Unit 2 power was reduced to approximately 50% power for planned circulating water tunnel cleaning between January 10 and January 14, 2014, 2) From January 4 to January 10, 2014, power was reduced approximately 10 MW for improved equipment performance, 3) On February 28, 2014, Unit 2 power was reduced to approximately 25 percent power due to high ocean swells. The high ocean swell power reduction is excluded per NEI 99-02 FAQs for Diablo Canyon.

1Q/13: There were no initiating events for Unit 2 during the first quarter of 2013.

4Q/12: Unplanned power change narrative added: On December 12, Diablo Canyon Unit 2 had an unplanned power change (power reduced to approximately 15%) to address Unit 2 main generator voltage fluctuations and replace two fuses needed for manual voltage regulator control and protective features. Work was completed on December 13th and Unit 2 was subsequently returned to full power.

Unplanned Scrams with Complications



Thresholds: White > 1.0

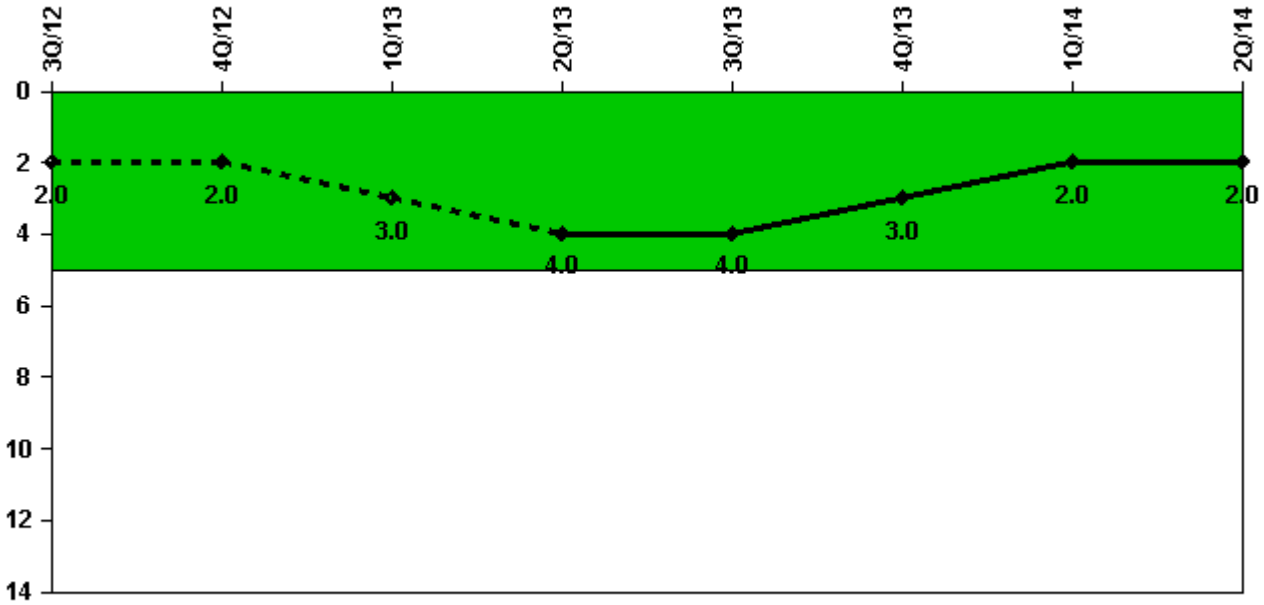
Notes

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	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Licensee Comments:

1Q/13: There were no initiating events for Unit 2 during the first quarter of 2013.

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	1	1	1	1	1	0	0	1
Indicator value	**2**	**2**	**3**	**4**	**4**	**3**	**2**	**2**

Licensee Comments:

2Q/14: LER 1-2014-003-00 reported an unanalyzed condition regarding diesel exhaust plenum inadequate protection from tornado missiles. This costitutes a safety system functional failure. A supplement to the LER will be provided. Reference SAPN 50639263.

3Q/13: LER 2-2013-004 submitted on July 30, 2013 identified a SSFF for Technical Specification 3.8.1 not being met due to a failed wire lug on emergency diesel generator 2-3.

2Q/13: DCPP Unit 2 had 1 SSFF reported in May 2013 for a loss of two source range nuclear instruments in Mode 6 during Unit 2 refueling outage seventeen. Reference DCL-13-050, LER 2-2013-002-00.

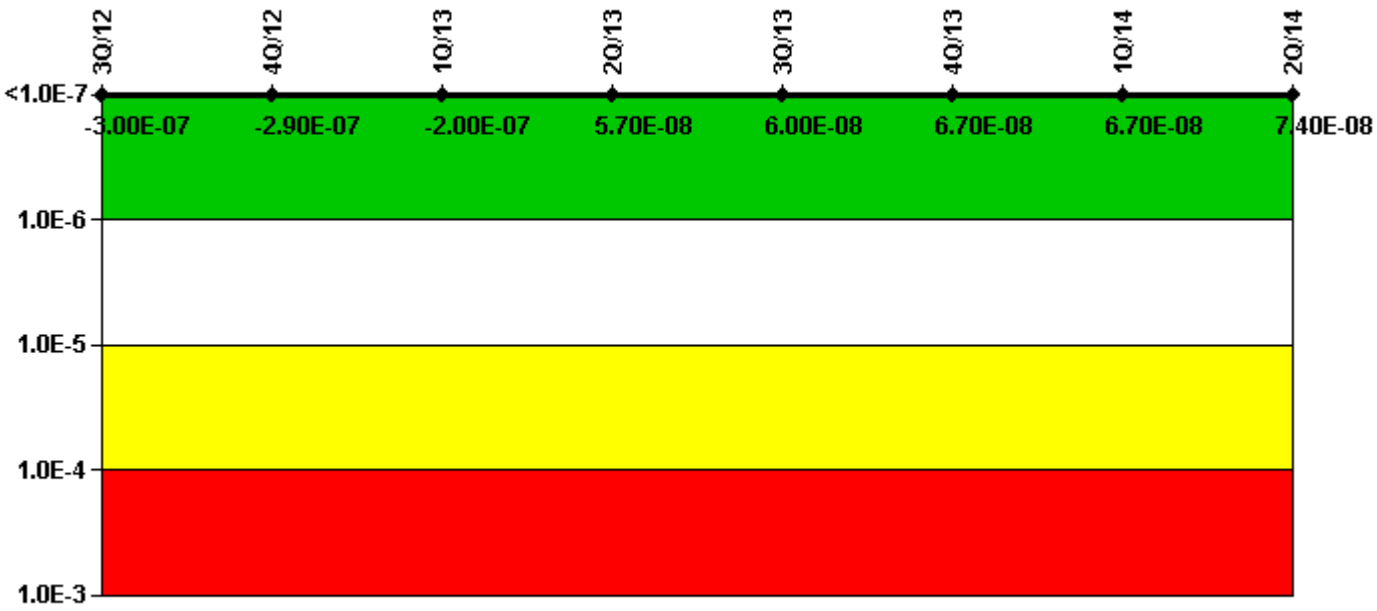
1Q/13: Unit 2 recorded 1 safety system functional failure for the first quarter of 2013. DCL-13-005 reported that inadequate design controls resulted in loss of the control room ventilation system.

1Q/13: Unit 2 recorded 1 safety system functional failure for the first quarter of 2013. DCL-13-005 reported that inadequate design controls resulted in loss of the control room ventilation system. See LER 1-2012-008-00. (LER # added 6-13-2013)

4Q/12: On October 16, 2012, PG&E submitted LER 2-2012-001-00 for a SSFF of an emergency diesel generator due to a broken fuel oil booster pump drive belt and subsequent failure to meet plant technical specifications

(Ref. DCL-12-096).

Mitigating Systems Performance Index, Emergency AC Power System



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

Notes

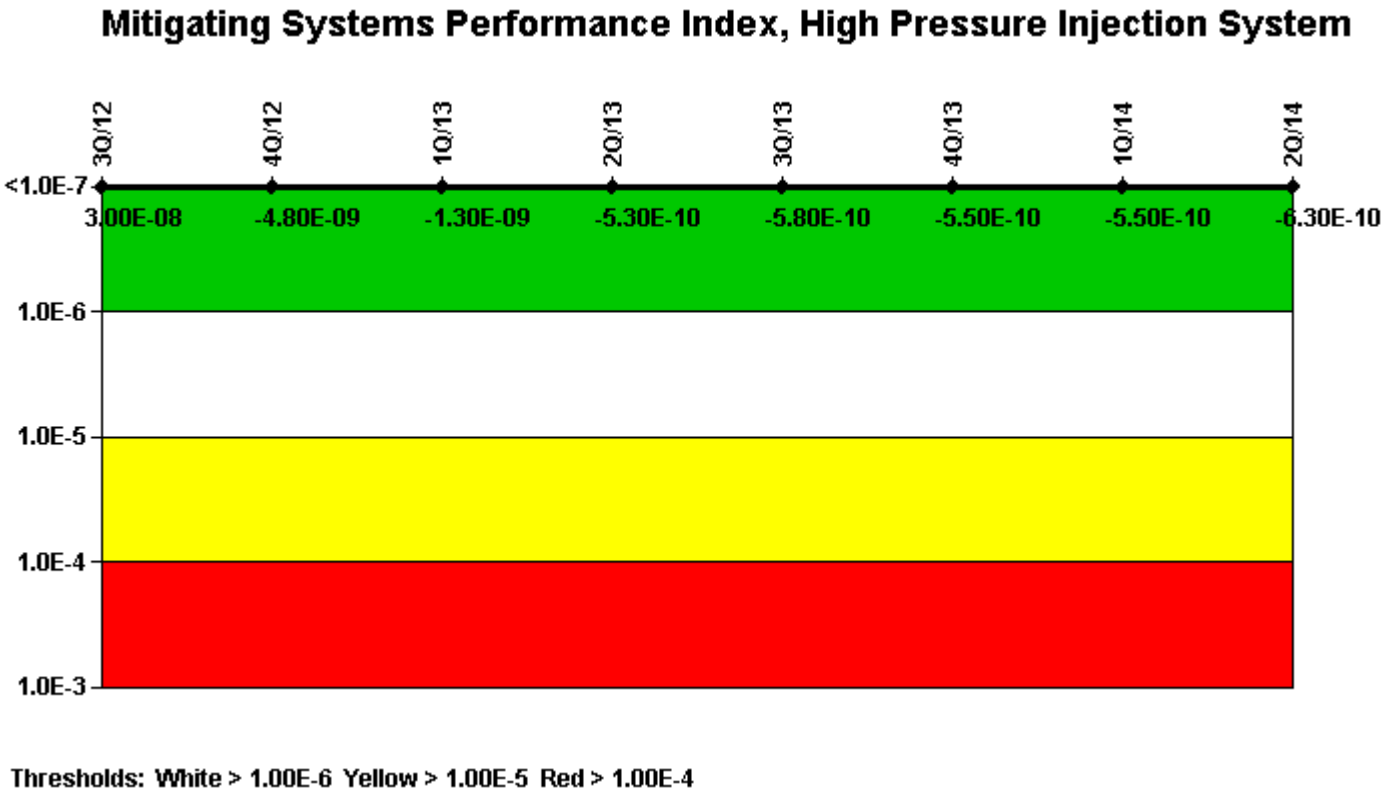
Mitigating Systems Performance Index, Emergency AC Power System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (ΔCDF)	-2.40E-09	8.46E-09	7.25E-09	6.76E-09	4.73E-09	4.73E-09	-1.95E-09	-2.10E-09
URI (ΔCDF)	-2.98E-07	-2.95E-07	-2.06E-07	4.98E-08	5.56E-08	6.21E-08	6.88E-08	7.57E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.00E-07**	**-2.90E-07**	**-2.00E-07**	**5.70E-08**	**6.00E-08**	**6.70E-08**	**6.70E-08**	**7.40E-08**

Licensee Comments:

1Q/13: Diablo Canyon Probabilistic Risk Assessment (PRA) model revision DC02 was approved on 11/23/2012. The Mitigating System Performance Index (MSPI) basis document revision 7A was approved on 4/18/2013 and contains the updated PRA parameters. The DC02 model revision is a periodic update that incorporates new model data for initiating events, equipment failures probabilities and Human error probabilities. As a result of this update, the Core Damage Frequency, Fussel-Vessely and basic event probabilities for all monitored trains and components were revised. The update also resulted in the addition of two monitored Component Cooling Water flow control vales scoped into the Residual Heat Removal system which were previously screened out due

to low Birnbaum values.

1Q/13: Changed PRA Parameter(s).



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

Notes

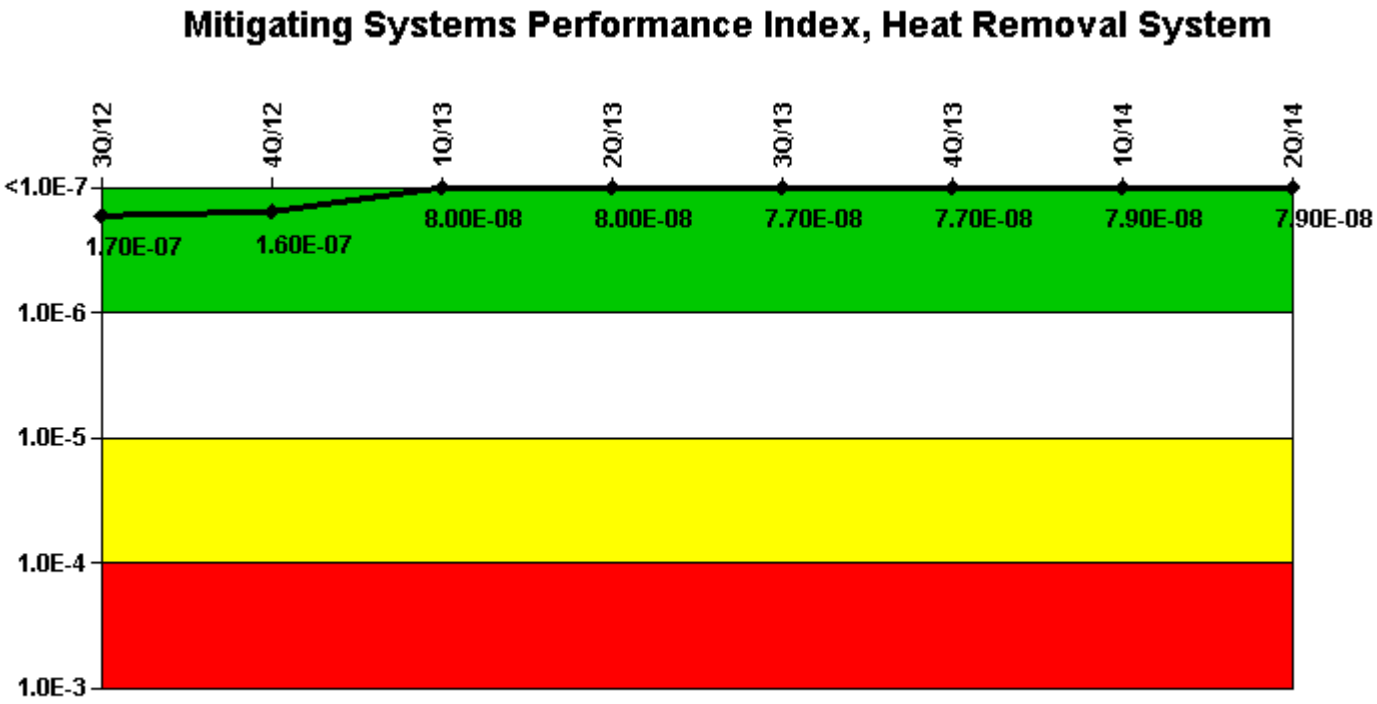
Mitigating Systems Performance Index, High Pressure Injection System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (ΔCDF)	-3.18E-09	-3.36E-09	-1.27E-10	6.25E-10	5.78E-10	6.04E-10	6.03E-10	5.26E-10
URI (ΔCDF)	3.35E-08	-1.41E-09	-1.16E-09	-1.16E-09	-1.16E-09	-1.16E-09	-1.16E-09	-1.16E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**3.00E-08**	**-4.80E-09**	**-1.30E-09**	**-5.30E-10**	**-5.80E-10**	**-5.50E-10**	**-5.50E-10**	**-6.30E-10**

Licensee Comments:

1Q/13: Diablo Canyon Probabilistic Risk Assessment (PRA) model revision DC02 was approved on 11/23/2012. The Mitigating System Performance Index (MSPI) basis document revision 7A was approved on 4/18/2013 and contains the updated PRA parameters. The DC02 model revision is a periodic update that incorporates new model data for initiating events, equipment failures probabilities and Human error probabilities. As a result of this update, the Core Damage Frequency, Fussel-Vessely and basic event probabilities for all monitored trains

and components were revised. The update also resulted in the addition of two monitored Component Cooling Water flow control vales scoped into the Residual Heat Removal system which were previously screened out due to low Birnbaum values.

1Q/13: Changed PRA Parameter(s).



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 (ΔCDF)	-2.25E-08	-2.27E-08	-1.18E-08	-1.18E-08	-1.19E-08	-1.16E-08	-1.17E-08	-1.15E-08
URI (ΔCDF)	1.88E-07	1.82E-07	9.18E-08	9.18E-08	8.87E-08	8.87E-08	9.06E-08	9.06E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**1.70E-07**	**1.60E-07**	**8.00E-08**	**8.00E-08**	**7.70E-08**	**7.70E-08**	**7.90E-08**	**7.90E-08**

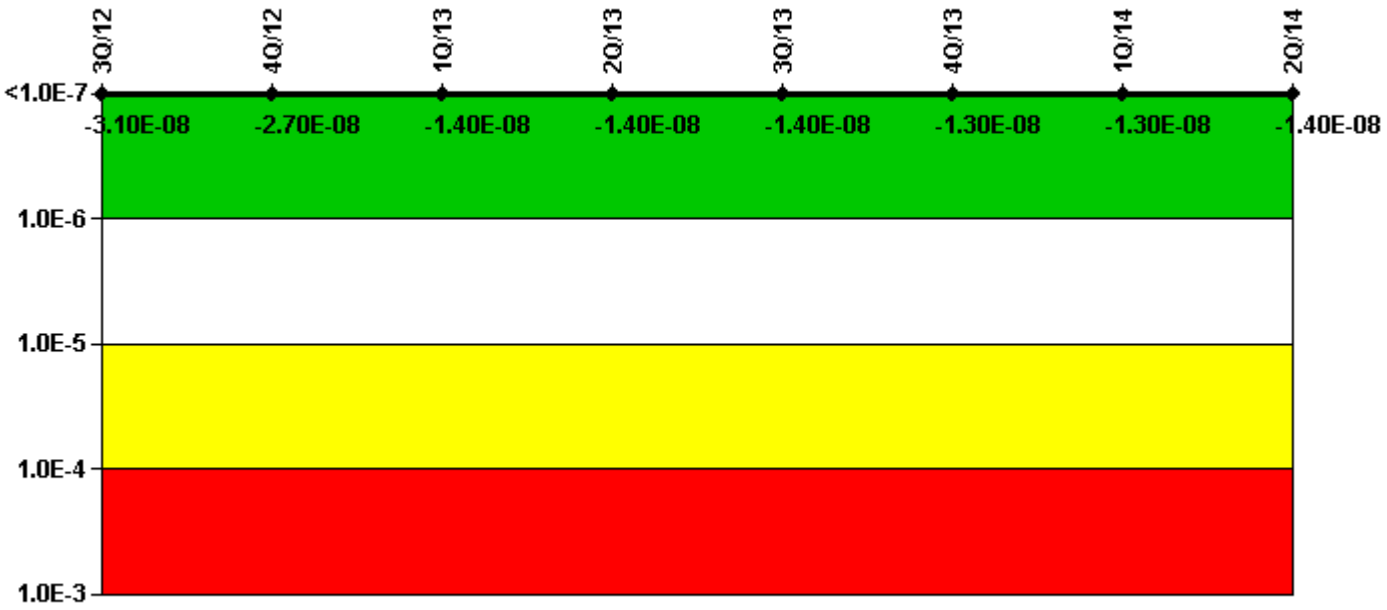
Licensee Comments:

1Q/13: Diablo Canyon Probabilistic Risk Assessment (PRA) model revision DC02 was approved on 11/23/2012. The Mitigating System Performance Index (MSPI) basis document revision 7A was approved on 4/18/2013 and contains the updated PRA parameters. The DC02 model revision is a periodic update that incorporates new

model data for initiating events, equipment failures probabilities and Human error probabilities. As a result of this update, the Core Damage Frequency, Fussel-Vessely and basic event probabilities for all monitored trains and components were revised. The update also resulted in the addition of two monitored Component Cooling Water flow control vales scoped into the Residual Heat Removal system which were previously screened out due to low Birnbaum values.

1Q/13: 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

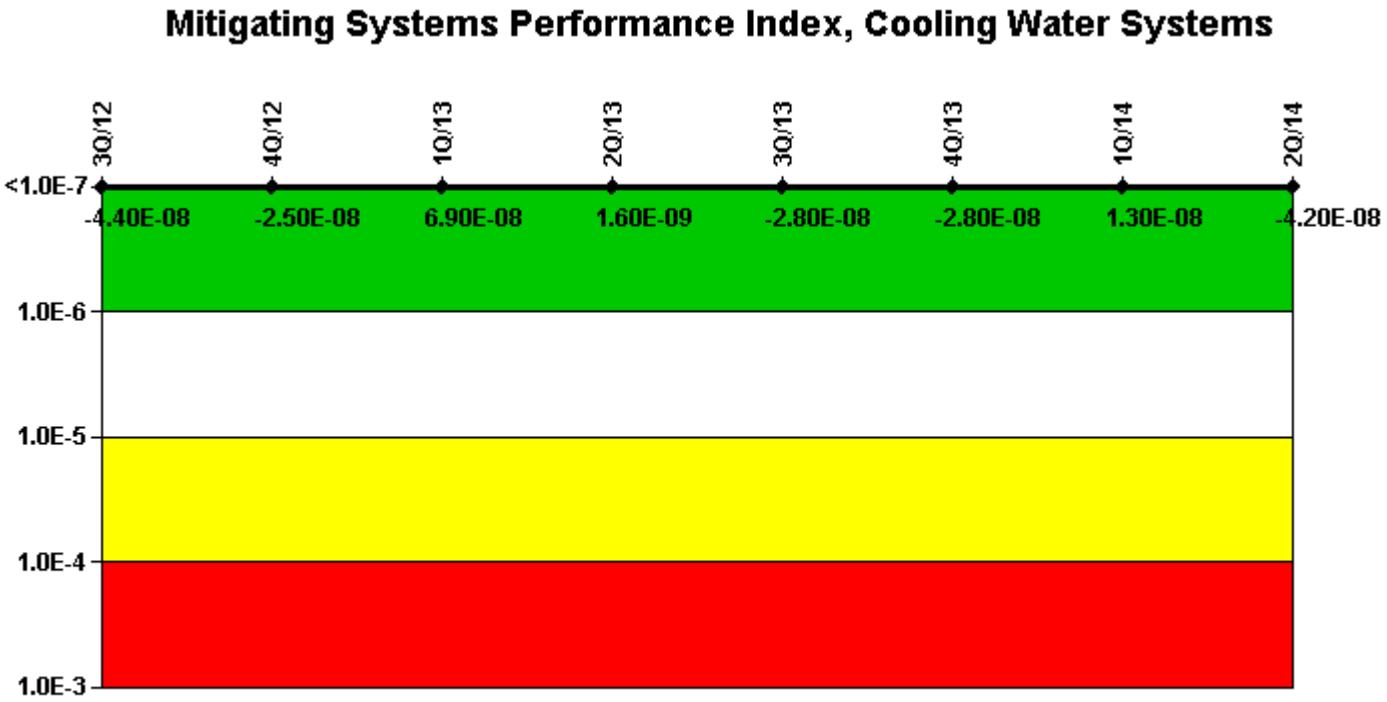
Mitigating Systems Performance Index, Residual Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (ΔCDF)	-5.43E-09	-1.54E-09	-2.41E-09	-2.41E-09	-2.41E-09	-1.66E-09	-1.78E-09	-2.09E-09
URI (ΔCDF)	-2.53E-08	-2.53E-08	-1.14E-08	-1.15E-08	-1.15E-08	-1.16E-08	-1.16E-08	-1.17E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.10E-08**	**-2.70E-08**	**-1.40E-08**	**-1.40E-08**	**-1.40E-08**	**-1.30E-08**	**-1.30E-08**	**-1.40E-08**

Licensee Comments:

1Q/13: Diablo Canyon Probabilistic Risk Assessment (PRA) model revision DC02 was approved on 11/23/2012.

The Mitigating System Performance Index (MSPI) basis document revision 7A was approved on 4/18/2013 and contains the updated PRA parameters. The DC02 model revision is a periodic update that incorporates new model data for initiating events, equipment failures probabilities and Human error probabilities. As a result of this update, the Core Damage Frequency, Fussel-Vessely and basic event probabilities for all monitored trains and components were revised. The update also resulted in the addition of two monitored Component Cooling Water flow control vales scoped into the Residual Heat Removal system which were previously screened out due to low Birnbaum values.

1Q/13: Changed PRA Parameter(s).



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

Notes

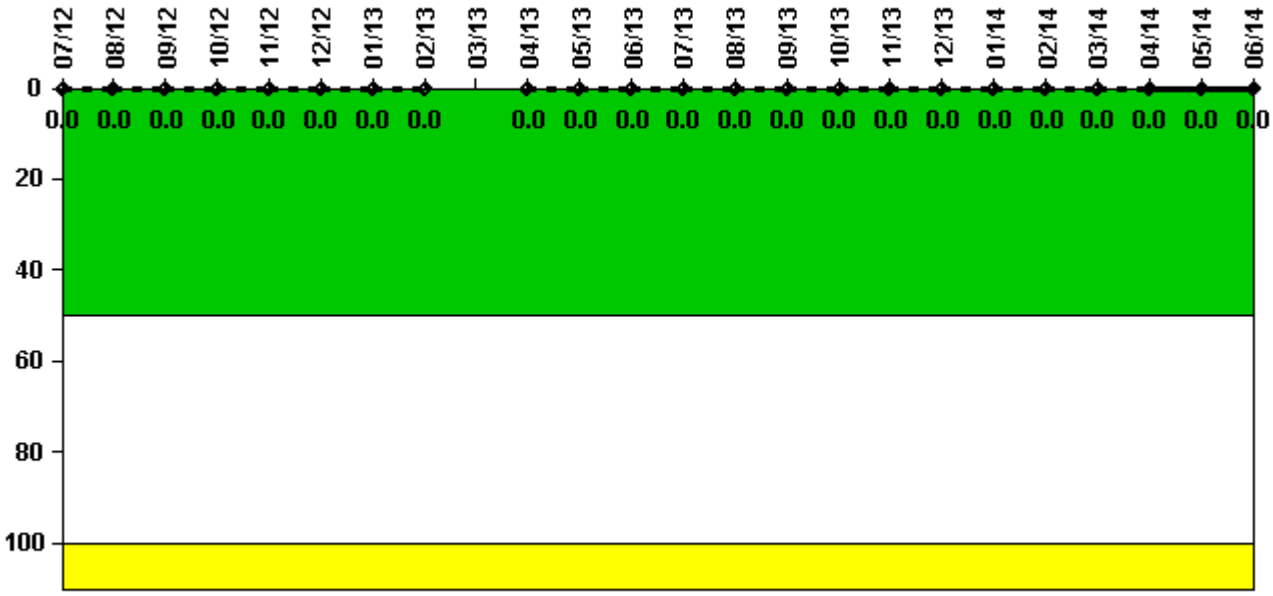
Mitigating Systems Performance Index, Cooling Water Systems	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (ΔCDF)	-1.95E-08	-4.53E-10	1.16E-07	4.83E-08	1.86E-08	1.83E-08	5.93E-08	5.11E-09
URI (ΔCDF)	-2.41E-08	-2.41E-08	-4.67E-08	-4.67E-08	-4.67E-08	-4.67E-08	-4.68E-08	-4.68E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-4.40E-08**	**-2.50E-08**	**6.90E-08**	**1.60E-09**	**-2.80E-08**	**-2.80E-08**	**1.30E-08**	**-4.20E-08**

Licensee Comments:

1Q/13: Diablo Canyon Probabilistic Risk Assessment (PRA) model revision DC02 was approved on 11/23/2012. The Mitigating System Performance Index (MSPI) basis document revision 7A was approved on 4/18/2013 and contains the updated PRA parameters. The DC02 model revision is a periodic update that incorporates new model data for initiating events, equipment failures probabilities and Human error probabilities. As a result of this update, the Core Damage Frequency, Fussel-Vessely and basic event probabilities for all monitored trains and components were revised. The update also resulted in the addition of two monitored Component Cooling Water flow control vales scoped into the Residual Heat Removal system which were previously screened out due to low Birnbaum values.

1Q/13: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

Notes

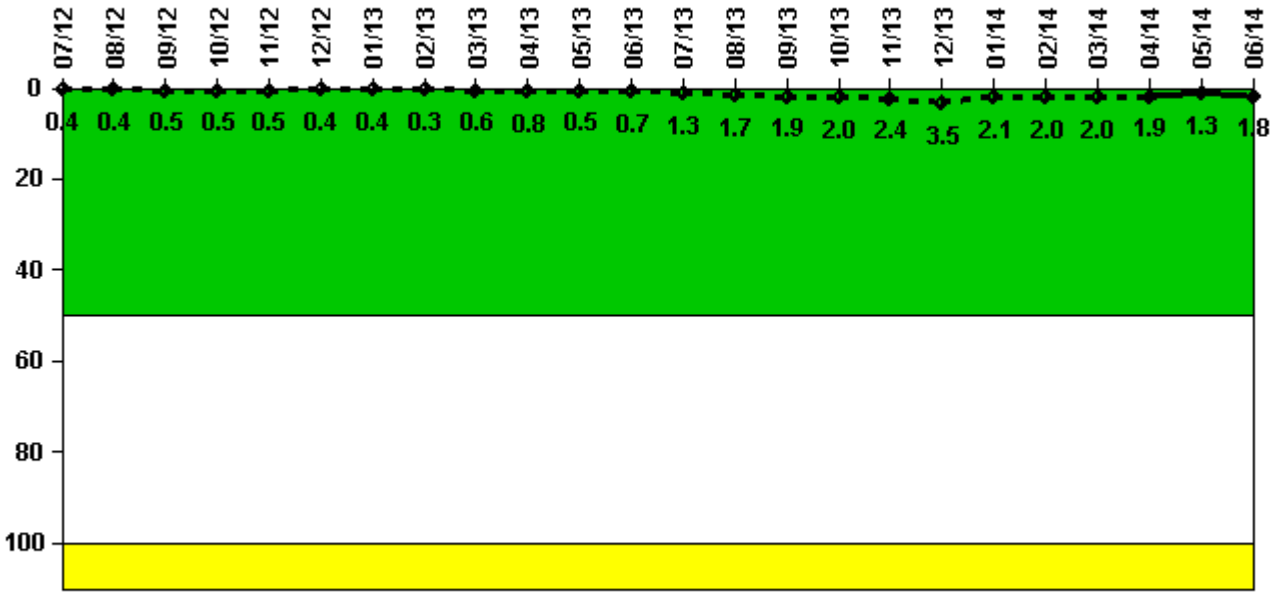
Reactor Coolant System Activity	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum activity	0.000418	0.000313	0.000253	0.000245	0.000261	0.000381	0.000401	0.000215	N/A	0.000081	0.000077	0.000088
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**N/A**	**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	0.000088	0.000093	0.000088	0.000096	0.000098	0.000116	0.000103	0.000104	0.000109	0.000118	0.000128	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

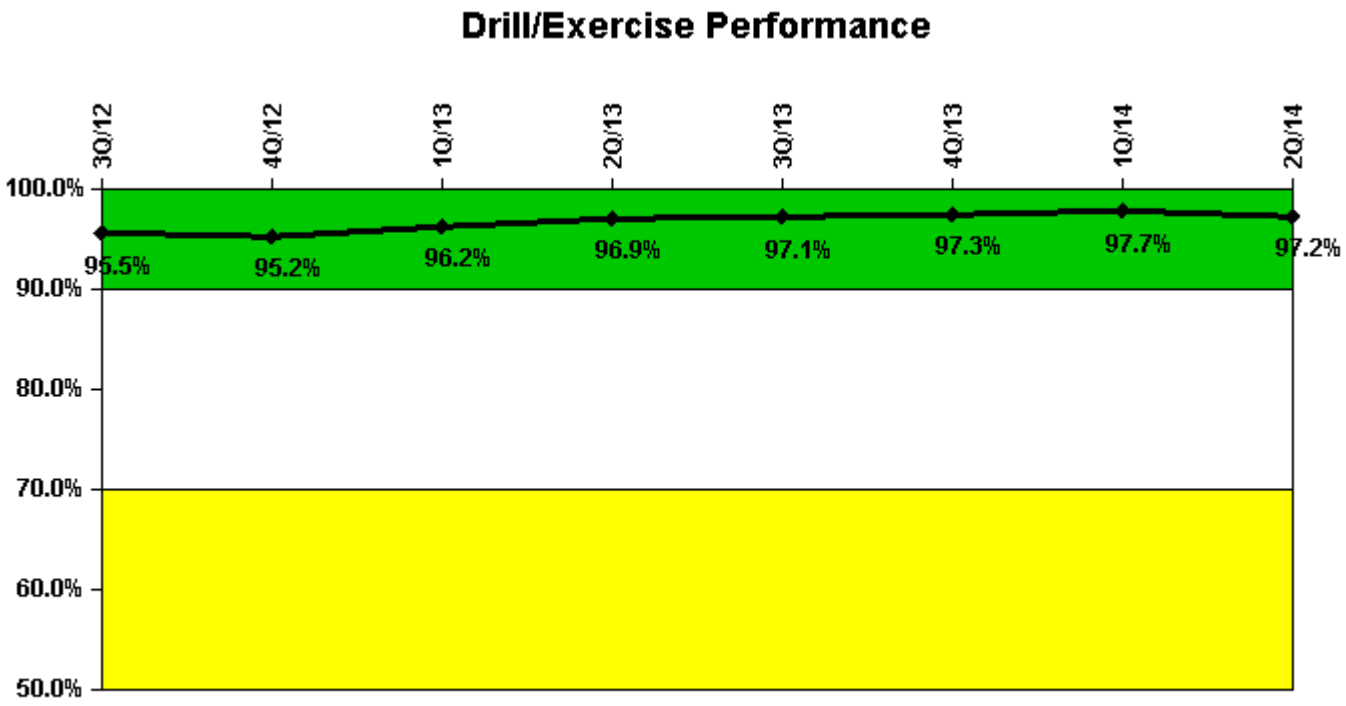
Notes

Reactor Coolant System Leakage	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum leakage	0.035	0.037	0.051	0.045	0.049	0.041	0.039	0.031	0.055	0.079	0.054	0.071
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**	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.3**	**0.6**	**0.8**	**0.5**	**0.7**

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	0.125	0.170	0.191	0.201	0.235	0.354	0.207	0.196	0.197	0.189	0.133	0.178
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	**1.3**	**1.7**	**1.9**	**2.0**	**2.4**	**3.5**	**2.1**	**2.0**	**2.0**	**1.9**	**1.3**	**1.8**

Licensee Comments: none

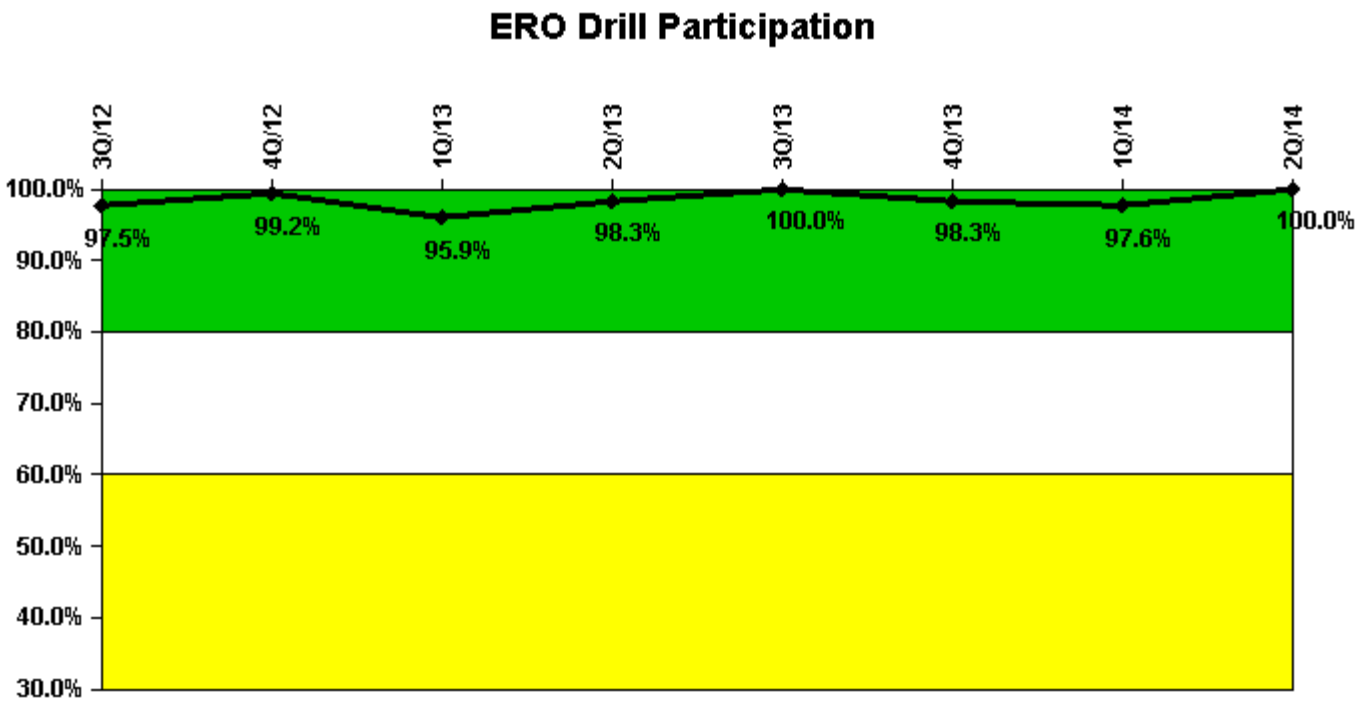


Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	**3Q/12**	**4Q/12**	**1Q/13**	**2Q/13**	**3Q/13**	**4Q/13**	**1Q/14**	**2Q/14**
Successful opportunities	52.0	22.0	8.0	37.0	29.0	42.0	19.0	64.0
Total opportunities	54.0	25.0	8.0	37.0	29.0	42.0	19.0	67.0
Indicator value	**95.5%**	**95.2%**	**96.2%**	**96.9%**	**97.1%**	**97.3%**	**97.7%**	**97.2%**

Licensee Comments: none



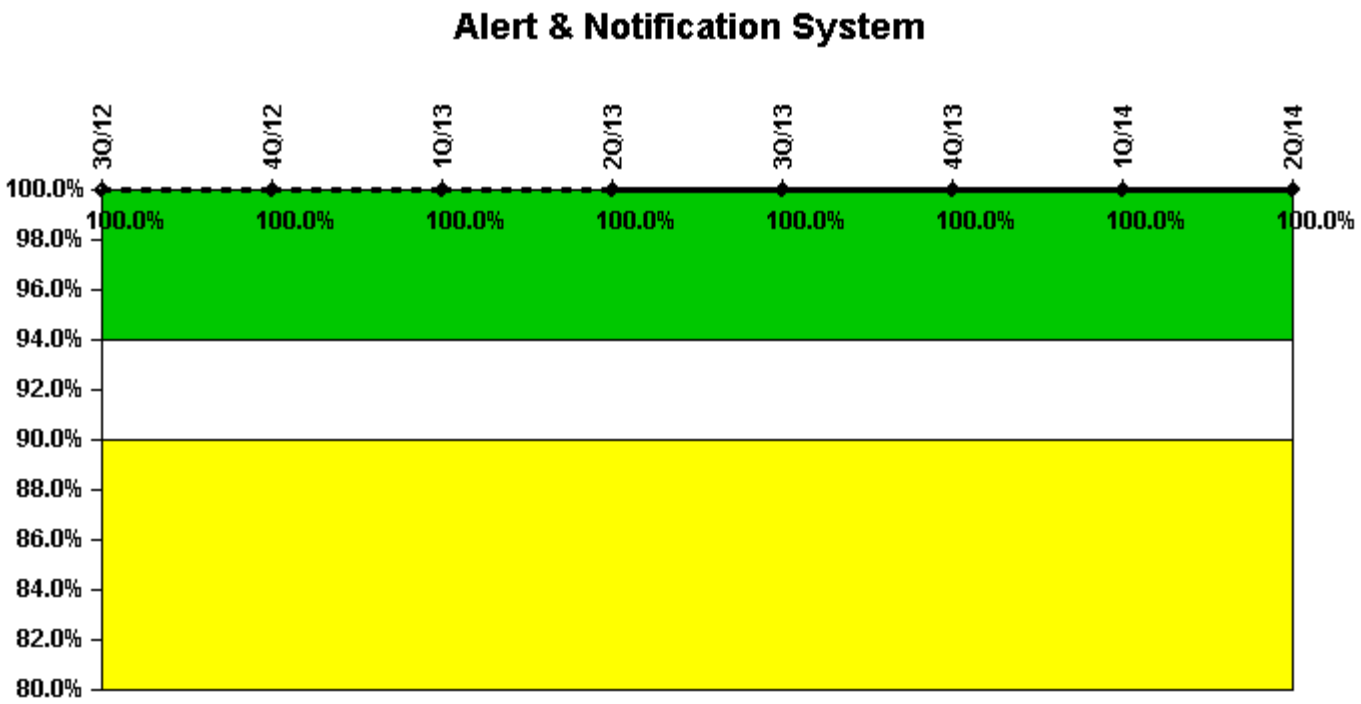
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Participating Key personnel	116.0	119.0	117.0	119.0	115.0	118.0	120.0	117.0
Total Key personnel	119.0	120.0	122.0	121.0	115.0	120.0	123.0	117.0
Indicator value	**97.5%**	**99.2%**	**95.9%**	**98.3%**	**100.0%**	**98.3%**	**97.6%**	**100.0%**

Licensee Comments:

3Q/13: Total Key ERO personnel adjusted due to mis-calculation.



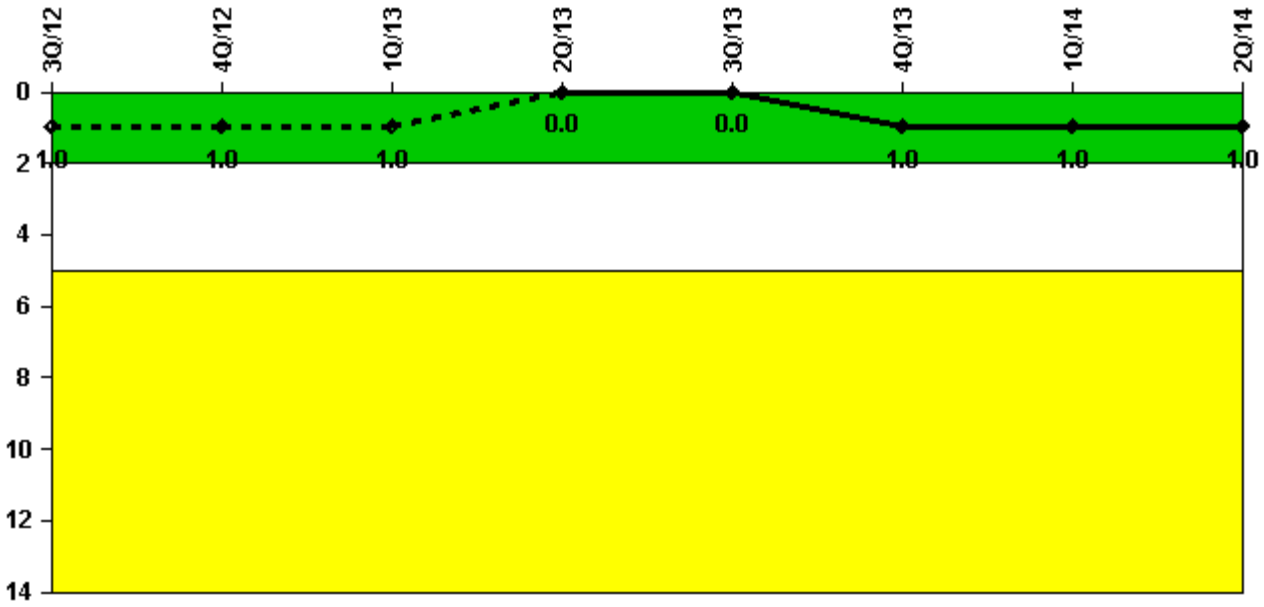
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful siren-tests	1310	917	1046	917	1310	1048	917	917
Total sirens-tests	1310	917	1047	917	1310	1048	917	917
Indicator value	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

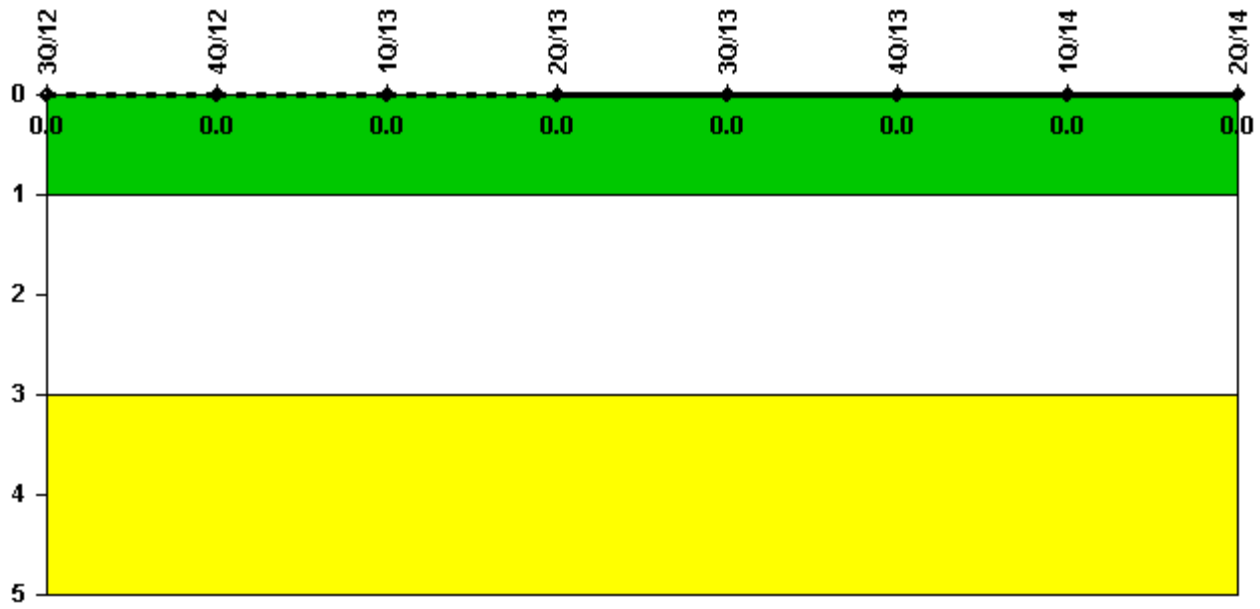
Notes

Occupational Exposure Control Effectiveness	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	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	**1**	**1**	**1**	**0**	**0**	**1**	**1**	**1**

Licensee Comments:

4Q/12: Data approved by manager T. Irving. Approval checked by M. Richardson per request of T. Irving due to technical issues.

RETS/ODCM Radiological Effluent



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:

4Q/12: Data approved by manager T. Irving. Approval checked by M. Richardson per request of T. Irving due to technical issues.

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