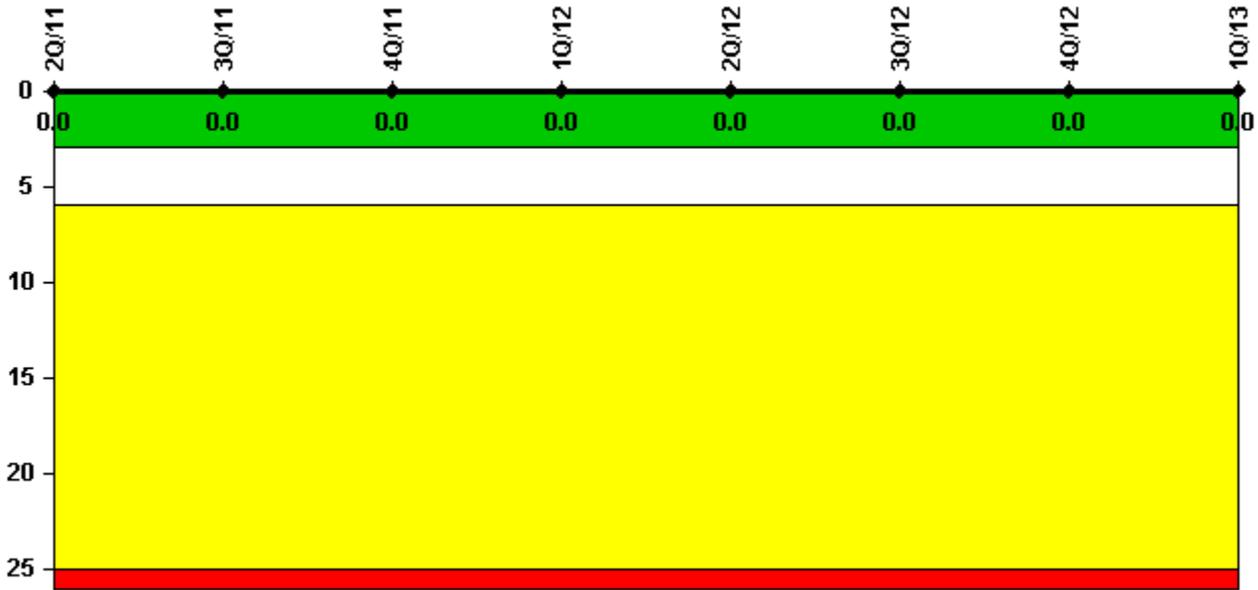


# Diablo Canyon 1

## 1Q/2013 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

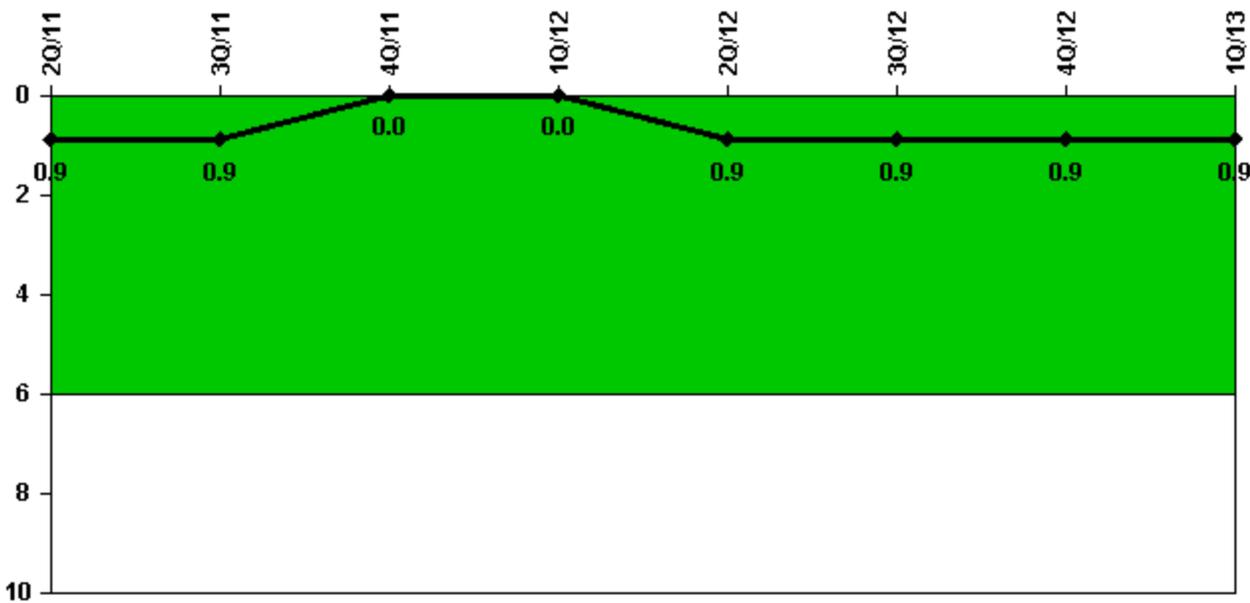
### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	2183.0	893.4	2208.0	2209.0	2159.0
<b>Indicator value</b>	<b>0</b>							

Licensee Comments:

1Q/13: Unit 1 operated at approximately 100 percent power for the first quarter of 2013. There were no initiating events.

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

#### Notes

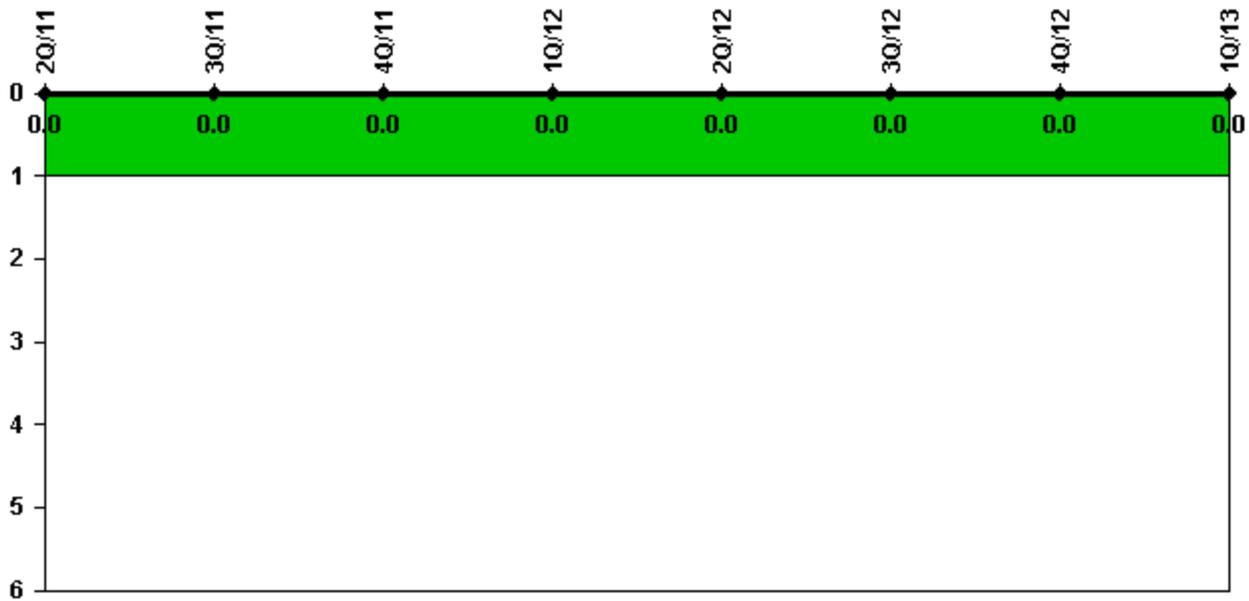
Unplanned Power Changes per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned power changes	0	0	0	0	1.0	0	0	0
Critical hours	2184.0	2208.0	2209.0	2183.0	893.4	2208.0	2209.0	2159.0
<b>Indicator value</b>	<b>0.9</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>

#### Licensee Comments:

1Q/13: Unit 1 operated at approximately 100 percent power for the first quarter of 2013. There were no initiating events.

2Q/12: On June 19, 2012, during power ascension following refueling outage 17, operators noted high vibration in a main feedwater pump, and reduced power to facilitate corrective maintenance (unplanned power change). Reference SAPN 50492737.

### Unplanned Scrams with Complications



Thresholds: White > 1.0

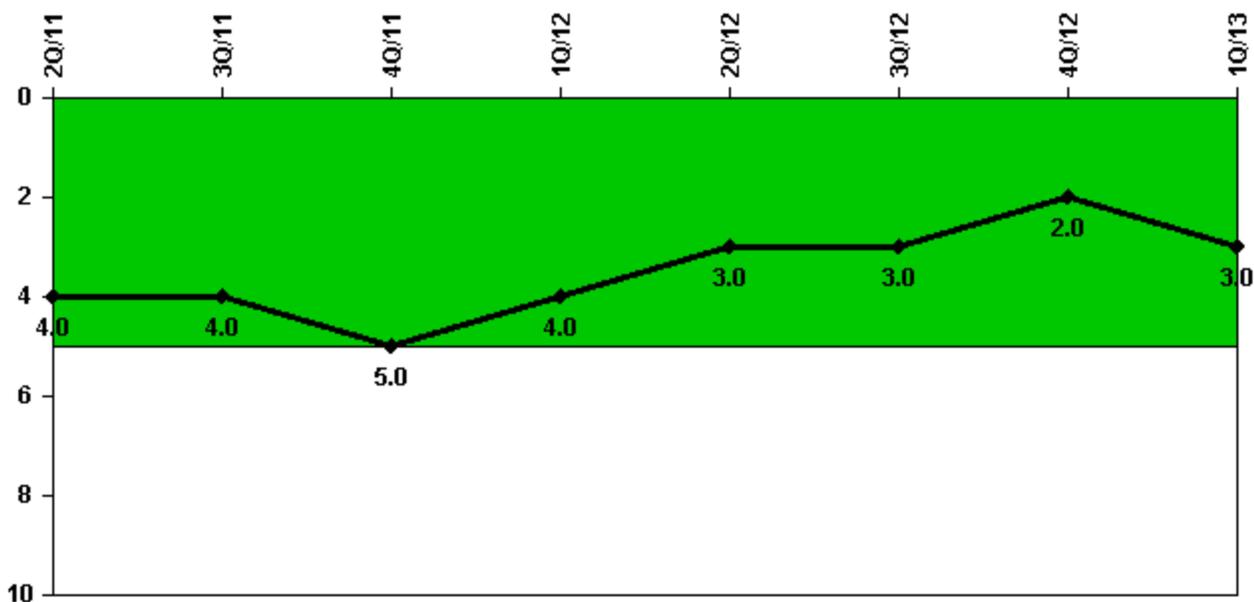
#### Notes

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	0	0	0	0	0
<b>Indicator value</b>	<b>0.0</b>							

Licensee Comments:

1Q/13: Unit 1 operated at approximately 100 percent power for the first quarter of 2013. There were no initiating events.

### 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	2	1	0	0	2	0	1
<b>Indicator value</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>

#### Licensee Comments:

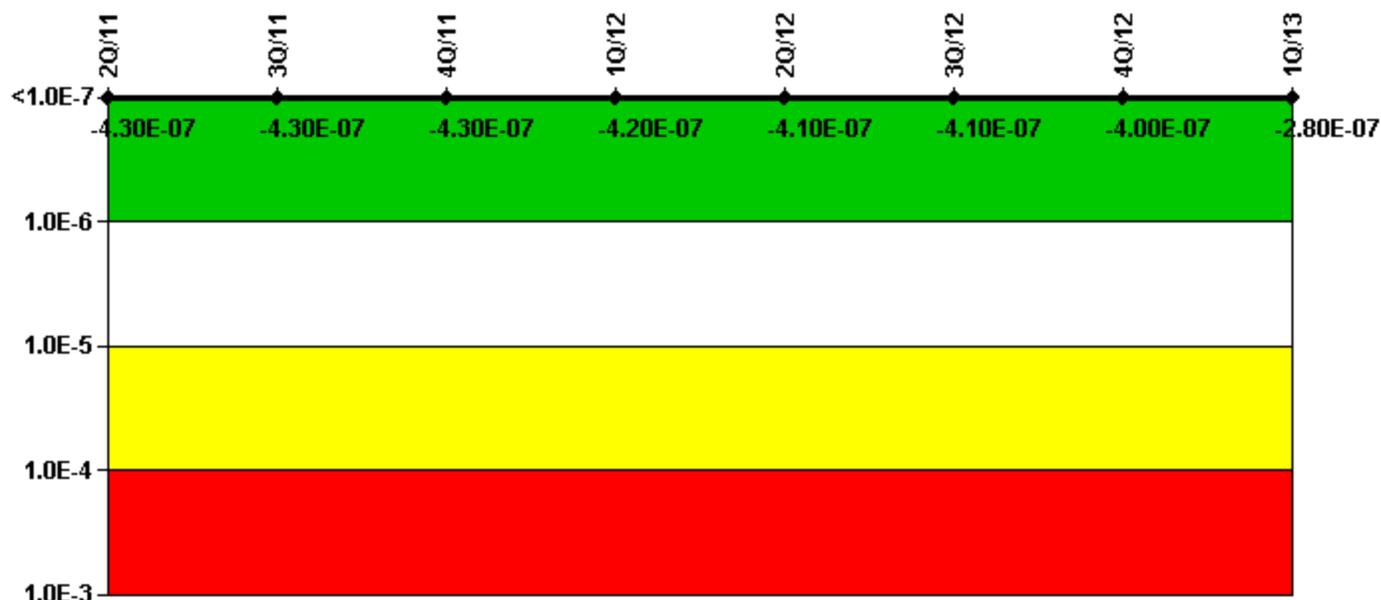
1Q/13: Unit 1 recorded 1 safety system functional failure for the first quarter of 2013. DCL-13-005 reported that inadequate design controls resulted in loss of the control room ventilation system.

4Q/11: DCPD had a SSFF reported in LER 2011-006-0 (DCL-11-113) that reported a loss of control room envelope.

3Q/11: Unit 1 LER 1-2011-005-00, "Emergency Diesel Generator Actuations Upon Loss of 230 kV Startup Due to Electrical Maintenance Testing Activities," was sent on July 22, 2011. These two events represent 2 SSFFs.

2Q/11: LER 1-2011-004-00, "Emergency Diesel Generators Actuated Upon 230 kV Isolation Due to Maintenance Activities on Relay Panel" was sent on June 30, 2011.

### Mitigating Systems Performance Index, Emergency AC Power System



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

#### Notes

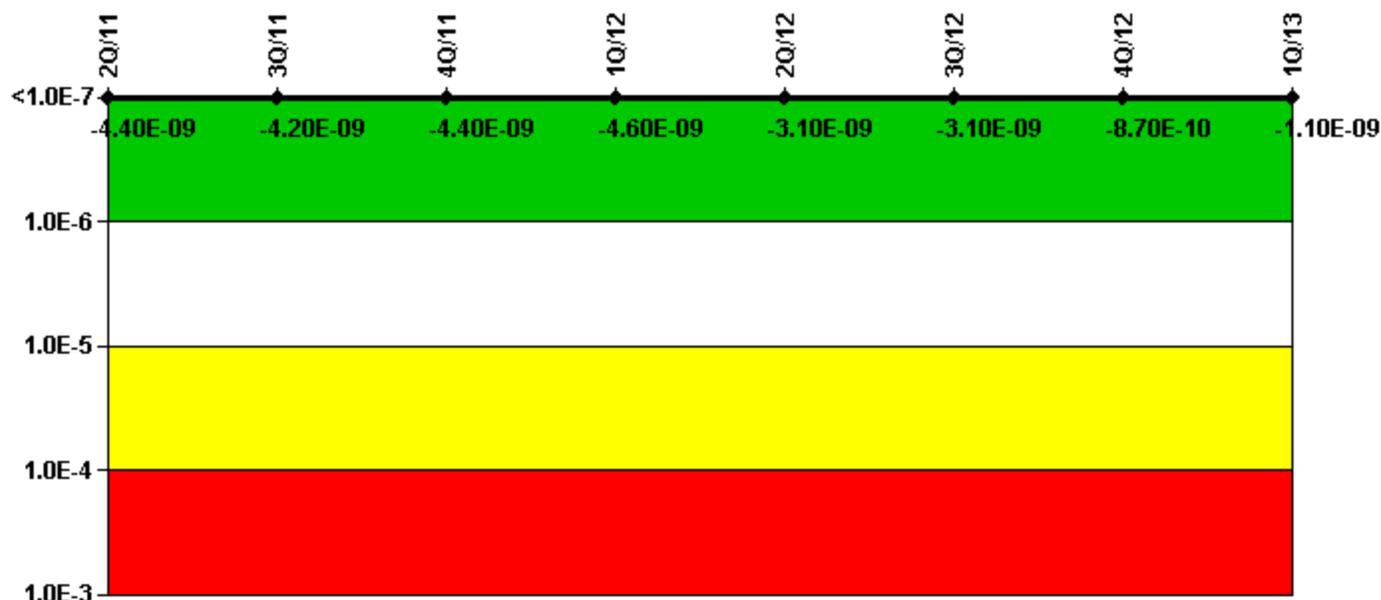
Mitigating Systems Performance Index, Emergency AC Power System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	-5.00E-09	-2.02E-09	-7.77E-09	-1.01E-09	3.71E-09	5.26E-09	5.31E-09	-1.82E-10
URI ( $\Delta$ CDF)	-4.23E-07	-4.23E-07	-4.23E-07	-4.20E-07	-4.16E-07	-4.12E-07	-4.07E-07	-2.84E-07
PLE	NO							
Indicator value	-4.30E-07	-4.30E-07	-4.30E-07	-4.20E-07	-4.10E-07	-4.10E-07	-4.00E-07	-2.80E-07

Licensee Comments:

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

2Q/11: After a conversation with an MSPI working group member it was decided that DCPD needed to report the Unit 1 Emergency Diesel starts during 2R16 as MSPI actual ESF actuations. Reported 7/25/11

### Mitigating Systems Performance Index, High Pressure Injection System



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

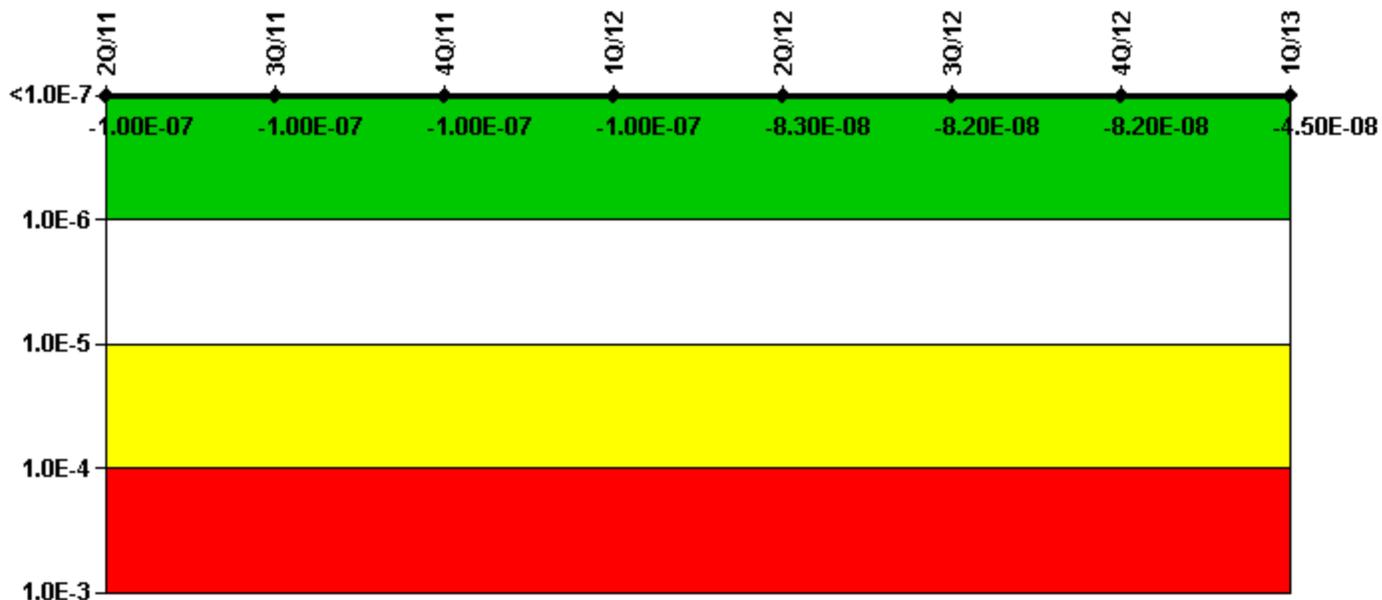
#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	-2.94E-09	-2.75E-09	-2.98E-09	-3.21E-09	-1.70E-09	-1.72E-09	5.15E-10	4.00E-11
URI ( $\Delta$ CDF)	-1.41E-09	-1.40E-09	-1.40E-09	-1.39E-09	-1.39E-09	-1.39E-09	-1.39E-09	-1.13E-09
PLE	NO							
Indicator value	-4.40E-09	-4.20E-09	-4.40E-09	-4.60E-09	-3.10E-09	-3.10E-09	-8.70E-10	-1.10E-09

Licensee Comments:

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

### Mitigating Systems Performance Index, Heat Removal System



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

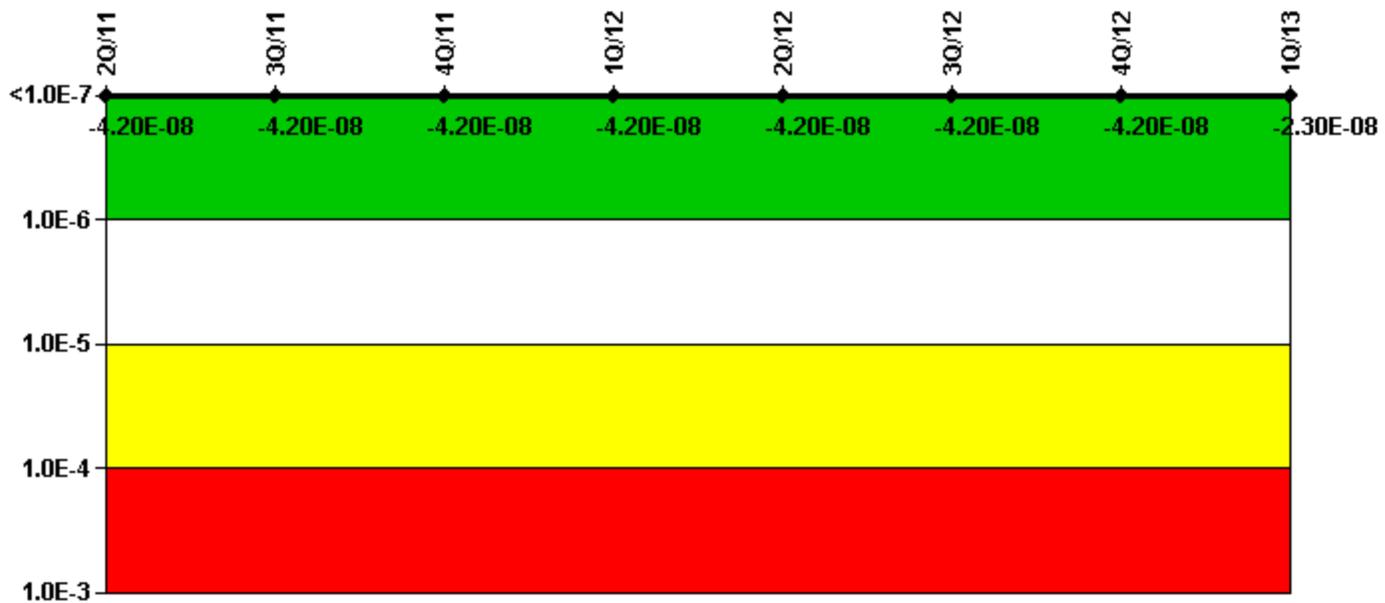
#### Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	-1.70E-08	-1.70E-08	-1.70E-08	-1.92E-08	9.98E-10	2.13E-09	2.13E-09	4.73E-09
URI ( $\Delta$ CDF)	-8.37E-08	-4.97E-08						
PLE	NO							
Indicator value	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-8.30E-08	-8.20E-08	-8.20E-08	-4.50E-08

Licensee Comments:

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

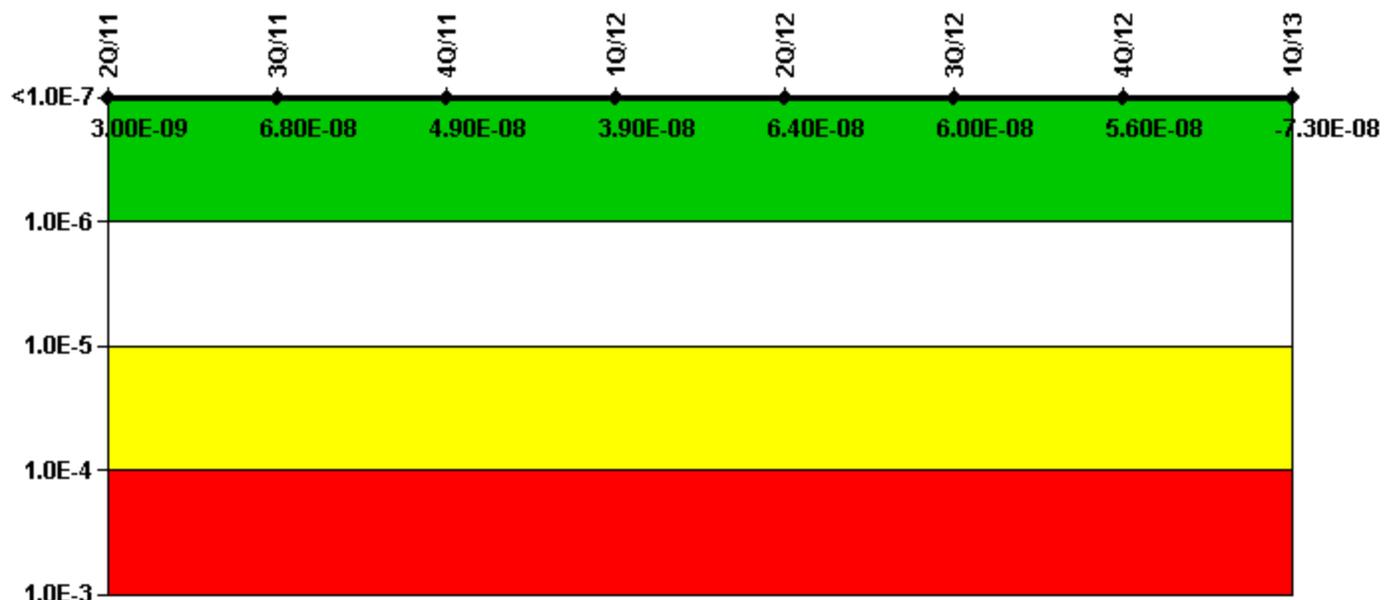
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	-5.94E-09	-5.60E-09						
URI ( $\Delta$ CDF)	-3.64E-08	-1.76E-08						
PLE	NO							
Indicator value	-4.20E-08	-2.30E-08						

Licensee Comments:

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

### Mitigating Systems Performance Index, Cooling Water Systems



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

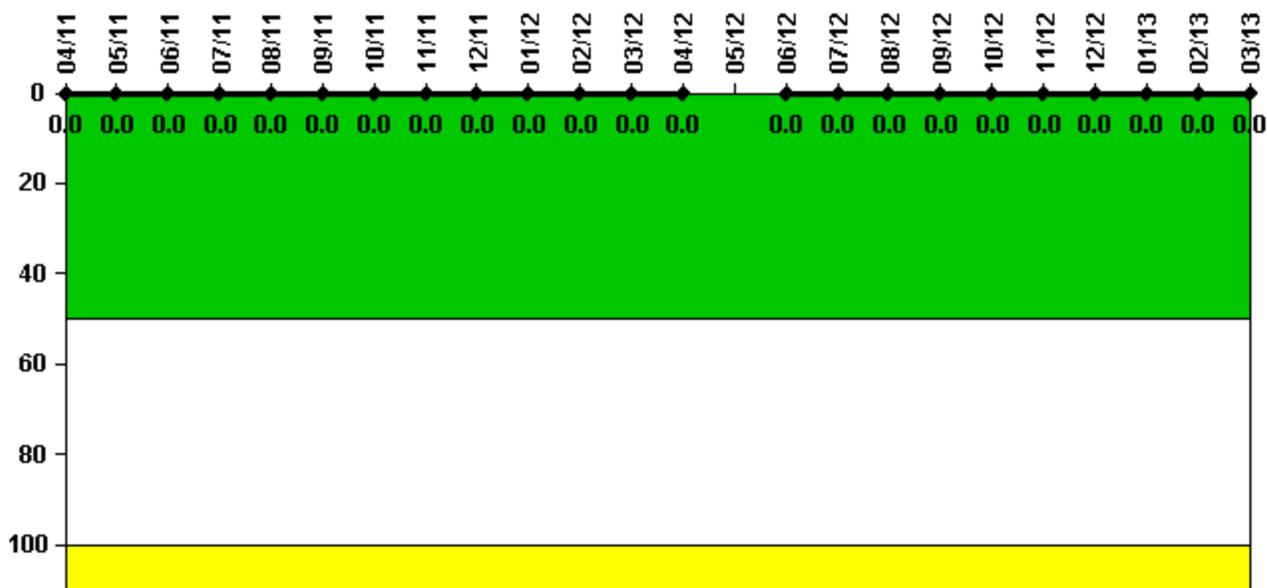
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI (ΔCDF)	3.00E-08	9.48E-08	7.62E-08	6.65E-08	9.12E-08	8.73E-08	8.27E-08	-2.08E-08
URI (ΔCDF)	-2.70E-08	-5.20E-08						
PLE	NO							
Indicator value	3.00E-09	6.80E-08	4.90E-08	3.90E-08	6.40E-08	6.00E-08	5.60E-08	7.30E-08

Licensee Comments:

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

### Reactor Coolant System Activity



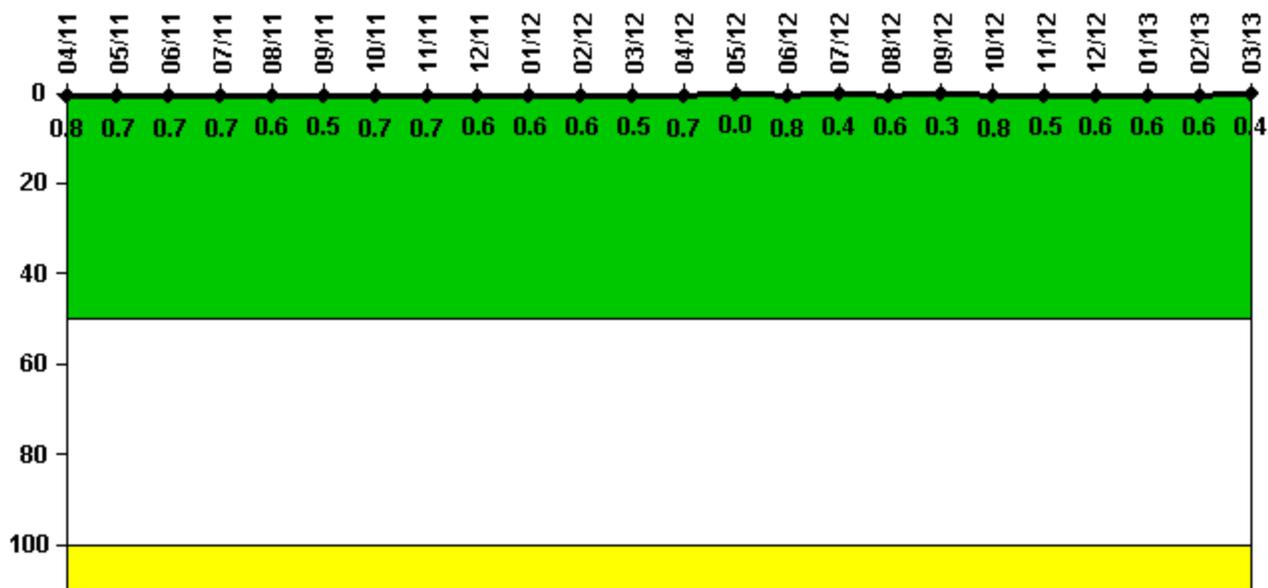
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

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	0.000091	0.000091	0.000104	0.000095	0.000100	0.000104	0.000115	0.000105	0.000115	0.000128	0.000120	0.000116
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	0.000090	N/A	0.000055	0.000057	0.000065	0.000057	0.000062	0.000059	0.000062	0.000065	0.000064	0.000068
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	N/A	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



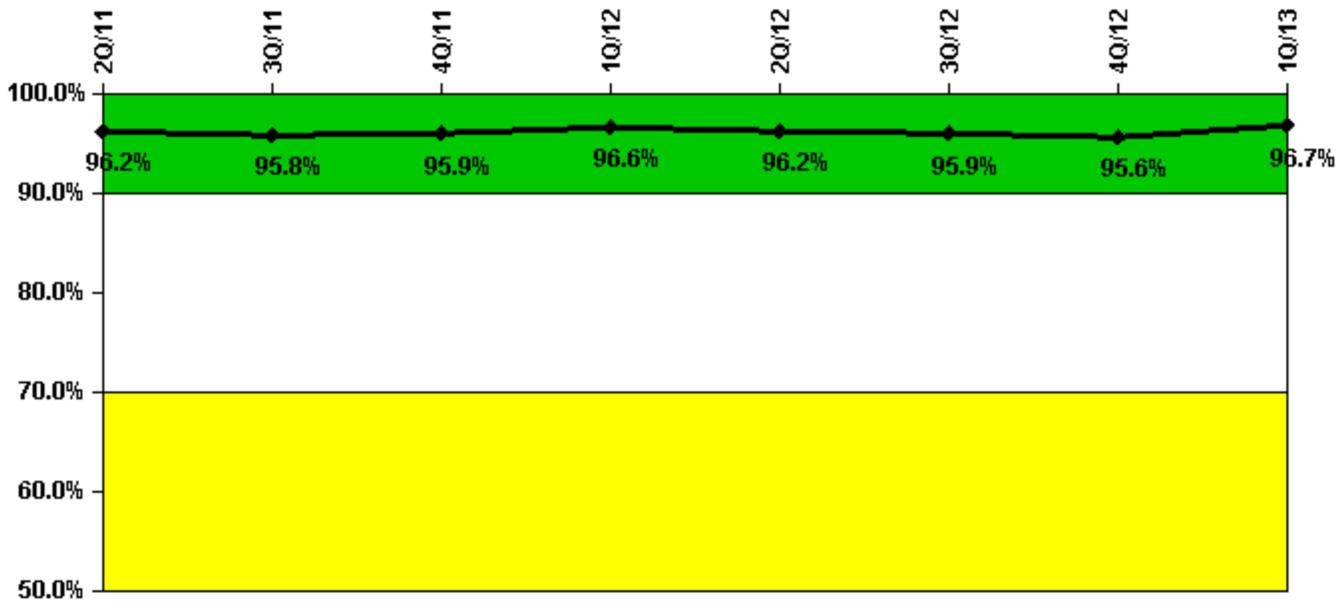
Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.083	0.072	0.066	0.068	0.059	0.046	0.066	0.069	0.059	0.058	0.059	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
<b>Indicator value</b>	<b>0.8</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>0.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>
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	0.070	0	0.075	0.044	0.058	0.033	0.075	0.049	0.055	0.061	0.056	0.041
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
<b>Indicator value</b>	<b>0.7</b>	<b>0</b>	<b>0.8</b>	<b>0.4</b>	<b>0.6</b>	<b>0.3</b>	<b>0.8</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.4</b>

Licensee Comments: none

### Drill/Exercise Performance



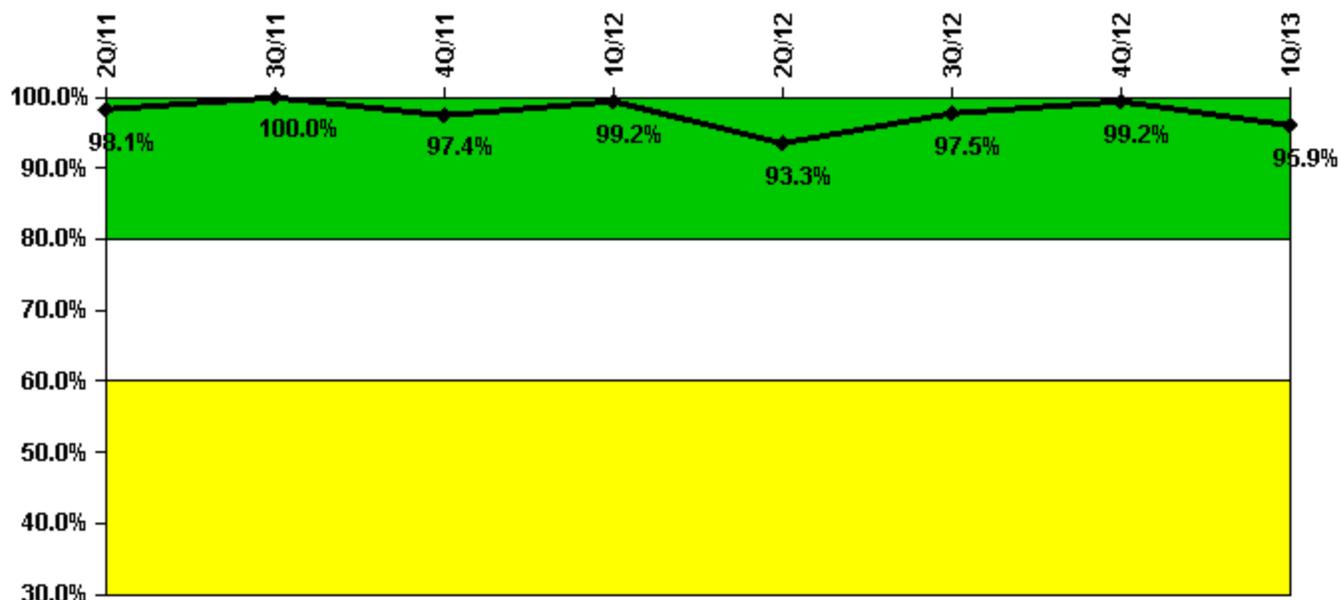
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful opportunities	21.0	9.0	28.0	57.0	6.0	52.0	22.0	8.0
Total opportunities	22.0	9.0	28.0	58.0	6.0	54.0	25.0	8.0
Indicator value	96.2%	95.8%	95.9%	96.6%	96.2%	95.9%	95.6%	96.7%

Licensee Comments: none

### ERO Drill Participation



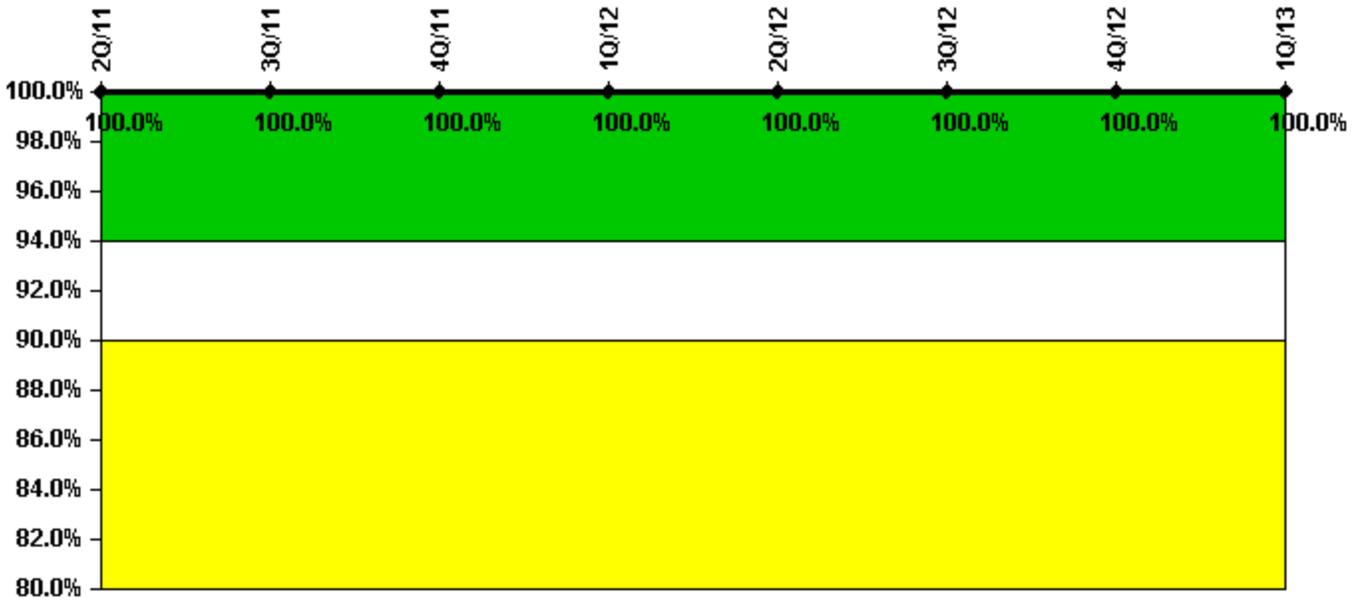
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Participating Key personnel	102.0	104.0	111.0	117.0	112.0	116.0	119.0	117.0
Total Key personnel	104.0	104.0	114.0	118.0	120.0	119.0	120.0	122.0
Indicator value	98.1%	100.0%	97.4%	99.2%	93.3%	97.5%	99.2%	95.9%

Licensee Comments: none

### Alert & Notification System



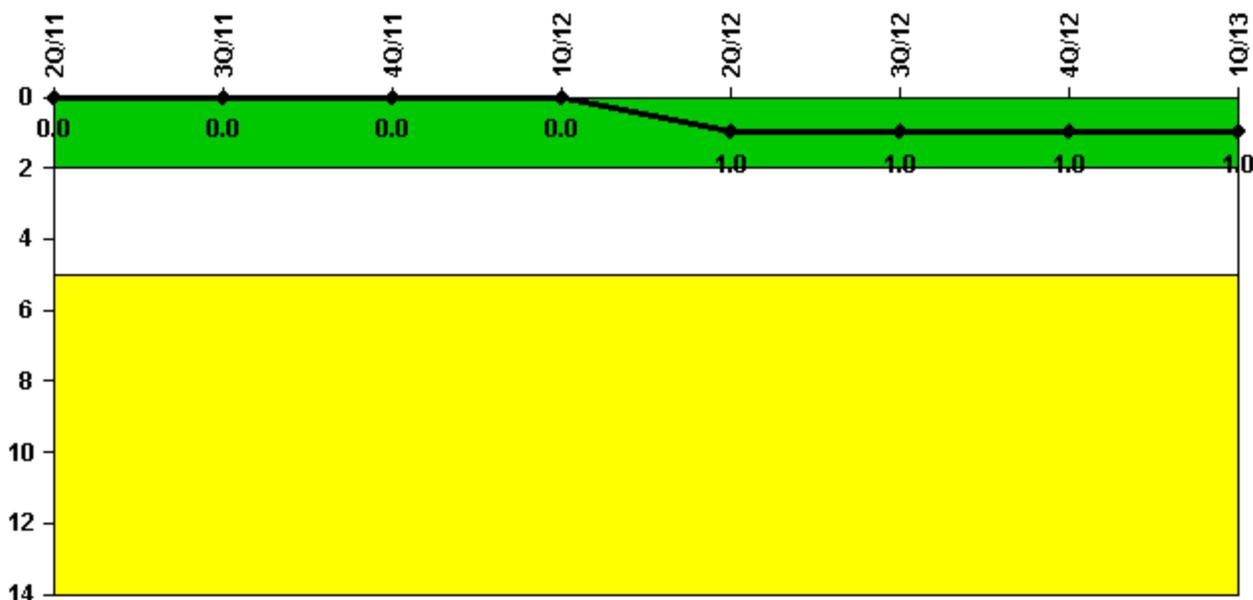
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful siren-tests	917	1309	917	1048	916	1310	917	1046
Total sirens-tests	917	1310	917	1048	917	1310	917	1047
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	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
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
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

#### Licensee Comments:

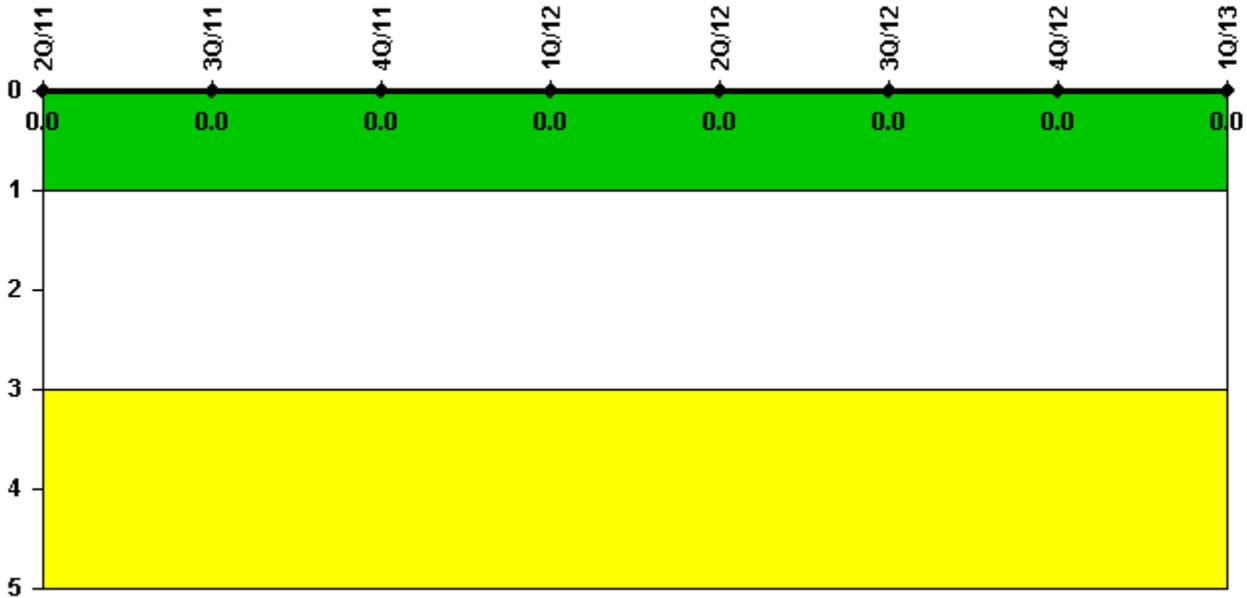
1Q/13: 50538483 identified a potential access path through a pipe chase between the Letdown Orifice Room and the Regenerative Heat Exchanger room. This was later determined to not be a violation of DCPD Technical Specification 5.7.2. Retracted

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

1Q/12: A March 2012 "High radiation area occurrence" was retracted in July 2012, following completion of the cause evaluation. The change has no impact on the color of the indicator. The basis for the retraction is contained in SAPN 50499040.

4Q/11: U1 and U2 Occupational Radiation Safety for 4Q2011 approved by manager T. Irving, approval boxes checked by M. Richardson per RS manager request.

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

Licensee Comments:

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

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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.

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

*Last Modified: April 23, 2013*