

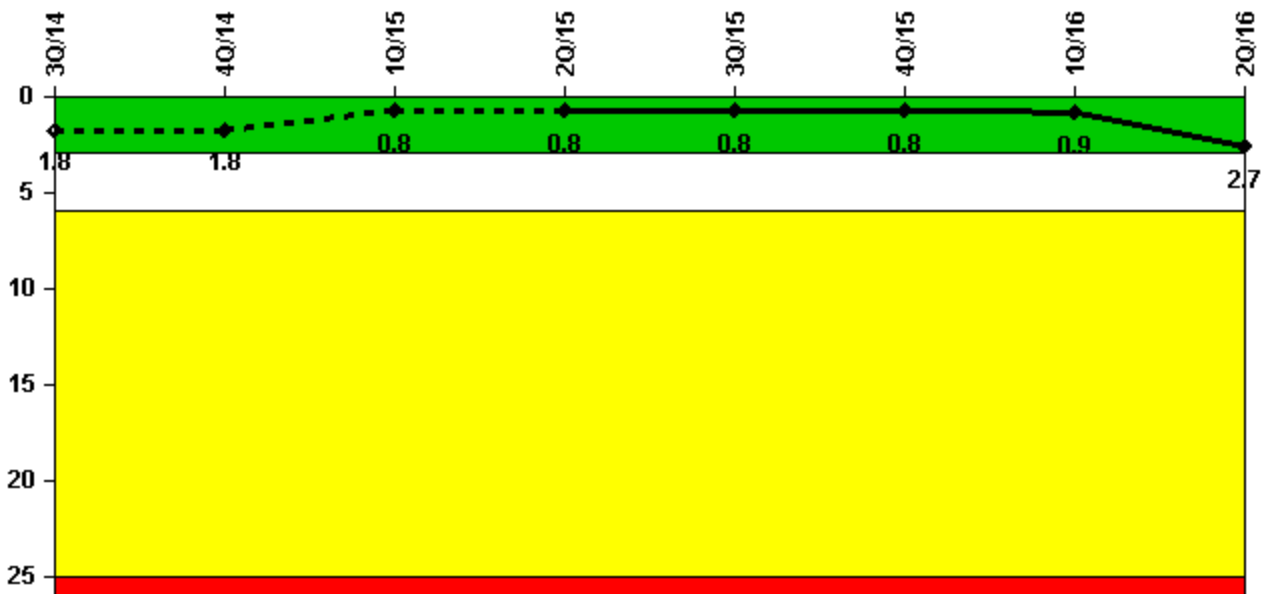
# Grand Gulf 1

## 2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



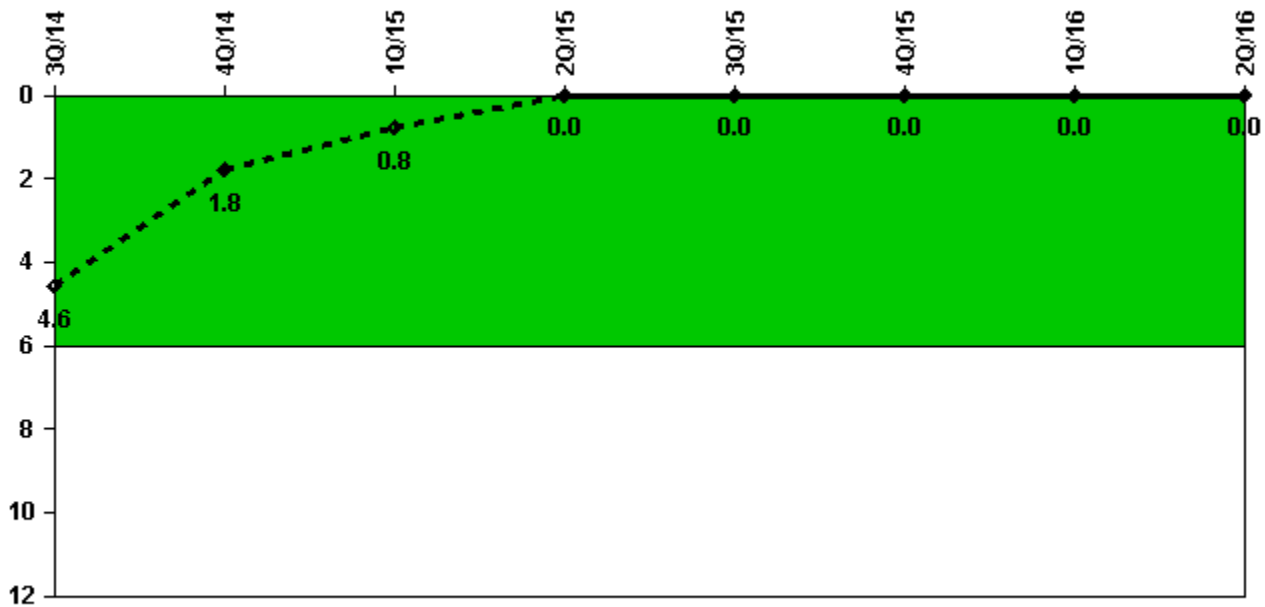
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned scrams	0	0	1.0	0	0	0	1.0	2.0
Critical hours	2208.0	2209.0	2005.0	2184.0	2208.0	2209.0	1315.9	2010.2
Indicator value	1.8	1.8	0.8	0.8	0.8	0.8	0.9	2.7

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

#### Notes

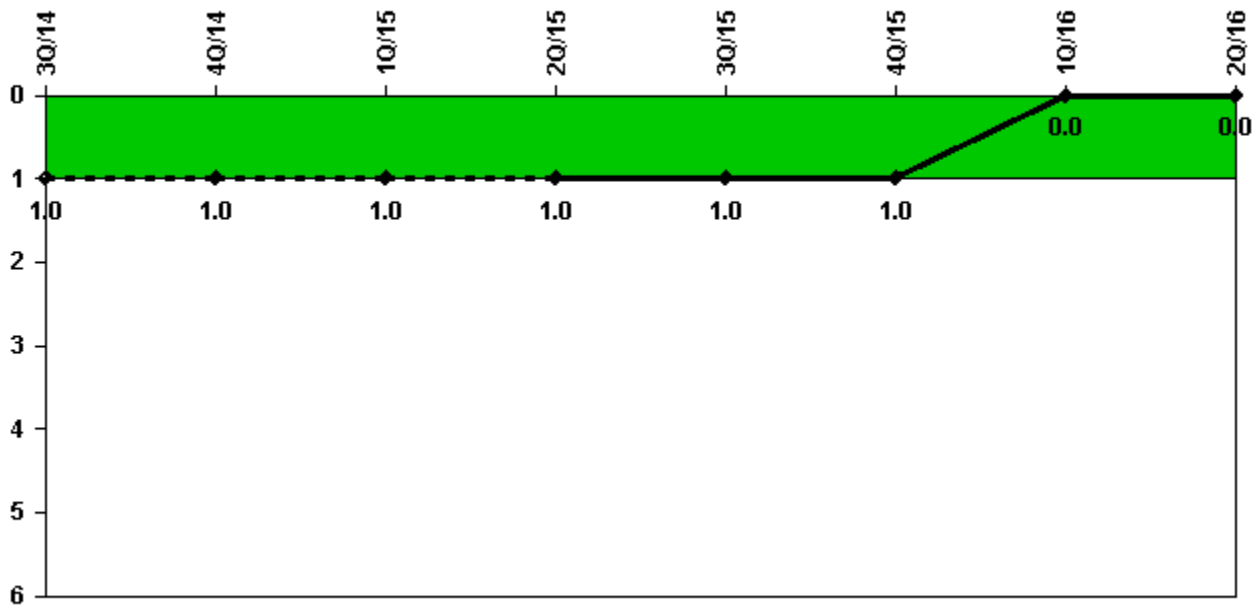
Unplanned Power Changes per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2005.0	2184.0	2208.0	2209.0	1315.9	2010.2
<b>Indicator value</b>	<b>4.6</b>	<b>1.8</b>	<b>0.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Licensee Comments:

1Q/15: Grand Gulf has added one unplanned power change to 2Q2014. This event was incorrectly counted due to human error and has been added to the corrective action program.

4Q/14: Plant power was reduced by greater than 20% on November 23, 2014 at the direction of the grid dispatcher due to grid instability. This down power was outside of management control.

### Unplanned Scrams with Complications



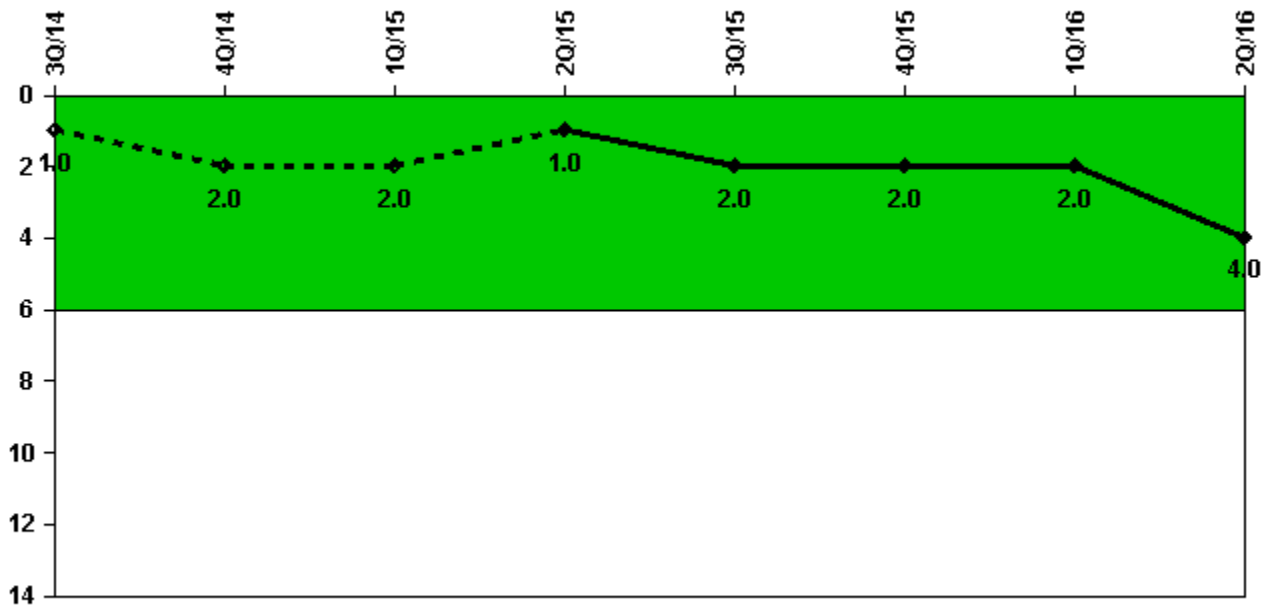
Thresholds: White > 1.0

#### 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	1.0	0	0	0	0	0
<b>Indicator value</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

#### Notes

Safety System Functional Failures (BWR)	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Safety System Functional Failures	0	1	0	0	1	1	0	2
<b>Indicator value</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4</b>

Licensee Comments:

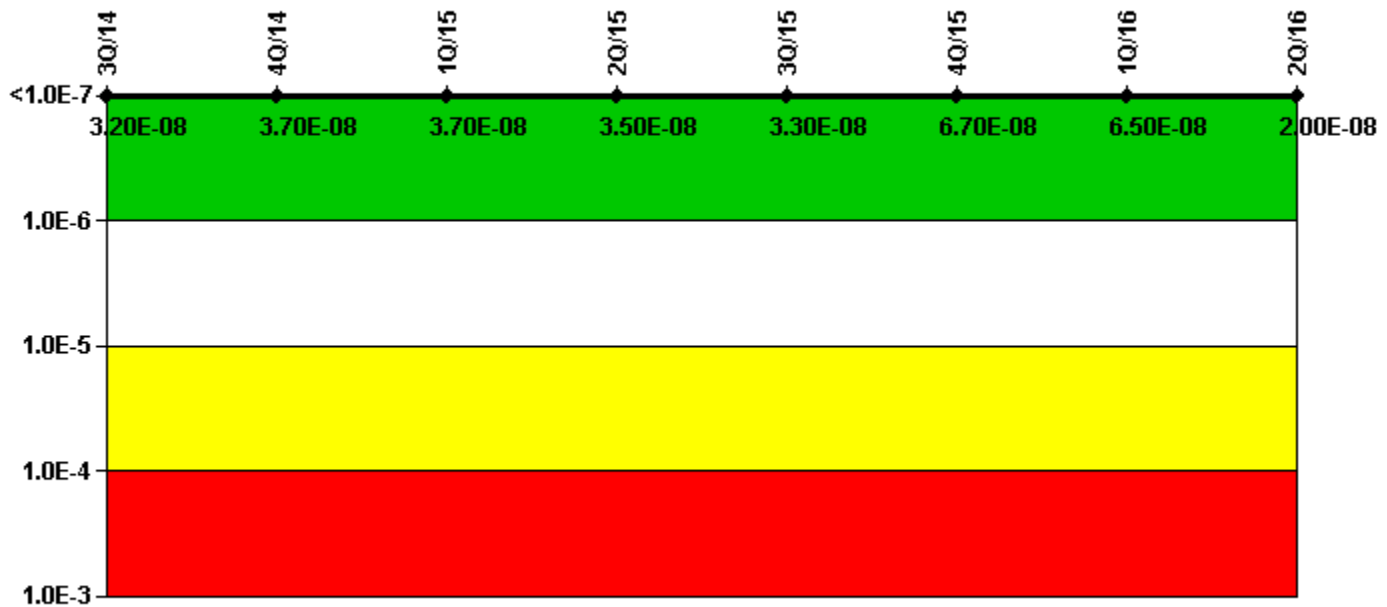
2Q/16: Reference LERs 2016-001-00 & 2016-003-00

4Q/15: LER 2015-002-00 Documents 4 SSFF failures one in 2Q14, one in 4Q14, one in 3Q14 and one in 4Q14

3Q/15: LER 2015-002-00 Documents one safety system functional failure in August 2015.

4Q/14: LER 2015-002-00 Documents one safety system functional failure in October 2014.

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



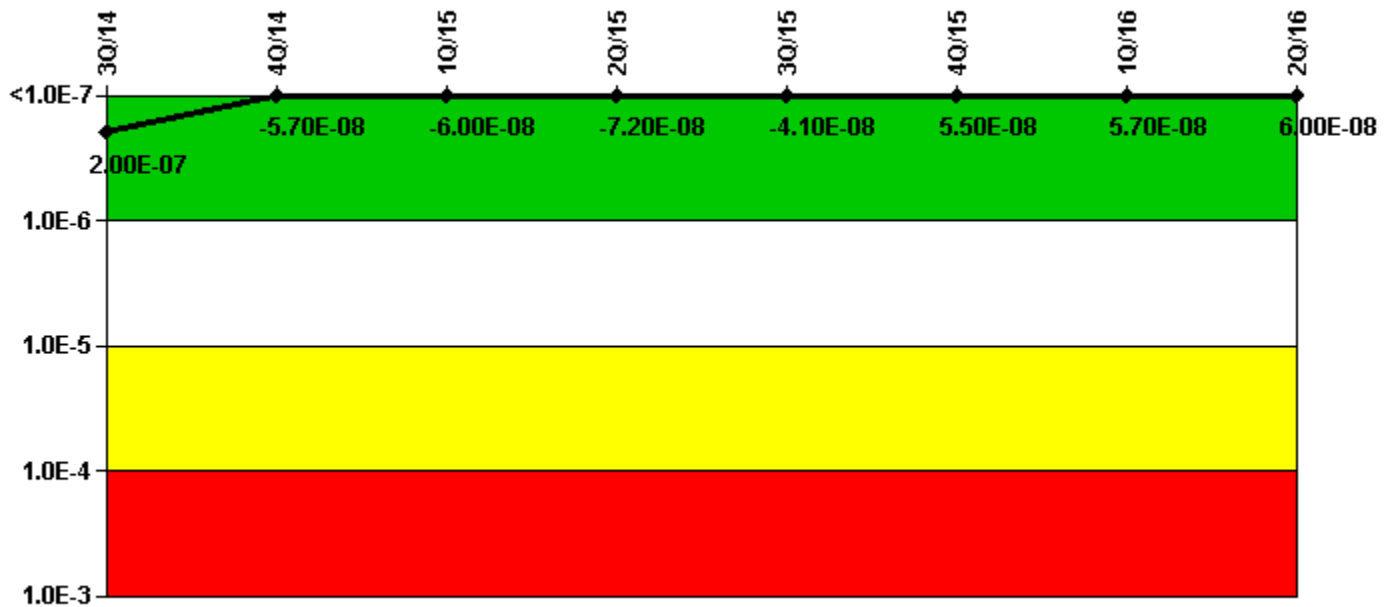
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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 ( $\Delta$ CDF)	1.42E-08	1.90E-08	1.61E-08	1.41E-08	1.33E-08	1.31E-08	1.44E-08	1.57E-09
URI ( $\Delta$ CDF)	1.74E-08	1.78E-08	2.13E-08	2.07E-08	1.94E-08	5.39E-08	5.01E-08	1.87E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.20E-08	3.70E-08	3.70E-08	3.50E-08	3.30E-08	6.70E-08	6.50E-08	2.00E-08

Licensee Comments: none

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



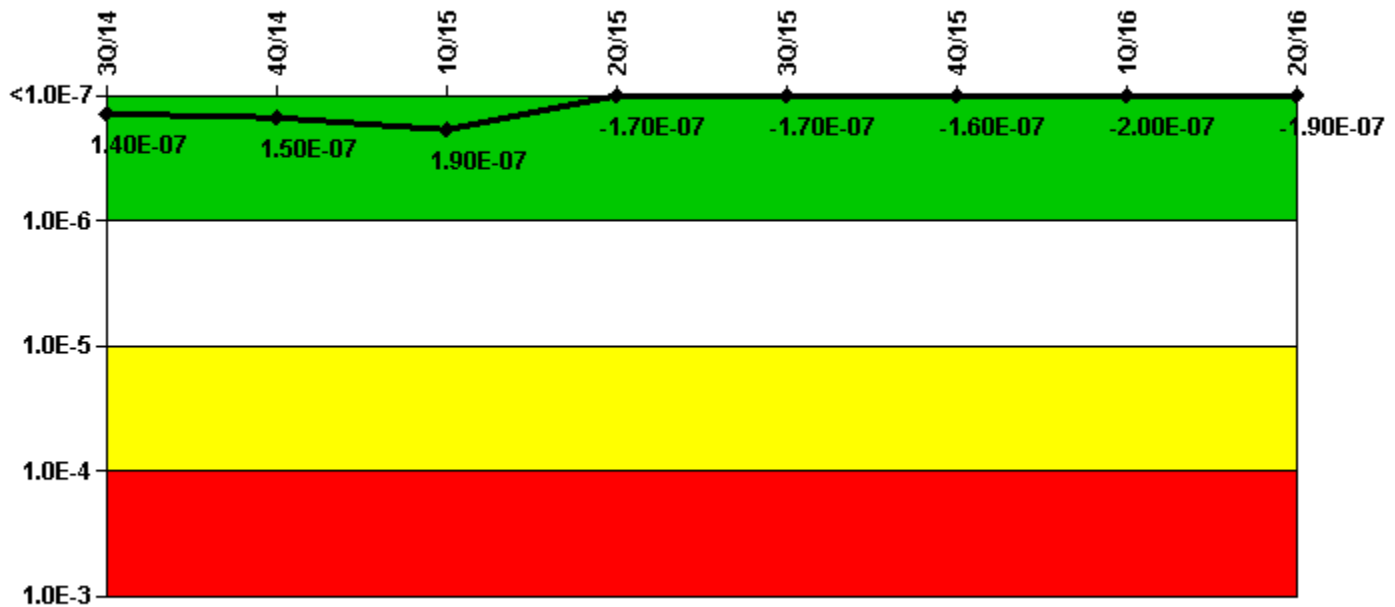
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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 ( $\Delta$ CDF)	2.85E-07	2.16E-08	1.80E-08	3.12E-08	3.69E-08	1.36E-07	1.33E-07	1.36E-07
URI ( $\Delta$ CDF)	-8.56E-08	-7.83E-08	-7.75E-08	-1.03E-07	-7.84E-08	-8.09E-08	-7.69E-08	-7.59E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.00E-07	-5.70E-08	-6.00E-08	-7.20E-08	-4.10E-08	5.50E-08	5.70E-08	6.00E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



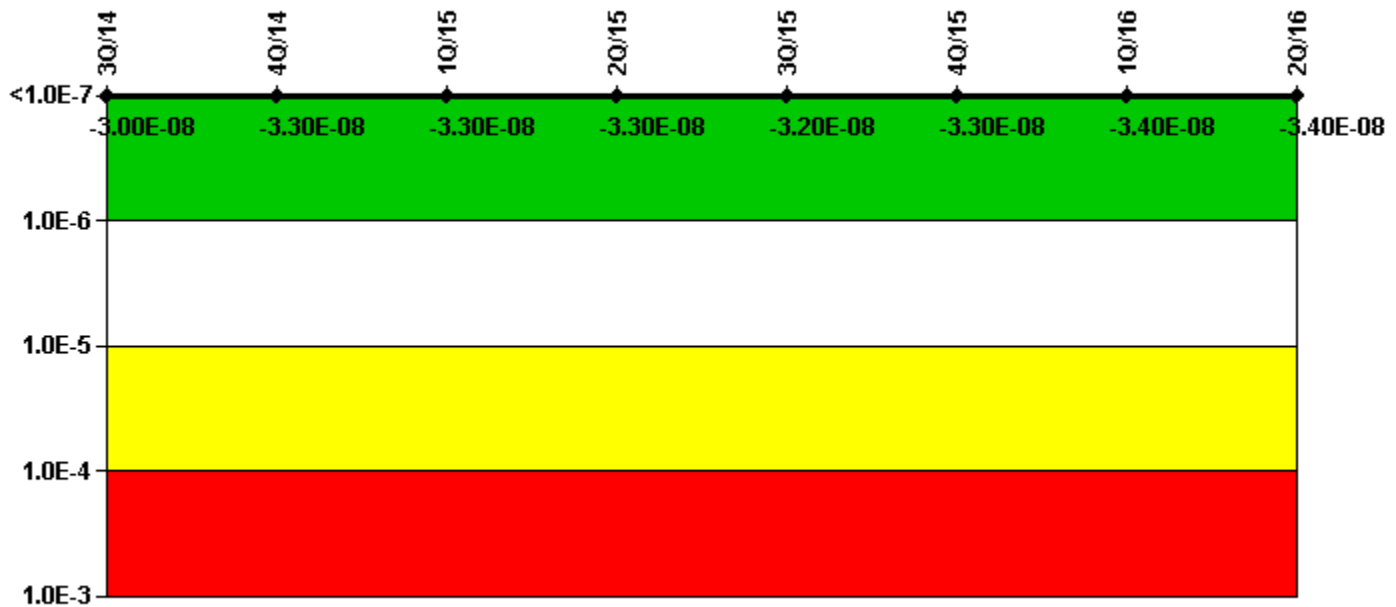
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	7.21E-09	2.43E-08	5.30E-08	2.80E-08	2.80E-08	2.73E-08	-1.47E-08	-8.76E-09
URI (ΔCDF)	1.28E-07	1.28E-07	1.35E-07	-1.99E-07	-1.96E-07	-1.90E-07	-1.85E-07	-1.79E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.40E-07	1.50E-07	1.90E-07	-1.70E-07	-1.70E-07	-1.60E-07	-2.00E-07	-1.90E-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

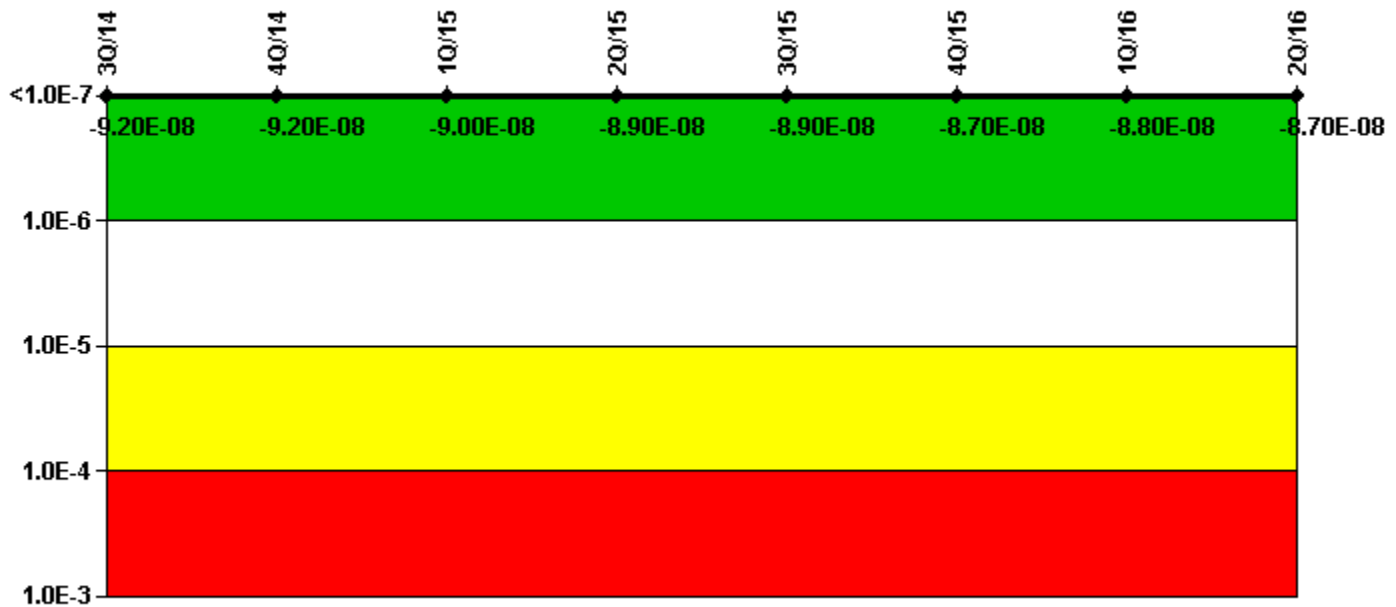
#### Notes

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 ( $\Delta$ CDF)	-3.39E-09	-6.21E-09	-7.80E-09	-8.56E-09	-7.32E-09	-8.56E-09	-8.56E-09	-8.56E-09
URI ( $\Delta$ CDF)	-2.62E-08	-2.67E-08	-2.56E-08	-2.41E-08	-2.44E-08	-2.42E-08	-2.57E-08	-2.55E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.00E-08	-3.30E-08	-3.30E-08	-3.30E-08	-3.20E-08	-3.30E-08	-3.40E-08	-3.40E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



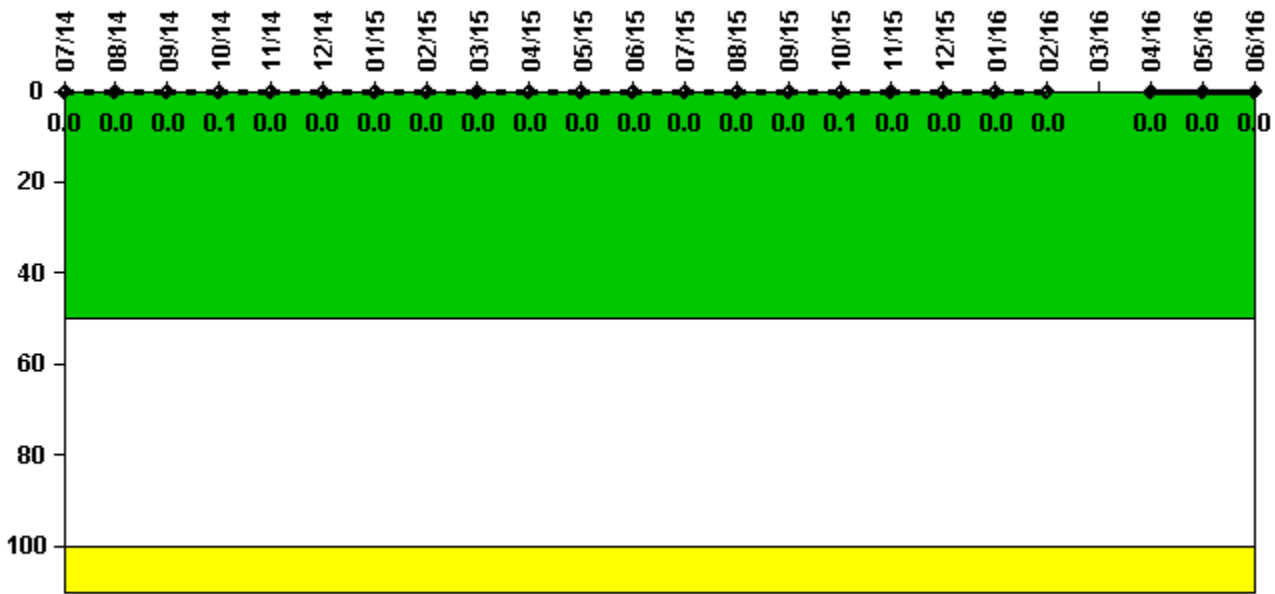
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI ( $\Delta$ CDF)	-1.71E-09	-1.71E-09	-1.71E-09	-1.71E-09	-1.71E-09	-1.71E-09	-1.71E-09	-1.71E-09
URI ( $\Delta$ CDF)	-9.03E-08	-9.01E-08	-8.87E-08	-8.77E-08	-8.70E-08	-8.54E-08	-8.68E-08	-8.54E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.20E-08	-9.20E-08	-9.00E-08	-8.90E-08	-8.90E-08	-8.70E-08	-8.80E-08	-8.70E-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	0.000043	0.000065	0.000069	0.000107	0.000063	0.000038	0.000021	0.000008	0.000093	0.000036	0.000037	0.000039
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0.1	0	0	0	0	0	0	0	0

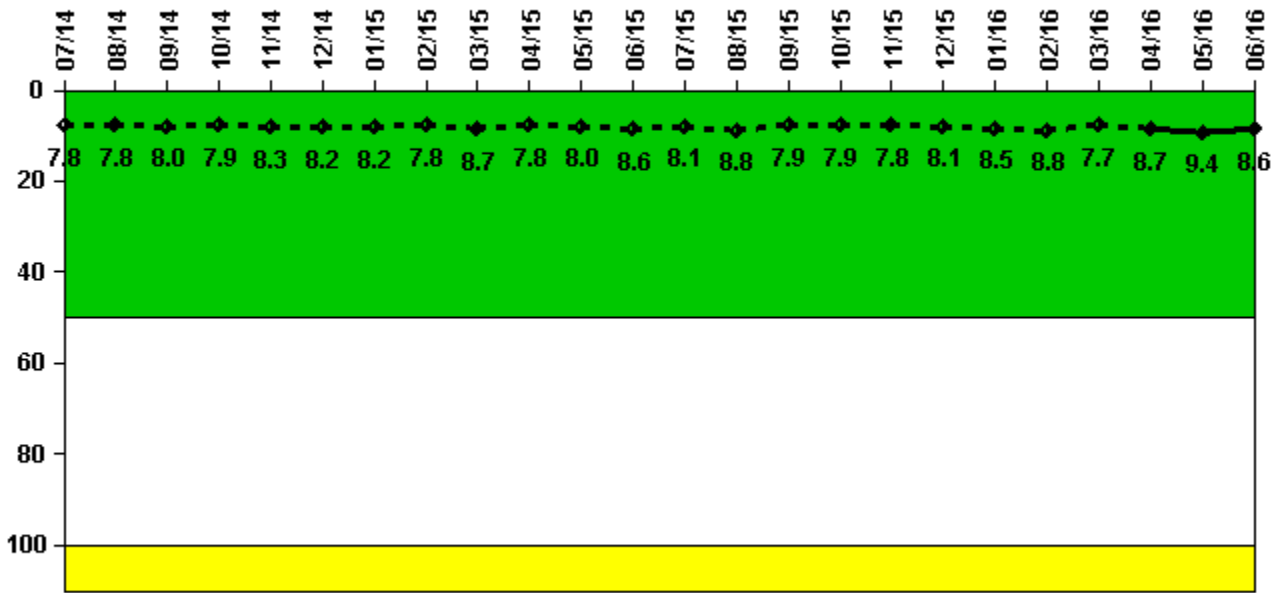
  

Reactor Coolant System Activity	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum activity	0.000063	0.000079	0.000092	0.000116	0.000033	0.000053	0.000069	0.000053	N/A	0.000013	0.000094	0.000005
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0.1	0	0	0	0	N/A	0	0	0

Licensee Comments:

3/16: For March 2016 the unit did not obtain a stable state power condition

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

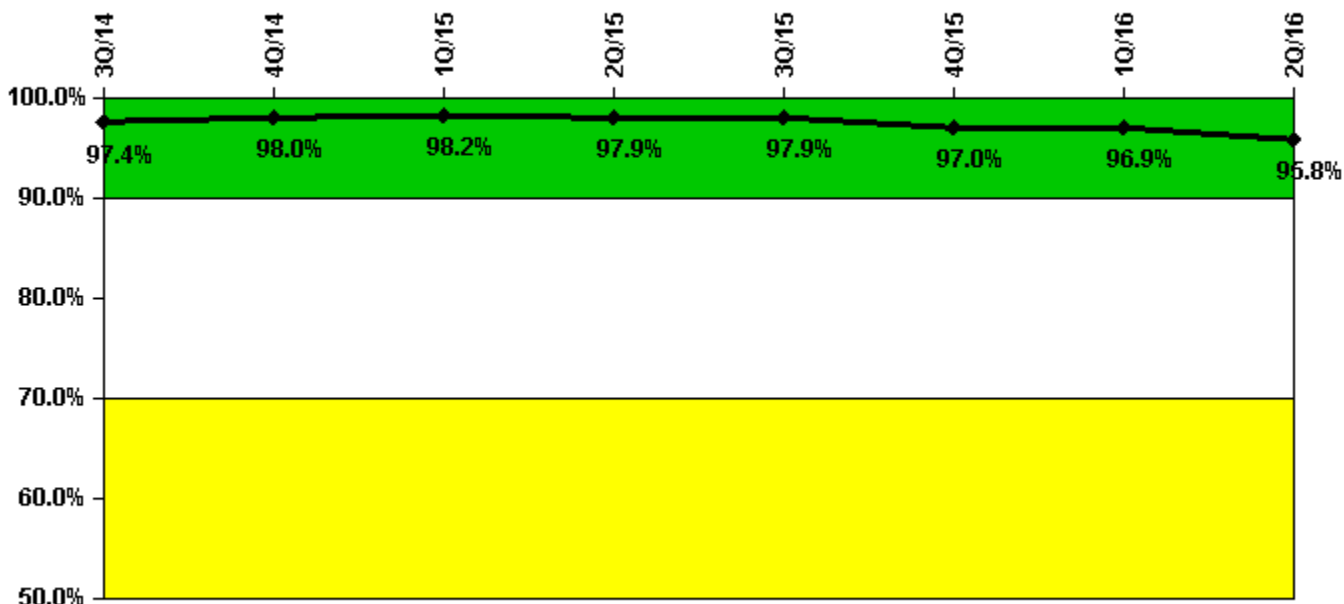
Reactor Coolant System Leakage	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum leakage	2.340	2.350	2.410	2.370	2.480	2.450	2.460	2.330	2.600	2.350	2.400	2.580
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.8	7.8	8.0	7.9	8.3	8.2	8.2	7.8	8.7	7.8	8.0	8.6

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	2.440	2.630	2.370	2.370	2.350	2.430	2.540	2.630	2.300	2.600	2.810	2.580
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	8.1	8.8	7.9	7.9	7.8	8.1	8.5	8.8	7.7	8.7	9.4	8.6

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

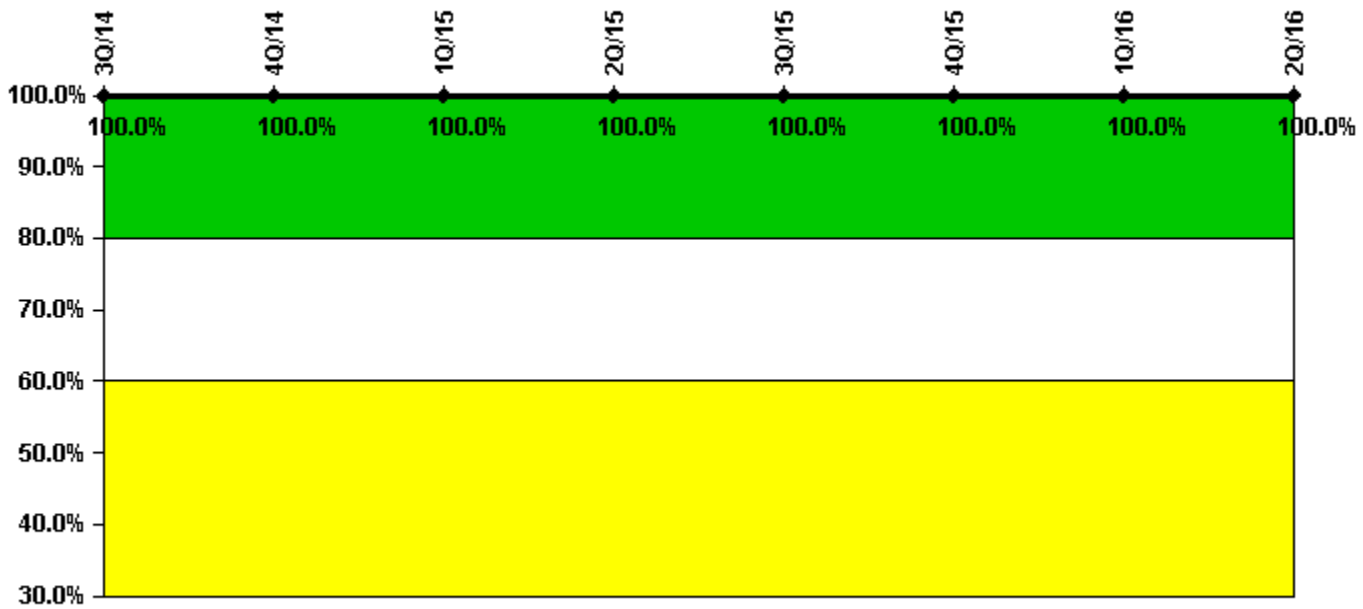
Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	51.0	50.0	25.0	31.0	17.0	51.0	0	29.0
Total opportunities	54.0	50.0	26.0	33.0	17.0	53.0	0	32.0
Indicator value	97.4%	98.0%	98.2%	97.9%	97.9%	97.0%	96.9%	95.8%

Licensee Comments:

1Q/15: Performed data update for the data reported in January 2015 (RAM 7-3-15)

3Q/14: Performed update to the data reported in August 2014 (RAM 7-3-2015)

### ERO Drill Participation



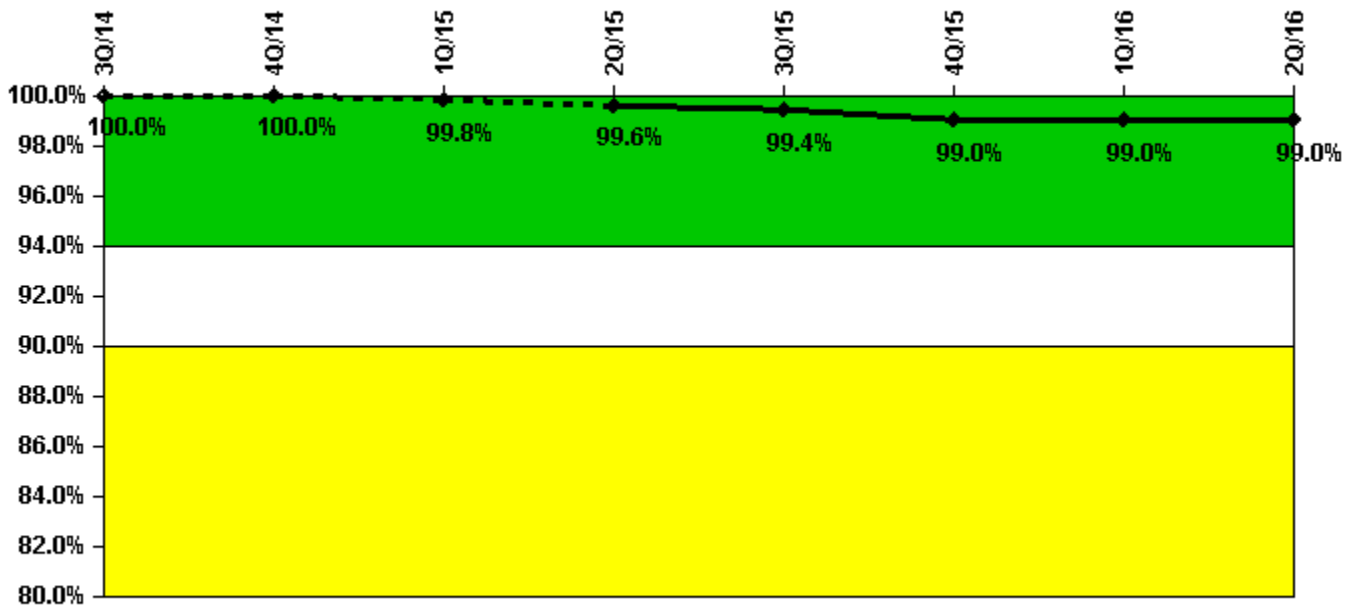
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Participating Key personnel	63.0	64.0	62.0	65.0	64.0	66.0	64.0	67.0
Total Key personnel	63.0	64.0	62.0	65.0	64.0	66.0	64.0	67.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



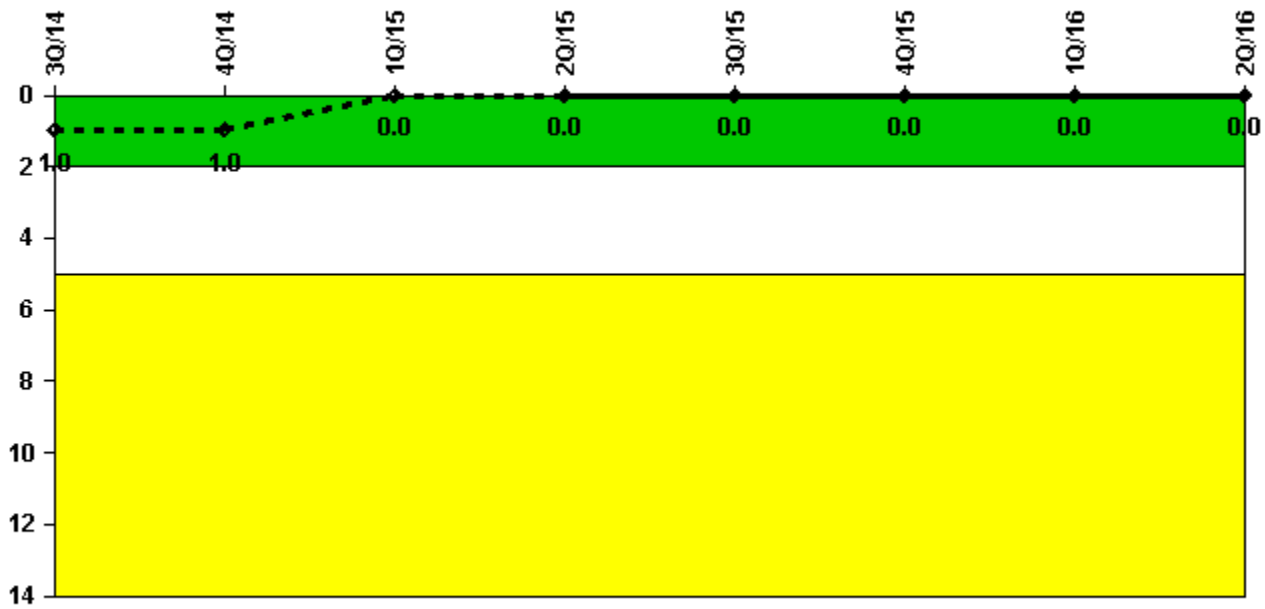
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	129	129	128	126	126	127	127	128
Total sirens-tests	129	129	129	127	127	129	128	129
Indicator value	100.0%	100.0%	99.8%	99.6%	99.4%	99.0%	99.0%	99.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



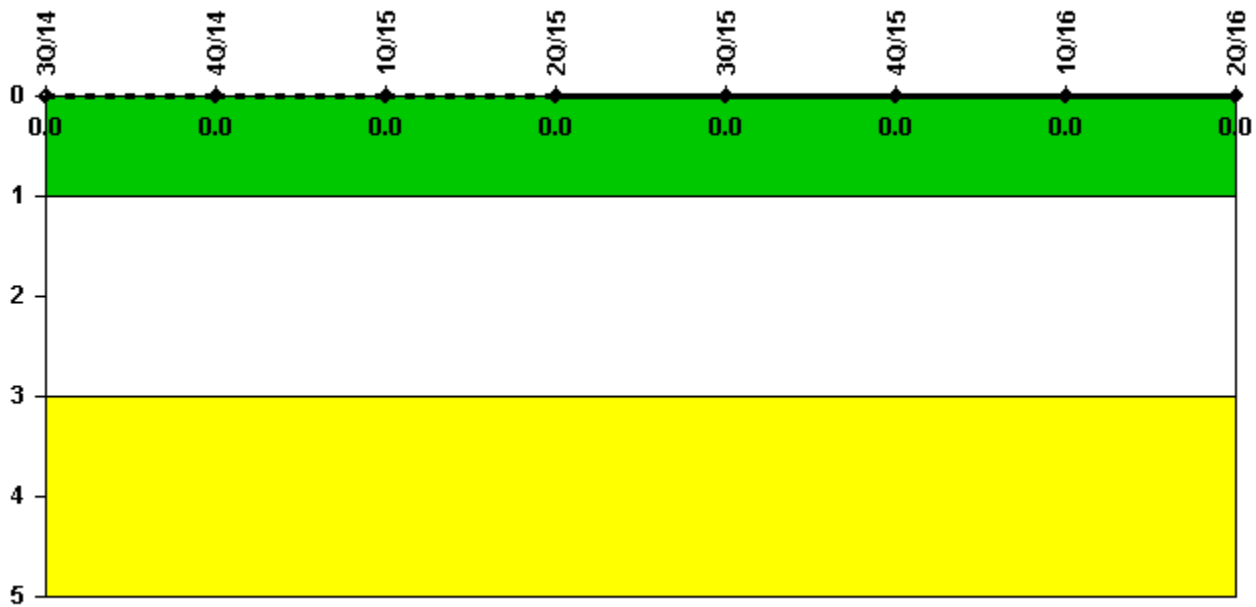
Thresholds: White > 2.0 Yellow > 5.0

#### 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
<b>Indicator value</b>	<b>1</b>	<b>1</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	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*