

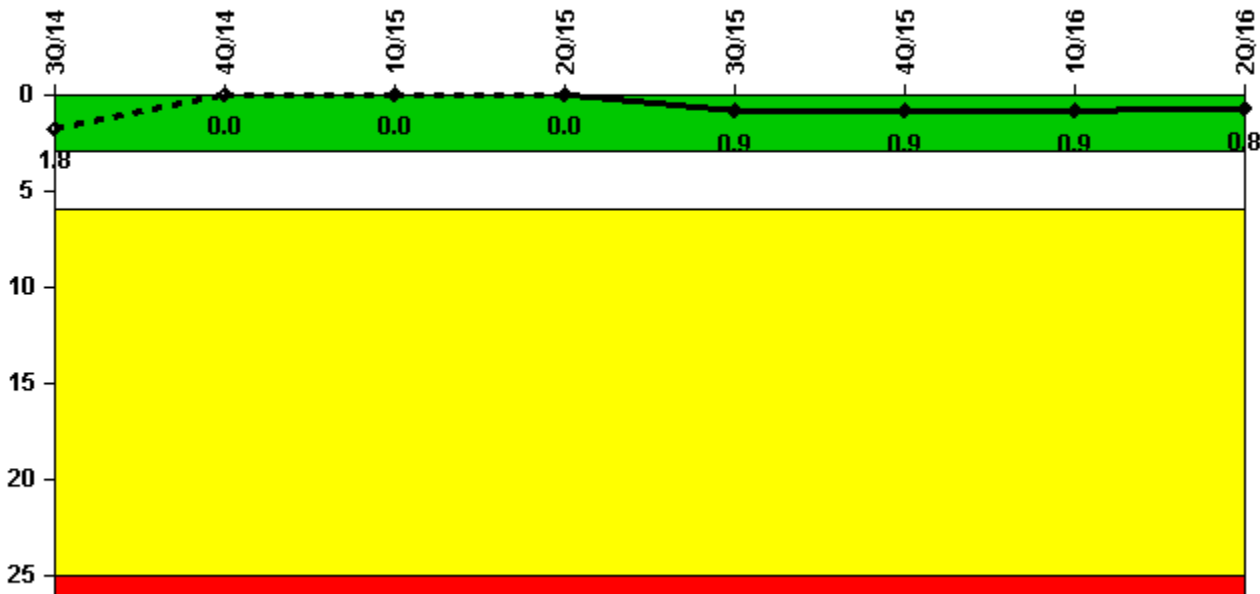
# Hope Creek 1

## 2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: The failure of the C EDG Jacket Water on January 2016 hose was noted not to be reflected in CDE data. A manufacturing defect combined with high vibration in the line resulted in a leak on the EDG that impacted its ability to complete its mission time. This resulted in an MSPI failure to run of the machine. The hose was replaced and the station continue to troubleshoot to correct the vibration condition. This resulted in 5.35 unplanned unavailable hours for the C EDG in January 2016. It was determined to be a negligible increase in MSPI Emergency AC power values. The revised values were incorporated into CDE effective the second quarter 2016.

**Unplanned Scrams per 7000 Critical Hrs**



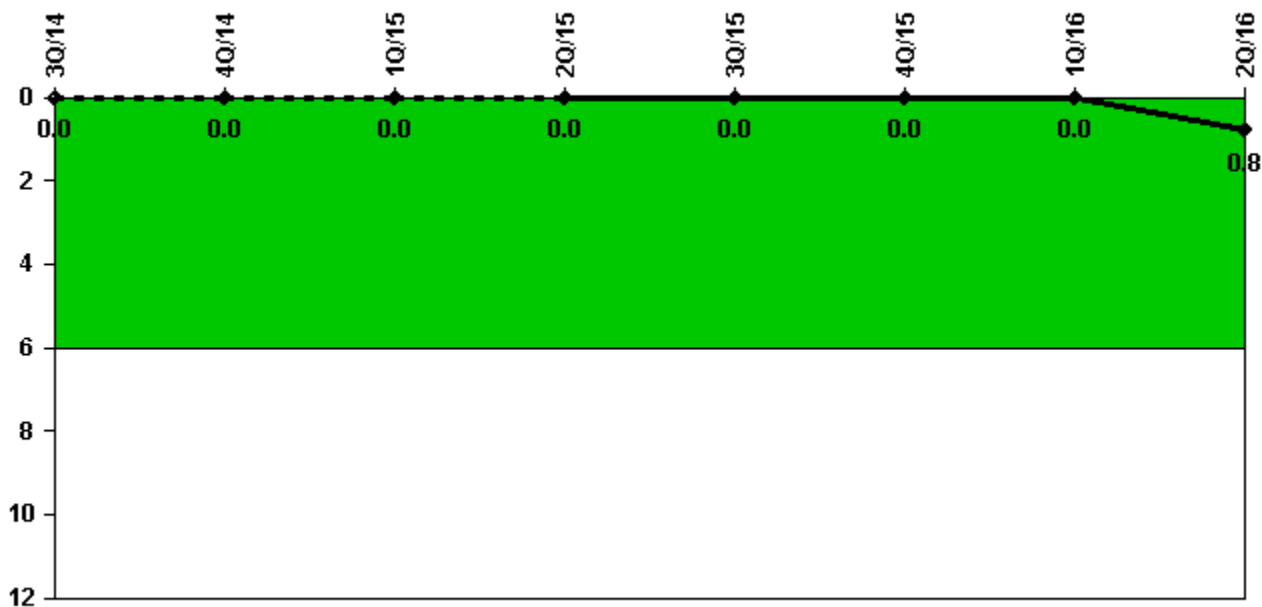
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	1.0	0	0	0
Critical hours	2102.8	2209.0	2159.0	1500.7	2167.1	2209.0	2183.0	2184.0
<b>Indicator value</b>	<b>1.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



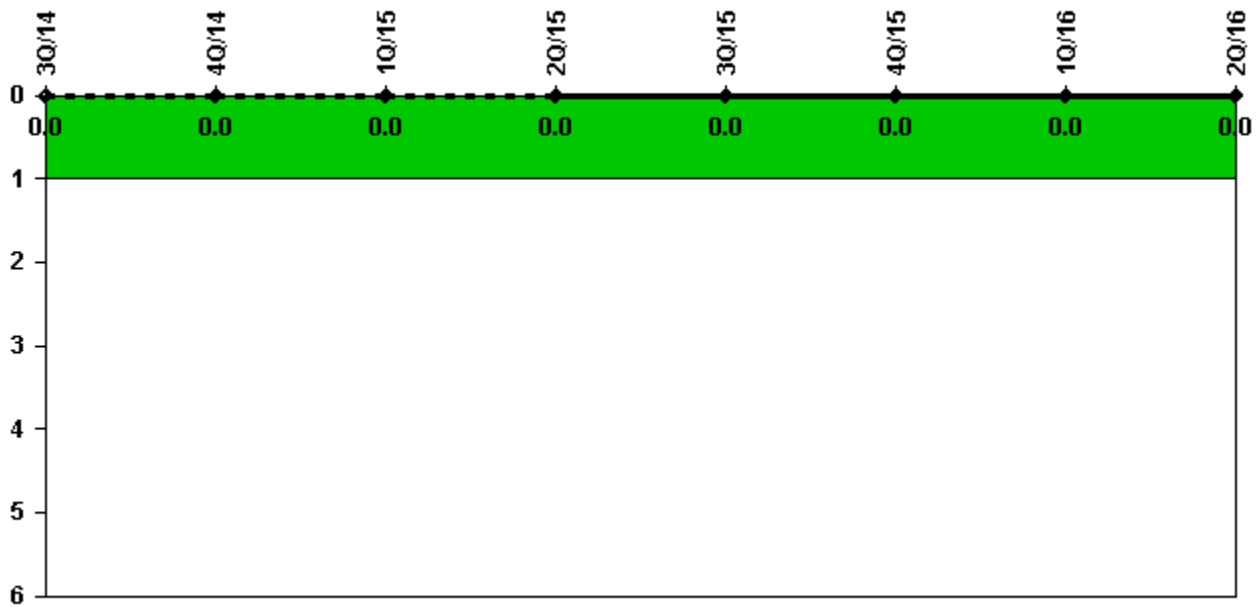
Thresholds: White > 6.0

#### 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	1.0
Critical hours	2102.8	2209.0	2159.0	1500.7	2167.1	2209.0	2183.0	2184.0
<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>	<b>0.8</b>

Licensee Comments: none

### Unplanned Scrams with Complications



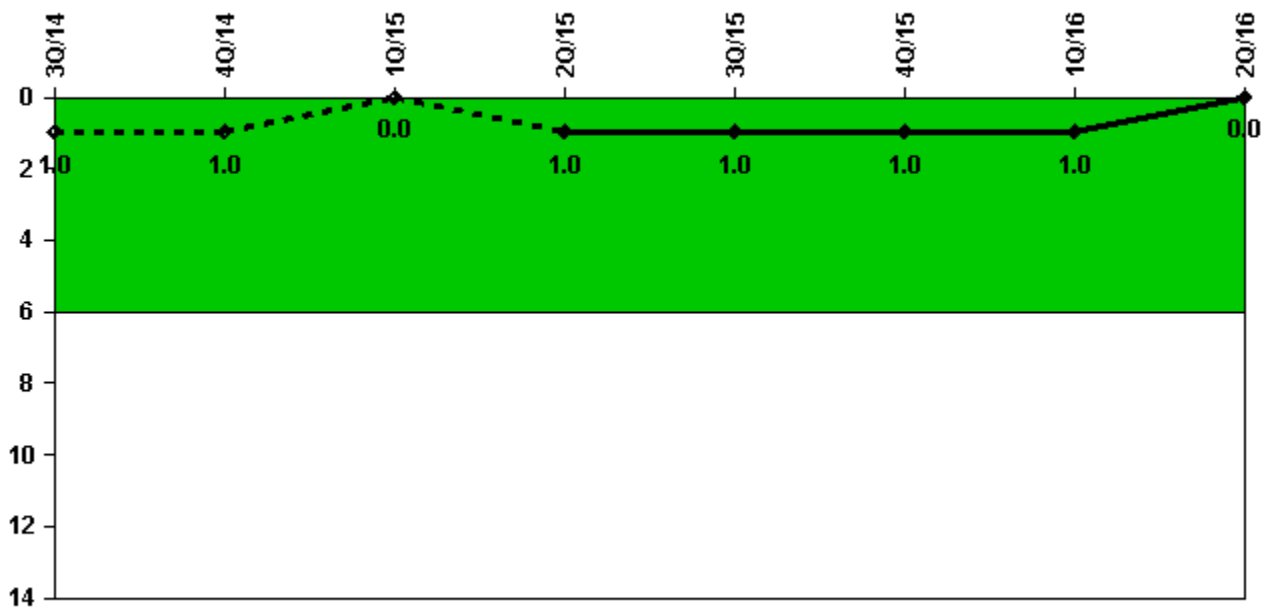
Thresholds: White > 1.0

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

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

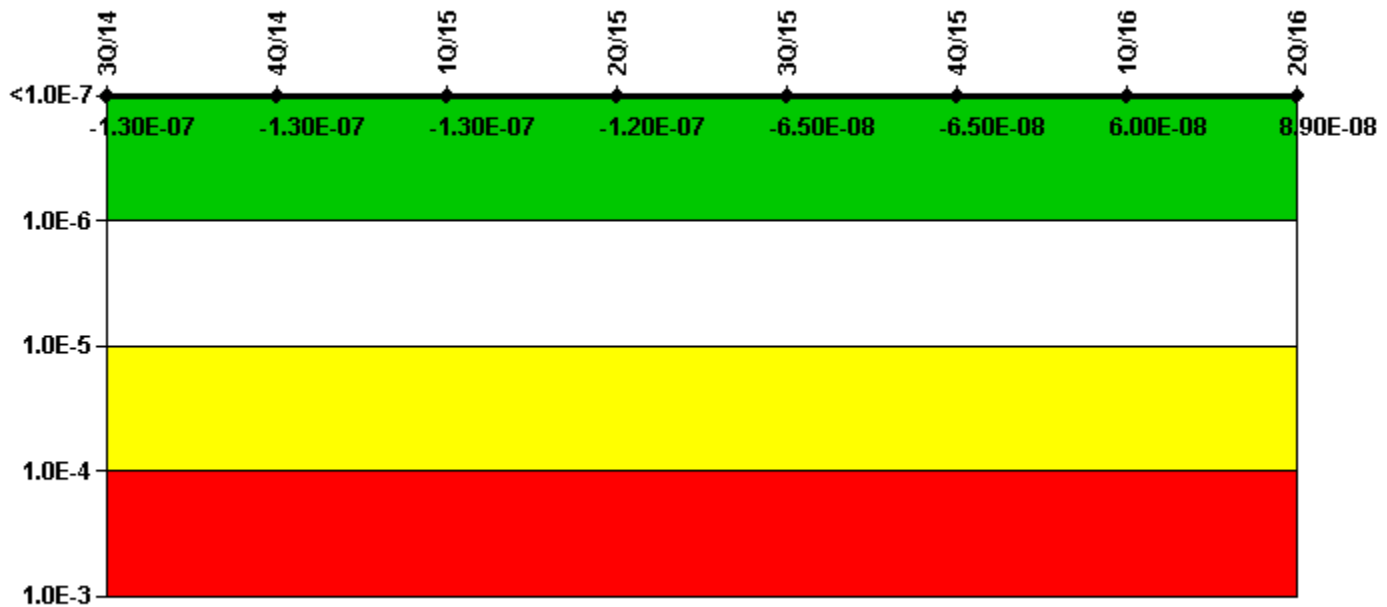
#### Notes

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	0	0	1	0	0	0	0
<b>Indicator value</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>

Licensee Comments:

2Q/15: LER 2015-001-00 "Conditions Prohibited by Technical Specifications Due to Core Spray Inoperabilities" submitted on 5/29/15 reported a SSFF.

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



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

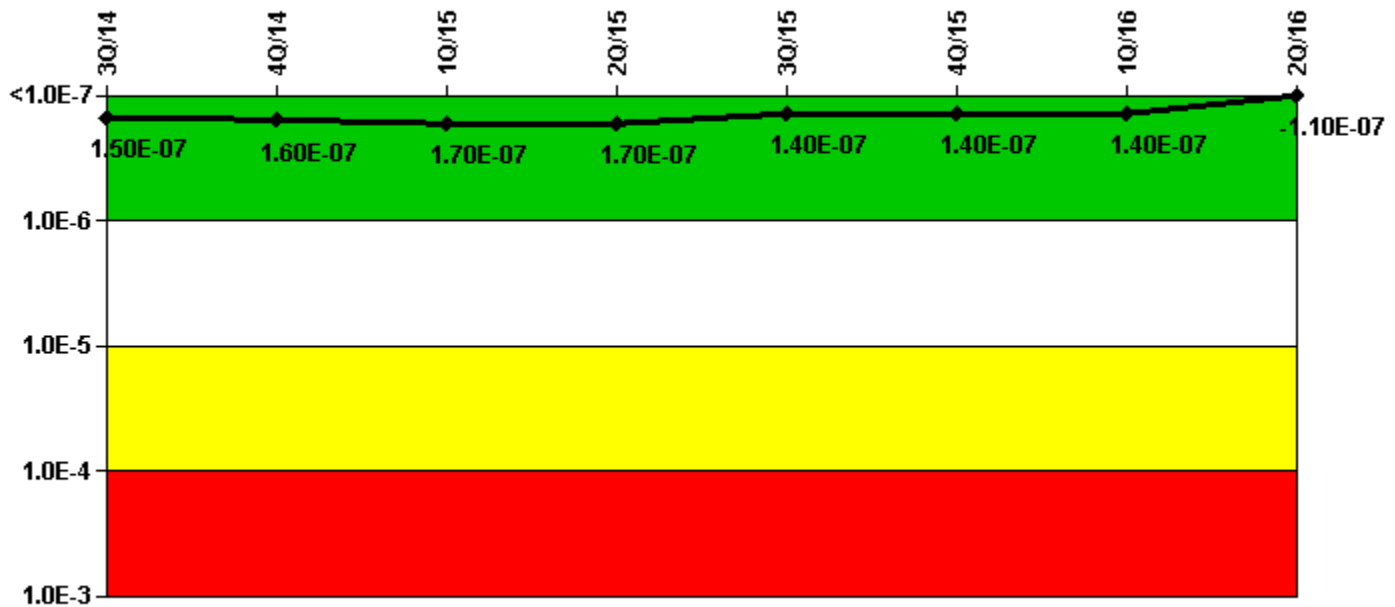
#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI ( $\Delta$ CDF)	7.75E-09	3.80E-09	6.36E-09	1.59E-08	5.88E-10	5.88E-10	-4.66E-09	2.42E-08
URI ( $\Delta$ CDF)	-1.37E-07	-1.35E-07	-1.37E-07	-1.37E-07	-6.58E-08	-6.52E-08	6.47E-08	6.50E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.30E-07	-1.30E-07	-1.20E-07	-6.50E-08	-6.50E-08	6.00E-08	8.90E-08

#### Licensee Comments:

2Q/16: The failure of the C EDG Jacket Water Hose on January 2016 was noted not to be reflected in CDE data. A manufacturing defect combined with high vibration in the line resulted in a leak on the EDG that impacted its ability to complete its mission time. This resulted in an MSPI failure to run of the machine. The hose was replaced and the station continue to troubleshoot to correct the vibration condition. This resulted in 5.35 unplanned unavailable hours for the C EDG in January 2016. It was determined to be a negligible increase in MSPI Emergency AC power values. The revised values were incorporated into CDE effective the second quarter 2016.

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



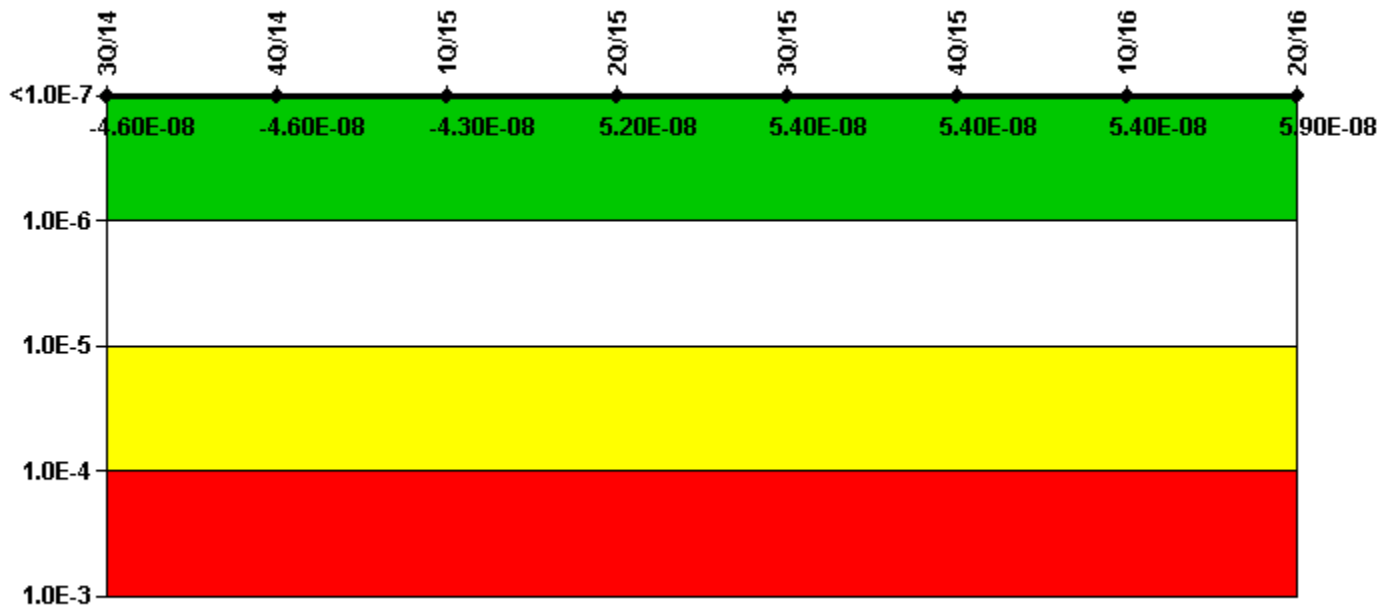
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	-3.03E-08	-3.03E-08	-3.03E-08	-3.02E-08	-3.36E-08	-3.36E-08	-3.36E-08	-3.36E-08
URI ( $\Delta$ CDF)	1.85E-07	1.85E-07	2.03E-07	2.03E-07	1.69E-07	1.75E-07	1.75E-07	-7.42E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.50E-07	1.60E-07	1.70E-07	1.70E-07	1.40E-07	1.40E-07	1.40E-07	-1.10E-07

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



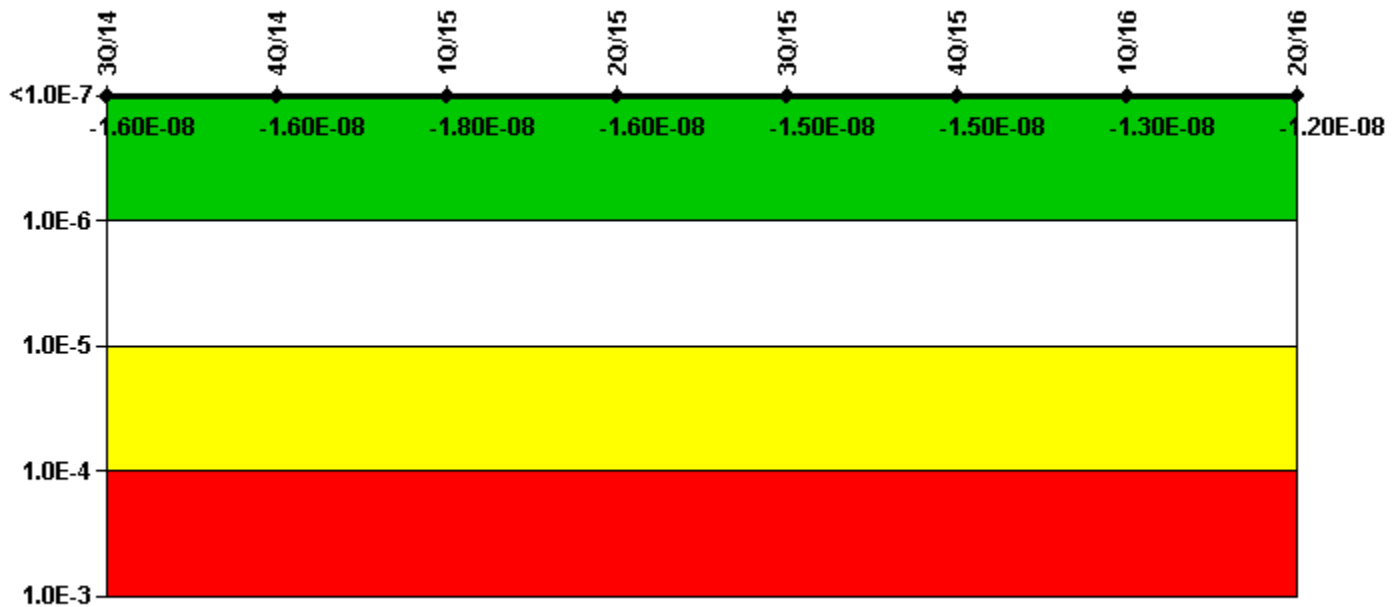
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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 ( $\Delta$ CDF)	-1.16E-08	-1.16E-08	-8.22E-09	-8.05E-09	-8.04E-09	-8.04E-09	-8.05E-09	-8.06E-09
URI ( $\Delta$ CDF)	-3.44E-08	-3.43E-08	-3.44E-08	6.01E-08	6.23E-08	6.23E-08	6.22E-08	6.69E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.60E-08	-4.60E-08	-4.30E-08	5.20E-08	5.40E-08	5.40E-08	5.40E-08	5.90E-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

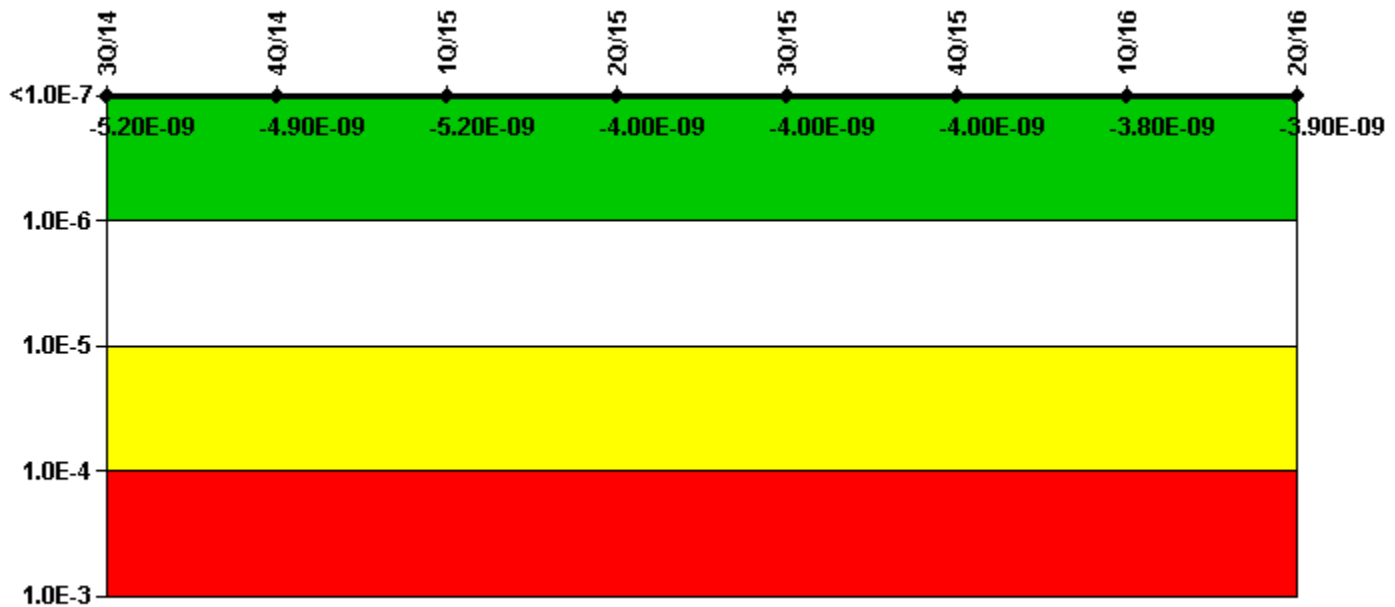
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI ( $\Delta$ CDF)	-1.45E-09	-1.10E-09	-3.43E-09	-5.36E-10	3.32E-10	8.44E-10	3.56E-09	4.58E-09
URI ( $\Delta$ CDF)	-1.46E-08	-1.46E-08	-1.47E-08	-1.50E-08	-1.57E-08	-1.62E-08	-1.64E-08	-1.64E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.60E-08	-1.60E-08	-1.80E-08	-1.60E-08	-1.50E-08	-1.50E-08	-1.30E-08	-1.20E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



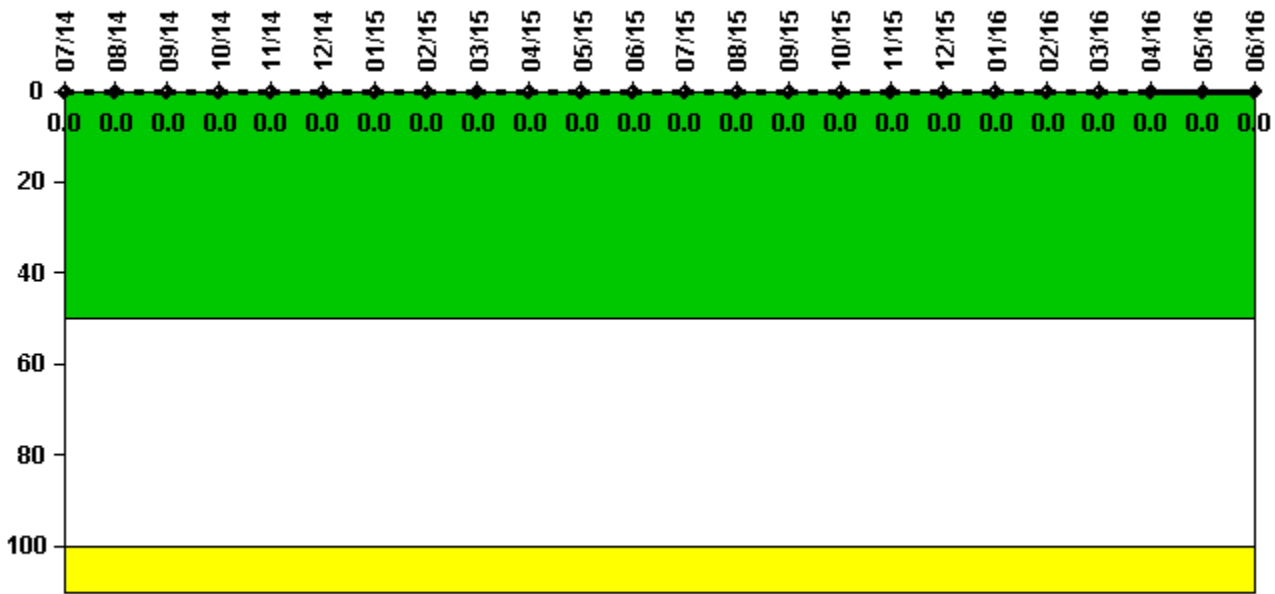
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	-3.81E-09	-3.52E-09	-3.84E-09	-2.58E-09	-2.58E-09	-2.59E-09	-2.47E-09	-2.48E-09
URI ( $\Delta$ CDF)	-1.41E-09	-1.40E-09	-1.39E-09	-1.40E-09	-1.42E-09	-1.40E-09	-1.38E-09	-1.37E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.20E-09	-4.90E-09	-5.20E-09	-4.00E-09	-4.00E-09	-4.00E-09	-3.80E-09	-3.90E-09

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

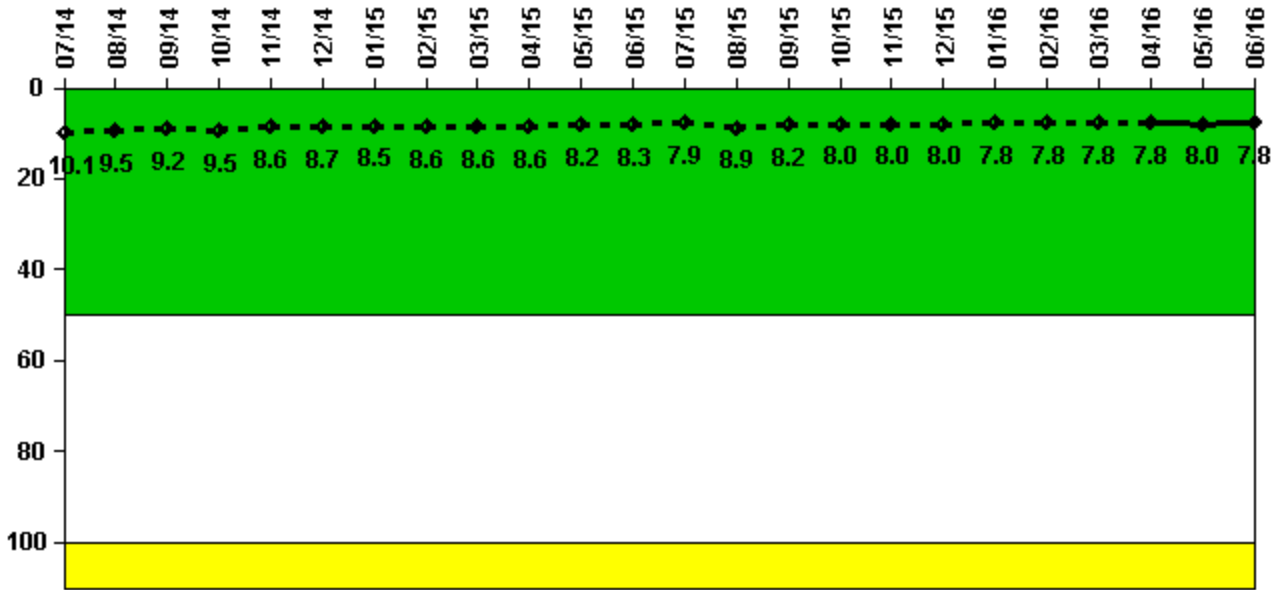
Reactor Coolant System Activity	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum activity	0.000038	0.000036	0.000038	0.000037	0.000038	0.000043	0.000062	0.000039	0.000052	0.000040	0.000025	0.000025
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	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	0.000029	0.000026	0.000028	0.000027	0.000027	0.000026	0.000026	0.000037	0.000025	0.000030	0.000026	0.000028
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	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



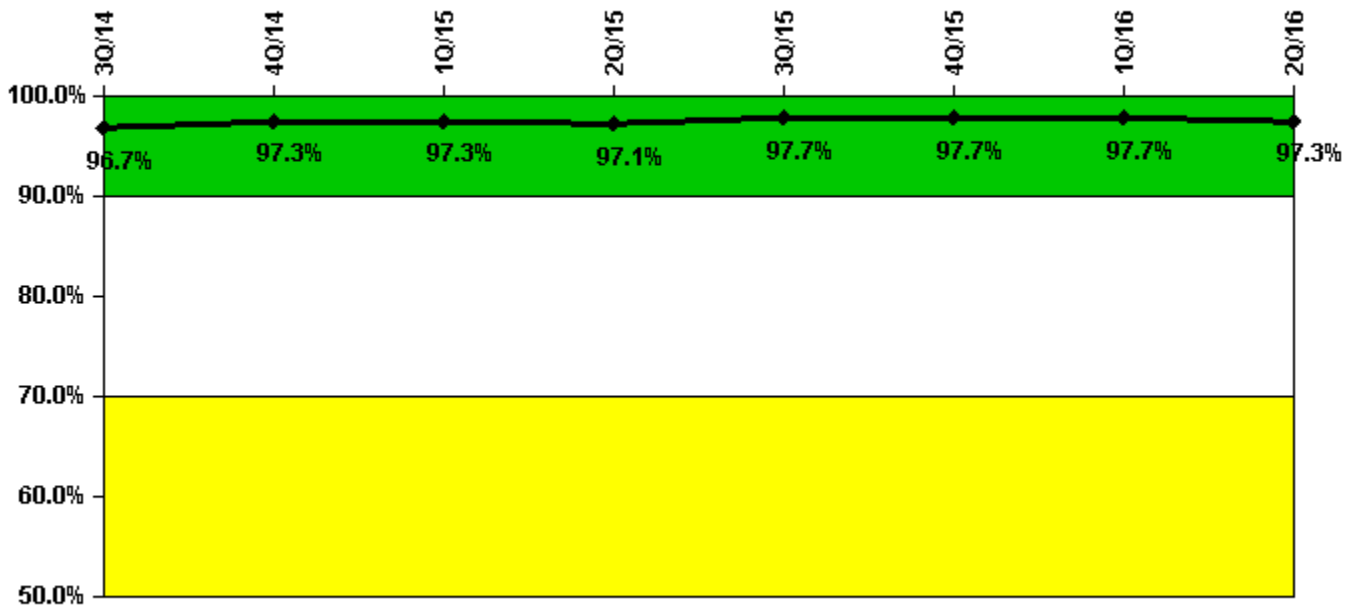
Thresholds: White > 50.0 Yellow > 100.0

**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	2.530	2.370	2.290	2.370	2.150	2.170	2.120	2.160	2.140	2.140	2.040	2.080
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	<b>10.1</b>	<b>9.5</b>	<b>9.2</b>	<b>9.5</b>	<b>8.6</b>	<b>8.7</b>	<b>8.5</b>	<b>8.6</b>	<b>8.6</b>	<b>8.6</b>	<b>8.2</b>	<b>8.3</b>
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	1.970	2.220	2.050	2.010	1.990	1.990	1.950	1.950	1.960	1.940	1.990	1.950
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	<b>7.9</b>	<b>8.9</b>	<b>8.2</b>	<b>8.0</b>	<b>8.0</b>	<b>8.0</b>	<b>7.8</b>	<b>7.8</b>	<b>7.8</b>	<b>7.8</b>	<b>8.0</b>	<b>7.8</b>

Licensee Comments: none

### Drill/Exercise Performance



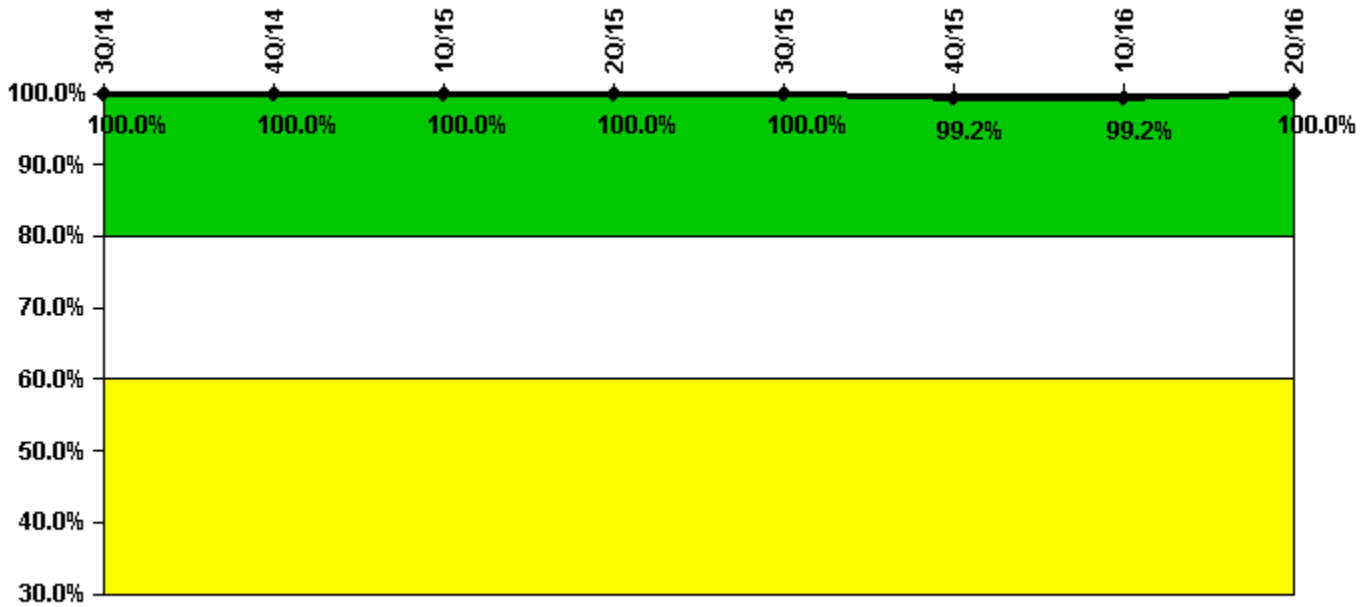
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	58.0	27.0	34.0	29.0	41.0	31.0	38.0	34.0
Total opportunities	59.0	27.0	36.0	30.0	41.0	32.0	39.0	36.0
Indicator value	96.7%	97.3%	97.3%	97.1%	97.7%	97.7%	97.7%	97.3%

Licensee Comments: none

### ERO Drill Participation



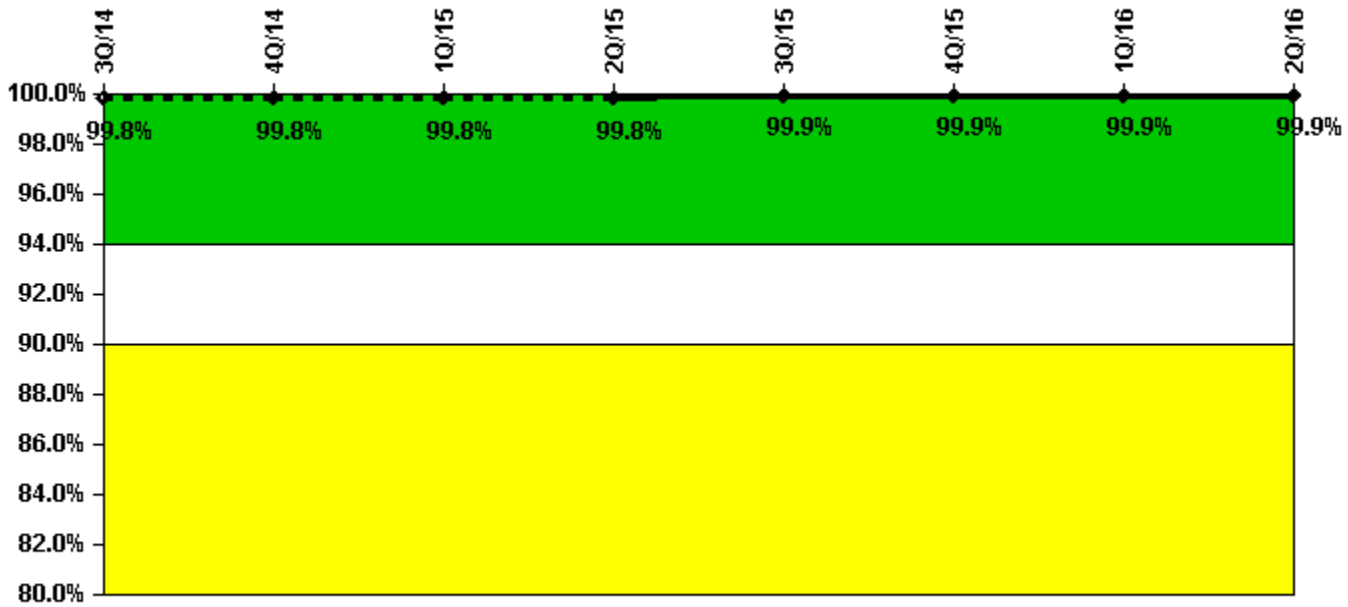
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Participating Key personnel	116.0	120.0	116.0	119.0	125.0	119.0	119.0	118.0
Total Key personnel	116.0	120.0	116.0	119.0	125.0	120.0	120.0	118.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	99.2%	99.2%	100.0%

Licensee Comments: none

### Alert & Notification System



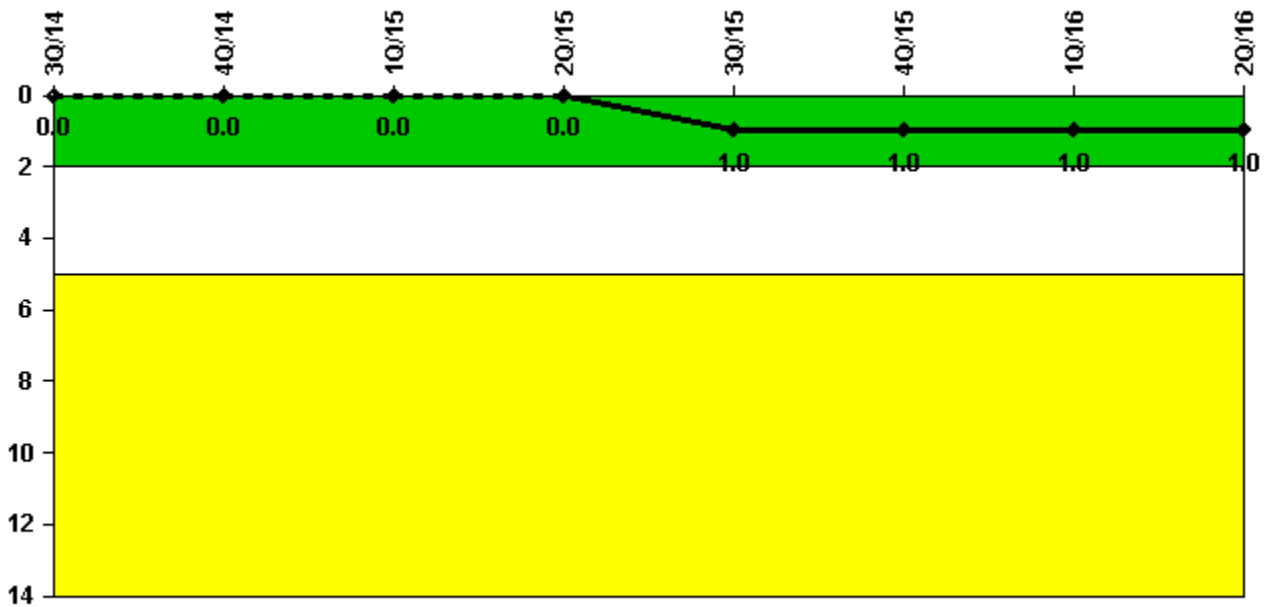
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	494	497	497	497	496	496	497	497
Total sirens-tests	497	497	497	497	497	497	497	497
Indicator value	99.8%	99.8%	99.8%	99.8%	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	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:

3Q/15: 2015-09 High Radiation Area Occurrence - An operator entered a high radiation area without signing on to the proper radiation work permit, without obtaining a proper radiation protection brief, and without the proper instrumentation.

### 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*