

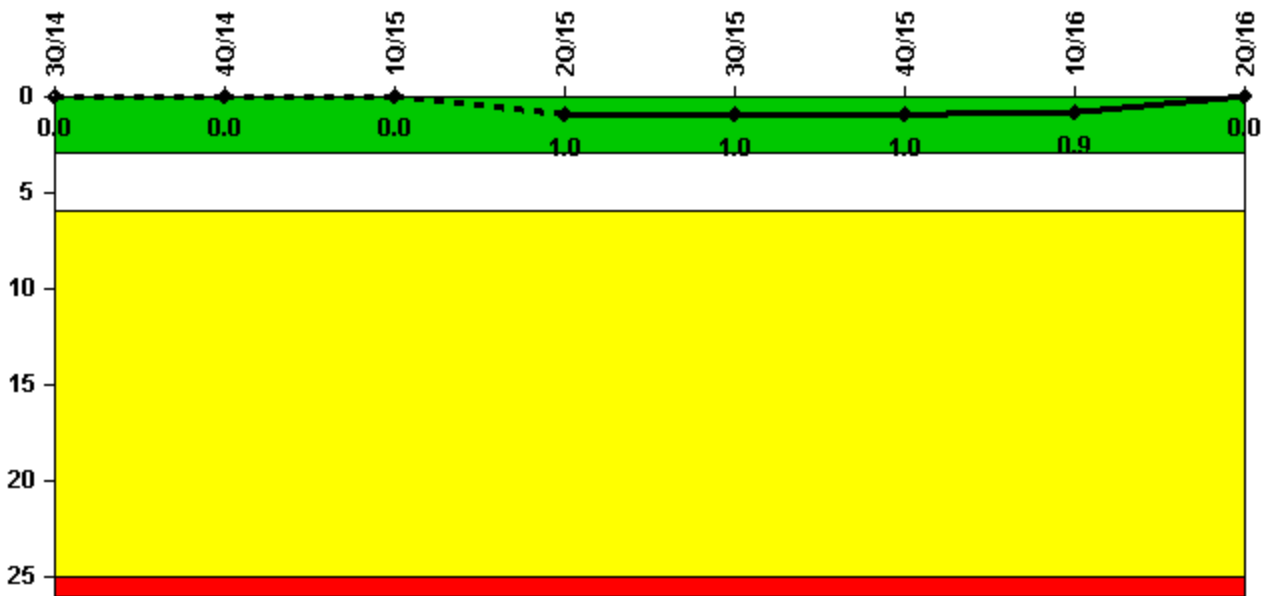
# Wolf Creek 1

## 2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



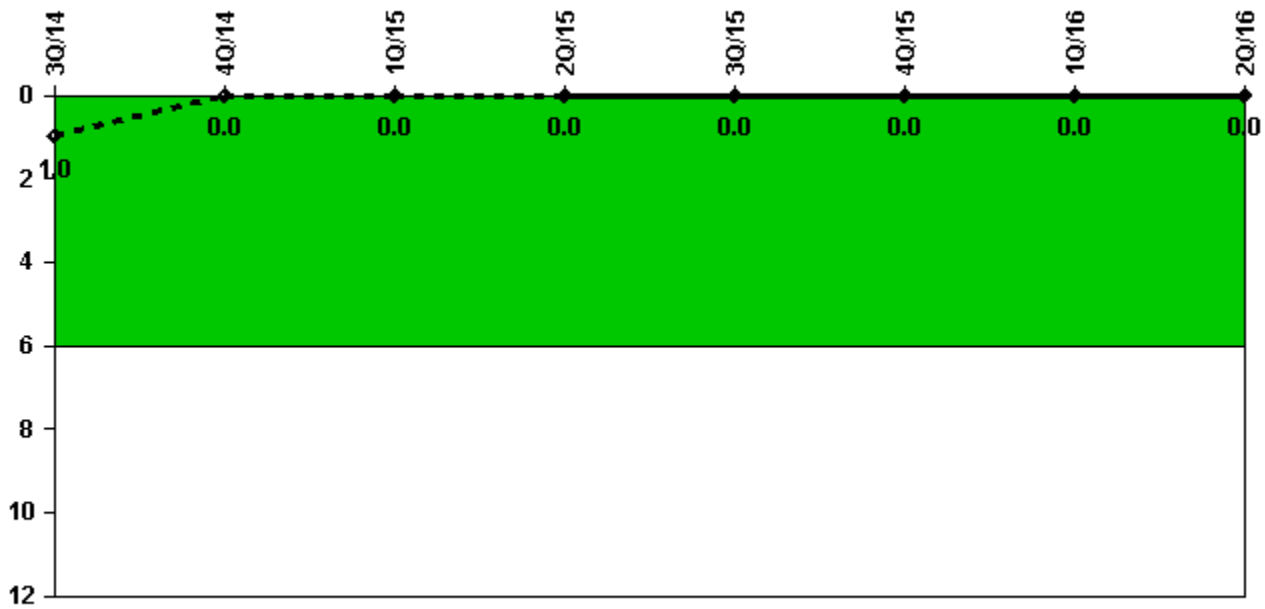
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	0	1.0	0	0	0	0
Critical hours	2208.0	2209.0	1392.0	1419.7	2208.0	2209.0	2183.0	2184.0
Indicator value	0	0	0	1.0	1.0	1.0	0.9	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

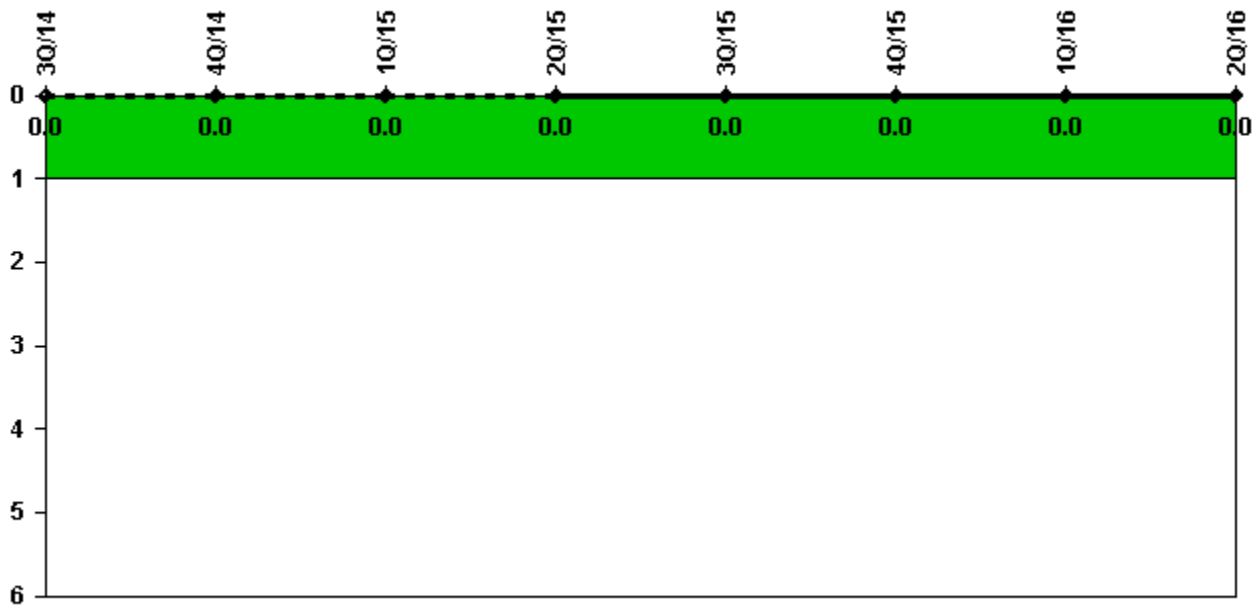
#### Notes

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	1392.0	1419.7	2208.0	2209.0	2183.0	2184.0
<b>Indicator value</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Licensee Comments:

4Q/14: On October 9, 2014, the NRC verbally approved the request for a NOED to not enforce compliance with Required Action B.4.1 of Technical Specification 3.8.1, "AC Source - Operating," which required restoration of the "B" diesel generator (DG) within 72 hours of being declared inoperable. The NOED provided an additional 8 hours to complete the 24-hour endurance and margin test required by TS Surveillance Requirement 3.8.1.14. The "B" DG was restored to operable status at approximately 75 hours such that granting of the NOED potentially avoided an unplanned power change.

### Unplanned Scrams with Complications



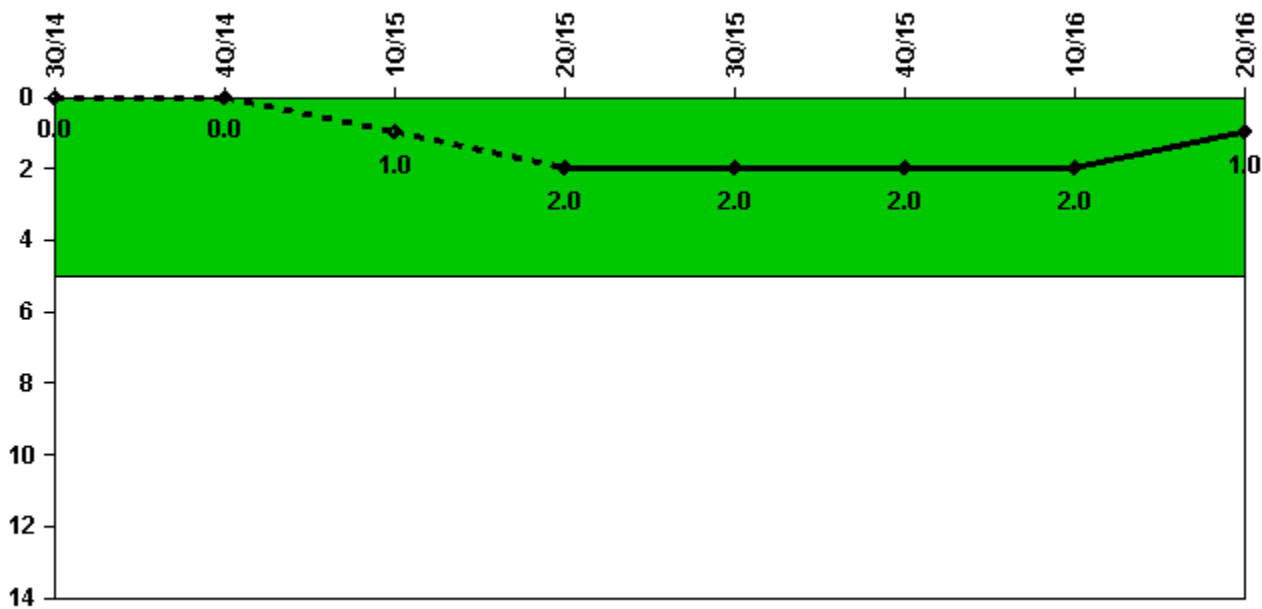
Thresholds: White > 1.0

#### 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 (PWR)



Thresholds: White > 5.0

#### Notes

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

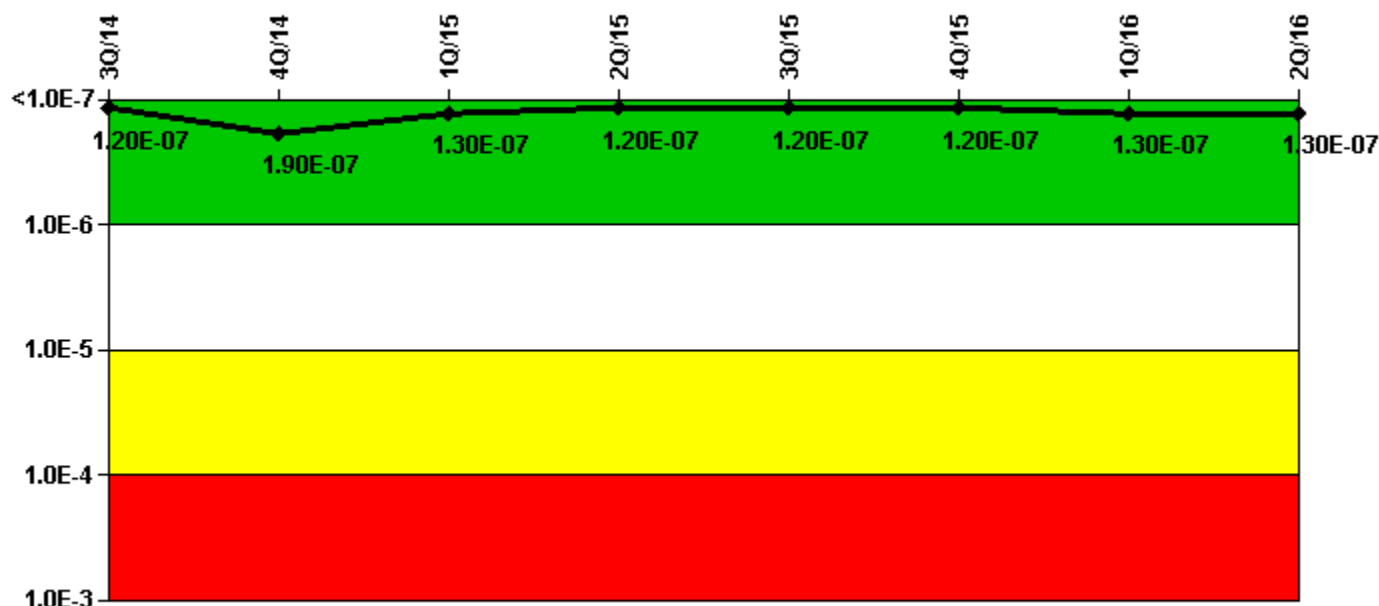
Licensee Comments:

1Q/16: LER 2016-001

2Q/15: LER 2015-002-00

1Q/15: LER 2015-001-00 issued 3/25/15 for loss of 2 RHR trains

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



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

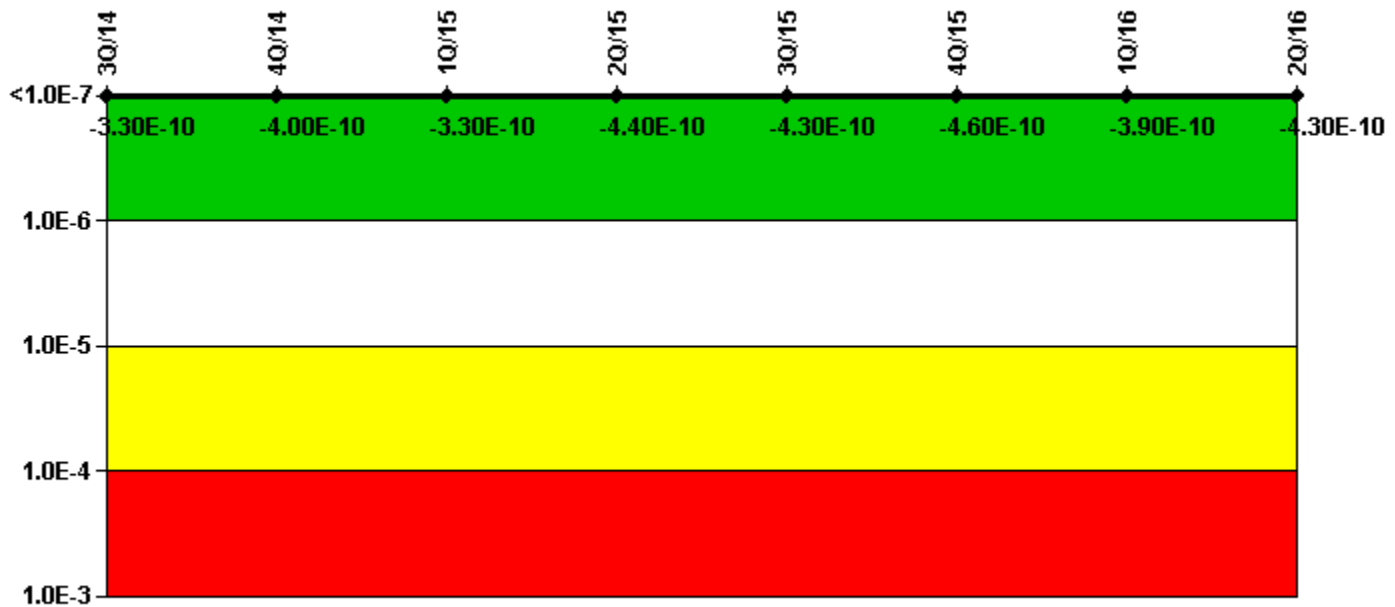
#### Notes

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)	-9.53E-11	3.64E-09	3.33E-09	3.57E-09	3.57E-09	3.57E-09	3.26E-09	2.76E-09
URI ( $\Delta$ CDF)	1.22E-07	1.82E-07	1.27E-07	1.16E-07	1.16E-07	1.16E-07	1.28E-07	1.28E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.20E-07	1.90E-07	1.30E-07	1.20E-07	1.20E-07	1.20E-07	1.30E-07	1.30E-07

#### Licensee Comments:

4Q/14: On October 9, 2014, the NRC verbally approved the request for a NOED to not enforce compliance with Required Action B.4.1 of Technical Specification 3.8.1, "AC Source - Operating," which required restoration of the "B" diesel generator (DG) within 72 hours of being declared inoperable. The NOED provided an additional 8 hours to complete the 24-hour endurance and margin test required by TS Surveillance Requirement 3.8.1.14. The "B" DG was restored to operable status at approximately 75 hours such that granting of the NOED potentially avoided an unplanned power change.

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



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

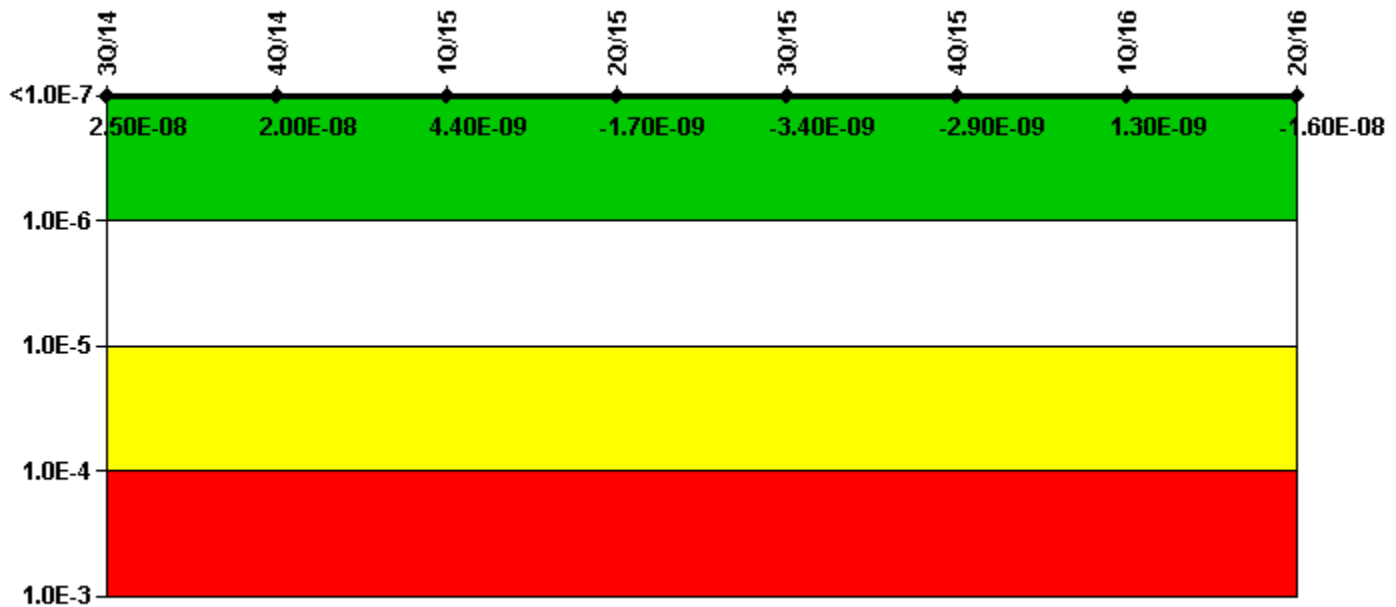
#### Notes

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)	6.37E-11	-4.03E-12	7.90E-11	-7.97E-12	-2.04E-11	-3.03E-11	-1.36E-12	-6.79E-11
URI ( $\Delta$ CDF)	-3.91E-10	-3.96E-10	-4.09E-10	-4.33E-10	-4.13E-10	-4.33E-10	-3.93E-10	-3.60E-10
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.30E-10	-4.00E-10	-3.30E-10	-4.40E-10	-4.30E-10	-4.60E-10	-3.90E-10	-4.30E-10

#### Licensee Comments:

3Q/15: Responsible engineer missed a surveillance entry in the EM system on valve EMHV8924. This entry has been corrected.

### Mitigating Systems Performance Index, Heat Removal System



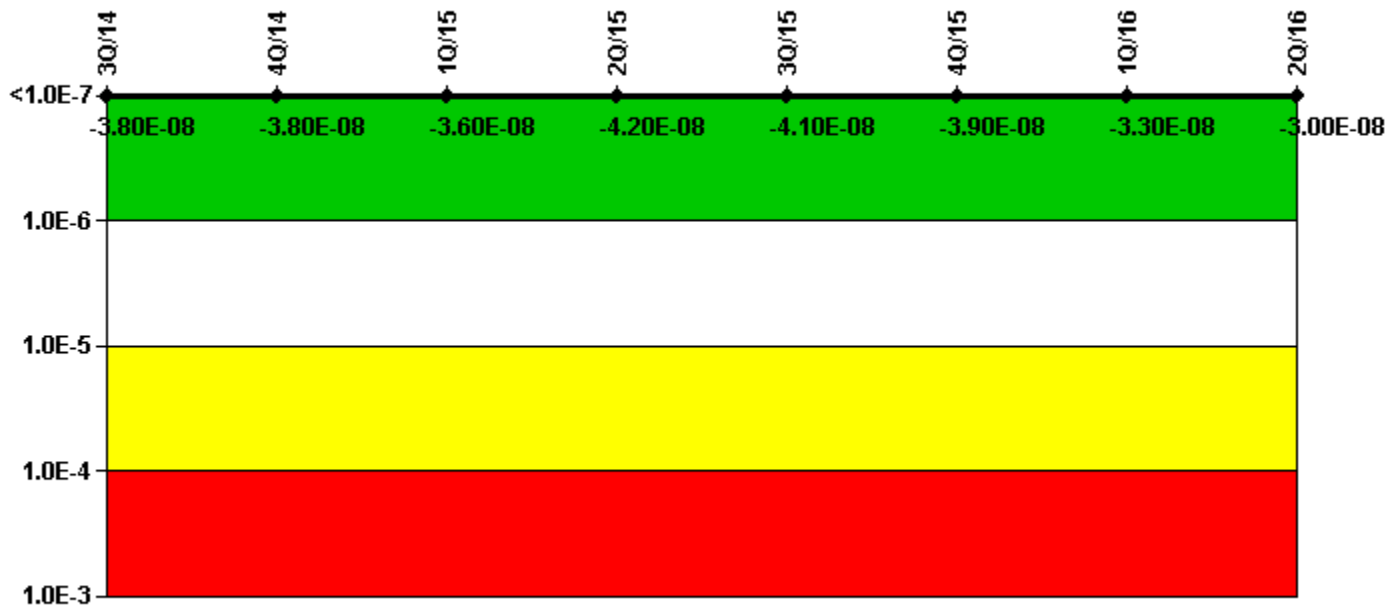
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	8.39E-08	7.74E-08	5.95E-08	6.02E-08	5.94E-08	6.01E-08	6.57E-08	4.14E-08
URI ( $\Delta$ CDF)	-5.84E-08	-5.77E-08	-5.51E-08	-6.19E-08	-6.28E-08	-6.30E-08	-6.44E-08	-5.71E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.50E-08	2.00E-08	4.40E-09	-1.70E-09	-3.40E-09	-2.90E-09	1.30E-09	-1.60E-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

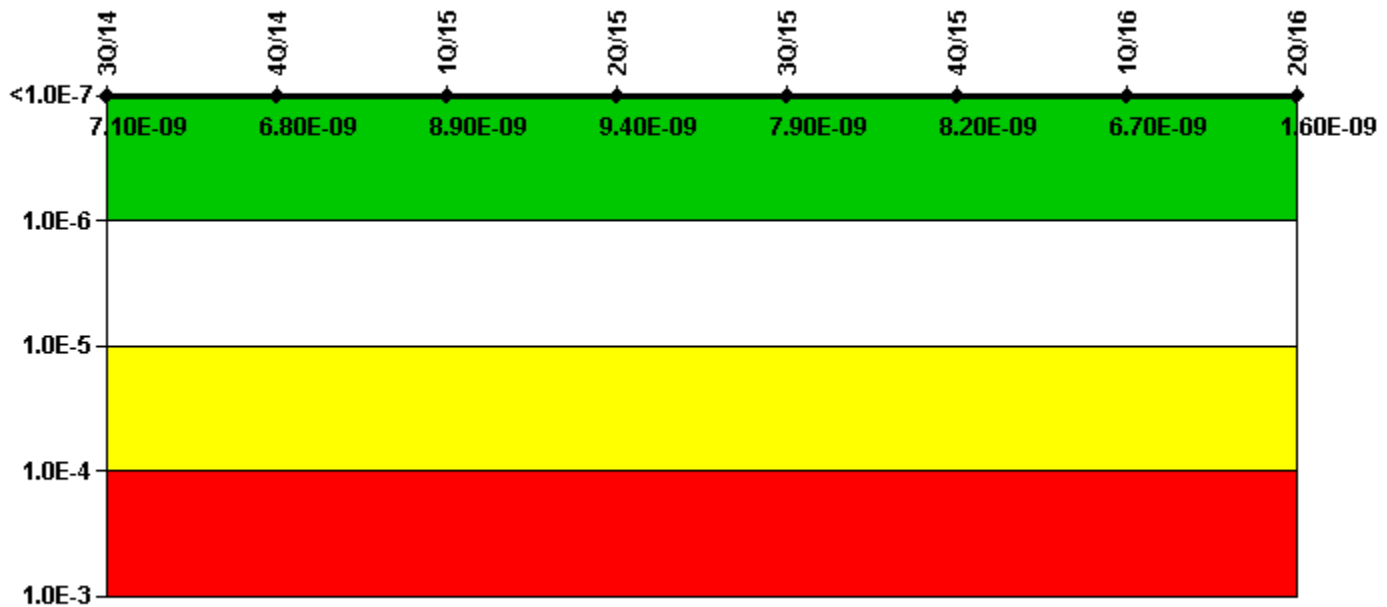
#### Notes

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)	1.99E-09	2.42E-09	3.23E-09	2.03E-09	3.50E-09	5.59E-09	4.70E-09	5.13E-09
URI ( $\Delta$ CDF)	-3.99E-08	-4.00E-08	-3.91E-08	-4.41E-08	-4.41E-08	-4.45E-08	-3.76E-08	-3.52E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.60E-08	-4.20E-08	-4.10E-08	-3.90E-08	-3.30E-08	-3.00E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



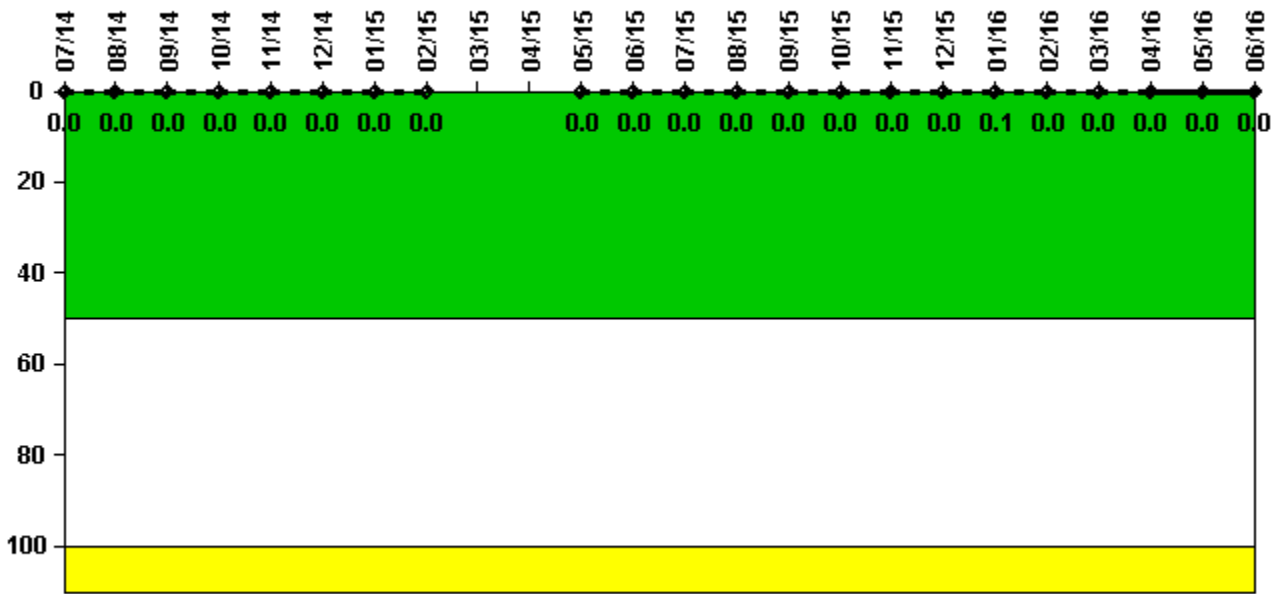
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	2.92E-08	2.87E-08	3.03E-08	3.17E-08	2.99E-08	3.05E-08	2.80E-08	2.23E-08
URI ( $\Delta$ CDF)	-2.20E-08	-2.19E-08	-2.14E-08	-2.23E-08	-2.21E-08	-2.23E-08	-2.12E-08	-2.07E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	7.10E-09	6.80E-09	8.90E-09	9.40E-09	7.90E-09	8.20E-09	6.70E-09	1.60E-09

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

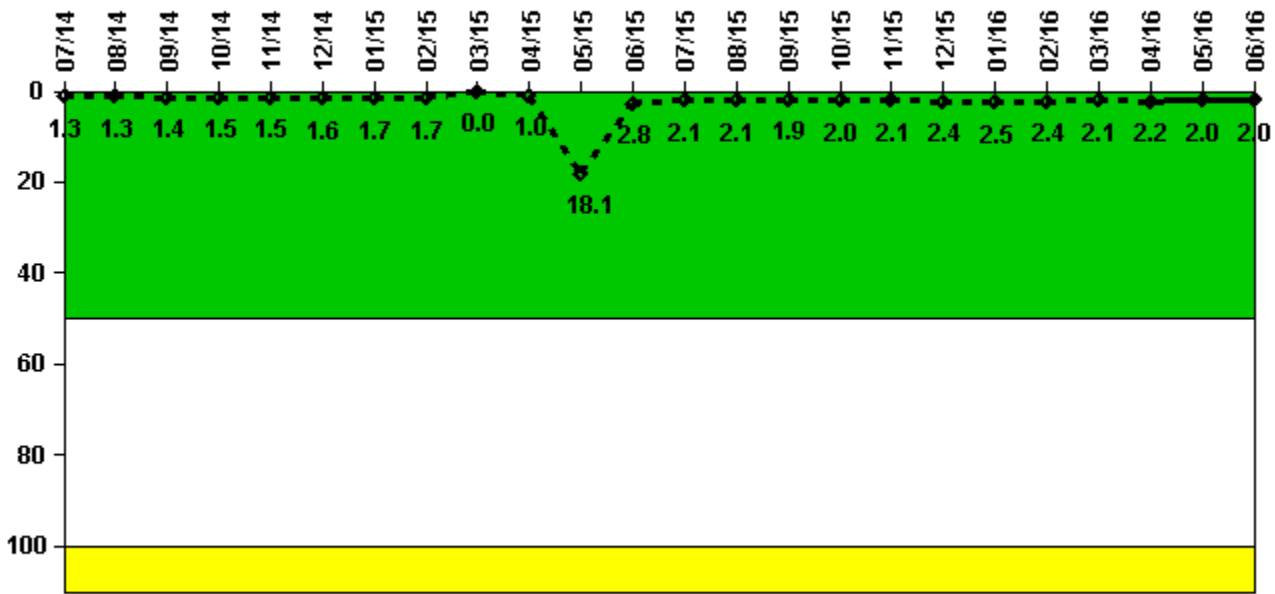
Reactor Coolant System Activity	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum activity	0.000200	0.000300	0.000400	0.000300	0.000300	0.000400	0.000300	0.000400	N/A	N/A	0.000300	0.000200
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	N/A	N/A	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	0.000200	0.000200	0.000200	0.000200	0.000200	0.000200	0.000700	0.000200	0.000300	0.000300	0.000300	0.000300
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	0.1	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	0.130	0.130	0.140	0.150	0.150	0.160	0.170	0.170	0	0.100	1.810	0.280
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	1.3	1.4	1.5	1.5	1.6	1.7	1.7	0	1.0	18.1	2.8

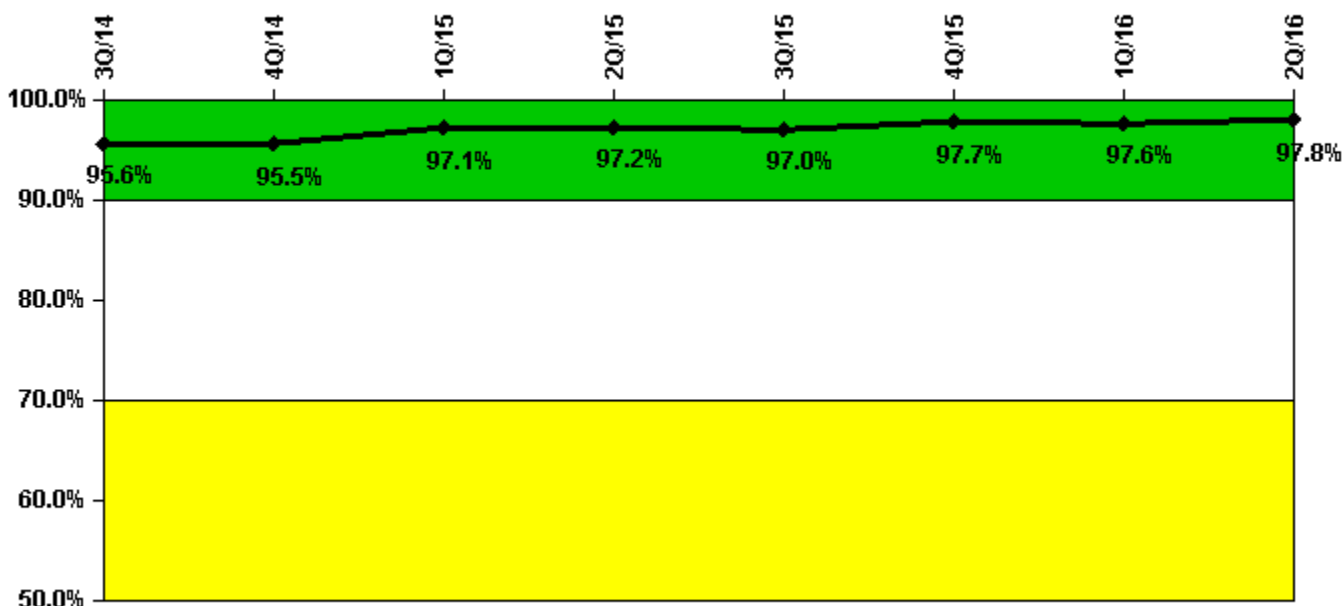
  

Reactor Coolant System Leakage	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum leakage	0.210	0.210	0.190	0.200	0.210	0.240	0.250	0.240	0.210	0.220	0.200	0.200
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.1	2.1	1.9	2.0	2.1	2.4	2.5	2.4	2.1	2.2	2.0	2.0

Licensee Comments:

12/15: Data correction for 11-2015 Max RCS Leakage

### Drill/Exercise Performance



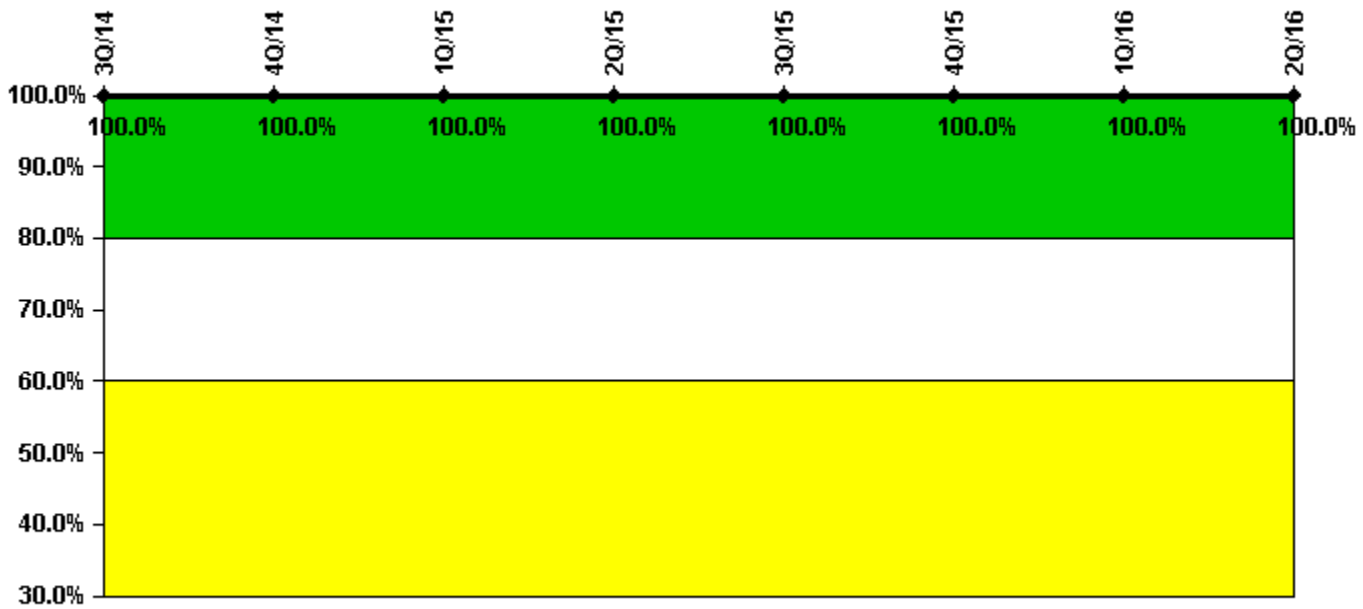
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	41.0	65.0	128.0	21.0	23.0	18.0	36.0	27.0
Total opportunities	45.0	66.0	128.0	22.0	24.0	18.0	37.0	27.0
Indicator value	95.6%	95.5%	97.1%	97.2%	97.0%	97.7%	97.6%	97.8%

Licensee Comments: none

### ERO Drill Participation



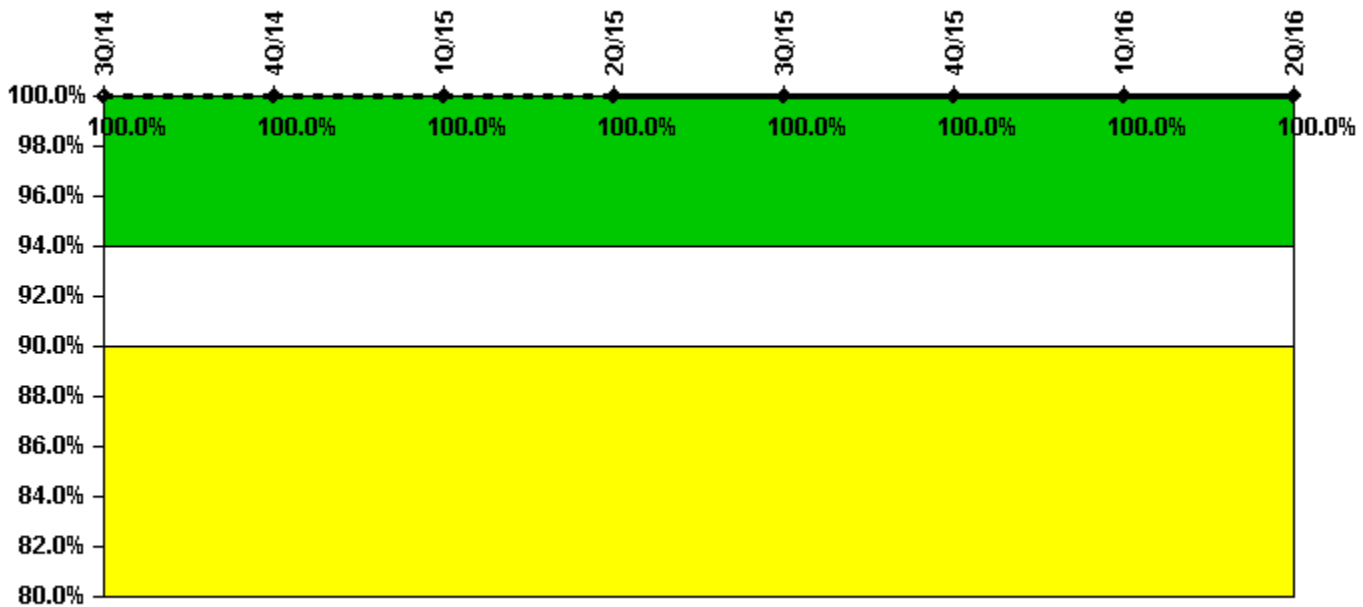
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Participating Key personnel	66.0	66.0	66.0	65.0	65.0	66.0	75.0	76.0
Total Key personnel	66.0	66.0	66.0	65.0	65.0	66.0	75.0	76.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



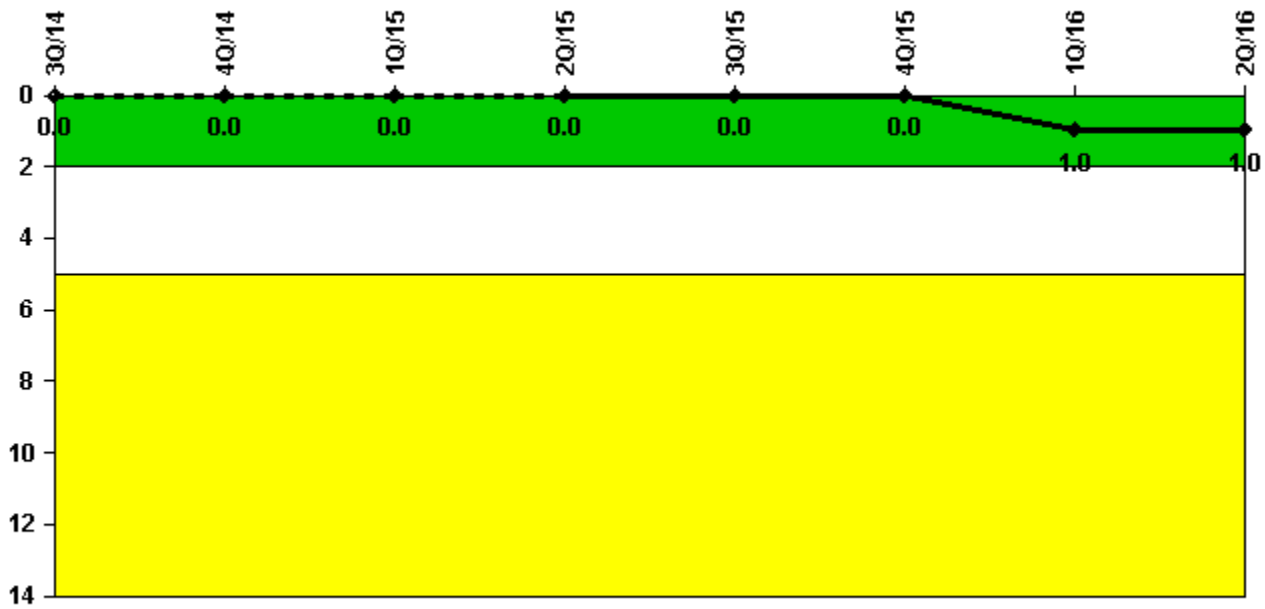
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	77	66	77	66	77	66	77	66
Total sirens-tests	77	66	77	66	77	66	77	66
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



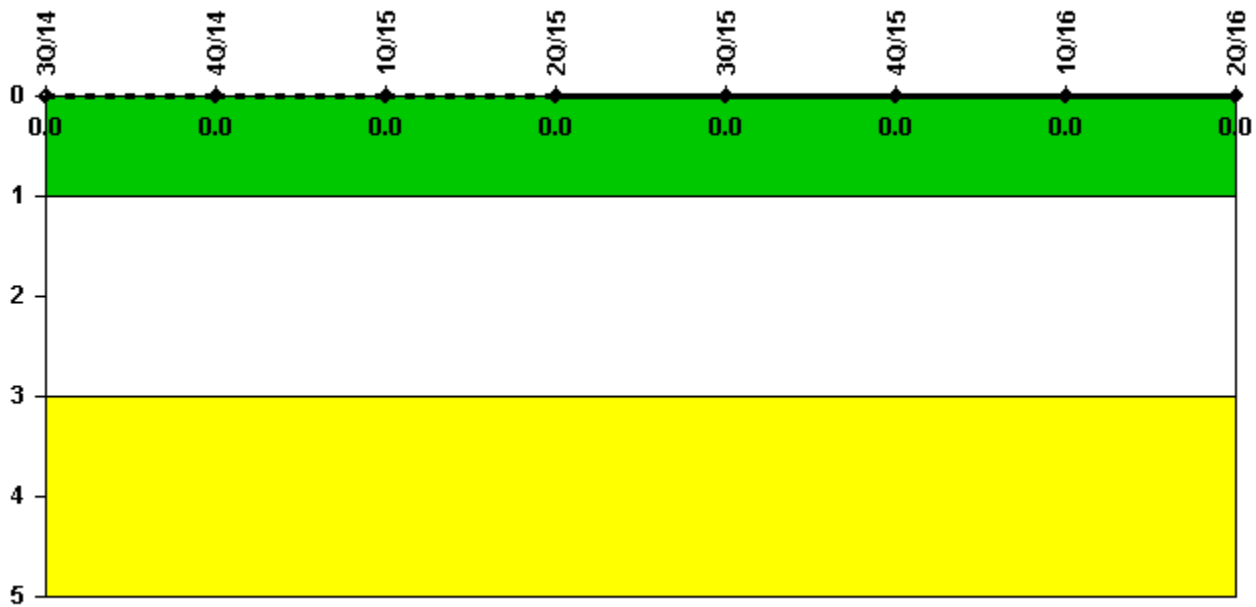
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	3Q/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	1	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>0</b>	<b>0</b>	<b>1</b>	<b>1</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*