

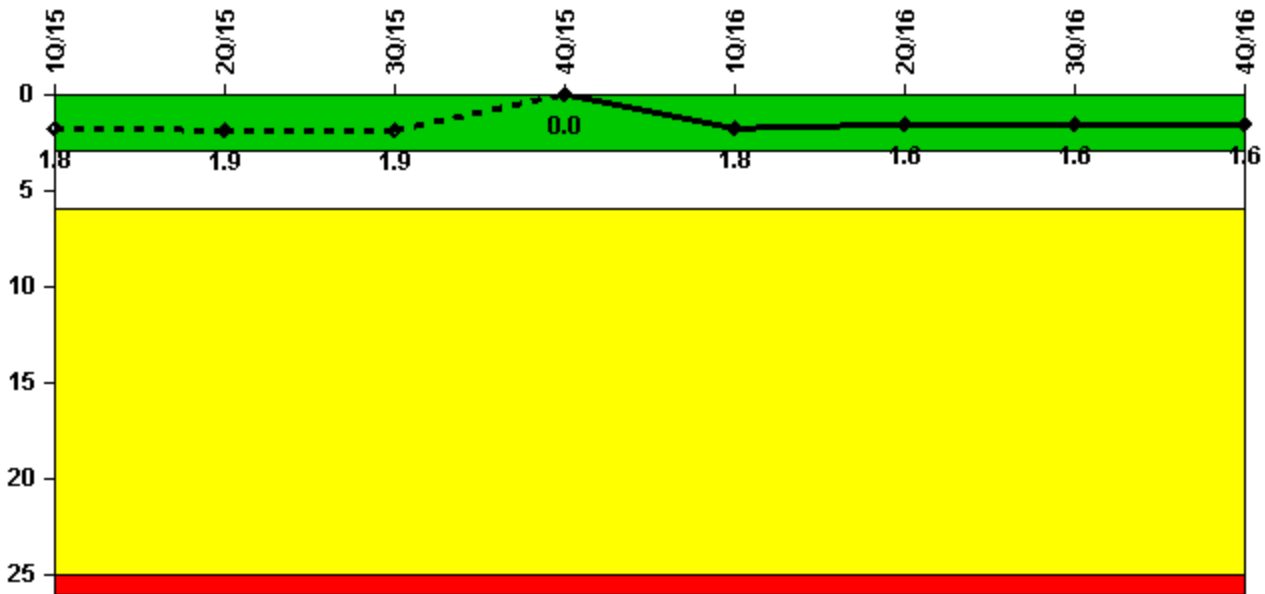
# Perry 1

## 4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



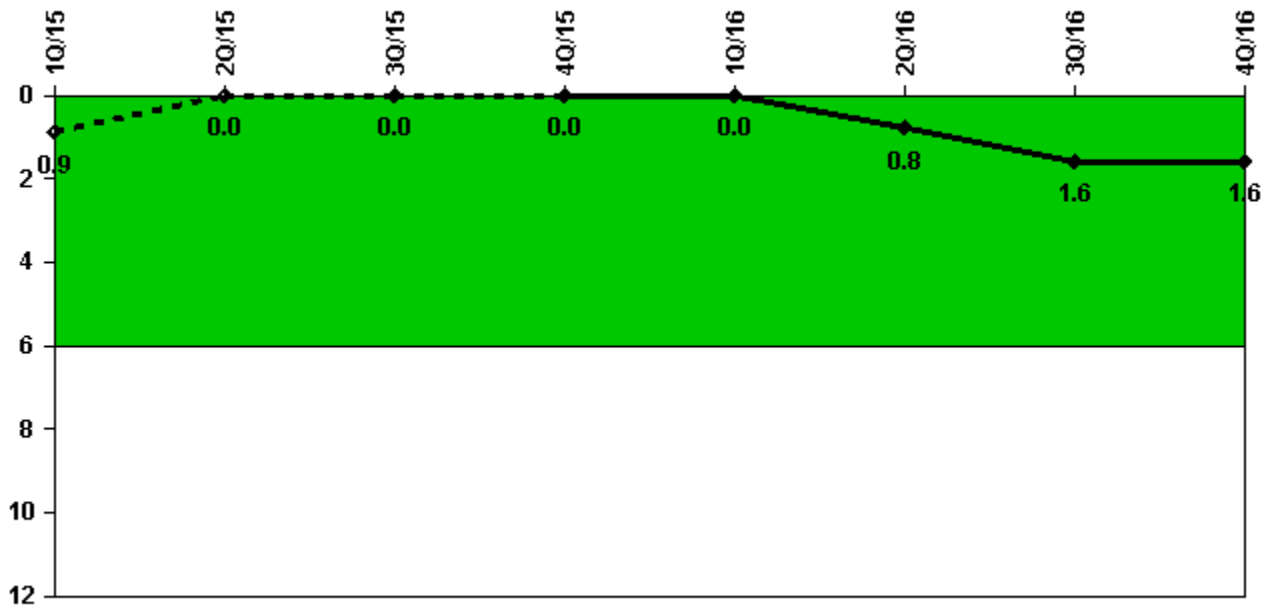
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Unplanned scrams	0	0	0	0	2.0	0	0	0
Critical hours	1607.7	1642.2	2208.0	2209.0	1913.7	2184.0	2208.0	2209.0
Indicator value	1.8	1.9	1.9	0	1.8	1.6	1.6	1.6

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



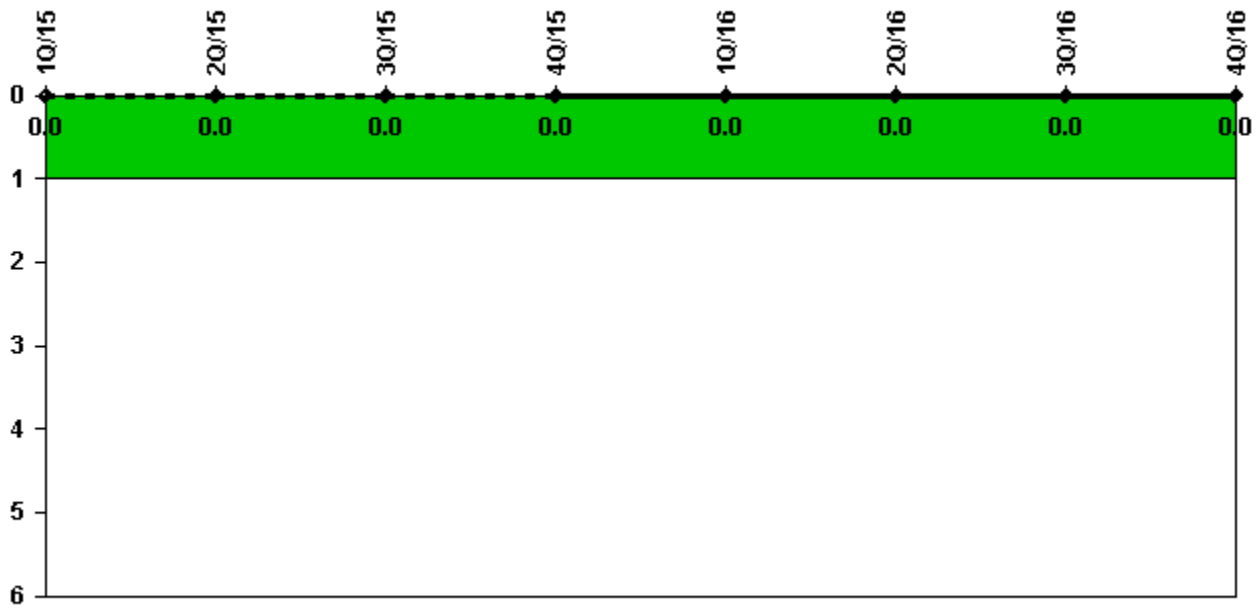
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Unplanned power changes	0	0	0	0	0	1.0	1.0	0
Critical hours	1607.7	1642.2	2208.0	2209.0	1913.7	2184.0	2208.0	2209.0
<b>Indicator value</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.8</b>	<b>1.6</b>	<b>1.6</b>

Licensee Comments: none

### Unplanned Scrams with Complications



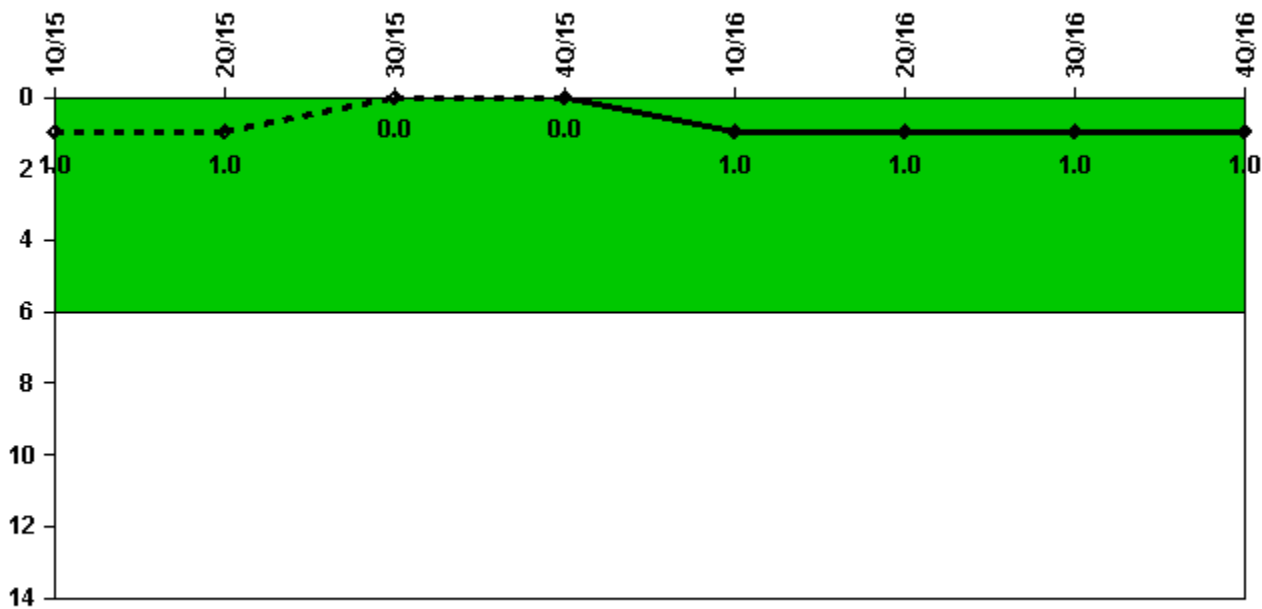
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/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)



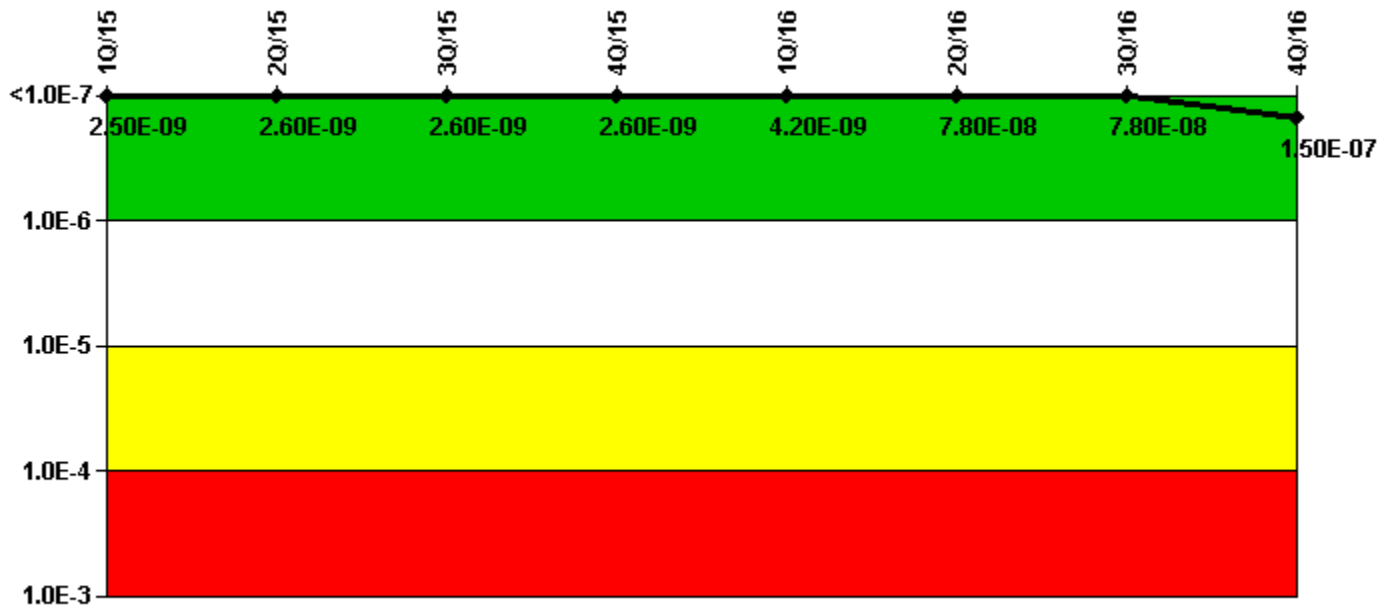
Thresholds: White > 6.0

#### Notes

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

Licensee Comments: none

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



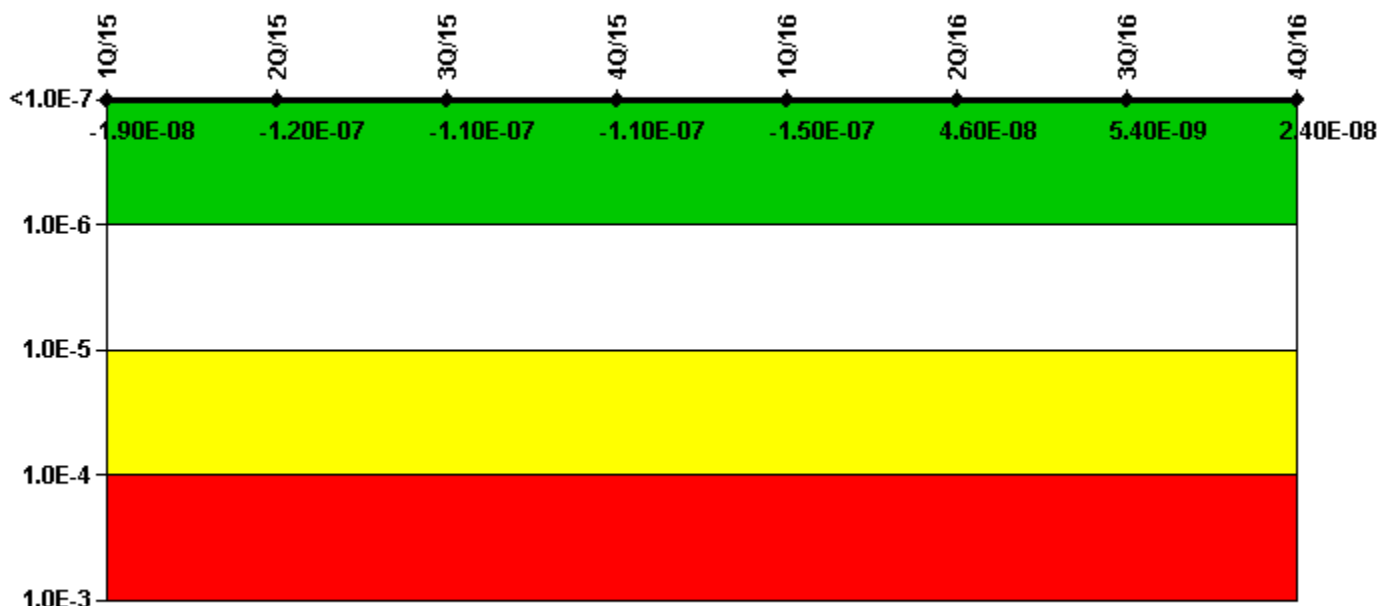
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI ( $\Delta$ CDF)	-3.66E-09	-3.58E-09	-3.58E-09	-3.58E-09	-1.72E-09	-1.93E-09	-1.87E-09	-1.43E-09
URI ( $\Delta$ CDF)	6.14E-09	6.14E-09	6.14E-09	6.14E-09	5.94E-09	7.98E-08	7.98E-08	1.53E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.50E-09	2.60E-09	2.60E-09	2.60E-09	4.20E-09	7.80E-08	7.80E-08	1.50E-07

Licensee Comments: none

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



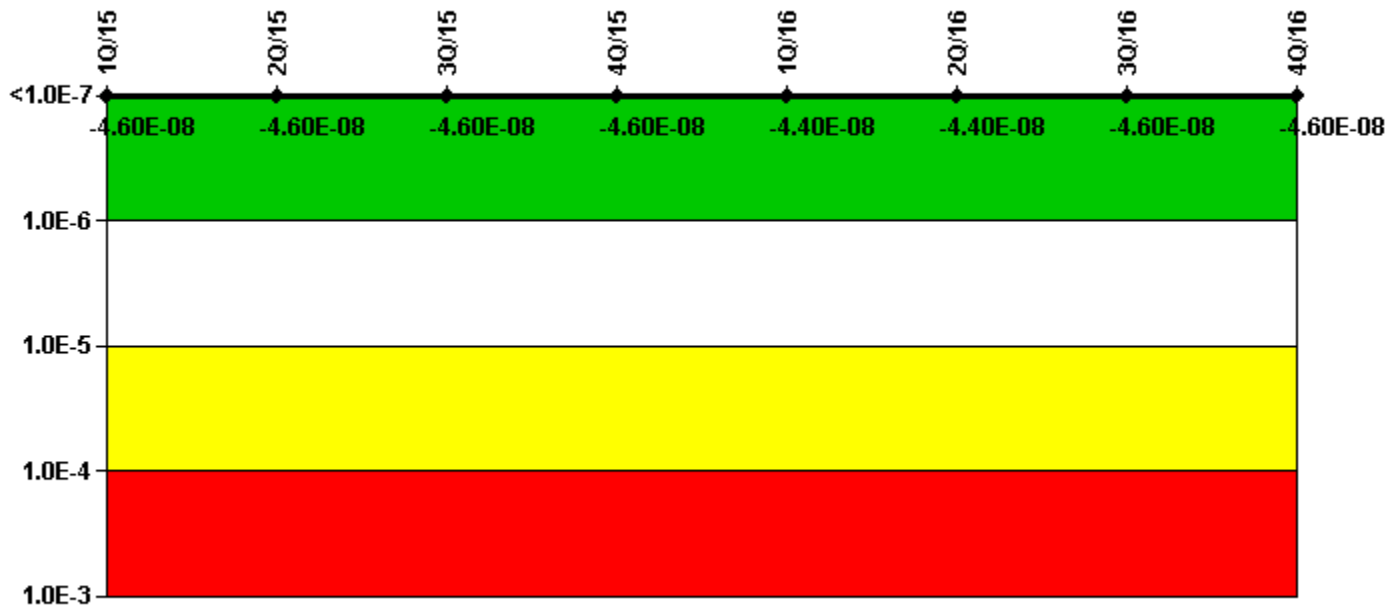
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI ( $\Delta$ CDF)	1.18E-07	2.07E-08	2.45E-08	2.29E-08	-1.23E-08	1.82E-07	1.41E-07	1.60E-07
URI ( $\Delta$ CDF)	-1.37E-07	-1.37E-07	-1.37E-07	-1.37E-07	-1.36E-07	-1.36E-07	-1.36E-07	-1.36E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.90E-08	-1.20E-07	-1.10E-07	-1.10E-07	-1.50E-07	4.60E-08	5.40E-09	2.40E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



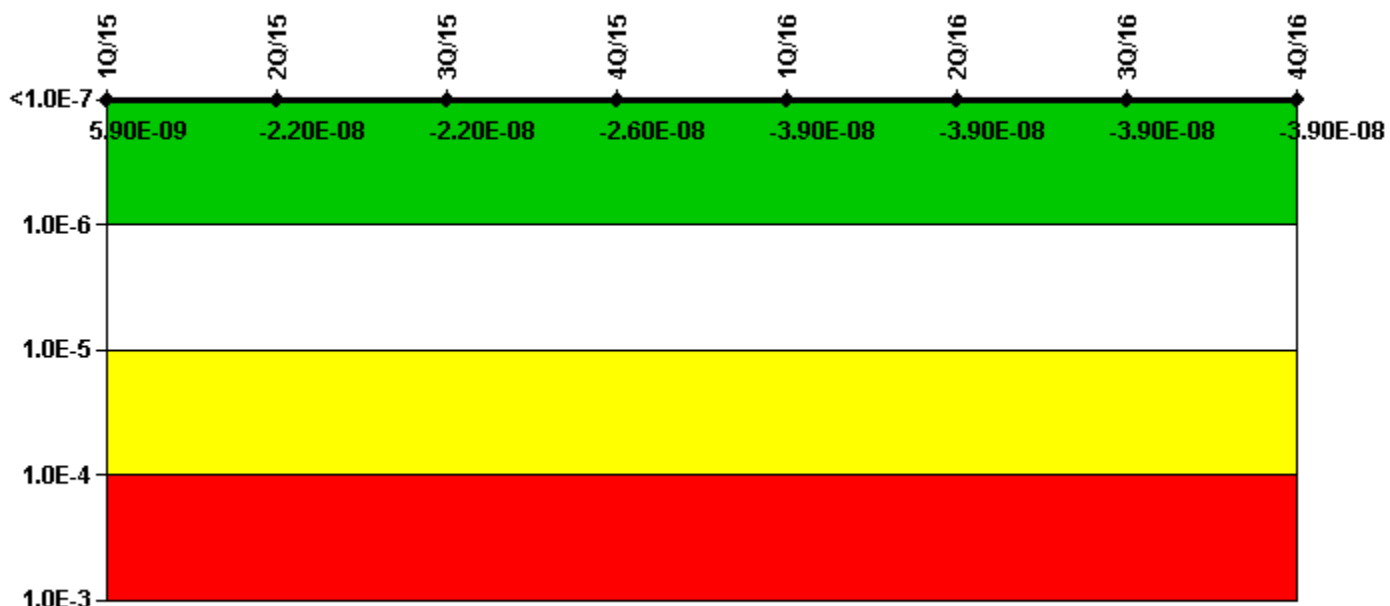
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI ( $\Delta$ CDF)	-1.07E-08	-1.07E-08	-1.04E-08	-1.04E-08	-1.04E-08	-1.05E-08	-1.26E-08	-1.26E-08
URI ( $\Delta$ CDF)	-3.51E-08	-3.51E-08	-3.51E-08	-3.51E-08	-3.37E-08	-3.37E-08	-3.37E-08	-3.37E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.60E-08	-4.60E-08	-4.60E-08	-4.60E-08	-4.40E-08	-4.40E-08	-4.60E-08	-4.60E-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

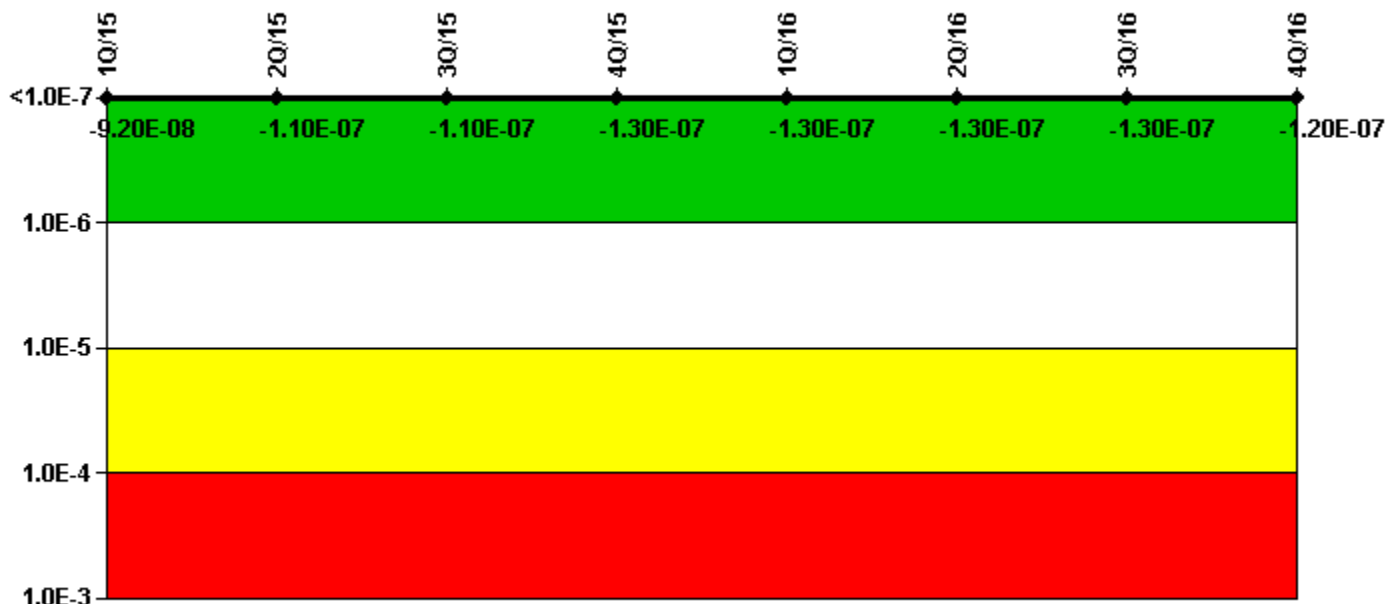
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI ( $\Delta$ CDF)	2.66E-08	-1.30E-09	-1.66E-09	-5.13E-09	-1.87E-08	-1.87E-08	-1.87E-08	-1.87E-08
URI ( $\Delta$ CDF)	-2.06E-08	-2.06E-08	-2.06E-08	-2.06E-08	-2.06E-08	-2.06E-08	-2.06E-08	-2.06E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	5.90E-09	-2.20E-08	-2.20E-08	-2.60E-08	-3.90E-08	-3.90E-08	-3.90E-08	-3.90E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



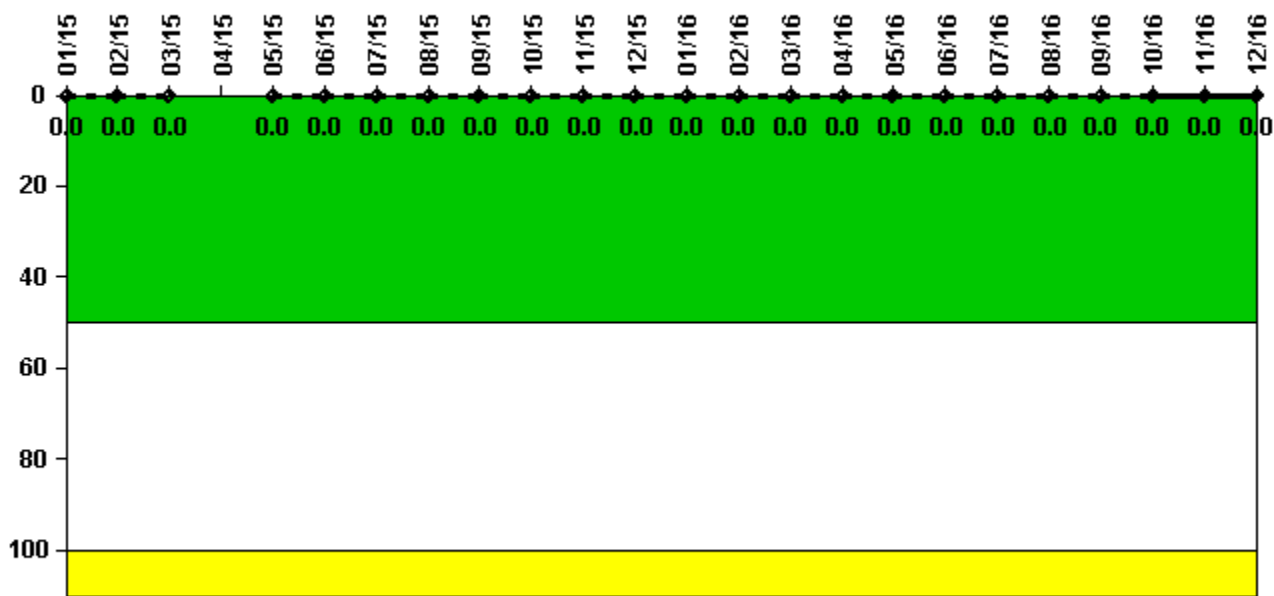
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI ( $\Delta$ CDF)	-5.14E-09	-2.00E-08	-2.00E-08	-4.07E-08	-3.96E-08	-3.96E-08	-4.51E-08	-2.95E-08
URI ( $\Delta$ CDF)	-8.65E-08	-8.65E-08	-8.65E-08	-8.65E-08	-8.65E-08	-8.65E-08	-8.65E-08	-8.65E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.20E-08	-1.10E-07	-1.10E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.20E-07

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum activity	0.000022	0.000020	0.000019	N/A	0.000018	0.000010	0.000012	0.000017	0.000015	0.000019	0.000015	0.000016
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	N/A	0	0	0	0	0	0	0	0

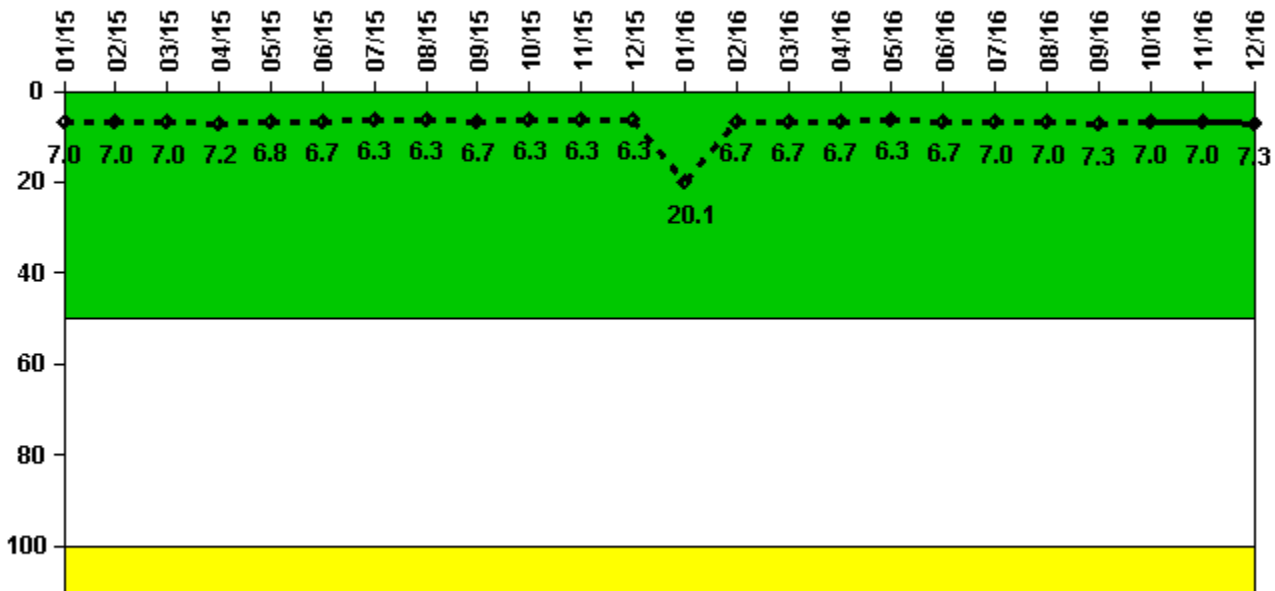
  

Reactor Coolant System Activity	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum activity	0.000018	0.000014	0.000012	0.000014	0.000015	0.000013	0.000017	0.000018	0.000014	0.000012	0.000012	0.000013
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

#### Licensee Comments:

6/15: The May 2015 data was revised due to a misread value. The revised value does not change the color of the indicator. CR 2015-15391

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

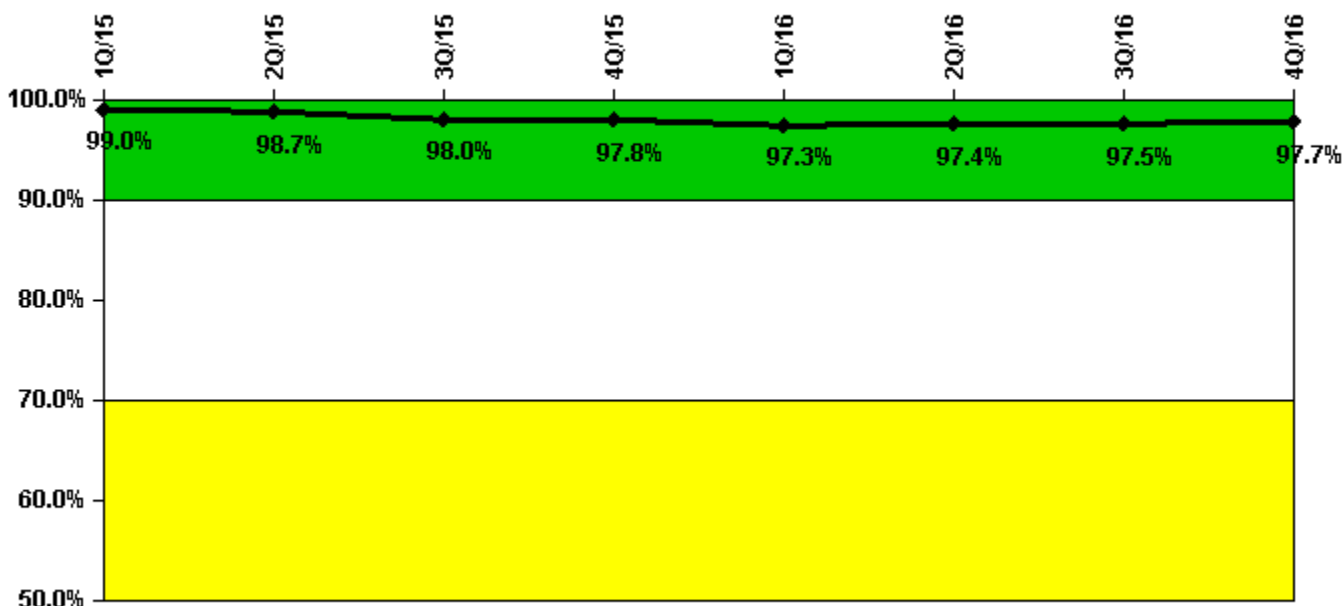
Reactor Coolant System Leakage	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum leakage	2.100	2.100	2.100	2.160	2.050	2.000	1.900	1.900	2.000	1.900	1.900	1.900
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.0	7.0	7.0	7.2	6.8	6.7	6.3	6.3	6.7	6.3	6.3	6.3

Reactor Coolant System Leakage	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum leakage	6.020	2.000	2.000	2.010	1.900	2.000	2.100	2.100	2.200	2.100	2.100	2.200
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	20.1	6.7	6.7	6.7	6.3	6.7	7.0	7.0	7.3	7.0	7.0	7.3

Licensee Comments: none

### Drill/Exercise Performance



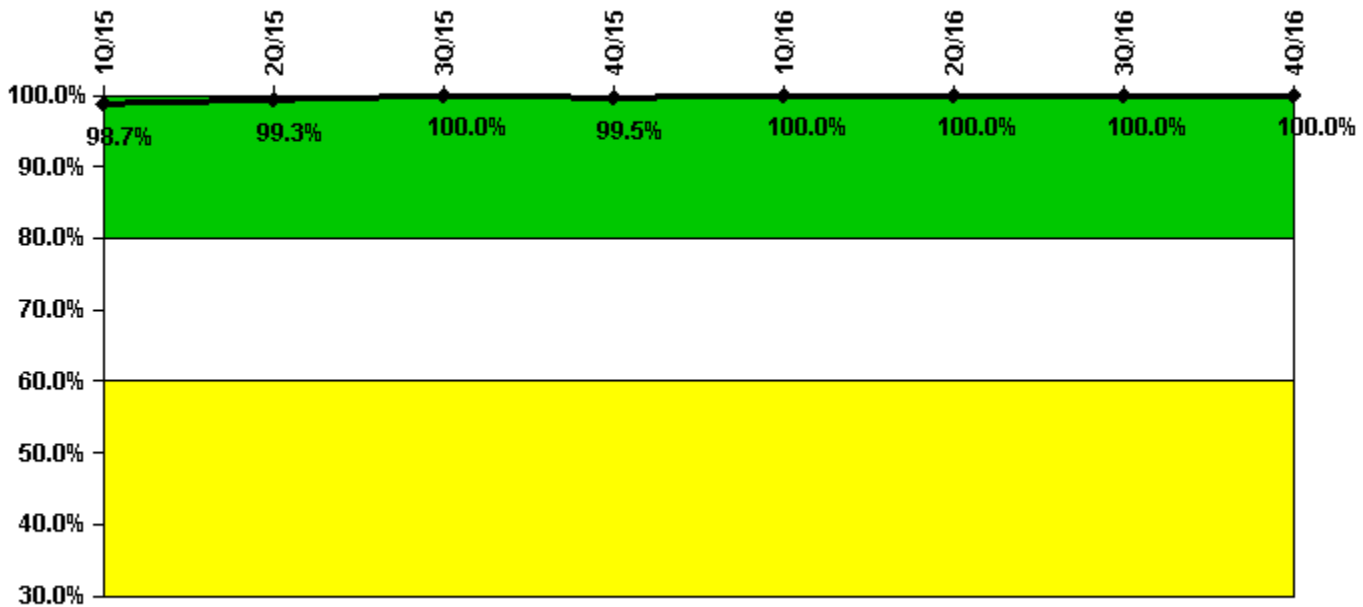
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful opportunities	22.0	39.0	48.0	37.0	36.0	44.0	35.0	30.0
Total opportunities	22.0	40.0	50.0	38.0	38.0	44.0	36.0	30.0
Indicator value	99.0%	98.7%	98.0%	97.8%	97.3%	97.4%	97.5%	97.7%

Licensee Comments: none

### ERO Drill Participation



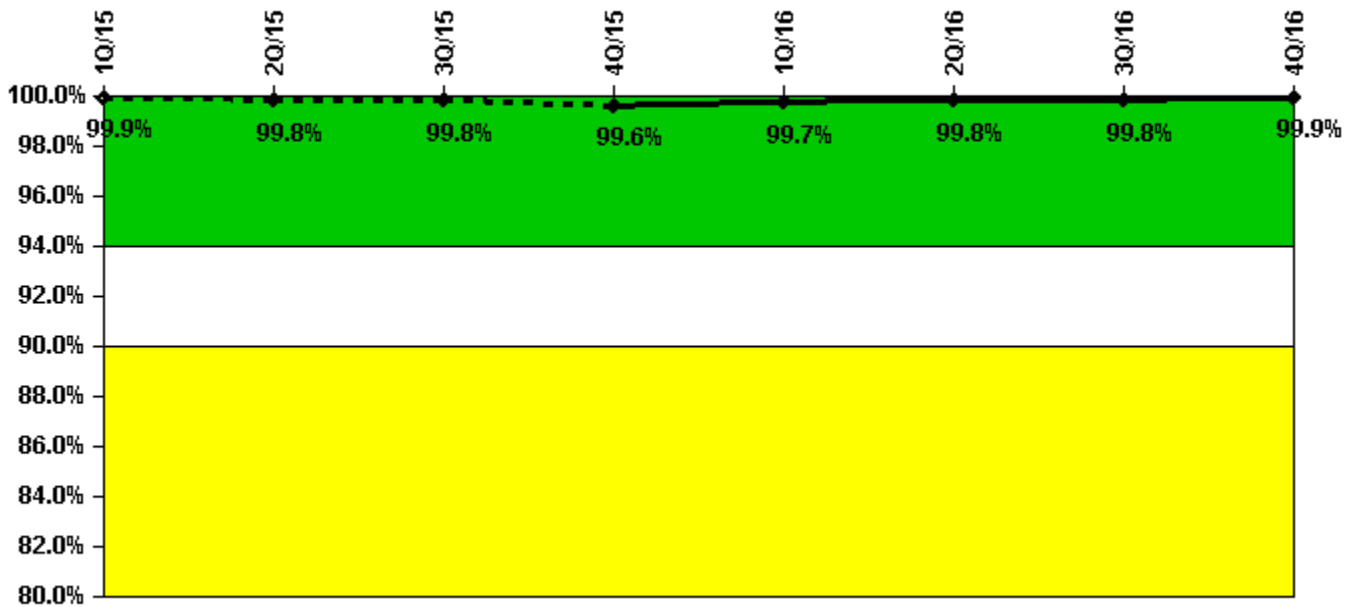
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	153.0	150.0	164.0	183.0	179.0	179.0	183.0	188.0
Total Key personnel	155.0	151.0	164.0	184.0	179.0	179.0	183.0	188.0
Indicator value	98.7%	99.3%	100.0%	99.5%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



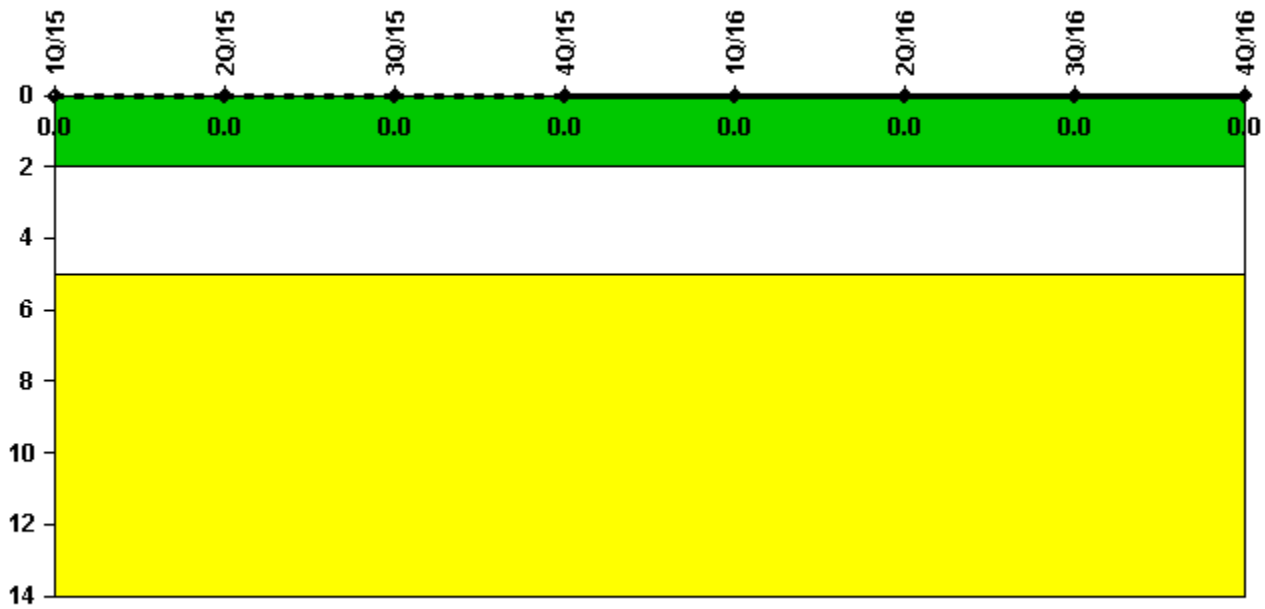
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful siren-tests	454	454	532	1059	987	988	980	988
Total sirens-tests	456	456	532	1064	988	988	981	988
Indicator value	99.9%	99.8%	99.8%	99.6%	99.7%	99.8%	99.8%	99.9%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



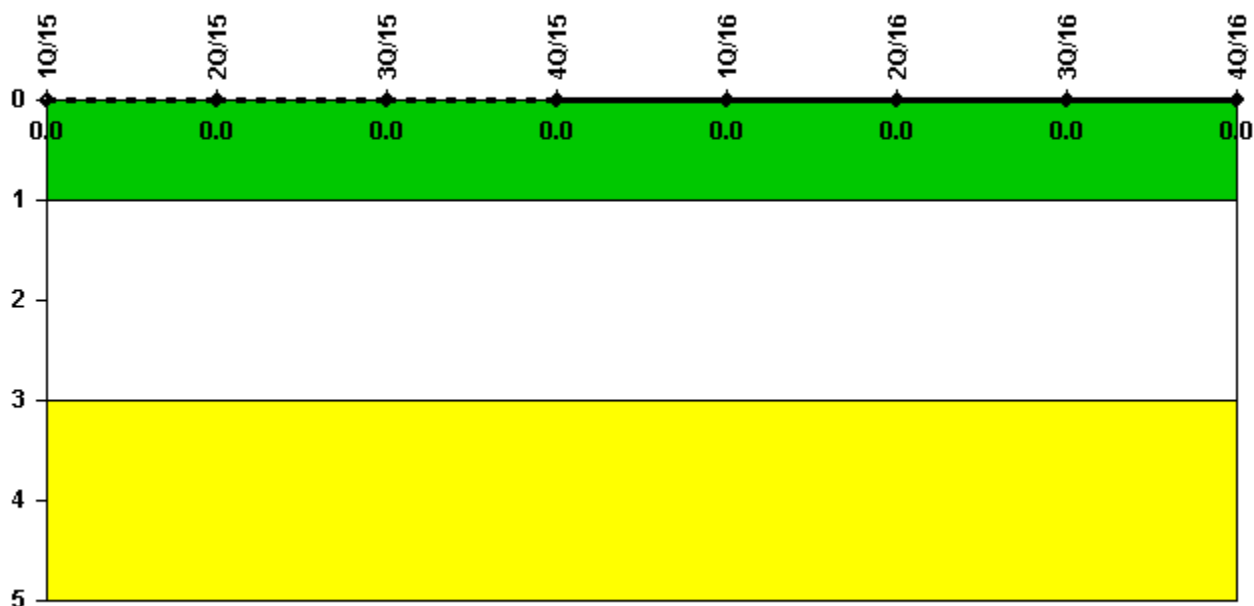
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/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>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: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/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: January 24, 2017*