

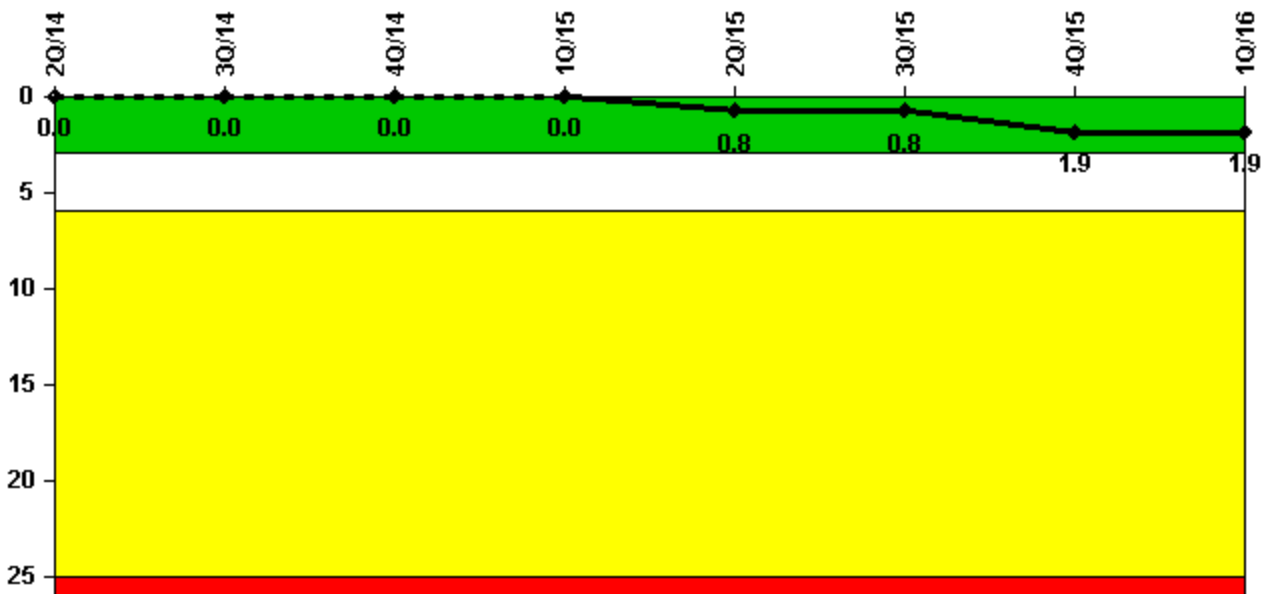
# Waterford 3

## 1Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



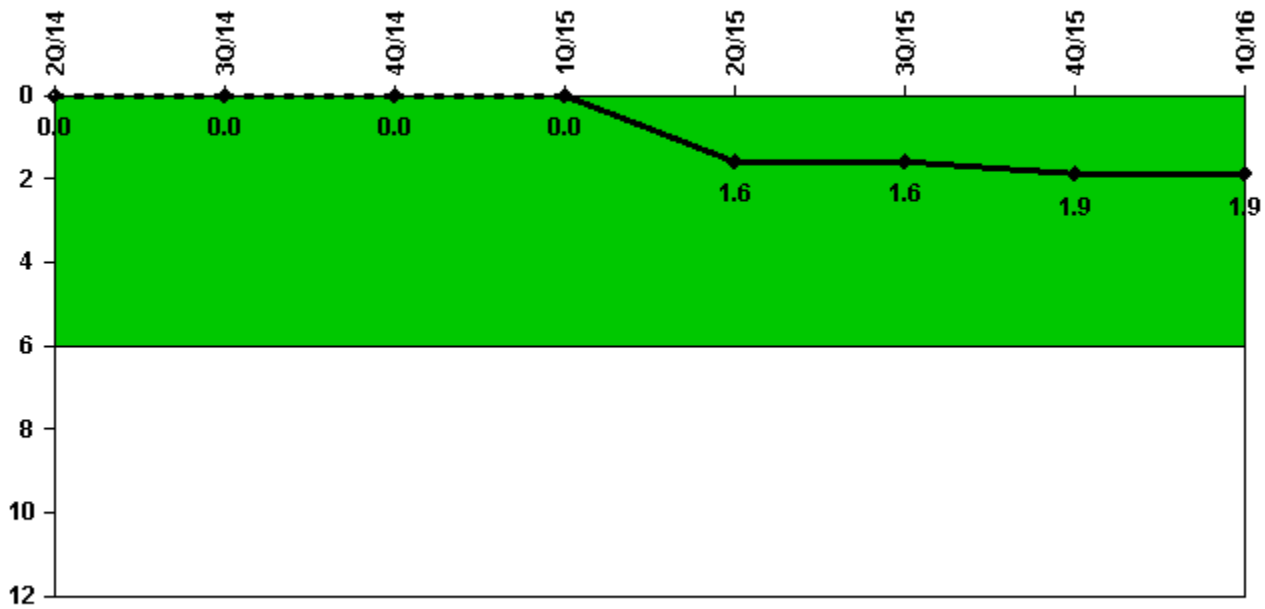
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned scrams	0	0	0	0	1.0	0	1.0	0
Critical hours	1439.6	2208.0	2209.0	2159.0	2079.8	2208.0	929.5	2183.0
Indicator value	0	0	0	0	0.8	0.8	1.9	1.9

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



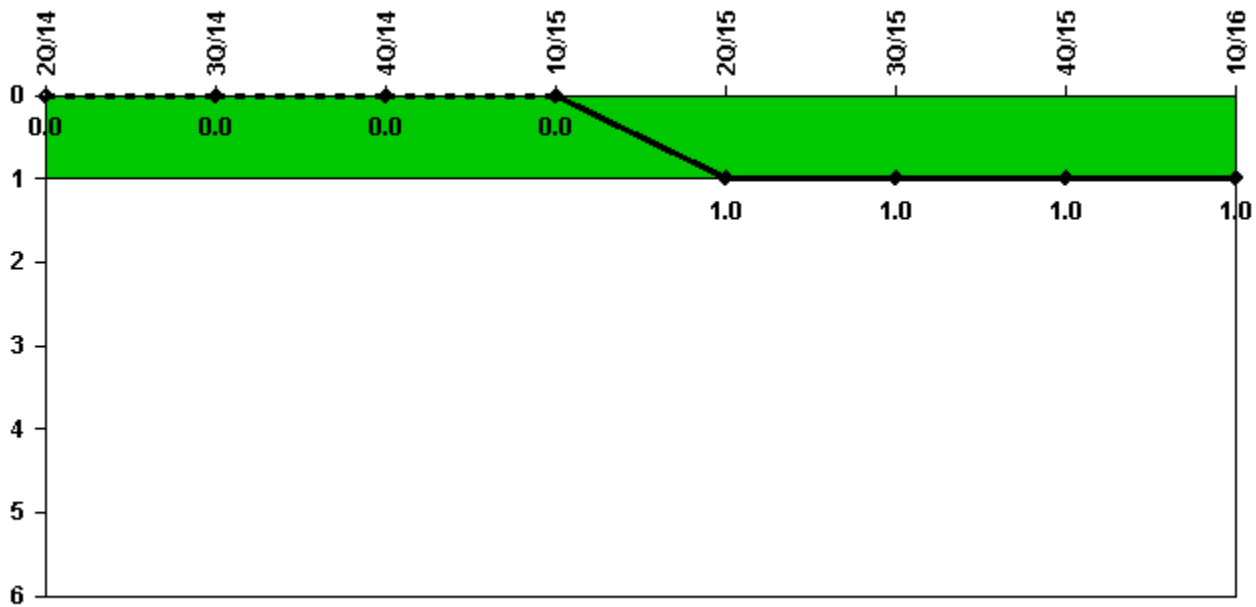
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned power changes	0	0	0	0	2.0	0	0	0
Critical hours	1439.6	2208.0	2209.0	2159.0	2079.8	2208.0	929.5	2183.0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.6</b>	<b>1.6</b>	<b>1.9</b>	<b>1.9</b>

Licensee Comments: none

### Unplanned Scrams with Complications



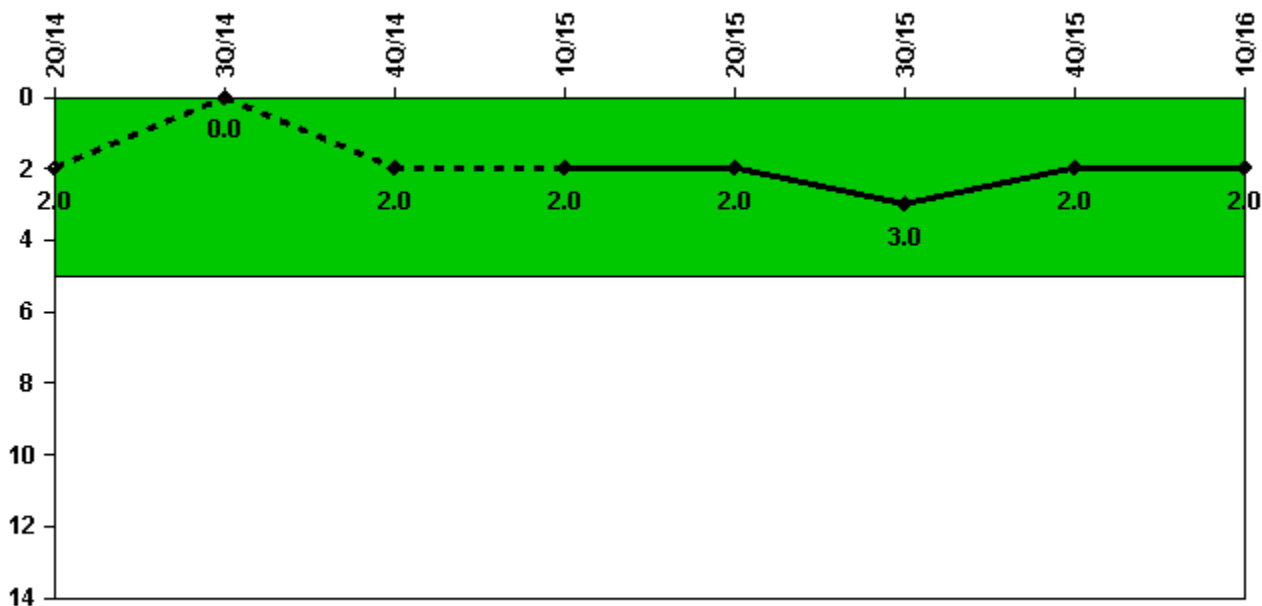
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Scrams with complications	0	0	0	0	1.0	0	0	0
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

#### Notes

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

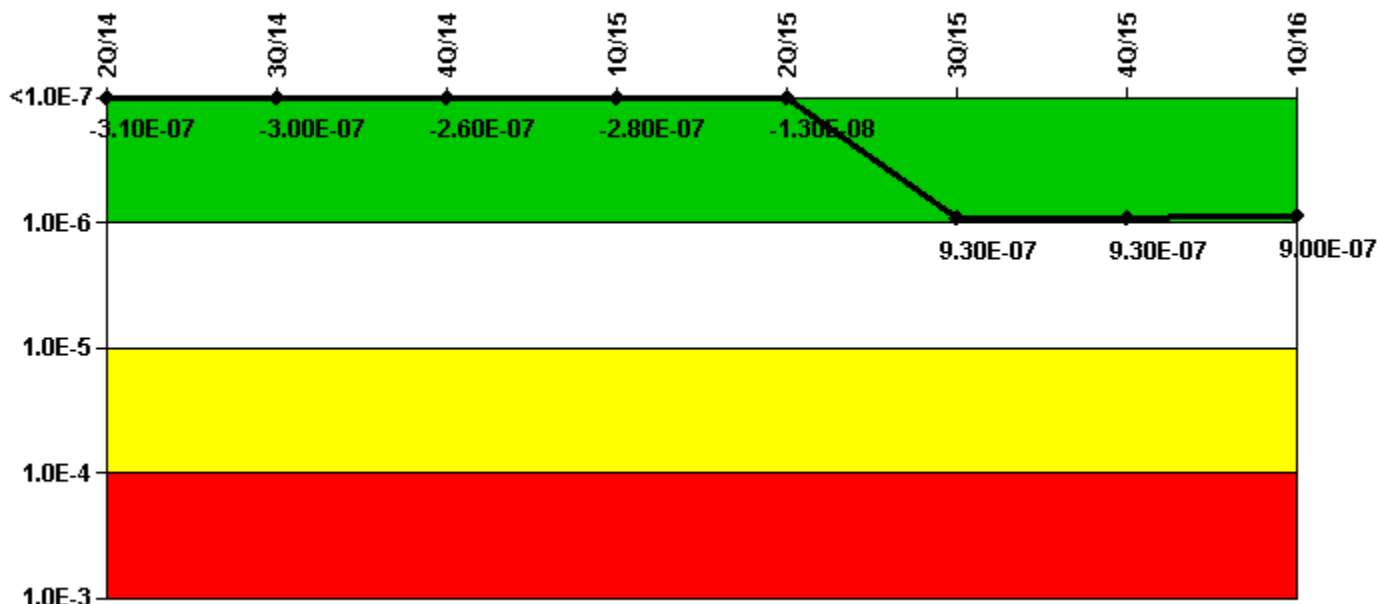
#### Licensee Comments:

4Q/15: LER 2015-007-00 issued 10/23/2015. On 8/16/2015, Both A & B EDG declared inoperable, entry into TS 3.8.1.1 action f. - EDG A was declared inoperable following a trip on generator differential due to failed current transformer. Then EDG B, which was subsequently started per TS 3.8.1.1 action b(1), was declared inoperable due to exhaust fan not starting when diesel was started then TS 3.8.1.1 action f was entered.

4Q/14: LER 2014-003-00 and LER 2014-004-00 both submitted 4th quarter as SSFF.

3Q/14: LER 2014-003-00 a SSFF was reported in Licensing Event Report LER 2014-003-00. This SSFF was originally reported with 3rd quarter 2014 data submittal for time of occurrence in error. This has been entered into the corrective action program under CR-WF3-2014-6299. The PI color will change from Yellow back to Green.

### 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/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	1.09E-07	1.03E-07	1.32E-07	1.15E-07	3.81E-07	5.69E-07	5.71E-07	5.55E-07
URI ( $\Delta$ CDF)	-4.15E-07	-4.04E-07	-3.95E-07	-3.95E-07	-3.95E-07	3.57E-07	3.56E-07	3.49E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-07	-3.00E-07	-2.60E-07	-2.80E-07	-1.30E-08	9.30E-07	9.30E-07	9.00E-07

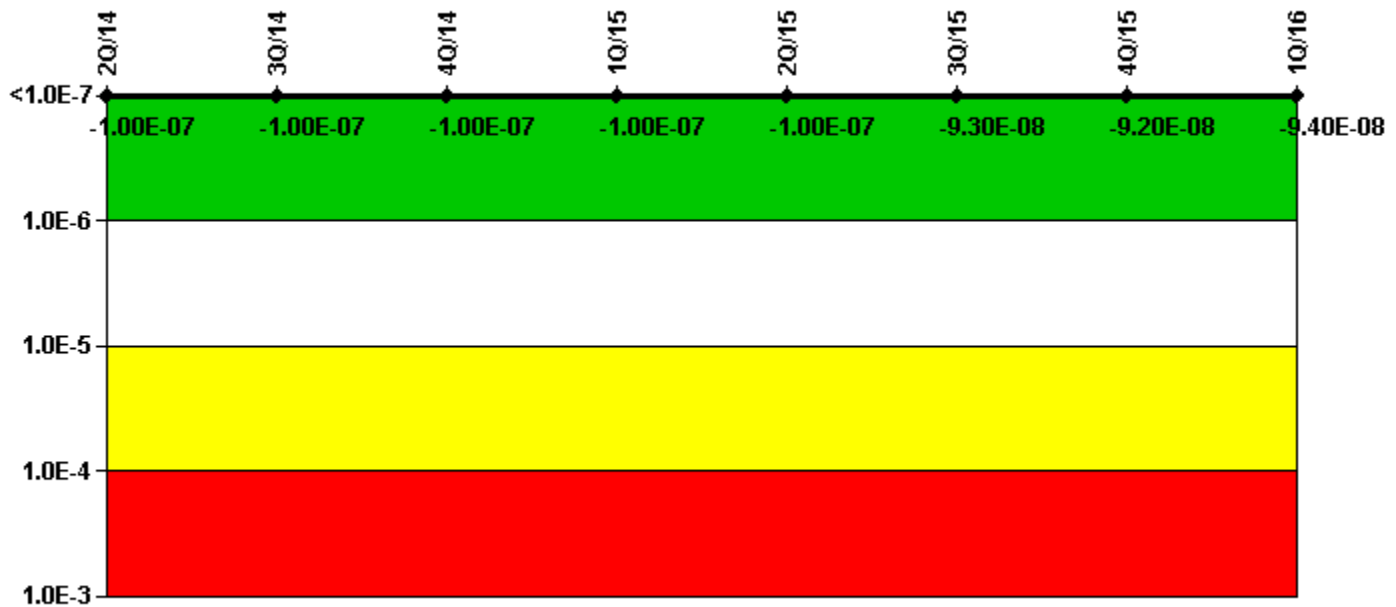
#### Licensee Comments:

1Q/16: Risk Cap Invoked. The Generic Common Cause Failure (CCF) Factors applied to the Emergency Diesel Generator (EDG) runtime failure Birnbaum were not correct. The incorrect value of 1.0 should be changed to 1.25 per the guidance in NEI 99-02 Rev. 7. Ref. EC-63198.

4Q/15: Risk Cap Invoked.

3Q/15: Risk Cap Invoked.

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



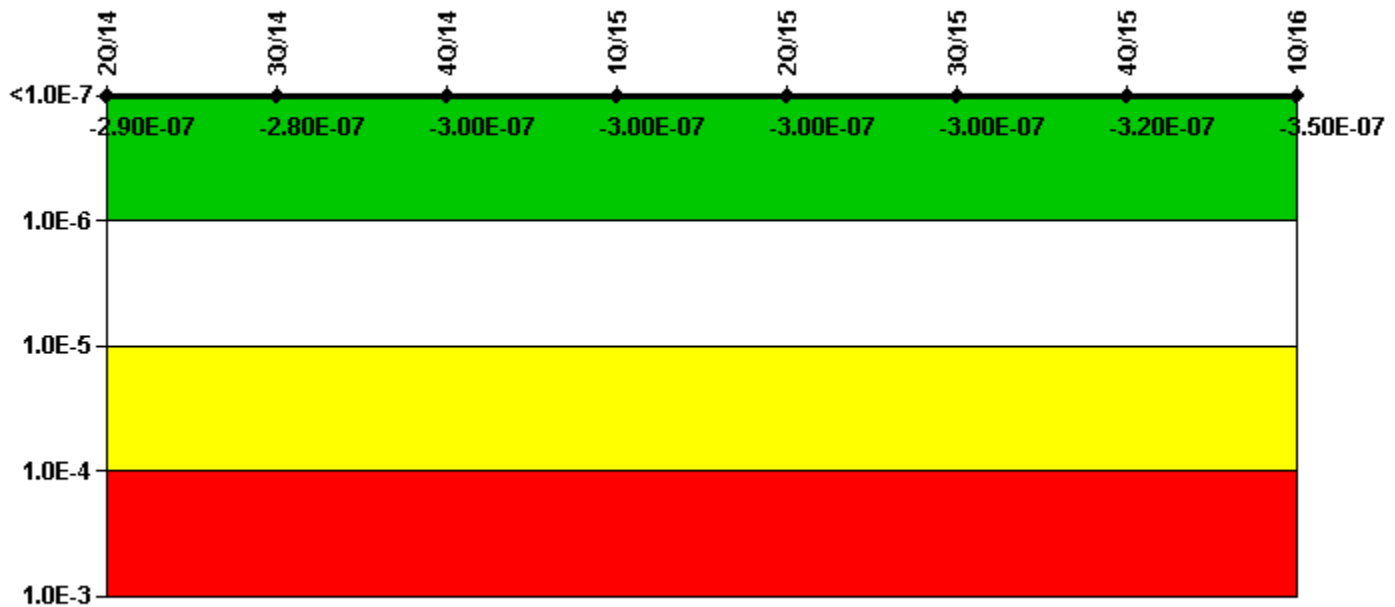
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	-1.30E-08	-9.58E-09	-9.58E-09	-9.54E-09	-1.01E-08	-3.32E-10	-1.32E-09	-5.11E-09
URI ( $\Delta$ CDF)	-9.13E-08	-9.18E-08	-9.34E-08	-9.35E-08	-9.24E-08	-9.26E-08	-9.11E-08	-8.93E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-9.30E-08	-9.20E-08	-9.40E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



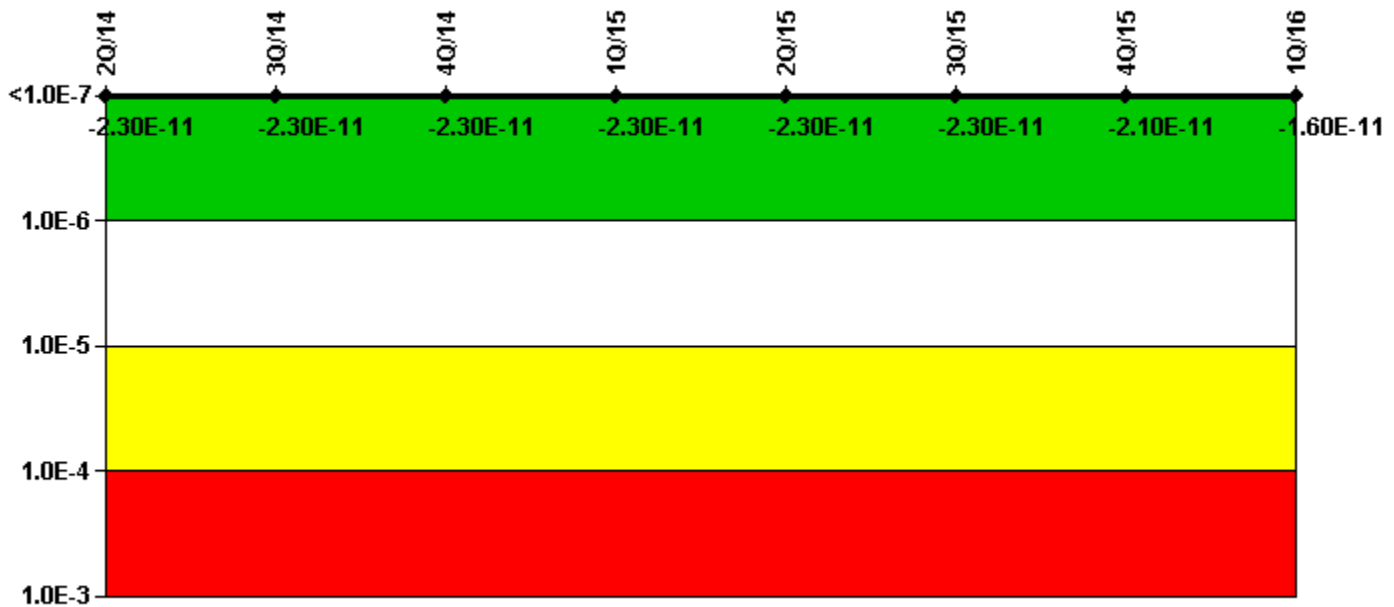
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	3.32E-08	3.32E-08	1.84E-08	1.85E-08	1.92E-08	1.86E-08	5.12E-09	-4.01E-08
URI ( $\Delta$ CDF)	-3.21E-07	-3.14E-07	-3.19E-07	-3.19E-07	-3.19E-07	-3.21E-07	-3.26E-07	-3.13E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.90E-07	-2.80E-07	-3.00E-07	-3.00E-07	-3.00E-07	-3.00E-07	-3.20E-07	-3.50E-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

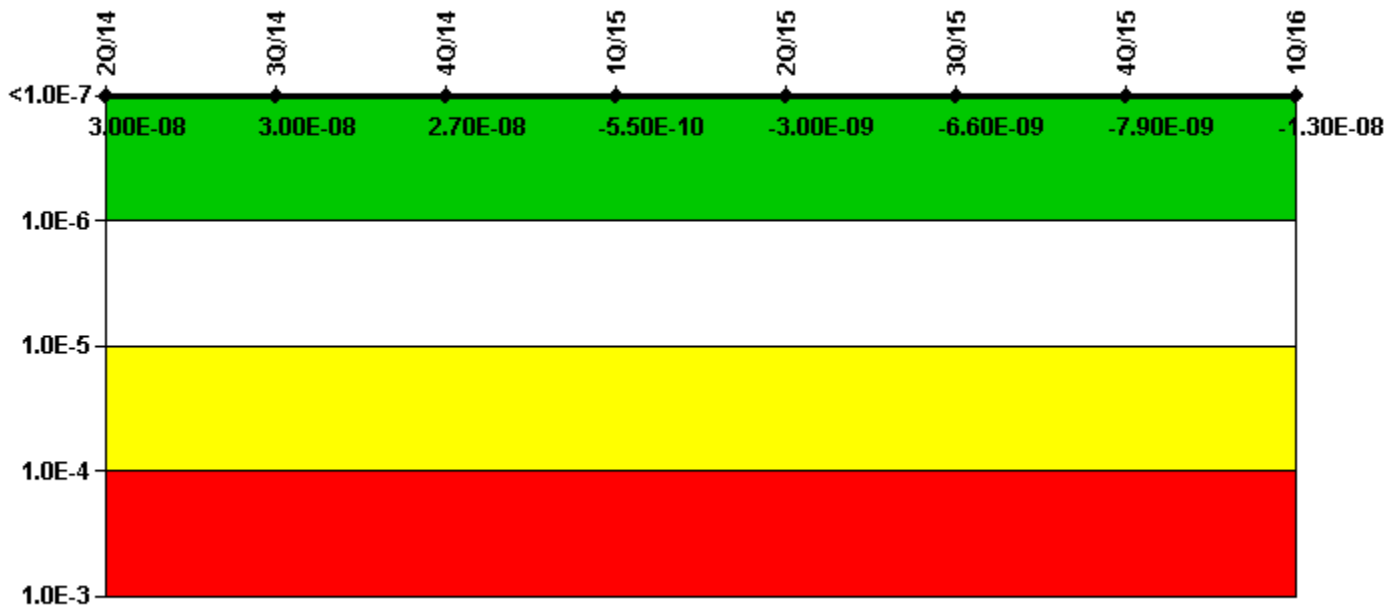
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	-1.07E-11	-1.07E-11	-1.07E-11	-1.06E-11	-1.07E-11	-1.07E-11	-8.56E-12	-3.88E-12
URI ( $\Delta$ CDF)	-1.25E-11	-1.23E-11	-1.24E-11	-1.25E-11	-1.25E-11	-1.22E-11	-1.22E-11	-1.20E-11
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.30E-11	-2.30E-11	-2.30E-11	-2.30E-11	-2.30E-11	-2.30E-11	-2.10E-11	-1.60E-11

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



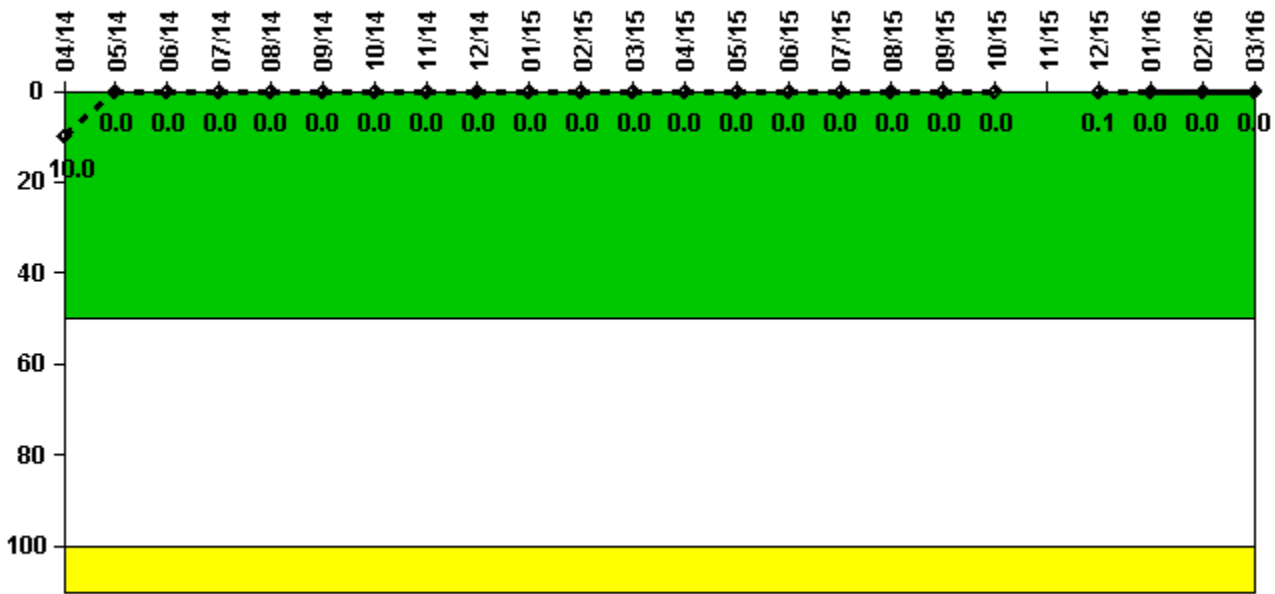
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	7.28E-08	7.34E-08	7.05E-08	4.28E-08	3.98E-08	3.61E-08	3.47E-08	3.52E-08
URI ( $\Delta$ CDF)	-4.32E-08	-4.30E-08	-4.31E-08	-4.34E-08	-4.28E-08	-4.27E-08	-4.26E-08	-4.81E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.00E-08	3.00E-08	2.70E-08	-5.50E-10	-3.00E-09	-6.60E-09	-7.90E-09	-1.30E-08

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

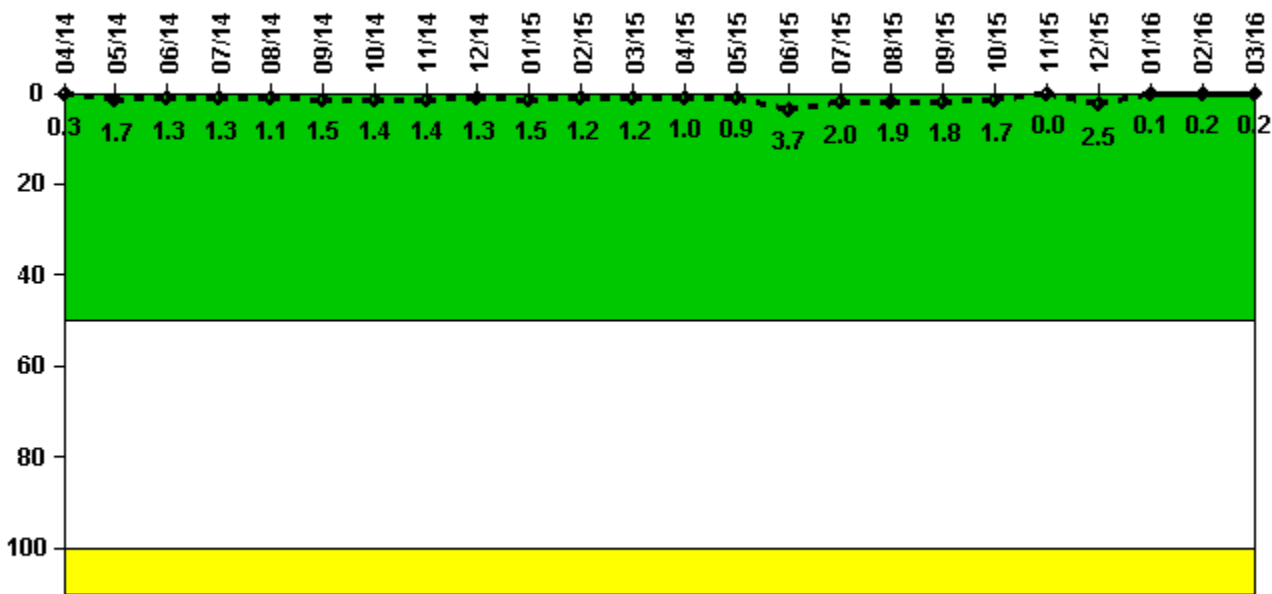
Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0.100000	0.000160	0.000133	0.000195	0.000185	0.000195	0.000136	0.000208	0.000207	0.000151	0.000150	0.000162
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	10.0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0.000164	0.000151	0.000165	0.000178	0.000183	0.000178	0.000182	N/A	0.000984	0.000106	0.000183	0.000185
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	N/A	0.1	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



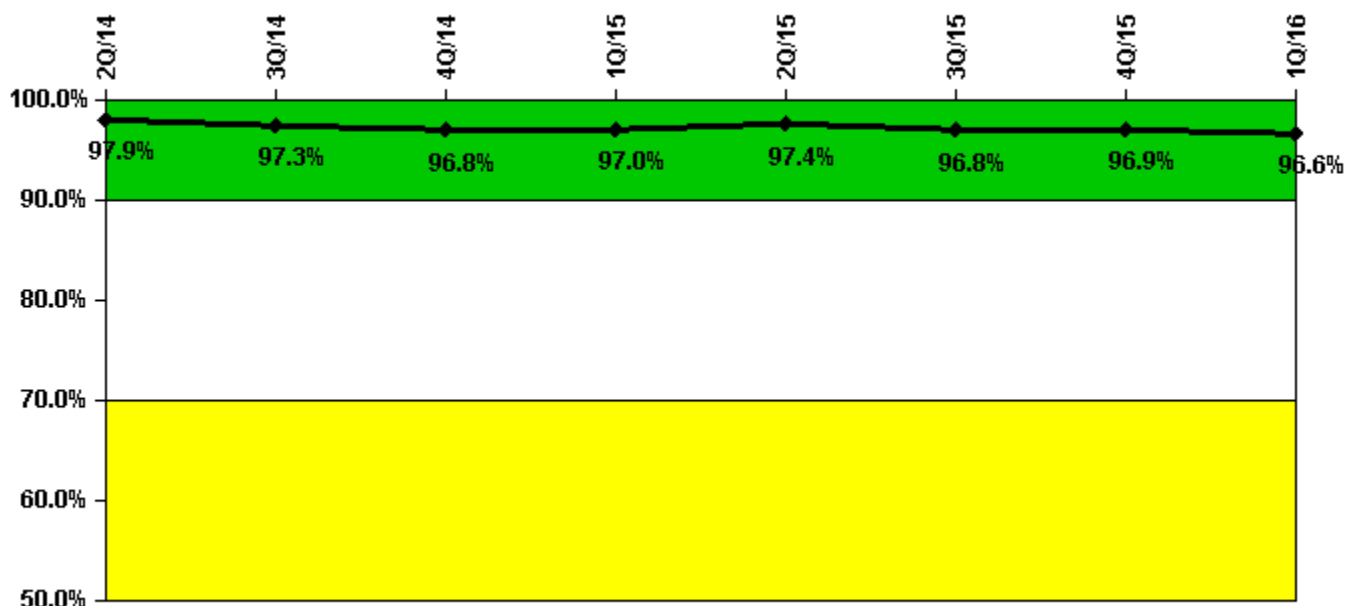
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	0.030	0.170	0.130	0.130	0.110	0.150	0.140	0.140	0.130	0.150	0.120	0.120
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	0.3	1.7	1.3	1.3	1.1	1.5	1.4	1.4	1.3	1.5	1.2	1.2
Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	0.100	0.090	0.370	0.200	0.190	0.180	0.170	0	0.249	0.010	0.020	0.017
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	1.0	0.9	3.7	2.0	1.9	1.8	1.7	0	2.5	0.1	0.2	0.2

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful opportunities	46.0	25.0	68.0	22.0	36.0	49.0	2.0	60.0
Total opportunities	46.0	27.0	72.0	22.0	36.0	52.0	2.0	62.0
Indicator value	97.9%	97.3%	96.8%	97.0%	97.4%	96.8%	96.9%	96.6%

Licensee Comments: none

### ERO Drill Participation



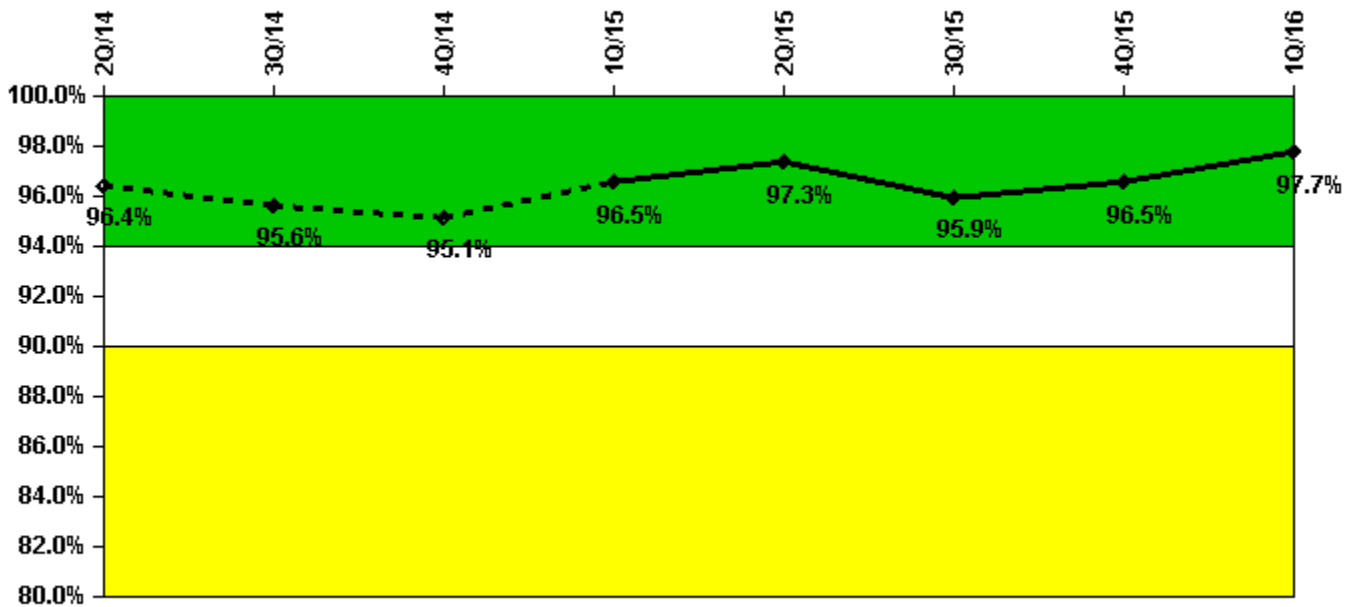
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Participating Key personnel	113.0	110.0	113.0	115.0	113.0	104.0	100.0	98.0
Total Key personnel	115.0	110.0	113.0	115.0	113.0	104.0	100.0	98.0
Indicator value	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



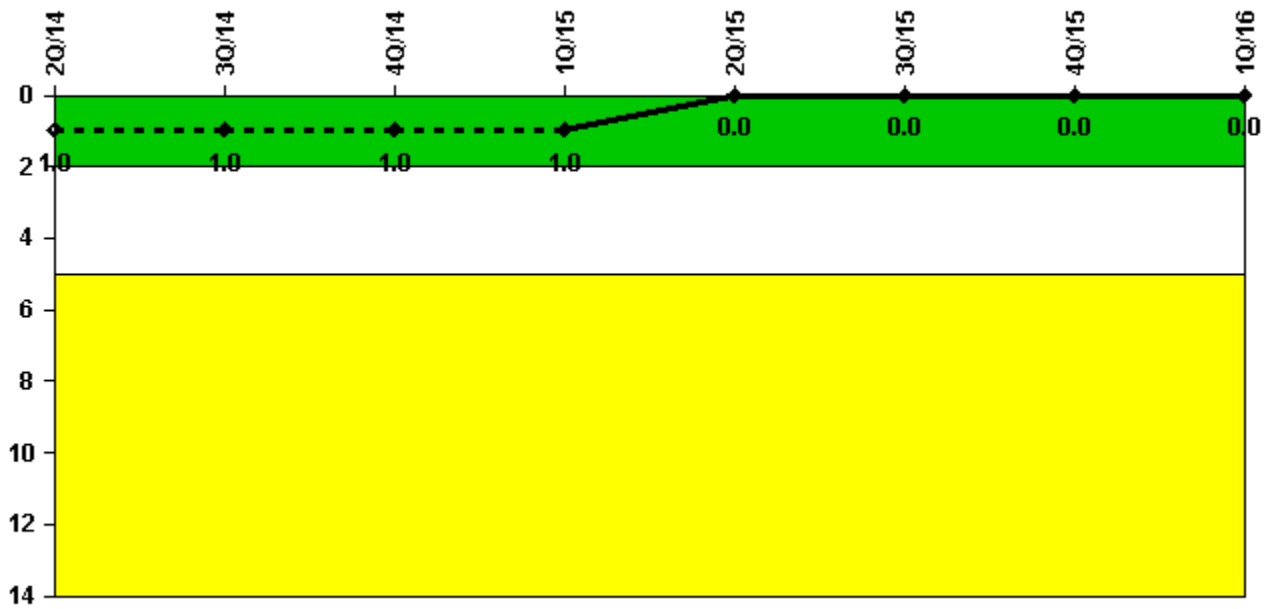
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful siren-tests	422	424	429	416	435	401	438	437
Total sirens-tests	438	438	438	438	438	438	438	438
Indicator value	96.4%	95.6%	95.1%	96.5%	97.3%	95.9%	96.5%	97.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



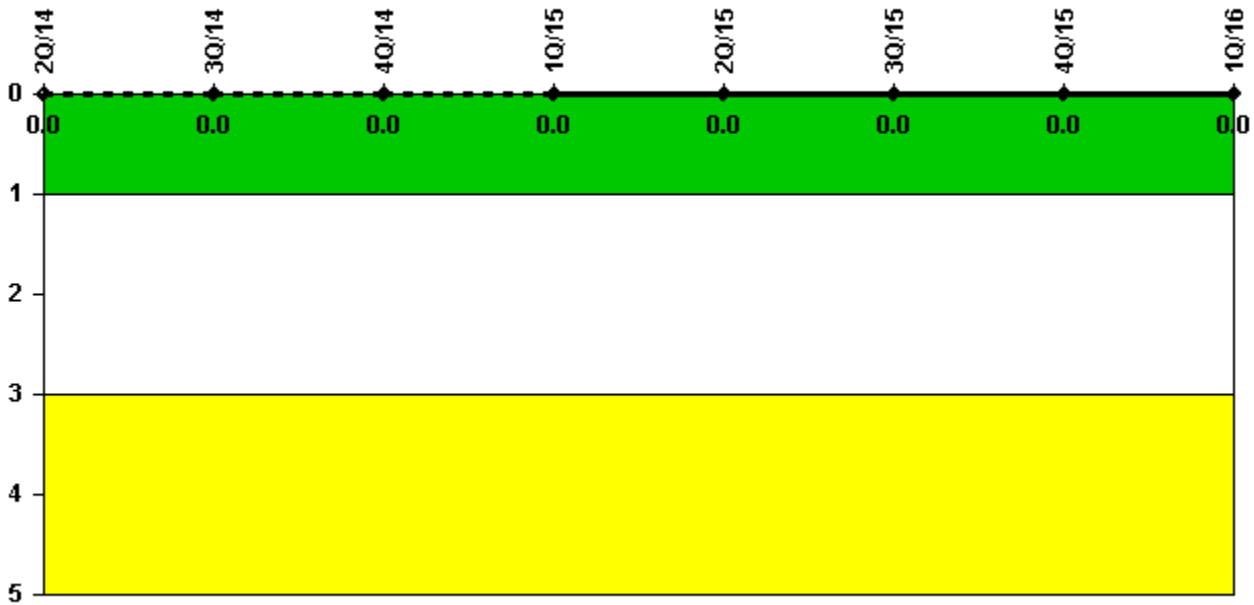
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
High radiation area occurrences	1	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>1</b>	<b>1</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	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/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: April 23, 2016*