

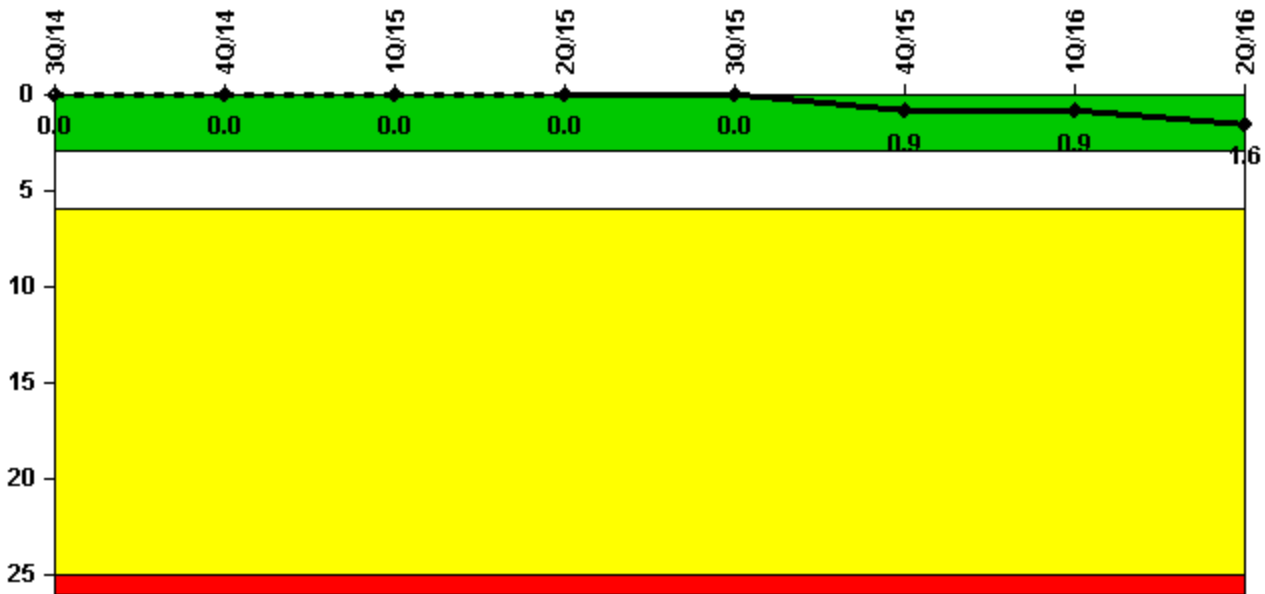
## Limerick 2

### 2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



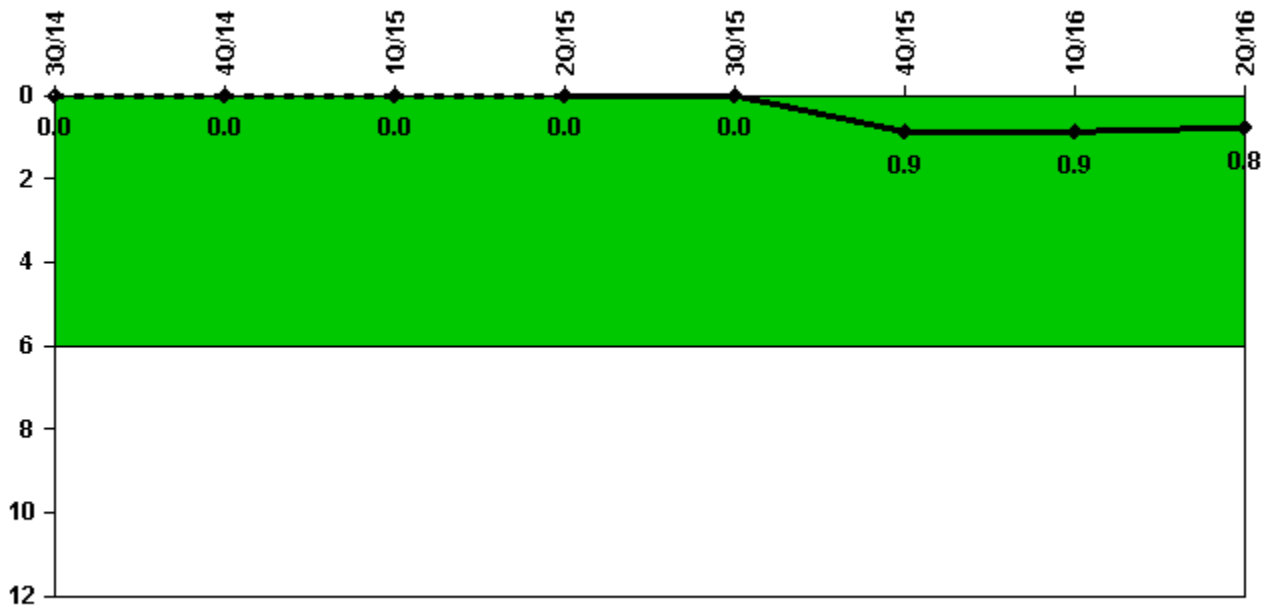
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### 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	0	0	1.0	0	1.0
Critical hours	2208.0	2209.0	2159.0	1649.2	2208.0	2059.6	2183.0	2156.0
Indicator value	0	0	0	0	0	0.9	0.9	1.6

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



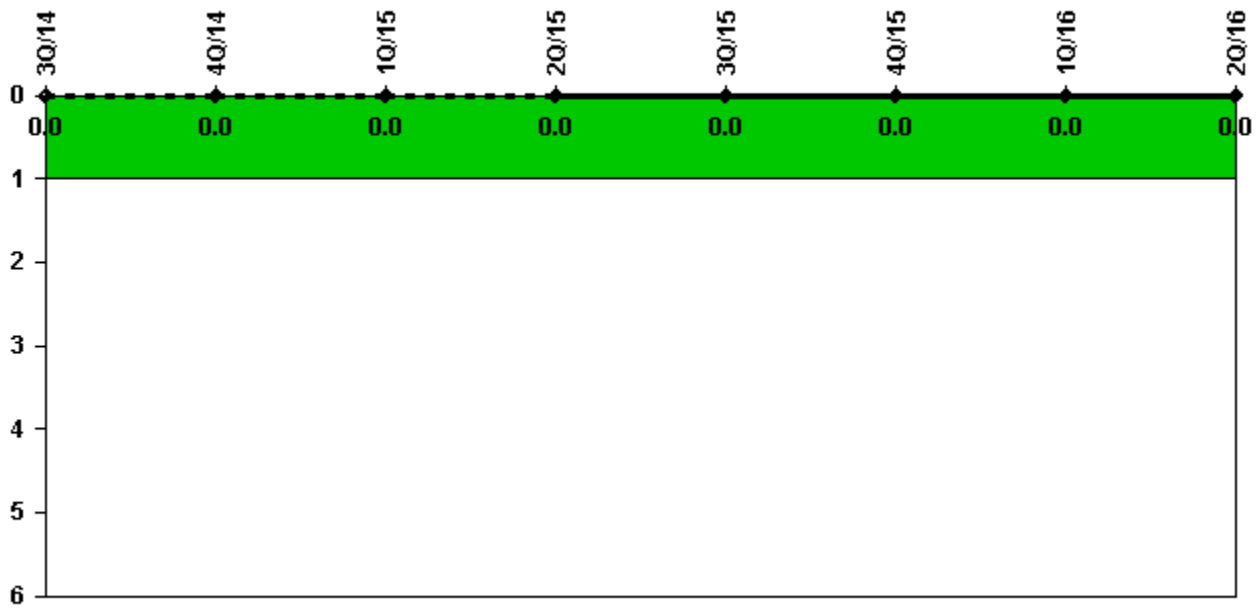
Thresholds: White > 6.0

#### 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	1.0	0	0
Critical hours	2208.0	2209.0	2159.0	1649.2	2208.0	2059.6	2183.0	2156.0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>

Licensee Comments: none

### Unplanned Scrams with Complications



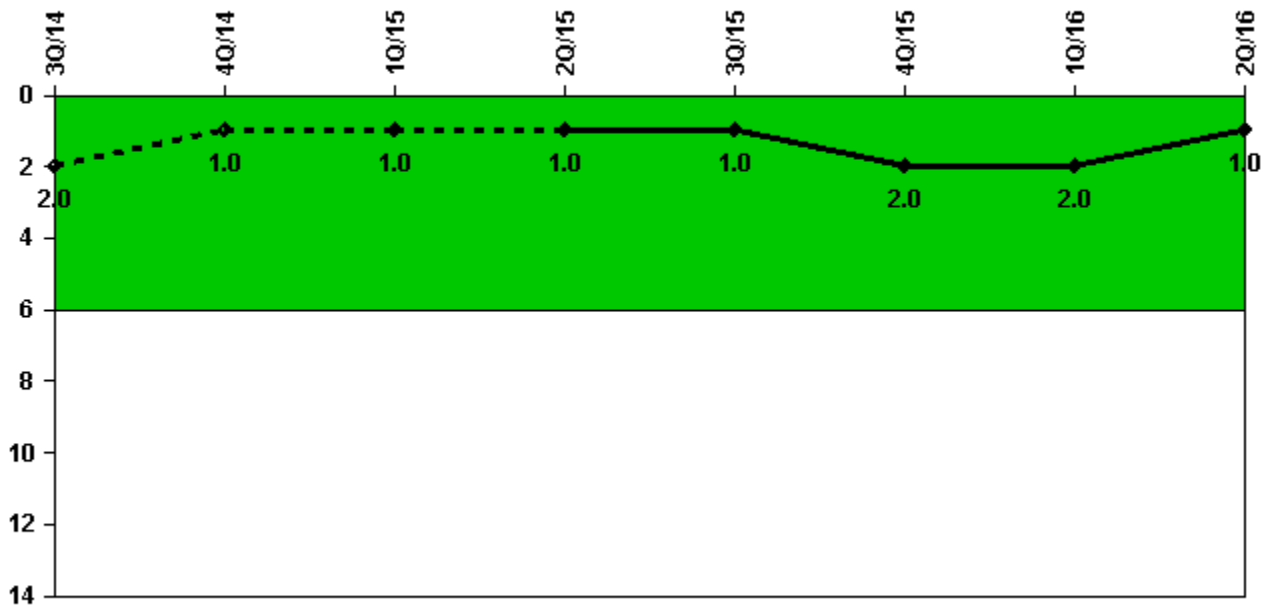
Thresholds: White > 1.0

#### 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

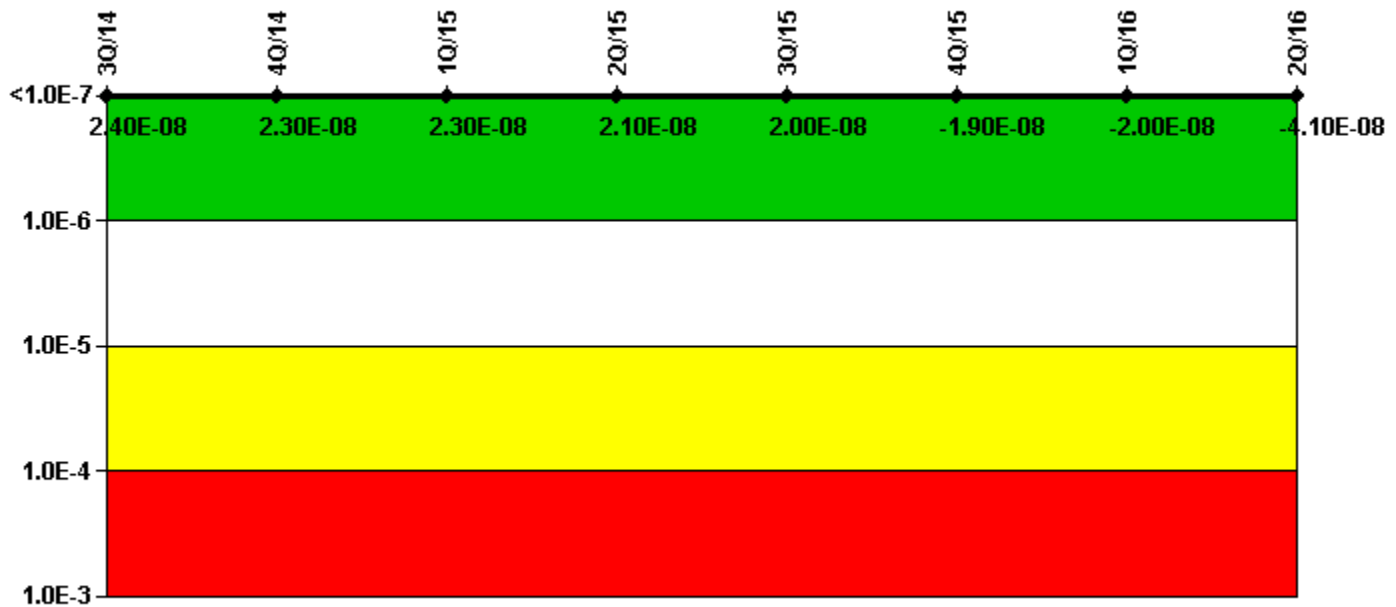
Safety System Functional Failures (BWR)	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Safety System Functional Failures	0	0	0	1	0	1	0	0
<b>Indicator value</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>

Licensee Comments:

4Q/15: 1/21/16-LER 2015-005-00 was submitted on November 2, 2015 due to a Division 4 high steam flow isolation actuation failure on the HPCI system which rendered HPCI inoperable. No color threshold change resulted from this event.

2Q/15: LER 2015-001-00 was submitted on June 4, 2015 due to a small electrical fire in one compartment of a 250 VDC MCC which rendered HPCI inoperable. The fire was extinguished within 8 minutes. No color threshold resulted from this event.

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



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

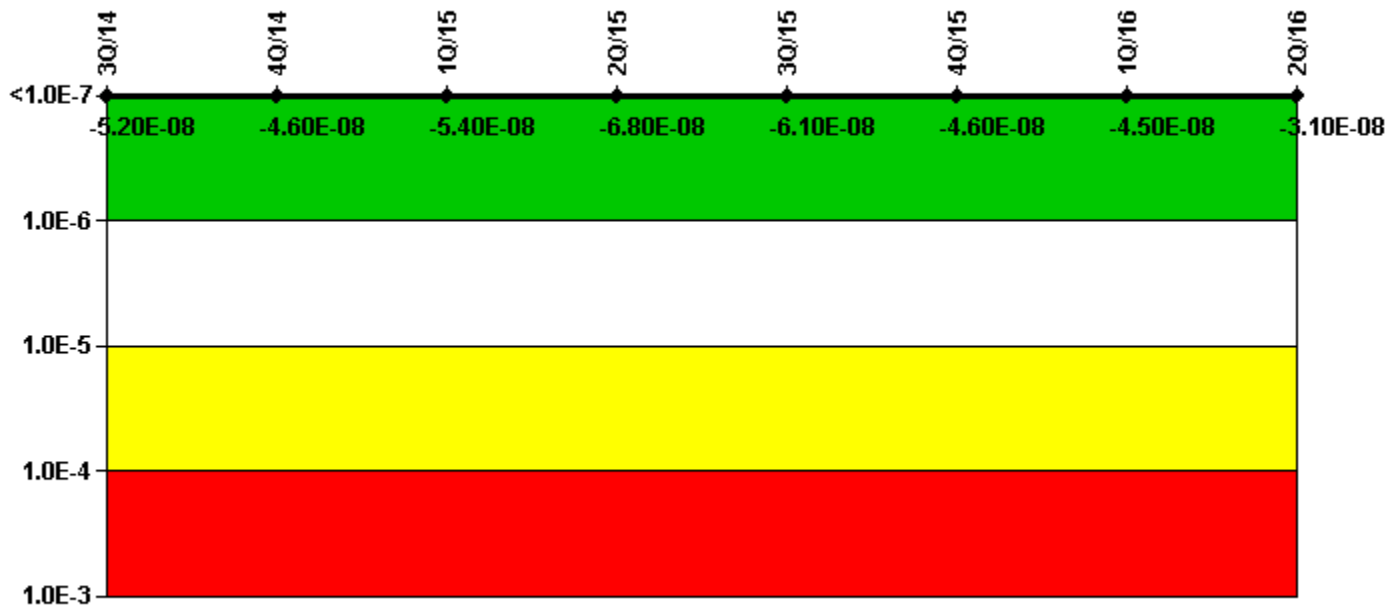
#### Notes

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)	4.37E-09	2.90E-09	2.12E-09	2.44E-09	2.50E-09	4.11E-09	3.45E-09	3.20E-09
URI ( $\Delta$ CDF)	1.94E-08	2.04E-08	2.10E-08	1.87E-08	1.73E-08	-2.26E-08	-2.35E-08	-4.46E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.40E-08	2.30E-08	2.30E-08	2.10E-08	2.00E-08	-1.90E-08	-2.00E-08	-4.10E-08

Licensee Comments:

3Q/14: Changed PRA Parameter(s). 10/20/14- PRA parameters were updated during 2Q2014 data submittal, effective 2Q2014. No additional PRA parameters have changed.

### 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)	-1.52E-09	4.64E-09	-3.48E-09	-1.77E-08	-1.09E-08	4.69E-09	5.08E-09	1.91E-08
URI ( $\Delta$ CDF)	-5.03E-08	-5.03E-08	-5.03E-08	-5.03E-08	-5.03E-08	-5.03E-08	-5.03E-08	-5.03E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.20E-08	-4.60E-08	-5.40E-08	-6.80E-08	-6.10E-08	-4.60E-08	-4.50E-08	-3.10E-08

#### Licensee Comments:

3Q/14: Changed PRA Parameter(s). 10/20/14- PRA parameters were updated during 2Q2014 data submittal, effective 2Q2014. No additional PRA parameters have changed.

### Mitigating Systems Performance Index, Heat Removal System



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

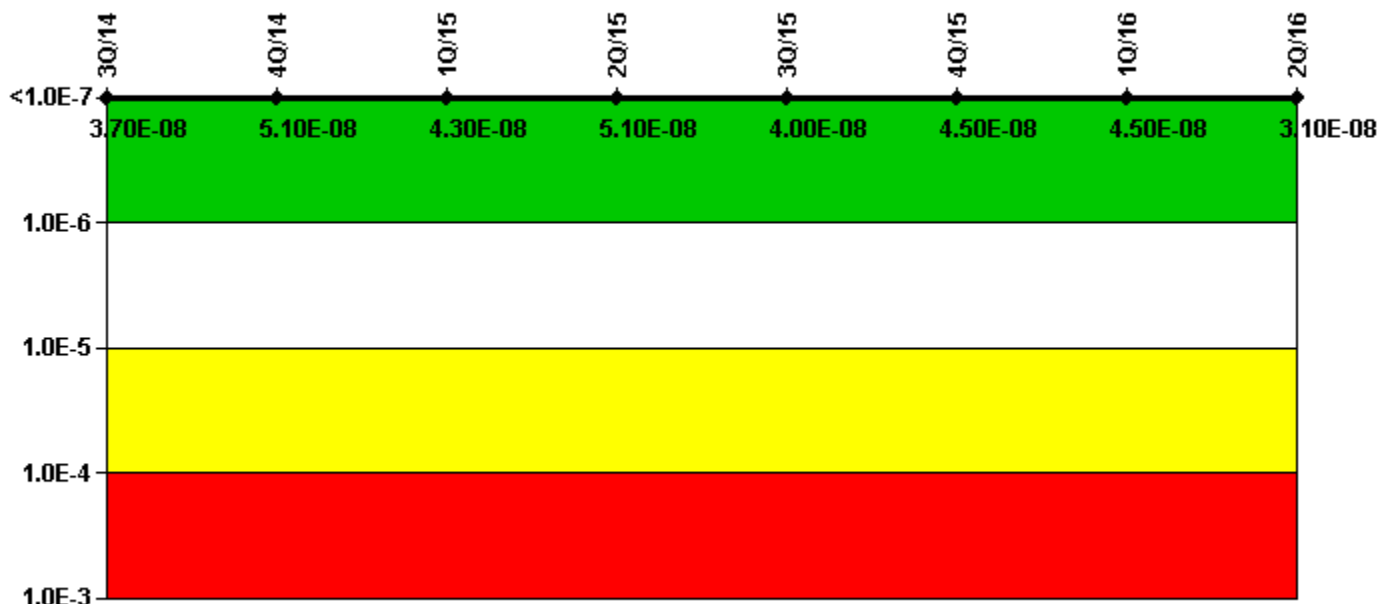
#### Notes

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)	1.06E-08	1.99E-09	6.17E-09	6.49E-09	5.40E-11	9.55E-09	7.54E-09	1.55E-08
URI ( $\Delta$ CDF)	-1.97E-08	-1.97E-08	-1.97E-08	-1.97E-08	-1.97E-08	-1.97E-08	-1.97E-08	-1.97E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.10E-09	-1.80E-08	-1.40E-08	-1.30E-08	-2.00E-08	-1.00E-08	-1.20E-08	-4.20E-09

Licensee Comments:

3Q/14: Changed PRA Parameter(s). 10/20/14- PRA parameters were updated during 2Q2014 data submittal, effective 2Q2014. No additional PRA parameters have changed.

### 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)	4.90E-08	6.28E-08	5.42E-08	6.32E-08	5.17E-08	5.68E-08	5.69E-08	4.11E-08
URI ( $\Delta$ CDF)	-1.18E-08	-1.15E-08	-1.10E-08	-1.18E-08	-1.17E-08	-1.19E-08	-1.16E-08	-1.01E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.70E-08	5.10E-08	4.30E-08	5.10E-08	4.00E-08	4.50E-08	4.50E-08	3.10E-08

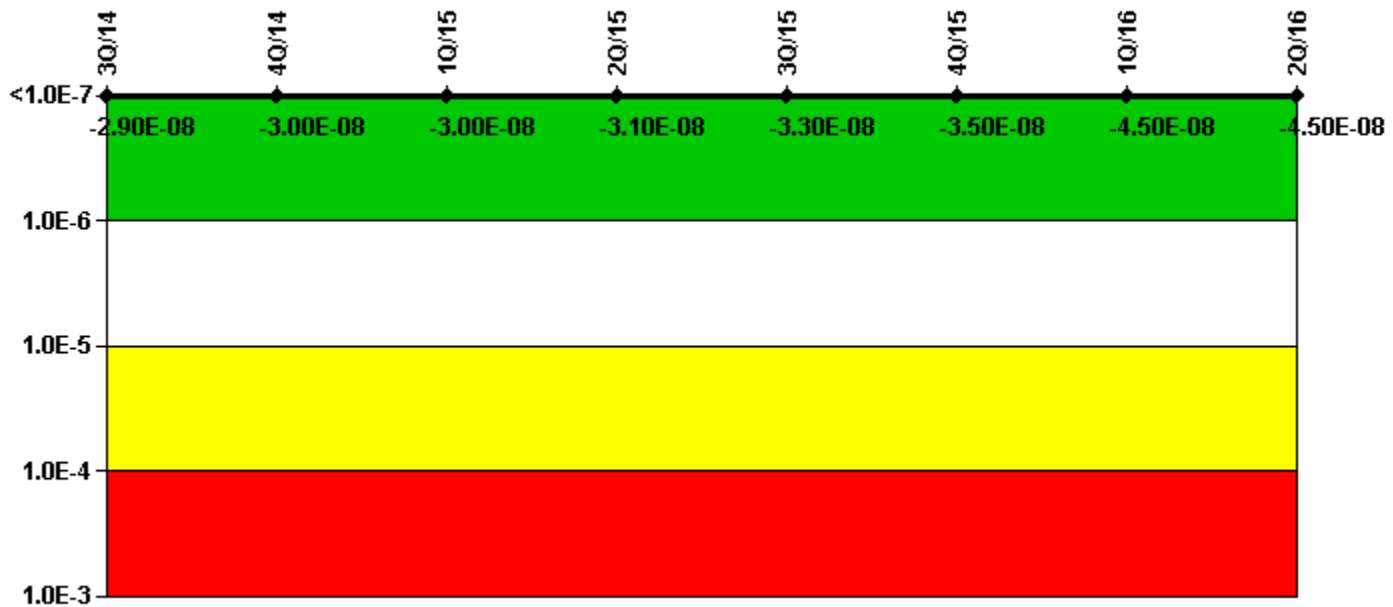
Licensee Comments:

3Q/14: 10/20/14- PRA parameters were updated during 2Q2014 data submittal, effective 2Q2014. No additional PRA parameters have changed.

3Q/14: Changed PRA Parameter(s). 10/20/14- PRA parameters were updated during 2Q2014 data submittal, effective 2Q2014. No additional PRA parameters have changed.



### Mitigating Systems Performance Index, Cooling Water Systems



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

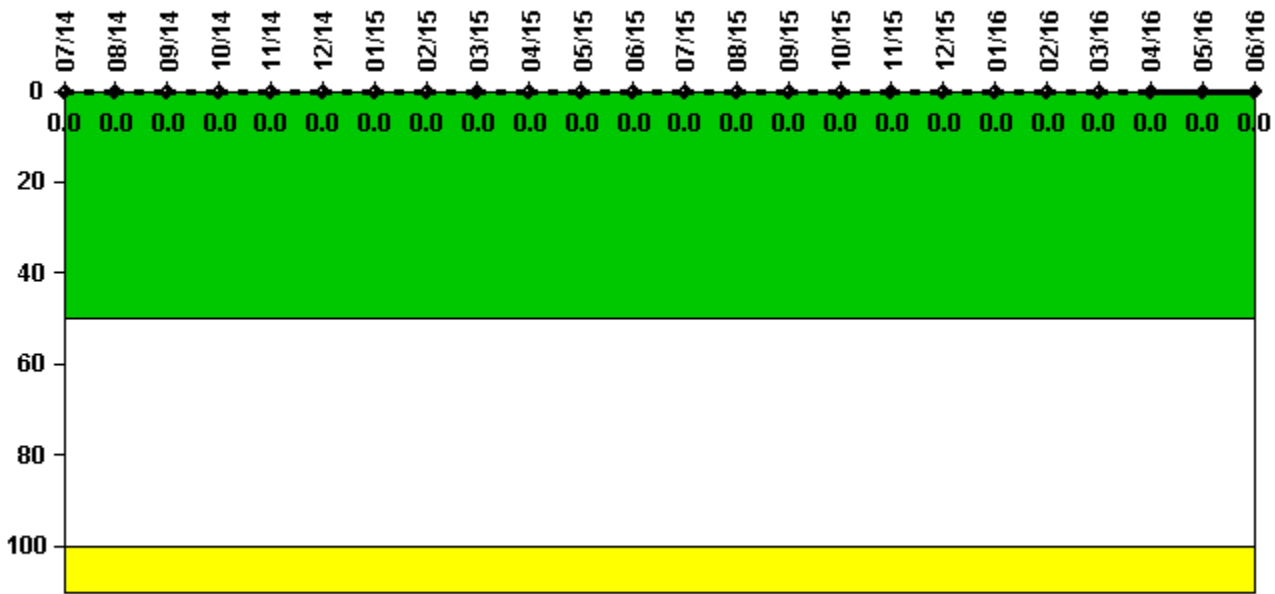
#### Notes

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)	4.86E-08	4.61E-08	4.21E-08	4.15E-08	3.99E-08	3.70E-08	3.02E-08	2.90E-08
URI ( $\Delta$ CDF)	-7.79E-08	-7.58E-08	-7.22E-08	-7.24E-08	-7.27E-08	-7.24E-08	-7.50E-08	-7.41E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.90E-08	-3.00E-08	-3.00E-08	-3.10E-08	-3.30E-08	-3.50E-08	-4.50E-08	-4.50E-08

Licensee Comments:

3Q/14: Changed PRA Parameter(s). 10/20/14- PRA parameters were updated during 2Q2014 data submittal, effective 2Q2014. No additional PRA parameters have changed.

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

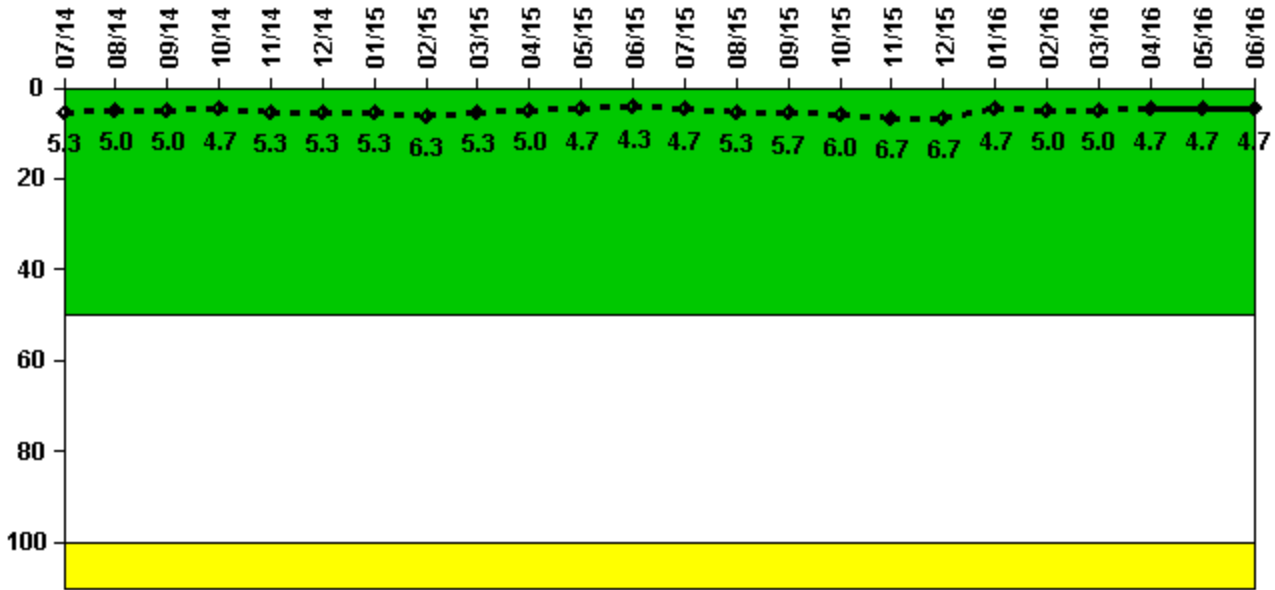
Reactor Coolant System Activity	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum activity	0.000008	0.000008	0.000008	0.000012	0.000008	0.000007	0.000007	0.000009	0.000008	0.000006	0.000005	0.000005
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	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	0.000007	0.000005	0.000006	0.000009	0.000008	0.000008	0.000007	0.000007	0.000008	0.000008	0.000008	0.000009
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

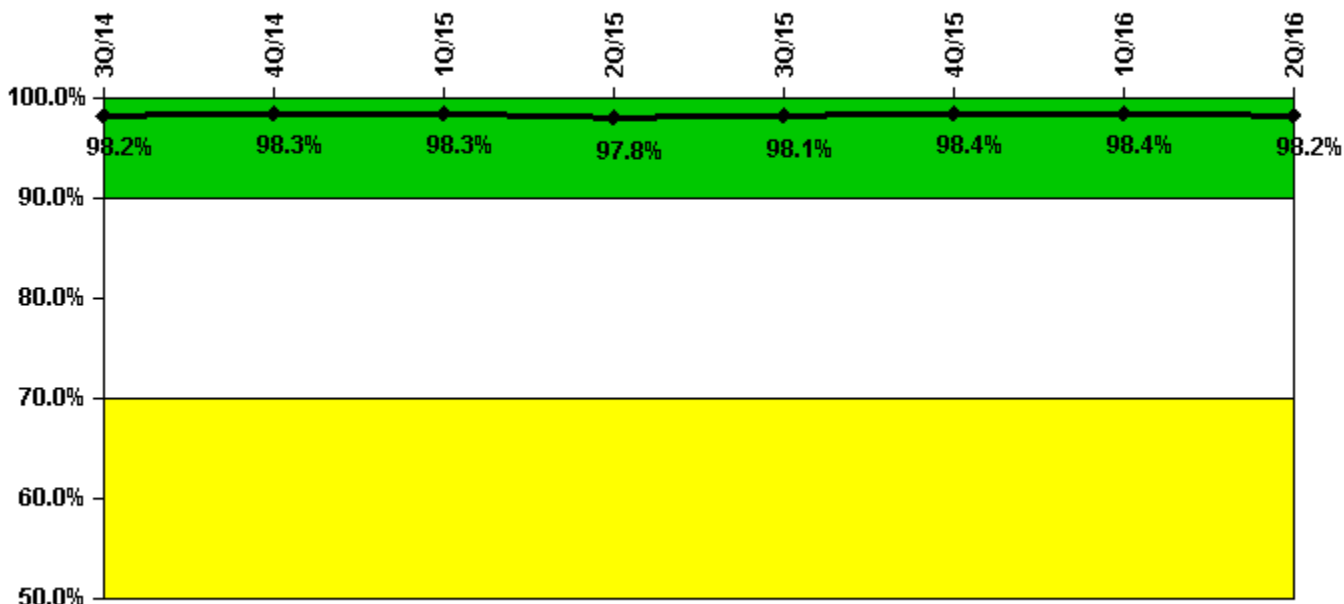
Reactor Coolant System Leakage	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum leakage	1.600	1.500	1.500	1.400	1.600	1.600	1.600	1.900	1.600	1.500	1.400	1.300
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	5.3	5.0	5.0	4.7	5.3	5.3	5.3	6.3	5.3	5.0	4.7	4.3

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	1.400	1.600	1.700	1.800	2.000	2.000	1.400	1.500	1.500	1.400	1.400	1.400
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	4.7	5.3	5.7	6.0	6.7	6.7	4.7	5.0	5.0	4.7	4.7	4.7

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

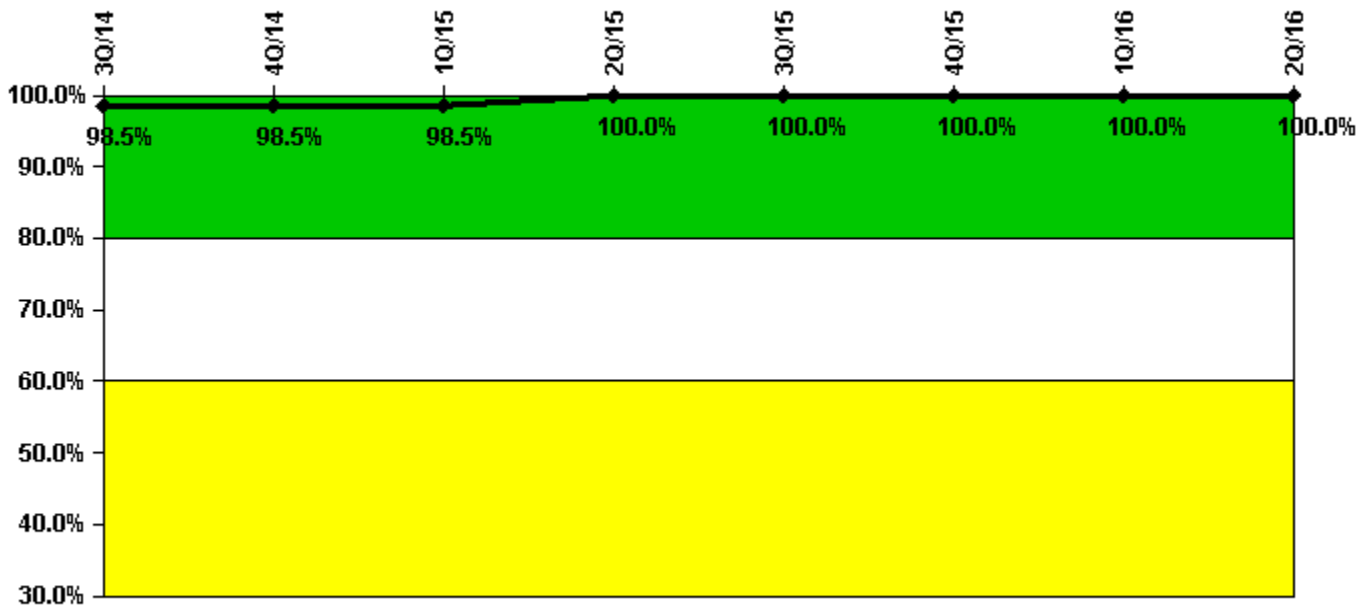
Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	42.0	37.0	27.0	32.0	48.0	26.0	30.0	30.0
Total opportunities	42.0	37.0	27.0	34.0	49.0	26.0	30.0	32.0
Indicator value	98.2%	98.3%	98.3%	97.8%	98.1%	98.4%	98.4%	98.2%

#### Licensee Comments:

1Q/15: 10/21/15 - March 2014 data was changed from 4 successful drill opportunities out of 4 total opportunities to 8 successful opportunities out of 8 total opportunities. A reporting error was identified during an EP self assessment. No color or PI threshold change is impacted by this data correction.

3Q/14: 1/15/15- ERO Drill Exercise data was corrected. The previously submitted Drill Exercise opportunities in September 2014 had actually occurred in October 2014. No color change or threshold impact resulted from the correction.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

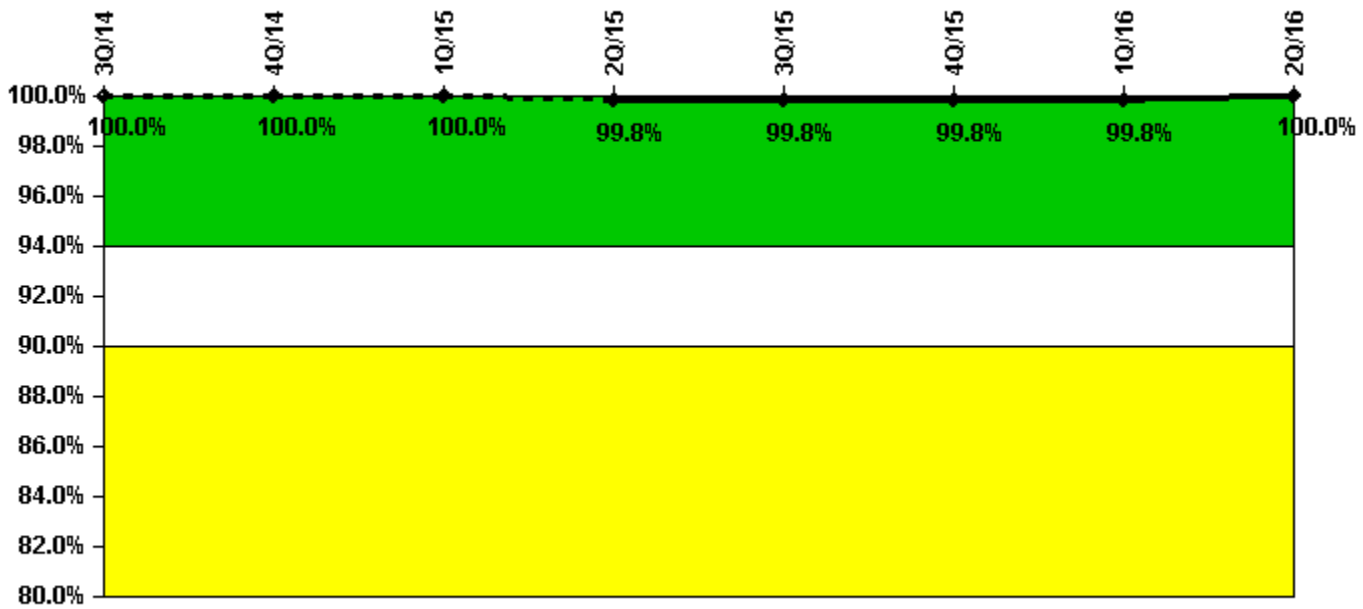
#### Notes

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	66.0	66.0	65.0	63.0	66.0
Total Key personnel	67.0	67.0	67.0	66.0	66.0	65.0	63.0	66.0
Indicator value	98.5%	98.5%	98.5%	100.0%	100.0%	100.0%	100.0%	100.0%

#### Licensee Comments:

2Q/15: 10/21/15 - The number of participating key personnel and total key personnel was corrected for 2nd quarter 2014 after an EP self assessment identified that offsite ERO members had not been included. No color or PI threshold change is impacted by this correction.

### Alert & Notification System



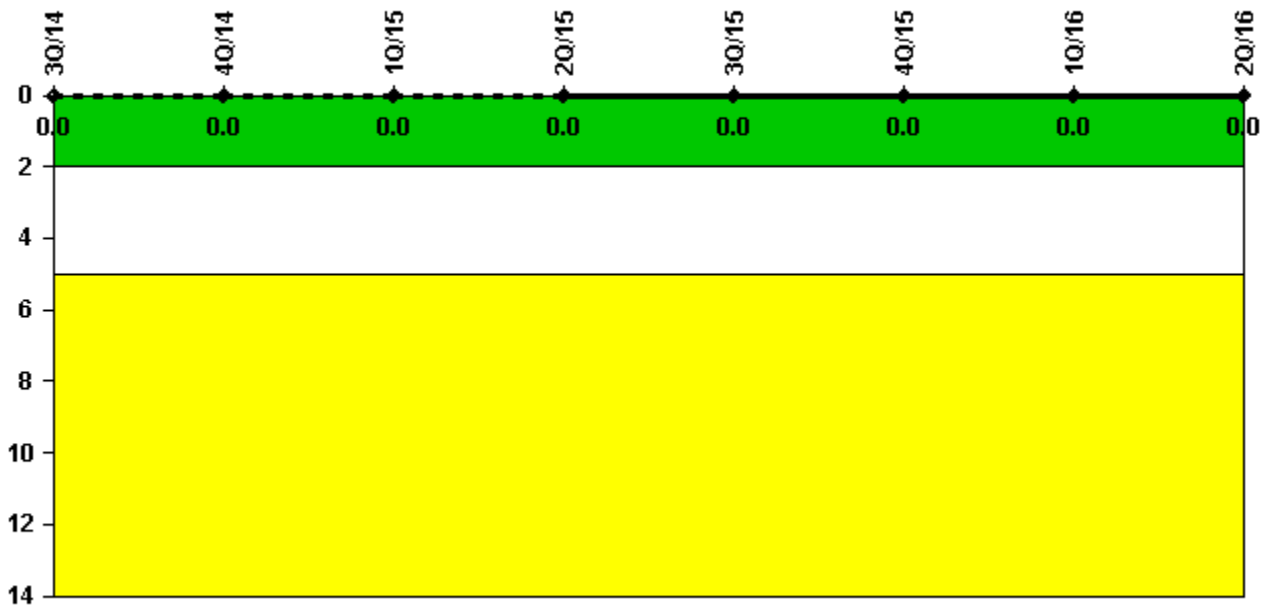
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	2145	2144	2144	2133	2145	2143	2145	2144
Total sirens-tests	2145	2145	2145	2145	2145	2145	2145	2145
Indicator value	100.0%	100.0%	100.0%	99.8%	99.8%	99.8%	99.8%	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	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	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*