

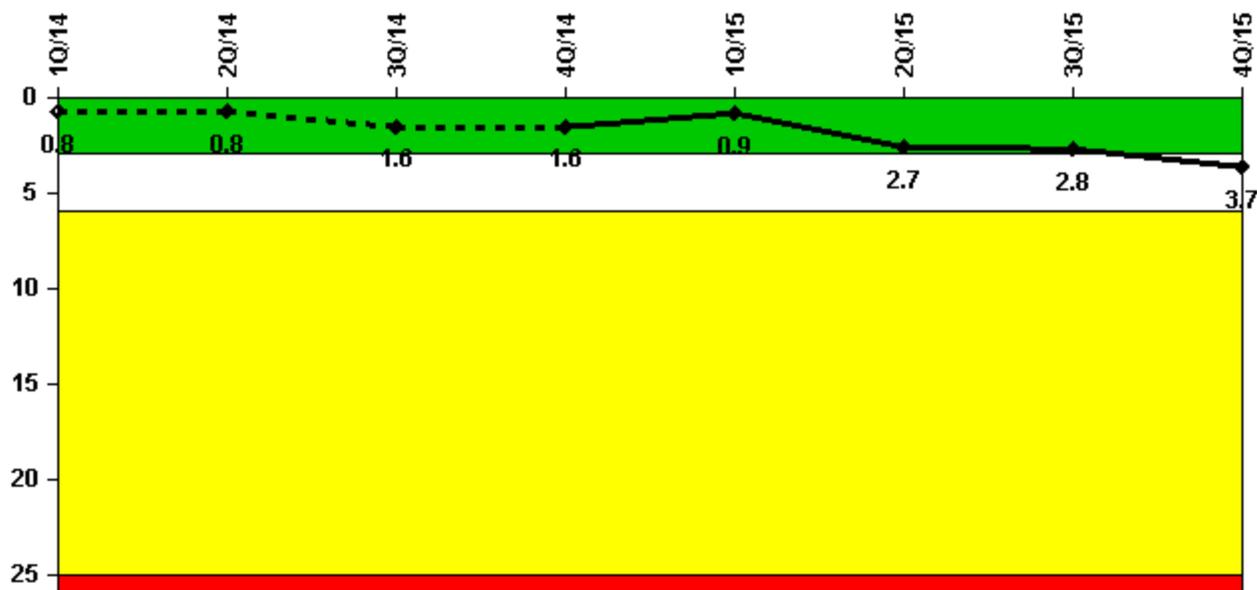
## Indian Point 3

### 4Q/2015 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/14      | 2Q/14      | 3Q/14      | 4Q/14      | 1Q/15      | 2Q/15      | 3Q/15      | 4Q/15      |
|--|------------|------------|------------|------------|------------|------------|------------|------------|
| Unplanned scrams                       | 1.0        | 0          | 1.0        | 0          | 0          | 2.0        | 1.0        | 1.0        |
| Critical hours                         | 2129.5     | 2184.0     | 2161.6     | 2209.0     | 1626.7     | 1788.8     | 1947.1     | 2157.5     |
| <b>Indicator value</b>                 | <b>0.8</b> | <b>0.8</b> | <b>1.6</b> | <b>1.6</b> | <b>0.9</b> | <b>2.7</b> | <b>2.8</b> | <b>3.7</b> |

Licensee Comments:

4Q/15: PI exceeded Green threshold due to a reactor trip on December 14, 2015, as a result of a Main Generator protective trip (Primary Lockout Relay 86P) due to a 345 kV grid disturbance. This trip is the fourth reactor trip (RT) in 4 quarters. Prior RTs include RT May 9, due to failure of the 31 Main Transformer, RT June 15, due to a 345 kV switchyard breaker failure, manual RT July 8, due to decreasing SG levels caused by main feedwater (FW) pump low suction pressure as a result of a mis-wired circuit board for the FW pump speed control system.

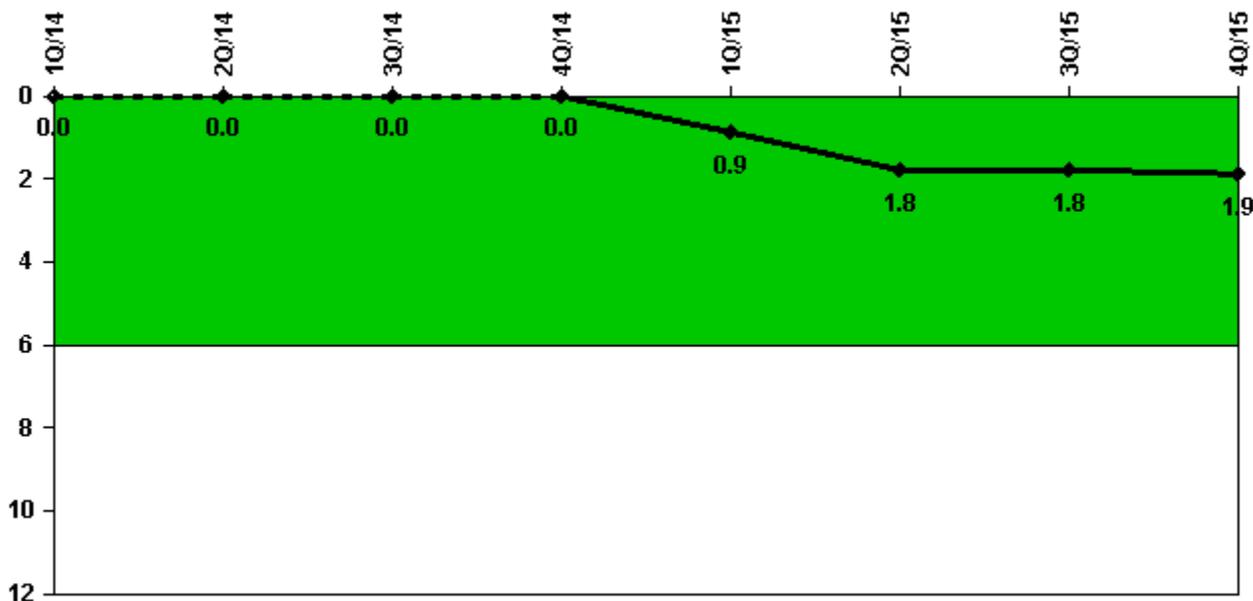
3Q/15: On July 8, 2015, the reactor was manually tripped due to decreasing steam generator levels caused by 31 main feedwater pump speed control locked-in at minimum speed. Direct cause was the 31 main feedwater pump entered a hold condition due to a mis-wired Track and Hold circuit board in the speed control system. LER-2015-007 reported the event.

2Q/15: On May 9, 2015 an automatic reactor trip occurred due to a turbine-generator trip as a result of the failure of the 31 main transformer. Direct cause was an internal fault of the A phase high voltage winding in the upper portion of the transformer. LER-2015-004 reported the event. On June 15, 2015, an automatic reactor trip occurred as a result of a turbine-generator trip. Prior to the trip, Con Edison District Operator requested that 345 kV breaker number 1 in the Buchanan Switchyard south ring bus be opened to aid in Con Edison isolation of 345 kV feeder W97 in support of removing a mylar balloon caught in the high voltage wires at Millwood. 345 kV breaker 5 faulted after opening breaker 1 causing breaker 3 to open which initiated a direct generator trip.

3Q/14: On August 13, 2014, an automatic reactor trip occurred during scheduled testing of the reactor protection system pressurizer pressure loop P-455 channel calibration as a result of meeting the trip logic of 2/4 trip logic for over temperature delta temperature. LER-2014-004 reported event.

1Q/14: LER-2014-001 reported an automatic reactor trip January 6, 2014, on steam flow/feedwater flow mismatch with low steam generator level due to feedwater reg valve flow controller failure. PI remains in the Green Band.

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 1Q/14  | 2Q/14  | 3Q/14  | 4Q/14  | 1Q/15  | 2Q/15  | 3Q/15  | 4Q/15  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned power changes                       | 0      | 0      | 0      | 0      | 1.0    | 1.0    | 0      | 0      |
| Critical hours                                | 2129.5 | 2184.0 | 2161.6 | 2209.0 | 1626.7 | 1788.8 | 1947.1 | 2157.5 |

|                 |   |   |   |   |     |     |     |     |
|-----------------|---|---|---|---|-----|-----|-----|-----|
| Indicator value | 0 | 0 | 0 | 0 | 0.9 | 1.8 | 1.8 | 1.9 |
|-----------------|---|---|---|---|-----|-----|-----|-----|

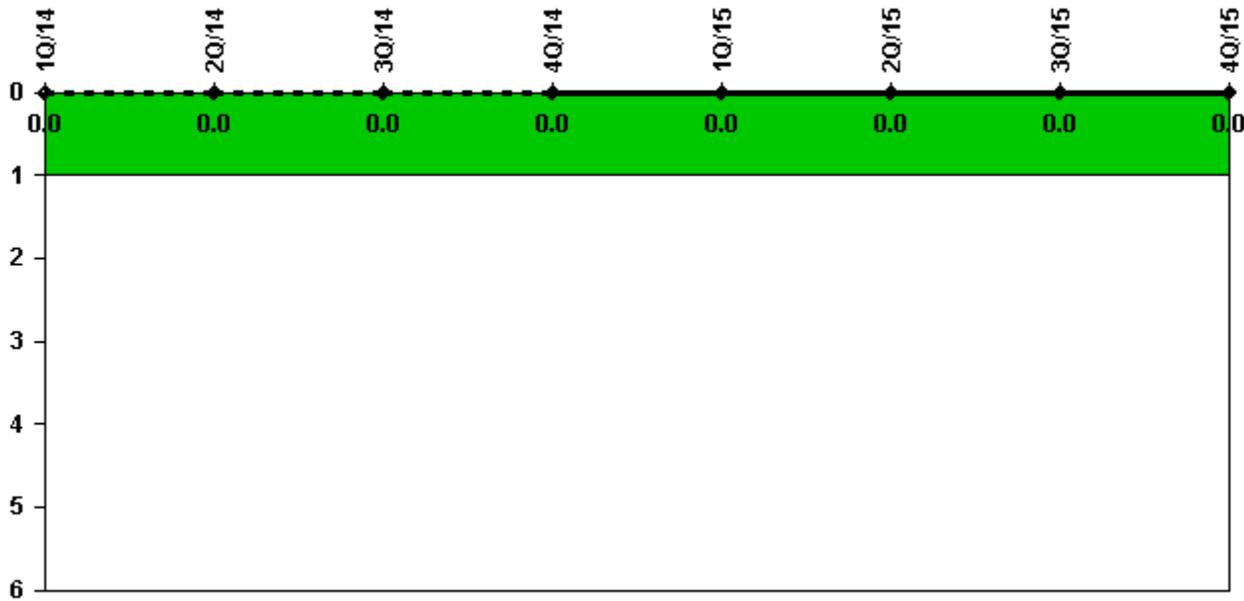
Licensee Comments:

3Q/15: On September 15, 2015, a planned shutdown for maintenance was initiated to replace the reactor vessel O-rings due to leakage.

2Q/15: On May 7, 2015, the unit initiated a coast down to a planned trip to repair a weld crack on valve BFD-64-10. Valve BFD-64-10 is a low side isolation valve for feedwater flow transmitter FT-438B.

1Q/15: On January 8, 2015, at 04000 hours, entered TS 3.5.4 (RWST) due to both RWST level sensing lines frozen resulting in inoperable low-low level alarms in the control room. At 0700 hours began unit shutdown per TS for two inoperable RWST level alarms. At 1000 hours, repaired level alarms and halted unit shutdown at 43.3% reactor power.

### Unplanned Scrams with Complications



Thresholds: White > 1.0

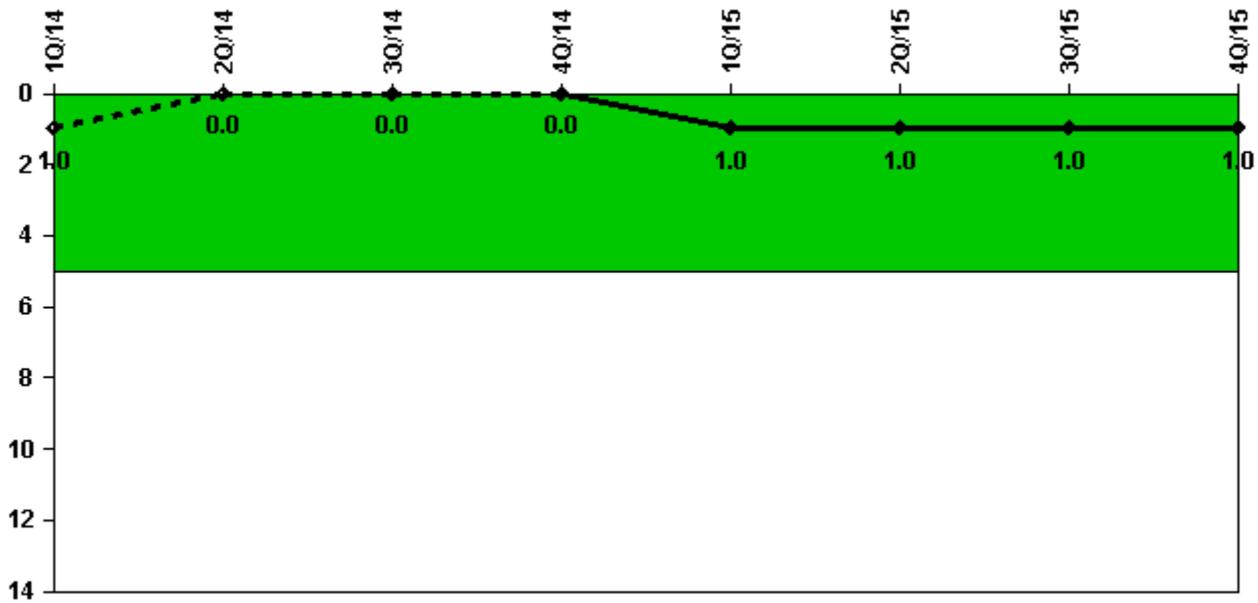
Notes

| Unplanned Scrams with Complications | 1Q/14 | 2Q/14 | 3Q/14 | 4Q/14 | 1Q/15 | 2Q/15 | 3Q/15 | 4Q/15 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Scrams with complications           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
|                                     |       |       |       |       |       |       |       |       |
|                                     |       |       |       |       |       |       |       |       |

|                 |     |     |     |     |     |     |     |     |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Indicator value | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

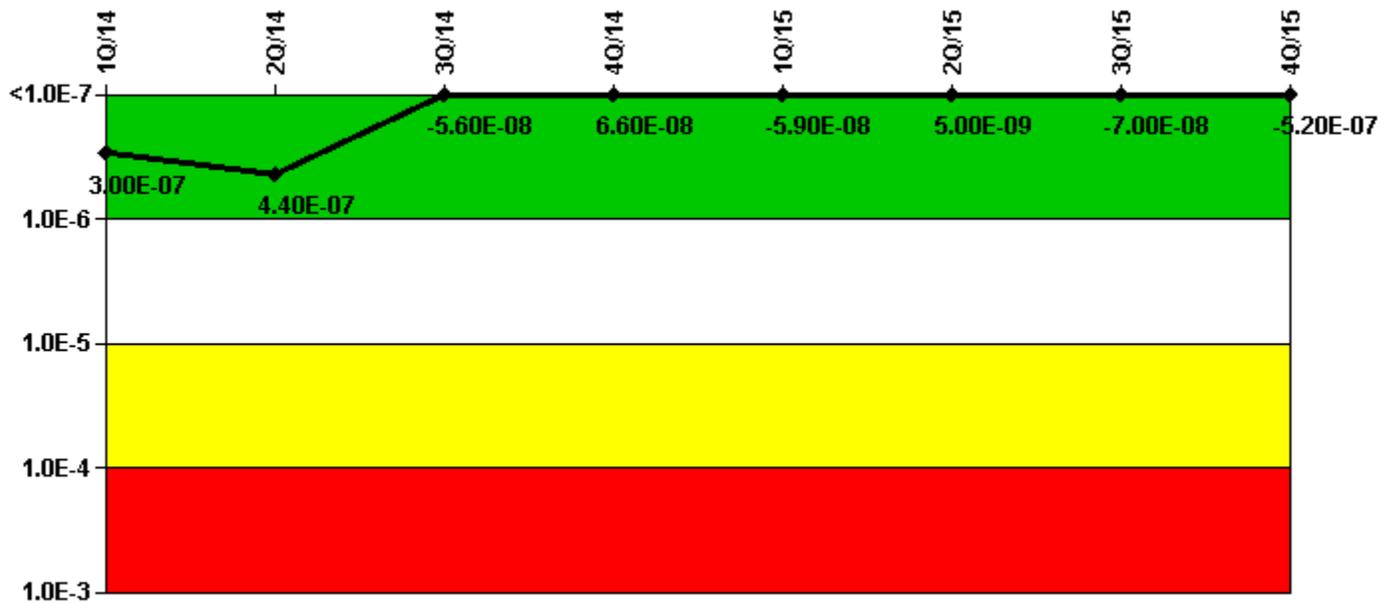
### Notes

| Safety System Functional Failures (PWR) | 1Q/14 | 2Q/14 | 3Q/14 | 4Q/14 | 1Q/15 | 2Q/15 | 3Q/15 | 4Q/15 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Safety System Functional Failures       | 0     | 0     | 0     | 0     | 1     | 0     | 0     | 0     |
| Indicator value                         | 1     | 0     | 0     | 0     | 1     | 1     | 1     | 1     |

Licensee Comments:

1Q/15: LER-2015-001 submitted on March 3, 2015 for a SSFF and common cause inoperability of independent trains or channels due to discovery on January 8, 2015 of both RWST level instruments sensing lines frozen. Safety function is to alert operators to switch over from the RWST to containment sump during a LOCA.

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



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

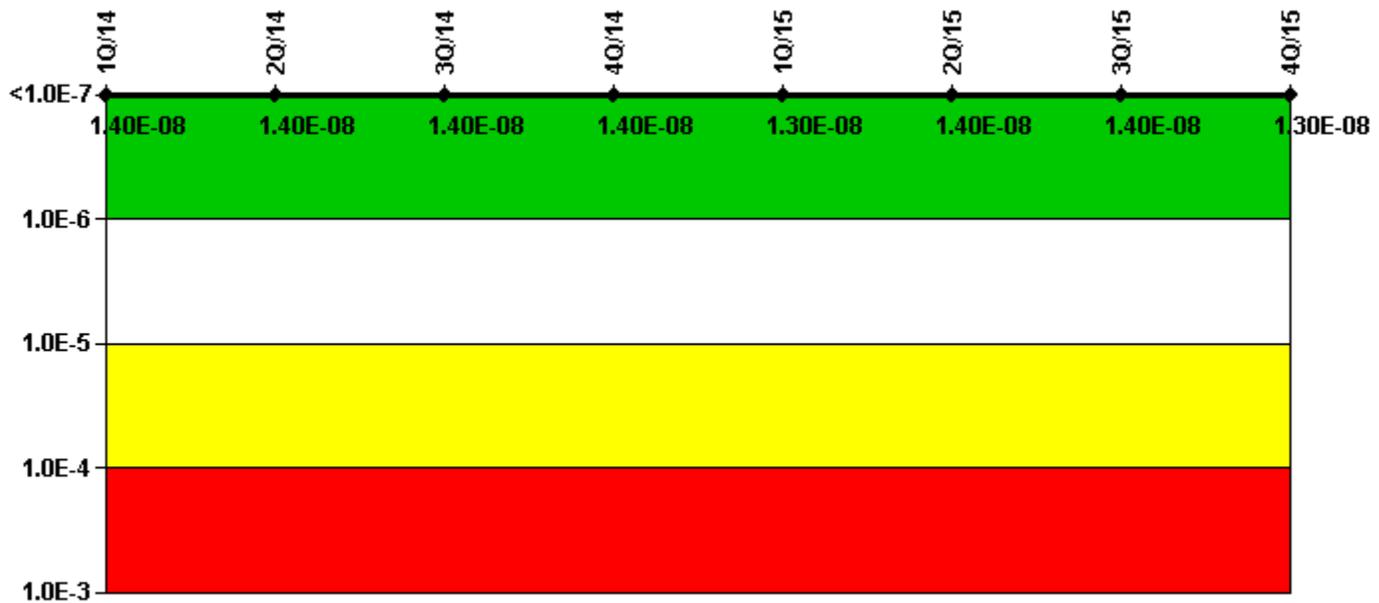
#### Notes

| Mitigating Systems Performance Index, Emergency AC Power System | 1Q/14     | 2Q/14    | 3Q/14     | 4Q/14     | 1Q/15     | 2Q/15     | 3Q/15     | 4Q/15     |
|---|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI (ΔCDF)  | 3.45E-07  | 3.96E-07 | 3.12E-07  | 4.07E-07  | 3.91E-07  | 4.53E-07  | 3.79E-07  | 3.87E-07  |
| URI (ΔCDF)  | -4.10E-08 | 4.65E-08 | -3.68E-07 | -3.41E-07 | -4.51E-07 | -4.48E-07 | -4.49E-07 | -9.02E-07 |
| PLE   | NO        | NO       | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | 3.00E-07  | 4.40E-07 | -5.60E-08 | 6.60E-08  | -5.90E-08 | 5.00E-09  | -7.00E-08 | -5.20E-07 |

Licensee Comments:

3Q/14: Auto roll-off after 36 months of the failure of the 33 EDG in September 2011.

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



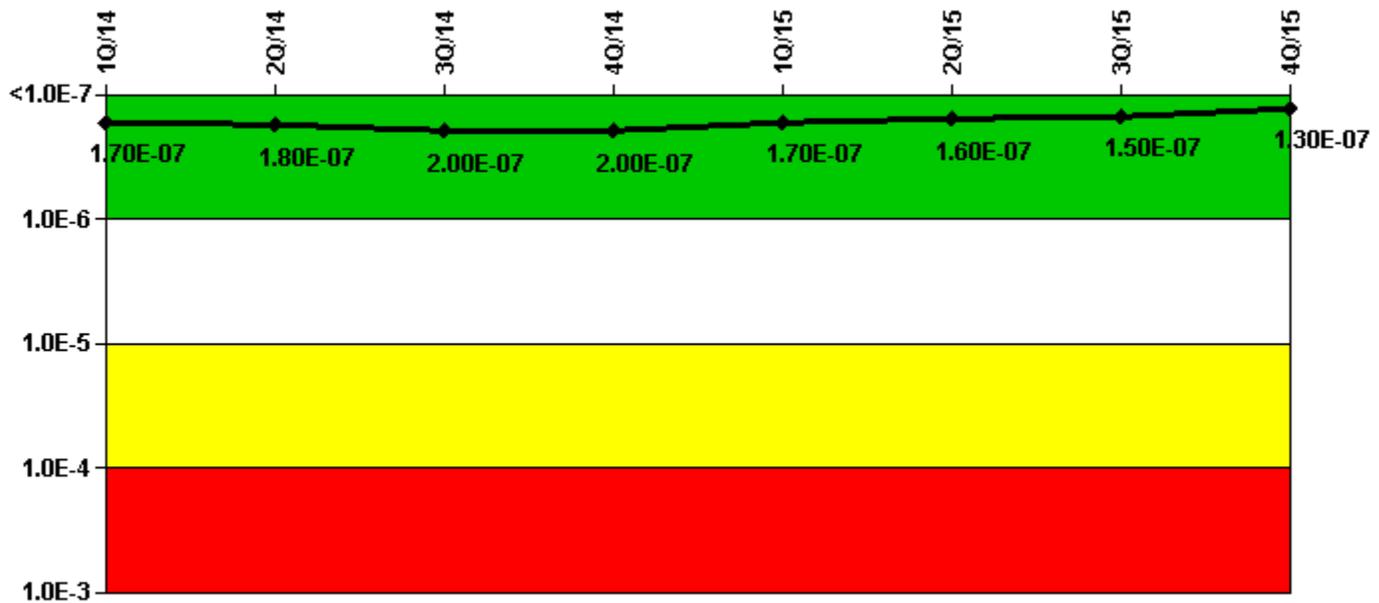
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

| Mitigating Systems Performance Index, High Pressure Injection System | 1Q/14    | 2Q/14    | 3Q/14    | 4Q/14    | 1Q/15    | 2Q/15    | 3Q/15    | 4Q/15    |
|--|----------|----------|----------|----------|----------|----------|----------|----------|
| UAI ( $\Delta$ CDF)  | 2.31E-10 | 2.13E-10 | 2.18E-10 | 2.19E-10 | 2.41E-10 | 8.60E-10 | 1.03E-09 | 3.55E-10 |
| URI ( $\Delta$ CDF)  | 1.35E-08 | 1.39E-08 | 1.40E-08 | 1.41E-08 | 1.29E-08 | 1.30E-08 | 1.32E-08 | 1.31E-08 |
| PLE  | NO       |
| Indicator value  | 1.40E-08 | 1.40E-08 | 1.40E-08 | 1.40E-08 | 1.30E-08 | 1.40E-08 | 1.40E-08 | 1.30E-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/14     | 2Q/14     | 3Q/14     | 4Q/14     | 1Q/15     | 2Q/15     | 3Q/15     | 4Q/15     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI (ΔCDF)  | -1.87E-08 | -2.14E-08 | -1.52E-08 | -1.12E-08 | -7.14E-09 | -2.73E-09 | -2.56E-09 | -2.17E-09 |
| URI (ΔCDF)  | 1.86E-07  | 1.99E-07  | 2.11E-07  | 2.11E-07  | 1.79E-07  | 1.63E-07  | 1.52E-07  | 1.27E-07  |
| PLE   | NO        |
| Indicator value   | 1.70E-07  | 1.80E-07  | 2.00E-07  | 2.00E-07  | 1.70E-07  | 1.60E-07  | 1.50E-07  | 1.30E-07  |

Licensee Comments:

4Q/15: Risk Cap Invoked.

3Q/15: Risk Cap Invoked.

2Q/15: Risk Cap Invoked.

1Q/15: Risk Cap Invoked.

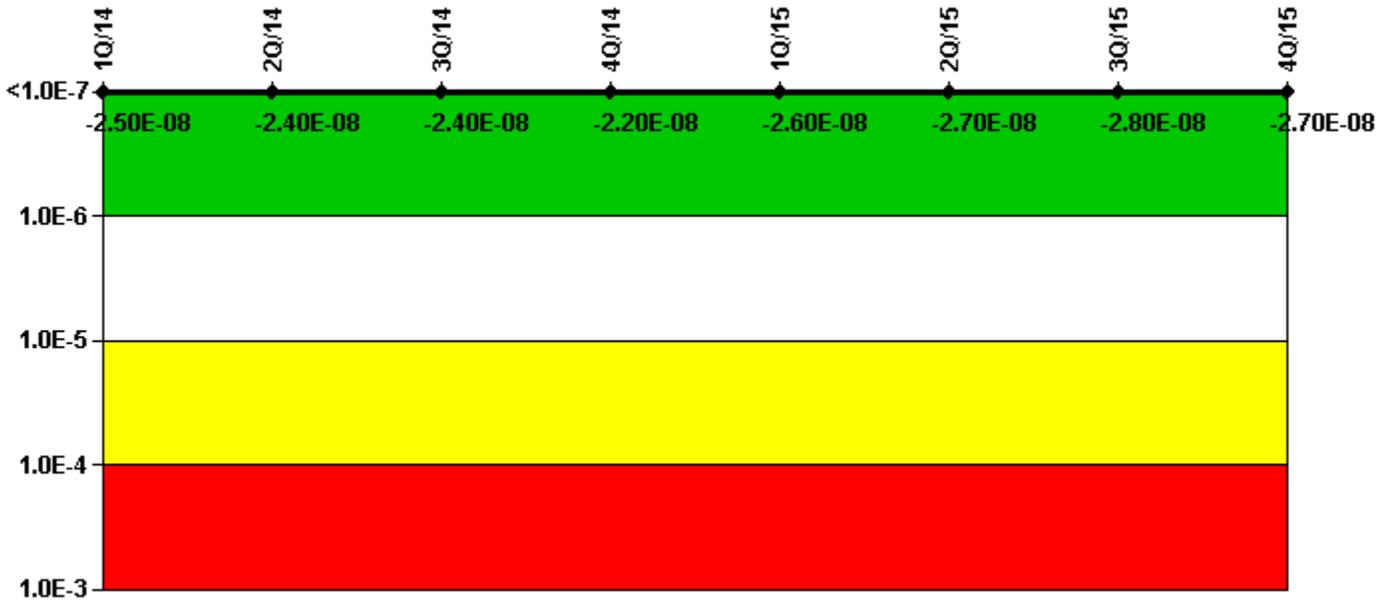
4Q/14: Risk Cap Invoked.

3Q/14: Risk Cap Invoked.

2Q/14: Risk Cap Invoked.

1Q/14: Risk Cap Invoked.

### Mitigating Systems Performance Index, Residual Heat Removal System



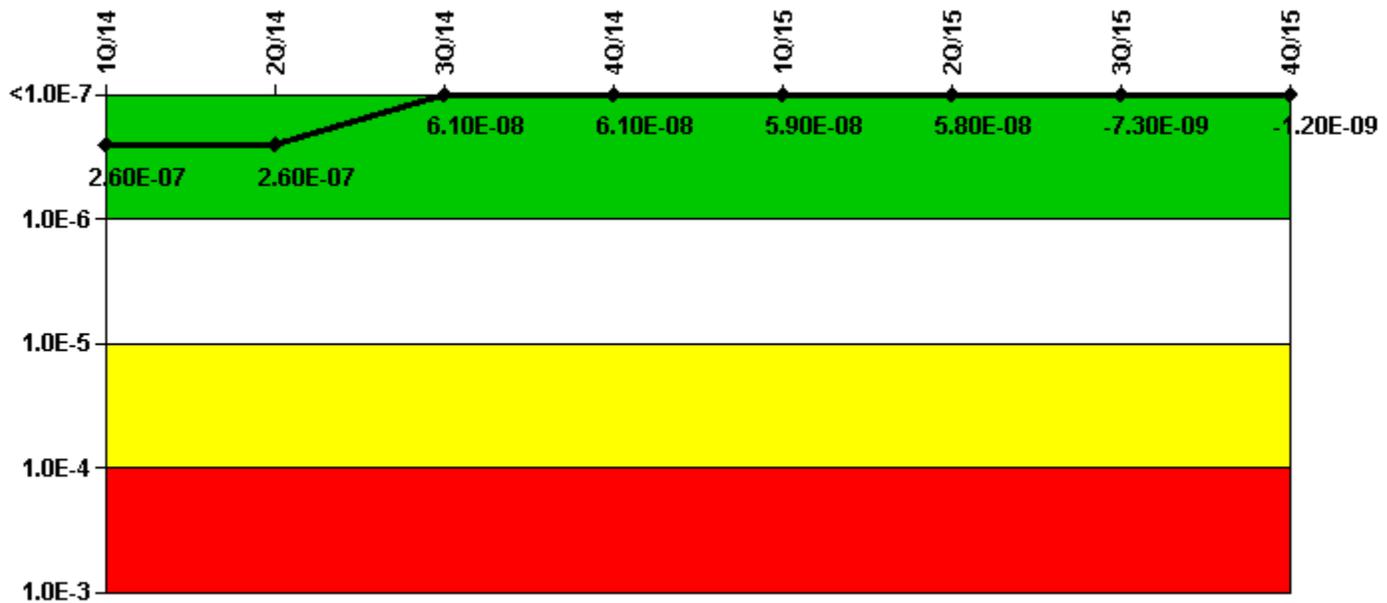
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

| Mitigating Systems Performance Index, Residual Heat Removal System | 1Q/14     | 2Q/14     | 3Q/14     | 4Q/14     | 1Q/15     | 2Q/15     | 3Q/15     | 4Q/15     |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)  | -1.39E-08 | -1.45E-08 | -1.45E-08 | -1.23E-08 | -1.20E-08 | -1.18E-08 | -1.14E-08 | -1.14E-08 |
| URI ( $\Delta$ CDF)  | -1.08E-08 | -9.84E-09 | -9.84E-09 | -9.84E-09 | -1.38E-08 | -1.49E-08 | -1.62E-08 | -1.61E-08 |
| PLE  | NO        |
| Indicator value  | -2.50E-08 | -2.40E-08 | -2.40E-08 | -2.20E-08 | -2.60E-08 | -2.70E-08 | -2.80E-08 | -2.70E-08 |

Licensee Comments: none

### Mitigating Systems Performance Index, Cooling Water Systems



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

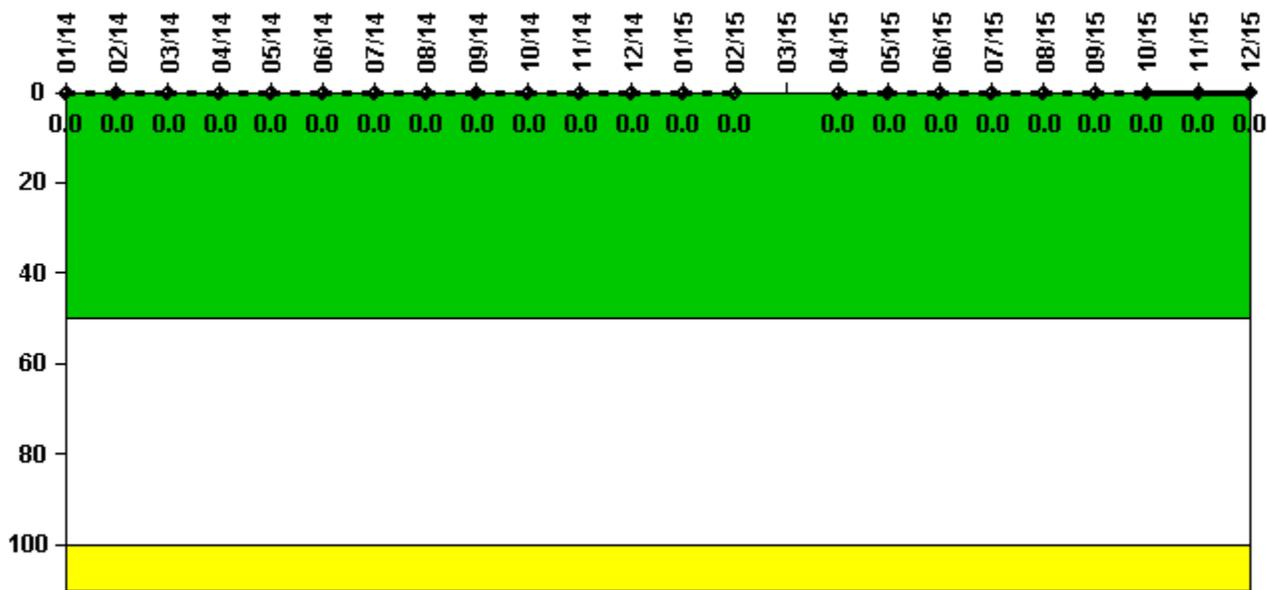
#### Notes

| Mitigating Systems Performance Index, Cooling Water Systems | 1Q/14    | 2Q/14    | 3Q/14    | 4Q/14    | 1Q/15    | 2Q/15    | 3Q/15     | 4Q/15     |
|---|----------|----------|----------|----------|----------|----------|-----------|-----------|
| UAI (ΔCDF)  | 2.17E-07 | 2.17E-07 | 2.72E-08 | 2.70E-08 | 2.64E-08 | 2.41E-08 | 2.12E-08  | 2.74E-08  |
| URI (ΔCDF)  | 4.51E-08 | 4.74E-08 | 3.35E-08 | 3.36E-08 | 3.30E-08 | 3.41E-08 | -2.85E-08 | -2.86E-08 |
| PLE   | NO        | NO        |
| Indicator value   | 2.60E-07 | 2.60E-07 | 6.10E-08 | 6.10E-08 | 5.90E-08 | 5.80E-08 | -7.30E-09 | -1.20E-09 |

Licensee Comments:

3Q/14: Auto roll-off of the 32 CCW pump failure on August 19, 2011.

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

| Reactor Coolant System Activity | 1/14     | 2/14     | 3/14     | 4/14     | 5/14     | 6/14     | 7/14     | 8/14     | 9/14     | 10/14    | 11/14    | 12/14    |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | 0.000136 | 0.000138 | 0.000144 | 0.000139 | 0.000147 | 0.000147 | 0.000169 | 0.000162 | 0.000171 | 0.000183 | 0.000181 | 0.000183 |
| 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        | 0        | 0        | 0        | 0        |

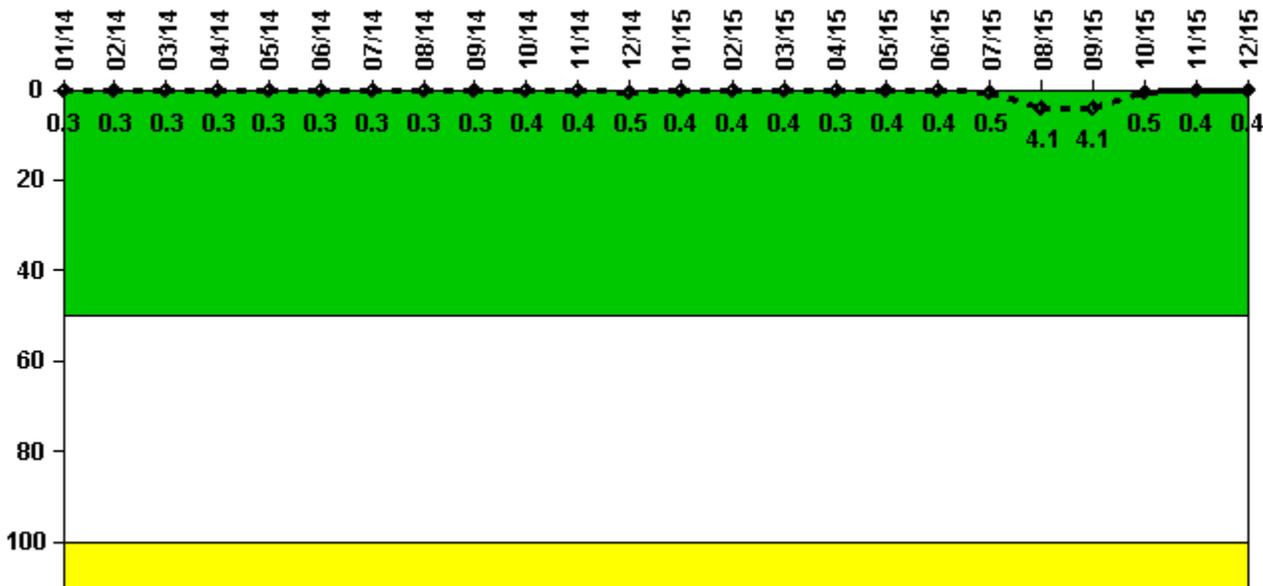
  

| Reactor Coolant System Activity | 1/15     | 2/15     | 3/15 | 4/15     | 5/15     | 6/15     | 7/15     | 8/15     | 9/15     | 10/15    | 11/15    | 12/15    |
|---------------------------------|----------|----------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | 0.000191 | 0.000203 | N/A  | 0.000099 | 0.000090 | 0.000108 | 0.000109 | 0.000117 | 0.000121 | 0.000127 | 0.000132 | 0.000130 |
| 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        | N/A  | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |

#### Licensee Comments:

3/15: (NA) No data for March 2015 due to unit in refueling outage (unstable RCS activity concentrations). Unit coastdown March 1, 2015 to initial criticality March 24, 2015, with startup for the remainder of the month.

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

| Reactor Coolant System Leakage | 1/14       | 2/14       | 3/14       | 4/14       | 5/14       | 6/14       | 7/14       | 8/14       | 9/14       | 10/14      | 11/14      | 12/14      |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Maximum leakage                | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.030      | 0.040      | 0.040      | 0.050      |
| 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                | <b>0.3</b> | <b>0.4</b> | <b>0.4</b> | <b>0.5</b> |

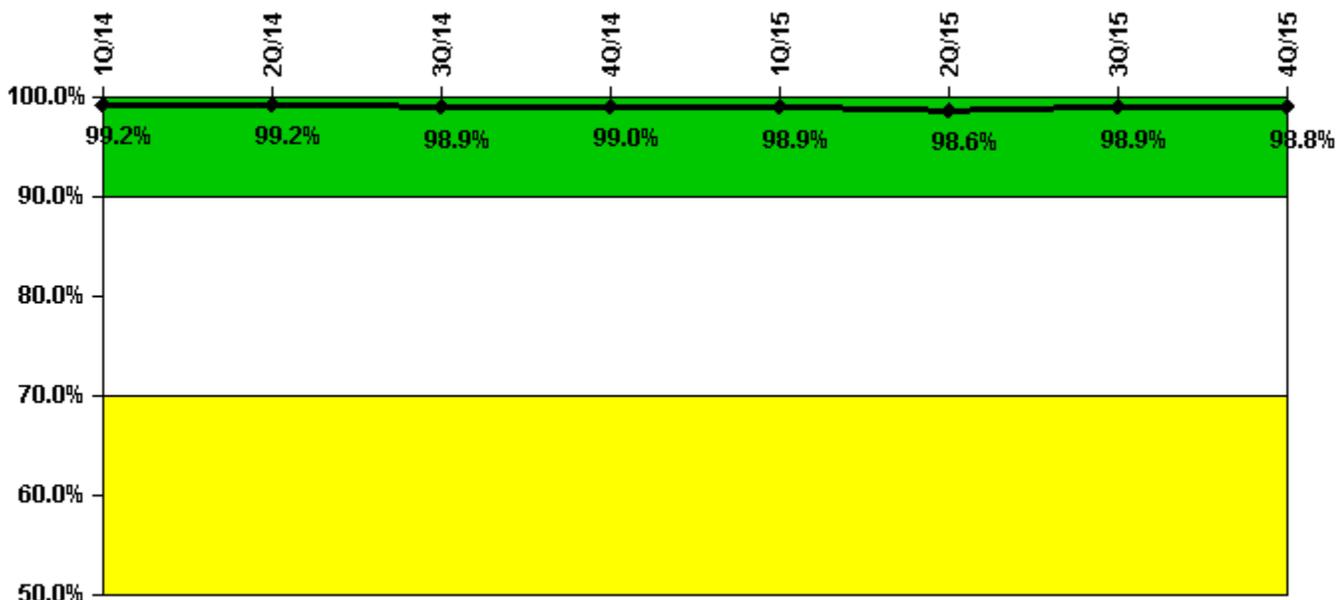
  

| Reactor Coolant System Leakage | 1/15       | 2/15       | 3/15       | 4/15       | 5/15       | 6/15       | 7/15       | 8/15       | 9/15       | 10/15      | 11/15      | 12/15      |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Maximum leakage                | 0.040      | 0.040      | 0.040      | 0.030      | 0.040      | 0.040      | 0.050      | 0.410      | 0.410      | 0.050      | 0.040      | 0.040      |
| 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                | <b>0.4</b> | <b>0.4</b> | <b>0.4</b> | <b>0.3</b> | <b>0.4</b> | <b>0.4</b> | <b>0.5</b> | <b>4.1</b> | <b>4.1</b> | <b>0.5</b> | <b>0.4</b> | <b>0.4</b> |

Licensee Comments:

9/15: August and September RCS leak rate elevated due to reactor vessel O-ring leakage which was repaired in a planned maintenance outage in September.

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

| Drill/Exercise Performance | 1Q/14 | 2Q/14 | 3Q/14 | 4Q/14 | 1Q/15 | 2Q/15 | 3Q/15 | 4Q/15 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 50.0  | 108.0 | 200.0 | 109.0 | 20.0  | 71.0  | 146.0 | 28.0  |
| Total opportunities        | 51.0  | 110.0 | 203.0 | 109.0 | 21.0  | 72.0  | 147.0 | 28.0  |
| Indicator value            | 99.2% | 99.2% | 98.9% | 99.0% | 98.9% | 98.6% | 98.9% | 98.8% |

Licensee Comments: none

### ERO Drill Participation



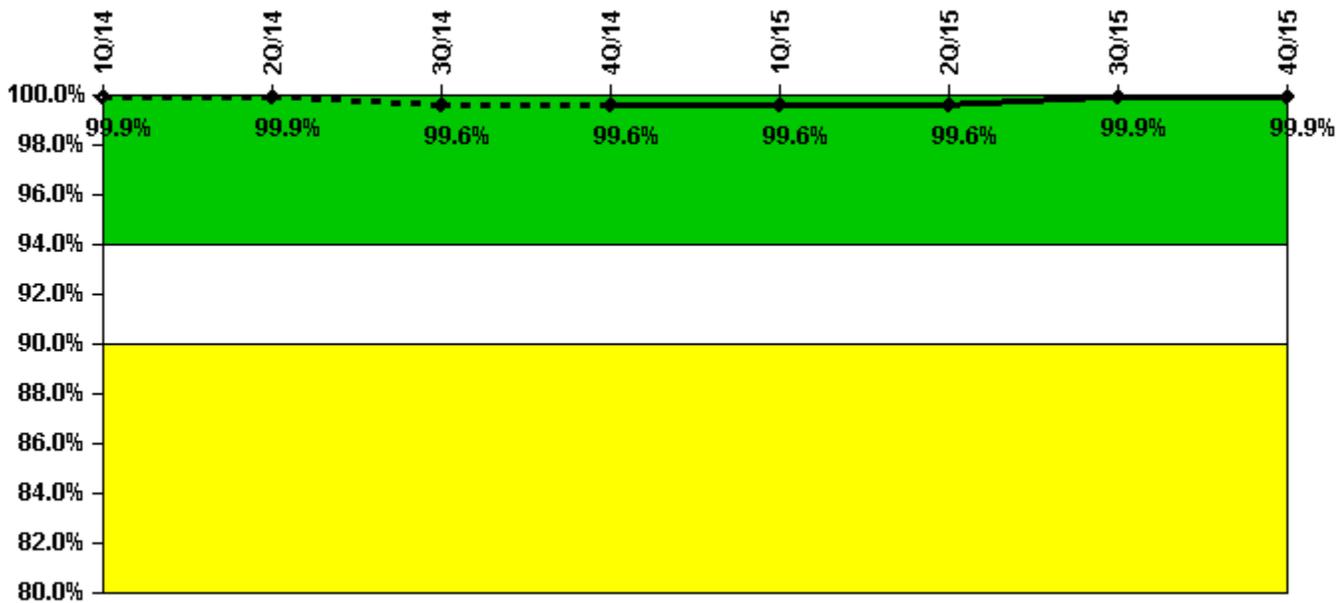
**Thresholds:** White < 80.0% Yellow < 60.0%

**Notes**

| ERO Drill Participation     | 1Q/14  | 2Q/14  | 3Q/14  | 4Q/14  | 1Q/15  | 2Q/15  | 3Q/15  | 4Q/15  |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Participating Key personnel | 104.0  | 104.0  | 100.0  | 106.0  | 104.0  | 104.0  | 105.0  | 103.0  |
| Total Key personnel         | 104.0  | 104.0  | 100.0  | 106.0  | 104.0  | 104.0  | 105.0  | 103.0  |
| Indicator value             | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Licensee Comments: none

### Alert & Notification System



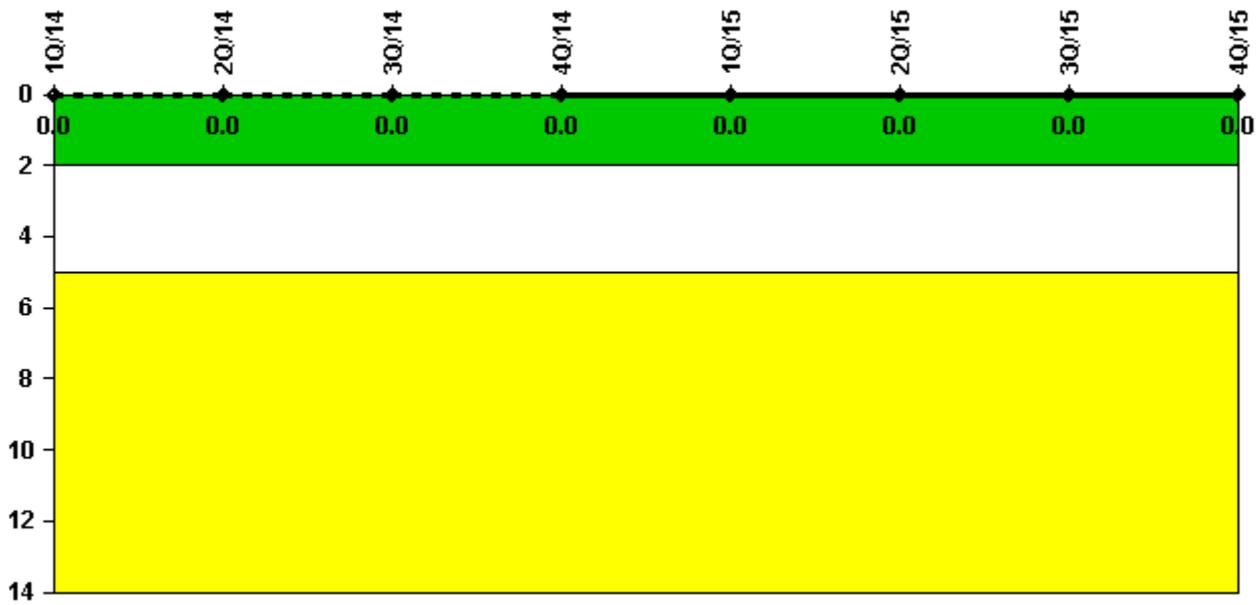
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

| Alert & Notification System | 1Q/14 | 2Q/14 | 3Q/14 | 4Q/14 | 1Q/15 | 2Q/15 | 3Q/15 | 4Q/15 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests      | 1148  | 1079  | 1110  | 1104  | 1135  | 917   | 1105  | 1046  |
| Total sirens-tests          | 1148  | 1081  | 1126  | 1104  | 1135  | 917   | 1109  | 1046  |
| Indicator value             | 99.9% | 99.9% | 99.6% | 99.6% | 99.6% | 99.6% | 99.9% | 99.9% |

Licensee Comments: none

### Occupational Exposure Control Effectiveness



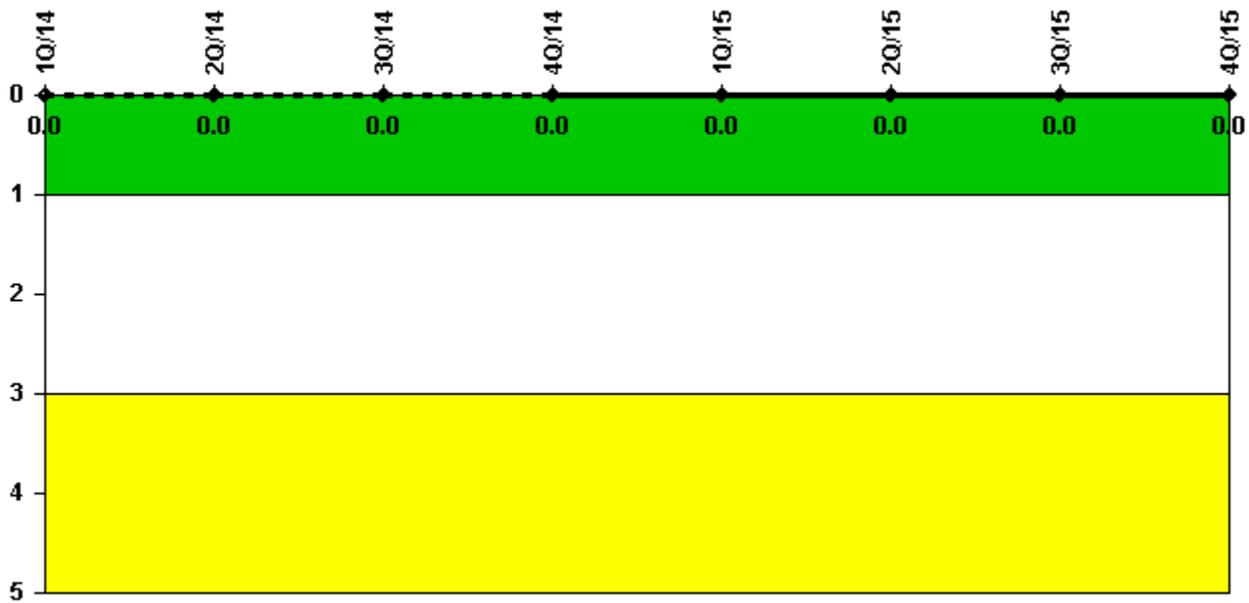
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

| Occupational Exposure Control Effectiveness | 1Q/14    | 2Q/14    | 3Q/14    | 4Q/14    | 1Q/15    | 2Q/15    | 3Q/15    | 4Q/15    |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| 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> |

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

| RETS/ODCM Radiological Effluent | 1Q/14 | 2Q/14 | 3Q/14 | 4Q/14 | 1Q/15 | 2Q/15 | 3Q/15 | 4Q/15 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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: March 1, 2016*