

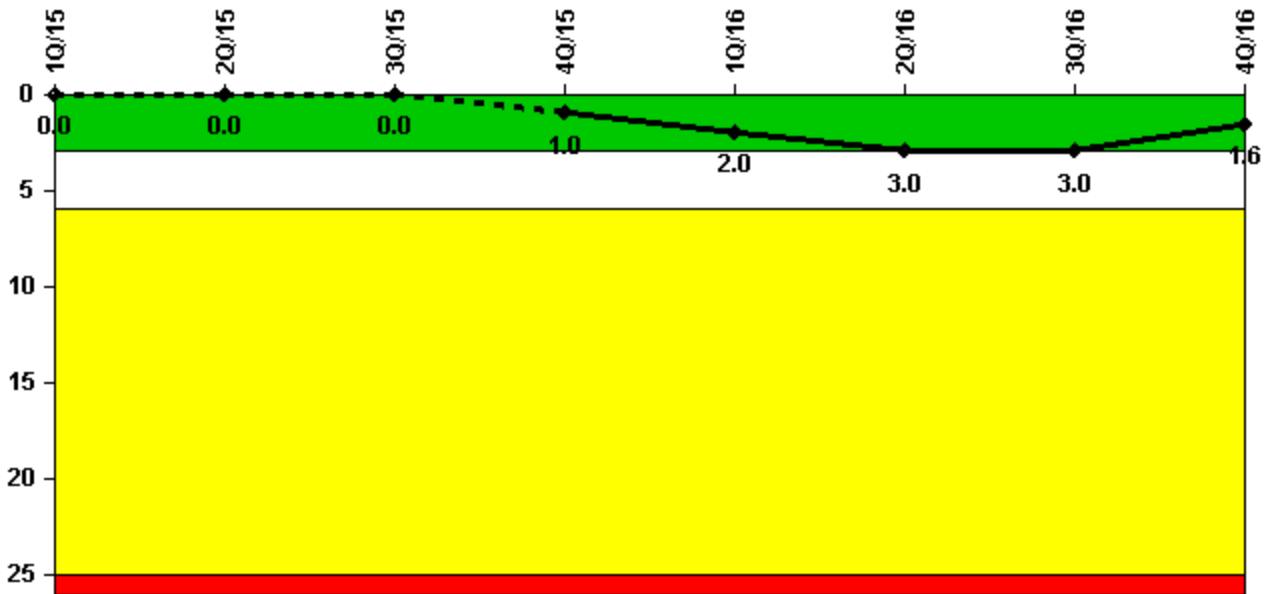
South Texas 1

4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



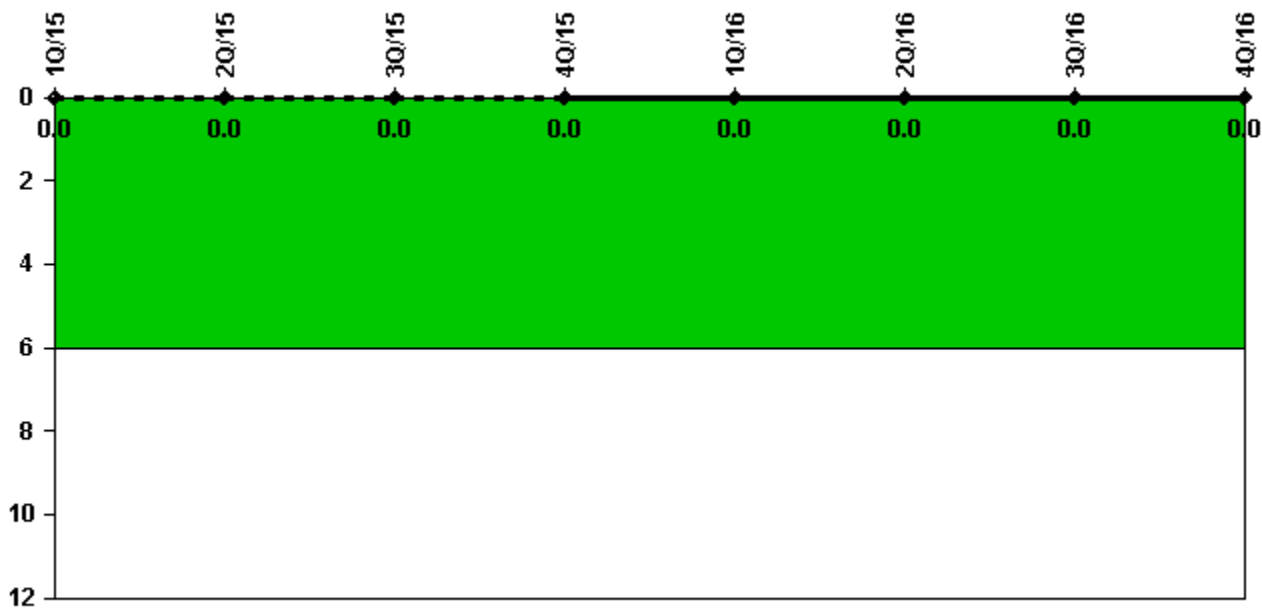
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	1.0	1.0	1.0	0	0
Critical hours	2159.0	2184.0	2208.0	627.1	2111.7	2091.7	2208.0	2209.0
Indicator value	0	0	0	1.0	2.0	3.0	3.0	1.6

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



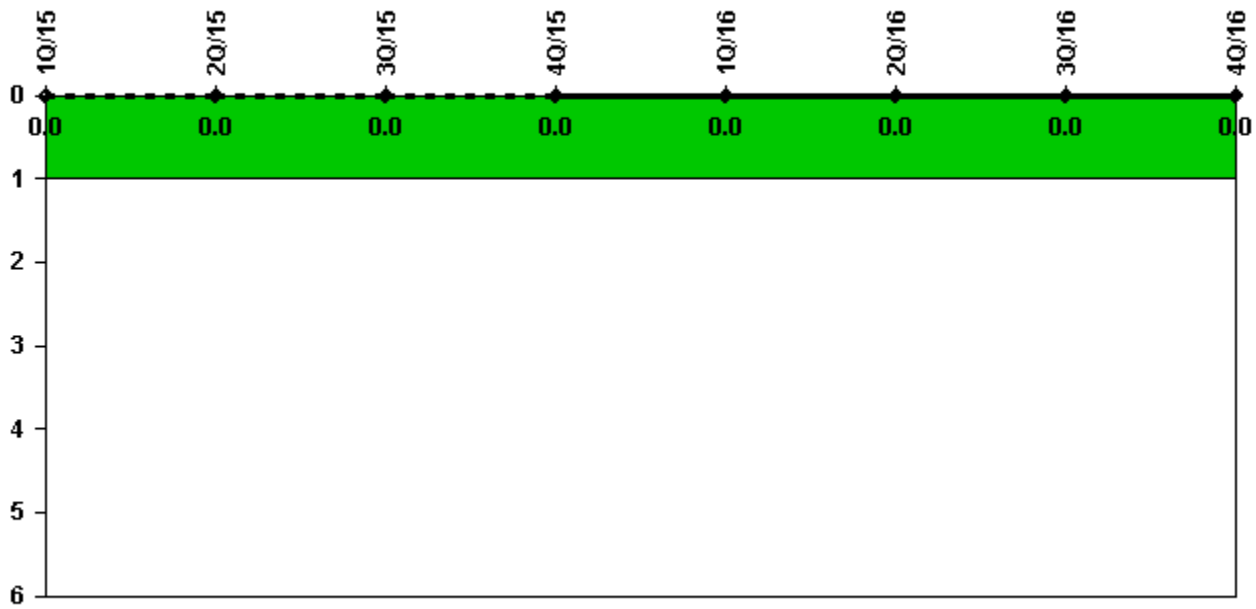
Thresholds: White > 6.0

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	0	0	0
Critical hours	2159.0	2184.0	2208.0	627.1	2111.7	2091.7	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



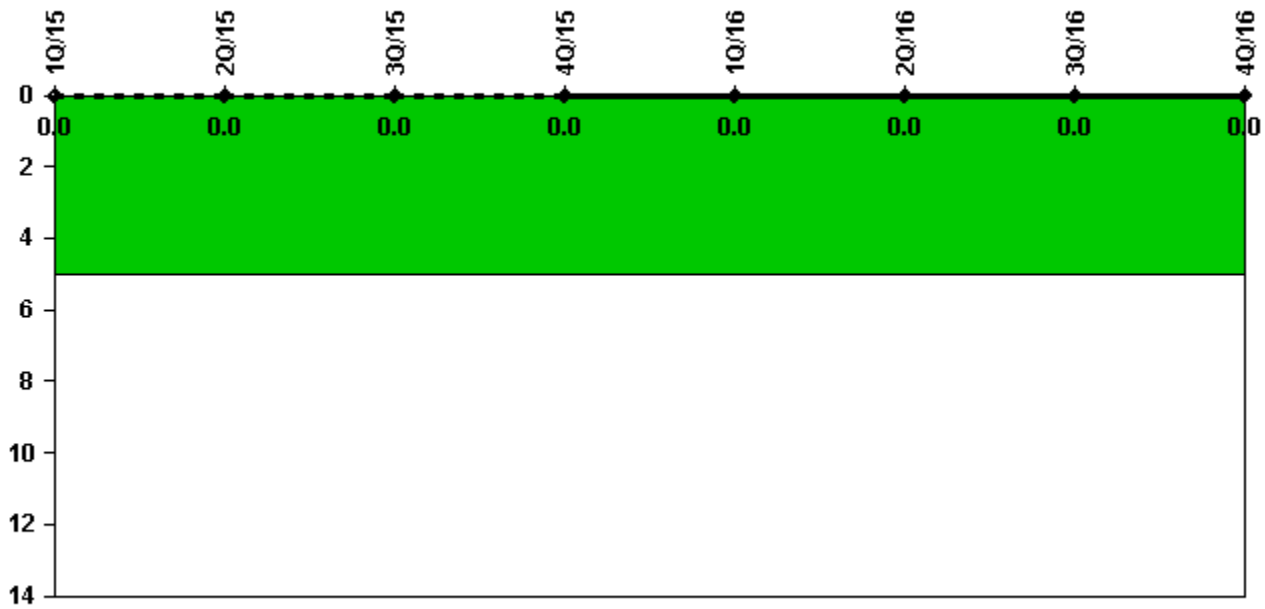
Thresholds: White > 1.0

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
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)



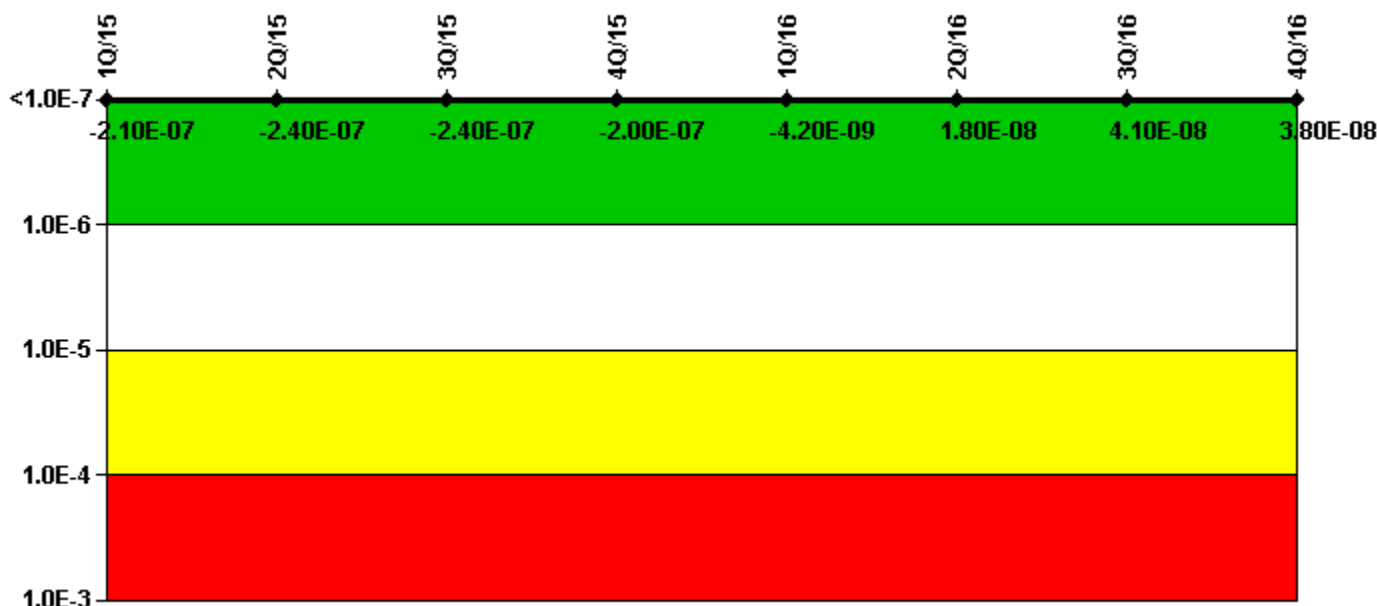
Thresholds: White > 5.0

Notes

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

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

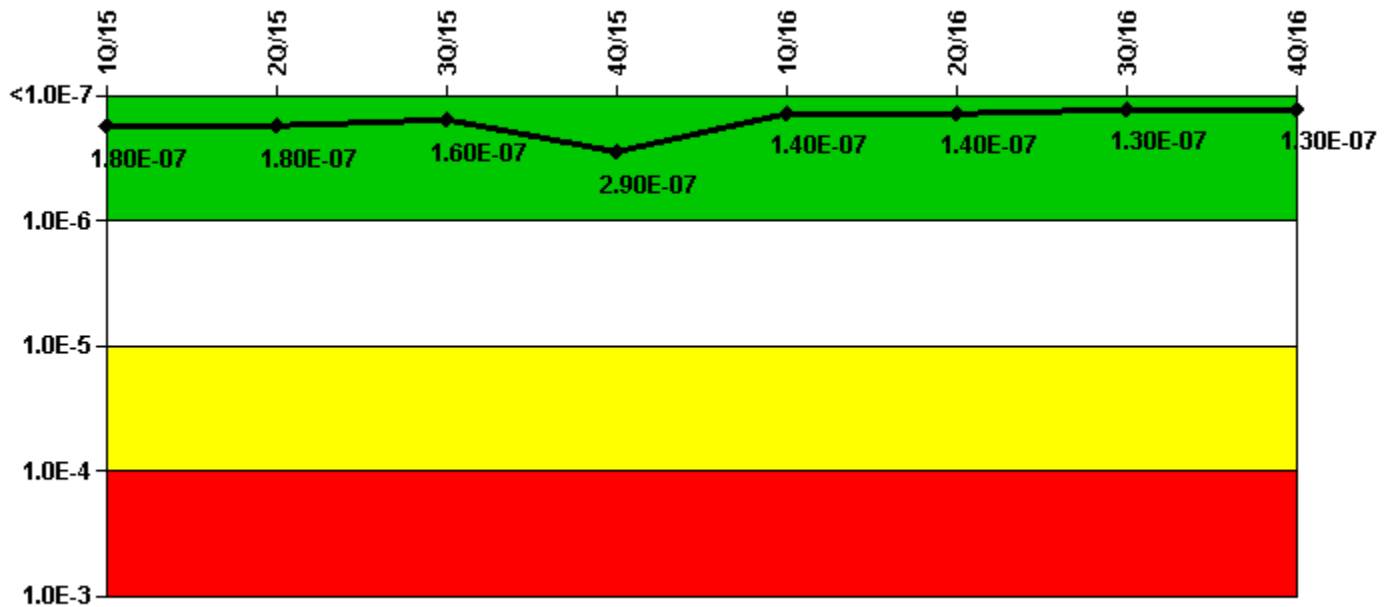
Mitigating Systems Performance Index, Emergency AC Power System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	1.08E-07	7.99E-08	7.70E-08	1.24E-07	7.88E-08	1.01E-07	1.24E-07	1.21E-07
URI (ΔCDF)	-3.20E-07	-3.20E-07	-3.20E-07	-3.20E-07	-8.30E-08	-8.30E-08	-8.30E-08	-8.30E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.10E-07	-2.40E-07	-2.40E-07	-2.00E-07	-4.20E-09	1.80E-08	4.10E-08	3.80E-08

Licensee Comments:

1Q/16: Changed PRA Parameter(s). Approved PRA Model Rev 8.1 and updated coefficients effective 1Q16.

4Q/15: Changed PRA Parameter(s). The Planned UA Baseline coefficient for Unit 1 EDG B (DG 12) was revised to remove the planned UA baseline hours related to 15 year preventive maintenance from January 2013. This change will be effective 1Q16 (Reference CR 13-3103-4). The MSPI Bases Document was revised to the change in EDG B UA coefficient and to incorporate FAQ-14-01 regarding MSPI PRA Technical Adequacy (Reference CR 14-12028- 34).

Mitigating Systems Performance Index, High Pressure Injection System



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

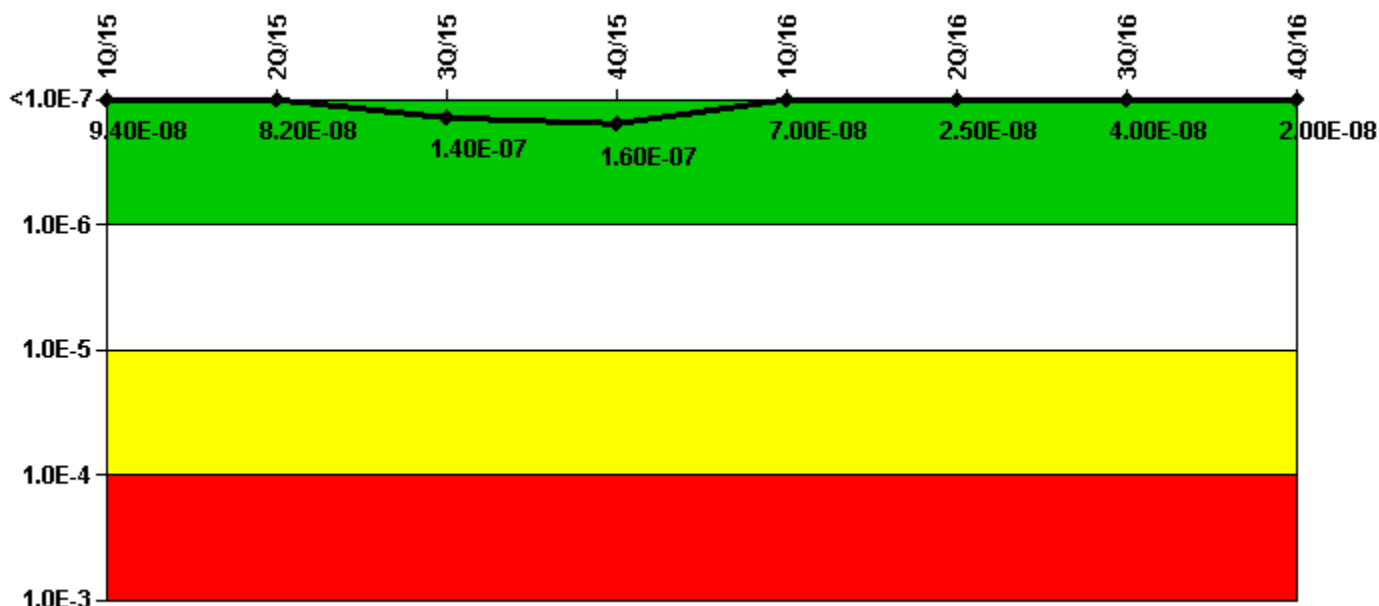
Notes

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 (ΔCDF)	2.07E-07	2.07E-07	1.84E-07	3.11E-07	1.63E-07	1.61E-07	1.48E-07	1.47E-07
URI (ΔCDF)	-2.53E-08	-2.53E-08	-2.53E-08	-2.53E-08	-2.13E-08	-2.13E-08	-2.13E-08	-2.13E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.80E-07	1.80E-07	1.60E-07	2.90E-07	1.40E-07	1.40E-07	1.30E-07	1.30E-07

Licensee Comments:

1Q/16: Changed PRA Parameter(s). Approved PRA Model Rev 8.1 and updated coefficients effective 1Q16.

Mitigating Systems Performance Index, Heat Removal System



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

Notes

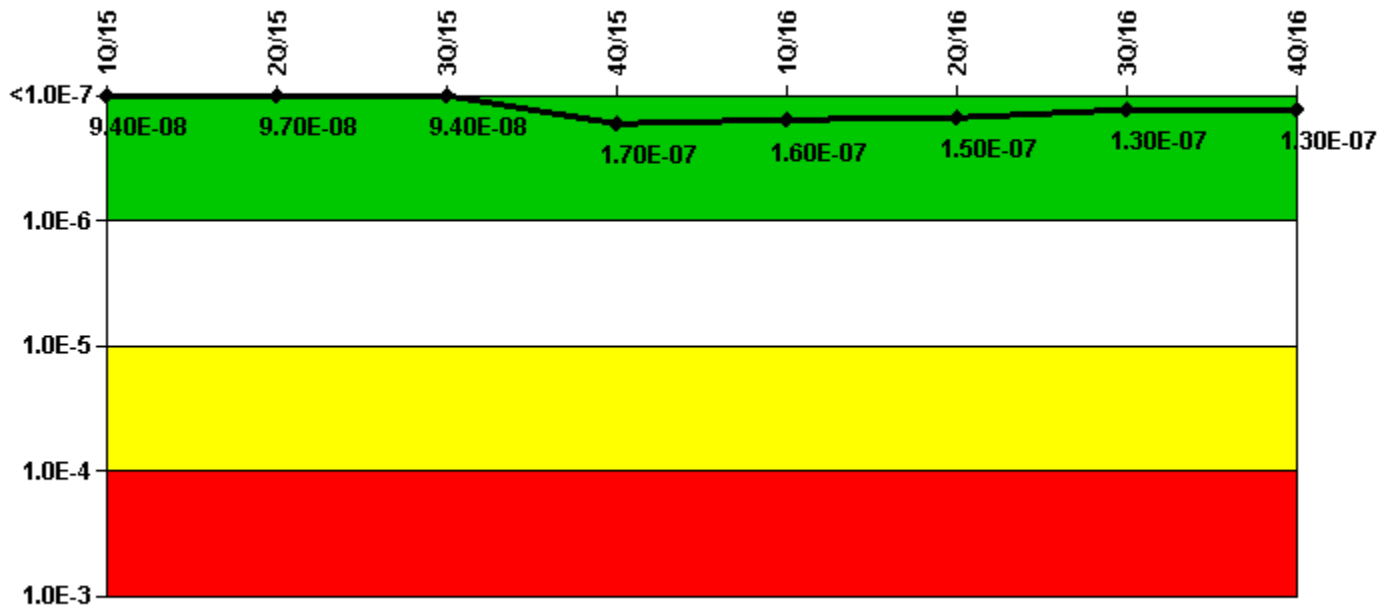
Mitigating Systems Performance Index, Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	1.49E-07	1.38E-07	1.93E-07	2.21E-07	1.43E-07	9.92E-08	1.14E-07	9.41E-08
URI (ΔCDF)	-5.58E-08	-5.58E-08	-5.58E-08	-5.68E-08	-7.28E-08	-7.40E-08	-7.40E-08	-7.40E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.40E-08	8.20E-08	1.40E-07	1.60E-07	7.00E-08	2.50E-08	4.00E-08	2.00E-08

Licensee Comments:

1Q/16: Changed PRA Parameter(s). Approved PRA Model Rev 8.1 and updated coefficients effective 1Q16.

3Q/15: Engineering is evaluating whether AFW-B degraded condition reported in CR 15-21784 in September 2015 impacted an MSPI monitored function.

Mitigating Systems Performance Index, Residual Heat Removal System



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

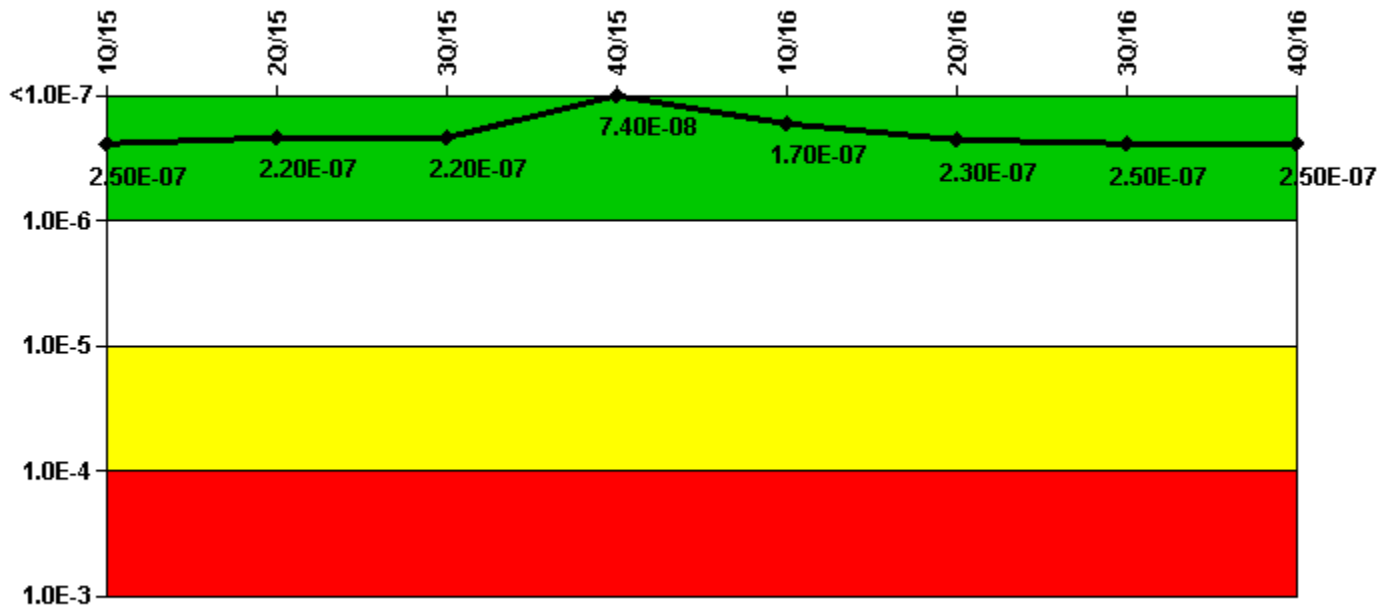
Notes

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 (ΔCDF)	1.06E-07	1.08E-07	1.06E-07	1.85E-07	1.72E-07	1.63E-07	1.46E-07	1.38E-07
URI (ΔCDF)	-1.14E-08	-1.14E-08	-1.14E-08	-1.14E-08	-1.11E-08	-1.11E-08	-1.11E-08	-1.11E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.40E-08	9.70E-08	9.40E-08	1.70E-07	1.60E-07	1.50E-07	1.30E-07	1.30E-07

Licensee Comments:

1Q/16: Changed PRA Parameter(s). Approved PRA Model Rev 8.1 and updated coefficients effective 1Q16.

Mitigating Systems Performance Index, Cooling Water Systems



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

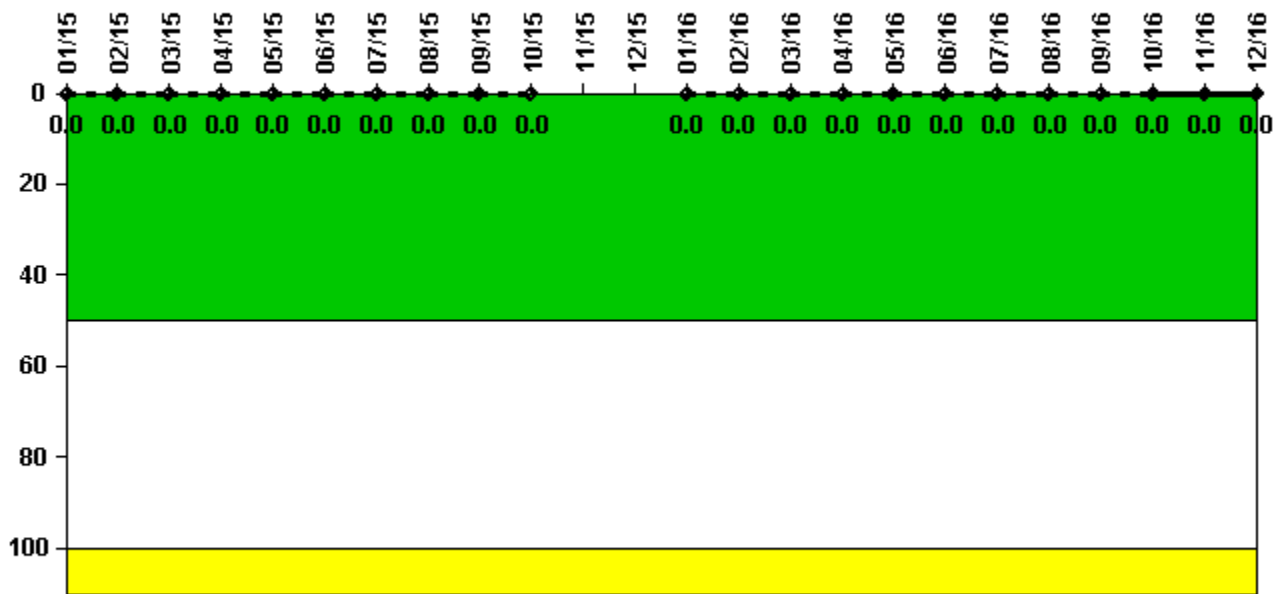
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	1.47E-07	1.16E-07	1.14E-07	1.12E-07	1.96E-07	2.59E-07	2.78E-07	2.77E-07
URI (ΔCDF)	1.06E-07	1.06E-07	1.06E-07	-3.81E-08	-2.85E-08	-2.85E-08	-2.85E-08	-2.85E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.50E-07	2.20E-07	2.20E-07	7.40E-08	1.70E-07	2.30E-07	2.50E-07	2.50E-07

Licensee Comments:

1Q/16: Changed PRA Parameter(s). Approved PRA Model Rev 8.1 and updated coefficients effective 1Q16.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

Notes

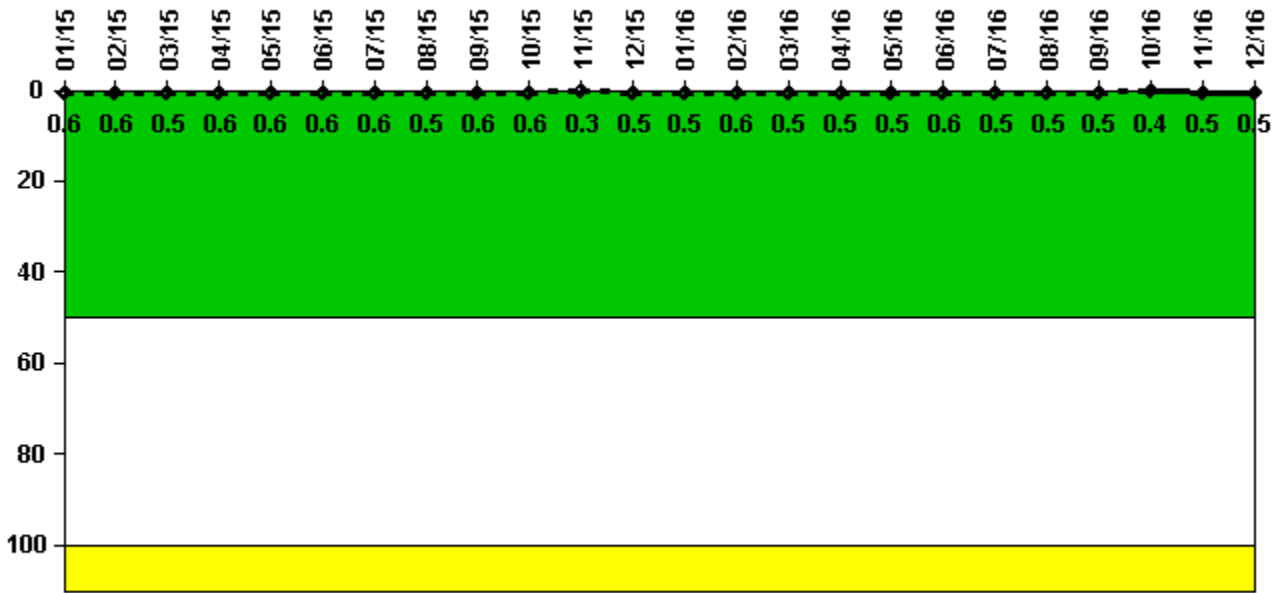
Reactor Coolant System Activity	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum activity	0.000031	0.000029	0.000033	0.000031	0.000033	0.000031	0.000032	0.000032	0.000035	0.000031	N/A	N/A
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	N/A	N/A

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	0.000018	0.000014	0.000028	0.000018	0.000022	0.000023	0.000025	0.000027	0.000027	0.000027	0.000028
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

Licensee Comments:

12/15: No steady state data in November or December 2015. Unit 1 Refueling Outage 1RE19.

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

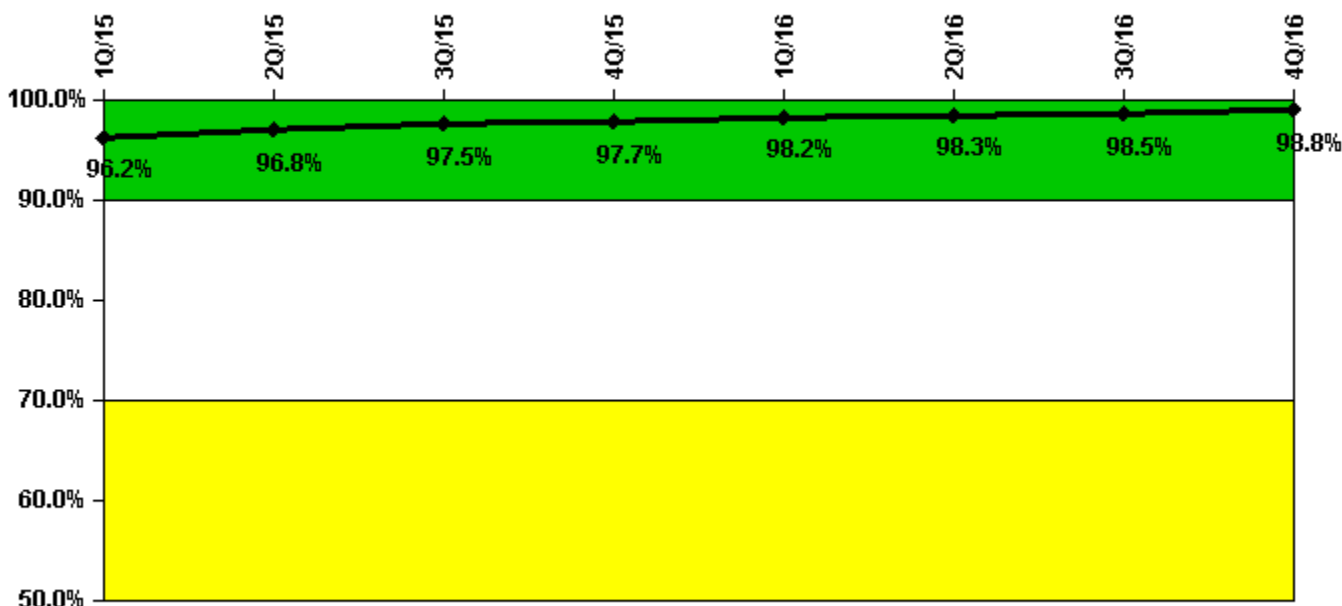
Notes

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	0.056	0.060	0.046	0.060	0.056	0.060	0.058	0.050	0.059	0.061	0.034	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	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.3	0.5

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	0.046	0.060	0.052	0.052	0.051	0.058	0.048	0.046	0.045	0.037	0.045	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	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

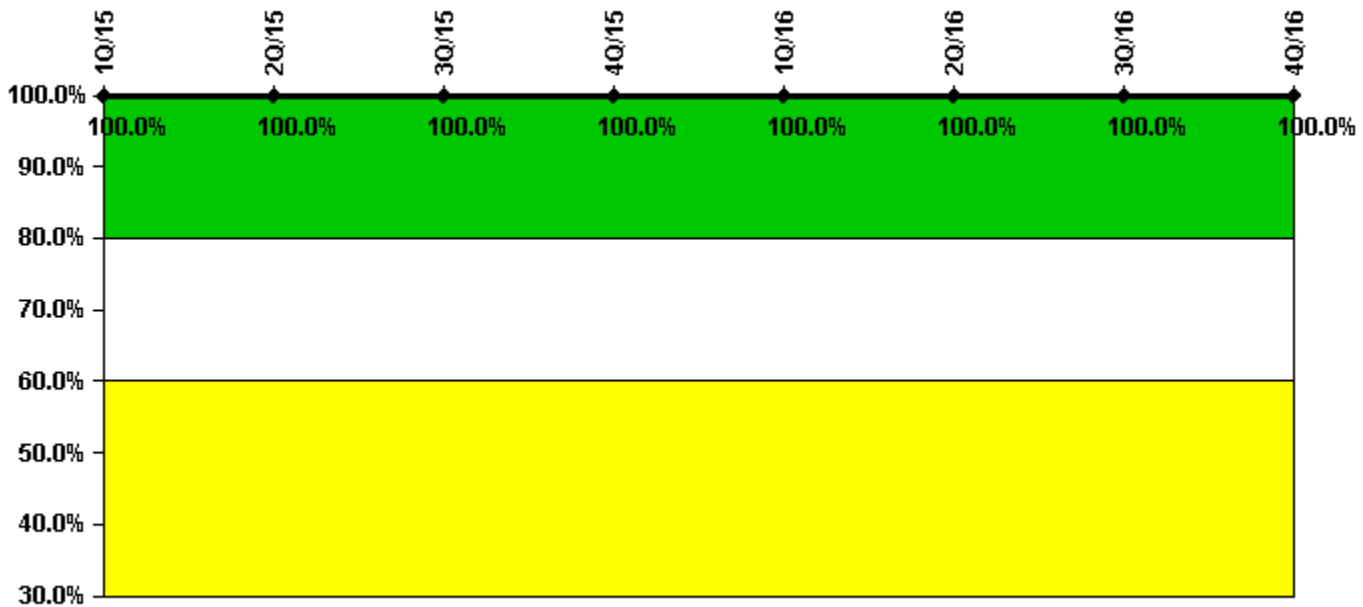
Notes

Drill/Exercise Performance	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful opportunities	104.0	91.0	60.0	2.0	10.0	126.0	85.0	10.0
Total opportunities	106.0	91.0	61.0	2.0	10.0	129.0	85.0	10.0
Indicator value	96.2%	96.8%	97.5%	97.7%	98.2%	98.3%	98.5%	98.8%

Licensee Comments:

1Q/15: Corrected 4Q14 data DEP total opportunities from 50 to 46 and DEP total success from 52 to 48 due to administrative error. (CR 15-4048). This change did not affect the color of the indicator. Corrected 2Q14 data DEP total opportunities from 183 to 61 and DEP total success from 177 to 59 due data entry error (CR 15-2575). This change did not affect the color of the indicator.

ERO Drill Participation



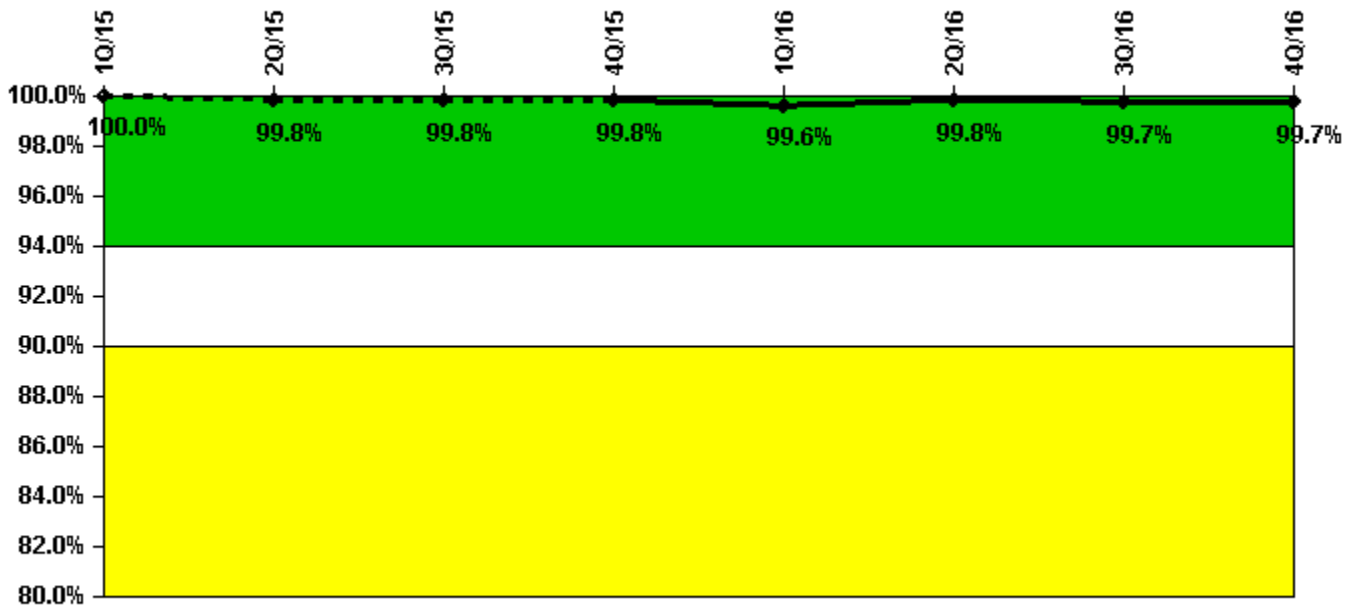
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	129.0	127.0	128.0	125.0	113.0	122.0	124.0	134.0
Total Key personnel	129.0	127.0	128.0	125.0	113.0	122.0	124.0	134.0
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/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful siren-tests	256	222	256	256	254	256	223	256
Total sirens-tests	256	224	256	256	256	256	224	256
Indicator value	100.0%	99.8%	99.8%	99.8%	99.6%	99.8%	99.7%	99.7%

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
Indicator value	0	0	0	0	0	0	0	0

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