

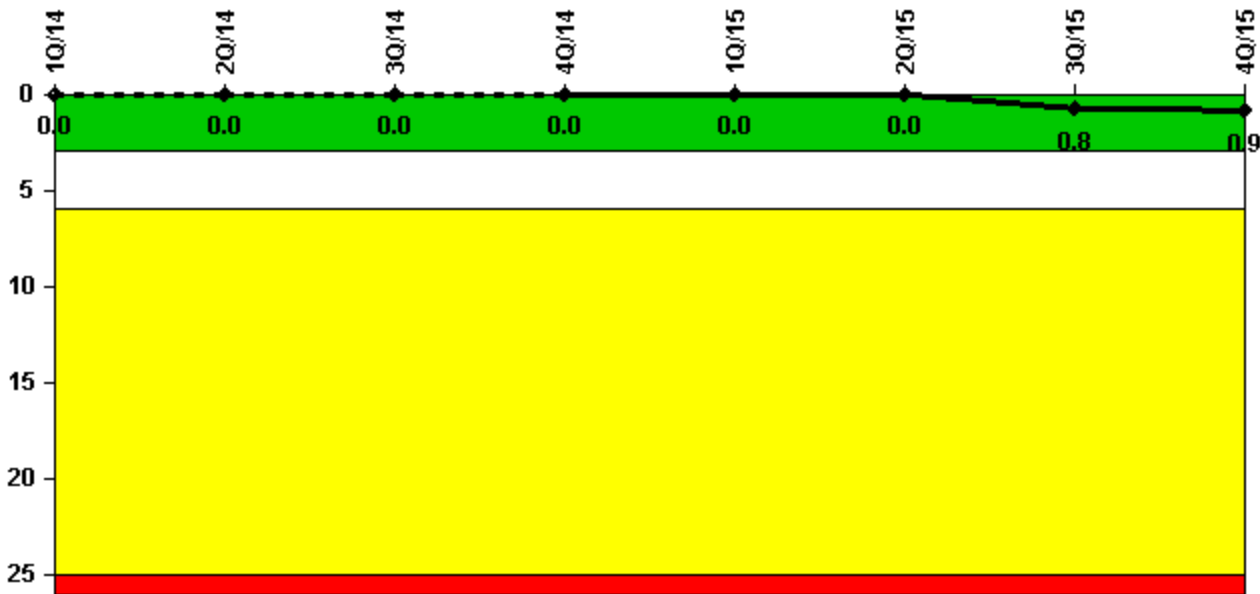
Palisades

4Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



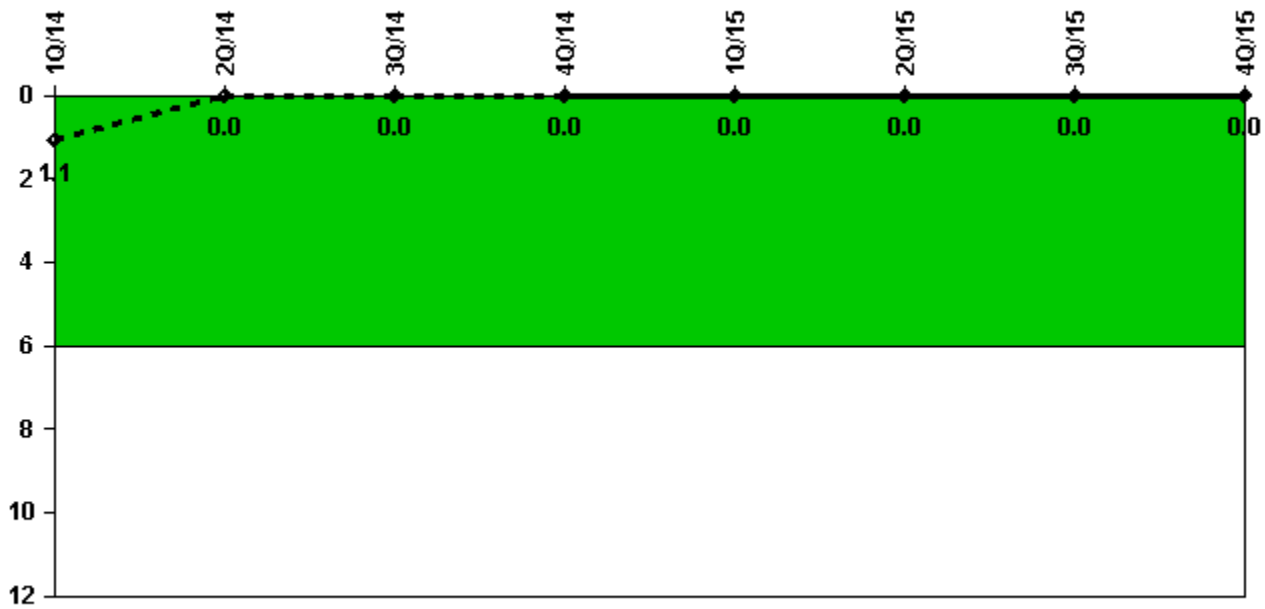
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	0	0	0	0	0	0	1.0	0
Critical hours	839.1	2054.0	2208.0	2209.0	2159.0	2184.0	1849.3	1771.8
Indicator value	0	0	0	0	0	0	0.8	0.9

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



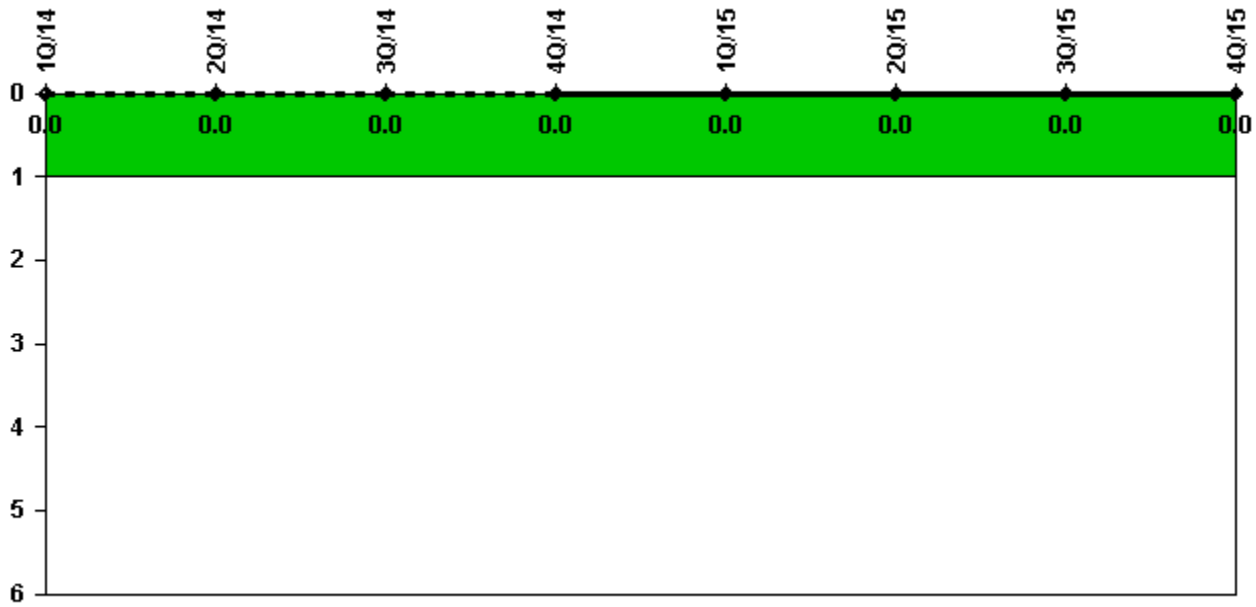
Thresholds: White > 6.0

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	0	0	0	0
Critical hours	839.1	2054.0	2208.0	2209.0	2159.0	2184.0	1849.3	1771.8
Indicator value	1.1	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



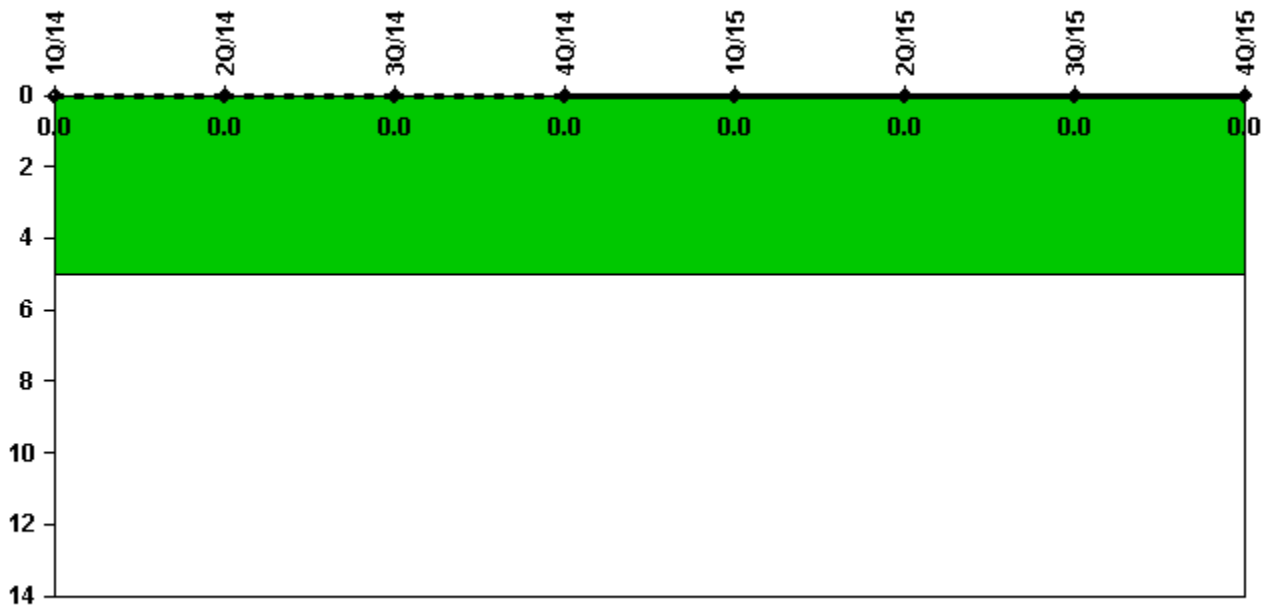
Thresholds: White > 1.0

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)



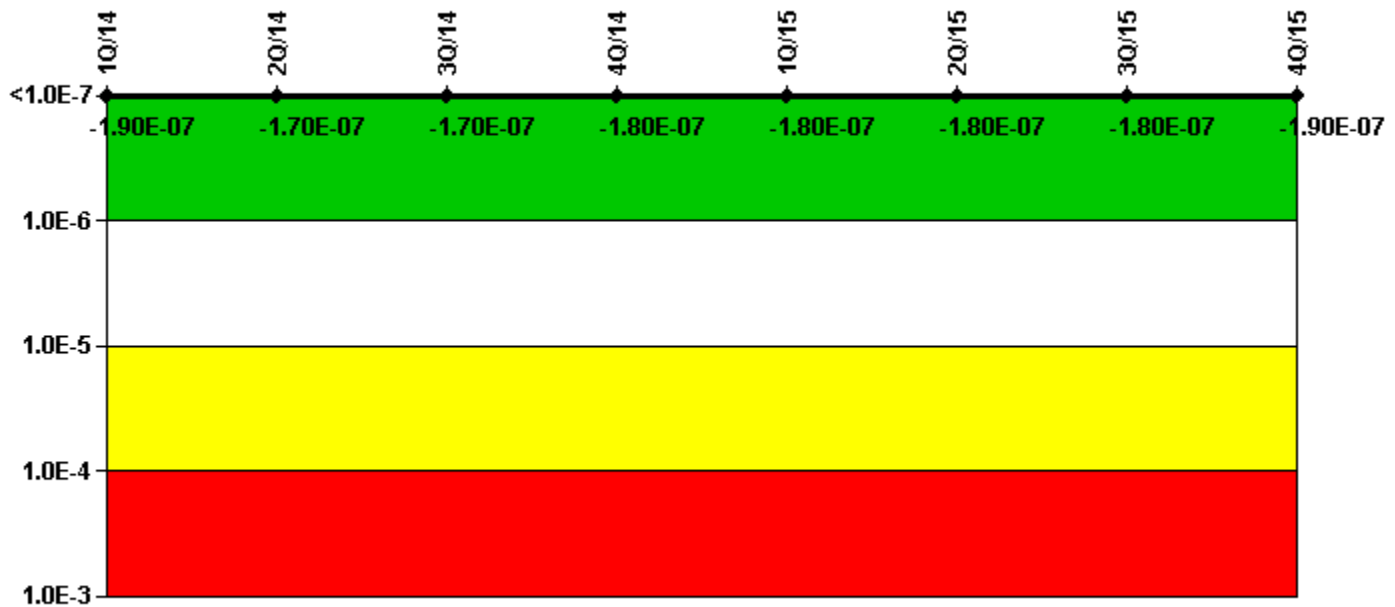
Thresholds: White > 5.0

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	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



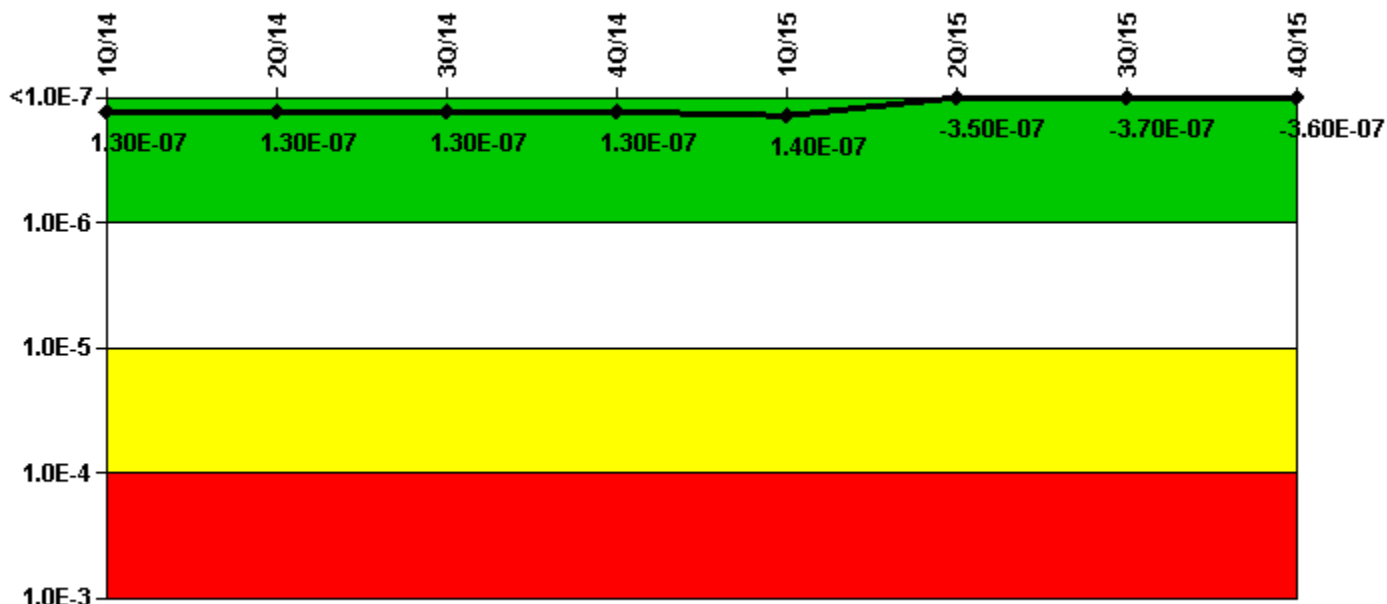
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (Δ CDF)	-2.73E-08	-1.08E-08	-1.24E-08	-1.75E-08	-1.79E-08	-2.02E-08	-2.11E-08	-2.73E-08
URI (Δ CDF)	-1.61E-07	-1.60E-07	-1.60E-07	-1.59E-07	-1.59E-07	-1.59E-07	-1.59E-07	-1.59E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.90E-07	-1.70E-07	-1.70E-07	-1.80E-07	-1.80E-07	-1.80E-07	-1.80E-07	-1.90E-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/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (ΔCDF)	-1.06E-07	-1.06E-07	-1.06E-07	-1.06E-07	-9.92E-08	-8.21E-08	-1.06E-07	-9.31E-08
URI (ΔCDF)	2.35E-07	2.35E-07	2.35E-07	2.35E-07	2.35E-07	-2.65E-07	-2.65E-07	-2.65E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.30E-07	1.30E-07	1.30E-07	1.30E-07	1.40E-07	-3.50E-07	-3.70E-07	-3.60E-07

Licensee Comments:

4Q/15: Evaluation of Control Valve CV-3057 SIRW (Safety Injection Refueling Water) Storage Tank Outlet degradation from September 2015 concluded No MPSI Failure occurred. (Reference CR-PLP-2015-04043)

3Q/15: Evaluation is pending on degradation of Control Valve CV-3057 SIRW (Safety Injection Refueling Water) Storage Tank Outlet identified in September 2015. (Reference CR-PLP-2015-04043)

1Q/15: Risk Cap Invoked.

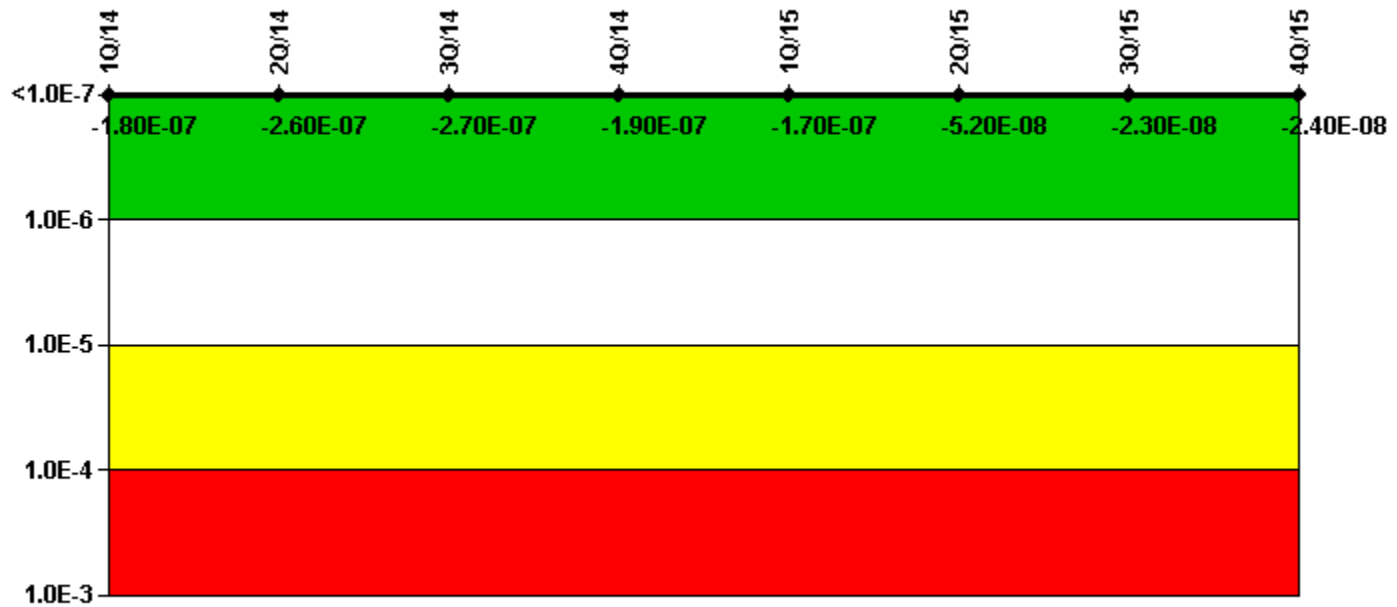
4Q/14: Risk Cap Invoked.

3Q/14: Risk Cap Invoked.

2Q/14: Risk Cap Invoked.

1Q/14: Risk Cap Invoked.

Mitigating Systems Performance Index, Heat Removal System



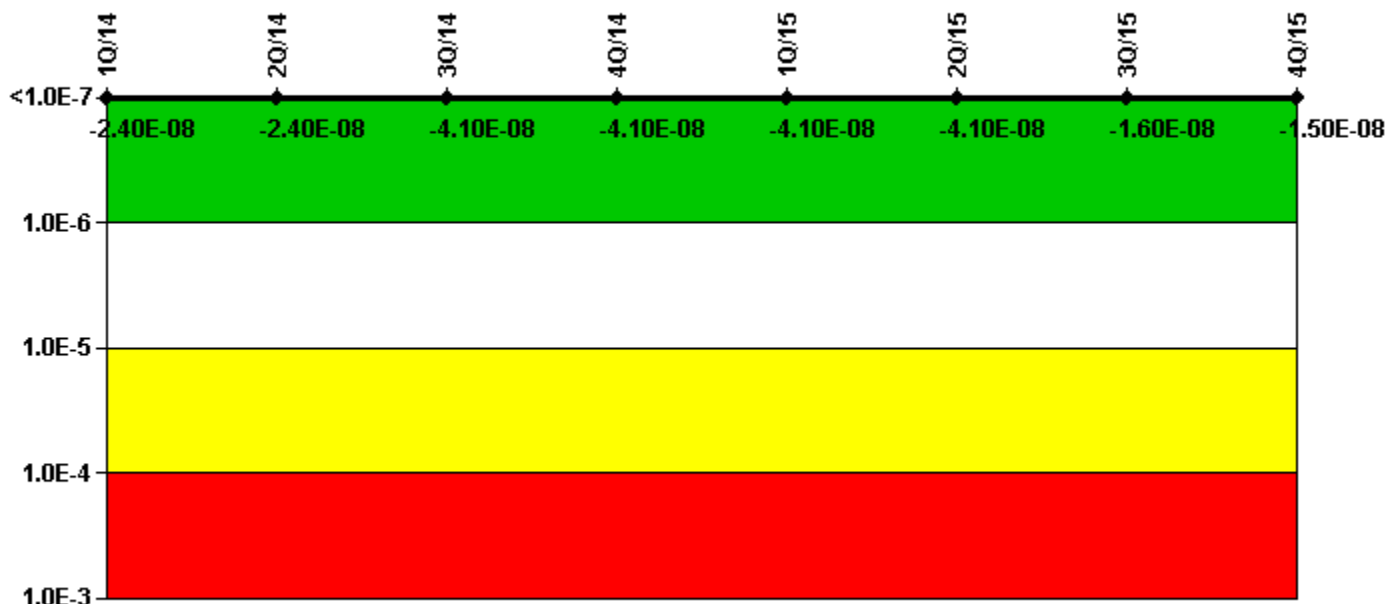
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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 (Δ CDF)	1.60E-08	1.40E-08	1.19E-08	1.37E-08	3.38E-08	1.48E-07	1.77E-07	1.76E-07
URI (Δ CDF)	-2.01E-07	-2.78E-07	-2.77E-07	-2.00E-07	-2.00E-07	-2.00E-07	-2.00E-07	-2.00E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.80E-07	-2.60E-07	-2.70E-07	-1.90E-07	-1.70E-07	-5.20E-08	-2.30E-08	-2.40E-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

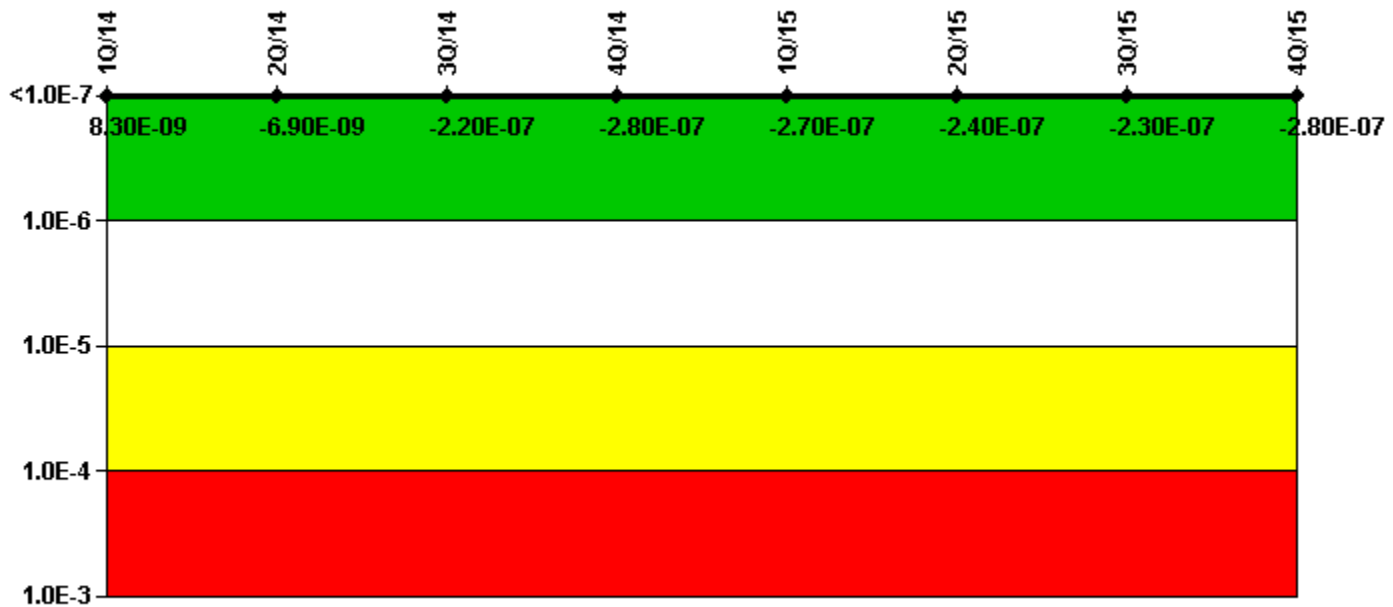
Mitigating Systems Performance Index, Residual Heat Removal System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (Δ CDF)	1.62E-08	1.64E-08	-2.90E-10	-2.90E-10	-2.91E-10	-3.01E-10	2.48E-08	2.52E-08
URI (Δ CDF)	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.40E-08	-2.40E-08	-4.10E-08	-4.10E-08	-4.10E-08	-4.10E-08	-1.60E-08	-1.50E-08

Licensee Comments:

4Q/15: Evaluation of Control Valve CV-3057 SIRW (Safety Injection Refueling Water) Storage Tank Outlet degradation from September 2015 concluded No MPSI Failure occurred. (Reference CR-PLP-2015-04043)

3Q/15: Evaluation is pending on degradation of Control Valve CV-3057 SIRW (Safety Injection Refueling Water) Storage Tank Outlet identified in September 2015. (Reference CR-PLP-2015-04043)

Mitigating Systems Performance Index, Cooling Water Systems



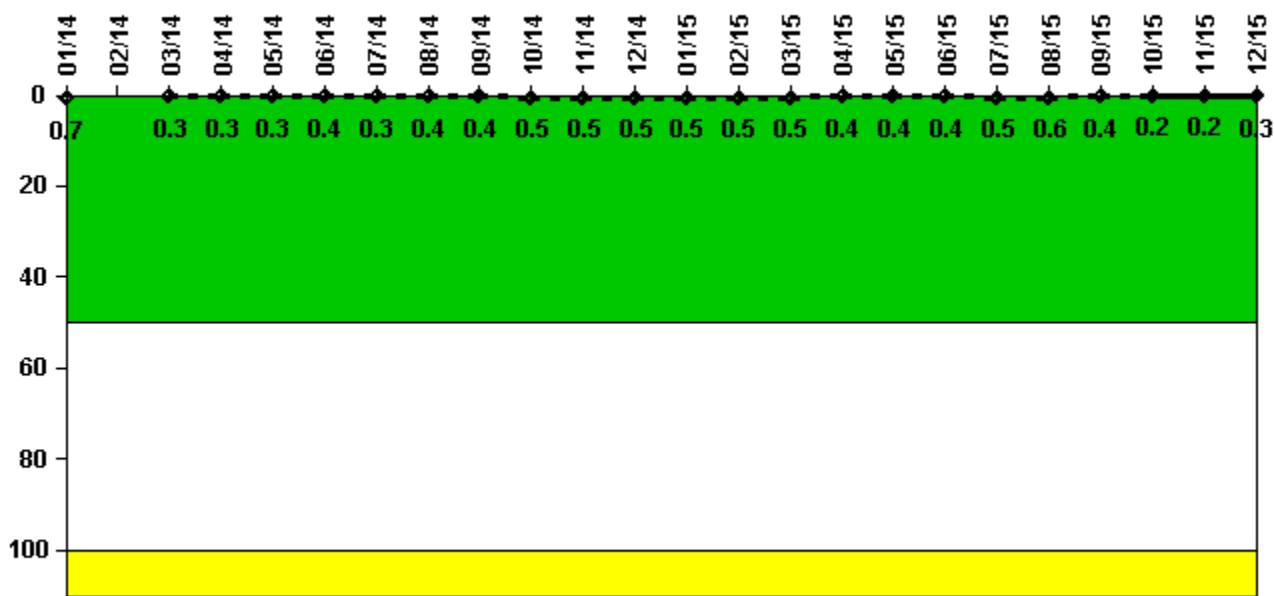
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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 (Δ CDF)	1.95E-07	1.80E-07	1.47E-08	-5.15E-08	-3.68E-08	-9.34E-09	-1.86E-09	-4.99E-08
URI (Δ CDF)	-1.87E-07	-1.87E-07	-2.31E-07	-2.31E-07	-2.31E-07	-2.31E-07	-2.31E-07	-2.31E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	8.30E-09	-6.90E-09	-2.20E-07	-2.80E-07	-2.70E-07	-2.40E-07	-2.30E-07	-2.80E-07

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

Notes

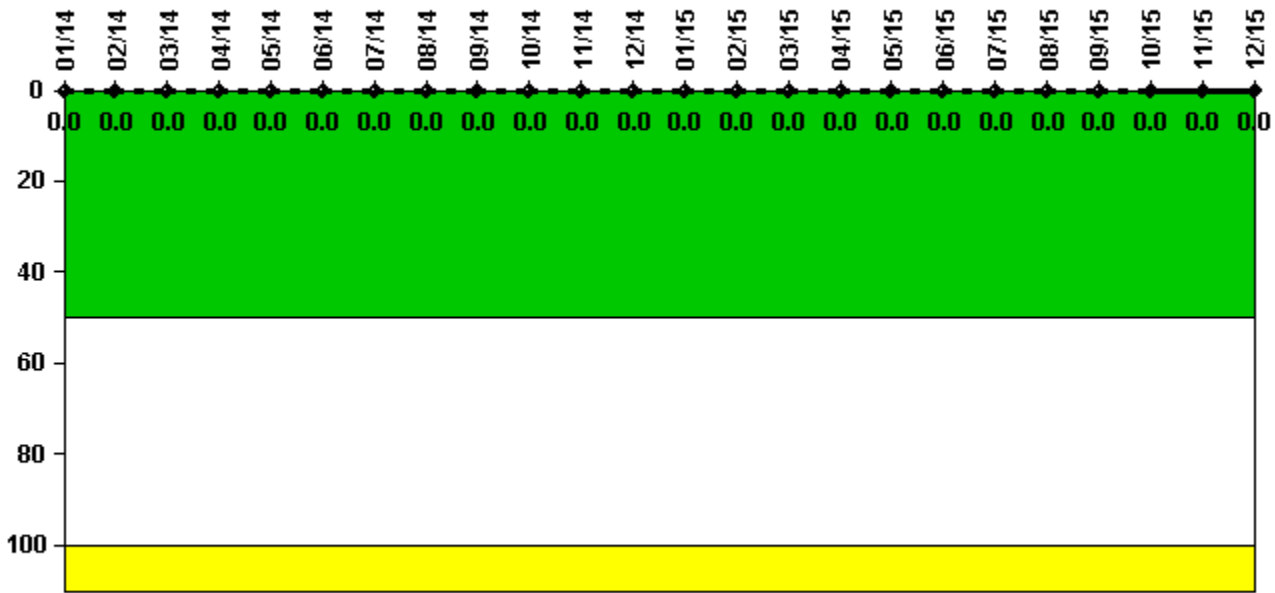
Reactor Coolant System Activity	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum activity	0.007360	N/A	0.002890	0.002970	0.003430	0.003510	0.003460	0.004060	0.004240	0.004550	0.004540	0.004820
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.7	N/A	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.5	0.5

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	0.005160	0.005170	0.004910	0.004100	0.004450	0.004110	0.005340	0.005930	0.004120	0.001920	0.002100	0.002710
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	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.4	0.2	0.2	0.3

Licensee Comments:

3/14: Refueling outage for Feb 2014; no sampling per INPO 04-004.

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

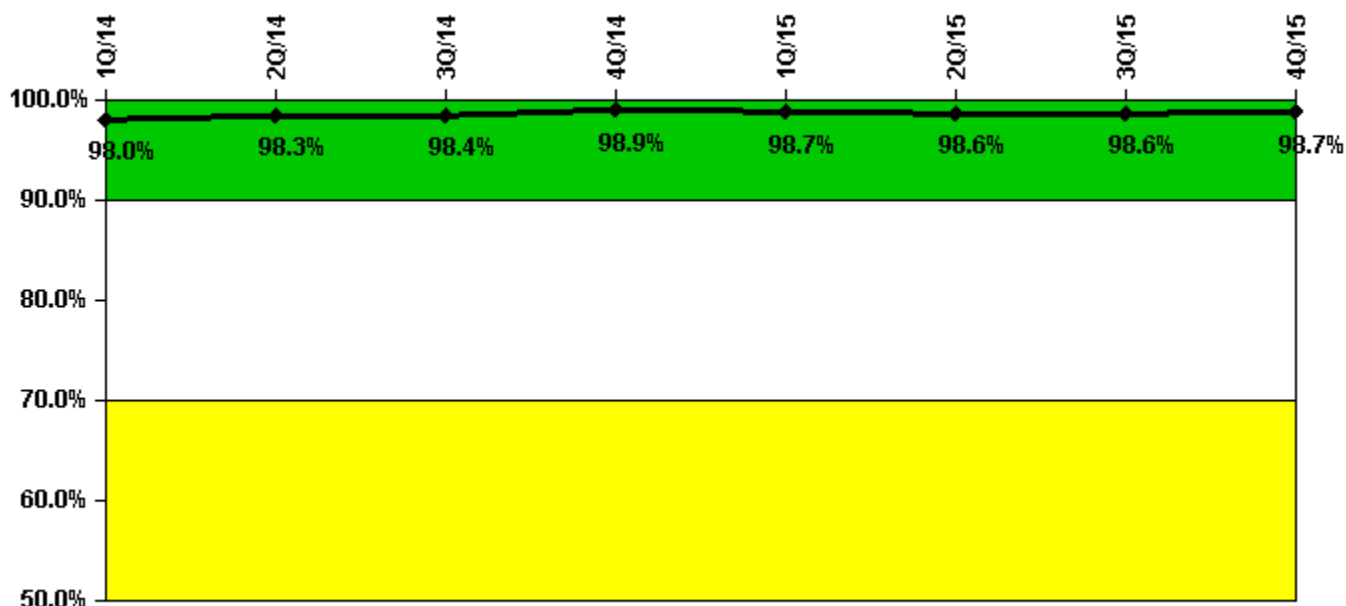
Notes

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	0.001	0	0	0	0	0	0.001	0.001	0.001	0.003	0.003	0.001
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	0	0	0	0	0	0	0	0	0	0	0

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	0.001	0.001	0.001	0.001	0.001	0	0	0	0	0.001	0.001	0.001
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	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

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	32.0	66.0	19.0	30.0	80.0	57.0	98.0	66.0
Total opportunities	32.0	67.0	22.0	30.0	81.0	58.0	98.0	66.0
Indicator value	98.0%	98.3%	98.4%	98.9%	98.7%	98.6%	98.6%	98.7%

Licensee Comments: none

ERO Drill Participation



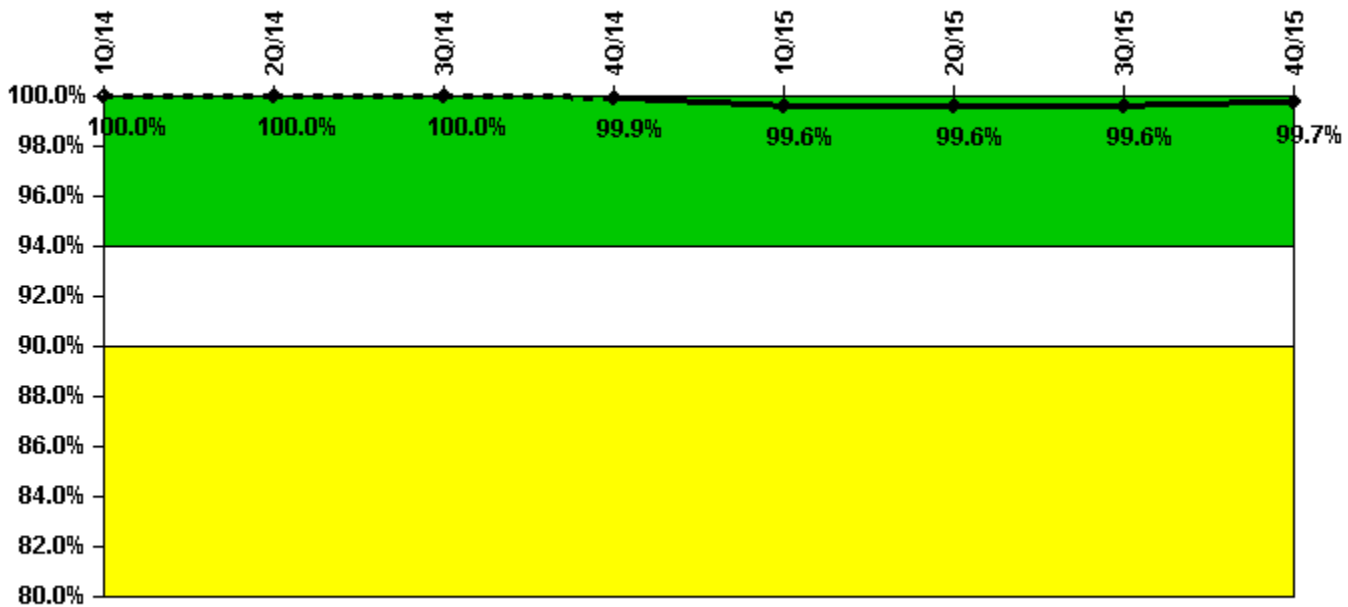
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Participating Key personnel	70.0	68.0	62.0	69.0	68.0	69.0	67.0	68.0
Total Key personnel	70.0	68.0	62.0	69.0	68.0	69.0	67.0	68.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



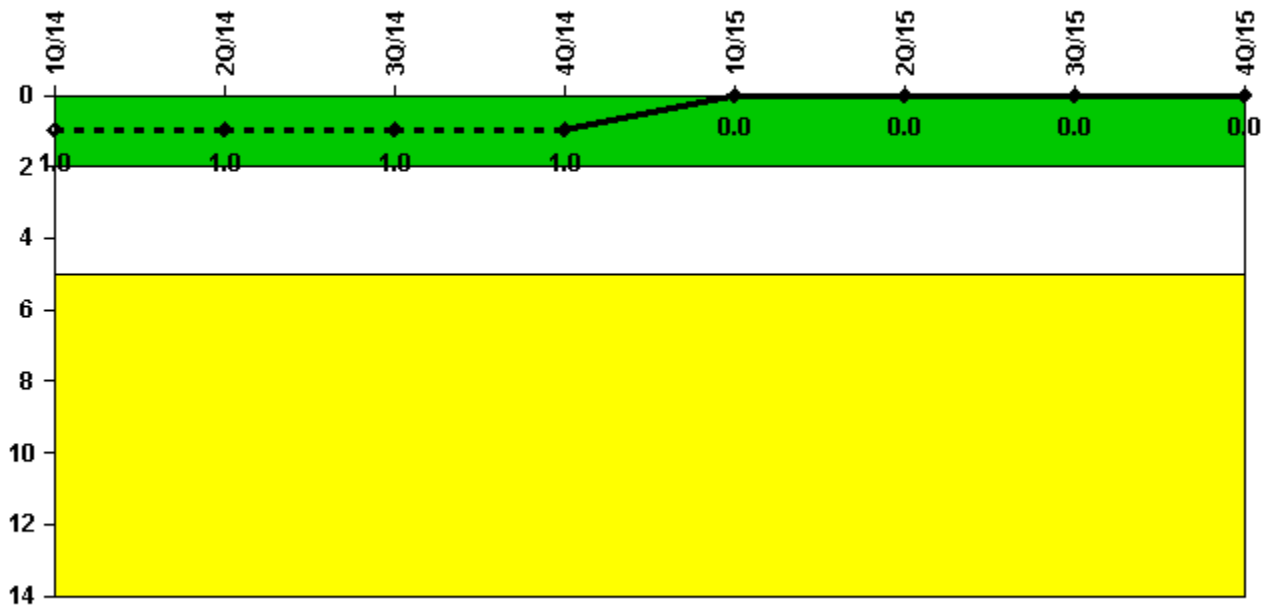
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful siren-tests	183	183	183	182	181	183	183	183
Total sirens-tests	183	183	183	183	183	183	183	183
Indicator value	100.0%	100.0%	100.0%	99.9%	99.6%	99.6%	99.6%	99.7%

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	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
Indicator value	1	1	1	1	0	0	0	0

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