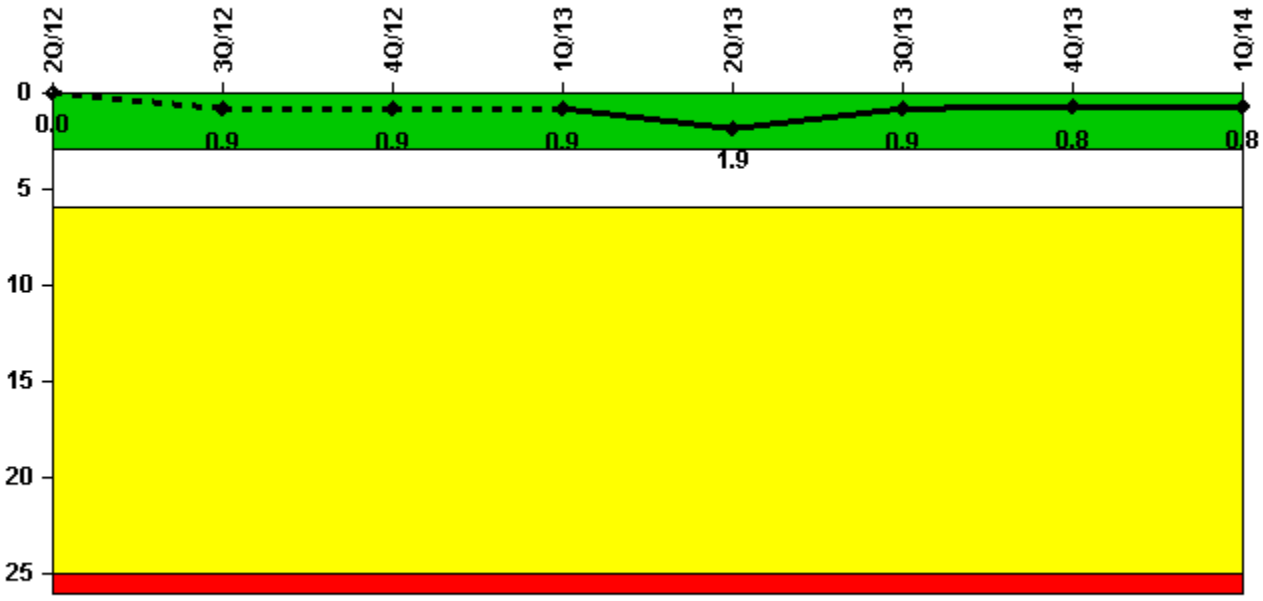
Watts Bar 1

1Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: A modification was completed on 12/4/13 that added a cooling water monitored MOV in the Residual Heat Removal System boundary. The MSPI basis document R6 was approved on 4/15/14 to account for this impact. The PRA model was revised 2/7/14 which included this new component. The valve and PRA information has been added to INPO CDE database effective 1/1/14 so this quarter report includes this component.

Unplanned Scrams per 7000 Critical Hrs

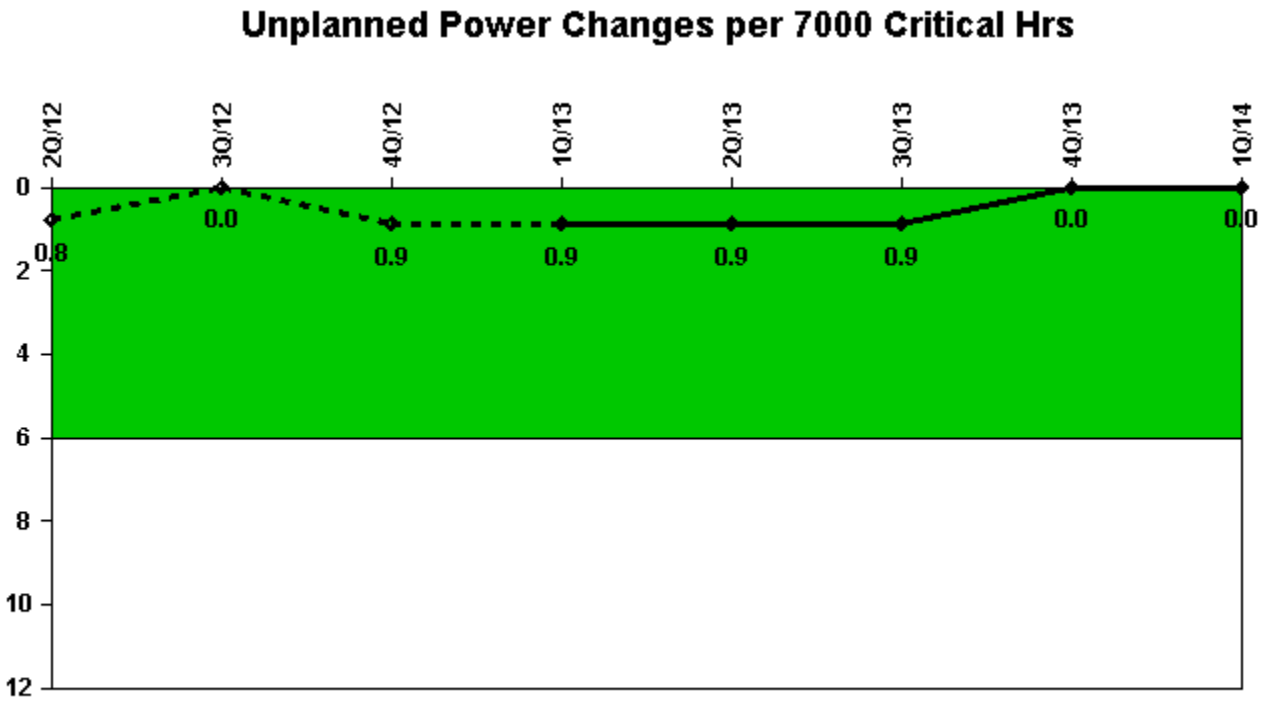


Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Unplanned scrams	0	1.0	0	0	1.0	0	0	0
Critical hours	2184.0	1667.4	1559.8	2159.0	2144.0	2208.0	2209.0	1967.0
Indicator value	**0**	**0.9**	**0.9**	**0.9**	**1.9**	**0.9**	**0.8**	**0.8**

Licensee Comments: none



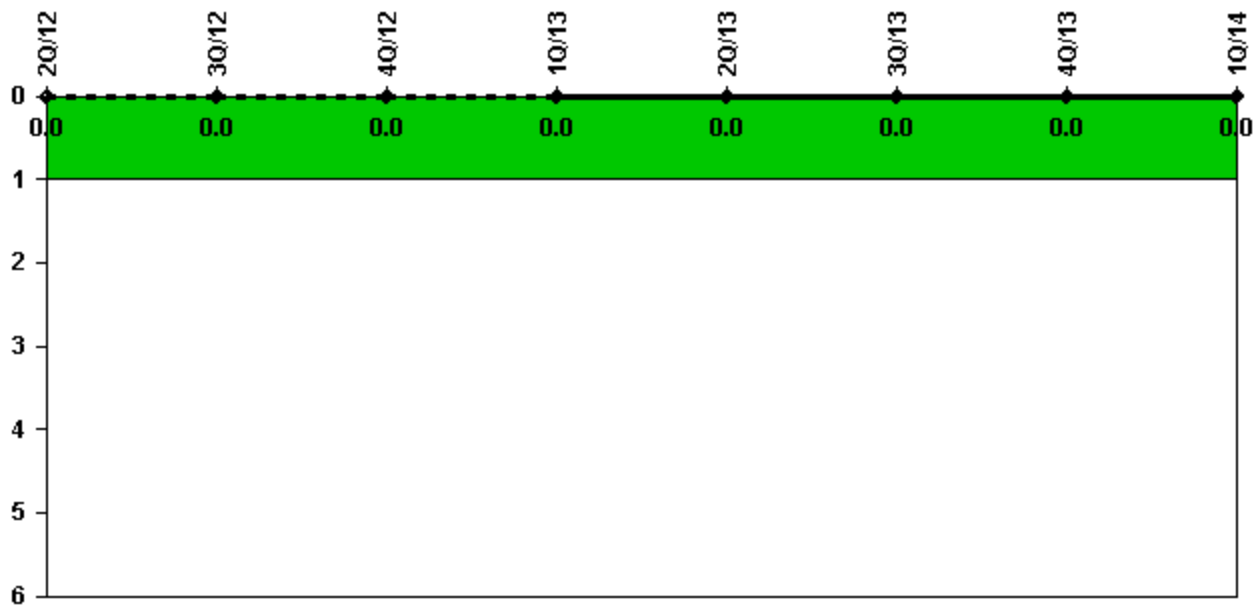
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	2184.0	1667.4	1559.8	2159.0	2144.0	2208.0	2209.0	1967.0
Indicator value	**0.8**	**0**	**0.9**	**0.9**	**0.9**	**0.9**	**0**	**0**

Licensee Comments: none

Unplanned Scrams with Complications



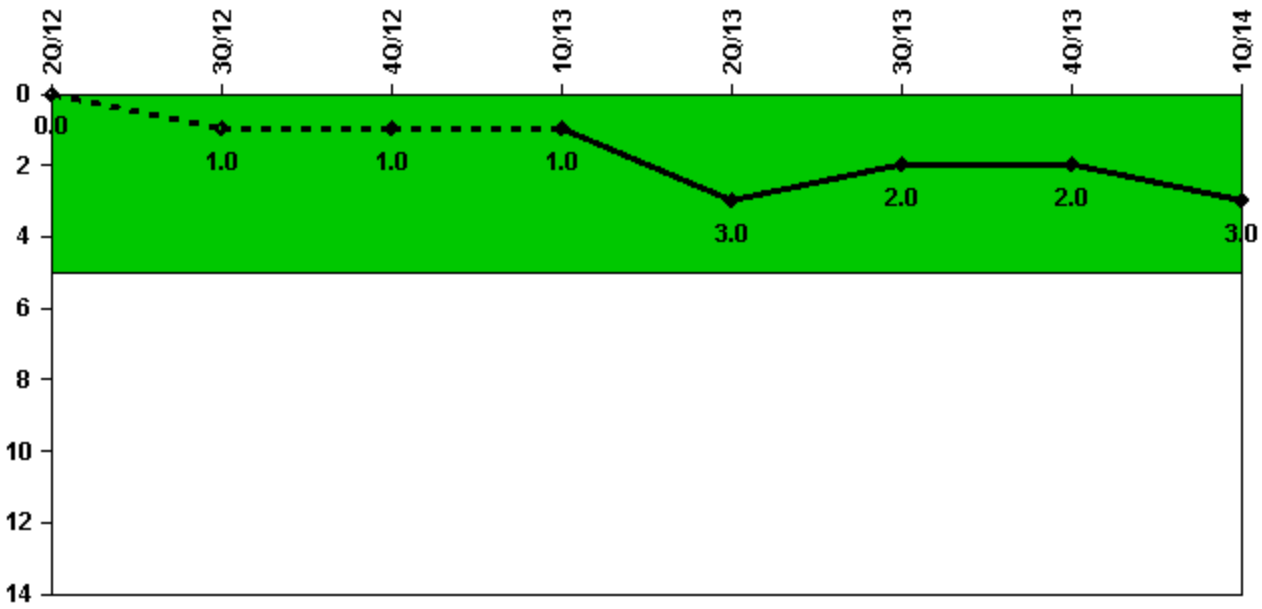
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
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

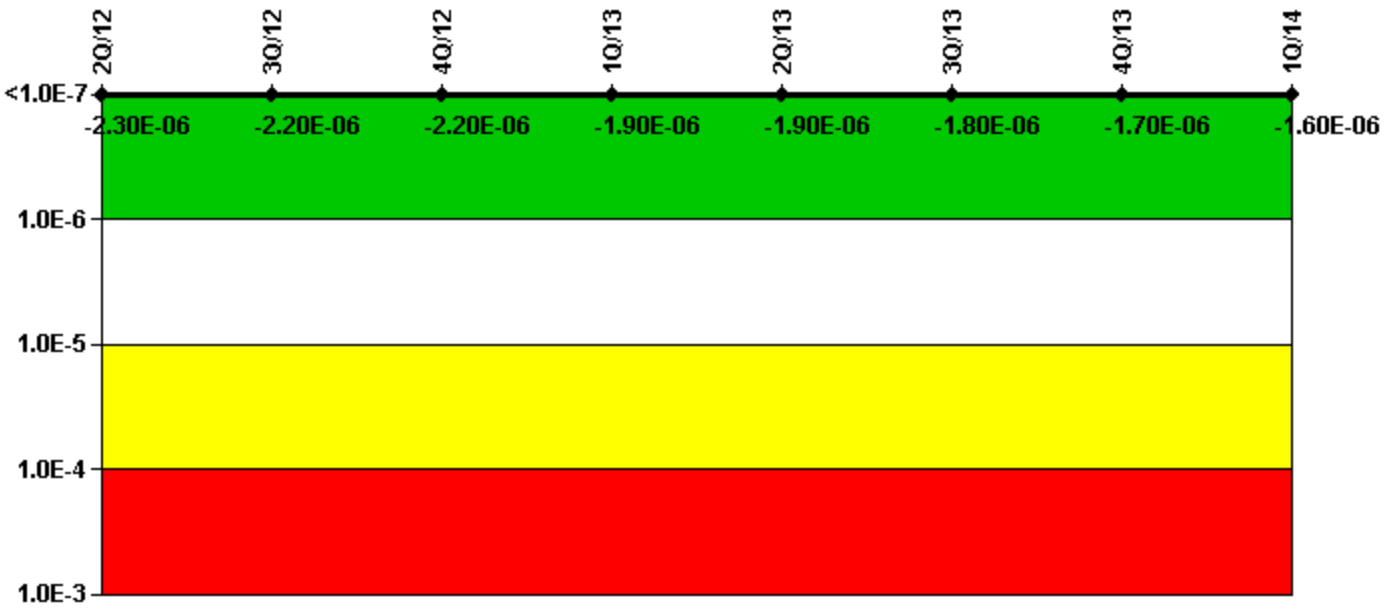
Notes

Safety System Functional Failures (PWR)	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Safety System Functional Failures	0	1	0	0	2	0	0	1
Indicator value	**0**	**1**	**1**	**1**	**3**	**2**	**2**	**3**

Licensee Comments:

3Q/12: LER 2012-002 (B) Remove residual heat If the probable maximum flood level had occurred while raw water was required for shutdown cooling then WBNs ability to remove residual heat would have been lost; therefore, this is a reported as a safety system functional failure.

Mitigating Systems Performance Index, Emergency AC Power System



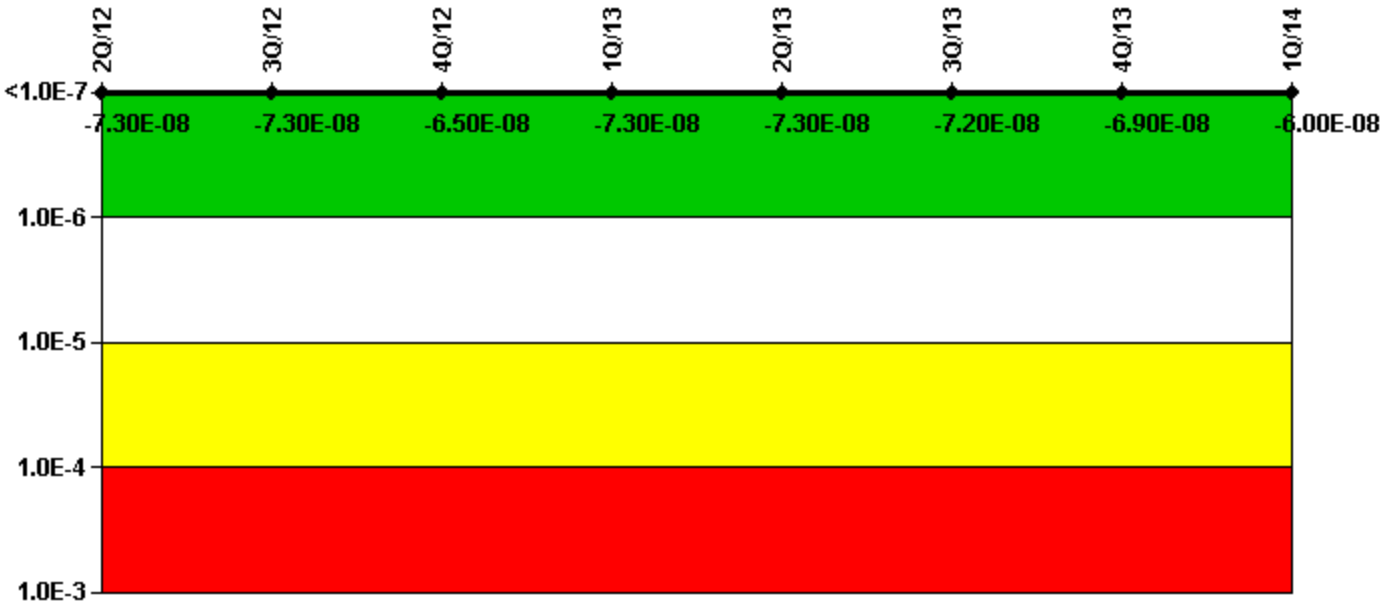
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (ΔCDF)	7.44E-07	7.16E-07	7.53E-07	1.05E-06	1.00E-06	1.00E-06	1.08E-06	1.22E-06
URI (ΔCDF)	-3.03E-06	-2.94E-06	-2.93E-06	-2.91E-06	-2.88E-06	-2.85E-06	-2.82E-06	-2.79E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-2.30E-06**	**-2.20E-06**	**-2.20E-06**	**-1.90E-06**	**-1.90E-06**	**-1.80E-06**	**-1.70E-06**	**-1.60E-06**

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



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

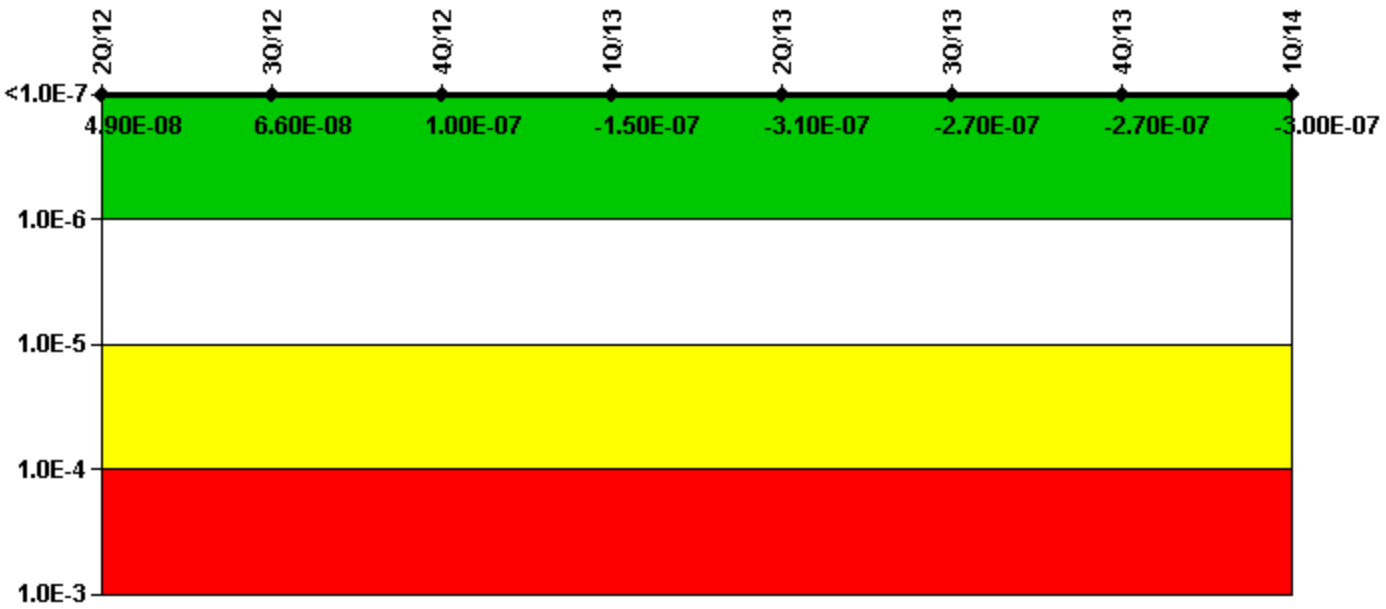
Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (ΔCDF)	-5.87E-08	-5.85E-08	-5.03E-08	-5.81E-08	-5.79E-08	-5.76E-08	-5.39E-08	-4.46E-08
URI (ΔCDF)	-1.42E-08	-1.43E-08	-1.45E-08	-1.46E-08	-1.48E-08	-1.49E-08	-1.50E-08	-1.50E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-7.30E-08**	**-7.30E-08**	**-6.50E-08**	**-7.30E-08**	**-7.30E-08**	**-7.20E-08**	**-6.90E-08**	**-6.00E-08**

Licensee Comments:

1Q/14: Changed PRA Parameter(s). PRA parameter was changed to support INPO trobleshooting. The PRA values was changed and returned to orginal value. No affect on indicator.

Mitigating Systems Performance Index, Heat Removal System



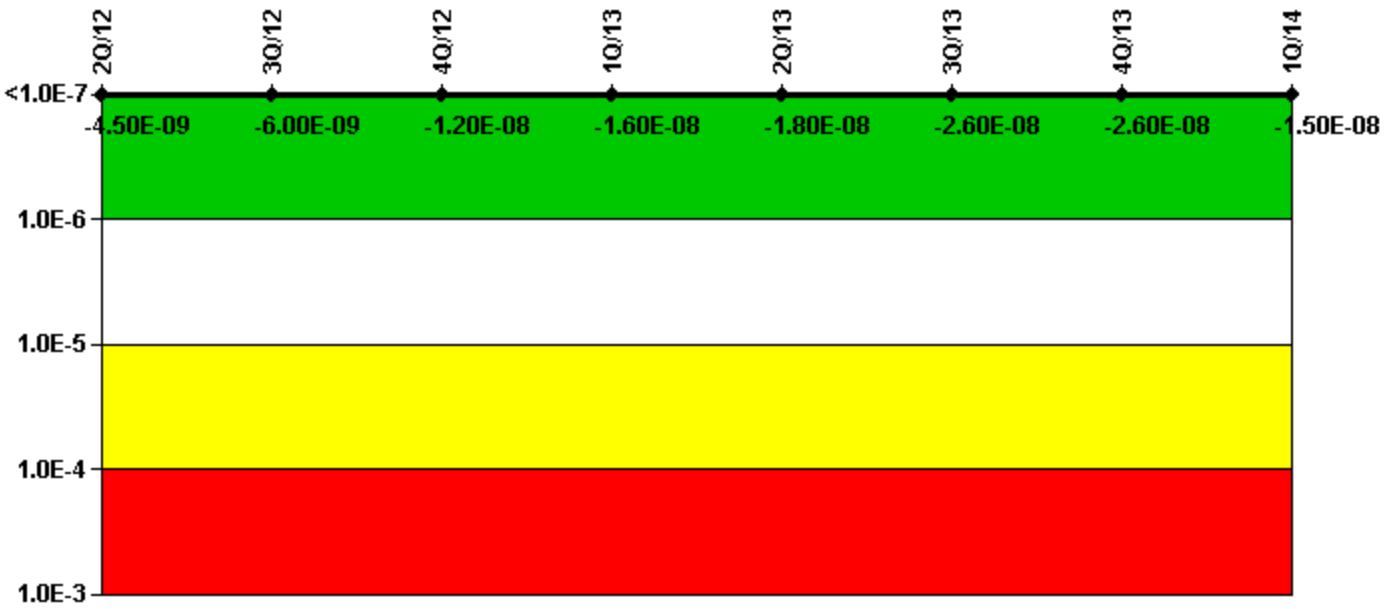
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (ΔCDF)	4.27E-07	4.48E-07	4.85E-07	2.31E-07	2.31E-07	2.66E-07	2.66E-07	2.36E-07
URI (ΔCDF)	-3.78E-07	-3.82E-07	-3.82E-07	-3.82E-07	-5.46E-07	-5.40E-07	-5.40E-07	-5.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**4.90E-08**	**6.60E-08**	**1.00E-07**	**-1.50E-07**	**-3.10E-07**	**-2.70E-07**	**-2.70E-07**	**-3.00E-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

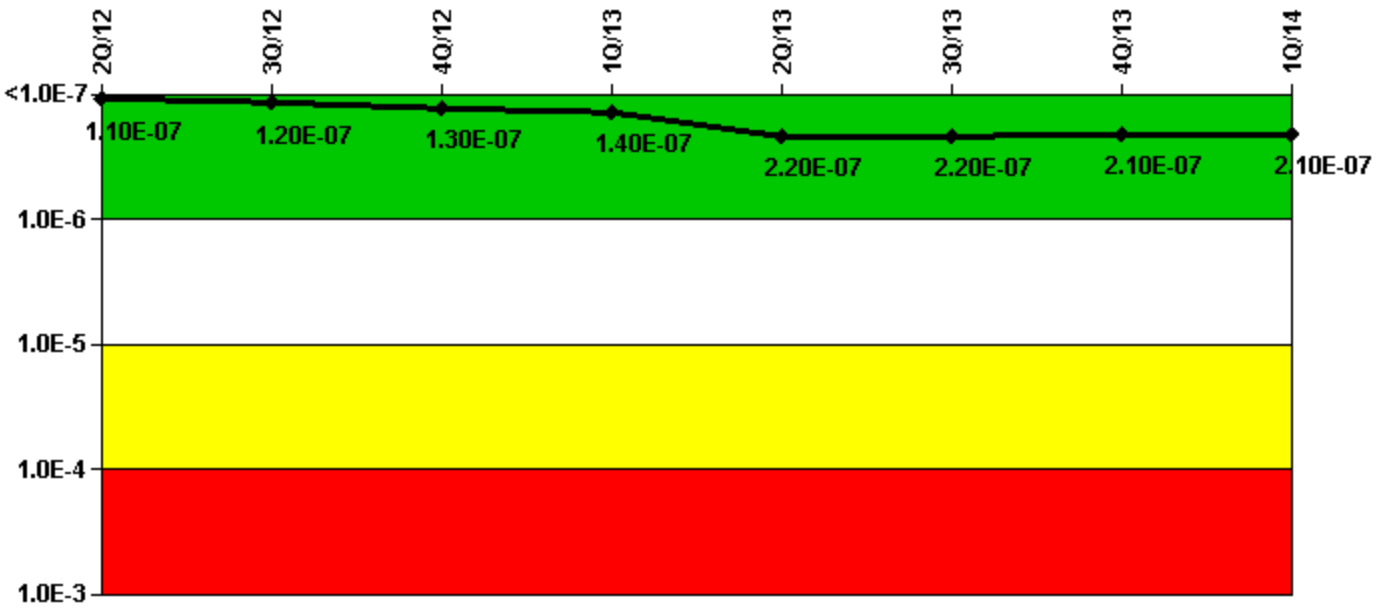
Mitigating Systems Performance Index, Residual Heat Removal System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (ΔCDF)	3.83E-08	3.72E-08	3.20E-08	2.75E-08	2.64E-08	1.90E-08	1.92E-08	3.19E-08
URI (ΔCDF)	-4.28E-08	-4.32E-08	-4.36E-08	-4.40E-08	-4.44E-08	-4.48E-08	-4.51E-08	-4.68E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-4.50E-09**	**-6.00E-09**	**-1.20E-08**	**-1.60E-08**	**-1.80E-08**	**-2.60E-08**	**-2.60E-08**	**-1.50E-08**

Licensee Comments:

1Q/14: A modification was completed on 12/4/13 that added a cooling water monitored MOV in the Residual Heat Removal System boundary. The MSPI basis document R6 was approved on 4/15/14 to account for this impact. The PRA model was revised 2/7/14 which included this new component. The valve and PRA information has been added to INPO CDE database effective 1/1/14 so this quarter report includes this component.

1Q/14: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



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

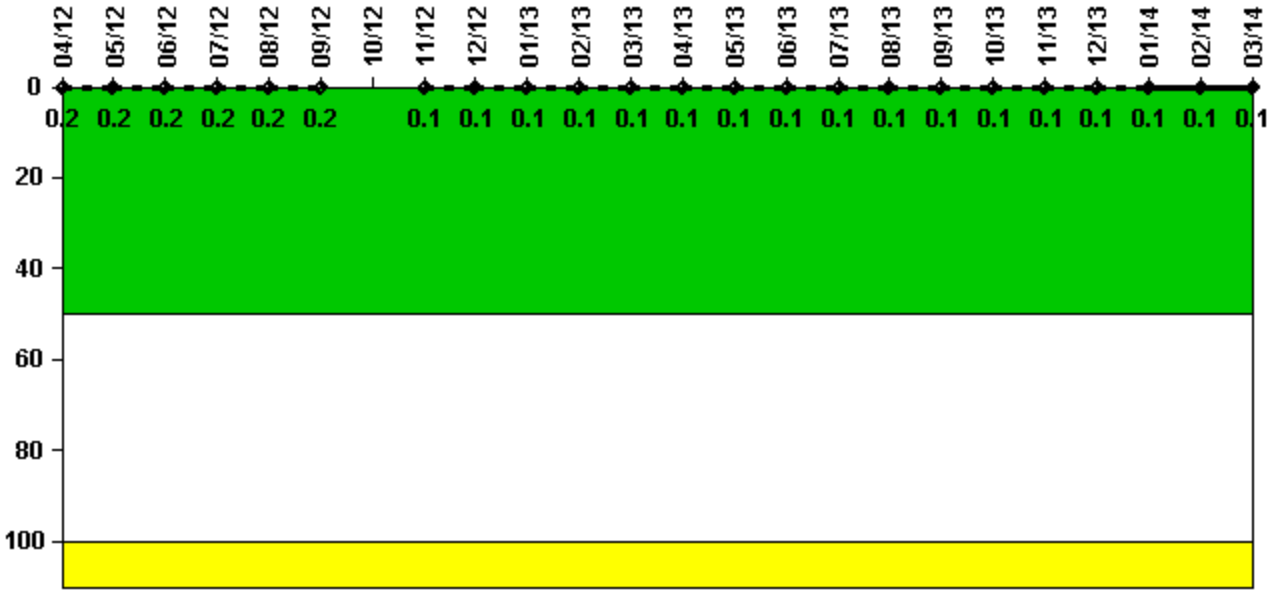
Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI (ΔCDF)	1.63E-07	1.65E-07	1.75E-07	1.92E-07	2.11E-07	2.10E-07	2.07E-07	2.09E-07
URI (ΔCDF)	-4.85E-08	-4.85E-08	-4.85E-08	-4.85E-08	6.04E-09	6.04E-09	-8.10E-10	-8.10E-10
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**1.10E-07**	**1.20E-07**	**1.30E-07**	**1.40E-07**	**2.20E-07**	**2.20E-07**	**2.10E-07**	**2.10E-07**

Licensee Comments:

3Q/12: Change July 2011 MSPI value for G-B ERCW pump from planned to unplanned hours of 52.33.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

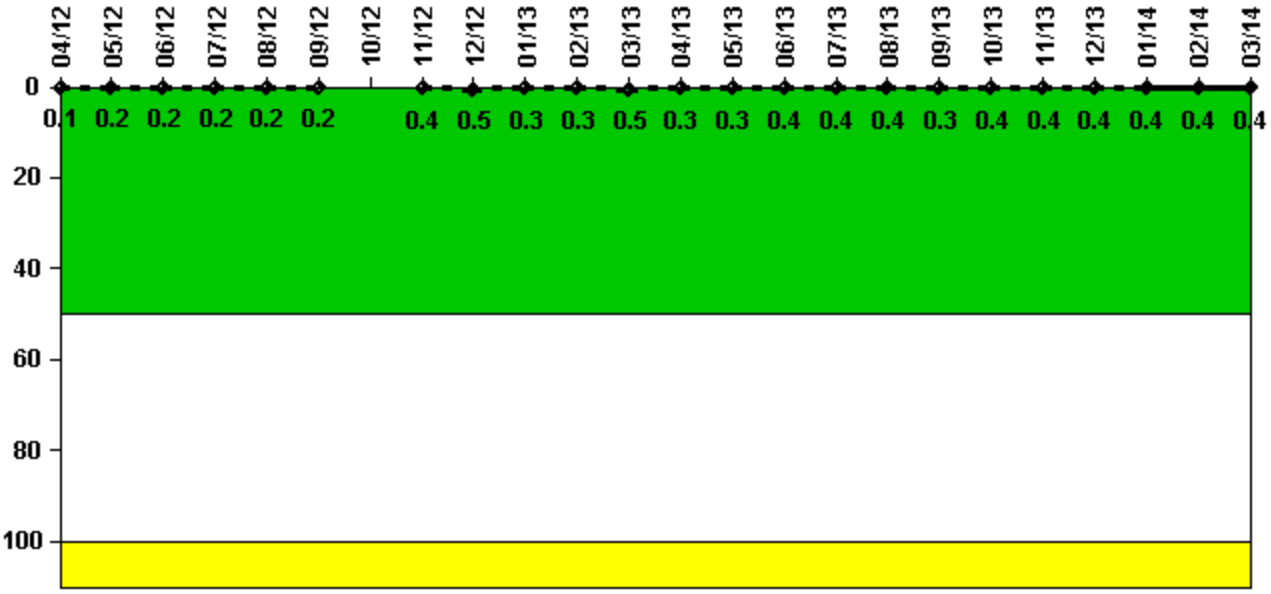
Notes

Reactor Coolant System Activity	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum activity	0.000434	0.000442	0.000450	0.000466	0.000480	0.000491	N/A	0.000149	0.000160	0.000169	0.000171	0.000179
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Indicator value	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**N/A**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

Reactor Coolant System Activity	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum activity	0.000196	0.000217	0.000211	0.000221	0.000222	0.000212	0.000221	0.000233	0.000242	0.000250	0.000244	0.000255
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Indicator value	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

Licensee Comments: none

Reactor Coolant System Leakage

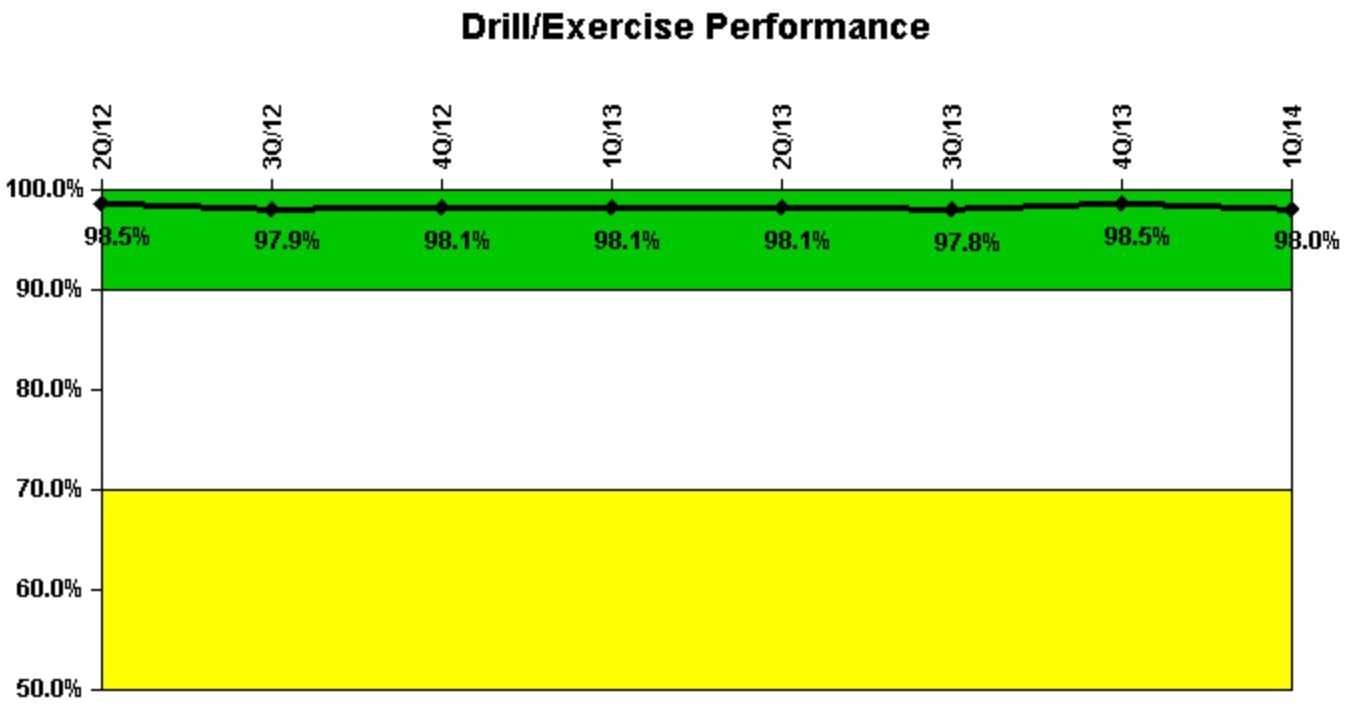


Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum leakage	0.010	0.020	0.020	0.020	0.020	0.020	N/A	0.040	0.050	0.030	0.030	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	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**N/A**	**0.4**	**0.5**	**0.3**	**0.3**	**0.5**
Reactor Coolant System Leakage	**4/13**	**5/13**	**6/13**	**7/13**	**8/13**	**9/13**	**10/13**	**11/13**	**12/13**	**1/14**	**2/14**	**3/14**
Maximum leakage	0.030	0.030	0.040	0.040	0.040	0.030	0.040	0.040	0.040	0.040	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	**0.3**	**0.3**	**0.4**	**0.4**	**0.4**	**0.3**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**

Licensee Comments: none

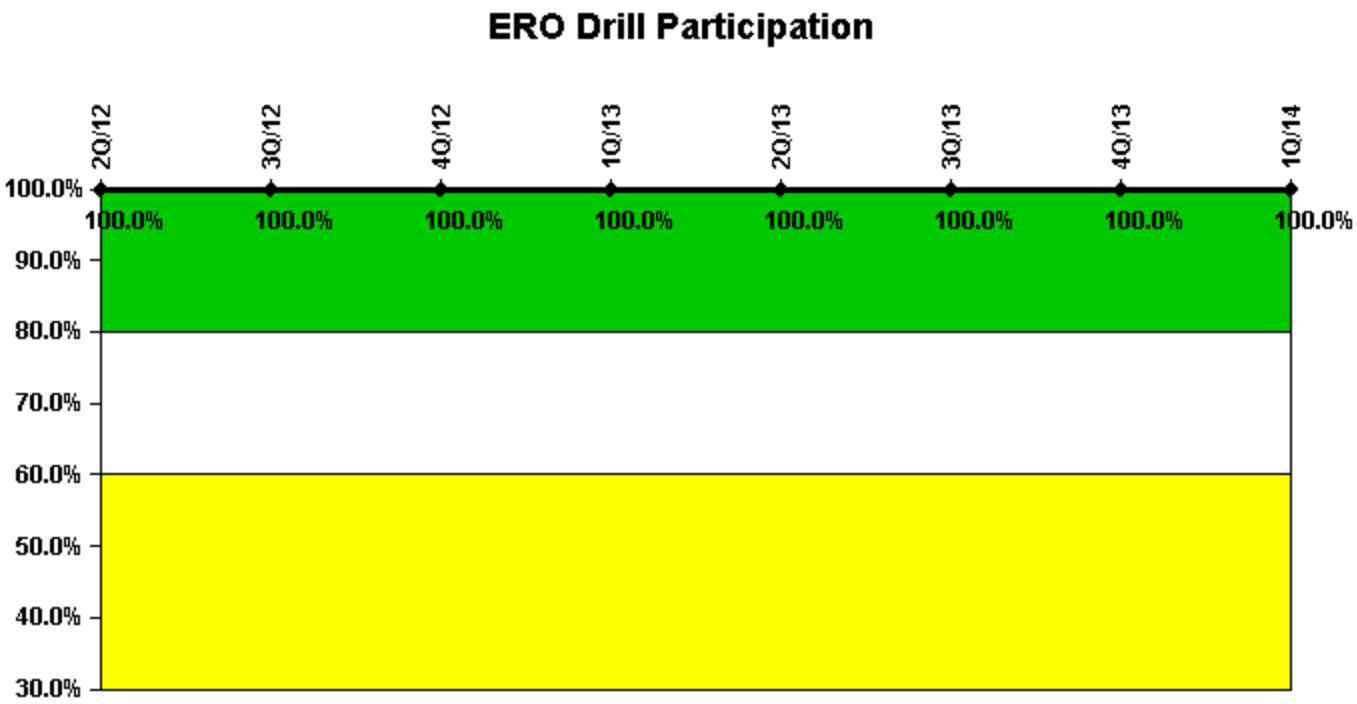


Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Successful opportunities	25.0	1.0	44.0	30.0	49.0	63.0	8.0	30.0
Total opportunities	26.0	2.0	44.0	30.0	50.0	64.0	8.0	31.0
Indicator value	**98.5%**	**97.9%**	**98.1%**	**98.1%**	**98.1%**	**97.8%**	**98.5%**	**98.0%**

Licensee Comments: none

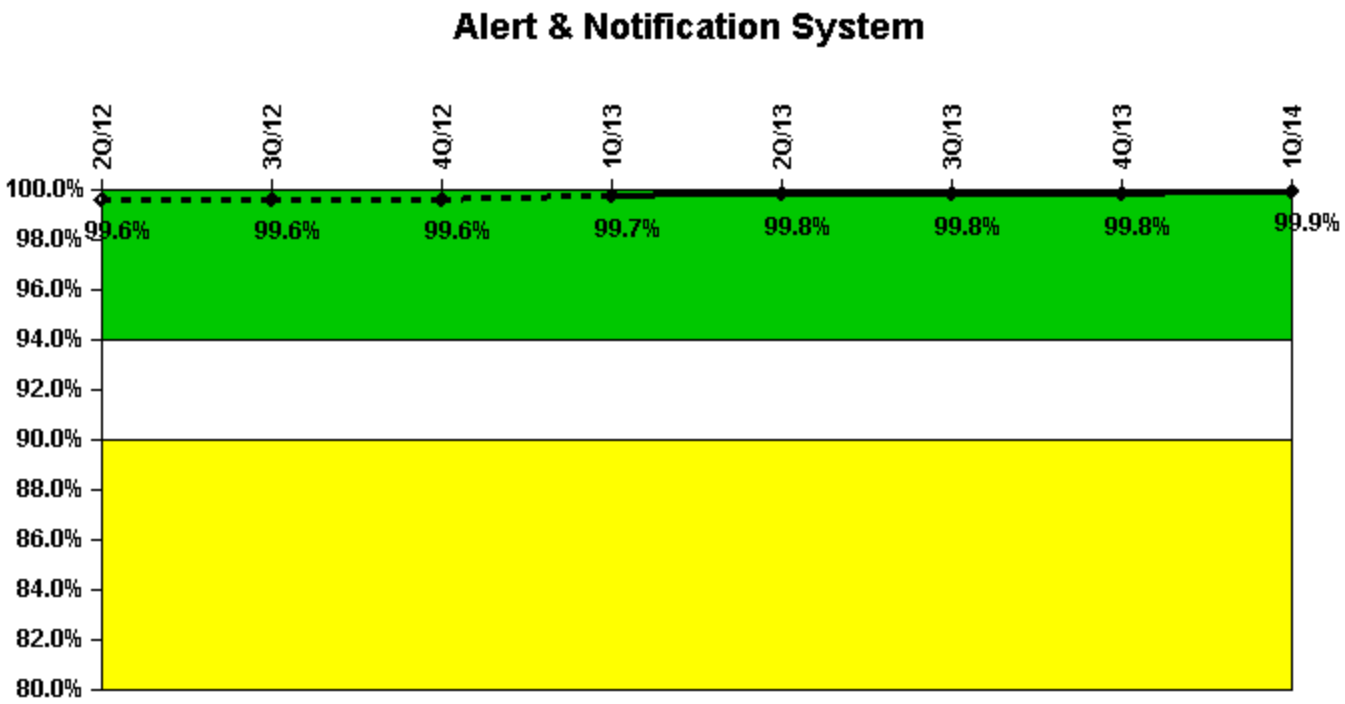


Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Participating Key personnel	71.0	69.0	72.0	75.0	73.0	72.0	73.0	72.0
Total Key personnel	71.0	69.0	72.0	75.0	73.0	72.0	73.0	72.0
Indicator value	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments: none



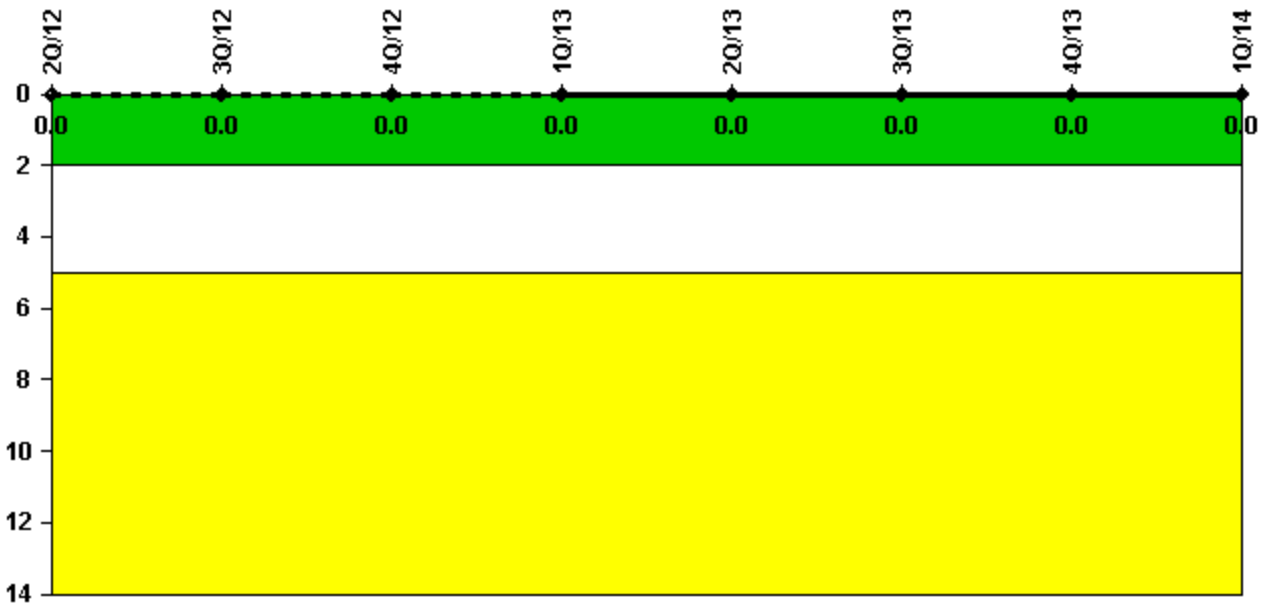
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Successful siren-tests	787	789	692	887	792	897	700	900
Total sirens-tests	790	792	693	890	792	899	700	900
Indicator value	**99.6%**	**99.6%**	**99.6%**	**99.7%**	**99.8%**	**99.8%**	**99.8%**	**99.9%**

Licensee Comments: none

Occupational Exposure Control Effectiveness

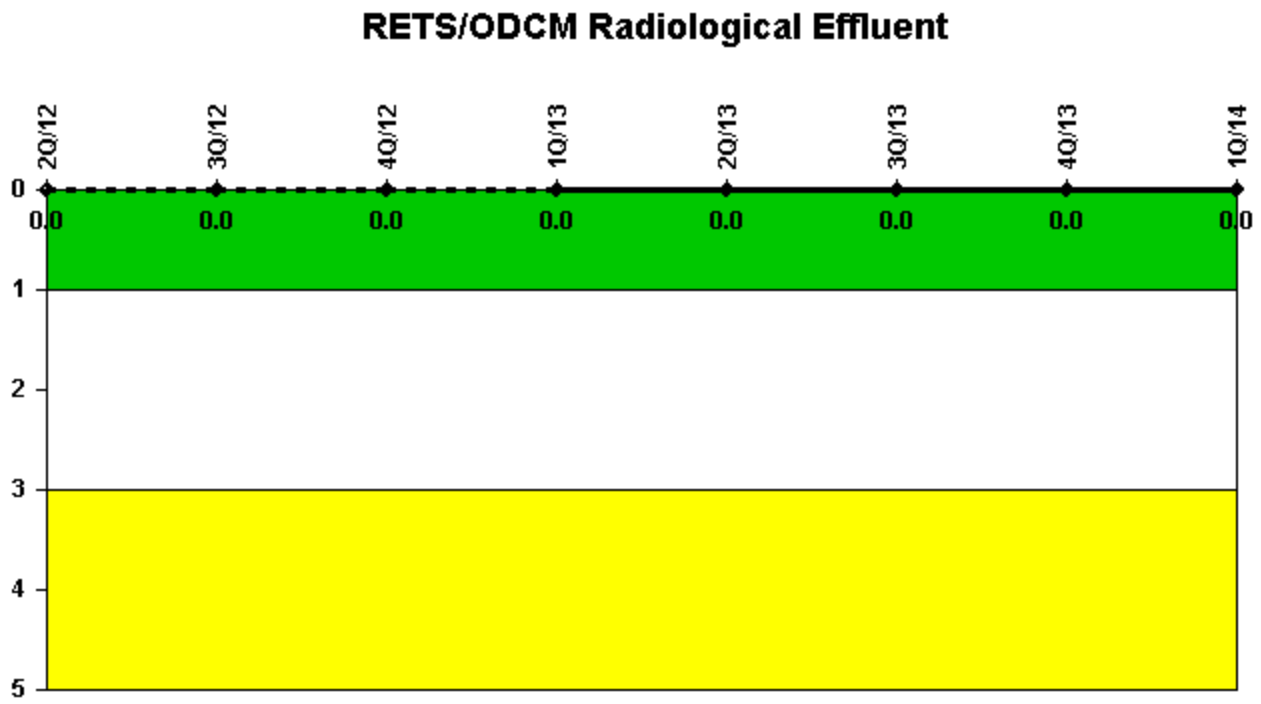


Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
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



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
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, 2014