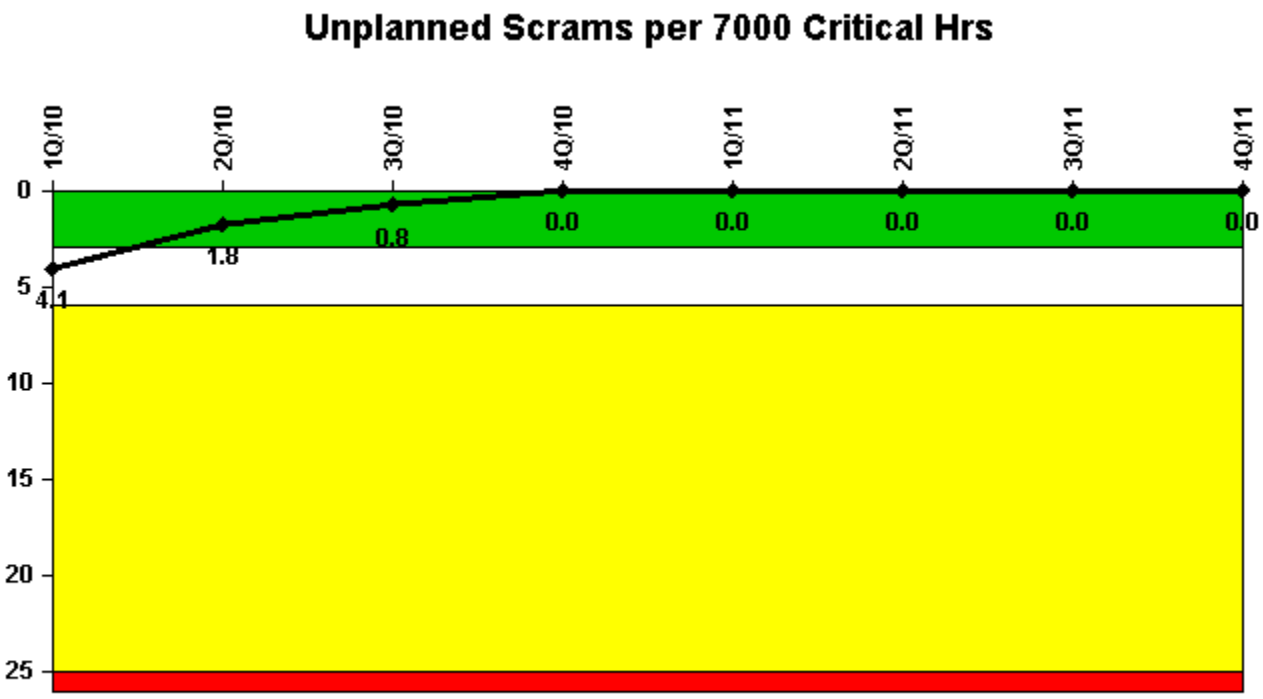
Columbia Generating Station

4Q/2011 Performance Indicators

Licensee's General Comments: none



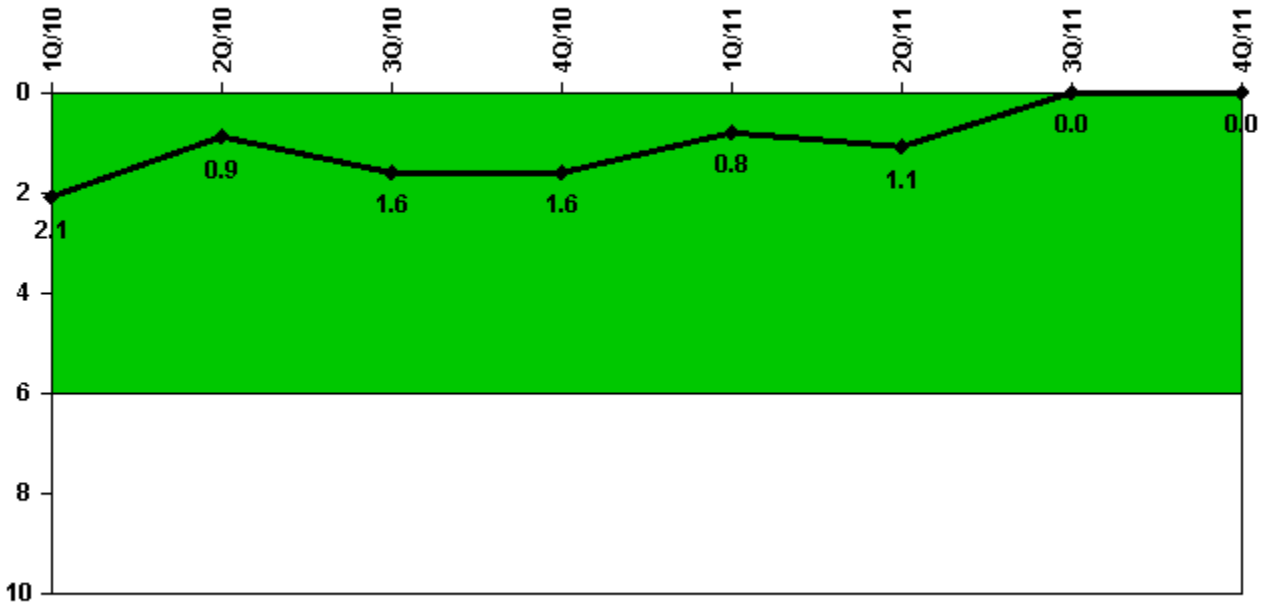
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2159.0	2184.0	2208.0	2209.0	2159.0	40.6	272.6	2209.0
Indicator value	**4.1**	**1.8**	**0.8**	**0**	**0**	**0**	**0**	**0**

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



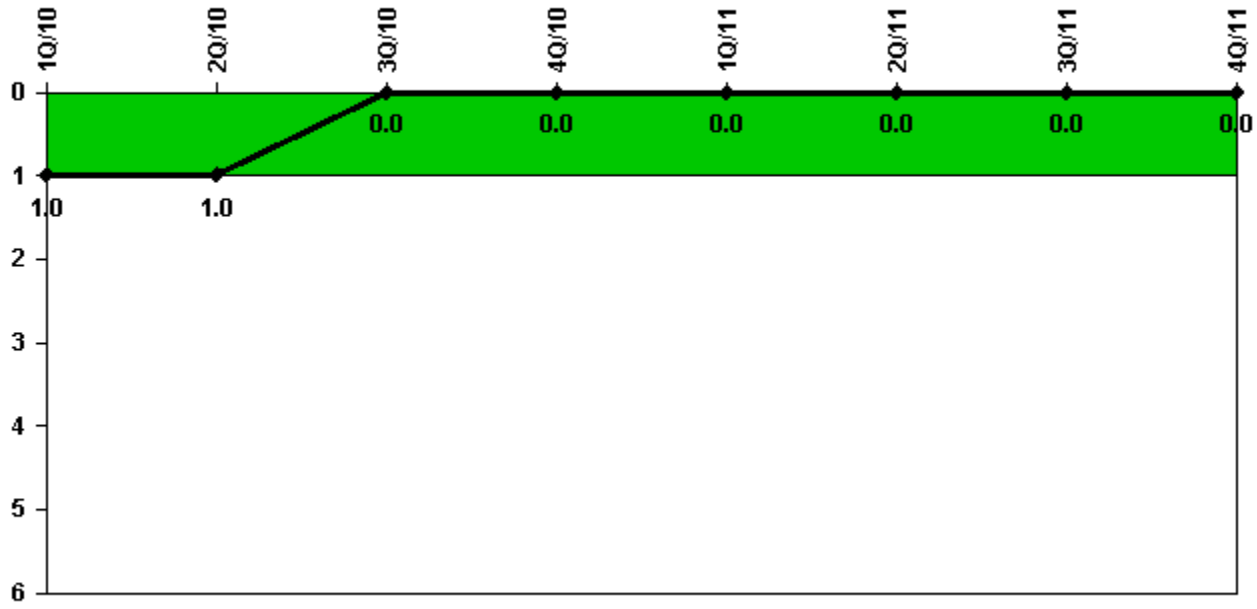
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Unplanned power changes	1.0	0	1.0	0	0	0	0	0
Critical hours	2159.0	2184.0	2208.0	2209.0	2159.0	40.6	272.6	2209.0
Indicator value	**2.1**	**0.9**	**1.6**	**1.6**	**0.8**	**1.1**	**0**	**0**

Licensee Comments: none

Unplanned Scrams with Complications



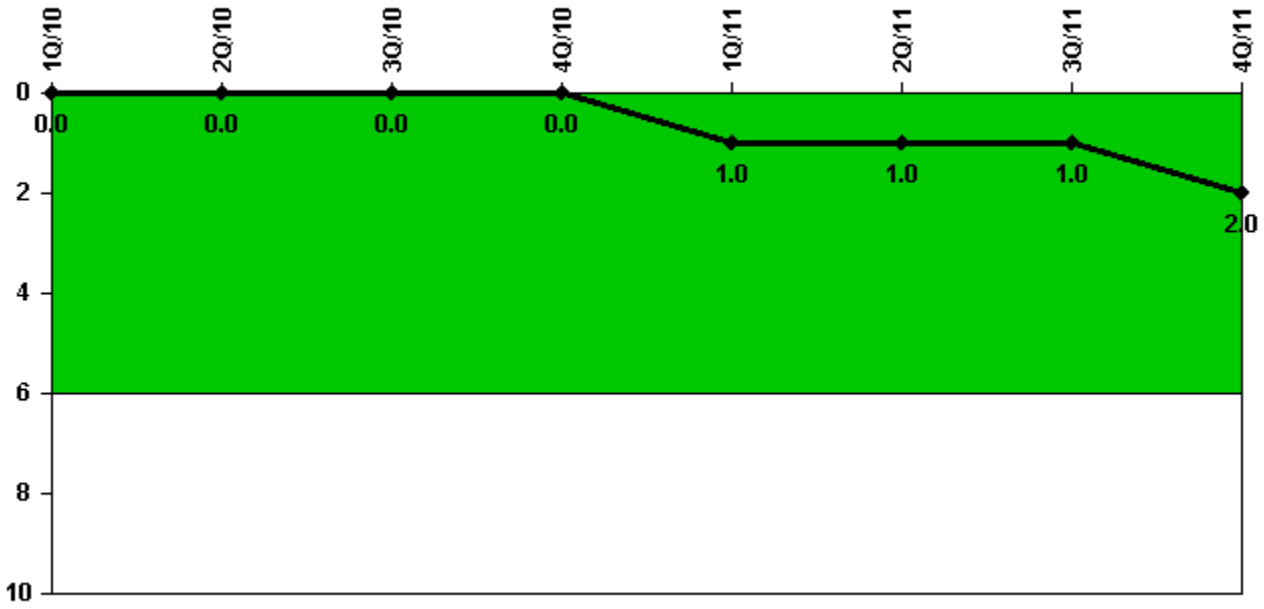
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	**1.0**	**1.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Licensee Comments: none

Safety System Functional Failures (BWR)



Thresholds: White > 6.0

Notes

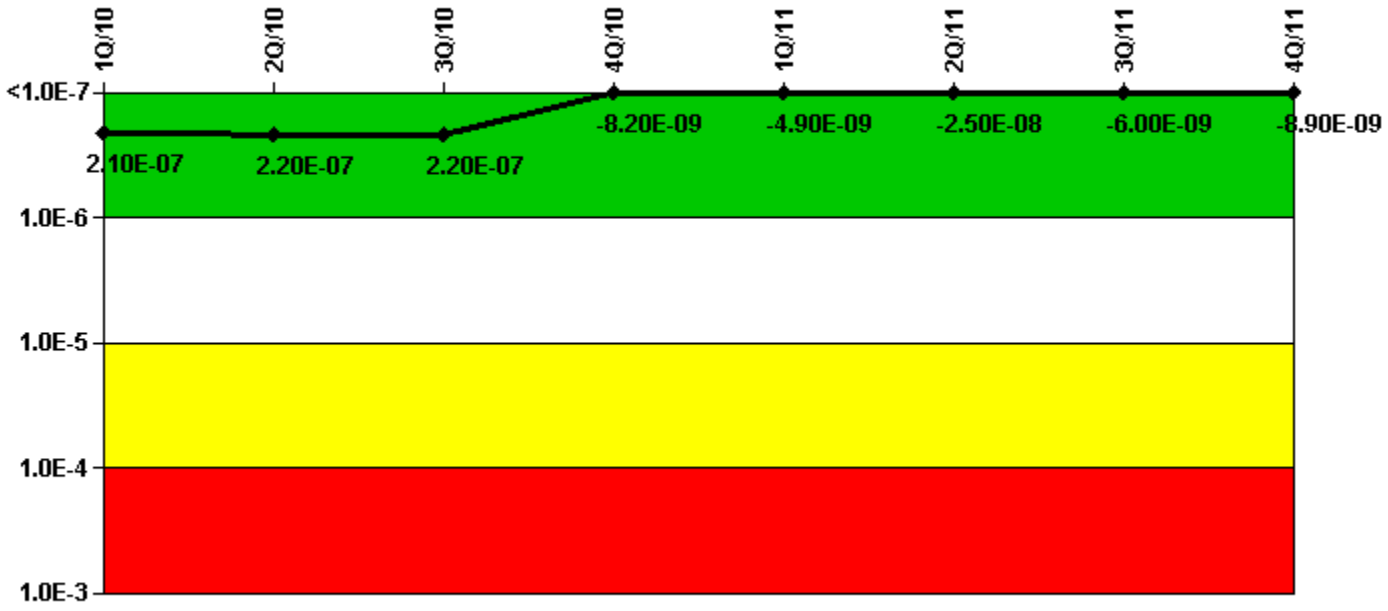
Safety System Functional Failures (BWR)	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Safety System Functional Failures	0	0	0	0	1	0	0	1
Indicator value	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**2**

Licensee Comments:

4Q/11: LER 2011-02-011 -- Loss of shutdown cooling due to logic card failure.

1Q/11: LER 2010-002 Reported February 2010 Low pressure core spray minimum flow valve failure to open due to premature fuse failure at the solder joint. This discrepant condition was discovered on December 20, 2010.

Mitigating Systems Performance Index, Emergency AC Power System



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

Notes

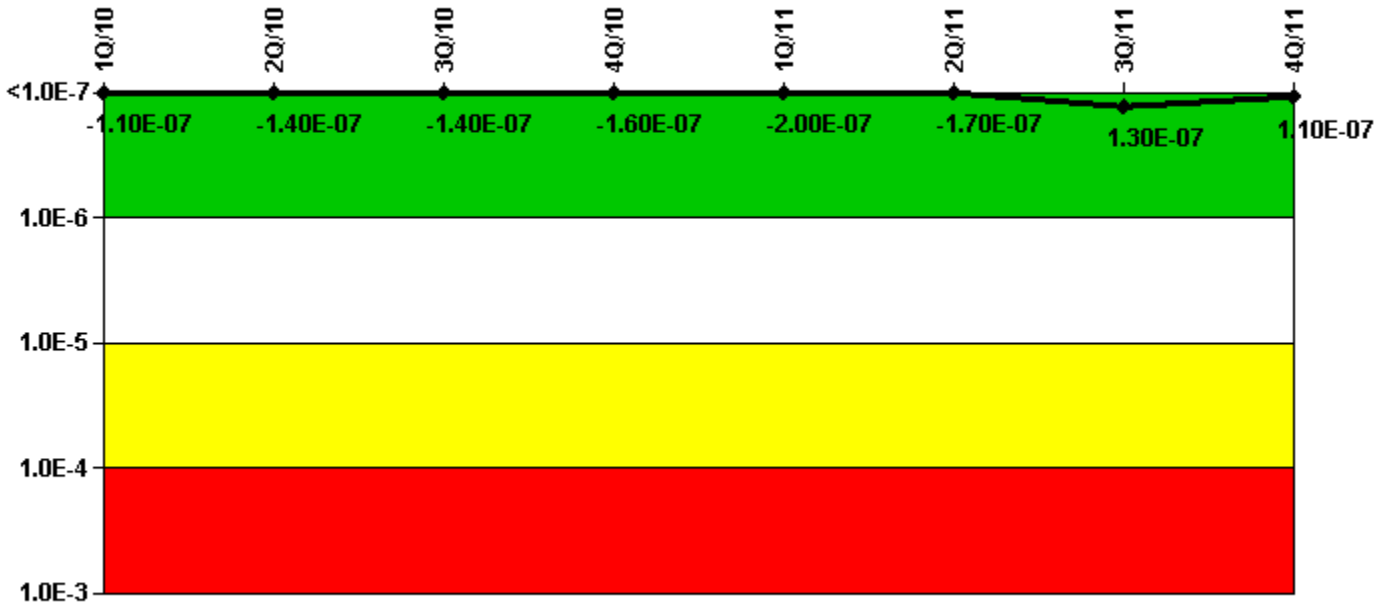
Mitigating Systems Performance Index, Emergency AC Power System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	7.67E-08	9.20E-08	8.90E-08	2.31E-08	2.96E-08	1.30E-08	7.61E-09	5.70E-09
URI (ΔCDF)	1.33E-07	1.30E-07	1.26E-07	-3.12E-08	-3.45E-08	-3.76E-08	-1.36E-08	-1.46E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**2.10E-07**	**2.20E-07**	**2.20E-07**	**-8.20E-09**	**-4.90E-09**	**-2.50E-08**	**-6.00E-09**	**-8.90E-09**

Licensee Comments:

4Q/11: FAQ 480, 484, 487 were incorporated into the MSPI Basis Document. Additional changes included demand/runtime estimates for the 3 DGs were updated. Removal of planned baseline temporary change for RCIC since 3 year period is over. The baseline planned unavailability was changed due to needed one-time maintenance activities on SWC. The baseline planned unavailability for DG3 was changed incorporating the 2yr/4yr PM to be permanent. Provisional coefficient changes included: RCIC, HPCS-DG, HPCS-SW, and DG1.

2Q/11: The plant specific PRA was updated. Many changes in the FV & UA and FV & UR coefficients for DG1, DG2, HPCS, RCIC, RHRA, RHRB,SWA, & SWB. However, there were no changes in the MSPI Systems ???Baseline Planned UA Coefficients for any of the MSPI Systems. There are numerous changes to the Table 2.1.1, CGS Initiating Event Frequencies. The PRA model used for this update is Rev. 7.1.

Mitigating Systems Performance Index, High Pressure Injection System



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

Notes

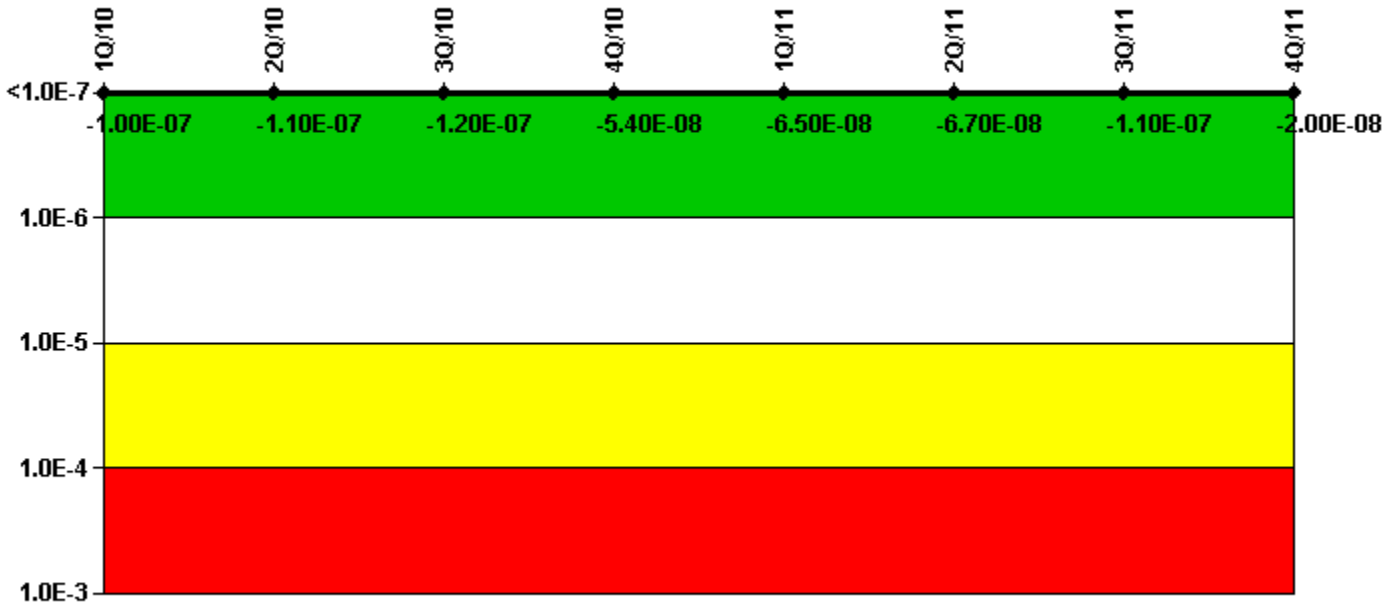
Mitigating Systems Performance Index, High Pressure Injection System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	1.26E-07	9.21E-08	8.87E-08	7.41E-08	3.55E-08	7.10E-08	4.77E-07	4.62E-07
URI (ΔCDF)	-2.33E-07	-2.32E-07	-2.34E-07	-2.35E-07	-2.36E-07	-2.38E-07	-3.45E-07	-3.47E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.10E-07**	**-1.40E-07**	**-1.40E-07**	**-1.60E-07**	**-2.00E-07**	**-1.70E-07**	**1.30E-07**	**1.10E-07**

Licensee Comments:

4Q/11: FAQ 480, 484, 487 were incorporated into the MSPI Basis Document. Additional changes included demand/runtime estimates for the 3 DGs were updated. Removal of planned baseline temporary change for RCIC since 3 year period is over. The baseline planned unavailability was changed due to needed one-time maintenance activities on SWC. The baseline planned unavailability for DG3 was changed incorporating the 2yr/4yr PM to be permanent. Provisional coefficient changes included: RCIC, HPCS-DG, HPCS-SW, and DG1.

2Q/11: The plant specific PRA was updated. Many changes in the FV & UA and FV & UR coefficients for DG1, DG2, HPCS, RCIC, RHRA, RHRB,SWA, & SWB. However, there were no changes in the MSPI Systems ???Baseline Planned UA Coefficients for any of the MSPI Systems. There are numerous changes to the Table 2.1.1, CGS Initiating Event Frequencies. The PRA model used for this update is Rev. 7.1.

Mitigating Systems Performance Index, Heat Removal System



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

Notes

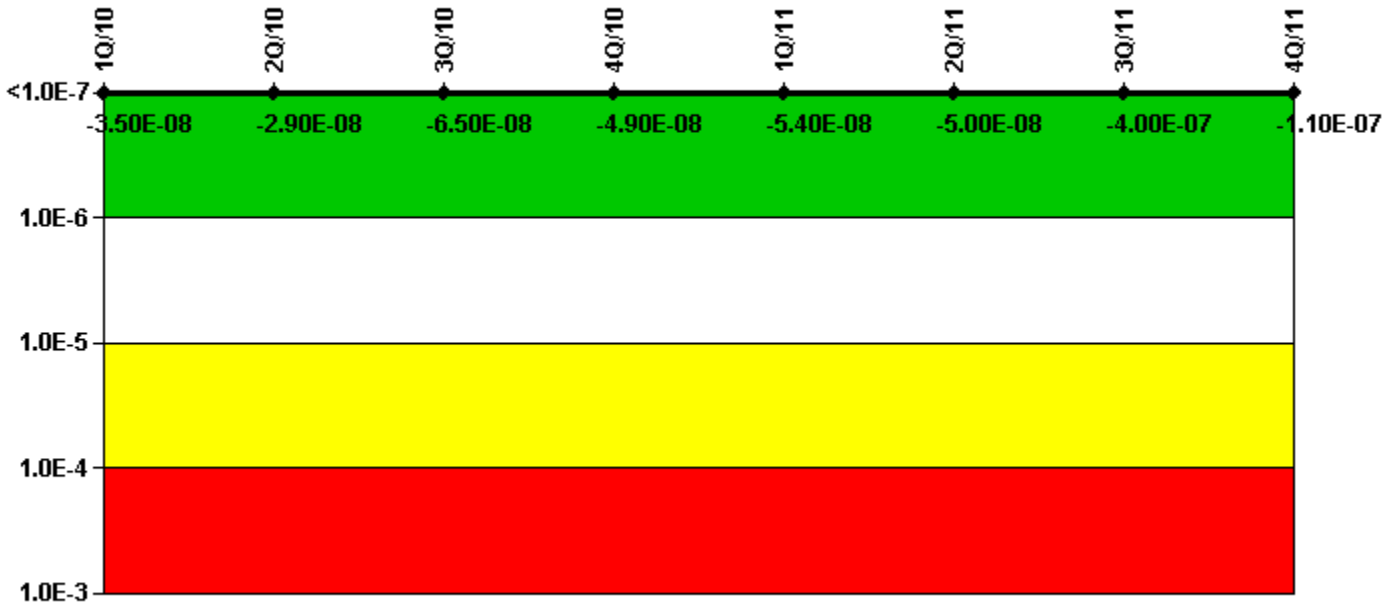
Mitigating Systems Performance Index, Heat Removal System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	1.61E-08	8.56E-09	-9.37E-10	6.27E-08	5.15E-08	5.02E-08	3.12E-08	1.18E-07
URI (ΔCDF)	-1.18E-07	-1.15E-07	-1.16E-07	-1.17E-07	-1.17E-07	-1.17E-07	-1.38E-07	-1.38E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.00E-07**	**-1.10E-07**	**-1.20E-07**	**-5.40E-08**	**-6.50E-08**	**-6.70E-08**	**-1.10E-07**	**-2.00E-08**

Licensee Comments:

4Q/11: FAQ 480, 484, 487 were incorporated into the MSPI Basis Document. Additional changes included demand/runtime estimates for the 3 DGs were updated. Removal of planned baseline temporary change for RCIC since 3 year period is over. The baseline planned unavailability was changed due to needed one-time maintenance activities on SWC. The baseline planned unavailability for DG3 was changed incorporating the 2yr/4yr PM to be permanent. Provisional coefficient changes included: RCIC, HPCS-DG, HPCS-SW, and DG1.

2Q/11: The plant specific PRA was updated. Many changes in the FV & UA and FV & UR coefficients for DG1, DG2, HPCS, RCIC, RHRA, RHRB,SWA, & SWB. However, there were no changes in the MSPI Systems ???Baseline Planned UA Coefficients for any of the MSPI Systems. There are numerous changes to the Table 2.1.1, CGS Initiating Event Frequencies. The PRA model used for this update is Rev. 7.1.

Mitigating Systems Performance Index, Residual Heat Removal System



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

Notes

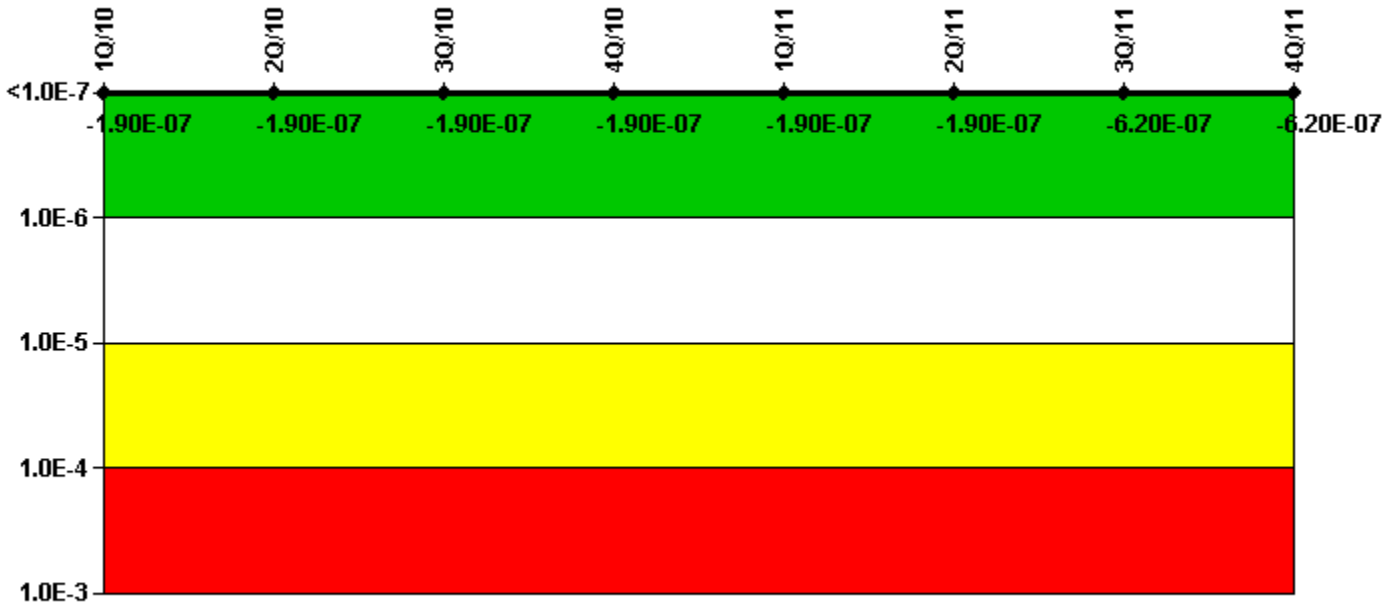
Mitigating Systems Performance Index, Residual Heat Removal System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	8.99E-10	6.30E-09	4.78E-09	2.13E-08	1.66E-08	2.02E-08	1.92E-08	8.82E-08
URI (ΔCDF)	-3.58E-08	-3.58E-08	-7.03E-08	-7.03E-08	-7.03E-08	-7.03E-08	-4.18E-07	-1.99E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.50E-08**	**-2.90E-08**	**-6.50E-08**	**-4.90E-08**	**-5.40E-08**	**-5.00E-08**	**-4.00E-07**	**-1.10E-07**

Licensee Comments:

4Q/11: FAQ 480, 484, 487 were incorporated into the MSPI Basis Document. Additional changes included demand/runtime estimates for the 3 DGs were updated. Removal of planned baseline temporary change for RCIC since 3 year period is over. The baseline planned unavailability was changed due to needed one-time maintenance activities on SWC. The baseline planned unavailability for DG3 was changed incorporating the 2yr/4yr PM to be permanent. Provisional coefficient changes included: RCIC, HPCS-DG, HPCS-SW, and DG1.

2Q/11: The plant specific PRA was updated. Many changes in the FV & UA and FV & UR coefficients for DG1, DG2, HPCS, RCIC, RHRA, RHRB,SWA, & SWB. However, there were no changes in the MSPI Systems ???Baseline Planned UA Coefficients for any of the MSPI Systems. There are numerous changes to the Table 2.1.1, CGS Initiating Event Frequencies. The PRA model used for this update is Rev. 7.1.

Mitigating Systems Performance Index, Cooling Water Systems



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

Notes

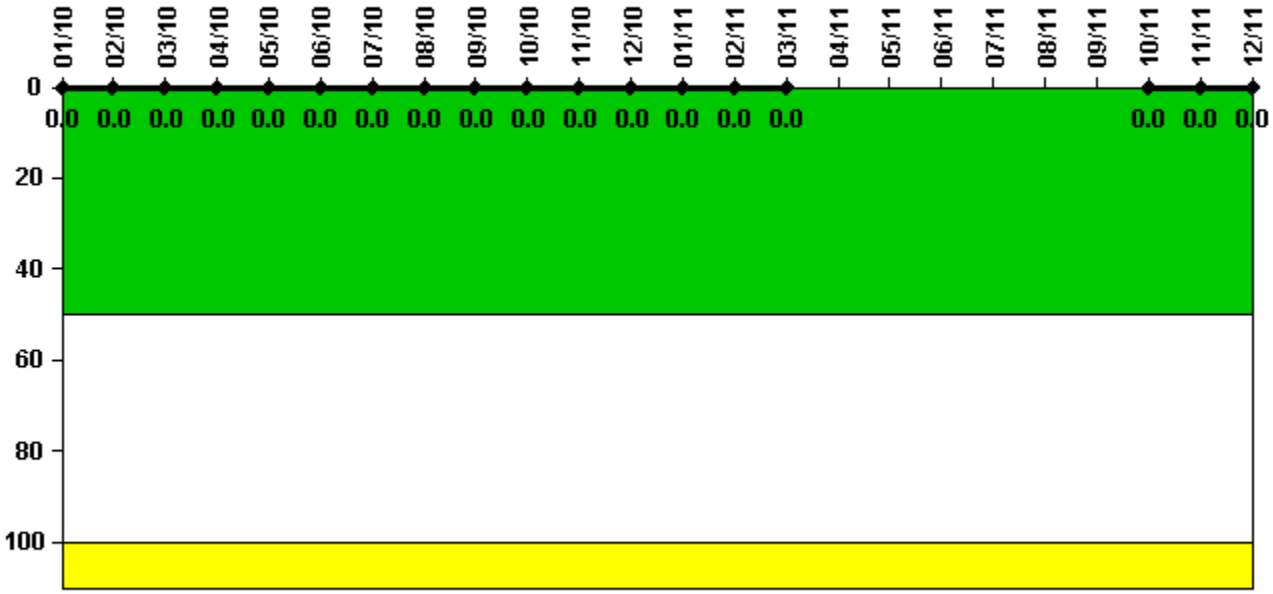
Mitigating Systems Performance Index, Cooling Water Systems	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI (ΔCDF)	-3.12E-08	-3.12E-08	-3.12E-08	-3.12E-08	-3.12E-08	-3.12E-08	-1.04E-07	-1.04E-07
URI (ΔCDF)	-1.63E-07	-1.63E-07	-1.63E-07	-1.63E-07	-1.63E-07	-1.63E-07	-5.19E-07	-5.19E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.90E-07**	**-1.90E-07**	**-1.90E-07**	**-1.90E-07**	**-1.90E-07**	**-1.90E-07**	**-6.20E-07**	**-6.20E-07**

Licensee Comments:

4Q/11: FAQ 480, 484, 487 were incorporated into the MSPI Basis Document. Additional changes included demand/runtime estimates for the 3 DGs were updated. Removal of planned baseline temporary change for RCIC since 3 year period is over. The baseline planned unavailability was changed due to needed one-time maintenance activities on SWC. The baseline planned unavailability for DG3 was changed incorporating the 2yr/4yr PM to be permanent. Provisiona coefficient changes included: RCIC, HPCS-DG, HPCS-SW, and DG1.

2Q/11: The plant specific PRA was updated. Many changes in the FV & UA and FV & UR coefficients for DG1, DG2, HPCS, RCIC, RHRA, RHRB,SWA, & SWB. However, there were no changes in the MSPI Systems ???Baseline Planned UA Coefficients for any of the MSPI Systems. There are numerous changes to the Table 2.1.1, CGS Initiating Event Frequencies. The PRA model used for this update is Rev. 7.1.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

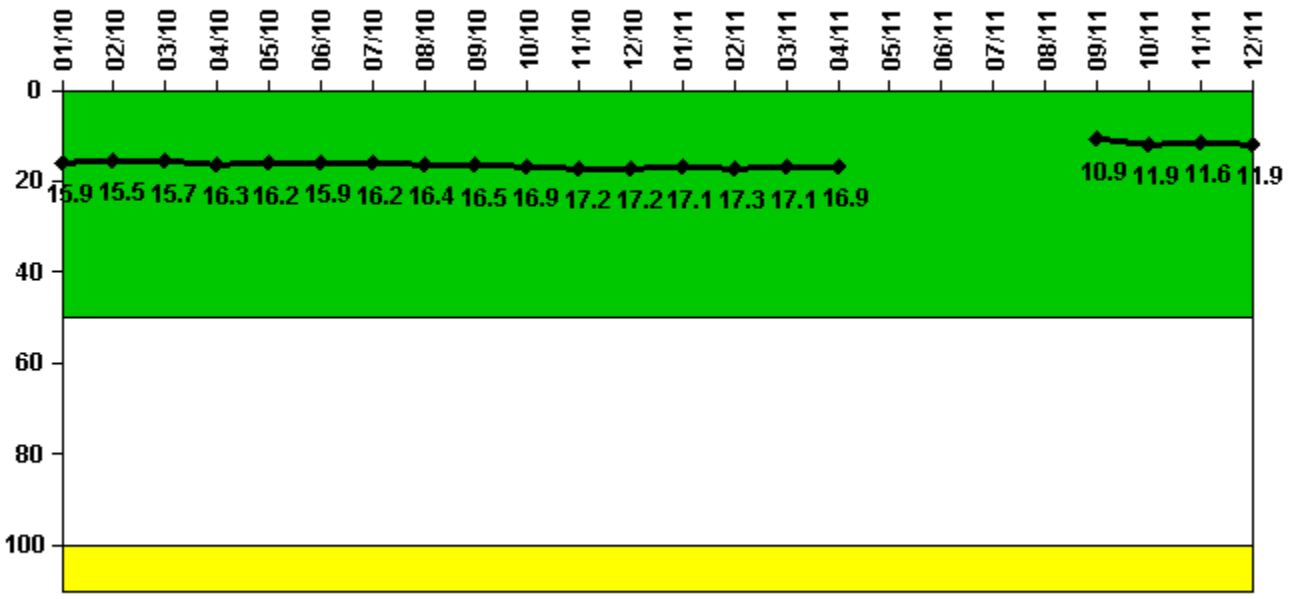
Notes

Reactor Coolant System Activity	**1/10**	**2/10**	**3/10**	**4/10**	**5/10**	**6/10**	**7/10**	**8/10**	**9/10**	**10/10**	**11/10**	**12/10**
Maximum activity	0.000003	0.000002	0.000004	0.000003	0.000003	0.000003	0.000004	0.000002	0.000002	0.000002	0.000002	0.000002
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	**1/11**	**2/11**	**3/11**	**4/11**	**5/11**	**6/11**	**7/11**	**8/11**	**9/11**	**10/11**	**11/11**	**12/11**
Maximum activity	0.000002	0.000002	0.000003	N/A	N/A	N/A	N/A	N/A	N/A	0.000002	0.000001	0.000001
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**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0**	**0**	**0**

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Maximum leakage	3.970	3.880	3.920	4.070	4.060	3.970	4.040	4.090	4.130	4.230	4.310	4.310
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	**15.9**	**15.5**	**15.7**	**16.3**	**16.2**	**15.9**	**16.2**	**16.4**	**16.5**	**16.9**	**17.2**	**17.2**

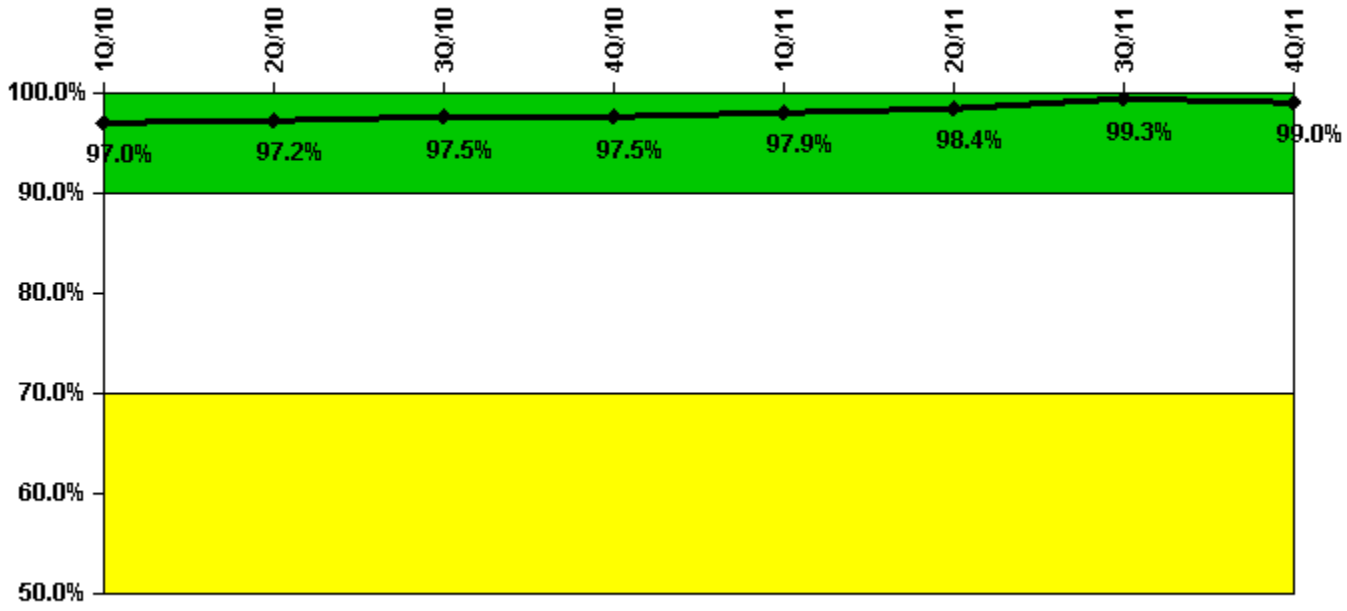
Reactor Coolant System Leakage	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum leakage	4.280	4.320	4.270	4.230	N/A	N/A	N/A	N/A	2.730	2.970	2.900	2.970
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	**17.1**	**17.3**	**17.1**	**16.9**	**N/A**	**N/A**	**N/A**	**N/A**	**10.9**	**11.9**	**11.6**	**11.9**

Licensee Comments:

9/11: CGS is in refueling outage R-20. Data changed to conform to NEI 99-02. Tech Specs do not require RCS Leakage measurement in Modes 4 or 5.

6/11: CGS is in refueling outage R-20. Data changed to conform to NEI 99-02. Tech Specs do not require RCS Leakage measurement in Modes 4 or 5.

Drill/Exercise Performance



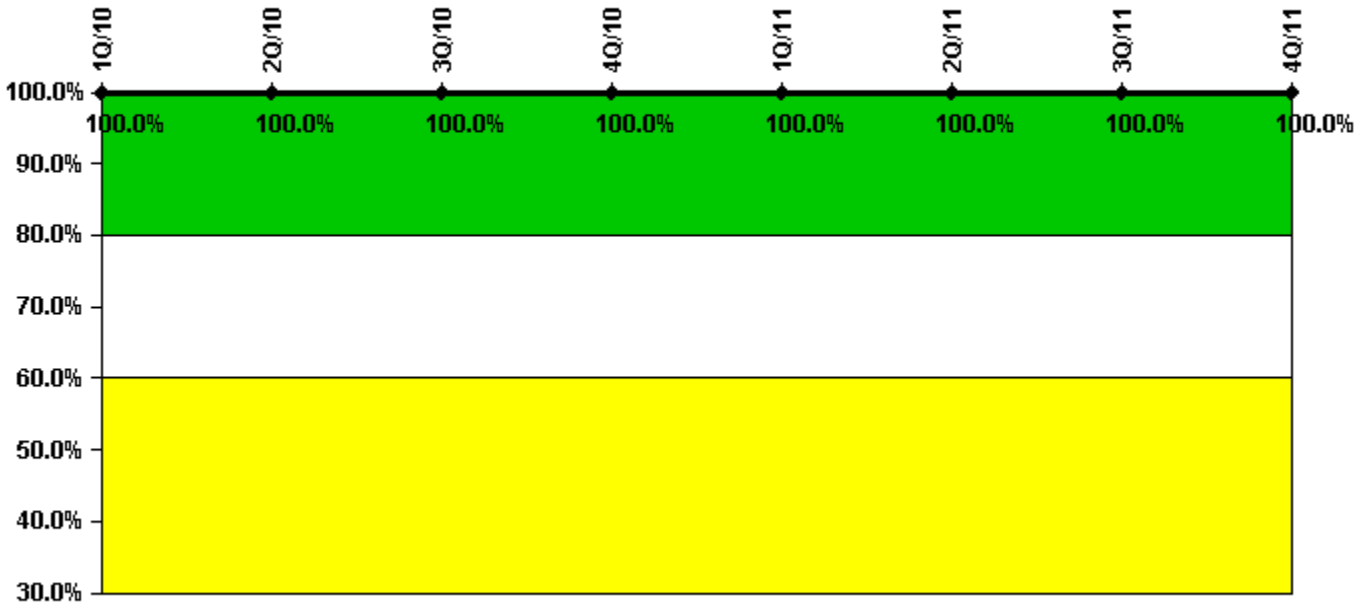
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Successful opportunities	24.0	39.0	35.0	57.0	19.0	5.0	33.0	92.0
Total opportunities	24.0	40.0	36.0	57.0	19.0	5.0	33.0	93.0
Indicator value	**97.0%**	**97.2%**	**97.5%**	**97.5%**	**97.9%**	**98.4%**	**99.3%**	**99.0%**

Licensee Comments: none

ERO Drill Participation



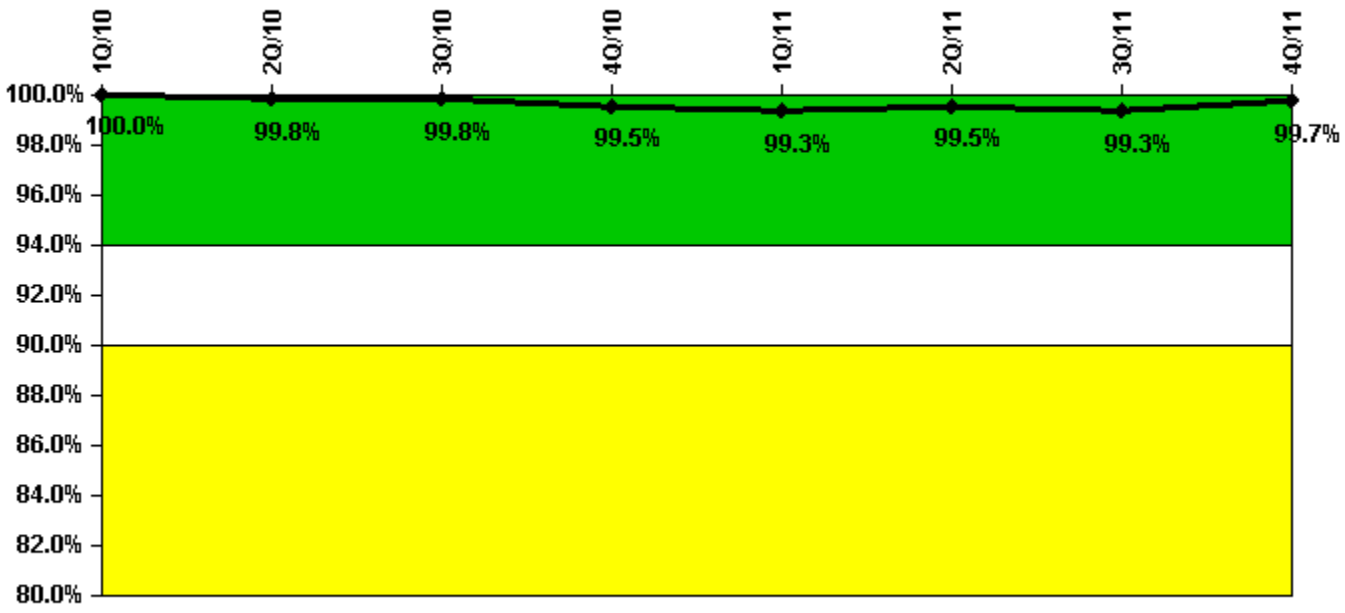
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Participating Key personnel	61.0	60.0	55.0	56.0	57.0	55.0	54.0	55.0
Total Key personnel	61.0	60.0	55.0	56.0	57.0	55.0	54.0	55.0
Indicator value	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments: none

Alert & Notification System



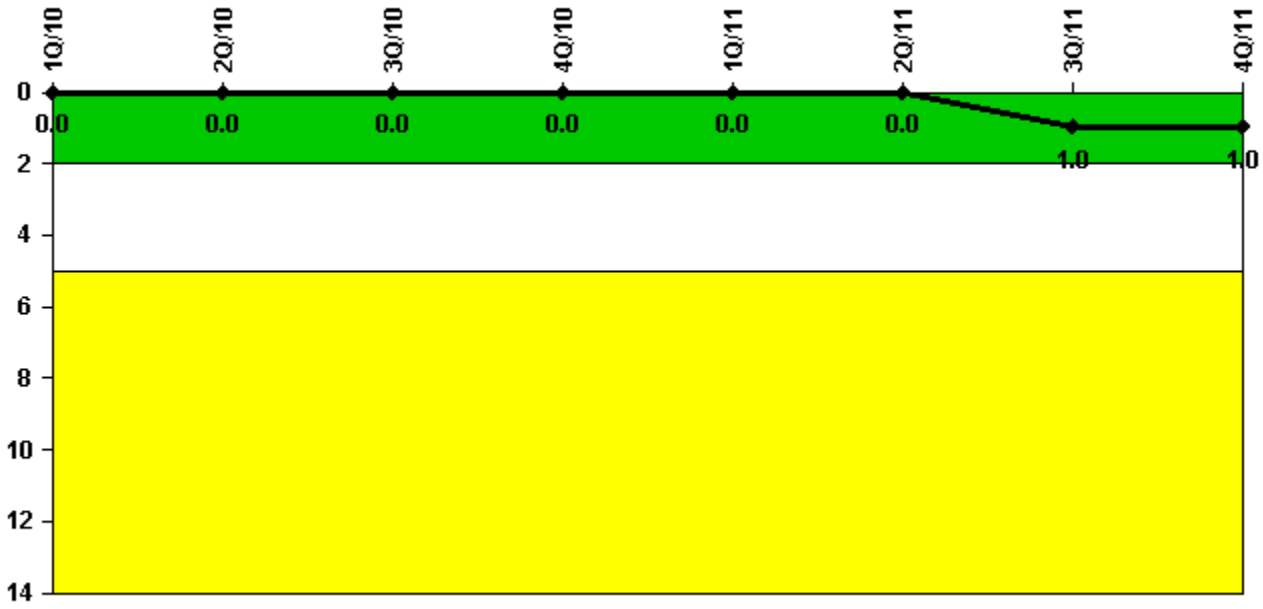
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Successful siren-tests	143	142	143	152	140	143	142	154
Total sirens-tests	143	143	143	154	141	143	143	154
Indicator value	**100.0%**	**99.8%**	**99.8%**	**99.5%**	**99.3%**	**99.5%**	**99.3%**	**99.7%**

Licensee Comments: none

Occupational Exposure Control Effectiveness



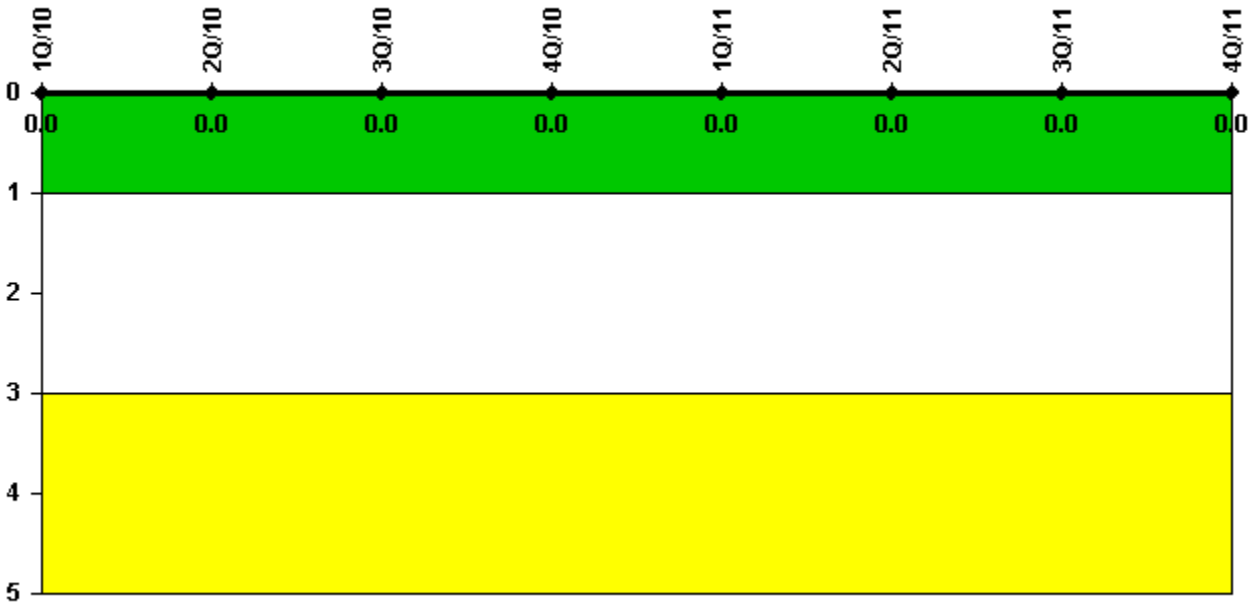
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
High radiation area occurrences	0	0	0	0	0	0	1	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**	**1**	**1**

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Licensee Comments: none

Security information not publicly available.

▲ Action Matrix Summary | Inspection Findings Summary | PI Summary | Reactor Oversight Process

Last Modified: March 2, 2012