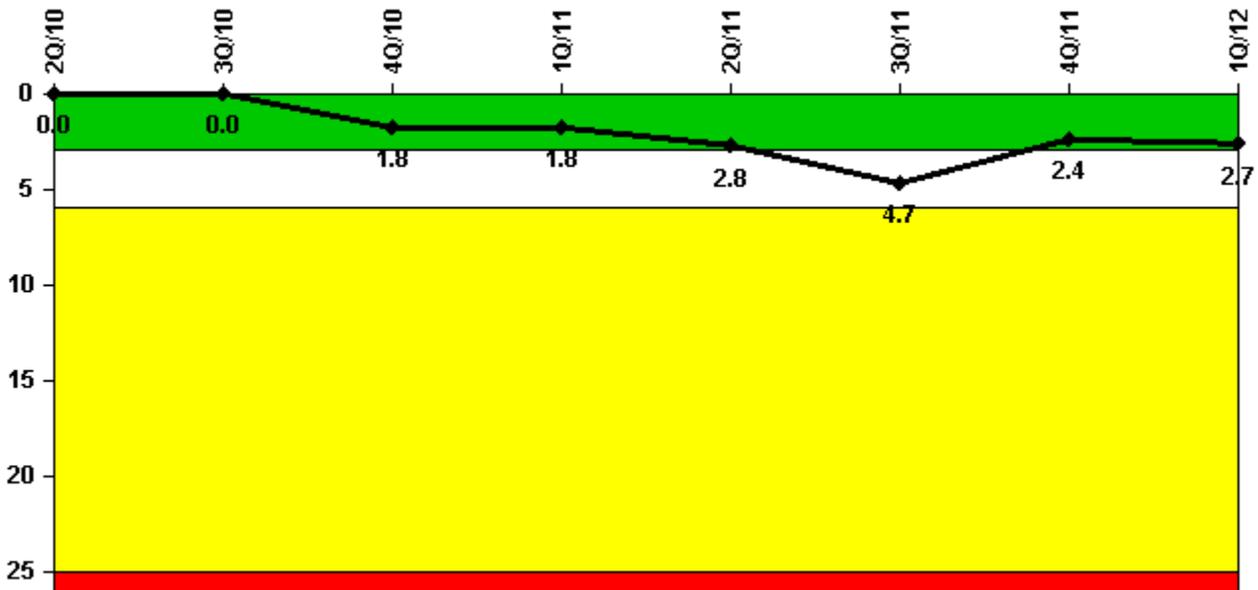


# Sequyah 1

## 1Q/2012 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

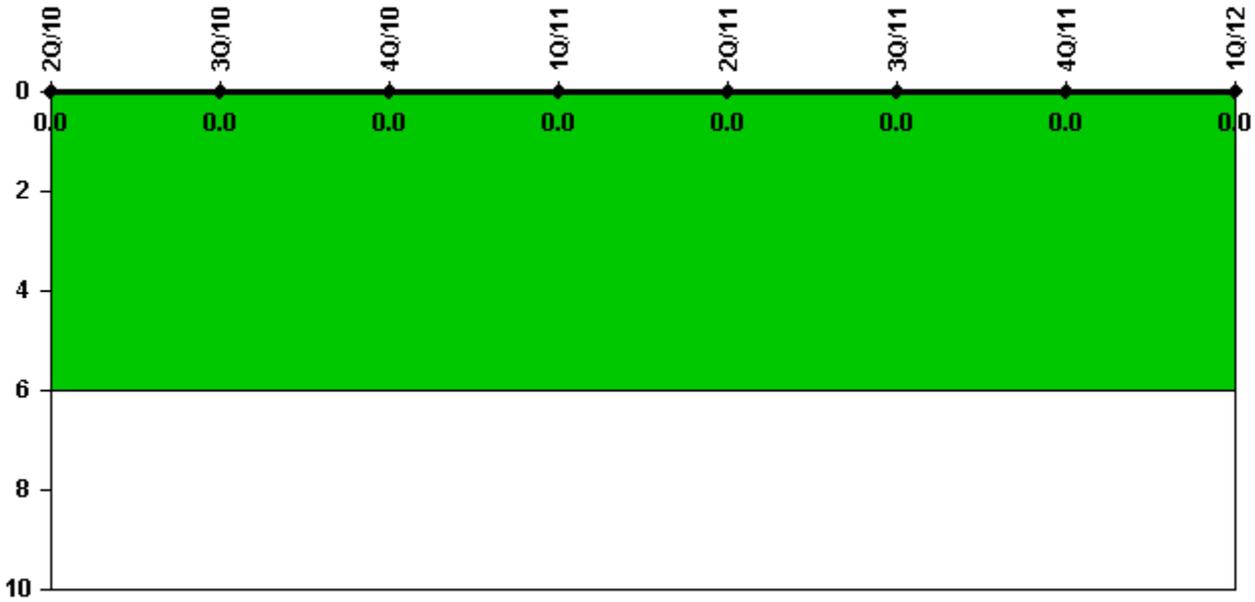
### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned scrams	0	0	2.0	0	1.0	2.0	0	0
Critical hours	2184.0	2208.0	1022.1	2159.0	2155.8	2141.4	2209.0	1386.4
Indicator value	0	0	1.8	1.8	2.8	4.7	2.4	2.7

Licensee Comments: none

---

## Unplanned Power Changes per 7000 Critical Hrs



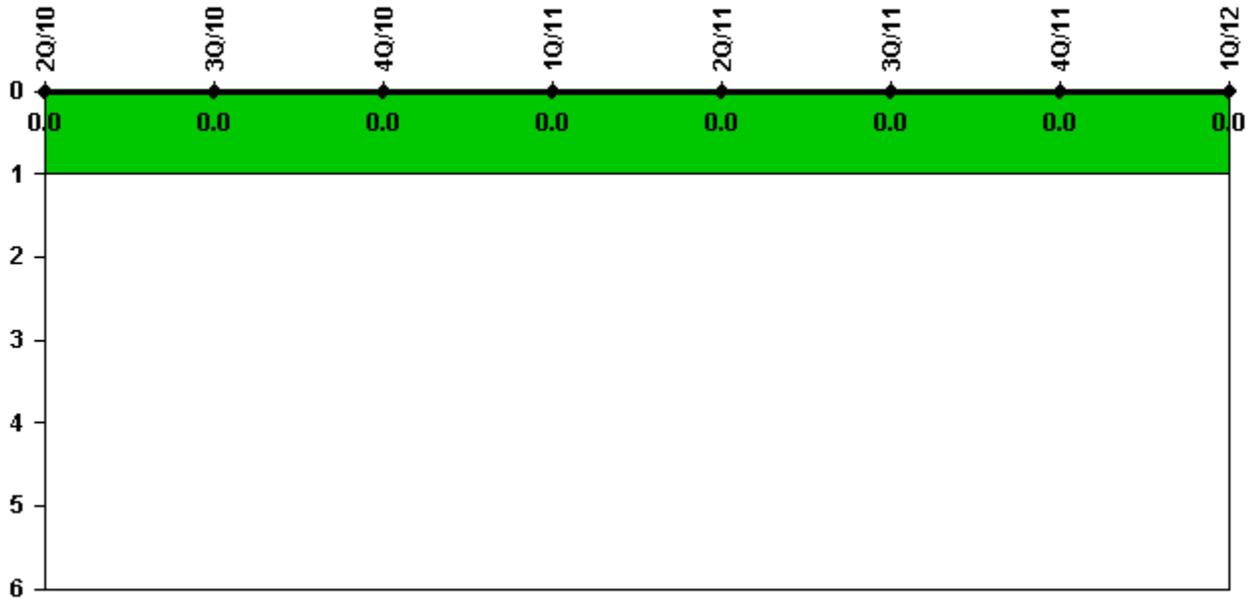
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	1022.1	2159.0	2155.8	2141.4	2209.0	1386.4
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

## Unplanned Scrams with Complications



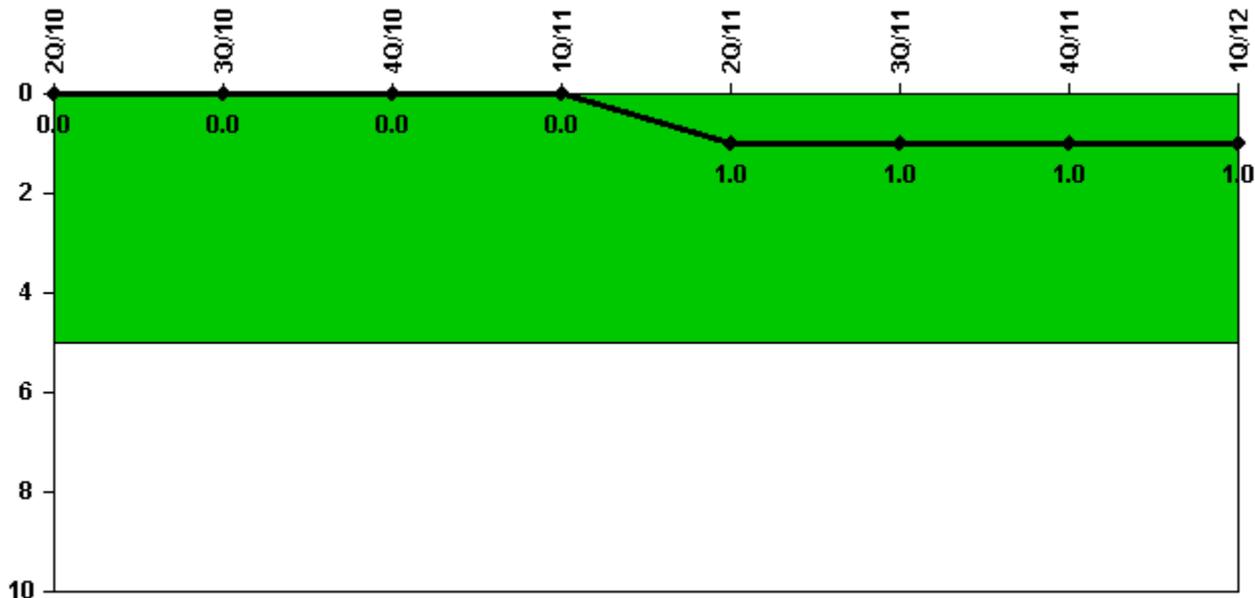
Thresholds: White > 1.0

### Notes

Unplanned Scrams with Complications	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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

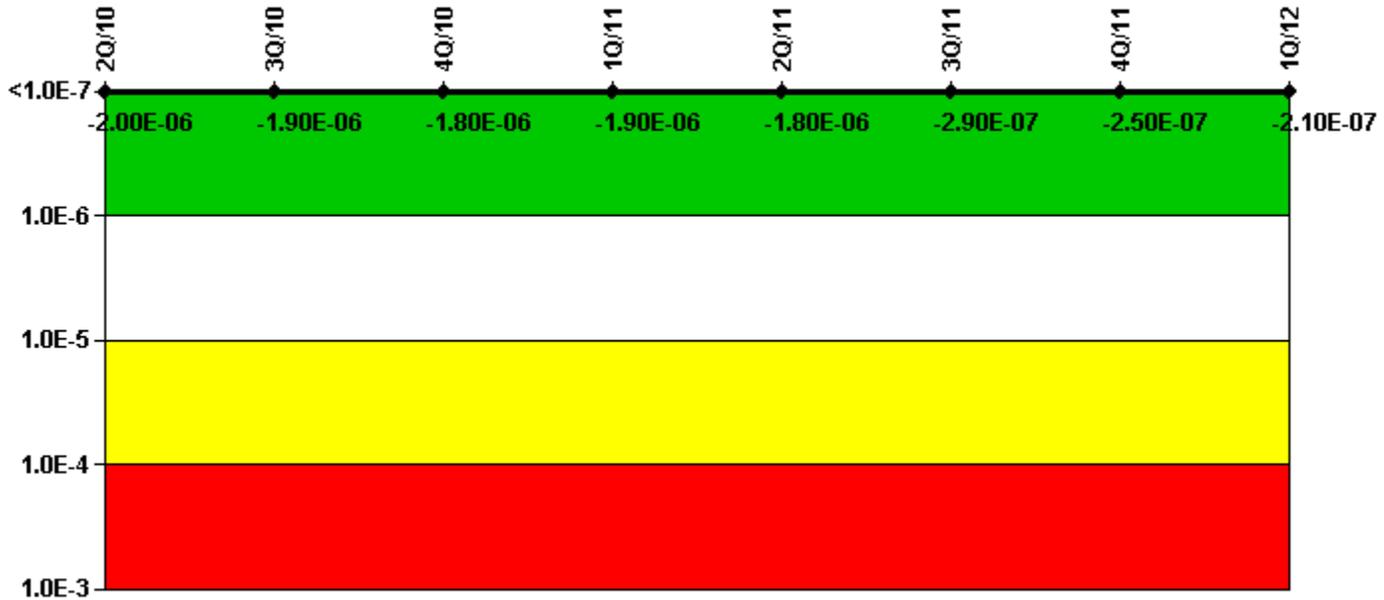
### Notes

Safety System Functional Failures (PWR)	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Safety System Functional Failures	0	0	0	0	1	0	0	0
Indicator value	0	0	0	0	1	1	1	1

Licensee Comments:

2Q/11: LER 327, 328/2011-001-00, Both trains of control room air conditioning system being inoperable was reported as a safety system functional failure on April 15, 2011.

# 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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-8.27E-08	-2.14E-08	-1.45E-08	1.02E-08	5.39E-08	-1.17E-08	3.32E-08	6.06E-08
URI ( $\Delta$ CDF)	-1.90E-06	-1.90E-06	-1.83E-06	-1.90E-06	-1.90E-06	-2.74E-07	-2.81E-07	-2.72E-07
PLE	NO							
Indicator value	-2.00E-06	-1.90E-06	-1.80E-06	-1.90E-06	-1.80E-06	-2.90E-07	-2.50E-07	-2.10E-07

## Licensee Comments:

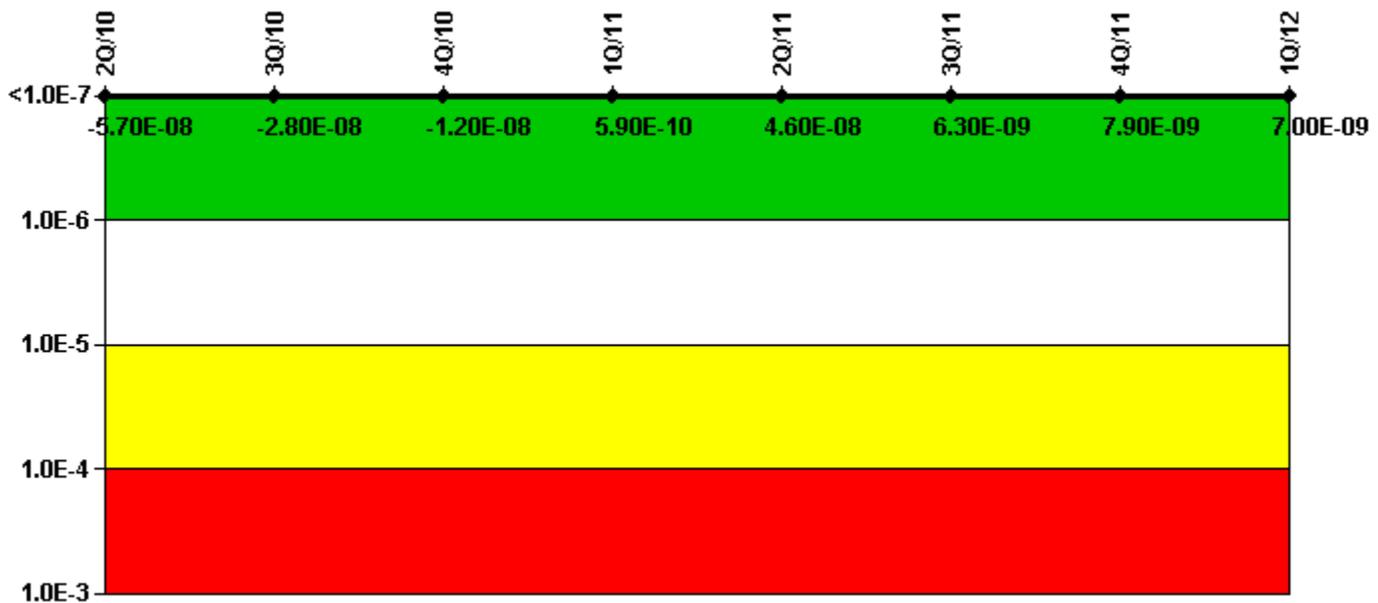
1Q/12: Changed PRA Parameter(s). Revised PRA values and scoping for the PRA Model of Record dated 5/27/11 as recalculated in Calc MDN-000-999-2011-0255 Rev 1 & 2 including adding the EDG FO Pumps to scope as required by a FAQ to NEI 99-02. Errors in calc Rev 0 corrected in CDE back thru 3rd quarter 2011 as required by NEI 99-02. Ref PER 483857.

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised.

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised.

## 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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	1.14E-07	1.43E-07	1.59E-07	1.71E-07	2.17E-07	6.73E-09	8.30E-09	7.43E-09
URI ( $\Delta$ CDF)	-1.71E-07	-1.71E-07	-1.71E-07	-1.71E-07	-1.71E-07	-4.21E-10	-4.22E-10	-4.22E-10
PLE	NO							
Indicator value	-5.70E-08	-2.80E-08	-1.20E-08	5.90E-10	4.60E-08	6.30E-09	7.90E-09	7.00E-09

### Licensee Comments:

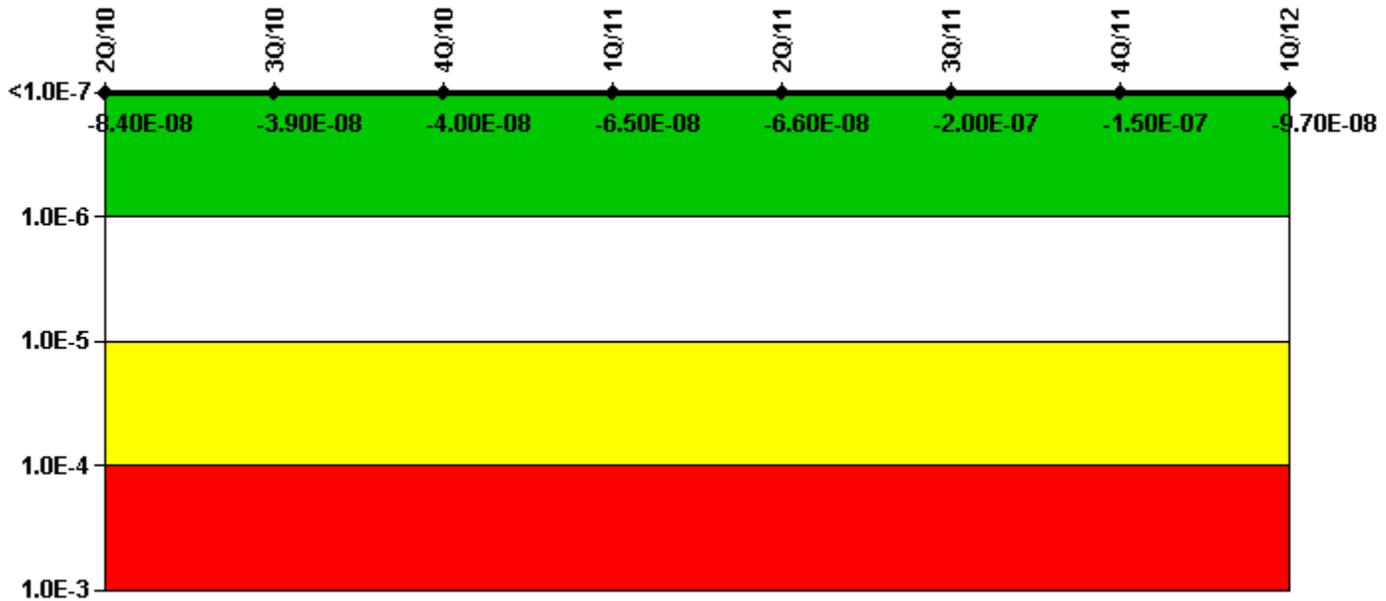
1Q/12: Changed PRA Parameter(s). Revised PRA values and scoping for the PRA Model of Record dated 5/27/11 as recalculated in Calc MDN-000-999-2011-0255 Rev 1 & 2. Errors in calc Rev 0 corrected in CDE back thru 3rd quarter 2011 as required by NEI 99-02. Ref PER 483857.

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised.

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised.

## Mitigating Systems Performance Index, Heat Removal System



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

### Notes

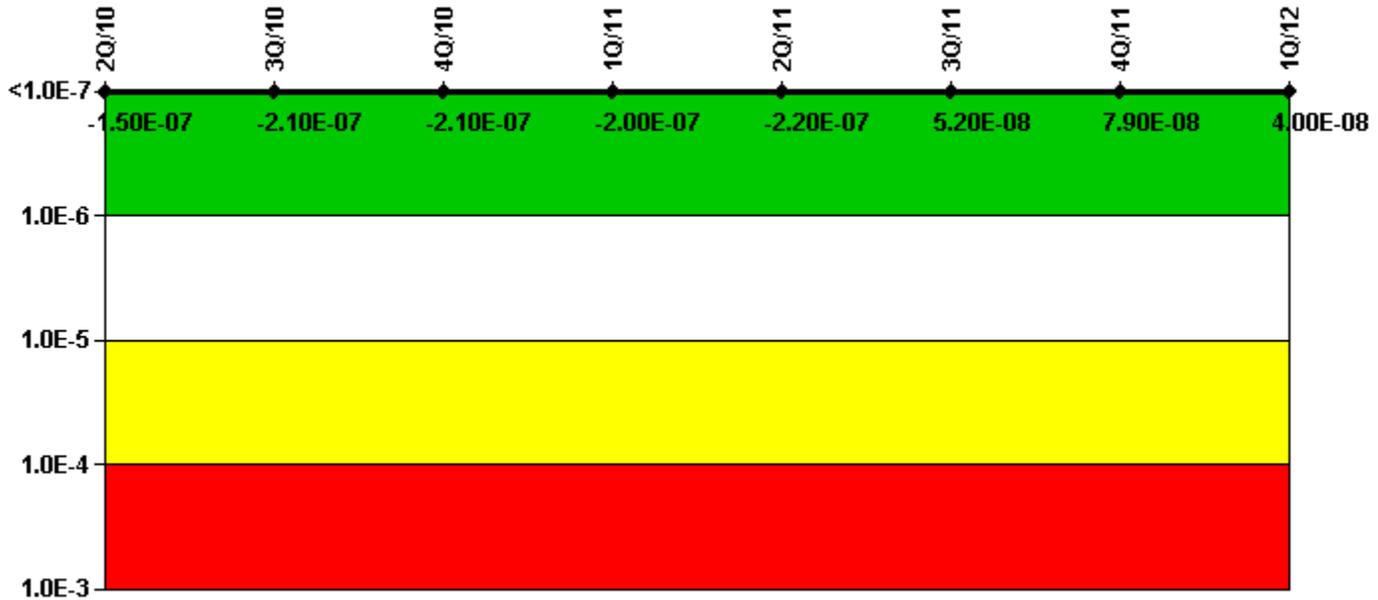
Mitigating Systems Performance Index, Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-1.73E-08	2.75E-08	2.86E-08	2.66E-08	2.71E-08	8.35E-08	1.40E-07	1.83E-07
URI ( $\Delta$ CDF)	-6.66E-08	-6.66E-08	-6.86E-08	-9.15E-08	-9.31E-08	-2.86E-07	-2.86E-07	-2.80E-07
PLE	NO							
Indicator value	-8.40E-08	-3.90E-08	-4.00E-08	-6.50E-08	-6.60E-08	-2.00E-07	-1.50E-07	-9.70E-08

### Licensee Comments:

1Q/12: Revised PRA values and scoping for the PRA Model of Record dated 5/27/11 as recalculated in Calc MDN-000-999-2011-0255 Rev 1 & 2. Errors in calc Rev 0 corrected in CDE back thru 3rd quarter 2011 as required by NEI 99-02. Ref PER 483857.

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised.

# Mitigating Systems Performance Index, Residual Heat Removal System



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

## Notes

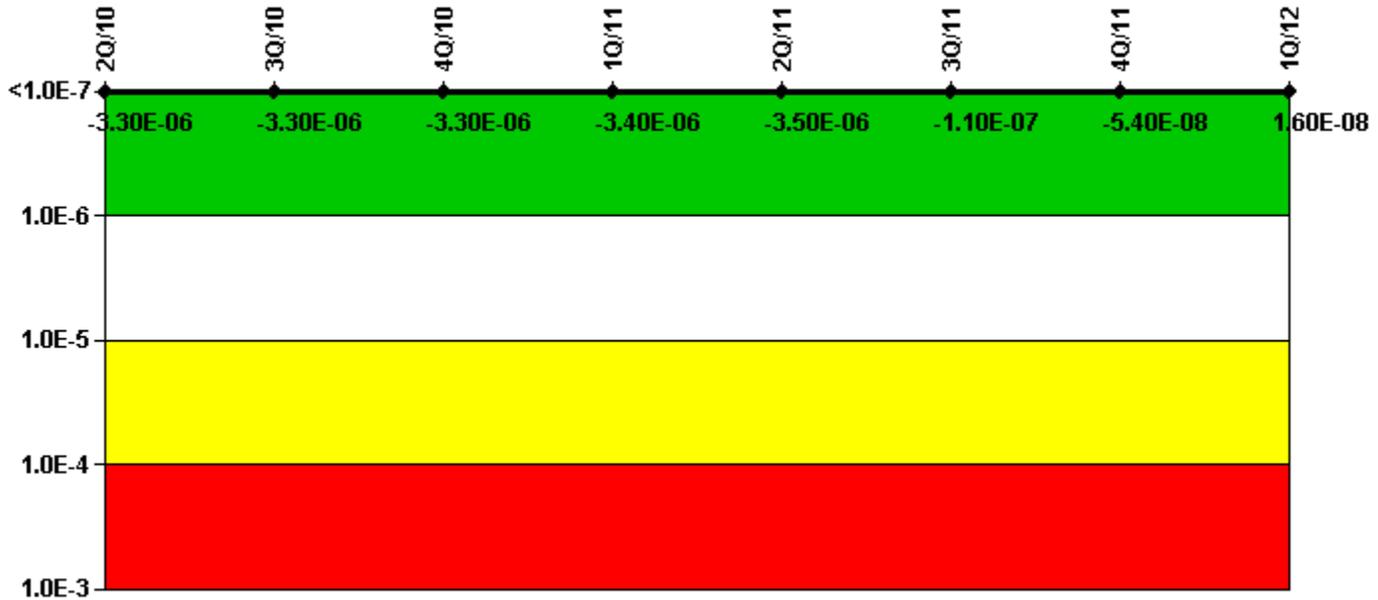
Mitigating Systems Performance Index, Residual Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	2.21E-07	1.52E-07	1.55E-07	1.69E-07	1.44E-07	2.27E-07	2.54E-07	2.14E-07
URI ( $\Delta$ CDF)	-3.66E-07	-3.66E-07	-3.66E-07	-3.66E-07	-3.66E-07	-1.75E-07	-1.75E-07	-1.75E-07
PLE	NO							
Indicator value	-1.50E-07	-2.10E-07	-2.10E-07	-2.00E-07	-2.20E-07	5.20E-08	7.90E-08	4.00E-08

## Licensee Comments:

1Q/12: Revised PRA values and scoping for the PRA Model of Record dated 5/27/11 as recalculated in Calc MDN-000-999-2011-0255 Rev 1 & 2. Errors in calc Rev 0 corrected in CDE back thru 3rd quarter 2011 as required by NEI 99-02. Ref PER 483857.

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised.

# 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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (ΔCDF)	-3.15E-06	-3.15E-06	-3.13E-06	-3.26E-06	-3.26E-06	-3.82E-08	2.09E-08	9.13E-08
URI (ΔCDF)	-1.90E-07	-1.90E-07	-1.90E-07	-1.90E-07	-1.90E-07	-7.49E-08	-7.49E-08	-7.49E-08
PLE	NO							
Indicator value	-3.30E-06	-3.30E-06	-3.30E-06	-3.40E-06	-3.50E-06	-1.10E-07	-5.40E-08	1.60E-08

## Licensee Comments:

1Q/12: Changed PRA Parameter(s). Revised PRA values and scoping for the PRA Model of Record dated 5/27/11 as recalculated in Calc MDN-000-999-2011-0255 Rev 1 & 2. Errors in calc Rev 0 corrected in CDE back thru 3rd quarter 2011 as required by NEI 99-02. Ref PER 483857. The planned unavailability baselines for all ERCW pumps were adjusted as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

4Q/11: The planned unavailability baselines for all ERCW pumps were adjusted as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

4Q/11: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were adjusted as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised. The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

3Q/11: Changed PRA Parameter(s). The calculations to input into MSPI were performed using the current

Sequoyah CAFTA PRA Model Rev 0. The PRA Model of Record was revised 5/27/11, updating the PRA model using the CAFTA program. The base numbers used in the MSPI database were also updated in accordance with NEI 99-02 Rev 6. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised. The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

2Q/11: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

2Q/11: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

2Q/11: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

1Q/11: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

1Q/11: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

1Q/11: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

4Q/10: Changed PRA Parameter(s).

4Q/10: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

4Q/10: The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

4Q/10: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

3Q/10: Changed PRA Parameter(s).

3Q/10: The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

3Q/10: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

3Q/10: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

2Q/10: Changed PRA Parameter(s).

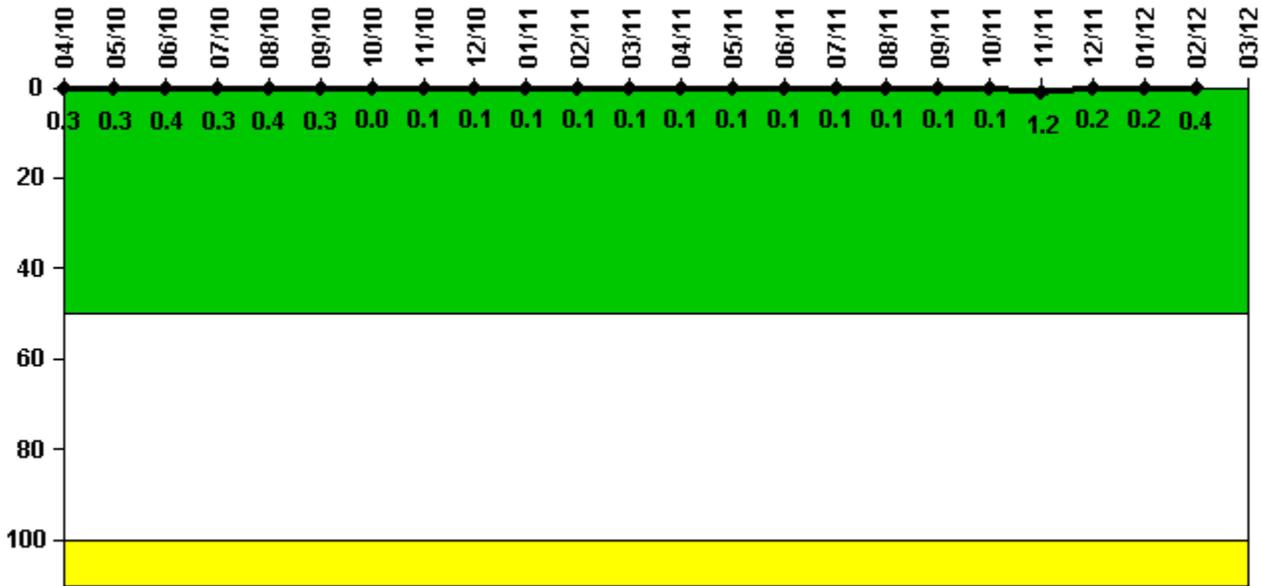
2Q/10: The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

2Q/10: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as

needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

2Q/10: Changed PRA Parameter(s). The planned unavailability baselines for all ERCW pumps were changed as needed to reflect past and current planned maintenance not performed every 3 years or less as specified by NEI 99-02.

### Reactor Coolant System Activity



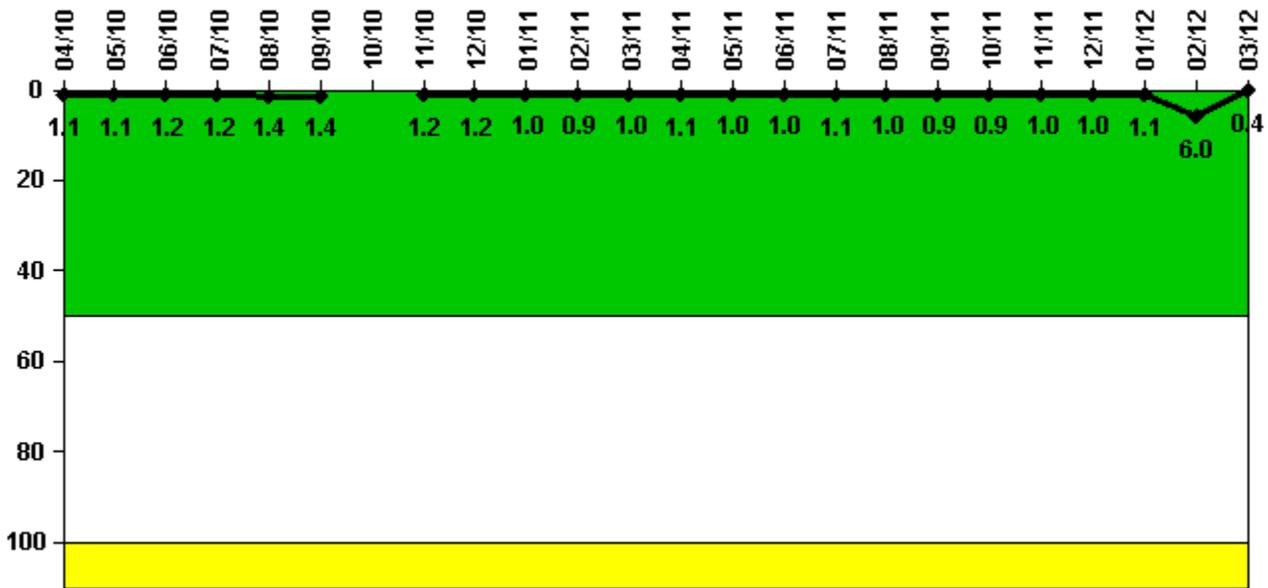
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Activity	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum activity	0.000958	0.001019	0.001407	0.001101	0.001251	0.001039	0.000001	0.000275	0.000453	0.000384	0.000512	0.000384
Technical specification limit	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Indicator value	0.3	0.3	0.4	0.3	0.4	0.3	0	0.1	0.1	0.1	0.1	0.1
Reactor Coolant System Activity	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.000382	0.000392	0.000474	0.000497	0.000500	0.000499	0.000436	0.004270	0.000609	0.000584	0.001269	N/A
Technical specification limit	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.2	0.2	0.2	0.4	N/A

Licensee Comments: none

## Reactor Coolant System Leakage



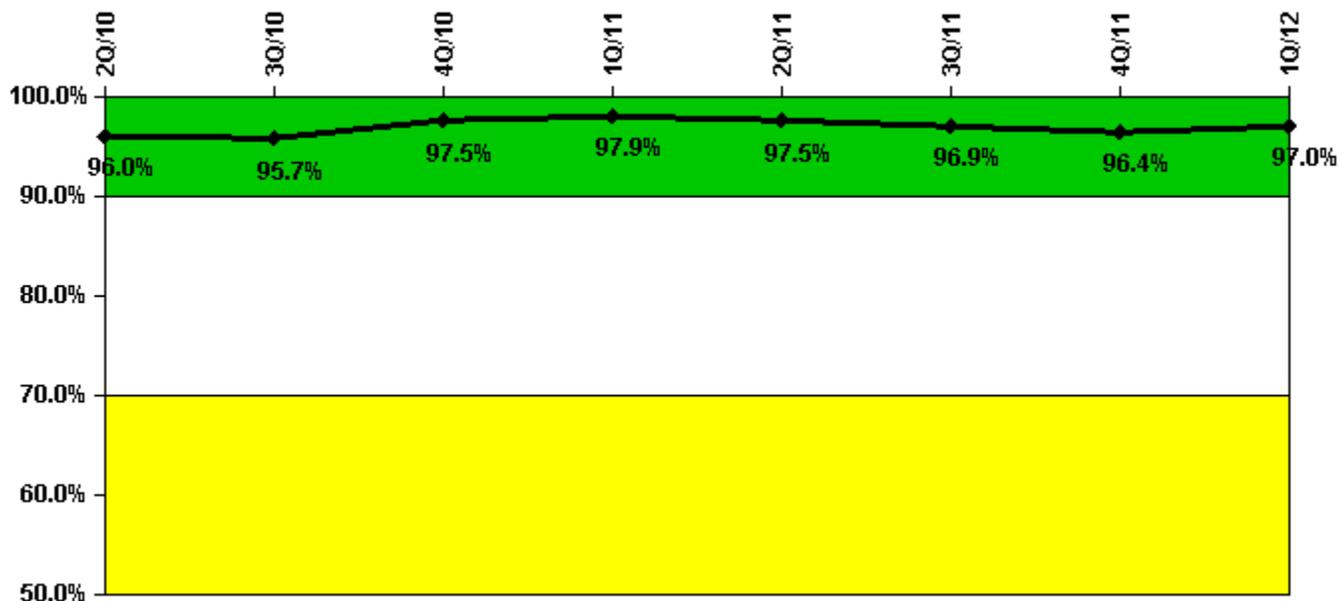
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum leakage	0.110	0.110	0.120	0.120	0.140	0.140	N/A	0.120	0.120	0.100	0.090	0.100
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	1.1	1.1	1.2	1.2	1.4	1.4	N/A	1.2	1.2	1.0	0.9	1.0
Reactor Coolant System Leakage	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum leakage	0.110	0.100	0.100	0.110	0.100	0.090	0.090	0.100	0.100	0.110	0.600	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	1.1	1.0	1.0	1.1	1.0	0.9	0.9	1.0	1.0	1.1	6.0	0.4

Licensee Comments: none

## Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

### Notes

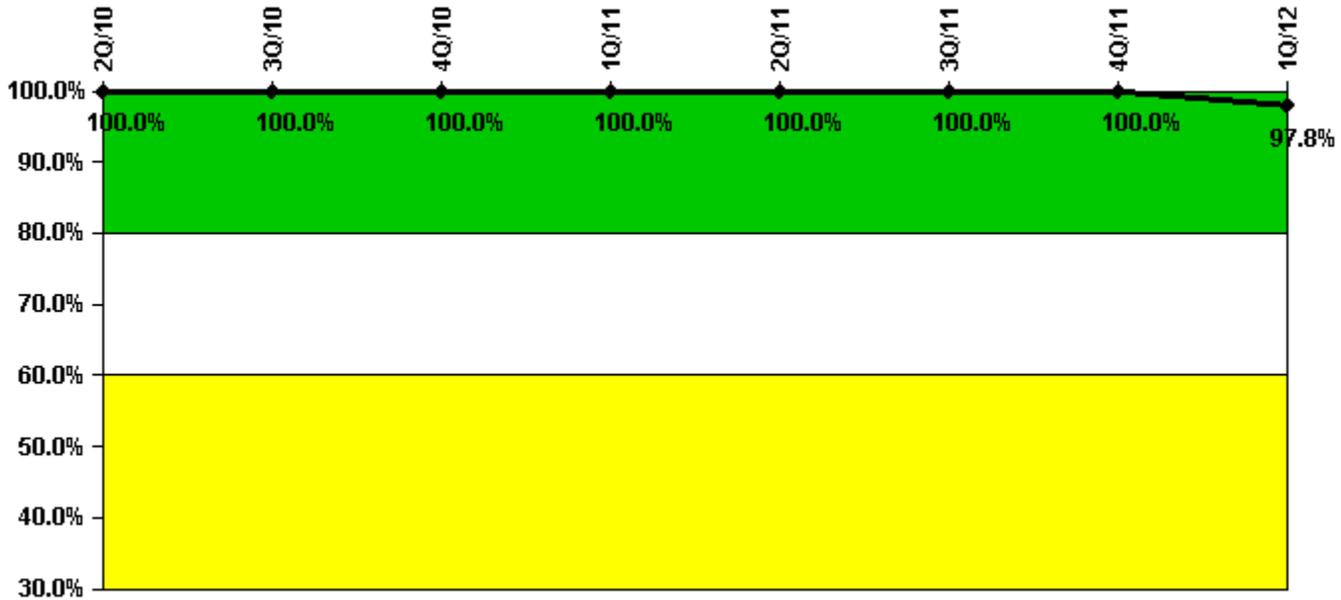
Drill/Exercise Performance	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful opportunities	22.0	26.0	45.0	18.0	4.0	34.0	70.0	6.0
Total opportunities	22.0	27.0	46.0	18.0	4.0	36.0	73.0	6.0
Indicator value	96.0%	95.7%	97.5%	97.9%	97.5%	96.9%	96.4%	97.0%

Licensee Comments:

3Q/10: Documentation for one previously reported notification opportunity and success could not be retrieved. The issue was documented in the Corrective Action Program.

2Q/10: June DEP updated due to the omission of Notification successes and opportunities and the late identification of DEP successes and opportunities during Licensed Operator Requalification. This issue was captured in the Corrective Action Program.

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

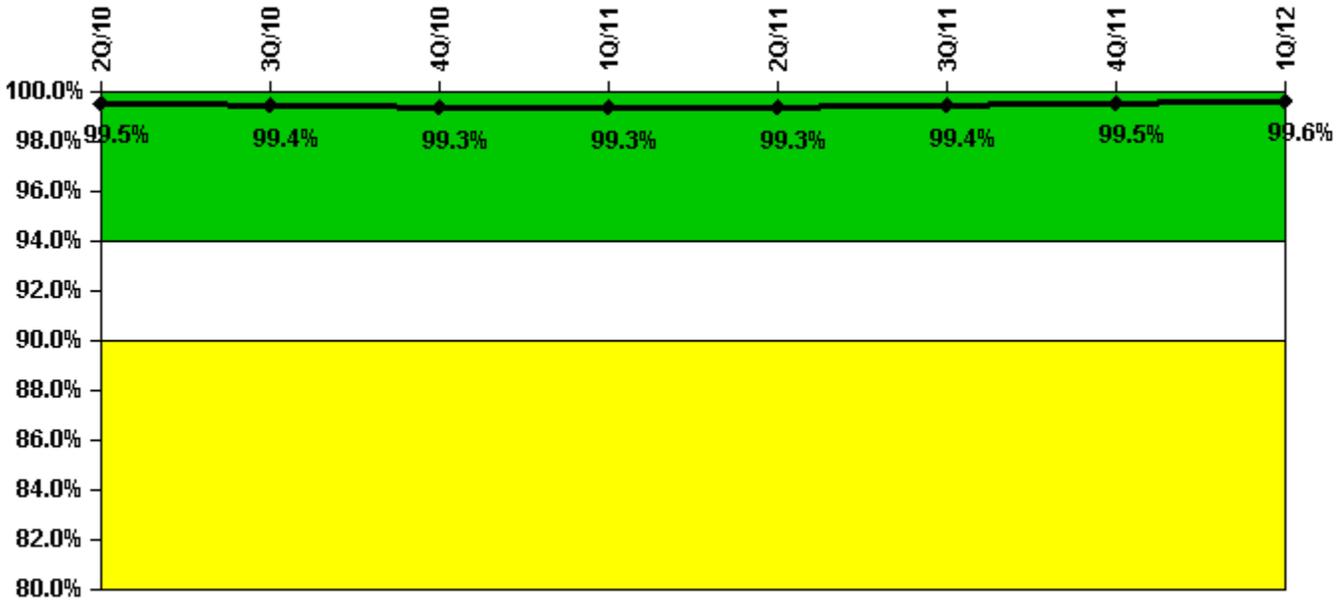
### Notes

ERO Drill Participation	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Participating Key personnel	76.0	78.0	70.0	78.0	75.0	74.0	90.0	88.0
Total Key personnel	76.0	78.0	70.0	78.0	75.0	74.0	90.0	90.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.8%

Licensee Comments:

2Q/10: June Participation was updated due to the omission of a Corporate EOF participant. This issue were captured in the Corrective Action Program.

# Alert & Notification System



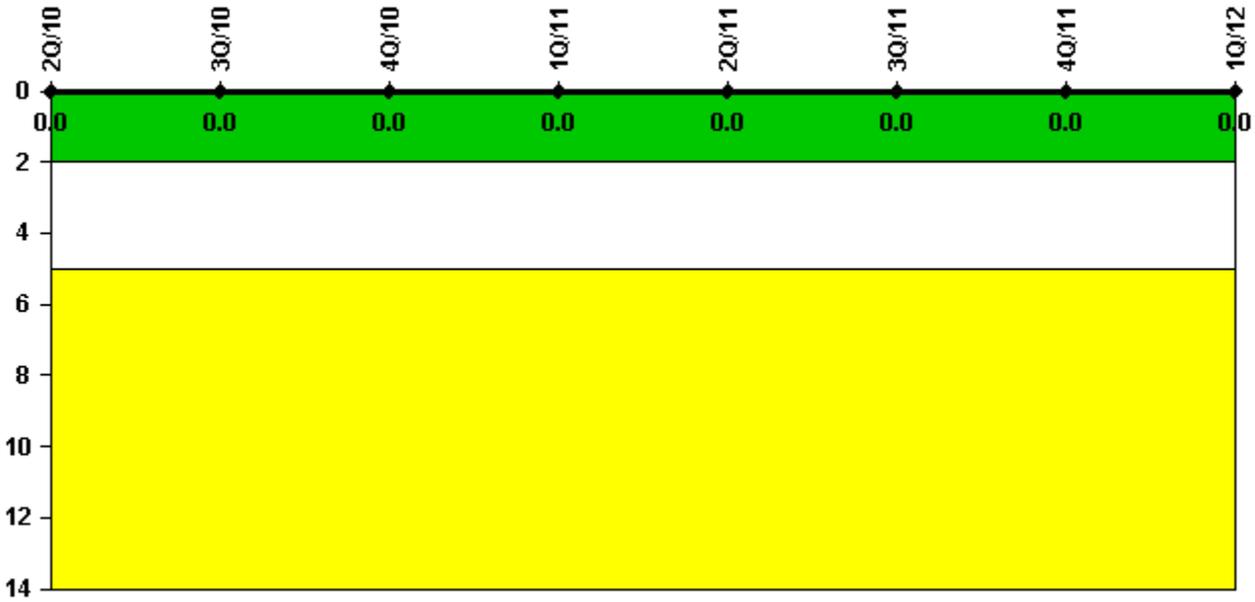
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful siren-tests	967	747	967	752	967	857	862	863
Total sirens-tests	972	756	972	756	972	864	864	864
Indicator value	99.5%	99.4%	99.3%	99.3%	99.3%	99.4%	99.5%	99.6%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



**Thresholds: White > 2.0 Yellow > 5.0**

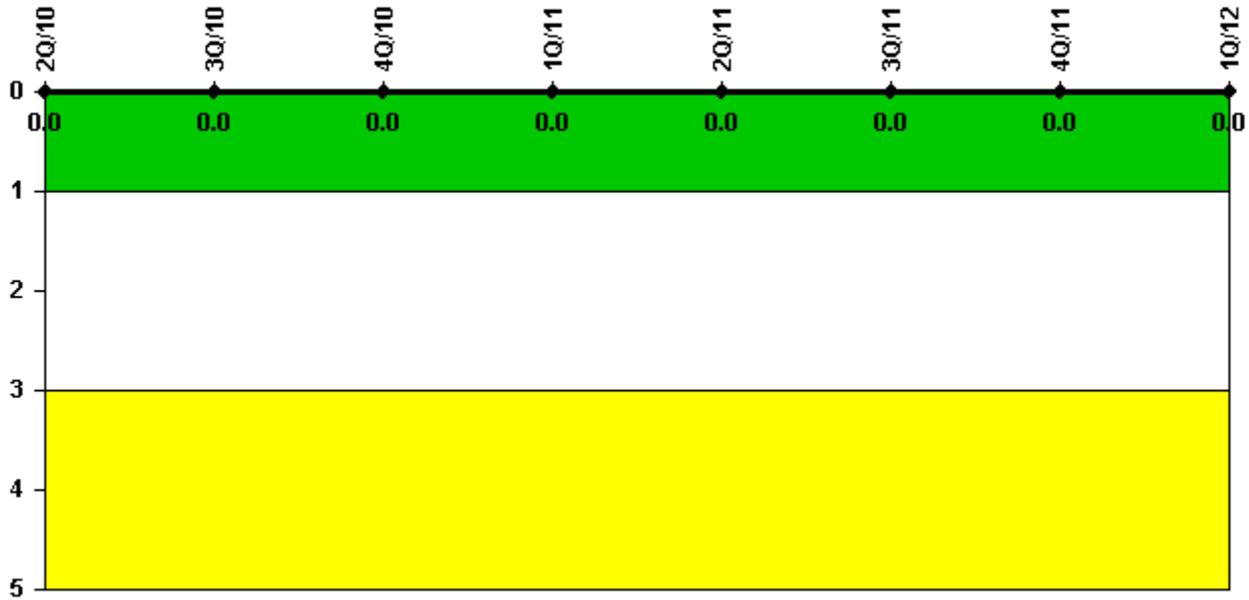
## Notes

Occupational Exposure Control Effectiveness	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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.