

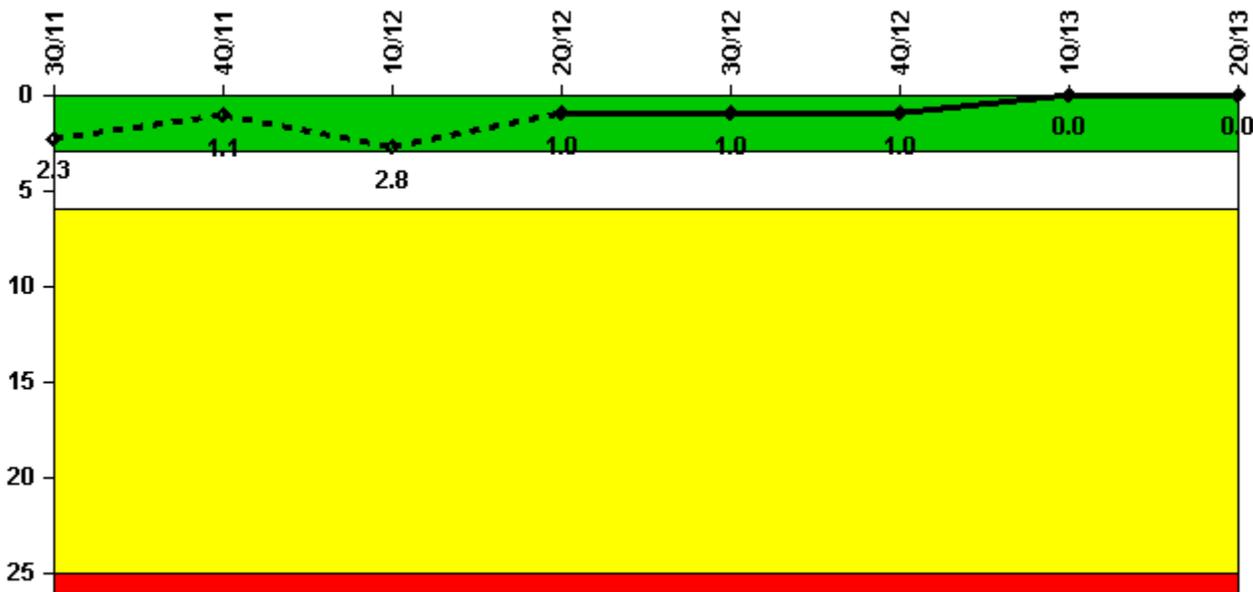
Wolf Creek 1

2Q/2013 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Revision 9 of the Wolf Creek MSPI Basis Document incorporates new PRA inputs from Wolf Creek Generating Station PSA Model Revision 6. This revision included updates of component reliability and unavailability data, credit for the SHIELD passive RCP seal, and credit for the non-safety auxiliary feedwater pump as well as other less significant model updates. Revision 6 to the PSA model is a significant change and resulted in the revision of CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components. This revision also incorporated use of plant-specific common cause adjustment factors for the ESW subsystem of the cooling water system as allowed in NEI 99-02 Section F.2.3.4. In addition, system drawings for High Pressure Safety Injection, Emergency AC Power, and Auxiliary Feedwater were revised to correct scoping errors on previous drawings. Corrected dates in tables in Appendix 3.

Unplanned Scrams per 7000 Critical Hrs



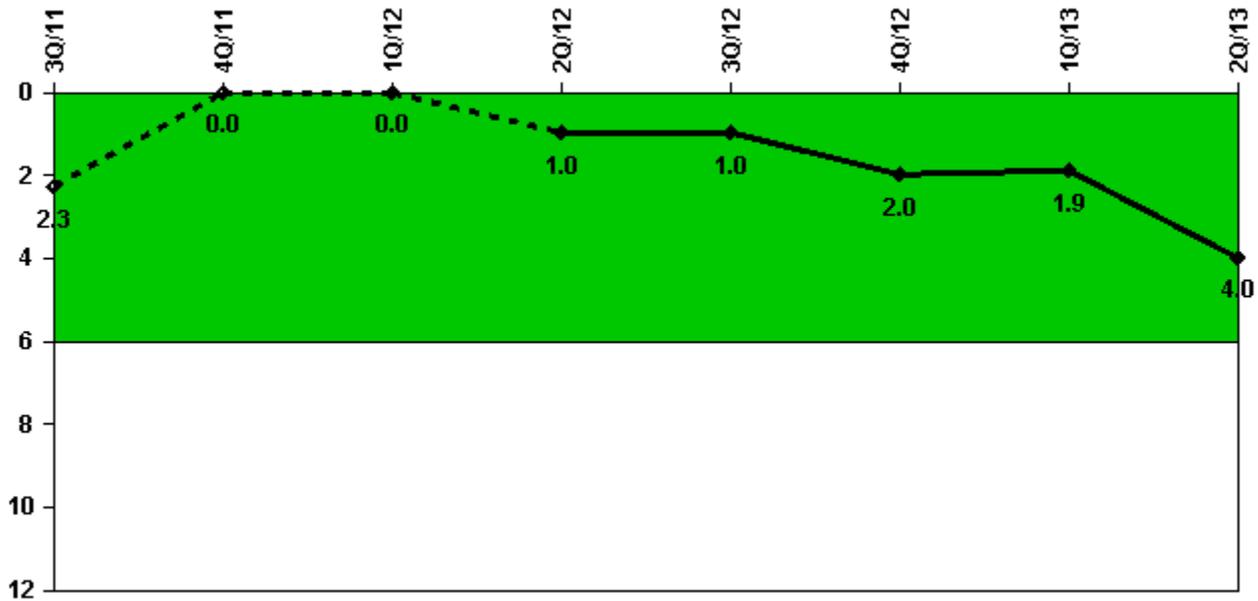
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Unplanned scrams	0	0	1.0	0	0	0	0	0
Critical hours	2208.0	2209.0	425.0	2184.0	2208.0	2209.0	816.0	1749.1
Indicator value	2.3	1.1	2.8	1.0	1.0	1.0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



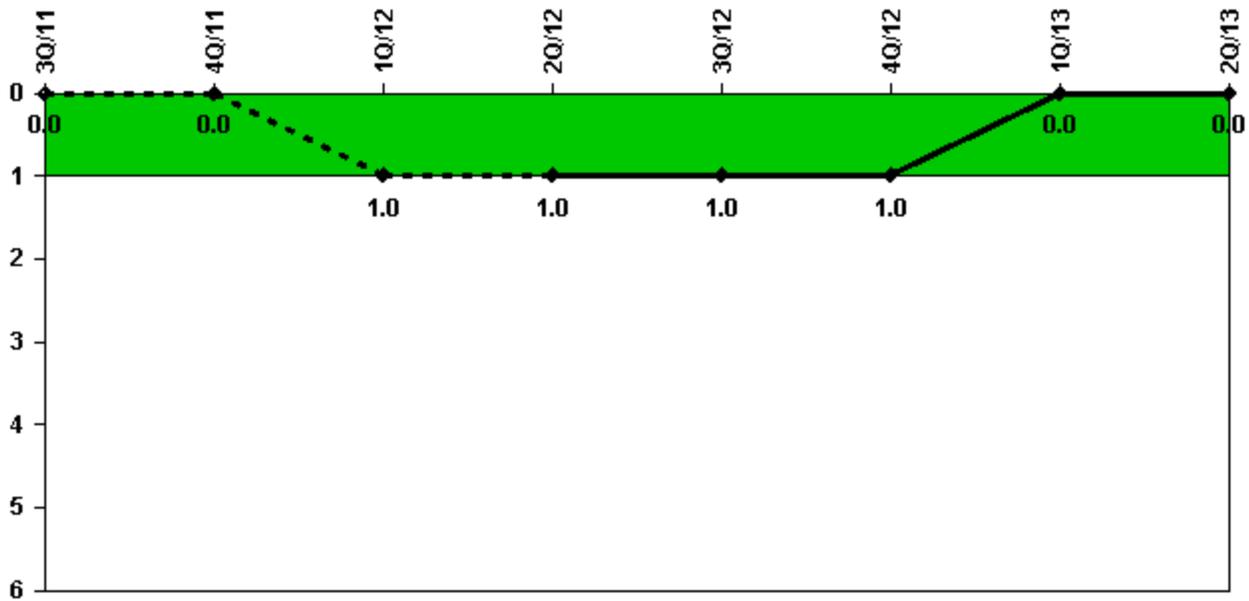
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Unplanned power changes	0	0	0	1.0	0	1.0	0	3.0
Critical hours	2208.0	2209.0	425.0	2184.0	2208.0	2209.0	816.0	1749.1
Indicator value	2.3	0	0	1.0	1.0	2.0	1.9	4.0

Licensee Comments: none

Unplanned Scrams with Complications



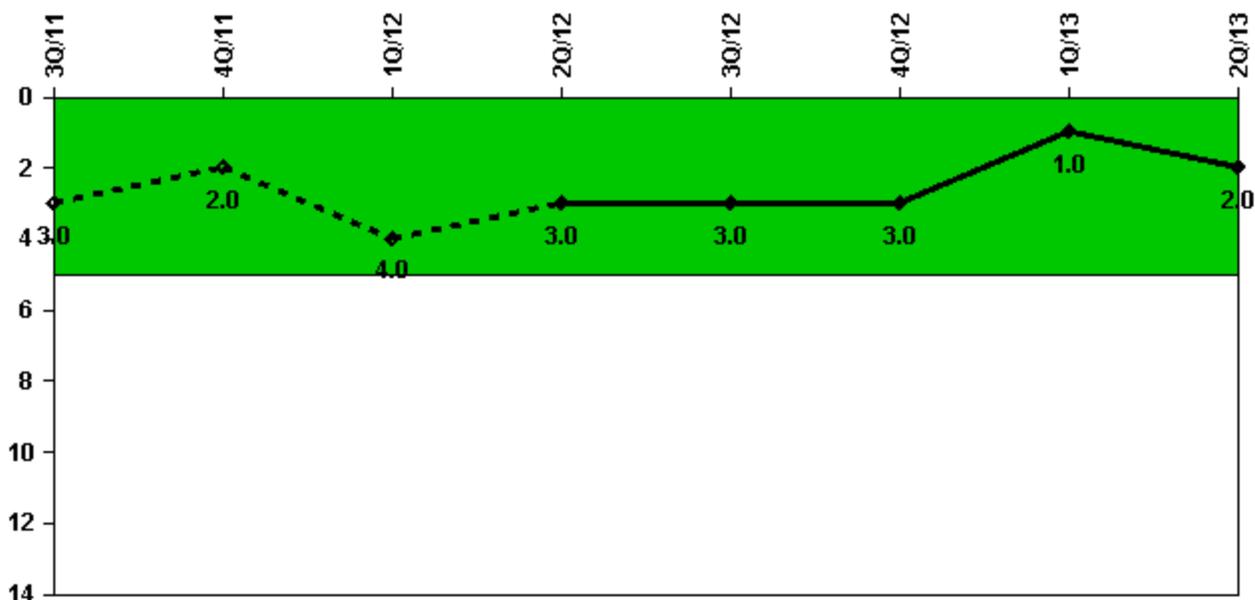
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Scrams with complications	0	0	1.0	0	0	0	0	0
Indicator value	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Safety System Functional Failures	0	0	2	1	0	0	0	2
Indicator value	3	2	4	3	3	3	1	2

Licensee Comments:

2Q/13: LER 2013-004-00 and LER 2013-005-00

2Q/12: LER 2012-003-00 B Train ECCS Inoperable Due to Damaged Watertight Containment Spray Pump Door Seal.

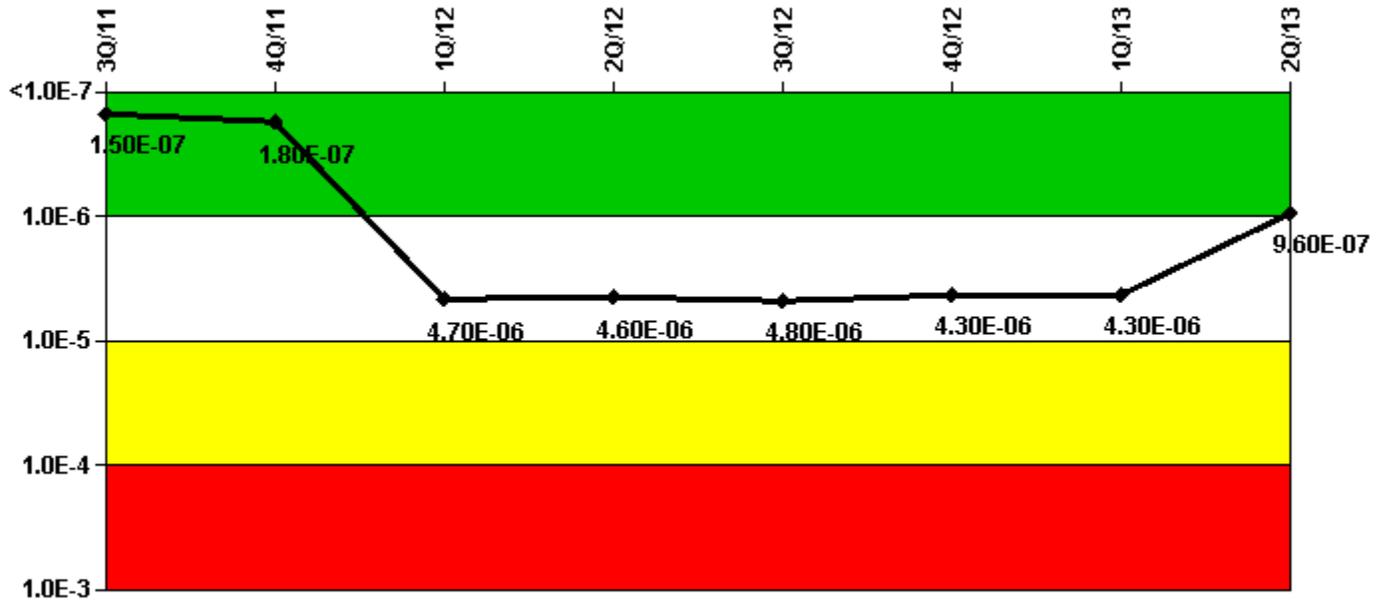
1Q/12: LER 2011-009-01 Inadequate Oil Analysis Caused Inoperable Auxiliary Feedwater Pump Longer Than Required Action Completion Time. LER 2012-001-00 Failure of 345 kV Switchyard Breaker Resulting in Reactor Trip and Loss of Offsite Power.

4Q/11: LER 2011-010-00 (10-2011). Based on functional failure evaluation results received, this LER will be retracted in the January 2012 data reporting as no failure was identified.

4Q/11: LER 2011-010-00 (10-2011). Based on functional failure evaluation results received, this LER will be retracted in the January 2012 data reporting as no failure was identified.

3Q/11: Letter WO 11-0078 submitted 9/29/11 provided supplemental report to indicate LER 2011-004-00 is not reportable as a SSFF.

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	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (ΔCDF)	1.36E-06	1.33E-06	9.46E-07	8.23E-07	6.34E-07	4.89E-07	7.78E-07	1.19E-07
URI (ΔCDF)	-1.21E-06	-1.15E-06	3.71E-06	3.81E-06	4.19E-06	3.80E-06	3.50E-06	8.39E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.50E-07	1.80E-07	4.70E-06	4.60E-06	4.80E-06	4.30E-06	4.30E-06	9.60E-07

Licensee Comments:

2Q/13: Risk Cap Invoked. Revision 9 of the Wolf Creek MSPI Basis Document incorporates new PRA inputs from Wolf Creek Generating Station PSA Model Revision 6. This revision included updates of component reliability and unavailability data, credit for the SHIELD passive RCP seal, and credit for the non-safety auxiliary feedwater pump as well as other less significant model updates. Revision 6 to the PSA model is a significant change and resulted in the revision of CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components. This revision also incorporated use of plant-specific common cause adjustment factors for the ESW subsystem of the cooling water system as allowed in NEI 99-02 Section F.2.3.4. In addition, system drawings for High Pressure Safety Injection, Emergency AC Power, and Auxiliary Feedwater were revised to correct scoping errors on previous drawings. Corrected dates in tables in Appendix 3 from 2004 to 2006 to 2002 to 2004.

1Q/13: Risk Cap Invoked. Within the last twelve quarters Wolf Creek experienced two run failures. These events

drive the NRC MS06 MSPI Emergency AC Power System across the green/white threshold. The following failures count against the indicator: 620 - run failure (02-22-11) and 673 run failure (03-12-12)

4Q/12: Risk Cap Invoked. Within the last twelve quarters Wolf Creek experienced two run failures. These events drive the NRC MS06 MSPI Emergency AC Power System across the green/white threshold. The following failures count against the indicator: 620 - run failure (02-22-11) and 673 run failure (03-12-12)

3Q/12: Risk Cap Invoked. Within the last twelve quarters Wolf Creek experienced one demand failure and two run failures. These events drive the NRC MS06 MSPI Emergency AC Power System across the green/white threshold. The following failures count against the indicator: 529 - demand failure (10-22-09) 620 - run failure (02-22-11) and 673 run failure (03-12-12)

2Q/12: Risk Cap Invoked. Within the last twelve quarters Wolf Creek has experienced one demand failure and two run failures. These events will drive the NRC MS06 MSPI Emergency AC Power System across the green/white threshold. The following failures count against the indicator: 529 - demand failure (10-22-09) 620 - run failure (02-22-11) and 673 run failure (03-12-12) - Hardware Failure Analysis ongoing.

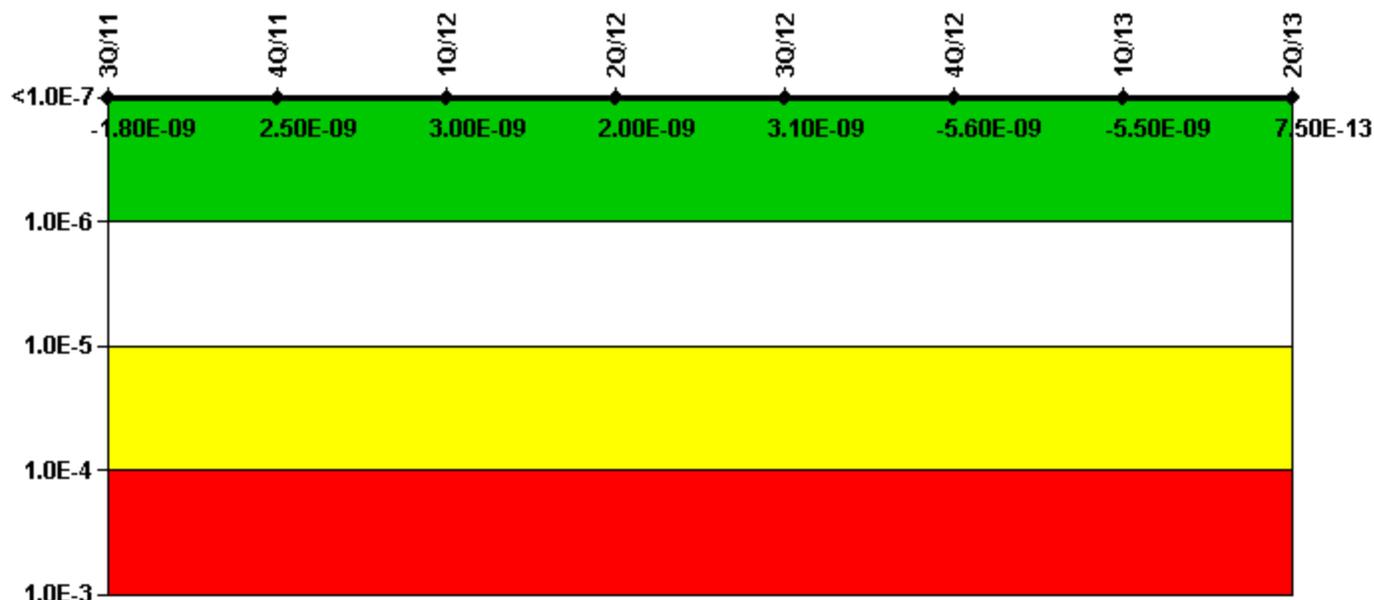
1Q/12: Risk Cap Invoked. 1) EDG governor tubing crack - Functional failure analysis is open; possible run failure. Currently pursuing bids for hardware failure analysis. 2) EDG field ground - Functional failure analysis is open. Hardware failure analysis draft is complete, final report expected by the end of April. Draft analysis supports 7 days of operation.

1Q/12: Risk Cap Invoked. 1) EDG governor tubing crack - Functional failure analysis is open; possible run failure. Currently pursuing bids for hardware failure analysis. 2) EDG field ground - Functional failure analysis is open. Hardware failure analysis draft is complete, final report expected by the end of April. Draft analysis supports 7 days of operation.

4Q/11: Risk Cap Invoked. EDG Load Oscillation (10-2011) - Functional Failure Evaluation is complete. Evaluation results determined no failure occurred.

3Q/11: Risk Cap Invoked. EDG Load Oscillation - Functional Failure Evaluation is still open. Currently pursuing vendor evaluation of potential "Load Failure" from two vendors.

Mitigating Systems Performance Index, High Pressure Injection System



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

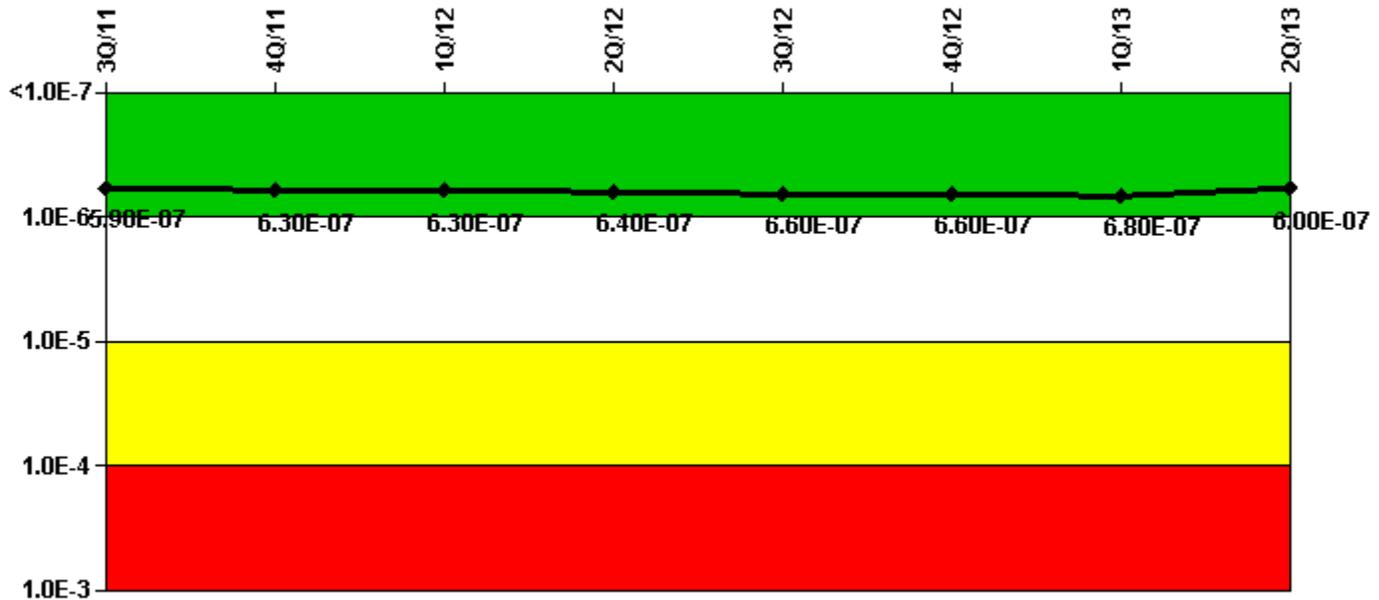
Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (Δ CDF)	6.70E-10	4.76E-09	6.89E-09	5.51E-09	7.12E-09	5.78E-09	7.31E-09	2.33E-09
URI (Δ CDF)	-2.46E-09	-2.23E-09	-3.87E-09	-3.53E-09	-4.04E-09	-1.14E-08	-1.28E-08	-2.33E-09
PLE	NO							
Indicator value	-1.80E-09	2.50E-09	3.00E-09	2.00E-09	3.10E-09	-5.60E-09	-5.50E-09	7.50E-13

Licensee Comments:

2Q/13: Revision 9 of the Wolf Creek MSPI Basis Document incorporates new PRA inputs from Wolf Creek Generating Station PSA Model Revision 6. This revision included updates of component reliability and unavailability data, credit for the SHIELD passive RCP seal, and credit for the non-safety auxiliary feedwater pump as well as other less significant model updates. Revision 6 to the PSA model is a significant change and resulted in the revision of CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components. This revision also incorporated use of plant-specific common cause adjustment factors for the ESW subsystem of the cooling water system as allowed in NEI 99-02 Section F.2.3.4. In addition, system drawings for High Pressure Safety Injection, Emergency AC Power, and Auxiliary Feedwater were revised to correct scoping errors on previous drawings. Corrected dates in tables in Appendix 3 from 2004 to 2006 to 2002 to 2004.

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	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (ΔCDF)	2.18E-07	2.59E-07	2.63E-07	2.70E-07	2.77E-07	2.75E-07	2.79E-07	6.10E-07
URI (ΔCDF)	3.71E-07	3.67E-07	3.66E-07	3.68E-07	3.80E-07	3.87E-07	3.99E-07	-1.40E-08
PLE	NO							
Indicator value	5.90E-07	6.30E-07	6.30E-07	6.40E-07	6.60E-07	6.60E-07	6.80E-07	6.00E-07

Licensee Comments:

2Q/13: Revision 9 of the Wolf Creek MSPI Basis Document incorporates new PRA inputs from Wolf Creek Generating Station PSA Model Revision 6. This revision included updates of component reliability and unavailability data, credit for the SHIELD passive RCP seal, and credit for the non-safety auxiliary feedwater pump as well as other less significant model updates. Revision 6 to the PSA model is a significant change and resulted in the revision of CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components. This revision also incorporated use of plant-specific common cause adjustment factors for the ESW subsystem of the cooling water system as allowed in NEI 99-02 Section F.2.3.4. In addition, system drawings for High Pressure Safety Injection, Emergency AC Power, and Auxiliary Feedwater were revised to correct scoping errors on previous drawings. Corrected dates in tables in Appendix 3 from 2004 to 2006 to 2002 to 2004.

1Q/13: Risk Cap Invoked.

4Q/12: Risk Cap Invoked.

3Q/12: Risk Cap Invoked.

2Q/12: Risk Cap Invoked.

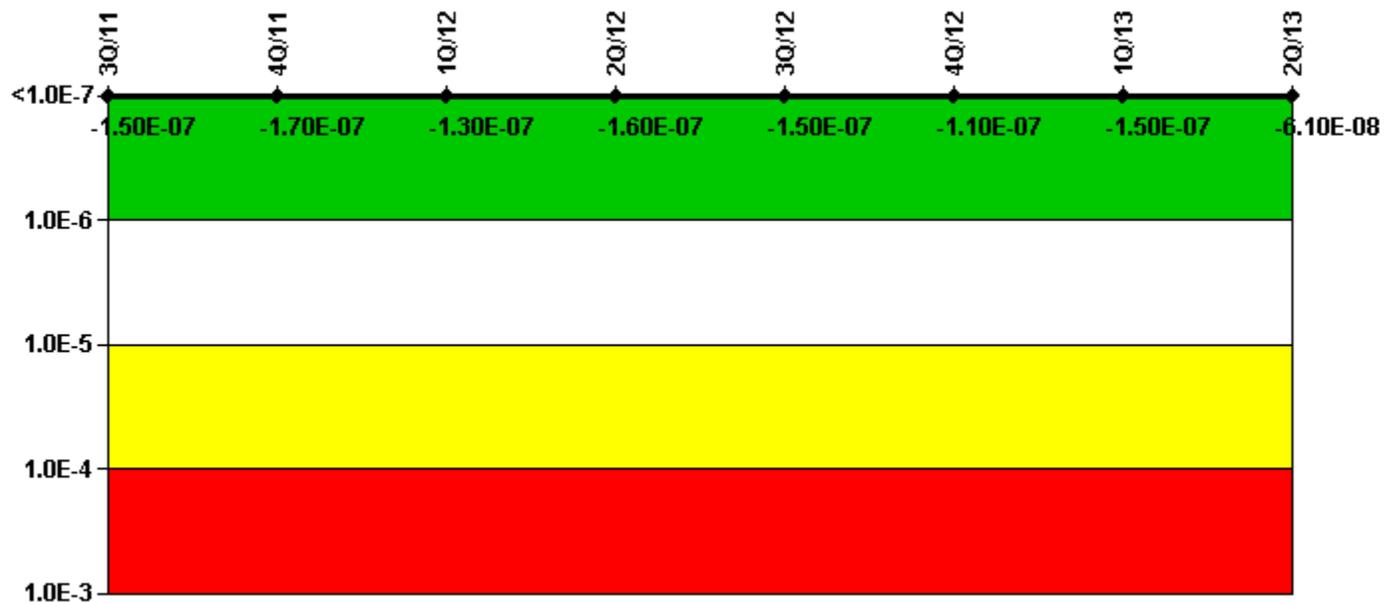
1Q/12: Risk Cap Invoked.

4Q/11: Risk Cap Invoked. MSPI Heat Removal System- TDAFWP oil issue - Functional Failure Evaluation ongoing. Entered 1 TDAFWP run time failure for August 2011. Upon completion of failure evaluation, this failure may be retracted. This change does not affect the overall color of the performance indicator.

3Q/11: Risk Cap Invoked. TDAFWP oil issue - Functional Failure Evaluation is still open. Currently pursuing vendor evaluation of potential "Run Time Failure".

3Q/11: TDAFWP oil issue - Functional Failure Evaluation is still open. Currently pursuing vendor evaluation of potential "Run Time Failure".

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	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (ΔCDF)	1.37E-07	1.19E-07	1.97E-07	1.66E-07	1.79E-07	1.68E-07	1.76E-07	4.96E-08
URI (ΔCDF)	-2.88E-07	-2.88E-07	-3.26E-07	-3.25E-07	-3.24E-07	-2.77E-07	-3.27E-07	-1.11E-07
PLE	NO							

Indicator value	-1.50E-07	-1.70E-07	-1.30E-07	-1.60E-07	-1.50E-07	-1.10E-07	-1.50E-07	-6.10E-08
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Licensee Comments:

2Q/13: Revision 9 of the Wolf Creek MSPI Basis Document incorporates new PRA inputs from Wolf Creek Generating Station PSA Model Revision 6. This revision included updates of component reliability and unavailability data, credit for the SHIELD passive RCP seal, and credit for the non-safety auxiliary feedwater pump as well as other less significant model updates. Revision 6 to the PSA model is a significant change and resulted in the revision of CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components. This revision also incorporated use of plant-specific common cause adjustment factors for the ESW subsystem of the cooling water system as allowed in NEI 99-02 Section F.2.3.4. In addition, system drawings for High Pressure Safety Injection, Emergency AC Power, and Auxiliary Feedwater were revised to correct scoping errors on previous drawings. Corrected dates in tables in Appendix 3 from 2004 to 2006 to 2002 to 2004.

1Q/13: Potential failure of EJFCV0611 on 3/22/2013 - MSPI failure evaluation underway.

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	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (ΔCDF)	6.42E-07	6.42E-07	7.47E-07	8.11E-07	7.23E-07	6.41E-07	7.15E-07	8.30E-08

URI (Δ CDF)	-9.74E-07	-9.94E-07	-1.03E-06	-1.06E-06	-1.08E-06	-1.02E-06	-1.06E-06	5.55E-08
PLE	NO	NO						
Indicator value	-3.30E-07	-3.50E-07	-2.80E-07	-2.50E-07	-3.50E-07	-3.80E-07	-3.40E-07	1.40E-07

Licensee Comments:

2Q/13: Revision 9 of the Wolf Creek MSPI Basis Document incorporates new PRA inputs from Wolf Creek Generating Station PSA Model Revision 6. This revision included updates of component reliability and unavailability data, credit for the SHIELD passive RCP seal, and credit for the non-safety auxiliary feedwater pump as well as other less significant model updates. Revision 6 to the PSA model is a significant change and resulted in the revision of CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components. This revision also incorporated use of plant-specific common cause adjustment factors for the ESW subsystem of the cooling water system as allowed in NEI 99-02 Section F.2.3.4. In addition, system drawings for High Pressure Safety Injection, Emergency AC Power, and Auxiliary Feedwater were revised to correct scoping errors on previous drawings. Corrected dates in tables in Appendix 3 from 2004 to 2006 to 2002 to 2004.

1Q/13: Risk Cap Invoked.

4Q/12: Risk Cap Invoked.

3Q/12: Risk Cap Invoked.

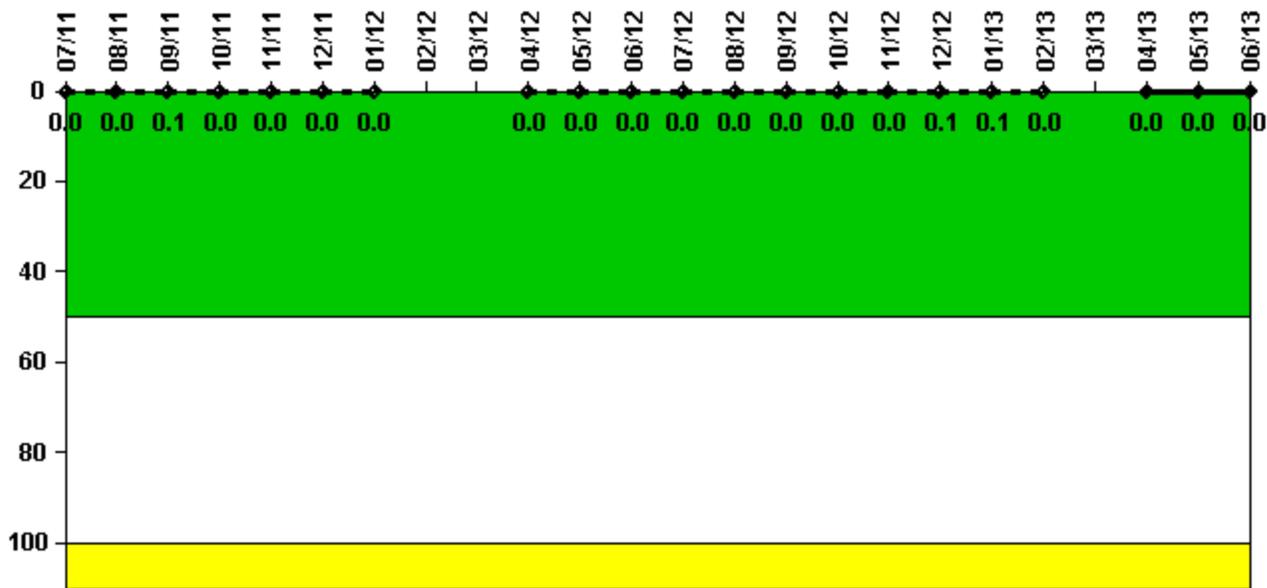
2Q/12: Risk Cap Invoked.

1Q/12: Risk Cap Invoked.

4Q/11: Risk Cap Invoked.

3Q/11: Risk Cap Invoked.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

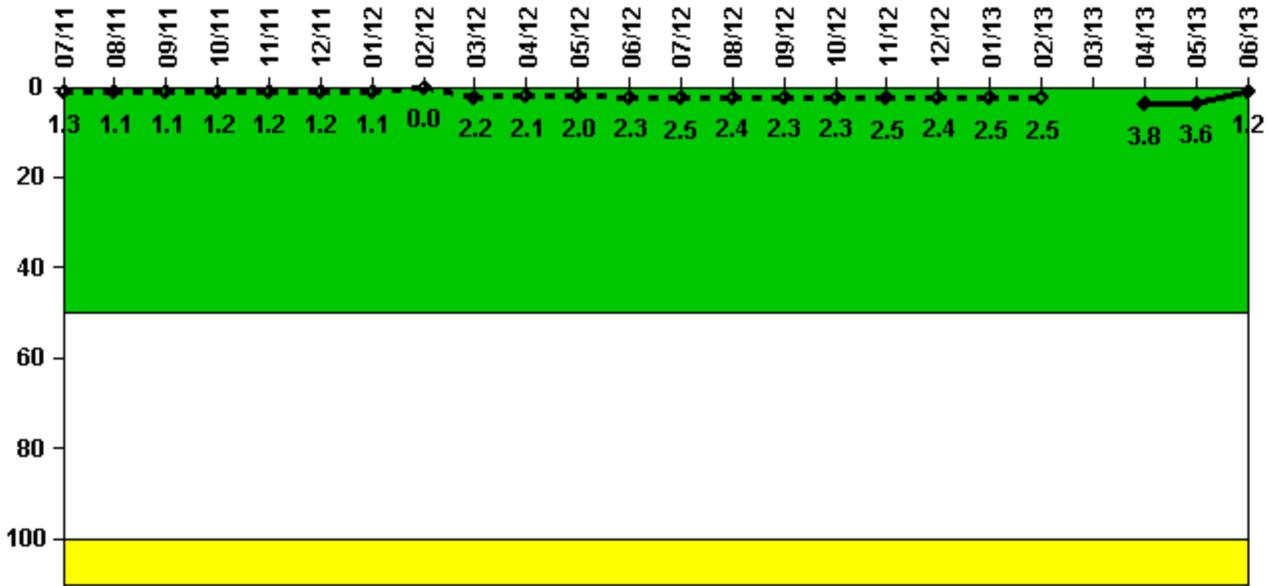
Notes

Reactor Coolant System Activity	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum activity	0.000200	0.000200	0.000800	0.000200	0.000200	0.000300	0.000200	N/A	N/A	0.000300	0.000300	0.000300
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	0.1	0	0	0	0	N/A	N/A	0	0	0

Reactor Coolant System Activity	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum activity	0.000300	0.000300	0.000300	0.000300	0.000400	0.000500	0.000500	0.000400	N/A	0.000100	0.000100	0.000200
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	0.1	0.1	0	N/A	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



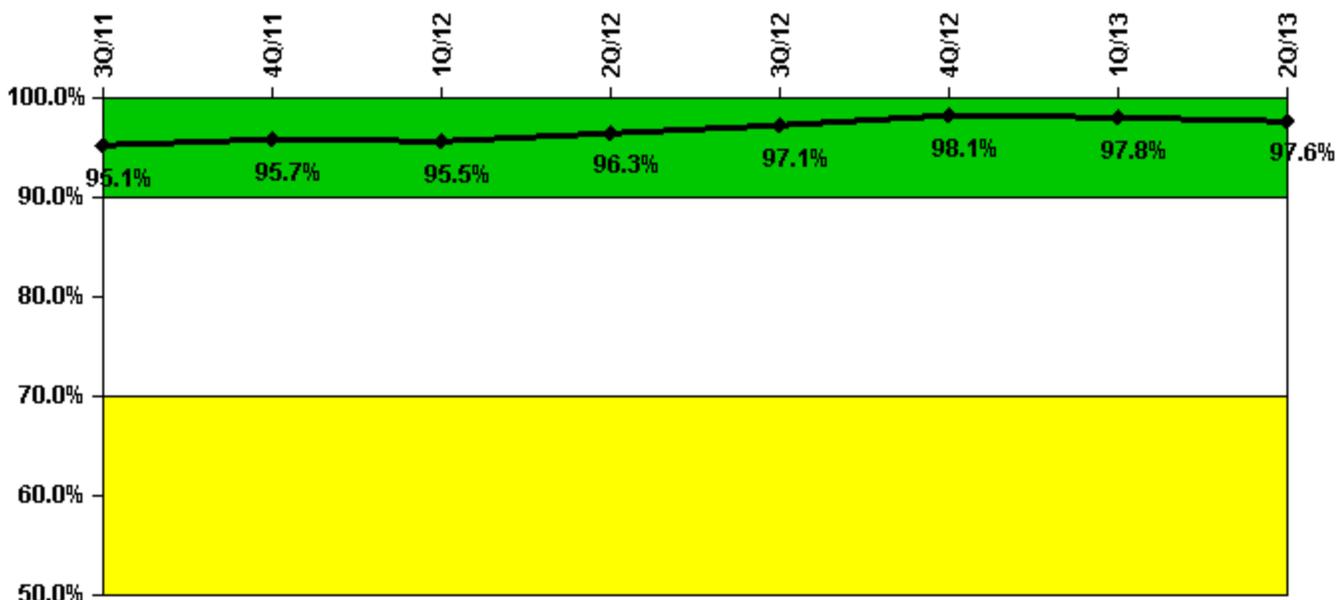
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum leakage	0.130	0.110	0.110	0.120	0.120	0.120	0.110	0	0.220	0.210	0.200	0.230
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	1.3	1.1	1.1	1.2	1.2	1.2	1.1	0	2.2	2.1	2.0	2.3
Reactor Coolant System Leakage	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum leakage	0.250	0.240	0.230	0.230	0.250	0.240	0.250	0.250	N/A	0.380	0.360	0.120
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	2.5	2.4	2.3	2.3	2.5	2.4	2.5	2.5	N/A	3.8	3.6	1.2

Licensee Comments: none

Drill/Exercise Performance



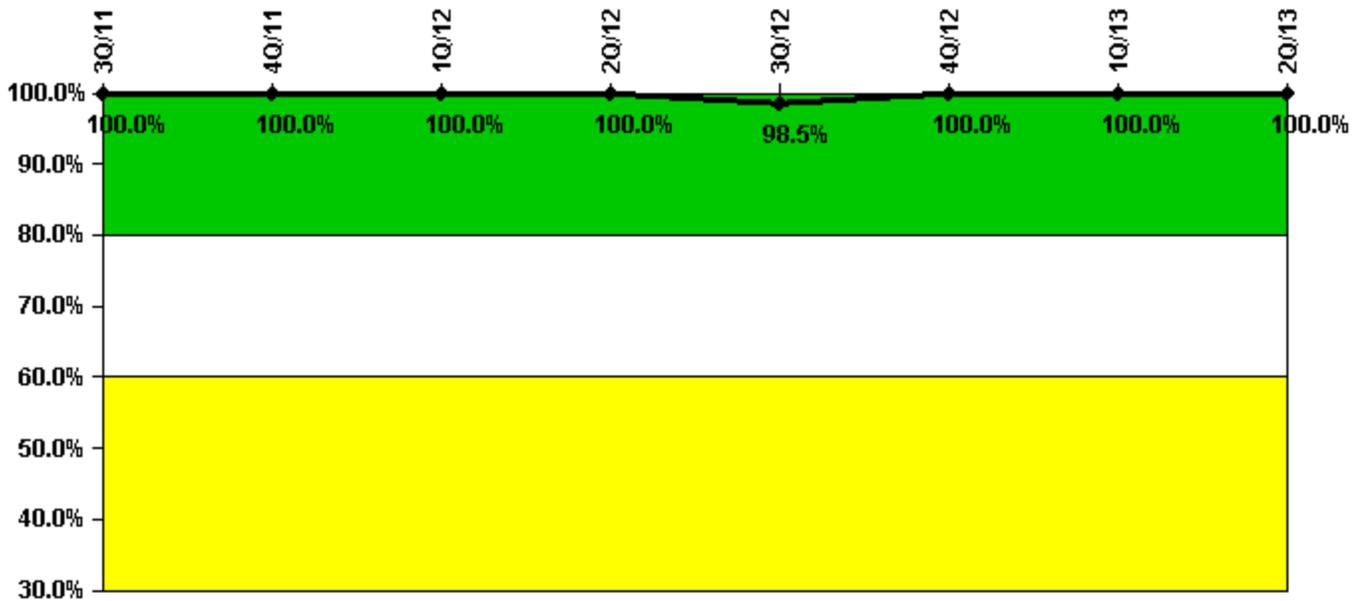
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Successful opportunities	163.0	82.0	42.0	28.0	24.0	46.0	49.0	5.0
Total opportunities	166.0	84.0	42.0	28.0	25.0	46.0	53.0	6.0
Indicator value	95.1%	95.7%	95.5%	96.3%	97.1%	98.1%	97.8%	97.6%

Licensee Comments: none

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

Notes

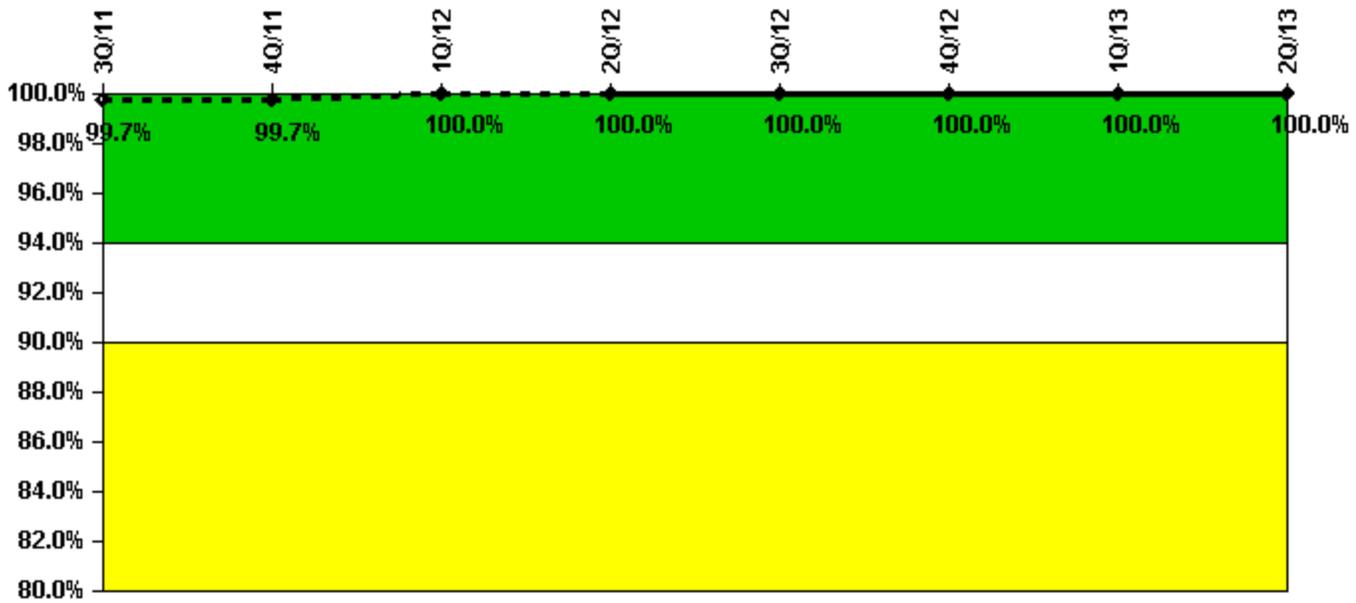
ERO Drill Participation	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Participating Key personnel	66.0	66.0	65.0	63.0	64.0	69.0	65.0	66.0
Total Key personnel	66.0	66.0	65.0	63.0	65.0	69.0	65.0	66.0
Indicator value	100.0%	100.0%	100.0%	100.0%	98.5%	100.0%	100.0%	100.0%

Licensee Comments:

1Q/13: A QA Surveillance identified a reporting delta in the total and participating key personnel. This error has been corrected. The indicator remains at 100%. The data issue was documented in the station corrective action program.

4Q/12: A QA Surveillance identified a reporting delta in the total and participating key personnel. This error has been corrected. The indicator remains at 100%.

Alert & Notification System



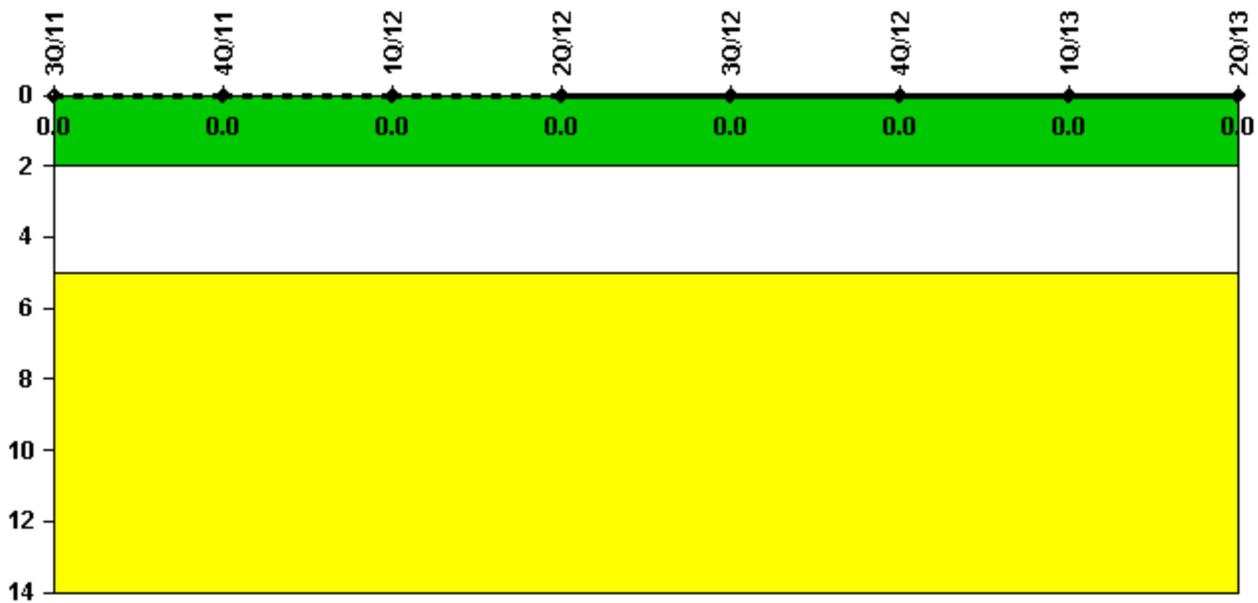
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Successful siren-tests	66	77	77	77	66	77	66	77
Total sirens-tests	66	77	77	77	66	77	66	77
Indicator value	99.7%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



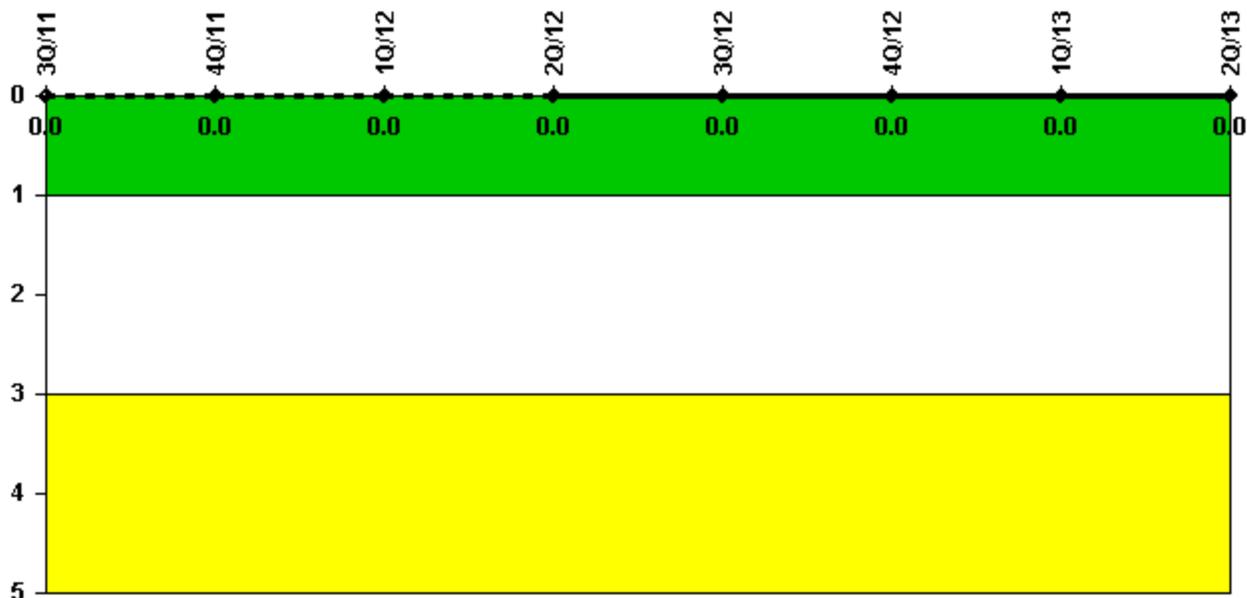
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
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							

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	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: August 19, 2013