

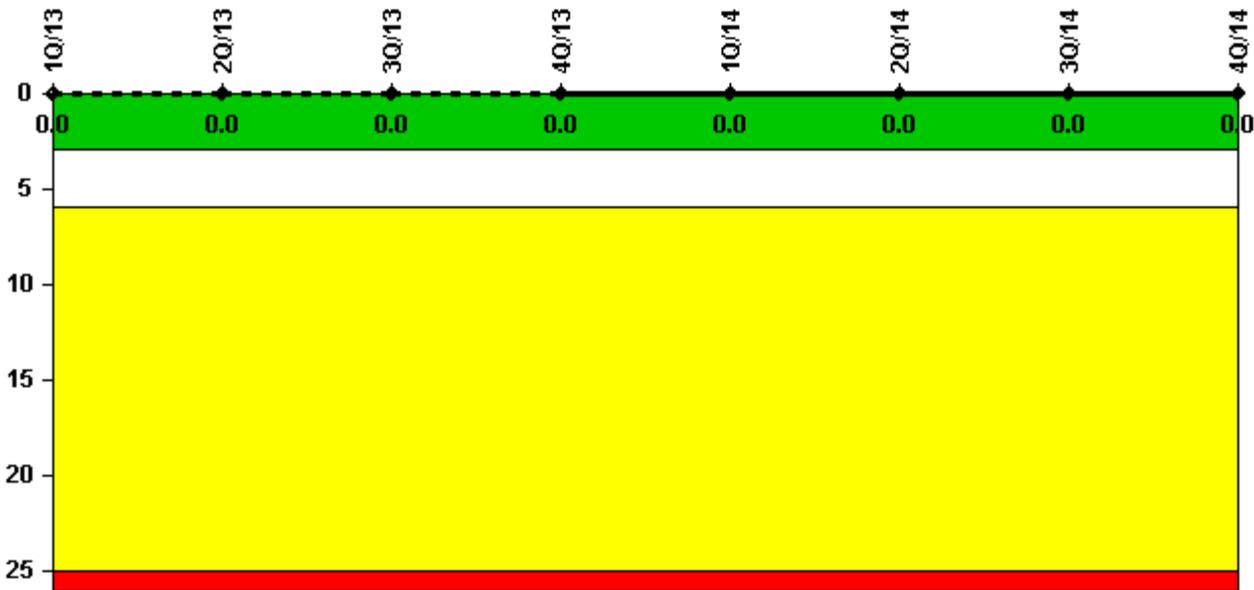
Wolf Creek 1

4Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



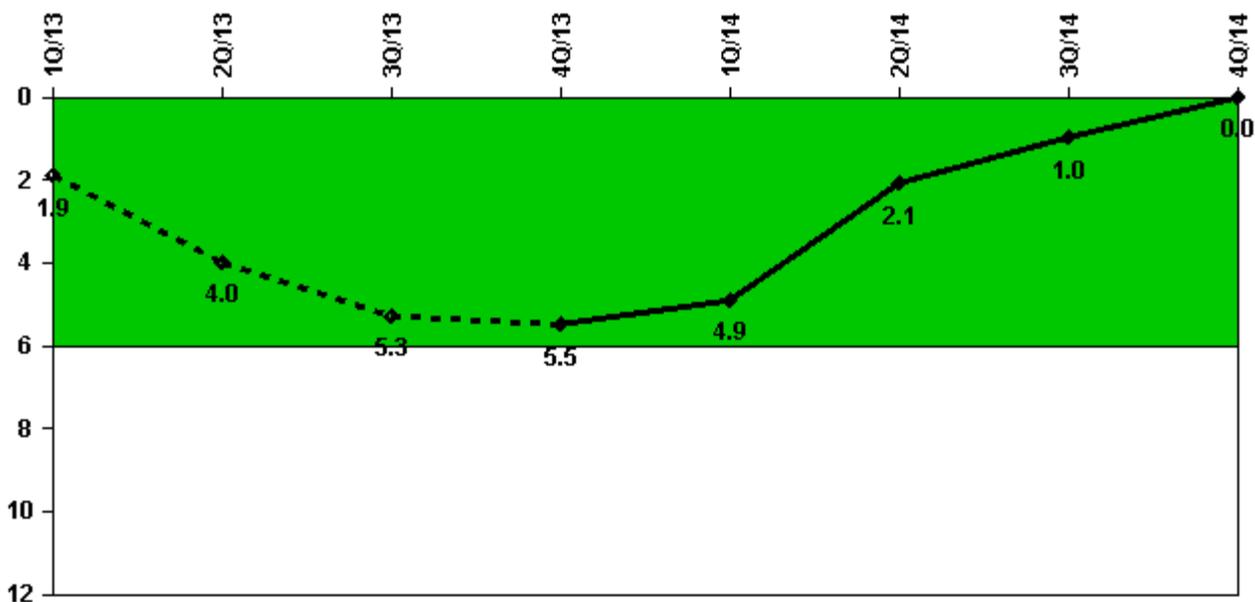
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	816.0	1749.1	1786.6	1998.9	1584.6	1170.7	2208.0	2209.0
Indicator value	0							

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

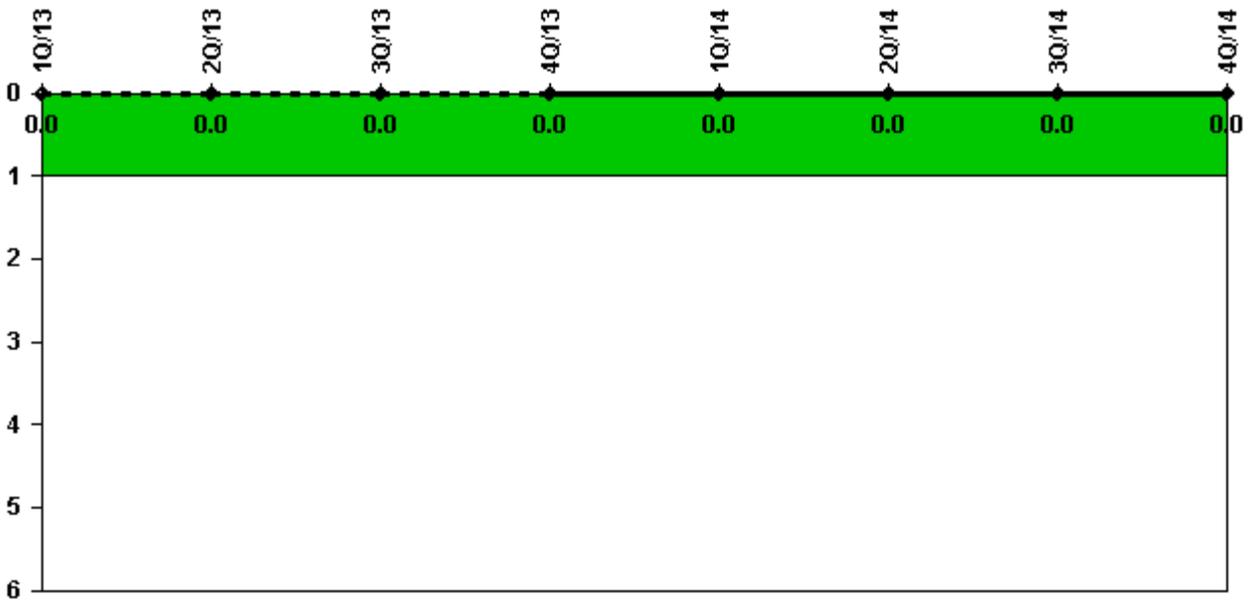
Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Unplanned power changes	0	3.0	1.0	1.0	0	0	0	0
Critical hours	816.0	1749.1	1786.6	1998.9	1584.6	1170.7	2208.0	2209.0
Indicator value	1.9	4.0	5.3	5.5	4.9	2.1	1.0	0

Licensee Comments:

4Q/14: On October 9, 2014, the NRC verbally approved the request for a NOED to not enforce compliance with Required Action B.4.1 of Technical Specification 3.8.1, "AC Source - Operating," which required restoration of the "B" diesel generator (DG) within 72 hours of being declared inoperable. The NOED provided an additional 8 hours to complete the 24-hour endurance and margin test required by TS Surveillance Requirement 3.8.1.14. The "B" DG was restored to operable status at approximately 75 hours such that granting of the NOED potentially avoided an unplanned power change.

Unplanned Scrams with Complications



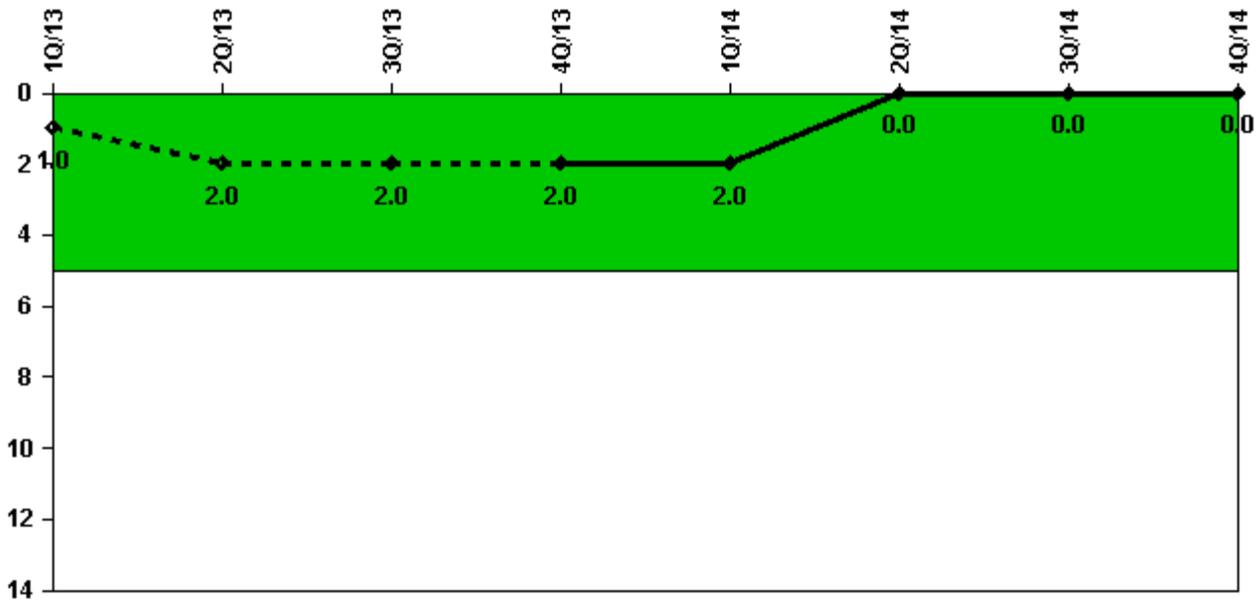
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0							

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

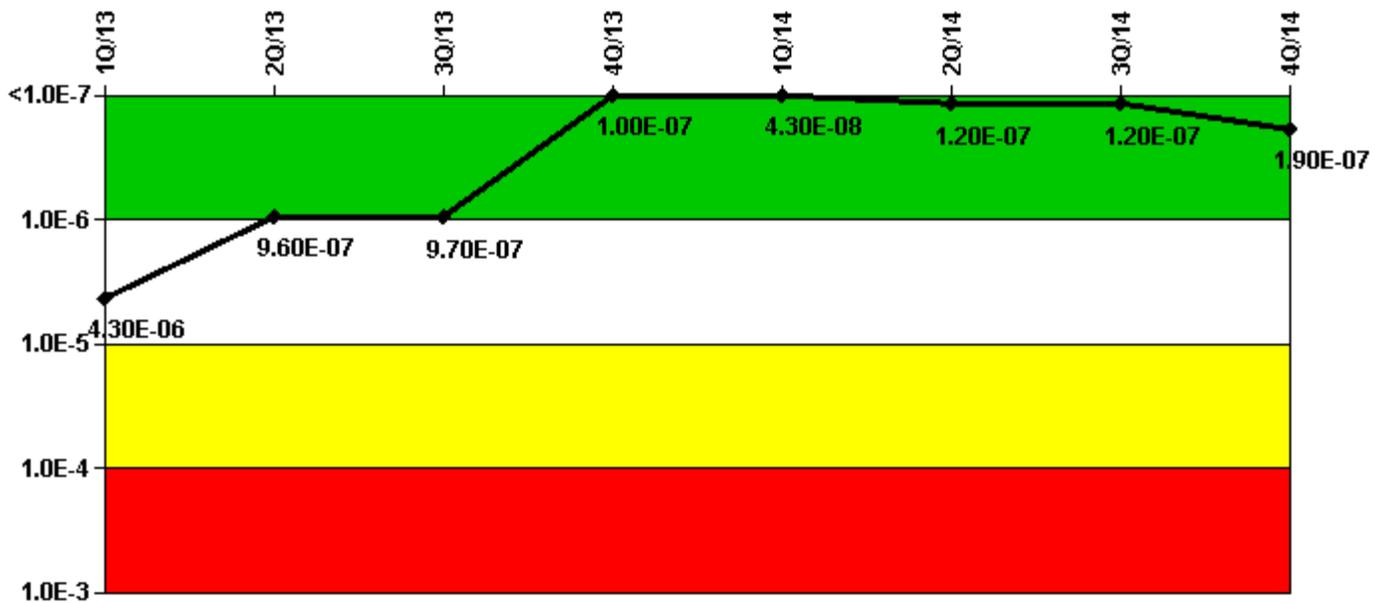
Notes

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

Licensee Comments:

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

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/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (ΔCDF)	7.78E-07	1.19E-07	1.08E-07	6.89E-09	2.88E-10	2.82E-09	-9.53E-11	3.64E-09
URI (ΔCDF)	3.50E-06	8.39E-07	8.61E-07	9.69E-08	4.24E-08	1.14E-07	1.22E-07	1.82E-07
PLE	NO	NO						
Indicator value	4.30E-06	9.60E-07	9.70E-07	1.00E-07	4.30E-08	1.20E-07	1.20E-07	1.90E-07

Licensee Comments:

4Q/14: On October 9, 2014, the NRC verbally approved the request for a NOED to not enforce compliance with Required Action B.4.1 of Technical Specification 3.8.1, "AC Source - Operating," which required restoration of the "B" diesel generator (DG) within 72 hours of being declared inoperable. The NOED provided an additional 8 hours to complete the 24-hour endurance and margin test required by TS Surveillance Requirement 3.8.1.14. The "B" DG was restored to operable status at approximately 75 hours such that granting of the NOED potentially avoided an unplanned power change.

2Q/14: Run Failure 312063 B EDG STS KJ-015B, frequency unexpectedly and erratically increased when the output bkr was opened after an hour of full load operation. Soldered wire termination failed within the hydraulic actuator transducer (coil) circuit.

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

4Q/13: Changed PRA Parameter(s). Revision 10 of the Wolf Creek Basis Document included Probabilistic Risk Assessment (PRA) Model Revision 7, which incorporated the new support system initiating event fault trees,

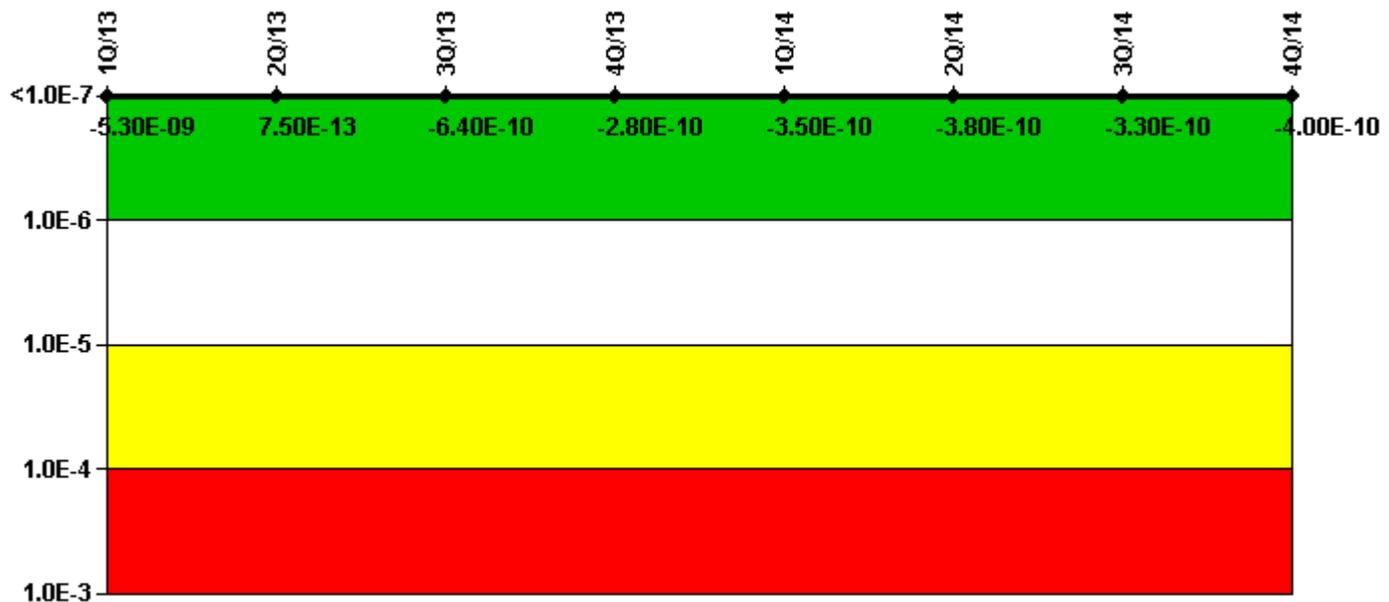
update of the station blackout accident sequence logic to remove credit for the SHIELD passive RCP seal and add credit for the newly installed non-safety station blackout diesel generators. The model change was a significant change and resulted in most PSA values changing.

3Q/13: Risk Cap Invoked.

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)

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									
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Pressure Injection System	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	7.50E-09	2.33E-09	1.68E-09	1.46E-10	5.16E-11	1.19E-11	6.37E-11	-4.03E-12
URI (Δ CDF)	-1.28E-08	-2.33E-09	-2.32E-09	-4.27E-10	-4.03E-10	-3.92E-10	-3.91E-10	-3.96E-10
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.30E-09	7.50E-13	-6.40E-10	-2.80E-10	-3.50E-10	-3.80E-10	-3.30E-10	-4.00E-10

Licensee Comments:

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

4Q/13: Changed PRA Parameter(s). Revision 10 of the Wolf Creek Basis Document included Probabilistic Risk Assessment (PRA) Model Revision 7, which incorporated the new support system initiating event fault trees, update of the station blackout accident sequence logic to remove credit for the SHIELD passive RCP seal and add credit for the newly installed non-safety station blackout diesel generators. The model change was a significant change and resulted in most PSA values changing.

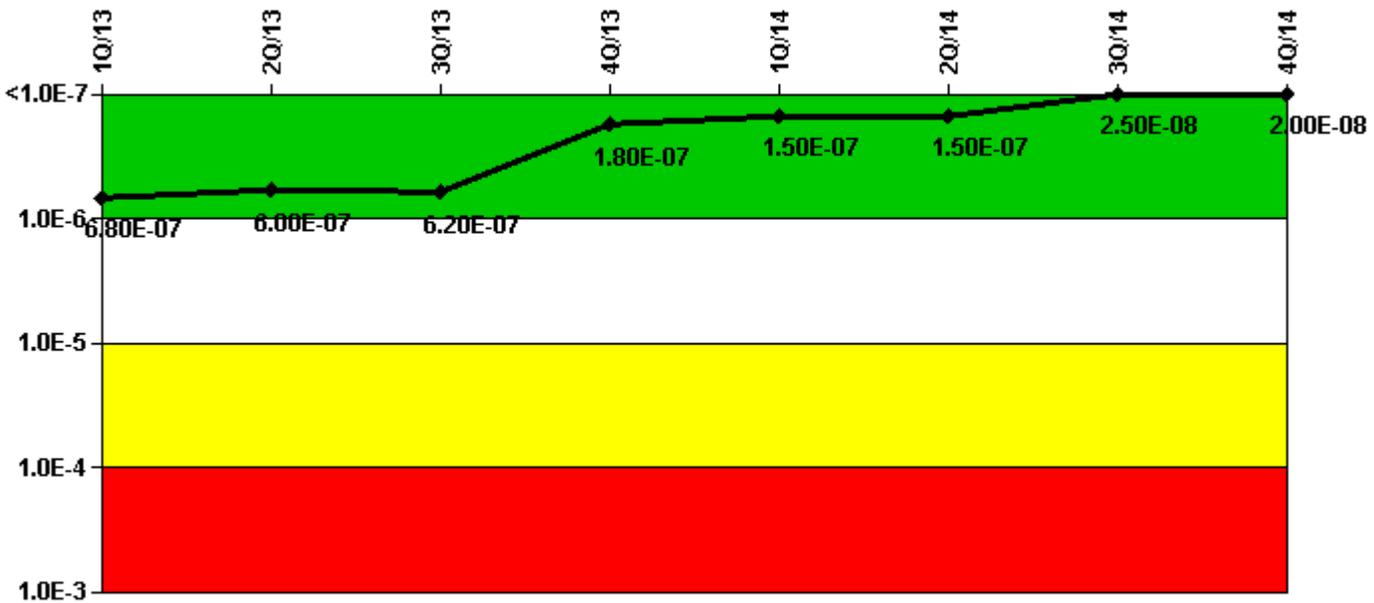
2Q/13: Revision 9 of the Wolf Creek MSPI Basis Document incorporates new PRA inputs from Wolf Creek Generating Station PSA Model Revision 6. This revision included updates of component reliability and unavailability data, credit for the SHIELD passive RCP seal, and credit for the non-safety auxiliary 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.

2Q/13: Changed PRA Parameter(s). 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: The Basic Event Fussel-Vesely (FV) values had been used in the past instead of the Average FV values for the High Pressure Injection (HPI) System and the Component Cooling Water portion of the Cooling Water Support (CWS) System. The average FV value should have been used to account for PRA modeling asymmetry per NEI 99-02 section F1.3.4. In accordance with Footnote 2 on Page 3 of NEI 99-02, the FV values were changed for the past 12 quarters in CDE for the CCP portion of HPI and just in the second quarter 2010 for the SIP portion of HPI and the CCW portion of CWS.

1Q/13: Changed PRA Parameter(s).

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/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	2.79E-07	6.10E-07	6.49E-07	1.69E-07	1.39E-07	1.30E-07	8.39E-08	7.74E-08
URI (Δ CDF)	3.99E-07	-1.40E-08	-2.92E-08	1.49E-08	1.45E-08	1.80E-08	-5.84E-08	-5.77E-08
PLE	NO							
Indicator value	6.80E-07	6.00E-07	6.20E-07	1.80E-07	1.50E-07	1.50E-07	2.50E-08	2.00E-08

Licensee Comments:

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

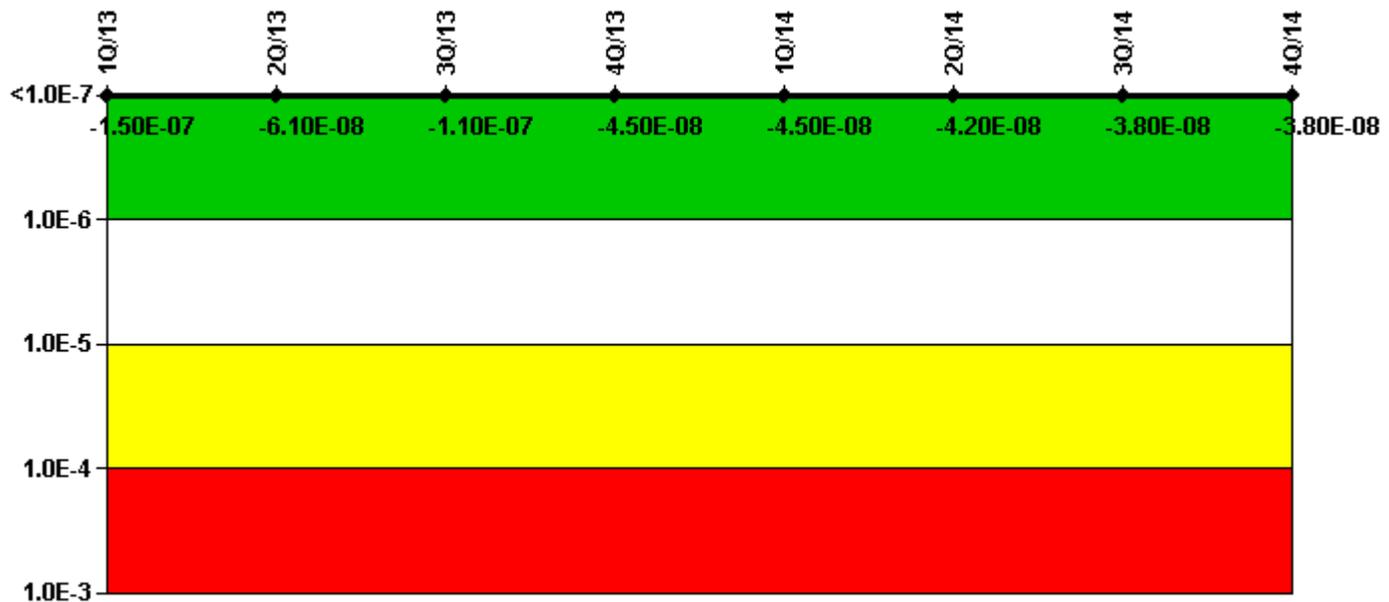
4Q/13: Changed PRA Parameter(s). Revision 10 of the Wolf Creek Basis Document included Probabilistic Risk Assessment (PRA) Model Revision 7, which incorporated the new support system initiating event fault trees, update of the station blackout accident sequence logic to remove credit for the SHIELD passive RCP seal and add credit for the newly installed non-safety station blackout diesel generators. The model change was a significant change and resulted in most PSA values changing.

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.

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/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
UAI (Δ CDF)	1.76E-07	4.96E-08	1.03E-09	-5.14E-10	5.92E-12	-2.05E-09	1.99E-09	2.42E-09
URI (Δ CDF)	-3.27E-07	-1.11E-07	-1.10E-07	-4.49E-08	-4.46E-08	-3.99E-08	-3.99E-08	-4.00E-08
PLE	NO							
Indicator value	-1.50E-07	-6.10E-08	-1.10E-07	-4.50E-08	-4.50E-08	-4.20E-08	-3.80E-08	-3.80E-08

Licensee Comments:

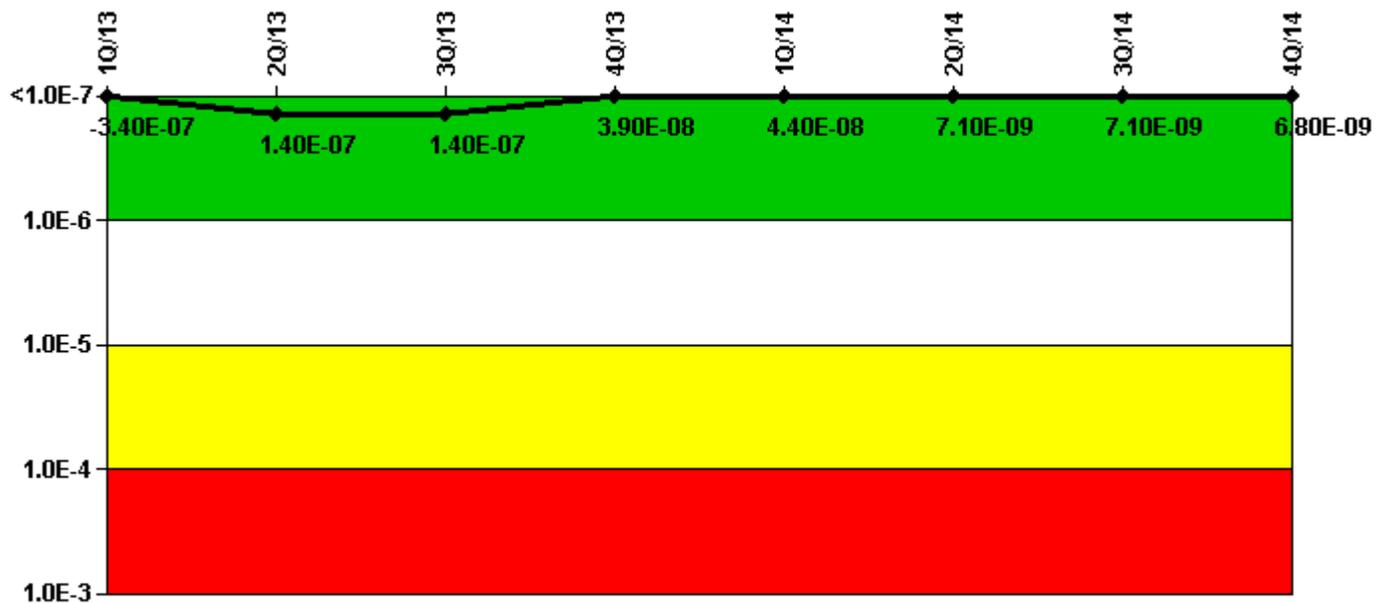
1Q/14: Changed PRA Parameter(s).

4Q/13: Changed PRA Parameter(s). Revision 10 of the Wolf Creek Basis Document included Probabilistic Risk Assessment (PRA) Model Revision 7, which incorporated the new support system initiating event fault trees, update of the station blackout accident sequence logic to remove credit for the SHIELD passive RCP seal and add credit for the newly installed non-safety station blackout diesel generators. The model change was a significant change and resulted in most PSA values changing.

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	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14

UAI (Δ CDF)	7.15E-07	8.30E-08	8.43E-08	2.18E-08	2.73E-08	2.96E-08	2.92E-08	2.87E-08
URI (Δ CDF)	-1.06E-06	5.55E-08	5.71E-08	1.68E-08	1.67E-08	-2.25E-08	-2.20E-08	-2.19E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	1.40E-07	1.40E-07	3.90E-08	4.40E-08	7.10E-09	7.10E-09	6.80E-09

Licensee Comments:

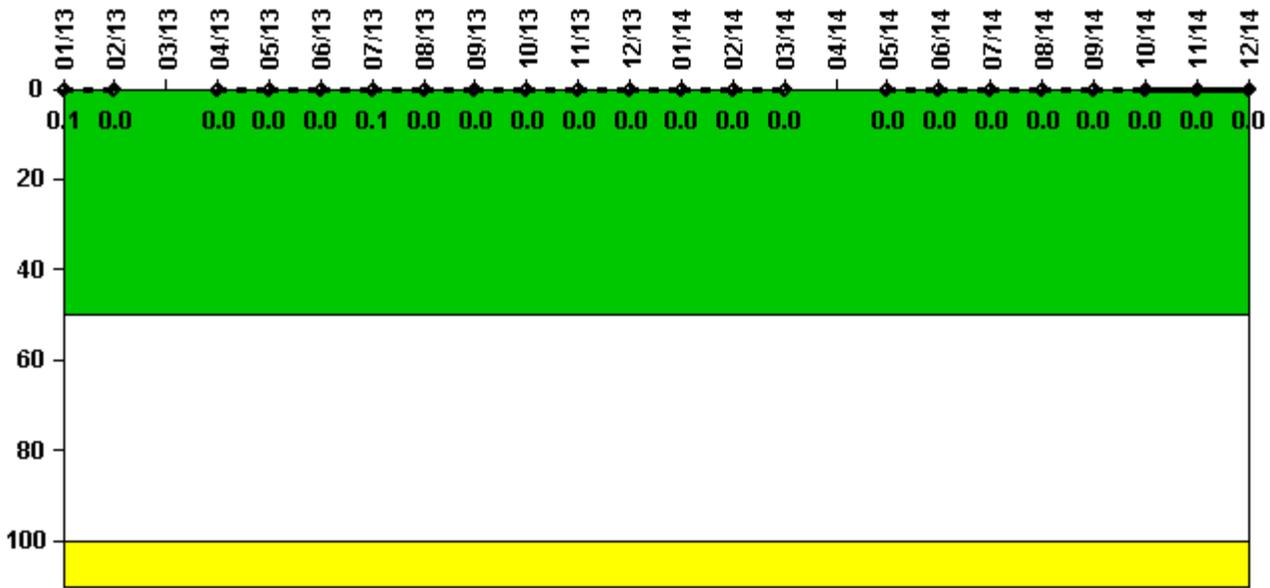
1Q/14: Changed PRA Parameter(s).

4Q/13: Changed PRA Parameter(s). Revision 10 of the Wolf Creek Basis Document included Probabilistic Risk Assessment (PRA) Model Revision 7, which incorporated the new support system initiating event fault trees, update of the station blackout accident sequence logic to remove credit for the SHIELD passive RCP seal and add credit for the newly installed non-safety station blackout diesel generators. The model change was a significant change and resulted in most PSA values changing.

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.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

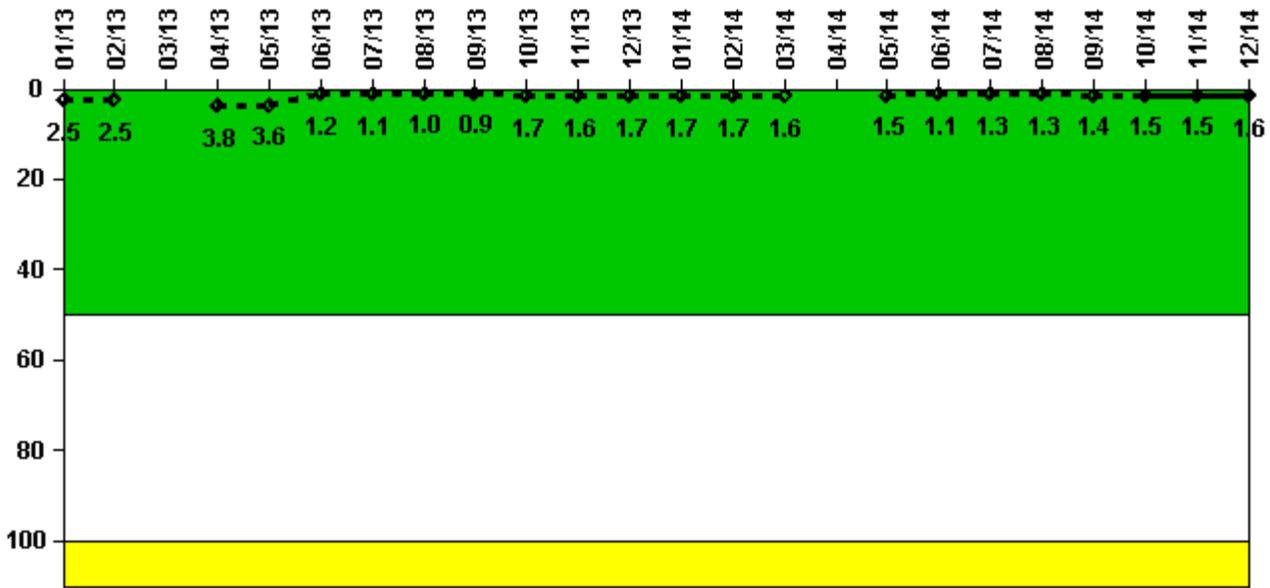
Notes

Reactor Coolant System Activity	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum activity	0.000500	0.000400	N/A	0.000100	0.000100	0.000200	0.000600	0.000200	0.000200	0.000100	0.000200	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	0.1	0	N/A	0	0	0	0.1	0	0	0	0	0

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	0.000200	0.000200	0.000200	N/A	0.000300	0.000300	0.000200	0.000300	0.000400	0.000300	0.000300	0.000400
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	N/A	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



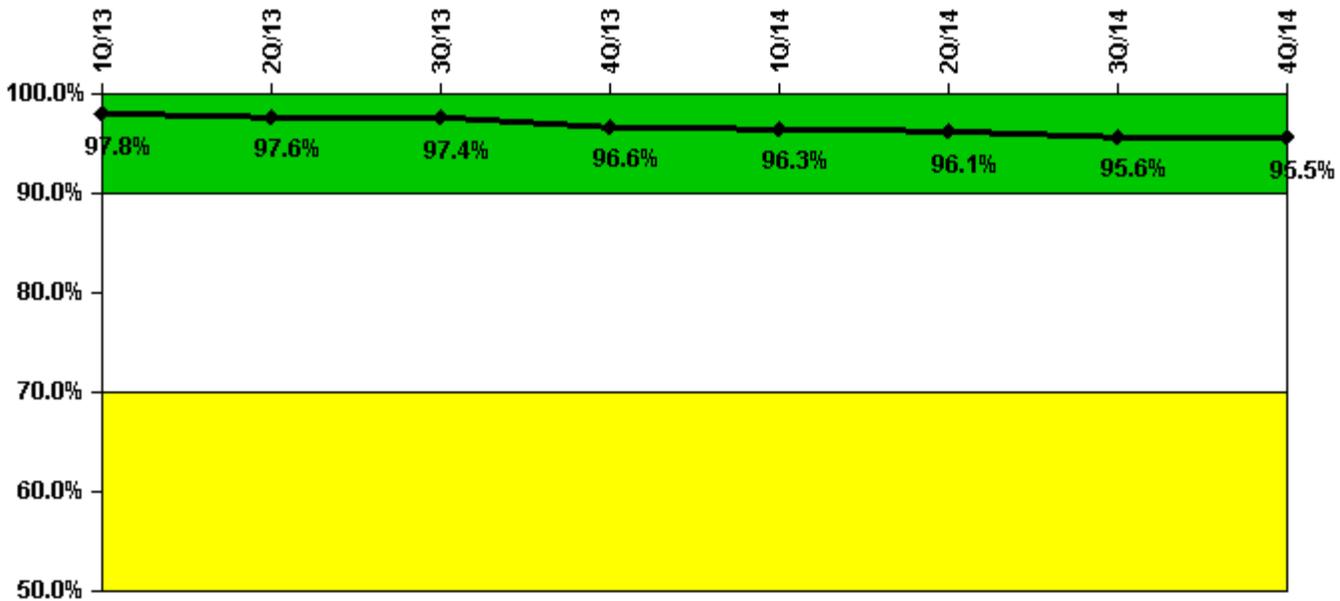
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum leakage	0.250	0.250	N/A	0.380	0.360	0.120	0.110	0.100	0.090	0.170	0.160	0.170
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	2.5	N/A	3.8	3.6	1.2	1.1	1.0	0.9	1.7	1.6	1.7
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	0.170	0.170	0.160	N/A	0.150	0.110	0.130	0.130	0.140	0.150	0.150	0.160
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	1.7	1.7	1.6	N/A	1.5	1.1	1.3	1.3	1.4	1.5	1.5	1.6

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

Notes

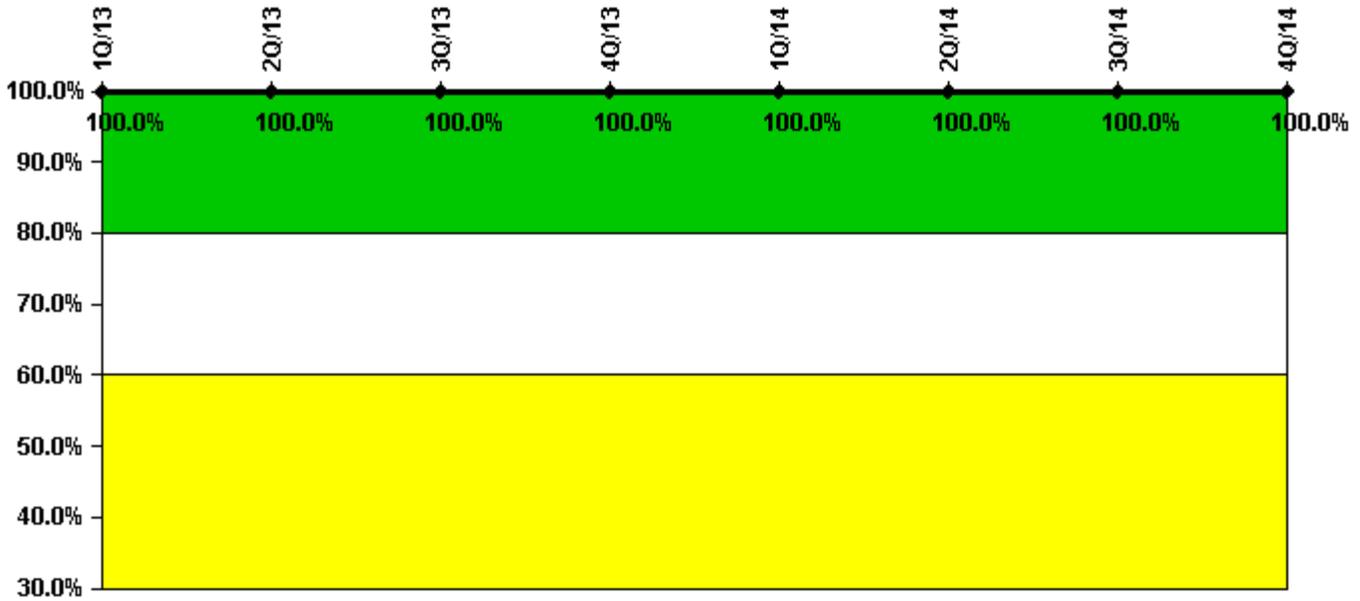
Drill/Exercise Performance	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Successful opportunities	49.0	6.0	55.0	118.0	14.0	37.0	41.0	65.0
Total opportunities	53.0	7.0	56.0	124.0	14.0	38.0	45.0	66.0
Indicator value	97.8%	97.6%	97.4%	96.6%	96.3%	96.1%	95.6%	95.5%

Licensee Comments:

4Q/13: QA audit identified a DEP reporting error for 12/2013 - data was corrected. No impact to the overall indicator color.

2Q/13: June 2013 DEP - It had been reported that there were three successes out of four opportunities. It should have been reported that there were four successes out of five opportunities. The additional opportunity was associated with the declaration of a Site Area Emergency. Site Area Emergency declarations inherently contain an automatic PAR. These PARs do NOT count as classification / PAR opportunities, but do count for notifications.

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

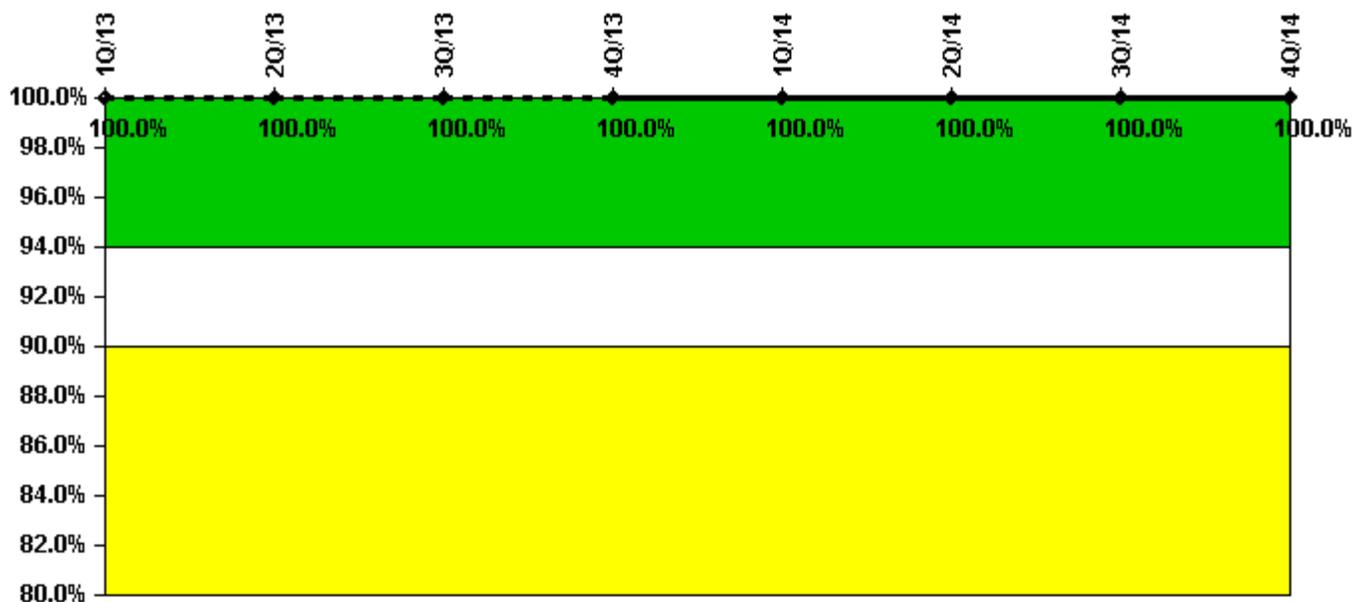
Notes

ERO Drill Participation	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Participating Key personnel	65.0	66.0	67.0	65.0	65.0	63.0	66.0	66.0
Total Key personnel	65.0	66.0	67.0	65.0	65.0	63.0	66.0	66.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	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.

Alert & Notification System



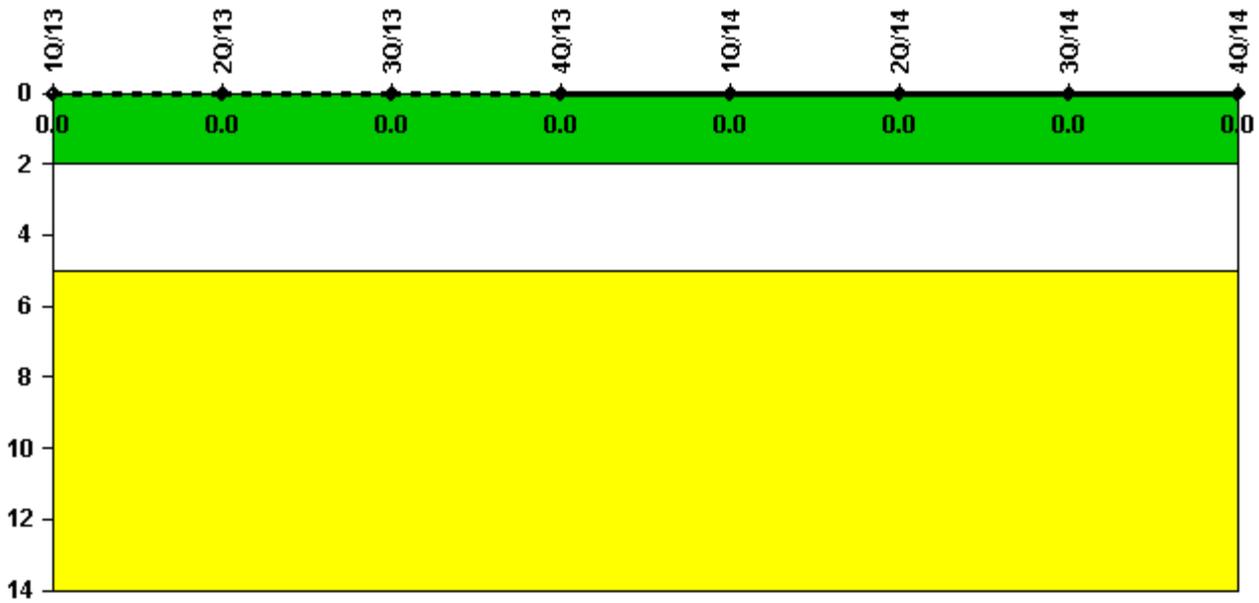
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
Successful siren-tests	66	77	66	77	77	77	77	66
Total sirens-tests	66	77	66	77	77	77	77	66
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



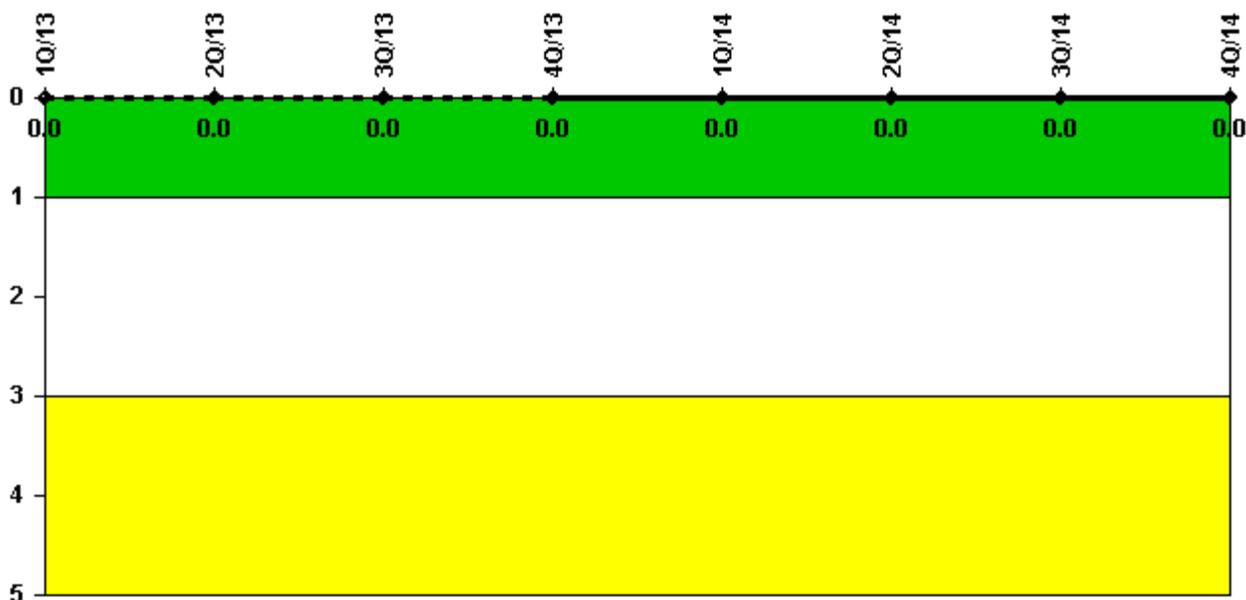
Thresholds: White > 2.0 Yellow > 5.0

Notes

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

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14
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: February 3, 2015