

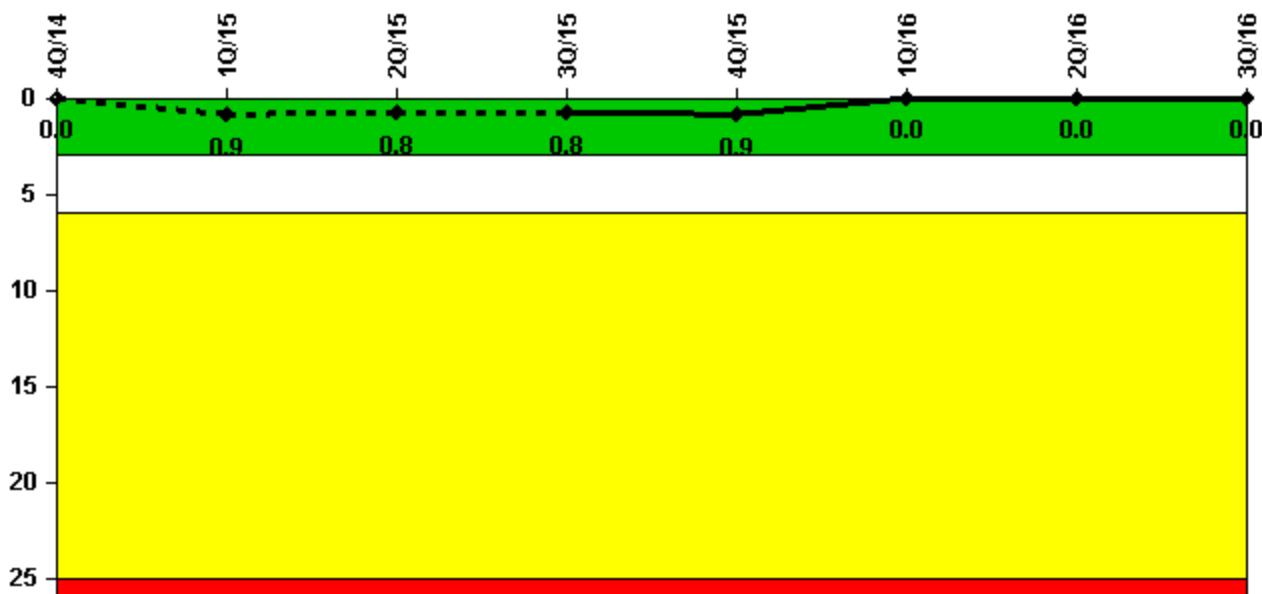
## Sequoyah 2

### 3Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

**Unplanned Scrams per 7000 Critical Hrs**



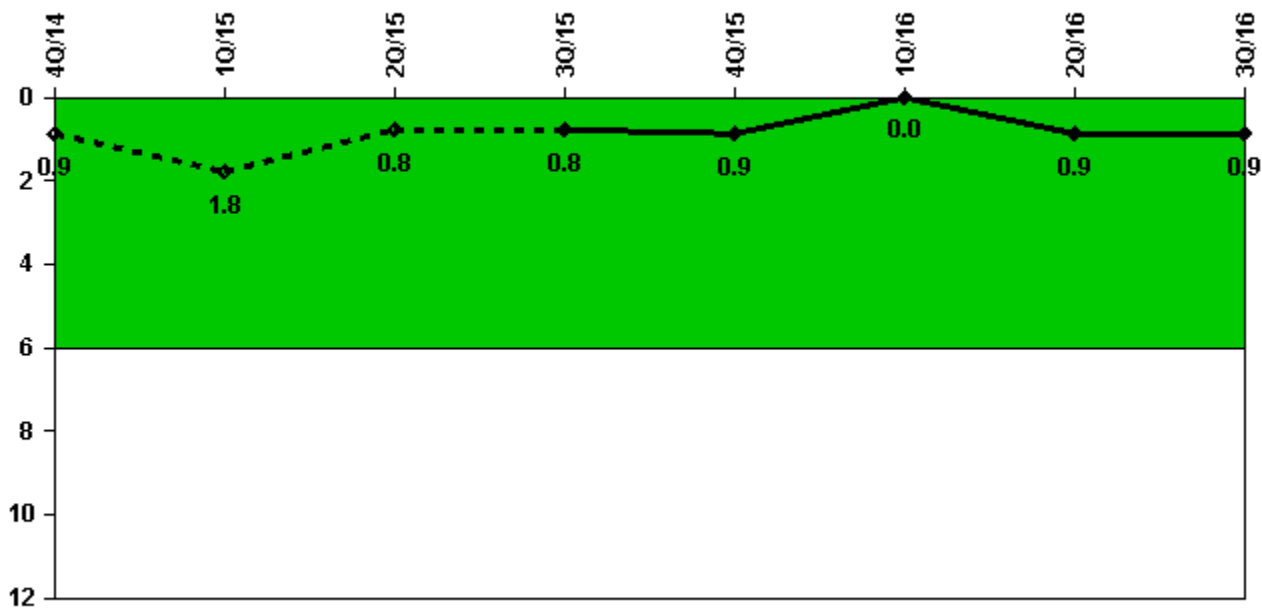
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

**Notes**

Unplanned Scrams per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned scrams	0	1.0	0	0	0	0	0	0
Critical hours	2209.0	2043.0	2184.0	2208.0	1498.6	2183.0	2150.3	2208.0
<b>Indicator value</b>	<b>0</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



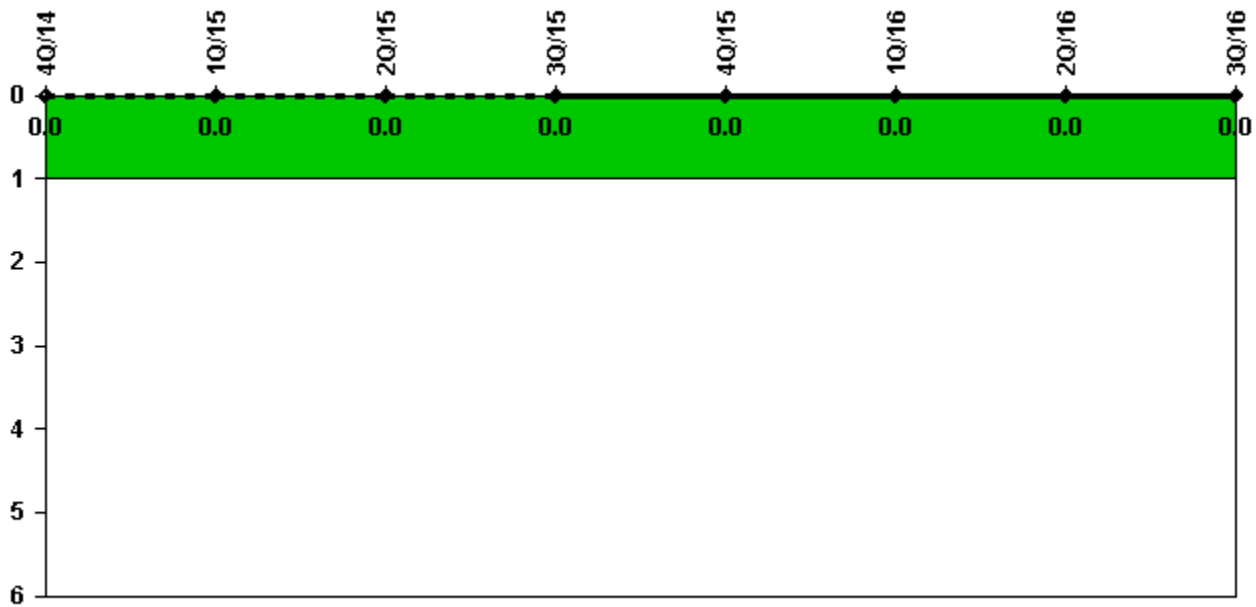
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned power changes	0	1.0	0	0	0	0	1.0	0
Critical hours	2209.0	2043.0	2184.0	2208.0	1498.6	2183.0	2150.3	2208.0
<b>Indicator value</b>	<b>0.9</b>	<b>1.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>

Licensee Comments: none

### Unplanned Scrams with Complications



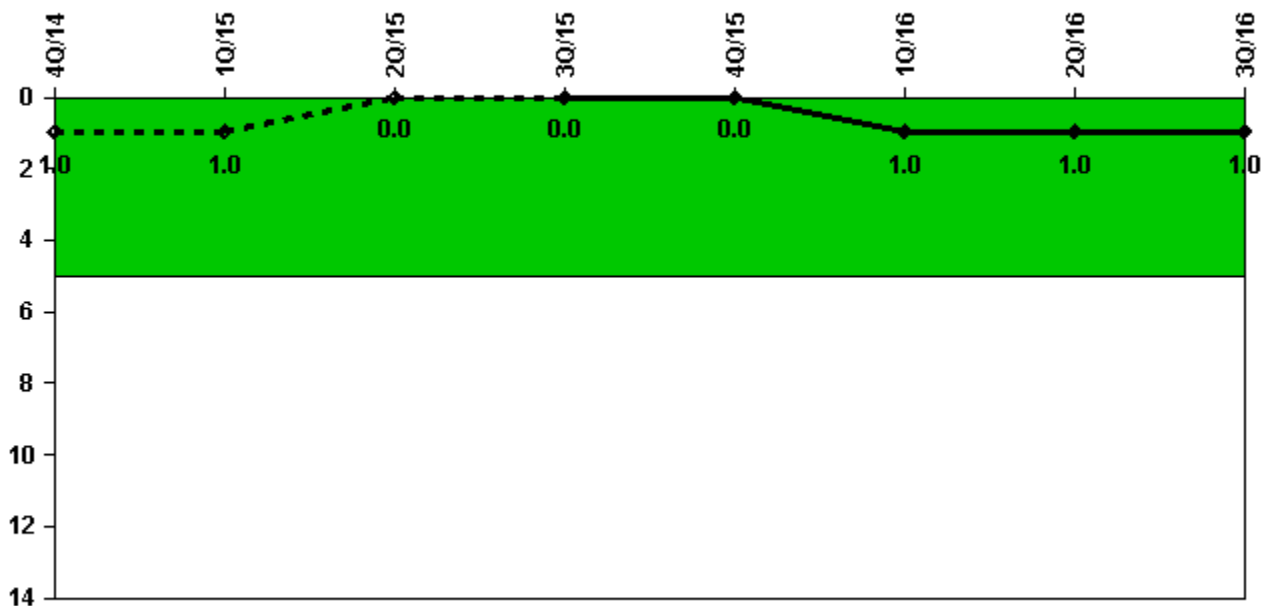
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Scrams with complications	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

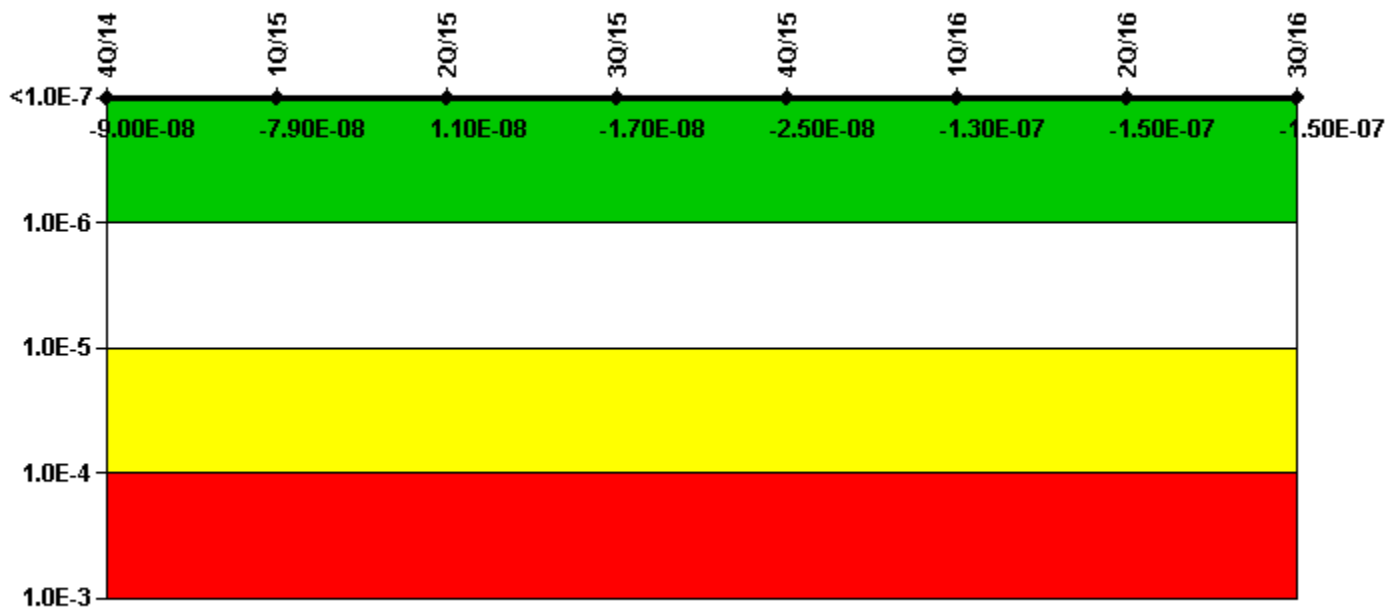
#### Notes

Safety System Functional Failures (PWR)	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Safety System Functional Failures	0	0	0	0	0	1	0	0
<b>Indicator value</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>

Licensee Comments:

1Q/16: Licensee Event Report 328/2015-002 - Unanalyzed Condition due to Inoperable Containment Recirculation Drains.

### Mitigating Systems Performance Index, Emergency AC Power System



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

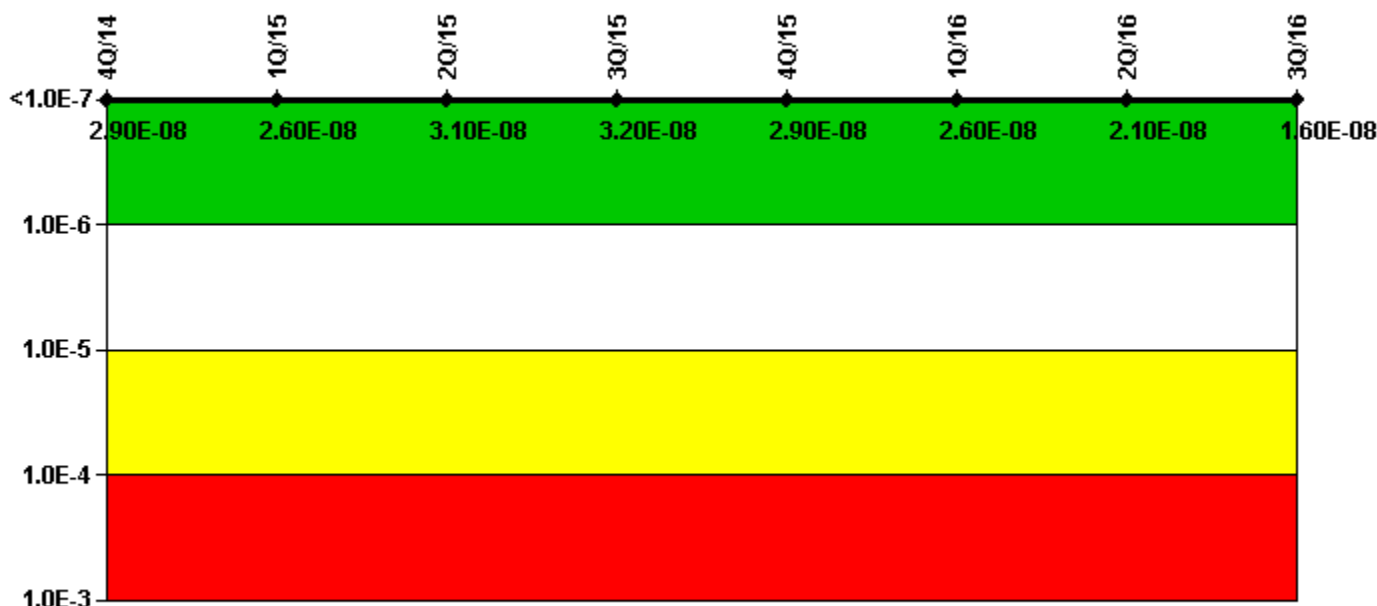
#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	3.83E-09	1.40E-08	4.84E-08	3.69E-08	2.95E-08	1.46E-08	1.56E-09	-5.45E-09
URI ( $\Delta$ CDF)	-9.34E-08	-9.29E-08	-3.73E-08	-5.36E-08	-5.49E-08	-1.46E-07	-1.49E-07	-1.46E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.00E-08	-7.90E-08	1.10E-08	-1.70E-08	-2.50E-08	-1.30E-07	-1.50E-07	-1.50E-07

#### Licensee Comments:

4Q/14: Changed PRA Parameter(s). The Sequoyah U1 and U2 PRA model Revision 3 was issued on August 5, 2014 with corresponding Revision 9 of MSPI Basis Document issued on 1-6-2015. The PRA model revision was periodic update to the model which made corrections to the Containment, CVCS, Electric Power (6900V, 480V 250V and Below, and Diesel Generators), ERCW, PORVs and Safeties, RCP Seals and Thermal Barrier, RPS and SI system models. 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

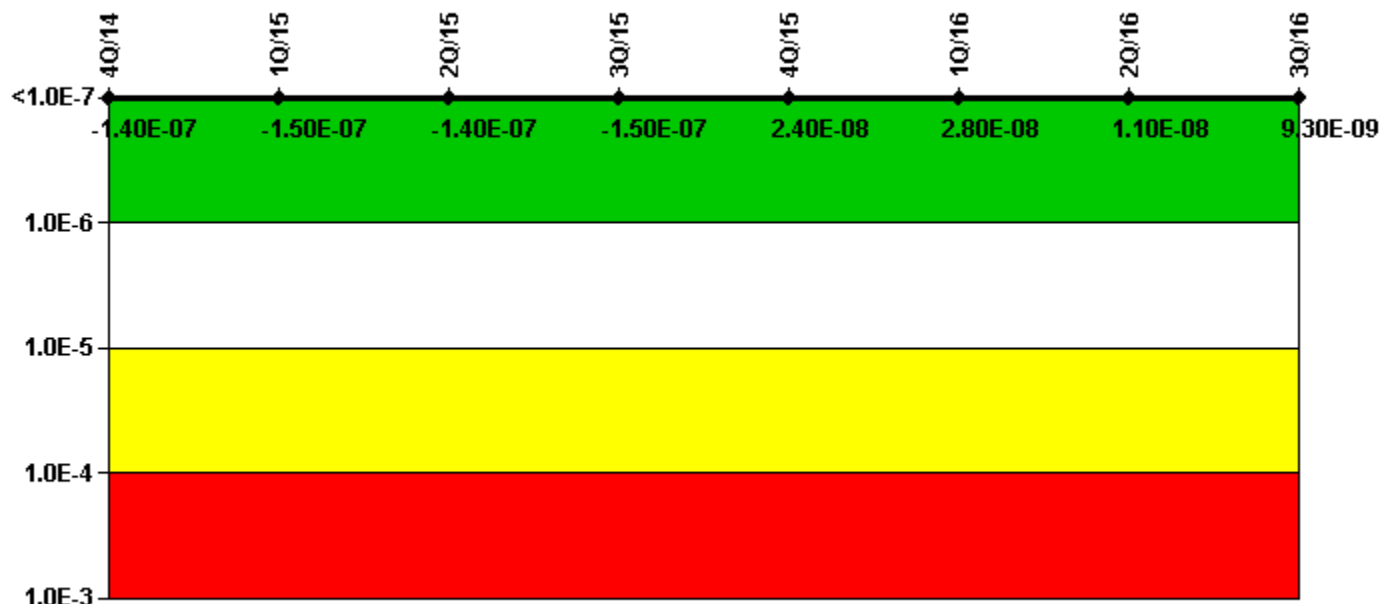
#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	3.17E-08	2.86E-08	3.32E-08	3.39E-08	3.14E-08	2.78E-08	2.34E-08	1.78E-08
URI (ΔCDF)	-2.25E-09	-2.25E-09	-2.25E-09	-2.25E-09	-2.25E-09	-2.25E-09	-2.25E-09	-2.25E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.90E-08	2.60E-08	3.10E-08	3.20E-08	2.90E-08	2.60E-08	2.10E-08	1.60E-08

#### Licensee Comments:

4Q/14: Changed PRA Parameter(s). The Sequoyah U1 and U2 PRA model Revision 3 was issued on August 5, 2014 with corresponding Revision 9 of MSPI Basis Document issued on 1-6-2015. The PRA model revision was periodic update to the model which made corrections to the Containment, CVCS, Electric Power (6900V, 480V 250V and Below, and Diesel Generators), ERCW, PORVs and Safeties, RCP Seals and Thermal Barrier, RPS and SI system models. 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

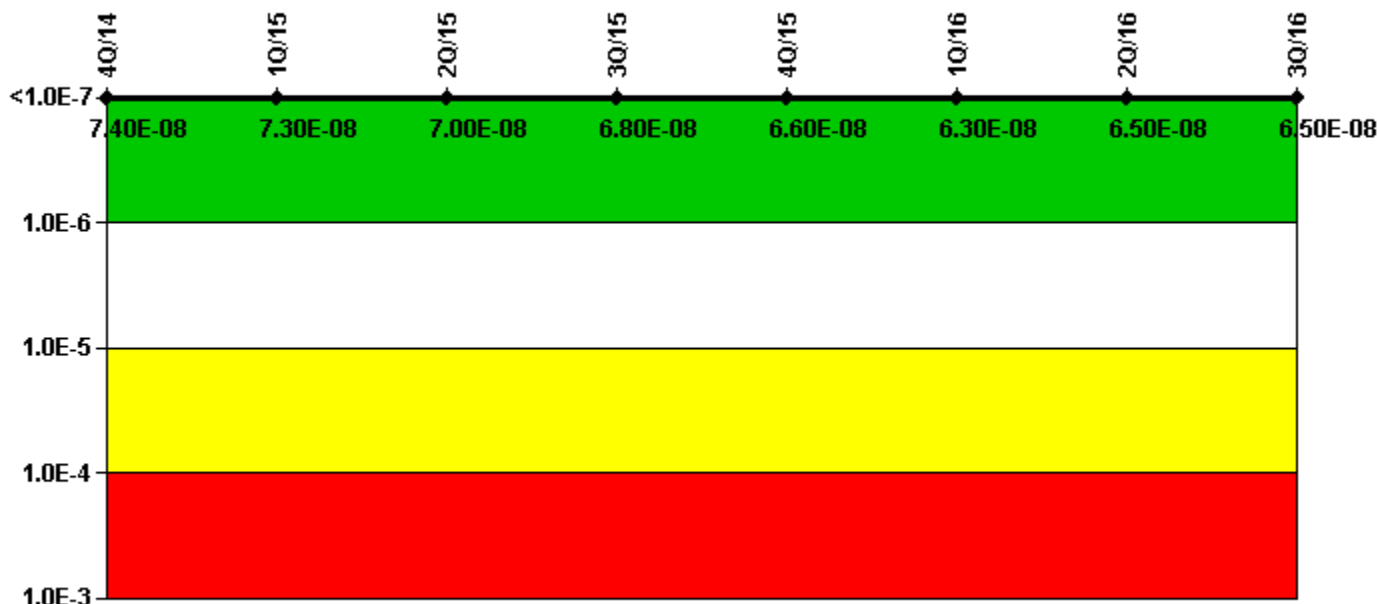
#### Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	2.23E-08	1.69E-08	2.34E-08	1.59E-08	-2.59E-09	-3.07E-09	-1.69E-08	-1.86E-08
URI ( $\Delta$ CDF)	-1.63E-07	-1.66E-07	-1.66E-07	-1.64E-07	2.67E-08	3.14E-08	2.80E-08	2.80E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-1.50E-07	-1.40E-07	-1.50E-07	2.40E-08	2.80E-08	1.10E-08	9.30E-09

#### Licensee Comments:

4Q/14: Changed PRA Parameter(s). The Sequoyah U1 and U2 PRA model Revision 3 was issued on August 5, 2014 with corresponding Revision 9 of MSPI Basis Document issued on 1-6-2015. The PRA model revision was periodic update to the model which made corrections to the Containment, CVCS, Electric Power (6900V, 480V 250V and Below, and Diesel Generators), ERCW, PORVs and Safeties, RCP Seals and Thermal Barrier, RPS and SI system models. 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

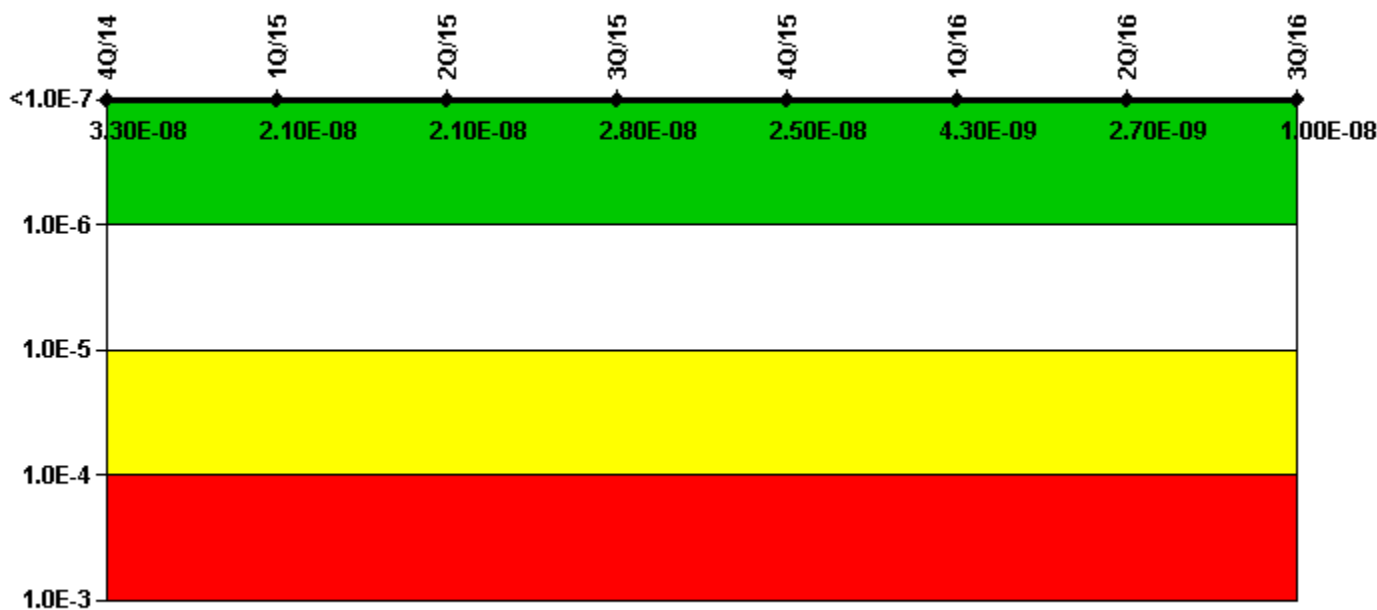
Mitigating Systems Performance Index, Residual Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	1.55E-08	1.54E-08	1.33E-08	1.32E-08	1.04E-08	8.21E-09	9.88E-09	1.03E-08
URI (ΔCDF)	5.83E-08	5.72E-08	5.62E-08	5.52E-08	5.52E-08	5.52E-08	5.52E-08	5.52E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	7.40E-08	7.30E-08	7.00E-08	6.80E-08	6.60E-08	6.30E-08	6.50E-08	6.50E-08

#### Licensee Comments:

4Q/14: Changed PRA Parameter(s). The Sequoyah U1 and U2 PRA model Revision 3 was issued on August 5, 2014 with corresponding Revision 9 of MSPI Basis Document issued on 1-6-2015. The PRA model revision was periodic update to the model which made corrections to the Containment, CVCS, Electric Power (6900V, 480V 250V and Below, and Diesel Generators), ERCW, PORVs and Safeties, RCP Seals and Thermal Barrier, RPS and SI system models. 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 Sequoyah U1 and U2 PRA model Revision 3 was issued on August 5, 2014 with corresponding Revision 9 of MSPI Basis Document issued on 1-6-2015. The PRA model revision was periodic update to the model which made corrections to the Containment, CVCS, Electric Power (6900V, 480V 250V and Below, and Diesel Generators), ERCW, PORVs and Safeties, RCP Seals and Thermal Barrier, RPS and SI system models. 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

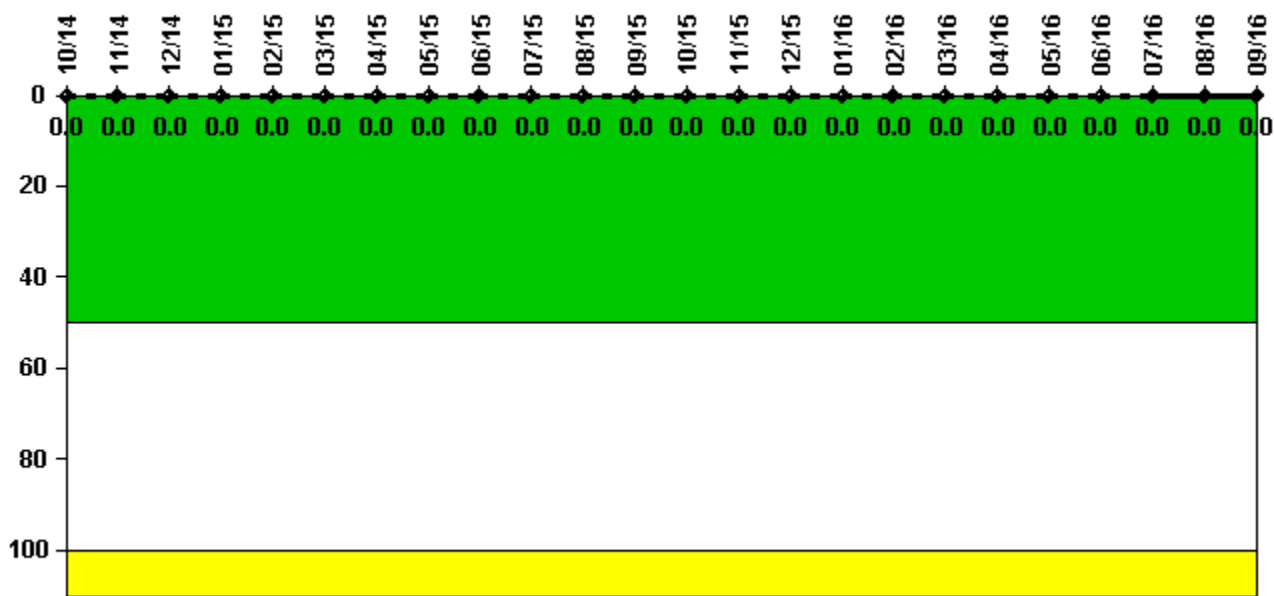
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	4.57E-08	3.44E-08	3.41E-08	4.10E-08	3.82E-08	1.73E-08	1.57E-08	2.33E-08
URI ( $\Delta$ CDF)	-1.30E-08	-1.30E-08	-1.30E-08	-1.30E-08	-1.30E-08	-1.30E-08	-1.30E-08	-1.30E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.30E-08	2.10E-08	2.10E-08	2.80E-08	2.50E-08	4.30E-09	2.70E-09	1.00E-08

#### Licensee Comments:

4Q/14: Changed PRA Parameter(s). The Sequoyah U1 and U2 PRA model Revision 3 was issued on August 5, 2014 with corresponding Revision 9 of MSPI Basis Document issued on 1-6-2015. The PRA model revision was periodic update to the model which made corrections to the Containment, CVCS, Electric Power (6900V, 480V 250V and Below, and Diesel Generators), ERCW, PORVs and Safeties, RCP Seals and Thermal Barrier, RPS and SI system models. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised

### Reactor Coolant System Activity



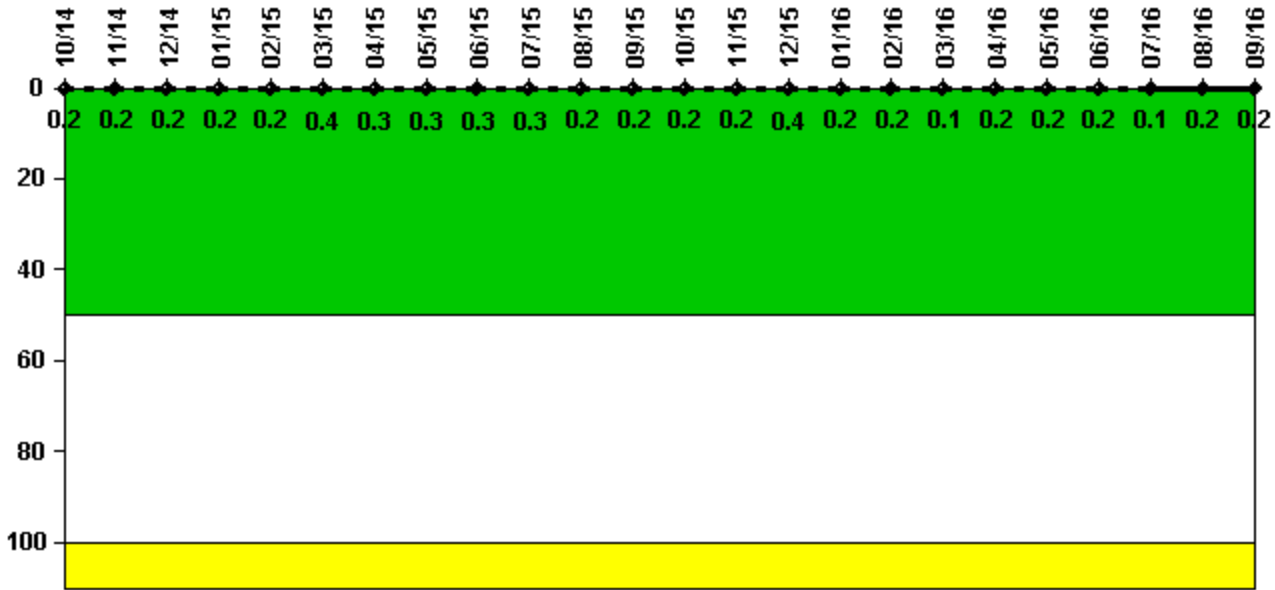
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum activity	0.000085	0.000075	0.000084	0.000078	0.000091	0.000114	0.000089	0.000118	0.000089	0.000094	0.000101	0.000090
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	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum activity	0.000138	0.000068	0.000055	0.000050	0.000095	0.000050	0.000053	0.000055	0.000067	0.000129	0.000066	0.000071
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	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

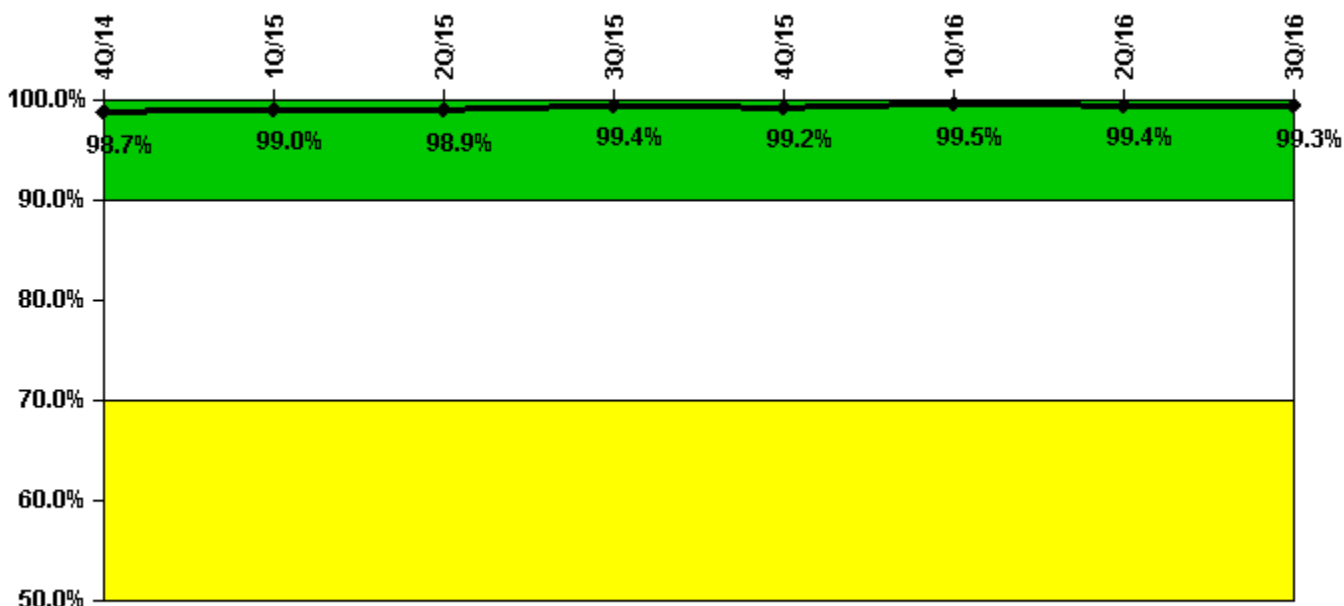
Reactor Coolant System Leakage	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum leakage	0.020	0.020	0.020	0.020	0.020	0.040	0.030	0.030	0.030	0.030	0.020	0.020
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.2	0.2

Reactor Coolant System Leakage	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum leakage	0.020	0.020	0.040	0.020	0.020	0.010	0.020	0.020	0.020	0.010	0.020	0.020
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	0.2	0.2	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2

Licensee Comments: none

### Drill/Exercise Performance



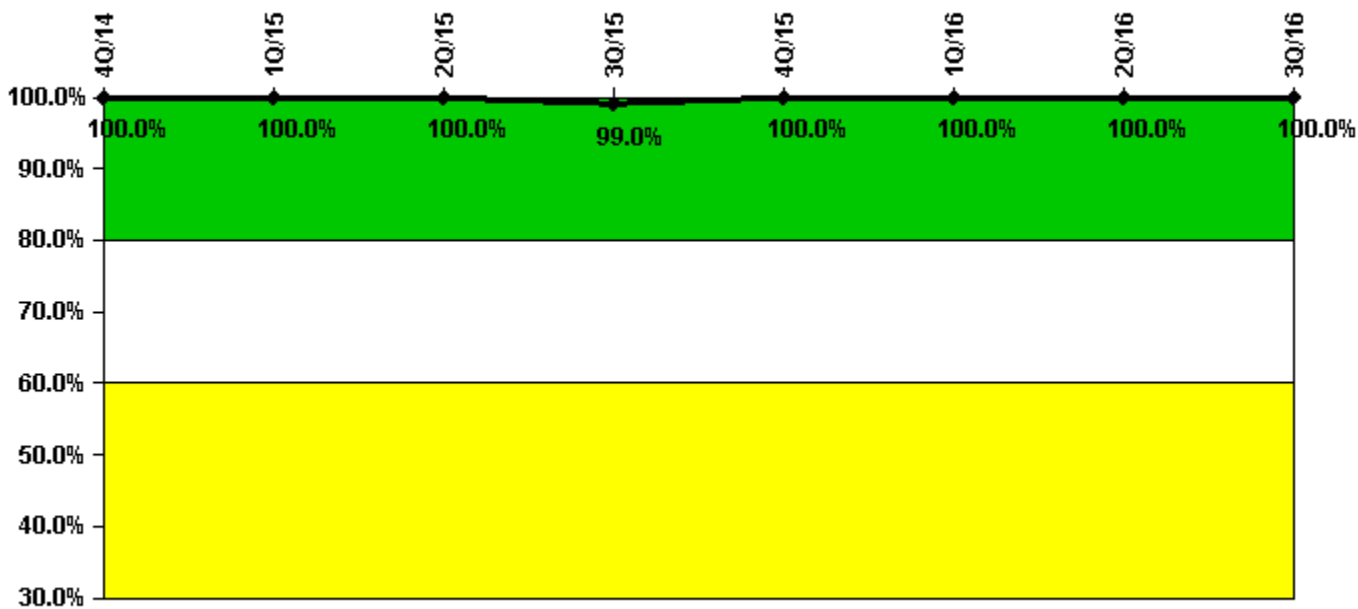
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful opportunities	85.0	58.0	10.0	58.0	63.0	84.0	74.0	107.0
Total opportunities	86.0	58.0	10.0	58.0	64.0	84.0	75.0	108.0
<b>Indicator value</b>	<b>98.7%</b>	<b>99.0%</b>	<b>98.9%</b>	<b>99.4%</b>	<b>99.2%</b>	<b>99.5%</b>	<b>99.4%</b>	<b>99.3%</b>

Licensee Comments: none

### ERO Drill Participation



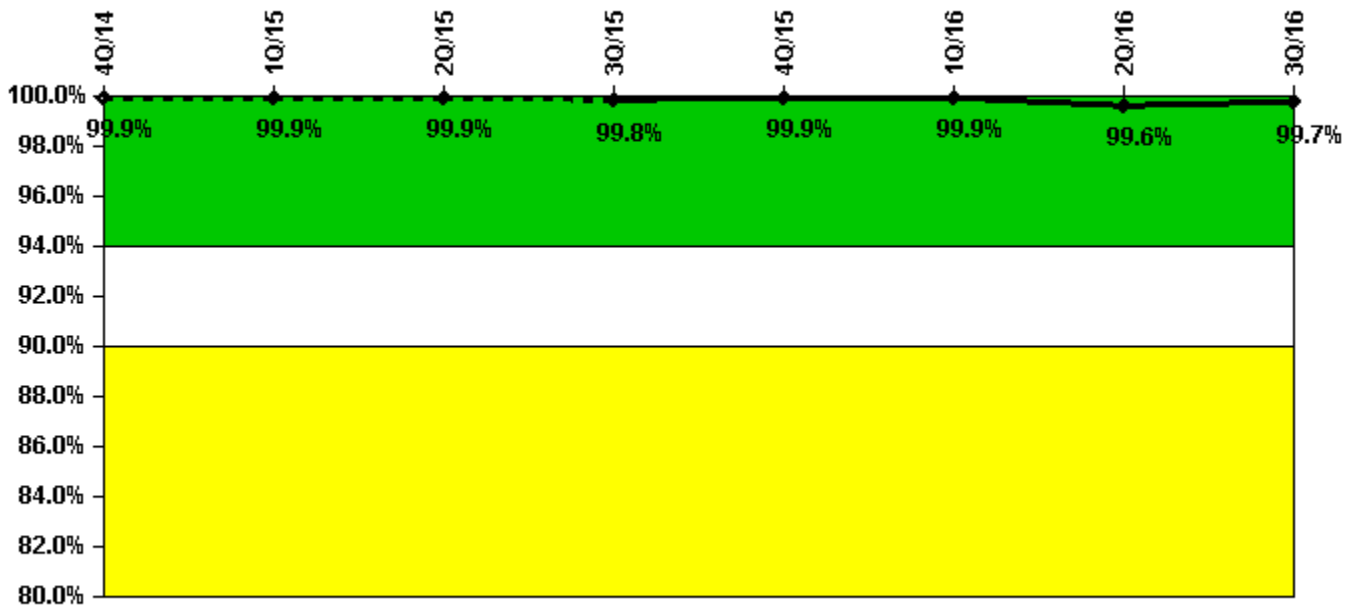
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Participating Key personnel	92.0	95.0	96.0	95.0	99.0	96.0	97.0	99.0
Total Key personnel	92.0	95.0	96.0	96.0	99.0	96.0	97.0	99.0
Indicator value	100.0%	100.0%	100.0%	99.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



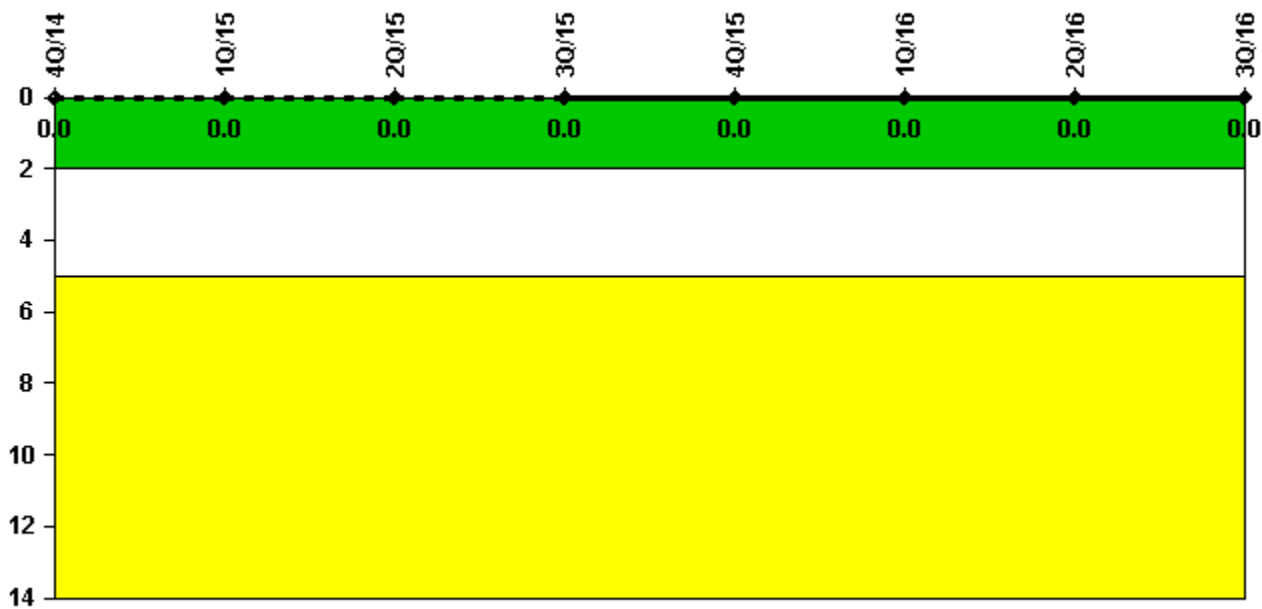
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful siren-tests	903	1017	791	1012	791	1017	780	903
Total sirens-tests	904	1017	791	1017	791	1017	791	904
Indicator value	99.9%	99.9%	99.9%	99.8%	99.9%	99.9%	99.6%	99.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



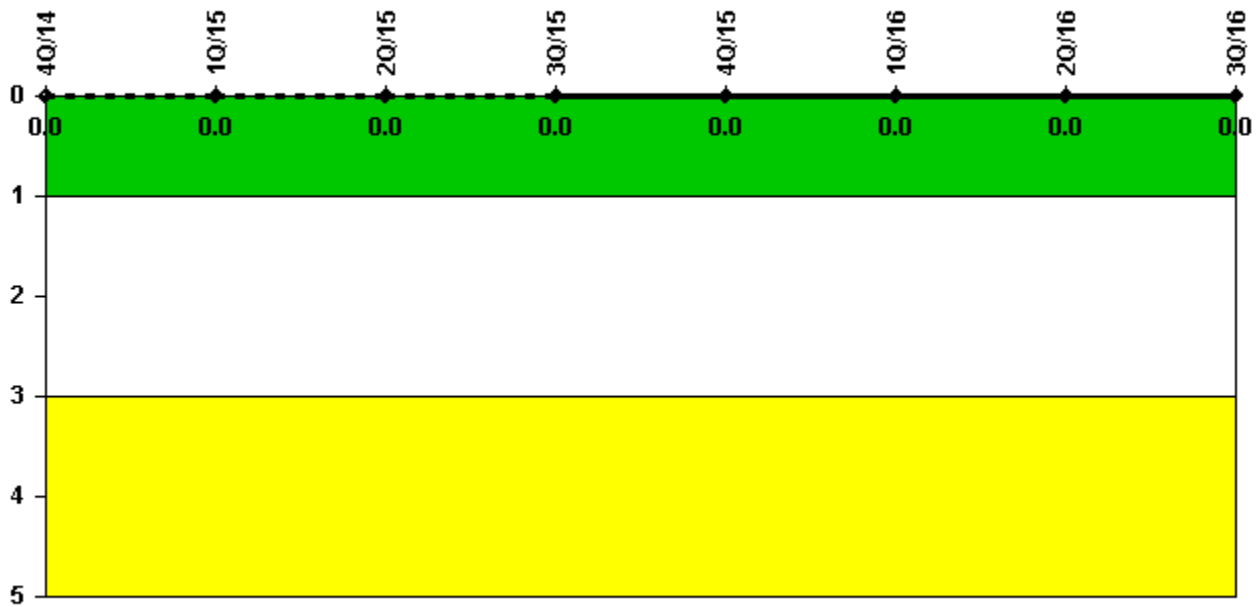
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
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>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
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: October 23, 2016*