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## Sequoyah 2 – Quarterly Performance Indicators

### 3Q/2017 Performance Indicators

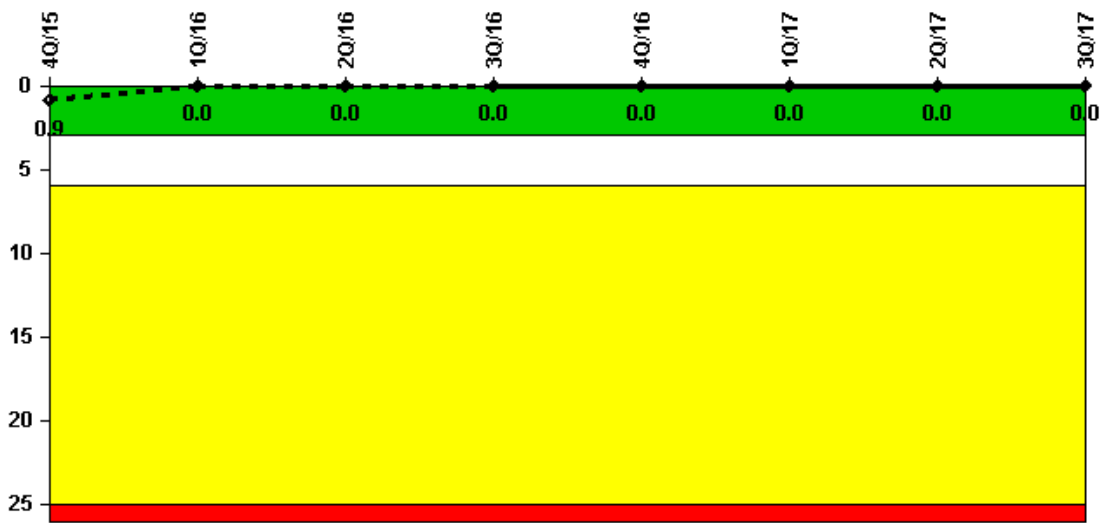
The solid trend line represents the current reporting period.

Licensee's General Comments: none

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- Unplanned Power Changes per 7000 Critical Hours (IE03)
- Unplanned Scrams with Complications (IE04)
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- Emergency AC Power Systems (MS06)
- High Pressure Injection Systems (MS07)
- Heat Removal Systems (MS08)
- Residual Heat Removal Systems (MS09)
- Cooling Water Systems (MS10)
- Reactor Coolant System Activity (BI01)
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- Drill/Exercise Performance (EP01)
- Emergency Response Organization Drill Participation (EP02)
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- Occupational Exposure Control Effectiveness (OR01)
- RETS/OCDM Radiological Effluent Occurrence (PR01)
- Protected Area Equipment (PP01)

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

**Notes**

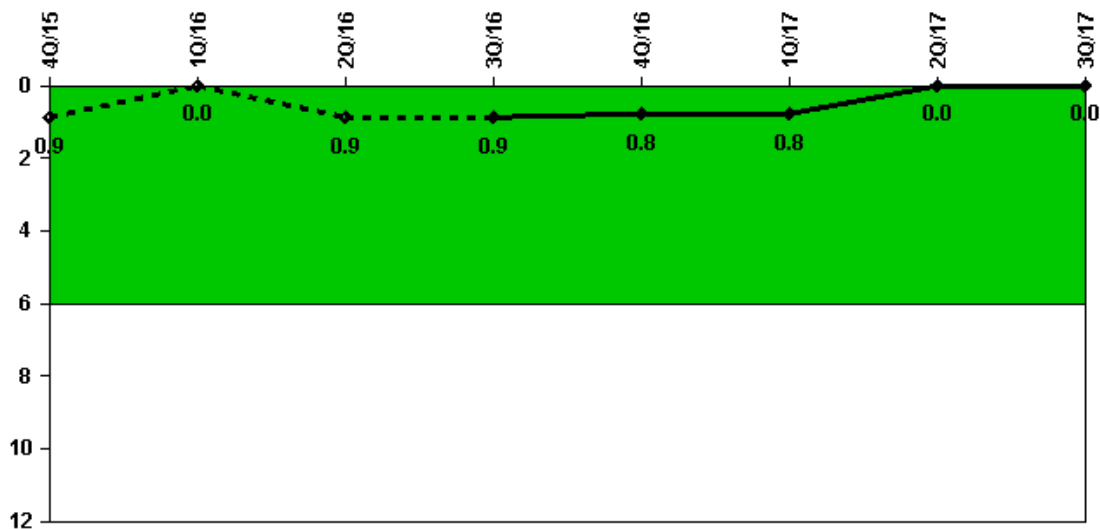
Unplanned Scrams per 7000 Critical Hrs	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1498.6	2183.0	2150.3	2208.0	2209.0	2159.0	1331.7	2208.0

Indicator value	0.9	0	0	0	0	0	0	0
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Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

**Notes**

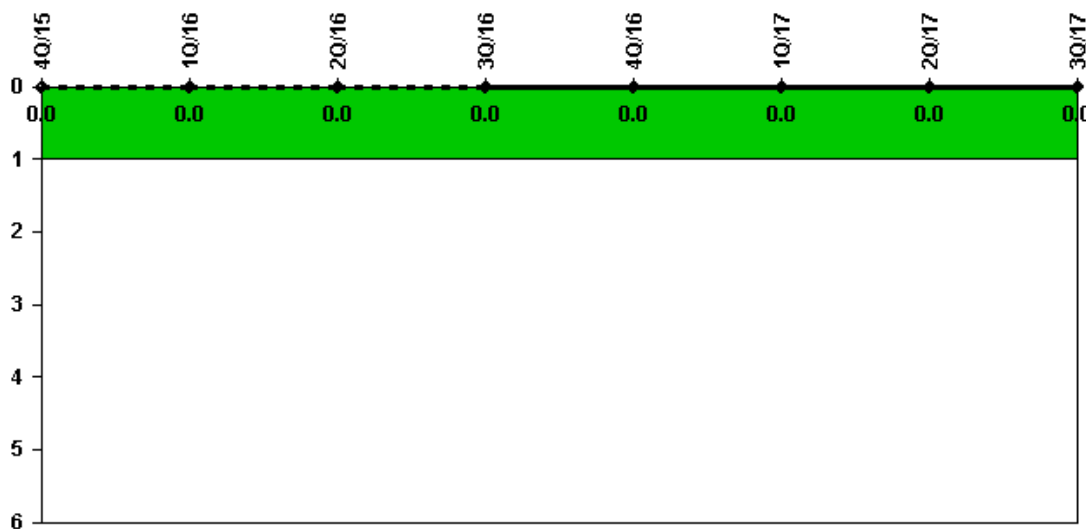
Unplanned Power Changes per 7000 Critical Hrs	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	1498.6	2183.0	2150.3	2208.0	2209.0	2159.0	1331.7	2208.0

<b>Indicator value</b>	<b>0.9</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0</b>	<b>0</b>
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Licensee Comments: none

**Unplanned Scrams with Complications**



Thresholds: White > 1.0

**Notes**

Unplanned Scrams with Complications	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Scrams with complications	0	0	0	0	0	0	0	0

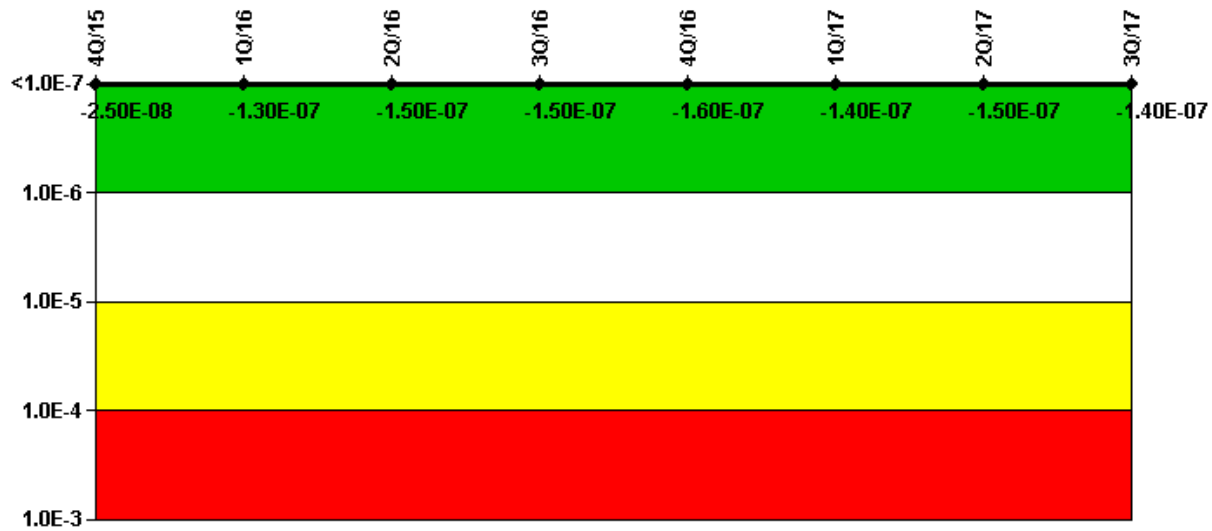
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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Licensee Comments: none



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



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

**Notes**

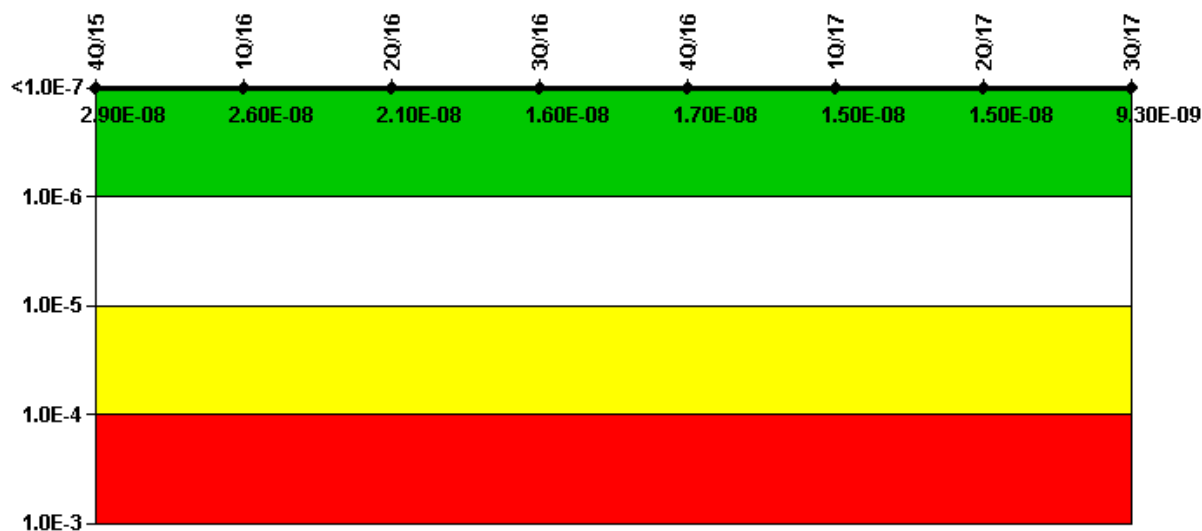
**Mitigating Systems Performance Index, Emergency AC Power System**

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	2.95E-08	1.46E-08	1.56E-09	-5.45E-09	-5.68E-09	1.21E-08	1.03E-08	1.12E-08
URI (ΔCDF)	-5.49E-08	-1.46E-07	-1.49E-07	-1.46E-07	-1.54E-07	-1.54E-07	-1.56E-07	-1.50E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-2.50E-08</b>	<b>-1.30E-07</b>	<b>-1.50E-07</b>	<b>-1.50E-07</b>	<b>-1.60E-07</b>	<b>-1.40E-07</b>	<b>-1.50E-07</b>	<b>-1.40E-07</b>

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Licensee Comments: none

### Mitigating Systems Performance Index, High Pressure Injection System



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

**Notes**

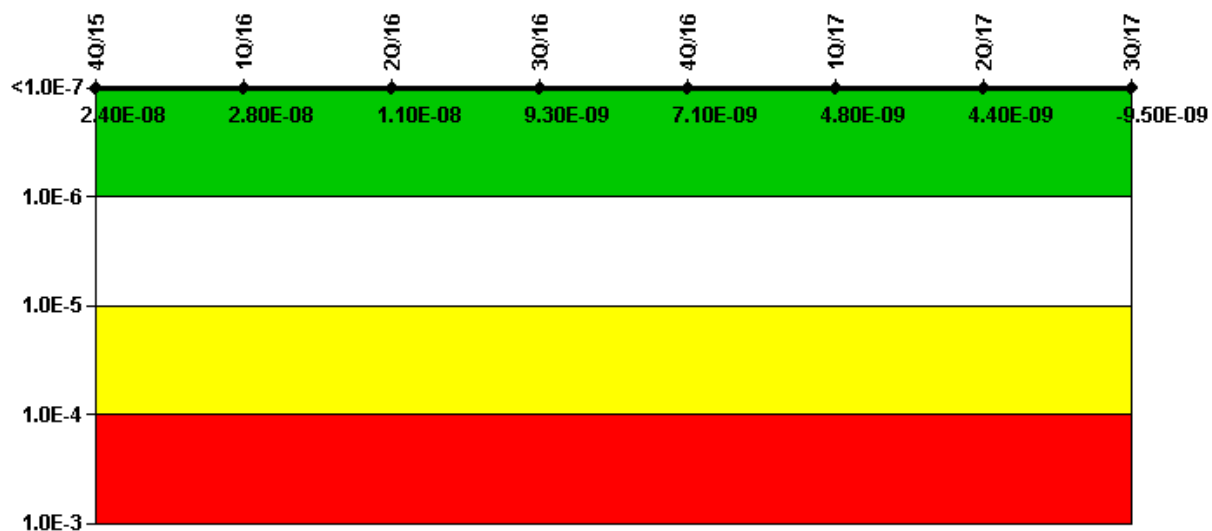
**Mitigating Systems Performance Index, High Pressure Injection System**

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	3.14E-08	2.78E-08	2.34E-08	1.78E-08	1.95E-08	1.75E-08	1.71E-08	1.16E-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
<b>Indicator value</b>	<b>2.90E-08</b>	<b>2.60E-08</b>	<b>2.10E-08</b>	<b>1.60E-08</b>	<b>1.70E-08</b>	<b>1.50E-08</b>	<b>1.50E-08</b>	<b>9.30E-09</b>

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Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



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

**Notes**

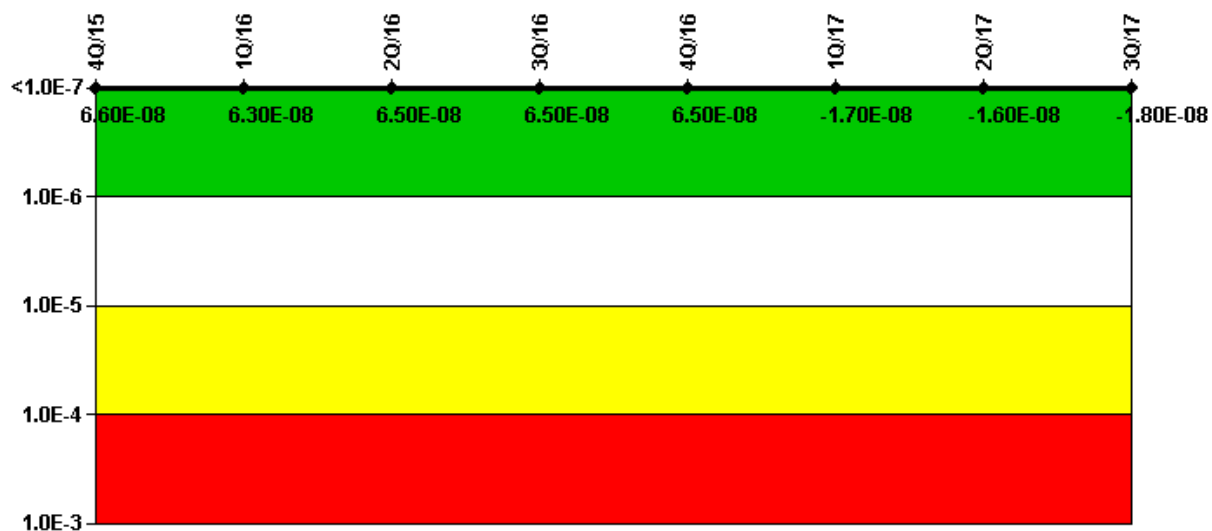
**Mitigating Systems Performance Index, Heat Removal System**

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI ( $\Delta$ CDF)	-2.59E-09	-3.07E-09	-1.69E-08	-1.86E-08	-2.09E-08	-2.31E-08	-2.03E-08	-3.41E-08
URI ( $\Delta$ CDF)	2.67E-08	3.14E-08	2.80E-08	2.80E-08	2.80E-08	2.80E-08	2.47E-08	2.47E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>2.40E-08</b>	<b>2.80E-08</b>	<b>1.10E-08</b>	<b>9.30E-09</b>	<b>7.10E-09</b>	<b>4.80E-09</b>	<b>4.40E-09</b>	<b>-9.50E-09</b>

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Licensee Comments: none

### 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/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	1.04E-08	8.21E-09	9.88E-09	1.03E-08	1.02E-08	8.61E-09	9.81E-09	7.93E-09
URI (ΔCDF)	5.52E-08	5.52E-08	5.52E-08	5.52E-08	5.52E-08	-2.57E-08	-2.57E-08	-2.57E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>6.60E-08</b>	<b>6.30E-08</b>	<b>6.50E-08</b>	<b>6.50E-08</b>	<b>6.50E-08</b>	<b>-1.70E-08</b>	<b>-1.60E-08</b>	<b>-1.80E-08</b>

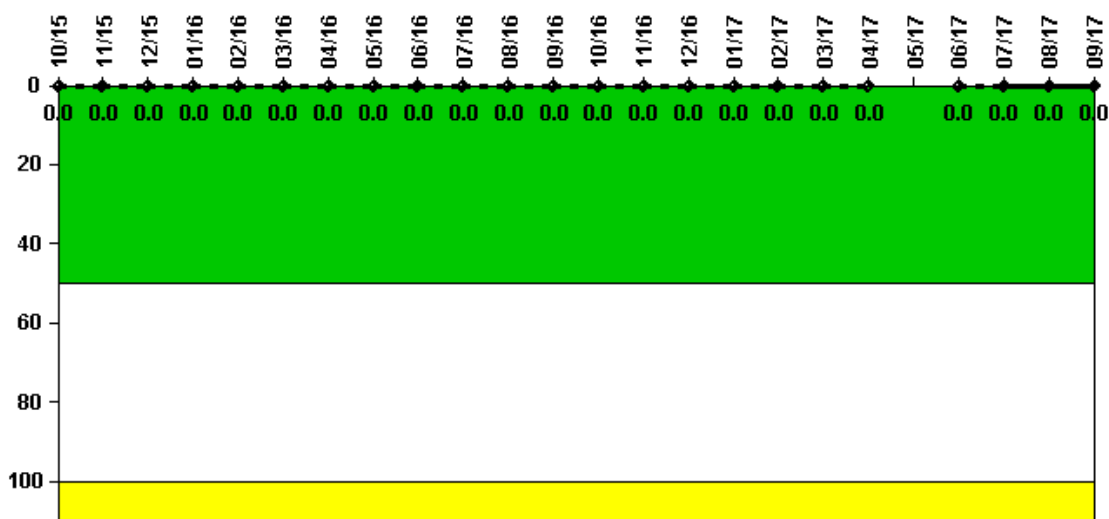
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Licensee Comments: none





### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

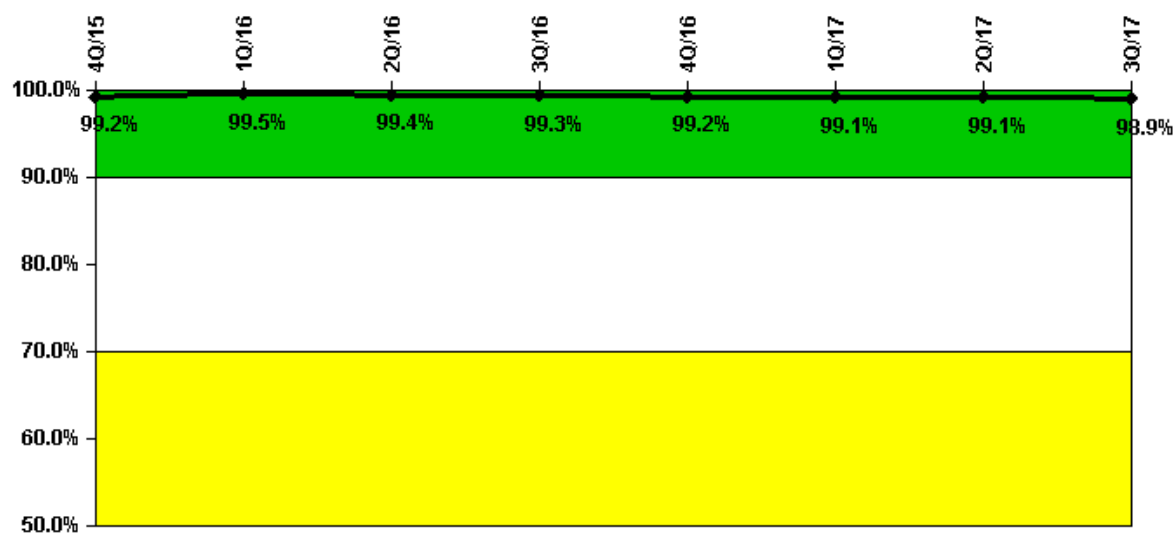
Reactor Coolant System Activity	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum activity	0.000138	0.000068	0.000055	0.000050	0.000095	0.000050	0.000053	0.000055	0.000067	0.000129	0.000066	0.000071
Technical specification limit	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
<b>Indicator 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>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Reactor Coolant System Activity	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17
Maximum activity	0.000077	0.000078	0.000076	0.000071	0.000074	0.000078	0.000086	N/A	0.000055	0.000070	0.000055	0.000063
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
<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>	<b>N/A</b>	<b>0</b>	<b>0</b>	<b>0</b>

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Licensee Comments: none



### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

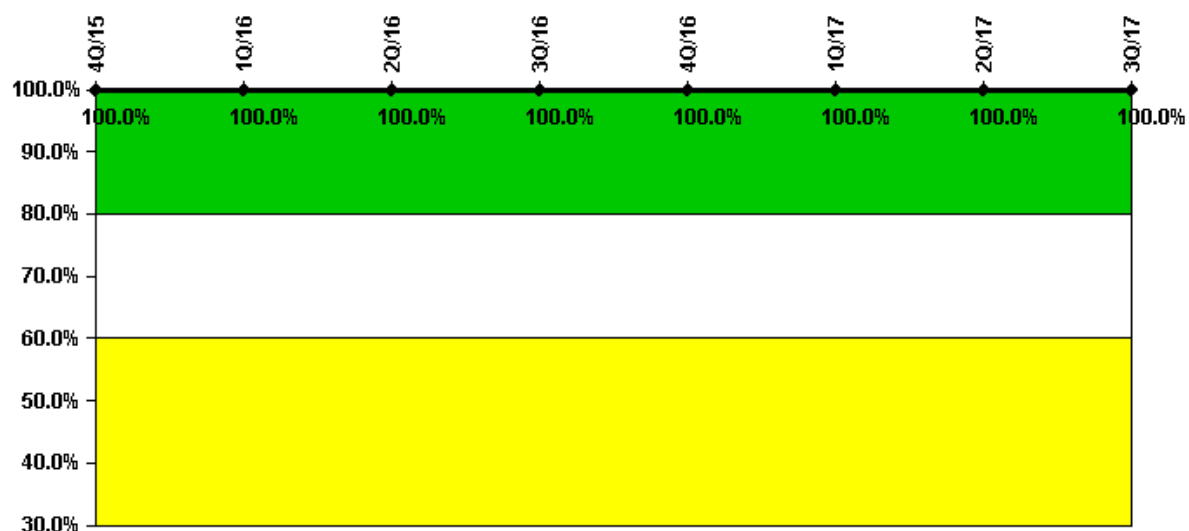
Drill/Exercise Performance	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Successful opportunities	63.0	84.0	74.0	107.0	20.0	28.0	12.0	43.0
Total opportunities	64.0	84.0	75.0	108.0	21.0	28.0	12.0	44.0

Indicator value                    99.2% 99.5% 99.4% 99.3% 99.2% 99.1% 99.1% 98.9%

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Licensee Comments: none

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

**Notes**

ERO Drill Participation	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Participating Key personnel	99.0	96.0	97.0	103.0	97.0	82.0	84.0	89.0
Total Key personnel	99.0	96.0	97.0	103.0	97.0	82.0	84.0	89.0

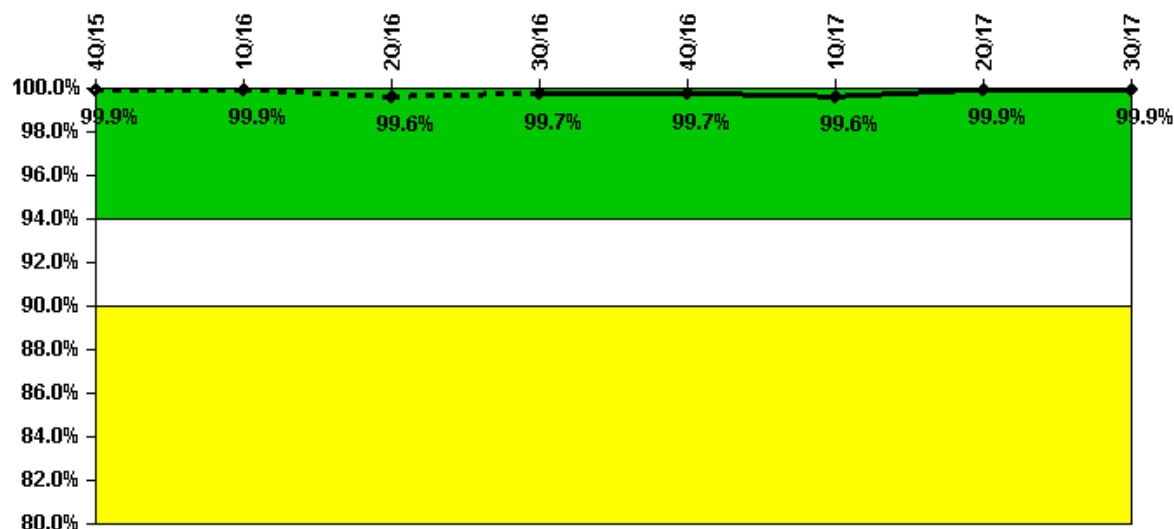
**Indicator value**                    **100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%**

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Licensee Comments:

3Q/16: CR 1228955 - Identified an error after submittal of participation data for September 2016. The data went from 99 to 103; there is no effect on color.

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

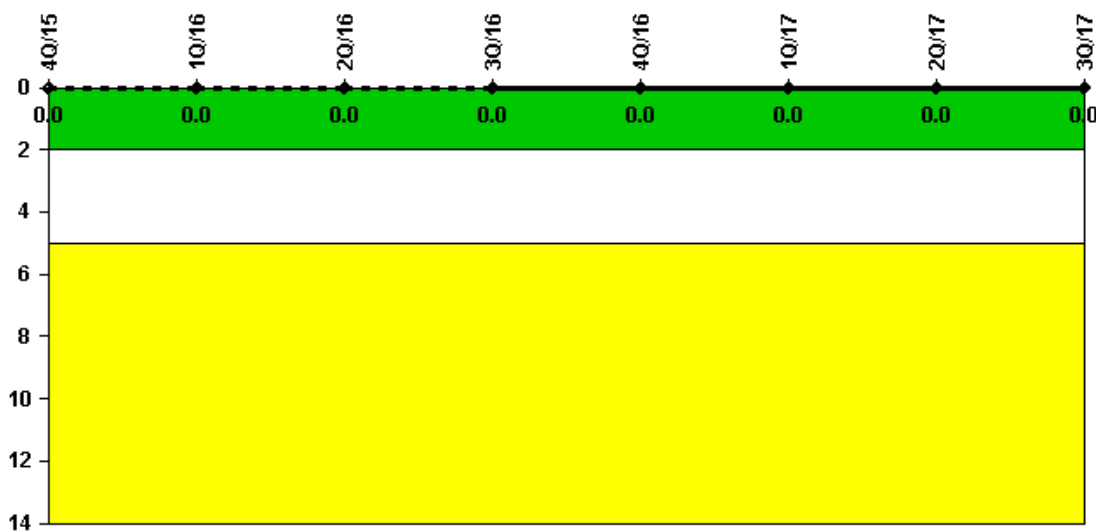
Alert & Notification System	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Successful siren-tests	791	1017	780	903	904	1016	904	903
Total sirens-tests	791	1017	791	904	904	1017	904	904

Indicator value                    99.9% 99.9% 99.6% 99.7% 99.7% 99.6% 99.9% 99.9%

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Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

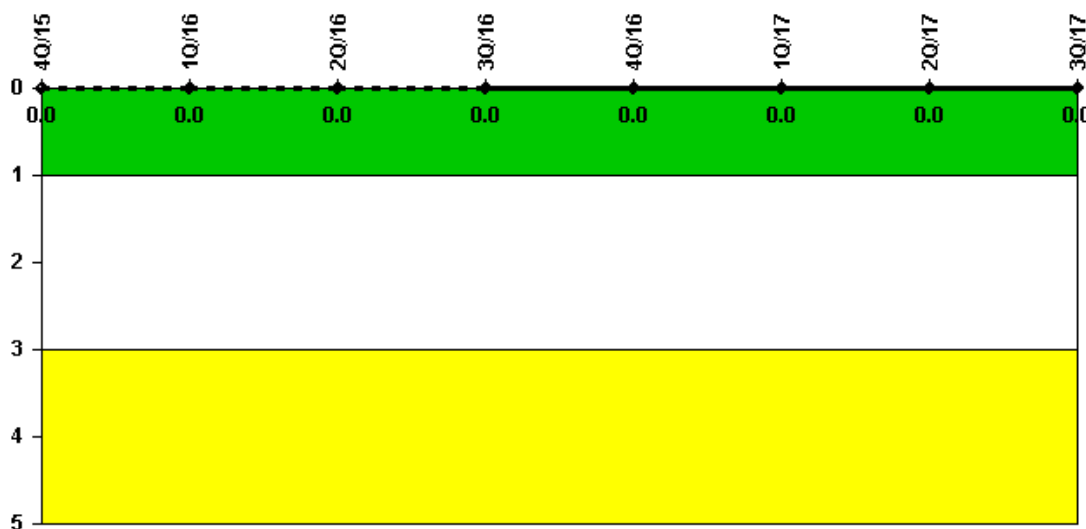
**Occupational Exposure Control Effectiveness** 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17

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>

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Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

**Notes**

**RETS/ODCM Radiological Effluent** 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17

RETS/ODCM occurrences                    0    0    0    0    0    0    0    0

**Indicator value**                            0    0    0    0    0    0    0    0

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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.

*Current data as of: October 31, 2017*

*Page Last Reviewed/Updated Monday, November 06, 2017*