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## **Arkansas Nuclear 2 – Quarterly Performance Indicators**

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### **1Q/2017 Performance Indicators**

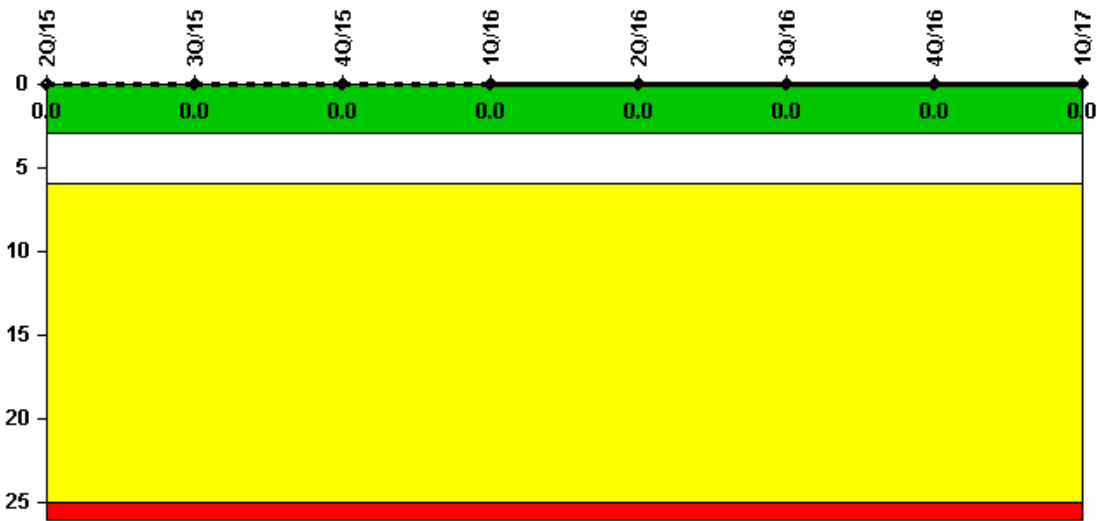
The solid trend line represents the current reporting period.

Licensee's General Comments: none

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### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

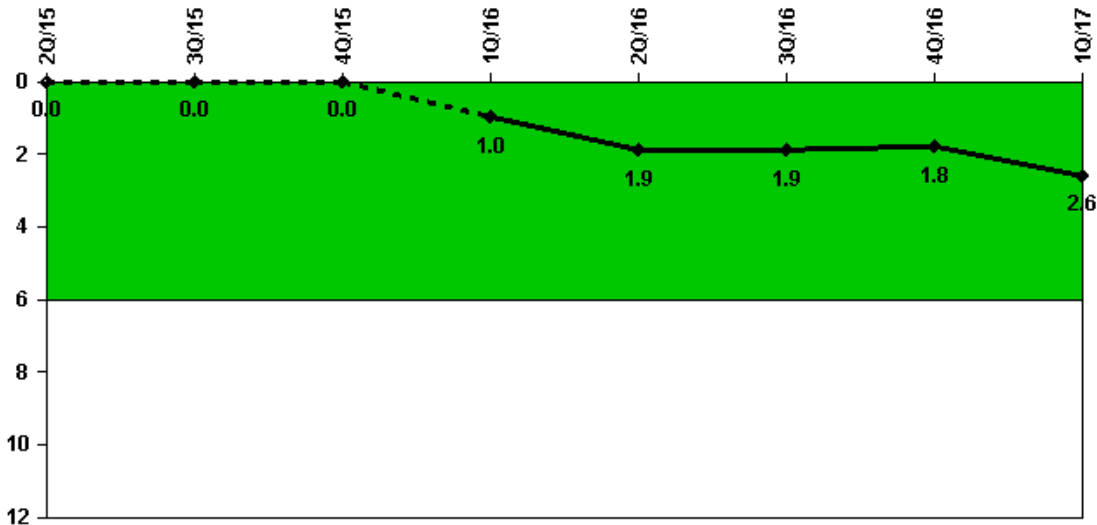
**Notes**

Unplanned Scrams per 7000 Critical Hrs	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	1952.9	1154.1	1982.6	2184.0	2145.5	1580.1	2087.9
<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

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

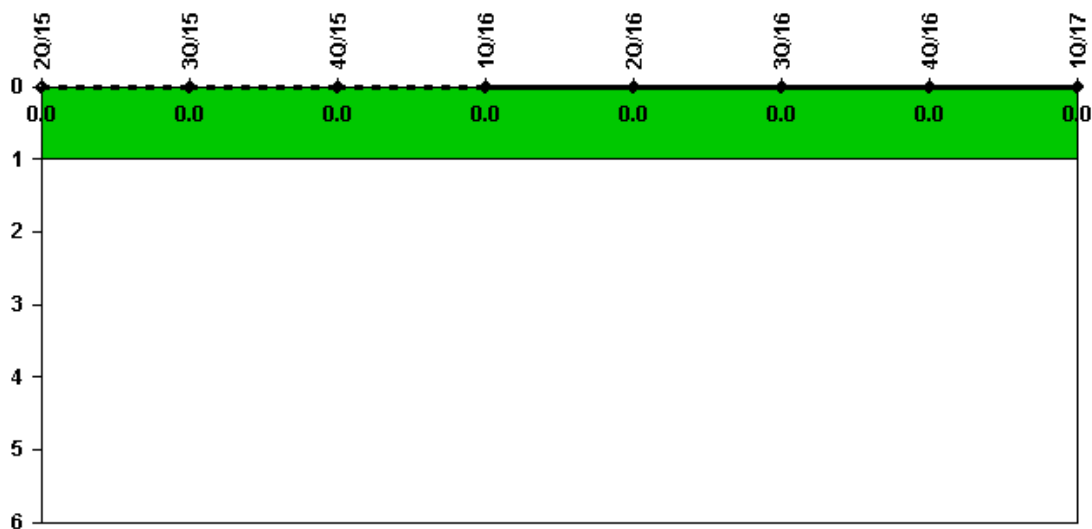
**Notes**

Unplanned Power Changes per 7000 Critical Hrs	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Unplanned power changes	0	0	0	1.0	1.0	0	0	2.0
Critical hours	2184.0	1952.9	1154.1	1982.6	2184.0	2145.5	1580.1	2087.9
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>1.9</b>	<b>1.9</b>	<b>1.8</b>	<b>2.6</b>

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Licensee Comments: none

**Unplanned Scrams with Complications**



Thresholds: White > 1.0

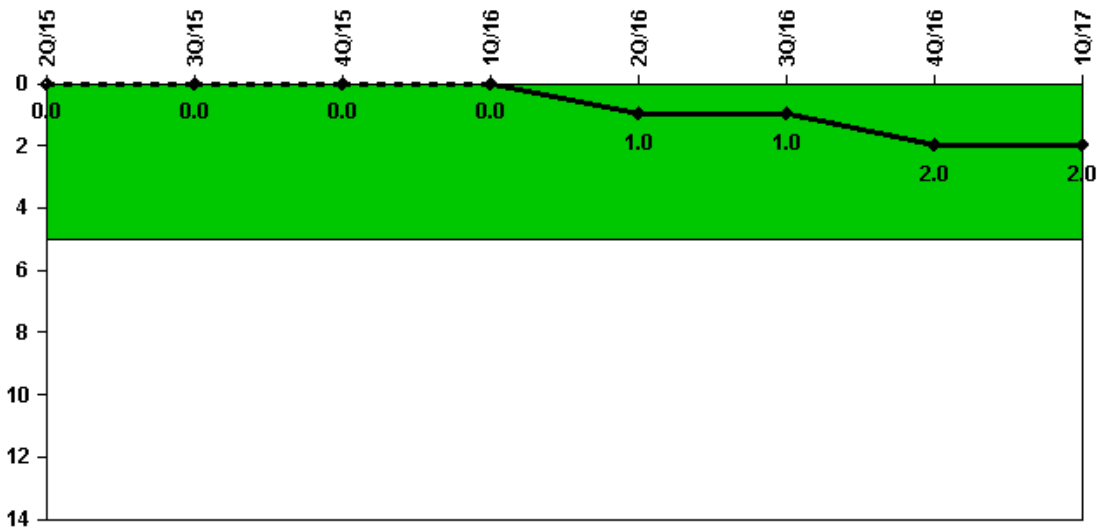
**Notes**

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

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR) 2Q/15 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17

Safety System Functional Failures                    0   0   0   0   1   0   1   0

Indicator value    0   0   0   0   1   1   2   2

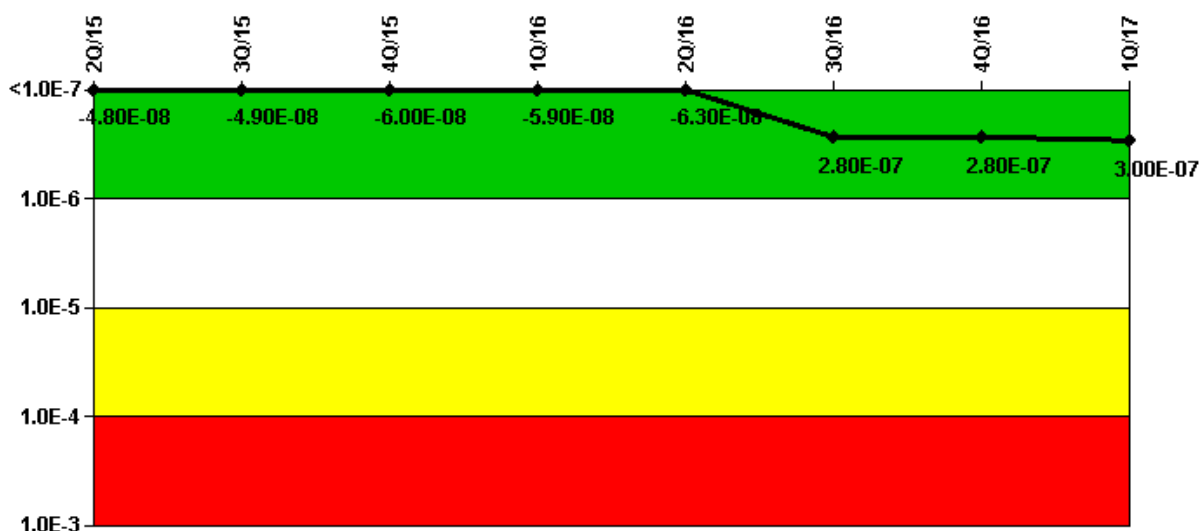
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Licensee Comments:

4Q/16: November: Licensing Event Report 50-368 2016-001-00

2Q/16: LER 50-313/2016-001-00

### 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**

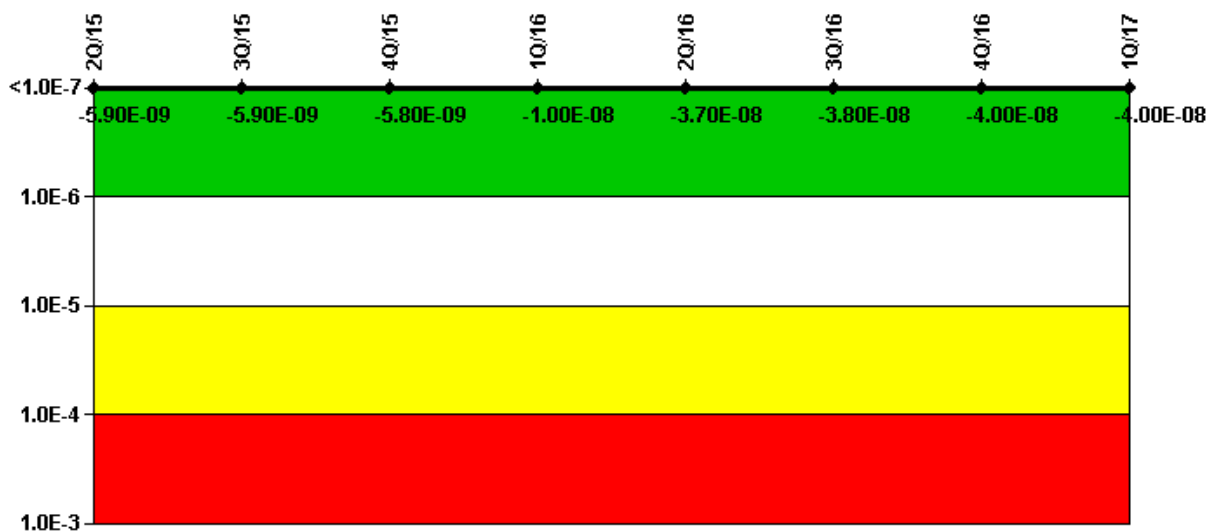
	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	6.28E-09	5.04E-09	-5.77E-09	-5.77E-09	8.38E-09	1.28E-07	1.28E-07	1.26E-07
URI (ΔCDF)	-5.47E-08	-5.41E-08	-5.45E-08	-5.27E-08	-7.13E-08	1.55E-07	1.56E-07	1.76E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-4.80E-08</b>	<b>-4.90E-08</b>	<b>-6.00E-08</b>	<b>-5.90E-08</b>	<b>-6.30E-08</b>	<b>2.80E-07</b>	<b>2.80E-07</b>	<b>3.00E-07</b>

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Licensee Comments:

2Q/16: The 2nd Quarter 2016 Emergency AC Power MSPI is being revised to include June Unplanned Unavailable Hours for the "A" Emergency Diesel Generator. This change does not affect the color of the Emergency AC Power MSPI indicator.

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



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

**Notes**

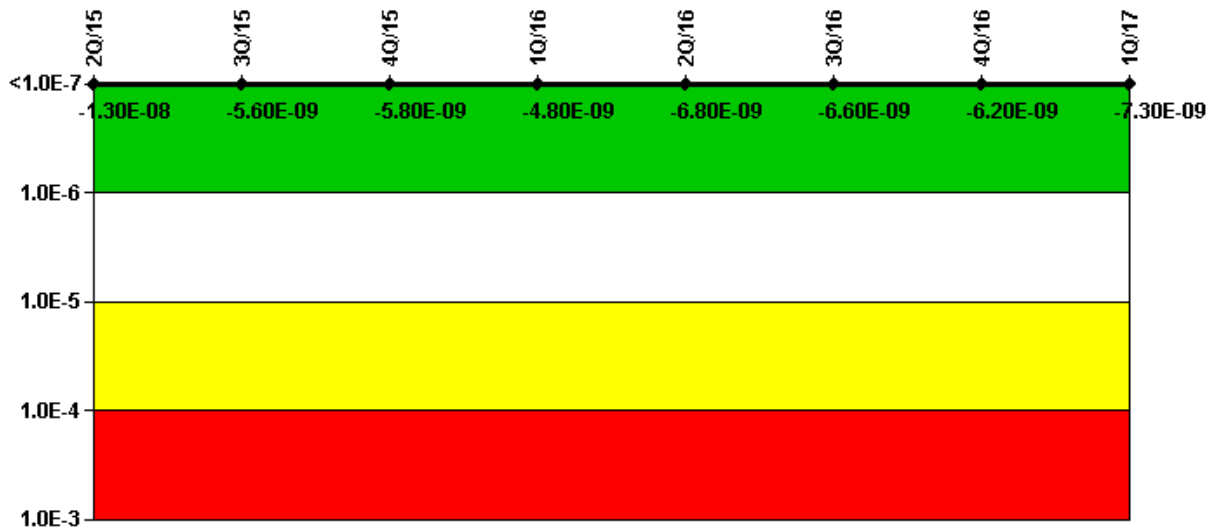
**Mitigating Systems Performance Index, High Pressure Injection System**

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI ( $\Delta$ CDF)	-6.31E-10	-6.91E-10	-4.30E-10	-4.59E-09	-3.30E-11	-3.30E-11	-3.30E-11	-3.30E-11
URI ( $\Delta$ CDF)	-5.31E-09	-5.22E-09	-5.41E-09	-5.46E-09	-3.73E-08	-3.82E-08	-3.98E-08	-4.03E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-5.90E-09</b>	<b>-5.90E-09</b>	<b>-5.80E-09</b>	<b>-1.00E-08</b>	<b>-3.70E-08</b>	<b>-3.80E-08</b>	<b>-4.00E-08</b>	<b>-4.00E-08</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**

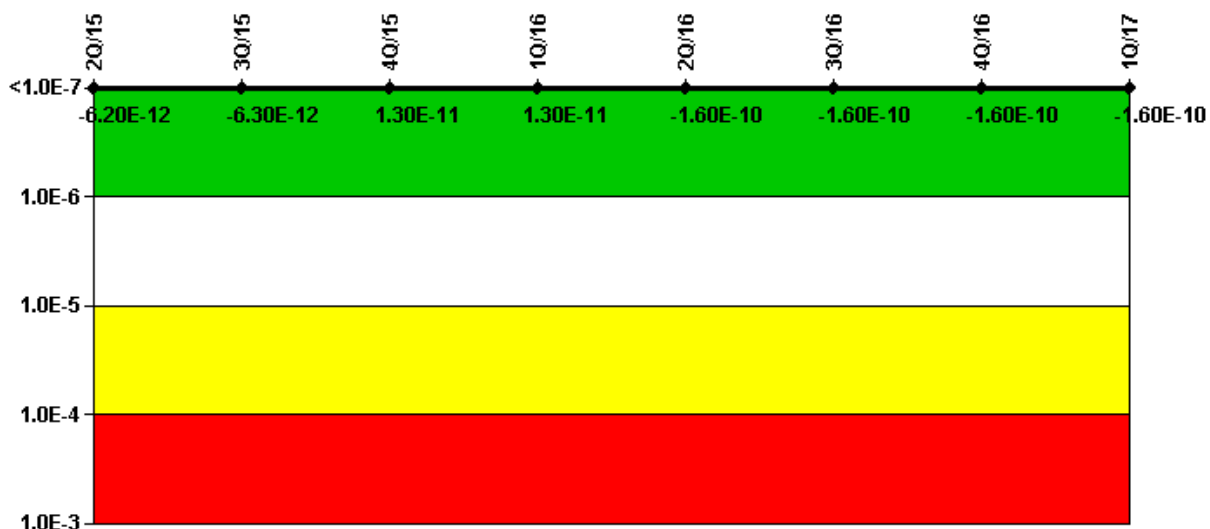
**Mitigating Systems Performance Index, Heat Removal System**

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI ( $\Delta$ CDF)	-4.14E-10	-3.69E-10	-2.40E-10	4.10E-10	-1.93E-09	-1.92E-09	-1.90E-09	-1.93E-09
URI ( $\Delta$ CDF)	-1.28E-08	-5.24E-09	-5.55E-09	-5.22E-09	-4.90E-09	-4.73E-09	-4.29E-09	-5.36E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-1.30E-08</b>	<b>-5.60E-09</b>	<b>-5.80E-09</b>	<b>-4.80E-09</b>	<b>-6.80E-09</b>	<b>-6.60E-09</b>	<b>-6.20E-09</b>	<b>-7.30E-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**

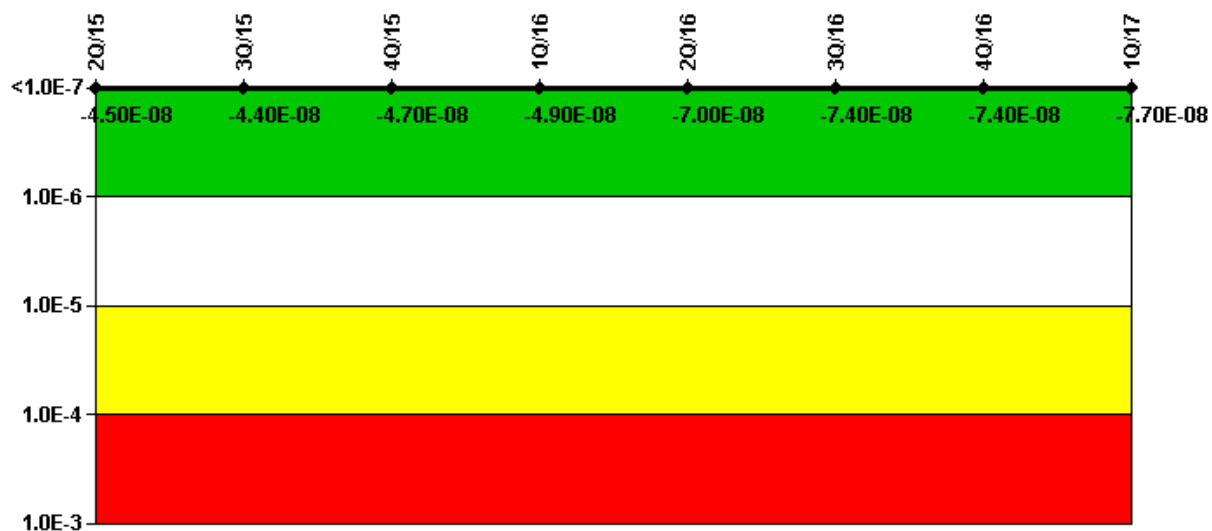
	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	-4.48E-12	-4.48E-12	-4.41E-12	-4.34E-12	-1.94E-10	-1.94E-10	-1.93E-10	-1.94E-10
URI (ΔCDF)	-1.73E-12	-1.86E-12	1.75E-11	1.76E-11	3.40E-11	3.40E-11	3.45E-11	3.43E-11
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-6.20E-12</b>	<b>-6.30E-12</b>	<b>1.30E-11</b>	<b>1.30E-11</b>	<b>-1.60E-10</b>	<b>-1.60E-10</b>	<b>-1.60E-10</b>	<b>-1.60E-10</b>

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Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



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

**Notes**

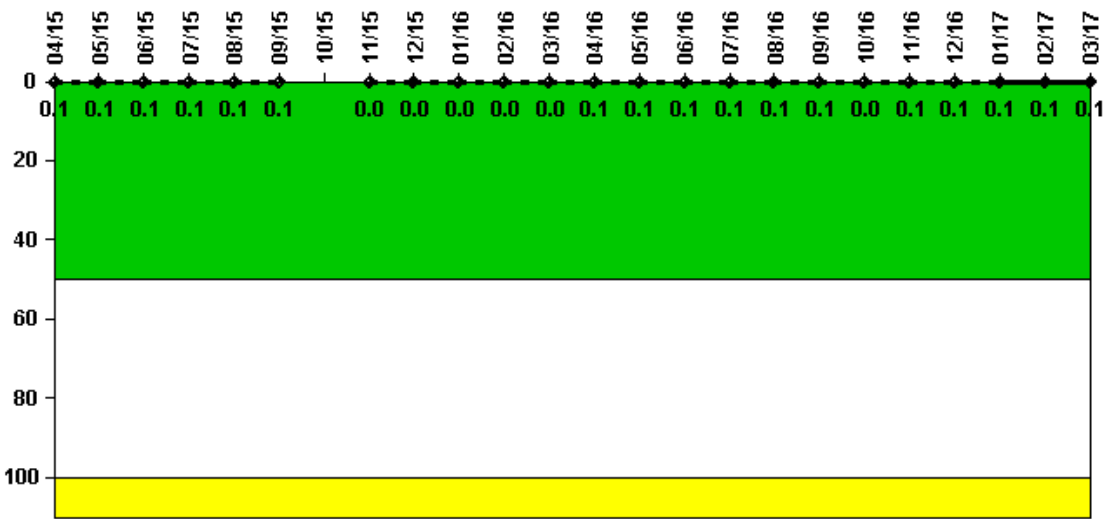
**Mitigating Systems Performance Index, Cooling Water Systems**

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI ( $\Delta$ CDF)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
URI ( $\Delta$ CDF)	-4.48E-08	-4.45E-08	-4.67E-08	-4.89E-08	-6.99E-08	-7.42E-08	-7.42E-08	-7.66E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-4.50E-08</b>	<b>-4.40E-08</b>	<b>-4.70E-08</b>	<b>-4.90E-08</b>	<b>-7.00E-08</b>	<b>-7.40E-08</b>	<b>-7.40E-08</b>	<b>-7.70E-08</b>

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Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

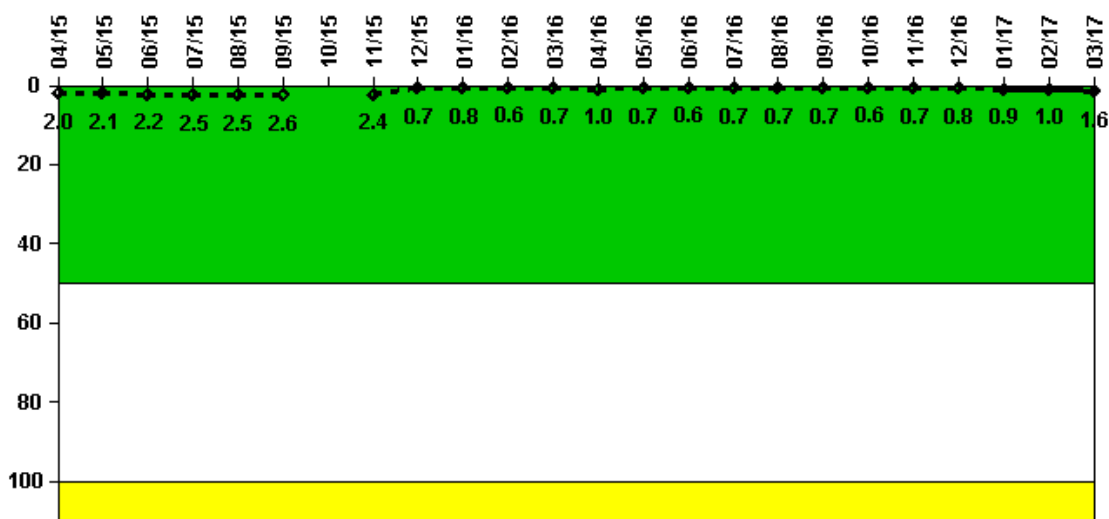
**Notes**

Reactor Coolant System Activity	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0.000725	0.000780	0.000844	0.000799	0.000841	0.000797	N/A	0.000438	0.000464	0.000476	0.000474	0.000491
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	0.1	0.1	0.1	0.1	0.1	N/A	0	0	0	0	0
Reactor Coolant System Activity	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17
Maximum activity	0.000583	0.000567	0.000568	0.000563	0.000593	0.000616	0.000458	0.000672	0.000702	0.000689	0.000700	0.000528
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	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1

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Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	0.201	0.211	0.219	0.246	0.250	0.264	N/A	0.243	0.066	0.080	0.060	0.070
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

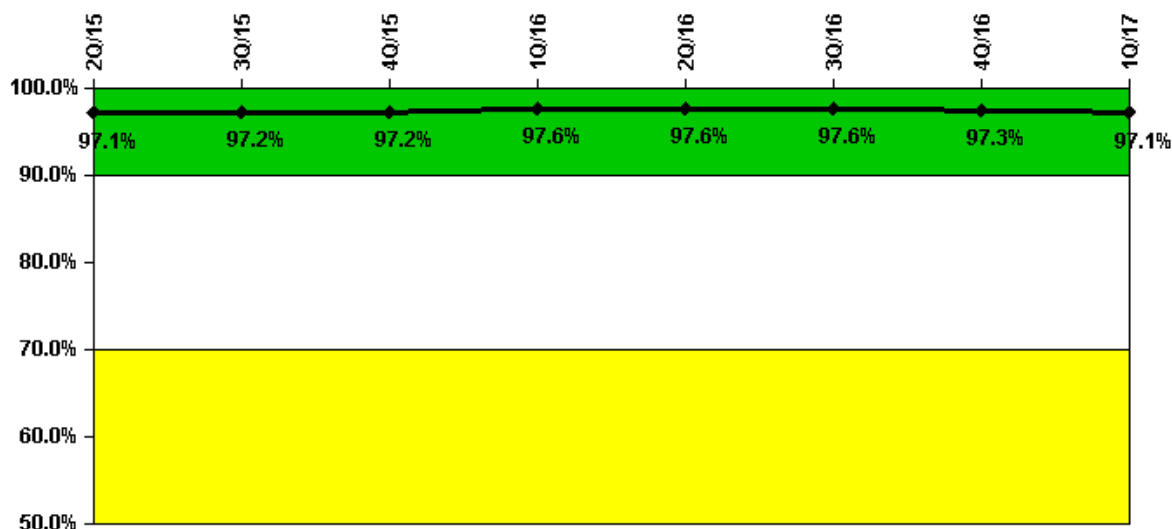
Indicator value	2.0	2.1	2.2	2.5	2.5	2.6	N/A	2.4	0.7	0.8	0.6	0.7
Reactor Coolant System Leakage	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17
Maximum leakage	0.095	0.065	0.061	0.071	0.071	0.065	0.058	0.074	0.084	0.090	0.101	0.158
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Indicator value	1.0	0.7	0.6	0.7	0.7	0.7	0.6	0.7	0.8	0.9	1.0	1.6
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Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Successful opportunities	93.0	65.0	19.0	31.0	98.0	63.0	5.0	60.0
Total opportunities	98.0	67.0	19.0	32.0	99.0	65.0	5.0	62.0

Indicator value                    97.1% 97.2% 97.2% 97.6% 97.6% 97.6% 97.3% 97.1%

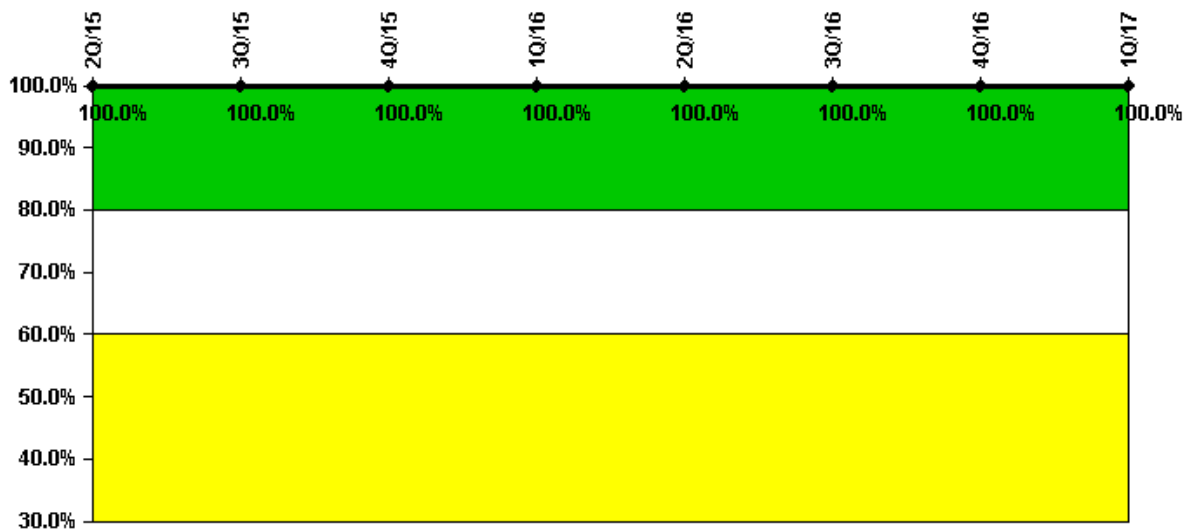
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#### Licensee Comments:

2Q/16: The 2nd Quarter 2016 June Drill/Exercise Performance is being revised to include five additional opportunities. This change does not affect the color of the Drill/Exercise Performance indicator.

2Q/15: The June Drill/Exercise Performance is being revised to include two Shift Manager requalification exams. This change does not affect the color of the Drill/Exercise Performance indicator.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

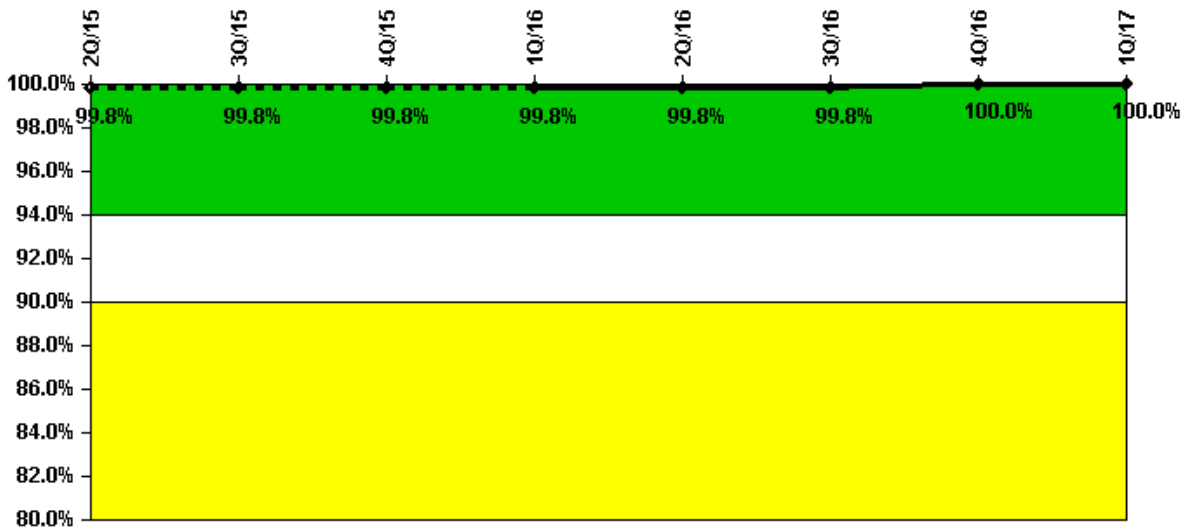
ERO Drill Participation	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Participating Key personnel	109.0	106.0	103.0	103.0	108.0	107.0	111.0	107.0
Total Key personnel	109.0	106.0	103.0	103.0	108.0	107.0	111.0	107.0

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

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Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

**Notes**

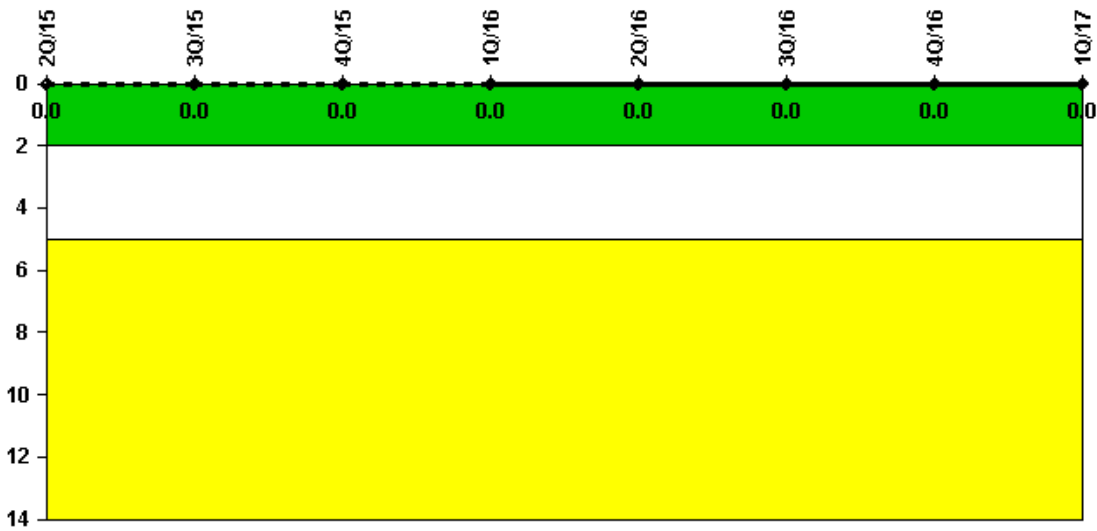
Alert & Notification System	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Successful siren-tests	147	147	146	147	147	147	147	147
Total sirens-tests	147	147	147	147	147	147	147	147

**Indicator value**                    99.8% 99.8% 99.8% 99.8% 99.8% 99.8% 100.0% 100.0%

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Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

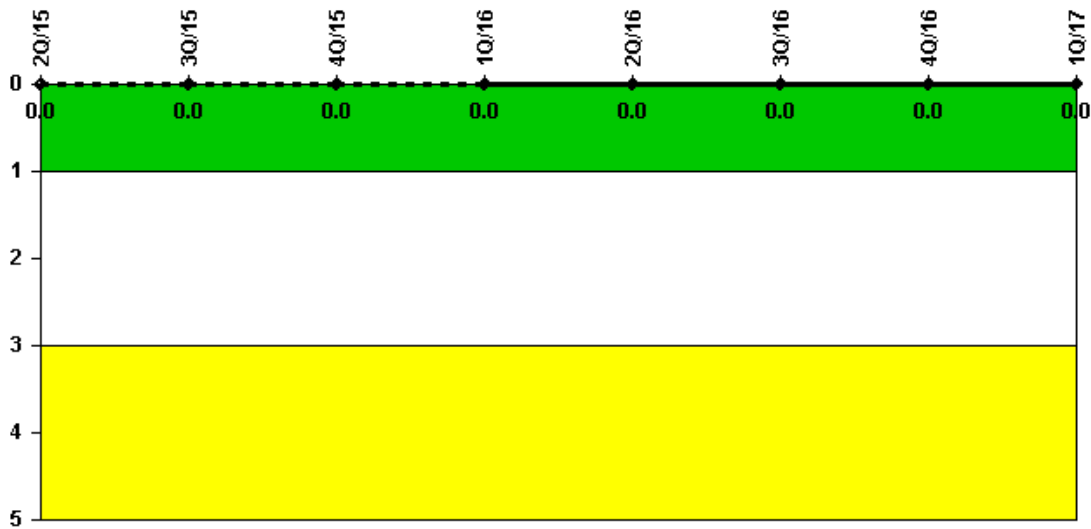
**Occupational Exposure Control Effectiveness** 2Q/15 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17

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 2Q/15 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/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: May 5, 2017

Page Last Reviewed/Updated Wednesday, June 07, 2017