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## **Farley 2 – Quarterly Performance Indicators**

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

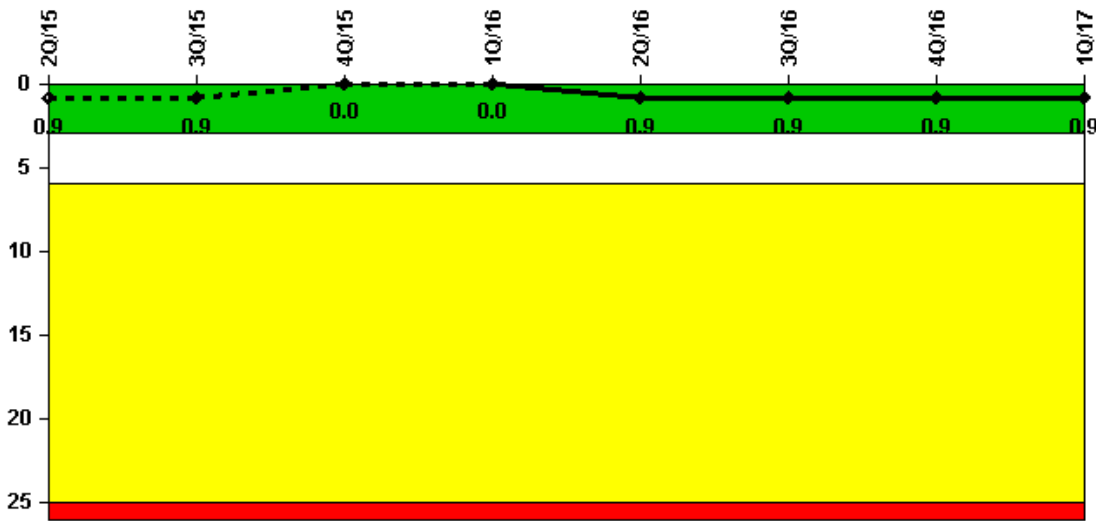
The solid trend line represents the current reporting period.

Licensee's General Comments: EP-Wrong data submitted in 2016Q1 but corrected in 2017Q1. The color of this indicator is not impacted.

On this page:

- Unplanned Scrams (IE01)
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- Heat Removal Systems (MS08)
- Residual Heat Removal Systems (MS09)
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- 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

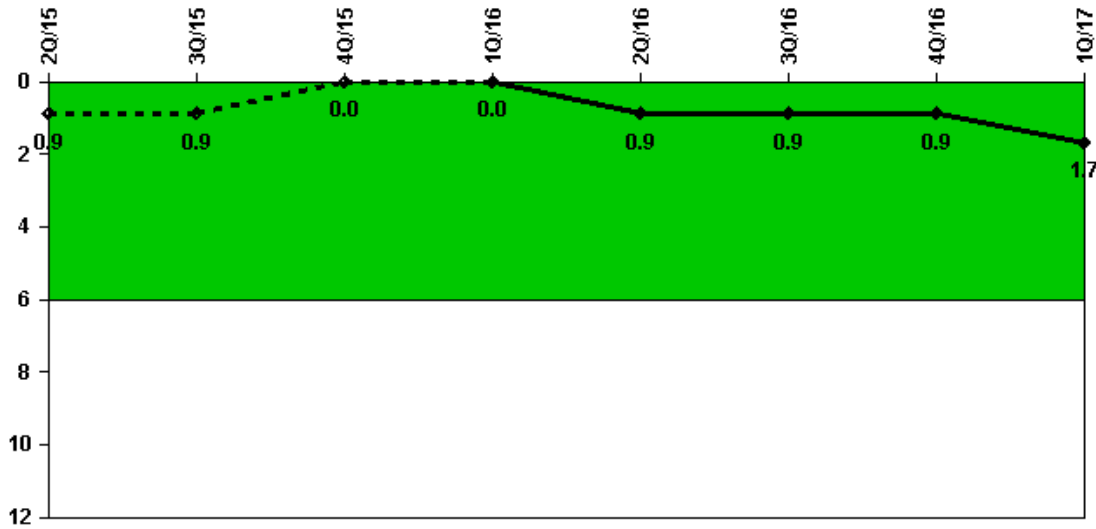
Unplanned Scrams per 7000 Critical Hrs	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Unplanned scrams	0	0	0	0	1.0	0	0	0
Critical hours	2184.0	2208.0	2080.2	2183.0	1453.8	2208.0	2209.0	2159.0

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

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

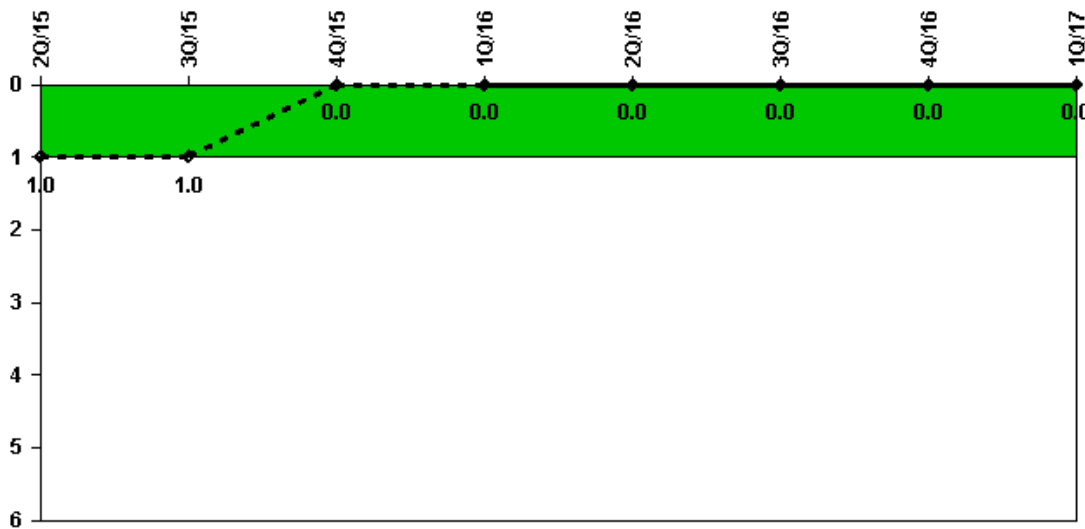
**Notes**

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	0	1.0	0	0	1.0
Critical hours	2184.0	2208.0	2080.2	2183.0	1453.8	2208.0	2209.0	2159.0
<b>Indicator value</b>	<b>0.9</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>1.7</b>

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Licensee Comments: none

**Unplanned Scrams with Complications**



Thresholds: White > 1.0

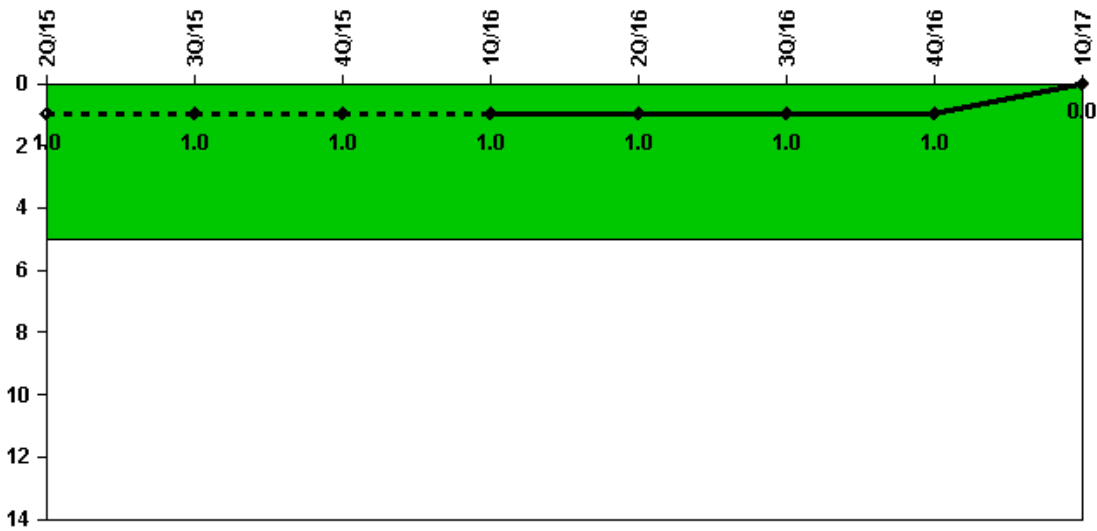
**Notes**

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>1.0</b>	<b>1.0</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 1 0 0 0 0

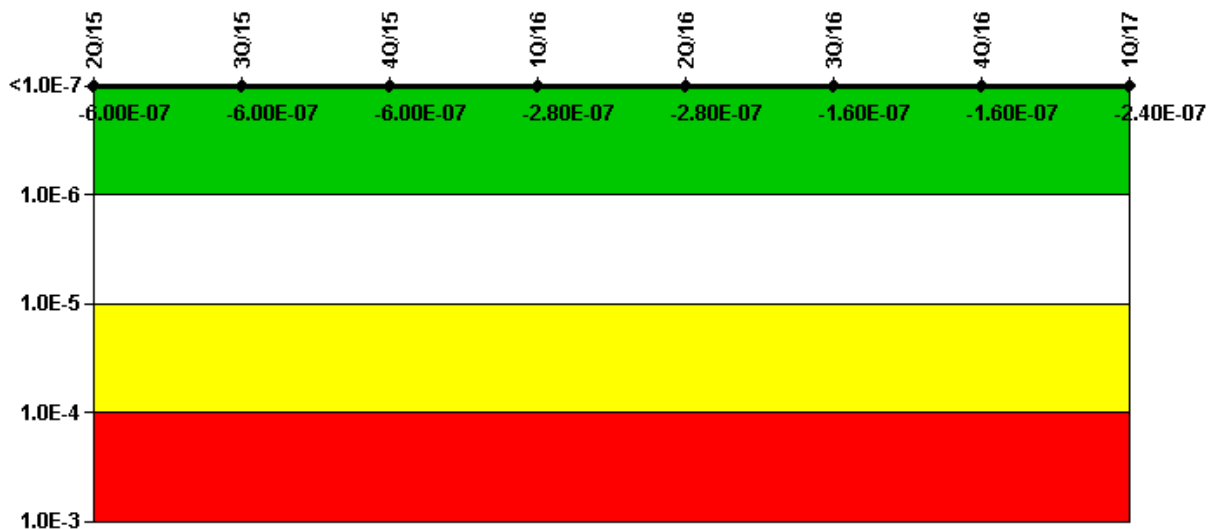
Indicator value 1 1 1 1 1 1 1 0

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Licensee Comments:

1Q/16: LER - 2015 005-00 Turbine Driven Auxiliary Feedwater in a Condition Prohibited by Technical Specifications due to a Design Issue per 10 CFR 50.73(a)(2)(v)(B)

### 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**

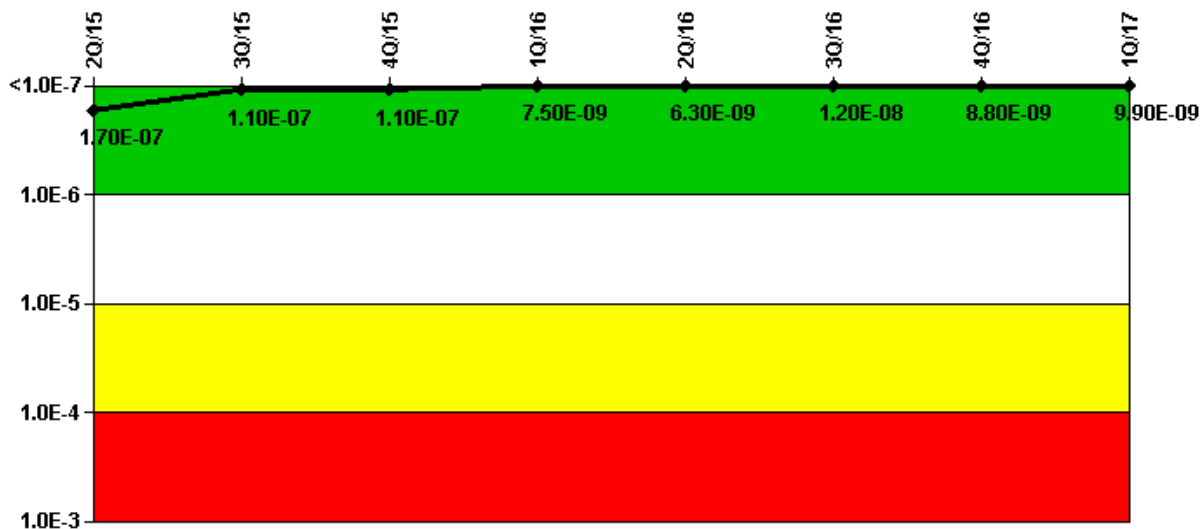
	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	-3.76E-08	-3.76E-08	-3.75E-08	-3.03E-08	-3.01E-08	-1.78E-08	-1.78E-08	-2.55E-08
URI (ΔCDF)	-5.60E-07	-5.60E-07	-5.60E-07	-2.47E-07	-2.47E-07	-1.41E-07	-1.42E-07	-2.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-6.00E-07</b>	<b>-6.00E-07</b>	<b>-6.00E-07</b>	<b>-2.80E-07</b>	<b>-2.80E-07</b>	<b>-1.60E-07</b>	<b>-1.60E-07</b>	<b>-2.40E-07</b>

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Licensee Comments:

3Q/16: Changed PRA Parameter(s).

### 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**

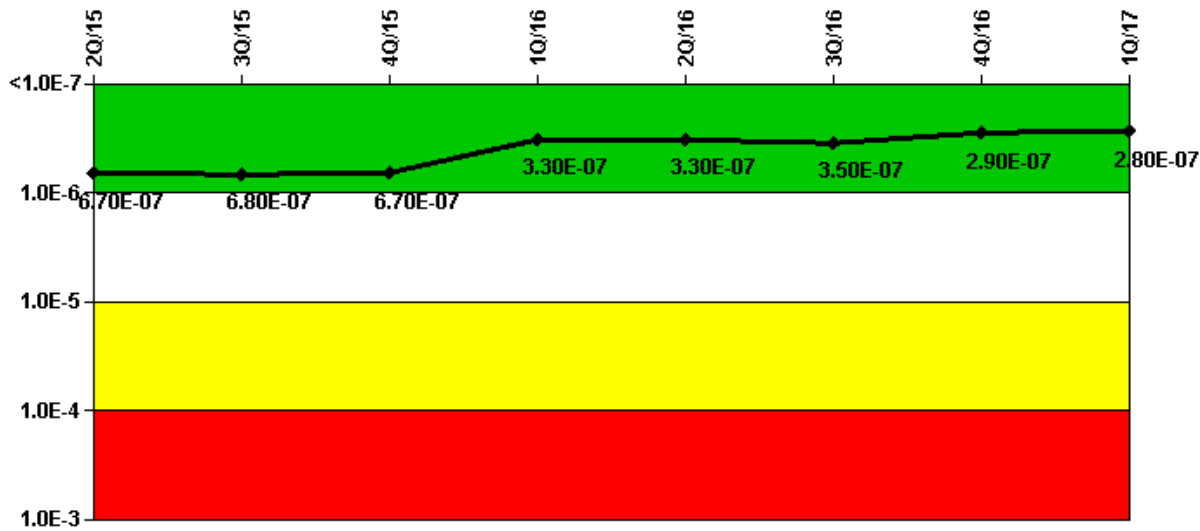
	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI ( $\Delta$ CDF)	1.96E-07	1.37E-07	1.40E-07	2.19E-08	2.07E-08	1.53E-08	1.20E-08	1.31E-08
URI ( $\Delta$ CDF)	-2.82E-08	-2.82E-08	-2.82E-08	-1.43E-08	-1.43E-08	-3.23E-09	-3.23E-09	-3.23E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>1.70E-07</b>	<b>1.10E-07</b>	<b>1.10E-07</b>	<b>7.50E-09</b>	<b>6.30E-09</b>	<b>1.20E-08</b>	<b>8.80E-09</b>	<b>9.90E-09</b>

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Licensee Comments:

3Q/16: 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**

	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	2.21E-07	2.35E-07	2.22E-07	1.09E-07	1.03E-07	1.28E-07	6.44E-08	5.06E-08
URI (ΔCDF)	4.44E-07	4.44E-07	4.44E-07	2.23E-07	2.23E-07	2.26E-07	2.26E-07	2.26E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>6.70E-07</b>	<b>6.80E-07</b>	<b>6.70E-07</b>	<b>3.30E-07</b>	<b>3.30E-07</b>	<b>3.50E-07</b>	<b>2.90E-07</b>	<b>2.80E-07</b>

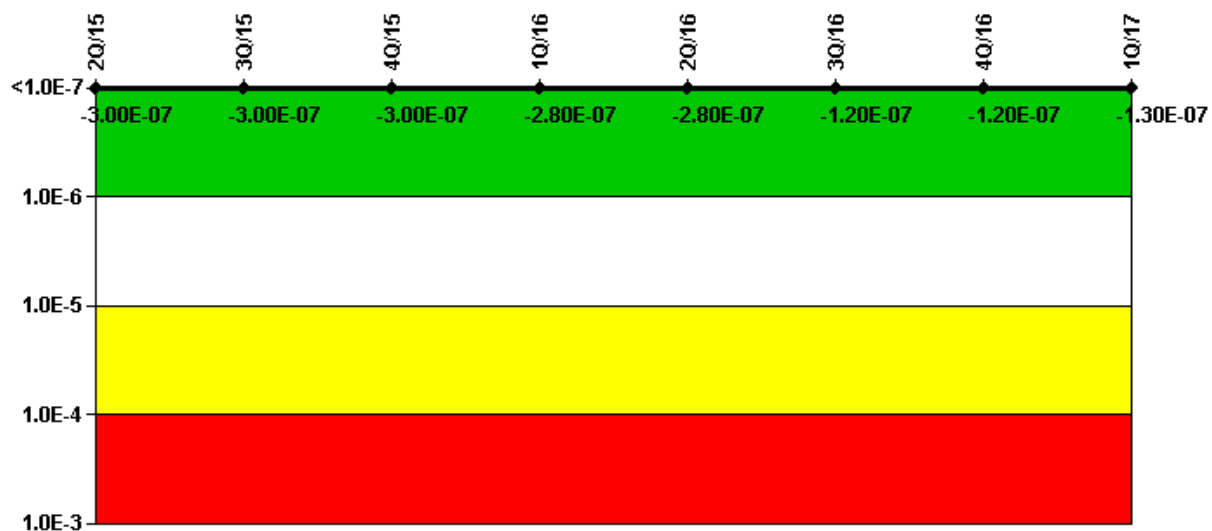
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Licensee Comments:

3Q/16: Changed PRA Parameter(s).

4Q/15: An evaluation is pending for the Nov 2015 failure on Unit 2 Heat Removal.

### 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 ( $\Delta$ CDF)	-7.74E-08	-7.74E-08	-7.74E-08	-7.60E-08	-7.60E-08	-3.01E-08	-3.01E-08	-3.01E-08
URI ( $\Delta$ CDF)	-2.25E-07	-2.25E-07	-2.25E-07	-2.05E-07	-2.05E-07	-9.49E-08	-9.49E-08	-9.49E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-3.00E-07</b>	<b>-3.00E-07</b>	<b>-3.00E-07</b>	<b>-2.80E-07</b>	<b>-2.80E-07</b>	<b>-1.20E-07</b>	<b>-1.20E-07</b>	<b>-1.30E-07</b>

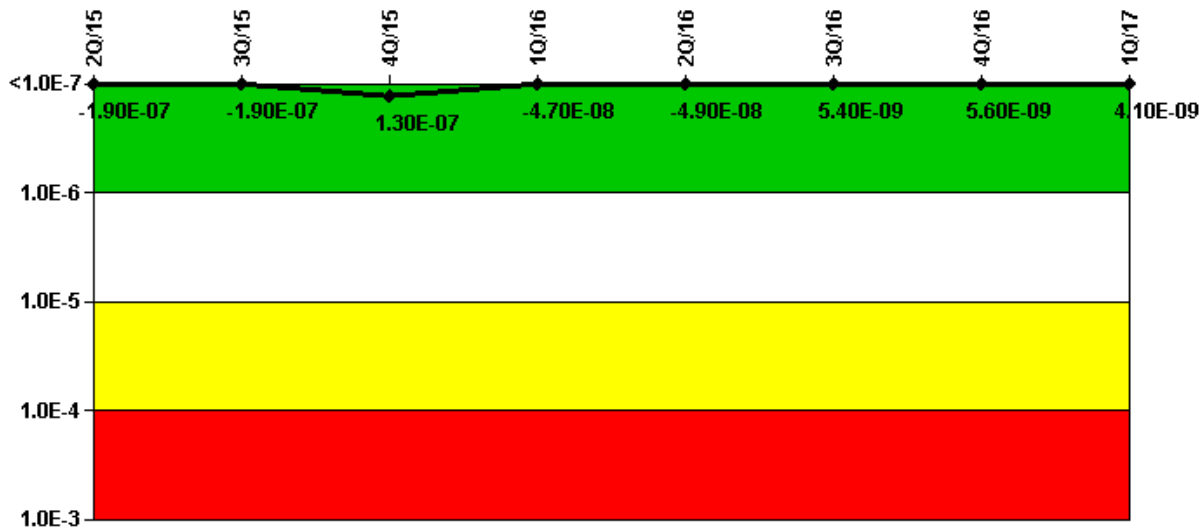
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Licensee Comments:

3Q/16: Changed PRA Parameter(s).



### 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**

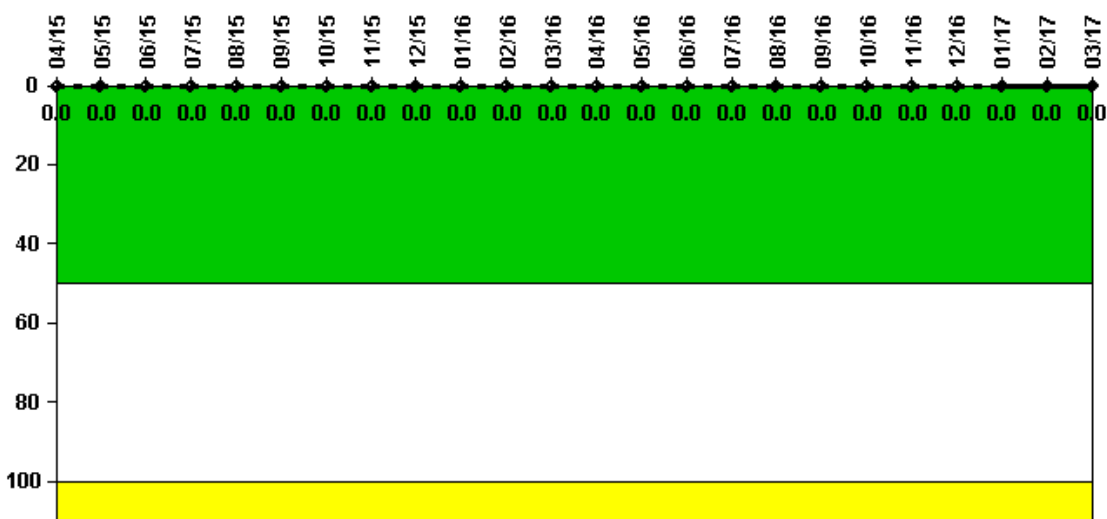
	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
UAI (ΔCDF)	2.30E-08	2.33E-08	2.71E-08	3.82E-08	3.63E-08	3.59E-09	3.76E-09	2.25E-09
URI (ΔCDF)	-2.12E-07	-2.12E-07	9.84E-08	-8.50E-08	-8.50E-08	1.83E-09	1.83E-09	1.83E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-1.90E-07</b>	<b>-1.90E-07</b>	<b>1.30E-07</b>	<b>-4.70E-08</b>	<b>-4.90E-08</b>	<b>5.40E-09</b>	<b>5.60E-09</b>	<b>4.10E-09</b>

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Licensee Comments:

3Q/16: Changed PRA Parameter(s).

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

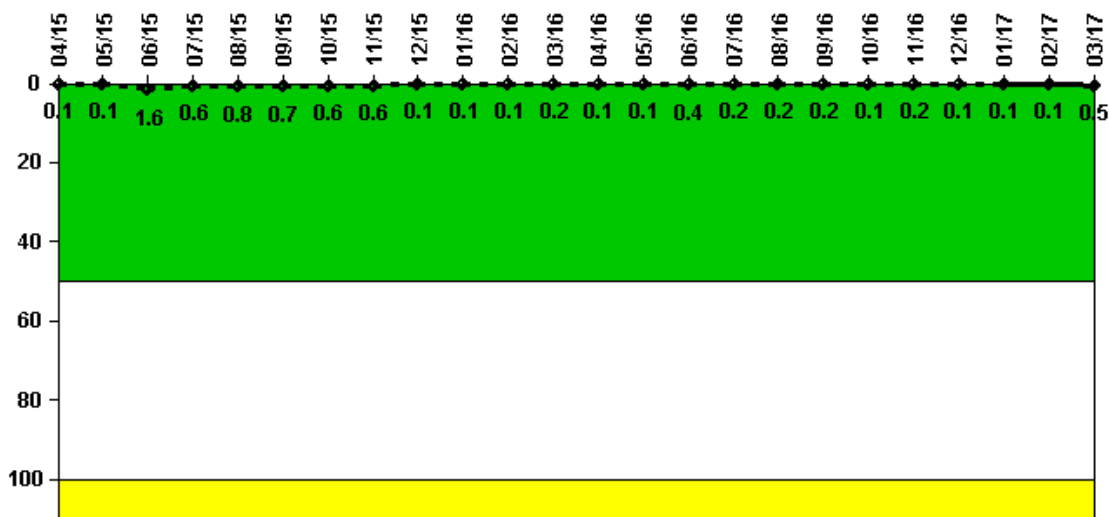
**Notes**

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	0.000032	0.000037	0.000038	0.000046	0.000042	0.000037	0.000043	0.000040	0.000045	0.000042	0.000046	0.000047
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0	0	0	0	0	0	0	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	0.000042	0.000025	0.000023	0.000041	0.000038	0.000035	0.000057	0.000034	0.000036	0.000034	0.000038	0.000042
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

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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	0.014	0.014	0.156	0.059	0.077	0.074	0.064	0.062	0.014	0.014	0.012	0.017
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

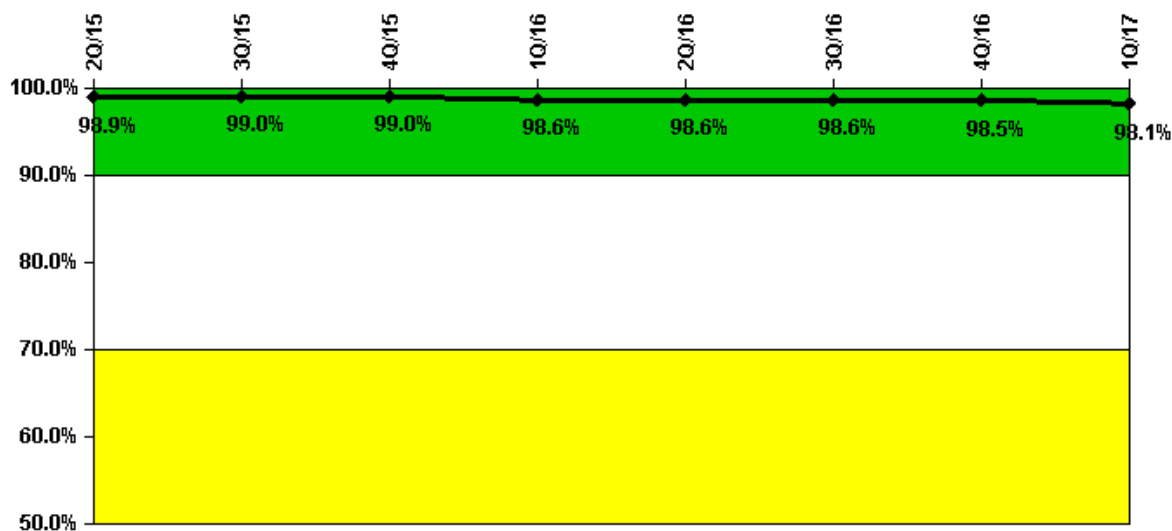
Indicator value	0.1	0.1	1.6	0.6	0.8	0.7	0.6	0.6	0.1	0.1	0.1	0.2
Reactor Coolant System Leakage	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17
Maximum leakage	0.011	0.014	0.042	0.024	0.020	0.016	0.013	0.016	0.010	0.011	0.013	0.050
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Indicator value	0.1	0.1	0.4	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.5
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Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

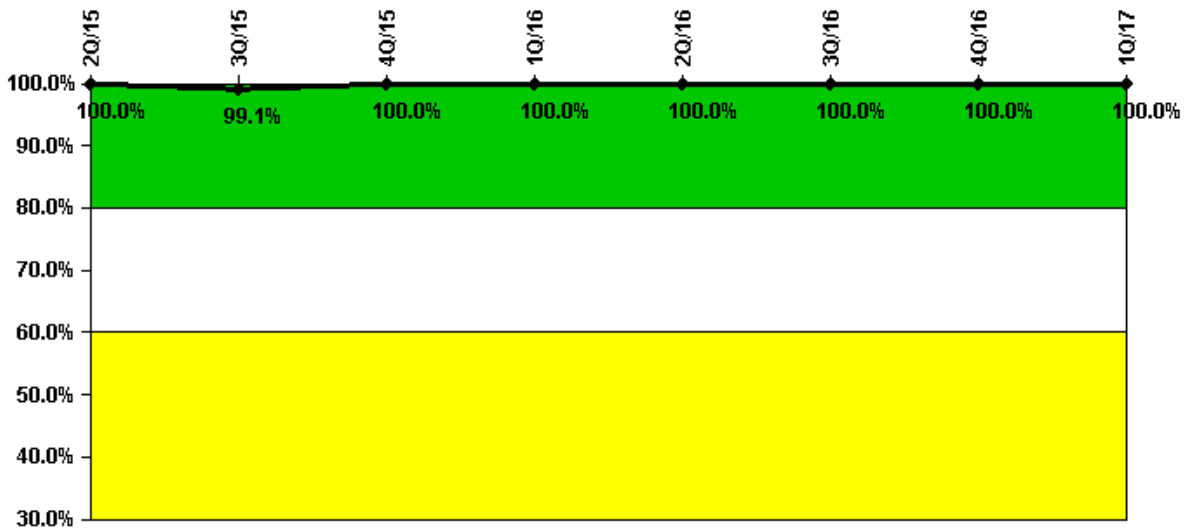
Drill/Exercise Performance	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Successful opportunities	22.0	59.0	22.0	84.0	39.0	37.0	6.0	35.0
Total opportunities	23.0	59.0	22.0	87.0	40.0	37.0	6.0	36.0

Indicator value                    98.9% 99.0% 99.0% 98.6% 98.6% 98.6% 98.5% 98.1%

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Licensee Comments: none

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

**Notes**

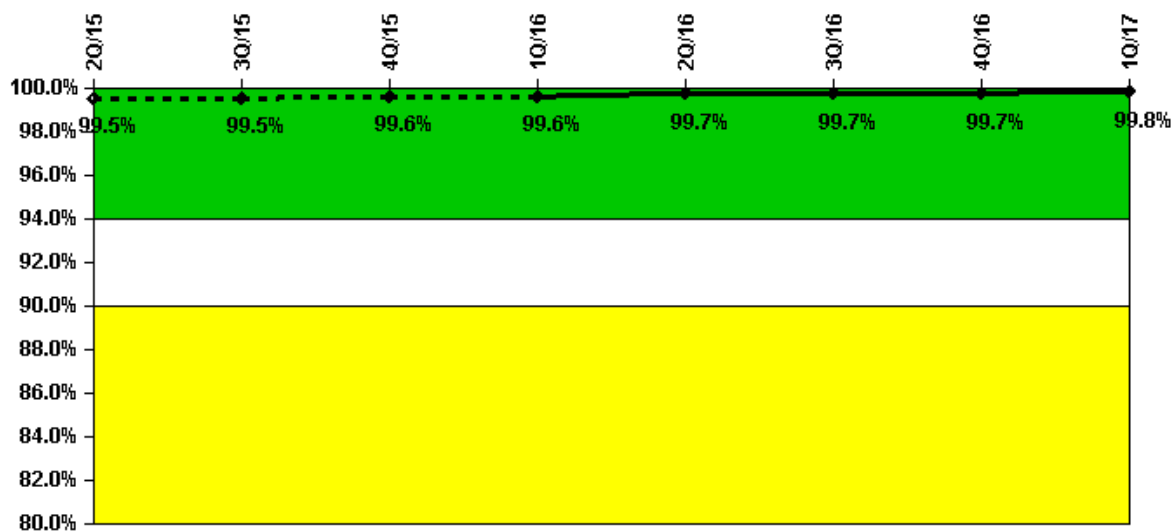
ERO Drill Participation	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Participating Key personnel	115.0	114.0	120.0	120.0	116.0	120.0	121.0	113.0
Total Key personnel	115.0	115.0	120.0	120.0	116.0	120.0	121.0	113.0

**Indicator value**                    **100.0% 99.1% 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

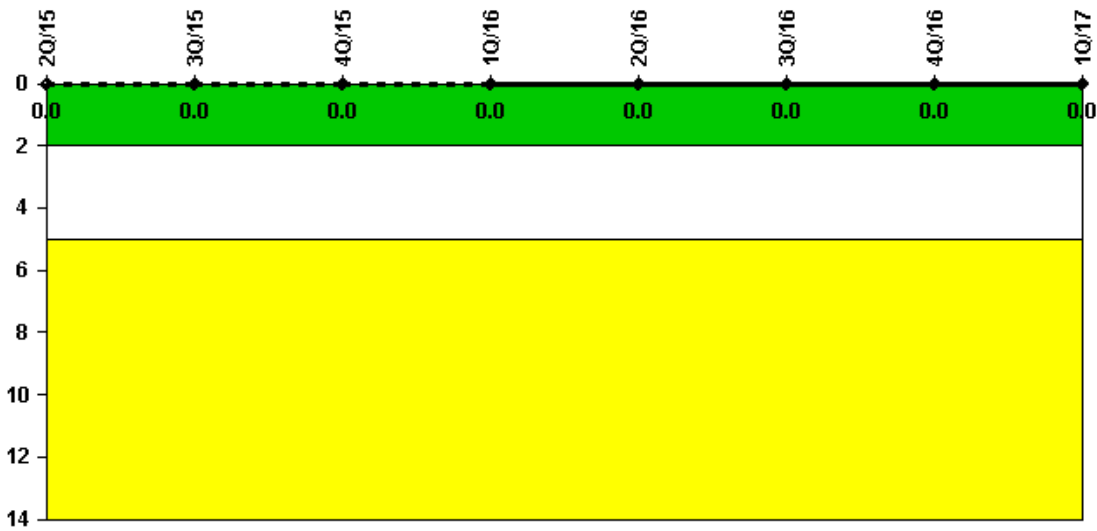
Alert & Notification System	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17
Successful siren-tests	1154	1150	1244	1152	1157	1152	1244	1155
Total sirens-tests	1157	1157	1246	1157	1157	1157	1246	1157

Indicator value                    99.5% 99.5% 99.6% 99.6% 99.7% 99.7% 99.7% 99.8%

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Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

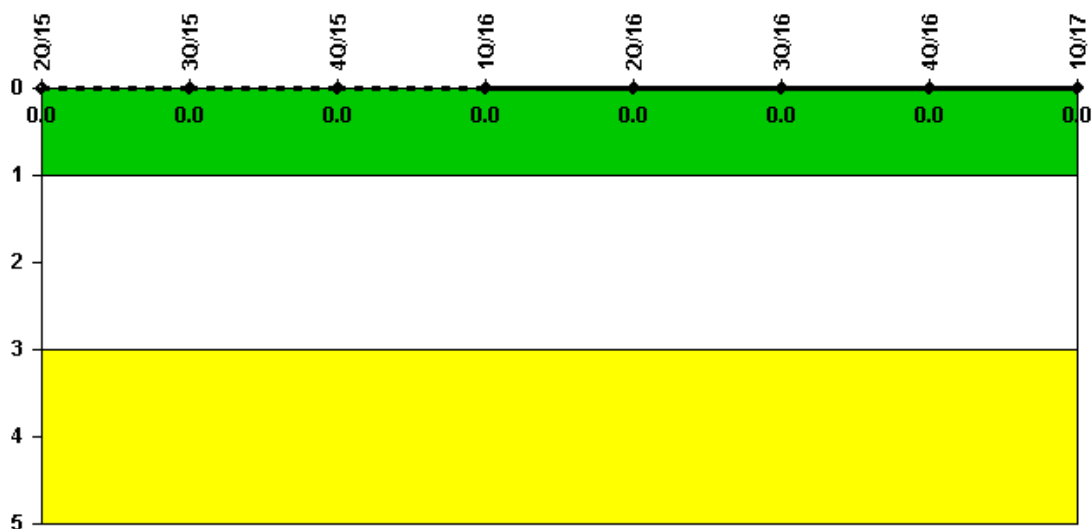
**Occupational Exposure Control Effectiveness** 2Q/15 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17

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