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## Seabrook 1 – Quarterly Performance Indicators

### 4Q/2017 Performance Indicators

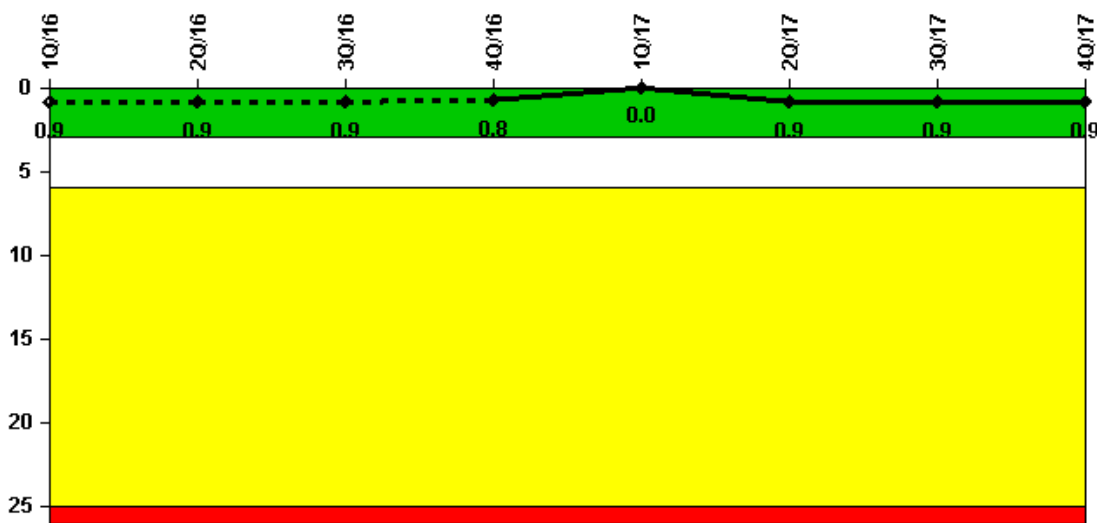
The solid trend line represents the current reporting period.

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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### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

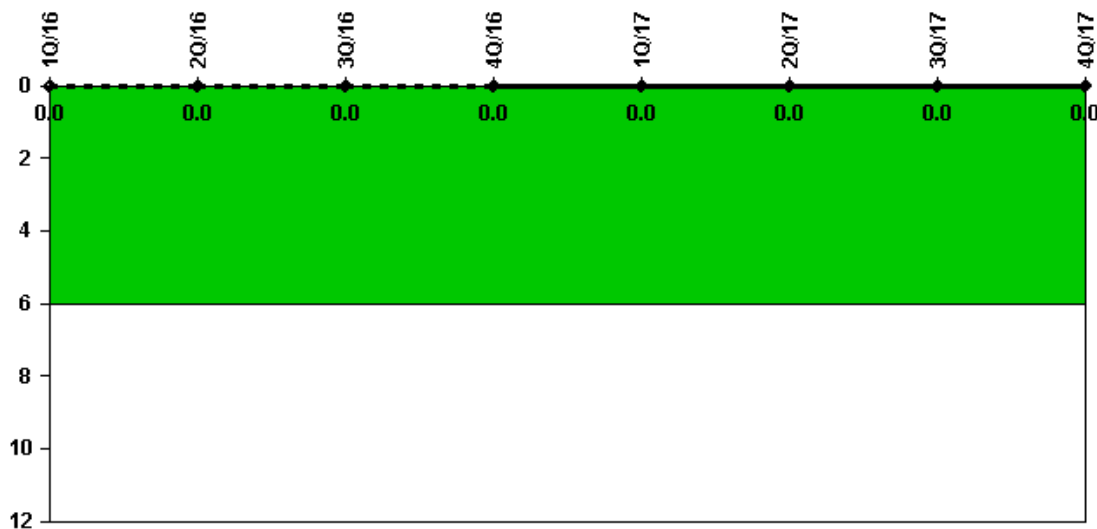
Unplanned Scrams per 7000 Critical Hrs	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Unplanned scrams	1.0	0	0	0	0	1.0	0	0
Critical hours	2078.7	2184.0	2208.0	2209.0	2159.0	1480.6	2208.0	2209.0

Indicator value: 0.9 0.9 0.9 0.8 0 0.9 0.9 0.9

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Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

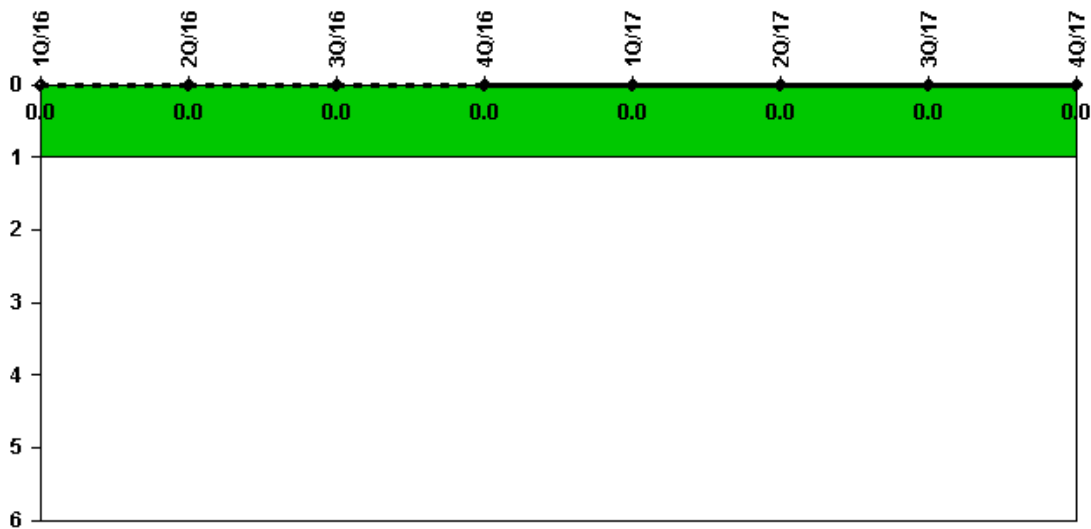
**Notes**

Unplanned Power Changes per 7000 Critical Hrs	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2078.7	2184.0	2208.0	2209.0	2159.0	1480.6	2208.0	2209.0
<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

**Unplanned Scrams with Complications**



Thresholds: White > 1.0

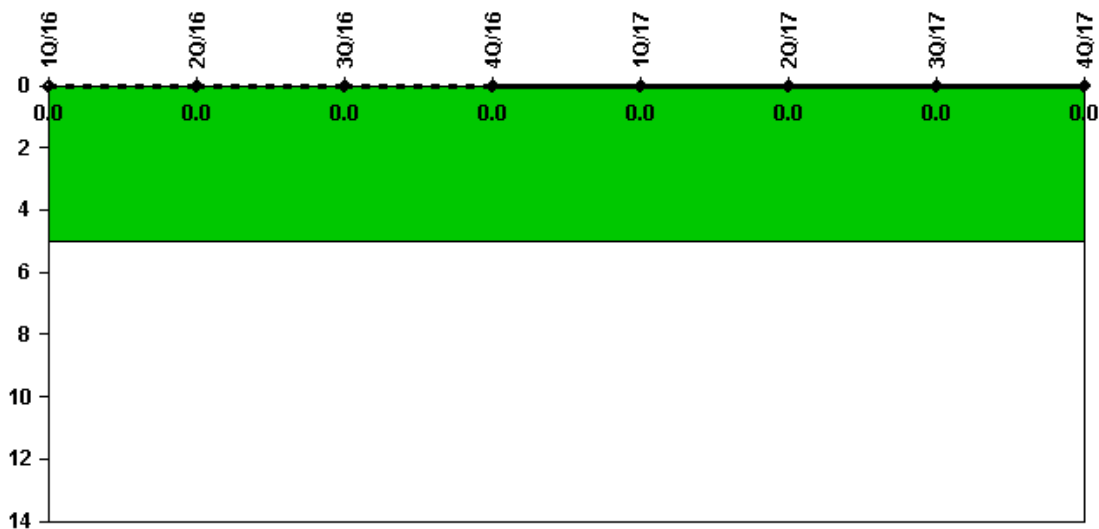
**Notes**

Unplanned Scrams with Complications	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/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) 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17 4Q/17

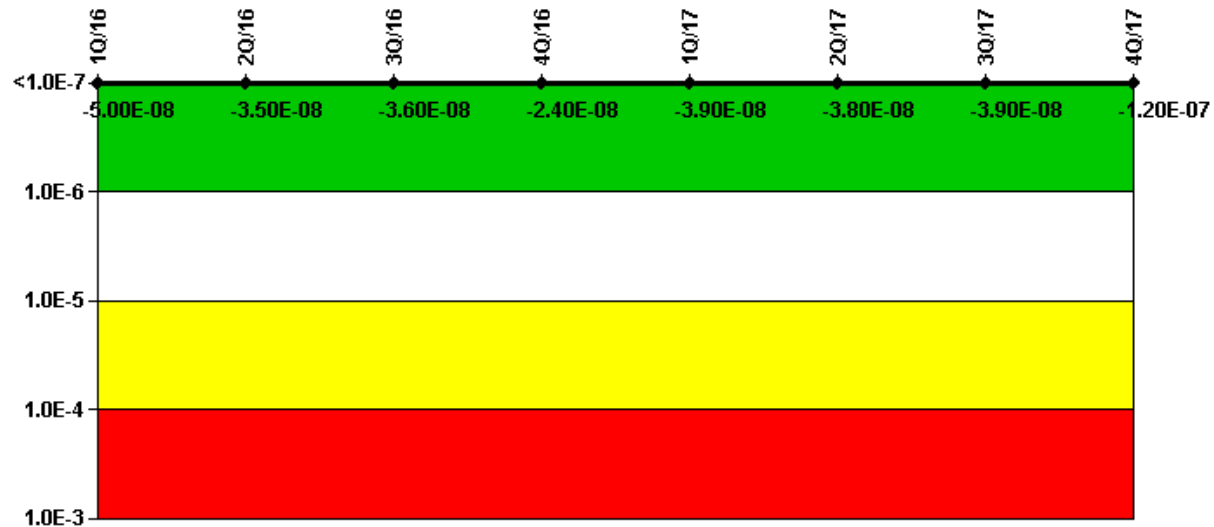
Safety System Functional Failures 0 0 0 0 0 0 0 0

Indicator value 0 0 0 0 0 0 0 0

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Licensee Comments: none

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



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

**Notes**

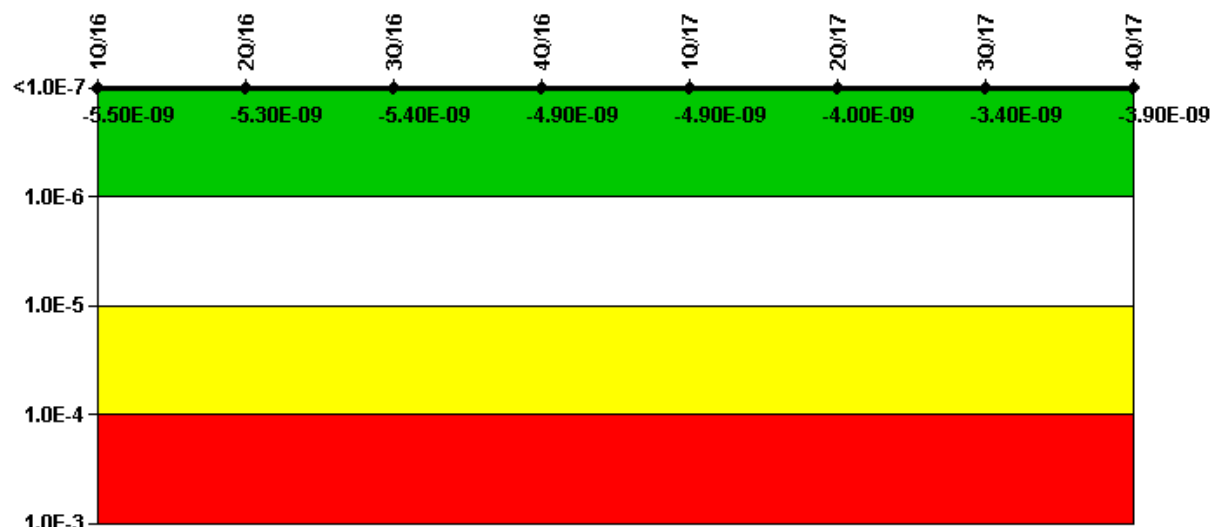
**Mitigating Systems Performance Index, Emergency AC Power System**

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	-3.06E-08	-1.46E-08	-1.49E-08	-2.56E-09	-1.70E-08	-1.61E-08	-1.73E-08	-3.06E-08
URI (ΔCDF)	-1.97E-08	-2.07E-08	-2.07E-08	-2.13E-08	-2.24E-08	-2.18E-08	-2.18E-08	-9.15E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-5.00E-08</b>	<b>-3.50E-08</b>	<b>-3.60E-08</b>	<b>-2.40E-08</b>	<b>-3.90E-08</b>	<b>-3.80E-08</b>	<b>-3.90E-08</b>	<b>-1.20E-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**

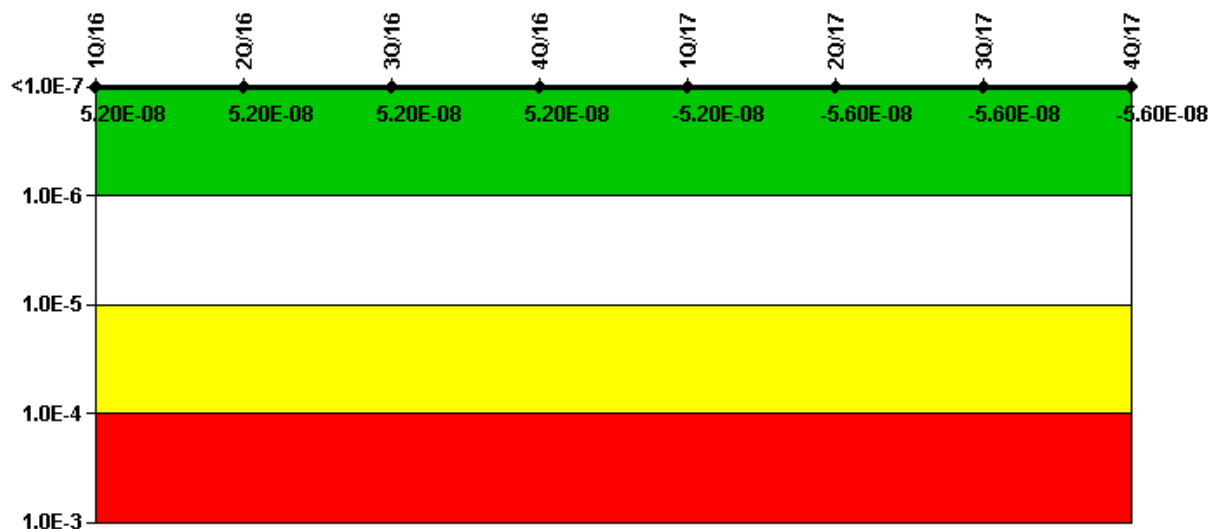
**Mitigating Systems Performance Index, High Pressure Injection System**

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	-3.11E-09	-2.89E-09	-3.02E-09	-2.56E-09	-2.57E-09	-1.72E-09	-1.17E-09	-1.64E-09
URI (ΔCDF)	-2.35E-09	-2.36E-09	-2.37E-09	-2.36E-09	-2.36E-09	-2.25E-09	-2.25E-09	-2.25E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-5.50E-09</b>	<b>-5.30E-09</b>	<b>-5.40E-09</b>	<b>-4.90E-09</b>	<b>-4.90E-09</b>	<b>-4.00E-09</b>	<b>-3.40E-09</b>	<b>-3.90E-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

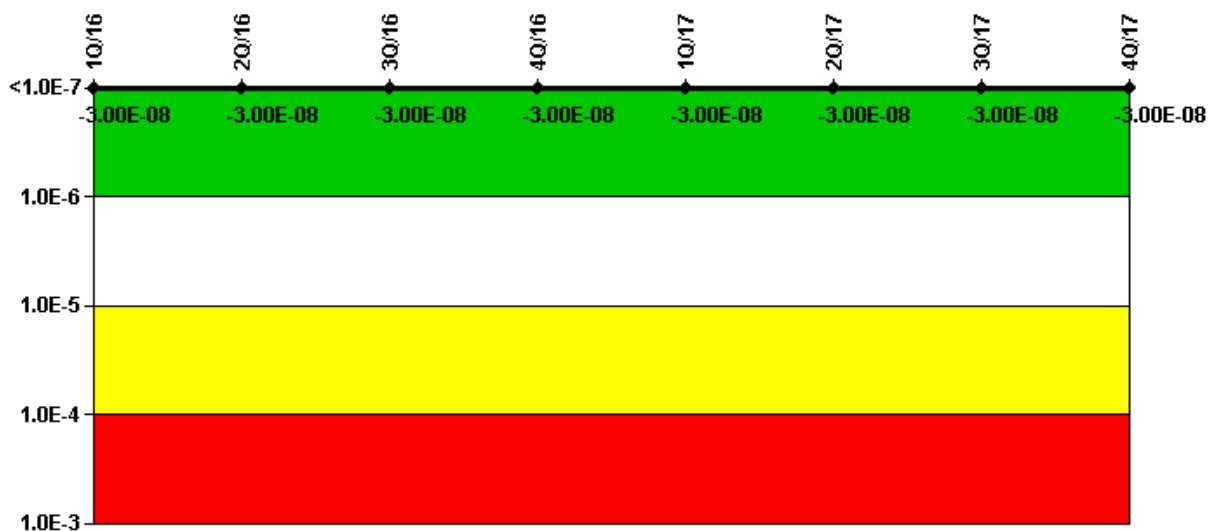
#### Mitigating Systems Performance Index, Heat Removal System

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI ( $\Delta$ CDF)	-1.87E-08	-1.87E-08	-1.87E-08	-1.87E-08	-1.87E-08	-1.87E-08	-1.87E-08	-1.87E-08
URI ( $\Delta$ CDF)	7.07E-08	7.07E-08	7.08E-08	7.09E-08	-3.31E-08	-3.73E-08	-3.72E-08	-3.71E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	5.20E-08	5.20E-08	5.20E-08	5.20E-08	-5.20E-08	-5.60E-08	-5.60E-08	-5.60E-08

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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**

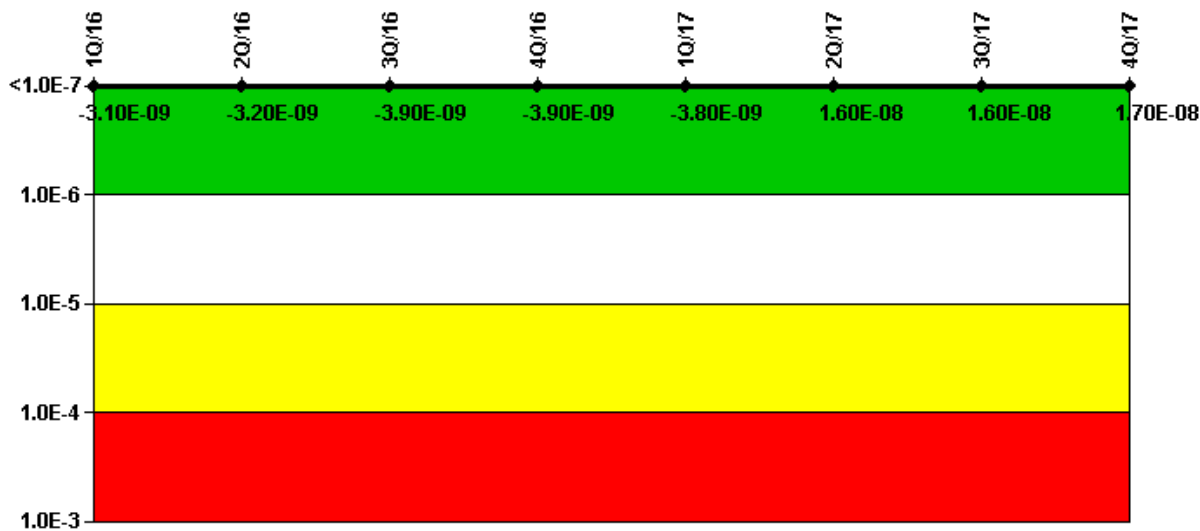
**Mitigating Systems Performance Index, Residual Heat Removal System**

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	-8.49E-09	-8.49E-09	-8.49E-09	-8.49E-09	-8.49E-09	-8.49E-09	-8.49E-09	-8.49E-09
URI (ΔCDF)	-2.13E-08	-2.13E-08	-2.13E-08	-2.14E-08	-2.11E-08	-2.13E-08	-2.12E-08	-2.12E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-3.00E-08</b>	<b>-3.00E-08</b>	<b>-3.00E-08</b>	<b>-3.00E-08</b>	<b>-3.00E-08</b>	<b>-3.00E-08</b>	<b>-3.00E-08</b>	<b>-3.00E-08</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

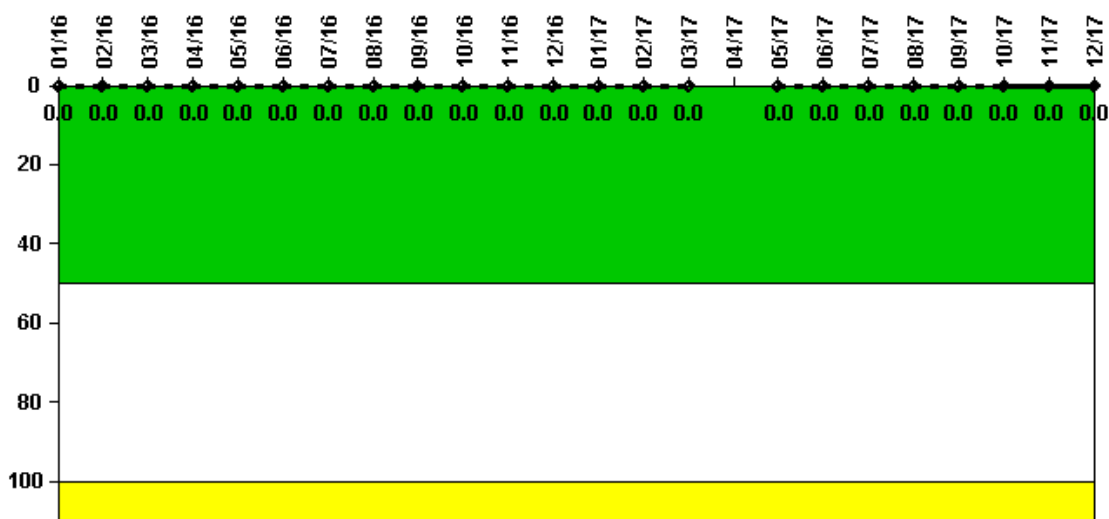
	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI ( $\Delta$ CDF)	-1.66E-14	-1.66E-14	-1.66E-14	-1.66E-14	-1.66E-14	-1.66E-14	-1.66E-14	-1.66E-14
URI ( $\Delta$ CDF)	-3.06E-09	-3.22E-09	-3.94E-09	-3.94E-09	-3.81E-09	1.65E-08	1.64E-08	1.68E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-09	-3.20E-09	-3.90E-09	-3.90E-09	-3.80E-09	1.60E-08	1.60E-08	1.70E-08

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Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

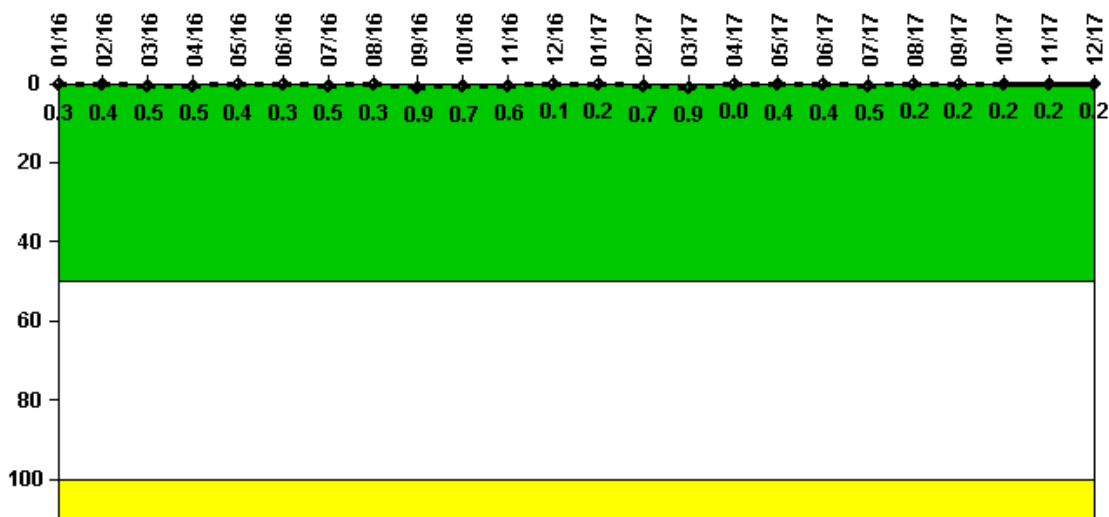
**Notes**

Reactor Coolant System Activity	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum activity	0.000035	0.000069	0.000078	0.000045	0.000044	0.000058	0.000050	0.000048	0.000054	0.000052	0.000060	0.000069
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
<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	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17	10/17	11/17	12/17
Maximum activity	0.000068	0.000065	0.000070	N/A	0.000061	0.000034	0.000043	0.000049	0.000041	0.000066	0.000048	0.000051
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
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>N/A</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

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum leakage	0.031	0.040	0.048	0.048	0.035	0.029	0.052	0.025	0.091	0.071	0.063	0.014
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**                      **0.3   0.4   0.5   0.5   0.4   0.3   0.5   0.3   0.9   0.7   0.6   0.1**

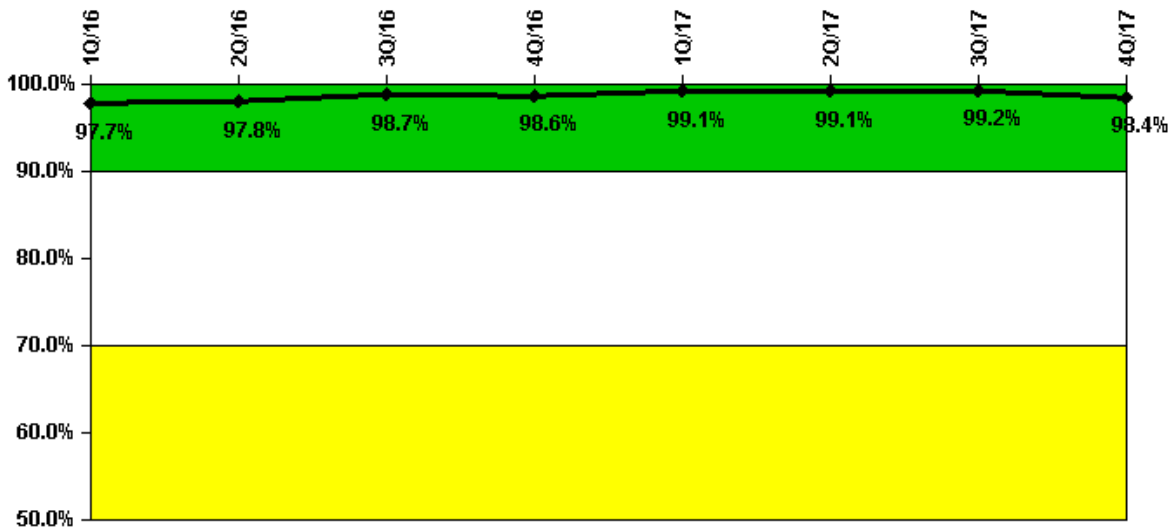
Reactor Coolant System Leakage	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17	10/17	11/17	12/17
Maximum leakage	0.015	0.071	0.087	0	0.041	0.035	0.045	0.022	0.022	0.020	0.018	0.021
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

**Indicator value**                      **0.2   0.7   0.9   0   0.4   0.4   0.5   0.2   0.2   0.2   0.2   0.2**

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Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Successful opportunities	42.0	32.0	27.0	23.0	21.0	40.0	17.0	37.0
Total opportunities	43.0	32.0	27.0	23.0	21.0	41.0	17.0	39.0

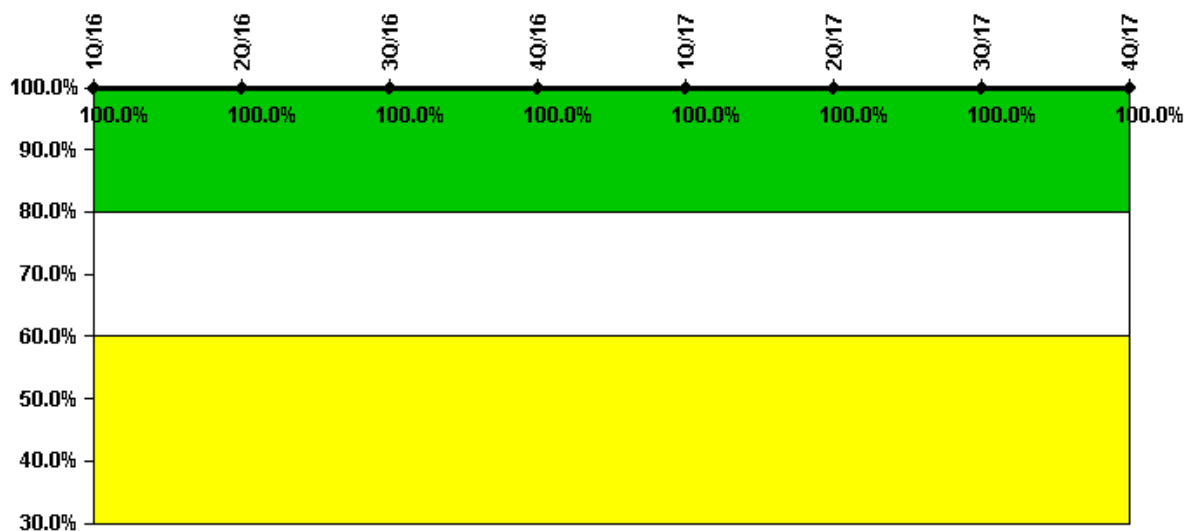
**Indicator value**                    **97.7% 97.8% 98.7% 98.6% 99.1% 99.1% 99.2% 98.4%**

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#### Licensee Comments:

4Q/16: October 2016 value revised after discovering number was under reported. This revision did not affect the color of the indicator.  
 3Q/16: September 2016 value revised after discovering number was under reported. This revision did not affect the color of the indicator

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

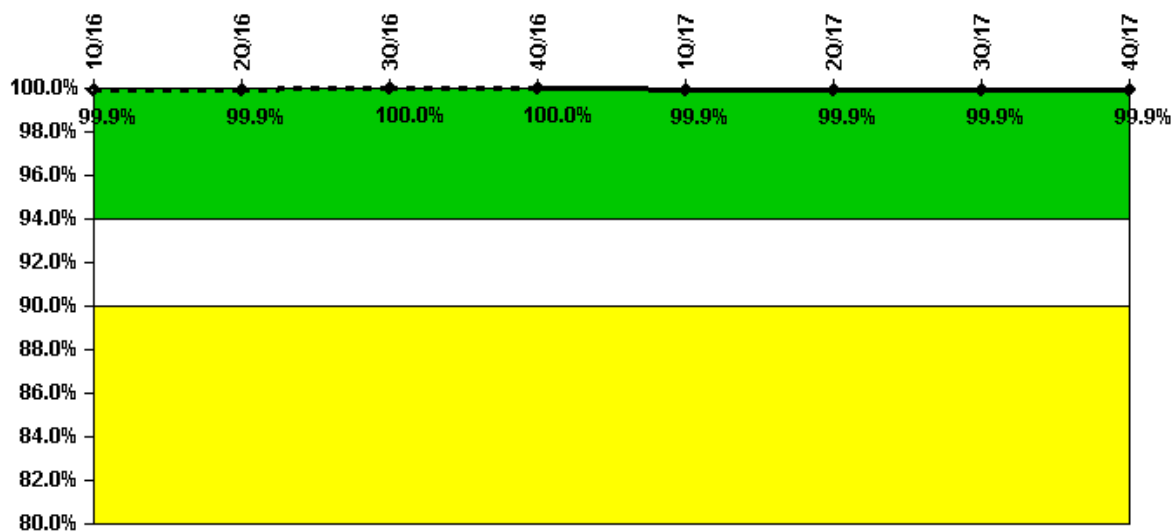
ERO Drill Participation	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Participating Key personnel	93.0	97.0	97.0	93.0	93.0	94.0	95.0	86.0
Total Key personnel	93.0	97.0	97.0	93.0	93.0	94.0	95.0	86.0

**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**

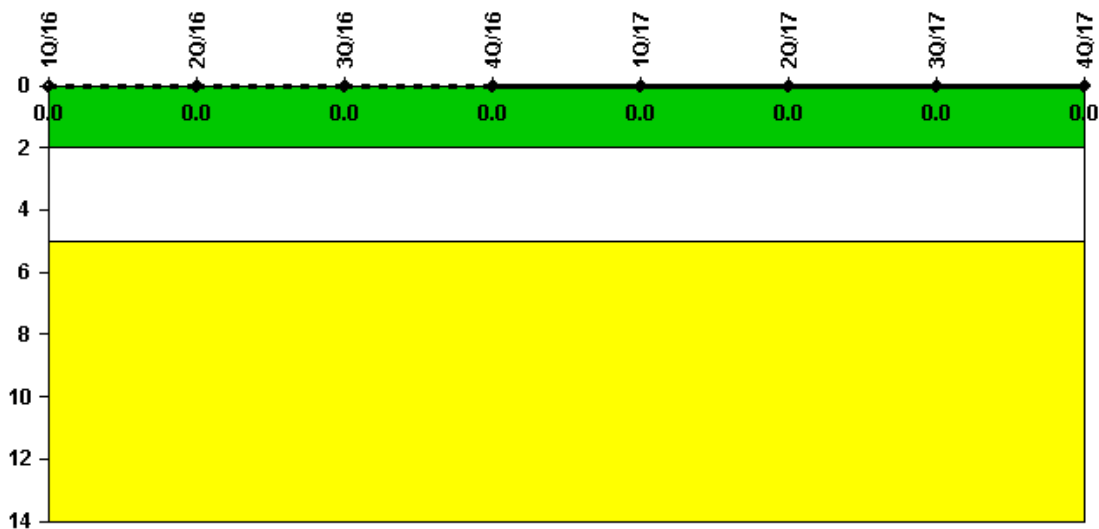
Alert & Notification System	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Successful siren-tests	726	847	725	847	725	847	725	726
Total sirens-tests	726	847	726	847	726	847	726	726

**Indicator value**                    99.9% 99.9% 100.0% 100.0% 99.9% 99.9% 99.9% 99.9%

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Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

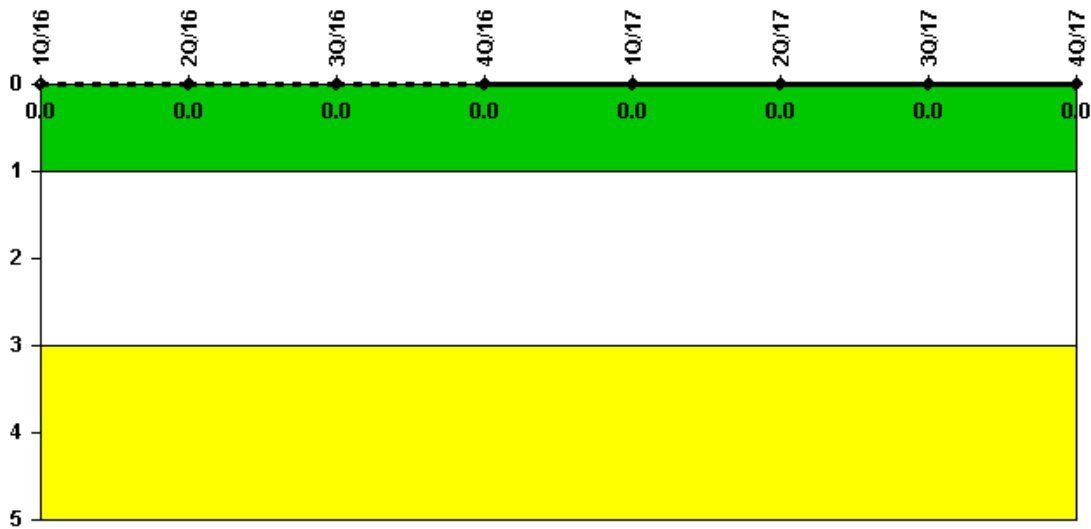
**Occupational Exposure Control Effectiveness** 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17 4Q/17

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** 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17 4Q/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: February 1, 2018*

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