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## Vogtle 2 – 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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- Occupational Exposure Control Effectiveness (OR01)
- RETS/OCDM Radiological Effluent Occurrence (PR01)
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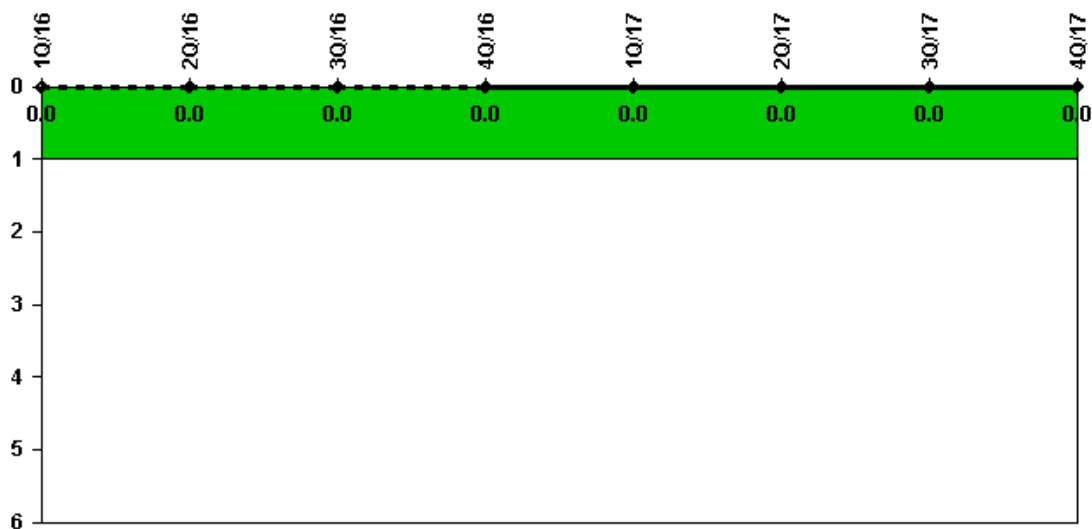
**Notes**

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	1672.2	2160.7	2208.0	2209.0	2159.0	2184.0	1877.0	2156.2
<b>Indicator value</b>	<b>0.8</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

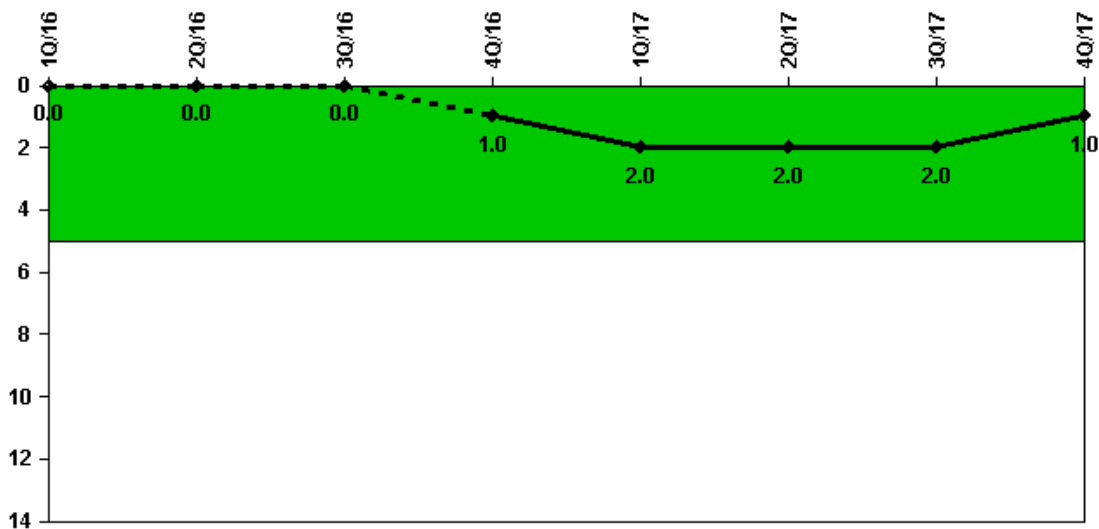
**Notes**

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 1 1 0 0 0

Indicator value 0 0 0 1 2 2 2 1

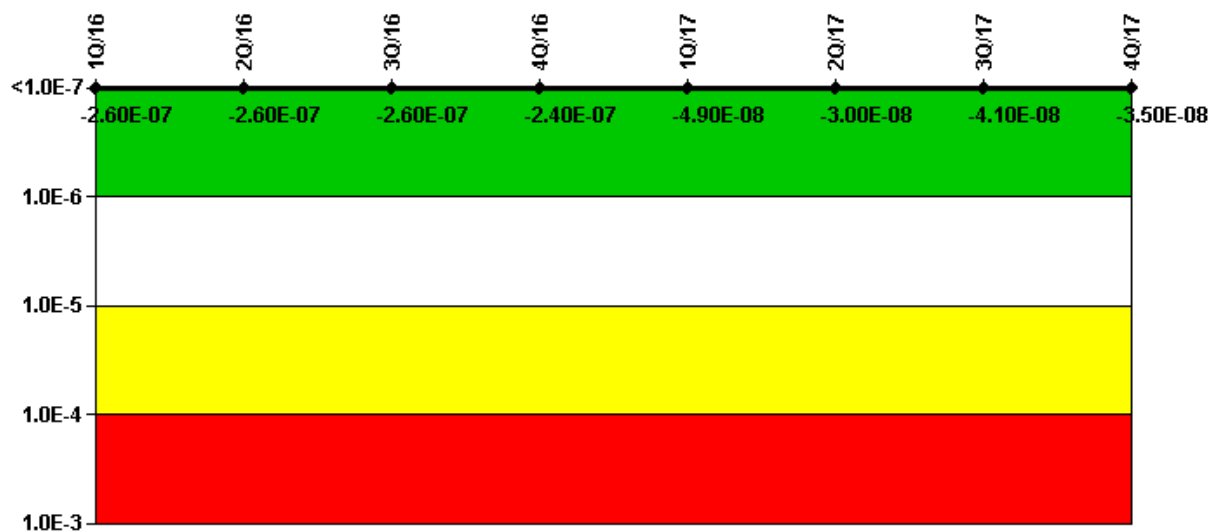
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Licensee Comments:

1Q/17: LER 2-2017-001-00

4Q/16: LER 1-2016-003-00 "Tornado Missile" Ref CR#10411593

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



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

**Notes**

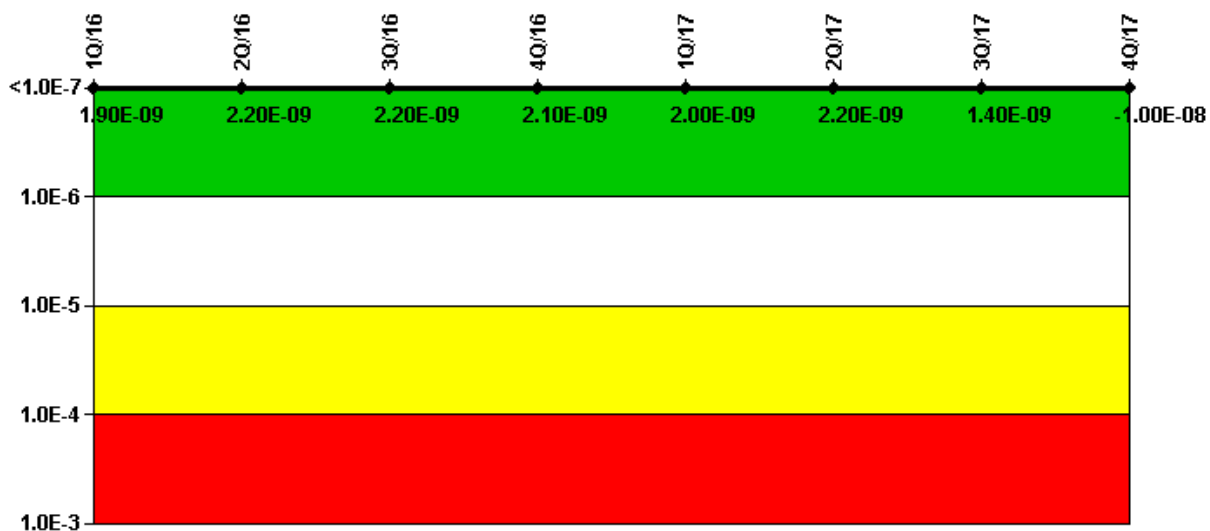
**Mitigating Systems Performance Index, Emergency AC Power System**

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI ( $\Delta$ CDF)	-2.07E-08	-2.72E-08	-2.72E-08	-3.58E-09	3.85E-09	3.79E-09	3.68E-09	3.26E-09
URI ( $\Delta$ CDF)	-2.35E-07	-2.33E-07	-2.34E-07	-2.35E-07	-5.30E-08	-3.36E-08	-4.50E-08	-3.83E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-2.60E-07</b>	<b>-2.60E-07</b>	<b>-2.60E-07</b>	<b>-2.40E-07</b>	<b>-4.90E-08</b>	<b>-3.00E-08</b>	<b>-4.10E-08</b>	<b>-3.50E-08</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**

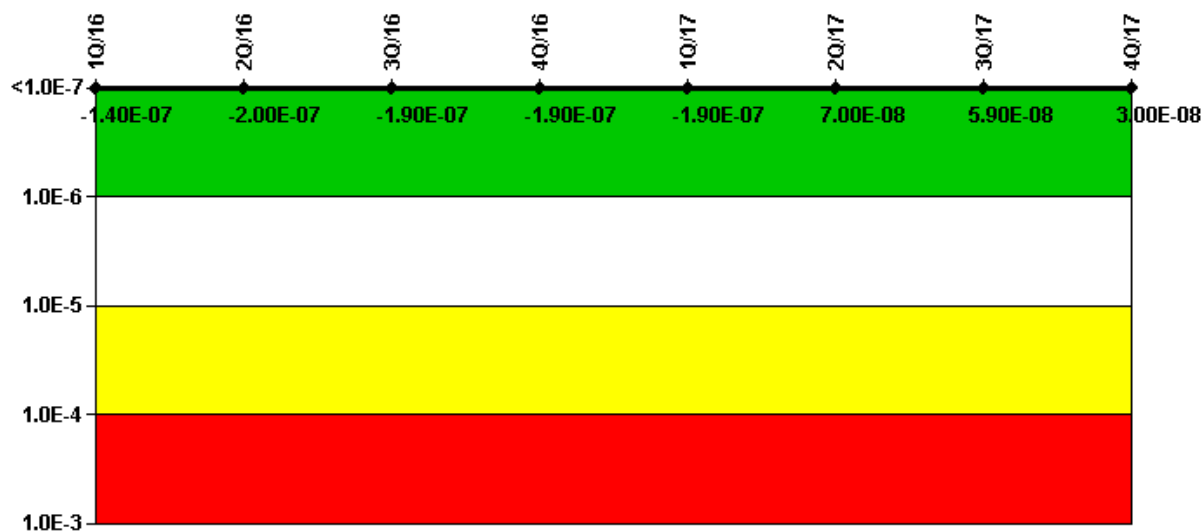
**Mitigating Systems Performance Index, High Pressure Injection System**

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI (ΔCDF)	-2.91E-09	-2.91E-09	-2.91E-09	-2.91E-09	-2.91E-09	-2.91E-09	-2.85E-09	-2.85E-09
URI (ΔCDF)	4.80E-09	5.07E-09	5.09E-09	5.04E-09	4.87E-09	5.10E-09	4.25E-09	-7.52E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>1.90E-09</b>	<b>2.20E-09</b>	<b>2.20E-09</b>	<b>2.10E-09</b>	<b>2.00E-09</b>	<b>2.20E-09</b>	<b>1.40E-09</b>	<b>-1.00E-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

	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI ( $\Delta$ CDF)	8.55E-08	2.60E-08	2.66E-08	2.67E-08	2.29E-08	3.39E-08	2.28E-08	-8.45E-09
URI ( $\Delta$ CDF)	-2.23E-07	-2.21E-07	-2.21E-07	-2.12E-07	-2.12E-07	3.59E-08	3.59E-08	3.80E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-2.00E-07	-1.90E-07	-1.90E-07	-1.90E-07	7.00E-08	5.90E-08	3.00E-08

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#### Licensee Comments:

2Q/17: Change file created due to revision of ICES Report#417612. Unit 2 TDAFW Functional Failure Ref CR#10384381

### 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**

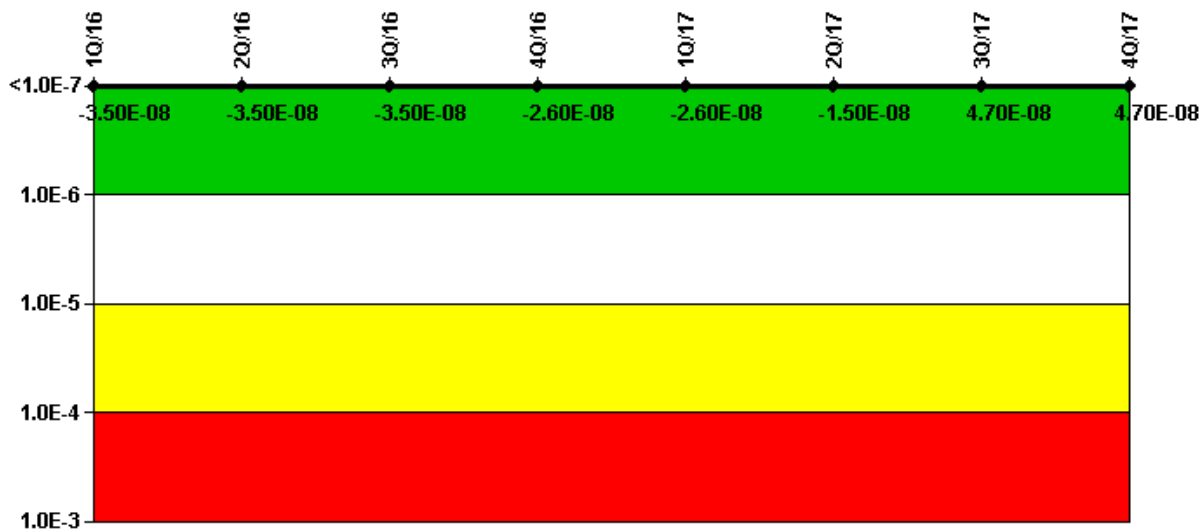
	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
UAI ( $\Delta$ CDF)	-1.81E-09	-1.11E-09	-1.12E-09	-1.16E-09	-1.35E-09	-1.53E-09	7.85E-09	7.41E-09
URI ( $\Delta$ CDF)	-2.35E-08	-2.26E-08	-2.26E-08	-2.26E-08	-2.26E-08	-2.26E-08	-2.37E-08	-2.15E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-2.50E-08</b>	<b>-2.40E-08</b>	<b>-2.40E-08</b>	<b>-2.40E-08</b>	<b>-2.40E-08</b>	<b>-2.40E-08</b>	<b>-1.60E-08</b>	<b>-1.40E-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 (ΔCDF)	-1.82E-08	-1.83E-08	-1.83E-08	-1.83E-08	-1.83E-08	-7.51E-09	4.22E-08	4.17E-08
URI (ΔCDF)	-1.66E-08	-1.66E-08	-1.66E-08	-7.92E-09	-7.75E-09	-7.70E-09	5.18E-09	5.61E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-3.50E-08</b>	<b>-3.50E-08</b>	<b>-3.50E-08</b>	<b>-2.60E-08</b>	<b>-2.60E-08</b>	<b>-1.50E-08</b>	<b>4.70E-08</b>	<b>4.70E-08</b>

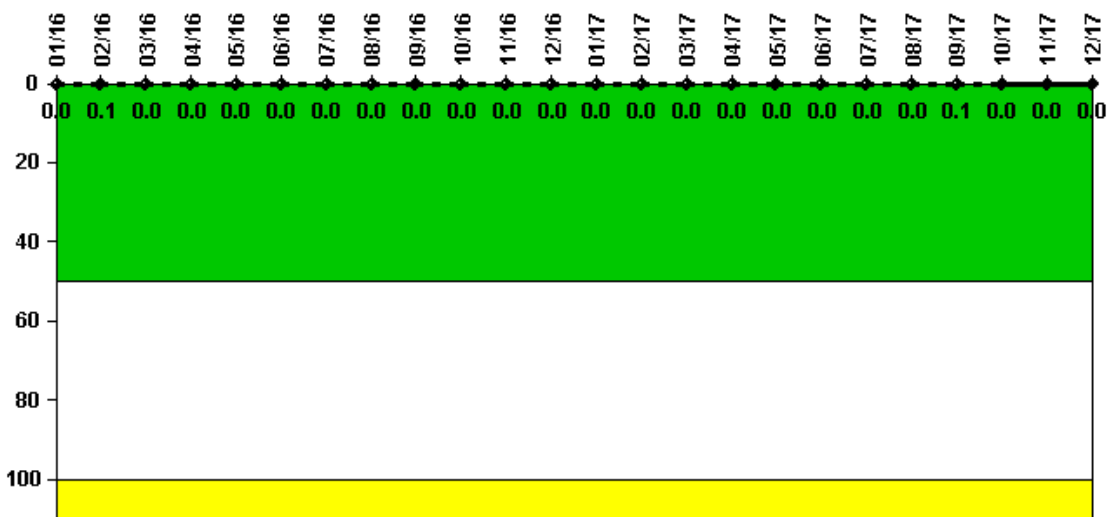
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Licensee Comments:

3Q/17: Change file created due to revision of ICES Record 425756 Nuclear Service Cooling Water Pump Trip Due to Phase to Ground Fault

4Q/16: Pump Demands for NSCW Pump#5 were entered incorrectly. This Data error did not impact the KPI report. Ref CR#10331455

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

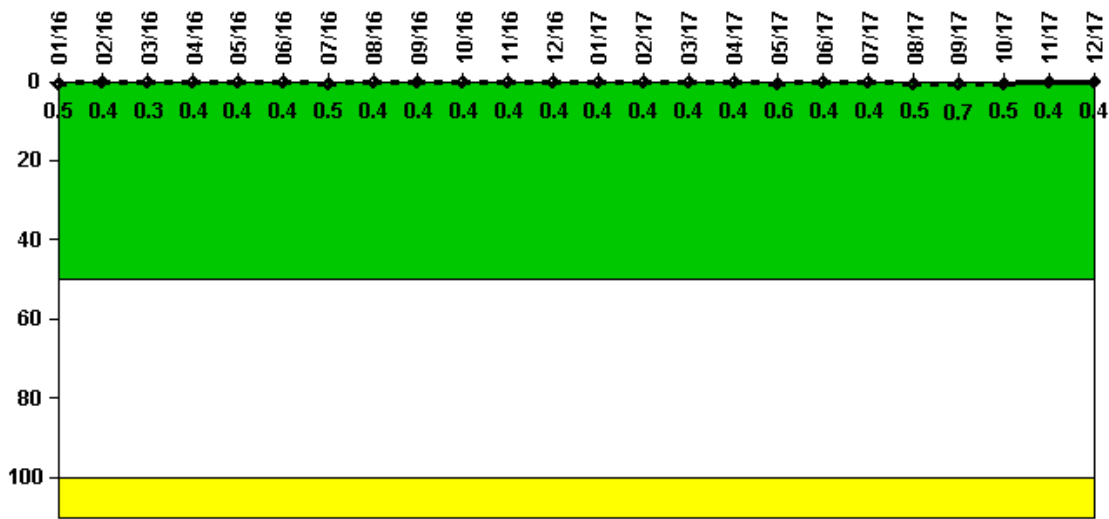
Reactor Coolant System Activity	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum activity	0.000434	0.000509	0.000205	0.000143	0.000140	0.000161	0.000173	0.000174	0.000179	0.000187	0.000205	0.000219
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0	0	0	0	0	0	0	0	0	0
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	0.000224	0.000245	0.000236	0.000274	0.000262	0.000272	0.000284	0.000399	0.000981	0.000110	0.000133	0.000127
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	0	0	0	0	0	0	0	0.1	0	0	0

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Licensee Comments:

9/16: Department review of CDE for Maximum I-131 Activity (uCi/gm for 2016 identified three entries (U-1 Aug 2016, Sept 2016 and U-2 Sept 2016) with the incorrect number. These numbers have been revised. Incorrect data entry was a result of human error. Ref CR#10373664

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

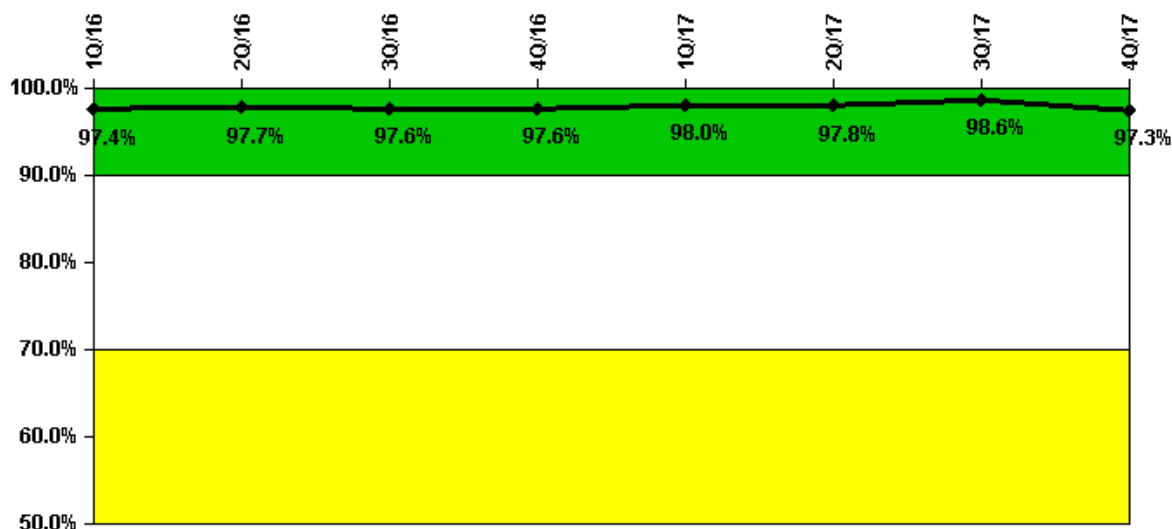
**Notes**

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	0.045	0.035	0.031	0.039	0.041	0.038	0.045	0.035	0.036	0.042	0.039	0.040
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
<b>Indicator value</b>	<b>0.5</b>	<b>0.4</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
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	0.041	0.043	0.039	0.039	0.055	0.036	0.036	0.049	0.070	0.053	0.042	0.039
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
<b>Indicator value</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.7</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>

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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	46.0	93.0	57.0	27.0	24.0	51.0	47.0	48.0
Total opportunities	46.0	94.0	58.0	28.0	24.0	52.0	48.0	54.0

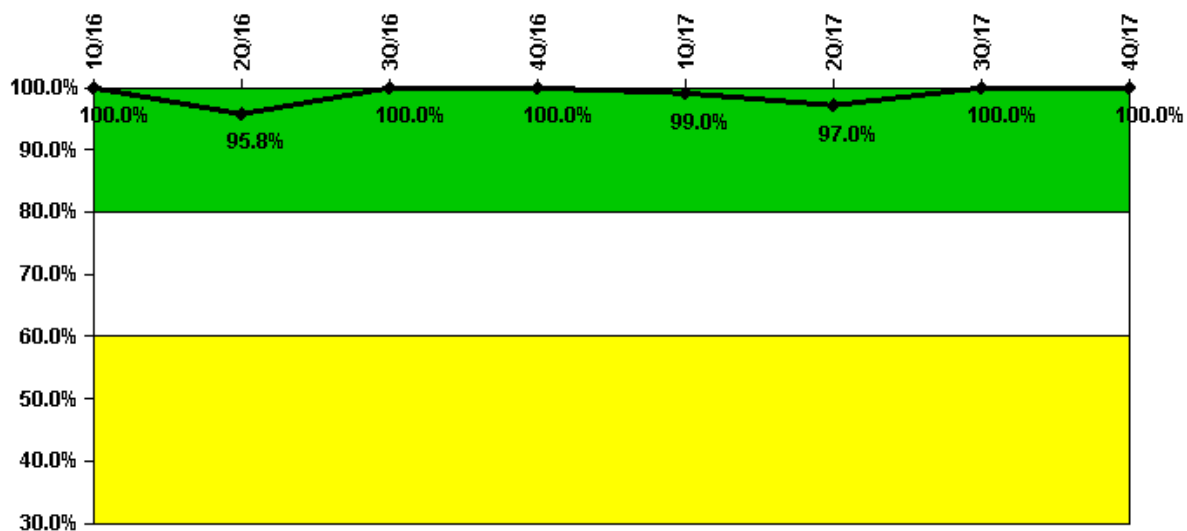
**Indicator value**                    **97.4% 97.7% 97.6% 97.6% 98.0% 97.8% 98.6% 97.3%**

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#### Licensee Comments:

2Q/17: KPI records for June 2017 Drill Exercise Participation (DEP) have been changed from 0 of 0 to 18 of 18 to add opportunities from Operations Annual Exams. Ref CR#10421233

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

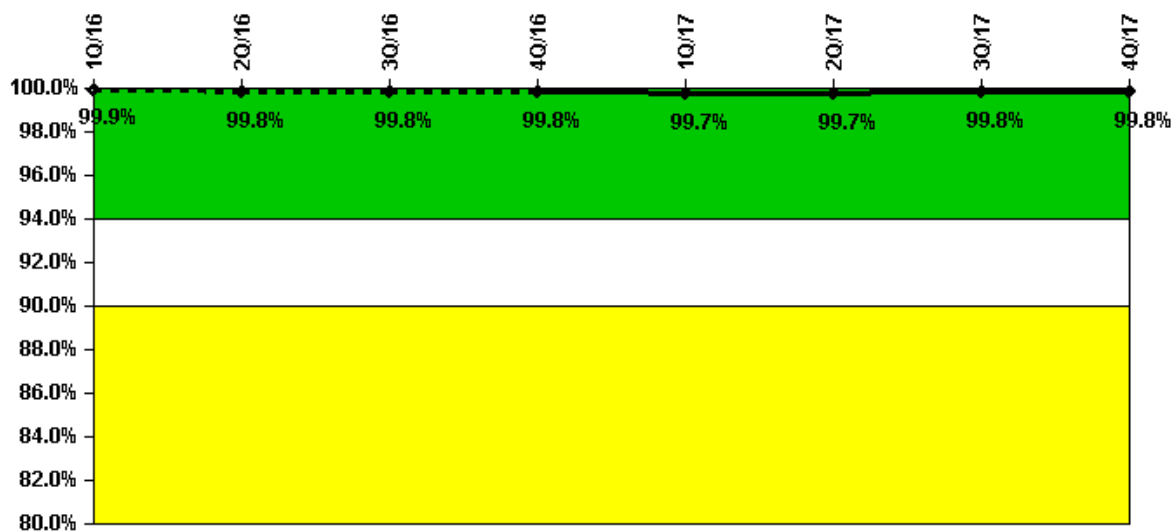
ERO Drill Participation	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Participating Key personnel	89.0	92.0	96.0	105.0	103.0	97.0	87.0	88.0
Total Key personnel	89.0	96.0	96.0	105.0	104.0	100.0	87.0	88.0

**Indicator value**                    **100.0% 95.8% 100.0% 100.0% 99.0% 97.0% 100.0% 100.0%**

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Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

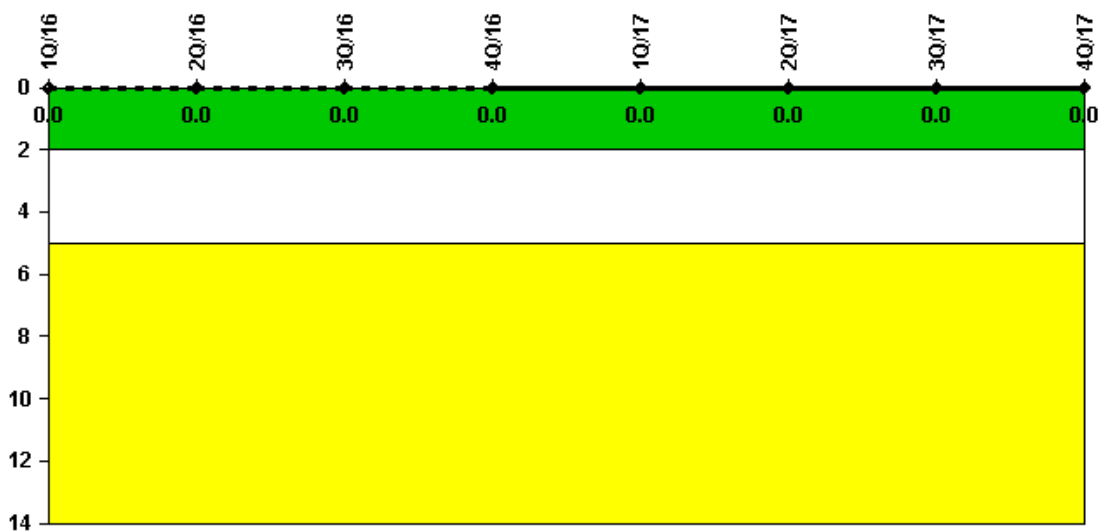
Alert & Notification System	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Successful siren-tests	611	608	610	609	610	608	611	611
Total sirens-tests	611	611	611	611	611	611	611	611

**Indicator value**                    **99.9% 99.8% 99.8% 99.8% 99.7% 99.7% 99.8% 99.8%**

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Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

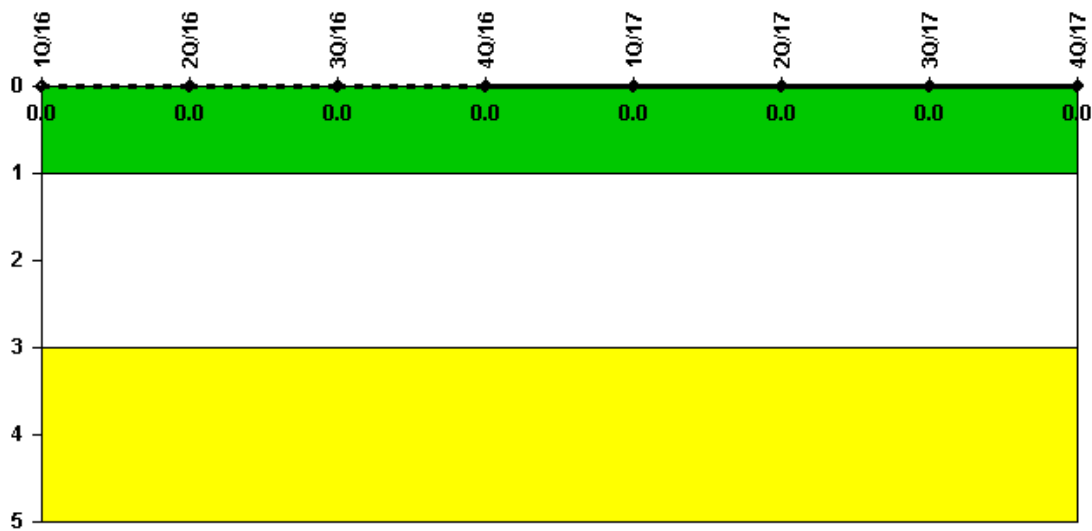
**Occupational Exposure Control Effectiveness** 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17 4Q/17

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*