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## La Salle 1 – Quarterly Performance Indicators

### 4Q/2017 Performance Indicators

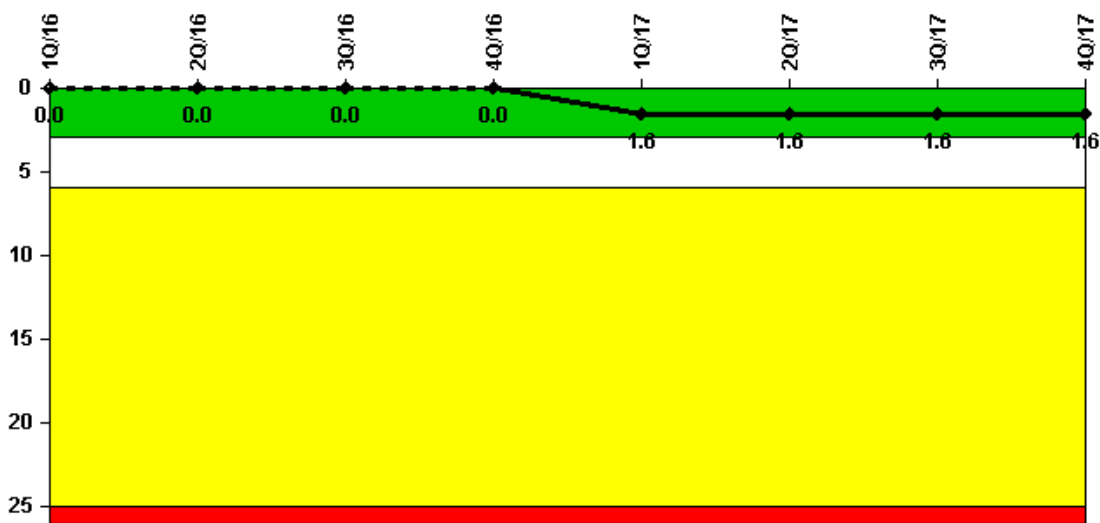
The solid trend line represents the current reporting period.

Licensee's General Comments: none

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- Unplanned Power Changes per 7000 Critical Hours (IE03)
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### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

**Notes**

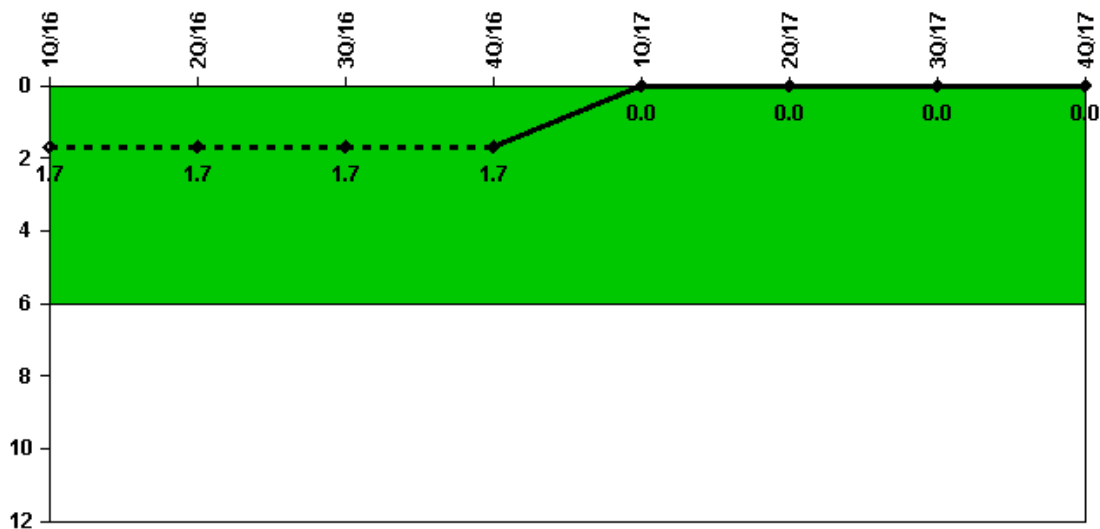
Unplanned Scrams per 7000 Critical Hrs	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Unplanned scrams	0	0	0	0	2.0	0	0	0
Critical hours	1484.7	2184.0	2208.0	2209.0	2084.6	2109.1	2208.0	2209.0

Indicator value	0	0	0	0	1.6	1.6	1.6	1.6
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Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

**Notes**

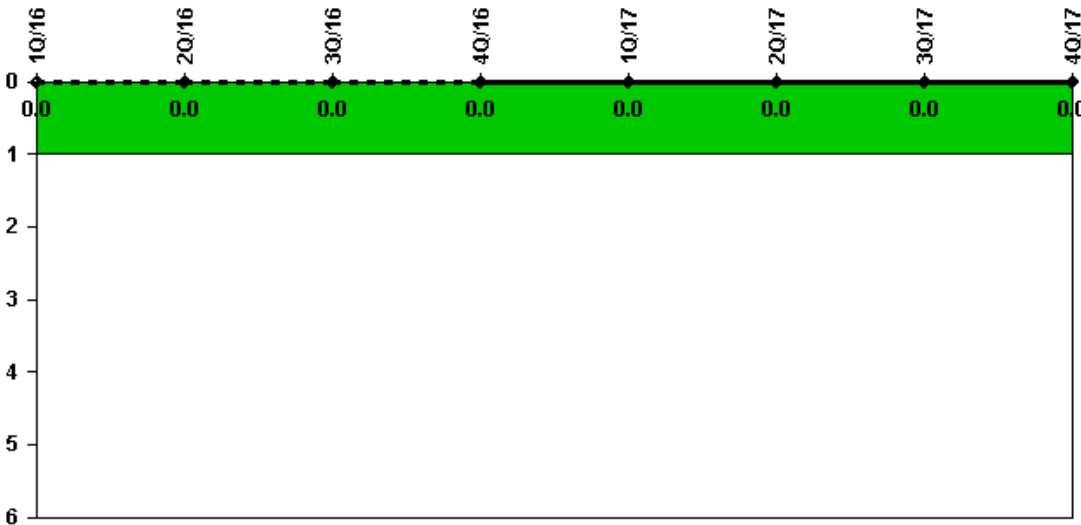
<b>Unplanned Power Changes per 7000 Critical Hrs</b>	<b>1Q/16</b>	<b>2Q/16</b>	<b>3Q/16</b>	<b>4Q/16</b>	<b>1Q/17</b>	<b>2Q/17</b>	<b>3Q/17</b>	<b>4Q/17</b>
Unplanned power changes	2.0	0	0	0	0	0	0	0
Critical hours	1484.7	2184.0	2208.0	2209.0	2084.6	2109.1	2208.0	2209.0
<b>Indicator value</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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Licensee Comments:

1Q/16: Unplanned power changes value for March 2016 has been corrected to reflect L1F42 and L1F43 as unplanned power changes per NEI 99-02. The correction has been documented in the corrective action program and do not result in a change to the performance indicator color for the affected quarters.

**Unplanned Scrams with Complications**



Thresholds: White > 1.0

**Notes**

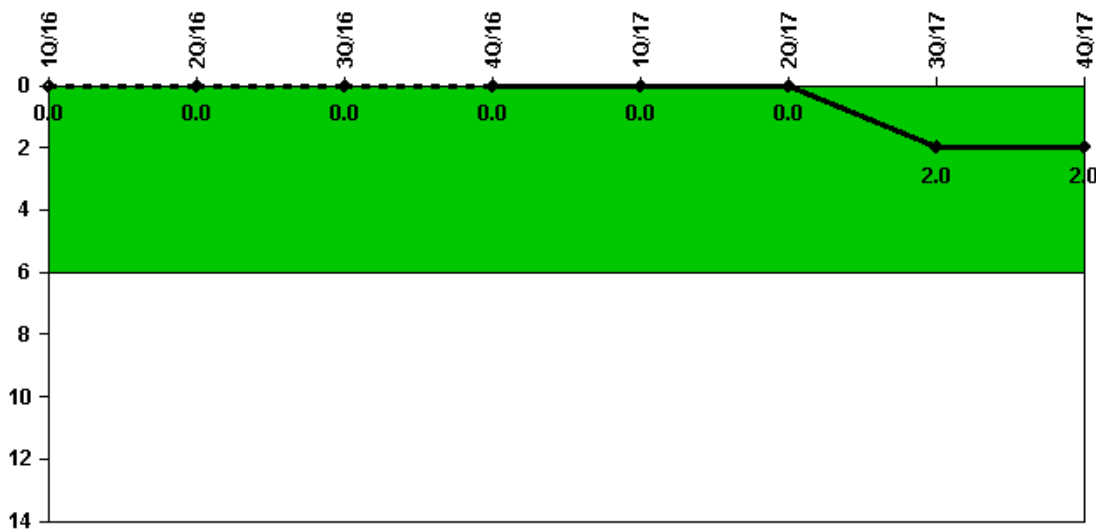
<b>Unplanned Scrams with Complications</b>	<b>1Q/16</b>	<b>2Q/16</b>	<b>3Q/16</b>	<b>4Q/16</b>	<b>1Q/17</b>	<b>2Q/17</b>	<b>3Q/17</b>	<b>4Q/17</b>
Scrams with complications	0	0	0	0	0	0	0	0

<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 (BWR)



Thresholds: White > 6.0

**Notes**

**Safety System Functional Failures (BWR)** 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   2   0

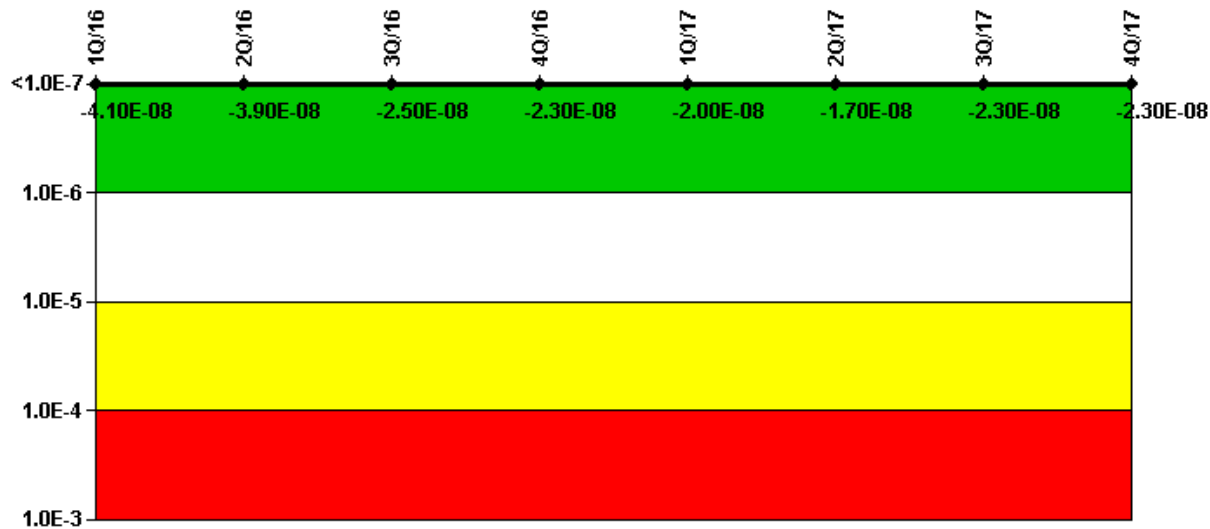
**Indicator value**    0   0   0   0   0   0   2   2

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Licensee Comments:

3Q/17: Third Quarter 2017 Safety System Functional Failures were reported under LER 373-2017-006-00 (2017-07) and LER 373-2017-007-00 (2017-08).

### 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)	-4.76E-09	-5.16E-09	8.86E-09	1.11E-08	1.39E-08	1.69E-08	1.05E-08	1.04E-08
URI (ΔCDF)	-3.60E-08	-3.38E-08	-3.38E-08	-3.38E-08	-3.38E-08	-3.38E-08	-3.38E-08	-3.38E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-4.10E-08</b>	<b>-3.90E-08</b>	<b>-2.50E-08</b>	<b>-2.30E-08</b>	<b>-2.00E-08</b>	<b>-1.70E-08</b>	<b>-2.30E-08</b>	<b>-2.30E-08</b>

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Licensee Comments:

3Q/17: LER 373-2017-006-00 (2017-07) and LER 373-2017-007-00 (2017-08)

3Q/17: Quarterly PI comments for Third Quarter 2017 Safety System Functional Failures were erroneously reported under Emergency AC Power System quarterly PI comments in third quarter 2017.

4Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

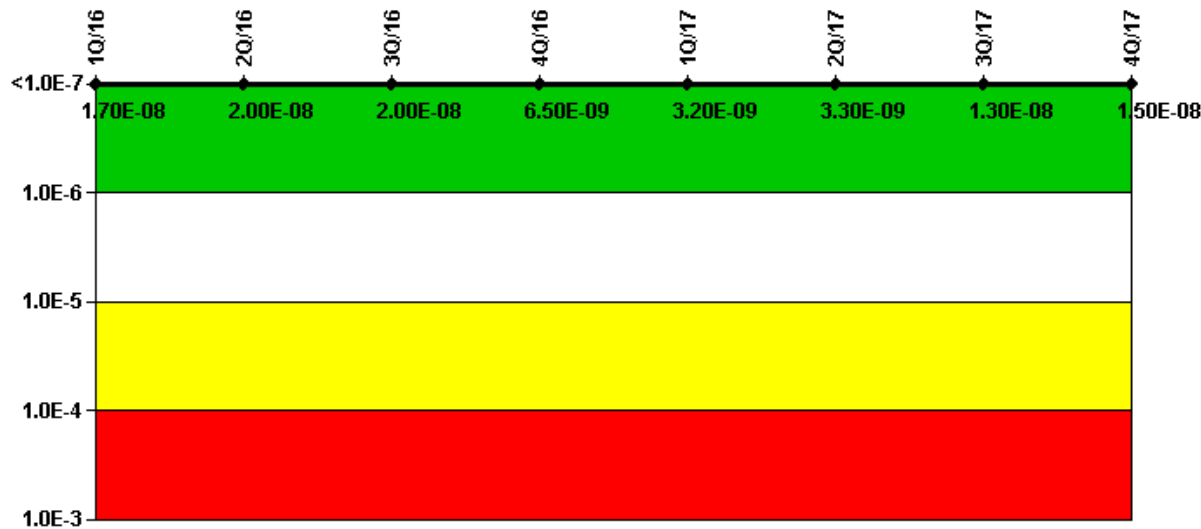
3Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

2Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in the 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model. 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in the 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model.

### 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)	2.76E-08	2.99E-08	2.90E-08	1.59E-08	1.26E-08	1.27E-08	2.20E-08	2.42E-08
URI (ΔCDF)	-1.01E-08	-9.41E-09	-9.41E-09	-9.41E-09	-9.41E-09	-9.41E-09	-9.41E-09	-9.41E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>1.70E-08</b>	<b>2.00E-08</b>	<b>2.00E-08</b>	<b>6.50E-09</b>	<b>3.20E-09</b>	<b>3.30E-09</b>	<b>1.30E-08</b>	<b>1.50E-08</b>

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Licensee Comments:

4Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

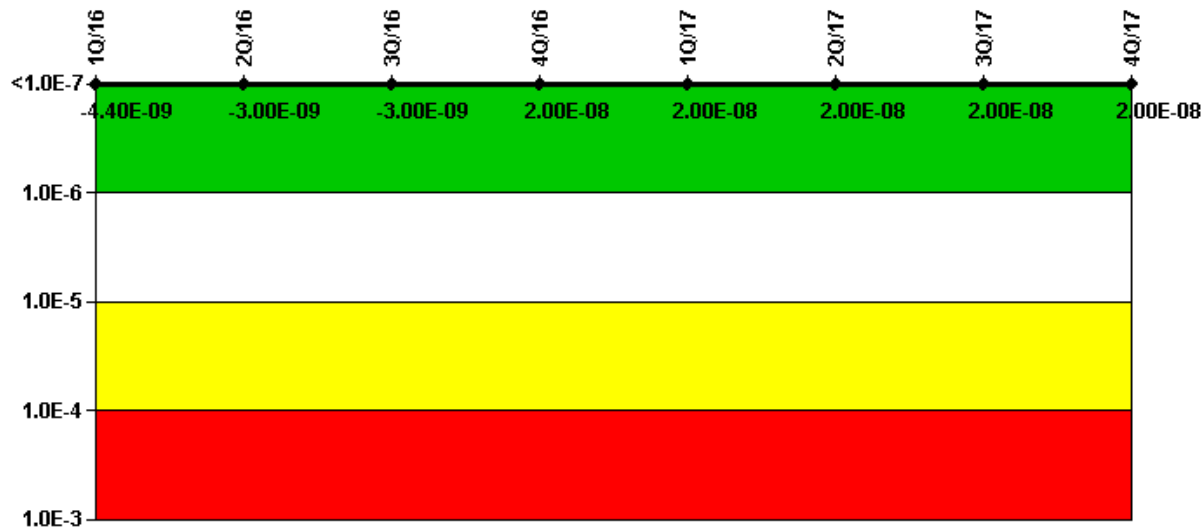
3Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

2Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in the 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model. 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in the 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model.

### 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 (ΔCDF)	-9.12E-10	-1.06E-09	-1.06E-09	4.46E-10	4.26E-10	4.31E-10	4.31E-10	4.21E-10
URI (ΔCDF)	-3.51E-09	-1.94E-09	-1.94E-09	1.93E-08	1.93E-08	1.93E-08	1.93E-08	1.93E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-4.40E-09</b>	<b>-3.00E-09</b>	<b>-3.00E-09</b>	<b>2.00E-08</b>	<b>2.00E-08</b>	<b>2.00E-08</b>	<b>2.00E-08</b>	<b>2.00E-08</b>

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Licensee Comments:

4Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

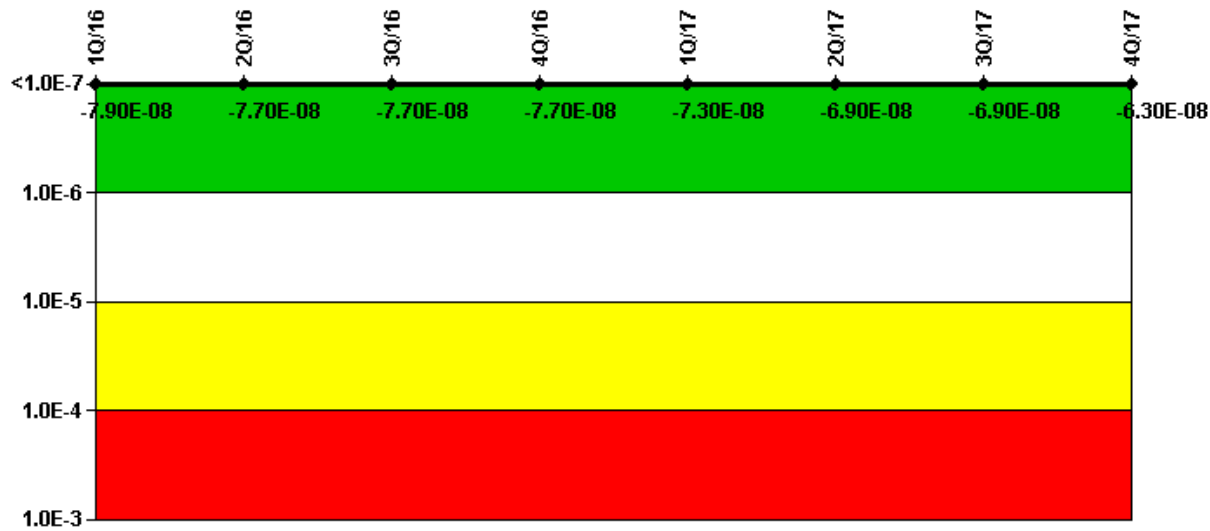
3Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

2Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model. 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model.

### 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)	-3.37E-08	-3.41E-08	-3.41E-08	-3.41E-08	-3.01E-08	-2.59E-08	-2.59E-08	-2.05E-08
URI ( $\Delta$ CDF)	-4.52E-08	-4.26E-08	-4.26E-08	-4.26E-08	-4.26E-08	-4.26E-08	-4.26E-08	-4.26E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-7.90E-08</b>	<b>-7.70E-08</b>	<b>-7.70E-08</b>	<b>-7.70E-08</b>	<b>-7.30E-08</b>	<b>-6.90E-08</b>	<b>-6.90E-08</b>	<b>-6.30E-08</b>

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Licensee Comments:

4Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

3Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

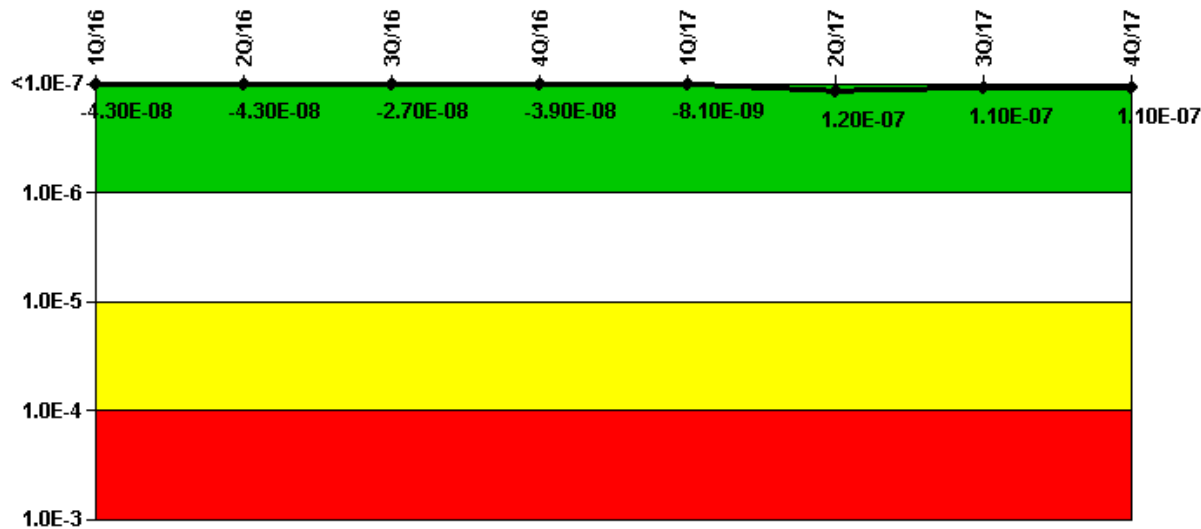
2Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model. 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented in 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model.



### 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)	8.07E-09	7.71E-09	2.31E-08	1.14E-08	4.24E-08	7.23E-08	6.87E-08	6.80E-08
URI (ΔCDF)	-5.09E-08	-5.05E-08	-5.05E-08	-5.05E-08	-5.05E-08	4.40E-08	4.40E-08	4.40E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-4.30E-08</b>	<b>-4.30E-08</b>	<b>-2.70E-08</b>	<b>-3.90E-08</b>	<b>-8.10E-09</b>	<b>1.20E-07</b>	<b>1.10E-07</b>	<b>1.10E-07</b>

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Licensee Comments:

2Q/17: 10/20/17: The unplanned unavailable hours for 0 DGCWP under MSPI Cooling Water System 2 indicator affecting Unit 1 June 2017 data is corrected from 0 hours to 11.43 hours. This correction has been documented in the corrective action program and does not result in a change to the MSPI performance indicator color for the affected quarter.

4Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

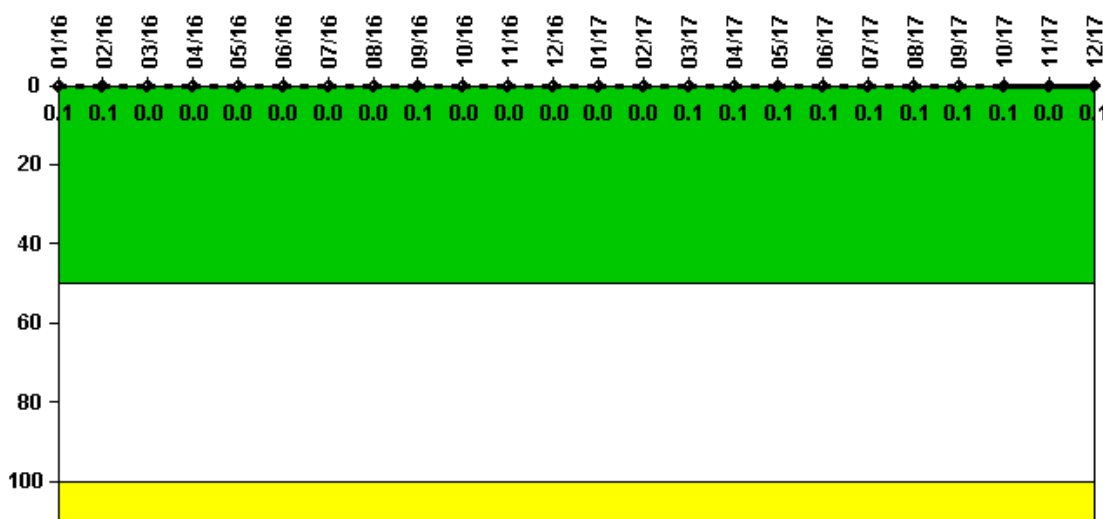
3Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

2Q/16: Changed PRA Parameter(s). 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented for 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model. 1/4/17: CDF value was corrected from 2.04E-06 to 2.01E-06 and is effective 1st Quarter 2016. This correction has been documented and does not result in a change to the MSPI performance indicator color for the affected quarters.

1Q/16: Changed PRA Parameter(s). A new PRA model (LS214A) was approved in November 2015 and implemented for 1st Quarter 2016. PRA coefficients were updated in CDE to reflect the new model.

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

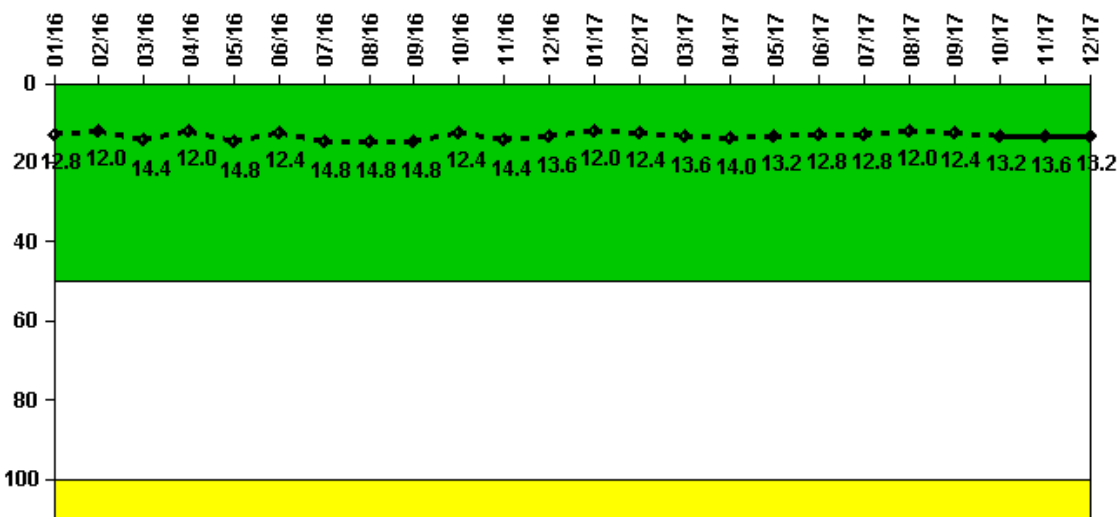
**Notes**

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	0.000115	0.000110	0.000048	0.000053	0.000049	0.000054	0.000092	0.000070	0.000107	0.000079	0.000075	0.000078
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>Indicator value</b>	<b>0.1</b>	<b>0.1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.1</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	0.000081	0.000097	0.000109	0.000127	0.000115	0.000138	0.000116	0.000140	0.000117	0.000114	0.000094	0.000105
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0</b>	<b>0.1</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	3.200	3.000	3.600	3.000	3.700	3.100	3.700	3.700	3.700	3.100	3.600	3.400
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0

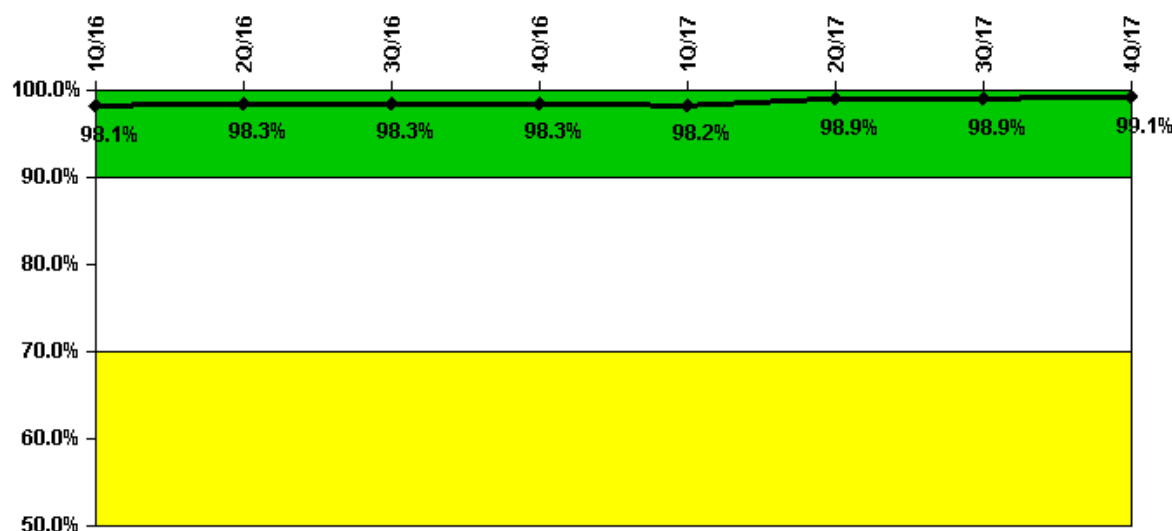
Indicator value	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Indicator value	12.8	12.0	14.4	12.0	14.8	12.4	14.8	14.8	14.8	12.4	14.4	13.6
Reactor Coolant System Leakage	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17	10/17	11/17	12/17
Maximum leakage	3.000	3.100	3.400	3.500	3.300	3.200	3.200	3.000	3.100	3.300	3.400	3.300
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0

Indicator value	12.0	12.4	13.6	14.0	13.2	12.8	12.8	12.0	12.4	13.2	13.6	13.2
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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	13.0	141.0	98.0	36.0	24.0	100.0	78.0	65.0
Total opportunities	13.0	142.0	101.0	36.0	24.0	101.0	78.0	65.0

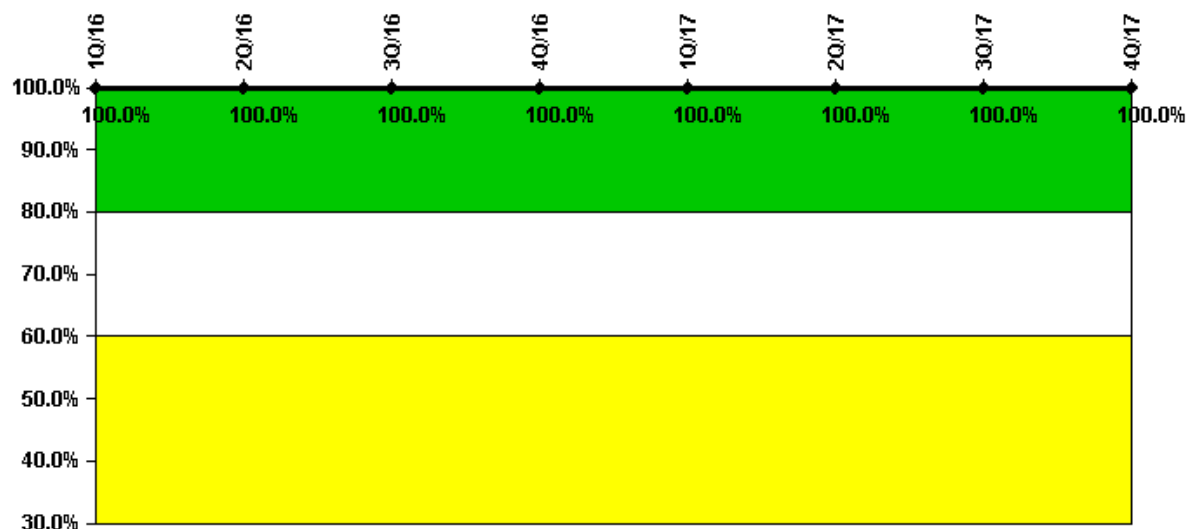
**Indicator value**                    **98.1% 98.3% 98.3% 98.3% 98.2% 98.9% 98.9% 99.1%**

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#### Licensee Comments:

1Q/16: During an internal assessment, it was discovered that credit taken in June 2015 did not include opportunities that should have been counted. This was corrected by increasing the number of successful drill, exercise & event opportunities from 32 to 35, and increasing the number of total drill, exercise & event opportunities from 32 to 36. This issue has been entered into the corrective action program and does not result in a change to the performance indicator color.

### 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	67.0	63.0	62.0	62.0	63.0	65.0	64.0	71.0
Total Key personnel	67.0	63.0	62.0	62.0	63.0	65.0	64.0	71.0

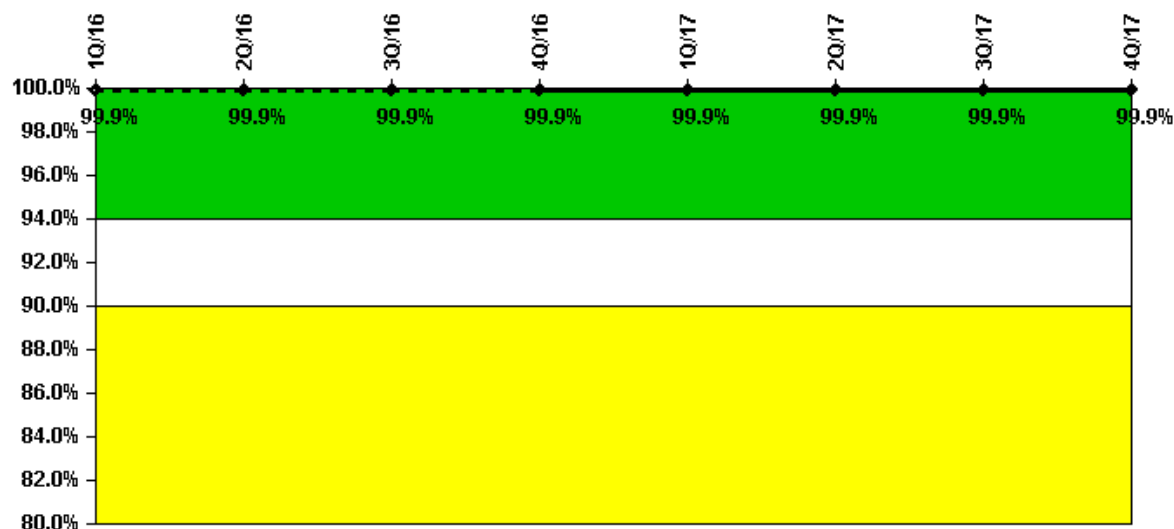
**Indicator value**                    **100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%**

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Licensee Comments:

1Q/16: During an internal assessment, it was discovered that credit taken in February and March 2016 did not include participations that should have been counted. This was corrected by increasing the number of participating key personnel and total key personnel by two for February and March 2016. This issue has been entered into the corrective action program and does not result in a change to the performance indicator color.

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

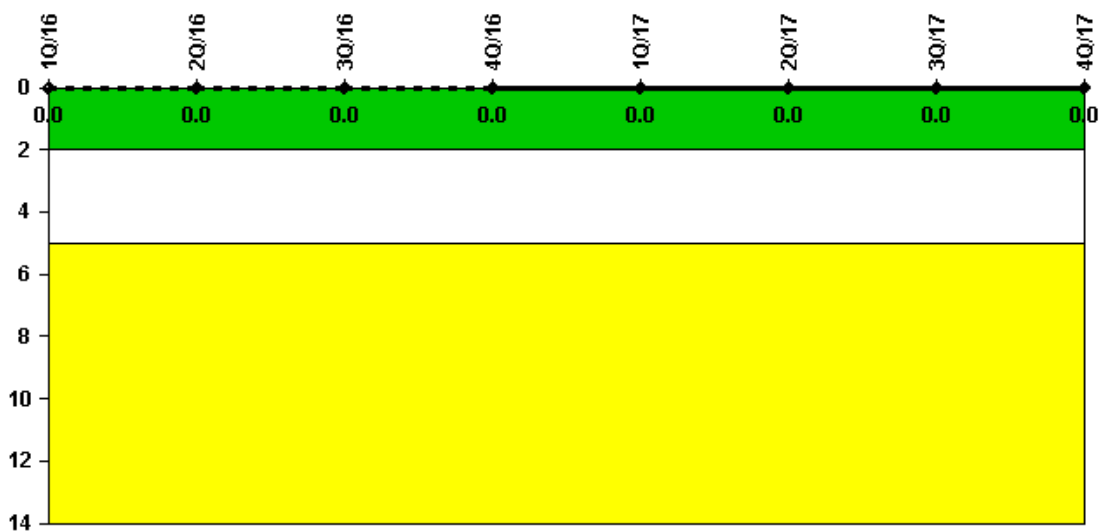
Alert & Notification System	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17	4Q/17
Successful siren-tests	2175	2174	2170	2106	2210	2173	2140	2141
Total sirens-tests	2176	2176	2176	2108	2210	2176	2142	2142

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

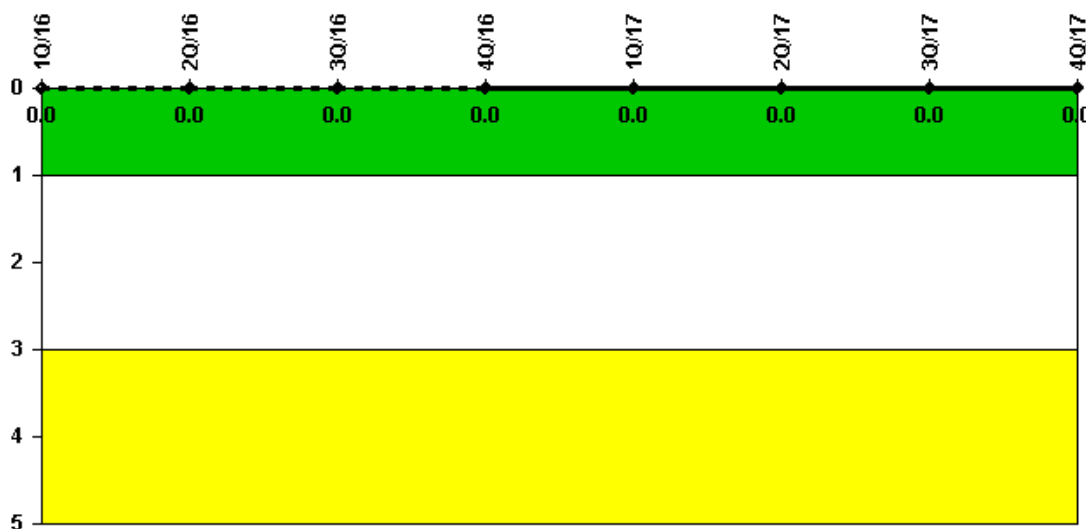
**Occupational Exposure Control Effectiveness** 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/17 4Q/17

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