

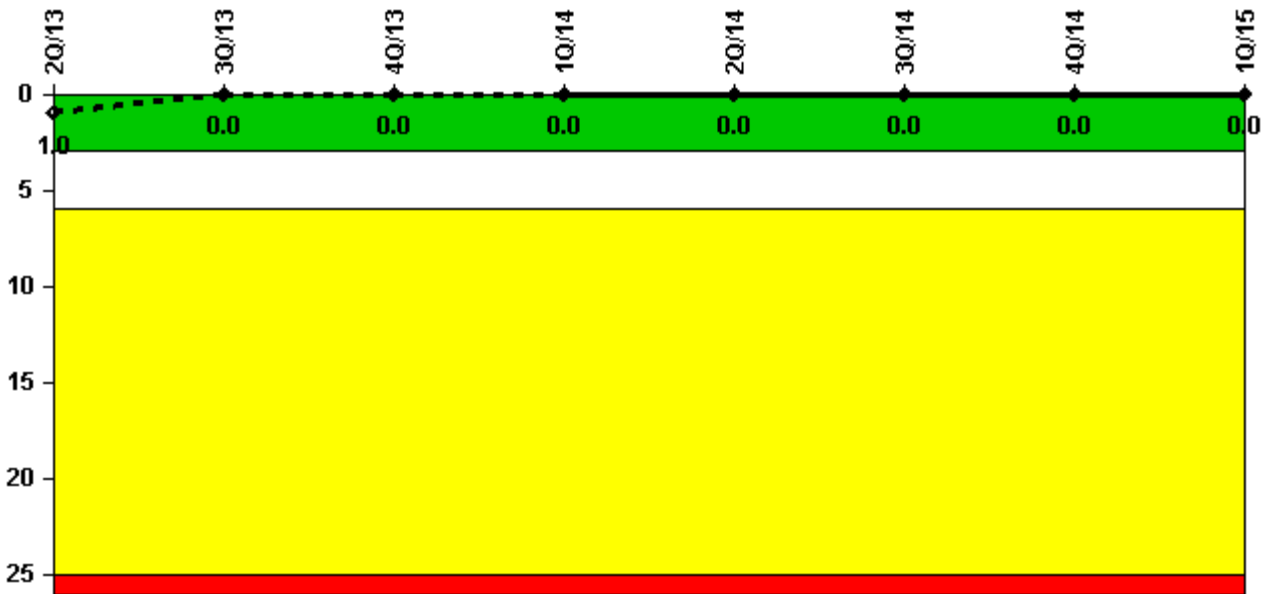
# Prairie Island 1

## 1Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



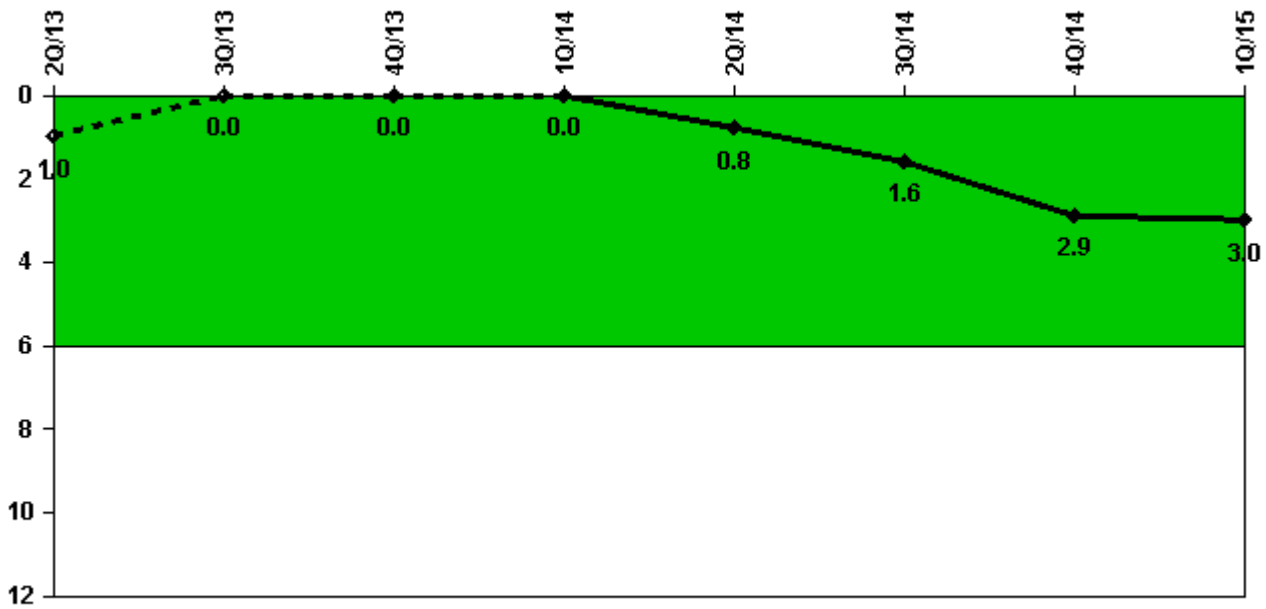
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	2159.0	2184.0	2208.0	768.5	1778.7
<b>Indicator value</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



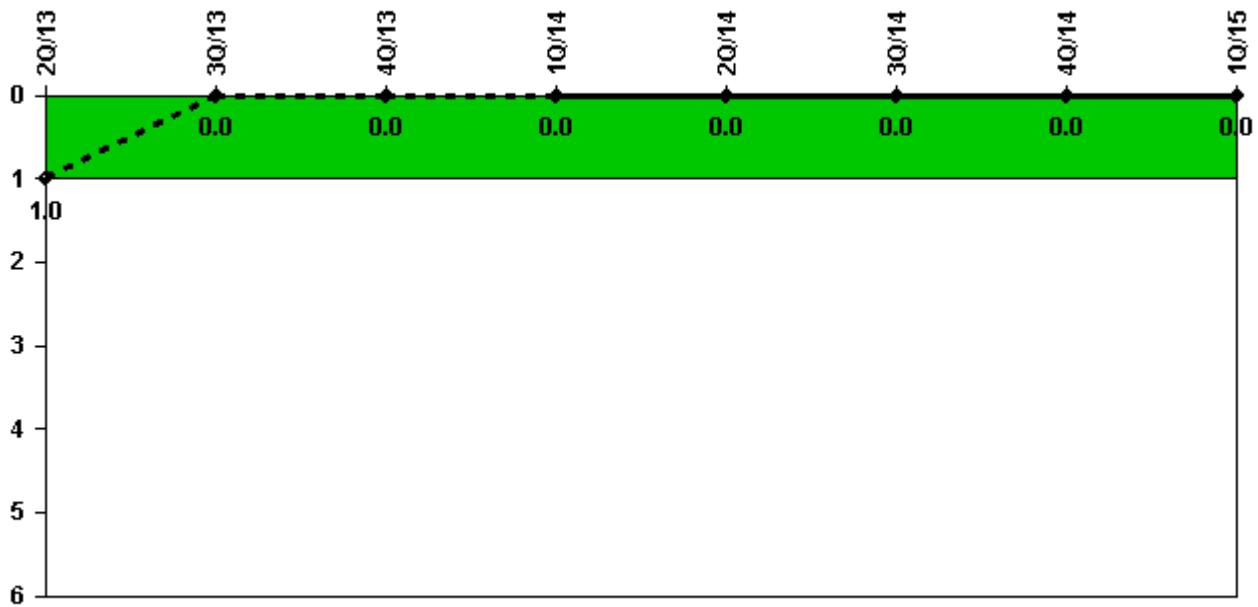
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned power changes	0	0	0	0	1.0	1.0	1.0	0
Critical hours	2184.0	2208.0	2209.0	2159.0	2184.0	2208.0	768.5	1778.7
<b>Indicator value</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.8</b>	<b>1.6</b>	<b>2.9</b>	<b>3.0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



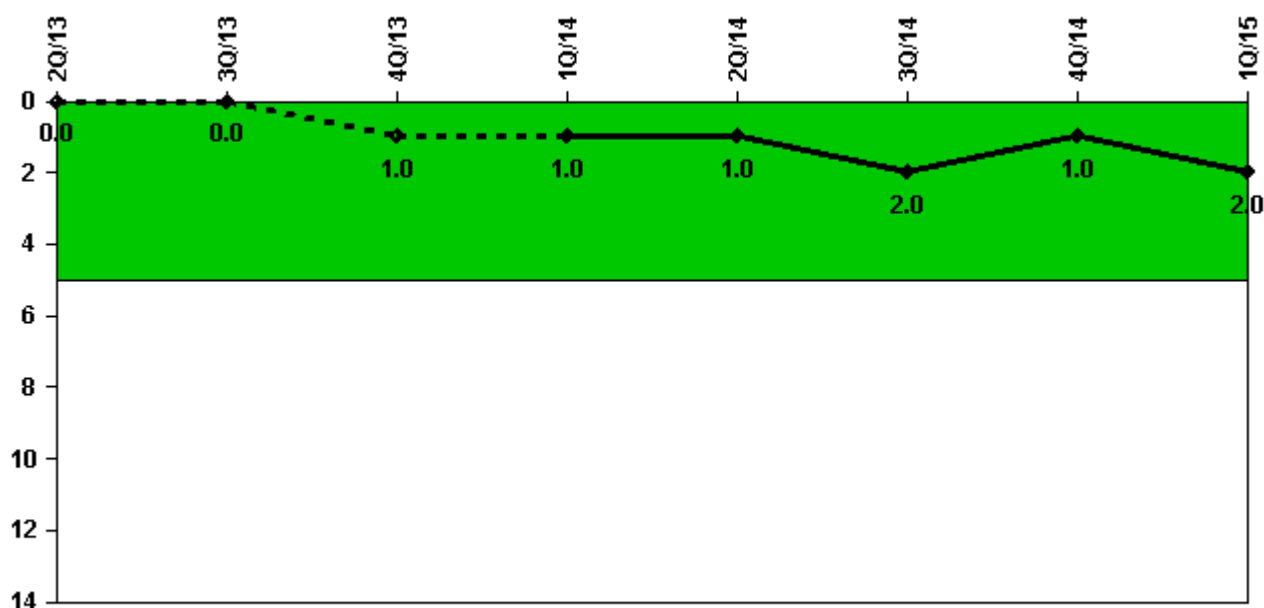
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Scrams with complications	0	0	0	0	0	0	0	0
<b>Indicator value</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>	<b>0.0</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Safety System Functional Failures	0	0	1	0	0	1	0	1
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>

Licensee Comments:

1Q/15: LER 50-282/2015-001-00, for 14 Fan Coil Unit Leak reported on 1/16/2015.

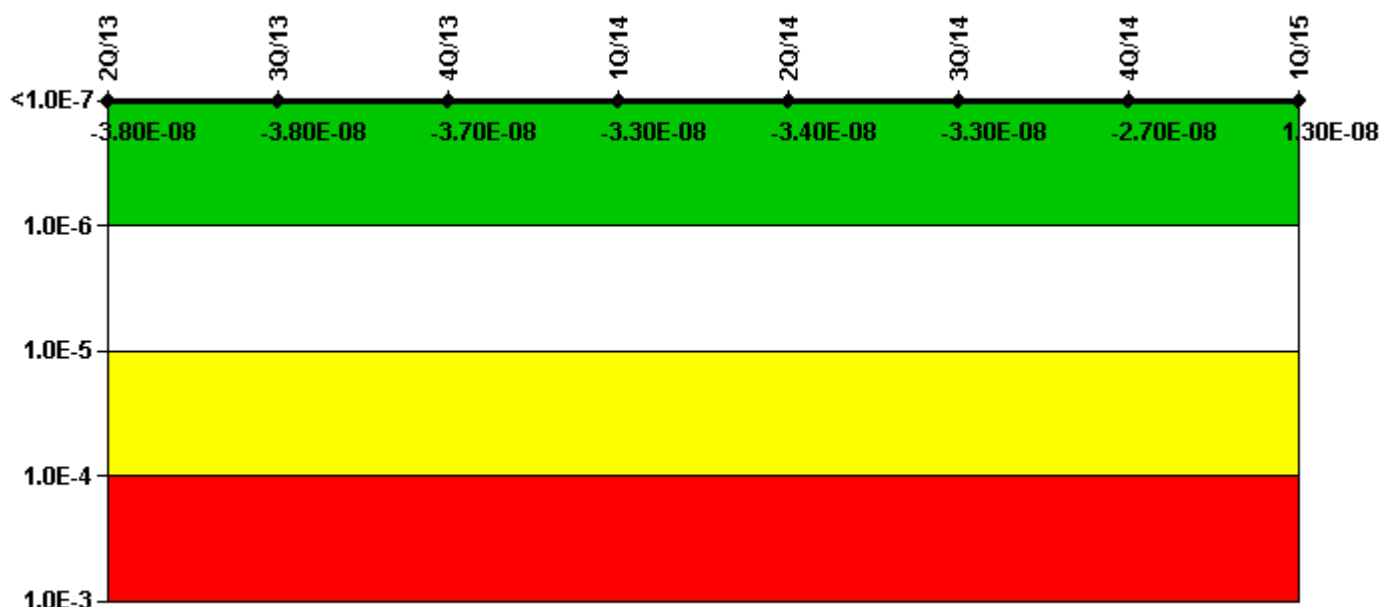
3Q/14: LER 50-282/2014-002-00, 8/4/14 EDG Declared Inoperable Due to Not Meeting High Energy Line Break Requirements

2Q/14: LER 50/282-2014-001-00, "D1/D2 EDGs Inoperable Due to Outside Air Temperature Greater Than 97 Degrees Fahrenheit" was submitted for Unit 1 on 6/24/14. The indicator value for 2Q2014 was revised to remove one SSFF (LER 50-282/2014-001-00) based on engineering analysis. The change did not affect the color of the indicator.

2Q/14: LER 50/282-2014-001-00, "D1/D2 EDGs Inoperable Due to Outside Air Temperature Greater Than 97 Degrees Fahrenheit" was submitted for Unit 1 on 6/24/14.

4Q/13: LER 50-282/2013-001-00, 10/8/2013, Control Room Envelope Inoperable.

### 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/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI ( $\Delta$ CDF)	-1.64E-08	-1.64E-08	-1.64E-08	-1.44E-08	-1.48E-08	-1.48E-08	-9.52E-09	2.82E-08
URI ( $\Delta$ CDF)	-2.19E-08	-2.11E-08	-2.03E-08	-1.86E-08	-1.88E-08	-1.81E-08	-1.73E-08	-1.47E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.70E-08	-3.30E-08	-3.40E-08	-3.30E-08	-2.70E-08	1.30E-08

#### Licensee Comments:

1Q/15: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.1 was approved on 11/21/2014 with a corresponding MSPI Basis Document Revision 16 approved on 2/26/2015. The PRA model revision was a maintenance update to the model which included an update to incorporate newly installed Unit 1 RCP Seals and PRA specific success criteria for cooling water trains. As a result of the PRA model change, the cross-tie breakers are no longer monitored components.

2Q/14: FAQ 14-08 was introduced to the ROP Task Force in November 2014 and finalized at March 2015 meeting. This documents basis for withdrawal of MSPI Failure associated with ICES 312270, 6/23/14 reverse power trip and lockout of Unit 1 EDG.

1Q/14: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.0 was approved on 12/20/2013 with a corresponding MSPI Basis Document Revision 13 approved on 4/3/2014. The PRA model revision was a periodic update to the model which included an update to incorporate newly installed Unit 2 RCP Seals. As a result of the

PRA model change, both units CDF and Fussel-Vesely values for all monitored trains and components were revised, and Auxiliary Feedwater monitored components were added.

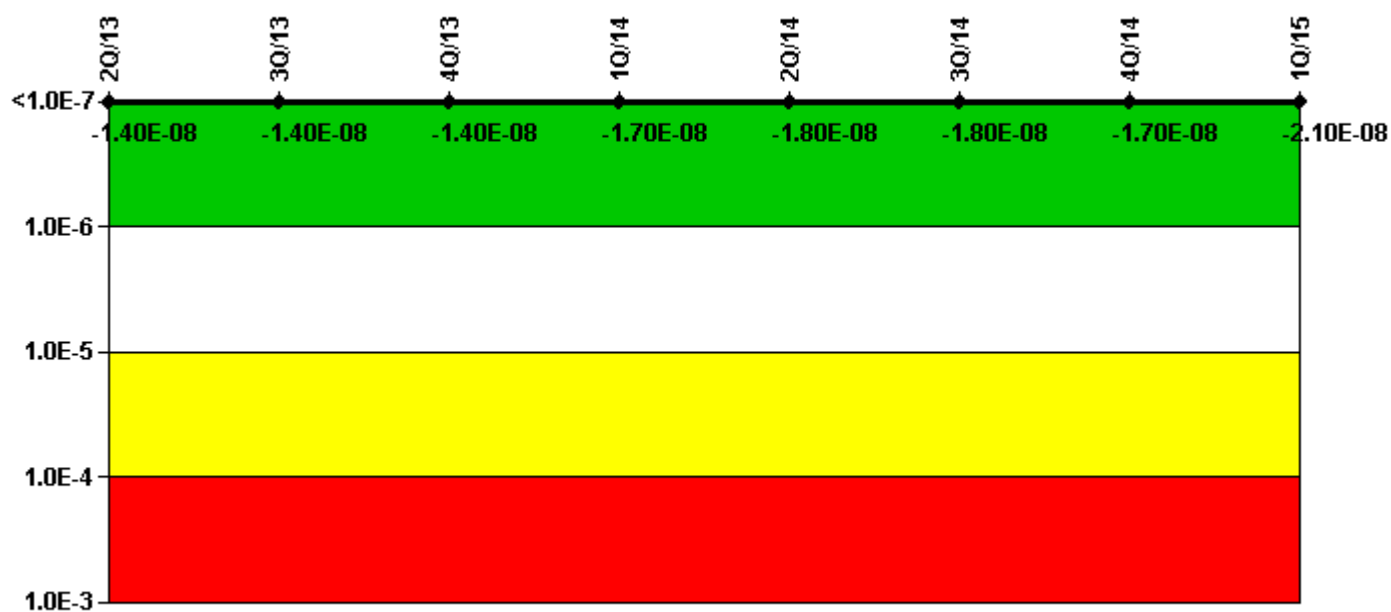
4Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

3Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

2Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

2Q/13: 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/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	1.22E-08	1.24E-08	1.23E-08	6.42E-09	5.41E-09	5.33E-09	5.75E-09	2.87E-09
URI (ΔCDF)	-2.62E-08	-2.62E-08	-2.63E-08	-2.39E-08	-2.30E-08	-2.31E-08	-2.30E-08	-2.40E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO

Indicator value	-1.40E-08	-1.40E-08	-1.40E-08	-1.70E-08	-1.80E-08	-1.80E-08	-1.70E-08	-2.10E-08
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## Licensee Comments:

1Q/15: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.1 was approved on 11/21/2014 with a corresponding MSPI Basis Document Revision 16 approved on 2/26/2015. The PRA model revision was a maintenance update to the model which included an update to incorporate newly installed Unit 1 RCP Seals and PRA specific success criteria for cooling water trains.

1Q/14: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.0 was approved on 12/20/2013 with a corresponding MSPI Basis Document Revision 13 approved on 4/3/2014. The PRA model revision was a periodic update to the model which included an update to incorporate newly installed Unit 2 RCP Seals. As a result of the PRA model change, both units CDF and Fussel-Vesely values for all monitored trains and components were revised, and Auxiliary Feedwater monitored components were added.

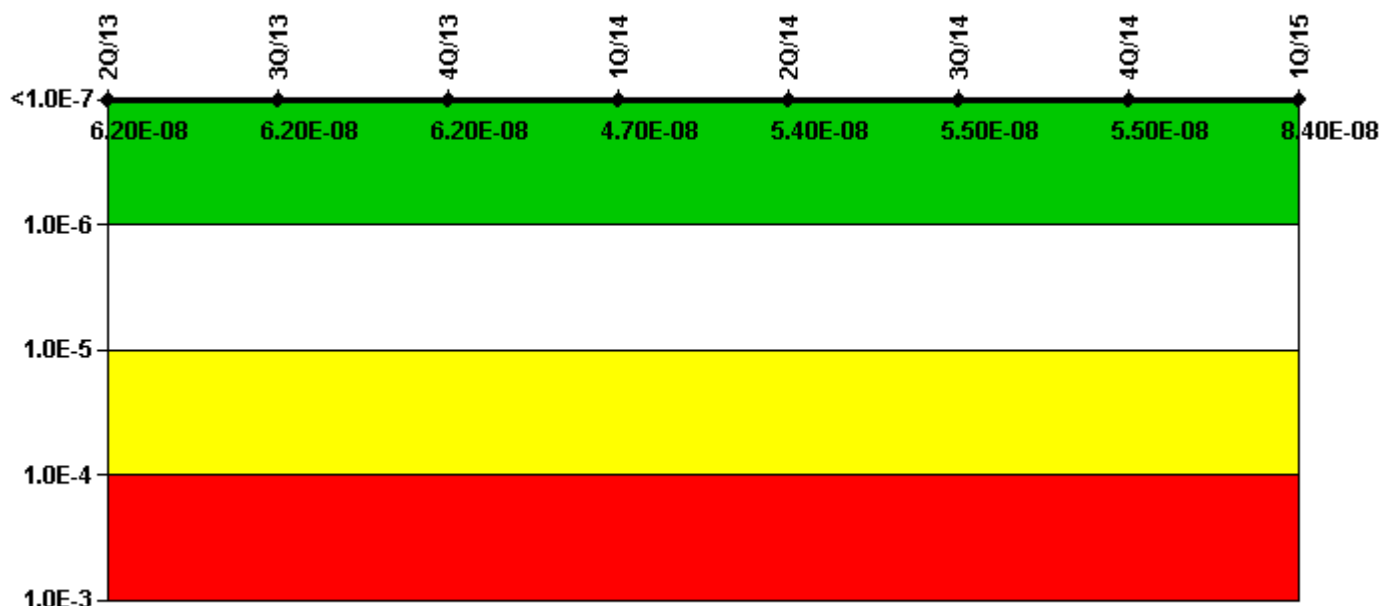
4Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

3Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

2Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

2Q/13: 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/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI ( $\Delta$ CDF)	-2.54E-08	-2.54E-08	-2.54E-08	-1.86E-08	-1.88E-08	-1.88E-08	-1.85E-08	-1.76E-08
URI ( $\Delta$ CDF)	8.74E-08	8.74E-08	8.74E-08	6.56E-08	7.24E-08	7.37E-08	7.37E-08	1.02E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.20E-08	6.20E-08	6.20E-08	4.70E-08	5.40E-08	5.50E-08	5.50E-08	8.40E-08

#### Licensee Comments:

1Q/15: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.1 was approved on 11/21/2014 with a corresponding MSPI Basis Document Revision 16 approved on 2/26/2015. The PRA model revision was a maintenance update to the model which included an update to incorporate newly installed Unit 1 RCP Seals and PRA specific success criteria for cooling water trains. As a result of the PRA model change, the motor valves are no longer monitored components.

4Q/14: Effective for the 4th quarter 2014, the reporting of Reliability Data for Component Cooling and Auxiliary Feedwater System MSPI Monitored Components has been changed to Estimated Operational/Alignment Demands and Estimated Operational/Alignment Run Hours. This change is coincident with an updated value of Estimated Test Demands and Estimated Test Run Hours for monitored components in these systems. This change did not require a change to the PRA model, is in accordance with NEI 99-02 requirements regarding Reporting of Estimated Data, and has basis documented in Prairie Island MSPI Basis Document Revision 15 as approved during the previous quarter.

1Q/14: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.0 was approved on 12/20/2013 with a



corresponding MSPI Basis Document Revision 13 approved on 4/3/2014. The PRA model revision was a periodic update to the model which included an update to incorporate newly installed Unit 2 RCP Seals. As a result of the PRA model change, both units CDF and Fussel-Vesely values for all monitored trains and components were revised, and Auxiliary Feedwater monitored components were added.

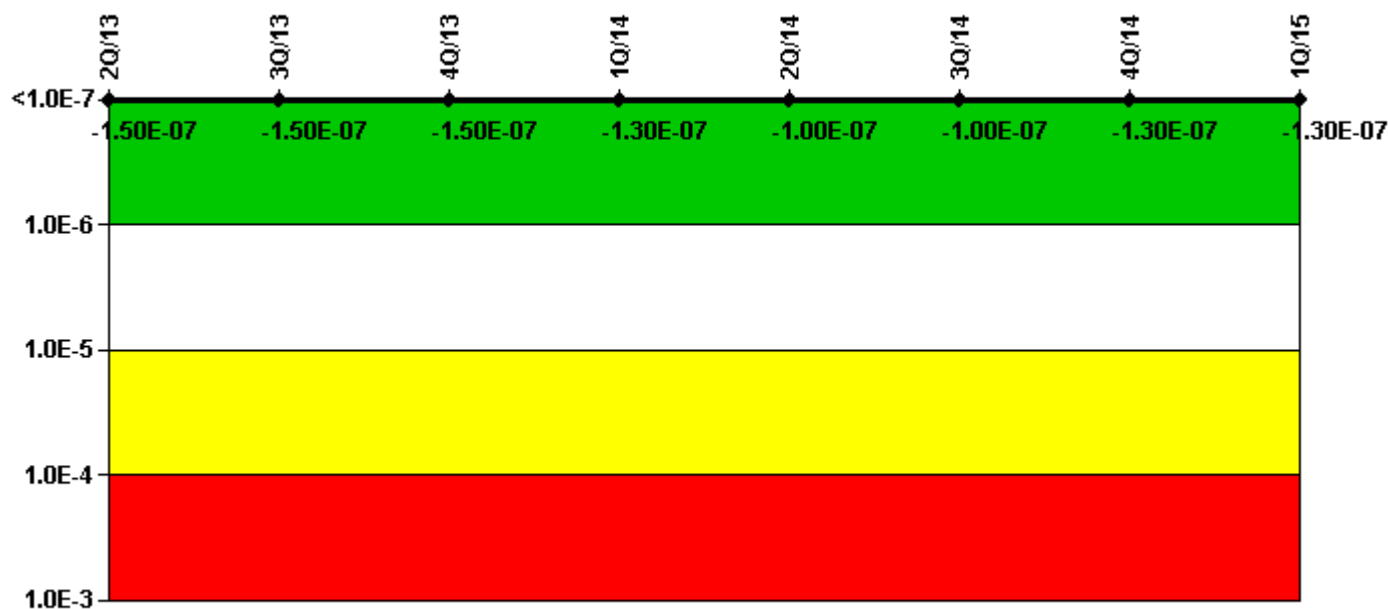
4Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

3Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

2Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

2Q/13: Changed PRA Parameter(s).

### 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/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	-2.38E-08	-2.38E-08	-2.38E-08	-1.83E-08	-1.83E-08	-1.83E-08	-1.83E-08	-1.71E-08
URI (ΔCDF)	-1.25E-07	-1.25E-07	-1.25E-07	-1.08E-07	-8.15E-08	-8.15E-08	-1.07E-07	-1.11E-07

PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-1.50E-07</b>	<b>-1.50E-07</b>	<b>-1.50E-07</b>	<b>-1.30E-07</b>	<b>-1.00E-07</b>	<b>-1.00E-07</b>	<b>-1.30E-07</b>	<b>-1.30E-07</b>

## Licensee Comments:

1Q/15: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.1 was approved on 11/21/2014 with a corresponding MSPI Basis Document Revision 16 approved on 2/26/2015. The PRA model revision was a maintenance update to the model which included an update to incorporate newly installed Unit 1 RCP Seals and PRA specific success criteria for cooling water trains.

1Q/14: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.0 was approved on 12/20/2013 with a corresponding MSPI Basis Document Revision 13 approved on 4/3/2014. The PRA model revision was a periodic update to the model which included an update to incorporate newly installed Unit 2 RCP Seals. As a result of the PRA model change, both units CDF and Fussel-Vesely values for all monitored trains and components were revised, and Auxiliary Feedwater monitored components were added.

1Q/14: MSPI Unavailability corrections due to previously missed unavailability windows when using RHR as load for Component Cooling Water testing.

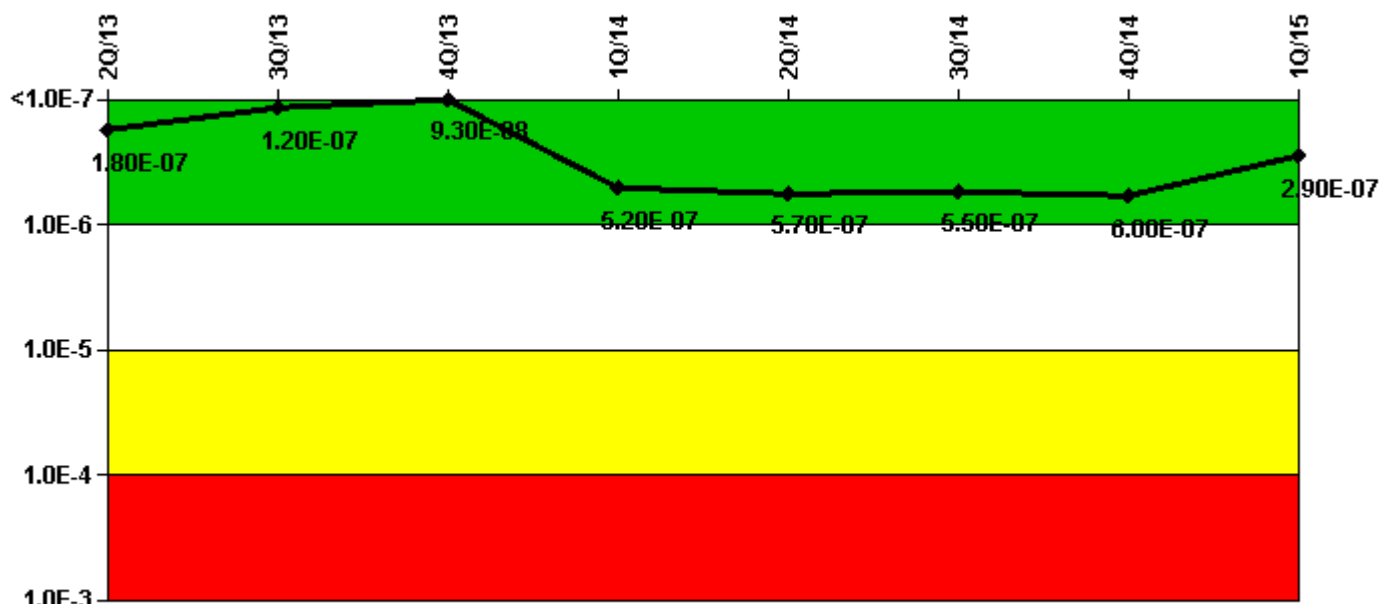
4Q/13: MSPI Unavailability corrections due to previously missed unavailability windows when using RHR as load for Component Cooling Water testing.

3Q/13: MSPI Unavailability corrections due to previously missed unavailability windows when using RHR as load for Component Cooling Water testing; also identify unavailability window extended from that previously reported.

2Q/13: MSPI Unavailability corrections due to previously missed unavailability windows when using RHR as load for Component Cooling Water testing.

2Q/13: 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/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (ΔCDF)	4.46E-07	3.90E-07	3.63E-07	5.63E-07	5.95E-07	5.80E-07	6.25E-07	3.18E-07
URI (ΔCDF)	-2.66E-07	-2.68E-07	-2.70E-07	-3.89E-08	-2.91E-08	-2.97E-08	-2.98E-08	-3.13E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.80E-07	1.20E-07	9.30E-08	5.20E-07	5.70E-07	5.50E-07	6.00E-07	2.90E-07

#### Licensee Comments:

1Q/15: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.1 was approved on 11/21/2014 with a corresponding MSPI Basis Document Revision 16 approved on 2/26/2015. The PRA model revision was a maintenance update to the model which included an update to incorporate newly installed Unit 1 RCP Seals and PRA specific success criteria for cooling water trains on both units.

4Q/14: Effective for the 4th quarter 2014, the reporting of Reliability Data for Component Cooling and Auxiliary Feedwater System MSPI Monitored Components has been changed to Estimated Operational/Alignment Demands and Estimated Operational/Alignment Run Hours. This change is coincident with an updated value of Estimated Test Demands and Estimated Test Run Hours for monitored components in these systems. This change did not require a change to the PRA model, is in accordance with NEI 99-02 requirements regarding Reporting of Estimated Data, and has basis documented in Prairie Island MSPI Basis Document Revision 15 as approved during the previous quarter.

3Q/14: 22 Cooling Water Pump was operable at time of replacement in April 2014. At time of third quarter submittal, vendor analysis of the pump which was removed is pending. If there is a question of past operability,

that will be evaluated in light of vendor information.

2Q/14: Data correction to reflect diesel driven cooling water pump replacement while motor driven pump was aligned. 22 Cooling Water Pump was operable at time of replacement in April 2014. At time of second quarter submittal, vendor analysis of the pump which was removed is pending. If there is a question of past operability, that will be evaluated in light of vendor information.

1Q/14: Changed PRA Parameter(s). The PINGP PRA Model Revision 5.0 was approved on 12/20/2013 with a corresponding MSPI Basis Document Revision 13 approved on 4/3/2014. The PRA model revision was a periodic update to the model which included an update to incorporate newly installed Unit 2 RCP Seals. As a result of the PRA model change, both units CDF and Fussel-Vesely values for all monitored trains and components were revised, and Auxiliary Feedwater monitored components were added.

1Q/14: The PINGP PRA Model Revision 5.0 was approved on 12/20/2013 with a corresponding MSPI Basis Document Revision 13 approved on 4/3/2014. The PRA model revision was a periodic update to the model which included an update to incorporate newly installed Unit 2 RCP Seals. As a result of the PRA model change, both units CDF and Fussel-Vesely values for all monitored trains and components were revised, and Auxiliary Feedwater monitored components were added.

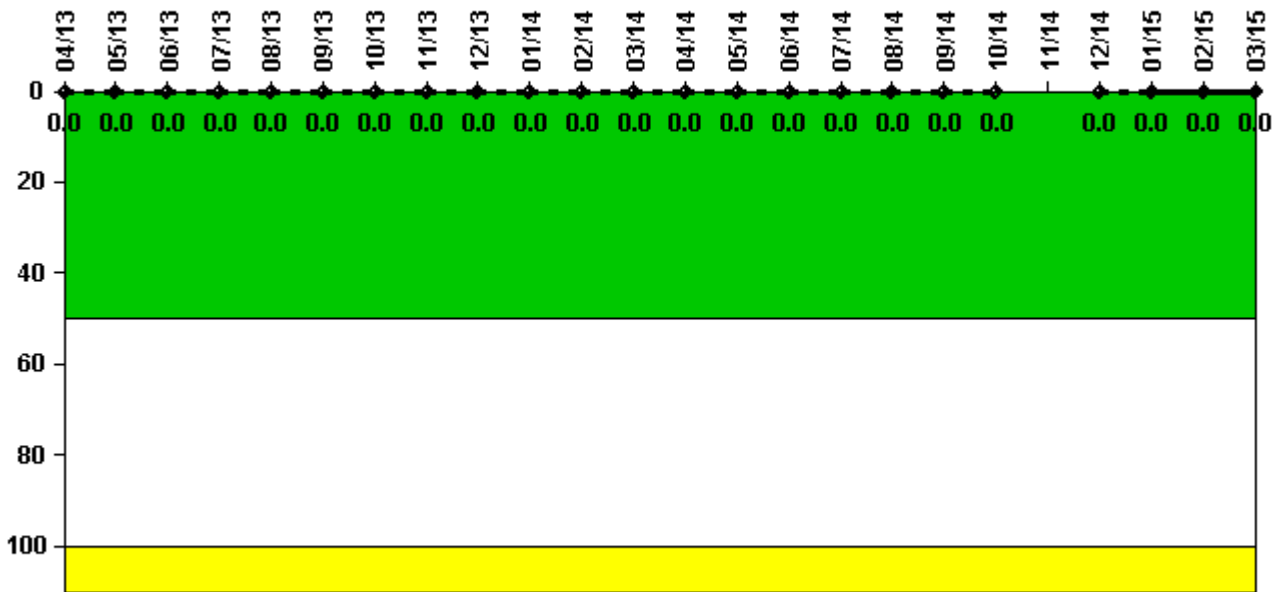
4Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

4Q/13: 2014 review of previously submitted data identified corrections to be made to MSPI Data reported. Changes do not result in a color change for any MSPI system.

2Q/13: Changed PRA Parameter(s).

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### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

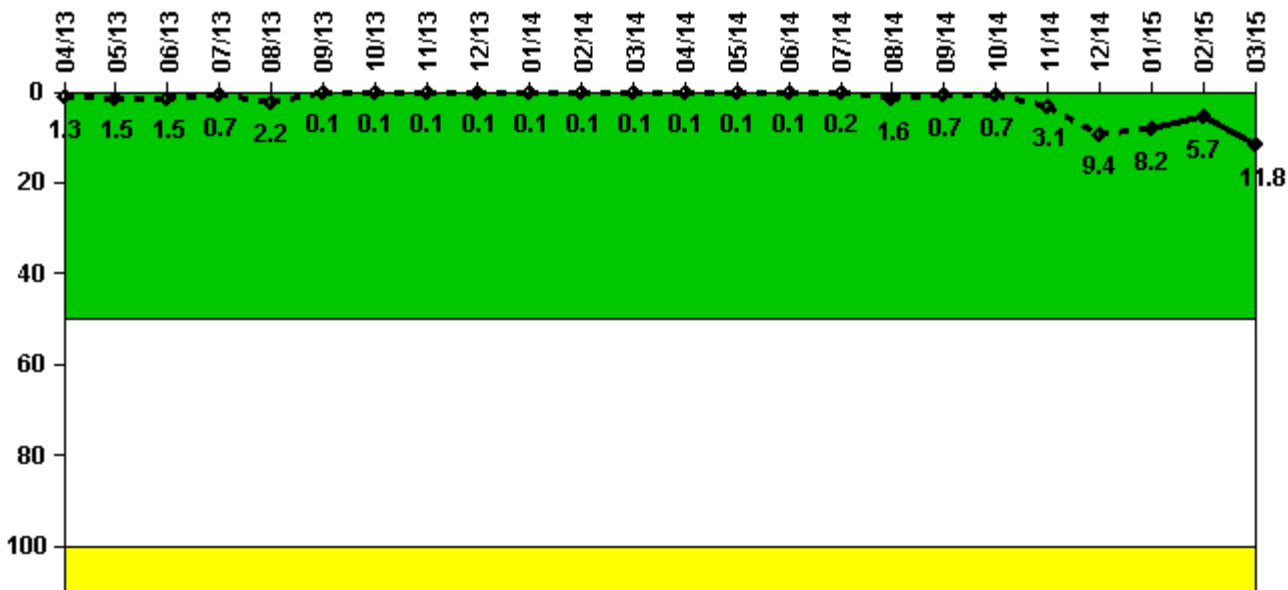
Reactor Coolant System Activity	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum activity	0.000081	0.000081	0.000085	0.000079	0.000091	0.000092	0.000093	0.000092	0.000117	0.000043	0.000063	0.000054
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0.000051	0.000059	0.000060	0.000060	0.000056	0.000055	0.000043	N/A	0.000029	0.000032	0.000031	0.000051
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	N/A	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

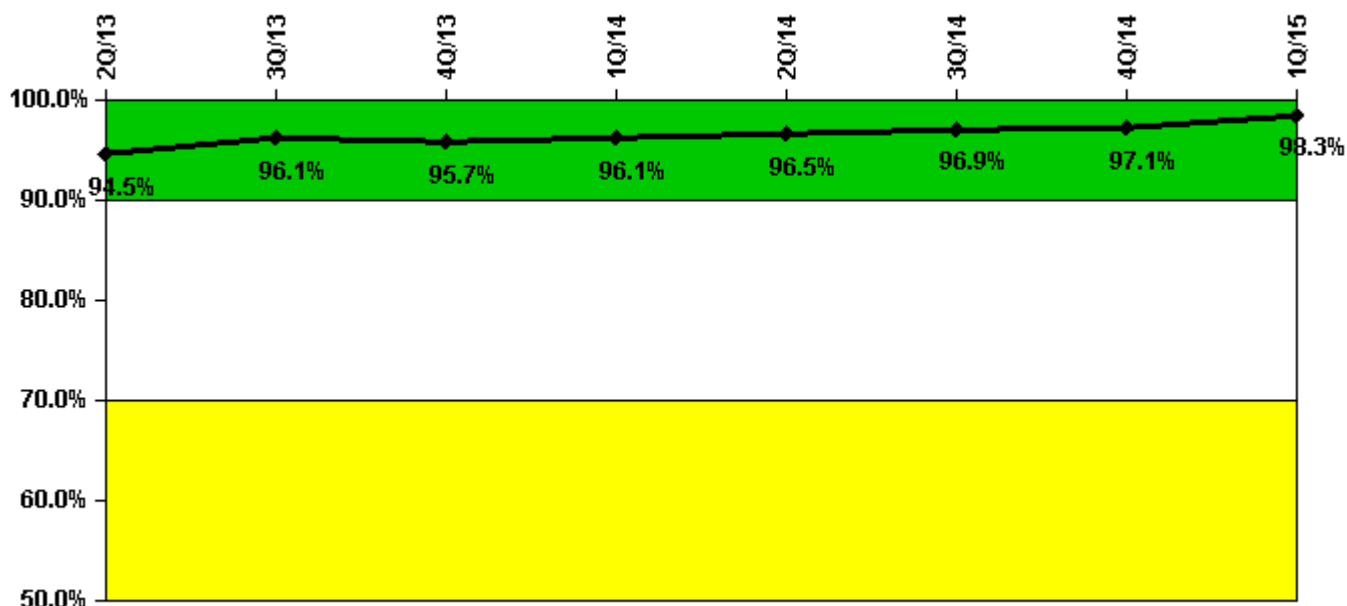
Reactor Coolant System Leakage	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum leakage	0.127	0.150	0.150	0.070	0.221	0.007	0.007	0.007	0.005	0.005	0.007	0.007
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.3	1.5	1.5	0.7	2.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	0.012	0.009	0.014	0.016	0.160	0.072	0.068	0.310	0.943	0.819	0.565	1.179
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	0.1	0.2	1.6	0.7	0.7	3.1	9.4	8.2	5.7	11.8

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

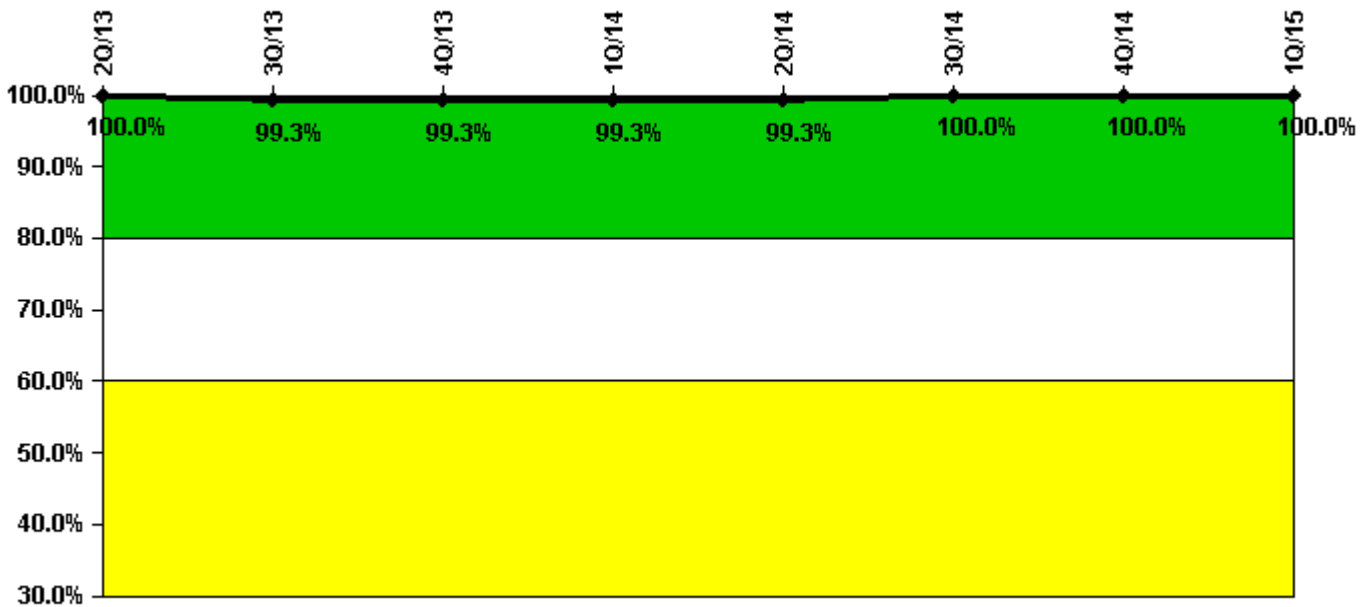
#### Notes

Drill/Exercise Performance	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful opportunities	86.0	111.0	0	106.0	112.0	71.0	8.0	32.0
Total opportunities	87.0	113.0	0	110.0	114.0	71.0	8.0	32.0
Indicator value	94.5%	96.1%	95.7%	96.1%	96.5%	96.9%	97.1%	98.3%

Licensee Comments:

3Q/13: DEP data for Aug 2013 was changed. The change does not affect the color of the indicator.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

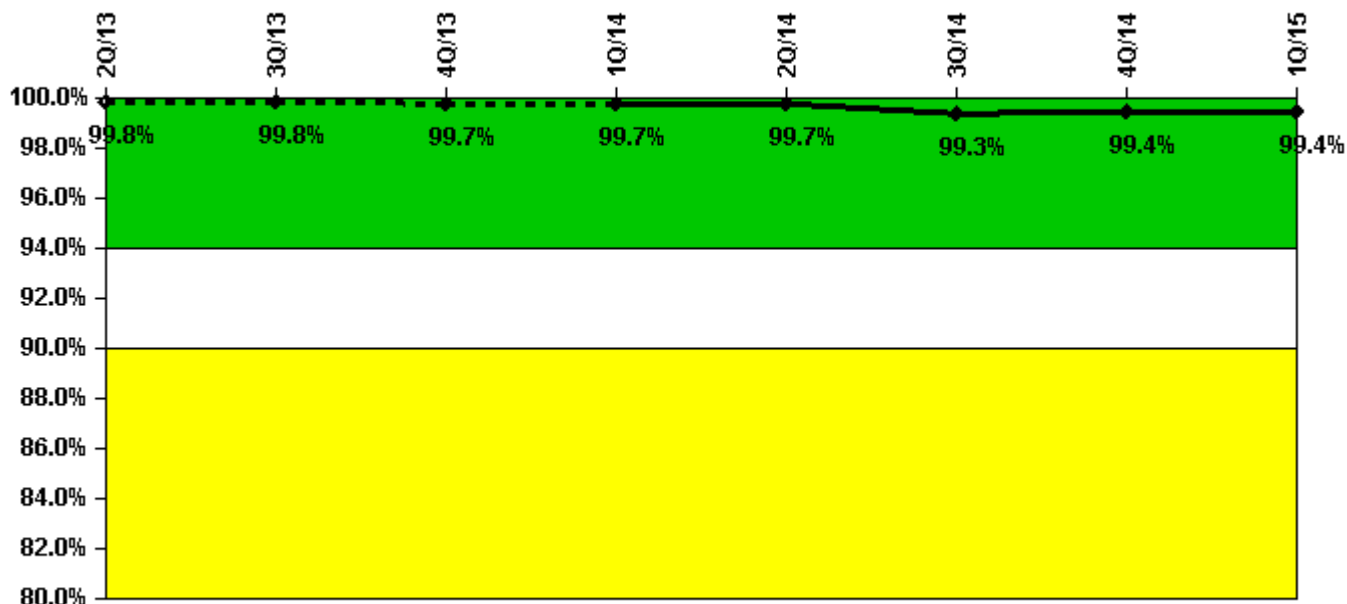
#### Notes

ERO Drill Participation	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Participating Key personnel	144.0	144.0	141.0	142.0	149.0	153.0	156.0	158.0
Total Key personnel	144.0	145.0	142.0	143.0	150.0	153.0	156.0	158.0
Indicator value	100.0%	99.3%	99.3%	99.3%	99.3%	100.0%	100.0%	100.0%

Licensee Comments: none



### Alert & Notification System



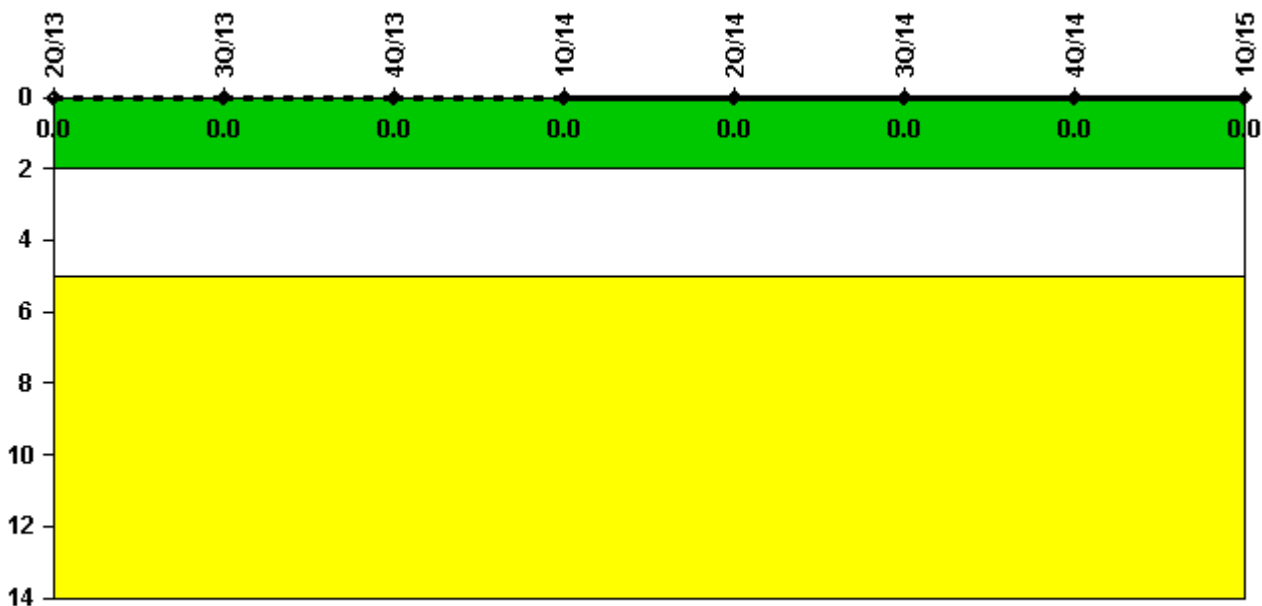
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful siren-tests	1519	1520	1591	1591	1596	1574	1719	1469
Total sirens-tests	1521	1521	1599	1599	1599	1599	1722	1476
Indicator value	99.8%	99.8%	99.7%	99.7%	99.7%	99.3%	99.4%	99.4%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



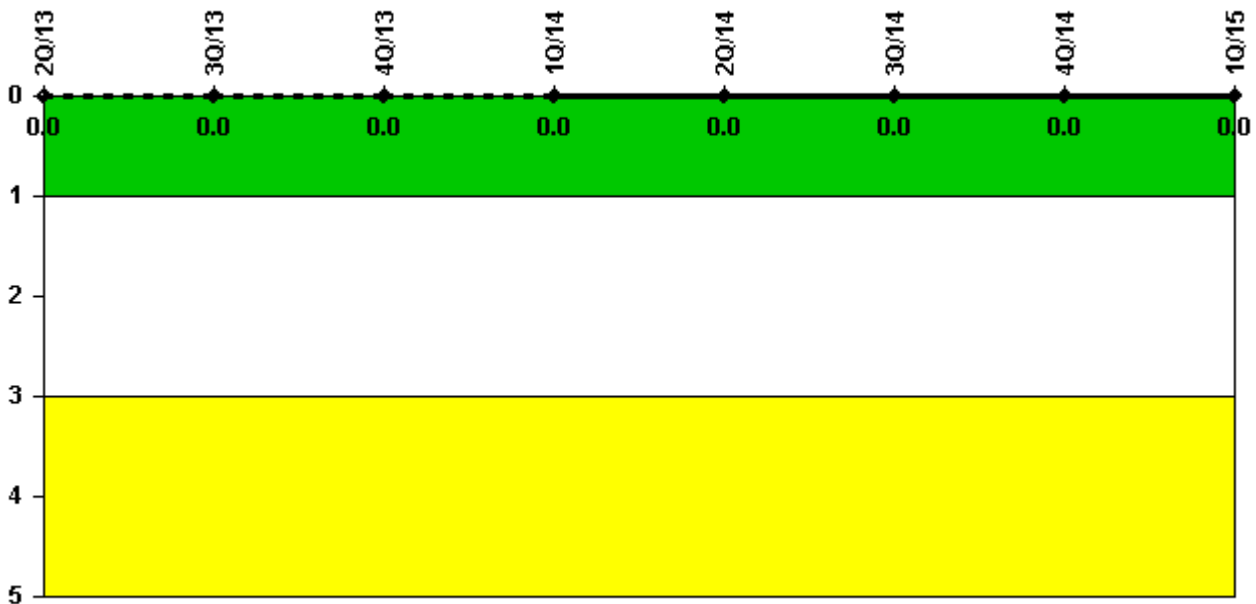
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
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>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
RETS/ODCM 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>

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.

 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

*Last Modified: April 23, 2015*