

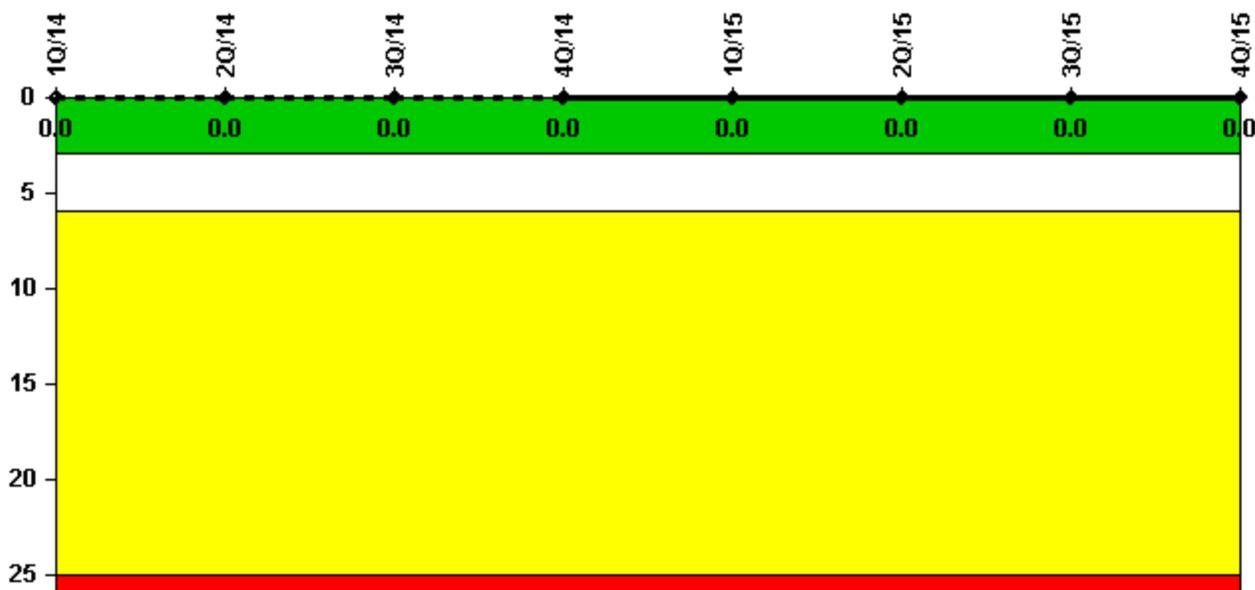
# Hatch 1

## 4Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



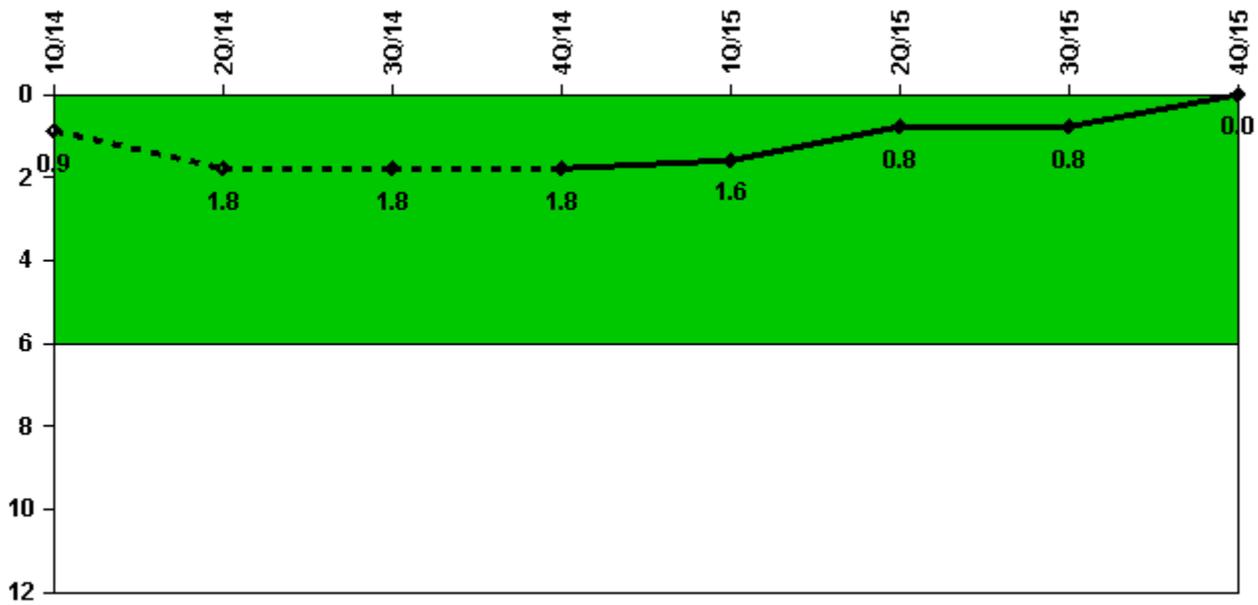
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1465.9	2184.0	2208.0	2135.4	2128.0	2184.0	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



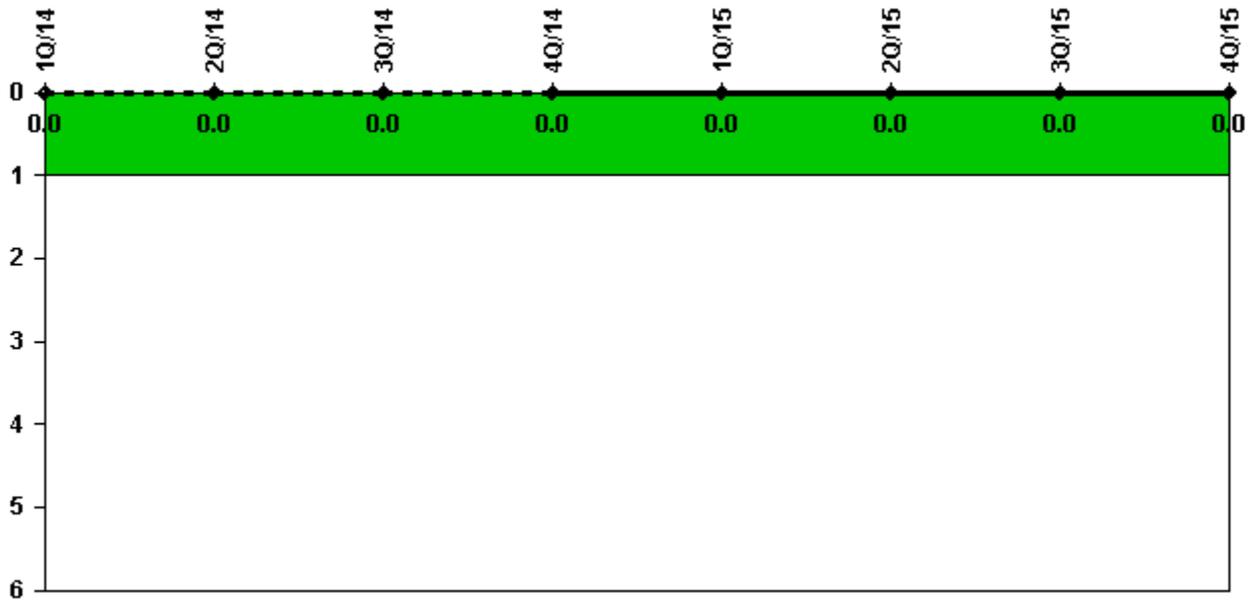
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Unplanned power changes	0	1.0	0	1.0	0	0	0	0
Critical hours	1465.9	2184.0	2208.0	2135.4	2128.0	2184.0	2208.0	2209.0
<b>Indicator value</b>	<b>0.9</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.6</b>	<b>0.8</b>	<b>0.8</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



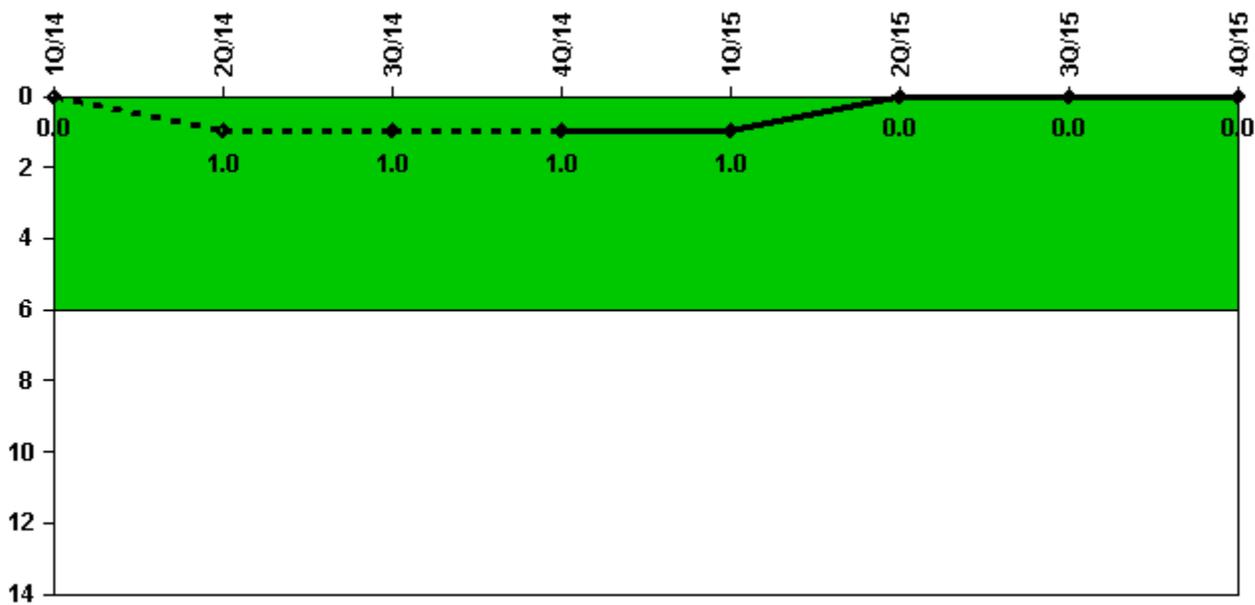
Thresholds: White > 1.0

#### Notes

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

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

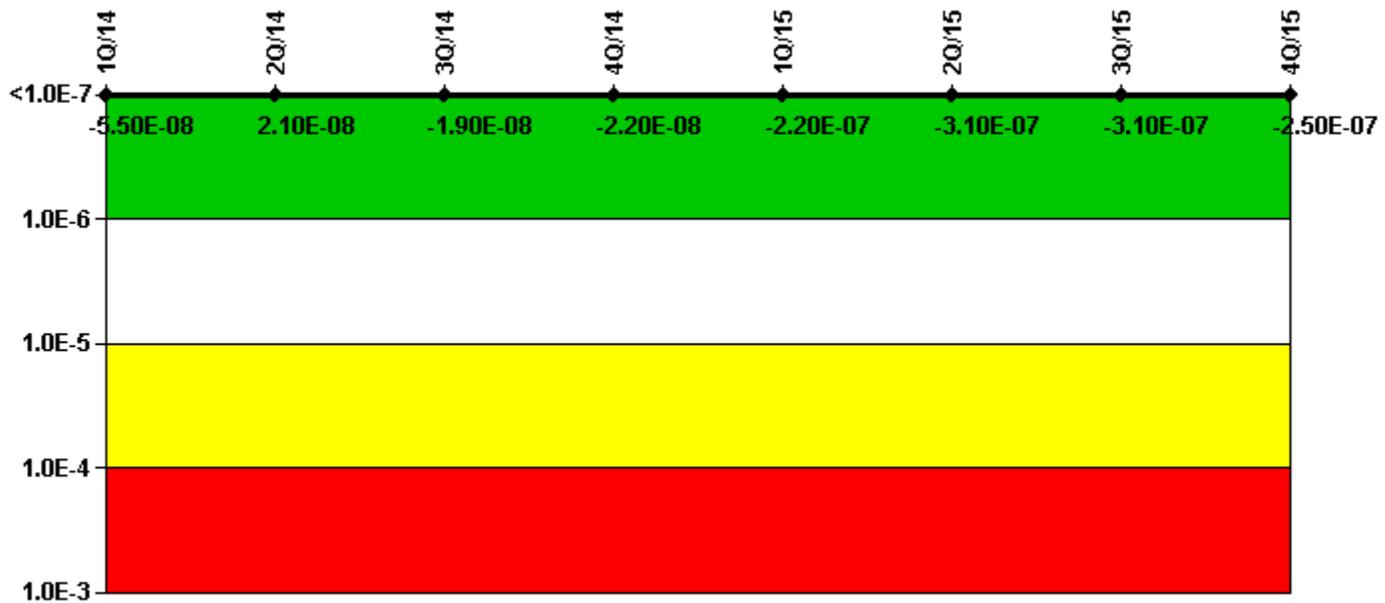
#### Notes

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

Licensee Comments:

2Q/14: LER 2014-002, HPCI Steam Leak Results in Water in the Turbine Making HPCI Inoperable.

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



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

#### Notes

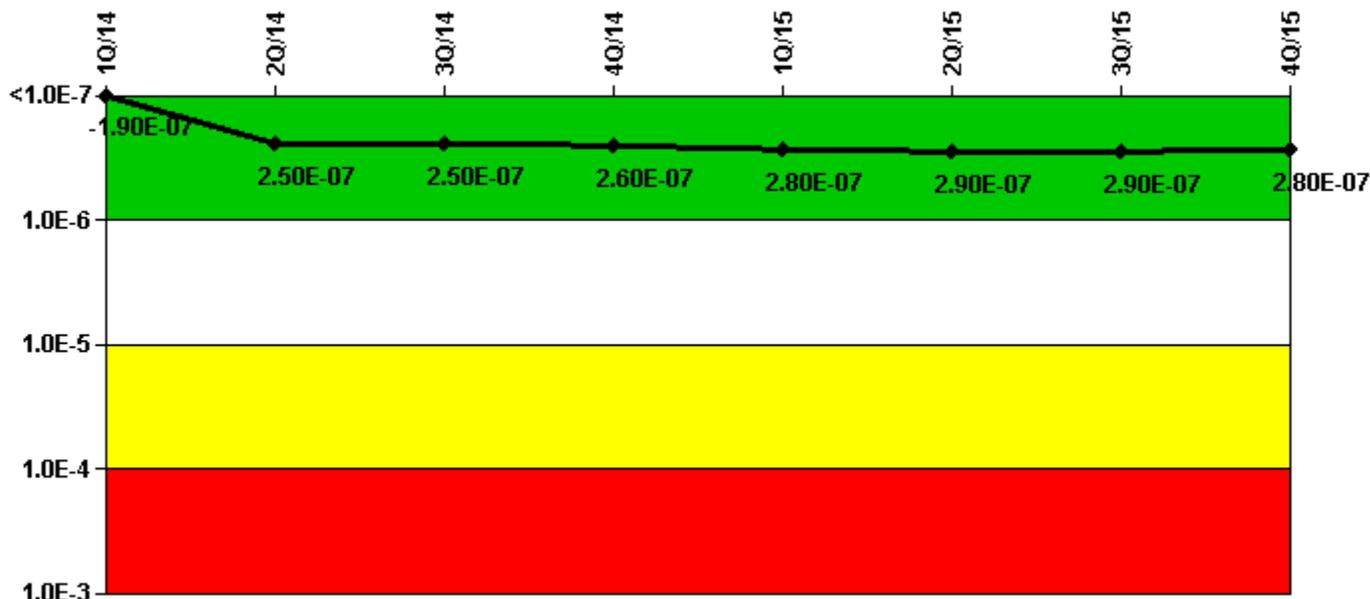
Mitigating Systems Performance Index, Emergency AC Power System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	5.34E-08	1.22E-07	7.52E-08	7.21E-08	8.51E-08	3.48E-09	1.26E-09	5.46E-08
URI ( $\Delta$ CDF)	-1.08E-07	-1.01E-07	-9.38E-08	-9.38E-08	-3.05E-07	-3.10E-07	-3.07E-07	-3.08E-07
PLE	NO							
Indicator value	-5.50E-08	2.10E-08	-1.90E-08	-2.20E-08	-2.20E-07	-3.10E-07	-3.10E-07	-2.50E-07

Licensee Comments:

2Q/14: Changed PRA Parameter(s).

1Q/14: Changed PRA Parameter(s). The Hatch baseline PRA models were revised October 12, 2013 to revision 4.1 per calculations PRA-CN-H-13-003 and PRA-CN-H-13-002. In accordance with NEI 99-02, Revision 7, the Hatch MSPI basis document was revised to incorporate the following changes: - Success criteria for each MPSI Function was expanded to include details such as flow rates and response times as contained in the PRA model documentation success criteria. This did not change any CDE data, but clarifies what an MSPI failure is. - The Hatch MSPI base CDF numbers were revised. This affects all MSPI calculations. - Planned unavailability values (UABLP) were revised to match the planned maintenance numbers in the current PRA models. This updates the MSPI information to match the current maintenance philosophy. - Six circuit breakers and two valves were added to the MSPI scope on each unit, based on Birnbaum values. - The FVUAP and FVURC coefficients for every monitored component changed due to changes in the PRA model logic. - The tables containing the above coefficients in section 2.0 of the MSPI basis document were re-formatted to more closely match the CDE data input screen. - The MSPI margin for HPCI Failure to Start was reduced from five (5) to two (2). - All MSPI functions still remain in green.

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



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

#### Notes

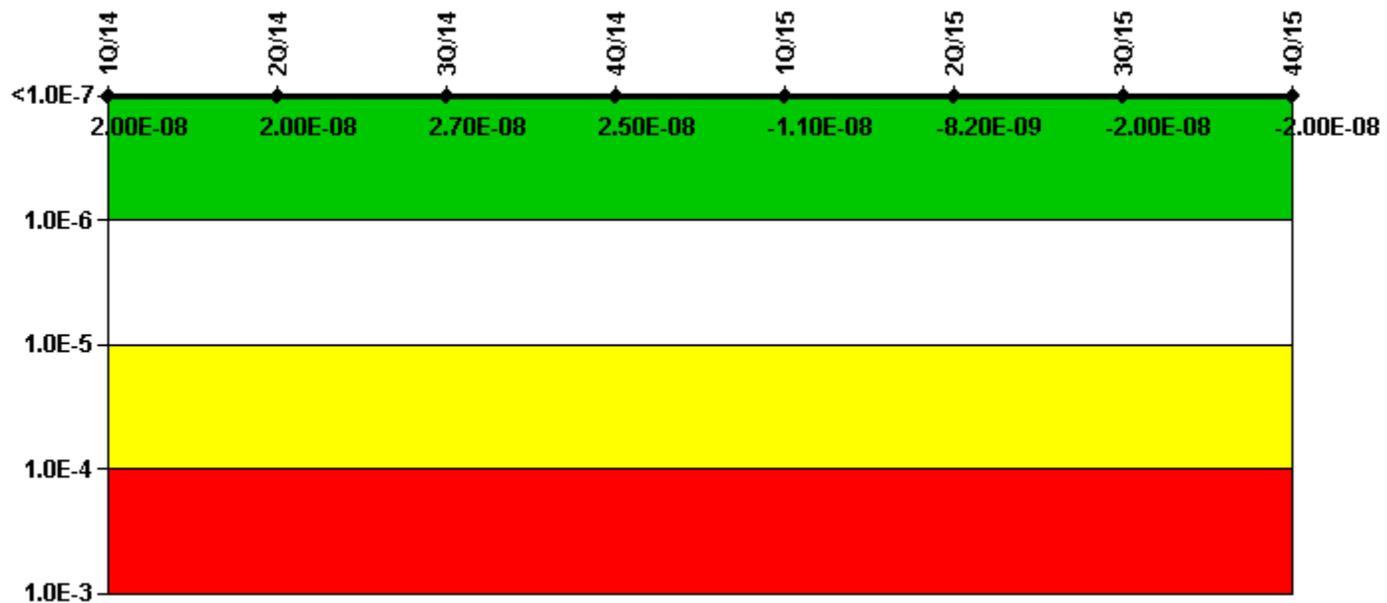
Mitigating Systems Performance Index, High Pressure Injection System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	-7.73E-08	-7.44E-08	-7.44E-08	-7.44E-08	-7.45E-08	-7.45E-08	-7.45E-08	-7.45E-08
URI ( $\Delta$ CDF)	-1.16E-07	3.25E-07	3.25E-07	3.38E-07	3.52E-07	3.65E-07	3.65E-07	3.51E-07
PLE	NO							
Indicator value	-1.90E-07	2.50E-07	2.50E-07	2.60E-07	2.80E-07	2.90E-07	2.90E-07	2.80E-07

#### Licensee Comments:

1Q/14: Changed PRA Parameter(s). The Hatch baseline PRA models were revised October 12, 2013 to revision 4.1 per calculations PRA-CN-H-13-003 and PRA-CN-H-13-002. In accordance with NEI 99-02, Revision 7, the Hatch MSPI basis document was revised to incorporate the following changes: - Success criteria for each MPSI Function was expanded to include details such as flow rates and response times as contained in the PRA model documentation success criteria. This did not change any CDE data, but clarifies what an MSPI failure is. - The Hatch MSPI base CDF numbers were revised. This affects all MSPI calculations. - Planned unavailability values (UABLP) were revised to match the planned maintenance numbers in the current PRA models. This updates the MSPI information to match the current maintenance philosophy. - Six circuit breakers and two valves were added to the MSPI scope on each unit, based on Birnbaum values. - The FVUAP and FVURC coefficients for every

monitored component changed due to changes in the PRA model logic. - The tables containing the above coefficients in section 2.0 of the MSPI basis document were re-formatted to more closely match the CDE data input screen. - The MSPI margin for HPCI Failure to Start was reduced from five (5) to two (2). - All MSPI functions still remain in green.

### 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/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	4.27E-09	4.21E-09	1.21E-08	1.06E-08	2.87E-09	5.59E-09	-7.00E-09	-7.00E-09
URI ( $\Delta$ CDF)	1.58E-08	1.57E-08	1.46E-08	1.45E-08	-1.38E-08	-1.38E-08	-1.30E-08	-1.30E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.00E-08	2.00E-08	2.70E-08	2.50E-08	-1.10E-08	-8.20E-09	-2.00E-08	-2.00E-08

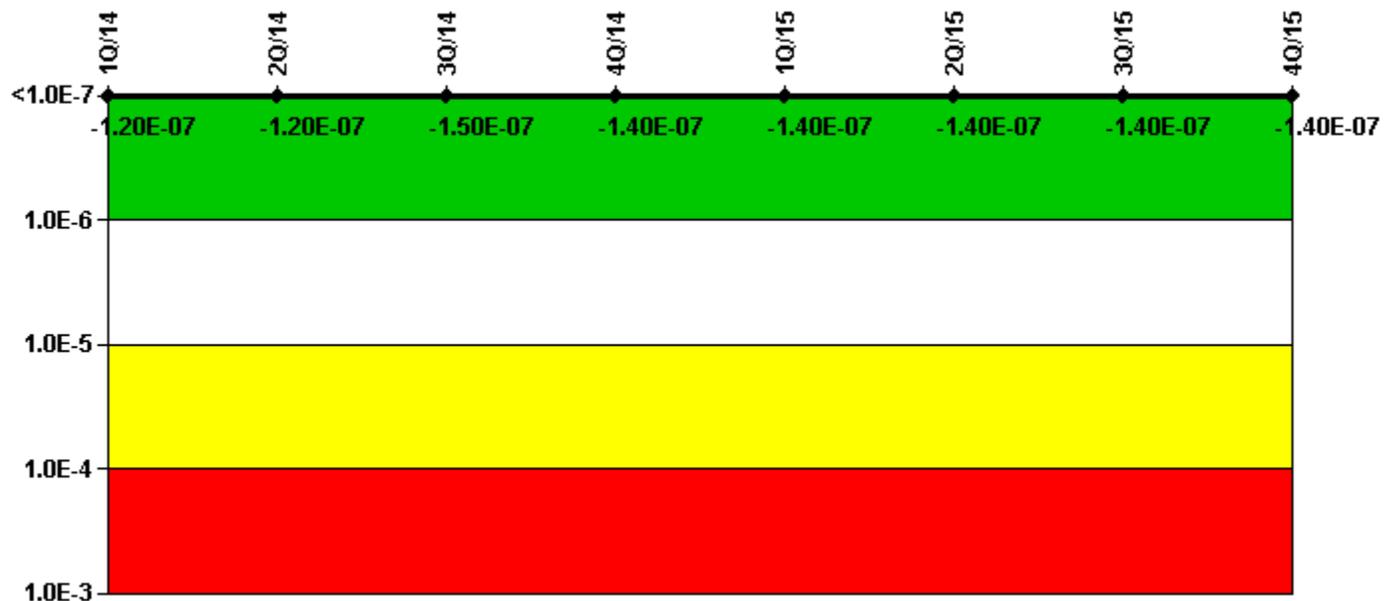
### Licensee Comments:

1Q/14: The Hatch baseline PRA models were revised October 12, 2013 to revision 4.1 per calculations PRA-CN-H-13-003 and PRA-CN-H-13-002. In accordance with NEI 99-02, Revision 7, the Hatch MSPI basis document was revised to incorporate the following changes: - Success criteria for each MPSI Function was expanded to include details such as flow rates and response times as contained in the PRA model documentation success criteria. This did not change any CDE data, but clarifies what an MSPI failure is. - The Hatch MSPI base CDF numbers were

revised. This affects all MSPI calculations. - Planned unavailability values (UABLP) were revised to match the planned maintenance numbers in the current PRA models. This updates the MSPI information to match the current maintenance philosophy. - Six circuit breakers and two valves were added to the MSPI scope on each unit, based on Birnbaum values. - The FVUAP and FVURC coefficients for every monitored component changed due to changes in the PRA model logic. - The tables containing the above coefficients in section 2.0 of the MSPI basis document were re-formatted to more closely match the CDE data input screen. - The MSPI margin for HPCI Failure to Start was reduced from five (5) to two (2). - All MSPI functions still remain in green.

1Q/14: Changed PRA Parameter(s). The Hatch baseline PRA models were revised October 12, 2013 to revision 4.1 per calculations PRA-CN-H-13-003 and PRA-CN-H-13-002. In accordance with NEI 99-02, Revision 7, the Hatch MSPI basis document was revised to incorporate the following changes: - Success criteria for each MPSI Function was expanded to include details such as flow rates and response times as contained in the PRA model documentation success criteria. This did not change any CDE data, but clarifies what an MSPI failure is. - The Hatch MSPI base CDF numbers were revised. This affects all MSPI calculations. - Planned unavailability values (UABLP) were revised to match the planned maintenance numbers in the current PRA models. This updates the MSPI information to match the current maintenance philosophy. - Six circuit breakers and two valves were added to the MSPI scope on each unit, based on Birnbaum values. - The FVUAP and FVURC coefficients for every monitored component changed due to changes in the PRA model logic. - The tables containing the above coefficients in section 2.0 of the MSPI basis document were re-formatted to more closely match the CDE data input screen. - The MSPI margin for HPCI Failure to Start was reduced from five (5) to two (2). - All MSPI functions still remain in green.

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



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

#### Notes

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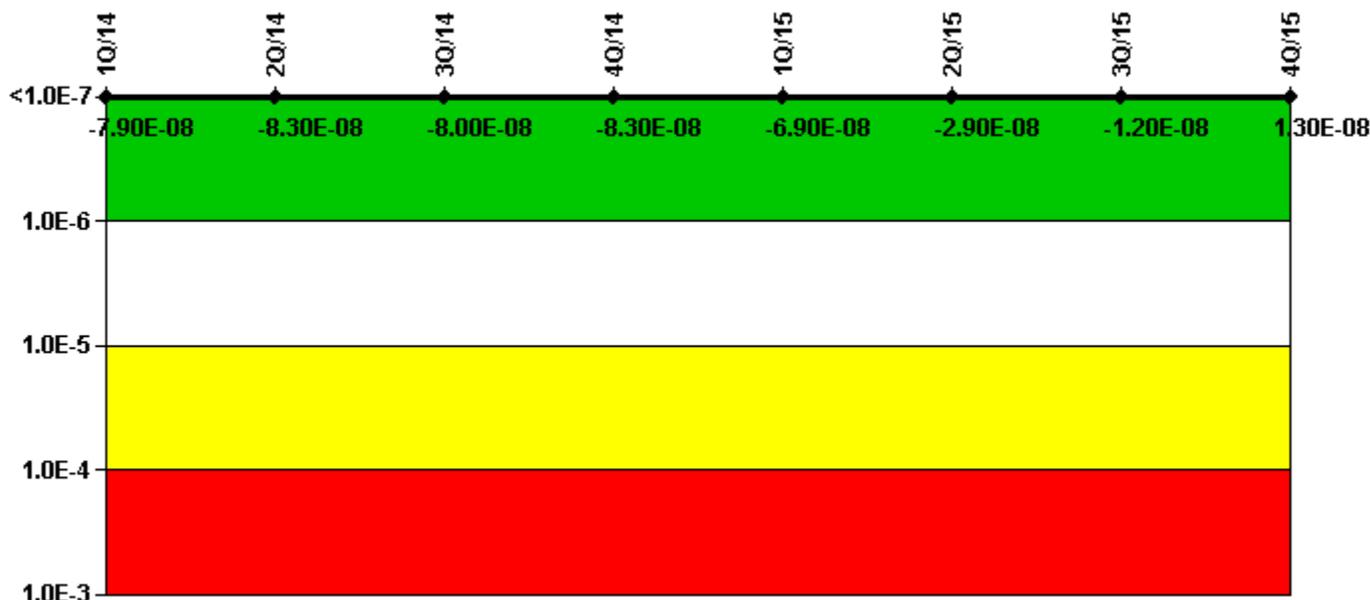
<b>Mitigating Systems Performance Index, Residual Heat Removal System</b>	<b>1Q/14</b>	<b>2Q/14</b>	<b>3Q/14</b>	<b>4Q/14</b>	<b>1Q/15</b>	<b>2Q/15</b>	<b>3Q/15</b>	<b>4Q/15</b>
UAI ( $\Delta$ CDF)	1.39E-08	1.38E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08
URI ( $\Delta$ CDF)	-1.32E-07	-1.34E-07	-1.33E-07	-1.32E-07	-1.25E-07	-1.25E-07	-1.25E-07	-1.23E-07
PLE	NO							
<b>Indicator value</b>	<b>-1.20E-07</b>	<b>-1.20E-07</b>	<b>-1.50E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>

## Licensee Comments:

2Q/14: Changed PRA Parameter(s).

1Q/14: Changed PRA Parameter(s). The Hatch baseline PRA models were revised October 12, 2013 to revision 4.1 per calculations PRA-CN-H-13-003 and PRA-CN-H-13-002. In accordance with NEI 99-02, Revision 7, the Hatch MSPI basis document was revised to incorporate the following changes: - Success criteria for each MPSI Function was expanded to include details such as flow rates and response times as contained in the PRA model documentation success criteria. This did not change any CDE data, but clarifies what an MSPI failure is. - The Hatch MSPI base CDF numbers were revised. This affects all MSPI calculations. - Planned unavailability values (UABLP) were revised to match the planned maintenance numbers in the current PRA models. This updates the MSPI information to match the current maintenance philosophy. - Six circuit breakers and two valves were added to the MSPI scope on each unit, based on Birnbaum values. - The FVUAP and FVURC coefficients for every monitored component changed due to changes in the PRA model logic. - The tables containing the above coefficients in section 2.0 of the MSPI basis document were re-formatted to more closely match the CDE data input screen. - The MSPI margin for HPCI Failure to Start was reduced from five (5) to two (2). - All MSPI functions still remain in green.

### Mitigating Systems Performance Index, Cooling Water Systems



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

#### Notes

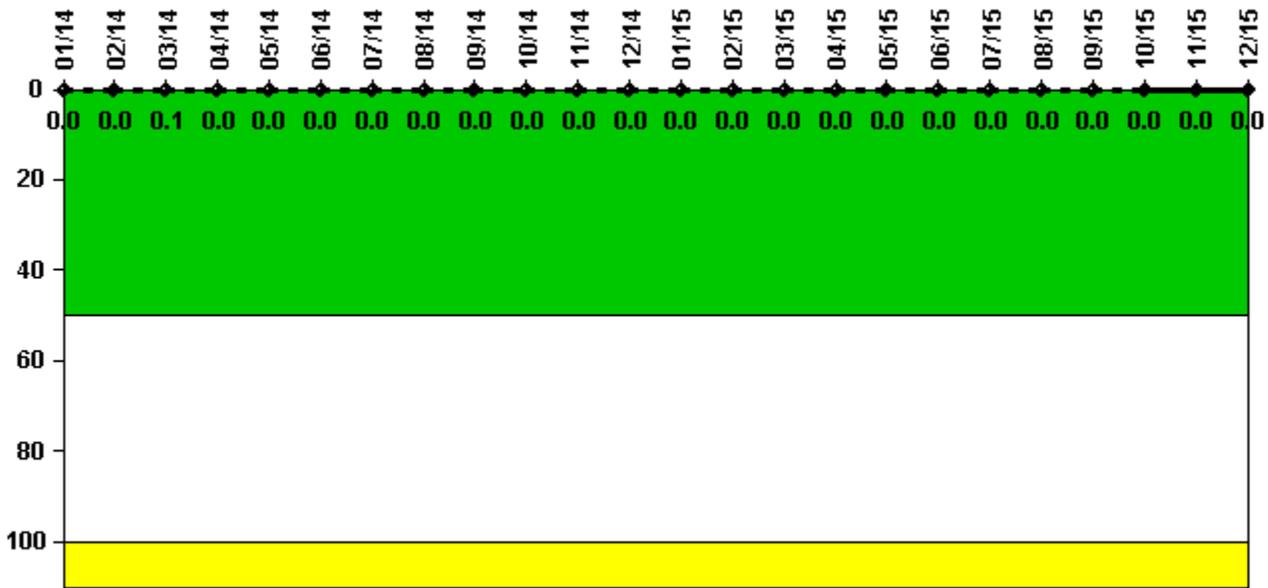
Mitigating Systems Performance Index, Cooling Water Systems	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI (ΔCDF)	1.47E-10	1.50E-10	4.48E-09	1.30E-09	1.23E-08	5.63E-08	7.27E-08	9.78E-08
URI (ΔCDF)	-7.94E-08	-8.28E-08	-8.45E-08	-8.48E-08	-8.17E-08	-8.48E-08	-8.44E-08	-8.48E-08
PLE	NO							
Indicator value	-7.90E-08	-8.30E-08	-8.00E-08	-8.30E-08	-6.90E-08	-2.90E-08	-1.20E-08	1.30E-08

Licensee Comments:

2Q/14: Changed PRA Parameter(s).

1Q/14: Changed PRA Parameter(s). The Hatch baseline PRA models were revised October 12, 2013 to revision 4.1 per calculations PRA-CN-H-13-003 and PRA-CN-H-13-002. In accordance with NEI 99-02, Revision 7, the Hatch MSPI basis document was revised to incorporate the following changes: - Success criteria for each MPSI Function was expanded to include details such as flow rates and response times as contained in the PRA model documentation success criteria. This did not change any CDE data, but clarifies what an MSPI failure is. - The Hatch MSPI base CDF numbers were revised. This affects all MSPI calculations. - Planned unavailability values (UABLP) were revised to match the planned maintenance numbers in the current PRA models. This updates the MSPI information to match the current maintenance philosophy. - Six circuit breakers and two valves were added to the MSPI scope on each unit, based on Birnbaum values. - The FVUAP and FVURC coefficients for every monitored component changed due to changes in the PRA model logic. - The tables containing the above coefficients in section 2.0 of the MSPI basis document were re-formatted to more closely match the CDE data input screen. - The MSPI margin for HPCI Failure to Start was reduced from five (5) to two (2). - All MSPI functions still remain in green.

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

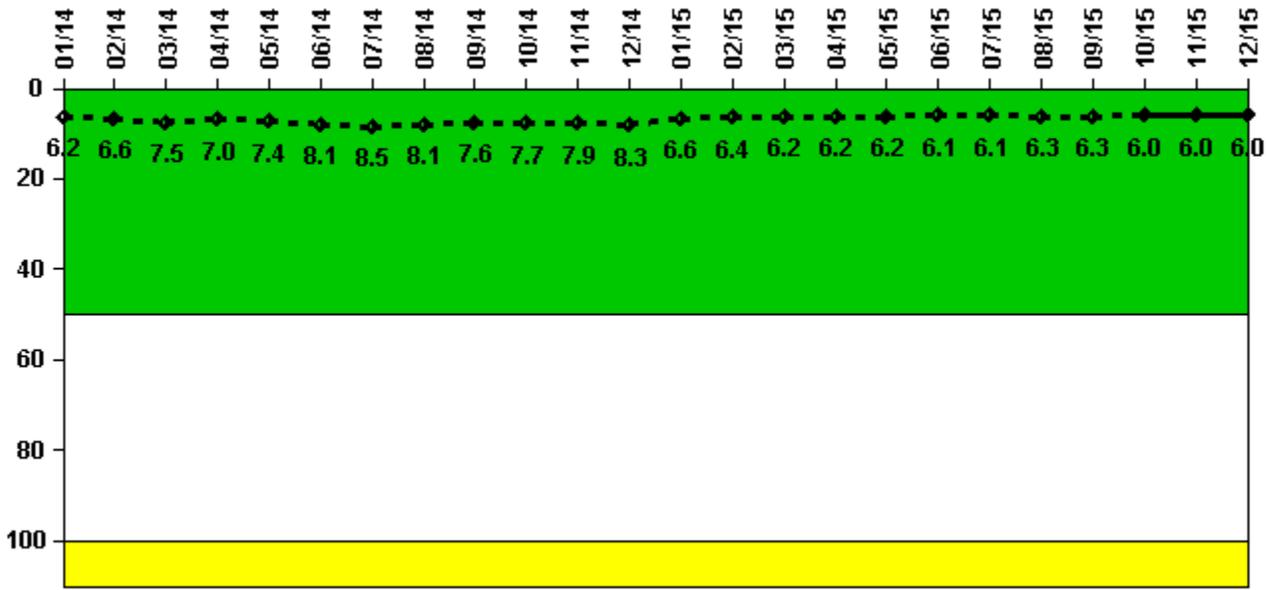
**Notes**

Reactor Coolant System Activity	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum activity	0.000011	0.000012	0.000188	0.000003	0.000002	0.000012	0.000003	0.000005	0.000004	0.000003	0.000005	0.000042
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
Indicator value	0	0	0.1	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum activity	0.000005	0.000004	0.000007	0.000003	0.000004	0.000004	0.000008	0.000004	0.000005	0.000004	0.000004	0.000003
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
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

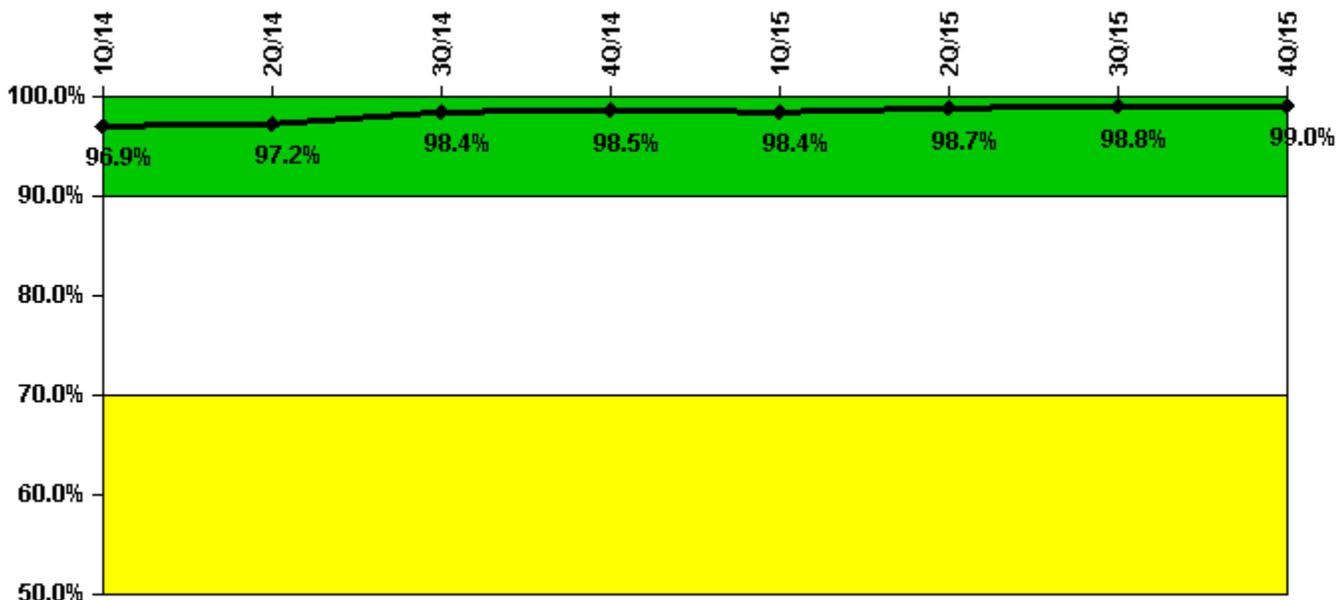
Reactor Coolant System Leakage	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum leakage	1.850	1.980	2.240	2.100	2.210	2.430	2.550	2.420	2.290	2.300	2.380	2.500
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	6.2	6.6	7.5	7.0	7.4	8.1	8.5	8.1	7.6	7.7	7.9	8.3

Reactor Coolant System Leakage	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum leakage	1.970	1.910	1.860	1.870	1.860	1.840	1.840	1.880	1.890	1.800	1.800	1.800
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	6.6	6.4	6.2	6.2	6.2	6.1	6.1	6.3	6.3	6.0	6.0	6.0

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

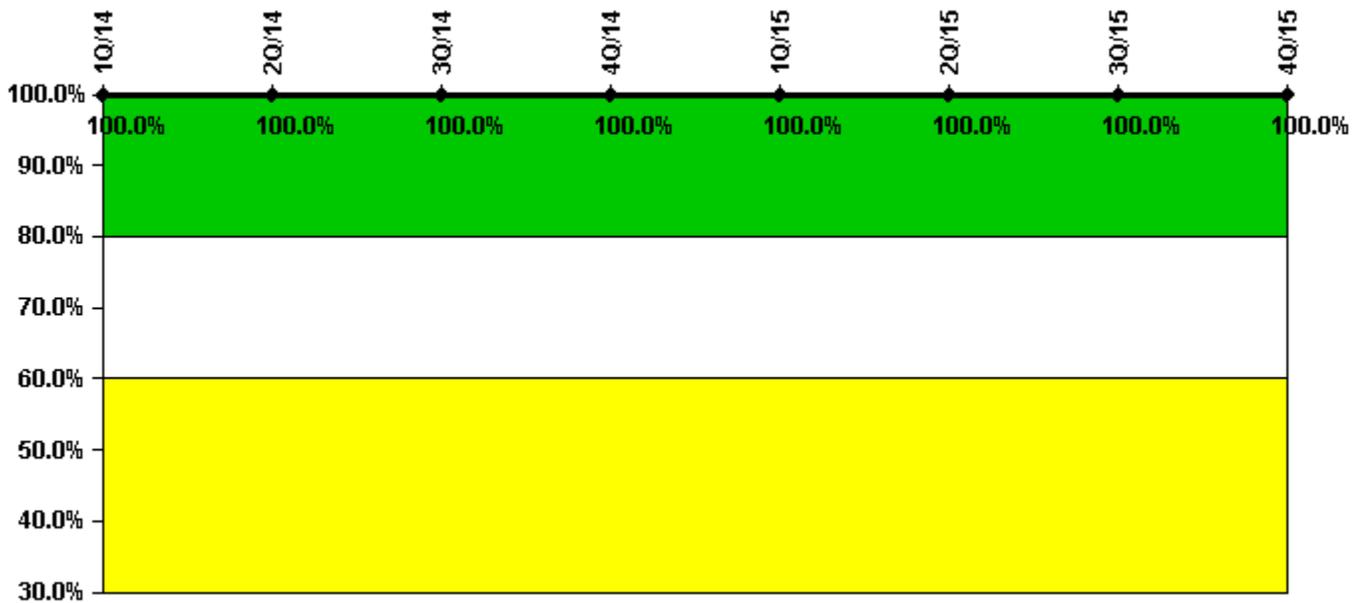
#### Notes

Drill/Exercise Performance	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful opportunities	26.0	64.0	78.0	50.0	26.0	53.0	58.0	41.0
Total opportunities	26.0	65.0	78.0	50.0	26.0	55.0	58.0	42.0
<b>Indicator value</b>	<b>96.9%</b>	<b>97.2%</b>	<b>98.4%</b>	<b>98.5%</b>	<b>98.4%</b>	<b>98.7%</b>	<b>98.8%</b>	<b>99.0%</b>

#### Licensee Comments:

1Q/14: These values have been revised do to a miscalculation of the original data. Previous values were 12 successful and 12 total. This change did not affect the color of the indicator.

### ERO Drill Participation



**Thresholds:** White < 80.0% Yellow < 60.0%

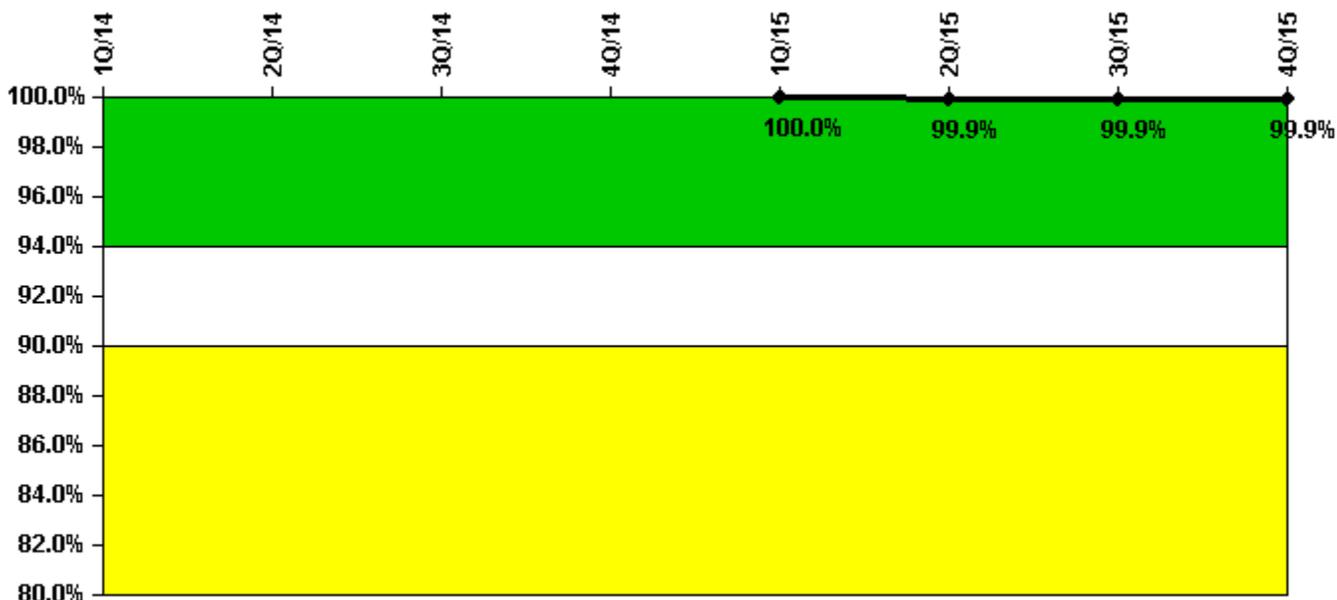
#### Notes

ERO Drill Participation	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Participating Key personnel	110.0	106.0	109.0	112.0	109.0	107.0	101.0	106.0
Total Key personnel	110.0	106.0	109.0	112.0	109.0	107.0	101.0	106.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments:

3Q/14: Correction to the original data submitted in 3rd quarter 2014. This correction is due to the identification of members added to the ERO but not included in the participation data.

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

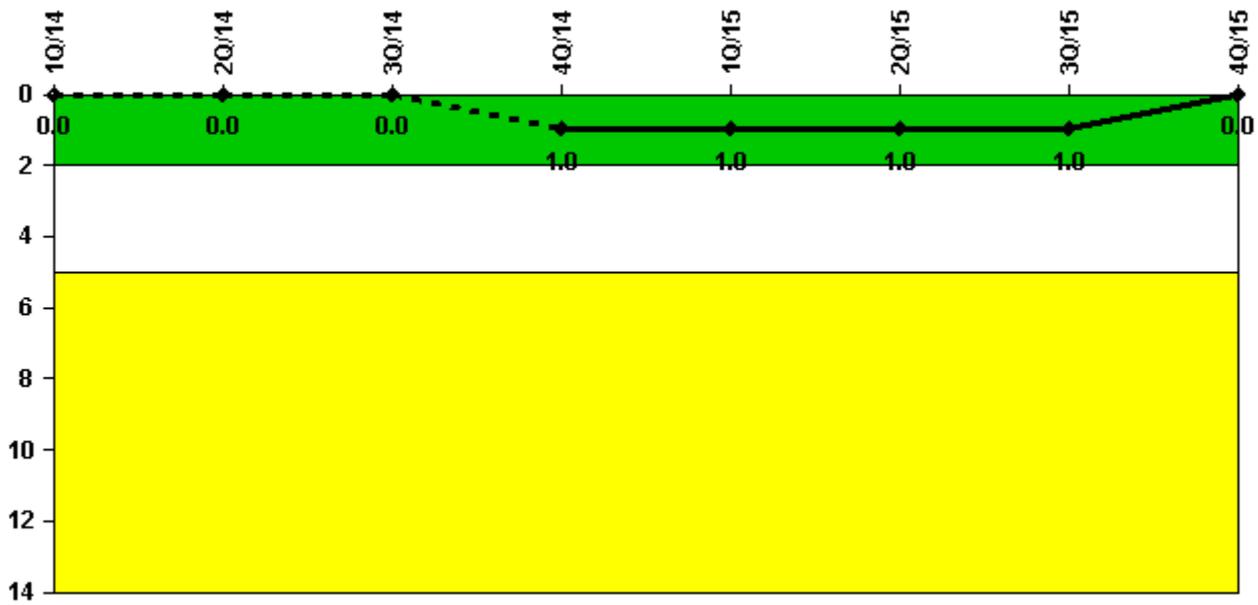
#### Notes

Alert & Notification System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful siren-tests		1040	1117	1120	960	1039	1117	1039
Total sirens-tests		1040	1119	1120	960	1040	1120	1040
Indicator value					100.0%	99.9%	99.9%	99.9%

Licensee Comments:

1Q/14: Plant Hatch does not use sirens as an emergency notification system.

### Occupational Exposure Control Effectiveness



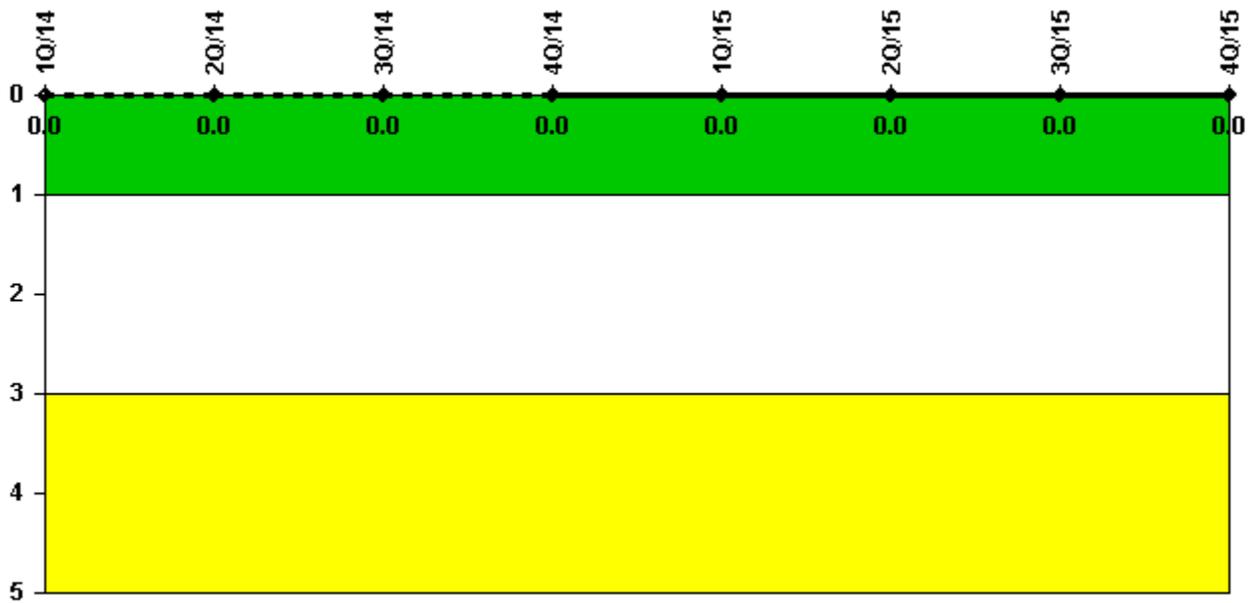
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
High radiation area occurrences	0	0	0	1	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>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

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: March 1, 2016*