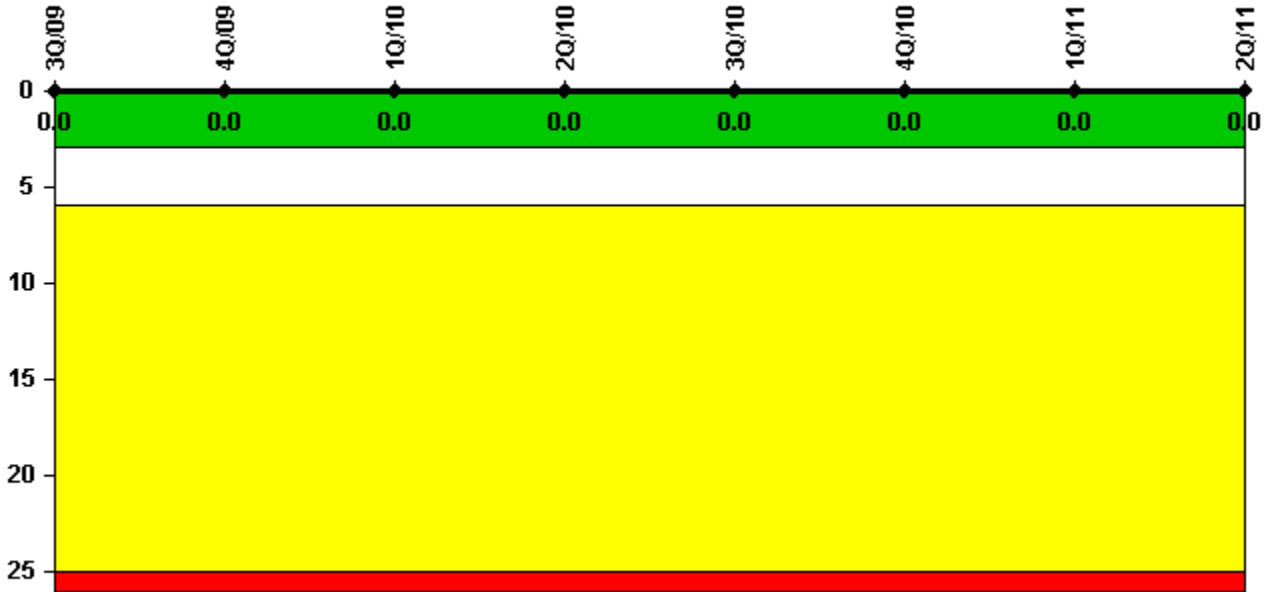


# Kewaunee

## 2Q/2011 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

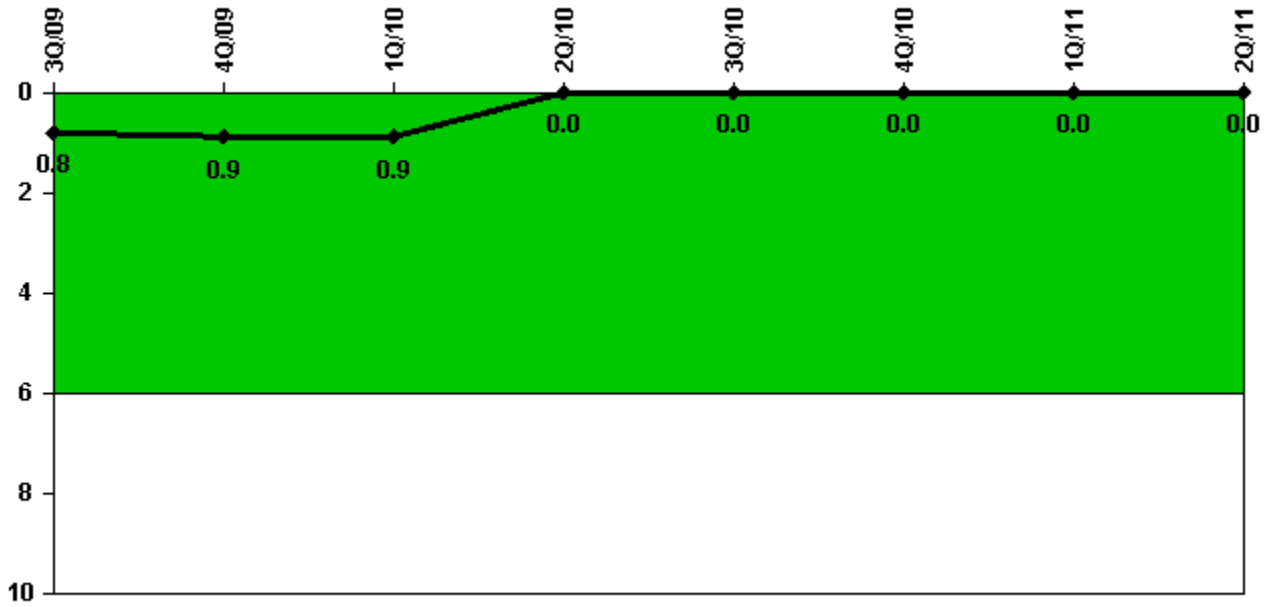
### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2089.7	1704.3	2159.0	2184.0	2208.0	2209.0	1486.8	2184.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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## Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2089.7	1704.3	2159.0	2184.0	2208.0	2209.0	1486.8	2184.0
Indicator value	0.8	0.9	0.9	0	0	0	0	0

Licensee Comments: none

# Unplanned Scrams with Complications



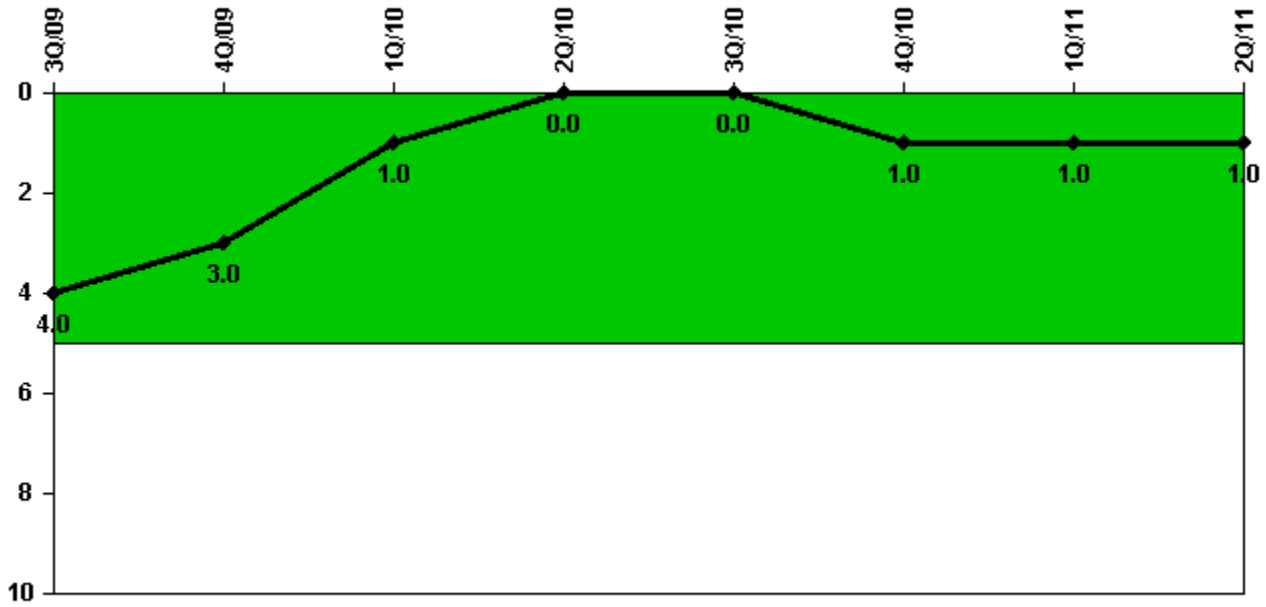
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

## Safety System Functional Failures (PWR)



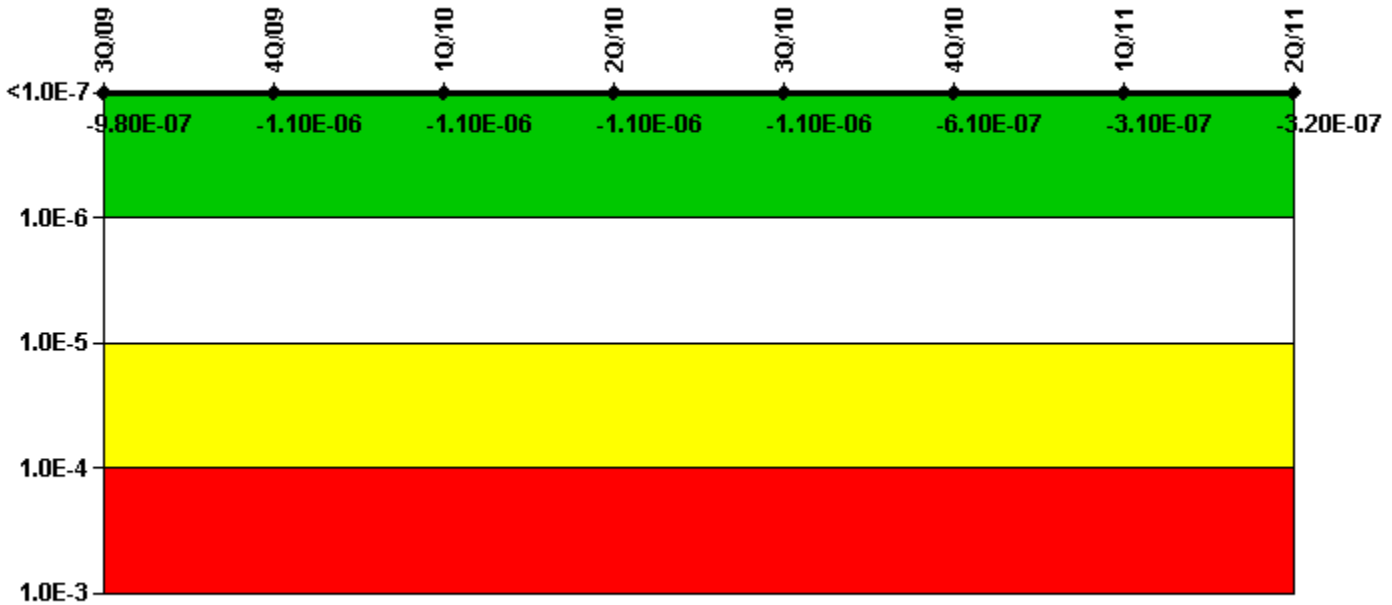
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Safety System Functional Failures	0	0	0	0	0	1	0	0
Indicator value	4	3	1	0	0	1	1	1

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



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

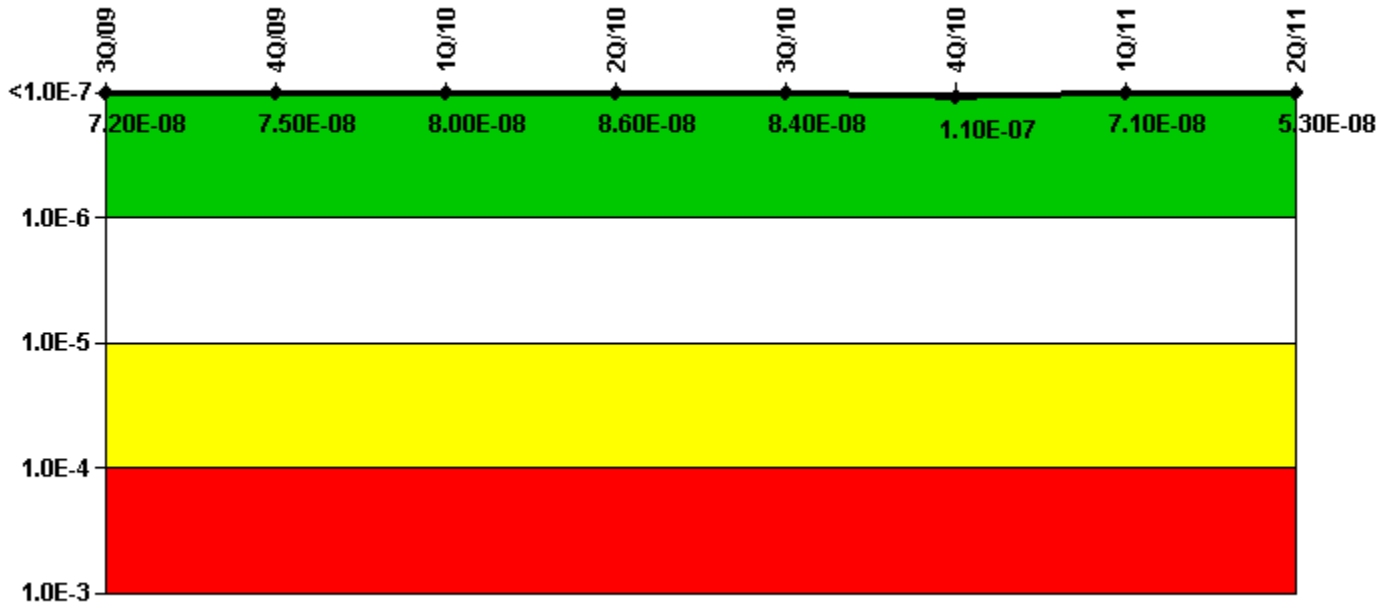
## Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	6.18E-08	4.83E-08	-6.48E-08	-1.07E-07	-1.16E-07	-6.82E-08	-6.82E-08	-6.82E-08
URI ( $\Delta$ CDF)	-1.05E-06	-1.10E-06	-1.06E-06	-1.03E-06	-1.01E-06	-5.45E-07	-2.44E-07	-2.53E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.80E-07	-1.10E-06	-1.10E-06	-1.10E-06	-1.10E-06	-6.10E-07	-3.10E-07	-3.20E-07

Licensee Comments:

2Q/11: The MSPI Basis document (Rev. 10) and PRA coefficients in CDE have been updated to reflect a modification to the AFW system that was performed during the spring refueling outage. The new PRA coefficients are based on PRA model K009A, and are documented in Dominion PRA Notebook KPS.RA.PR.1, Revision 4. The PRA coefficients for all systems were impacted by the changes to the PRA model. These changes are effective in the third quarter of 2011.

# Mitigating Systems Performance Index, High Pressure Injection System



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

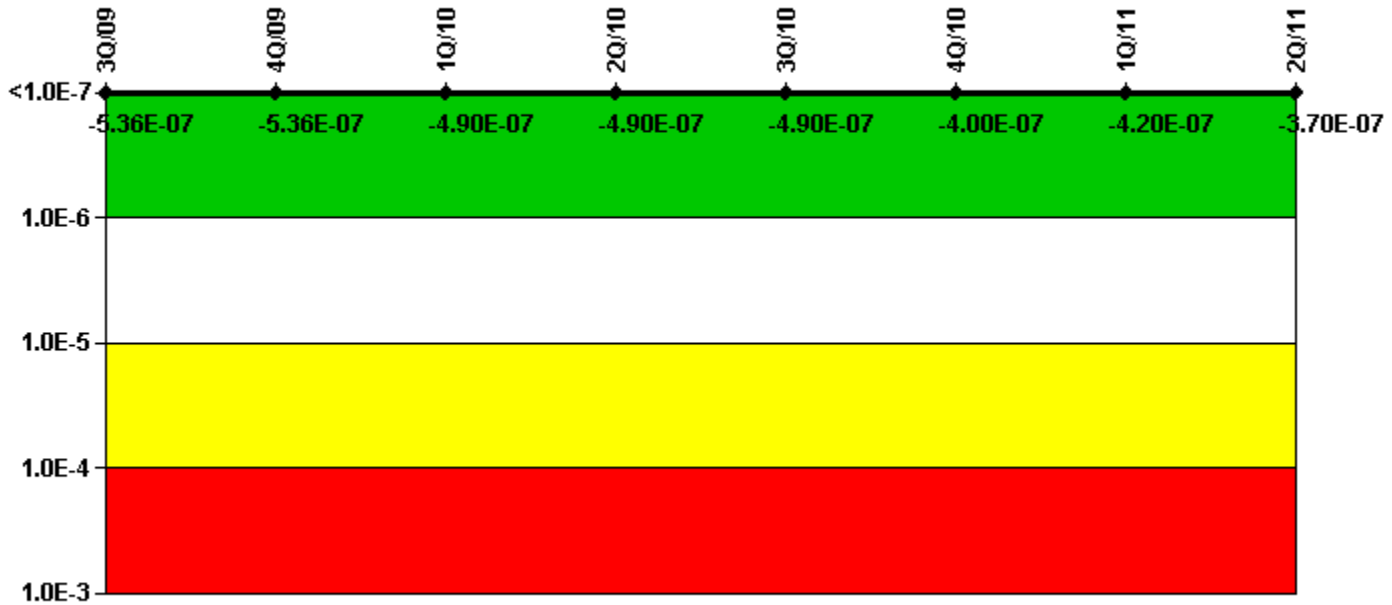
## Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	9.45E-08	9.67E-08	1.00E-07	1.07E-07	1.04E-07	1.29E-07	9.35E-08	7.27E-08
URI ( $\Delta$ CDF)	-2.21E-08	-2.15E-08	-2.08E-08	-2.10E-08	-2.04E-08	-2.06E-08	-2.26E-08	-2.00E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	7.20E-08	7.50E-08	8.00E-08	8.60E-08	8.40E-08	1.10E-07	7.10E-08	5.30E-08

Licensee Comments:

2Q/11: The MSPI Basis document (Rev. 10) and PRA coefficients in CDE have been updated to reflect a modification to the AFW system that was performed during the spring refueling outage. The new PRA coefficients are based on PRA model K009A, and are documented in Dominion PRA Notebook KPS.RA.PR.1, Revision 4. The PRA coefficients for all systems were impacted by the changes to the PRA model. These changes are effective in the third quarter of 2011.

## Mitigating Systems Performance Index, Heat Removal System



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

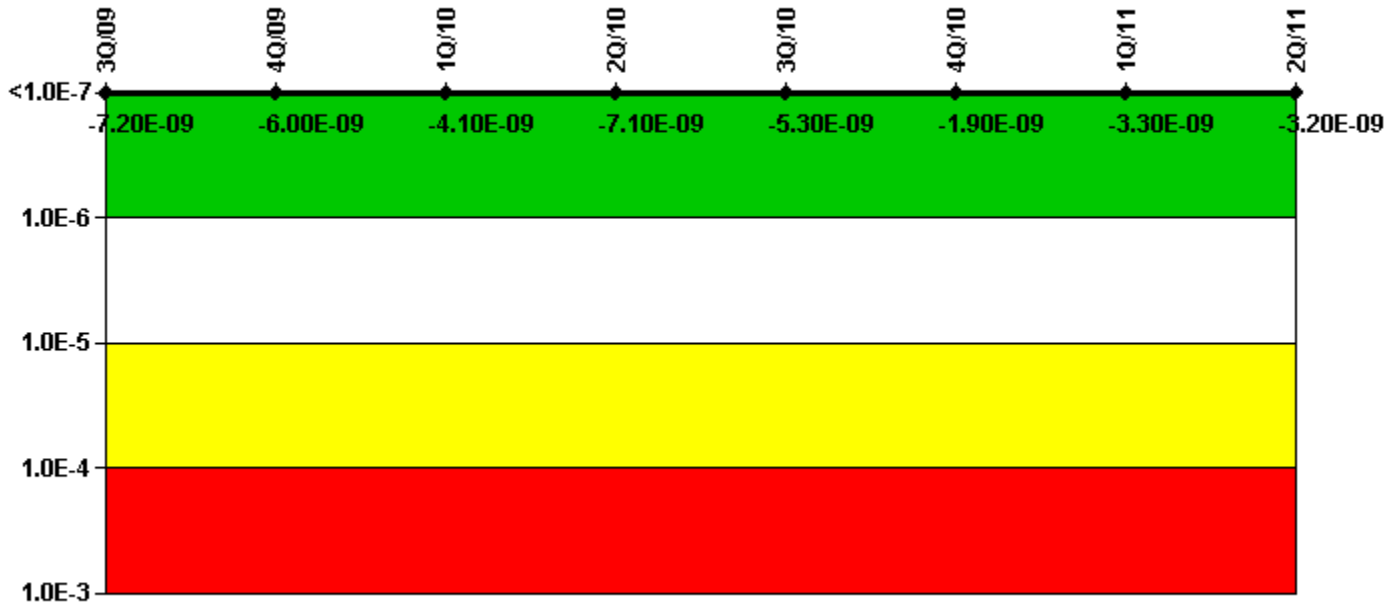
### Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-7.60E-08	-7.60E-08	-7.18E-08	-7.18E-08	-7.40E-08	-7.61E-08	-7.60E-08	-5.89E-08
URI ( $\Delta$ CDF)	-4.60E-07	-4.60E-07	-4.17E-07	-4.14E-07	-4.20E-07	-3.27E-07	-3.46E-07	-3.14E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.36E-07	-5.36E-07	-4.90E-07	-4.90E-07	-4.90E-07	-4.00E-07	-4.20E-07	-3.70E-07

### Licensee Comments:

2Q/11: The MSPI Basis document (Rev. 10) and PRA coefficients in CDE have been updated to reflect a modification to the AFW system that was performed during the spring refueling outage. The new PRA coefficients are based on PRA model K009A, and are documented in Dominion PRA Notebook KPS.RA.PR.1, Revision 4. The changes to the AFW system included new crossover piping from each motor driven AFW pump to the opposite train steam generator which provides the capability to feed either of the two steam generators from either of the motor driven AFW pumps or the turbine driven AFW pump. The Birnbaum values for the motor driven AFW pumps discharge valves (AFW-2A and AFW-2B) dropped well below 1E-06, thus will no longer be monitored components. The PRA coefficients for all systems were impacted by the changes to the PRA model. These changes are effective in the third quarter of 2011.

# Mitigating Systems Performance Index, Residual Heat Removal System



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

## Notes

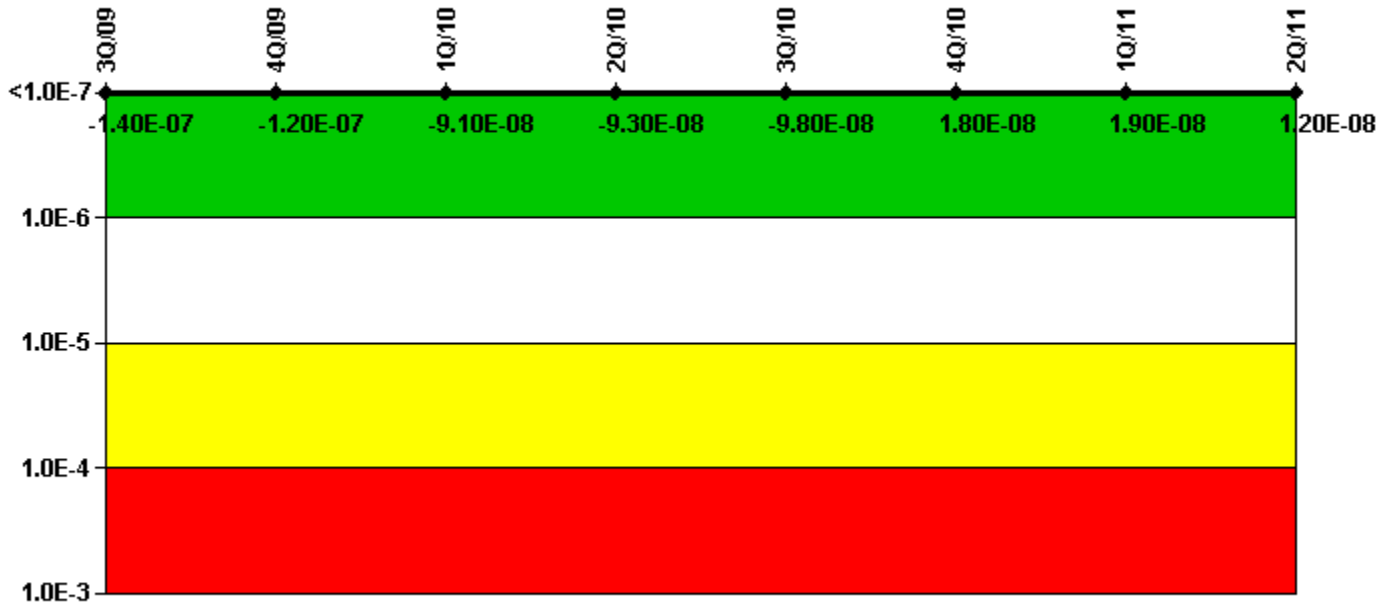
Mitigating Systems Performance Index, Residual Heat Removal System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	2.33E-08	2.47E-08	2.66E-08	2.45E-08	2.70E-08	4.32E-09	3.47E-09	3.10E-09
URI ( $\Delta$ CDF)	-3.05E-08	-3.07E-08	-3.07E-08	-3.16E-08	-3.23E-08	-6.23E-09	-6.82E-09	-6.27E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.20E-09	-6.00E-09	-4.10E-09	-7.10E-09	-5.30E-09	-1.90E-09	-3.30E-09	-3.20E-09

Licensee Comments:

2Q/11: The MSPI Basis document (Rev. 10) and PRA coefficients in CDE have been updated to reflect a modification to the AFW system that was performed during the spring refueling outage. The new PRA coefficients are based on PRA model K009A, and are documented in Dominion PRA Notebook KPS.RA.PR.1, Revision 4. The PRA coefficients for all systems were impacted by the changes to the PRA model. These changes are effective in the third quarter of 2011.



# Mitigating Systems Performance Index, Cooling Water Systems



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

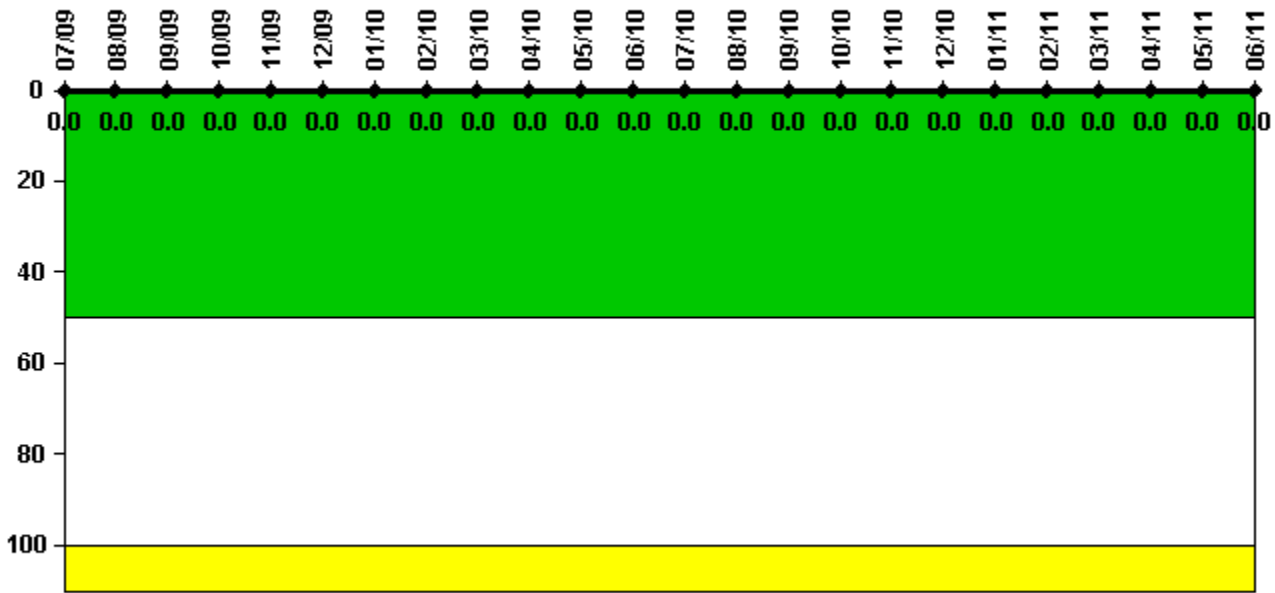
## Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-9.30E-08	-7.42E-08	-4.32E-08	-4.55E-08	-4.94E-08	4.23E-08	4.30E-08	3.68E-08
URI ( $\Delta$ CDF)	-4.53E-08	-4.78E-08	-4.78E-08	-4.75E-08	-4.81E-08	-2.41E-08	-2.45E-08	-2.43E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-1.20E-07	-9.10E-08	-9.30E-08	-9.80E-08	1.80E-08	1.90E-08	1.20E-08

Licensee Comments:

2Q/11: The MSPI Basis document (Rev. 10) and PRA coefficients in CDE have been updated to reflect a modification to the AFW system that was performed during the spring refueling outage. The new PRA coefficients are based on PRA model K009A, and are documented in Dominion PRA Notebook KPS.RA.PR.1, Revision 4. The PRA coefficients for all systems were impacted by the changes to the PRA model. These changes are effective in the third quarter of 2011.

# Reactor Coolant System Activity



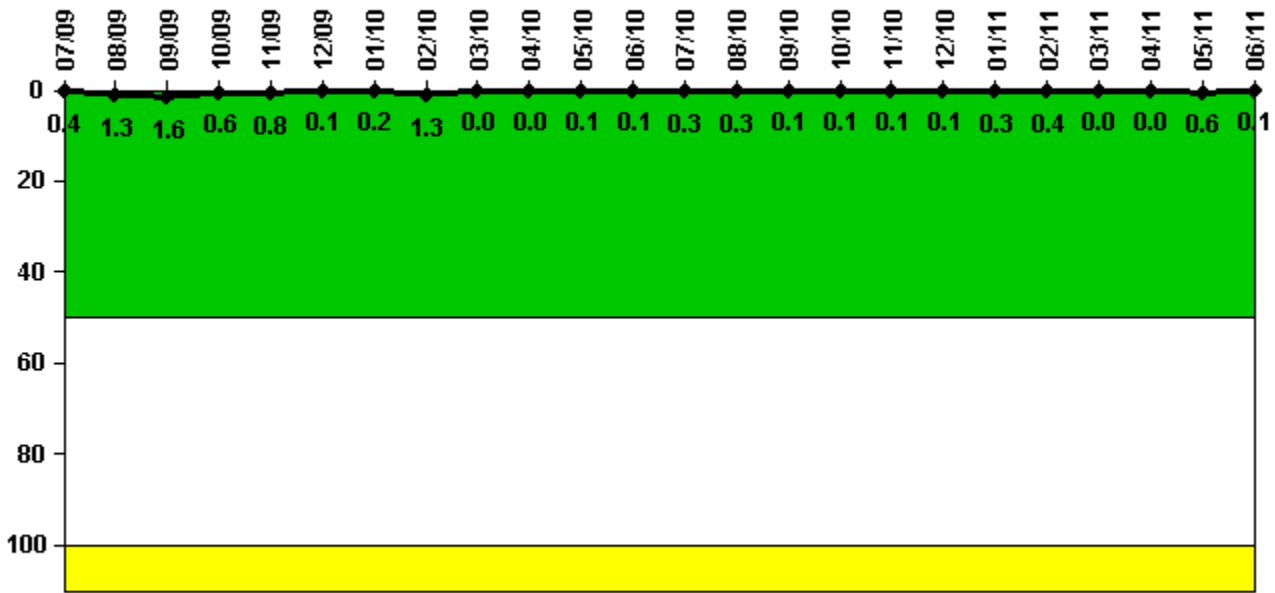
Thresholds: White > 50.0 Yellow > 100.0

## Notes

Reactor Coolant System Activity	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum activity	0.000162	0.000156	0.000164	0.000184	0.000113	0.000113	0.000113	0.000117	0.000118	0.000124	0.000134	0.000223
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	0	0	0
Reactor Coolant System Activity	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum activity	0.000135	0.000135	0.000130	0.000129	0.000156	0.000141	0.000154	0.000141	0.000059	0.000098	0.000097	0.000108
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	0	0	0

Licensee Comments: none

## Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

### Notes

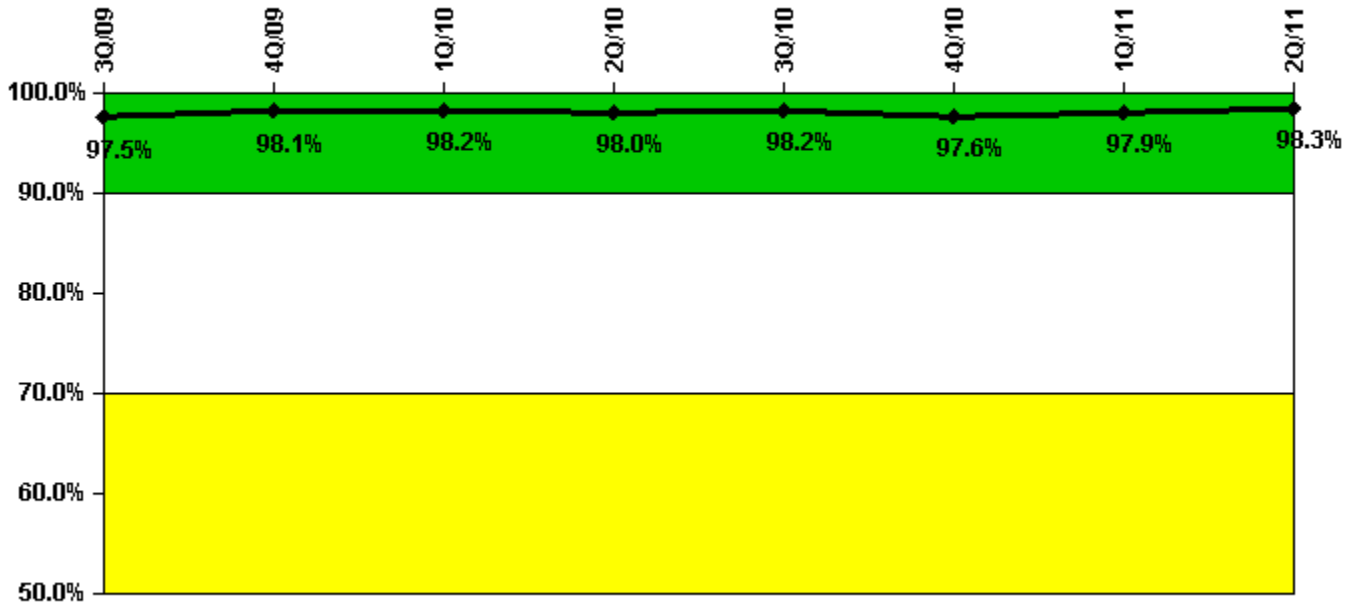
Reactor Coolant System Leakage	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum leakage	0.035	0.133	0.159	0.064	0.079	0.007	0.024	0.127	0.001	0.001	0.011	0.013
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.4	1.3	1.6	0.6	0.8	0.1	0.2	1.3	0	0	0.1	0.1

Reactor Coolant System Leakage	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum leakage	0.033	0.032	0.007	0.011	0.010	0.010	0.030	0.042	0.002	0.003	0.058	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	0.3	0.1	0.1	0.1	0.1	0.3	0.4	0	0	0.6	0.1

Licensee Comments: none

## Drill/Exercise Performance



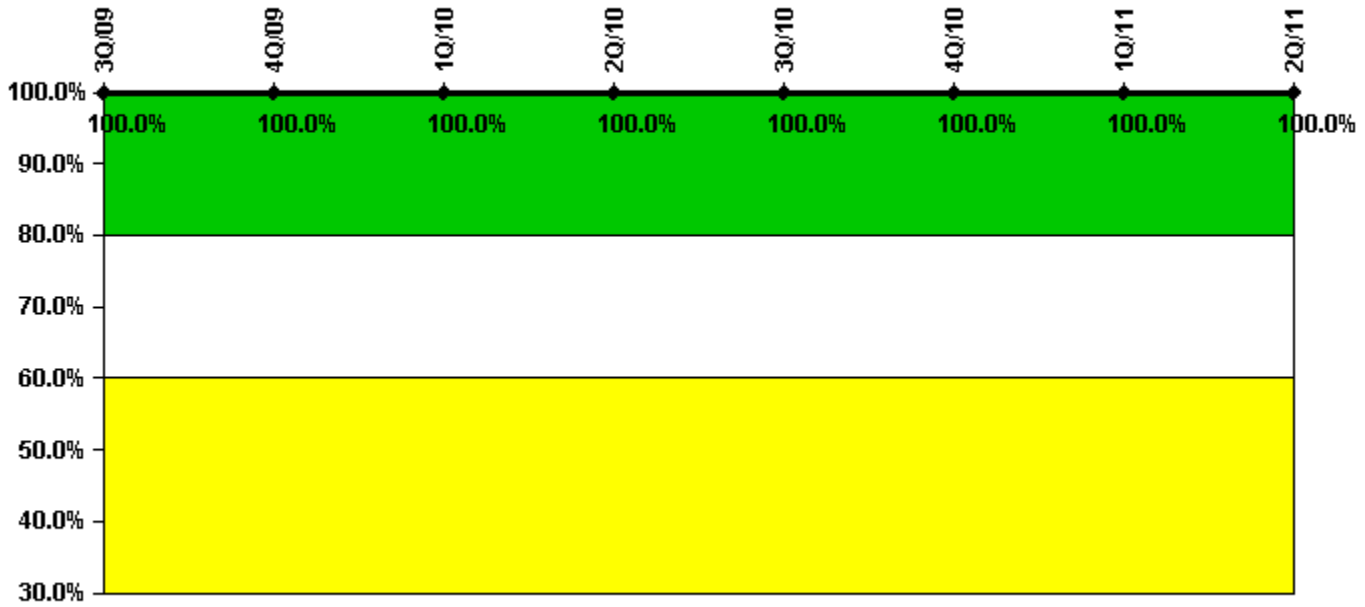
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful opportunities	20.0	45.0	54.0	12.0	43.0	15.0	58.0	43.0
Total opportunities	20.0	45.0	55.0	12.0	45.0	16.0	58.0	44.0
Indicator value	97.5%	98.1%	98.2%	98.0%	98.2%	97.6%	97.9%	98.3%

Licensee Comments: none

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

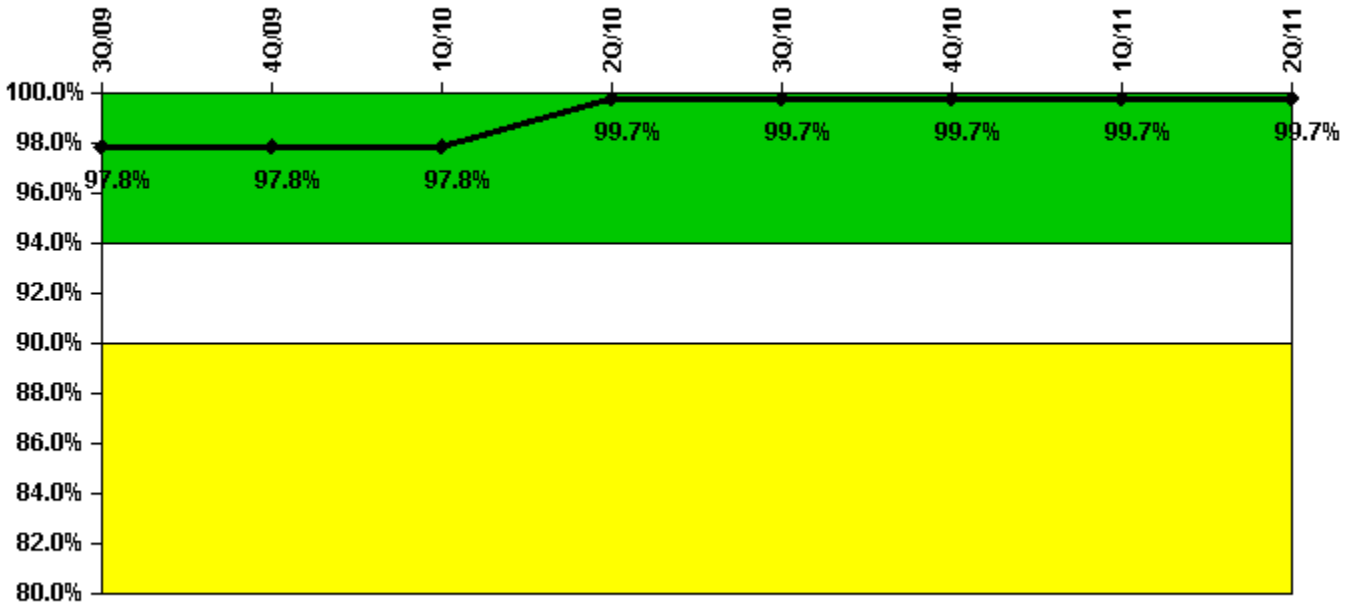
### Notes

ERO Drill Participation	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Participating Key personnel	65.0	62.0	55.0	58.0	56.0	63.0	67.0	63.0
Total Key personnel	65.0	62.0	55.0	58.0	56.0	63.0	67.0	63.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

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# Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful siren-tests	77	78	78	78	77	78	78	78
Total sirens-tests	78	78	78	78	78	78	78	78
Indicator value	97.8%	97.8%	97.8%	99.7%	99.7%	99.7%	99.7%	99.7%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

## Notes

Occupational Exposure Control Effectiveness	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
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	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.