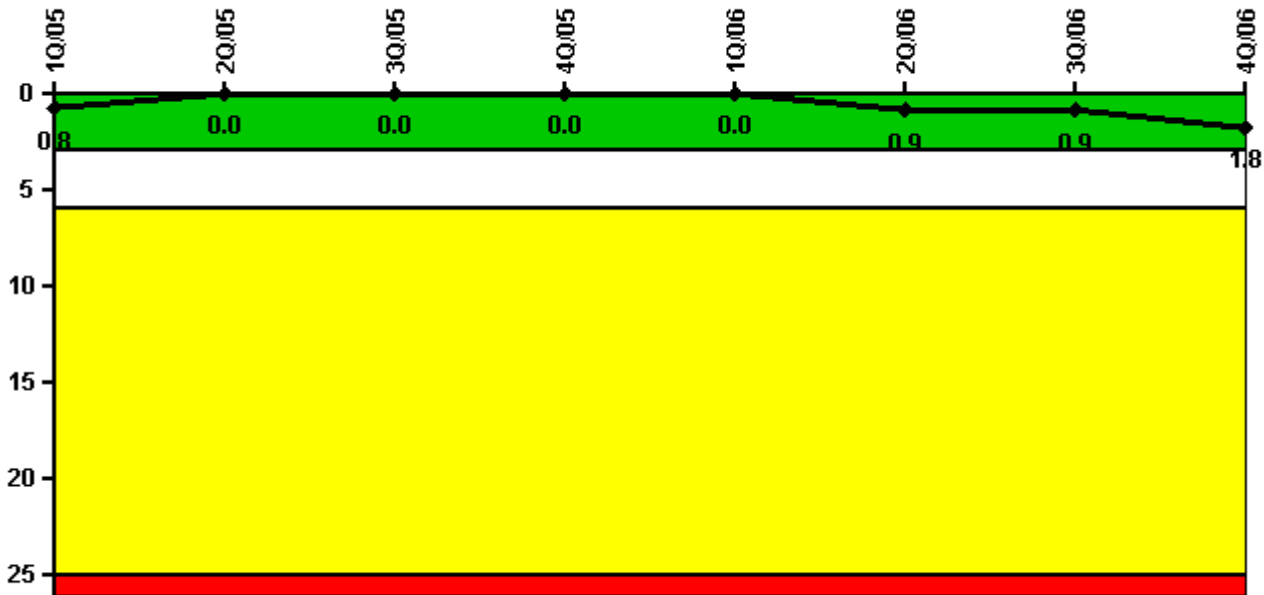


# Susquehanna 1

## 4Q/2006 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	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Unplanned scrams	0	0	0	0	0	1.0	0	1.0
Critical hours	2160.0	2183.0	2208.0	1838.6	1495.1	1873.6	2208.0	2133.0
Indicator value	0.8	0	0	0	0	0.9	0.9	1.8

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



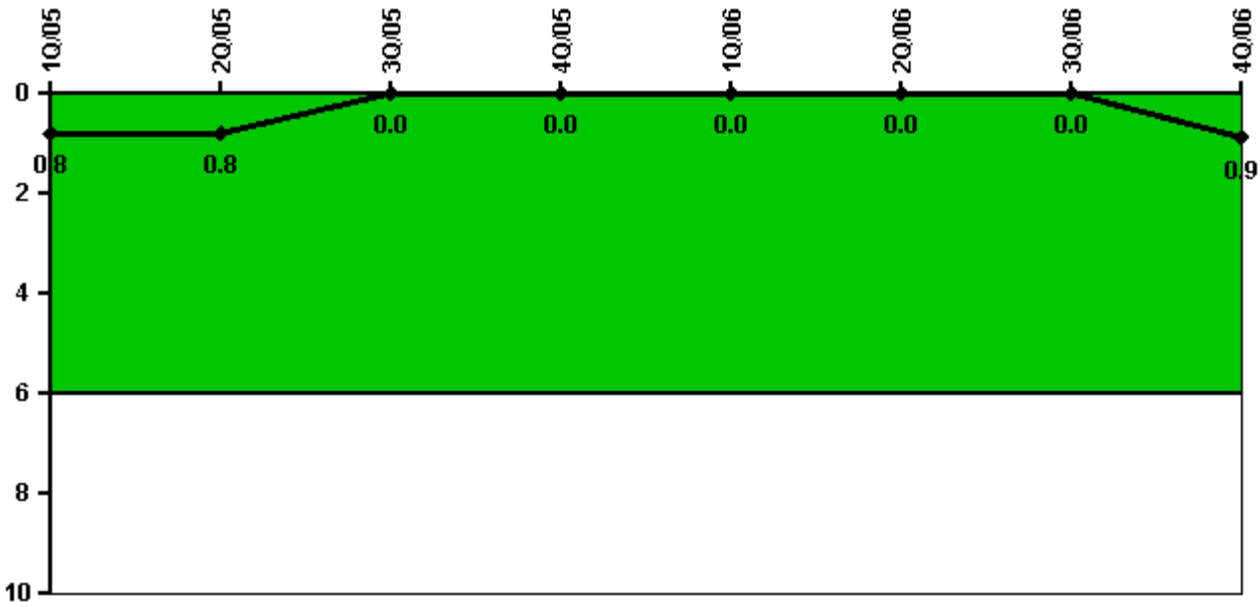
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



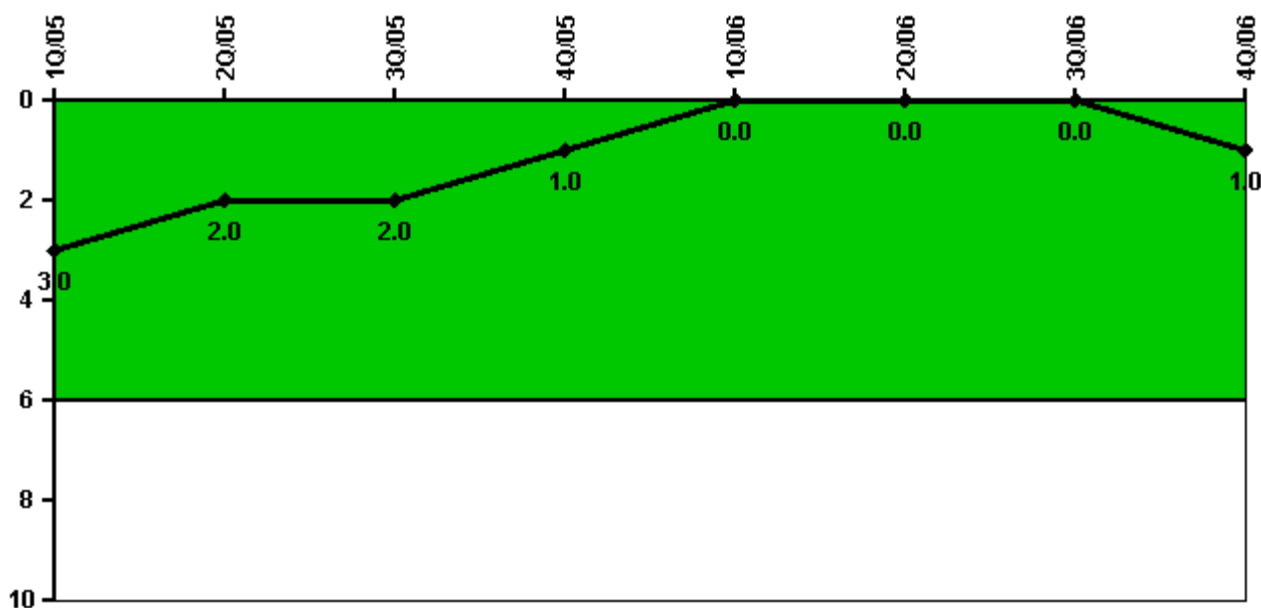
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Unplanned power changes	0	0	0	0	0	0	0	1.0
Critical hours	2160.0	2183.0	2208.0	1838.6	1495.1	1873.6	2208.0	2133.0
Indicator value	0.8	0.8	0	0	0	0	0	0.9

Licensee Comments: none

### Safety System Functional Failures (BWR)



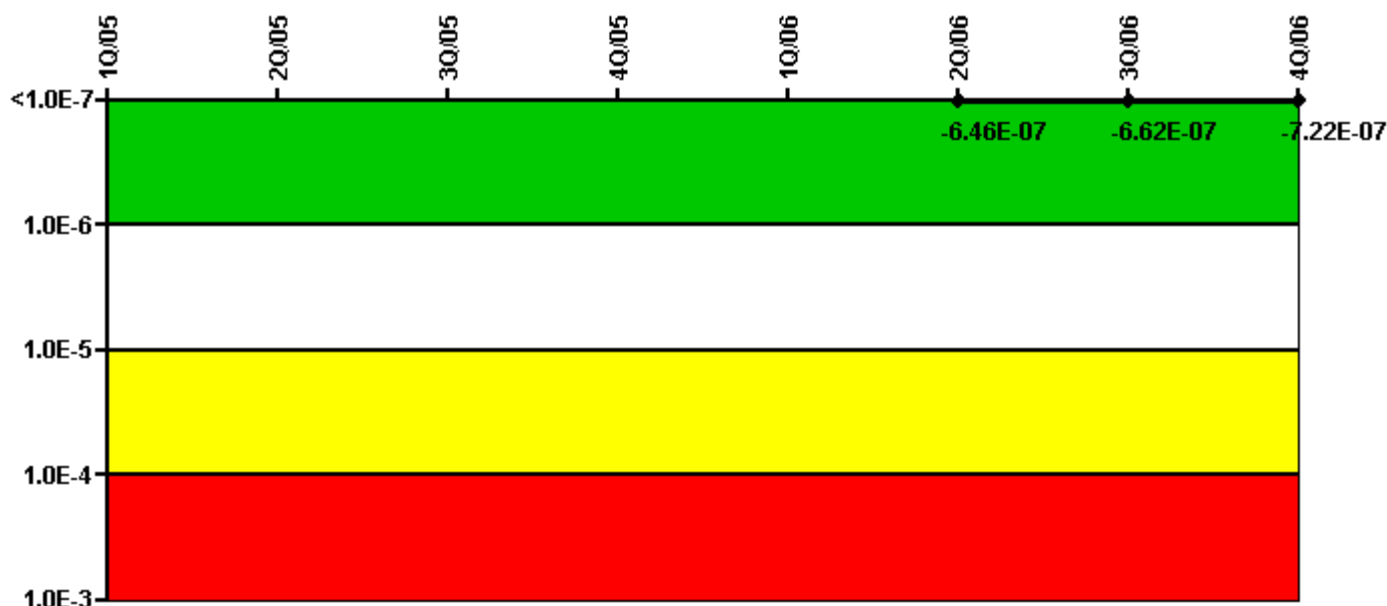
Thresholds: White > 6.0

**Notes**

Safety System Functional Failures (BWR)	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Safety System Functional Failures	1	0	0	0	0	0	0	1
Indicator value	3	2	2	1	0	0	0	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

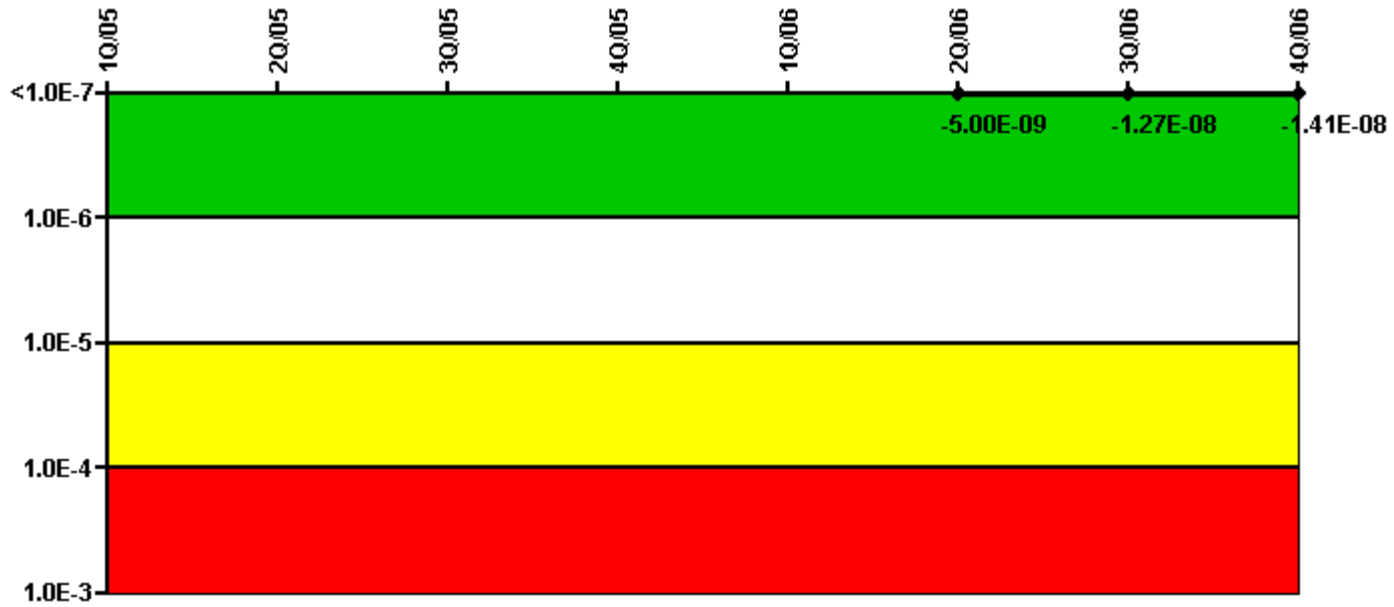
**Notes**

Mitigating Systems Performance Index, Emergency AC Power System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI ( $\Delta$ CDF)						-6.40E-09	-2.20E-08	-2.20E-08
URI ( $\Delta$ CDF)						-6.40E-07	-6.40E-07	-7.00E-07
PLE						NO	NO	NO
Indicator value						-6.46E-07	-6.62E-07	-7.22E-07

Licensee Comments:

4Q/06: Changed PRA Parameter(s). Second and third quarter 2006 Mitigating System Performance Index (MSPI) data is revised due to minor changes to the Probabilistic Risk Assessment (PRA) baseline data as a result of incorporating comments from an NRC inspection in late October 2006. There is no safety significance associated with these changes to the PRA data. This revision does not affect the color of the current Performance Indicators nor the previously reported color of these PI's.

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



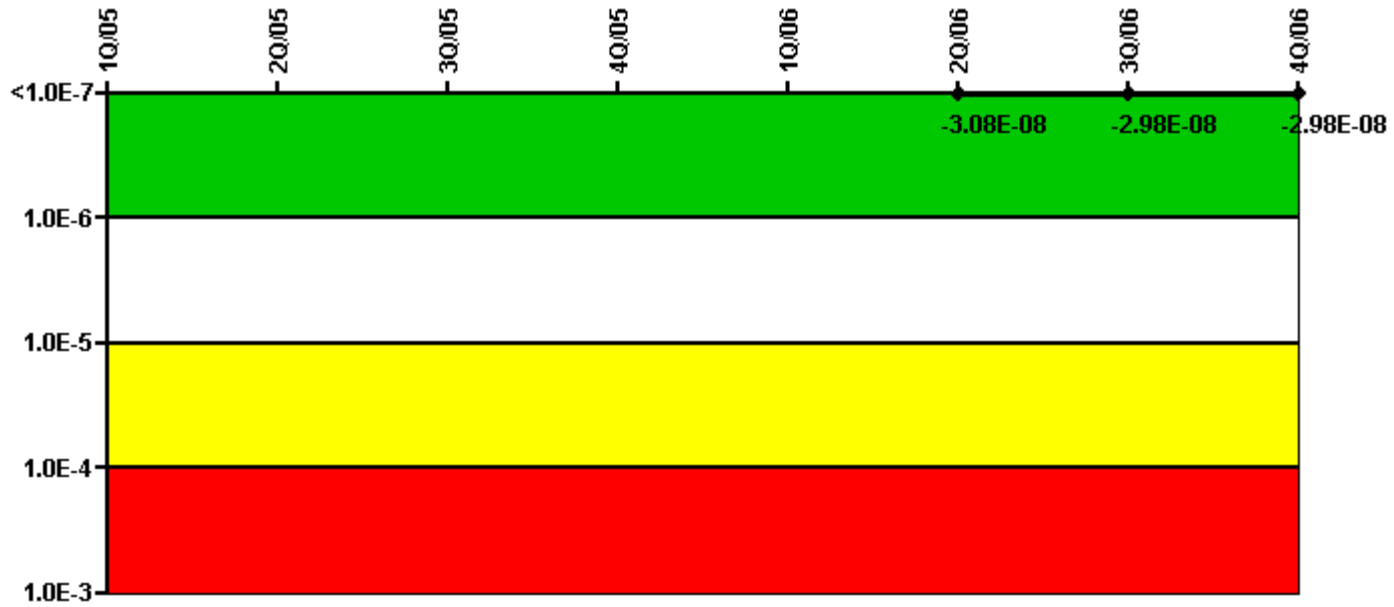
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

**Notes**

Mitigating Systems Performance Index, High Pressure Injection System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (ΔCDF)						1.20E-08	3.30E-09	1.90E-09
URI (ΔCDF)						-1.70E-08	-1.60E-08	-1.60E-08
PLE						NO	NO	NO
Indicator value						-5.00E-09	-1.27E-08	-1.41E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



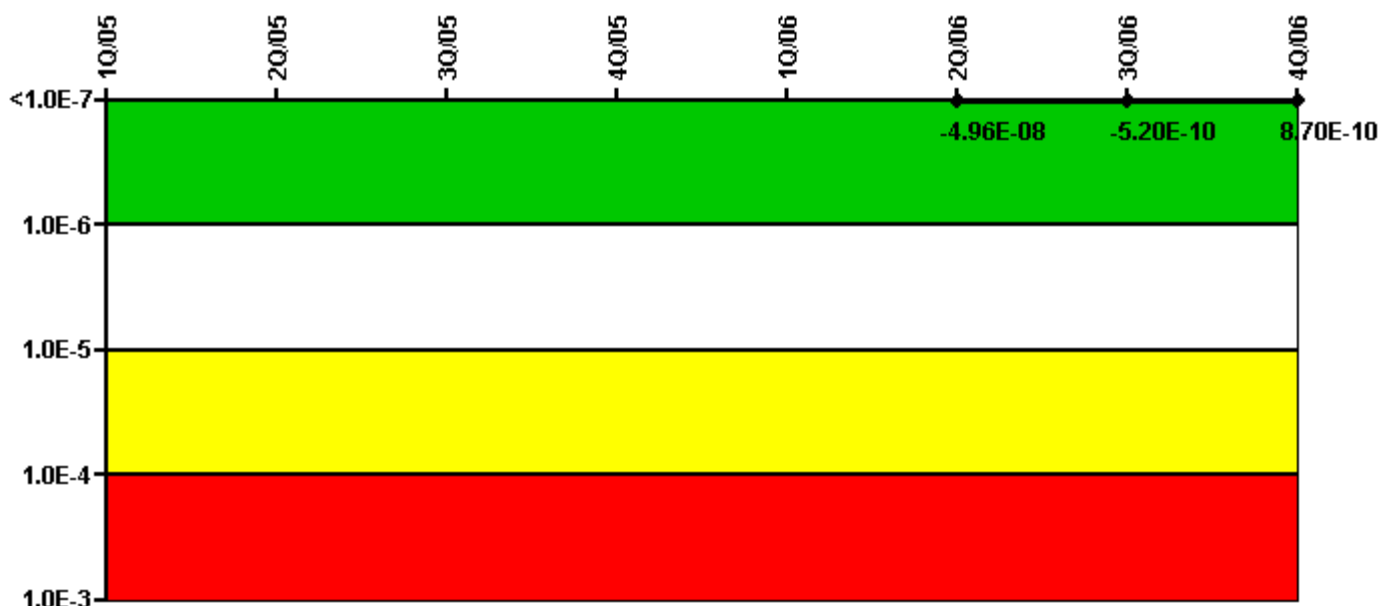
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI ( $\Delta$ CDF)						-7.80E-09	-7.80E-09	-7.80E-09
URI ( $\Delta$ CDF)						-2.30E-08	-2.20E-08	-2.20E-08
PLE						NO	NO	NO
Indicator value						-3.08E-08	-2.98E-08	-2.98E-08

Licensee Comments: none

### 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/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI ( $\Delta$ CDF)						4.50E-10	4.50E-10	3.50E-10
URI ( $\Delta$ CDF)						-5.00E-08	-9.70E-10	5.20E-10
PLE						NO	NO	NO
Indicator value						-4.96E-08	-5.20E-10	8.70E-10

Licensee Comments:

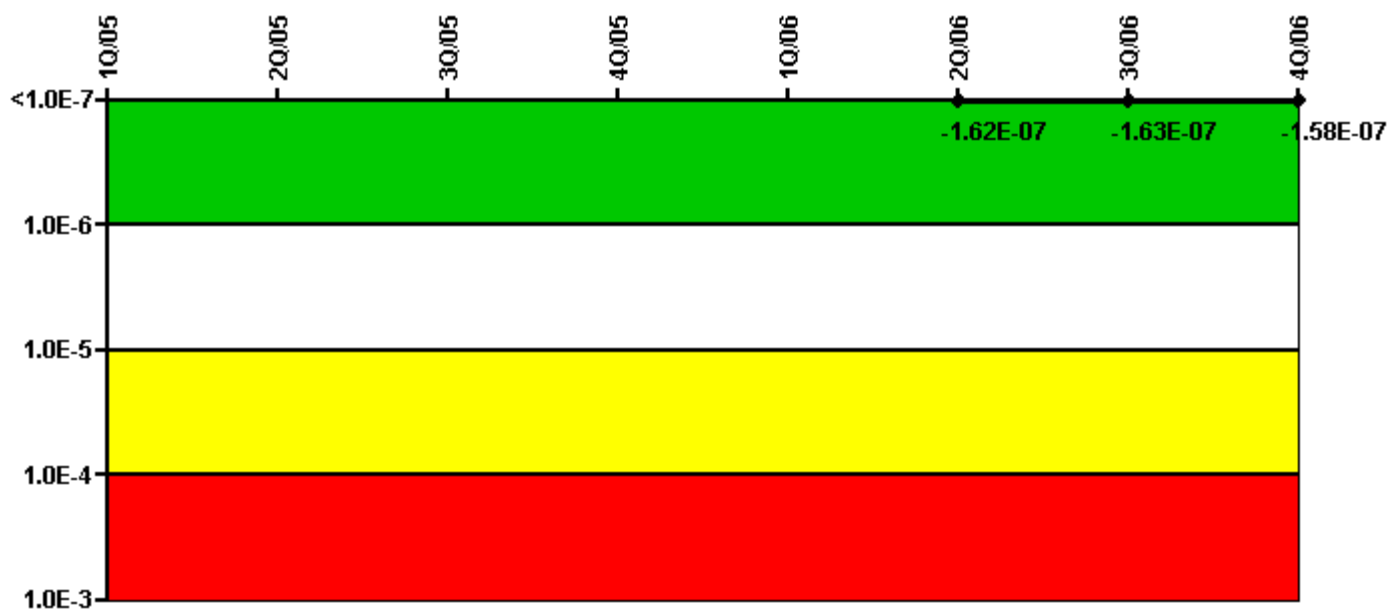
4Q/06: Changed PRA Parameter(s). Second and third quarter 2006 Mitigating System Performance Index (MSPI) data is revised due to minor changes to the Probabilistic Risk Assessment (PRA) baseline data as a result of incorporating comments from an NRC inspection in late October 2006. There is no safety significance associated with these changes to the PRA data. This revision does not affect the color of the current Performance Indicators nor the previously reported color of these PI's.

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).



### Mitigating Systems Performance Index, Cooling Water Systems



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

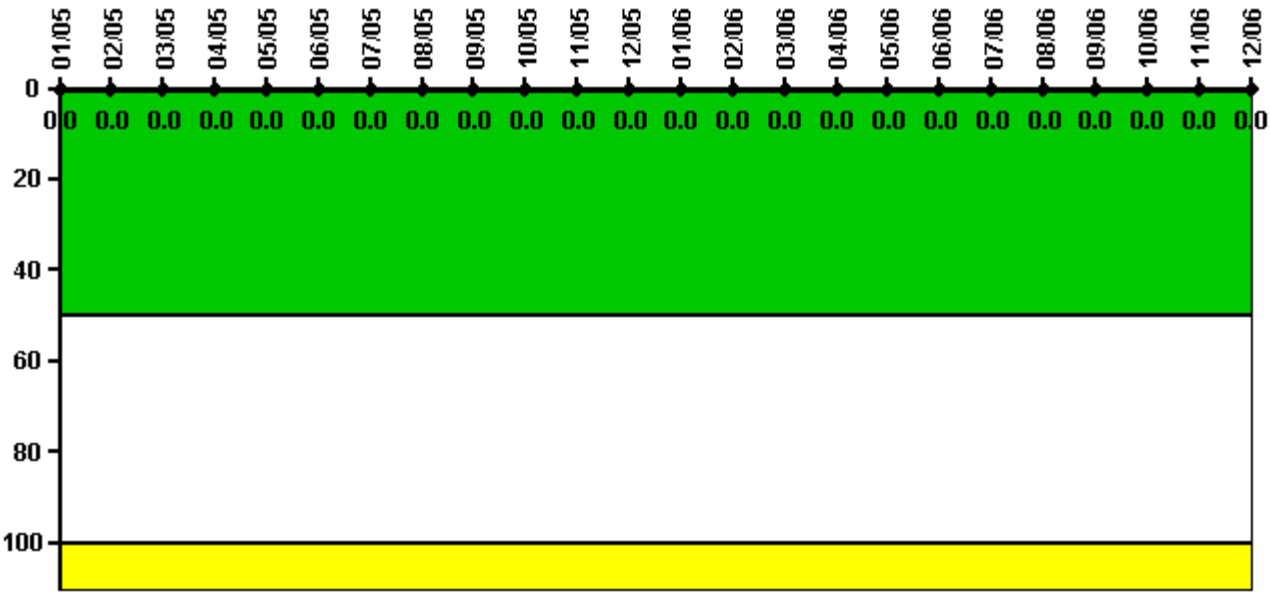
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (ΔCDF)						-1.50E-07	-1.50E-07	-1.50E-07
URI (ΔCDF)						-1.20E-08	-1.30E-08	-7.90E-09
PLE						NO	NO	NO
Indicator value						-1.62E-07	-1.63E-07	-1.58E-07

Licensee Comments:

4Q/06: Changed PRA Parameter(s). Second and third quarter 2006 Mitigating System Performance Index (MSPI) data is revised due to minor changes to the Probabilistic Risk Assessment (PRA) baseline data as a result of incorporating comments from an NRC inspection in late October 2006. There is no safety significance associated with these changes to the PRA data. This revision does not affect the color of the current Performance Indicators nor the previously reported color of these PI's.

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

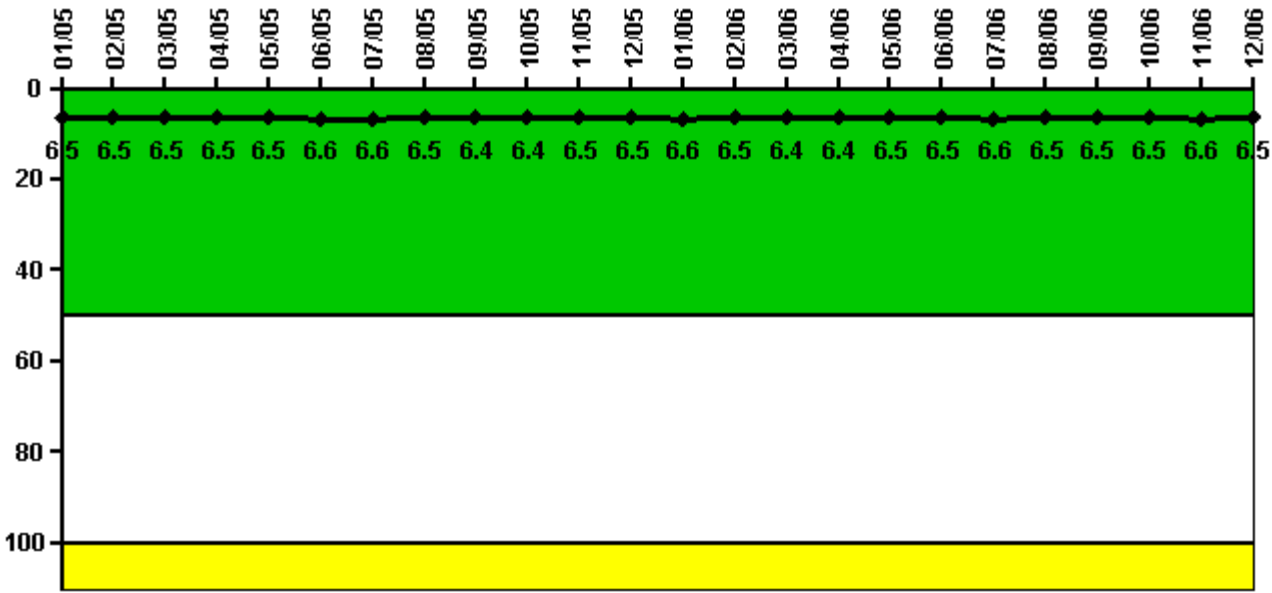
Reactor Coolant System Activity	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum activity	0.000005	0.000003	0.000006	0.000005	0.000005	0.000005	0.000005	0.000006	0.000006	0.000012	0.000005	0.000004
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum activity	0.000005	0.000005	0.000005	0.000002	0.000004	0.000003	0.000003	0.000003	0.000004	0.000006	0.000005	0.000004
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

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

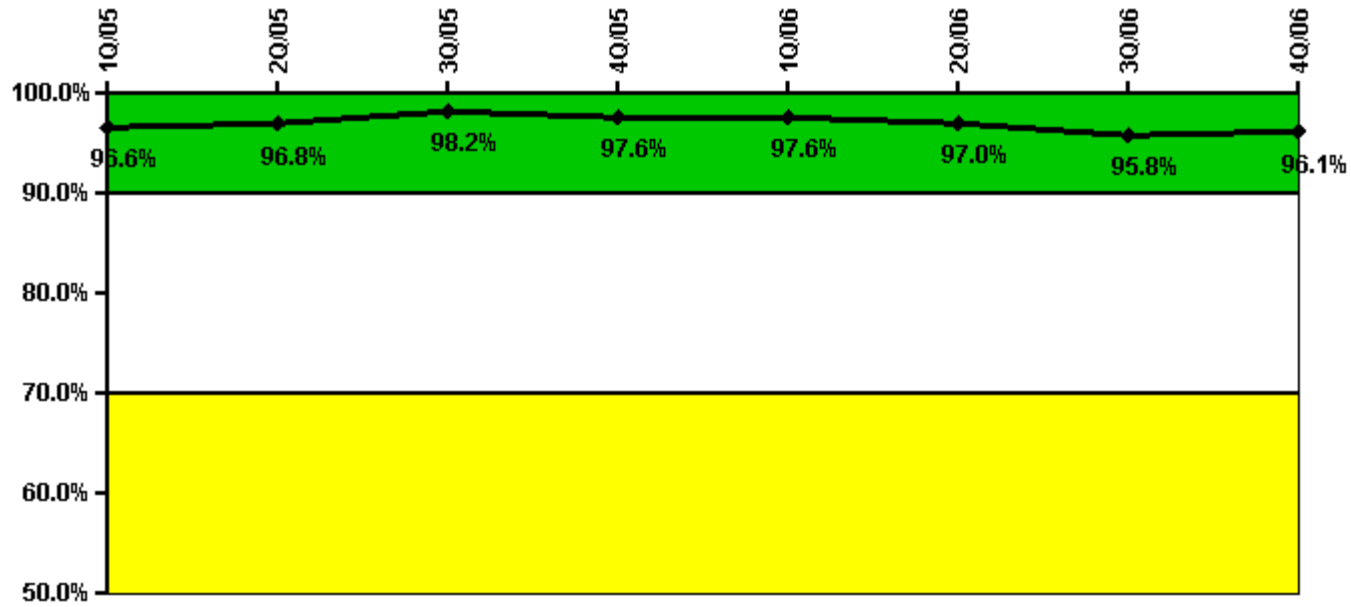
Reactor Coolant System Leakage	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum leakage	1.630	1.630	1.630	1.630	1.630	1.650	1.640	1.620	1.610	1.600	1.630	1.630
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	6.5	6.5	6.5	6.5	6.5	6.6	6.6	6.5	6.4	6.4	6.5	6.5

Reactor Coolant System Leakage	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum leakage	1.640	1.620	1.600	1.600	1.620	1.620	1.640	1.630	1.630	1.630	1.640	1.620
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	6.6	6.5	6.4	6.4	6.5	6.5	6.6	6.5	6.5	6.5	6.6	6.5

Licensee Comments: none

### Drill/Exercise Performance



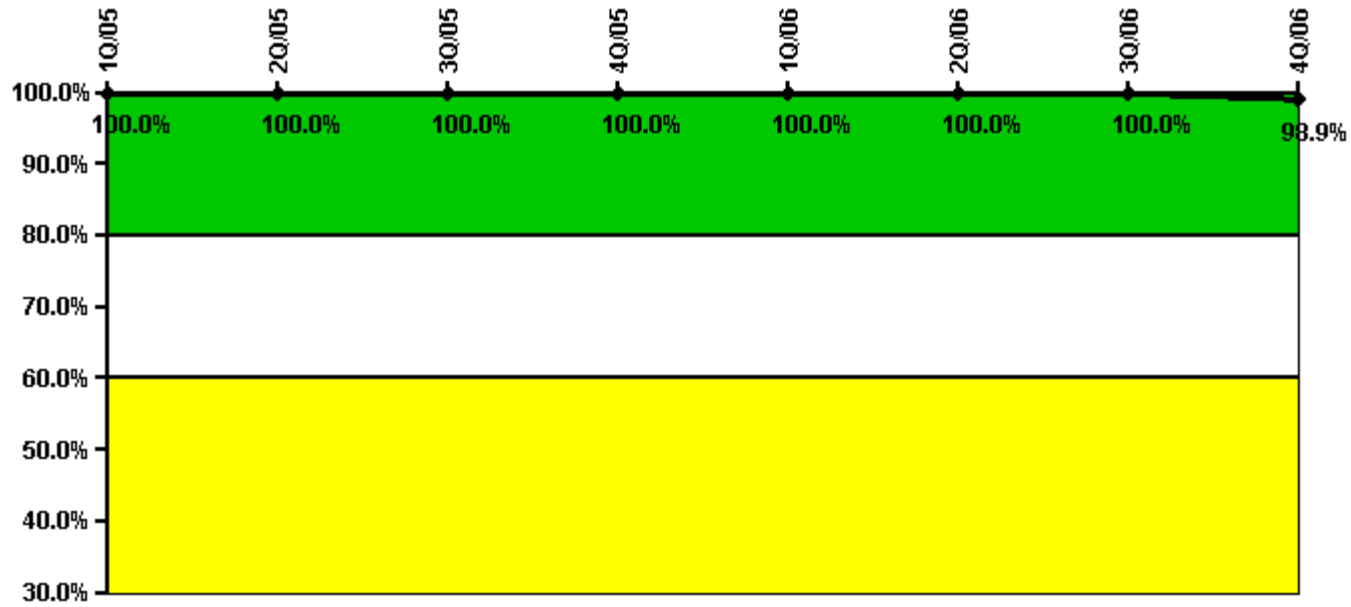
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Successful opportunities	12.0	51.0	30.0	10.0	10.0	8.0	18.0	8.0
Total opportunities	12.0	53.0	30.0	11.0	10.0	9.0	20.0	8.0
Indicator value	96.6%	96.8%	98.2%	97.6%	97.6%	97.0%	95.8%	96.1%

Licensee Comments: none

### ERO Drill Participation



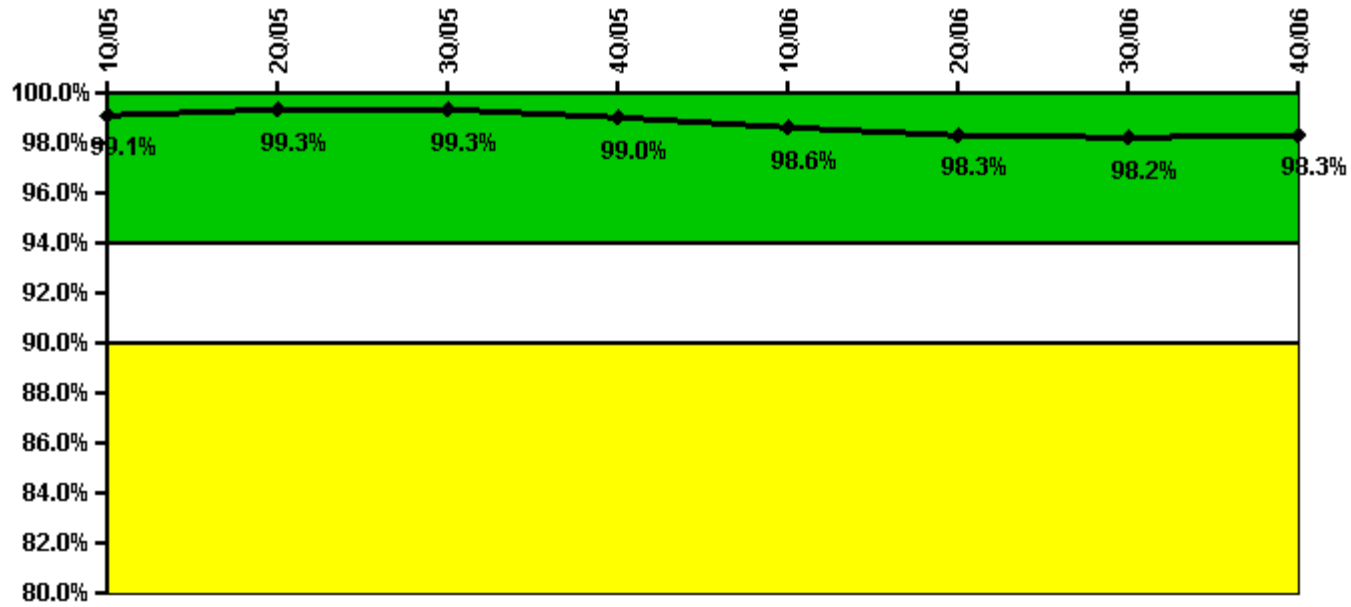
Thresholds: White < 80.0% Yellow < 60.0%

**Notes**

ERO Drill Participation	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Participating Key personnel	91.0	95.0	91.0	94.0	95.0	92.0	91.0	86.0
Total Key personnel	91.0	95.0	91.0	94.0	95.0	92.0	91.0	87.0
<b>Indicator value</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>98.9%</b>

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Successful siren-tests	894	778	884	880	880	660	880	882
Total sirens-tests	896	784	896	896	896	672	896	896
Indicator value	99.1%	99.3%	99.3%	99.0%	98.6%	98.3%	98.2%	98.3%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

Occupational Exposure Control Effectiveness	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
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	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Physical Protection](#) information not publicly available.