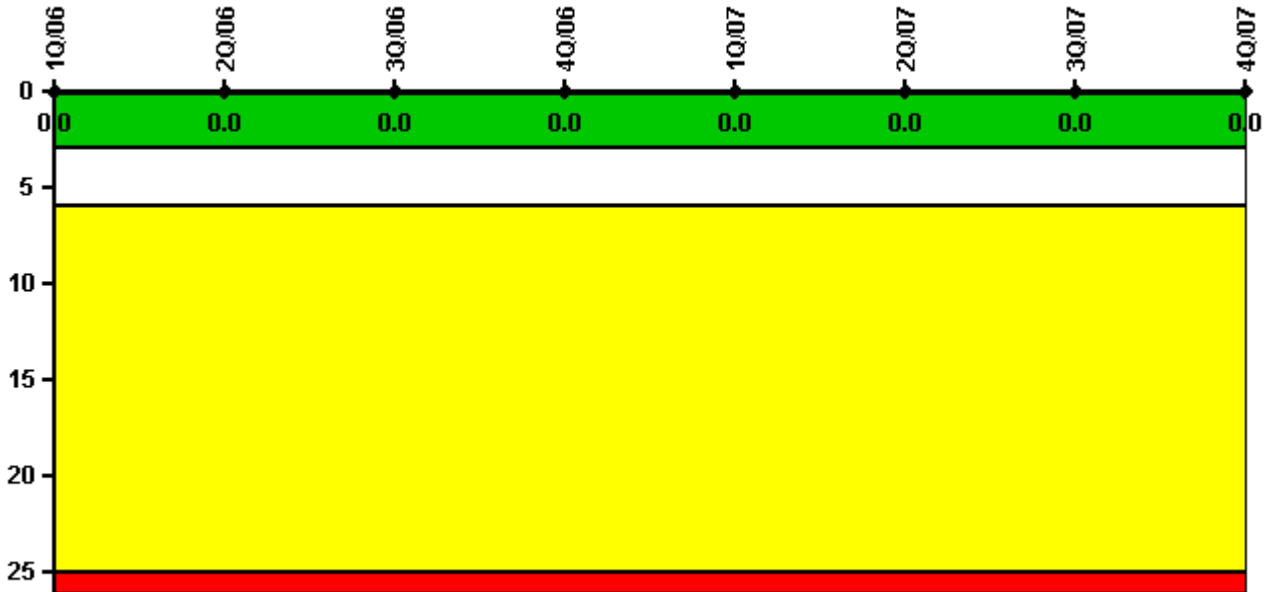


# Byron 1

## 4Q/2007 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

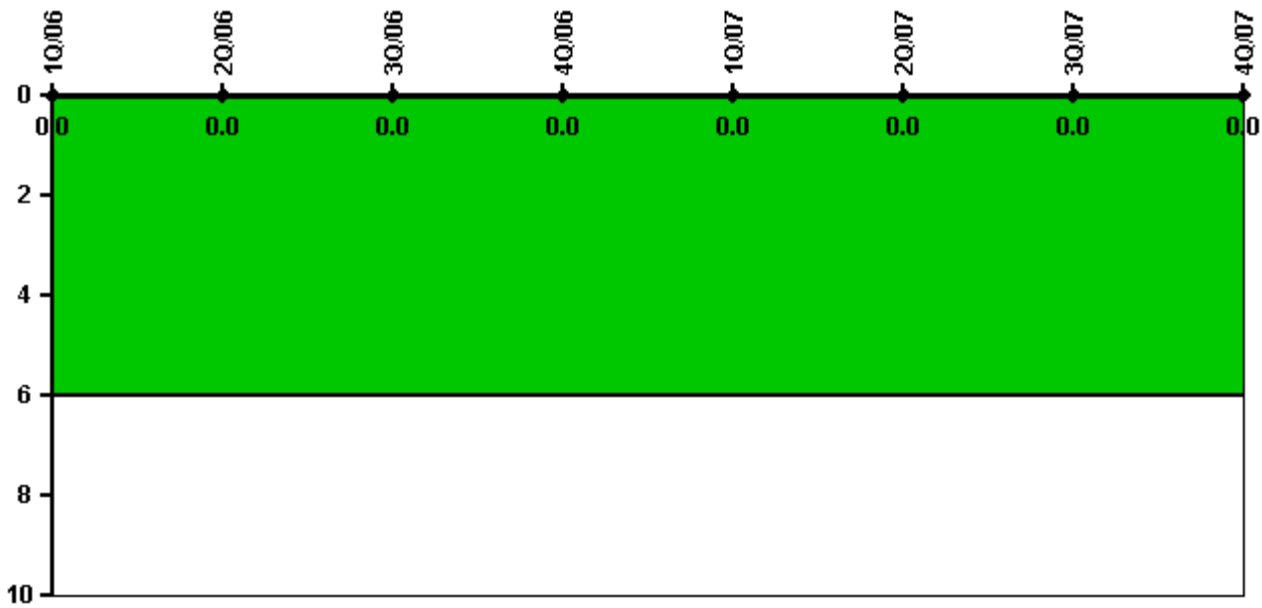
### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	1727.0	1855.6	2159.0	2184.0	2208.0	1944.2
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

---

## Unplanned Power Changes per 7000 Critical Hrs



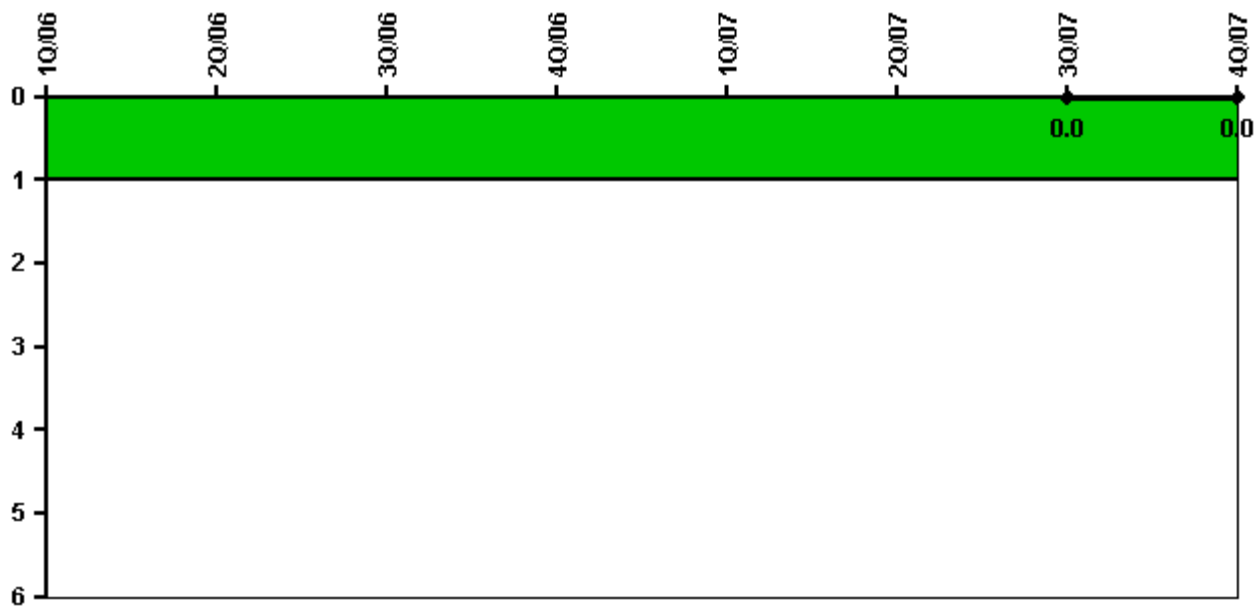
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	1727.0	1855.6	2159.0	2184.0	2208.0	1944.2
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

# Unplanned Scrams with Complications



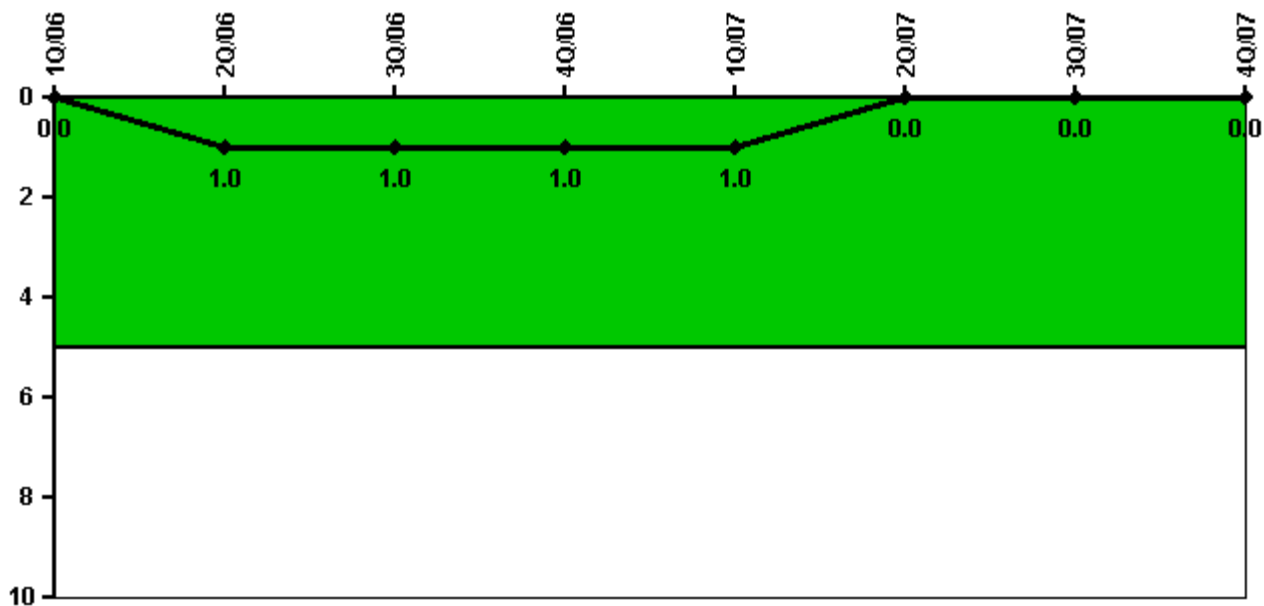
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Scrams with complications				0	0	0	0	0
<b>Indicator value</b>							<b>0.0</b>	<b>0.0</b>

Licensee Comments: none

## Safety System Functional Failures (PWR)



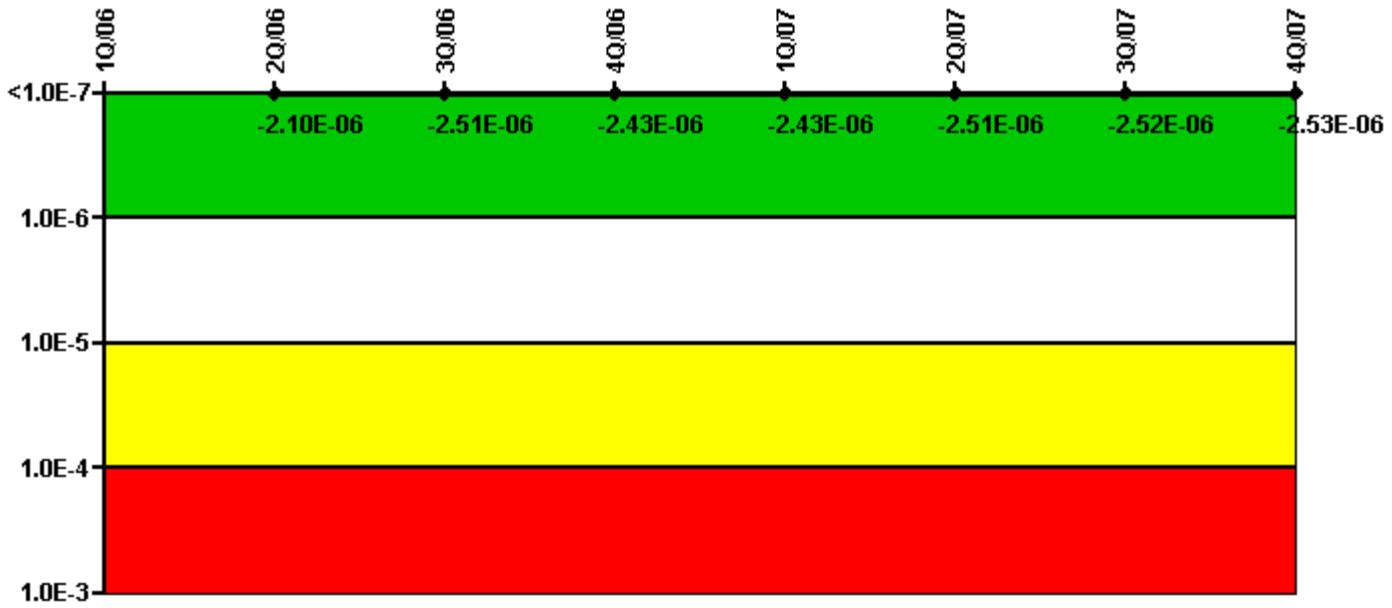
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Safety System Functional Failures	0	1	0	0	0	0	0	0
Indicator value	0	1	1	1	1	0	0	0

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



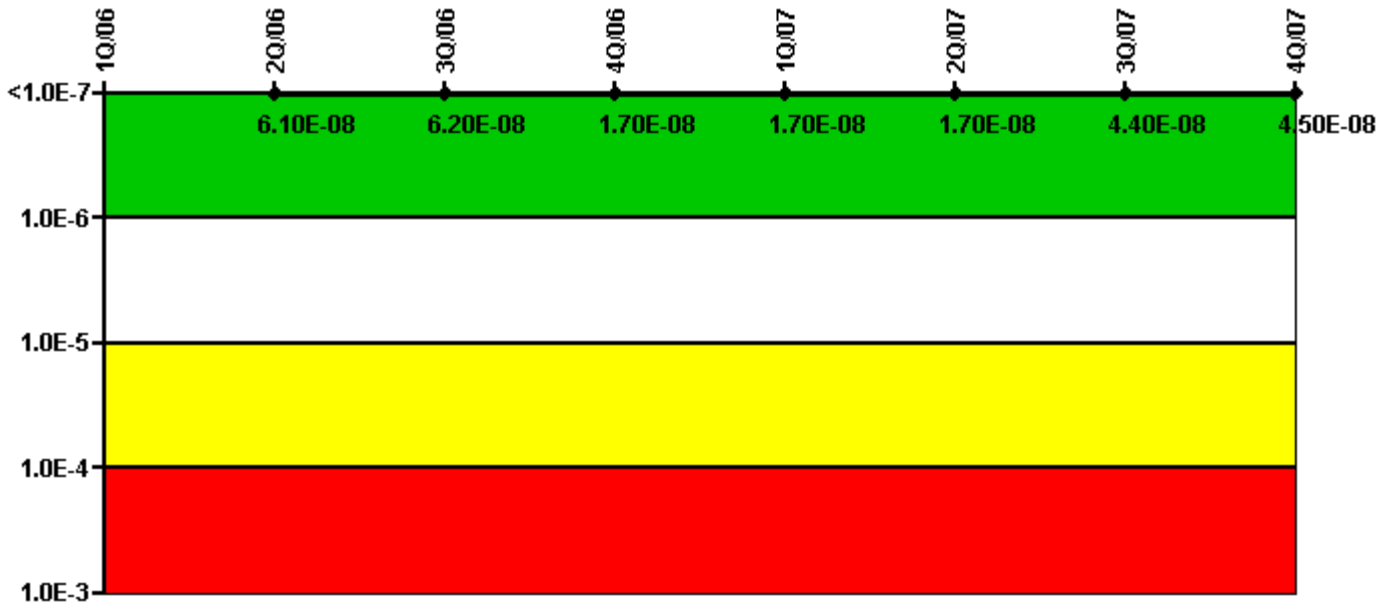
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		-9.30E-10	-6.70E-09	7.30E-08	7.30E-08	8.90E-08	7.80E-08	7.50E-08
URI ( $\Delta$ CDF)		-2.10E-06	-2.50E-06	-2.50E-06	-2.50E-06	-2.60E-06	-2.60E-06	-2.60E-06
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		-2.10E-06	-2.51E-06	-2.43E-06	-2.43E-06	-2.51E-06	-2.52E-06	-2.53E-06

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



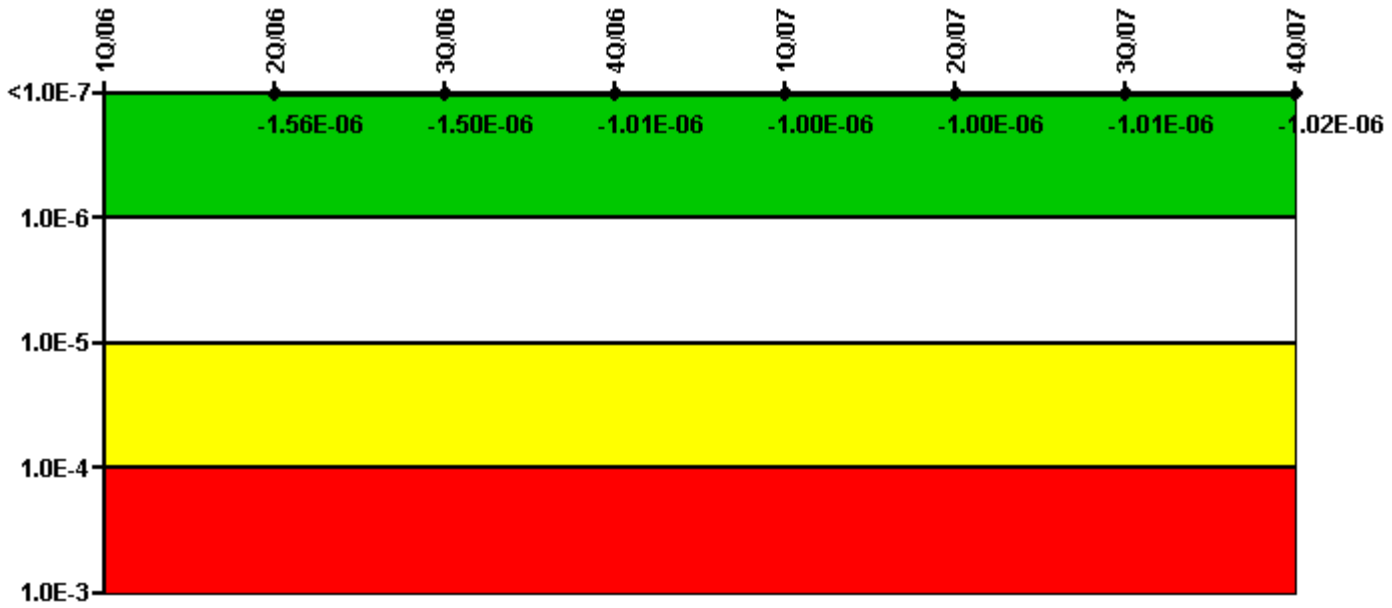
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI (ΔCDF)		4.50E-08	4.60E-08	3.10E-08	3.10E-08	3.10E-08	5.80E-08	5.90E-08
URI (ΔCDF)		1.60E-08	1.60E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		6.10E-08	6.20E-08	1.70E-08	1.70E-08	1.70E-08	4.40E-08	4.50E-08

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



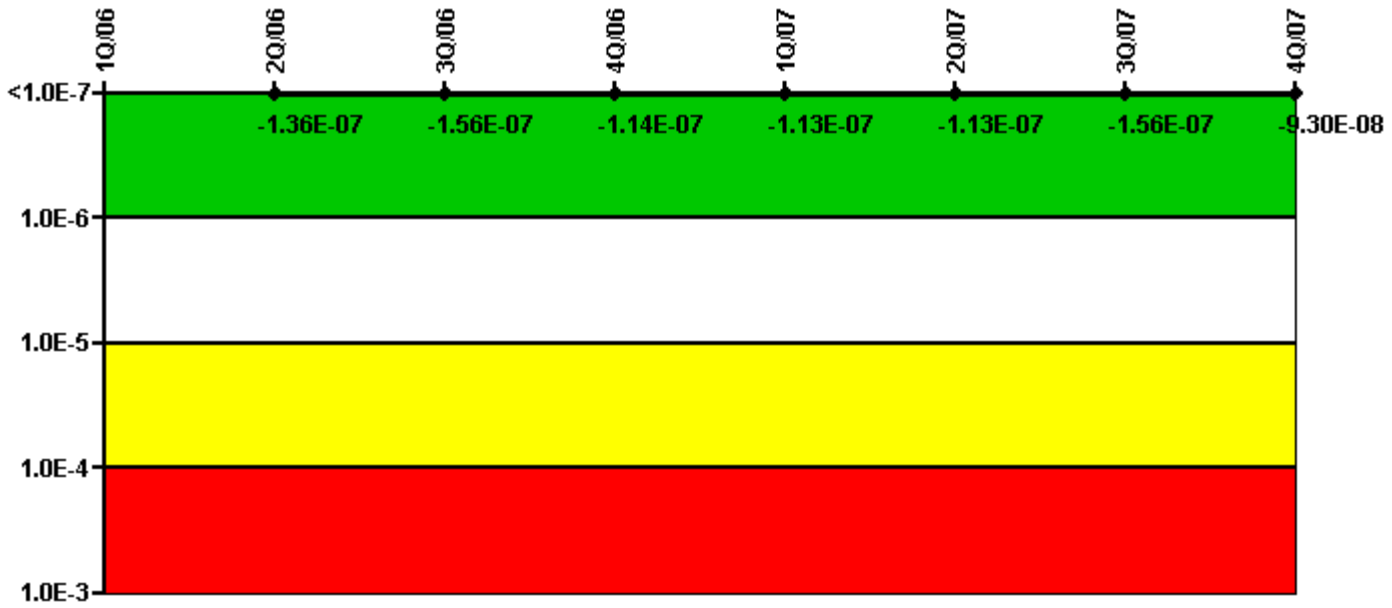
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		-3.60E-07	-3.00E-07	8.70E-08	1.00E-07	9.70E-08	8.80E-08	8.50E-08
URI ( $\Delta$ CDF)		-1.20E-06	-1.20E-06	-1.10E-06	-1.10E-06	-1.10E-06	-1.10E-06	-1.10E-06
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		-1.56E-06	-1.50E-06	-1.01E-06	-1.00E-06	-1.00E-06	-1.01E-06	-1.02E-06

Licensee Comments: none

# Mitigating Systems Performance Index, Residual Heat Removal System



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

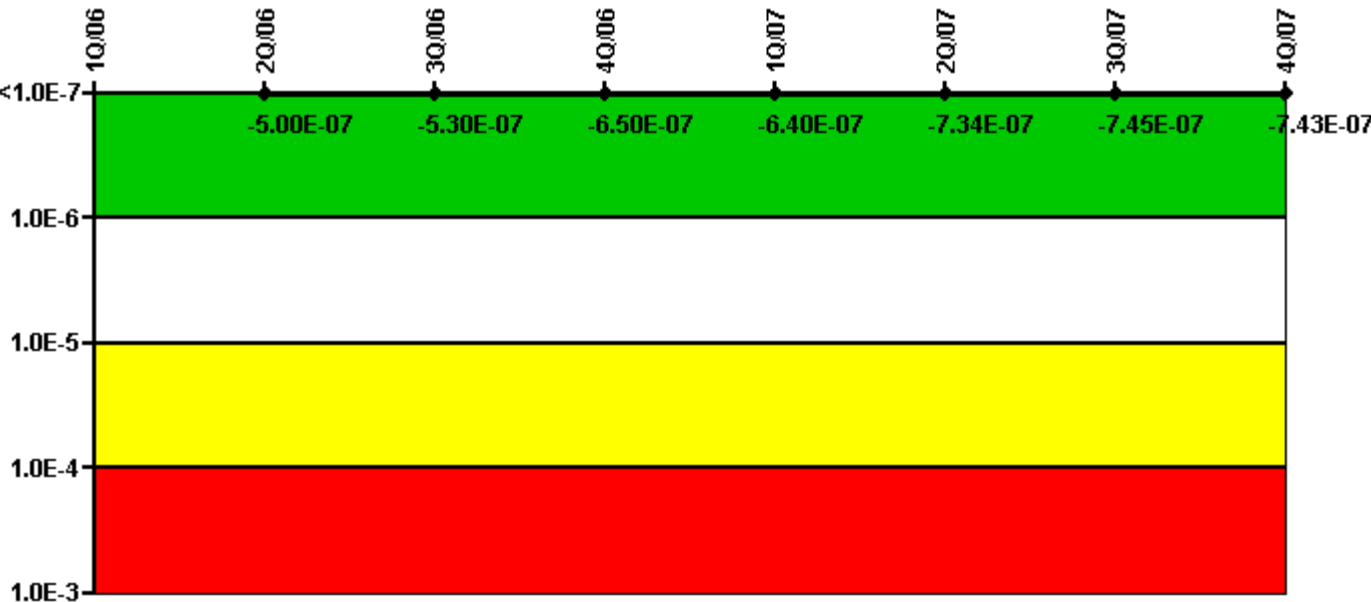
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		$-2.60E-08$	$-2.60E-08$	$1.60E-08$	$1.70E-08$	$1.70E-08$	$-2.60E-08$	$4.70E-08$
URI ( $\Delta$ CDF)		$-1.10E-07$	$-1.30E-07$	$-1.30E-07$	$-1.30E-07$	$-1.30E-07$	$-1.30E-07$	$-1.40E-07$
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		$-1.36E-07$	$-1.56E-07$	$-1.14E-07$	$-1.13E-07$	$-1.13E-07$	$-1.56E-07$	$-9.30E-08$

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



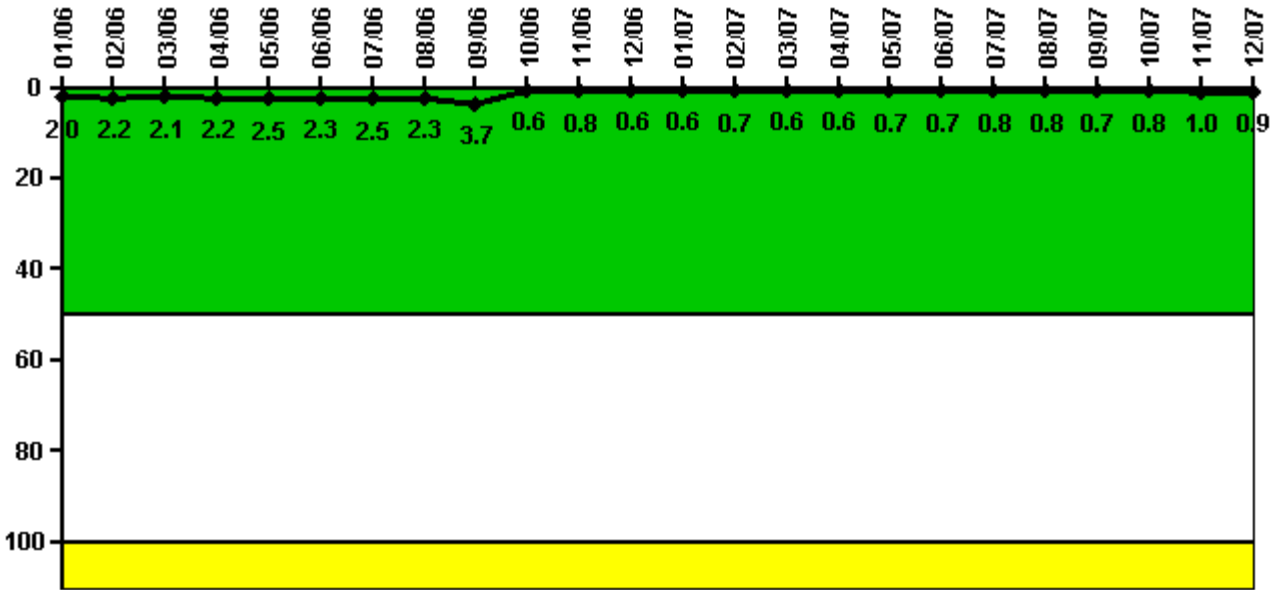
Thresholds: White >  $1.00E-6$  Yellow >  $1.00E-5$  Red >  $1.00E-4$

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		$2.50E-07$	$2.20E-07$	$1.00E-07$	$1.10E-07$	$2.60E-08$	$1.50E-08$	$1.70E-08$
URI ( $\Delta$ CDF)		$-7.50E-07$	$-7.50E-07$	$-7.50E-07$	$-7.50E-07$	$-7.60E-07$	$-7.60E-07$	$-7.60E-07$
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		$-5.00E-07$	$-5.30E-07$	$-6.50E-07$	$-6.40E-07$	$-7.34E-07$	$-7.45E-07$	$-7.43E-07$

Licensee Comments: none

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

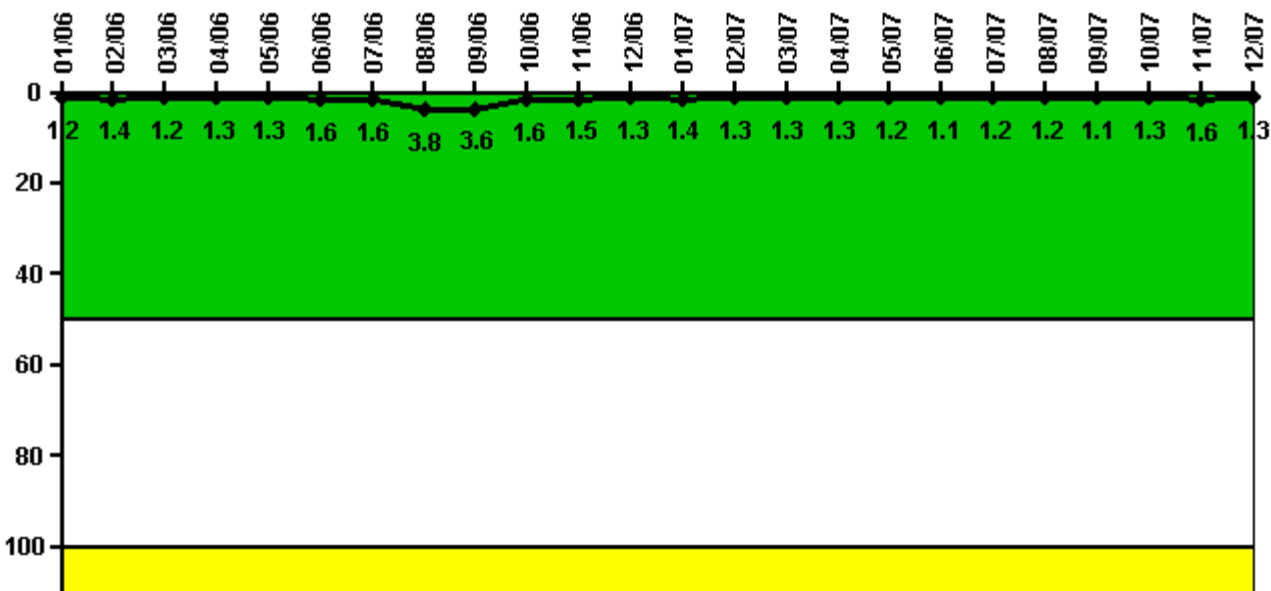
Reactor Coolant System Activity	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum activity	0.020200	0.021500	0.021000	0.021600	0.024600	0.022800	0.025400	0.023300	0.037300	0.005910	0.007650	0.005730
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	2.0	2.2	2.1	2.2	2.5	2.3	2.5	2.3	3.7	0.6	0.8	0.6

Reactor Coolant System Activity	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum activity	0.006490	0.006950	0.006230	0.006430	0.007010	0.007260	0.007640	0.007650	0.007380	0.008000	0.009550	0.008750
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	0.6	0.7	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.8	1.0	0.9

Licensee Comments: none

# Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

## Notes

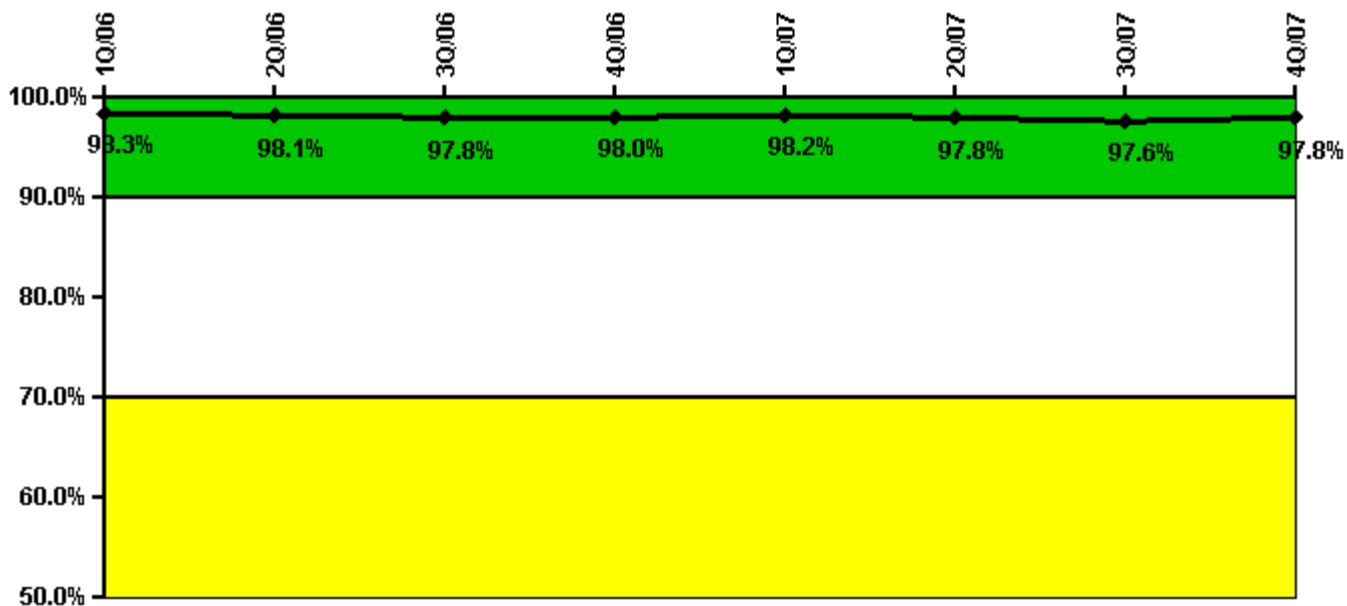
Reactor Coolant System Leakage	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum leakage	0.115	0.135	0.120	0.125	0.128	0.158	0.164	0.377	0.361	0.159	0.149	0.131
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.2	1.4	1.2	1.3	1.3	1.6	1.6	3.8	3.6	1.6	1.5	1.3

Reactor Coolant System Leakage	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum leakage	0.136	0.128	0.125	0.126	0.118	0.113	0.121	0.115	0.112	0.132	0.160	0.134
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	1.4	1.3	1.3	1.3	1.2	1.1	1.2	1.2	1.1	1.3	1.6	1.3

Licensee Comments: none

## Drill/Exercise Performance



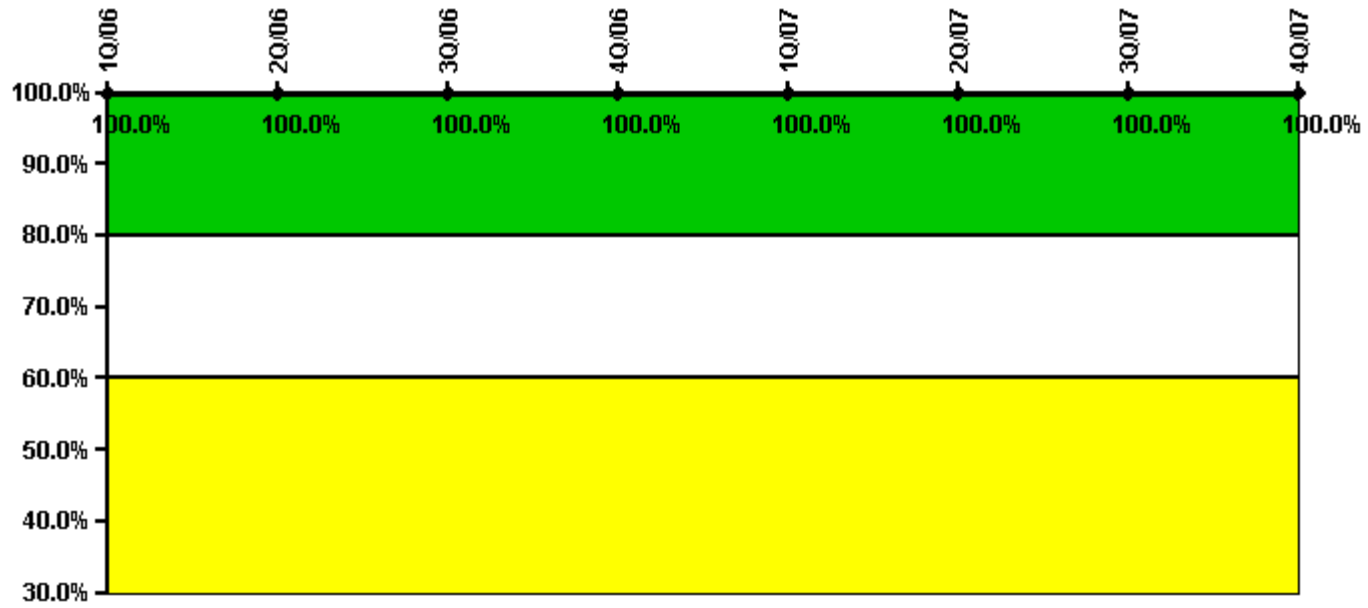
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Successful opportunities	22.0	12.0	136.0	40.0	10.0	45.0	43.0	89.0
Total opportunities	22.0	12.0	139.0	40.0	10.0	49.0	44.0	90.0
<b>Indicator value</b>	<b>98.3%</b>	<b>98.1%</b>	<b>97.8%</b>	<b>98.0%</b>	<b>98.2%</b>	<b>97.8%</b>	<b>97.6%</b>	<b>97.8%</b>

Licensee Comments: none

# ERO Drill Participation



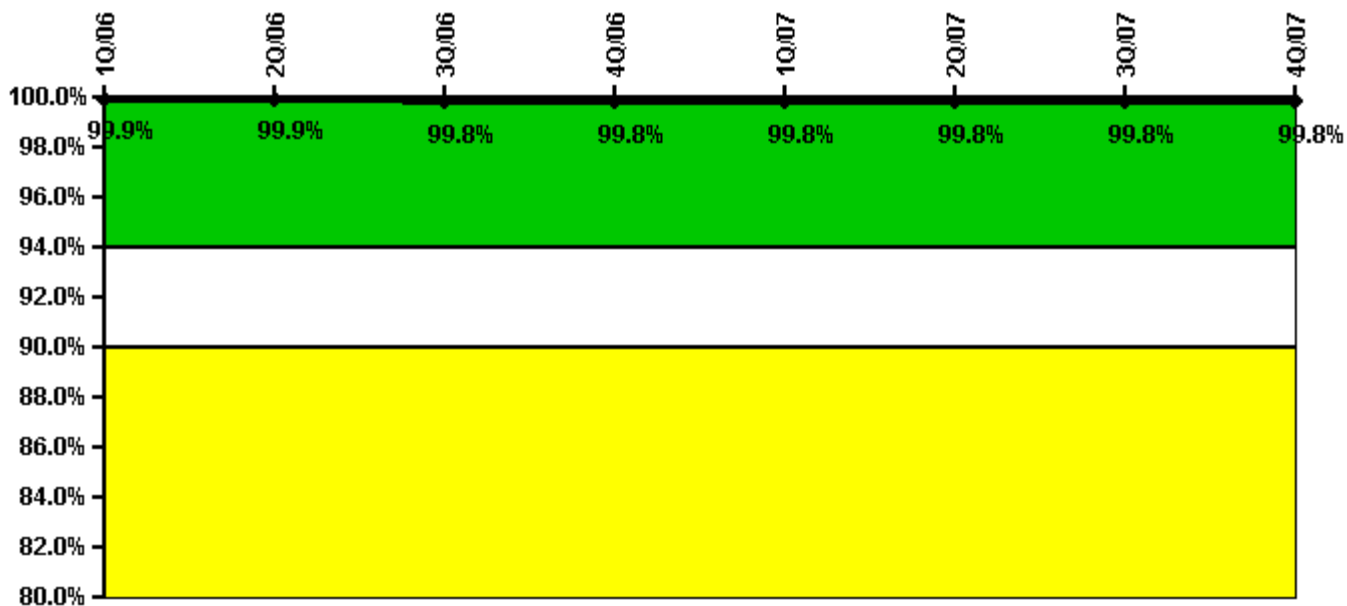
Thresholds: White < 80.0% Yellow < 60.0%

## Notes

ERO Drill Participation	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Participating Key personnel	78.0	78.0	76.0	76.0	71.0	66.0	75.0	75.0
Total Key personnel	78.0	78.0	76.0	76.0	71.0	66.0	75.0	75.0
<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>100.0%</b>

Licensee Comments: none

# Alert & Notification System



**Thresholds: White < 94.0% Yellow < 90.0%**

## Notes

Alert & Notification System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Successful siren-tests	6105	6005	5988	5915	6008	5985	5988	5997
Total sirens-tests	6110	6012	6012	5922	6016	6005	6009	6007
<b>Indicator value</b>	<b>99.9%</b>	<b>99.9%</b>	<b>99.8%</b>	<b>99.8%</b>	<b>99.8%</b>	<b>99.8%</b>	<b>99.8%</b>	<b>99.8%</b>

Licensee Comments: none

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# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

## Notes

Occupational Exposure Control Effectiveness	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
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/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
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.

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

Last Modified: February 4, 2008