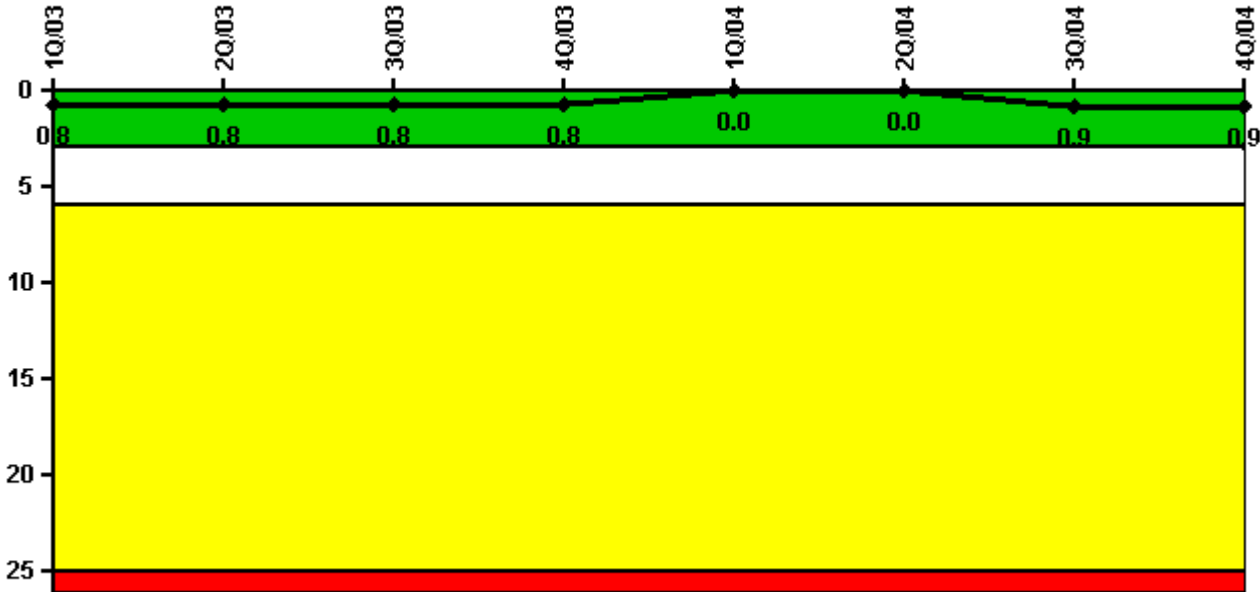


# Brunswick 1

## 4Q/2004 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/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned scrams	1.0	0	0	0	0	0	1.0	0
Critical hours	2134.6	2183.0	2162.1	2209.0	1403.3	2183.0	2137.2	2209.0
Indicator value	0.8	0.8	0.8	0.8	0	0	0.9	0.9

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



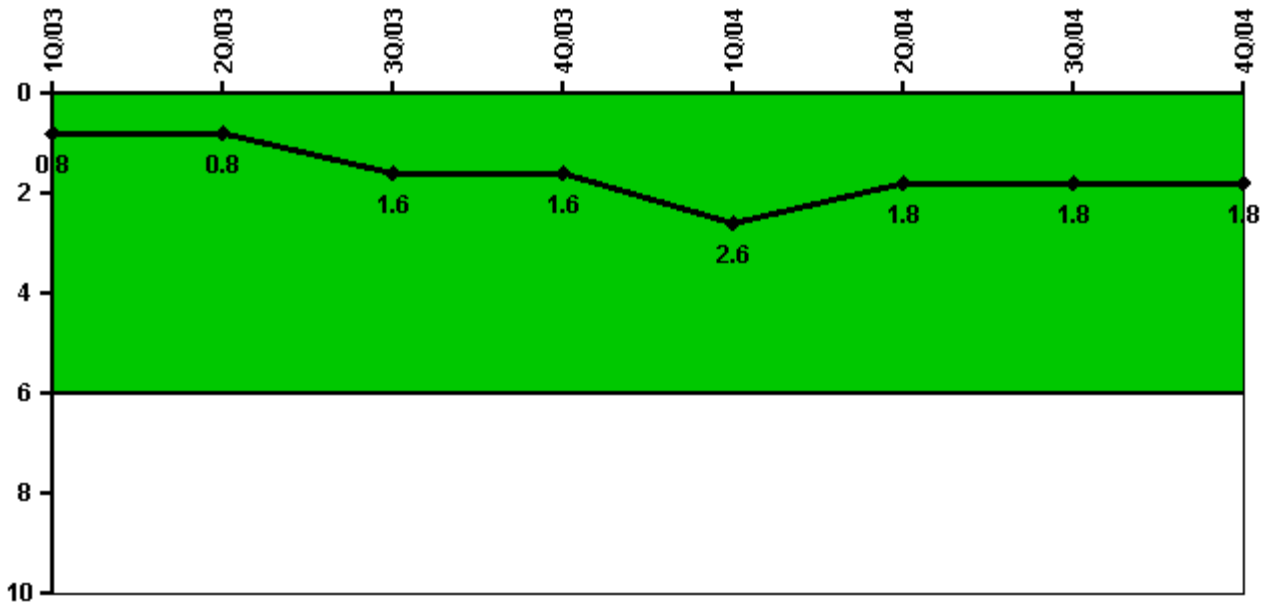
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
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



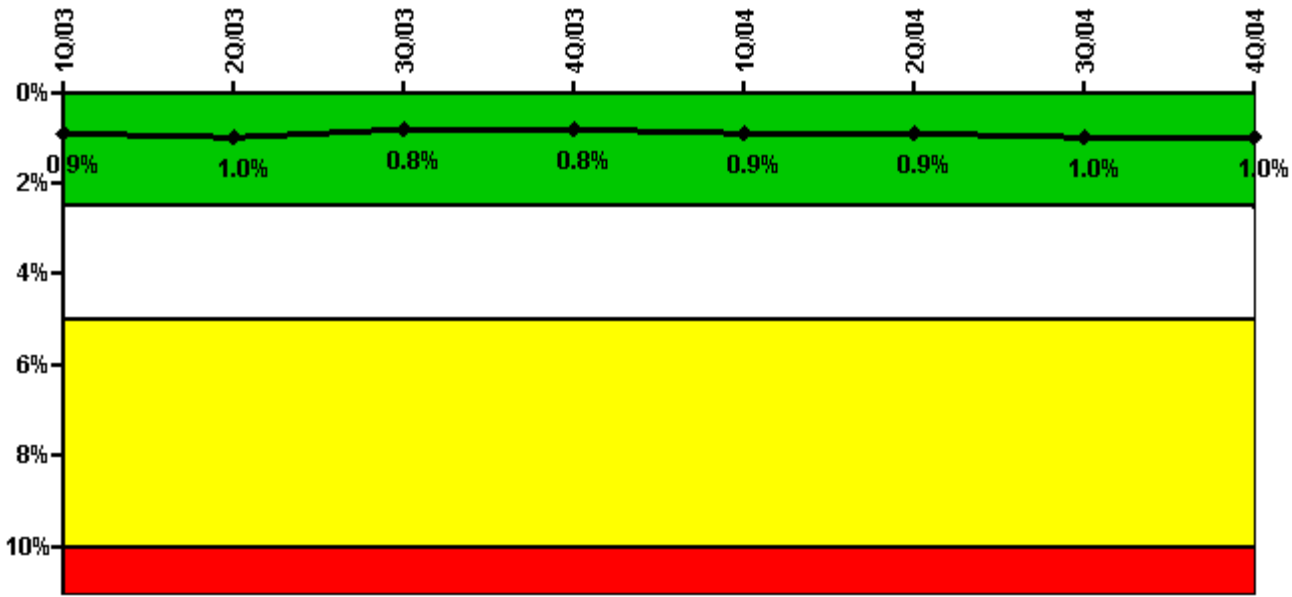
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned power changes	0	1.0	1.0	0	1.0	0	1.0	0
Critical hours	2134.6	2183.0	2162.1	2209.0	1403.3	2183.0	2137.2	2209.0
Indicator value	0.8	0.8	1.6	1.6	2.6	1.8	1.8	1.8

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

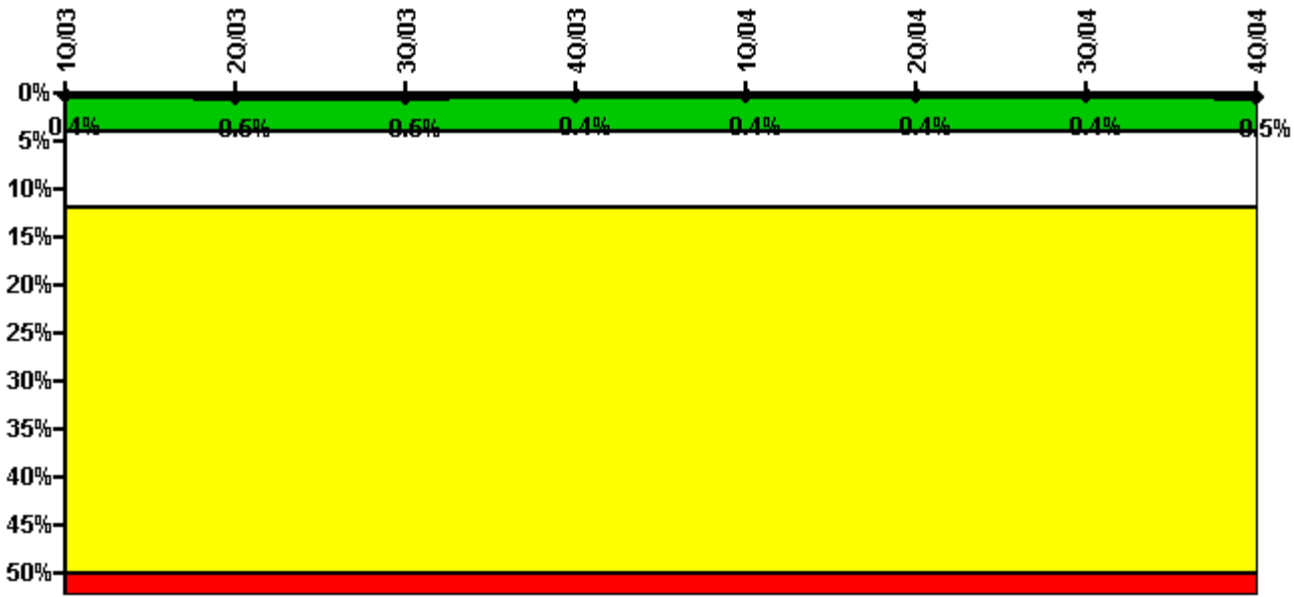
#### Notes

Safety System Unavailability, Emergency AC Power	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	2.39	43.43	5.25	1.12	19.05	1.48	3.71	1.30
Unplanned unavailable hours	0	0	0	0	1.90	0.90	0	0
Fault exposure hours	0	0	0	0	1.80	55.74	124.21	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	2.33	14.54	1.08	16.61	0.65	0.70	6.63	12.15
Unplanned unavailable hours	0	0	0	0	0	0	0.68	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
<b>Indicator value</b>	<b>0.9%</b>	<b>1.0%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.0%</b>

Licensee Comments:

3Q/04: Past operability evaluation (LER 1-2004-001) revised fault exposure hours in August 2004 from 70.56 to 63.39 hrs. Minor impact on SSU value and still within green band.

### Safety System Unavailability, High Pressure Injection System (HPCI)



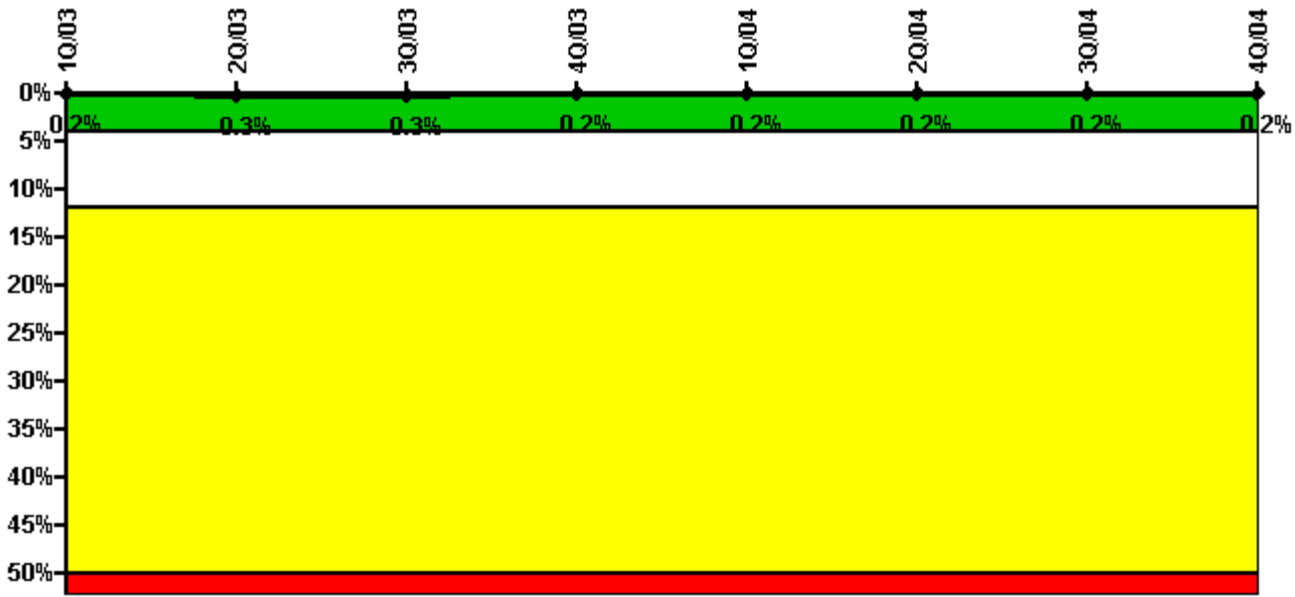
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPCI)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	19.80	14.30	9.00	15.80	0.30	1.00	9.80	19.30
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	1.80	0	0	0.28	0.43	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2134.60	2183.00	2162.10	2209.00	1403.30	2183.00	2137.22	2209.00
<b>Indicator value</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>

Licensee Comments: none

### Safety System Unavailability, Heat Removal System (RCIC)



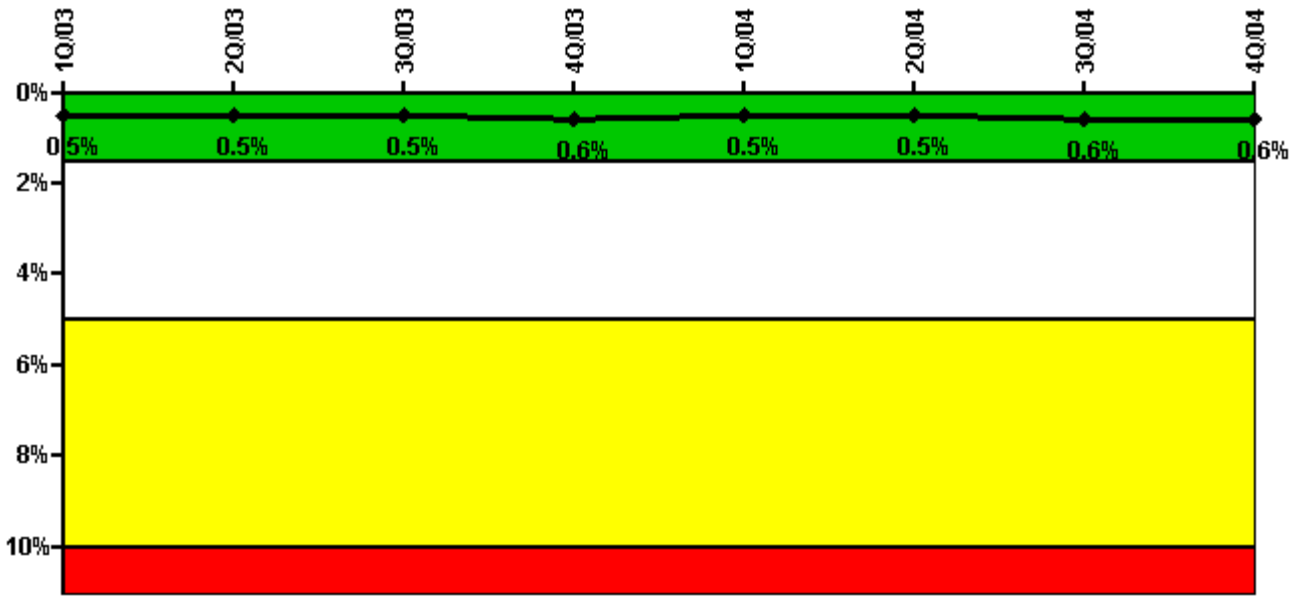
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

#### Notes

Safety System Unavailability, Heat Removal System (RCIC)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	0.30	32.10	0.40	0.50	6.80	1.50	1.10	7.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2134.60	2183.00	2162.10	2209.00	1403.30	2183.00	2137.22	2209.00
<b>Indicator value</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



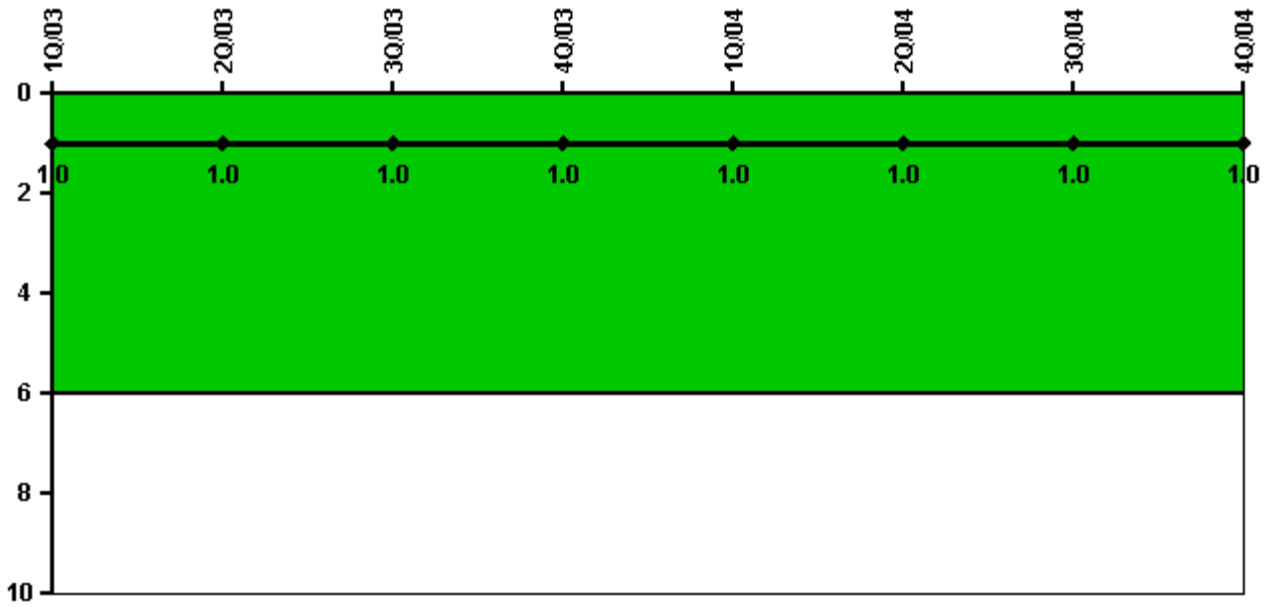
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, Residual Heat Removal System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	11.80	0	18.60	0	0	2.30	43.30	12.60
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	36.10	0	14.00	68.90	0	1.10	52.90	0
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

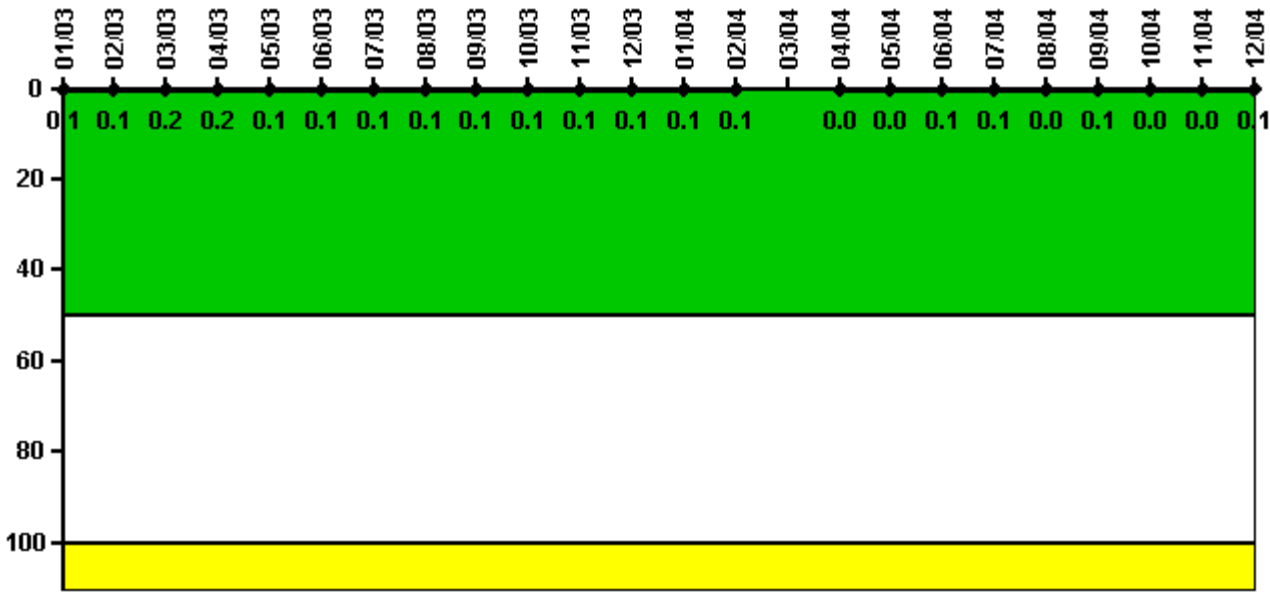
#### Notes

Safety System Functional Failures (BWR)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Safety System Functional Failures	0	0	0	1	0	0	0	1
Indicator value	1	1	1	1	1	1	1	1

Licensee Comments: none



### Reactor Coolant System Activity



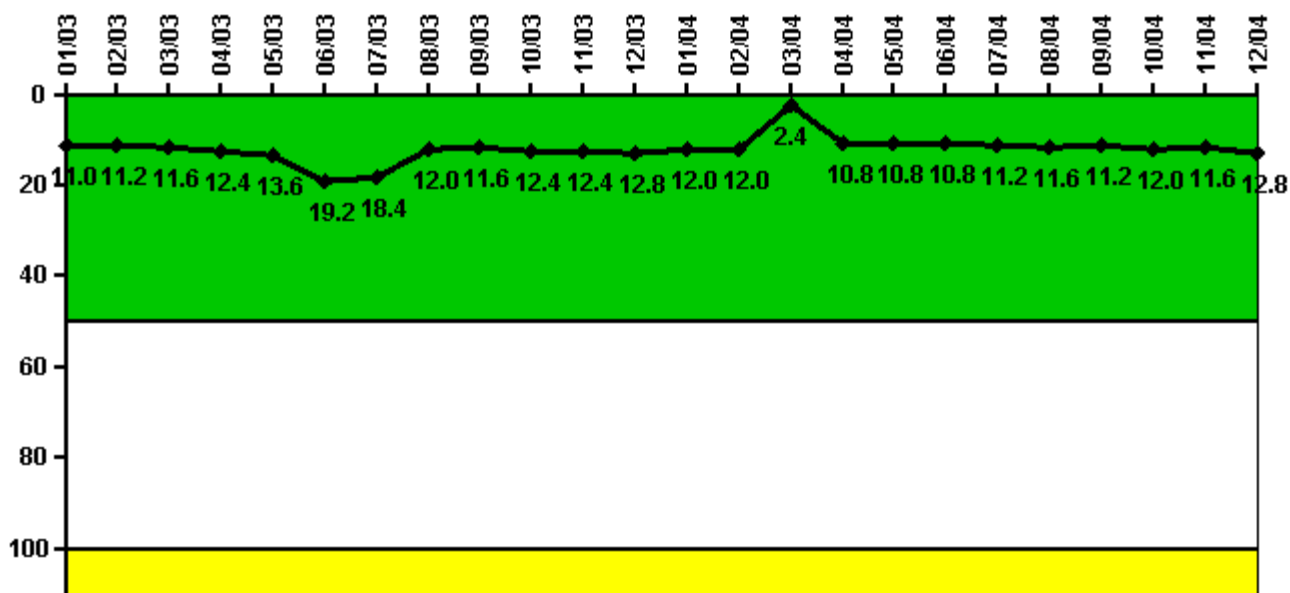
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.000278	0.000296	0.000326	0.000349	0.000278	0.000289	0.000267	0.000274	0.000282	0.000274	0.000260	0.000281
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	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Reactor Coolant System Activity	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum activity	0.000267	0.000244	N/A	0.000081	0.000063	0.000174	0.000105	0.000097	0.000103	0.000099	0.000091	0.000117
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	0.1	0.1	N/A	0	0	0.1	0.1	0	0.1	0	0	0.1

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

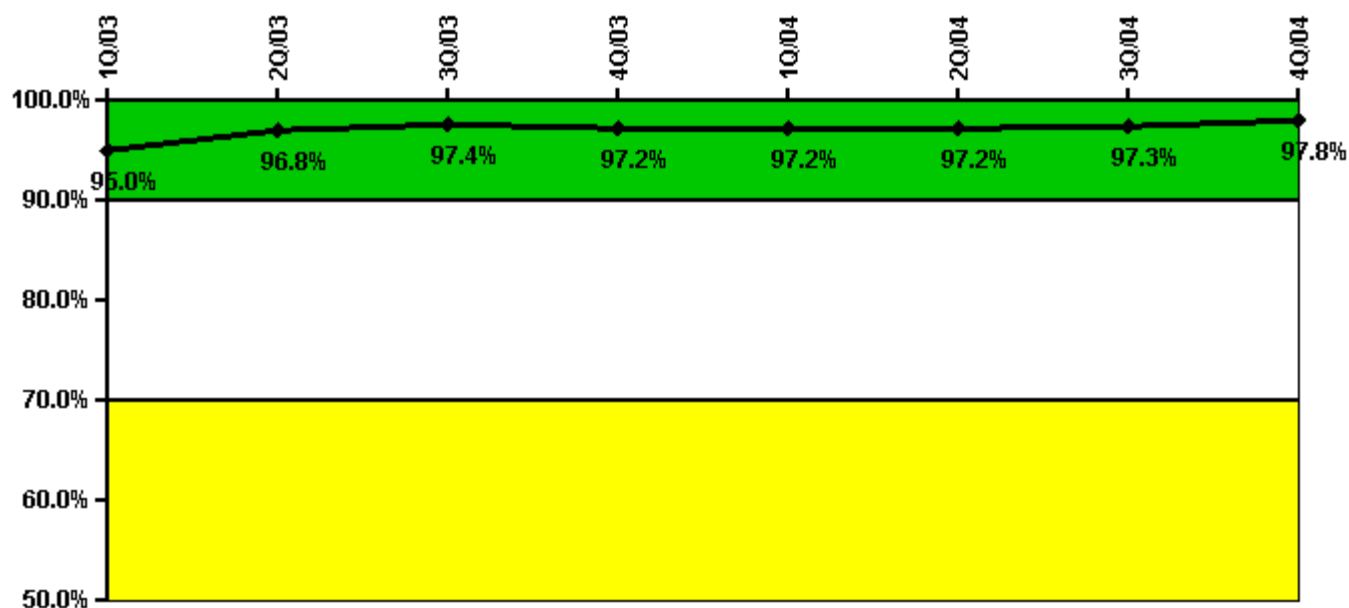
Reactor Coolant System Leakage	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum leakage	2.760	2.792	2.894	3.100	3.400	4.800	4.600	3.000	2.900	3.100	3.100	3.200
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	11.0	11.2	11.6	12.4	13.6	19.2	18.4	12.0	11.6	12.4	12.4	12.8

Reactor Coolant System Leakage	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum leakage	3.000	3.000	0.600	2.700	2.700	2.700	2.800	2.900	2.800	3.000	2.900	3.200
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	12.0	12.0	2.4	10.8	10.8	10.8	11.2	11.6	11.2	12.0	11.6	12.8

Licensee Comments: none

### Drill/Exercise Performance



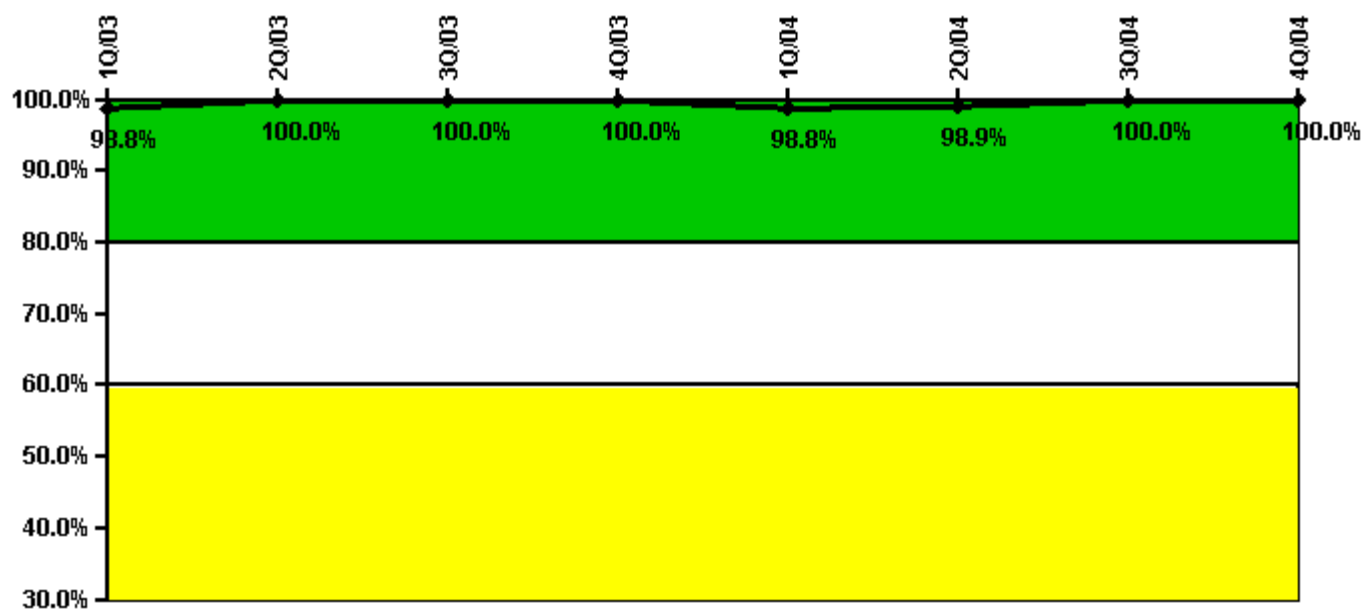
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful opportunities	8.0	51.0	36.0	10.0	0	0	55.0	20.0
Total opportunities	8.0	52.0	37.0	10.0	0	0	57.0	20.0
Indicator value	95.0%	96.8%	97.4%	97.2%	97.2%	97.2%	97.3%	97.8%

Licensee Comments: none

### ERO Drill Participation



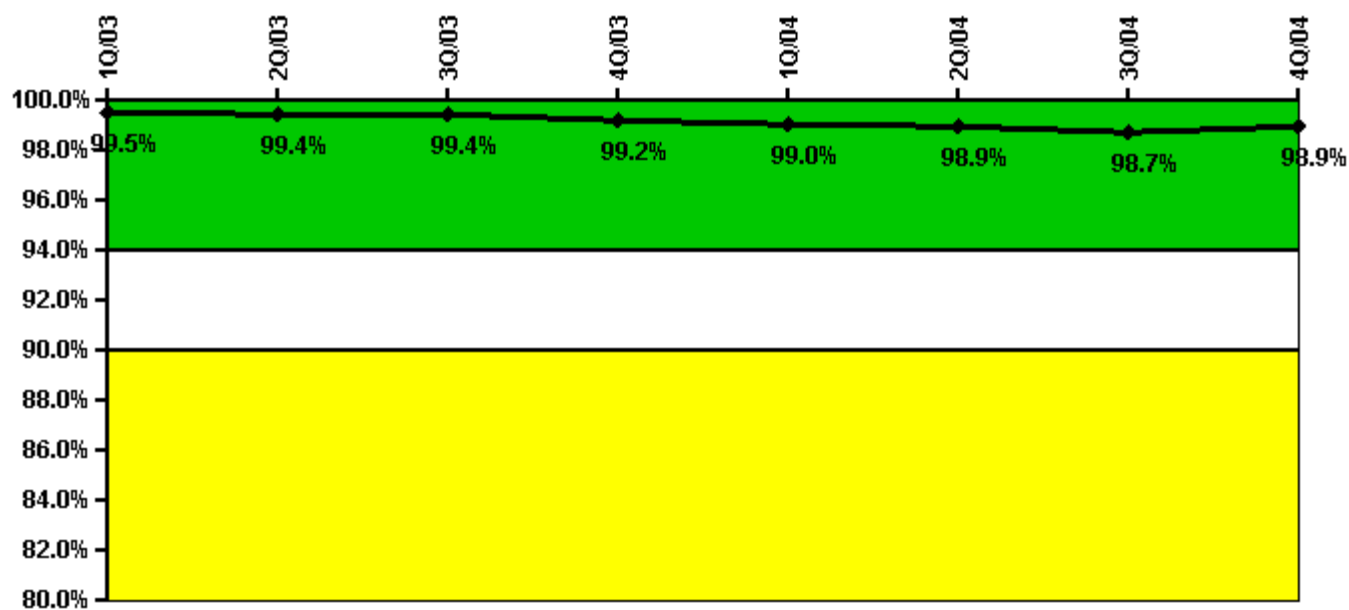
Thresholds: White < 80.0% Yellow < 60.0%

**Notes**

ERO Drill Participation	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Participating Key personnel	81.0	82.0	93.0	88.0	83.0	86.0	93.0	81.0
Total Key personnel	82.0	82.0	93.0	88.0	84.0	87.0	93.0	81.0
<b>Indicator value</b>	<b>98.8%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>98.8%</b>	<b>98.9%</b>	<b>100.0%</b>	<b>100.0%</b>

Licensee Comments: none

### Alert & Notification System



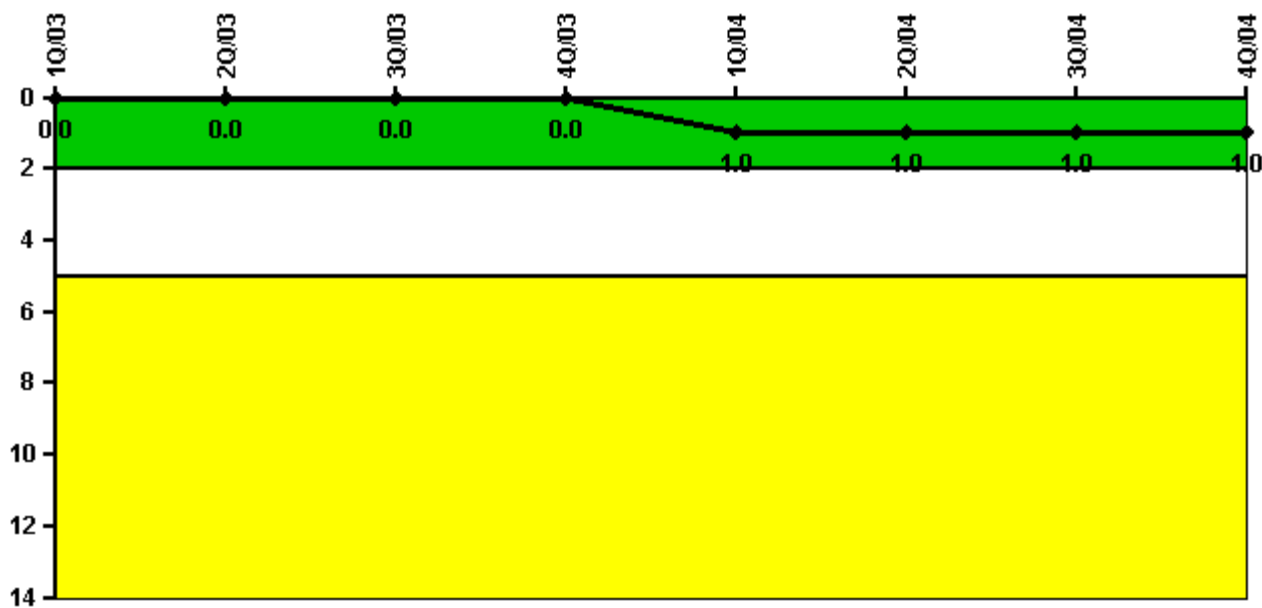
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful siren-tests	252	286	252	317	285	356	499	534
Total sirens-tests	252	288	252	324	288	360	504	540
Indicator value	99.5%	99.4%	99.4%	99.2%	99.0%	98.9%	98.7%	98.9%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

Occupational Exposure Control Effectiveness	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
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	1	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
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: March 9, 2005