

# Kewaunee

## 2Q/2004 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



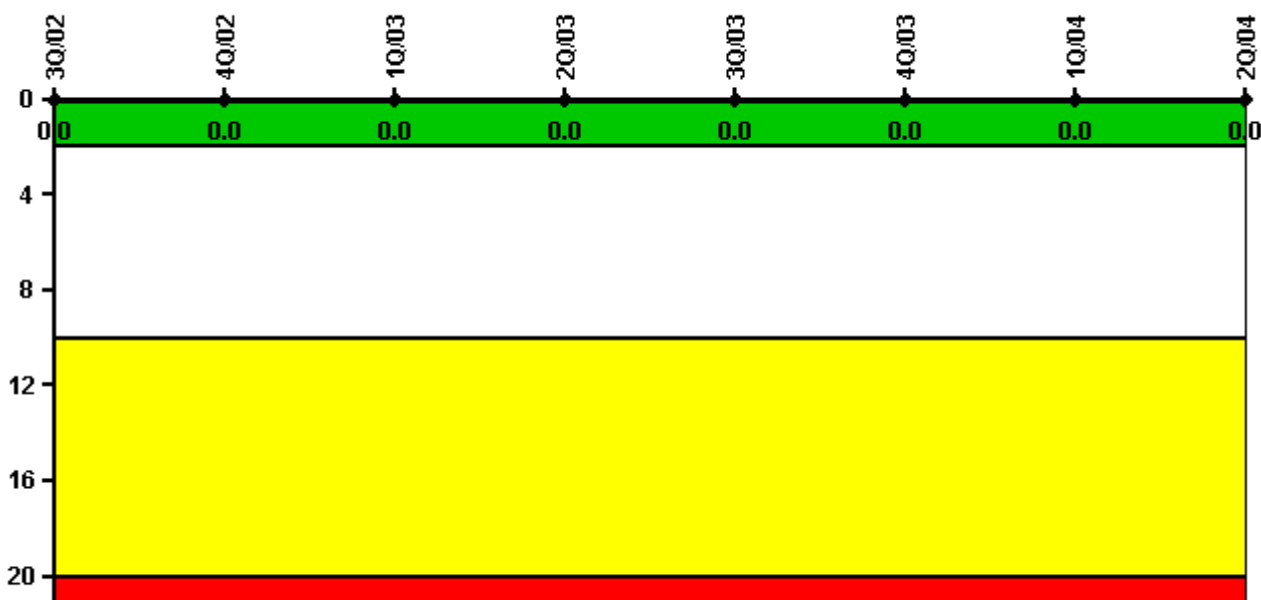
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

#### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2160.0	1348.2	2208.0	2209.0	1828.6	2183.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



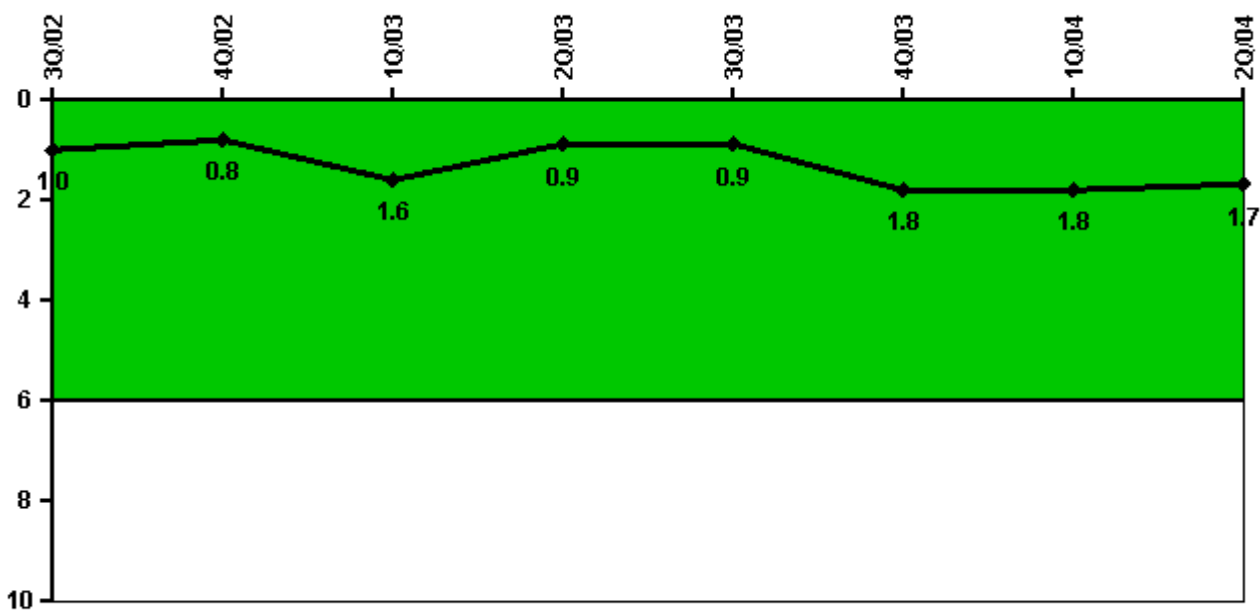
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/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



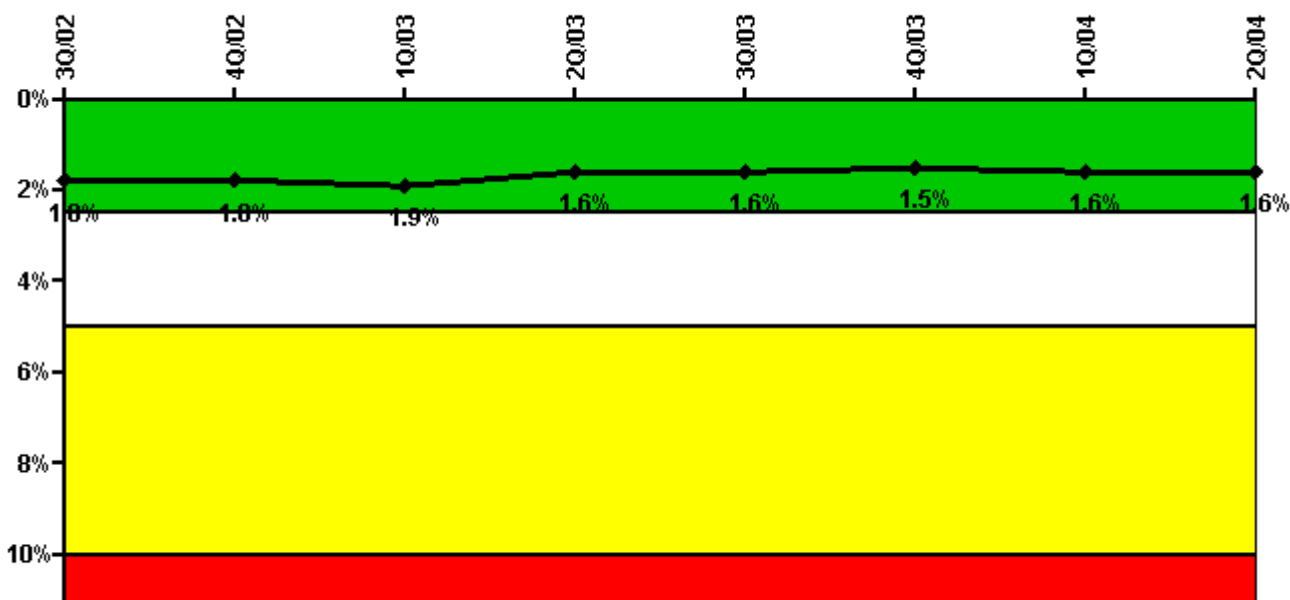
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned power changes	0	0	1.0	0	0	1.0	1.0	0
Critical hours	2208.0	2209.0	2160.0	1348.2	2208.0	2209.0	1828.6	2183.0
Indicator value	1.0	0.8	1.6	0.9	0.9	1.8	1.8	1.7

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



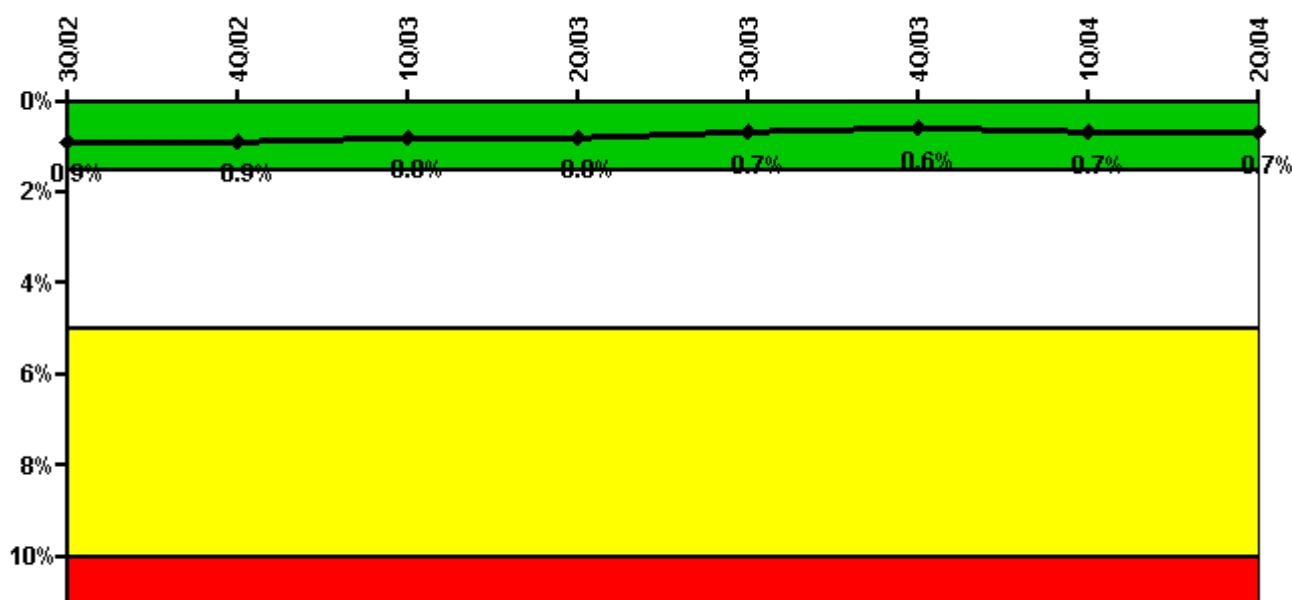
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	21.83	33.89	56.25	40.13	25.63	43.46	31.36	49.23
Unplanned unavailable hours	0	4.80	0	0	0	2.33	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	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
<b>Train 2</b>								
Planned unavailable hours	30.70	34.53	16.70	30.61	25.61	25.66	20.77	42.00
Unplanned unavailable hours	0	2.97	6.12	0	0	0	13.42	0
Fault exposure hours	0	0	22.75	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
<b>Indicator value</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.9%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.6%</b>	<b>1.6%</b>

Licensee Comments: none

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



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

### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	8.03	18.55	1.82	24.20	11.50	25.62	20.13	19.74
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	2208.00	2209.00	2160.00	1355.17	2208.00	2209.00	1820.38	2183.00
<b>Train 2</b>								
Planned unavailable hours	14.77	19.46	5.66	21.61	9.48	13.33	9.82	21.06
Unplanned unavailable hours	0	0	0	0	0	0	9.75	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	2208.00	2209.00	2160.00	1355.17	2208.00	2209.00	1820.38	2183.00
<b>Indicator value</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.7%</b>

### Licensee Comments:

2Q/04: During January 2004, Kewaunee shut down the reactor due to blockage being found in the Safety Injection Pump Lube Oil Coolers. T/2 fault exposure 1089.55 hours for Train A and 1009.41 hours for Train B were reported via comment with the 1st 2004 data submittal. A past operability evaluation has since determined that Safety Injection Pumps were available during the reported fault exposure period. Therefore, there is no fault exposure for the Safety Injection performance indicator during 1st quarter 2004.

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



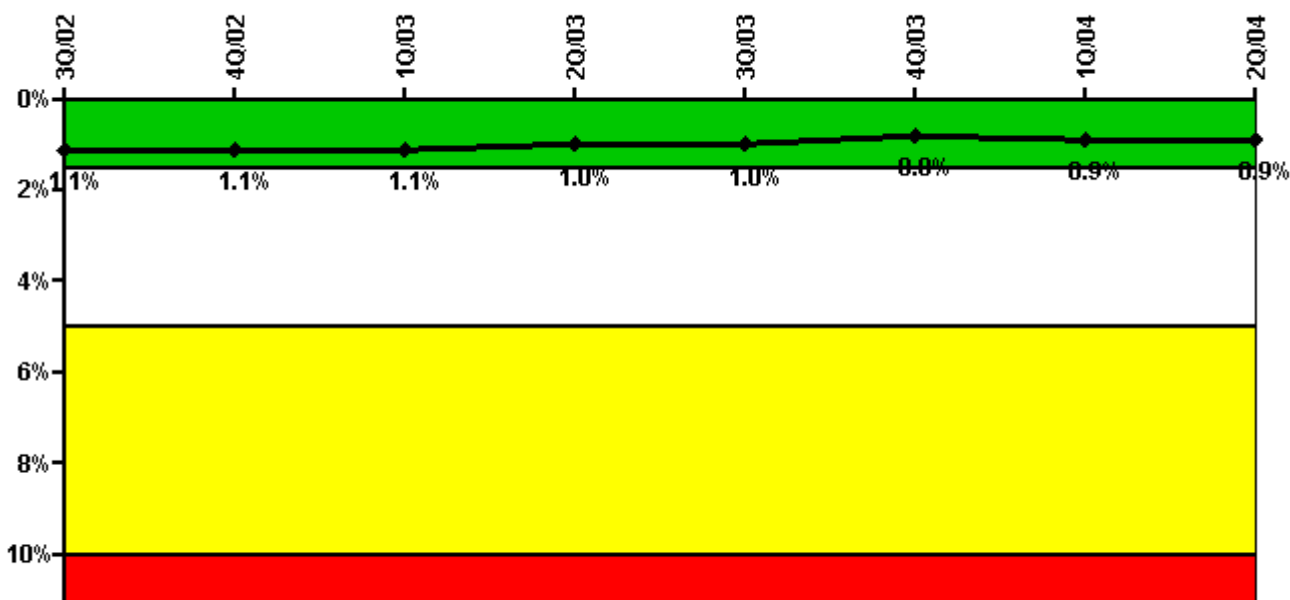
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	3.10	26.91	2.79	17.55	7.44	22.85	21.00	21.06
Unplanned unavailable hours	0.79	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	2208.00	2209.00	2160.00	1365.17	2208.00	2209.00	1828.60	2183.00
<b>Train 2</b>								
Planned unavailable hours	7.83	18.24	2.07	18.73	30.98	9.29	11.30	19.88
Unplanned unavailable hours	0.39	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	2208.00	2209.00	2160.00	1365.17	2208.00	2209.00	1828.60	2183.00
<b>Train 3</b>								
Planned unavailable hours	4.18	17.50	15.60	30.21	3.77	23.90	9.77	13.60
Unplanned unavailable hours	1.75	17.20	0	0	0	0	0	45.23
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	1365.17	2208.00	2209.00	1828.60	2183.00
<b>Indicator value</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



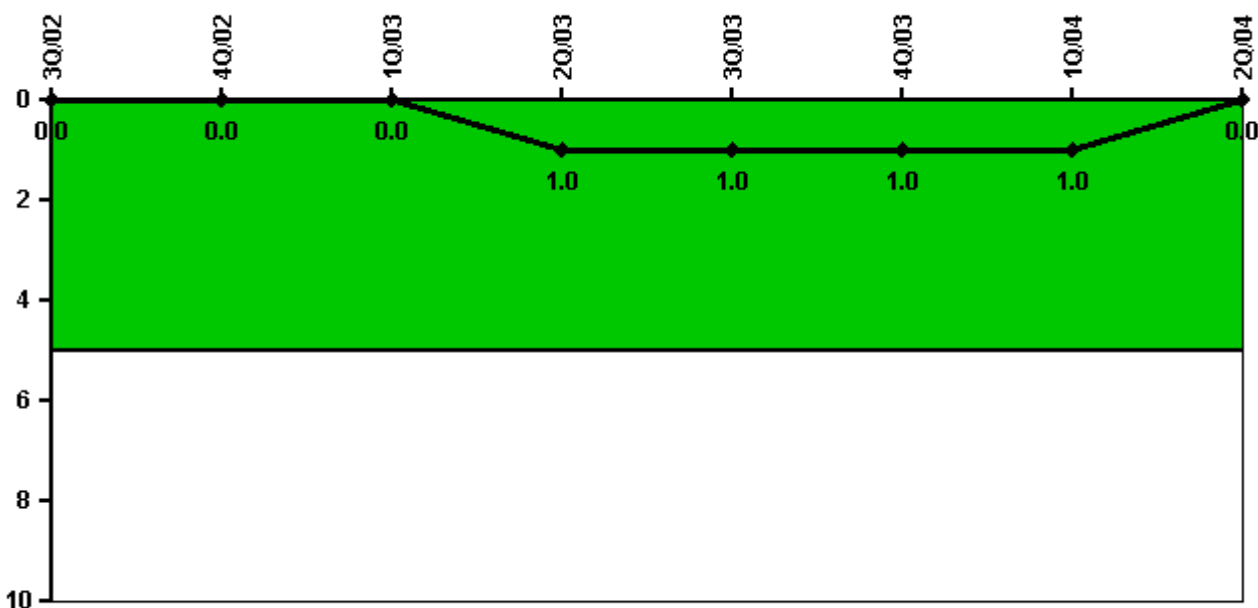
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	9.98	24.05	9.67	59.34	6.78	24.93	19.00	28.49
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	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
<b>Train 2</b>								
Planned unavailable hours	11.44	17.58	11.00	15.34	9.63	9.35	27.85	26.59
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	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
<b>Indicator value</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

#### Notes

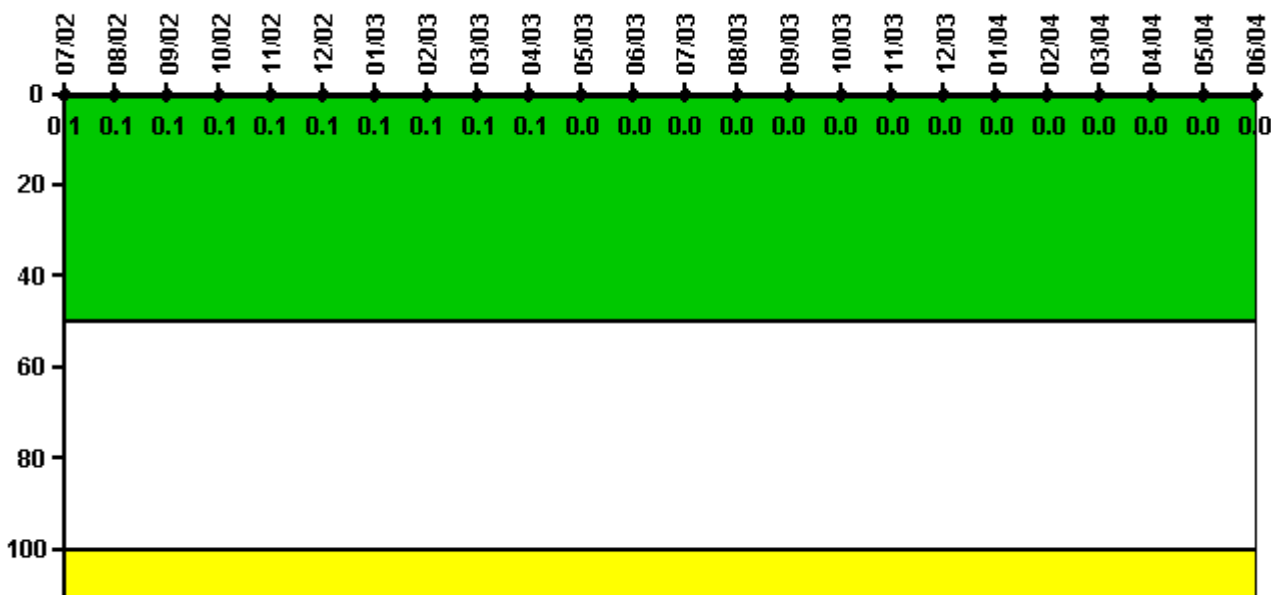
Safety System Functional Failures (PWR)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Safety System Functional Failures	0	0	0	1	0	0	0	0
Indicator value	0	0	0	1	1	1	1	0

Licensee Comments:

1Q/04: Feb -- An operability evaluation has since determined that Safety Injection Pumps were available during the reported period, and would have been able to perform their intended function. Mar -- Upon further review, the leak was not active and the function of the component cooling system was never lost, therefore it should not be counted as an SSFF.



### Reactor Coolant System Activity



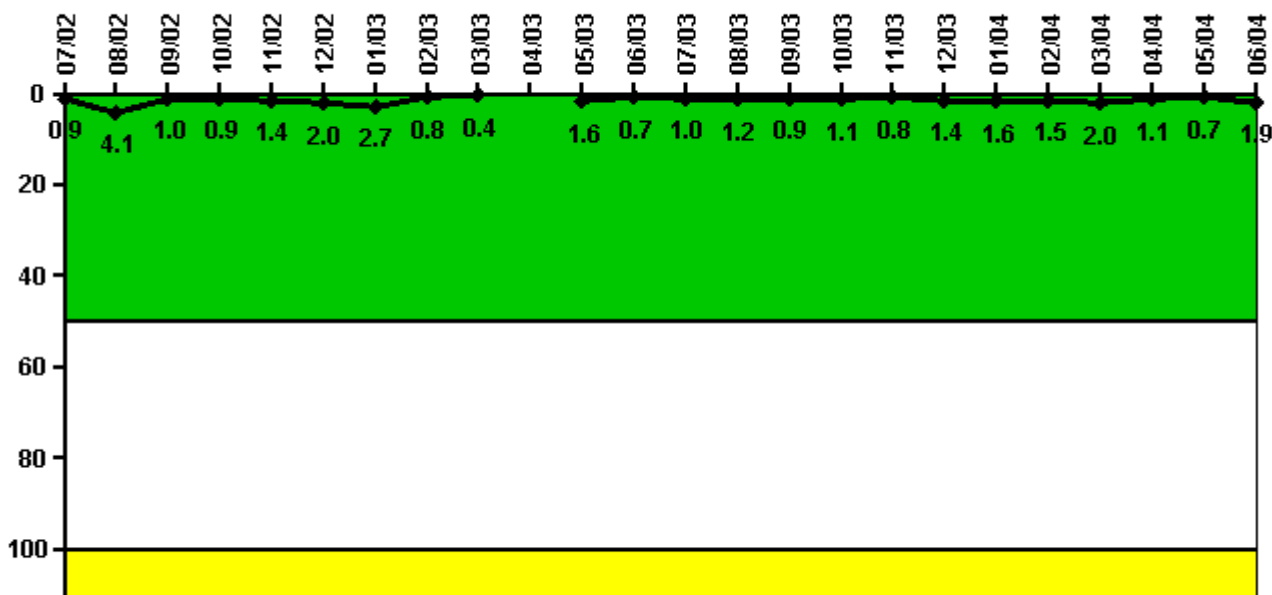
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum activity	0.000260	0.000272	0.000248	0.000258	0.000292	0.000288	0.000279	0.000293	0.000292	0.000282	0.000068	0.000079
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0	1.0
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
Reactor Coolant System Activity	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum activity	0.000078	0.000082	0.000088	0.000089	0.000093	0.000097	0.000096	0.000110	0.000111	0.000113	0.000121	0.000113
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



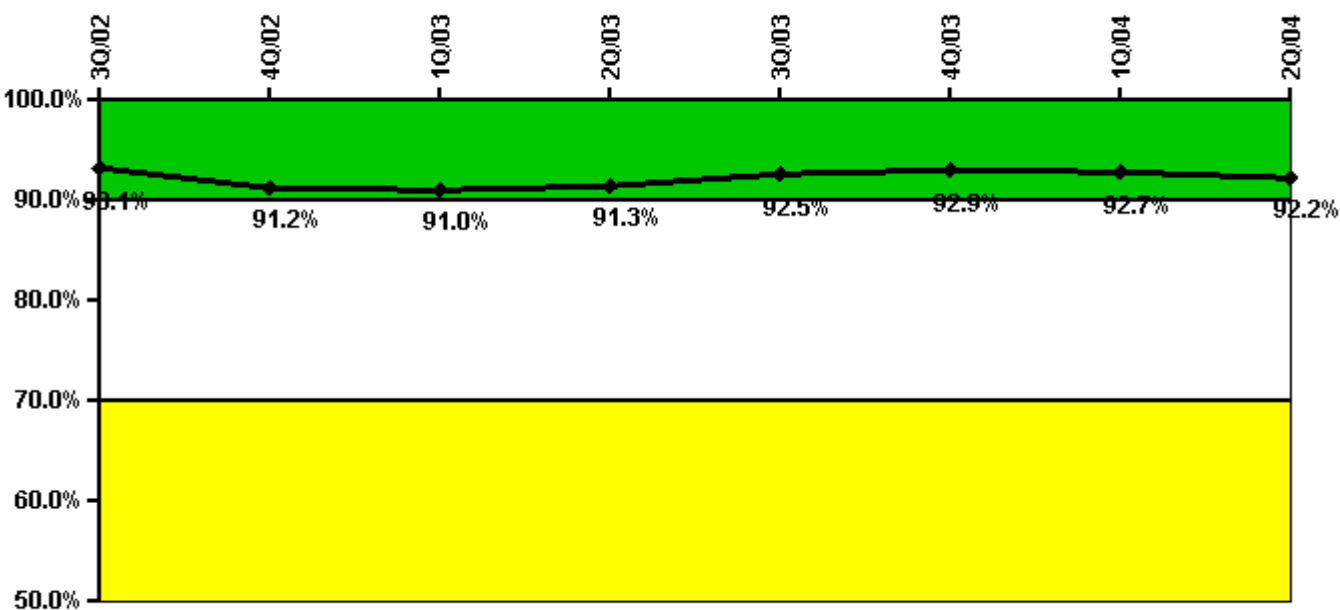
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum leakage	0.087	0.410	0.098	0.089	0.138	0.201	0.268	0.082	0.037	N/A	0.157	0.066
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	0.9	4.1	1.0	0.9	1.4	2.0	2.7	0.8	0.4	N/A	1.6	0.7
Reactor Coolant System Leakage	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum leakage	0.102	0.124	0.087	0.106	0.082	0.138	0.164	0.150	0.198	0.109	0.069	0.190
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	1.0	1.2	0.9	1.1	0.8	1.4	1.6	1.5	2.0	1.1	0.7	1.9

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

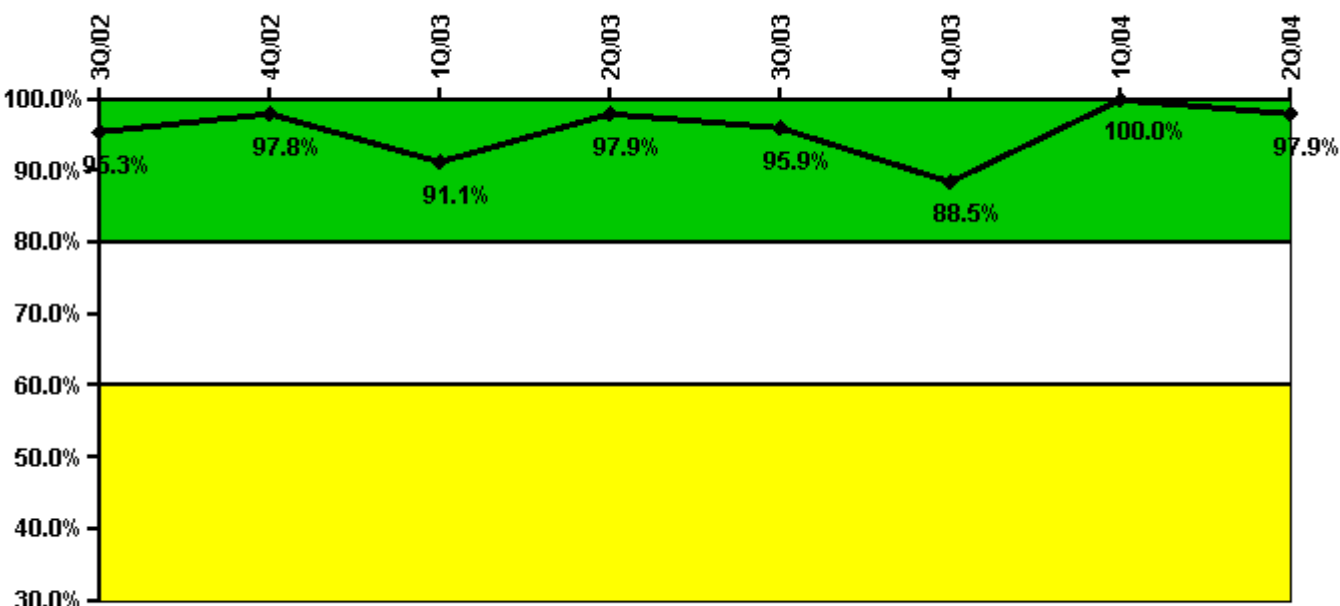
#### Notes

Drill/Exercise Performance	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful opportunities	7.0	19.0	41.0	51.0	21.0	7.0	14.0	6.0
Total opportunities	7.0	23.0	44.0	52.0	23.0	7.0	16.0	8.0
Indicator value	93.1%	91.2%	91.0%	91.3%	92.5%	92.9%	92.7%	92.2%

#### Licensee Comments:

3Q/03: The number of opportunities were under reported for 2 months (Aug and Sept) which was conservative since the two additional opportunities were both successful. The impact on the overall indicator value was positive but negligible.

### ERO Drill Participation



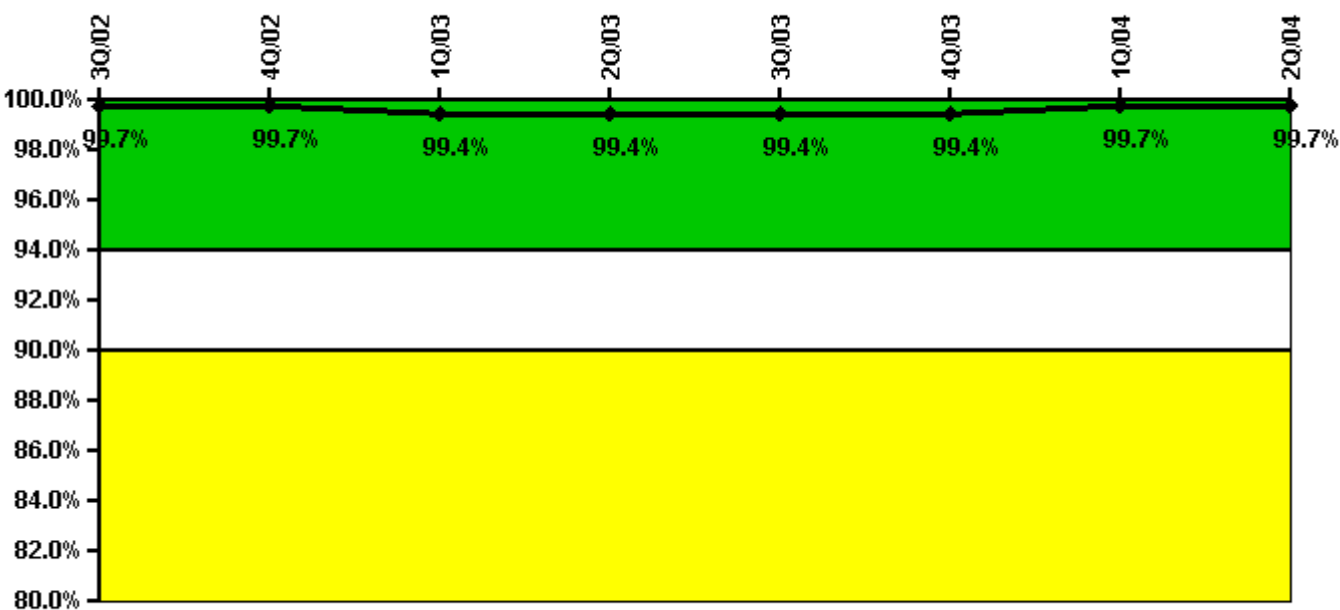
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Participating Key personnel	41.0	44.0	41.0	46.0	47.0	46.0	49.0	46.0
Total Key personnel	43.0	45.0	45.0	47.0	49.0	52.0	49.0	47.0
Indicator value	95.3%	97.8%	91.1%	97.9%	95.9%	88.5%	100.0%	97.9%

Licensee Comments: none

### Alert & Notification System



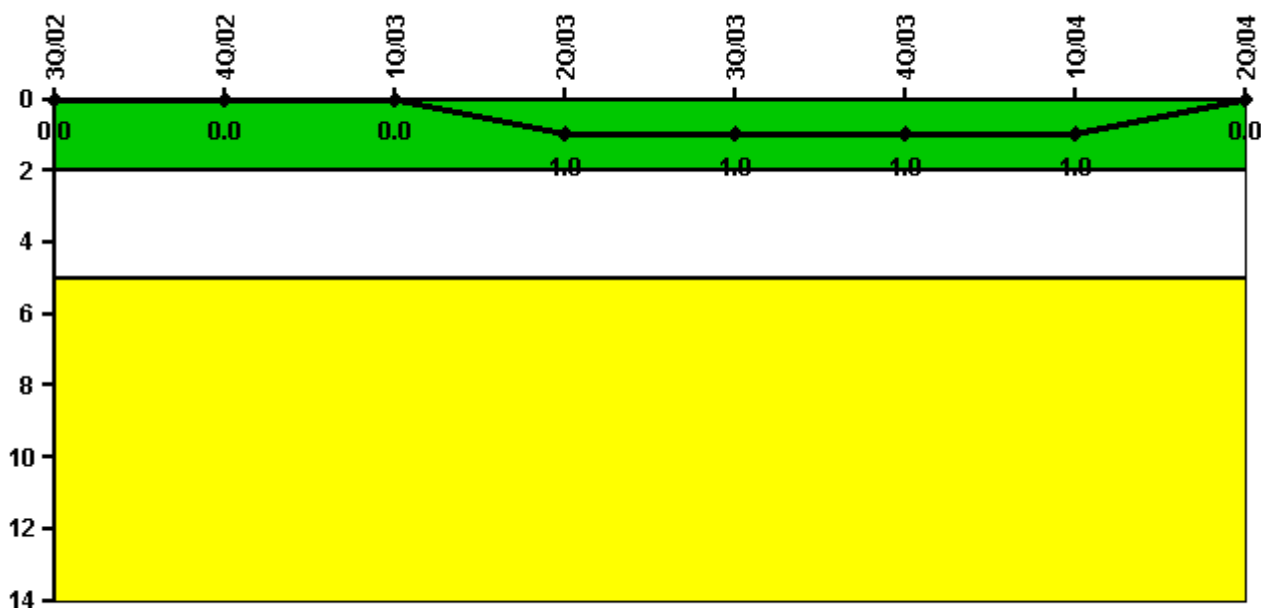
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful siren-tests	78	78	76	78	78	78	77	78
Total sirens-tests	78	78	78	78	78	78	78	78
Indicator value	99.7%	99.7%	99.4%	99.4%	99.4%	99.4%	99.7%	99.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
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	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/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: September 8, 2004