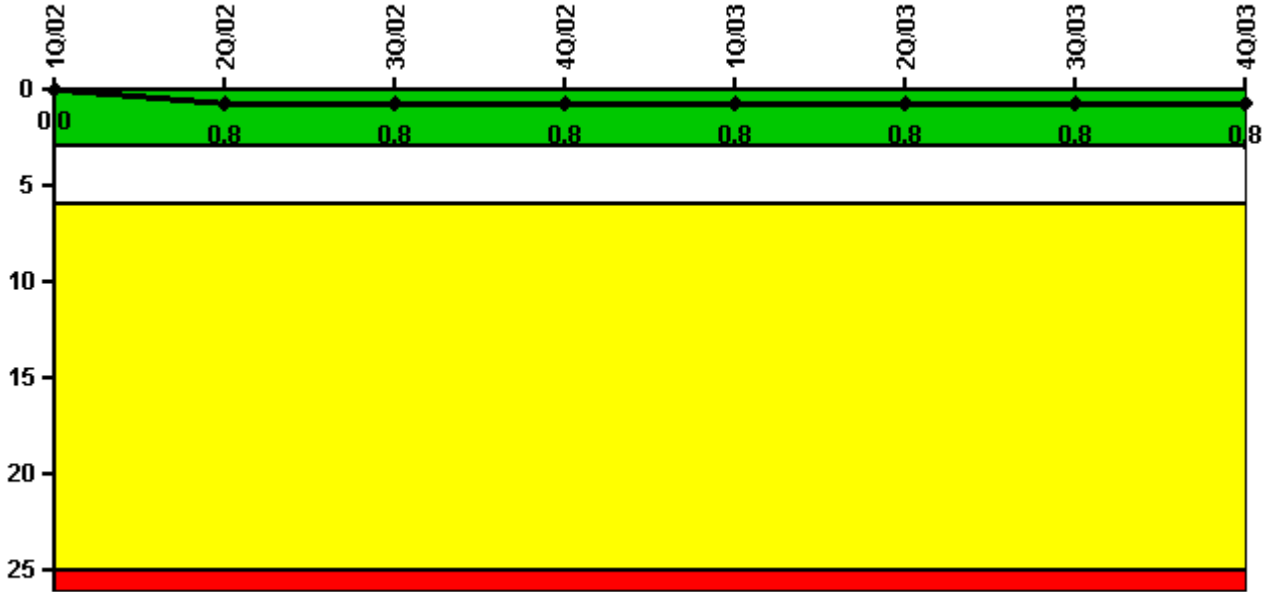


# Limerick 1

## 4Q/2003 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



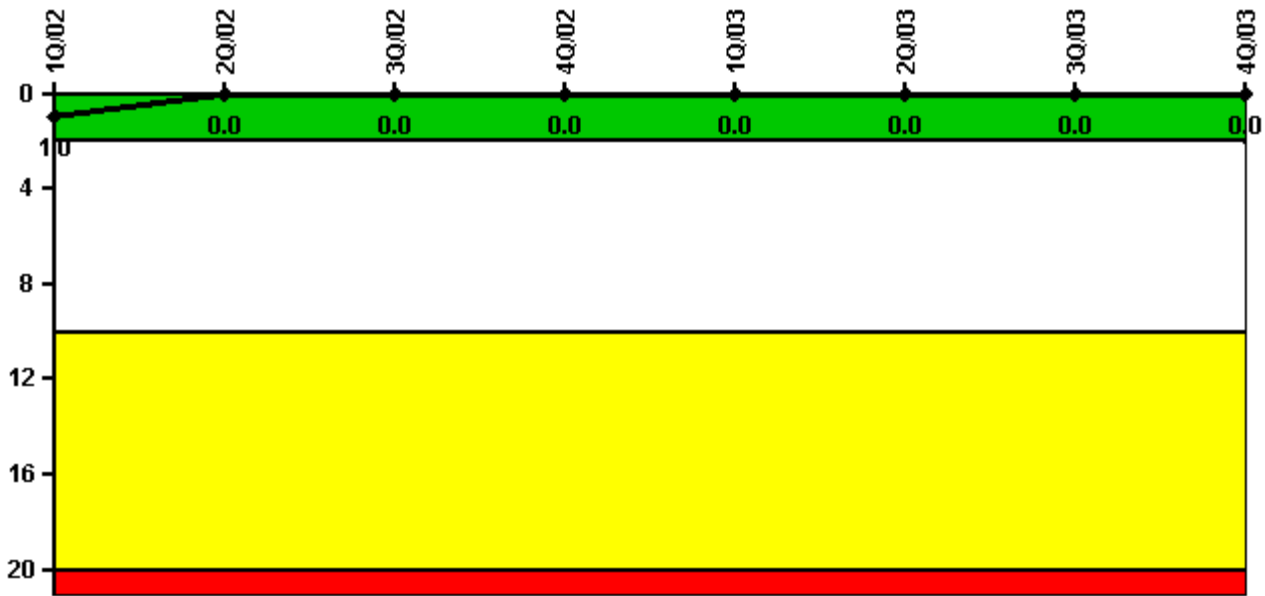
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

**Notes**

Unplanned Scrams per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned scrams	0	1.0	0	0	0	1.0	0	0
Critical hours	1797.5	2098.7	2208.0	2209.0	2160.0	2121.1	2208.0	2209.0
Indicator value	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



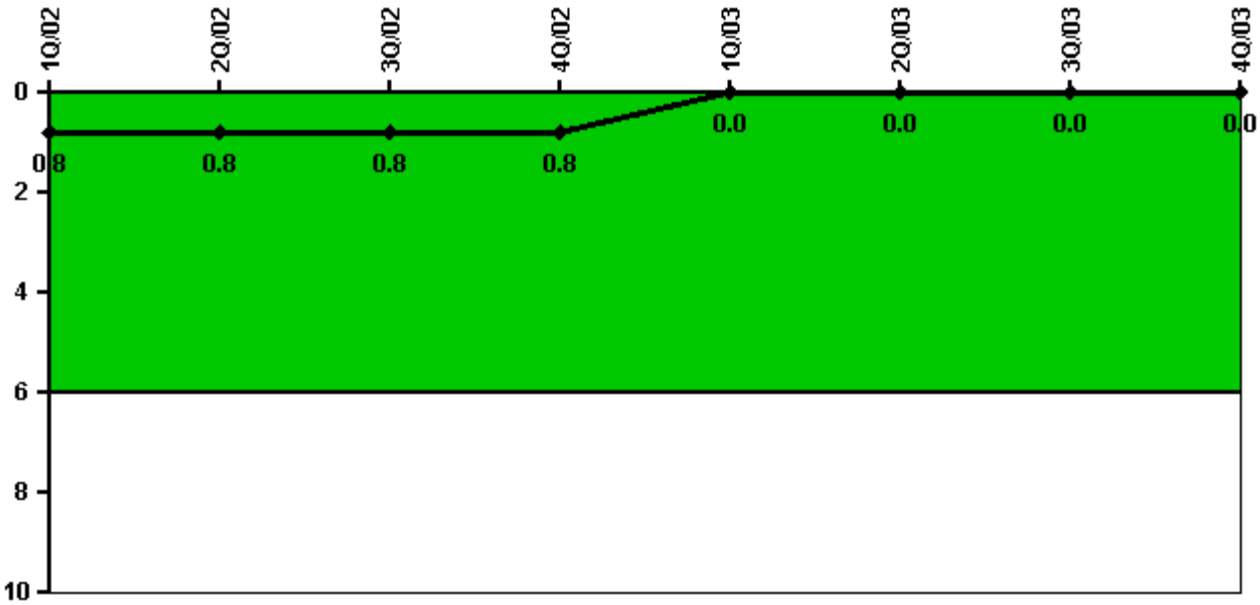
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Scrams	0	0	0	0	0	0	0	0
Indicator value	1.0	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

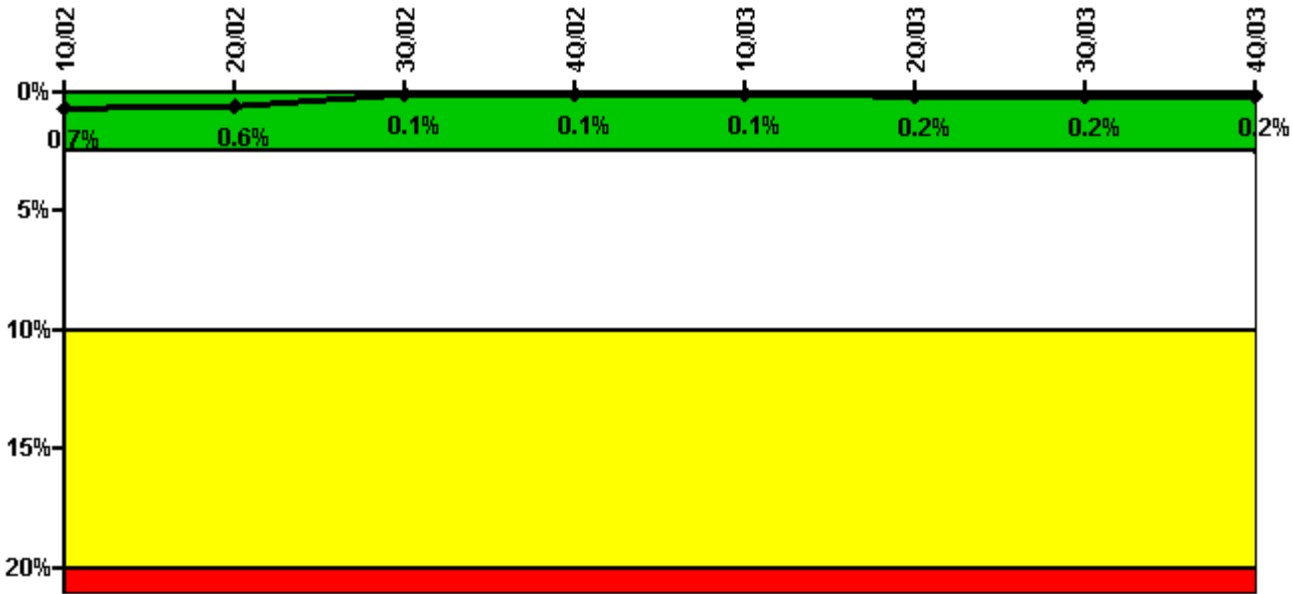
#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	1797.5	2098.7	2208.0	2209.0	2160.0	2121.1	2208.0	2209.0
Indicator value	0.8	0.8	0.8	0.8	0	0	0	0

Licensee Comments:

1Q/03: Based on conversations with NEI, the FAQ submitted for the Unit 2 power change due to loss of Schuylkill River pumps was retracted. Therefore, this power change is reclassified as "unplanned". This change does not result in a color change for this indicator (color Green).

### Safety System Unavailability, Emergency AC Power, >2EDG



Thresholds: White > 2.5% Yellow > 10.0% Red > 20.0%

#### Notes

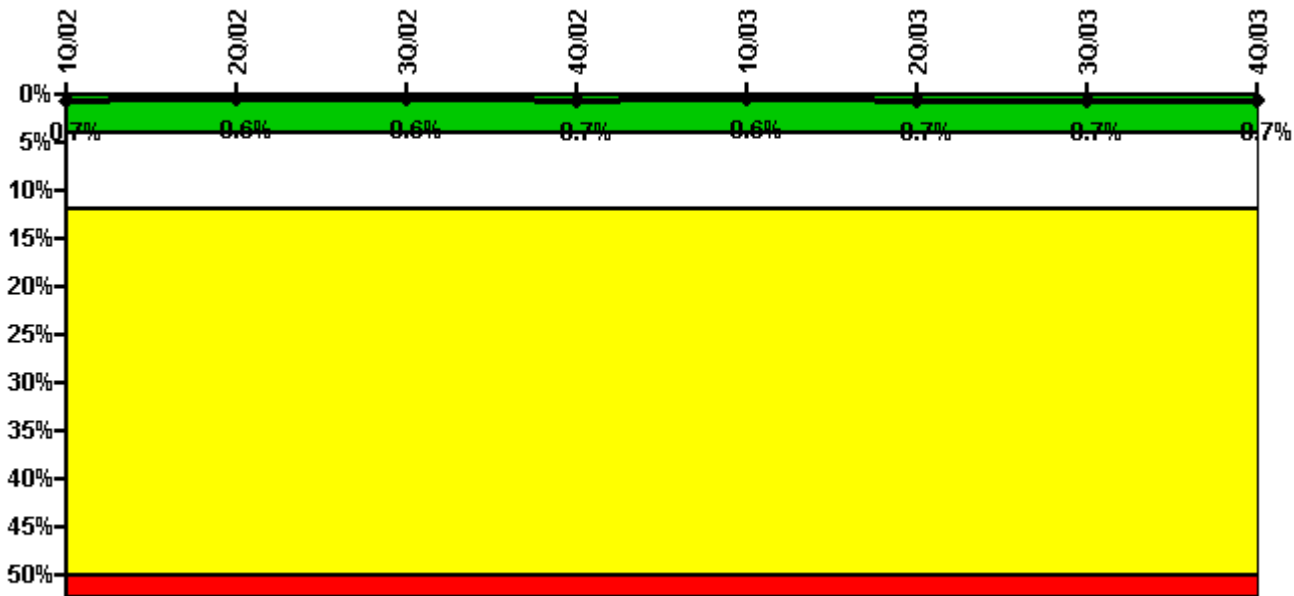
Safety System Unavailability, Emergency AC Power, >2EDG	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
<b>Train 1</b>								
Planned unavailable hours	0.90	0.32	0.50	0.33	1.07	2.68	8.65	0
Unplanned unavailable hours	0	0	4.70	0	14.23	14.62	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1983.82	2159.64	2208.00	2209.00	2160.00	2165.00	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	0.45	0	1.26	1.05	7.35	0	0.60	0.27
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	1983.82	2159.64	2208.00	2209.00	2160.00	2165.00	2208.00	2209.00
<b>Train 3</b>								
Planned unavailable hours	0.30	0.42	2.02	0.38	0.50	9.50	0.90	0
Unplanned unavailable hours	0	0	0	0	0	20.53	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	1983.82	2159.64	2208.00	2209.00	2160.00	2165.00	2208.00	2209.00
<b>Train 4</b>								
Planned unavailable hours	0.35	0	0.60	0.55	0.38	15.14	0.40	0
Unplanned unavailable hours	0	0	6.58	1.93	2.82	5.97	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	1983.82	2159.64	2208.00	2209.00	2160.00	2165.00	2208.00	2209.00

Indicator value	0.7%	0.6%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%

Licensee Comments:

2Q/03: The original submittal did not take into account daylight savings time for the month of April when calculating hours train required to be available for service. No impact to unavailability on train or unit level. PI region and color unchanged. April of 2003 is the only affected month...new comment 1/21/04- A recent review of the system impact when performing procedures RT-2-092-32 (1-4)-1&2, 4kv Undervoltage Relay Test, indicated that the test resulted in planned EDG unavailability not previously counted. The impacted period is from November 2000 to October 2003 (36 months). The data for 3rd quarter 2003 was corrected prior to submittal and is not included in this change submittal. The total hrs added to each train are as follows: train 1, 6.39 hrs; train 2, 7.79 hrs; train 3, 7.26 hrs; train 4, 5.07 hrs. The change had no impact on PI region or color.

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



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

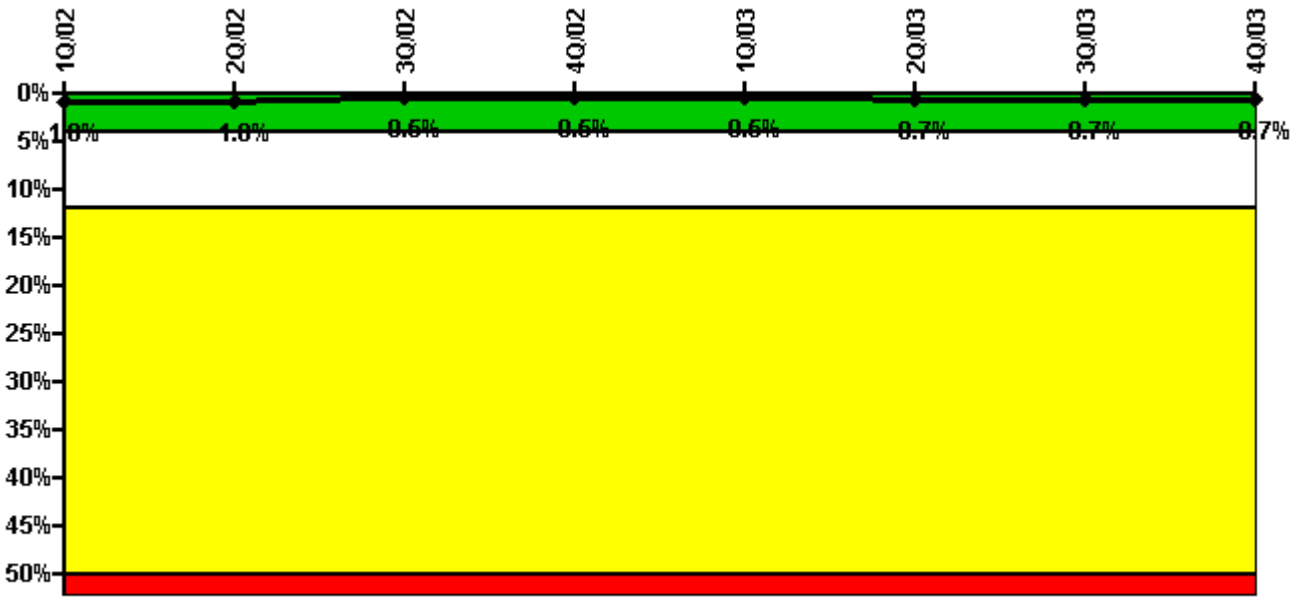
Notes

Safety System Unavailability, High Pressure Injection System (HPCI)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	7.30	20.90	18.40	14.60	0.40	40.60	0	10.10
Unplanned unavailable hours	5.60	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	1797.50	2098.70	2208.00	2209.00	2160.00	2121.10	2208.00	2209.00
Indicator value	0.7%	0.6%	0.6%	0.7%	0.6%	0.7%	0.7%	0.7%

Licensee Comments: none

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



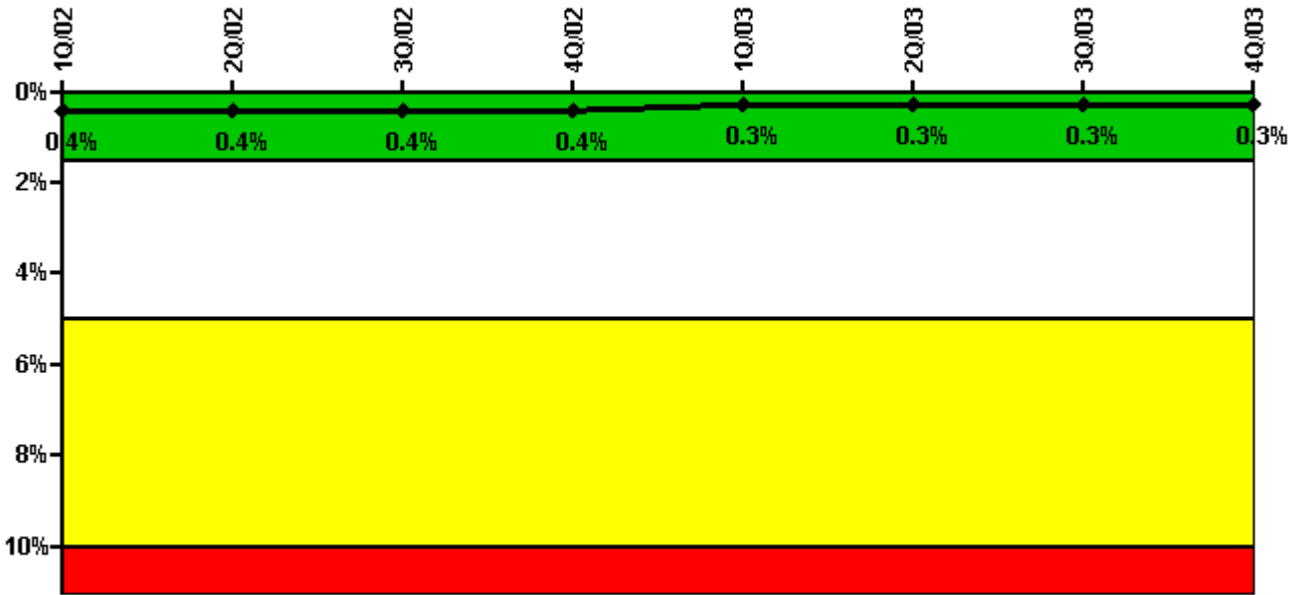
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

### Notes

Safety System Unavailability, Heat Removal System (RCIC)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	2.60	23.70	2.60	6.30	3.00	63.70	1.10	9.90
Unplanned unavailable hours	0	0	0	0	0	0	23.50	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	1797.50	2098.70	2208.00	2209.00	2160.00	2121.10	2208.00	2209.00
Indicator value	1.0%	1.0%	0.5%	0.5%	0.5%	0.7%	0.7%	0.7%

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



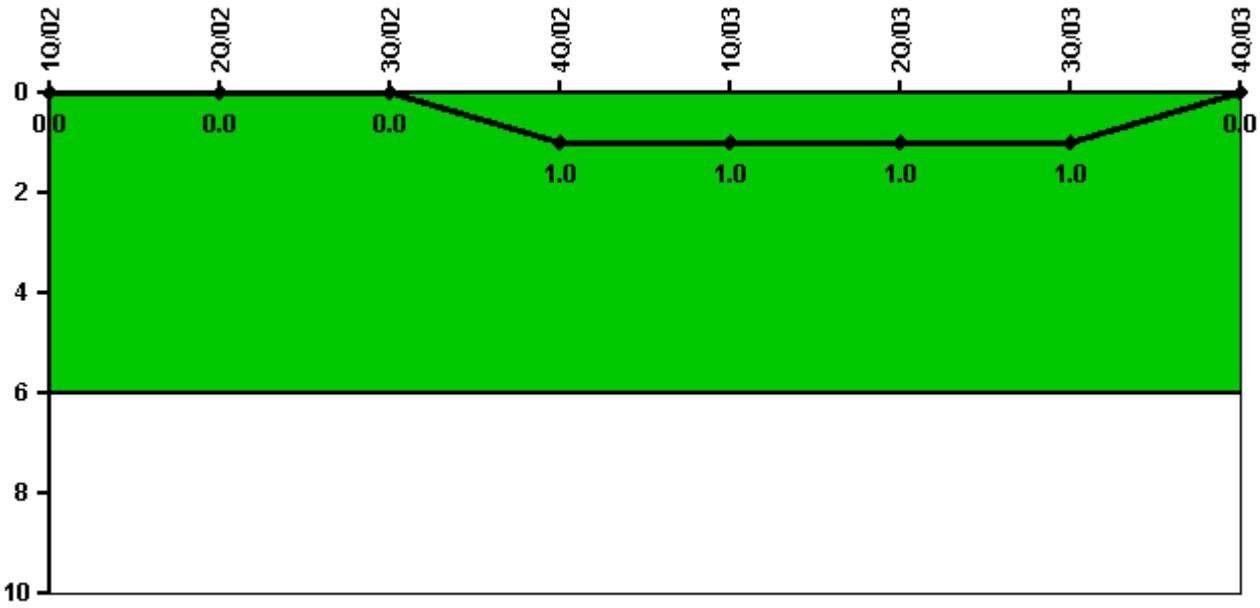
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, Residual Heat Removal System	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
<b>Train 1</b>								
Planned unavailable hours	17.70	1.22	2.53	0	13.63	0	0	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	2160.00	2183.00	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	0.38	0	0	24.28	16.00	0	0	29.00
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	2160.00	2183.00	2208.00	2209.00
<b>Indicator value</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

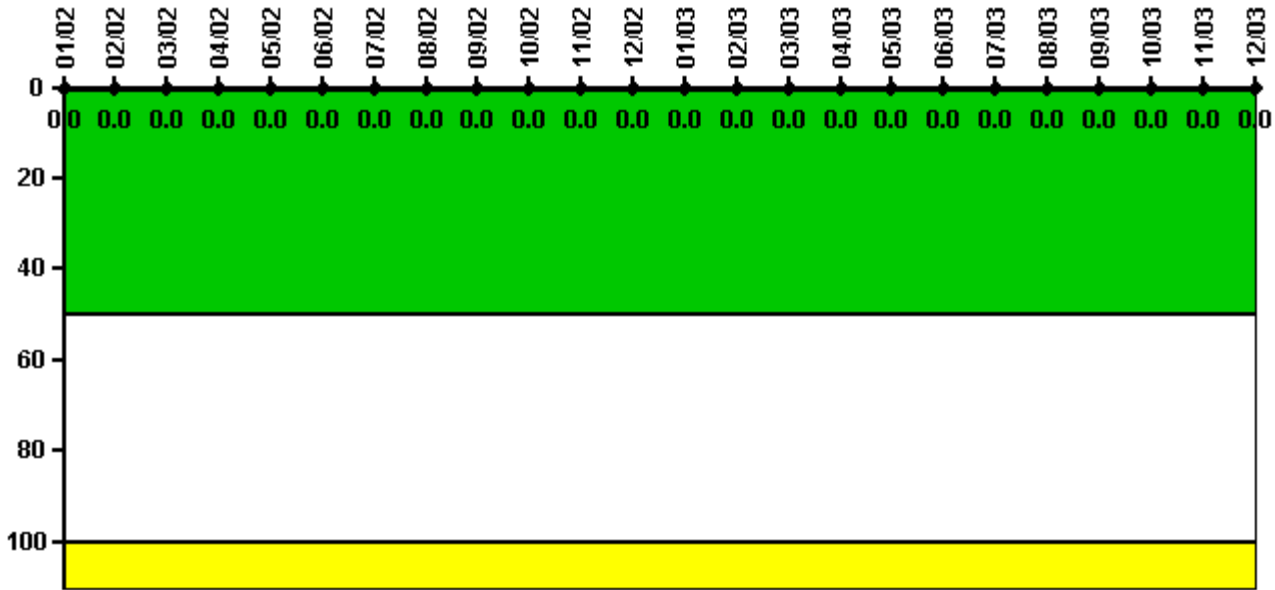
#### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

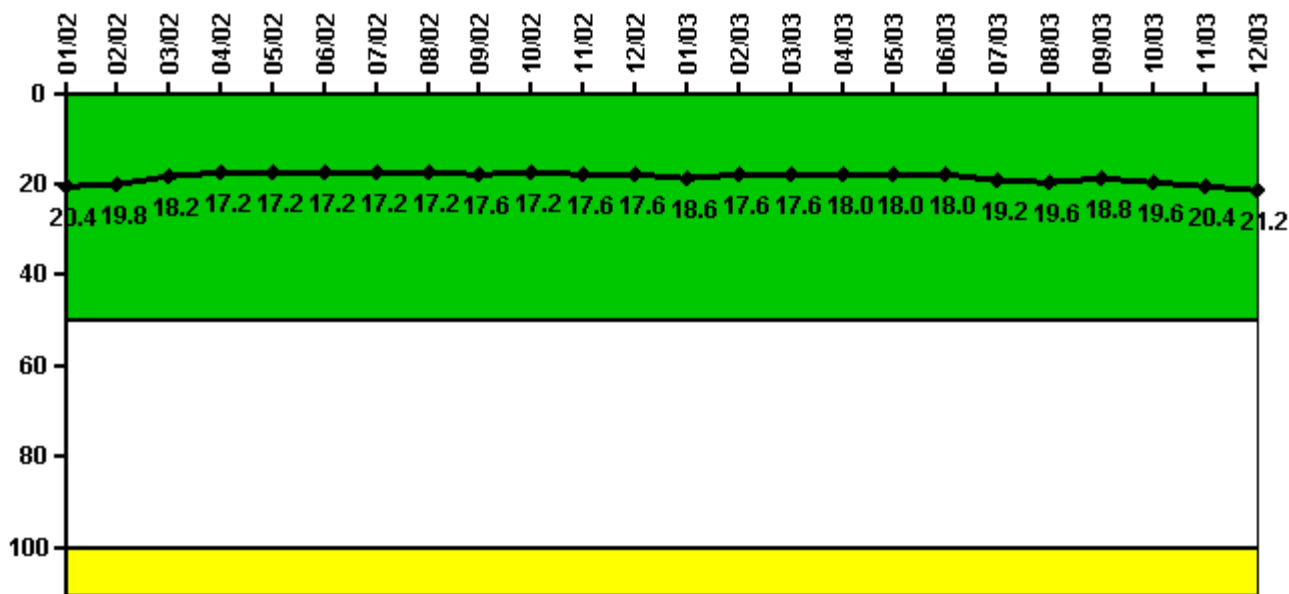
Reactor Coolant System Activity	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum activity	0.000035	0.000032	0.000014	0.000022	0.000017	0.000014	0.000006	0.000007	0.000008	0.000007	0.000014	0.000009
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.000015	0.000009	0.000010	0.000008	0.000012	0.000009	0.000016	0.000025	0.000021	0.000011	0.000011	0.000021
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

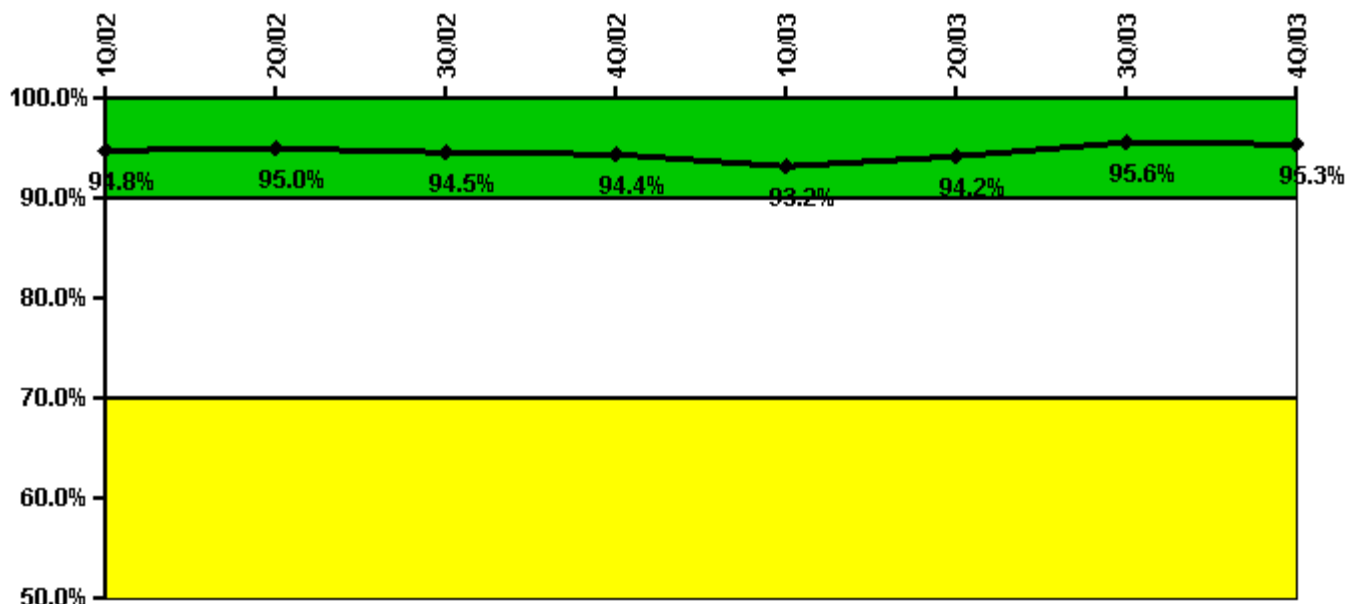
Reactor Coolant System Leakage	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum leakage	5.110	4.960	4.560	4.300	4.300	4.300	4.300	4.300	4.400	4.300	4.400	4.400
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	20.4	19.8	18.2	17.2	17.2	17.2	17.2	17.2	17.6	17.2	17.6	17.6

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	4.650	4.400	4.400	4.500	4.500	4.500	4.800	4.900	4.700	4.900	5.100	5.300
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	18.6	17.6	17.6	18.0	18.0	18.0	19.2	19.6	18.8	19.6	20.4	21.2

Licensee Comments: none

### Drill/Exercise Performance



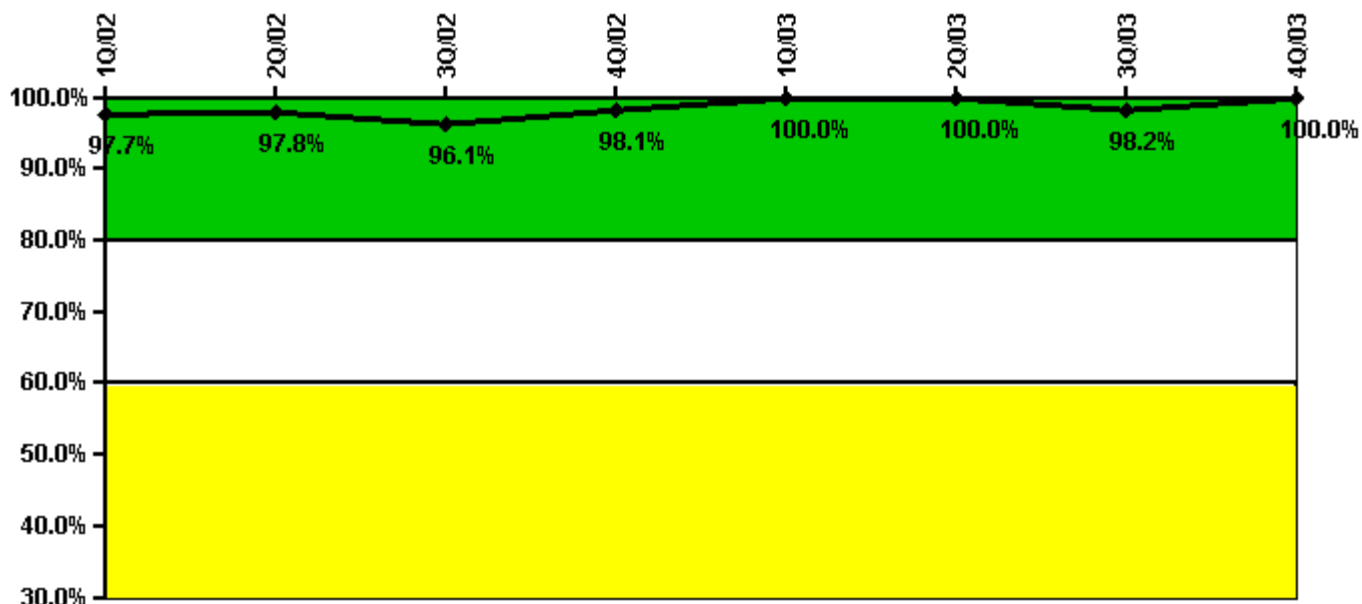
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful opportunities	16.0	32.0	5.0	15.0	11.0	36.0	8.0	141.0
Total opportunities	16.0	34.0	6.0	15.0	12.0	38.0	8.0	148.0
Indicator value	94.8%	95.0%	94.5%	94.4%	93.2%	94.2%	95.6%	95.3%

Licensee Comments: none

### ERO Drill Participation



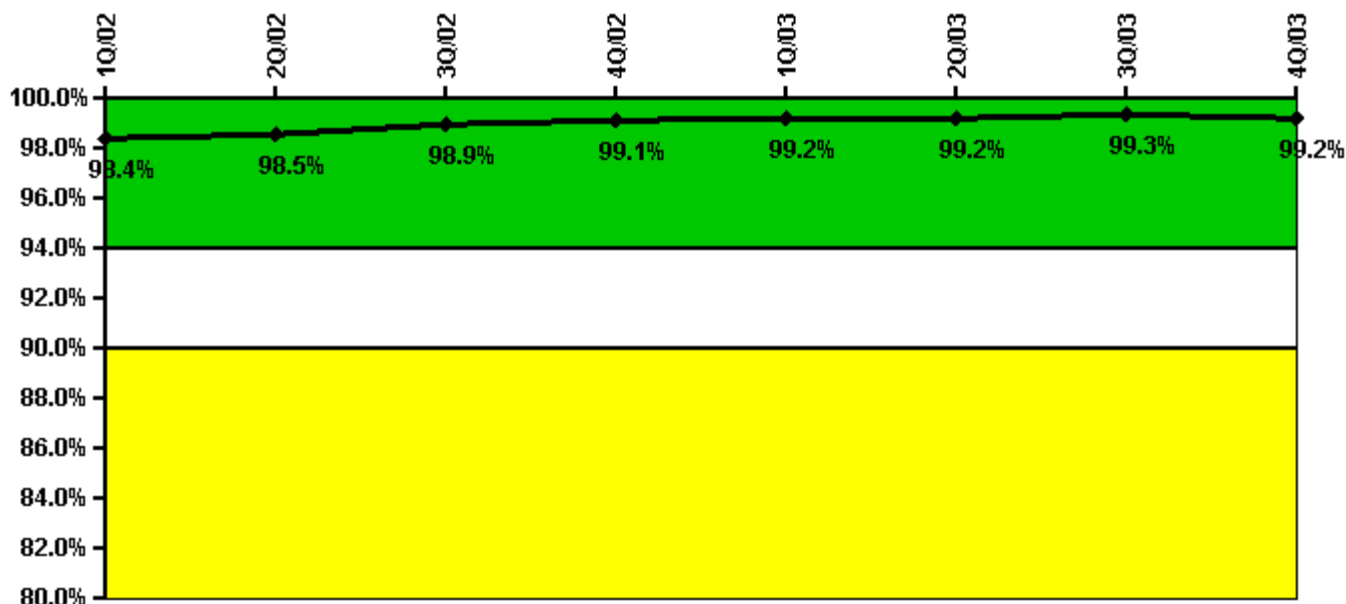
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Participating Key personnel	43.0	44.0	49.0	52.0	53.0	54.0	55.0	58.0
Total Key personnel	44.0	45.0	51.0	53.0	53.0	54.0	56.0	58.0
Indicator value	97.7%	97.8%	96.1%	98.1%	100.0%	100.0%	98.2%	100.0%

Licensee Comments: none

### Alert & Notification System



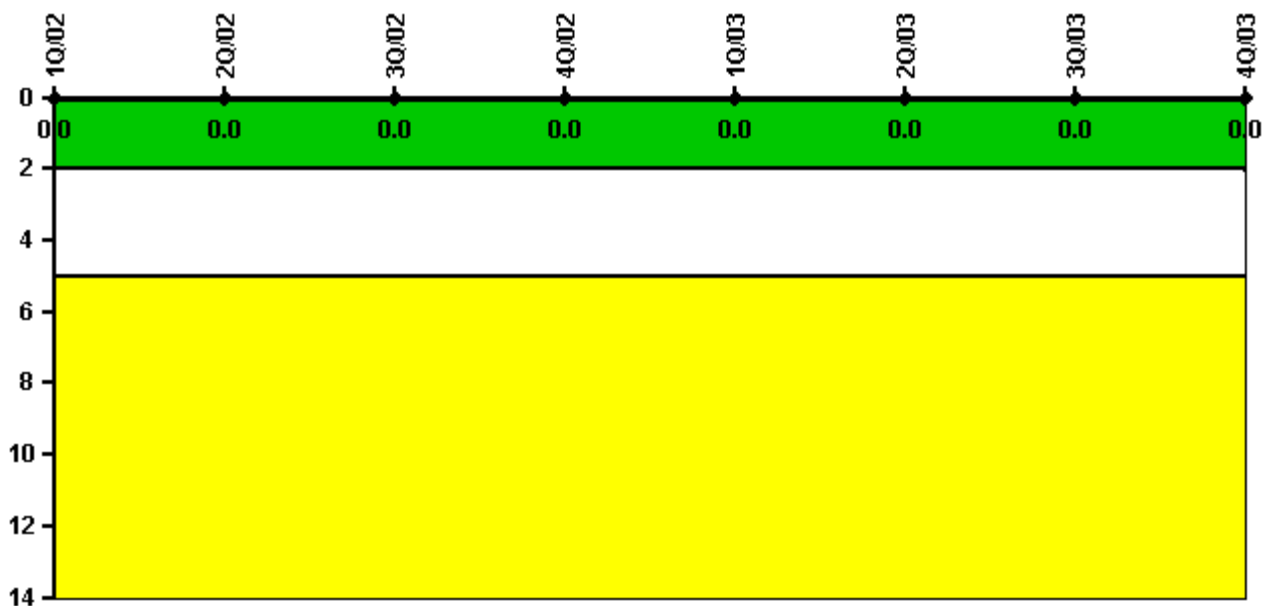
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful siren-tests	2122	2124	2121	2298	2133	2126	2129	2127
Total sirens-tests	2145	2145	2145	2310	2145	2145	2145	2145
Indicator value	98.4%	98.5%	98.9%	99.1%	99.2%	99.2%	99.3%	99.2%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



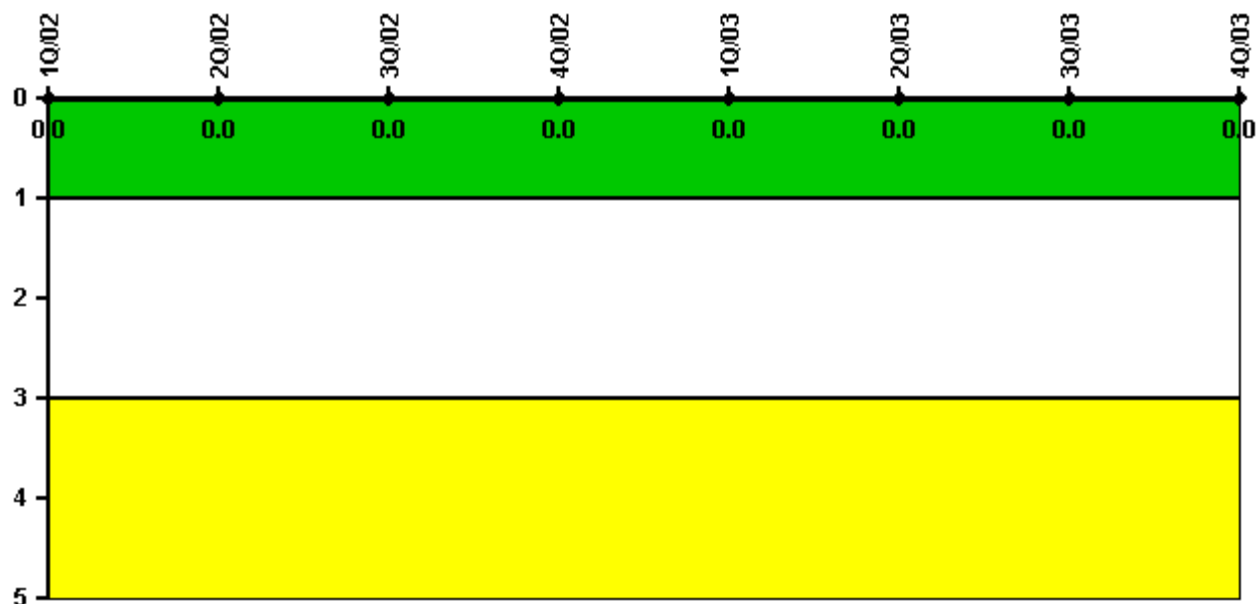
Thresholds: White > 2.0 Yellow > 5.0

**Notes**

Occupational Exposure Control Effectiveness	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
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
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### RETS/ODCM Radiological Effluent



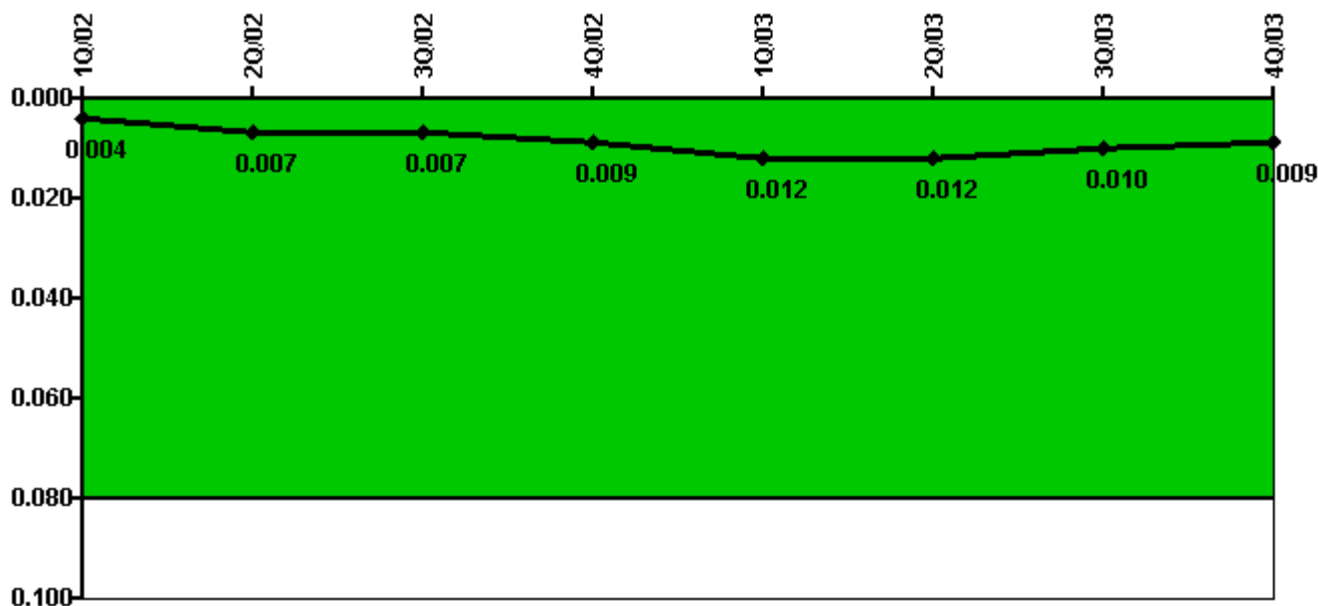
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Protected Area Security Performance Index



Thresholds: White > 0.080

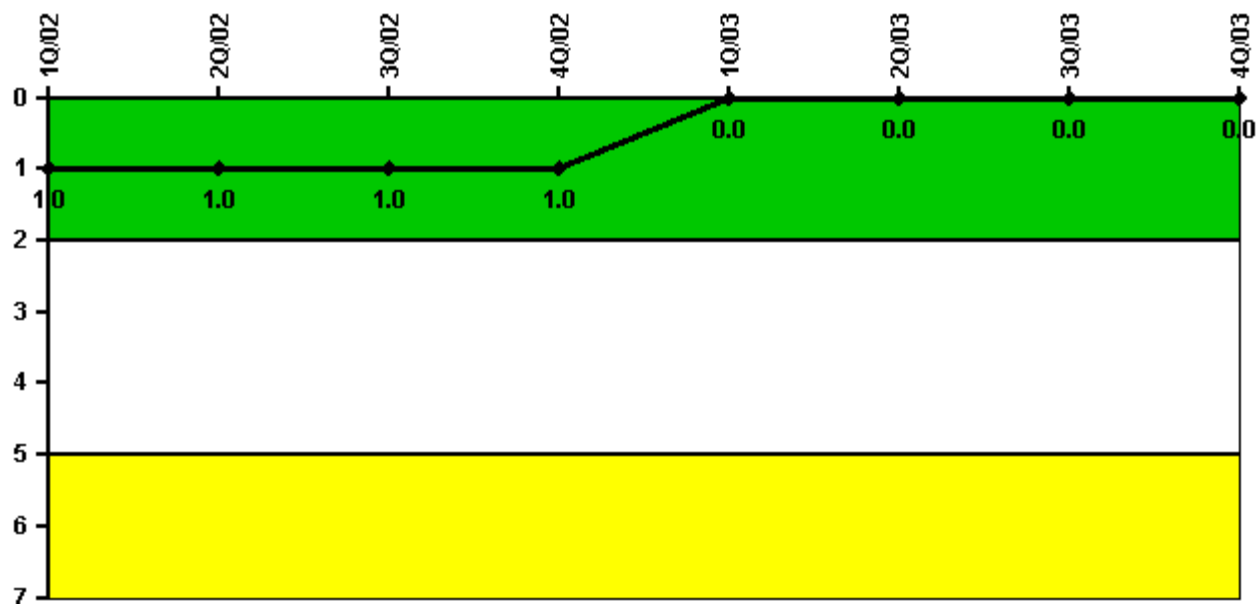
#### Notes

Protected Area Security Performance Index	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
IDS compensatory hours	36.60	92.60	64.70	60.90	129.50	52.10	5.90	16.40
CCTV compensatory hours	9.6	13.1	0	26.4	41.5	15.7	0.9	33.1
IDS normalization factor	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35
CCTV normalization factor	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Index Value	0.004	0.007	0.007	0.009	0.012	0.012	0.010	0.009

Licensee Comments: none



### Personnel Screening Program



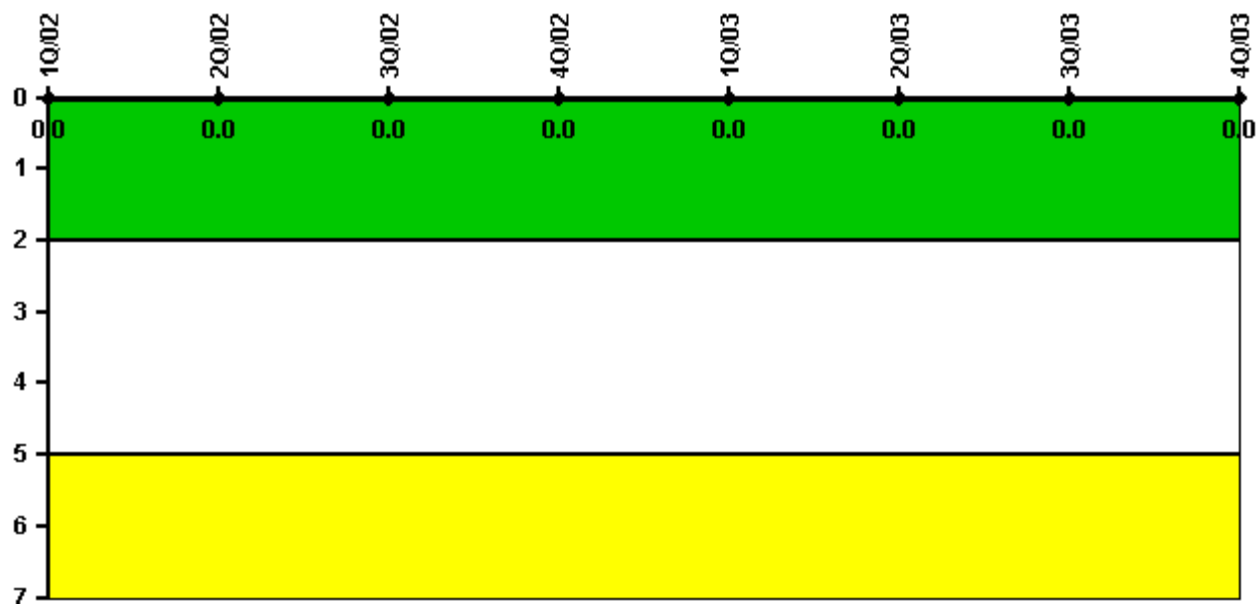
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Program failures	1	0	0	0	0	0	0	0
Indicator value	1	1	1	1	0	0	0	0

Licensee Comments: none

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

FFD/Personnel Reliability	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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

Last Modified: January 23, 2004