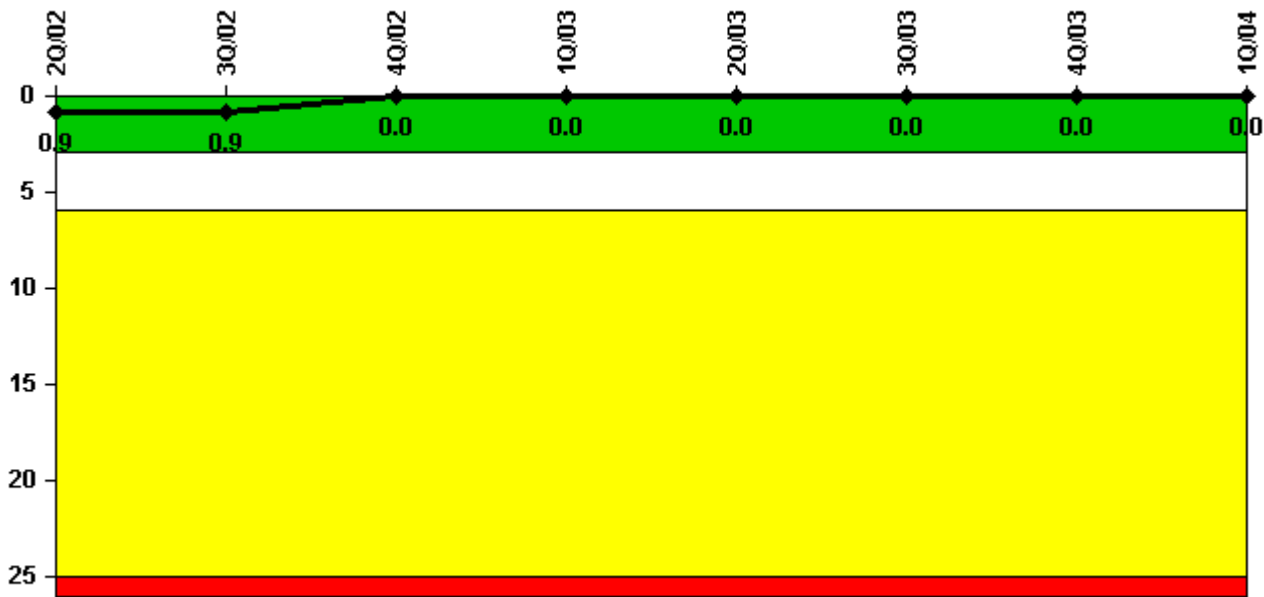


# Catawba 2

## 1Q/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	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2208.0	2209.0	1548.5	2183.0	2208.0	2209.0	2184.0
<b>Indicator value</b>	<b>0.9</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



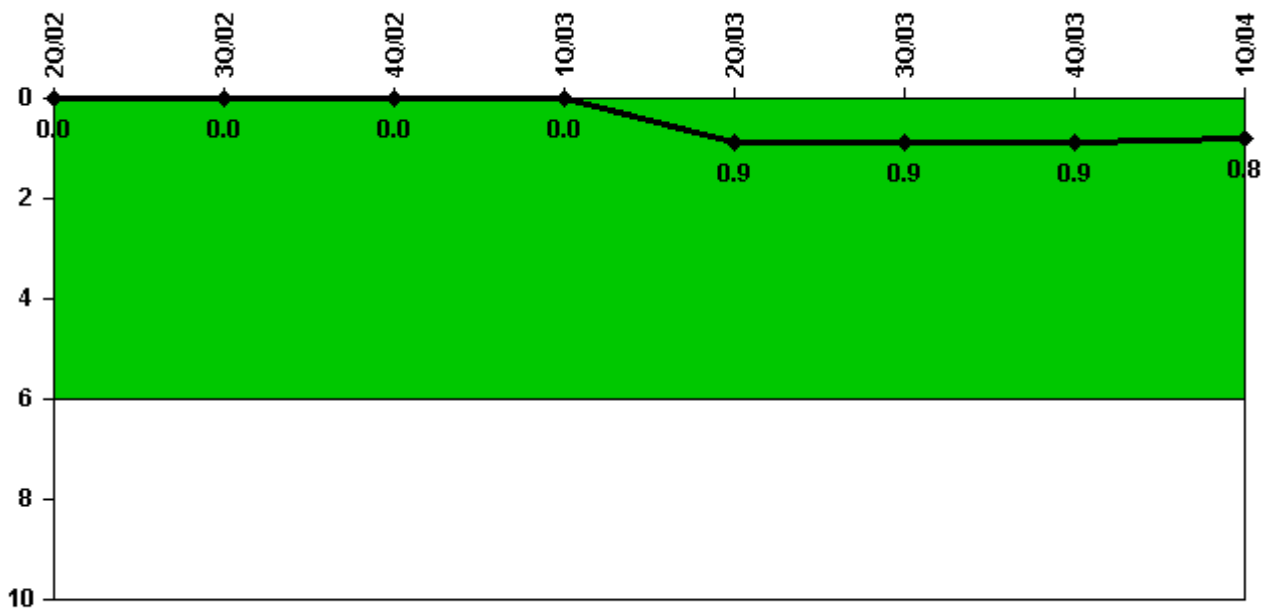
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

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



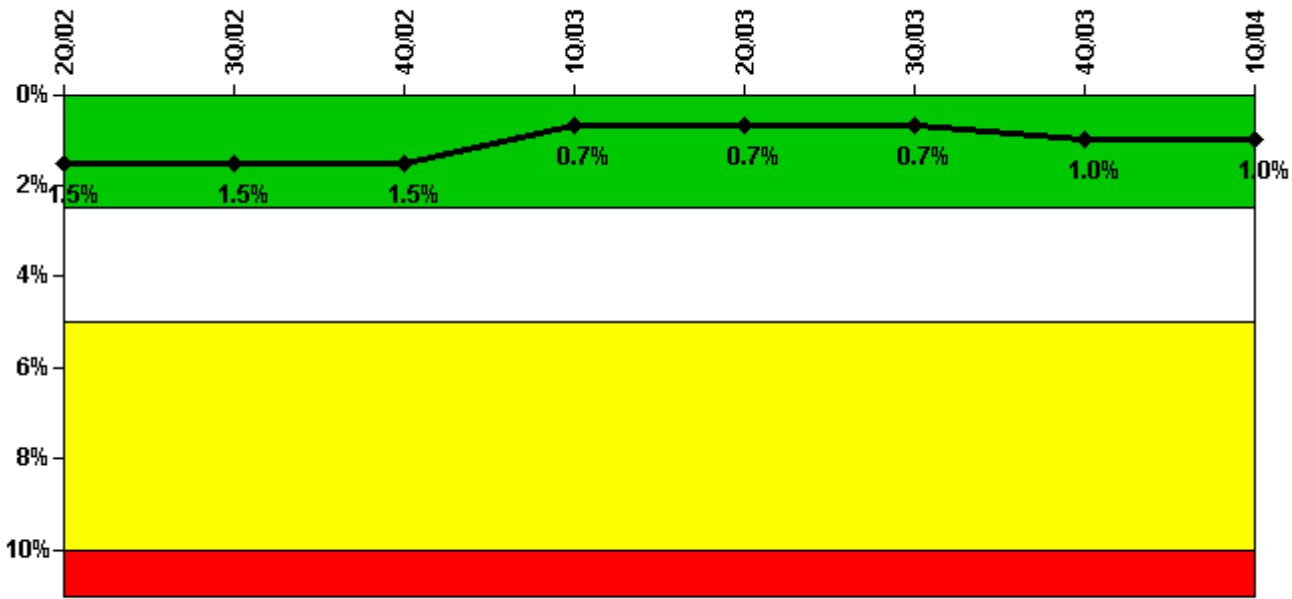
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Unplanned power changes	0	0	0	0	1.0	0	0	0
Critical hours	2183.0	2208.0	2209.0	1548.5	2183.0	2208.0	2209.0	2184.0
Indicator value	0	0	0	0	0.9	0.9	0.9	0.8

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



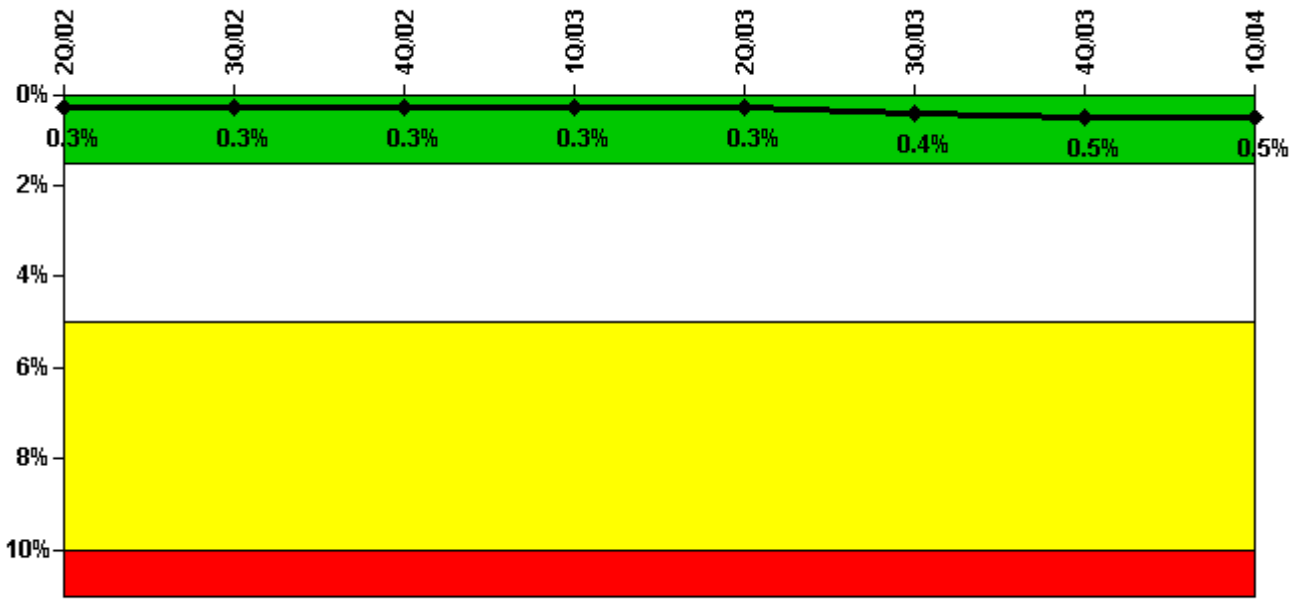
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
<b>Train 1</b>								
Planned unavailable hours	8.60	0	38.71	63.00	0	33.42	33.07	0
Unplanned unavailable hours	0	0.77	0	0	0	0	0	5.63
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
<b>Train 2</b>								
Planned unavailable hours	12.92	0	12.57	48.75	35.15	1.65	82.62	0
Unplanned unavailable hours	0	3.00	0	0	0	0	67.08	1.15
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
<b>Indicator value</b>	<b>1.5%</b>	<b>1.5%</b>	<b>1.5%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>1.0%</b>	<b>1.0%</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)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
<b>Train 1</b>								
Planned unavailable hours	19.02	0.25	8.68	0.25	0.35	8.98	27.00	1.57
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	2183.00	2208.00	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00
<b>Train 2</b>								
Planned unavailable hours	14.72	9.30	1.58	10.40	14.25	10.03	39.85	10.25
Unplanned unavailable hours	6.85	18.02	0	0	0	0	3.50	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	2183.00	2208.00	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00
<b>Train 3</b>								
Planned unavailable hours	1.20	2.50	13.90	0	10.50	13.50	26.50	7.70
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	2183.00	2208.00	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00
<b>Train 4</b>								
Planned unavailable hours	18.40	4.20	10.80	10.10	29.40	26.20	39.30	0
Unplanned unavailable hours	6.30	17.60	0	0	0	0	3.50	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	2183.00	2208.00	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00
<b>Indicator value</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.5%</b>

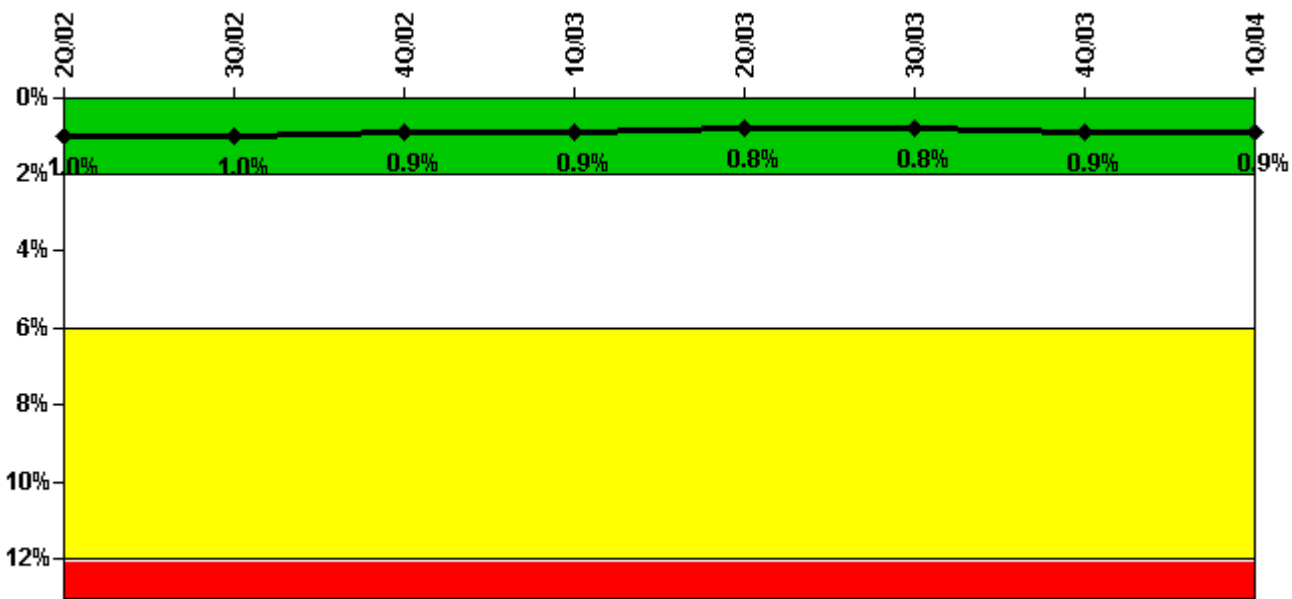
Licensee Comments:

4Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).

1Q/2004 Performance Indicators - Catawba 2

- 3Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 2Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 1Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 4Q/02: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 3Q/02: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 2Q/02: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 3Q/01: Unavailable hours revised to conform to NEI 99-02 guidance. Proper procedural guidance was not in place during IWP testing to maintain pump availability.
- 2Q/01: Unavailable hours revised to conform to NEI 99-02 guidance. Proper procedural guidance was not in place during IWP testing to maintain pump availability.
- 1Q/01: Unavailable hours revised to conform to NEI 99-02 guidance. Proper procedural guidance was not in place during IWP testing to maintain pump availability.

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



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

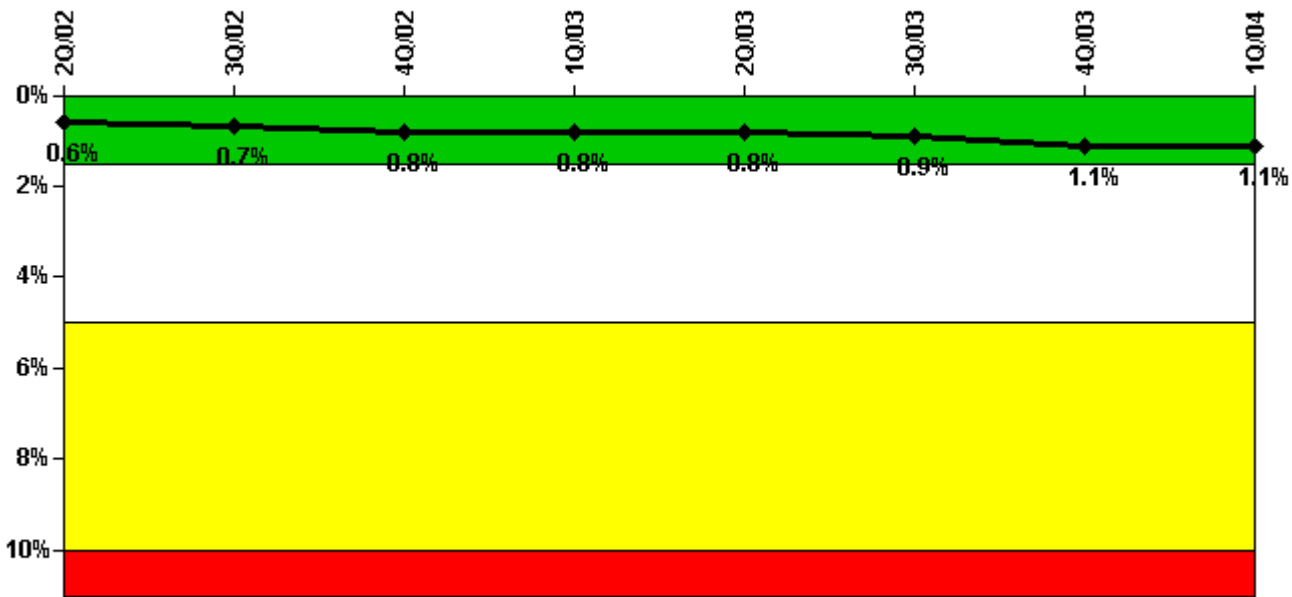
**Notes**

Safety System Unavailability, Heat Removal System (AFW)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
<b>Train 1</b>								
Planned unavailable hours	24.96	8.67	39.08	21.87	11.27	22.40	28.47	3.26
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	2183.00	2208.00	2209.00	1591.60	2183.00	2208.00	2209.00	2184.00
<b>Train 2</b>								
Planned unavailable hours	16.08	47.84	1.93	43.87	15.43	22.92	67.27	32.03

Unplanned unavailable hours	6.30	0	1.07	0	0	0	3.50	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	2183.00	2208.00	2209.00	1591.60	2183.00	2208.00	2209.00	2184.00
<b>Train 3</b>								
Planned unavailable hours	20.00	13.92	0.68	7.02	19.47	13.17	12.60	12.48
Unplanned unavailable hours	0	0	14.75	1.83	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	2183.00	2208.00	2209.00	1591.60	2183.00	2208.00	2209.00	2184.00
<b>Indicator value</b>	<b>1.0%</b>	<b>1.0%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



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

### Notes

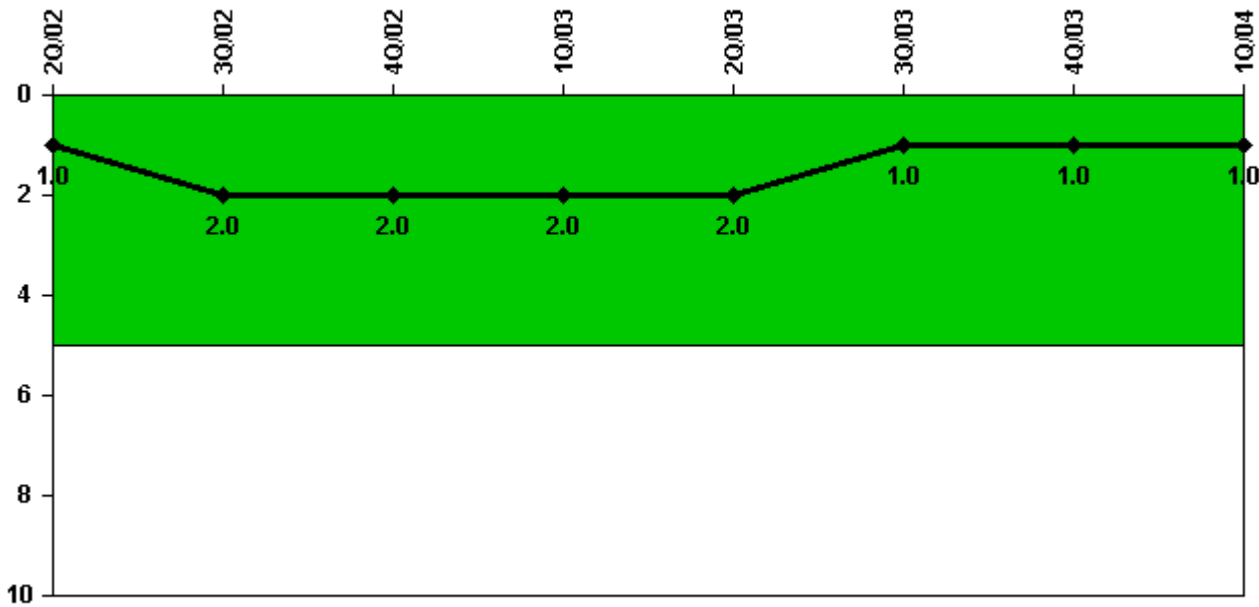
Safety System Unavailability, Residual Heat Removal System	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
<b>Train 1</b>								
Planned unavailable hours	26.13	0.30	23.52	0.35	0.32	23.58	26.87	26.02
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
<b>Train 2</b>								
Planned unavailable hours	13.48	0	26.85	60.75	83.40	21.97	67.40	0
Unplanned unavailable hours	32.78	58.80	0	0	0	0	3.50	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	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00
Indicator value	0.6%	0.7%	0.8%	0.8%	0.8%	0.9%	1.1%	1.1%

Licensee Comments:

- 4Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 3Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 2Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 1Q/03: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 4Q/02: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 3Q/02: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 2Q/02: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 1Q/02: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 4Q/01: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 3Q/01: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 2Q/01: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).
- 1Q/01: Revised to include no-mode hours in "hours train required" as a result of URI 03-05-02 (Revised 1Q2004).

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

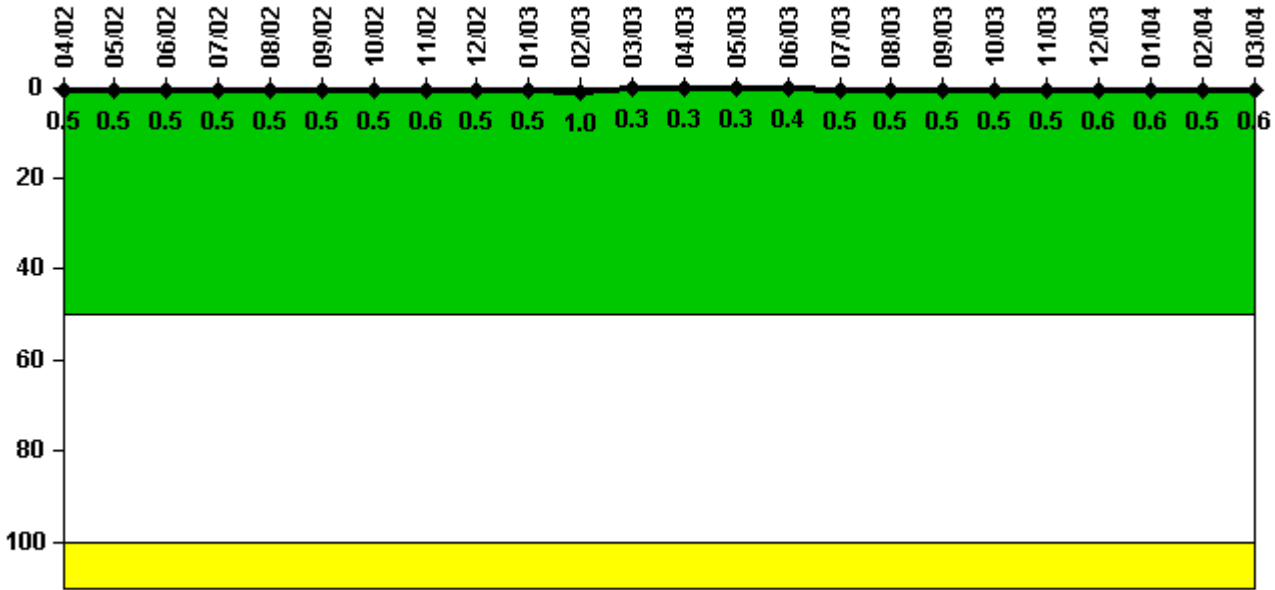
Notes



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

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

### Notes

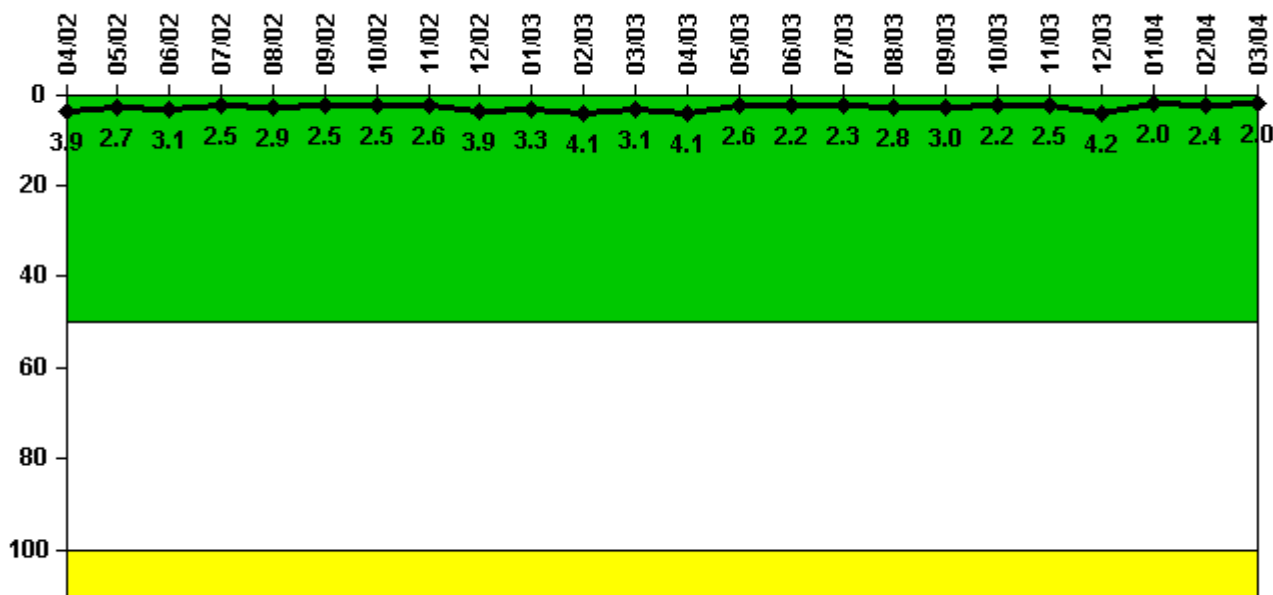
Reactor Coolant System Activity	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum activity	0.000340	0.000290	0.000310	0.000330	0.000320	0.000340	0.000350	0.000380	0.000350	0.000340	0.000622	0.000170
Technical specification limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Indicator value	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	1.0	0.3

Reactor Coolant System Activity	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum activity	0.000190	0.000213	0.000245	0.000290	0.000310	0.000310	0.000341	0.000340	0.000353	0.000352	0.000344	0.000405
Technical specification limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Indicator value	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.6

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

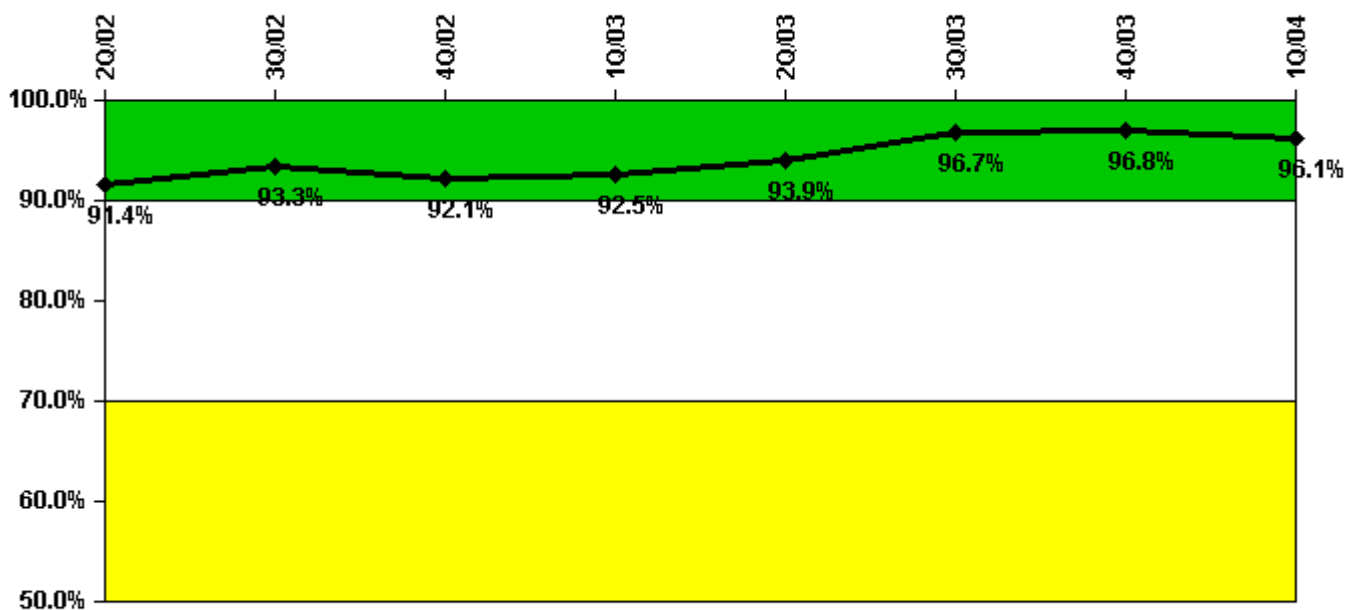
Reactor Coolant System Leakage	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum leakage	0.391	0.271	0.307	0.250	0.288	0.251	0.253	0.256	0.387	0.332	0.409	0.314
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	3.9	2.7	3.1	2.5	2.9	2.5	2.5	2.6	3.9	3.3	4.1	3.1

Reactor Coolant System Leakage	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum leakage	0.406	0.260	0.220	0.230	0.276	0.302	0.223	0.245	0.418	0.197	0.241	0.202
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	4.1	2.6	2.2	2.3	2.8	3.0	2.2	2.5	4.2	2.0	2.4	2.0

Licensee Comments: none

### Drill/Exercise Performance



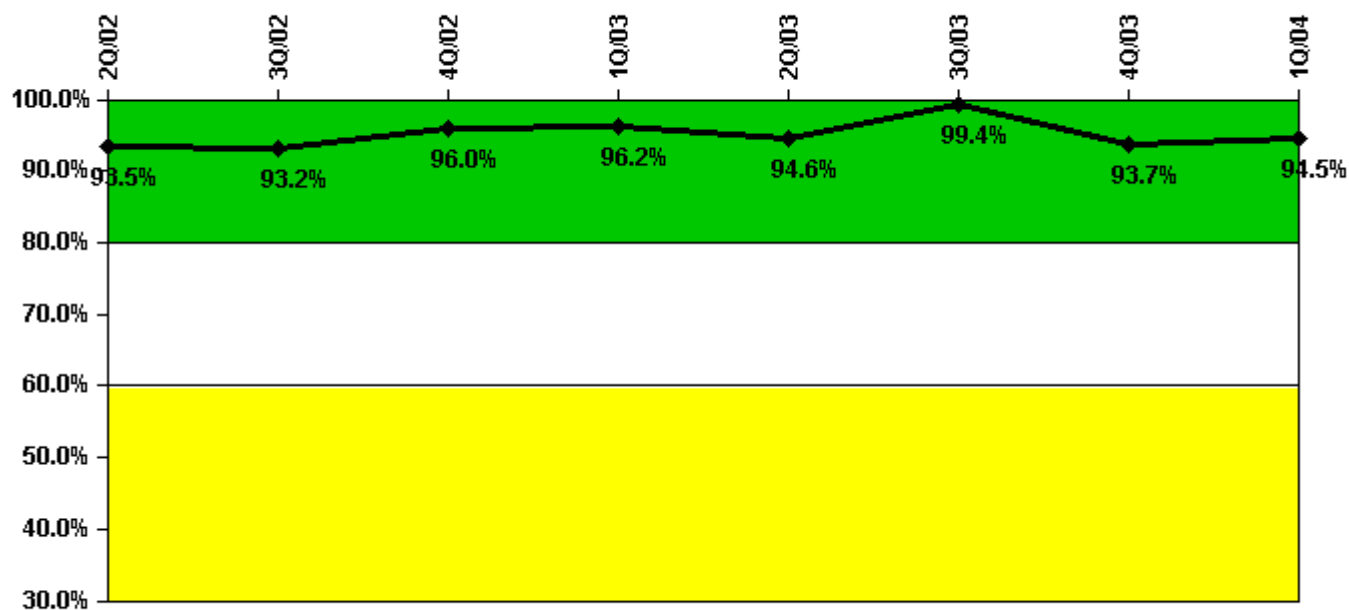
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Successful opportunities	8.0	71.0	40.0	18.0	78.0	80.0	22.0	25.0
Total opportunities	8.0	74.0	46.0	18.0	78.0	82.0	22.0	28.0
Indicator value	91.4%	93.3%	92.1%	92.5%	93.9%	96.7%	96.8%	96.1%

Licensee Comments: none

### ERO Drill Participation



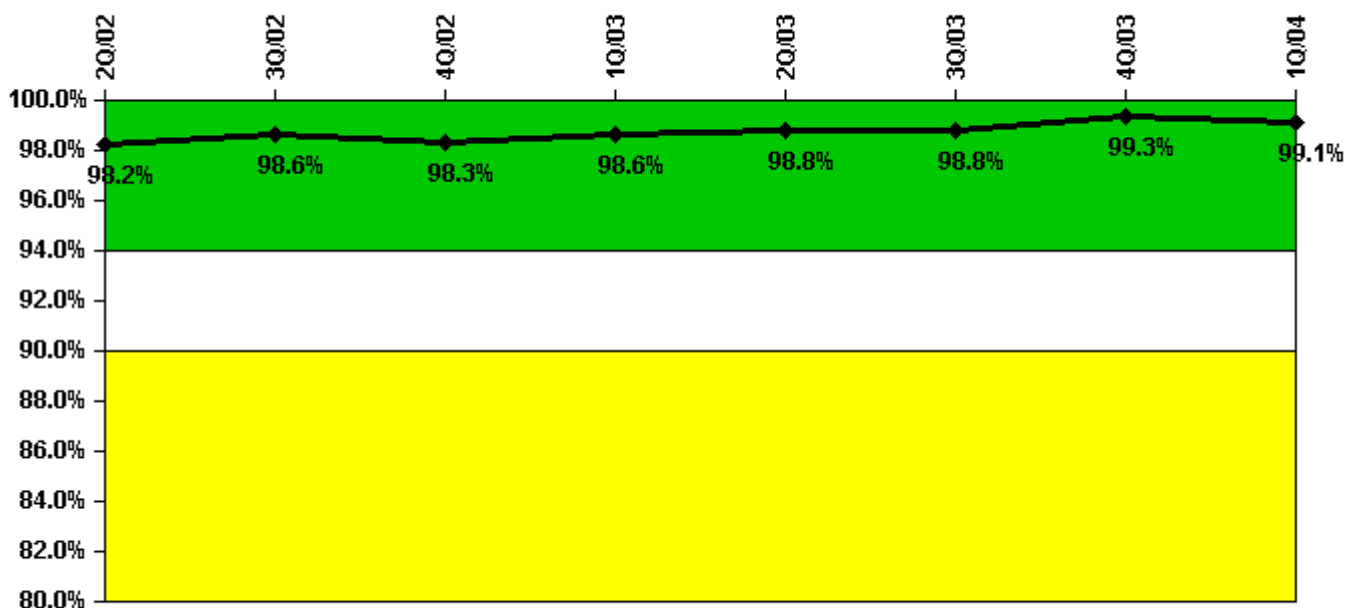
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Participating Key personnel	186.0	177.0	192.0	177.0	175.0	159.0	149.0	154.0
Total Key personnel	199.0	190.0	200.0	184.0	185.0	160.0	159.0	163.0
Indicator value	93.5%	93.2%	96.0%	96.2%	94.6%	99.4%	93.7%	94.5%

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Successful siren-tests	2253	2251	2248	2220	2386	2457	2375	2383
Total sirens-tests	2288	2281	2302	2225	2403	2492	2388	2403
Indicator value	98.2%	98.6%	98.3%	98.6%	98.8%	98.8%	99.3%	99.1%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

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



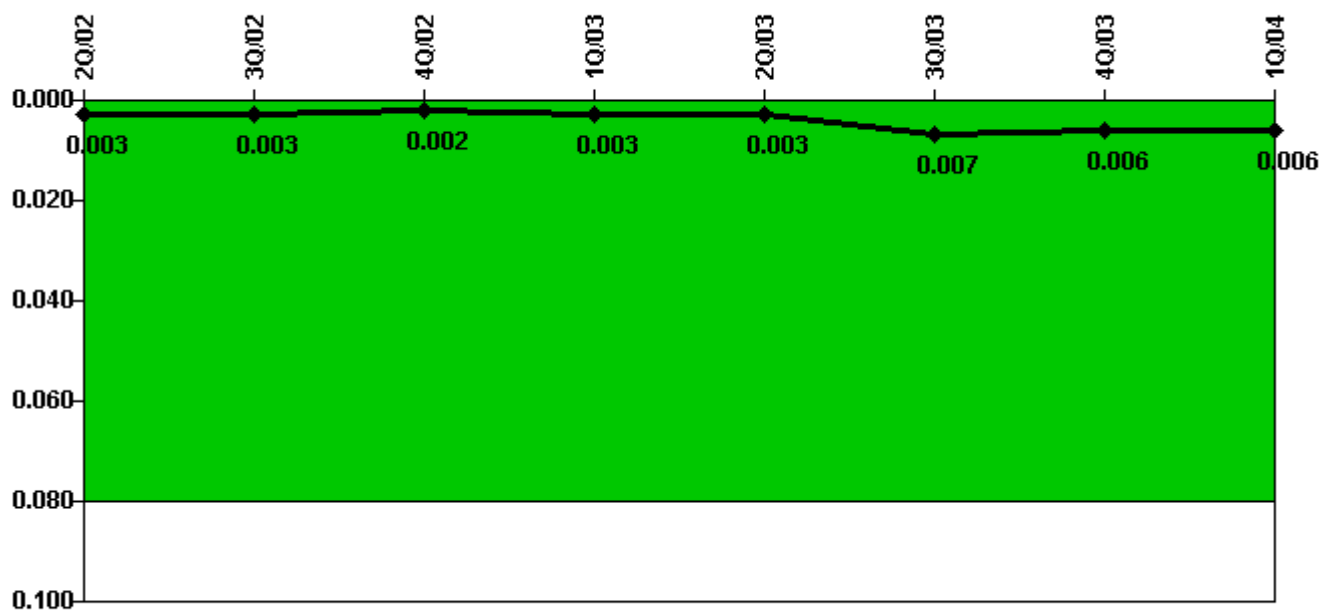
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
RETS/ODCM 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

### Protected Area Security Performance Index



Thresholds: White > 0.080

#### Notes

Protected Area Security Performance Index	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
IDS compensatory hours	5.10	2.10	62.30	29.00	28.50	146.20	1.80	20.90
CCTV compensatory hours	0	0	0	3.6	0	7.5	2.2	12.2
IDS normalization factor	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<b>Index Value</b>	<b>0.003</b>	<b>0.003</b>	<b>0.002</b>	<b>0.003</b>	<b>0.003</b>	<b>0.007</b>	<b>0.006</b>	<b>0.006</b>

Licensee Comments: none



### Personnel Screening Program



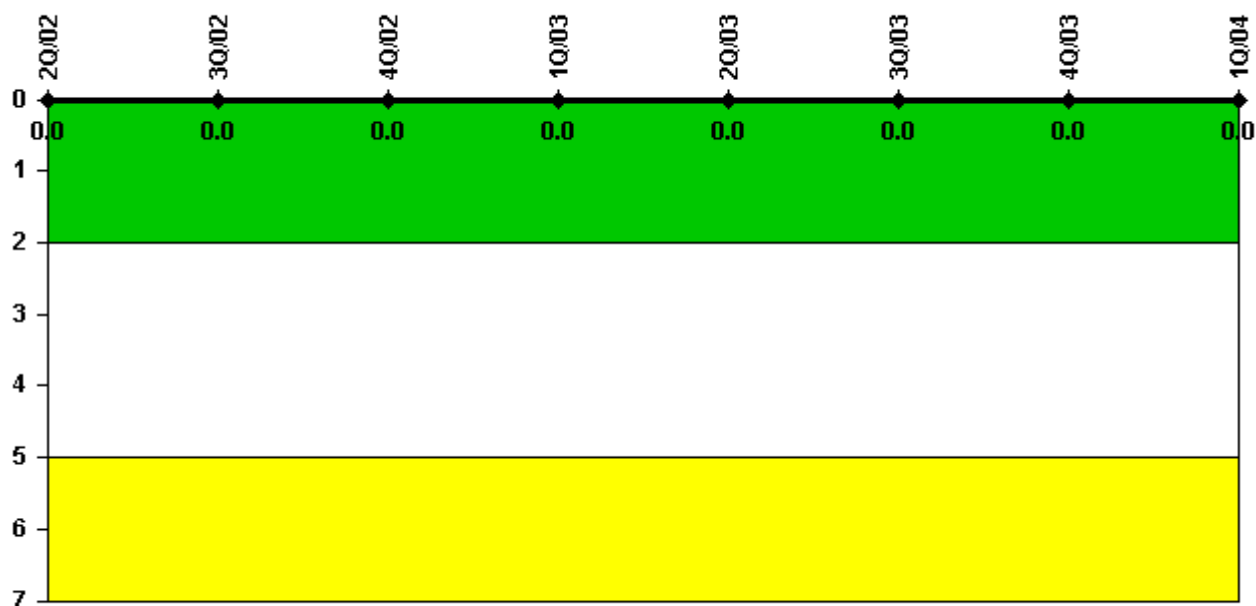
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Program failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

FFD/Personnel Reliability	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Program Failures	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

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

Last Modified: April 22, 2004