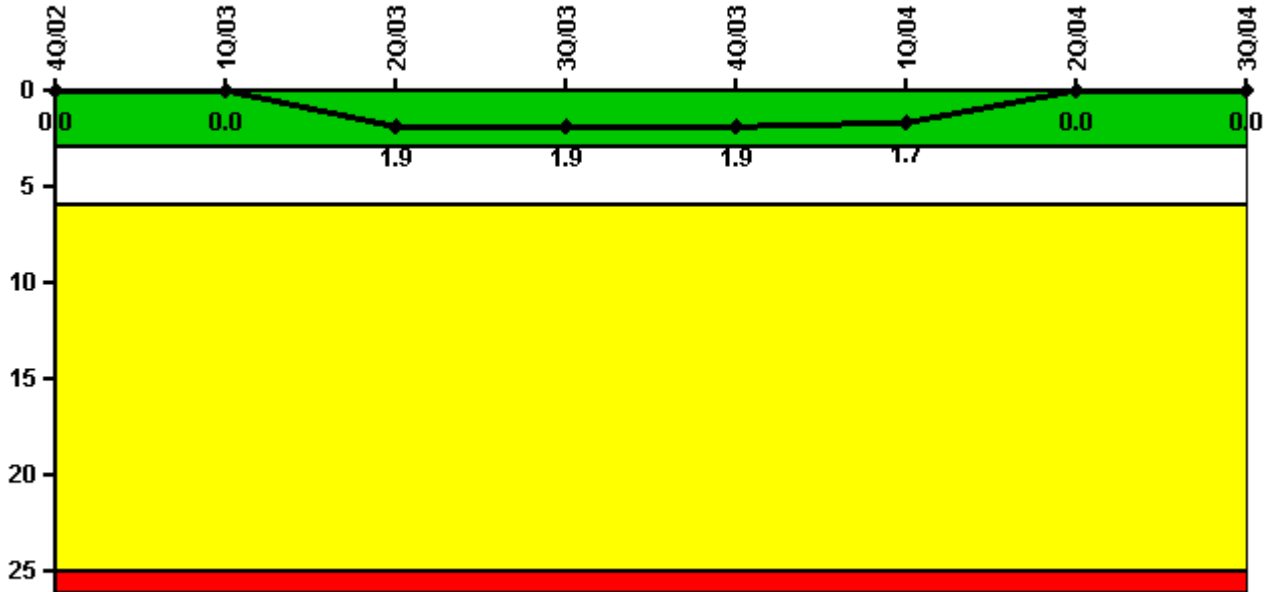


# North Anna 1

## 3Q/2004 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



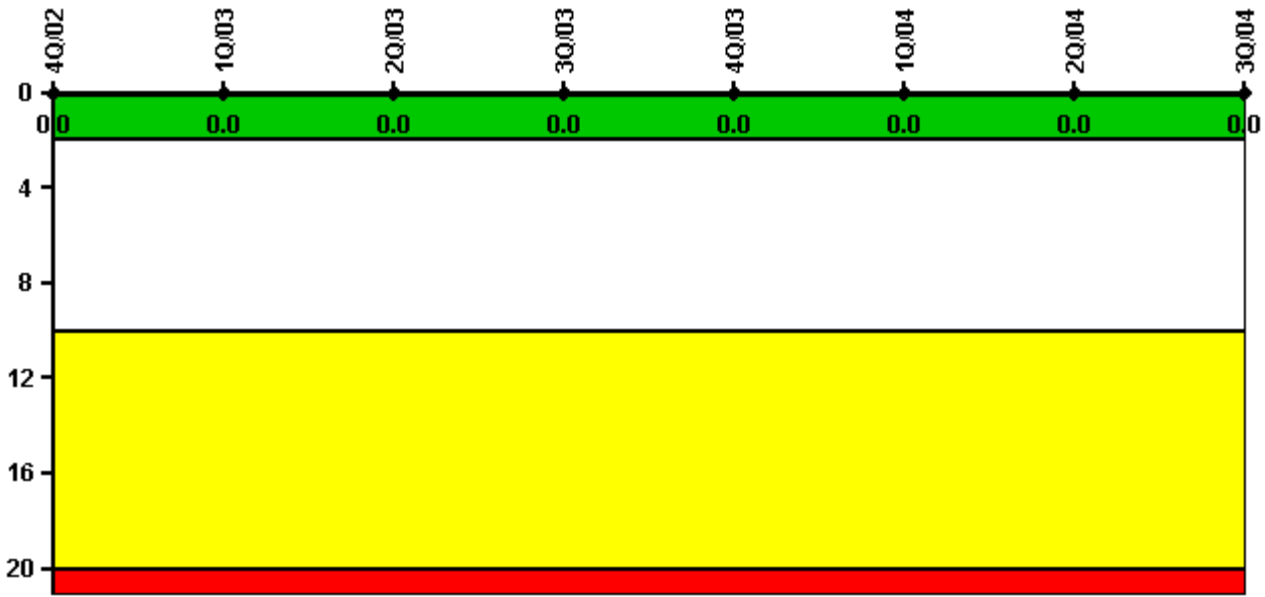
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Unplanned scrams	0	0	2.0	0	0	0	0	0
Critical hours	2209.0	1273.7	1549.9	2208.0	2209.0	2051.8	2183.0	1753.2
Indicator value	0	0	1.9	1.9	1.9	1.7	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



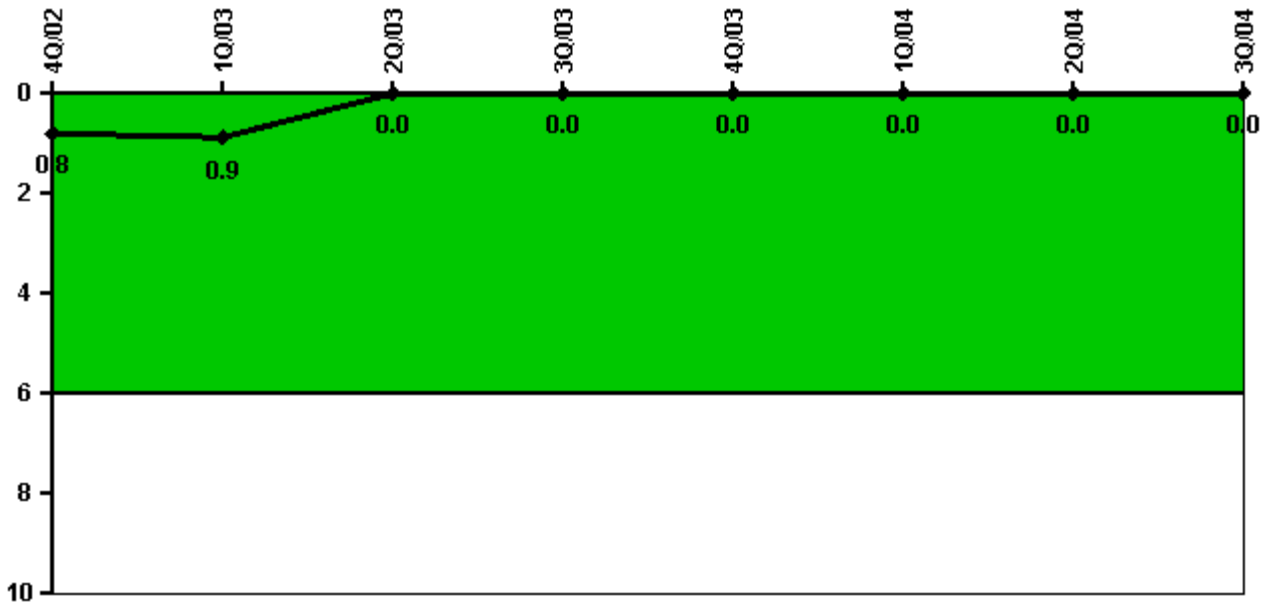
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

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



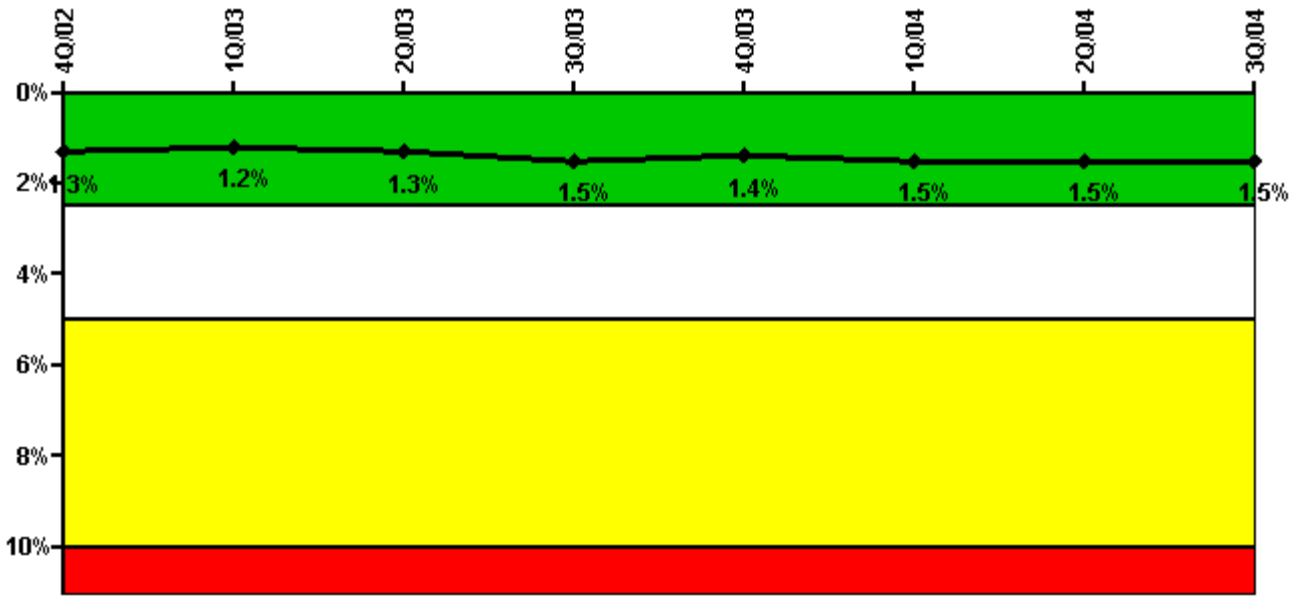
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2209.0	1273.7	1549.9	2208.0	2209.0	2051.8	2183.0	1753.2
<b>Indicator value</b>	<b>0.8</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

### Safety System Unavailability, Emergency AC Power



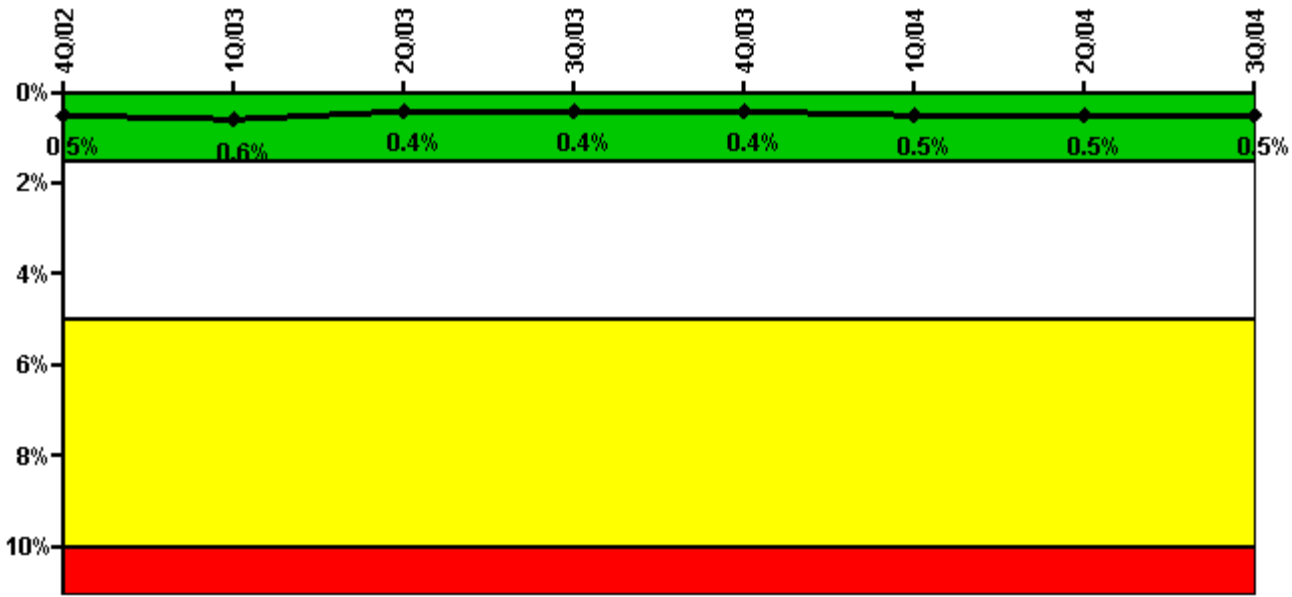
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, Emergency AC Power	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	7.36	4.61	2.67	50.35	9.10	6.20	37.97	7.38
Unplanned unavailable hours	9.67	77.40	23.50	23.00	0	104.52	2.50	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	2209.00	1723.64	1677.40	2208.00	2209.00	2184.00	2183.00	1987.51
<b>Train 2</b>								
Planned unavailable hours	10.60	7.69	7.48	54.00	14.39	8.02	27.52	8.46
Unplanned unavailable hours	11.80	0	3.88	0	18.21	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	2209.00	1723.64	1806.70	2208.00	2209.00	2184.00	2183.00	1987.51
<b>Indicator value</b>	<b>1.3%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.5%</b>	<b>1.4%</b>	<b>1.5%</b>	<b>1.5%</b>	<b>1.5%</b>

Licensee Comments: none

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



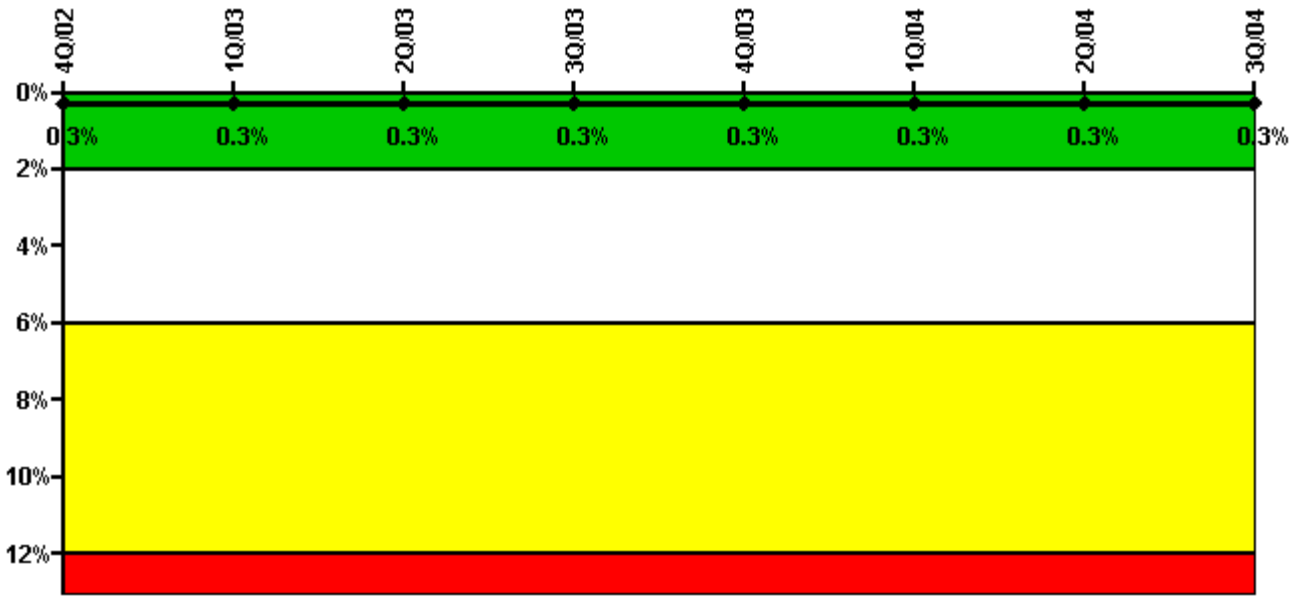
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	7.14	1.15	5.65	5.51	2.38	5.95	4.08	6.15
Unplanned unavailable hours	0.65	3.08	0.12	0	0	0	0	3.30
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1285.22	1836.99	2208.00	2209.00	2184.00	2183.00	1764.70
<b>Train 2</b>								
Planned unavailable hours	3.90	19.77	5.02	5.79	5.04	3.12	5.05	4.46
Unplanned unavailable hours	0	6.45	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	2209.00	1285.22	1836.99	2208.00	2209.00	2184.00	2183.00	1764.70
<b>Indicator value</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments: none

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



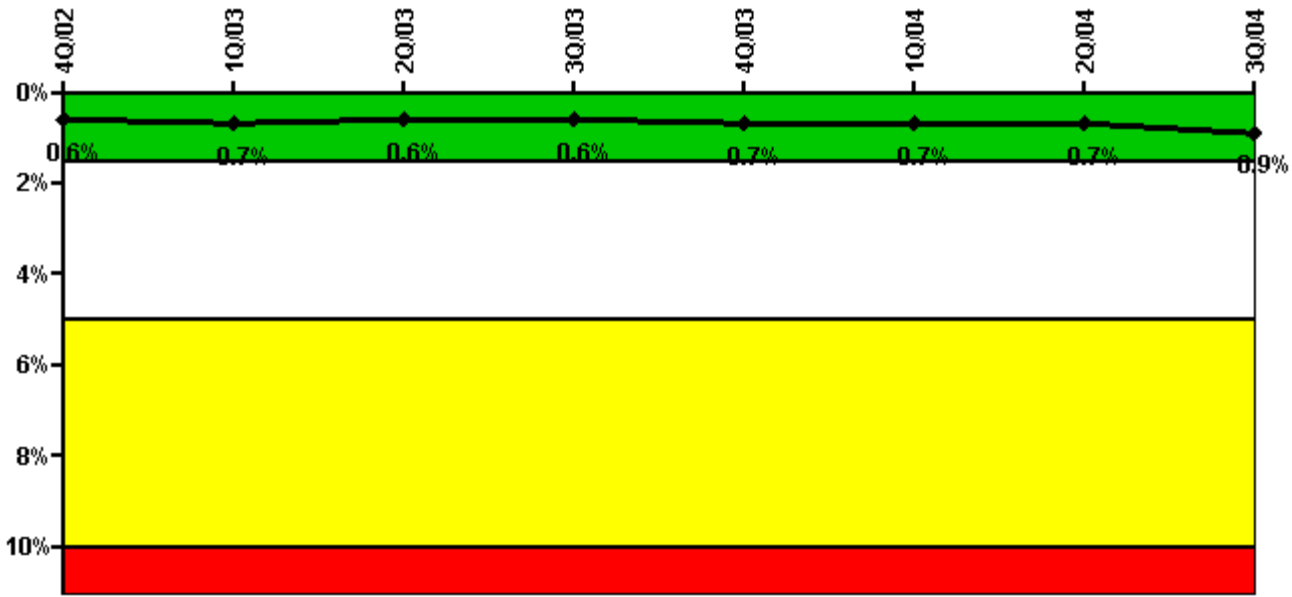
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

**Notes**

Safety System Unavailability, Heat Removal System (AFW)	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	10.42	1.50	7.78	4.48	13.62	8.62	4.17	5.35
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	2209.00	1285.22	1836.99	2208.00	2209.00	2184.00	2183.00	1762.57
<b>Train 2</b>								
Planned unavailable hours	4.03	13.52	4.09	6.23	14.22	2.52	6.25	2.72
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	2209.00	1285.22	1836.99	2208.00	2209.00	2184.00	2183.00	1762.57
<b>Train 3</b>								
Planned unavailable hours	4.80	0.33	9.81	10.45	6.48	5.32	9.92	0
Unplanned unavailable hours	0	0	3.27	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	2209.00	1283.17	1829.18	2208.00	2209.00	2184.00	2183.00	1762.57
<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>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



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

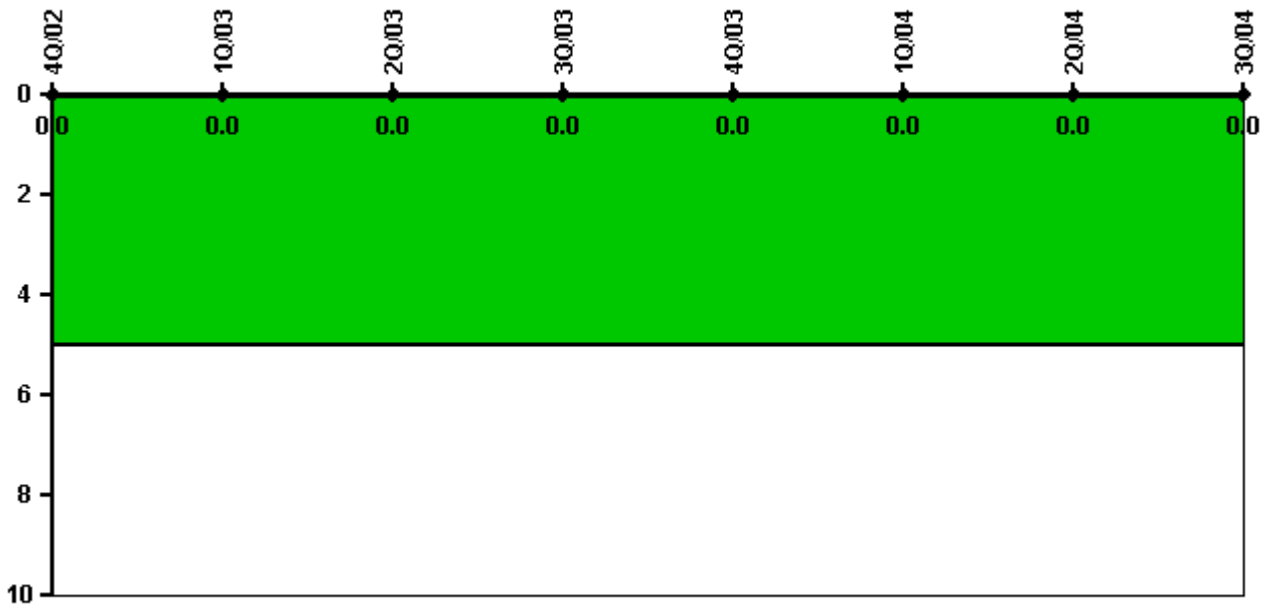
**Notes**

Safety System Unavailability, Residual Heat Removal System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	5.60	1.15	7.93	19.58	28.98	6.47	5.95	21.85
Unplanned unavailable hours	52.33	2.50	1.82	1.65	0	2.53	0	160.82
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1287.27	1844.79	2208.00	2209.00	2184.00	2183.00	1764.70
<b>Train 2</b>								
Planned unavailable hours	11.78	11.30	5.82	10.31	26.45	31.47	15.52	2.95
Unplanned unavailable hours	57.50	67.18	0	0	0	0	0	81.52
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	1287.27	1844.79	2208.00	2209.00	2184.00	2183.00	1764.70
<b>Train 3</b>								
Planned unavailable hours	37.17	3.20	0	10.15	0	0	0	3.33
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	2209.00	1414.64	2106.56	2208.00	2209.00	2184.00	2183.00	2029.98
<b>Train 4</b>								
Planned unavailable hours	0	2.98	0	0	0	0	0	5.27
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	2209.00	1414.64	2106.56	2208.00	2209.00	2184.00	2183.00	2029.98
<b>Indicator value</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.9%</b>

Licensee Comments:

3Q/04: Unplanned unavailability / 475.49 T/2 Fault Exposure hrs. due to the repair of a piping leak adjacent to LHSI Pump 1-SI-P-1A.

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

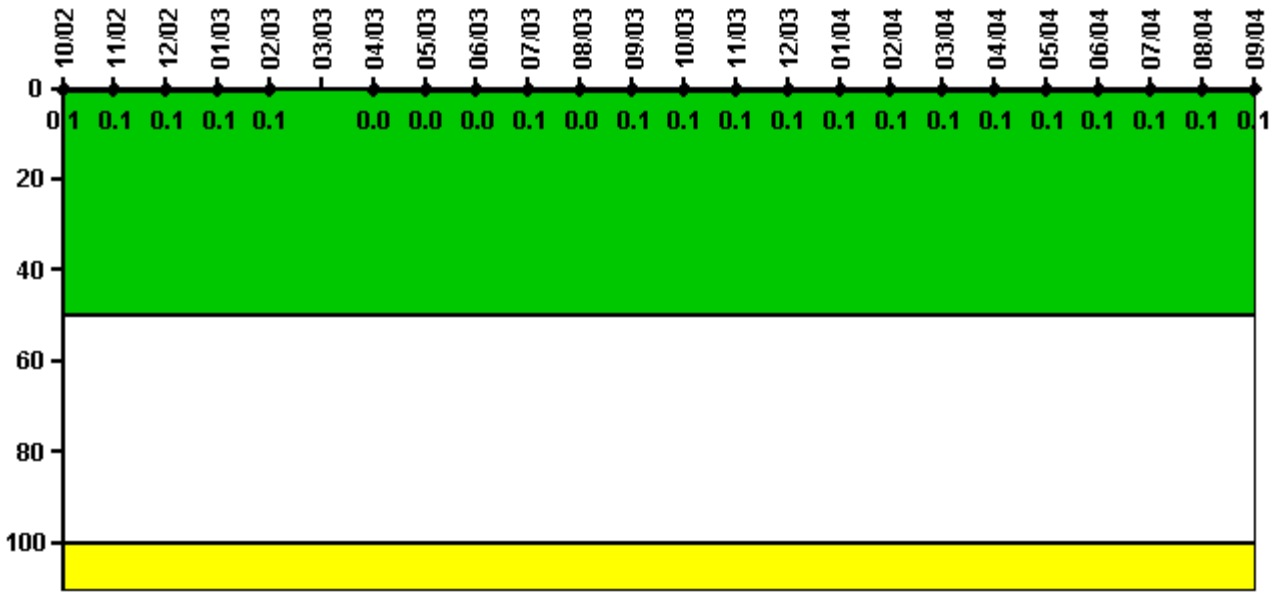
#### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

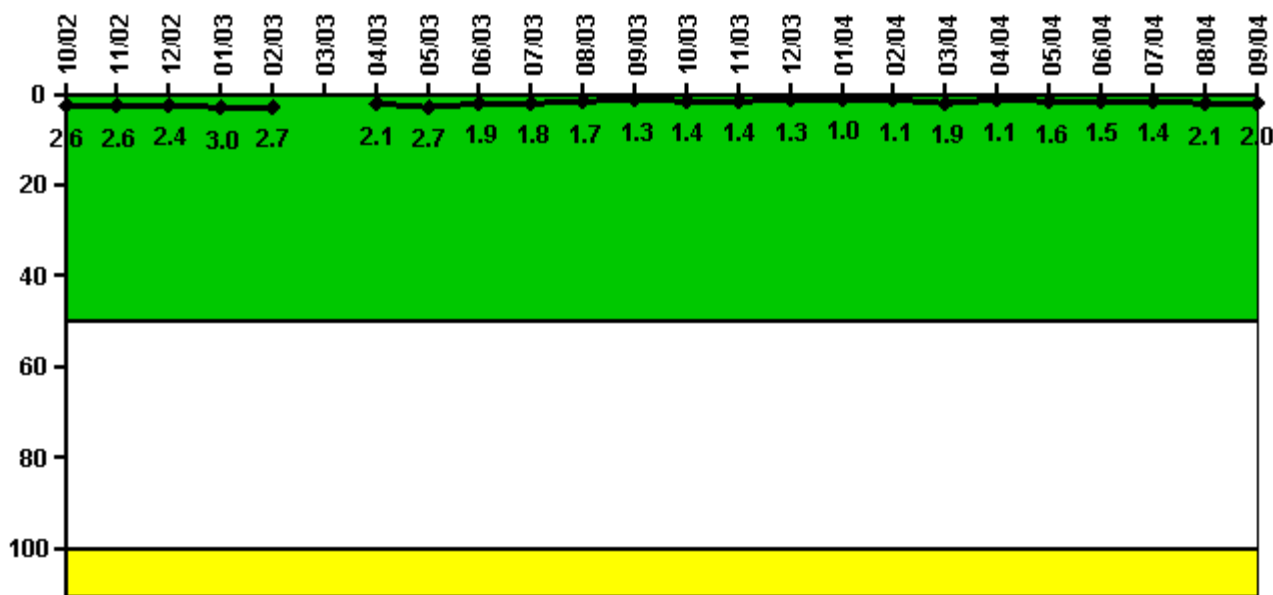
Reactor Coolant System Activity	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum activity	0.000815	0.000797	0.000852	0.000809	0.000947	N/A	0.000412	0.000495	0.000410	0.000513	0.000458	0.000705
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.1	0.1	0.1	0.1	0.1	N/A	0	0	0	0.1	0	0.1

Reactor Coolant System Activity	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum activity	0.000527	0.000559	0.000534	0.000546	0.000561	0.000594	0.000595	0.000600	0.000633	0.000646	0.000676	0.000908
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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

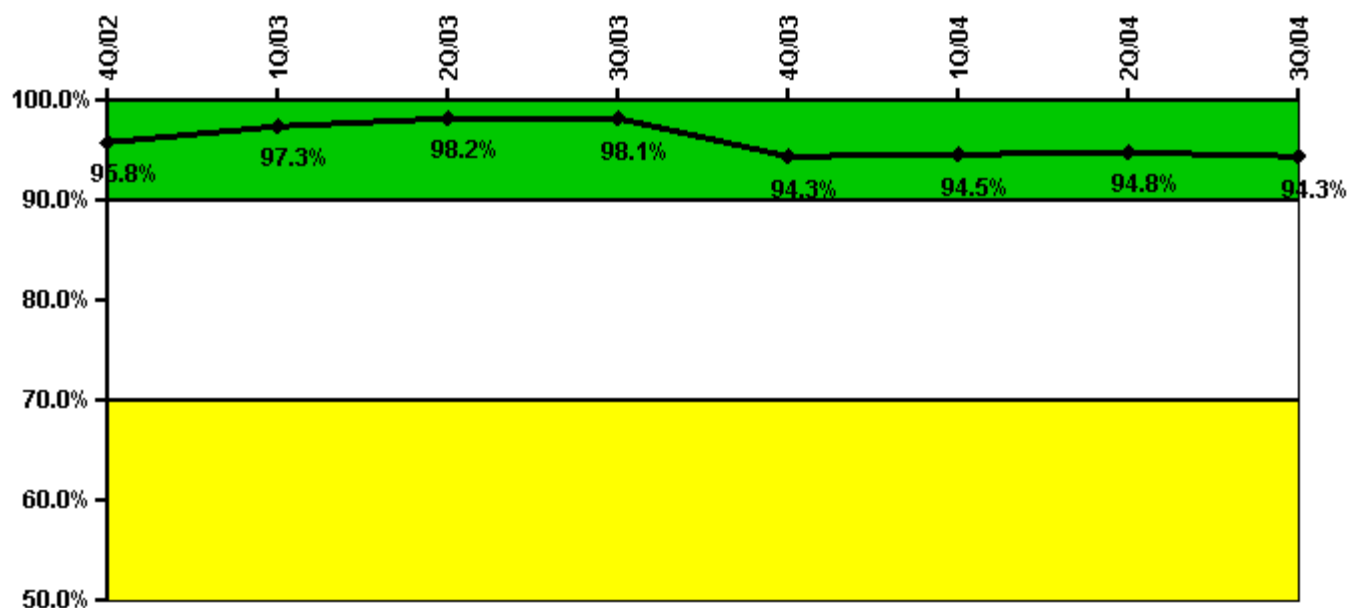
Reactor Coolant System Leakage	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum leakage	0.263	0.257	0.235	0.299	0.267	N/A	0.212	0.272	0.192	0.179	0.173	0.135
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.6	2.6	2.4	3.0	2.7	N/A	2.1	2.7	1.9	1.8	1.7	1.3

Reactor Coolant System Leakage	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum leakage	0.140	0.136	0.132	0.097	0.113	0.188	0.113	0.155	0.150	0.139	0.207	0.198
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	1.4	1.3	1.0	1.1	1.9	1.1	1.6	1.5	1.4	2.1	2.0

Licensee Comments: none

### Drill/Exercise Performance



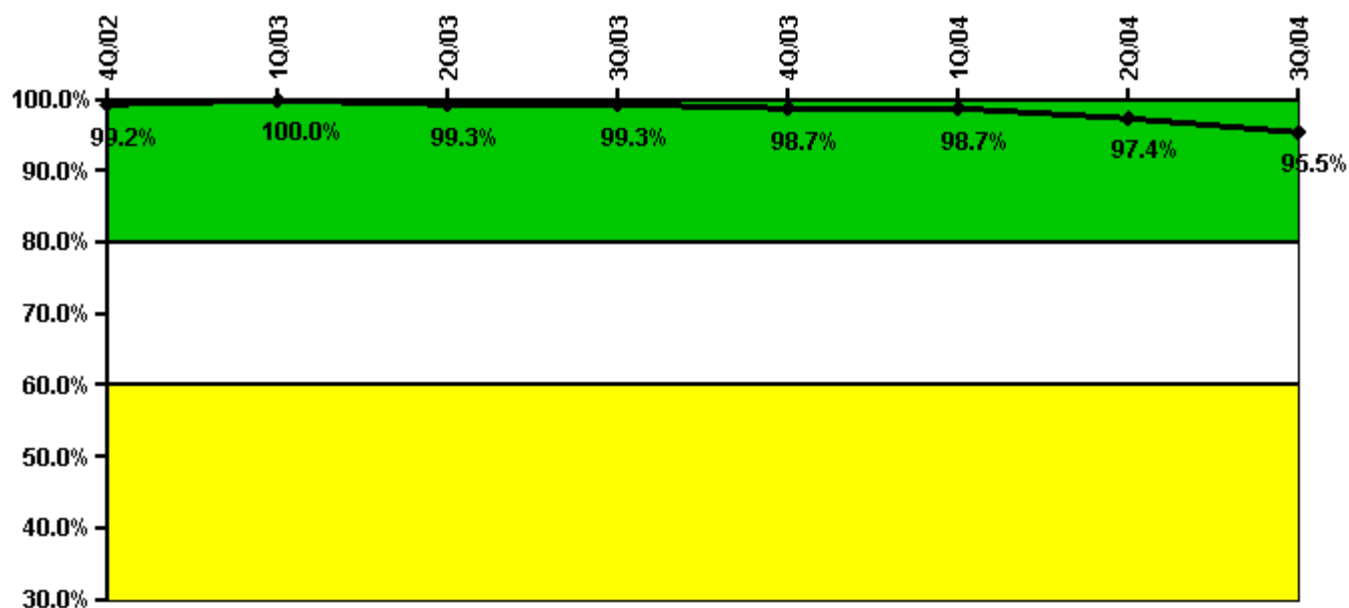
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful opportunities	10.0	30.0	108.0	3.0	25.0	31.0	11.0	13.0
Total opportunities	10.0	32.0	108.0	3.0	35.0	32.0	11.0	14.0
Indicator value	95.8%	97.3%	98.2%	98.1%	94.3%	94.5%	94.8%	94.3%

Licensee Comments: none

### ERO Drill Participation



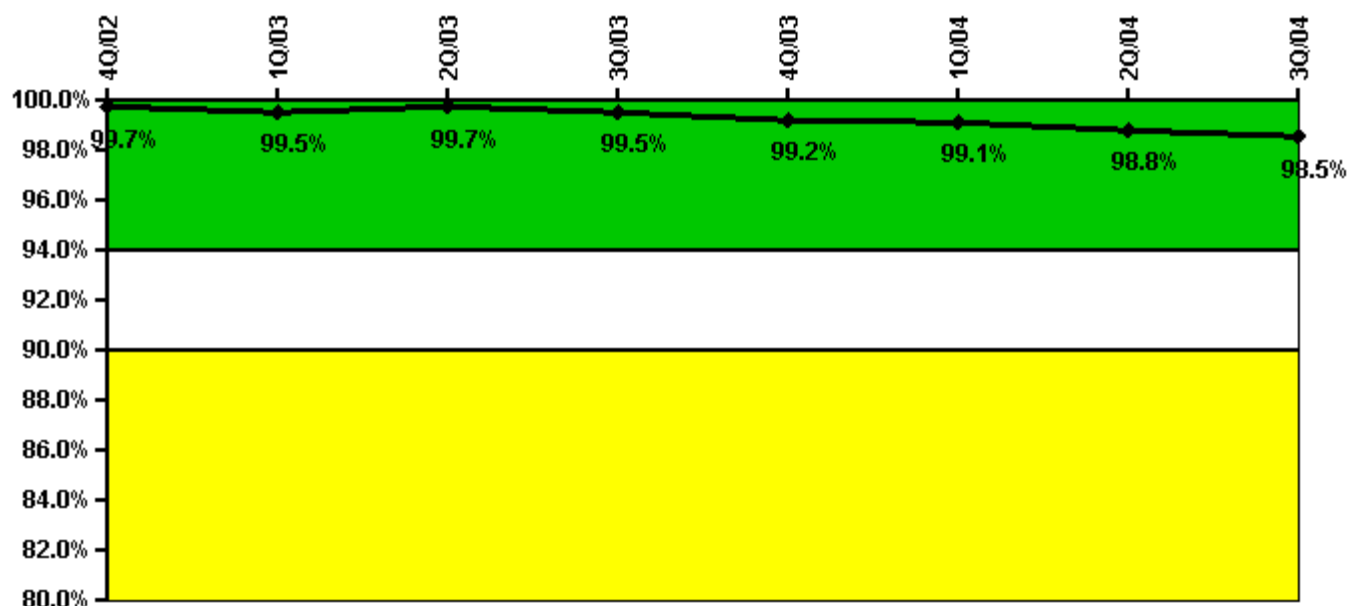
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Participating Key personnel	127.0	124.0	151.0	152.0	150.0	150.0	147.0	149.0
Total Key personnel	128.0	124.0	152.0	153.0	152.0	152.0	151.0	156.0
Indicator value	99.2%	100.0%	99.3%	99.3%	98.7%	98.7%	97.4%	95.5%

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful siren-tests	434	431	436	436	435	437	436	450
Total sirens-tests	434	434	436	441	441	441	443	460
Indicator value	99.7%	99.5%	99.7%	99.5%	99.2%	99.1%	98.8%	98.5%

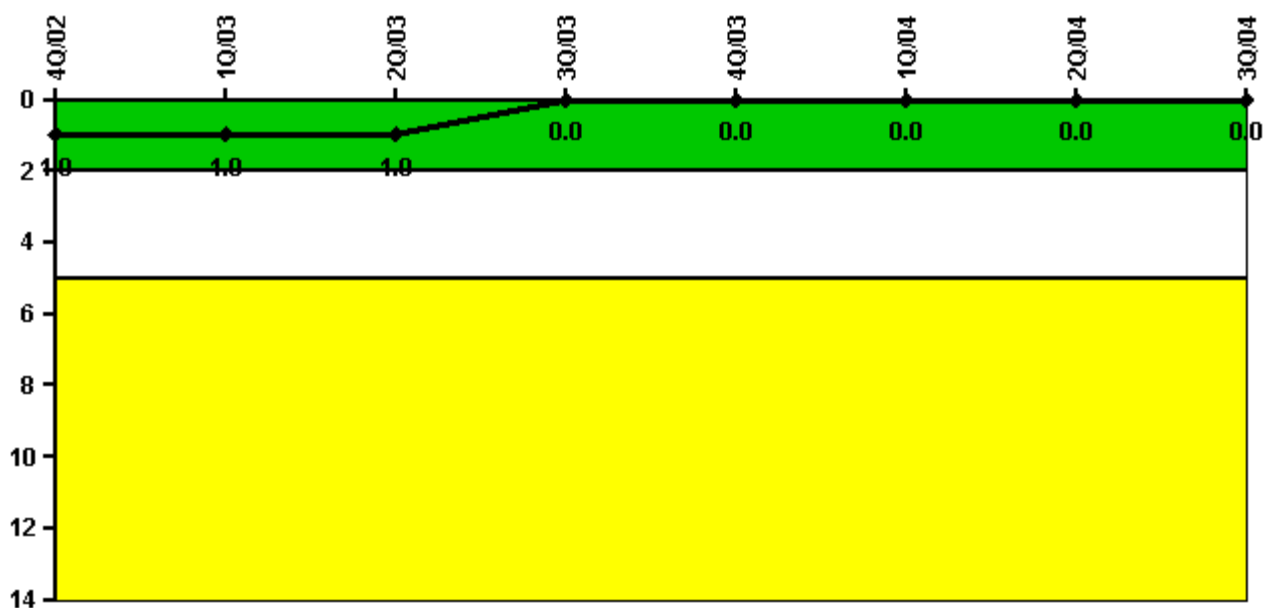
Licensee Comments:

3Q/04: Siren data revised after it was determined that siren # 45 has been inoperable since Feb '04.

2Q/04: Siren data revised after it was determined that siren # 45 has been inoperable since Feb '04.

1Q/04: Siren data revised after it was determined that siren # 45 has been inoperable since Feb '04.

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/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>1</b>	<b>1</b>	<b>1</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	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/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: October 25, 2004