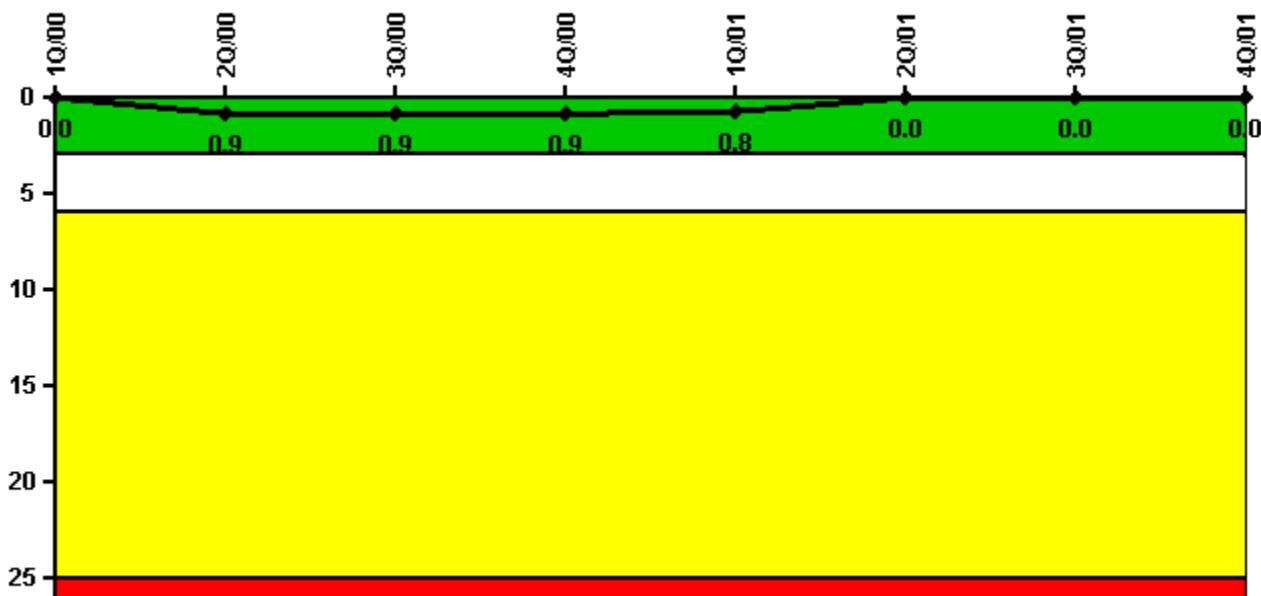


### North Anna 1

#### 4Q/2001 Performance Indicators

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



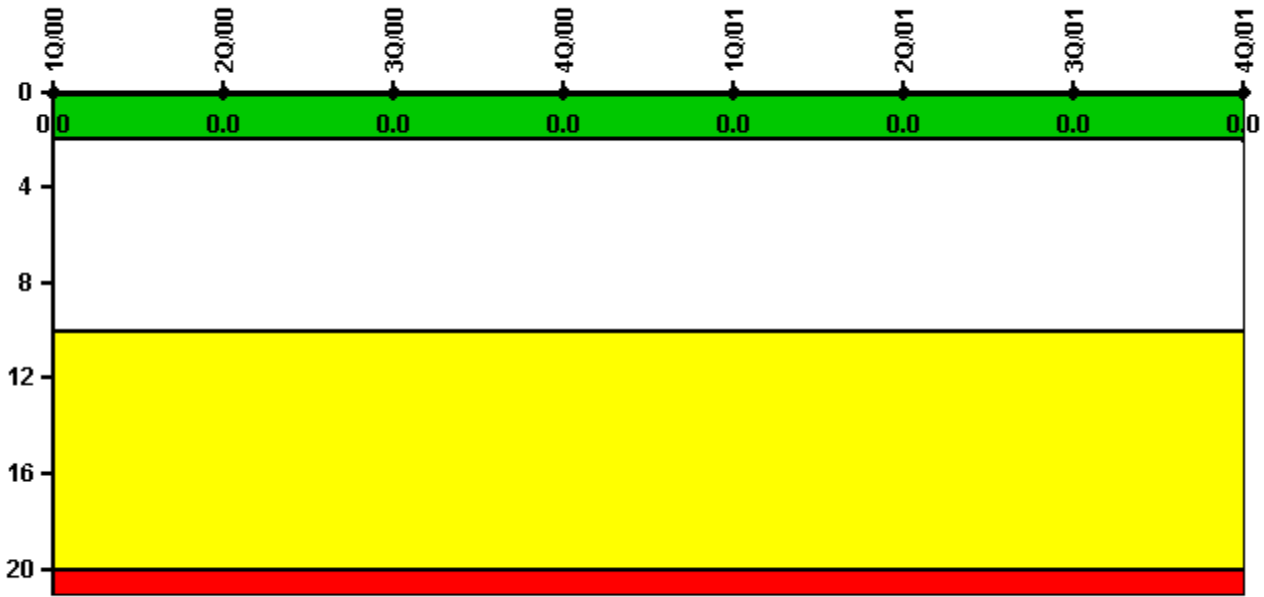
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Unplanned scrams	0	1.0	0	0	0	0	0	0
Critical hours	1705.5	1959.7	2208.0	2209.0	2160.0	2183.0	1681.6	2003.8
Indicator value	0	0.9	0.9	0.9	0.8	0	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



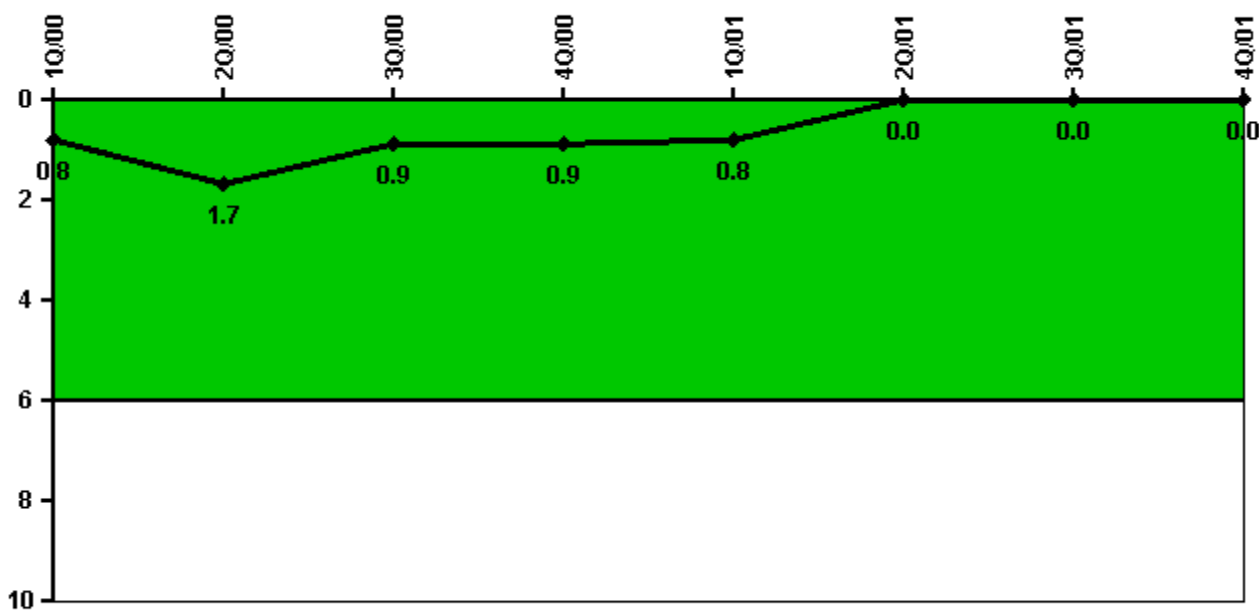
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
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



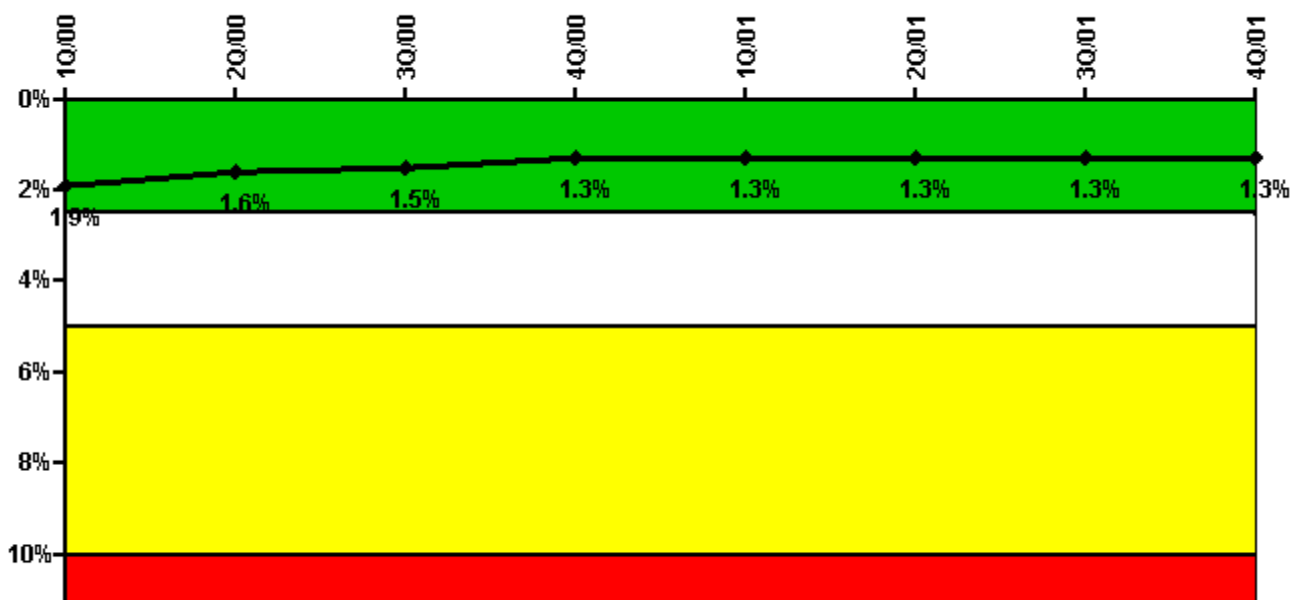
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Unplanned power changes	0	1.0	0	0	0	0	0	0
Critical hours	1705.5	1959.7	2208.0	2209.0	2160.0	2183.0	1681.6	2003.8
Indicator value	0.8	1.7	0.9	0.9	0.8	0	0	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



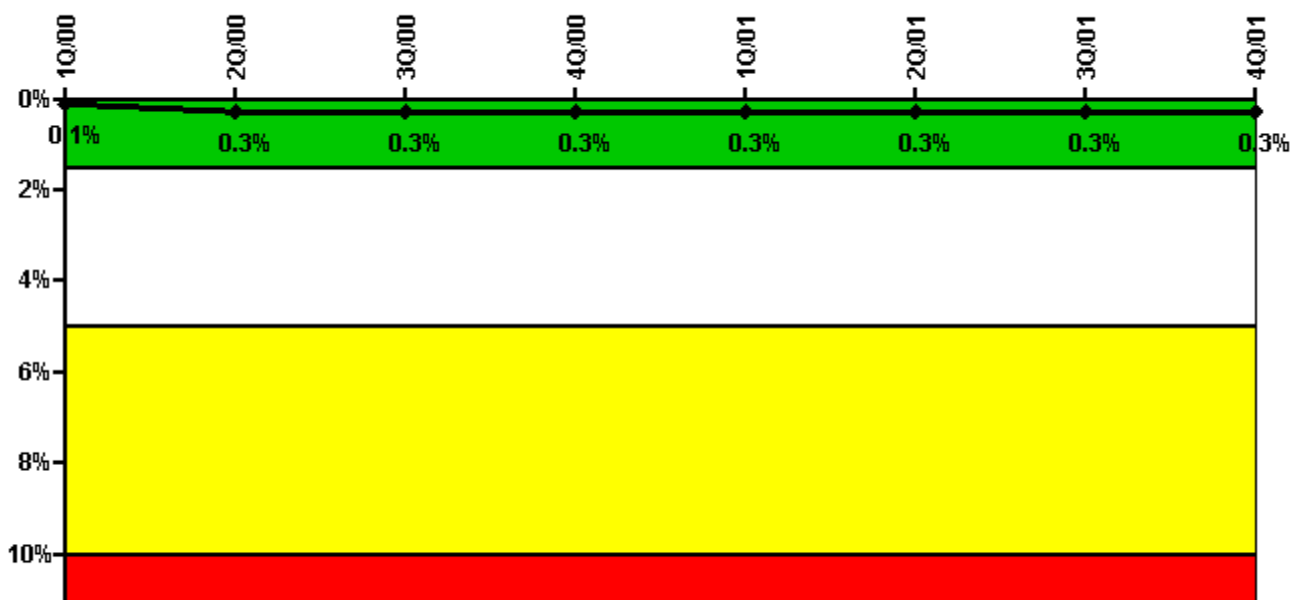
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
<b>Train 1</b>								
Planned unavailable hours	14.43	7.73	23.33	45.15	8.10	60.71	12.97	7.19
Unplanned unavailable hours	0	0.30	0	0	0	5.33	0	0
Fault exposure hours	95.52	3.92	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1815.70	2054.74	2208.00	2209.00	2160.00	2183.00	1952.00	2119.13
<b>Train 2</b>								
Planned unavailable hours	12.27	14.00	9.23	48.38	6.32	10.40	9.01	11.94
Unplanned unavailable hours	0	8.92	0	0	34.00	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	2088.50	2179.08	2208.00	2209.00	2160.00	2183.00	1952.00	2119.13
<b>Indicator value</b>	<b>1.9%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>1.3%</b>

Licensee Comments: none

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



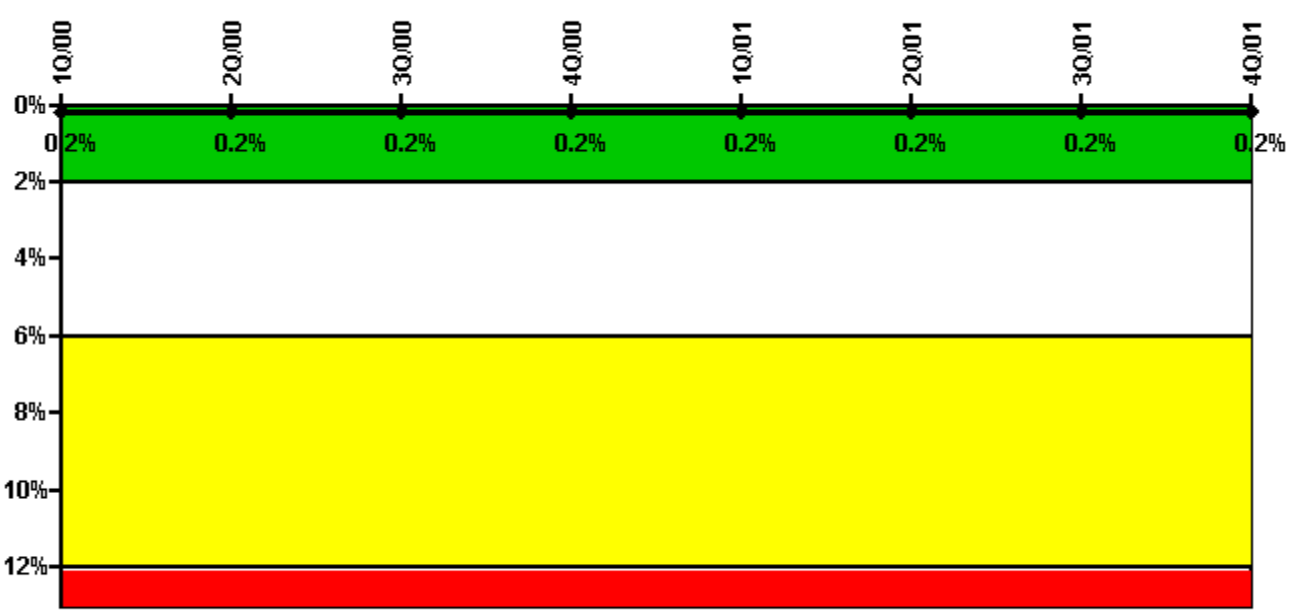
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
<b>Train 1</b>								
Planned unavailable hours	0.58	6.52	6.37	4.08	0.93	0.79	3.53	0
Unplanned unavailable hours	0	39.11	0.95	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	1720.20	2101.73	2208.00	2209.00	2160.00	2183.00	1693.25	2027.23
<b>Train 2</b>								
Planned unavailable hours	1.02	7.07	2.73	3.80	0.12	3.22	1.30	0.37
Unplanned unavailable hours	0	33.46	0.87	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	2034.78	2132.08	2208.00	2209.00	2160.00	2183.00	1693.25	2027.23
<b>Indicator value</b>	<b>0.1%</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, Heat Removal System (AFW)



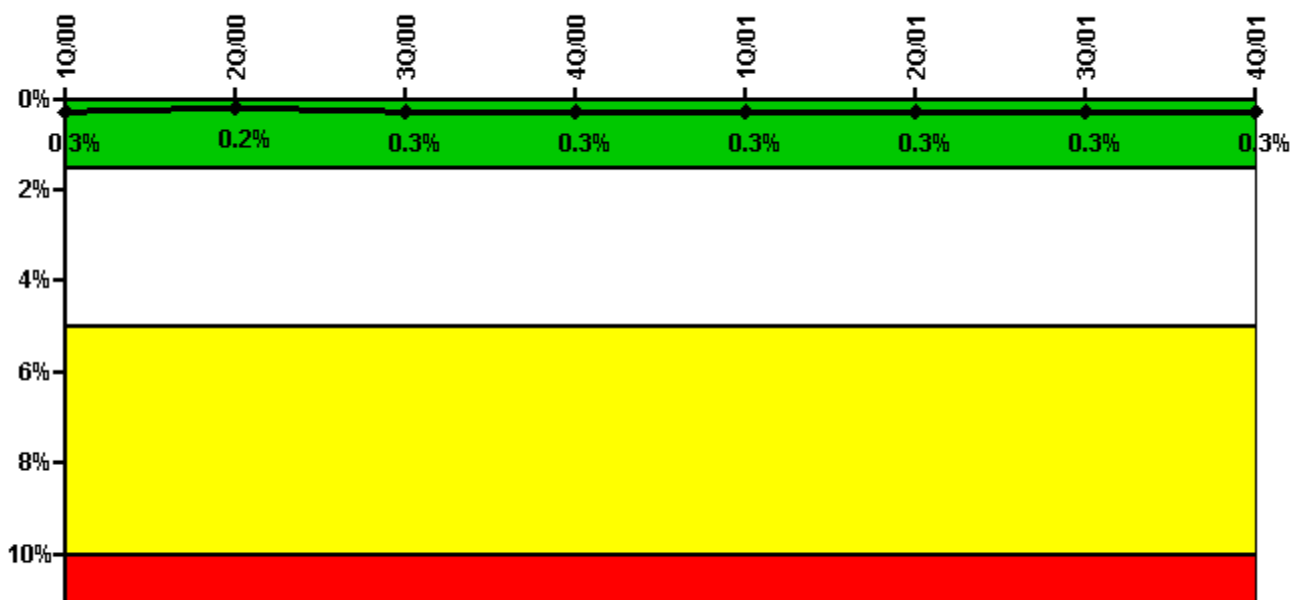
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
<b>Train 1</b>								
Planned unavailable hours	0	1.17	1.10	1.87	14.02	2.28	1.12	1.25
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	1715.78	2046.23	2208.00	2209.00	2160.00	2183.00	1690.82	2023.73
<b>Train 2</b>								
Planned unavailable hours	9.75	0	6.29	11.83	0.48	1.58	0	6.45
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	1715.78	2046.23	2208.00	2209.00	2160.00	2183.00	1690.82	2023.73
<b>Train 3</b>								
Planned unavailable hours	4.82	7.98	13.92	5.00	3.97	4.18	2.93	20.41
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	1715.78	2046.23	2208.00	2209.00	2160.00	2183.00	1690.82	2023.73
<b>Indicator value</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</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



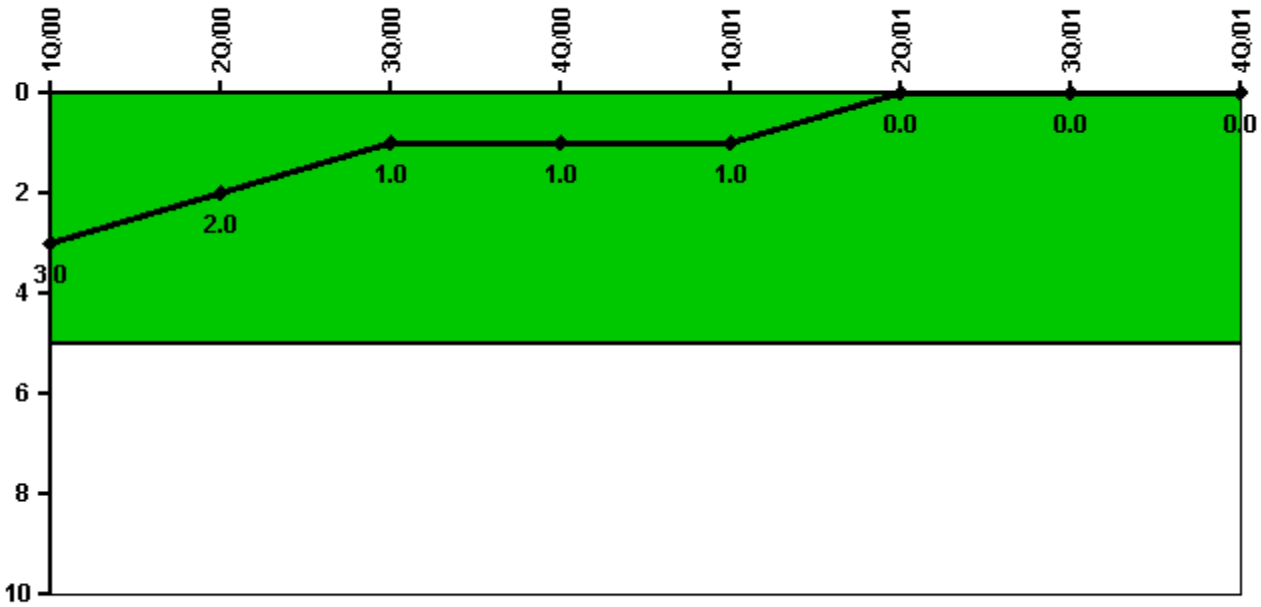
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
<b>Train 1</b>								
Planned unavailable hours	11.40	8.03	37.79	5.68	4.72	14.69	15.00	12.50
Unplanned unavailable hours	0	28.95	2.55	0	0	1.40	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	1720.20	2050.82	2208.00	2209.00	2160.00	2183.00	1695.67	2027.23
<b>Train 2</b>								
Planned unavailable hours	21.02	11.70	16.74	3.57	9.24	4.07	0.63	3.87
Unplanned unavailable hours	0	0	2.98	0	5.62	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	1720.20	2050.82	2208.00	2209.00	2160.00	2183.00	1695.67	2027.23
<b>Train 3</b>								
Planned unavailable hours	2.58	0	0	0	0	8.50	1.67	0
Unplanned unavailable hours	0	12.62	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	2034.78	2183.00	2208.00	2209.00	2160.00	2183.00	2022.20	2209.00
<b>Train 4</b>								
Planned unavailable hours	3.67	0	0	0	0	14.08	1.58	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	2034.78	2183.00	2208.00	2209.00	2160.00	2183.00	2022.20	2209.00
<b>Indicator value</b>	<b>0.3%</b>	<b>0.2%</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 Functional Failures (PWR)



Thresholds: White > 5.0

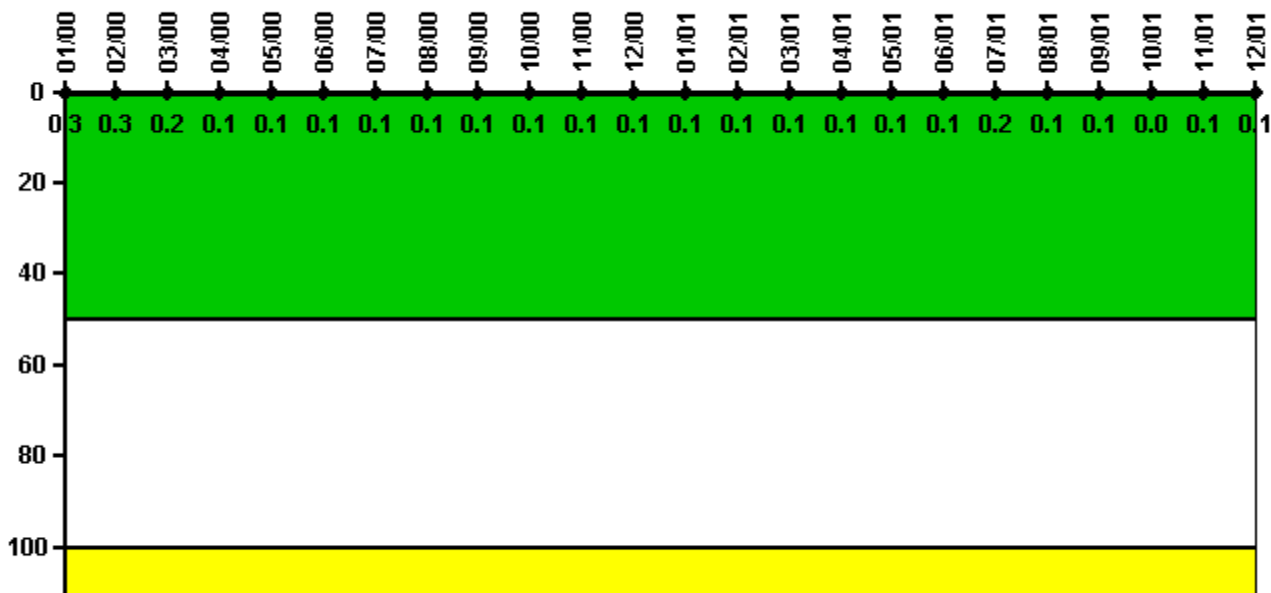
#### Notes

Safety System Functional Failures (PWR)	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Safety System Functional Failures	0	1	0	0	0	0	0	0
Indicator value	3	2	1	1	1	0	0	0

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

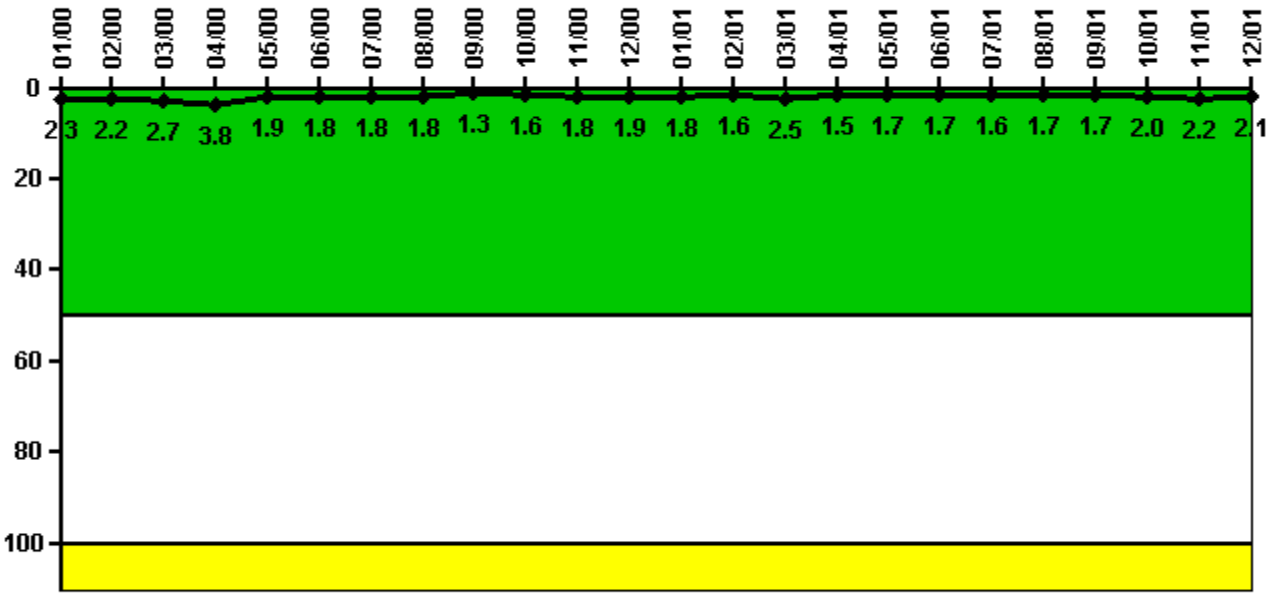
Reactor Coolant System Activity	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00
Maximum activity	0.002920	0.003050	0.002040	0.000579	0.000632	0.000832	0.000709	0.000717	0.000830	0.000777	0.001460	0.000833
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Reactor Coolant System Activity	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum activity	0.000854	0.000880	0.000999	0.001170	0.001150	0.001410	0.001580	0.001250	0.001380	0.000480	0.000526	0.000507
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	0.2	0.1	0.1	0	0.1	0.1

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

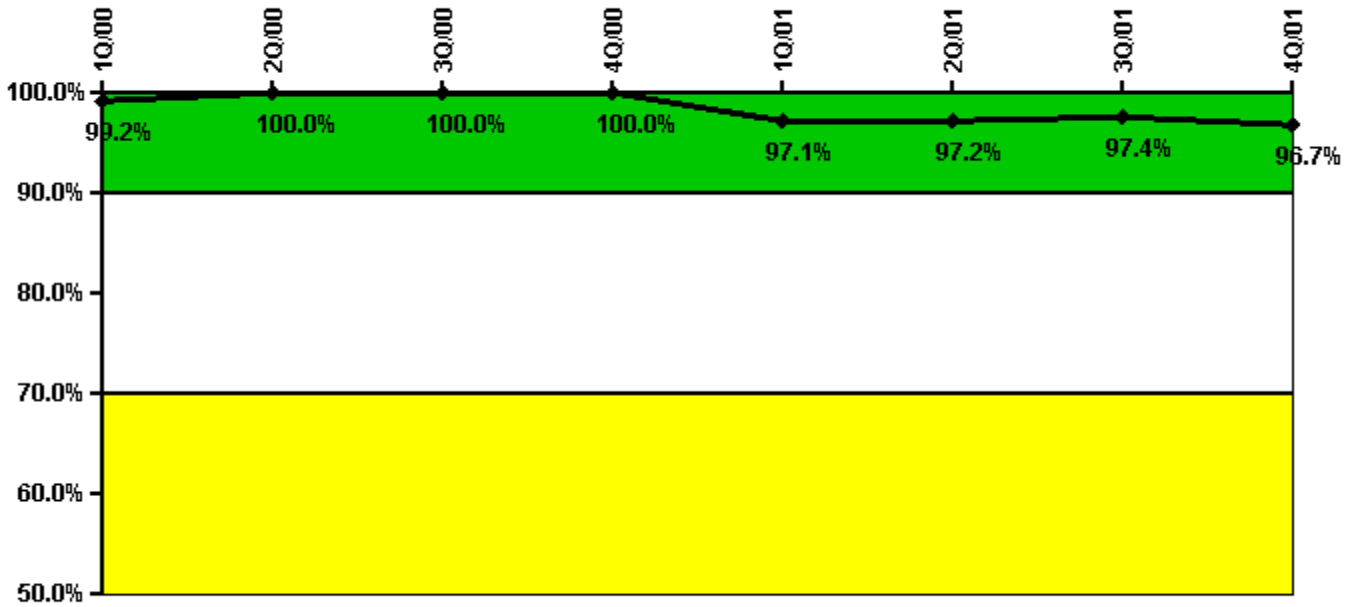
Reactor Coolant System Leakage	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00
Maximum leakage	0.230	0.222	0.268	0.384	0.187	0.176	0.175	0.183	0.132	0.160	0.182	0.189
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.3	2.2	2.7	3.8	1.9	1.8	1.8	1.8	1.3	1.6	1.8	1.9

Reactor Coolant System Leakage	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum leakage	0.179	0.159	0.246	0.145	0.169	0.165	0.163	0.169	0.171	0.205	0.220	0.211
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	1.8	1.6	2.5	1.5	1.7	1.7	1.6	1.7	1.7	2.0	2.2	2.1

Licensee Comments: none

### Drill/Exercise Performance



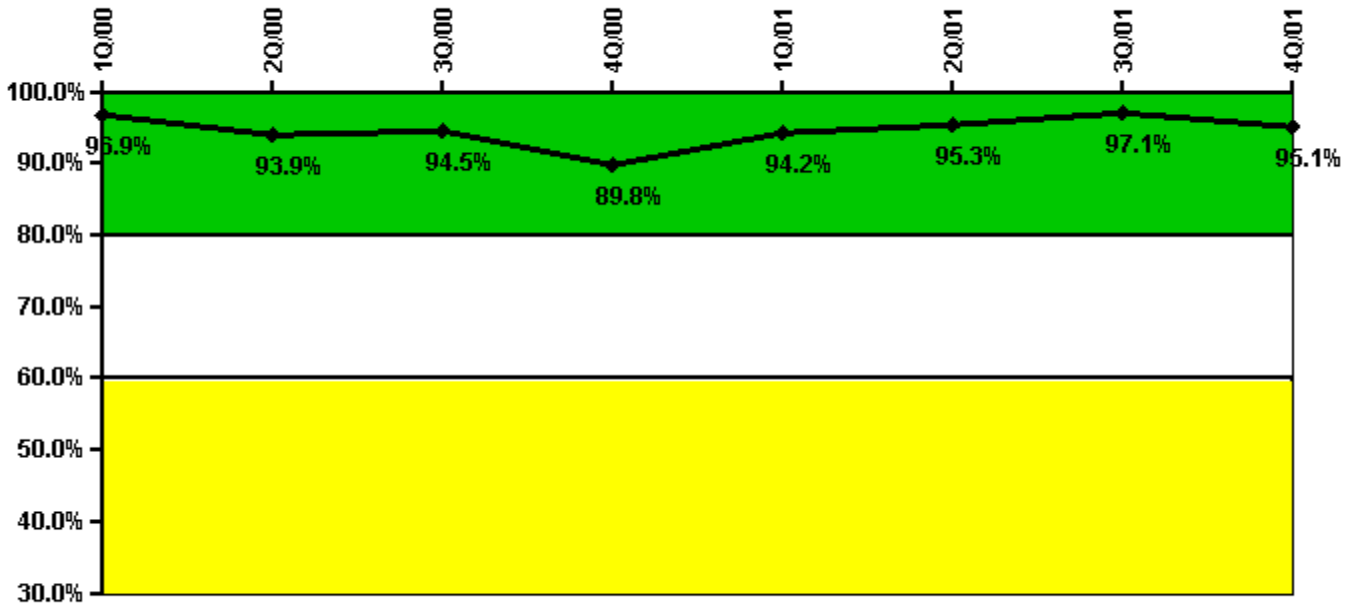
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Successful opportunities	25.0	2.0	4.0	18.0	30.0	18.0	16.0	35.0
Total opportunities	25.0	2.0	4.0	18.0	35.0	18.0	16.0	35.0
Indicator value	99.2%	100.0%	100.0%	100.0%	97.1%	97.2%	97.4%	96.7%

Licensee Comments: none

### ERO Drill Participation



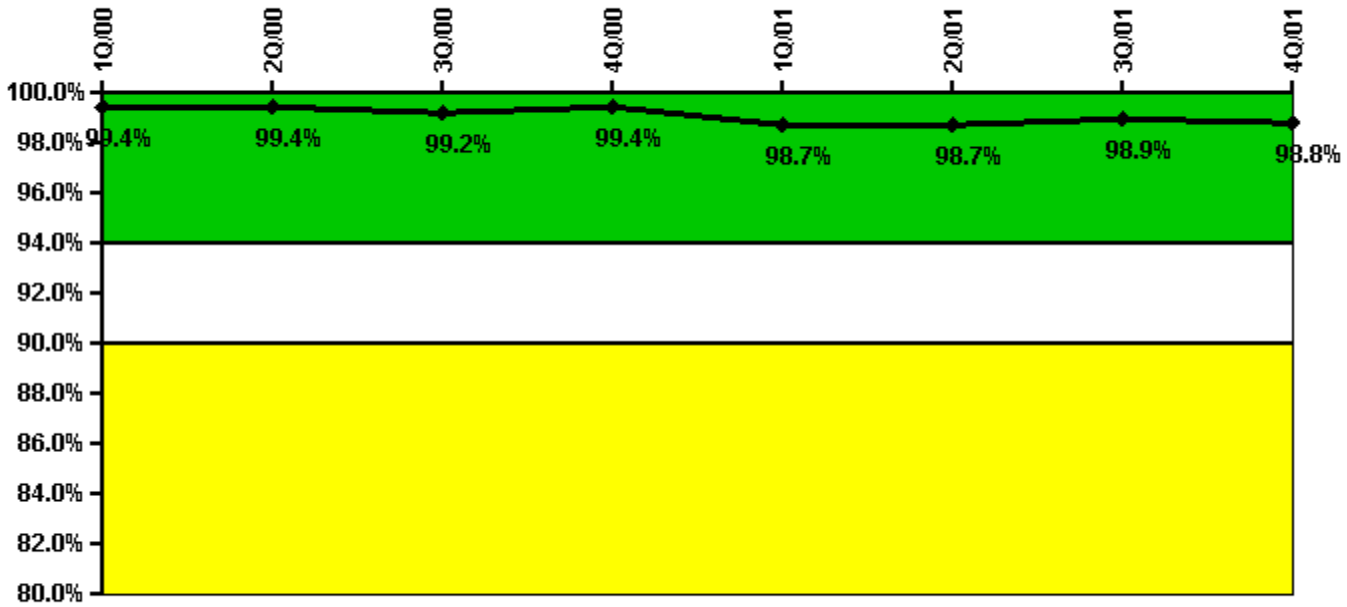
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Participating Key personnel	125.0	123.0	121.0	115.0	98.0	101.0	101.0	98.0
Total Key personnel	129.0	131.0	128.0	128.0	104.0	106.0	104.0	103.0
Indicator value	96.9%	93.9%	94.5%	89.8%	94.2%	95.3%	97.1%	95.1%

Licensee Comments: none

### Alert & Notification System



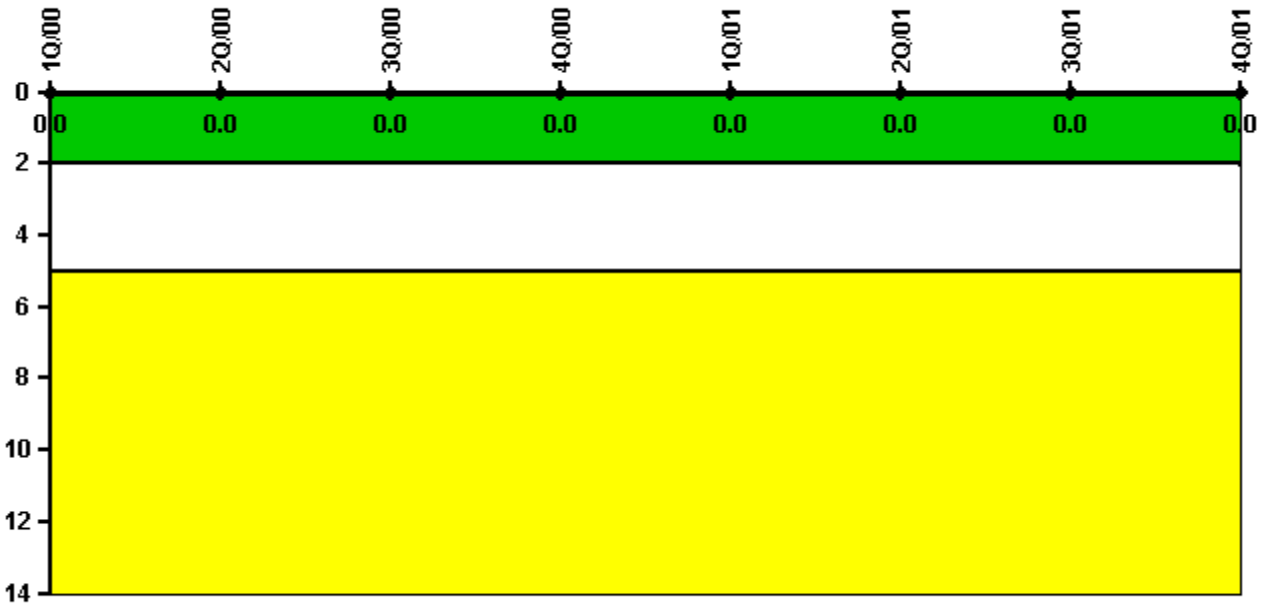
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
Successful siren-tests	382	384	380	384	414	427	431	431
Total sirens-tests	385	385	385	385	427	429	434	434
Indicator value	99.4%	99.4%	99.2%	99.4%	98.7%	98.7%	98.9%	98.8%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
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



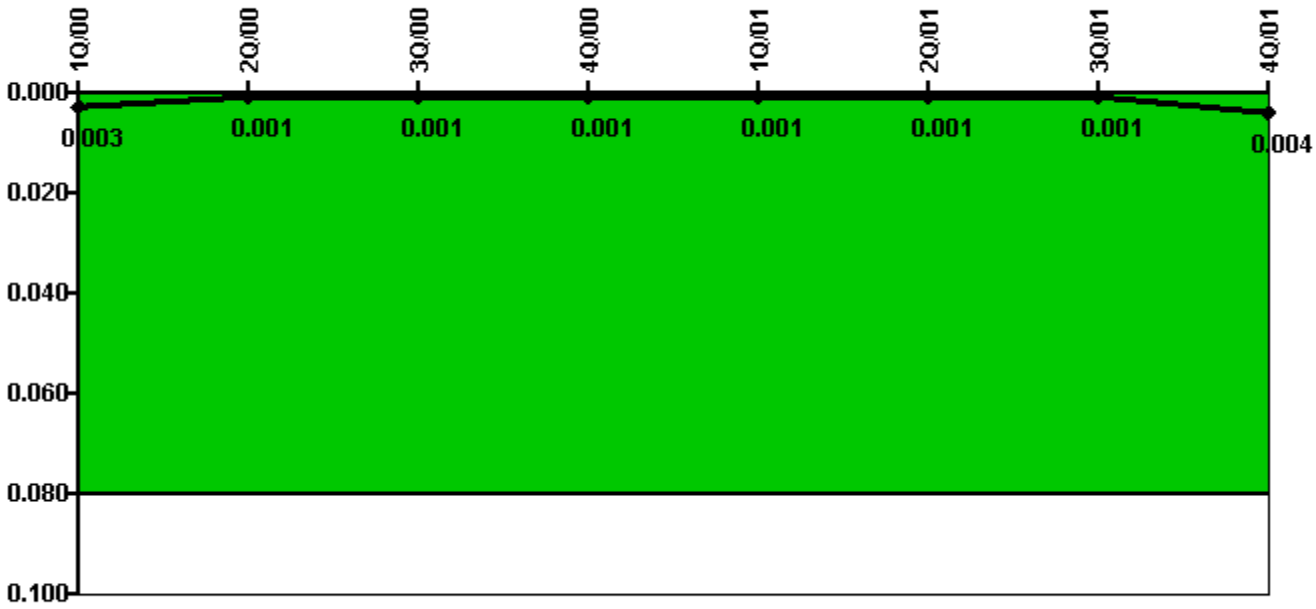
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
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/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
IDS compensatory hours	5.00	0	0	10.30	6.20	0	6.90	56.70
CCTV compensatory hours	0	0	0	0	0	0	0	0
IDS normalization factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	<b>0.003</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.004</b>

Licensee Comments:

4Q/01: Performance reflects 17.4 hours of CCTV camera operation during this reporting period with zero (0) failures.



### Personnel Screening Program



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
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	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01
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](#) | [Action Matrix Summary](#) | [Reactor Oversight Process](#)

Last Modified: March 15, 2002