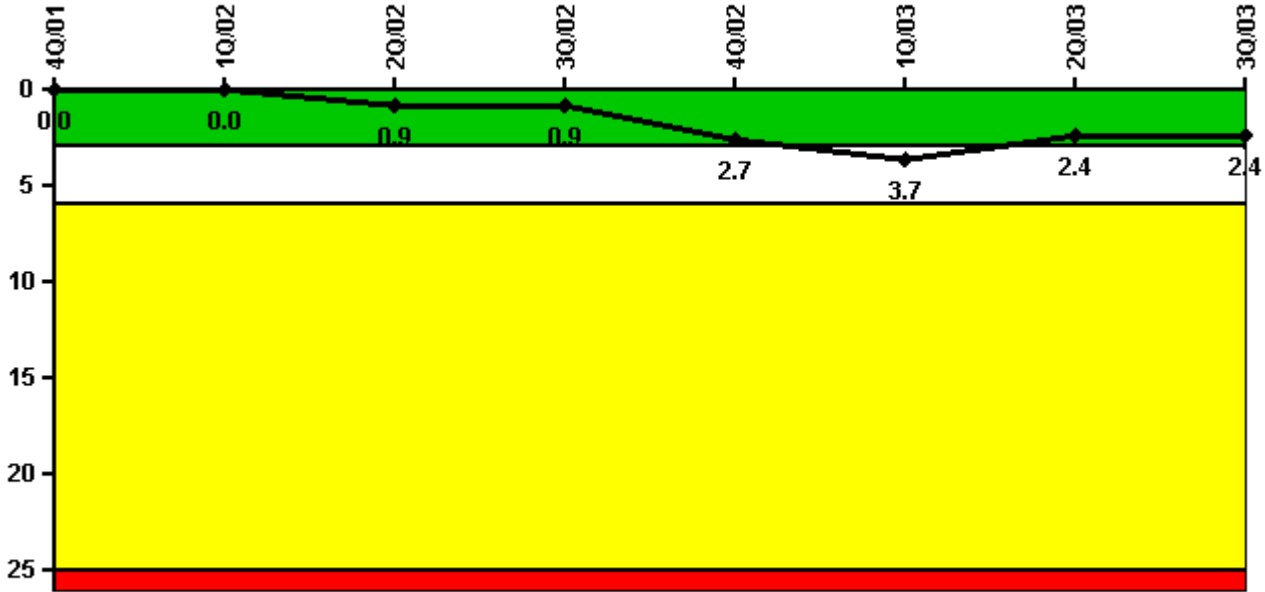


# San Onofre 2

## 3Q/2003 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



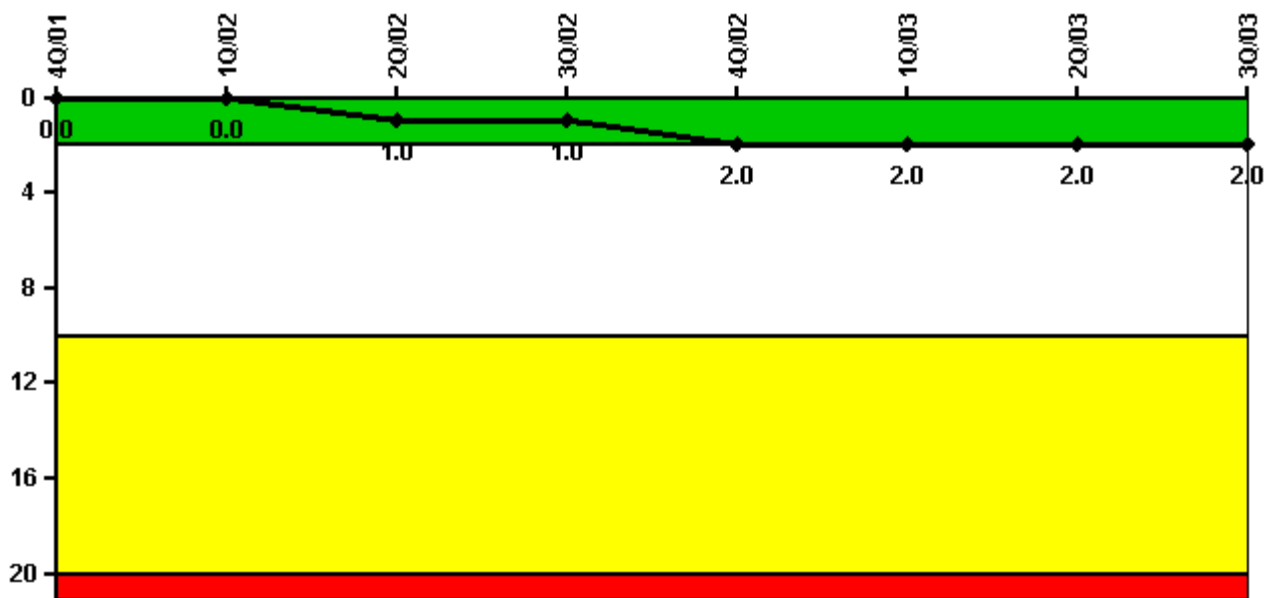
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Unplanned scrams	0	0	1.0	0	2.0	1.0	0	0
Critical hours	2004.9	2160.0	1206.2	2190.4	2124.1	2147.1	2139.7	2208.0
Indicator value	0	0	0.9	0.9	2.7	3.7	2.4	2.4

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



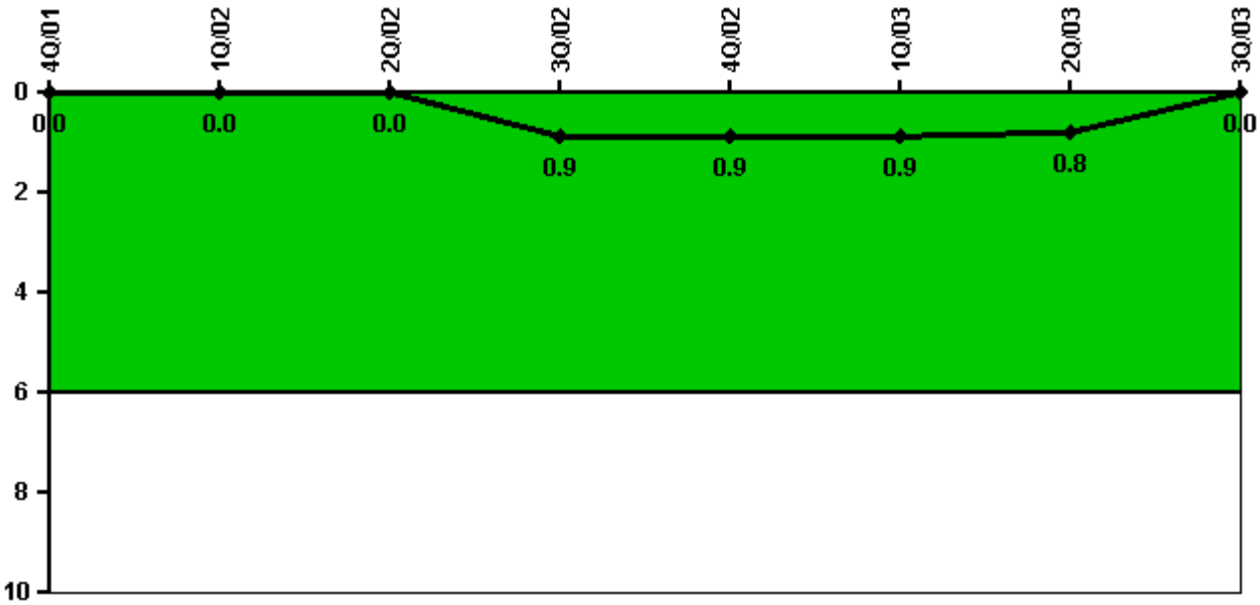
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Scrams	0	0	1.0	0	1.0	0	0	0
Indicator value	0	0	1.0	1.0	2.0	2.0	2.0	2.0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



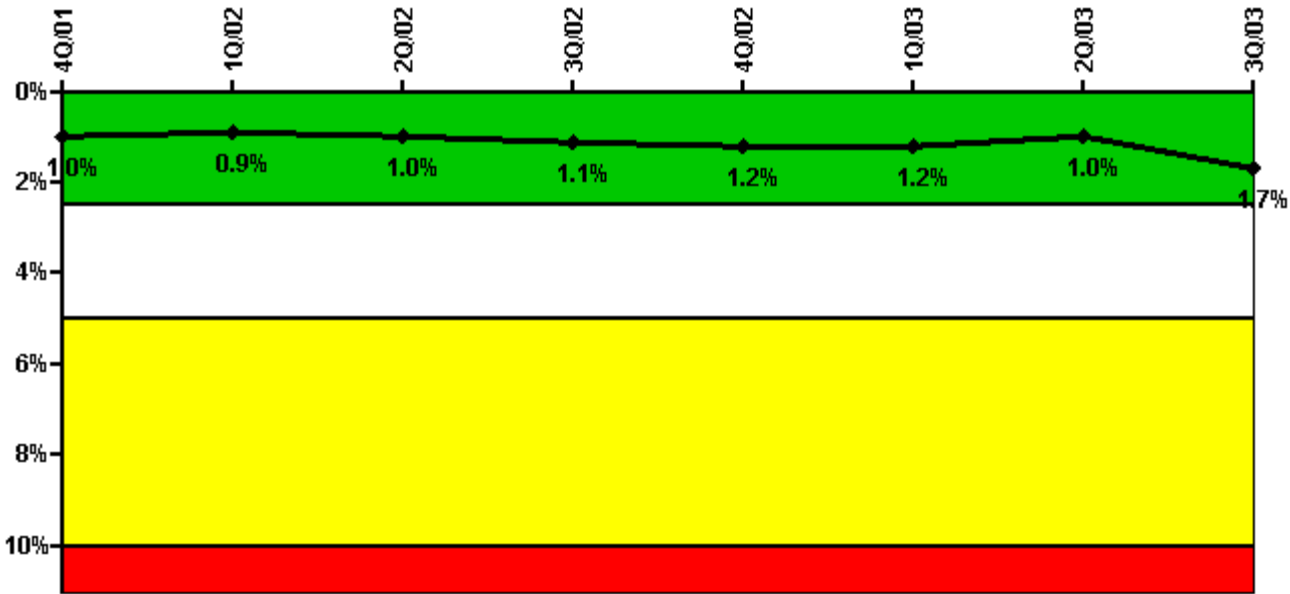
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Unplanned power changes	0	0	0	1.0	0	0	0	0
Critical hours	2004.9	2160.0	1206.2	2190.4	2124.1	2147.1	2139.7	2208.0
Indicator value	0	0	0	0.9	0.9	0.9	0.8	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



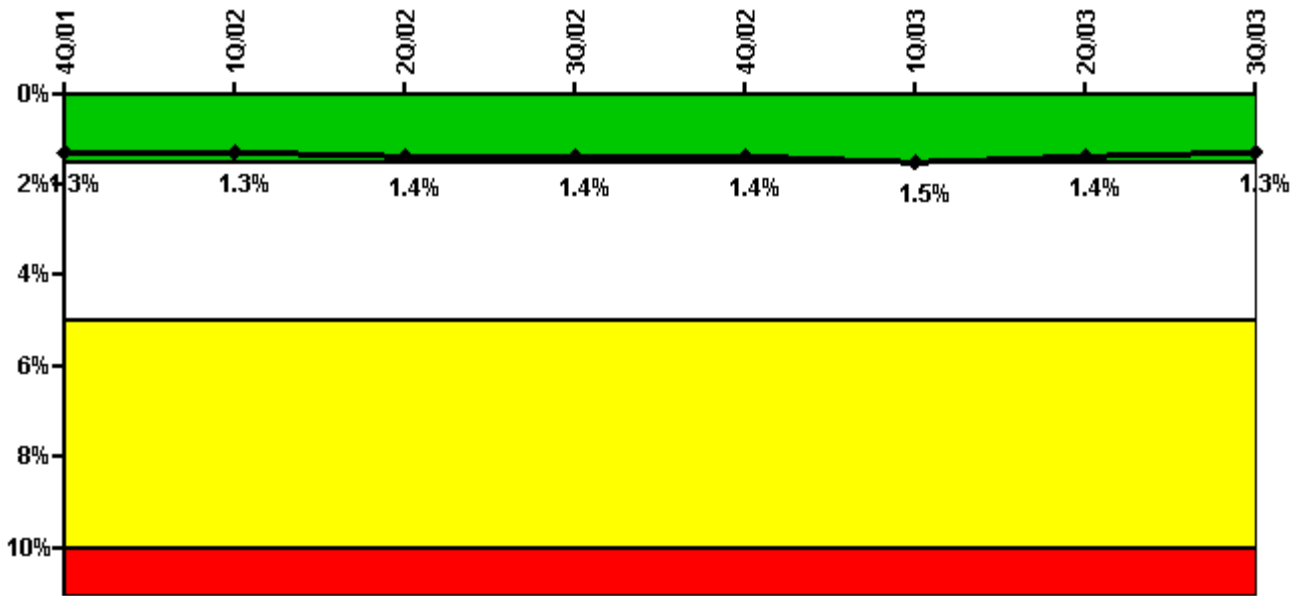
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
<b>Train 1</b>								
Planned unavailable hours	5.03	62.90	1.28	79.08	27.82	1.72	2.22	177.12
Unplanned unavailable hours	0	0	3.75	0	0	0	0	83.65
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	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	2.37	2.30	40.85	1.32	51.80	2.35	1.02	162.57
Unplanned unavailable hours	0	0	0	0	0	0	0	35.58
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	2160.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	1.0%	0.9%	1.0%	1.1%	1.2%	1.2%	1.0%	1.7%

Licensee Comments: none

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



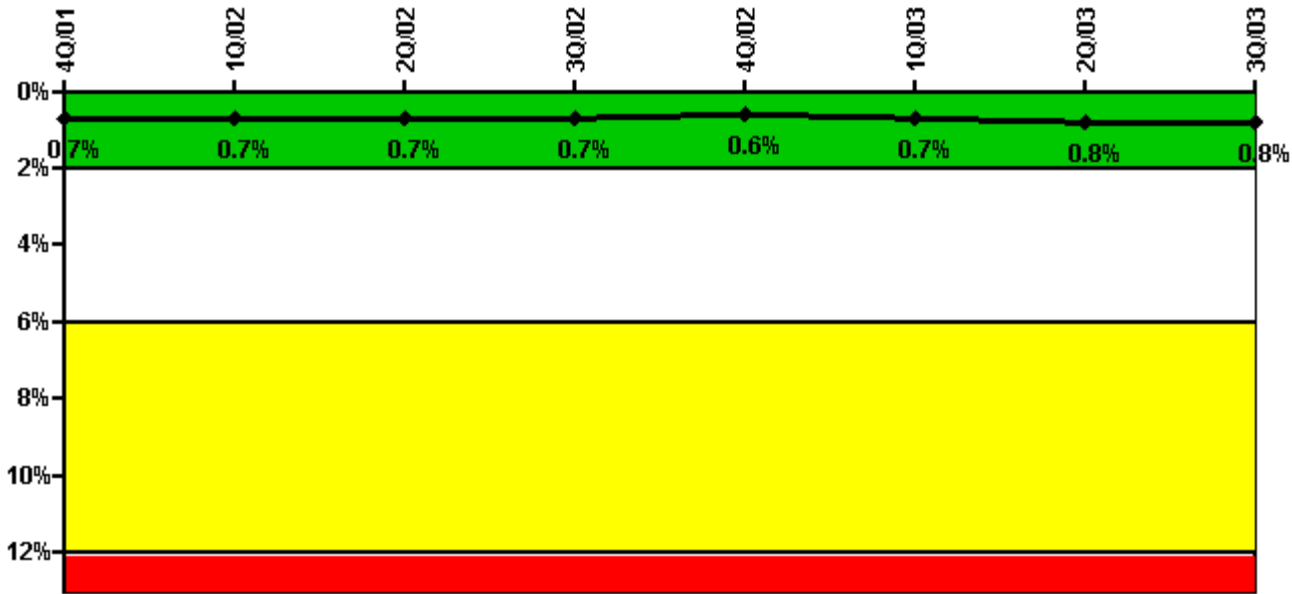
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
<b>Train 1</b>								
Planned unavailable hours	15.60	0.40	17.62	13.43	10.38	0.25	28.48	0.30
Unplanned unavailable hours	0.80	21.90	0	0.93	0	16.85	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	2000.00	2160.00	1206.17	2190.43	2124.09	2147.08	2139.68	2208.00
<b>Train 2</b>								
Planned unavailable hours	62.17	22.00	0	14.15	13.40	29.24	3.33	1.58
Unplanned unavailable hours	0	0	0	4.02	5.53	1.67	1.82	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	2000.00	2160.00	1206.17	2190.43	2124.09	2147.08	2139.68	2208.00
<b>Indicator value</b>	1.3%	1.3%	1.4%	1.4%	1.4%	1.5%	1.4%	1.3%

Licensee Comments: none

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



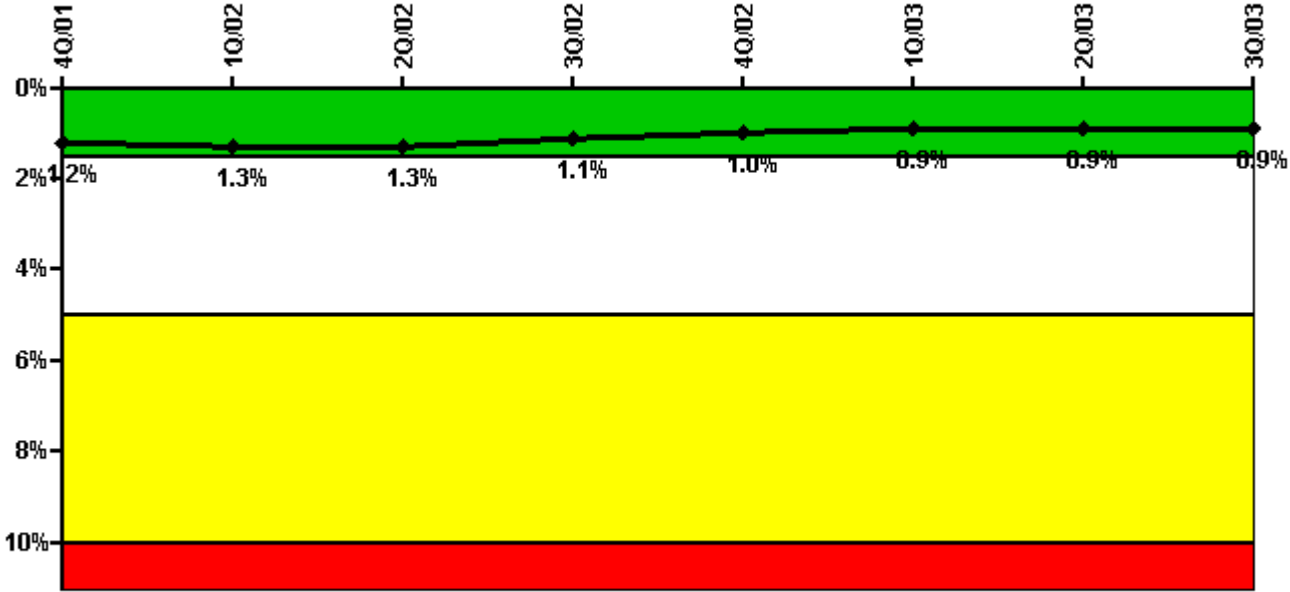
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
<b>Train 1</b>								
Planned unavailable hours	0	0	0	45.43	1.42	0.50	30.00	13.58
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	2000.00	2160.00	1206.17	2190.43	2124.09	2147.08	2139.68	2208.00
<b>Train 2</b>								
Planned unavailable hours	0	22.40	0	6.03	23.75	0	17.80	11.15
Unplanned unavailable hours	0	7.60	0	0	0	65.25	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	2000.00	2160.00	1206.17	2190.43	2124.09	2147.08	2139.68	2208.00
<b>Train 3</b>								
Planned unavailable hours	13.50	40.40	0	16.77	0.25	0.77	37.92	17.07
Unplanned unavailable hours	17.20	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	2000.00	2160.00	1206.17	2190.43	2124.09	2147.08	2139.68	2208.00
<b>Indicator value</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.8%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



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

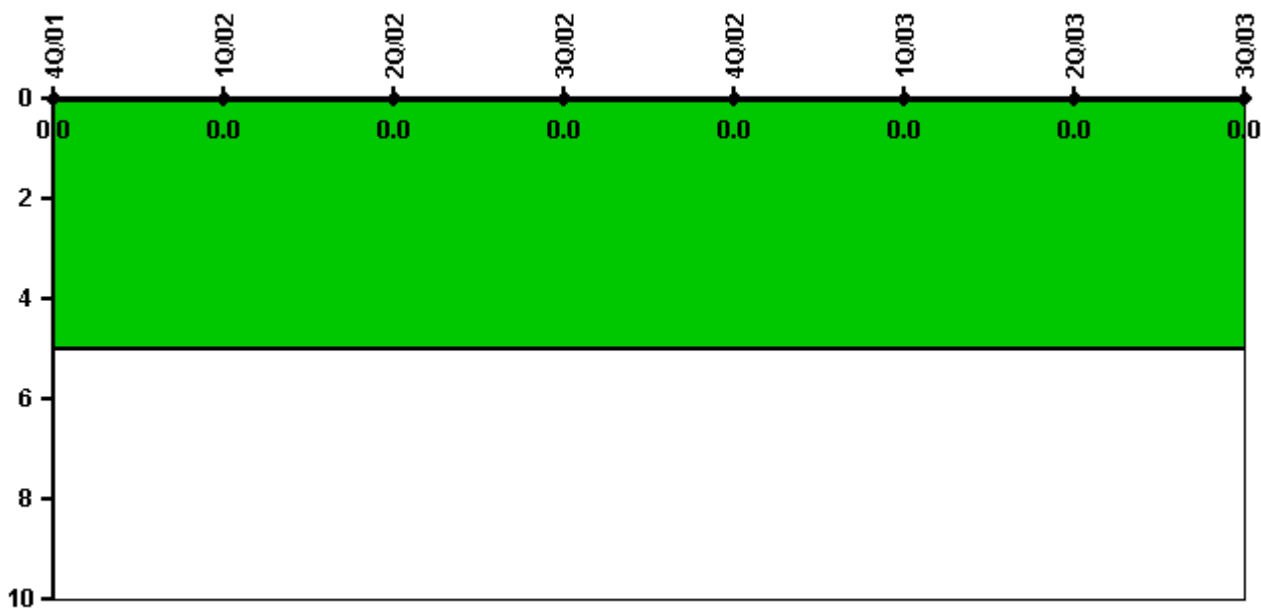
Notes

Safety System Unavailability, Residual Heat Removal System	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
<b>Train 1</b>								
Planned unavailable hours	61.40	1.00	18.35	67.30	12.65	0.25	25.45	8.88
Unplanned unavailable hours	0.80	21.90	0	0.93	0	16.85	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	2035.00	2160.00	1269.38	2208.00	2209.00	2160.00	2157.05	2208.00
<b>Train 2</b>								
Planned unavailable hours	84.60	2.50	25.00	44.43	3.35	38.47	20.77	19.20
Unplanned unavailable hours	0	0	0	4.02	4.78	1.67	1.82	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	2035.00	2160.00	1269.38	2208.00	2209.00	2160.00	2157.05	2208.00
<b>Train 3</b>								
Planned unavailable hours	0.60	0	0	0	0	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	174.00	0	913.62	0	0	0	25.95	0
<b>Train 4</b>								
Planned unavailable hours	0	0	0	0	0	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	174.00	0	913.62	0	0	0	25.95	0
Indicator value	1.2%	1.3%	1.3%	1.1%	1.0%	0.9%	0.9%	0.9%

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

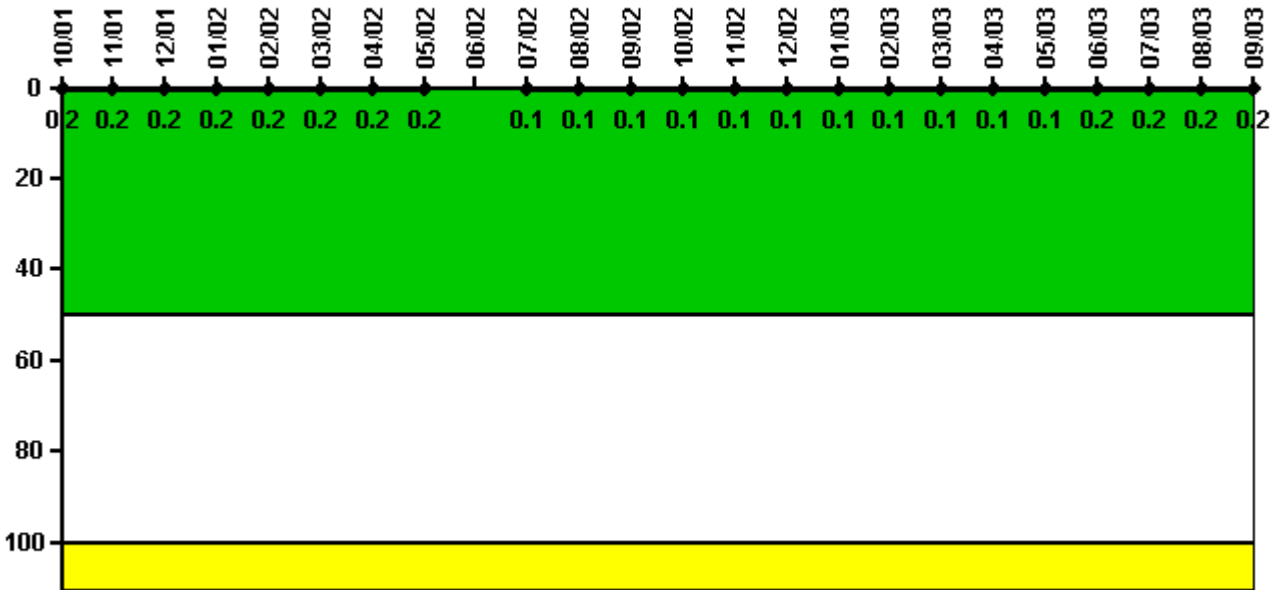
### Notes

Safety System Functional Failures (PWR)	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
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**

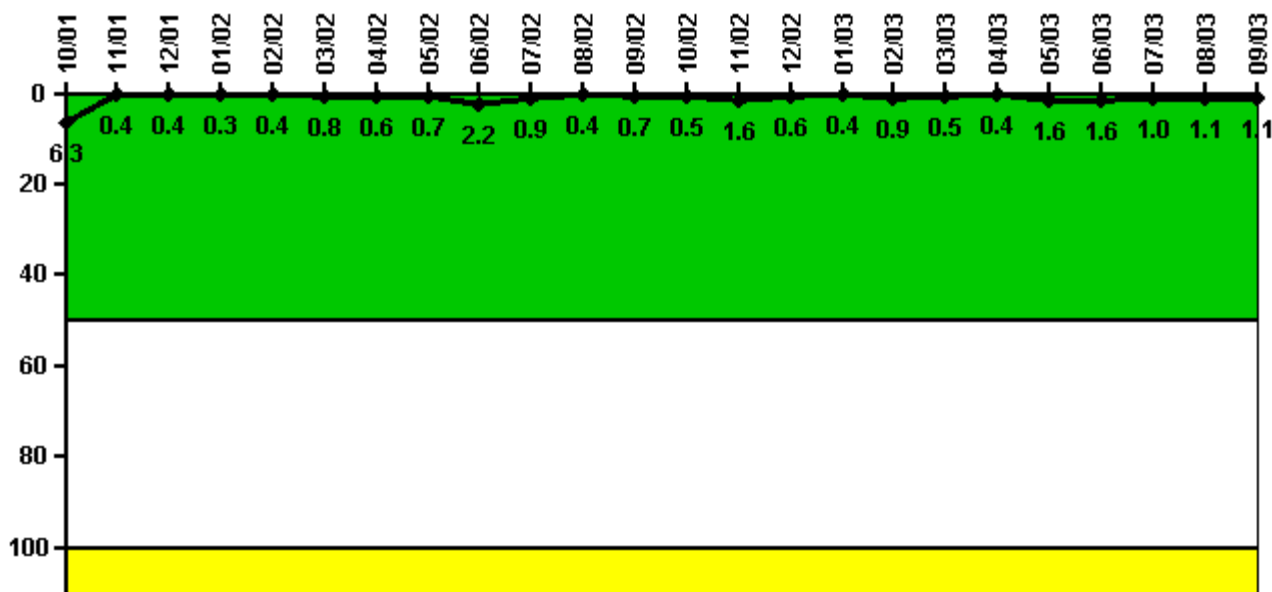
Reactor Coolant System Activity	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02
Maximum activity	0.002000	0.002000	0.002000	0.002000	0.002000	0.002000	0.002000	0.002000	N/A	0.001000	0.001000	0.001000
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N/A	0.1	0.1	0.1

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	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.002000	0.002000	0.002000	0.002000
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	0.2	0.2	0.2	0.2

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	10/01	11/01	12/01	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02
Maximum leakage	0.630	0.040	0.040	0.030	0.040	0.080	0.060	0.070	0.220	0.090	0.040	0.070
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	6.3	0.4	0.4	0.3	0.4	0.8	0.6	0.7	2.2	0.9	0.4	0.7

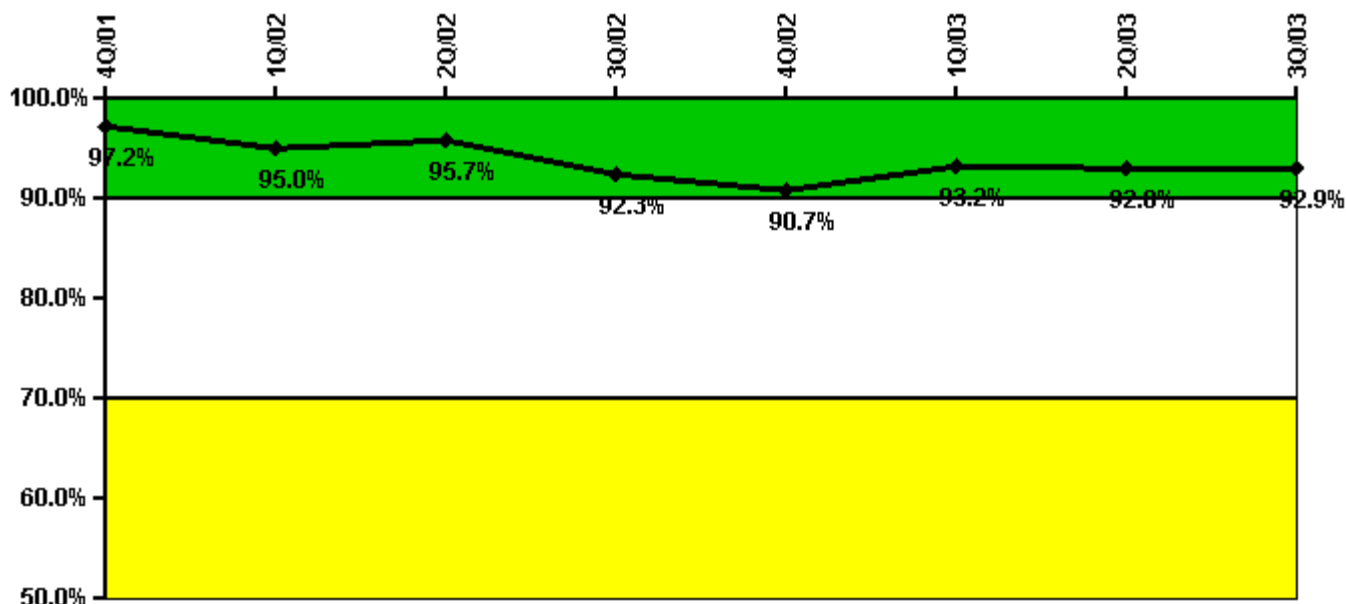
  

Reactor Coolant System Leakage	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum leakage	0.050	0.160	0.060	0.040	0.090	0.050	0.040	0.160	0.160	0.100	0.110	0.110
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.5	1.6	0.6	0.4	0.9	0.5	0.4	1.6	1.6	1.0	1.1	1.1

Licensee Comments:

9/03: Effective May 2003 the RCS Leakage being recorded is RCS TOTAL leakage versus RCS IDENTIFIED leakage. RCS Identified Leakage is generated only when RCS Total Leakage exceeds 1 GPM.

### Drill/Exercise Performance



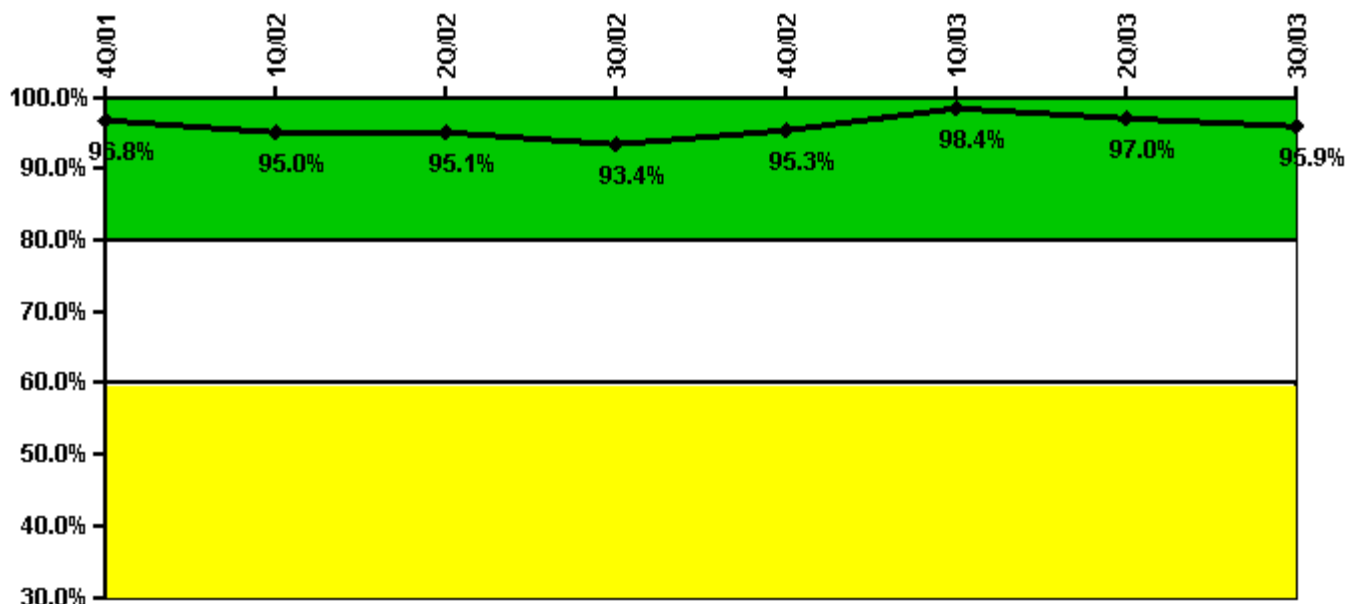
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Successful opportunities	0	1.0	0	39.0	11.0	60.0	49.0	22.0
Total opportunities	0	3.0	0	43.0	14.0	61.0	52.0	23.0
Indicator value	97.2%	95.0%	95.7%	92.3%	90.7%	93.2%	92.8%	92.9%

Licensee Comments: none

### ERO Drill Participation



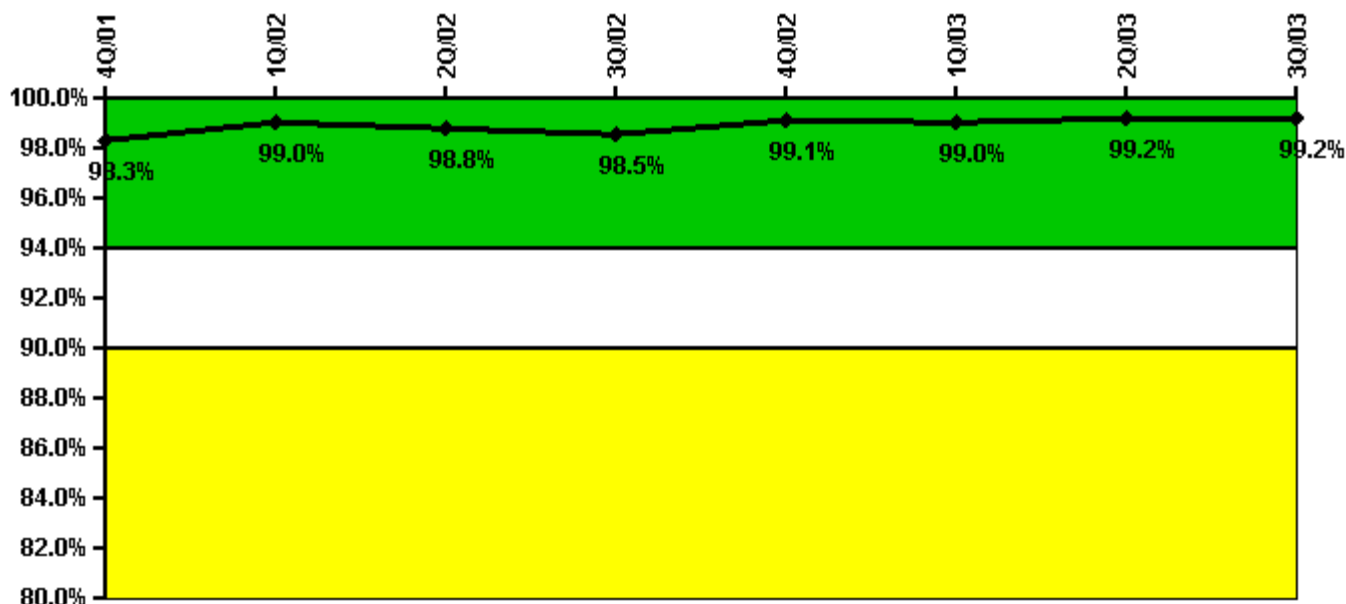
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Participating Key personnel	61.0	57.0	58.0	57.0	61.0	63.0	65.0	70.0
Total Key personnel	63.0	60.0	61.0	61.0	64.0	64.0	67.0	73.0
Indicator value	96.8%	95.0%	95.1%	93.4%	95.3%	98.4%	97.0%	95.9%

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Successful siren-tests	431	390	338	386	488	340	341	386
Total sirens-tests	441	392	343	392	490	343	343	392
Indicator value	98.3%	99.0%	98.8%	98.5%	99.1%	99.0%	99.2%	99.2%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/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



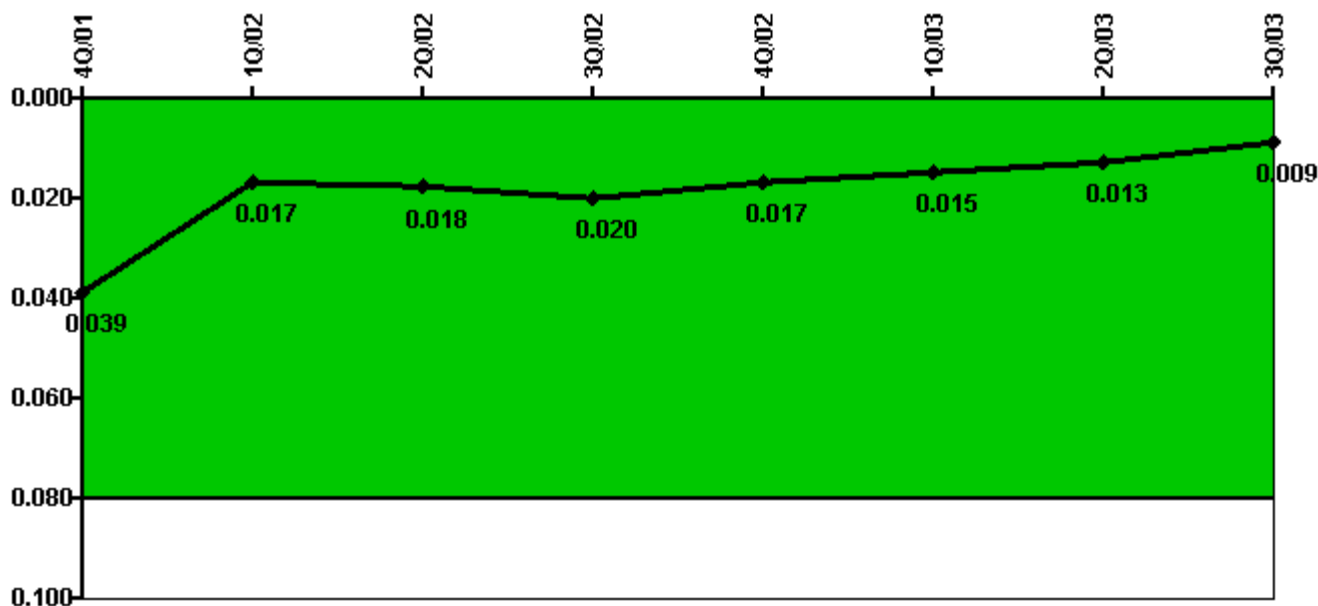
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/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	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
IDS compensatory hours	82.30	40.90	141.20	145.30	15.70	18.60	89.10	66.00
CCTV compensatory hours	0	4.5	1.2	0	1.8	0	0	0
IDS normalization factor	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
CCTV normalization factor	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Index Value	0.039	0.017	0.018	0.020	0.017	0.015	0.013	0.009

Licensee Comments: none



### Personnel Screening Program



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
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	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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Last Modified: October 22, 2003