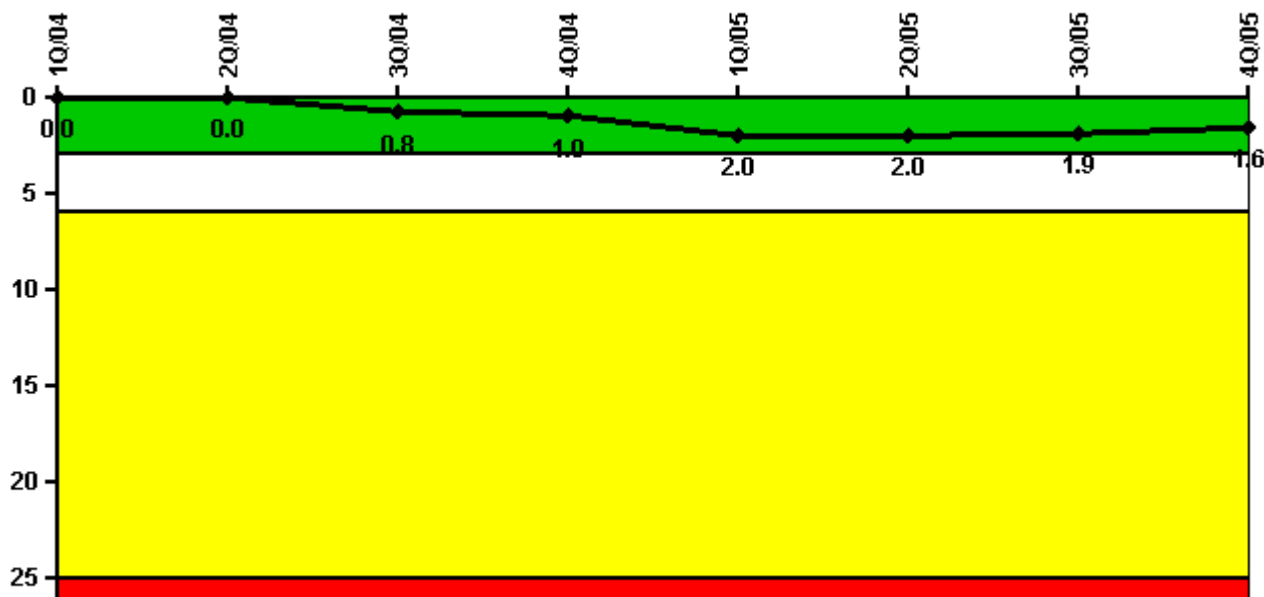


# Palisades

## 4Q/2005 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



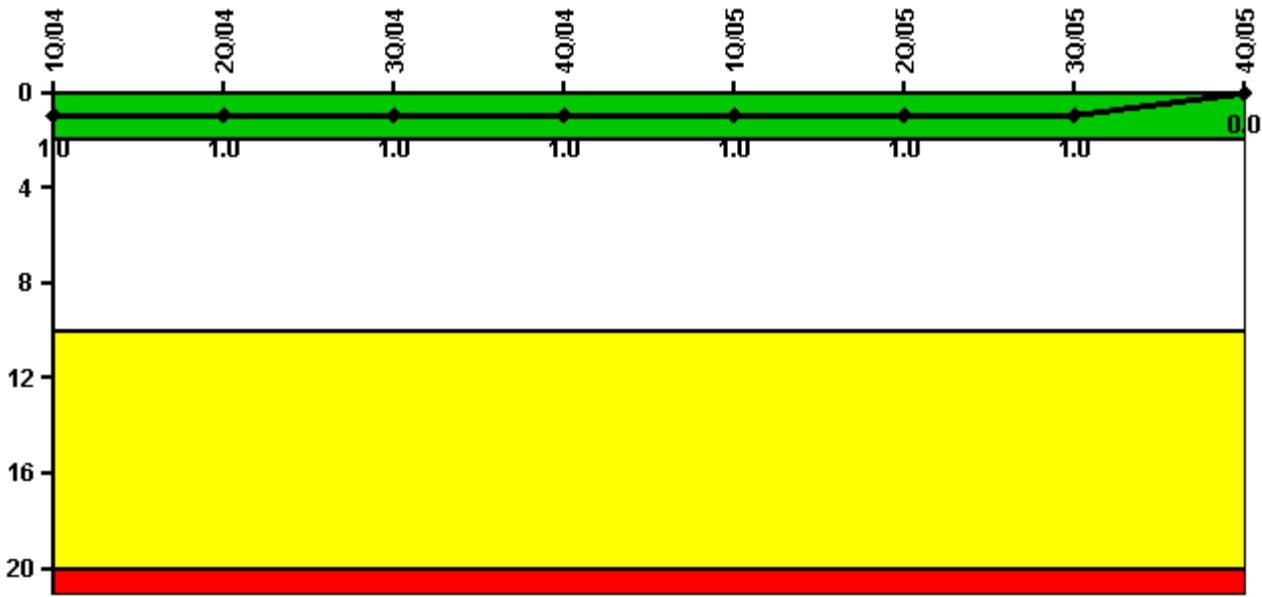
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Unplanned scrams	0	0	1.0	0	1.0	0	1.0	0
Critical hours	2184.0	2183.0	1756.4	1104.6	2039.5	2183.0	2173.7	2185.2
Indicator value	0	0	0.8	1.0	2.0	2.0	1.9	1.6

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



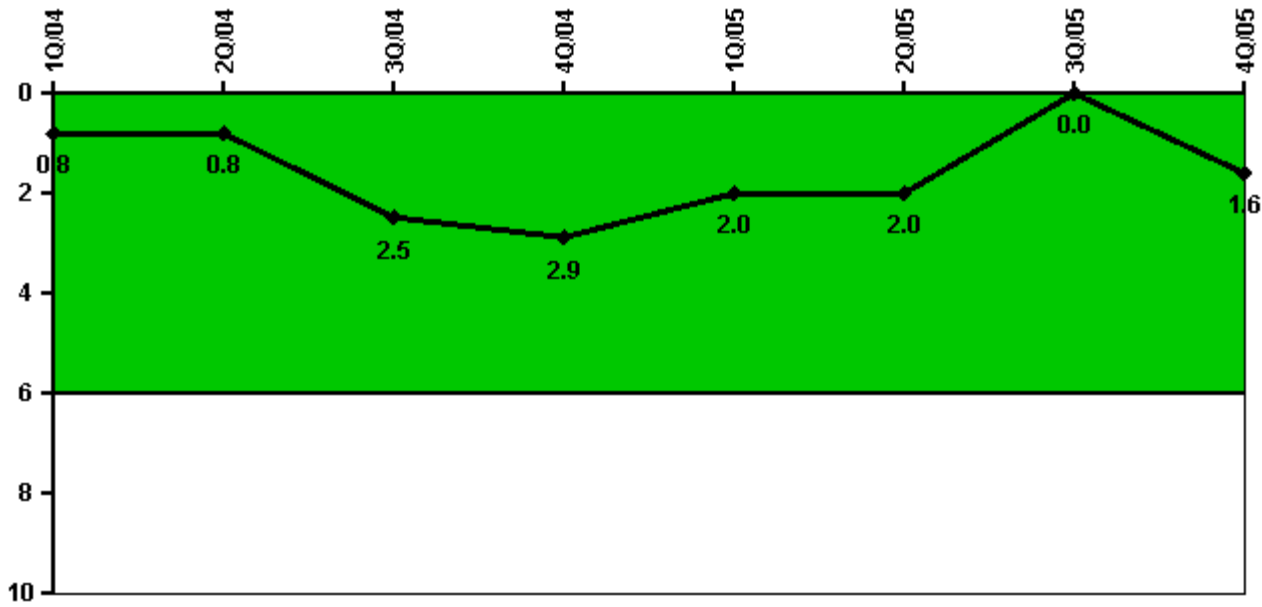
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Scrams	0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



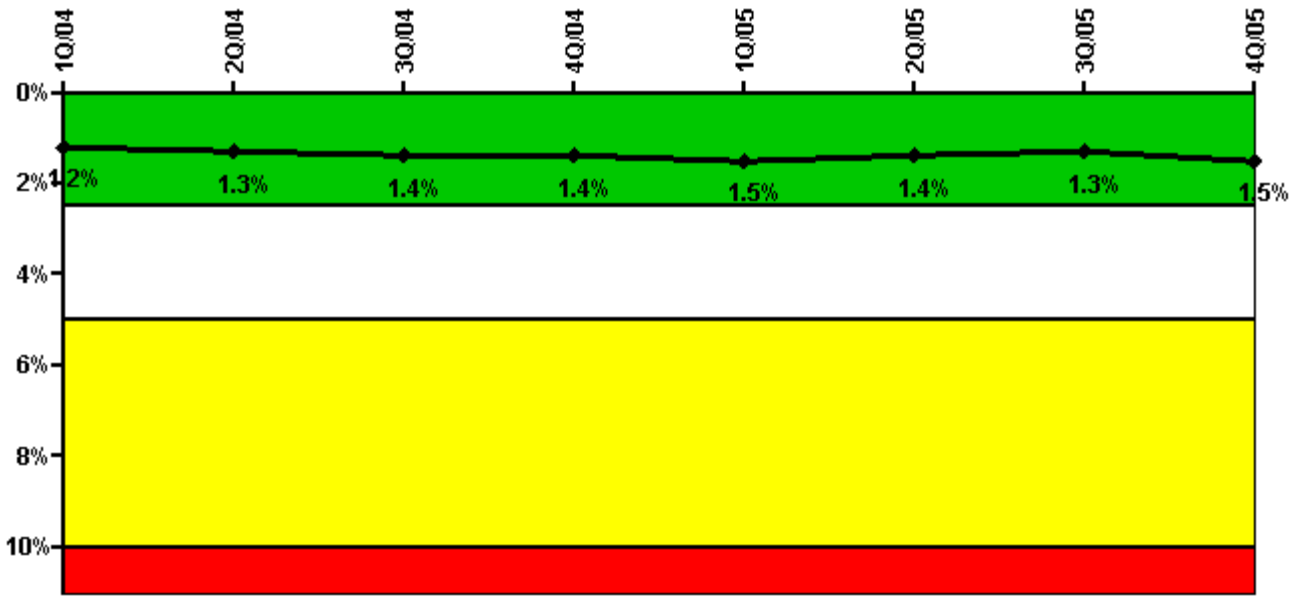
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Unplanned power changes	1.0	0	2.0	0	0	0	0	2.0
Critical hours	2184.0	2183.0	1756.4	1104.6	2039.5	2183.0	2173.7	2185.2
Indicator value	0.8	0.8	2.5	2.9	2.0	2.0	0	1.6

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



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

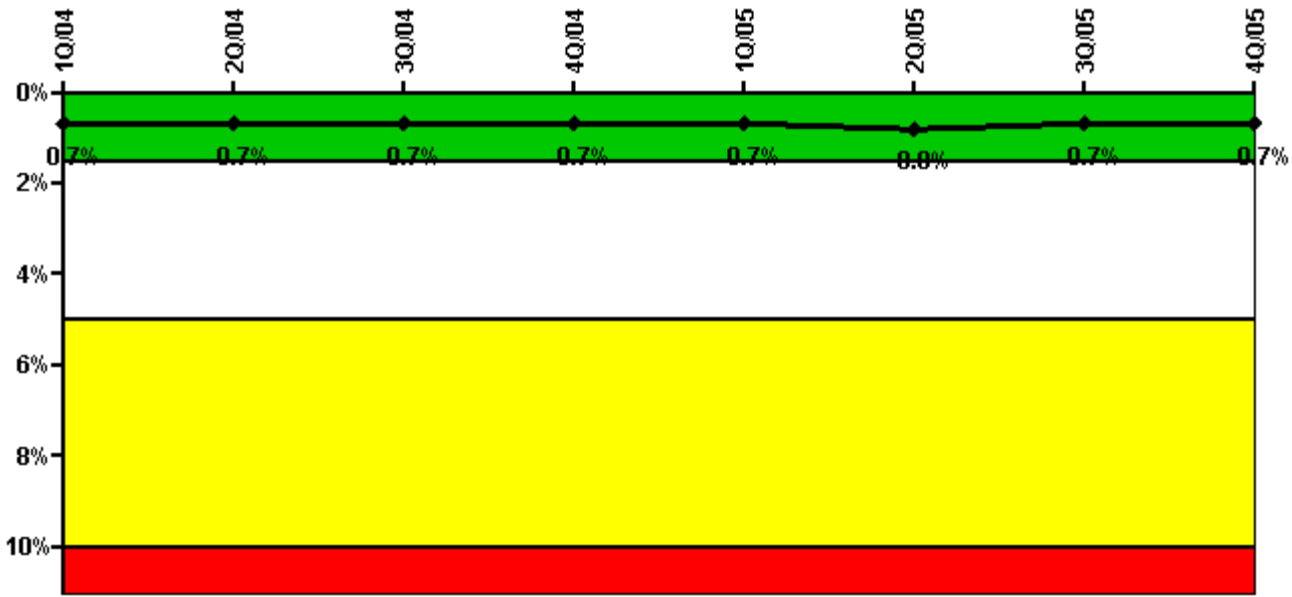
**Notes**

Safety System Unavailability, Emergency AC Power	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
<b>Train 1</b>								
Planned unavailable hours	104.05	5.11	6.53	1.50	11.95	14.87	0.48	83.15
Unplanned unavailable hours	0	0	0	0	0	0	0	39.37
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	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	0.96	86.40	6.33	0.20	10.67	1.80	0.73	99.62
Unplanned unavailable hours	48.40	0	1.43	0	46.13	0	0	10.00
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	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
<b>Indicator value</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.5%</b>	<b>1.4%</b>	<b>1.3%</b>	<b>1.5%</b>

Licensee Comments:

4Q/05: November 2005 T/2 Fault Exposure Hours from Train 2, cylinder 5R fuel oil leak. A fuel leak was discovered at the cylinder 5R fuel pump. The cause of the fuel leak was a cracked snubber valve located between the fuel pump and the high pressure fuel tube. The exact time the snubber cracked and failed is unknown. Only the time of discovery of the snubber failure is known with certainty. T/2 Fault Exposure Hours will be recorded as one half the time from discovery of the fuel leak, which occurred at 17:56 hours on November 20, 2005, until completion of the last successful surveillance test that proved the generator was capable of performing its safety function, which occurred at 10:19 hours on October 28, 2005. Fault Exposure Hour are 559.62 hours/2 = 280 T/2 Fault Exposure Hours.

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



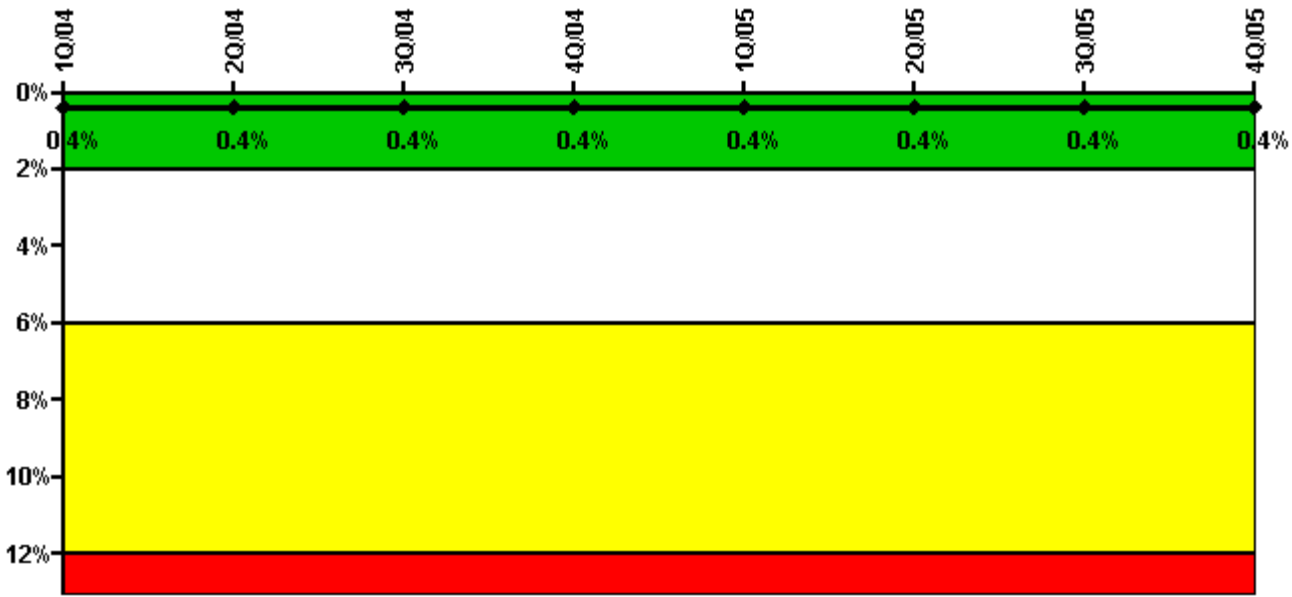
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
<b>Train 1</b>								
Planned unavailable hours	46.50	3.86	33.19	0.75	3.78	26.67	0	0.47
Unplanned unavailable hours	0	0	0	0	0	29.95	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	2184.00	2183.00	1842.31	1152.47	2160.00	2183.00	2208.00	2194.45
<b>Train 2</b>								
Planned unavailable hours	30.65	7.15	18.44	0.97	9.60	14.53	0	0.47
Unplanned unavailable hours	0	8.60	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	2184.00	2183.00	1842.31	1152.47	2160.00	2183.00	2208.00	2194.45
<b>Indicator value</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>0.7%</b>

Licensee Comments: none

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



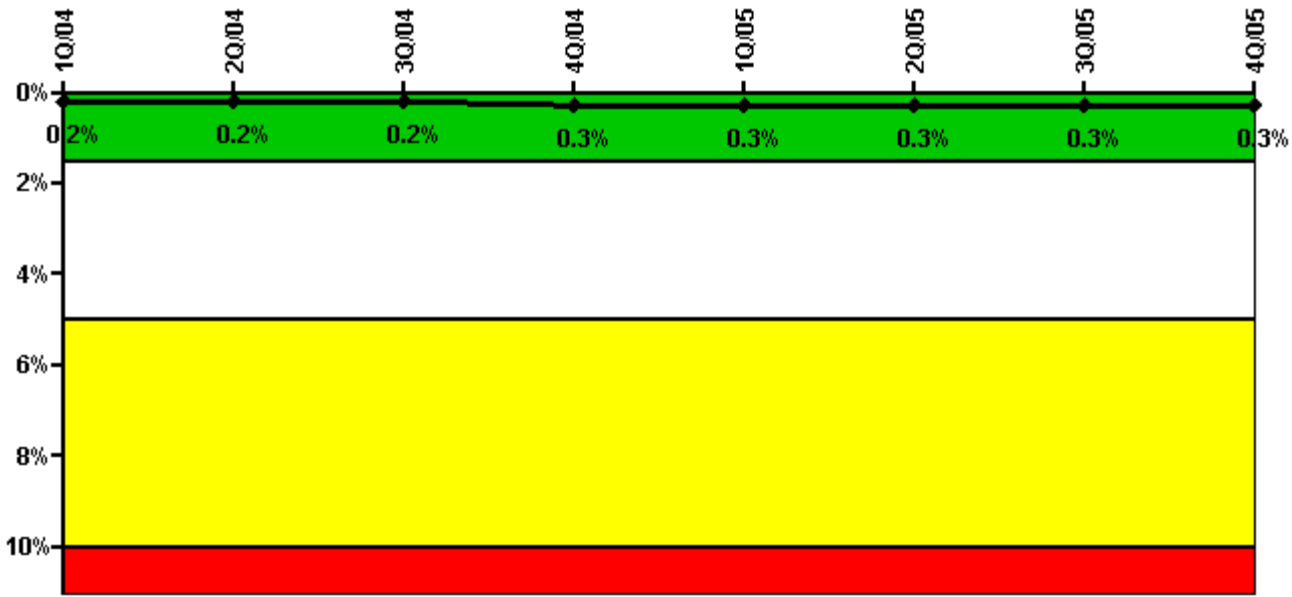
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

**Notes**

Safety System Unavailability, Heat Removal System (AFW)	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
<b>Train 1</b>								
Planned unavailable hours	1.64	4.68	1.45	2.25	3.08	5.56	9.81	2.46
Unplanned unavailable hours	0	0	0	0	0	4.30	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	2184.00	2183.00	1842.31	1152.47	2160.00	2183.00	2208.00	2194.45
<b>Train 2</b>								
Planned unavailable hours	6.97	5.13	1.33	2.32	15.12	8.25	1.87	2.48
Unplanned unavailable hours	0	0	0	0	0	0.68	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	2184.00	2183.00	1776.03	1104.63	2160.00	2183.00	2208.00	2194.45
<b>Train 3</b>								
Planned unavailable hours	22.02	3.73	0.65	0	14.02	1.73	0.92	0.80
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	2184.00	2183.00	1842.31	1152.47	2160.00	2183.00	2208.00	2194.45
<b>Indicator value</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



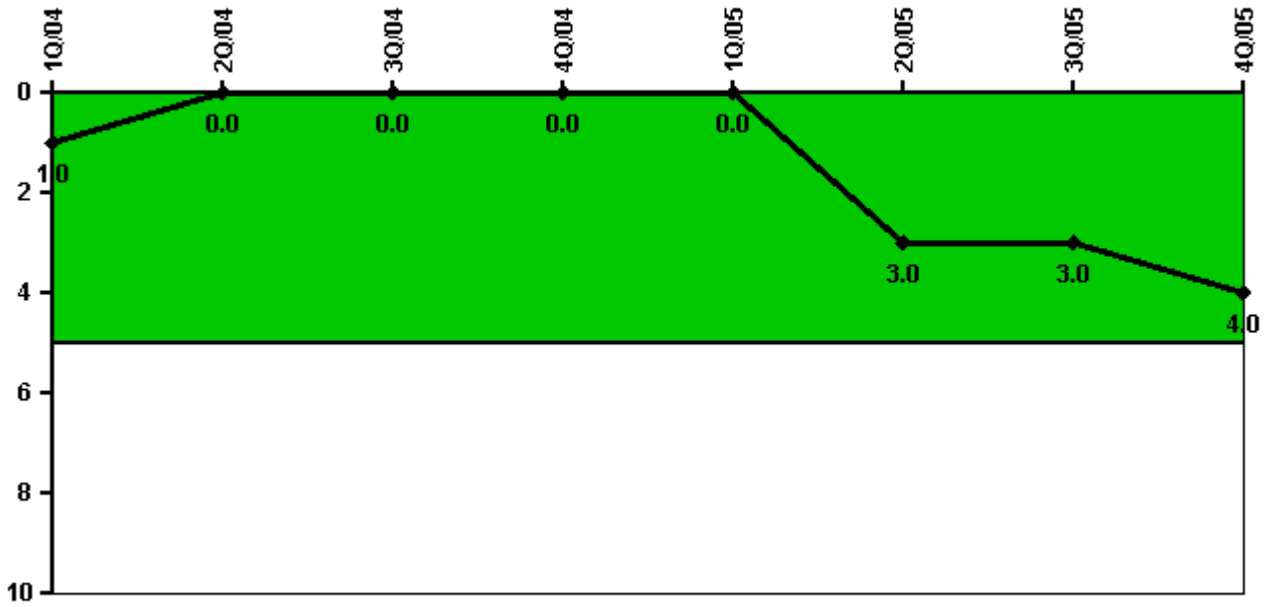
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, Residual Heat Removal System	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
<b>Train 1</b>								
Planned unavailable hours	1.12	4.36	21.22	0.60	19.37	13.68	3.26	0.68
Unplanned unavailable hours	0	0	0	0	0	0	0	4.52
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2183.00	1842.31	1152.47	2160.00	2183.00	2208.00	2194.45
<b>Train 2</b>								
Planned unavailable hours	0	1.30	9.88	0	3.02	0.62	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	2184.00	2183.00	1842.31	1152.47	2160.00	2183.00	2208.00	2194.45
<b>Train 3</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	0	0	365.69	845.47	0	0	0	14.55
<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	0	0	291.20	1021.90	0	0	0	14.55
<b>Indicator value</b>	<b>0.2%</b>	<b>0.2%</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>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

### Notes

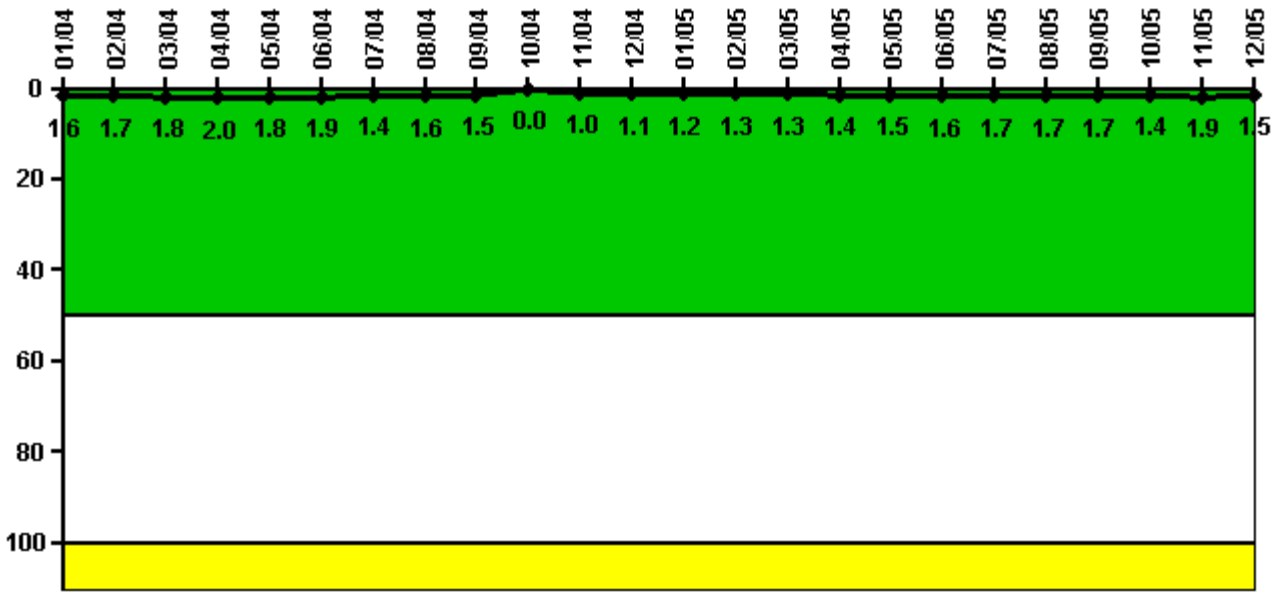
Safety System Functional Failures (PWR)	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Safety System Functional Failures	0	0	0	0	0	3	0	1
Indicator value	1	0	0	0	0	3	3	4

Licensee Comments:

4Q/05: December 2005, LER 2005-006-00, Inoperable Containment Due to Containment Air Cooler Through Wall Flaws.



### Reactor Coolant System Activity



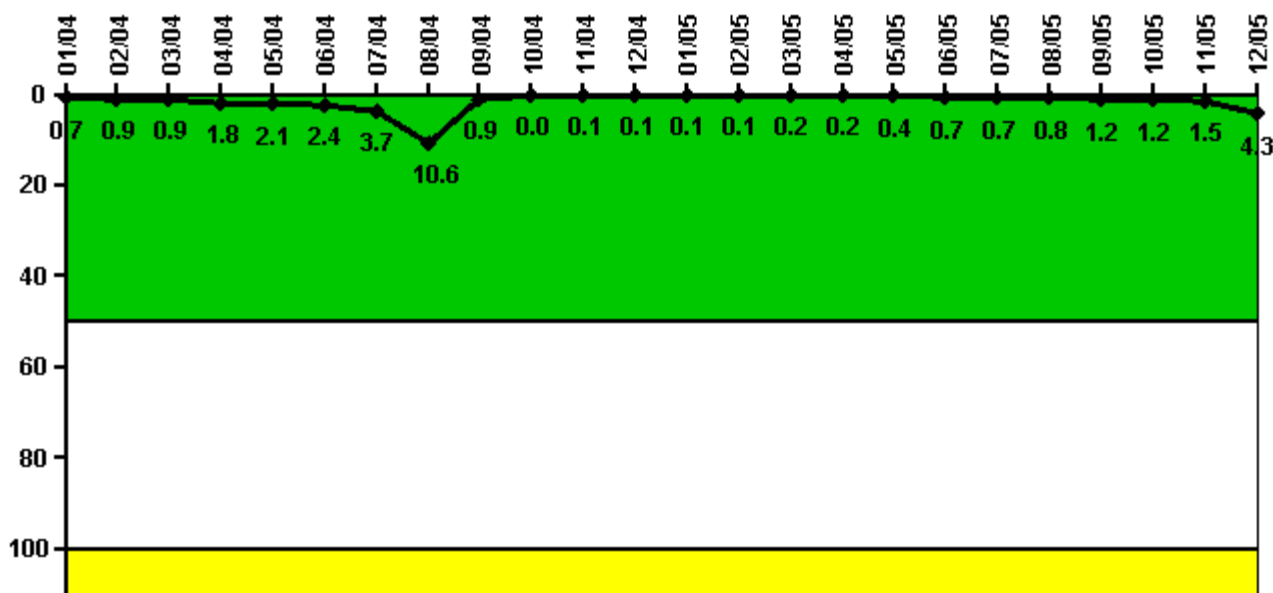
Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Activity	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum activity	0.016100	0.016600	0.018400	0.019700	0.018400	0.018800	0.014000	0.016000	0.015000	0.000003	0.010100	0.011100
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	1.6	1.7	1.8	2.0	1.8	1.9	1.4	1.6	1.5	0	1.0	1.1
Reactor Coolant System Activity	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum activity	0.012300	0.012600	0.013100	0.014300	0.015200	0.015900	0.017400	0.017300	0.017100	0.013800	0.018600	0.014500
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	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.7	1.7	1.4	1.9	1.5

Licensee Comments: none

### Reactor Coolant System Leakage



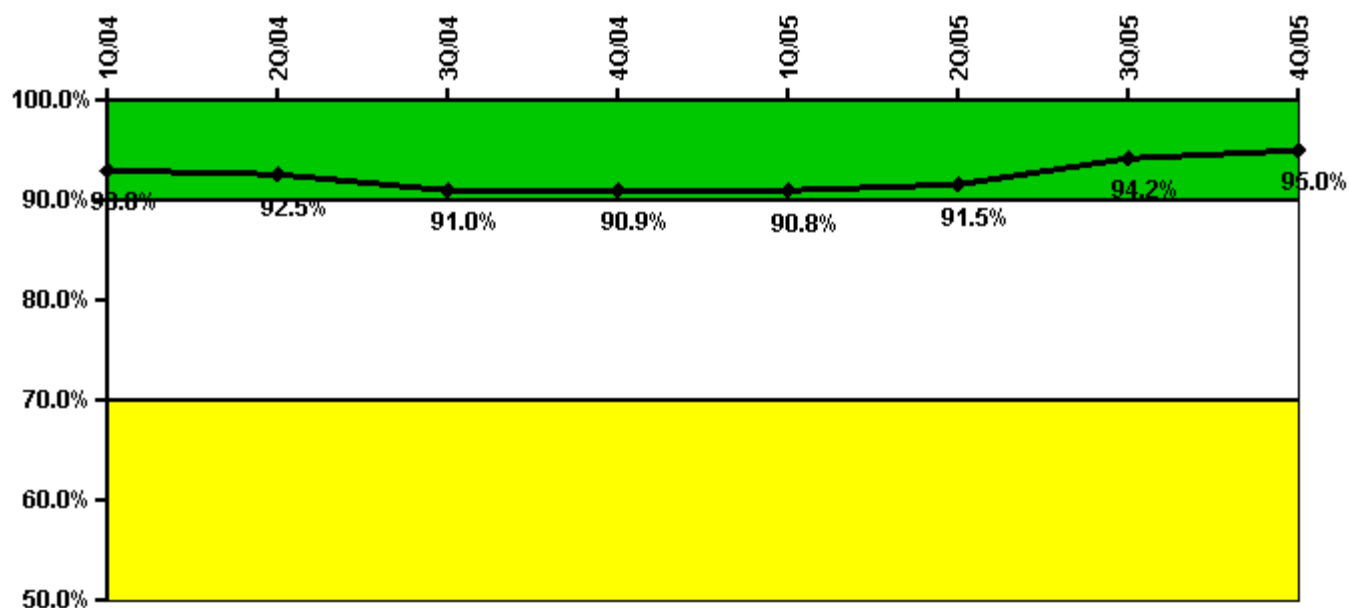
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum leakage	0.073	0.085	0.094	0.180	0.209	0.240	0.370	1.057	0.085	0	0.005	0.011
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	0.7	0.9	0.9	1.8	2.1	2.4	3.7	10.6	0.9	0	0.1	0.1
Reactor Coolant System Leakage	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05
Maximum leakage	0.011	0.008	0.020	0.016	0.040	0.066	0.066	0.079	0.120	0.119	0.148	0.429
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	0.1	0.1	0.2	0.2	0.4	0.7	0.7	0.8	1.2	1.2	1.5	4.3

Licensee Comments: none

### Drill/Exercise Performance



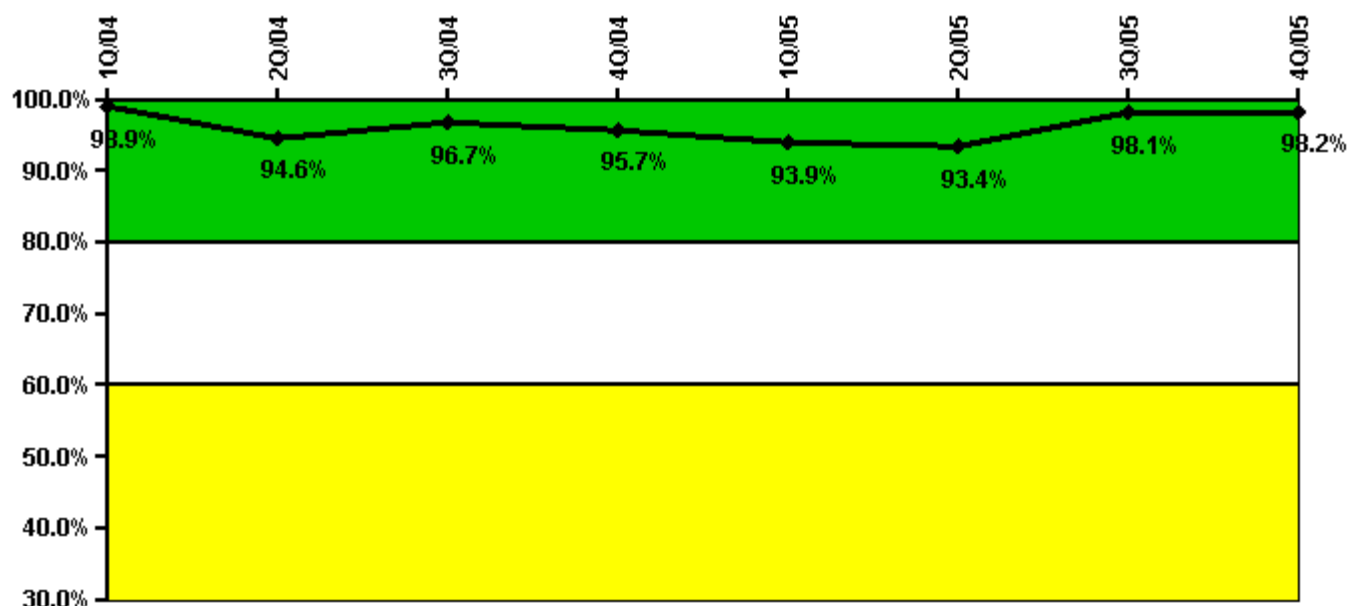
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Successful opportunities	23.0	27.0	24.0	11.0	85.0	75.0	82.0	12.0
Total opportunities	25.0	28.0	29.0	12.0	91.0	78.0	82.0	12.0
Indicator value	93.0%	92.5%	91.0%	90.9%	90.8%	91.5%	94.2%	95.0%

Licensee Comments: none

### ERO Drill Participation



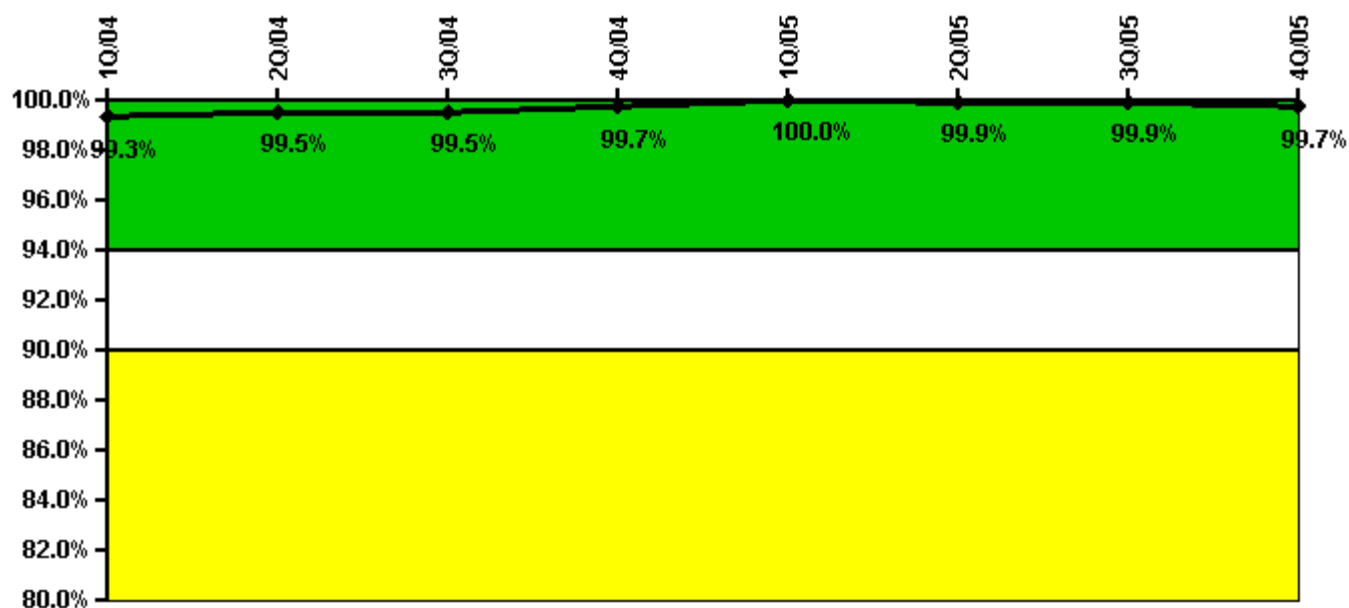
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Participating Key personnel	86.0	87.0	89.0	88.0	92.0	99.0	106.0	107.0
Total Key personnel	87.0	92.0	92.0	92.0	98.0	106.0	108.0	109.0
Indicator value	98.9%	94.6%	96.7%	95.7%	93.9%	93.4%	98.1%	98.2%

Licensee Comments: none

### Alert & Notification System



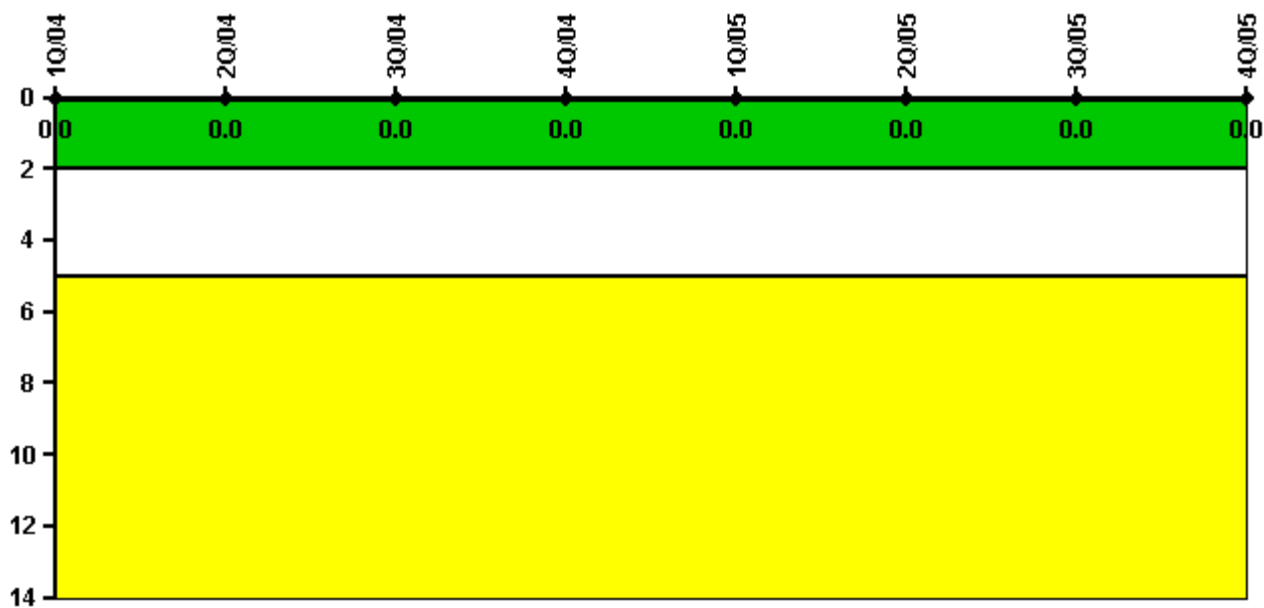
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Successful siren-tests	181	183	183	183	183	182	183	182
Total sirens-tests	183	183	183	183	183	183	183	183
Indicator value	99.3%	99.5%	99.5%	99.7%	100.0%	99.9%	99.9%	99.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



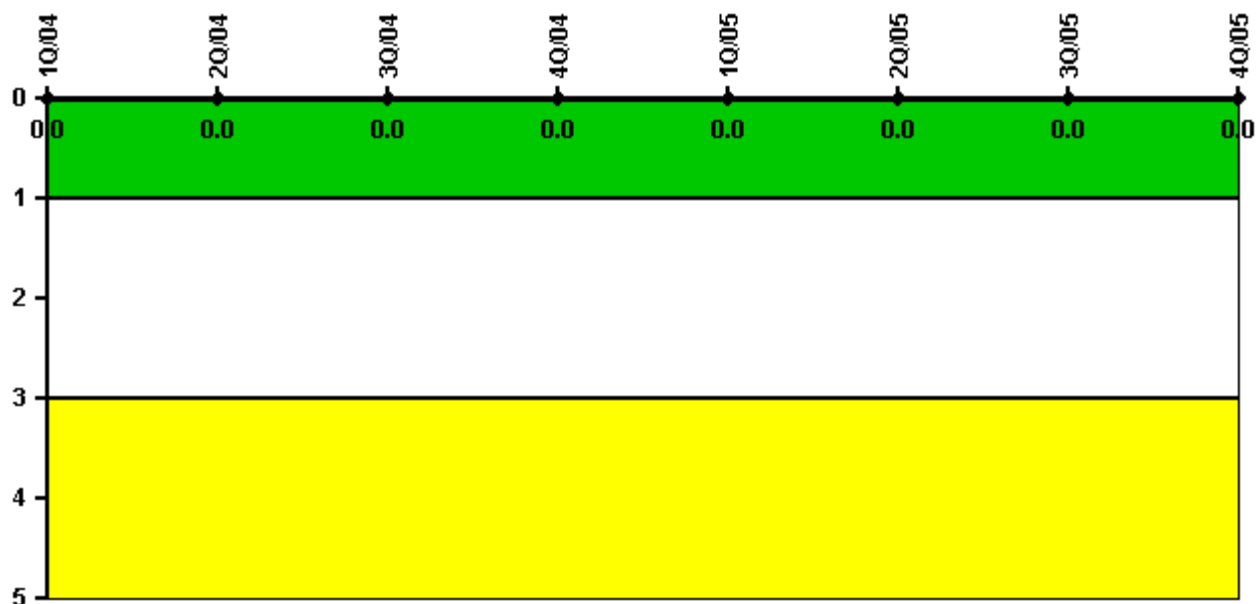
Thresholds: White > 2.0 Yellow > 5.0

**Notes**

Occupational Exposure Control Effectiveness	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
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/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
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: January 30, 2006