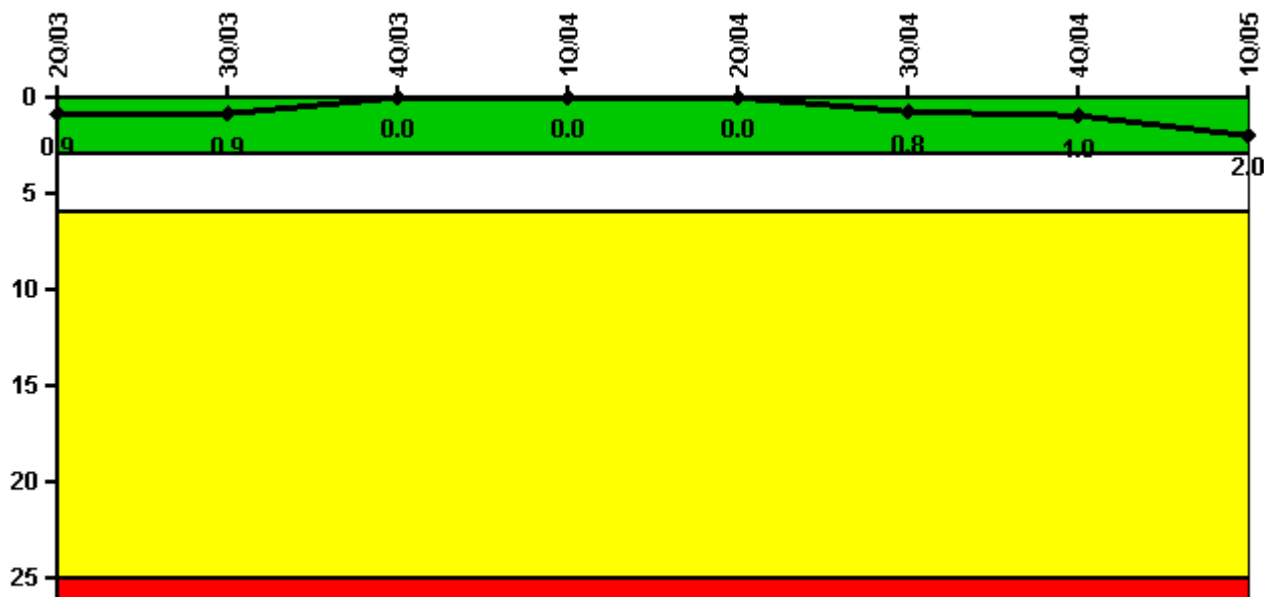


# Palisades

## 1Q/2005 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



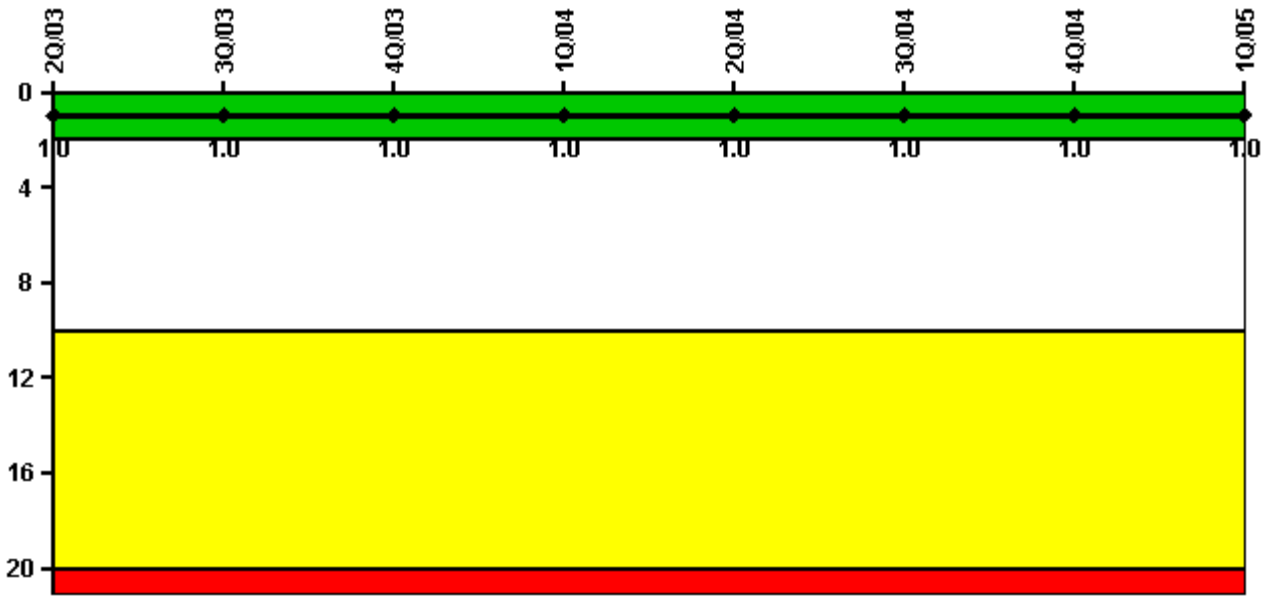
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Unplanned scrams	0	0	0	0	0	1.0	0	1.0
Critical hours	1743.9	2208.0	2209.0	2184.0	2183.0	1756.4	1104.6	2039.5
Indicator value	0.9	0.9	0	0	0	0.8	1.0	2.0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



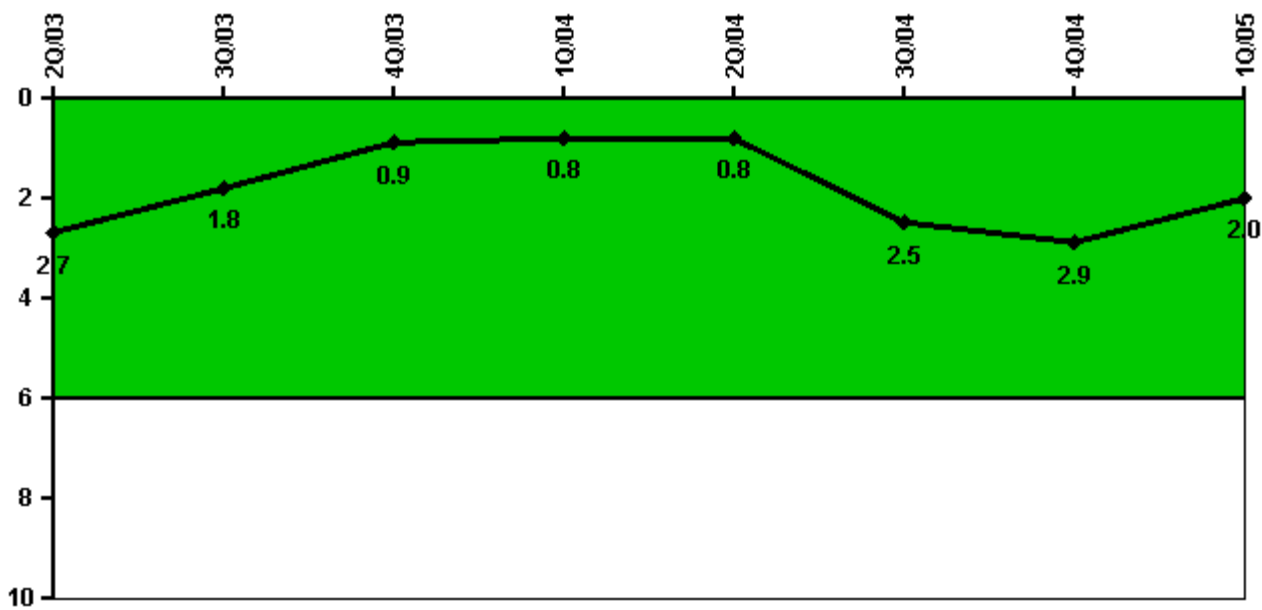
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/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	1.0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



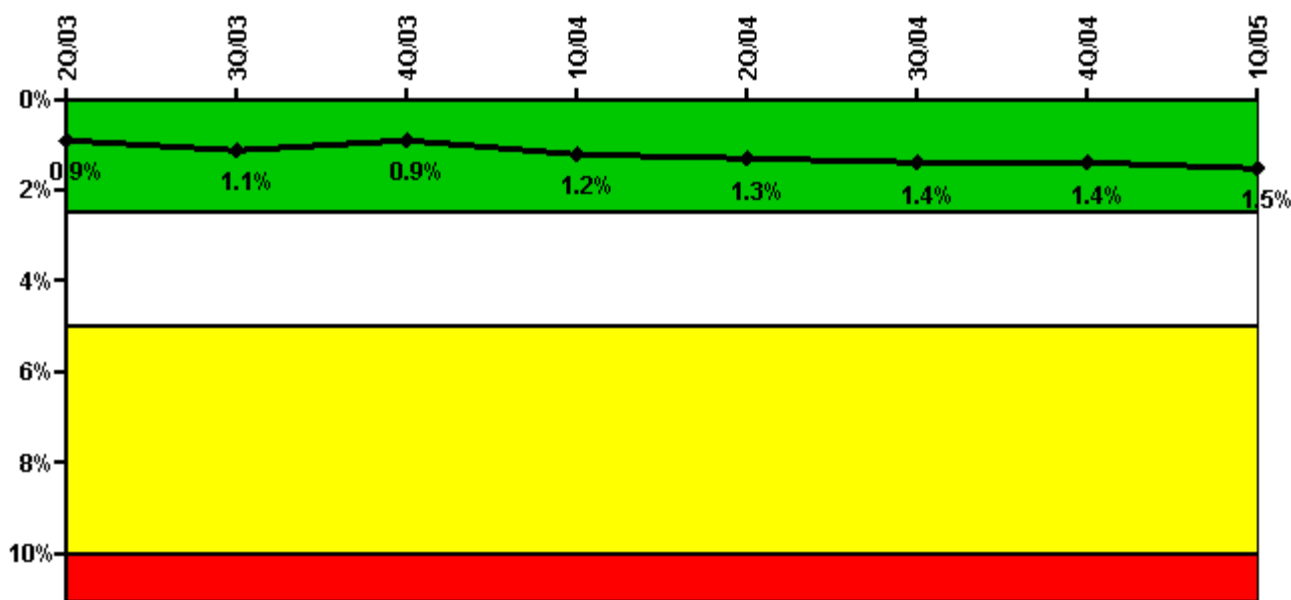
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Unplanned power changes	0	0	0	1.0	0	2.0	0	0
Critical hours	1743.9	2208.0	2209.0	2184.0	2183.0	1756.4	1104.6	2039.5
Indicator value	2.7	1.8	0.9	0.8	0.8	2.5	2.9	2.0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



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

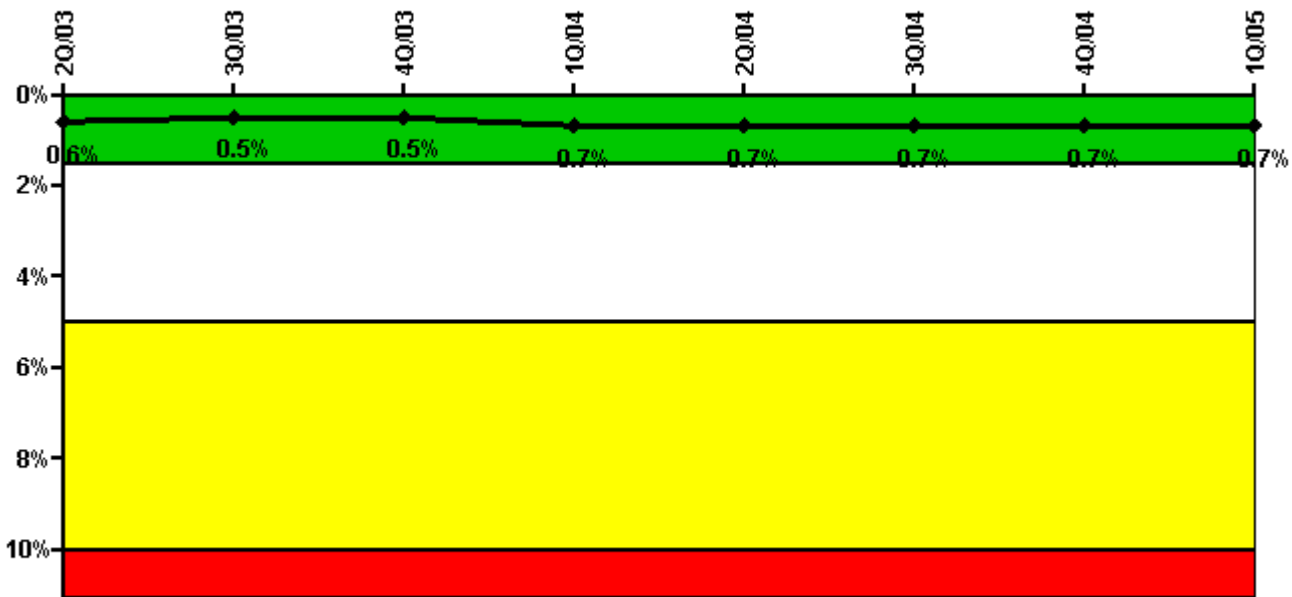
#### Notes

Safety System Unavailability, Emergency AC Power	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
<b>Train 1</b>								
Planned unavailable hours	12.80	33.60	0.64	104.05	5.11	6.53	1.50	11.95
Unplanned unavailable hours	0	11.20	46.35	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	2184.00	2183.00	2208.00	2209.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	17.57	42.75	0.47	0.96	86.40	6.33	0.20	10.67
Unplanned unavailable hours	0	0	0	48.40	0	1.43	0	46.13
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	2184.00	2183.00	2208.00	2209.00	2160.00
<b>Indicator value</b>	<b>0.9%</b>	<b>1.1%</b>	<b>0.9%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.5%</b>

#### Licensee Comments:

1Q/05: MS01, Train 2: Fault exposure of 162,048 hours is reported. On 2/17/05 Palisades identified that a pressurizer heater breaker 152-211 control circuit would allow, under certain accident conditions, the breaker to re-close. The re-closure could potentially overload the Train 2 Emergency Diesel generator resulting in an over current condition and subsequent trip of the Emergency diesel generator output breaker. On 2/19/05 a temporary modification was installed to the pressurizer heater breaker 152-211 control circuit. The modification changed the breaker control circuit and prevents the potential re-closure of the pressurizer heater breaker. Reference Palisades Action Request CAP046764. Fault Exposure hours are recorded from the time the pressurizer heater control circuit was modified on 8/24/86 until identification of the design issue. Fault exposure hours for this period are calculated as 6,752 days or 162,048 hours. This period is a conservative estimate and includes the time, which only one EDG was required to be available. Per NEI 99-02, revision 2, page 33 lines 17 - 23, failures that are not capable of being discovered during normal surveillance tests, are amenable to evaluation through the NRC's Significant Determination Process and are excluded from the unavailability indicators. The failure and the associated Fault Exposure hours should be reported in the comment field of the PI data submittal. Unplanned Unavailability has been reported from the time the design issue was identified until the EDG was declared operable. Specifically 18:34 on 2/17/05 until 16:42 on 2/19/05.

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



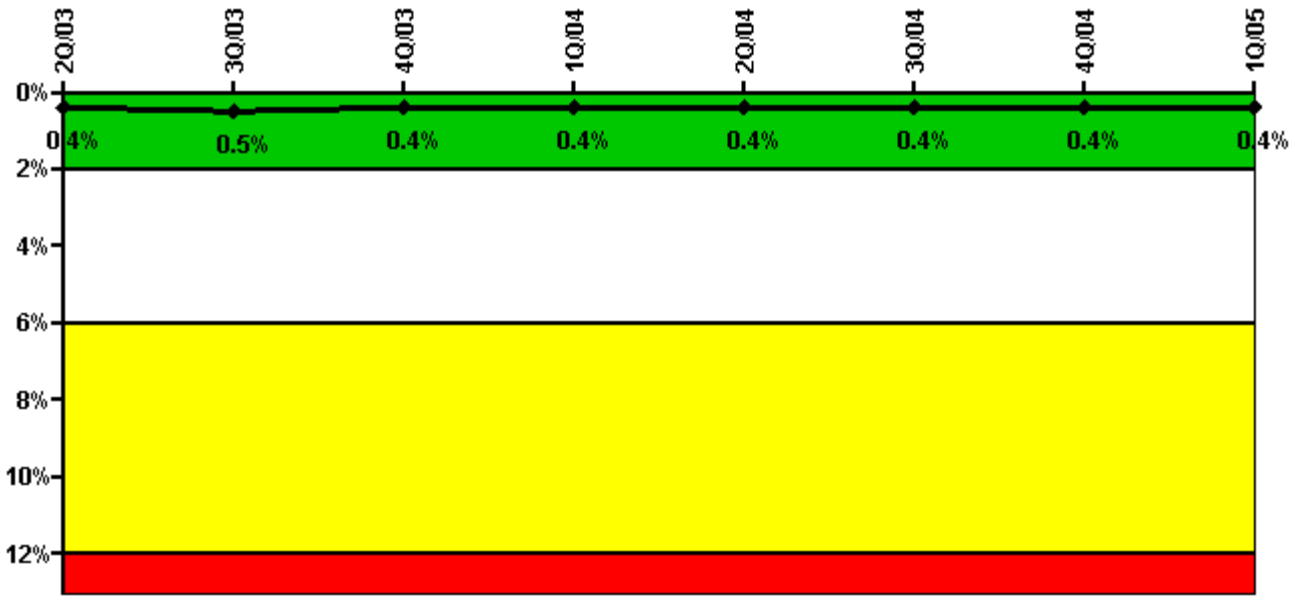
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
<b>Train 1</b>								
Planned unavailable hours	12.78	0	8.08	46.50	3.86	33.19	0.75	3.78
Unplanned unavailable hours	0	0	4.25	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	1777.52	2208.00	2209.00	2184.00	2183.00	1842.31	1152.47	2160.00
<b>Train 2</b>								
Planned unavailable hours	0	2.40	0.47	30.65	7.15	18.44	0.97	9.60
Unplanned unavailable hours	0	43.57	0	0	8.60	0	0	0
Fault exposure hours	0	0	3.95	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1777.52	2208.00	2209.00	2184.00	2183.00	1842.31	1152.47	2160.00
<b>Indicator value</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>

Licensee Comments: none

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



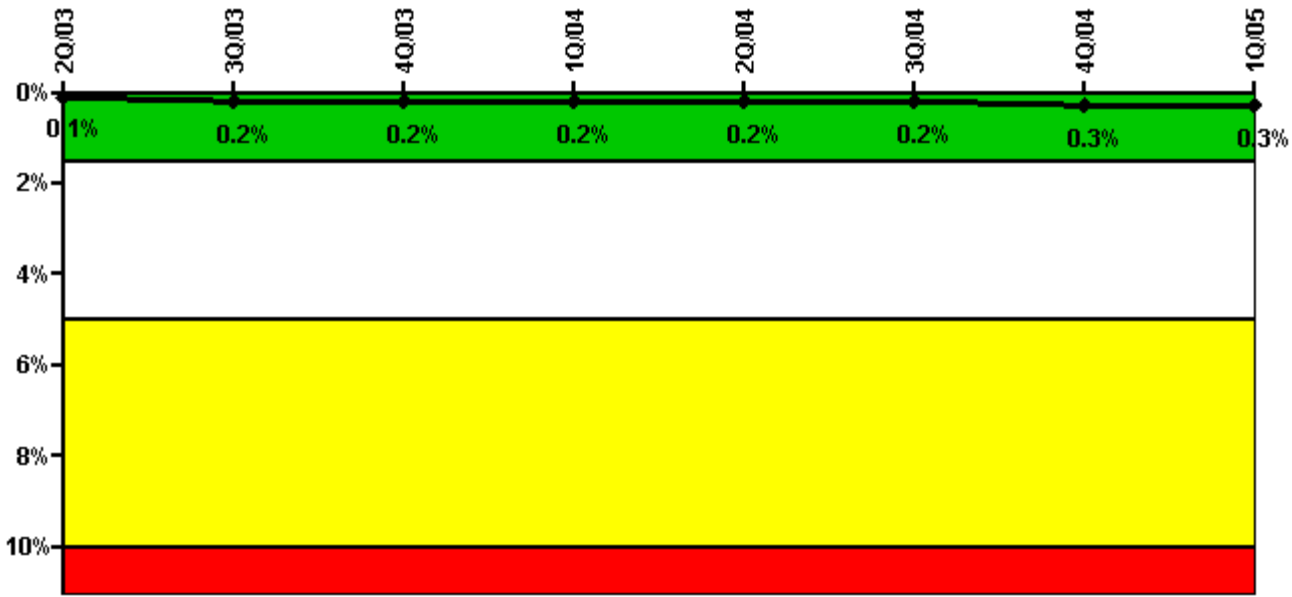
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
<b>Train 1</b>								
Planned unavailable hours	1.27	25.78	2.01	1.64	4.68	1.45	2.25	3.08
Unplanned unavailable hours	0	25.37	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	1777.52	2208.00	2209.00	2184.00	2183.00	1842.31	1152.47	2160.00
<b>Train 2</b>								
Planned unavailable hours	15.51	18.57	2.05	6.97	5.13	1.33	2.32	15.12
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	1777.52	2208.00	2209.00	2184.00	2183.00	1776.03	1104.63	2160.00
<b>Train 3</b>								
Planned unavailable hours	35.80	1.82	15.91	22.02	3.73	0.65	0	14.02
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	1777.52	2208.00	2209.00	2184.00	2183.00	1842.31	1152.47	2160.00
<b>Indicator value</b>	<b>0.4%</b>	<b>0.5%</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



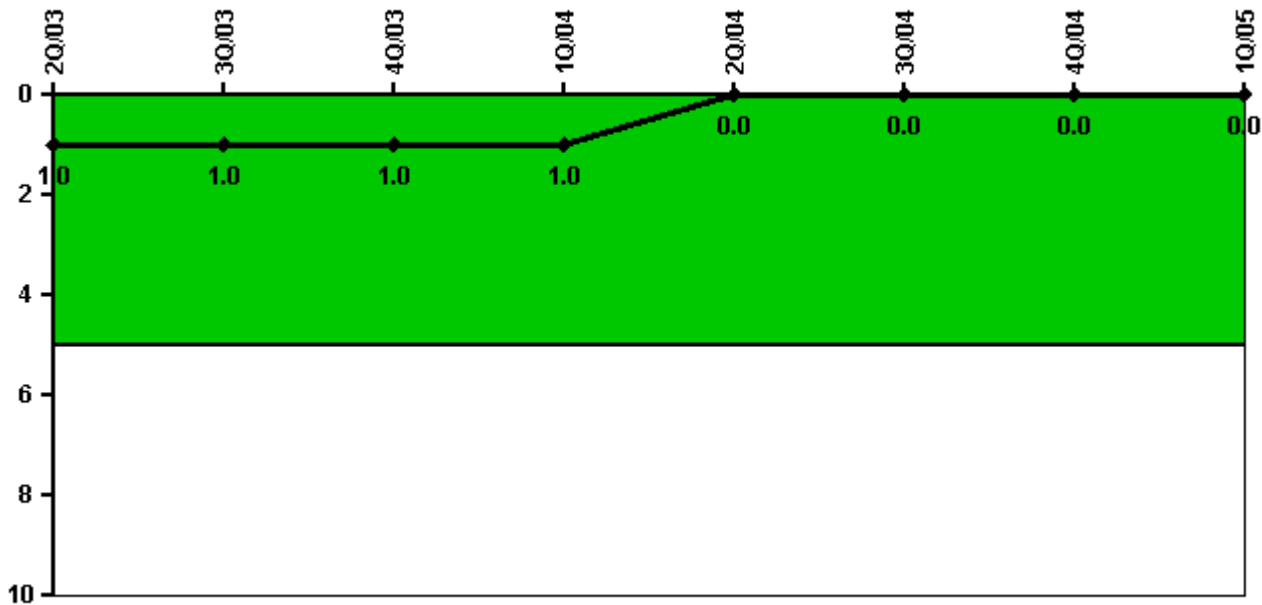
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
<b>Train 1</b>								
Planned unavailable hours	0.90	62.65	3.65	1.12	4.36	21.22	0.60	19.37
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	1777.52	2208.00	2209.00	2184.00	2183.00	1842.31	1152.47	2160.00
<b>Train 2</b>								
Planned unavailable hours	0	0.05	0.47	0	1.30	9.88	0	3.02
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	1777.52	2208.00	2209.00	2184.00	2183.00	1842.31	1152.47	2160.00
<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	295.68	0	0	0	0	365.69	845.47	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	343.66	0	0	0	0	291.20	1021.90	0
<b>Indicator value</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.3%</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

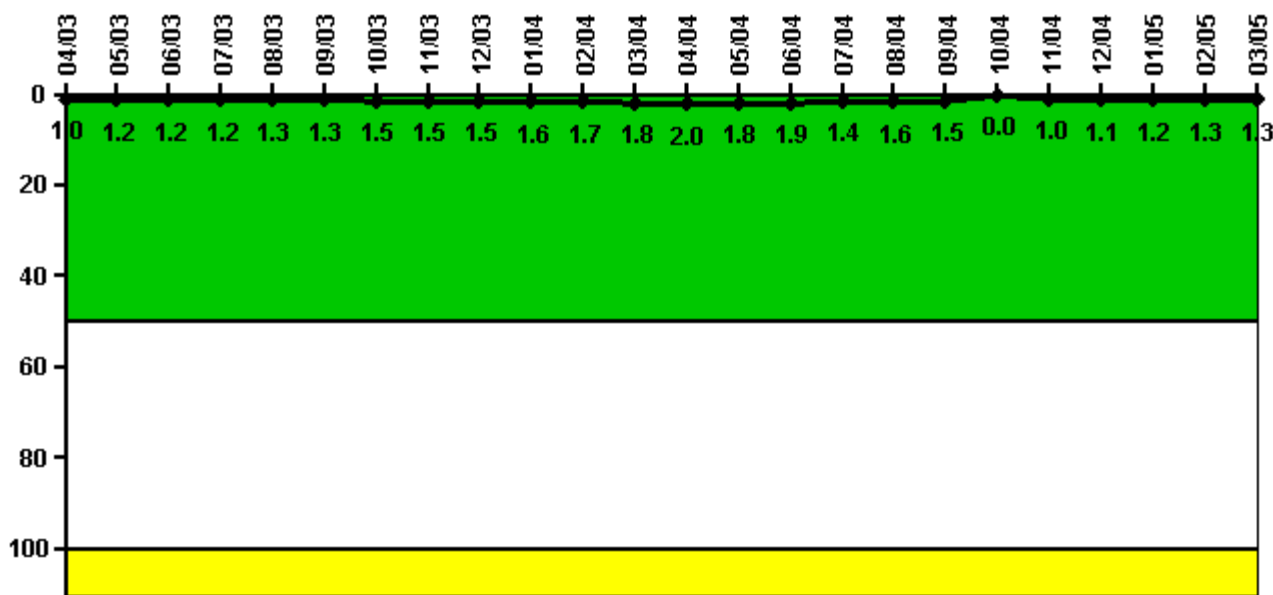
#### Notes

Safety System Functional Failures (PWR)	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Safety System Functional Failures	1	0	0	0	0	0	0	0
Indicator value	1	1	1	1	0	0	0	0

Licensee Comments: none



### Reactor Coolant System Activity



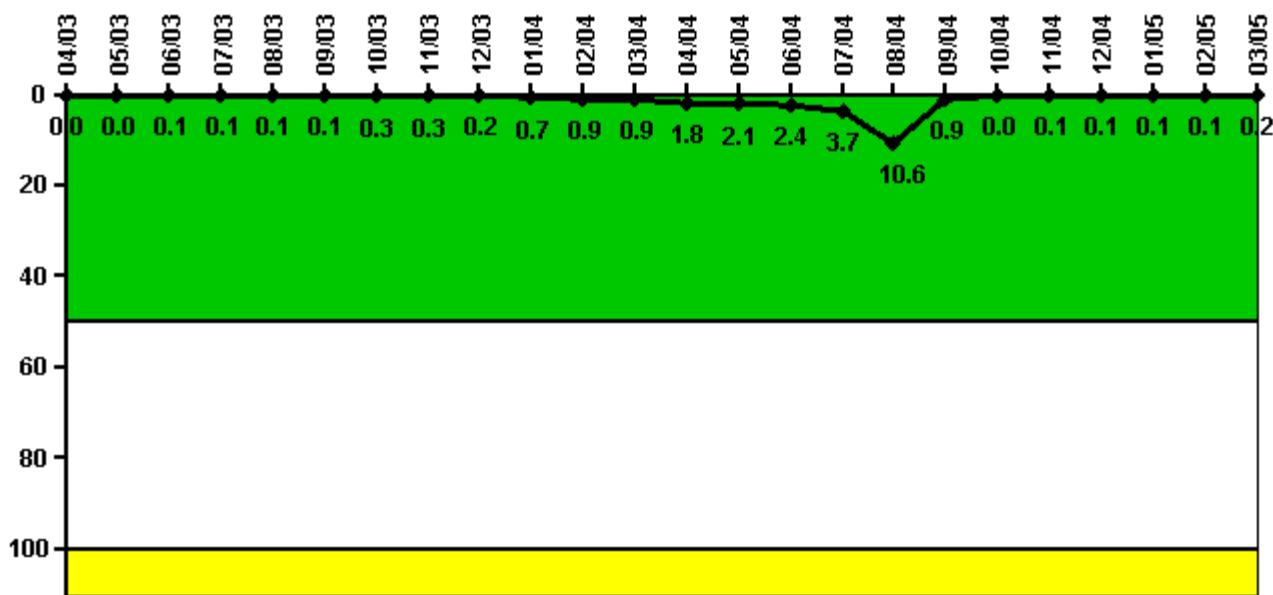
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

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	0.009580	0.011800	0.011600	0.012200	0.012800	0.013300	0.014600	0.014900	0.015400	0.016100	0.016600	0.018400
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	1.0	1.2	1.2	1.2	1.3	1.3	1.5	1.5	1.5	1.6	1.7	1.8
Reactor Coolant System Activity	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05
Maximum activity	0.019700	0.018400	0.018800	0.014000	0.016000	0.015000	0.000003	0.010100	0.011100	0.012300	0.012600	0.013100
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	2.0	1.8	1.9	1.4	1.6	1.5	0	1.0	1.1	1.2	1.3	1.3

Licensee Comments: none

### Reactor Coolant System Leakage



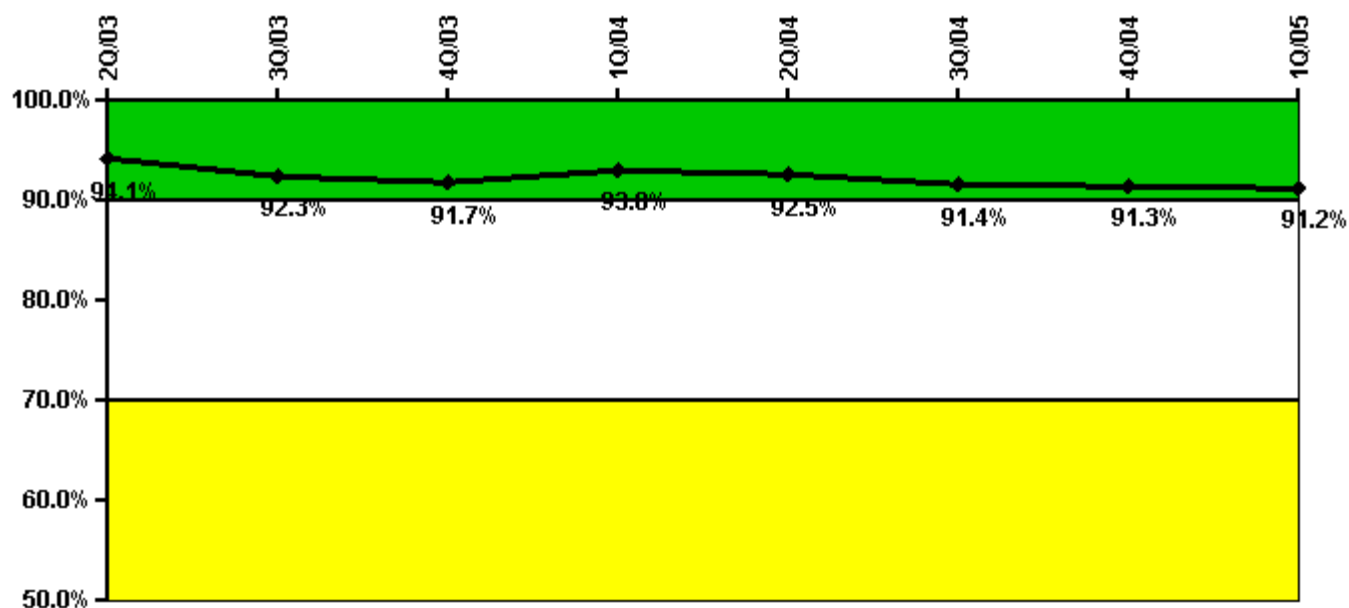
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

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	0.002	0.002	0.007	0.013	0.013	0.011	0.029	0.026	0.018	0.073	0.085	0.094
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	0	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.7	0.9	0.9
Reactor Coolant System Leakage	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04	1/05	2/05	3/05
Maximum leakage	0.180	0.209	0.240	0.370	1.057	0.085	0	0.005	0.011	0.011	0.008	0.020
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	2.1	2.4	3.7	10.6	0.9	0	0.1	0.1	0.1	0.1	0.2

Licensee Comments: none

### Drill/Exercise Performance



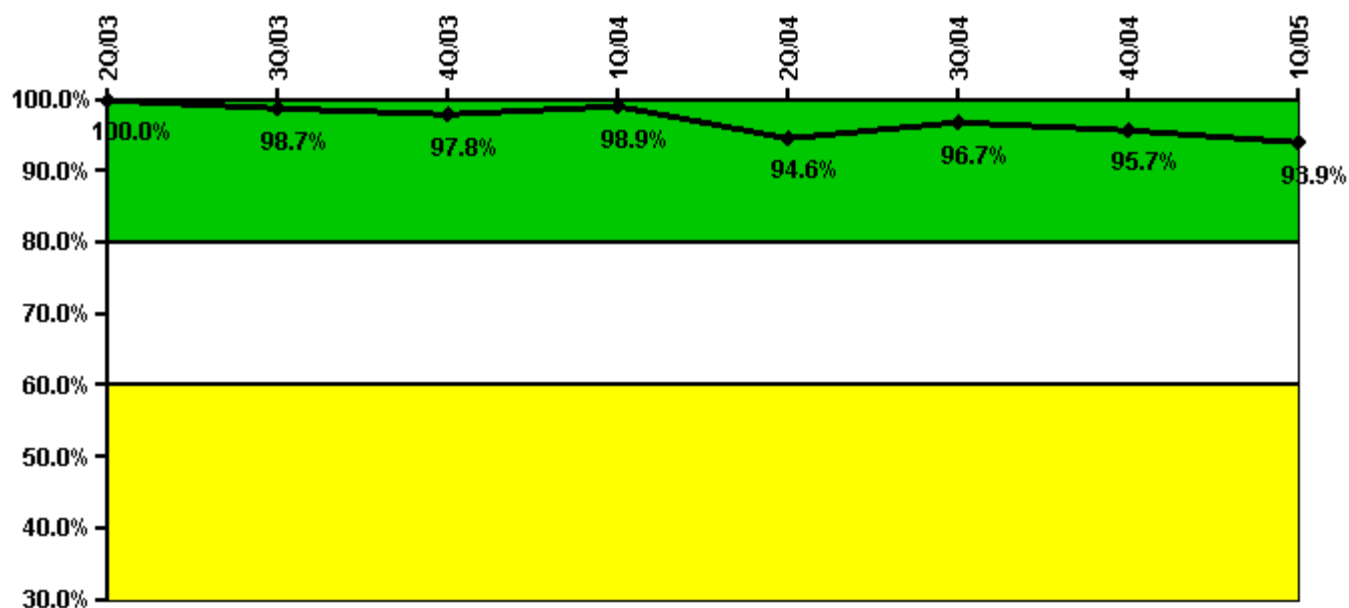
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Successful opportunities	18.0	41.0	28.0	23.0	27.0	25.0	11.0	85.0
Total opportunities	18.0	48.0	32.0	25.0	28.0	29.0	12.0	91.0
Indicator value	94.1%	92.3%	91.7%	93.0%	92.5%	91.4%	91.3%	91.2%

Licensee Comments: none

### ERO Drill Participation



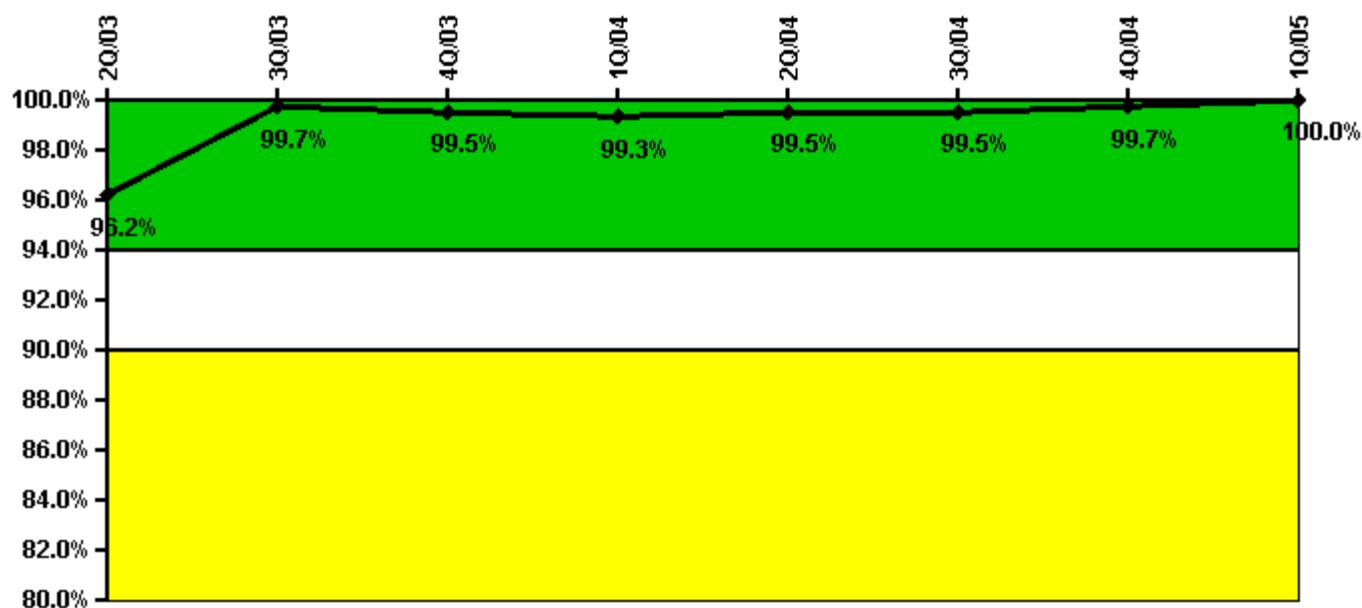
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Participating Key personnel	72.0	74.0	90.0	86.0	87.0	89.0	88.0	92.0
Total Key personnel	72.0	75.0	92.0	87.0	92.0	92.0	92.0	98.0
Indicator value	100.0%	98.7%	97.8%	98.9%	94.6%	96.7%	95.7%	93.9%

Licensee Comments: none

### Alert & Notification System



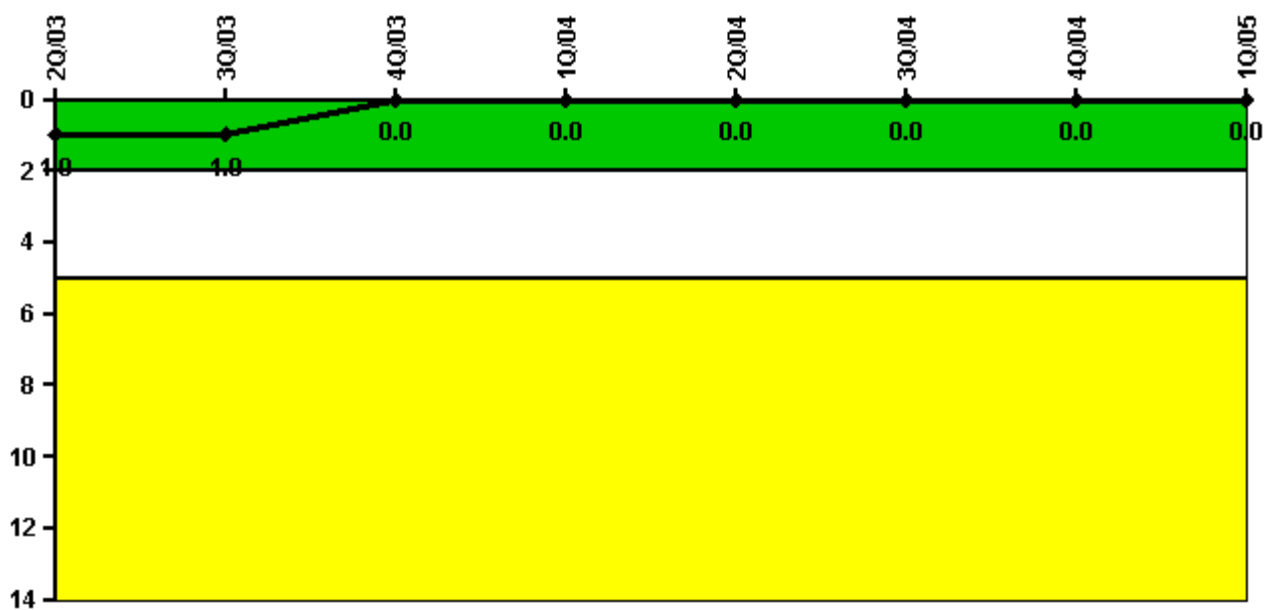
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Successful siren-tests	182	183	181	181	183	183	183	183
Total sirens-tests	183	183	183	183	183	183	183	183
Indicator value	96.2%	99.7%	99.5%	99.3%	99.5%	99.5%	99.7%	100.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/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>1</b>	<b>1</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/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/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: June 17, 2005