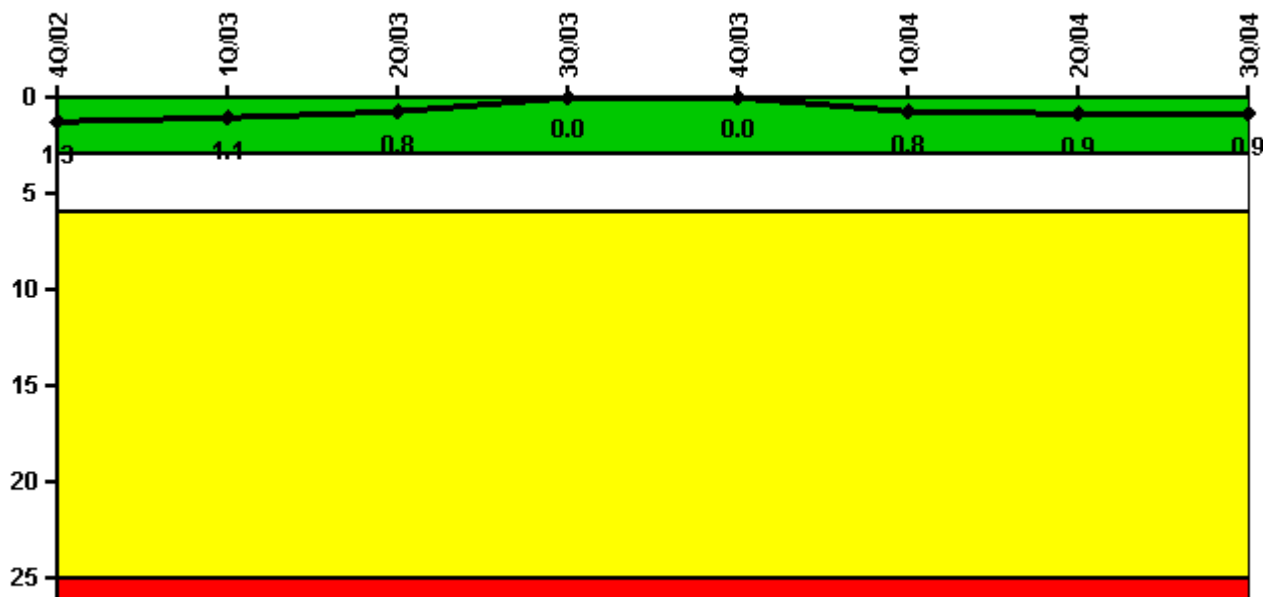


# Calvert Cliffs 1

## 3Q/2004 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



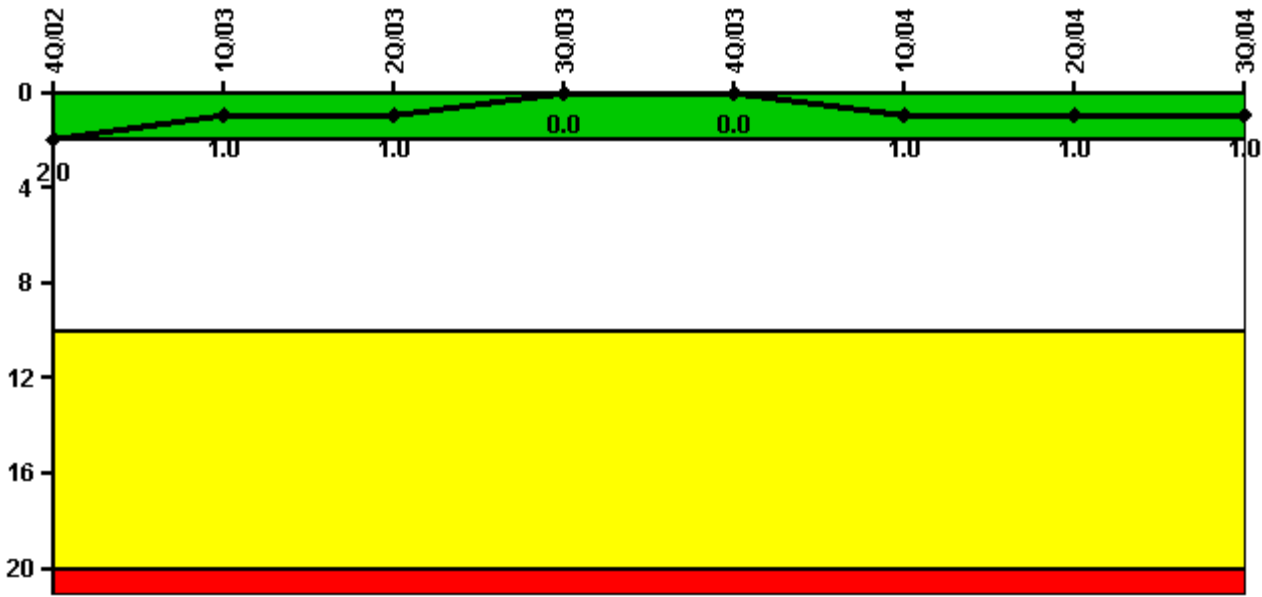
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	0	0	0	1.0	0	0
Critical hours	2035.6	2160.0	2183.0	2208.0	2209.0	2157.0	1501.0	2208.0
Indicator value	1.3	1.1	0.8	0	0	0.8	0.9	0.9

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



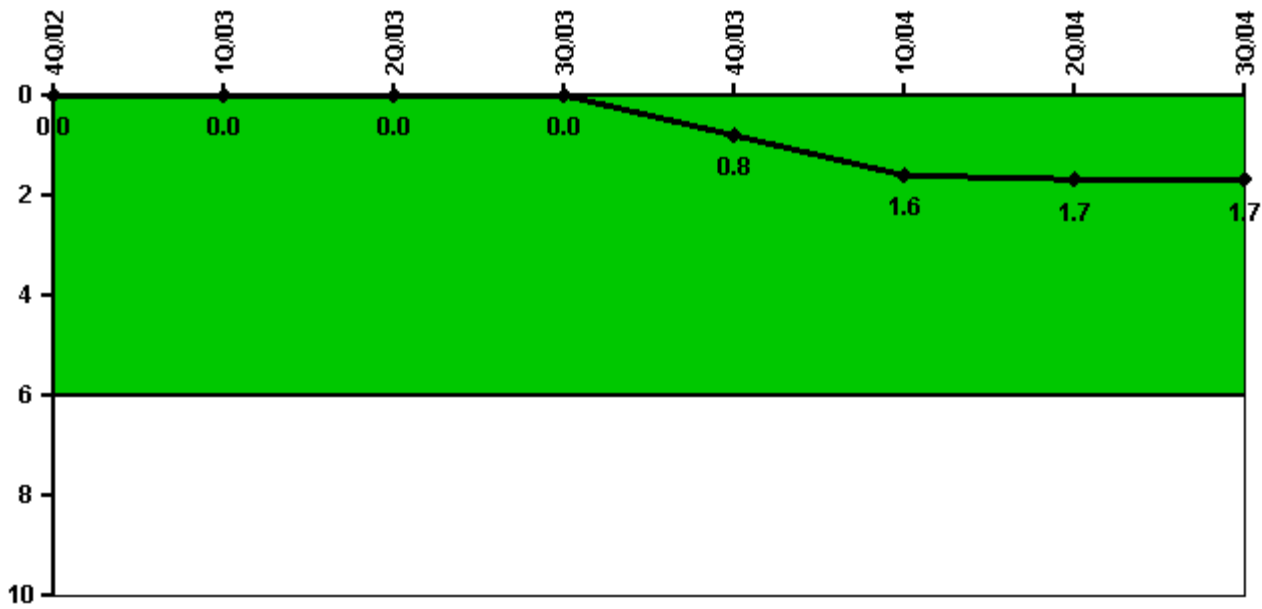
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### 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	1.0	0	0
Indicator value	2.0	1.0	1.0	0	0	1.0	1.0	1.0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



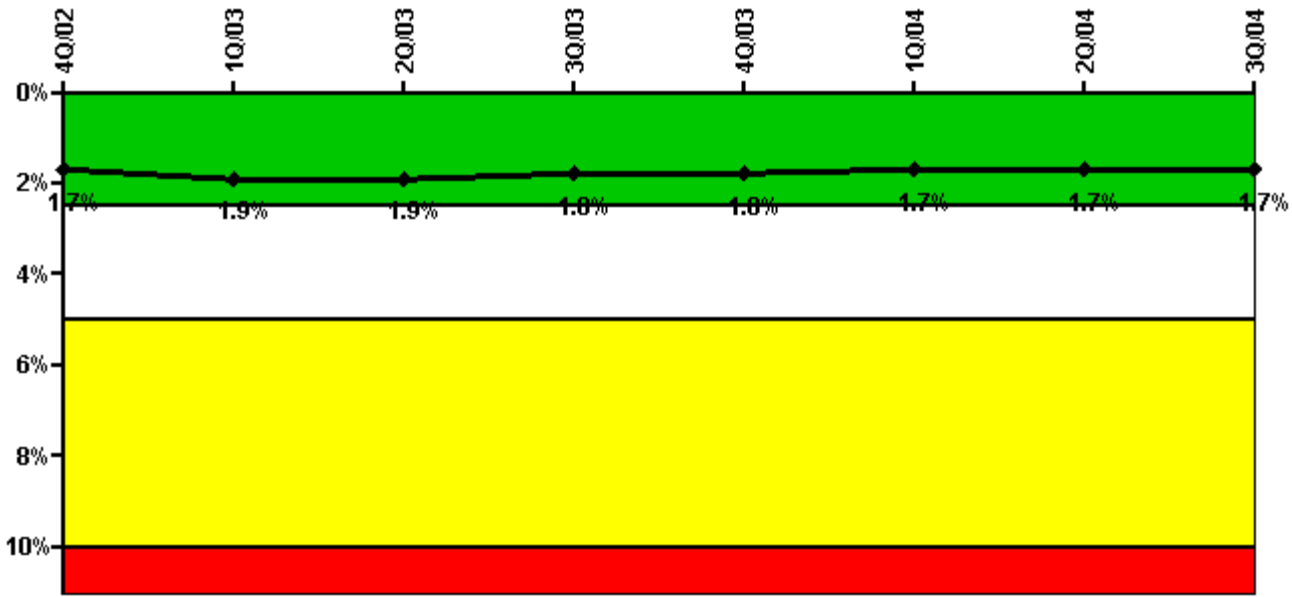
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Unplanned power changes	0	0	0	0	1.0	1.0	0	0
Critical hours	2035.6	2160.0	2183.0	2208.0	2209.0	2157.0	1501.0	2208.0
Indicator value	0	0	0	0	0.8	1.6	1.7	1.7

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



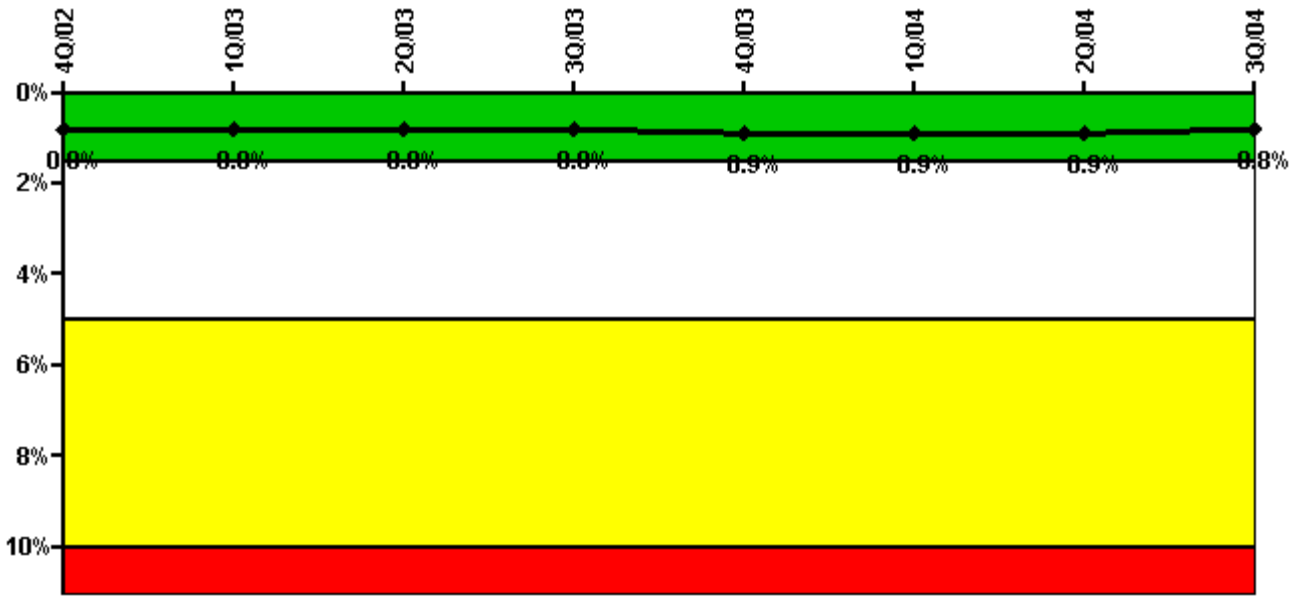
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

**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	4.80	23.08	31.15	0	4.25	0	0.67	15.64
Unplanned unavailable hours	0	0	12.83	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	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	24.65	0	0	0	40.05	31.90	0	1.52
Unplanned unavailable hours	0	15.63	5.32	0	0	0	0	0
Fault exposure hours	539.60	117.95	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	2184.00	2183.00	2208.00
<b>Indicator value</b>	<b>1.7%</b>	<b>1.9%</b>	<b>1.9%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.7%</b>	<b>1.7%</b>	<b>1.7%</b>

Licensee Comments: none

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



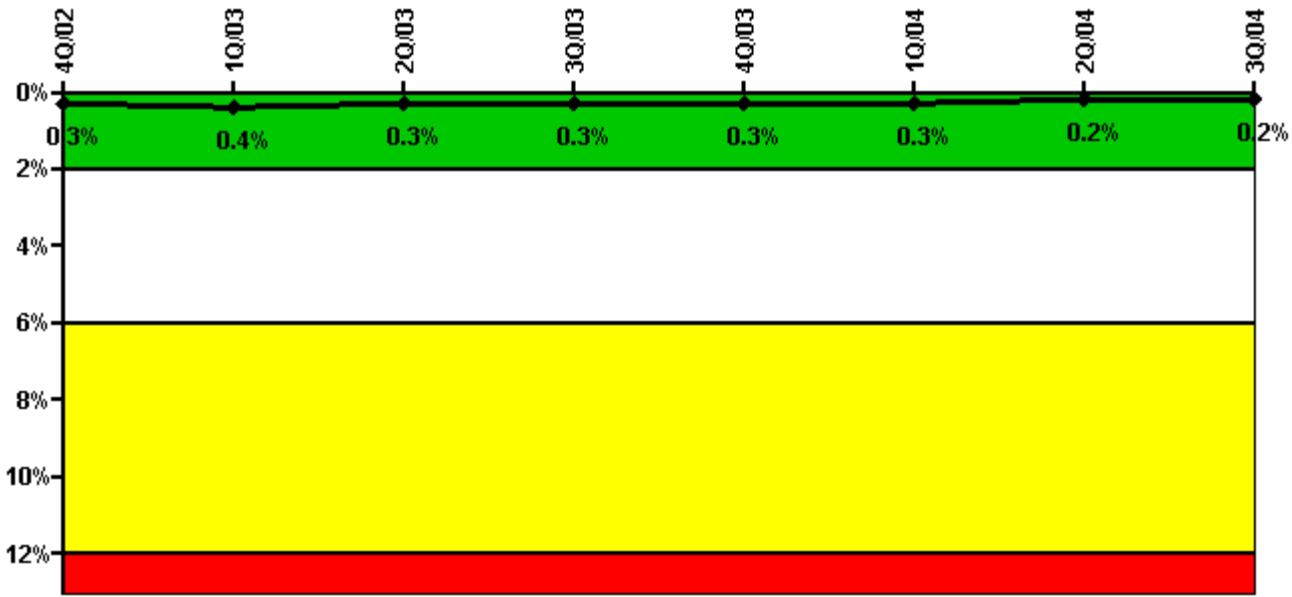
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**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	45.07	17.59	1.64	2.25	26.06	20.43	1.35	4.46
Unplanned unavailable hours	10.38	5.75	11.73	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	2035.60	2160.00	2183.00	2208.00	2209.00	2157.00	1500.90	2208.00
<b>Train 2</b>								
Planned unavailable hours	41.97	37.49	1.64	2.25	28.86	21.34	1.35	1.13
Unplanned unavailable hours	0	0	4.42	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	2035.60	2160.00	2183.00	2208.00	2209.00	2157.00	1500.90	2208.00
<b>Indicator value</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.8%</b>

Licensee Comments: none

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



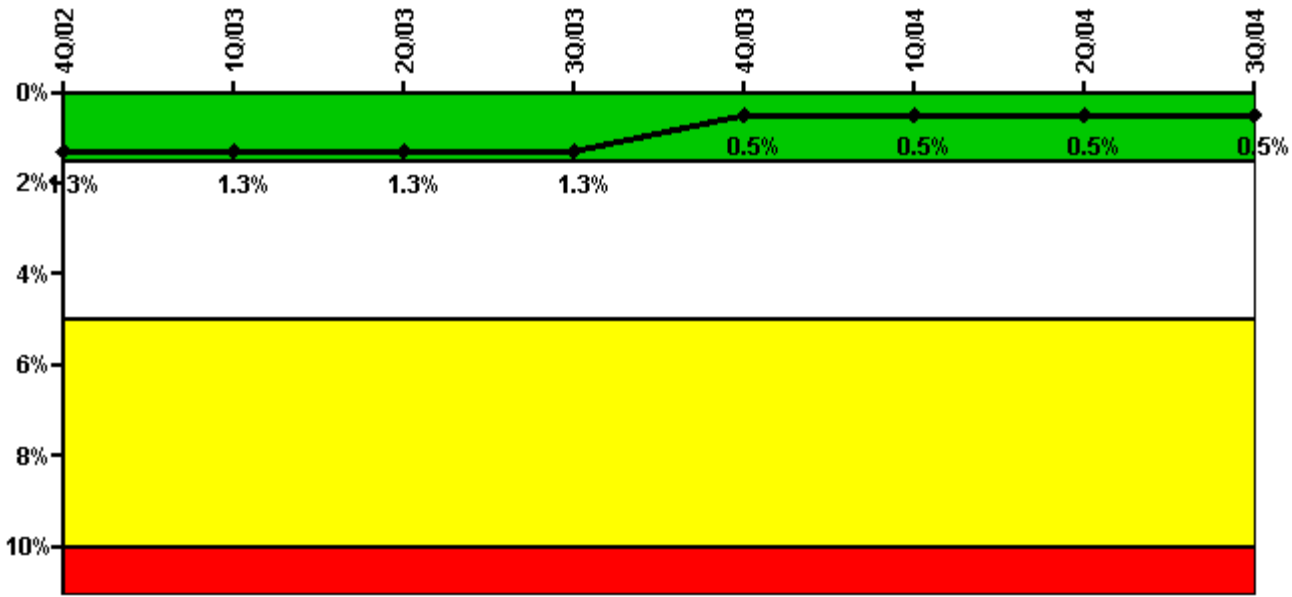
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### 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	2.10	20.50	0.67	0.73	0.32	0.57	1.63	0.68
Unplanned unavailable hours	0	0	0	0	6.00	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	2035.60	2160.00	2183.00	2208.00	2209.00	2157.00	1500.90	2208.00
<b>Train 2</b>								
Planned unavailable hours	0	20.00	0	0.35	0.40	0.52	0.38	1.65
Unplanned unavailable hours	0	38.65	0	0	6.00	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	2035.60	2160.00	2183.00	2208.00	2209.00	2157.00	1500.90	2208.00
<b>Train 3</b>								
Planned unavailable hours	1.83	0	0	0	0	0	6.65	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	2035.60	2160.00	2183.00	2208.00	2209.00	2157.00	1500.90	2208.00
<b>Indicator value</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.2%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



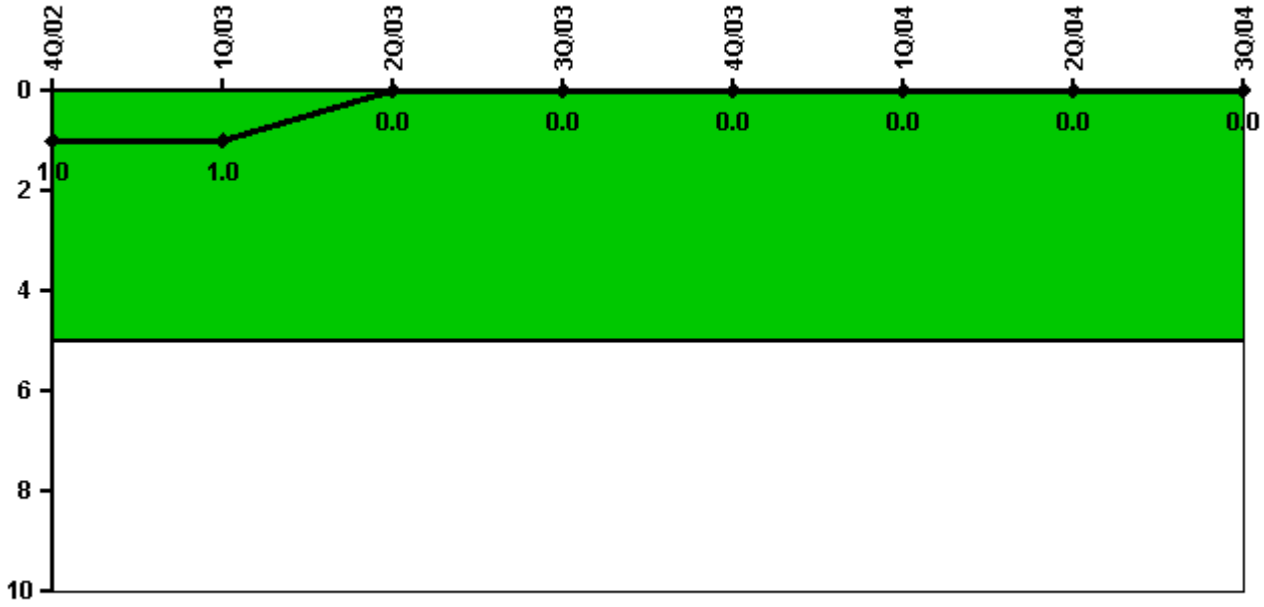
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</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	145.00	0	0	0	0	0	617.30	0
<b>Train 2</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	145.00	0	0	0	0	0	617.30	0
<b>Train 3</b>								
Planned unavailable hours	49.87	36.39	2.28	7.51	29.04	20.90	4.08	14.88
Unplanned unavailable hours	10.38	20.05	11.73	4.00	0	6.91	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	2064.00	2160.00	2183.00	2208.00	2209.00	2184.00	1565.70	2208.00
<b>Train 4</b>								
Planned unavailable hours	46.50	28.71	2.15	1.00	27.63	22.53	1.40	11.17
Unplanned unavailable hours	0	0	4.42	2.67	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	2064.00	2160.00	2183.00	2208.00	2209.00	2184.00	1565.70	2208.00
<b>Indicator value</b>	<b>1.3%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

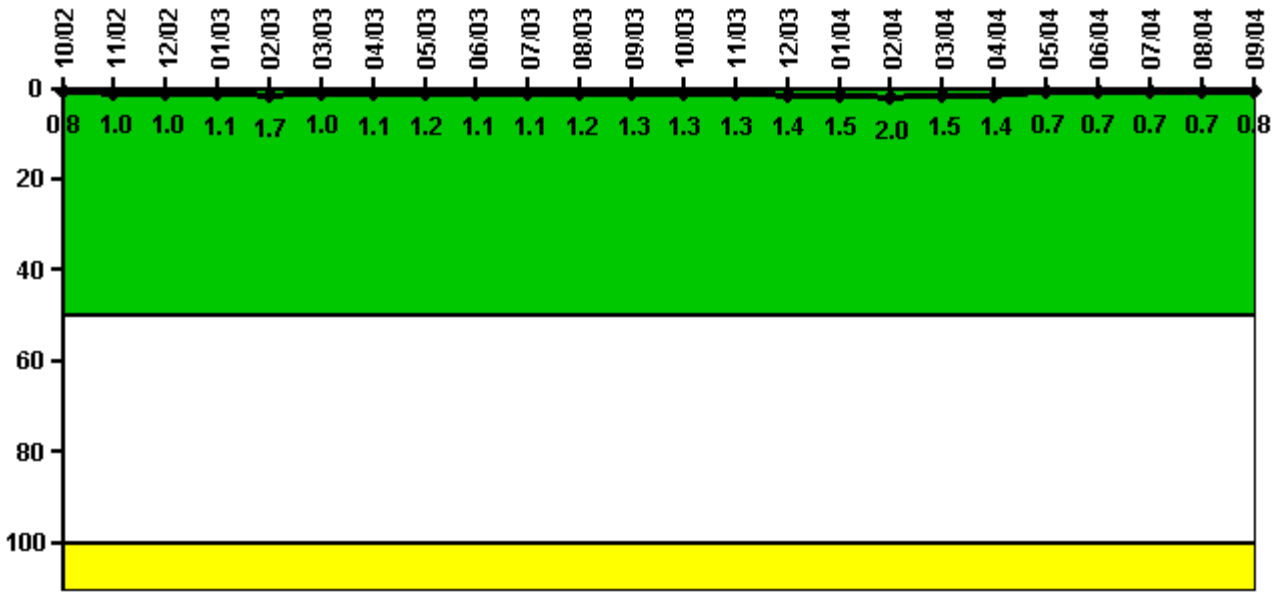
### Notes

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	1	1	0	0	0	0	0	0

Licensee Comments: none



### Reactor Coolant System Activity



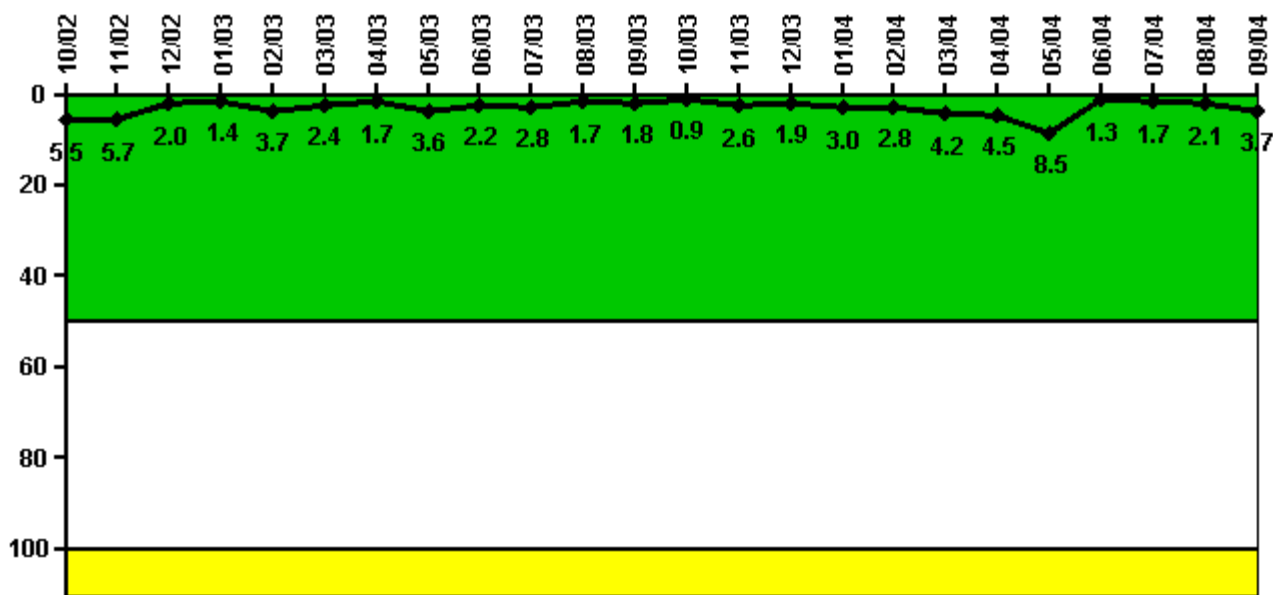
Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.007870	0.010400	0.010100	0.010800	0.016800	0.010300	0.010700	0.011700	0.010800	0.011200	0.012200	0.012800
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	0.8	1.0	1.0	1.1	1.7	1.0	1.1	1.2	1.1	1.1	1.2	1.3
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	0.012800	0.013300	0.013500	0.014500	0.019800	0.014500	0.014100	0.006520	0.006820	0.006760	0.007200	0.007750
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	1.3	1.3	1.4	1.5	2.0	1.5	1.4	0.7	0.7	0.7	0.7	0.8

Licensee Comments: none

### Reactor Coolant System Leakage



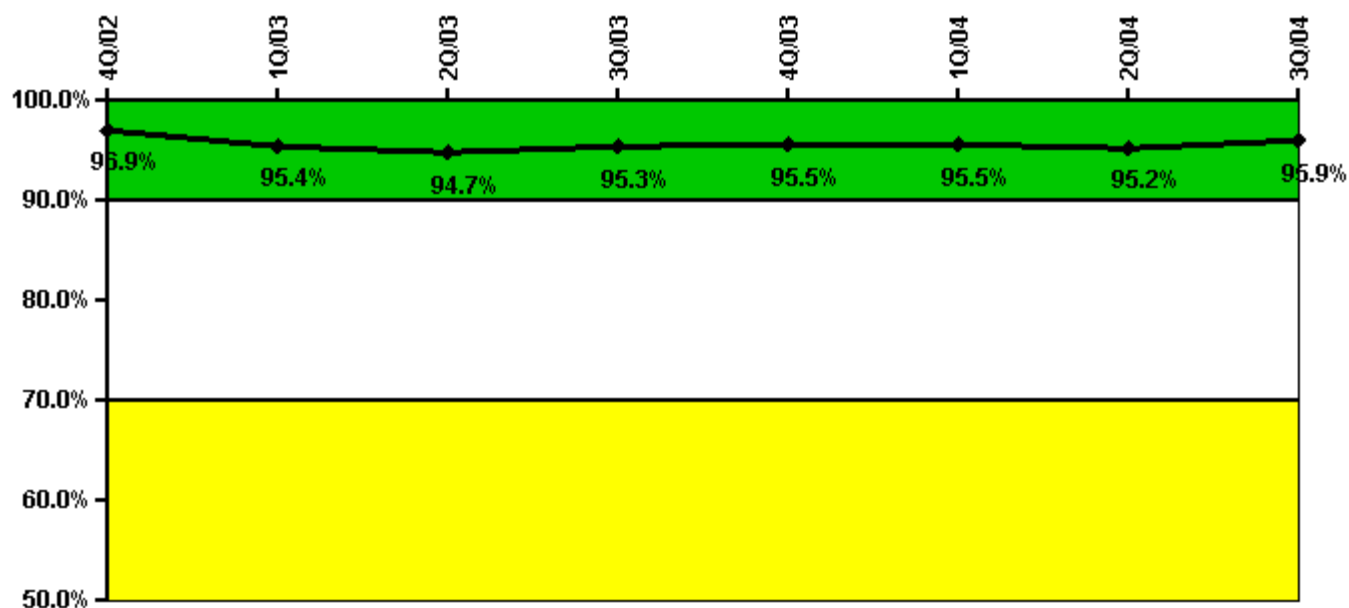
Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.548	0.567	0.197	0.140	0.370	0.240	0.170	0.360	0.220	0.276	0.173	0.175
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	5.5	5.7	2.0	1.4	3.7	2.4	1.7	3.6	2.2	2.8	1.7	1.8
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	0.086	0.261	0.187	0.300	0.280	0.420	0.450	0.850	0.130	0.170	0.210	0.370
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	0.9	2.6	1.9	3.0	2.8	4.2	4.5	8.5	1.3	1.7	2.1	3.7

Licensee Comments: none

### Drill/Exercise Performance



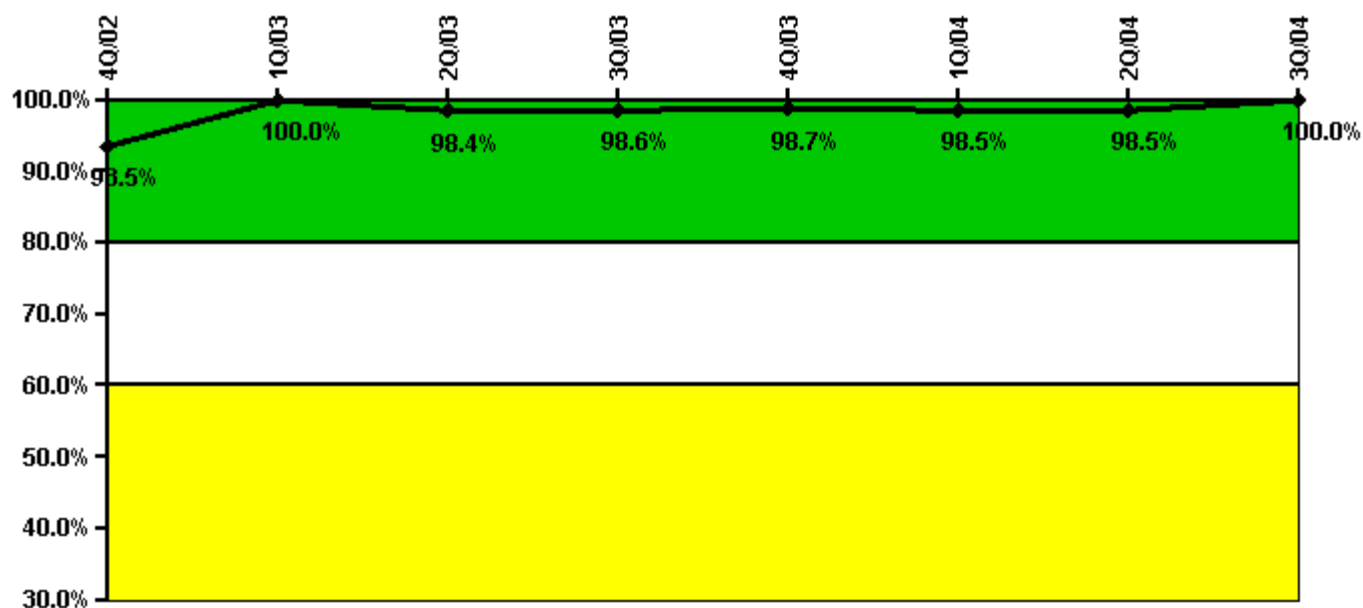
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful opportunities	45.0	9.0	14.0	29.0	56.0	18.0	14.0	26.0
Total opportunities	47.0	12.0	15.0	29.0	57.0	18.0	15.0	27.0
Indicator value	96.9%	95.4%	94.7%	95.3%	95.5%	95.5%	95.2%	95.9%

Licensee Comments: none

### ERO Drill Participation



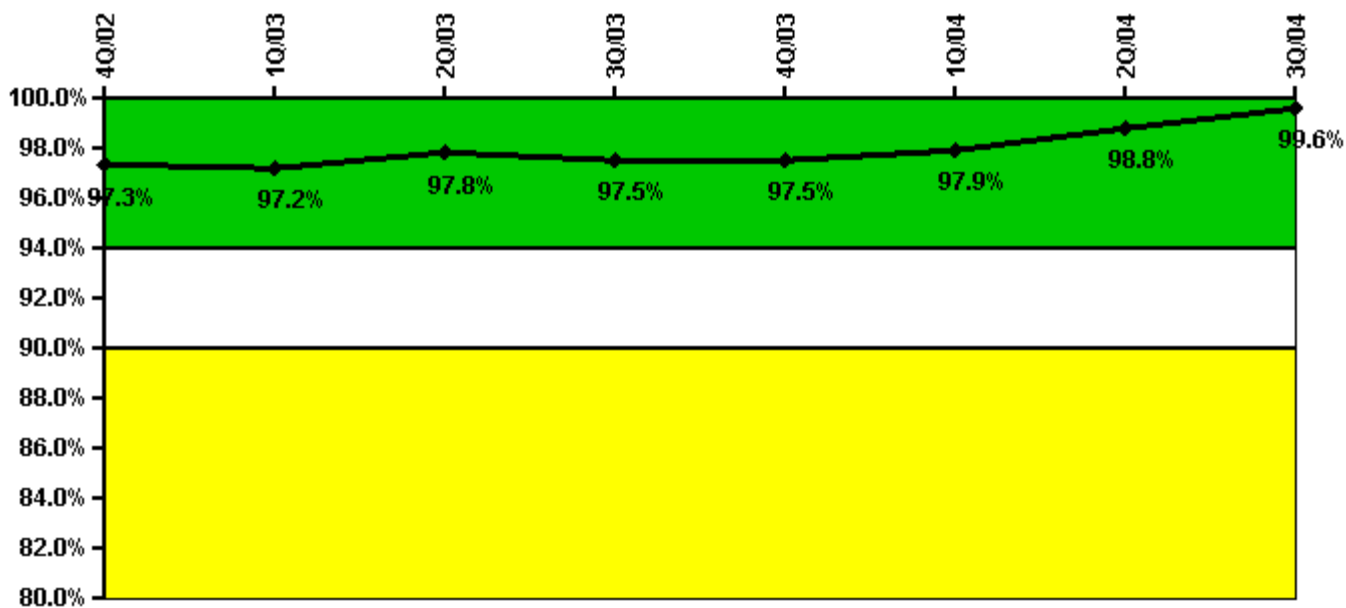
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Participating Key personnel	58.0	57.0	63.0	68.0	77.0	65.0	65.0	68.0
Total Key personnel	62.0	57.0	64.0	69.0	78.0	66.0	66.0	68.0
Indicator value	93.5%	100.0%	98.4%	98.6%	98.7%	98.5%	98.5%	100.0%

Licensee Comments: none

### Alert & Notification System



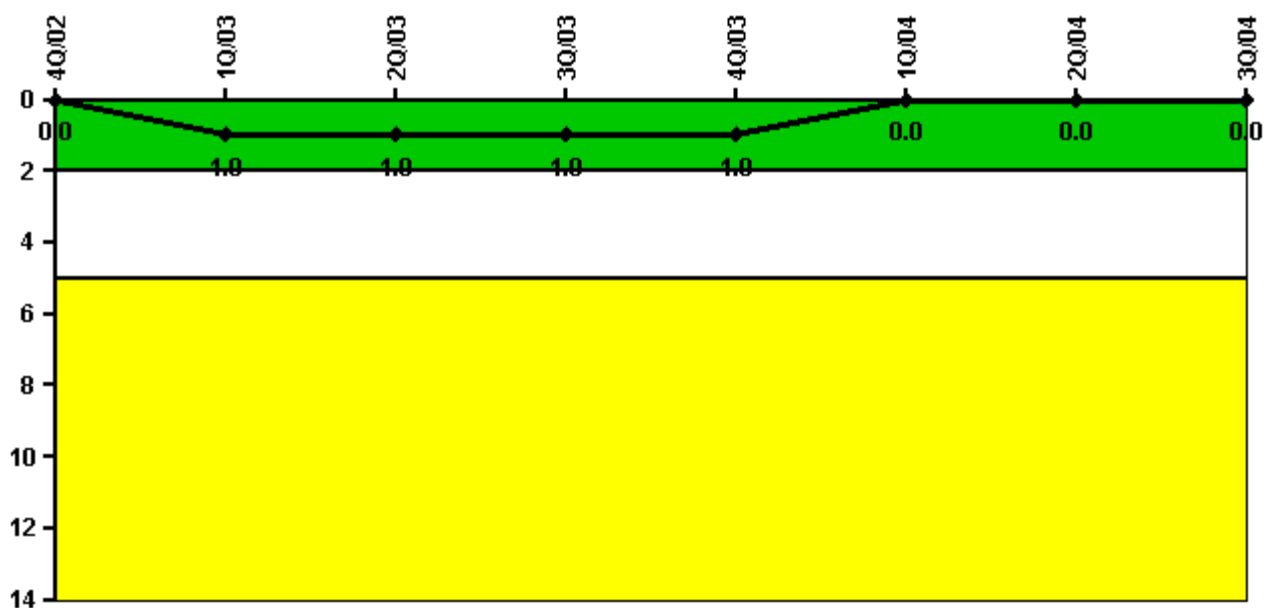
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful siren-tests	1007	914	1036	963	1007	935	934	934
Total sirens-tests	1019	930	1074	996	1019	936	936	936
Indicator value	97.3%	97.2%	97.8%	97.5%	97.5%	97.9%	98.8%	99.6%

Licensee Comments: none

### 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	1	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>1</b>	<b>1</b>	<b>1</b>	<b>1</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.