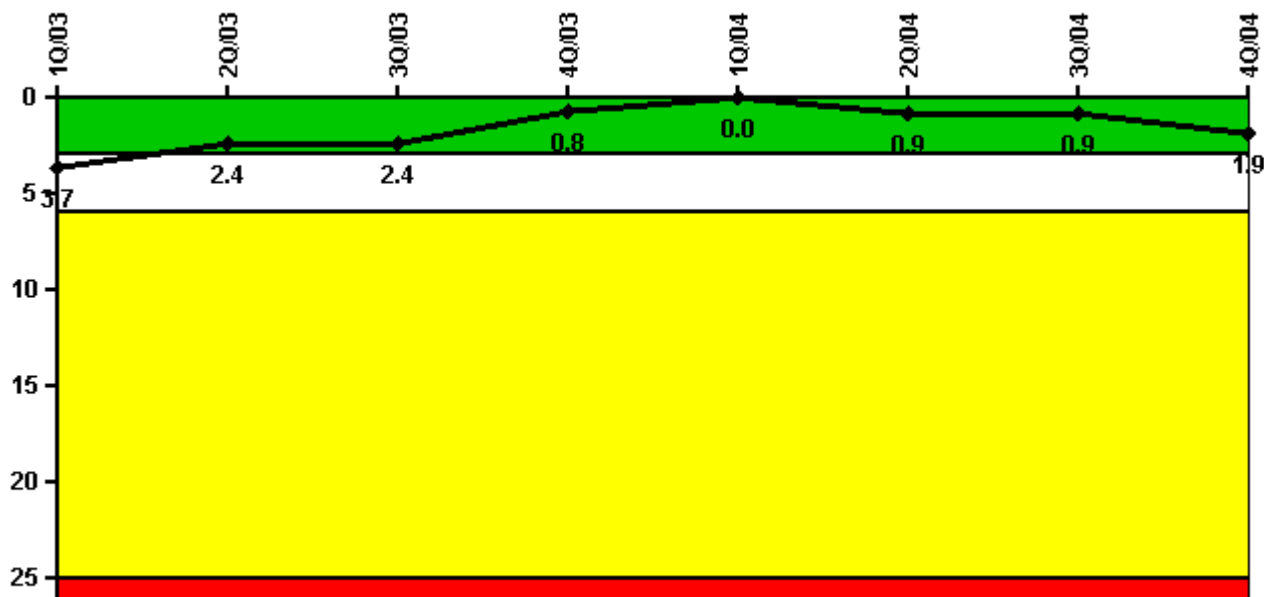


San Onofre 2

4Q/2004 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



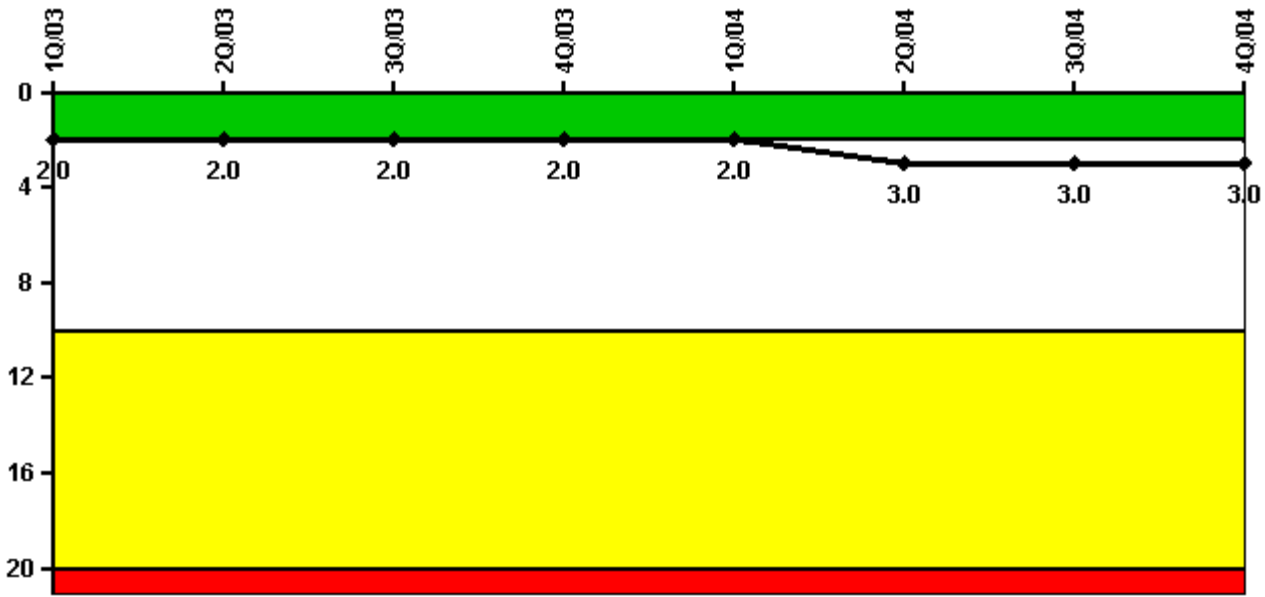
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned scrams	1.0	0	0	0	0	1.0	0	1.0
Critical hours	2147.1	2139.7	2208.0	2209.0	977.7	2091.9	2208.0	2180.4
Indicator value	3.7	2.4	2.4	0.8	0	0.9	0.9	1.9

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



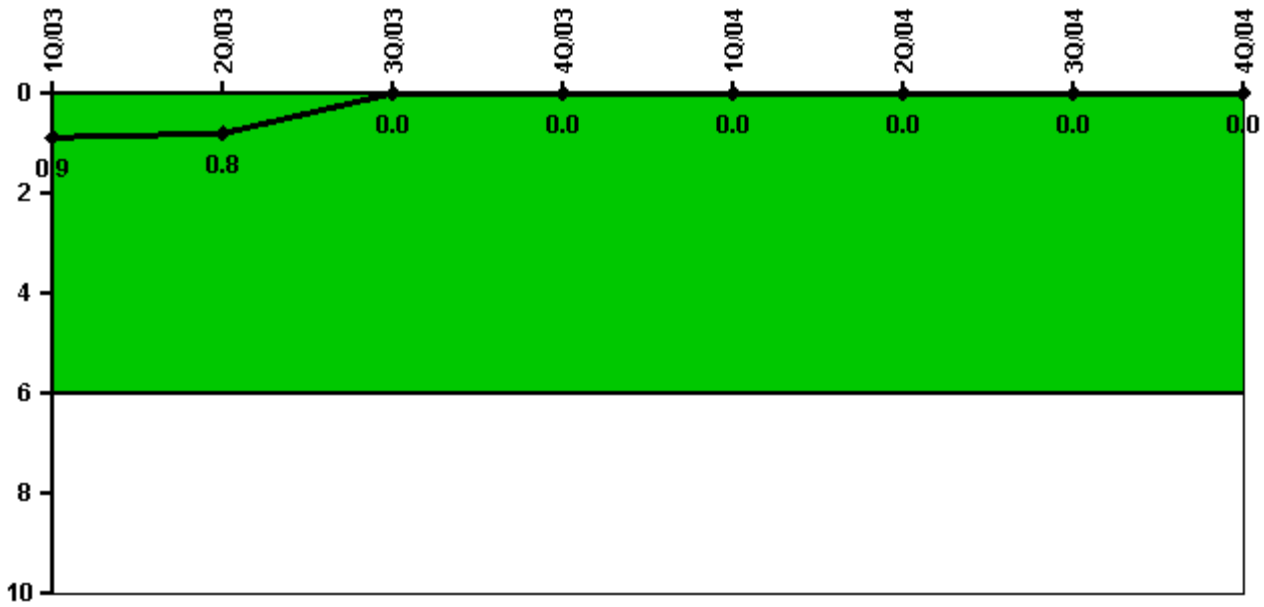
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Scrams	0	0	0	0	0	1.0	0	0
Indicator value	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



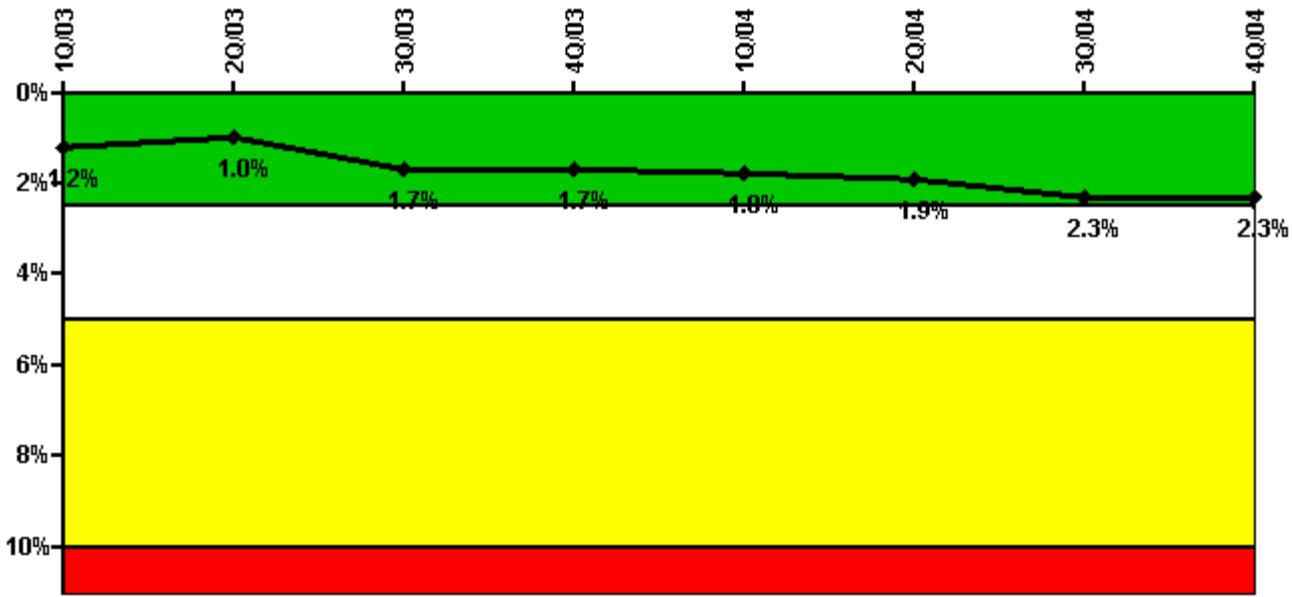
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2147.1	2139.7	2208.0	2209.0	977.7	2091.9	2208.0	2180.4
Indicator value	0.9	0.8	0	0	0	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



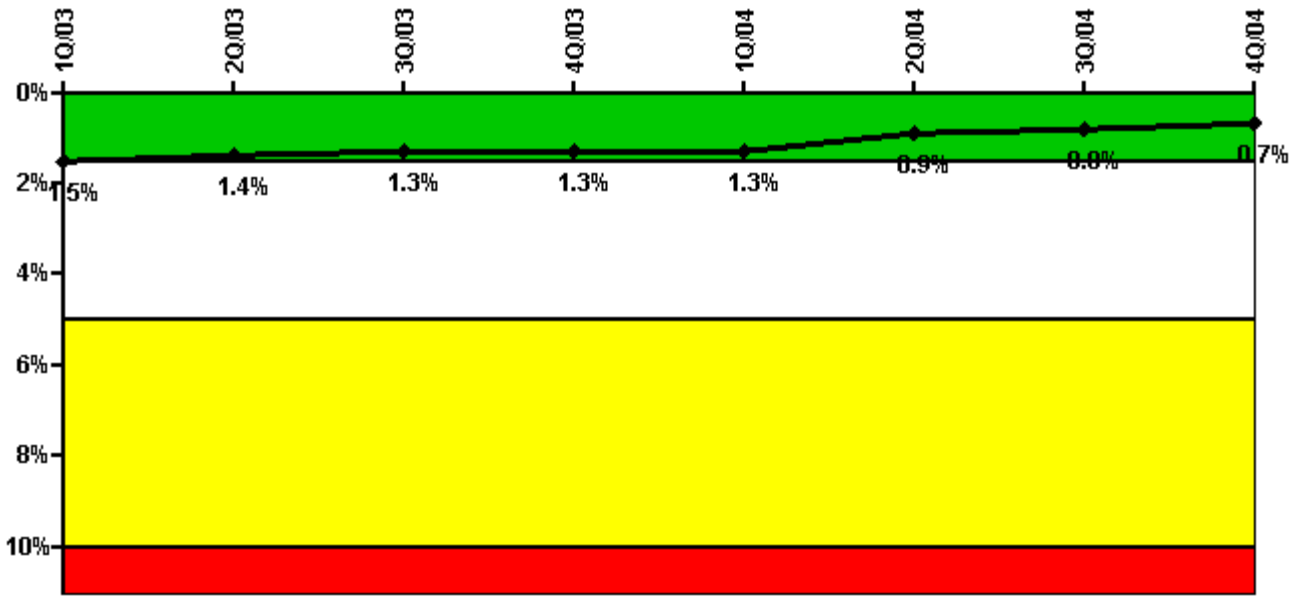
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	1.72	2.22	177.12	25.38	48.96	1.85	74.40	1.56
Unplanned unavailable hours	0	0	83.65	0	16.35	39.33	2.20	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	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
Train 2								
Planned unavailable hours	2.35	1.02	162.57	64.04	3.82	3.13	172.55	1.85
Unplanned unavailable hours	0	0	35.58	0	10.72	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	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00	2209.00
Indicator value	1.2%	1.0%	1.7%	1.7%	1.8%	1.9%	2.3%	2.3%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



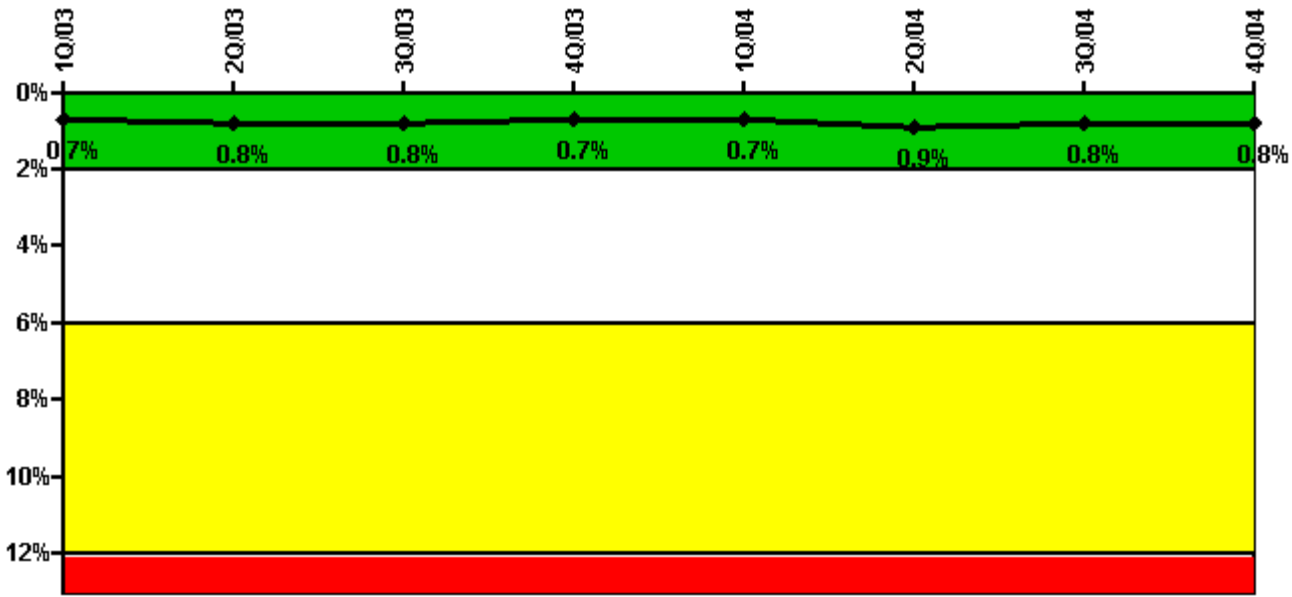
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	0.25	28.48	0.30	2.35	0.17	2.69	36.90	2.47
Unplanned unavailable hours	16.85	0	0	3.50	1.53	1.57	17.80	0.07
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2147.08	2139.68	2208.00	2209.00	977.73	2091.88	2208.00	2180.42
Train 2								
Planned unavailable hours	29.24	3.33	1.58	19.43	2.05	2.32	4.20	0.18
Unplanned unavailable hours	1.67	1.82	0	0	1.13	0	13.65	0.22
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2147.08	2139.68	2208.00	2209.00	977.73	2091.88	2208.00	2180.42
Indicator value	1.5%	1.4%	1.3%	1.3%	1.3%	0.9%	0.8%	0.7%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



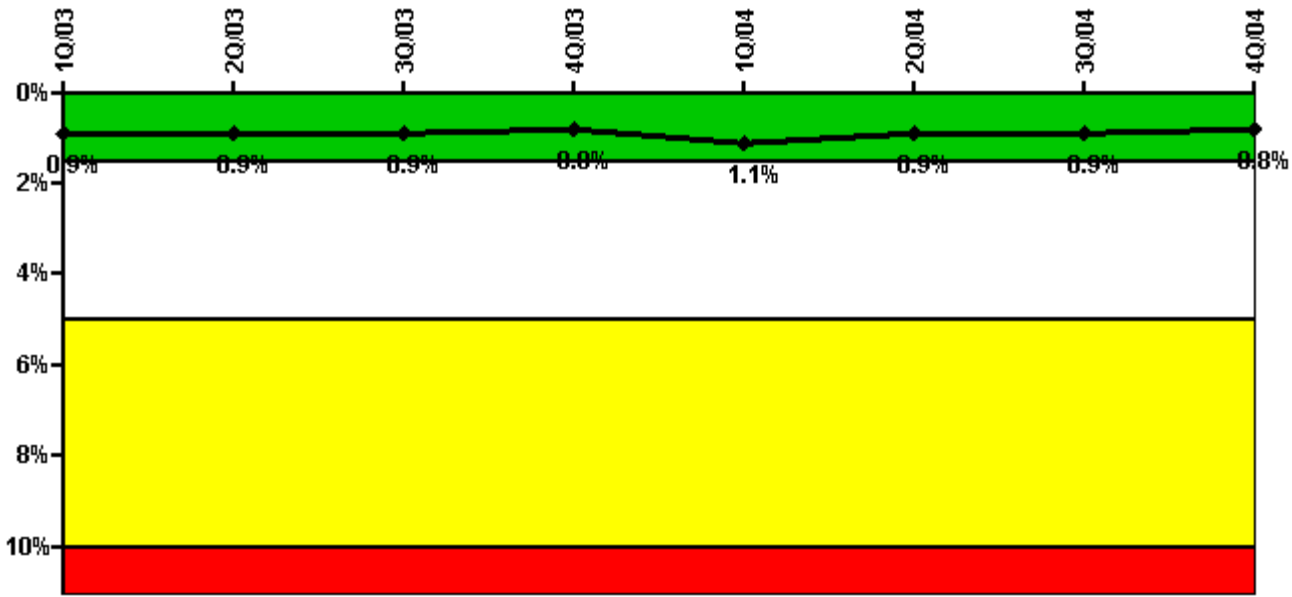
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	0.50	30.00	13.58	0.70	0.55	17.33	50.06	0
Unplanned unavailable hours	0	0	0	0	0	39.02	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	2147.08	2139.68	2208.00	2209.00	977.73	2091.88	2208.00	2180.42
Train 2								
Planned unavailable hours	0	17.80	11.15	15.15	0.95	0.42	9.09	0
Unplanned unavailable hours	65.25	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	2147.08	2139.68	2208.00	2209.00	977.73	2091.88	2208.00	2180.42
Train 3								
Planned unavailable hours	0.77	37.92	17.07	0	15.42	43.35	0.62	0
Unplanned unavailable hours	0	0	0	0	0	14.58	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	2147.08	2139.68	2208.00	2209.00	977.73	2091.88	2208.00	2180.42
Indicator value	0.7%	0.8%	0.8%	0.7%	0.7%	0.9%	0.8%	0.8%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



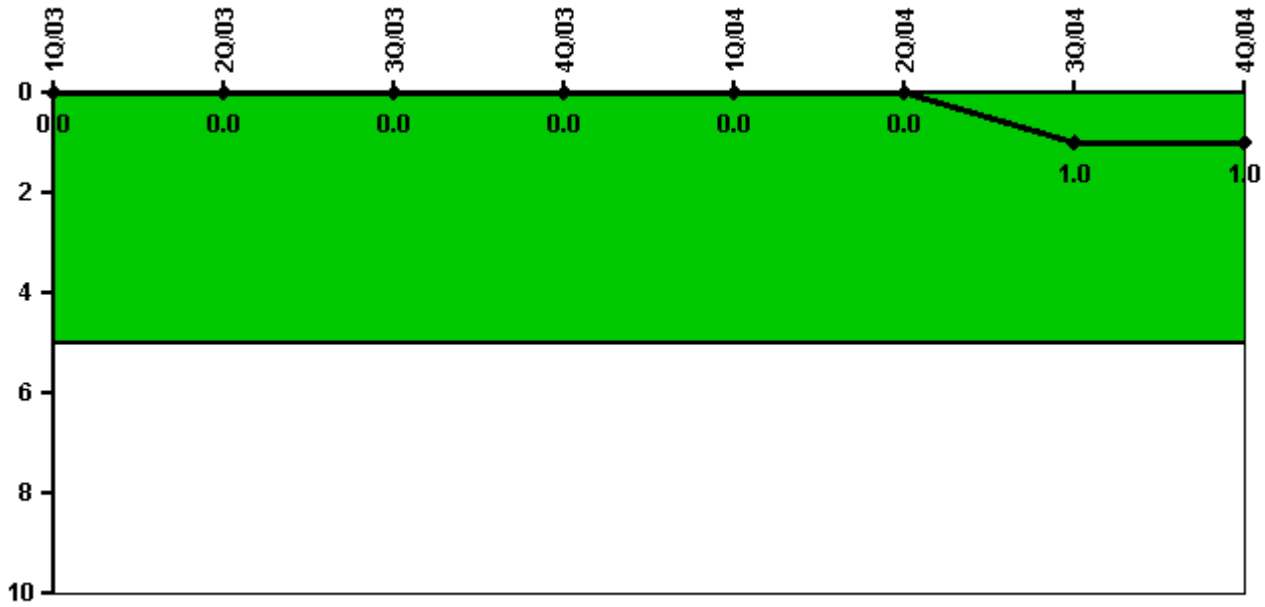
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Train 1								
Planned unavailable hours	0.25	25.45	8.88	2.30	0.17	12.39	58.75	1.67
Unplanned unavailable hours	16.85	0	0	3.50	1.53	1.57	17.80	0.07
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2157.05	2208.00	2209.00	1042.69	2144.47	2208.00	2209.00
Train 2								
Planned unavailable hours	38.47	20.77	19.20	19.43	1.00	2.62	13.22	1.30
Unplanned unavailable hours	1.67	1.82	0	0	1.13	0	0	0.22
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2157.05	2208.00	2209.00	1042.69	2144.47	2208.00	2209.00
Train 3								
Planned unavailable hours	0	0	0	0	22.25	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	25.95	0	0	1141.31	38.53	0	0
Train 4								
Planned unavailable hours	0	0	0	0	0	0	0	0
Unplanned unavailable hours	0	0	0	0	0	0.67	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	25.95	0	0	1141.31	38.53	0	0
Indicator value	0.9%	0.9%	0.9%	0.8%	1.1%	0.9%	0.9%	0.8%

Licensee Comments: none

Safety System Functional Failures (PWR)



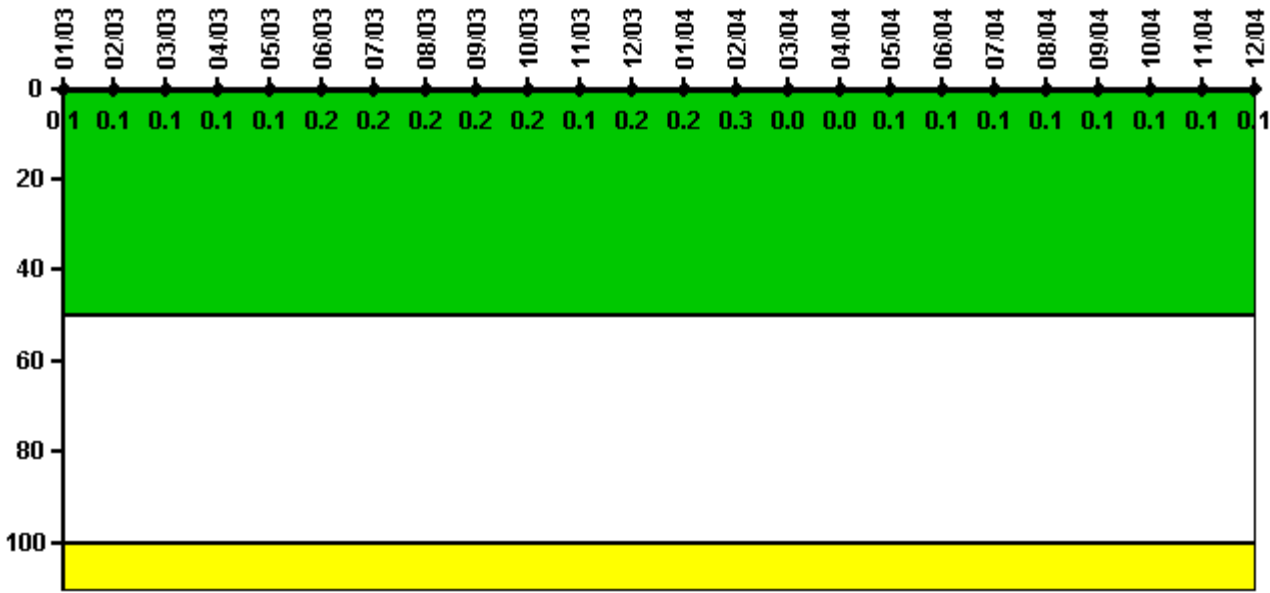
Thresholds: White > 5.0

Notes

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

Licensee Comments: none

Reactor Coolant System Activity



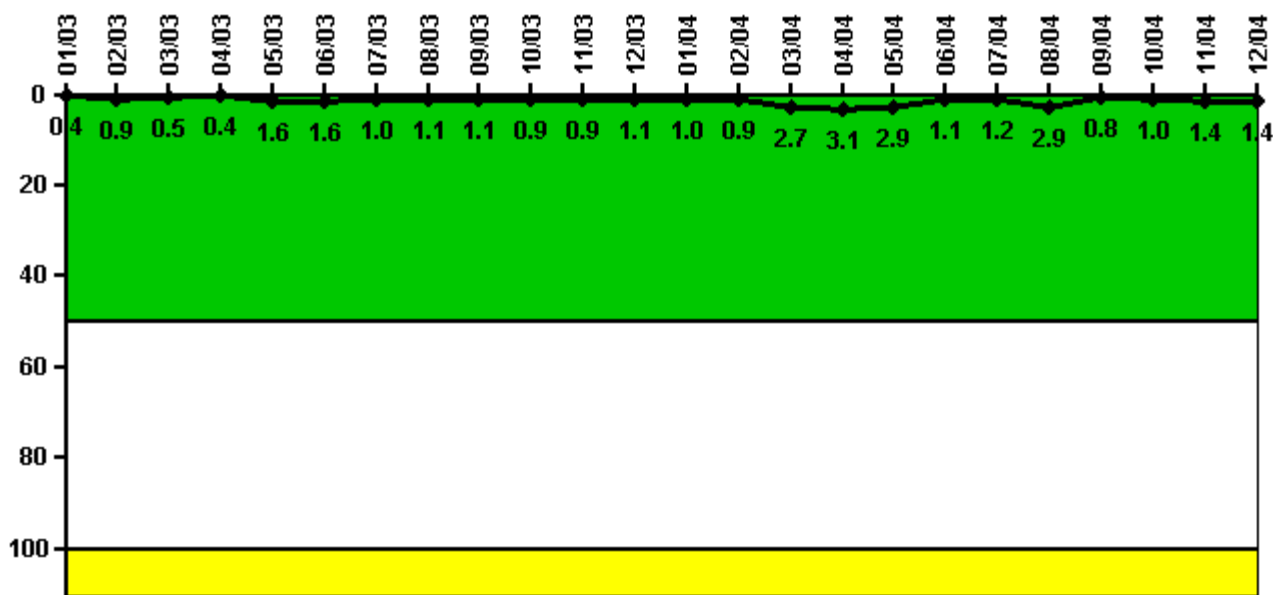
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.001000	0.001000	0.001000	0.001000	0.001000	0.002000	0.002000	0.002000	0.002000	0.001500	0.001480	0.001500
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	0.2	0.2	0.2	0.2	0.2	0.1	0.2
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	0.001500	0.003270	0	0.000427	0.000503	0.000524	0.000523	0.000529	0.000622	0.000566	0.000651	0.000761
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	0.3	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

Notes

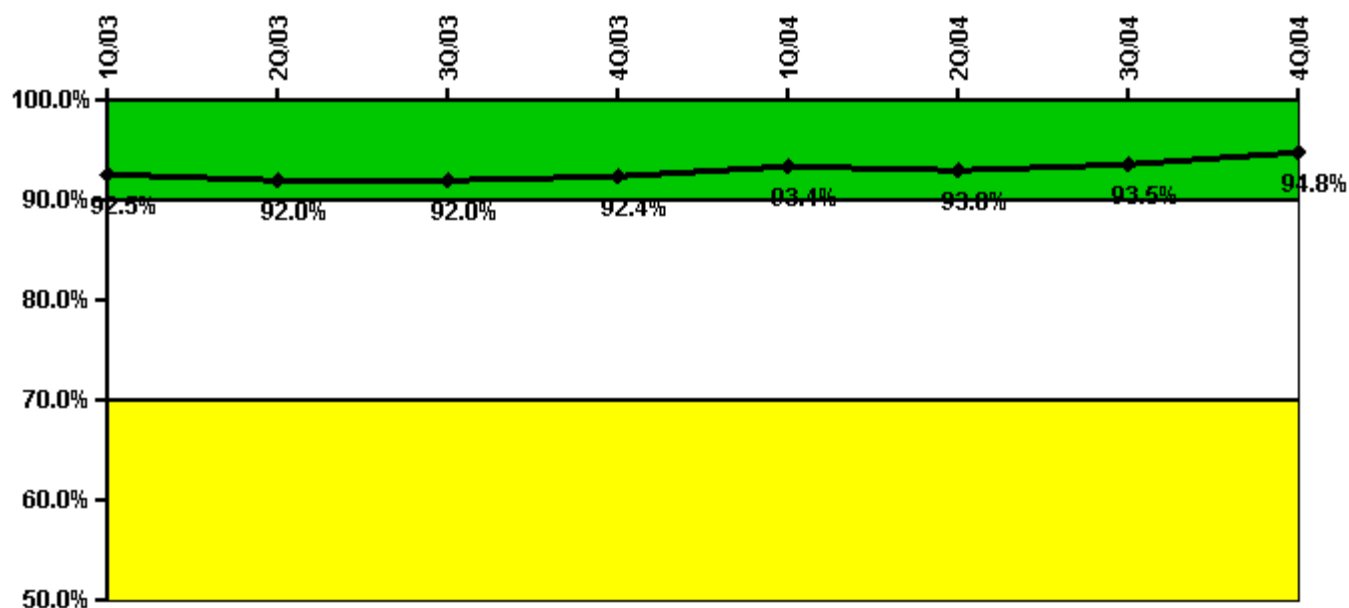
Reactor Coolant System Leakage	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum leakage	0.040	0.090	0.050	0.040	0.160	0.160	0.100	0.110	0.110	0.090	0.090	0.110
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.4	0.9	0.5	0.4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

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	0.100	0.090	0.270	0.310	0.290	0.110	0.120	0.290	0.080	0.100	0.140	0.140
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	1.0	0.9	2.7	3.1	2.9	1.1	1.2	2.9	0.8	1.0	1.4	1.4

Licensee Comments:

12/04: 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



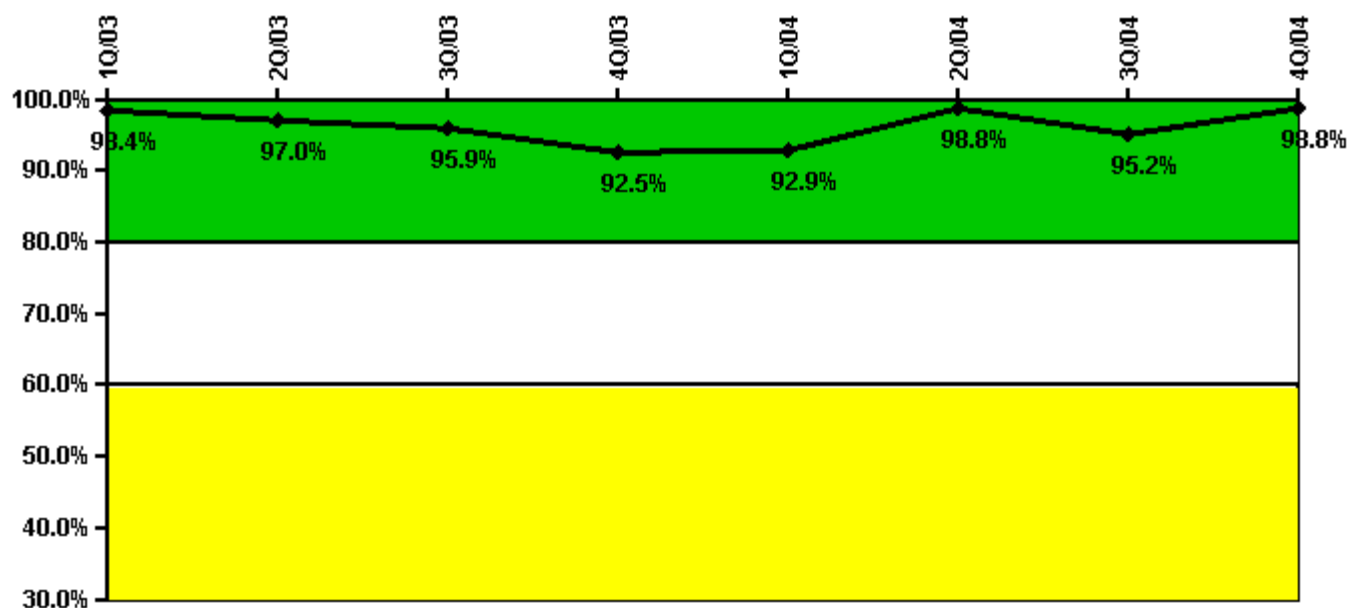
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful opportunities	43.0	48.0	19.0	9.0	0	42.0	0	39.0
Total opportunities	44.0	51.0	20.0	9.0	0	46.0	0	41.0
Indicator value	92.5%	92.0%	92.0%	92.4%	93.4%	93.0%	93.5%	94.8%

Licensee Comments: none

ERO Drill Participation



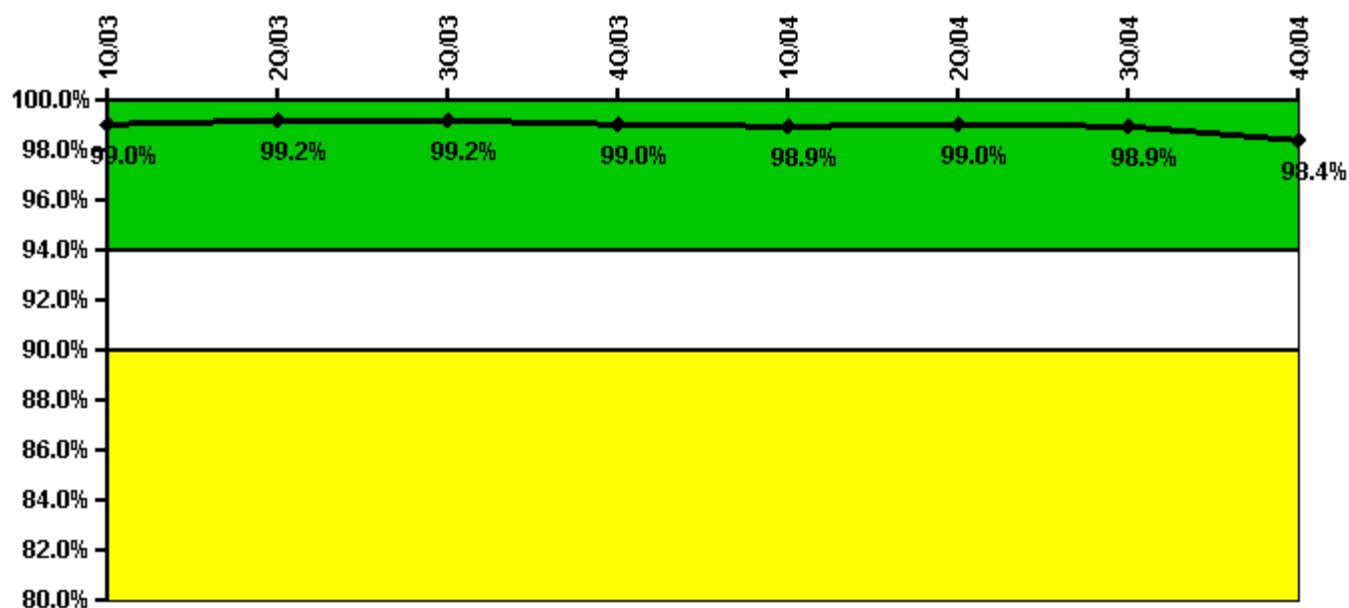
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Participating Key personnel	63.0	65.0	70.0	74.0	78.0	83.0	80.0	81.0
Total Key personnel	64.0	67.0	73.0	80.0	84.0	84.0	84.0	82.0
Indicator value	98.4%	97.0%	95.9%	92.5%	92.9%	98.8%	95.2%	98.8%

Licensee Comments: none

Alert & Notification System



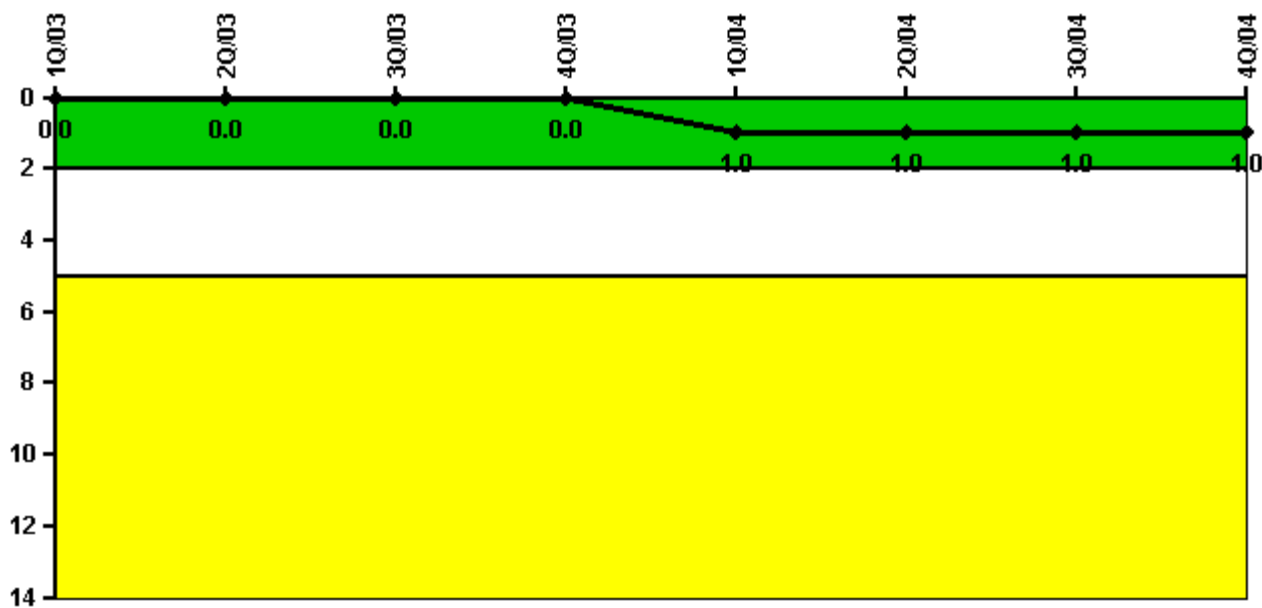
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful siren-tests	340	341	386	486	338	342	385	430
Total sirens-tests	343	343	392	490	343	343	392	441
Indicator value	99.0%	99.2%	99.2%	99.0%	98.9%	99.0%	98.9%	98.4%

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
High radiation area occurrences	0	0	0	0	1	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	1	1	1	1

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/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.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: March 9, 2005