

Indian Point 2

4Q/2006 Performance Indicators

Licensee's General Comments: During the NRC inspection for MSPI verification the following discrepancies were identified in the unit 2 MSPI Baseline Unavailability Data prepared in accordance with the requirements in Appendix G of NEI-99-02: MSPI06 EDG Train A: 48 hours of service water support system unavailability hours were subtracted from the baseline unavailability hours of the Train A EDG and not added to the service water baseline unavailable hours. PI remained in the Green Band. MSPI06 Train C: Unplanned and Fault Exposure hours unavailability hours did not reflect the unplanned unavailability hours reported in the PI source record document for the time period 2002-2004. Baseline value was 26 hours but the PI source record document showed 126 hours. PI remained in the Green Band. MSPI07 HHSI Train C: Baseline total planned unavailability hours was 4 hours less than the PI source record document. PI remained in the Green Band.

Unplanned Scrams per 7000 Critical Hrs



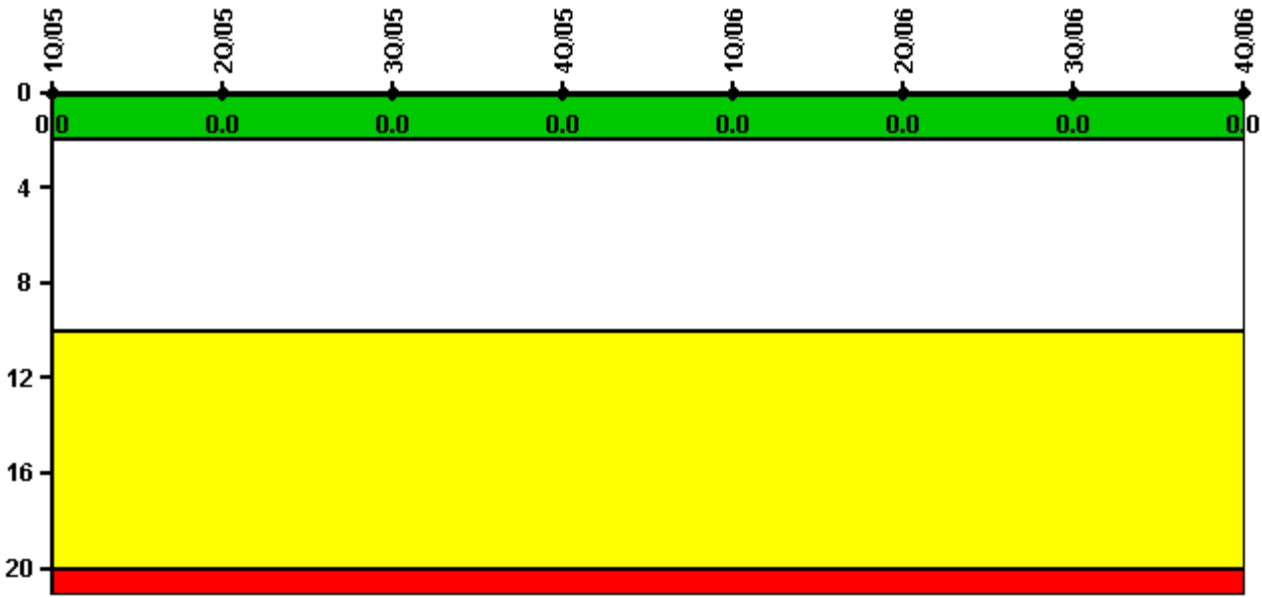
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Unplanned scrams	0	0	0	0	1.0	0	1.0	1.0
Critical hours	2160.0	2183.0	2208.0	2209.0	2148.6	1460.3	2187.3	2186.0
Indicator value	2.6	2.6	0.9	0	0.8	0.9	1.7	2.6

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



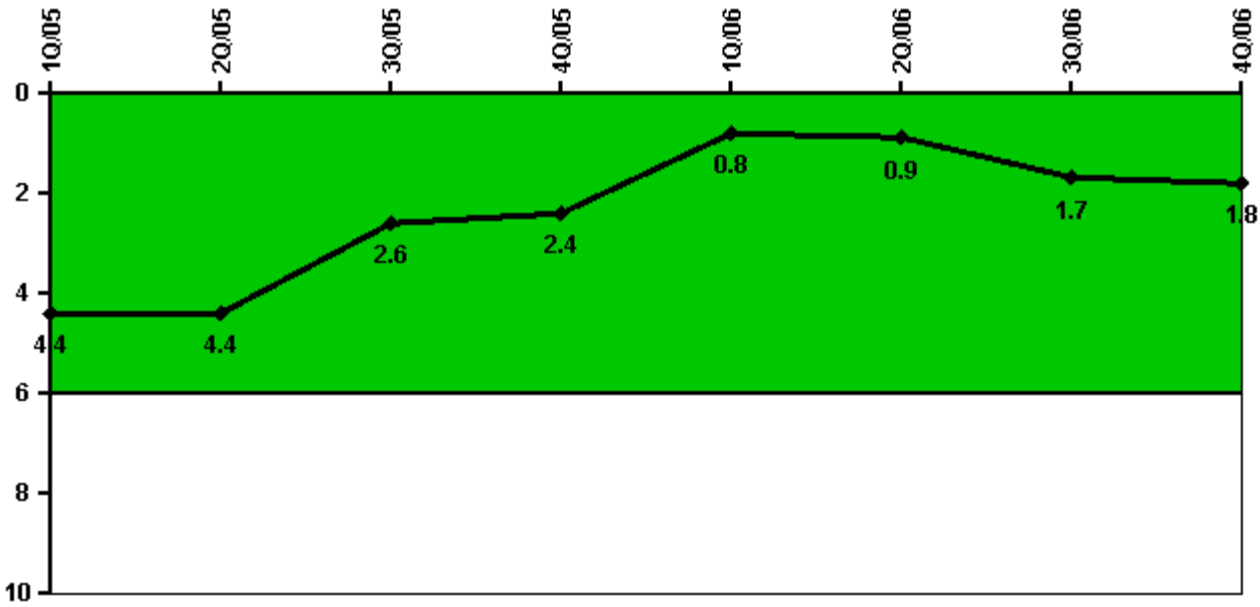
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



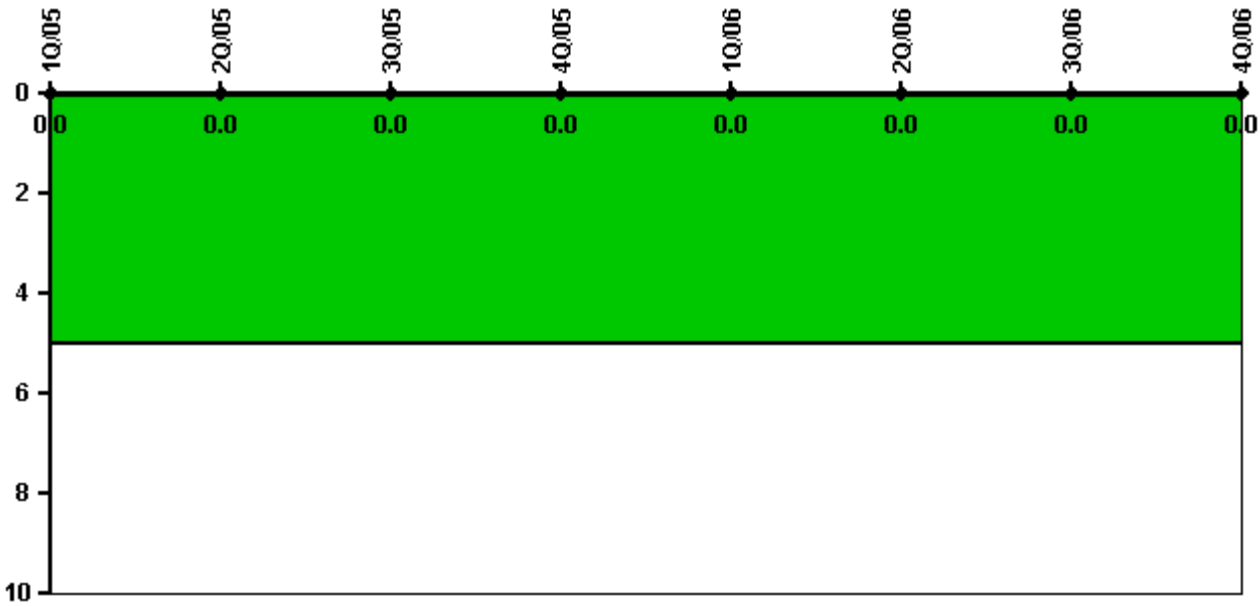
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Unplanned power changes	2.0	0	0	1.0	0	0	1.0	1.0
Critical hours	2160.0	2183.0	2208.0	2209.0	2148.6	1460.3	2187.3	2186.0
Indicator value	4.4	4.4	2.6	2.4	0.8	0.9	1.7	1.8

Licensee Comments: none

Safety System Functional Failures (PWR)



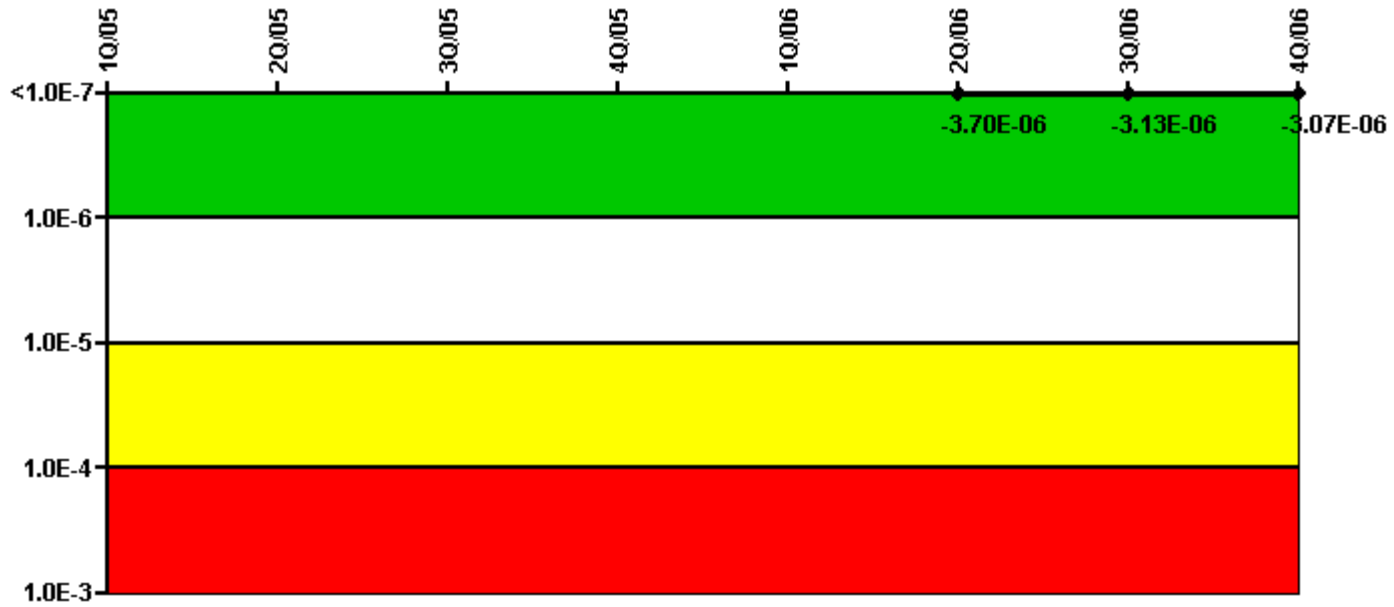
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
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

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (Δ CDF)						9.80E-08	5.70E-07	6.30E-07
URI (Δ CDF)						-3.80E-06	-3.70E-06	-3.70E-06
PLE						NO	NO	NO
Indicator value						-3.70E-06	-3.13E-06	-3.07E-06

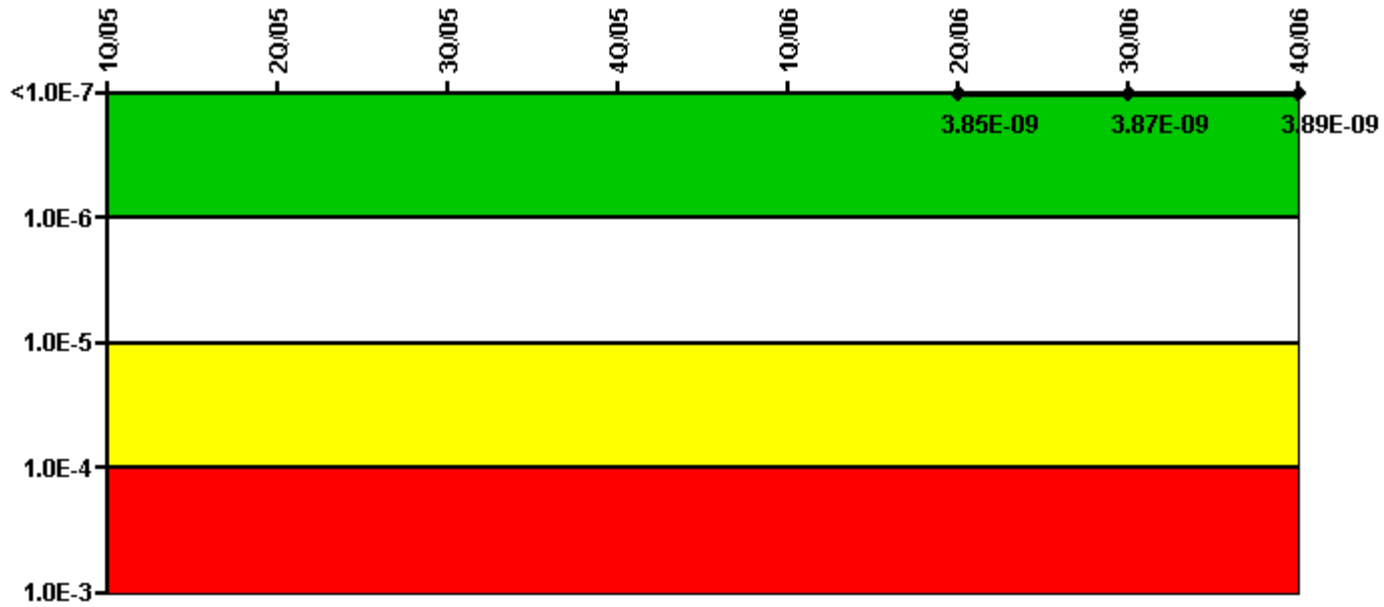
Licensee Comments:

4Q/06: Changed PRA Parameter(s).

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (Δ CDF)						2.50E-10	2.70E-10	2.90E-10
URI (Δ CDF)						3.60E-09	3.60E-09	3.60E-09
PLE						NO	NO	NO
Indicator value						3.85E-09	3.87E-09	3.89E-09

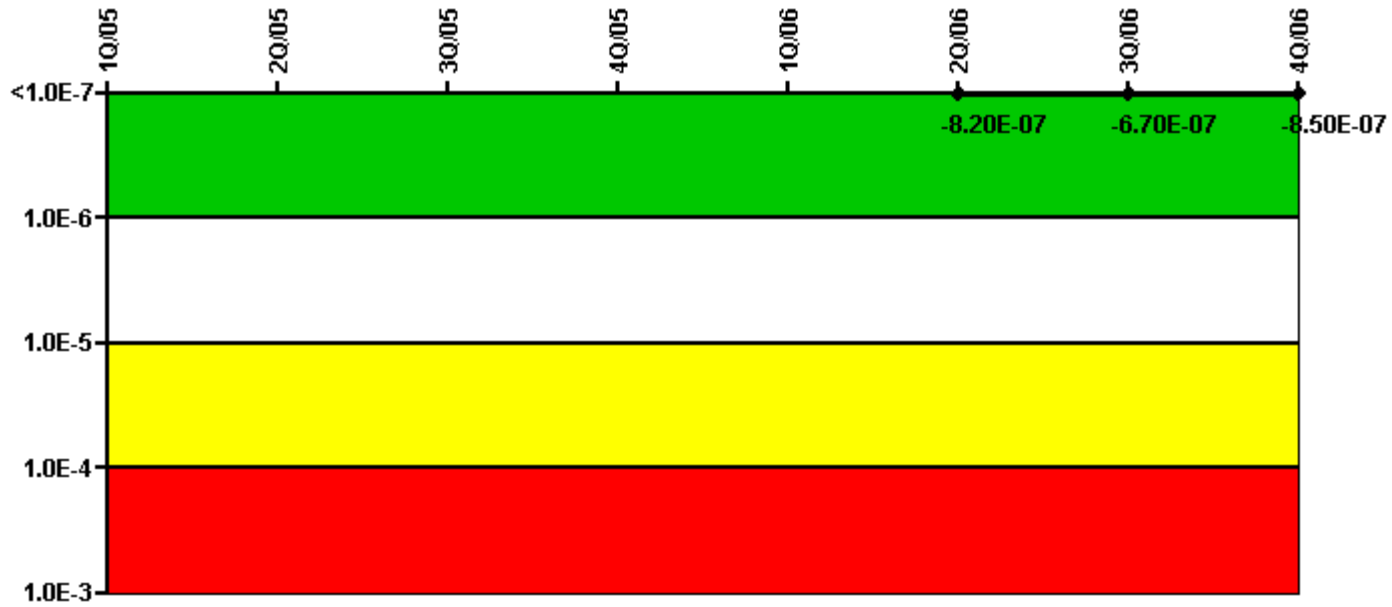
Licensee Comments:

4Q/06: Changed PRA Parameter(s).

3Q/06: Changed PRA Parameter(s).

2Q/06: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Heat Removal System



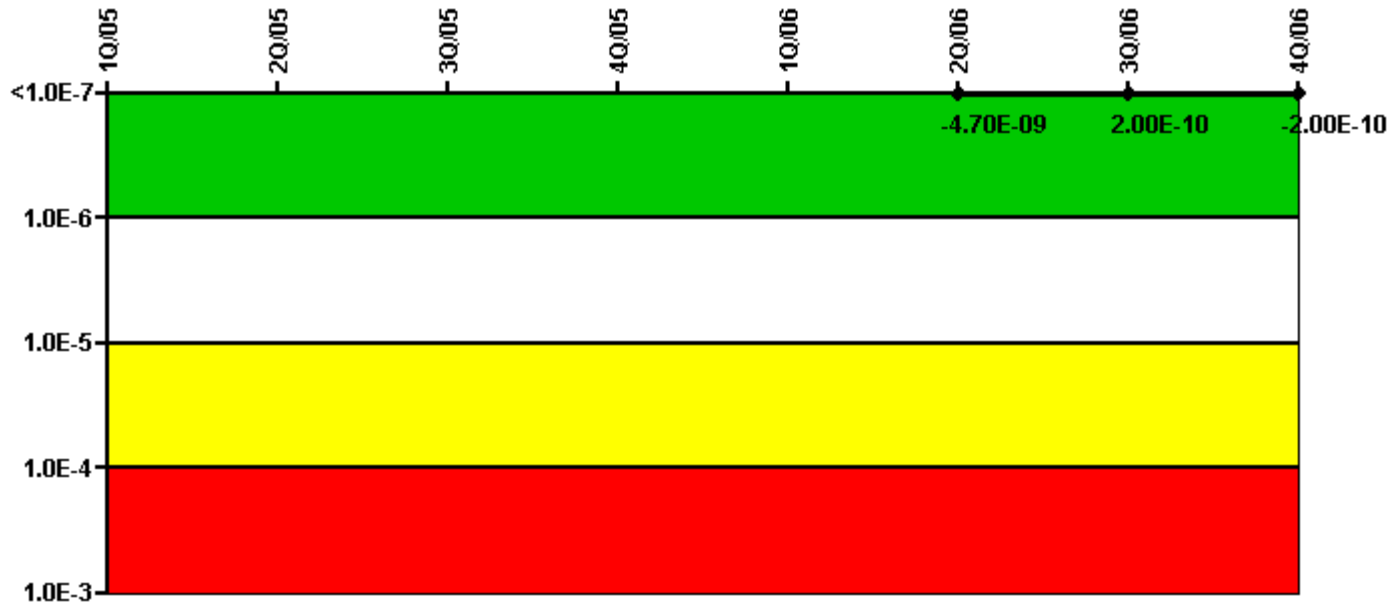
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (Δ CDF)						2.80E-07	4.30E-07	3.50E-07
URI (Δ CDF)						-1.10E-06	-1.10E-06	-1.20E-06
PLE						NO	NO	NO
Indicator value						-8.20E-07	-6.70E-07	-8.50E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



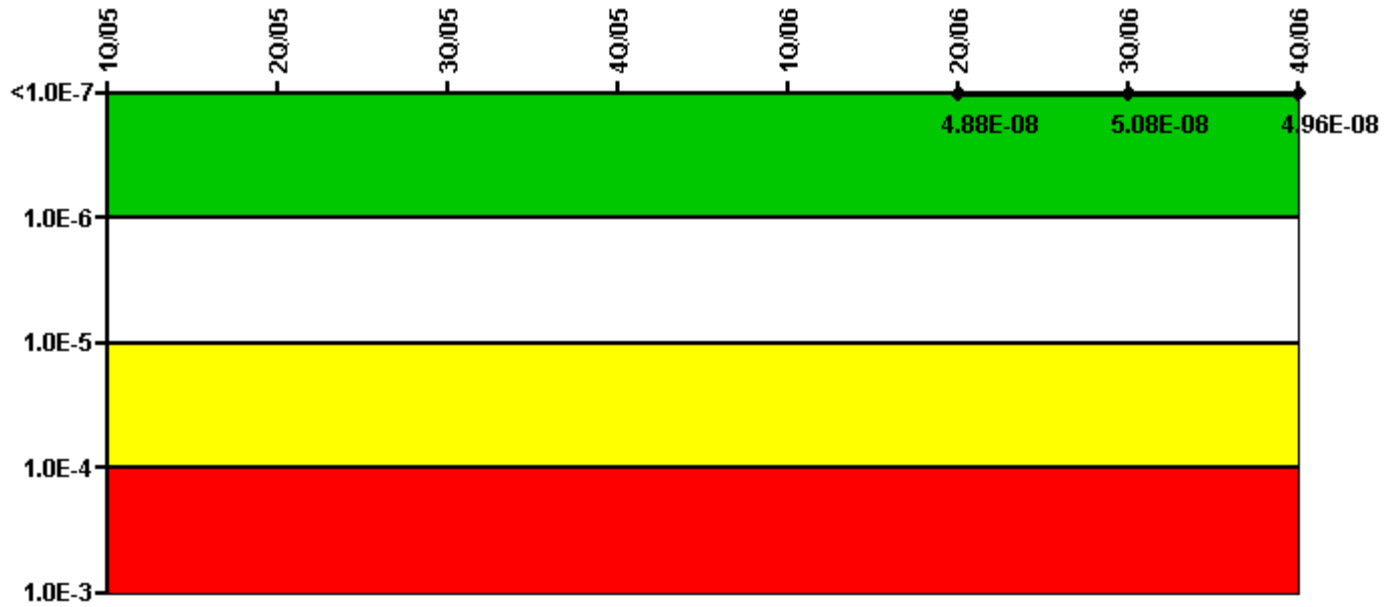
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (Δ CDF)						-1.10E-08	-5.60E-09	-5.60E-09
URI (Δ CDF)						6.30E-09	5.80E-09	5.40E-09
PLE						NO	NO	NO
Indicator value						-4.70E-09	2.00E-10	-2.00E-10

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



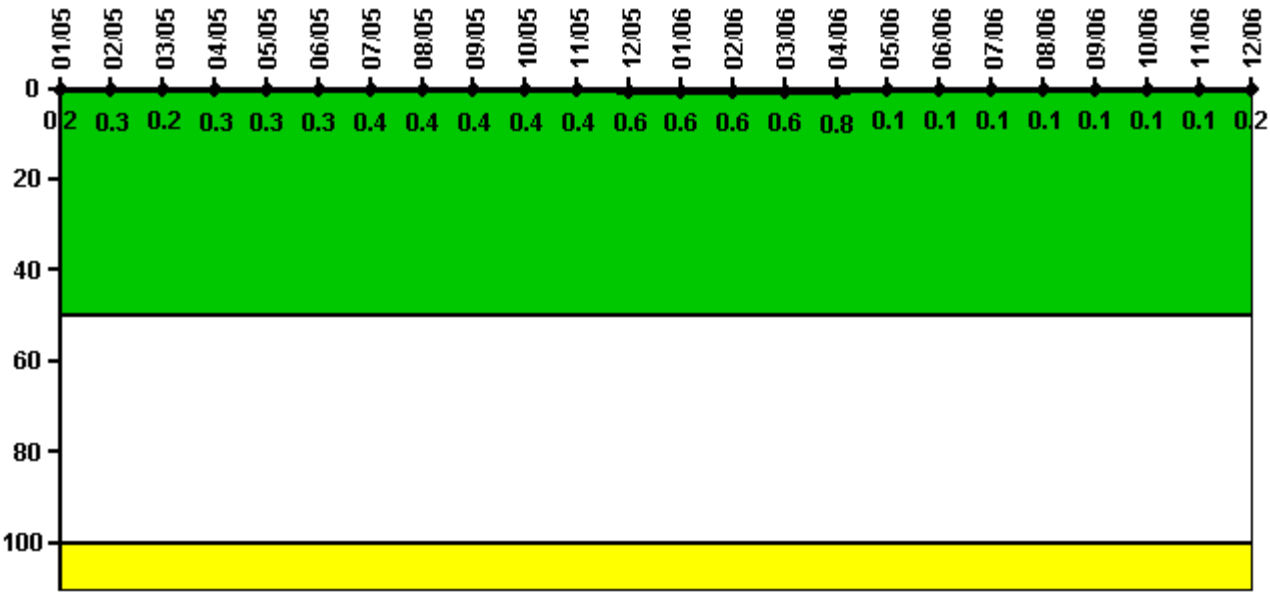
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
UAI (ΔCDF)						1.80E-09	2.80E-09	2.60E-09
URI (ΔCDF)						4.70E-08	4.80E-08	4.70E-08
PLE						NO	NO	NO
Indicator value						4.88E-08	5.08E-08	4.96E-08

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

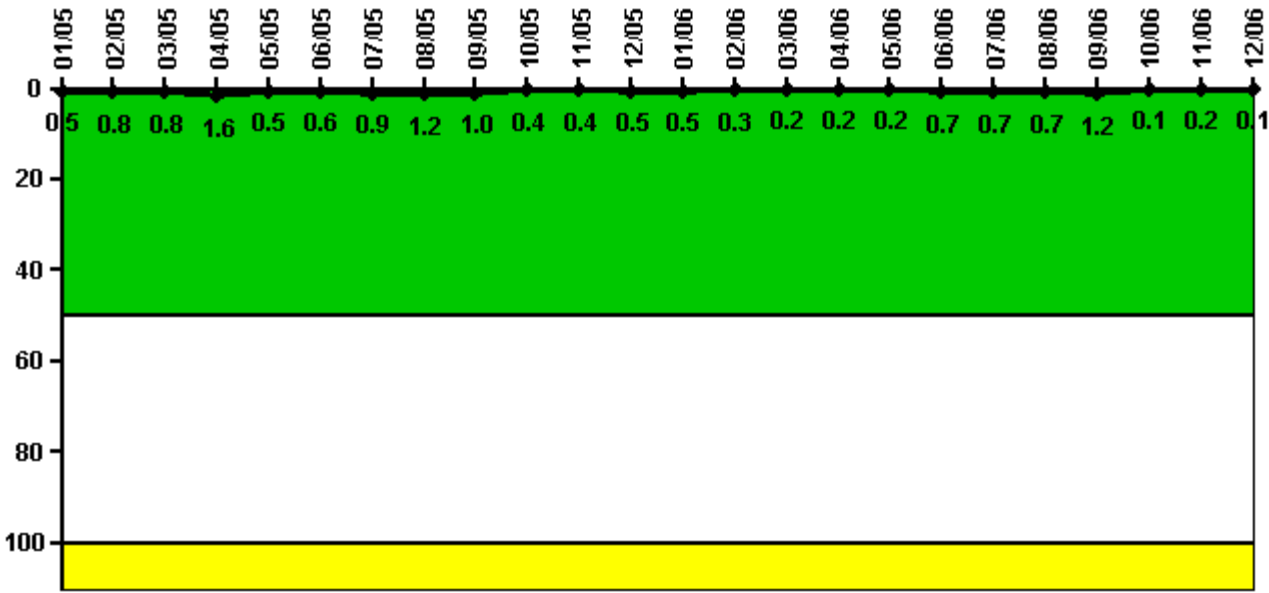
Notes

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	0.001870	0.003270	0.002140	0.002800	0.002630	0.003450	0.003840	0.004020	0.003970	0.004350	0.004420	0.005530
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	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.6

Reactor Coolant System Activity	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum activity	0.005620	0.005750	0.005910	0.008170	0.001100	0.001260	0.001360	0.001380	0.001310	0.001410	0.001480	0.001600
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	0.6	0.6	0.6	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Licensee Comments: none

Reactor Coolant System Leakage



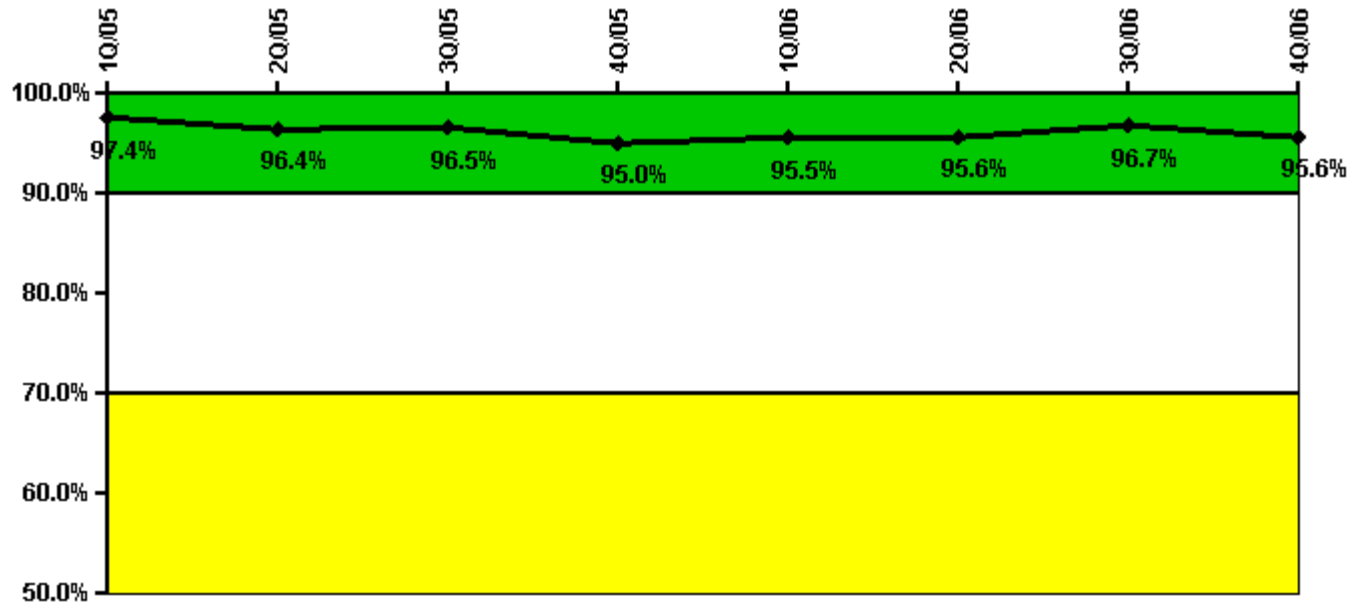
Thresholds: White > 50.0 Yellow > 100.0

Notes

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	0.051	0.075	0.075	0.160	0.054	0.064	0.094	0.124	0.097	0.036	0.035	0.054
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	0.8	0.8	1.6	0.5	0.6	0.9	1.2	1.0	0.4	0.4	0.5
Reactor Coolant System Leakage	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum leakage	0.054	0.030	0.024	0.023	0.022	0.065	0.069	0.069	0.120	0.011	0.020	0.010
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	0.3	0.2	0.2	0.2	0.7	0.7	0.7	1.2	0.1	0.2	0.1

Licensee Comments: none

Drill/Exercise Performance



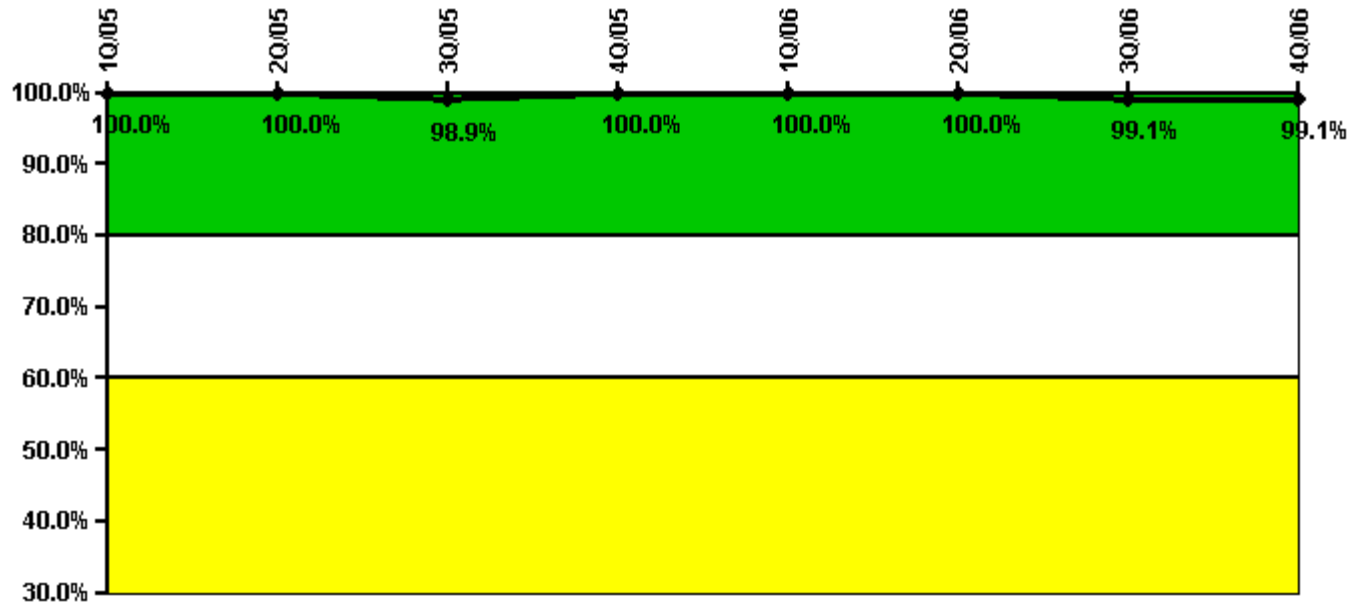
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Successful opportunities	12.0	17.0	27.0	11.0	37.0	30.0	73.0	11.0
Total opportunities	14.0	19.0	27.0	13.0	38.0	30.0	73.0	14.0
Indicator value	97.4%	96.4%	96.5%	95.0%	95.5%	95.6%	96.7%	95.6%

Licensee Comments: none

ERO Drill Participation



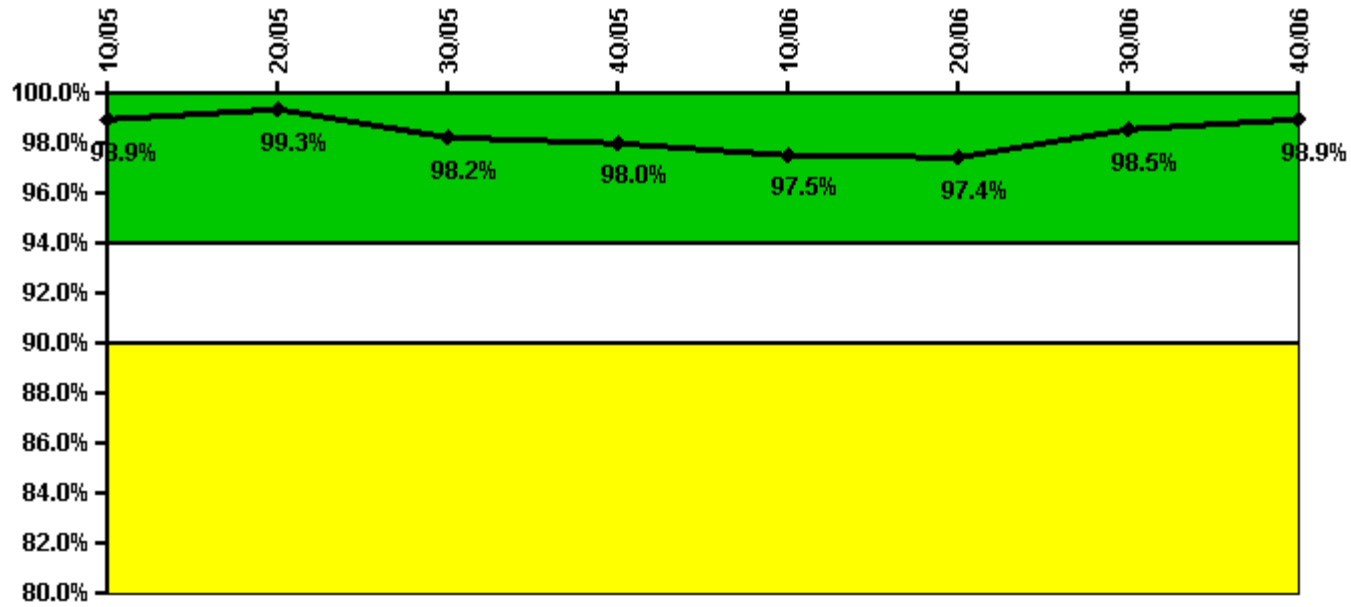
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Participating Key personnel	57.0	95.0	93.0	94.0	103.0	103.0	105.0	106.0
Total Key personnel	57.0	95.0	94.0	94.0	103.0	103.0	106.0	107.0
Indicator value	100.0%	100.0%	98.9%	100.0%	100.0%	100.0%	99.1%	99.1%

Licensee Comments: none

Alert & Notification System



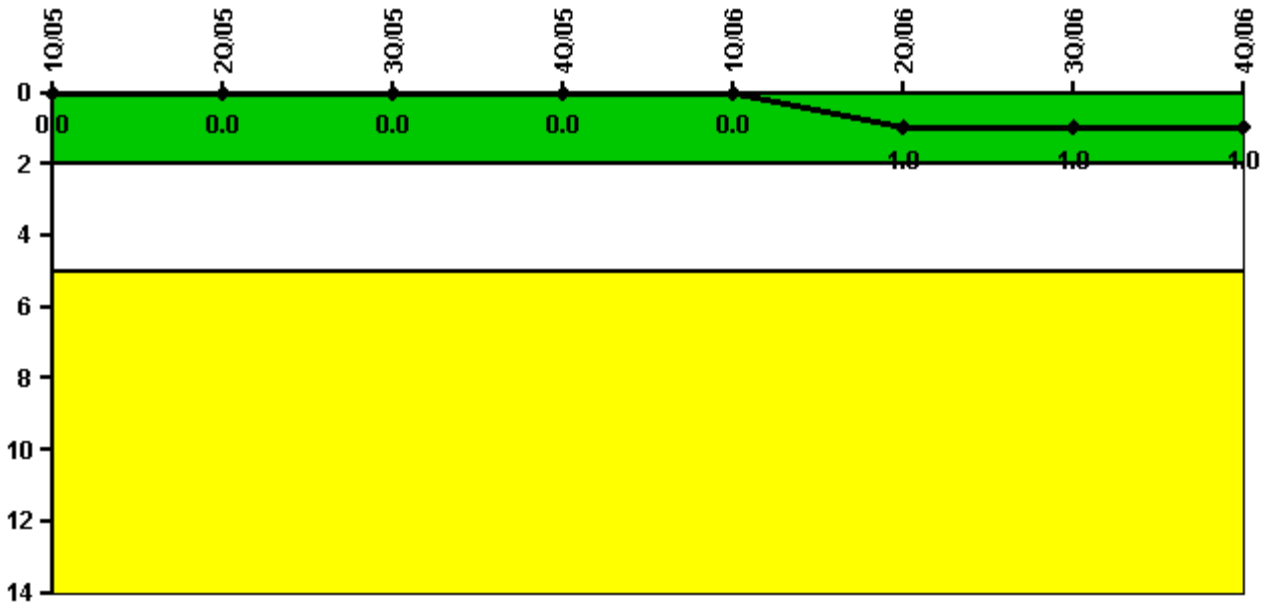
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
Successful siren-tests	1134	1014	1164	992	984	1083	882	885
Total sirens-tests	1143	1015	1225	1009	1010	1092	888	888
Indicator value	98.9%	99.3%	98.2%	98.0%	97.5%	97.4%	98.5%	98.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



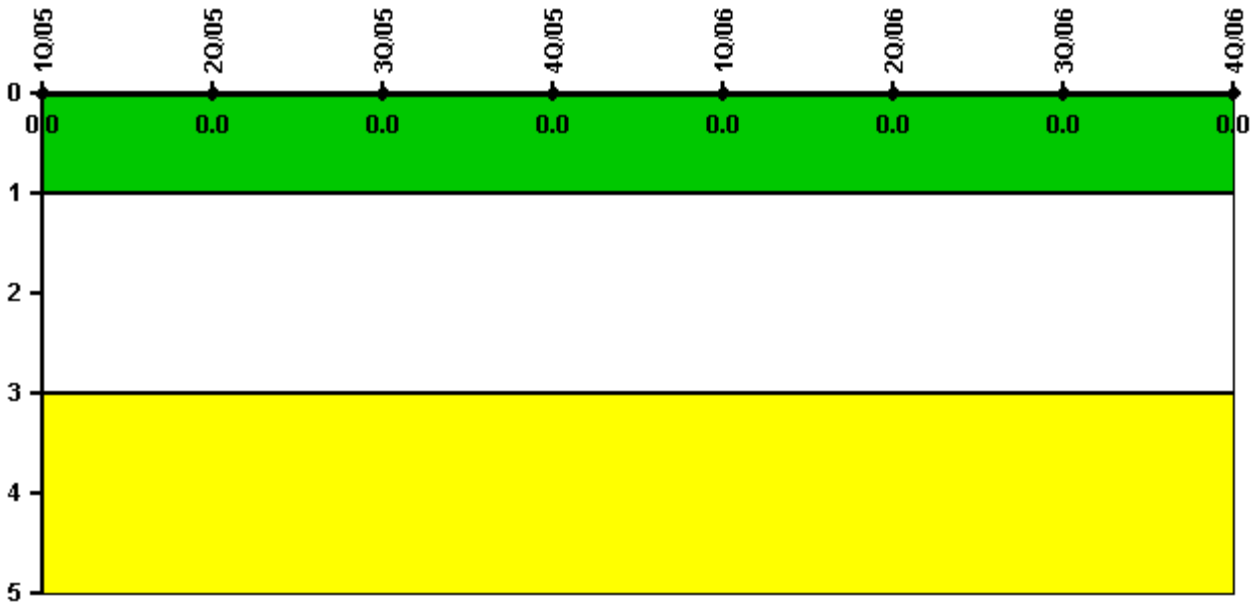
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
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	1	0	0
Indicator value	0	0	0	0	0	1	1	1

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06
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.