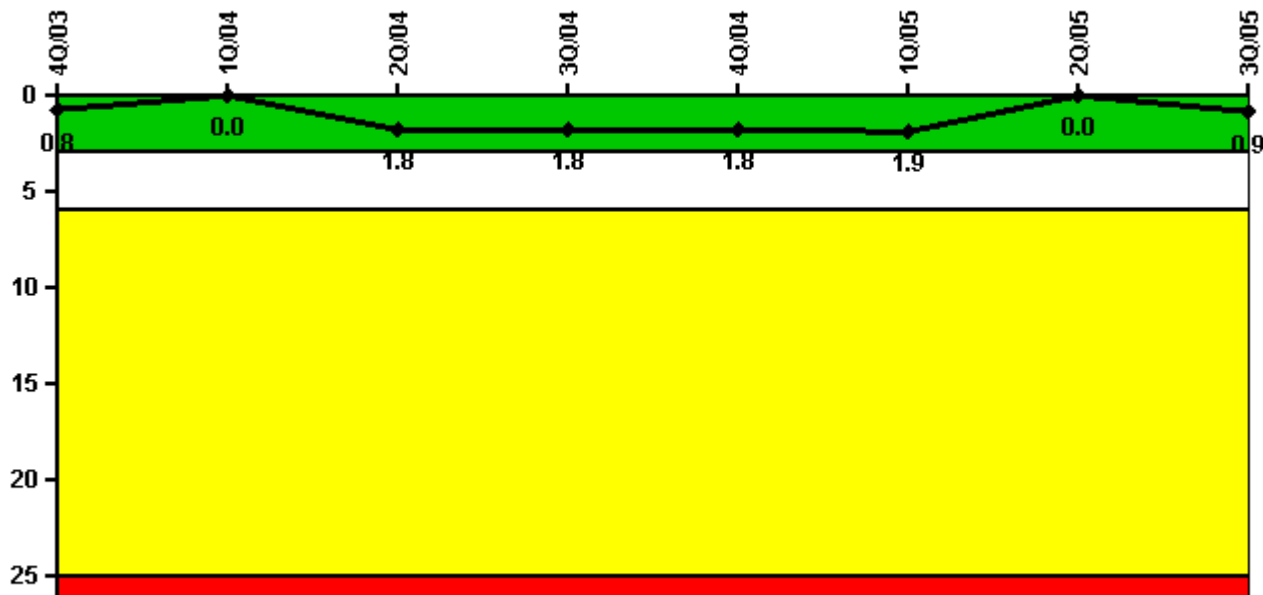


# Palo Verde 1

## 3Q/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	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Unplanned scrams	0	0	2.0	0	0	0	0	1.0
Critical hours	2208.0	2094.3	1216.0	2208.0	2208.0	1860.4	2184.0	1824.6
Indicator value	0.8	0	1.8	1.8	1.8	1.9	0	0.9

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



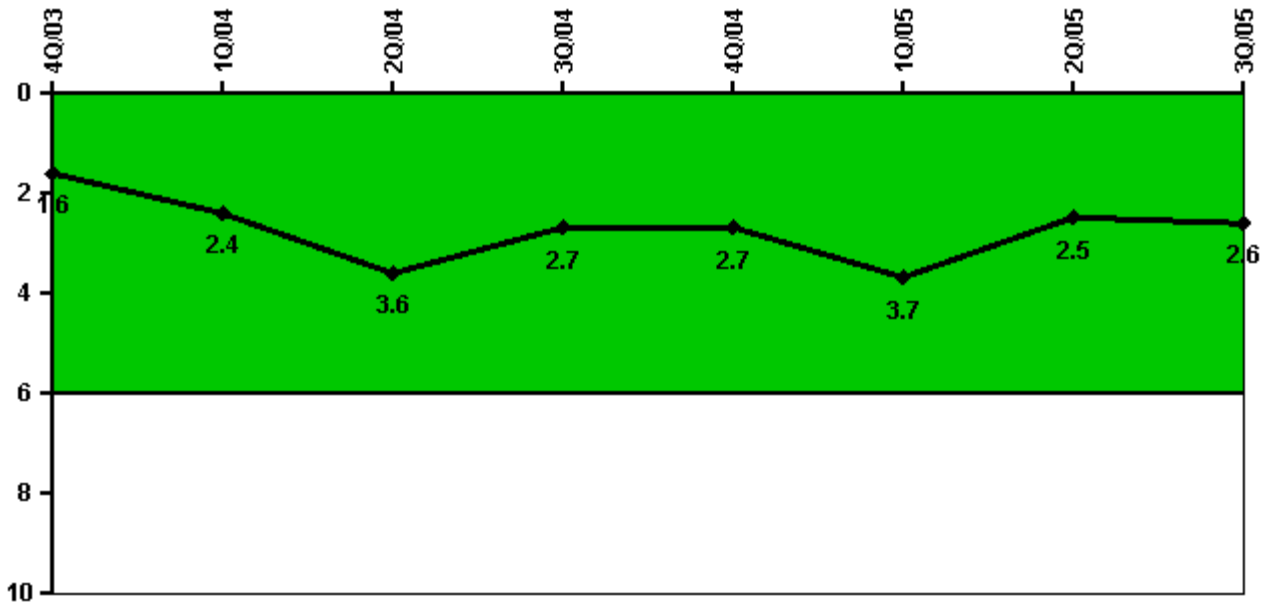
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
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



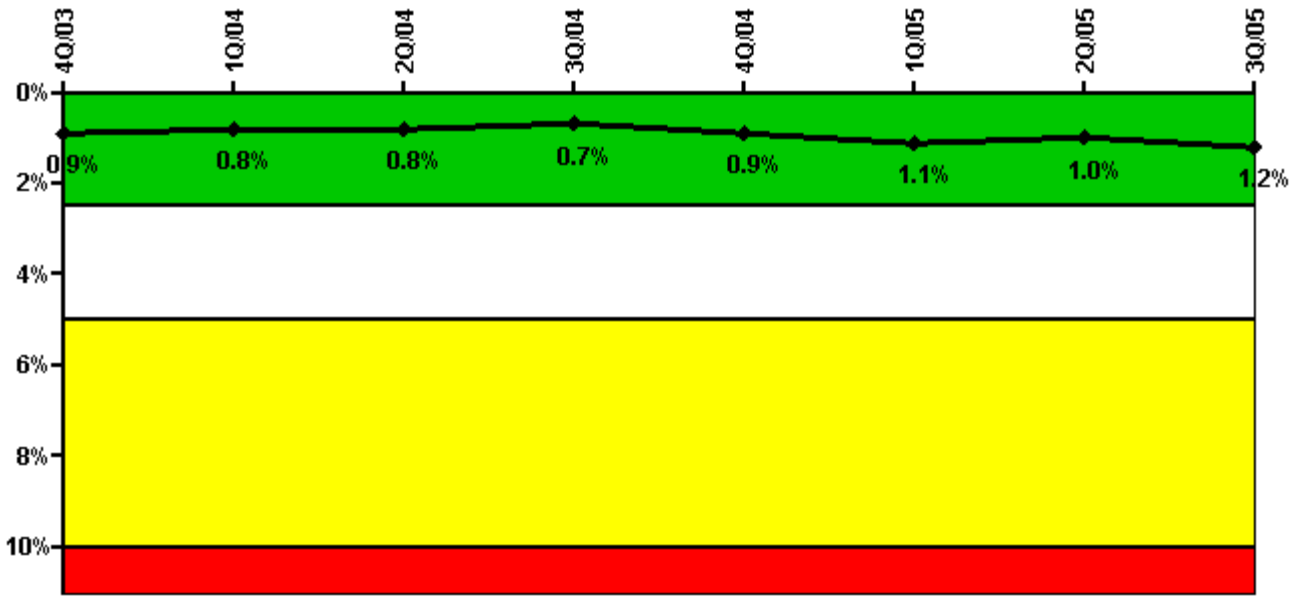
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Unplanned power changes	1.0	1.0	1.0	0	1.0	2.0	0	0
Critical hours	2208.0	2094.3	1216.0	2208.0	2208.0	1860.4	2184.0	1824.6
Indicator value	1.6	2.4	3.6	2.7	2.7	3.7	2.5	2.6

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



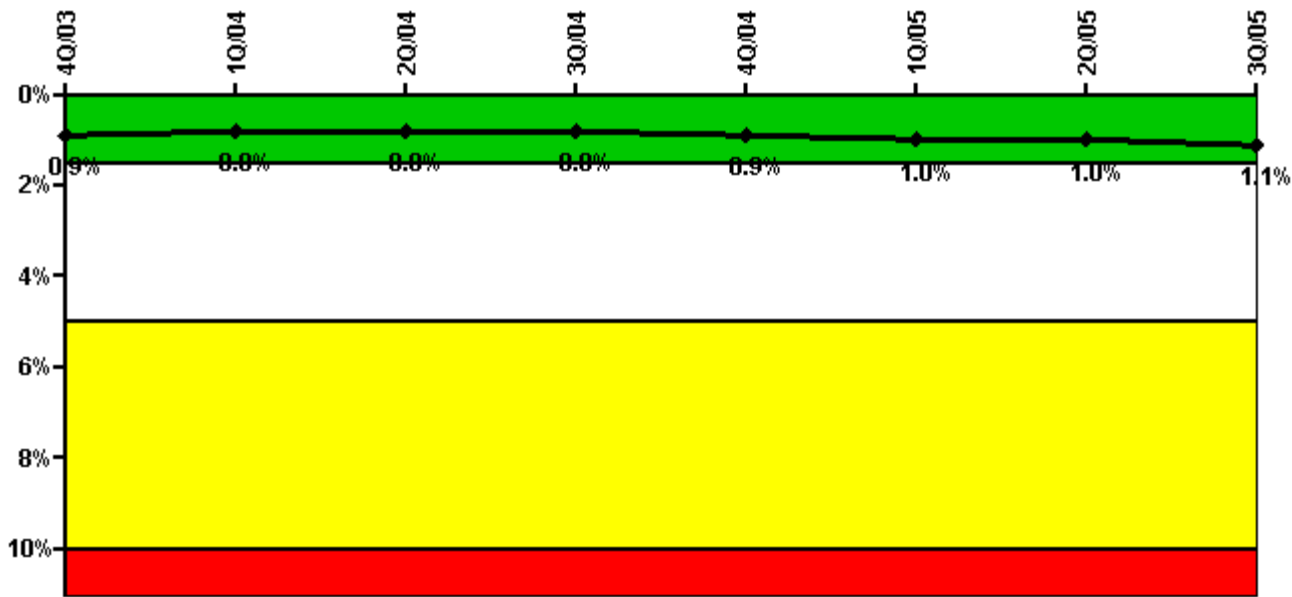
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
<b>Train 1</b>								
Planned unavailable hours	31.67	0.52	0.04	0.08	20.23	29.61	3.74	23.64
Unplanned unavailable hours	0	0	0	0	0	56.23	11.63	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	2208.00	2184.00	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	32.24	0.02	0.04	24.49	0.54	68.17	2.81	29.74
Unplanned unavailable hours	0	2.20	0	0	73.71	0	24.20	90.28
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2184.00	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00
<b>Indicator value</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>0.9%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.2%</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/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
<b>Train 1</b>								
Planned unavailable hours	15.23	10.90	5.85	27.43	28.32	13.54	16.43	17.46
Unplanned unavailable hours	0	0	0	0	0	15.65	12.52	34.37
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2094.30	1216.00	2208.00	2208.00	1860.35	2184.00	1824.55
<b>Train 2</b>								
Planned unavailable hours	15.54	19.57	28.94	33.37	2.27	57.35	3.20	23.76
Unplanned unavailable hours	0	0	2.42	0	0	0.02	0	2.62
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2094.30	1216.00	2208.00	2208.00	1860.35	2184.00	1824.55
<b>Indicator value</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.1%</b>

### Licensee Comments:

2Q/05: 3Q2005: High Pressure Safety Injection (HPSI) unavailability hours adjusted from 09/2004 through 06/2005 to credit availability during venting that would be promptly restored by an operator in the control room. Restoration actions are contained in written procedure 40ST-9SI07, are uncomplicated and require no diagnosis or repair. The actions are virtually certain to be successful (i.e., probability nearly equal to 1) during accident conditions. The operator in the main control room is in close proximity to restore the equipment when needed. The staffing is identified in advance by the procedure and an operator identified to take the appropriate prompt response for the testing configuration independent of other control room actions that may be required. Reference NEI 99-02, Revision 3, Section 2.2, Clarifying Notes, Planned Unavailable Hours, pg. 25.

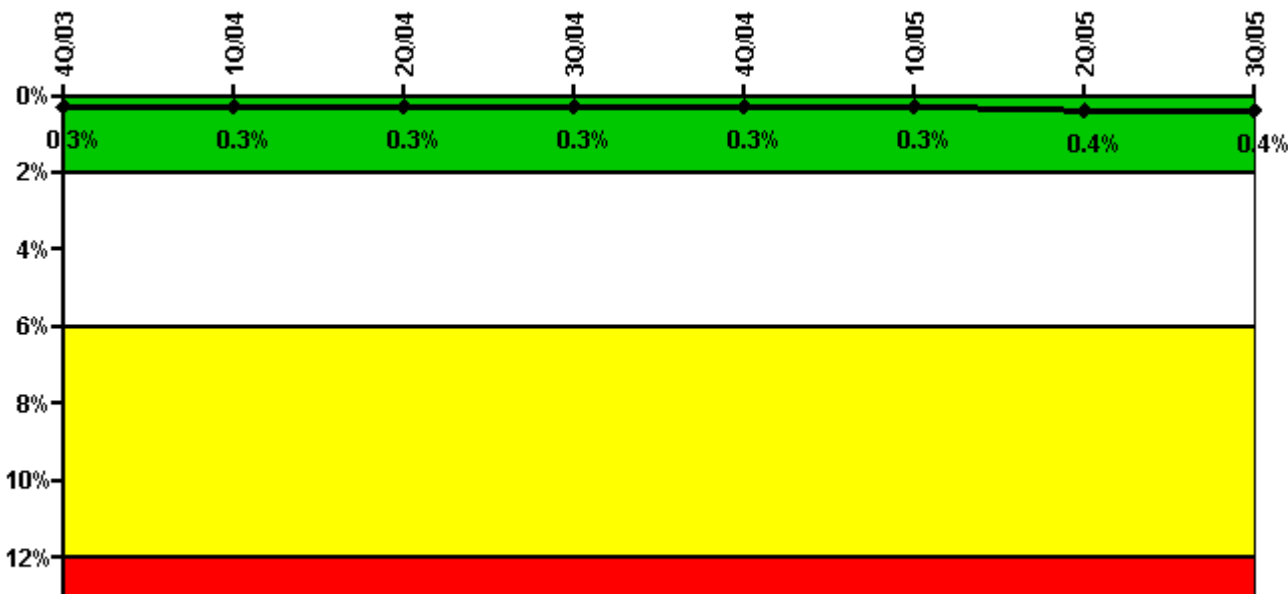
1Q/05: An engineering evaluation of HPSI unavailability due to air in the containment recirculation sump piping determined that the HPSI system may not have been able to perform its safety function in response to certain accident scenarios. The deficiency was not capable of being discovered during normal surveillance testing and as such is a discovered condition. The discovered condition has existed since initial plant operation. NEI 99-02, Revision 3, section 2.2, Clarifying Notes, discusses how to handle "Equipment failures or discovered conditions due to design or construction deficiencies." The guidance also

includes, "These failures are amenable to evaluation through the NRC's Significance Determination Process and are excluded from the unavailability indicators." The condition has been evaluated under the NRC's Significance Determination Process in NRC letter ML051010009, dated 11/08/2005, concluding that the inspection finding is most appropriately characterized as a yellow finding. 3Q2005: High Pressure Safety Injection (HPSI) unavailability hours adjusted from 09/2004 through 06/2005 to credit availability during venting that would be promptly restored by an operator in the control room. Restoration actions are contained in written procedure 40ST-9SI07, are uncomplicated and require no diagnosis or repair. The actions are virtually certain to be successful (i.e., probability nearly equal to 1) during accident conditions. The operator in the main control room is in close proximity to restore the equipment when needed. The staffing is identified in advance by the procedure and an operator identified to take the appropriate prompt response for the testing configuration independent of other control room actions that may be required. Reference NEI 99-02, Revision 3, Section 2.2, Clarifying Notes, Planned Unavailable Hours, pg. 25.

4Q/04: An engineering evaluation of HPSI unavailability due to air in the containment recirculation sump piping determined that the HPSI system may not have been able to perform its safety function in response to certain accident scenarios. The deficiency was not capable of being discovered during normal surveillance testing and as such is a design deficiency. The design deficiency has existed since initial plant operation. The condition is being evaluated under the NRC's Significance Determination Process and the associated fault exposure hours are not included in the calculation of the unavailability indicator in accordance with the provisions of NEI 99-02, "Equipment Unavailability due to Design Deficiency." 3Q2005: High Pressure Safety Injection (HPSI) unavailability hours adjusted from 09/2004 through 06/2005 to credit availability during venting that would be promptly restored by an operator in the control room. Restoration actions are contained in written procedure 40ST-9SI07, are uncomplicated and require no diagnosis or repair. The actions are virtually certain to be successful (i.e., probability nearly equal to 1) during accident conditions. The operator in the main control room is in close proximity to restore the equipment when needed. The staffing is identified in advance by the procedure and an operator identified to take the appropriate prompt response for the testing configuration independent of other control room actions that may be required. Reference NEI 99-02, Revision 3, Section 2.2, Clarifying Notes, Planned Unavailable Hours, pg. 25.

3Q/04: Engineering evaluation of HPSI unavailability due to air in containment recirculation sump piping is pending. 3Q2005: High Pressure Safety Injection (HPSI) unavailability hours adjusted from 09/2004 through 06/2005 to credit availability during venting that would be promptly restored by an operator in the control room. Restoration actions are contained in written procedure 40ST-9SI07, are uncomplicated and require no diagnosis or repair. The actions are virtually certain to be successful (i.e., probability nearly equal to 1) during accident conditions. The operator in the main control room is in close proximity to restore the equipment when needed. The staffing is identified in advance by the procedure and an operator identified to take the appropriate prompt response for the testing configuration independent of other control room actions that may be required. Reference NEI 99-02, Revision 3, Section 2.2, Clarifying Notes, Planned Unavailable Hours, pg. 25.

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



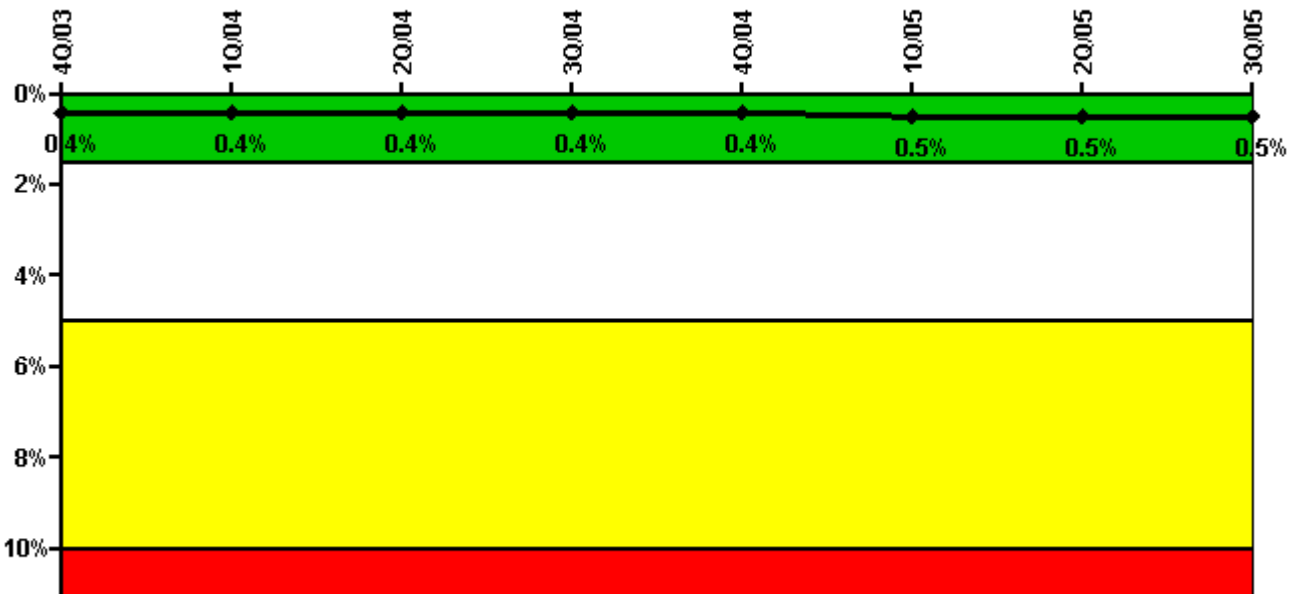
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

**Notes**

Safety System Unavailability, Heat Removal System (AFW)	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
<b>Train 1</b>								
Planned unavailable hours	13.65	2.25	0.67	4.88	30.40	12.42	15.16	11.08
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	2208.00	2094.30	1216.00	2208.00	2208.00	1860.35	2184.00	1824.55
<b>Train 2</b>								
Planned unavailable hours	7.70	15.38	0.20	9.83	2.50	35.68	4.03	15.50
Unplanned unavailable hours	0	0	2.42	0	0	0.02	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	2208.00	2094.30	1216.00	2208.00	2208.00	1860.35	2184.00	1824.55
<b>Train 3</b>								
Planned unavailable hours	0.58	0.62	0	0.47	0.75	0.98	0.67	0.83
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	2208.00	2094.30	1216.00	2208.00	2208.00	1860.35	2184.00	1824.55
<b>Indicator value</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</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**

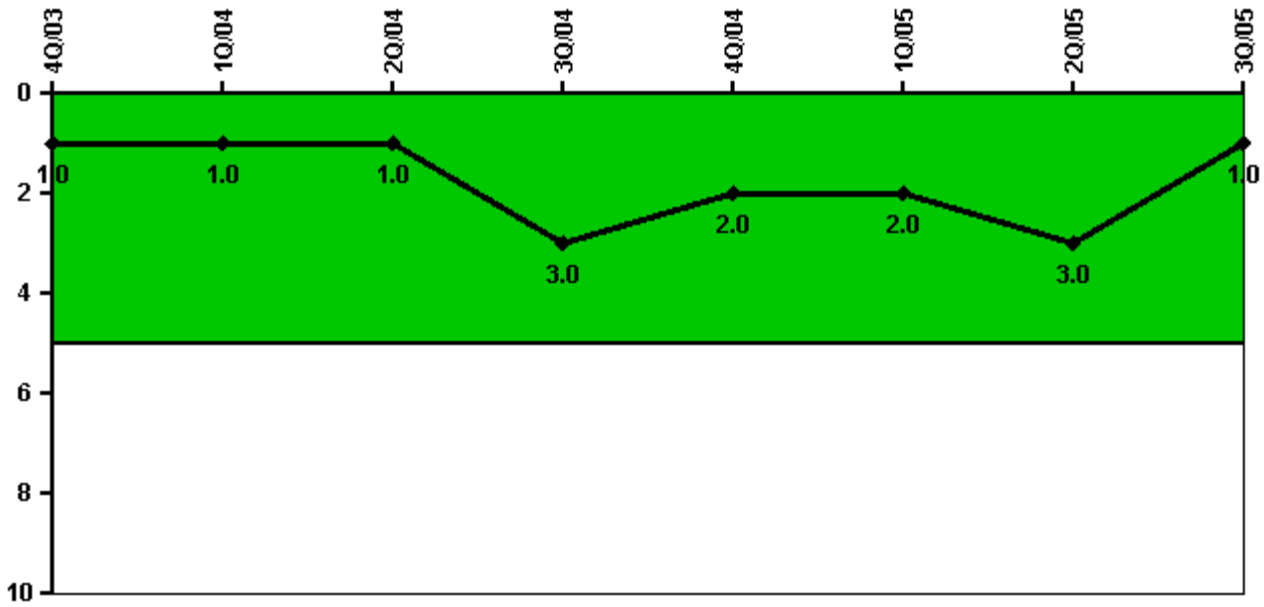
Safety System Unavailability, Residual Heat Removal System	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
<b>Train 1</b>								
Planned unavailable hours	16.77	2.54	13.30	13.31	11.93	68.07	16.38	26.18
Unplanned unavailable hours	0	0	0	0	0	0	12.62	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2140.32	1387.70	2208.00	2208.00	1950.80	2184.00	1957.03
<b>Train 2</b>								
Planned unavailable hours	14.10	24.82	5.17	26.47	6.75	41.82	5.00	36.97
Unplanned unavailable hours	0	0	2.42	0	14.67	0.02	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	2208.00	2140.32	1387.70	2208.00	2208.00	1950.80	2184.00	1957.03
<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	397.71	0	0	170.53	0	41.98
<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	33.88	434.17	0	0	30.17	0	186.28
<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>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments: none

---



### Safety System Functional Failures (PWR)



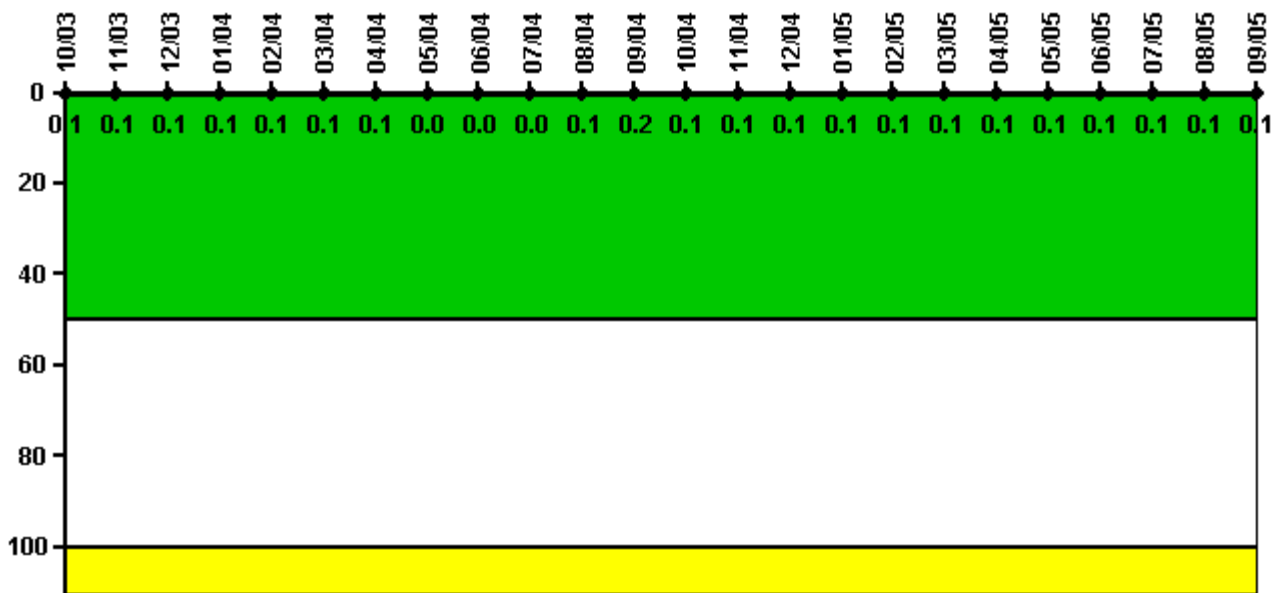
Thresholds: White > 5.0

#### Notes

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

Licensee Comments: none

### Reactor Coolant System Activity



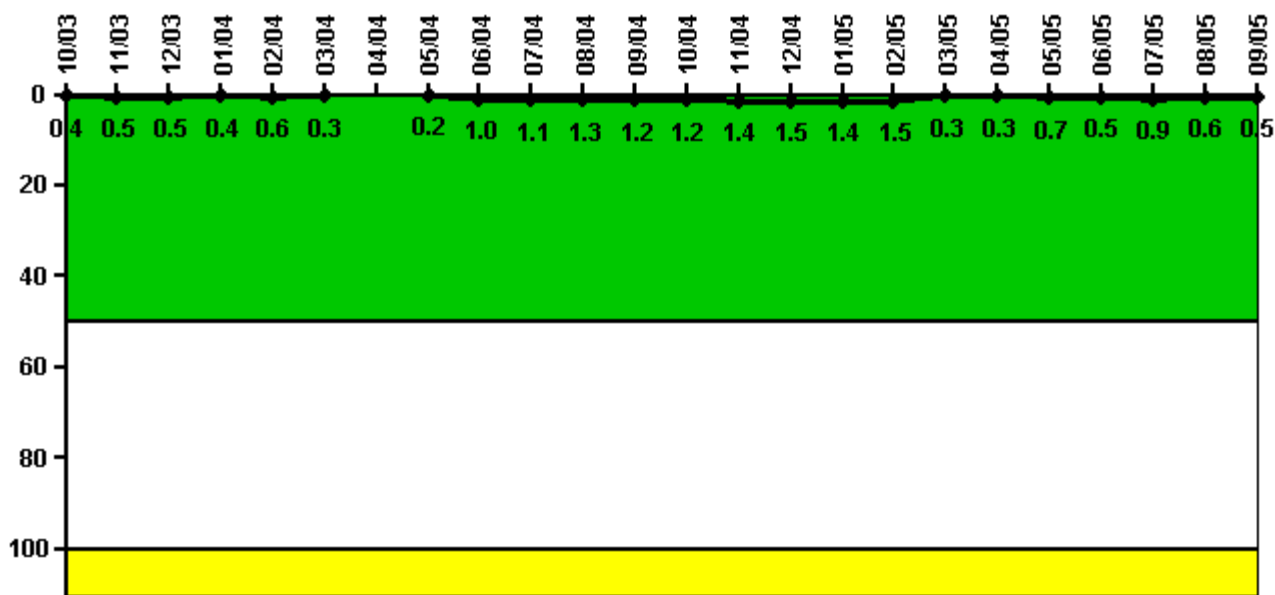
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

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	0.000948	0.001030	0.000977	0.001080	0.001050	0.001100	0.001120	0.000431	0.000458	0.000482	0.000546	0.001620
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	0.1	0.1	0	0	0	0.1	0.2
Reactor Coolant System Activity	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05
Maximum activity	0.000589	0.000613	0.000643	0.000704	0.000690	0.000724	0.000761	0.000785	0.000813	0.001430	0.000816	0.000908
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	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Licensee Comments: none

### Reactor Coolant System Leakage



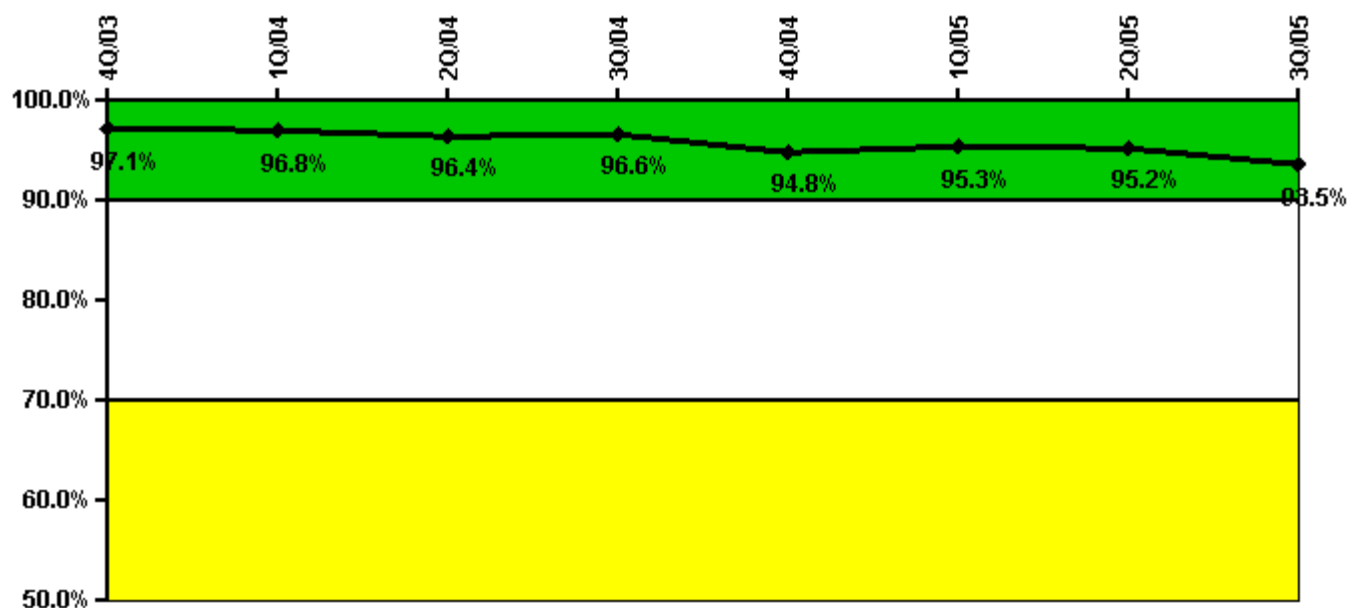
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	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	0.035	0.050	0.051	0.044	0.055	0.026	N/A	0.022	0.098	0.108	0.133	0.116
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	0.5	0.5	0.4	0.6	0.3	N/A	0.2	1.0	1.1	1.3	1.2
Reactor Coolant System Leakage	10/04	11/04	12/04	1/05	2/05	3/05	4/05	5/05	6/05	7/05	8/05	9/05
Maximum leakage	0.119	0.142	0.151	0.136	0.145	0.034	0.031	0.066	0.045	0.085	0.060	0.050
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	1.2	1.4	1.5	1.4	1.5	0.3	0.3	0.7	0.5	0.9	0.6	0.5

Licensee Comments: none

### Drill/Exercise Performance



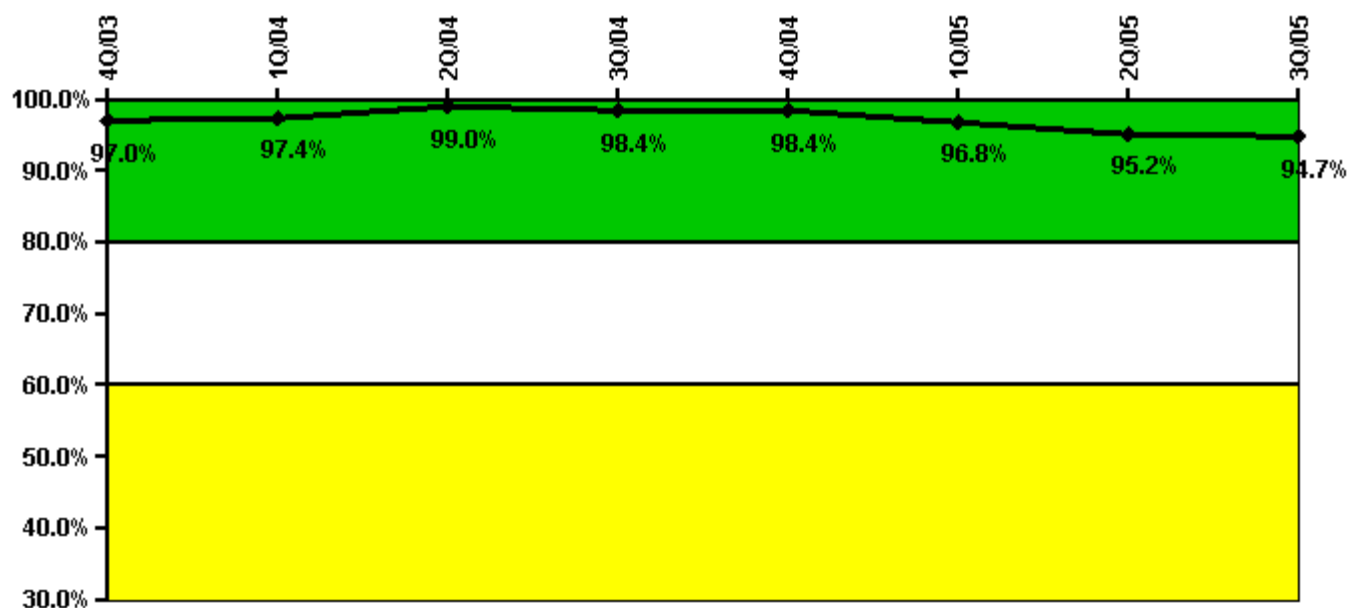
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Successful opportunities	38.0	17.0	14.0	111.0	97.0	21.0	0	75.0
Total opportunities	38.0	20.0	17.0	112.0	111.0	22.0	0	79.0
Indicator value	97.1%	96.8%	96.4%	96.6%	94.8%	95.3%	95.2%	93.5%

Licensee Comments: none

### ERO Drill Participation



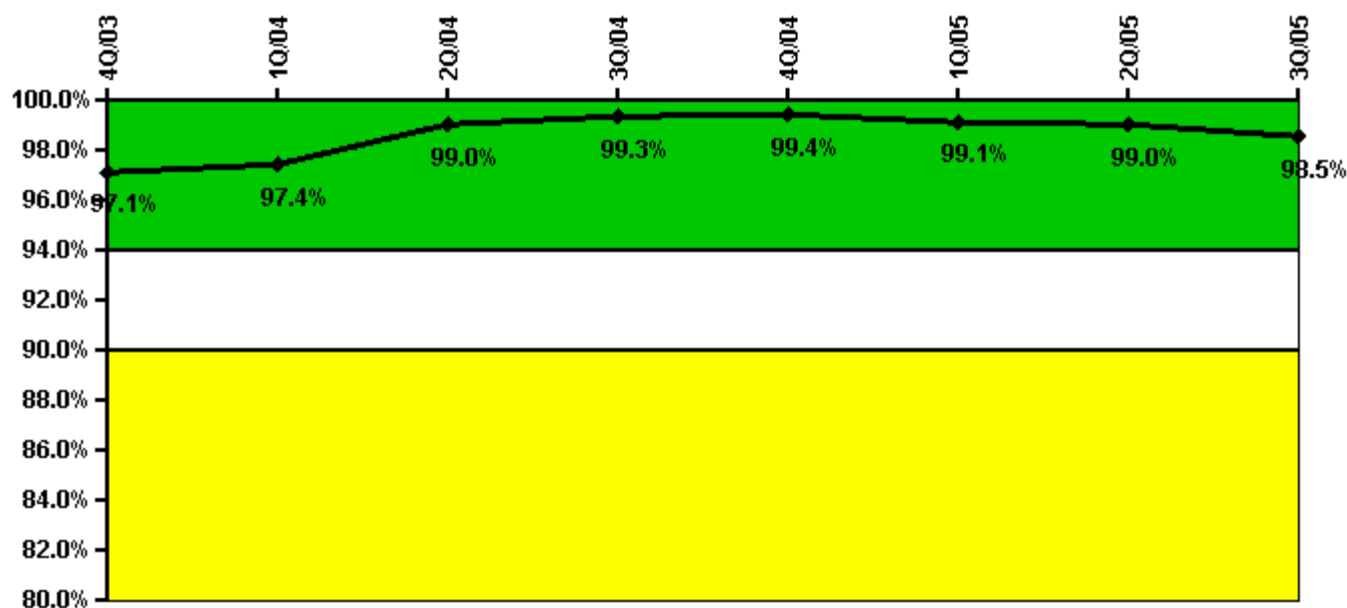
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Participating Key personnel	194.0	189.0	193.0	188.0	187.0	184.0	179.0	180.0
Total Key personnel	200.0	194.0	195.0	191.0	190.0	190.0	188.0	190.0
Indicator value	97.0%	97.4%	99.0%	98.4%	98.4%	96.8%	95.2%	94.7%

Licensee Comments: none

### Alert & Notification System



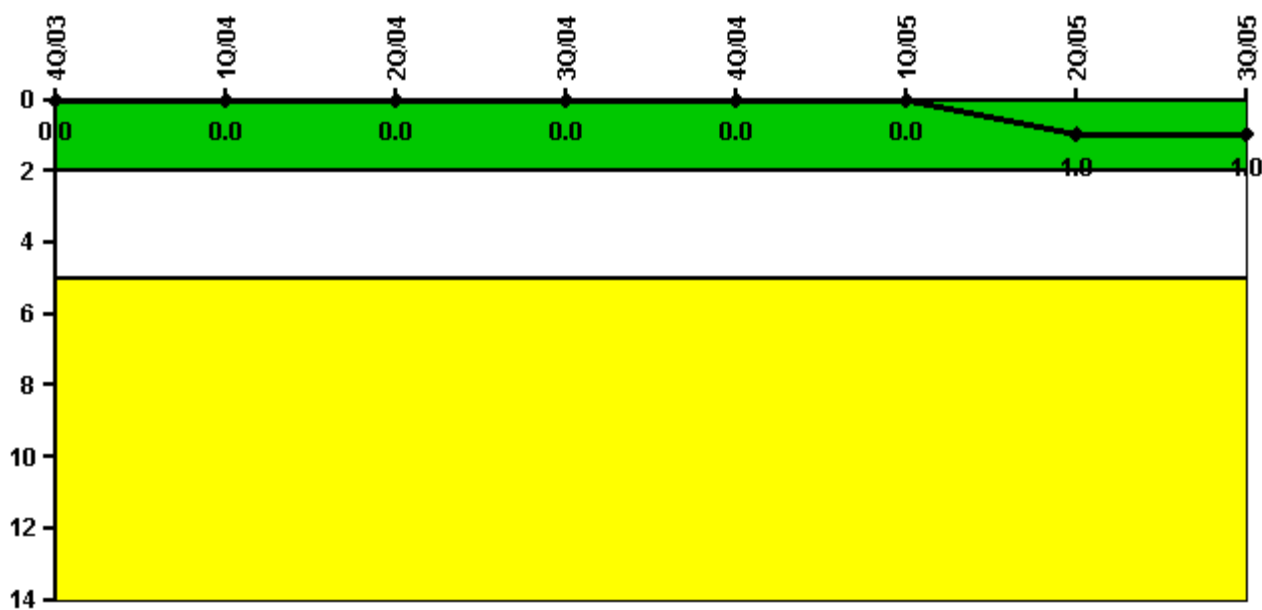
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
Successful siren-tests	867	712	798	792	872	700	797	753
Total sirens-tests	882	714	798	798	882	714	798	776
Indicator value	97.1%	97.4%	99.0%	99.3%	99.4%	99.1%	99.0%	98.5%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



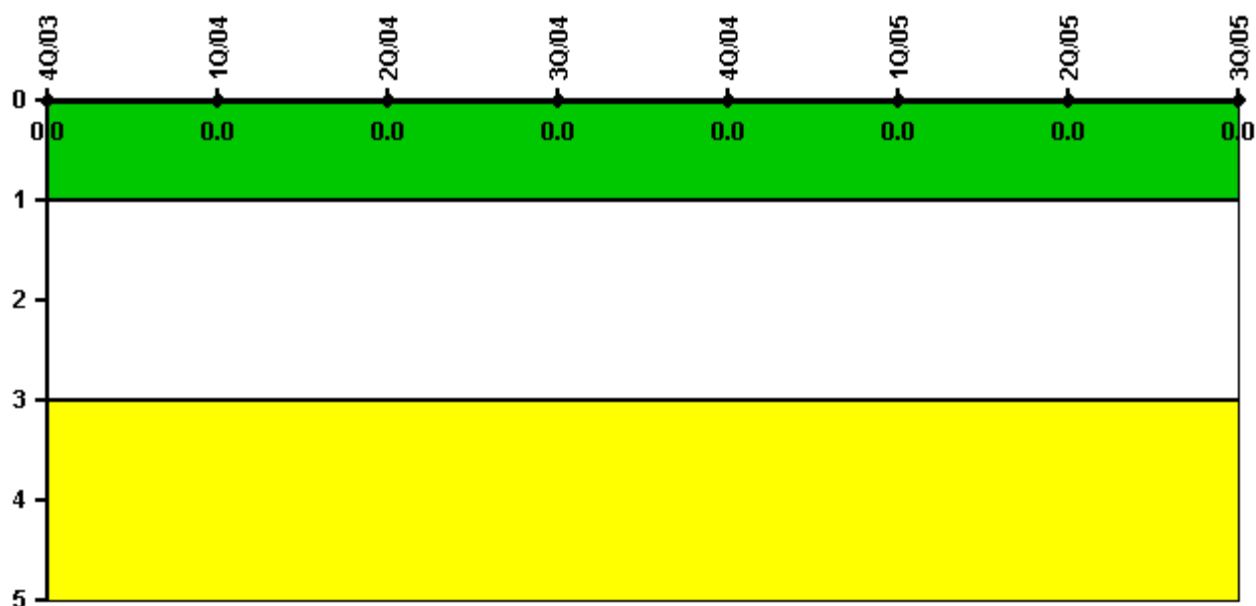
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05
High radiation area occurrences	0	0	0	0	0	0	1	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>1</b>	<b>1</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/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.