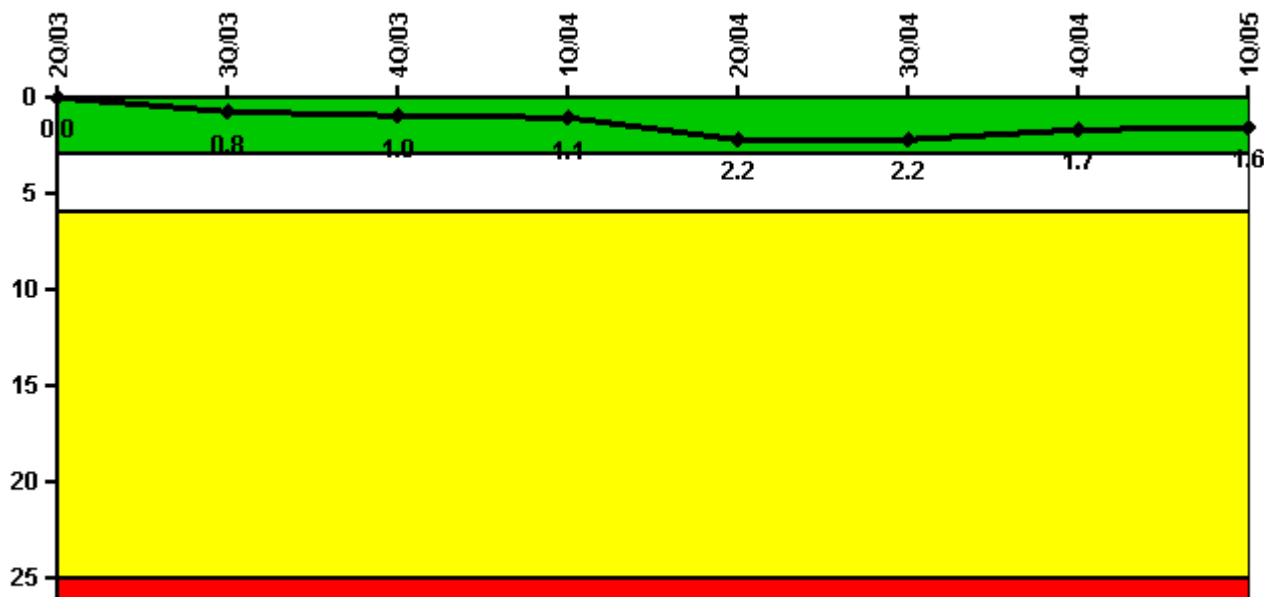


## Palo Verde 2

### 1Q/2005 Performance Indicators

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



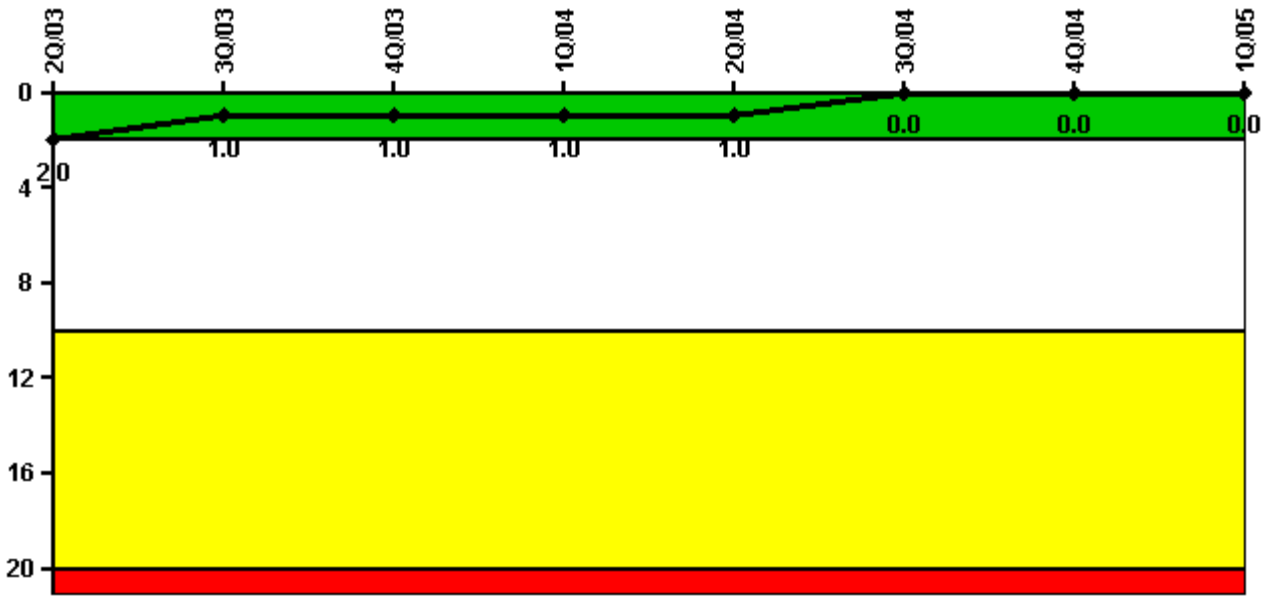
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

#### 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	1.0	0	0	1.0	1.0	0	0
Critical hours	2184.0	2071.9	461.9	1751.5	2072.5	2148.4	2208.0	2160.0
Indicator value	0	0.8	1.0	1.1	2.2	2.2	1.7	1.6

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



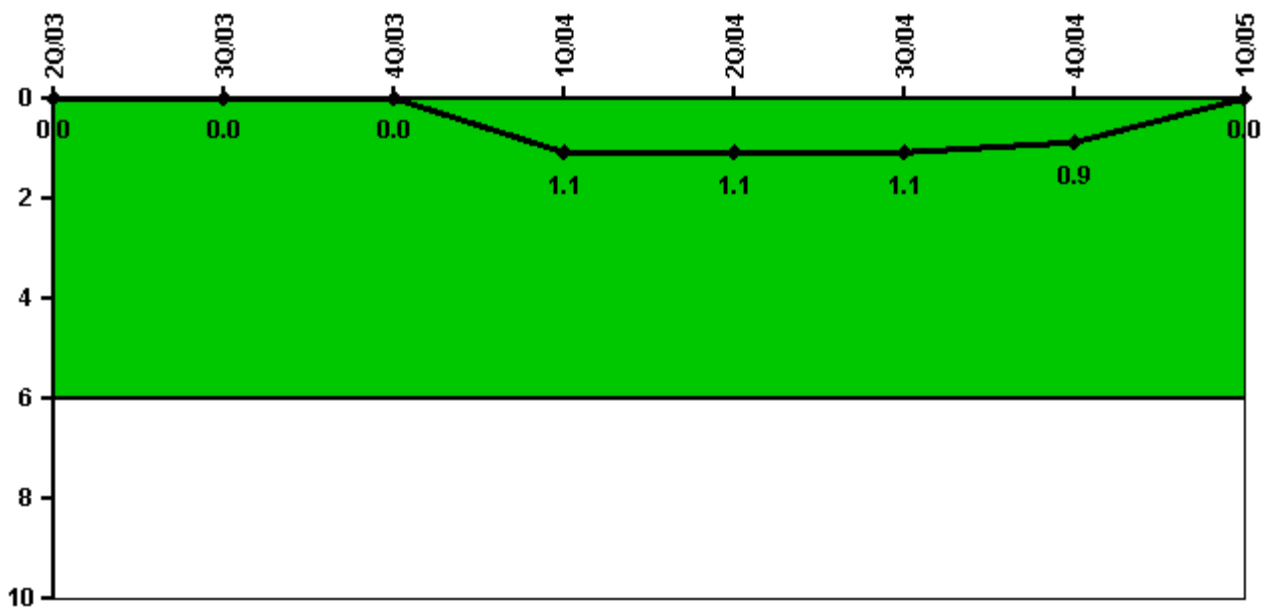
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	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	2.0	1.0	1.0	1.0	1.0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



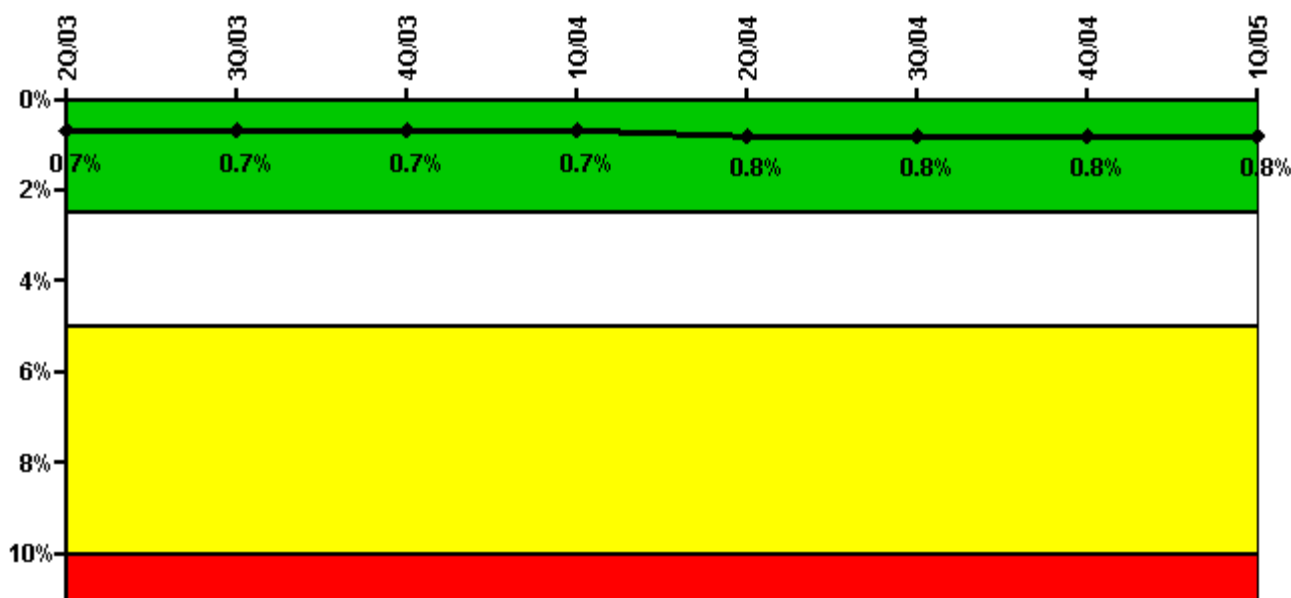
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	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	0	0	0
Critical hours	2184.0	2071.9	461.9	1751.5	2072.5	2148.4	2208.0	2160.0
Indicator value	0	0	0	1.1	1.1	1.1	0.9	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



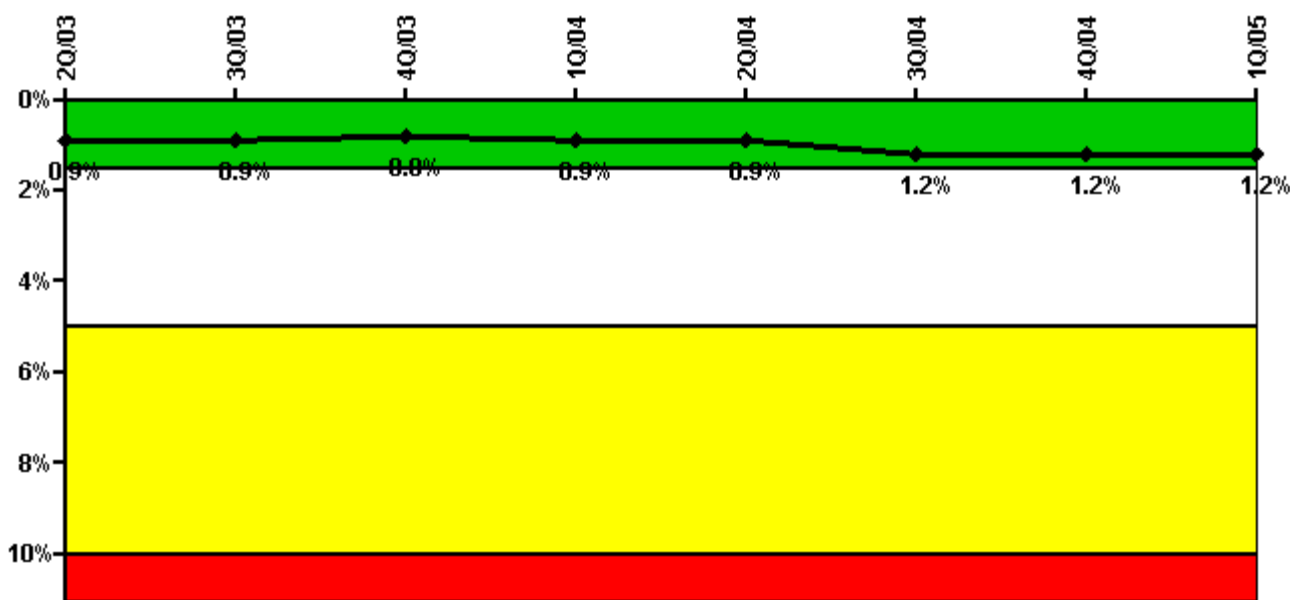
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### 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	20.46	2.24	0.03	4.94	19.21	26.25	5.58	26.22
Unplanned unavailable hours	0	0	0	0	68.95	0	11.58	6.00
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2208.00	2208.00	2184.00	2184.00	2208.00	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	0.06	25.27	0.02	18.54	0.06	43.47	0.81	28.74
Unplanned unavailable hours	0	0	0	0	0	0	2.67	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	2184.00	2208.00	2208.00	2184.00	2184.00	2208.00	2208.00	2160.00
<b>Indicator value</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>

Licensee Comments: none

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



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

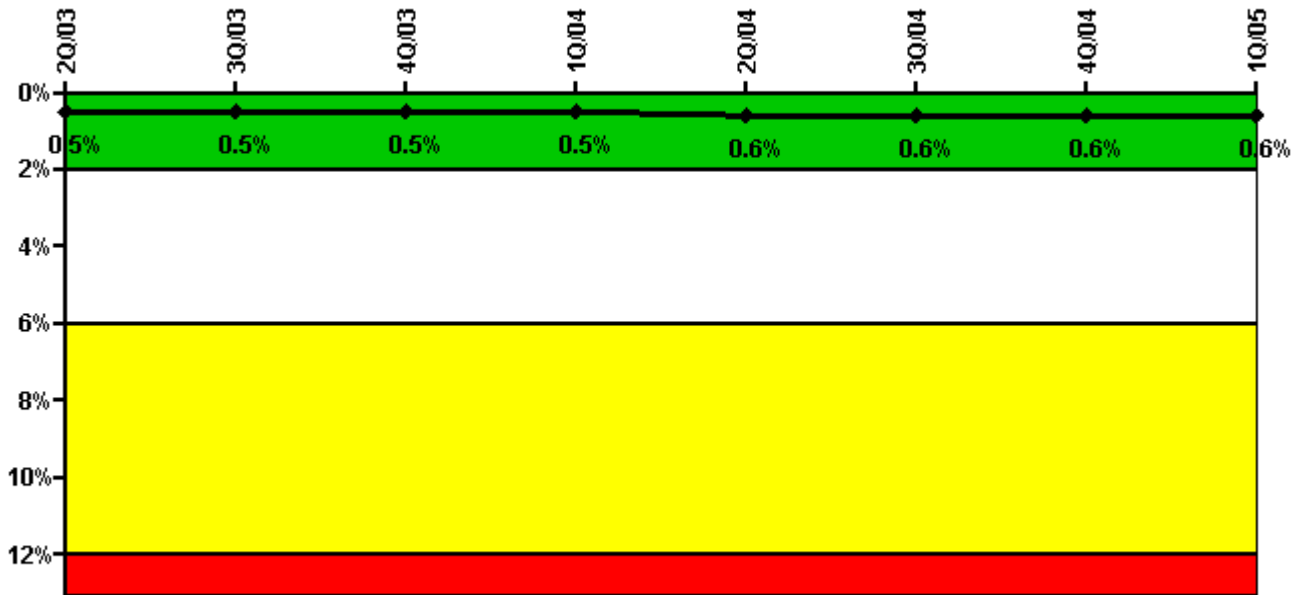
**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
<b>Train 1</b>								
Planned unavailable hours	4.49	6.86	5.67	21.39	24.01	105.57	17.77	18.72
Unplanned unavailable hours	0	0	0	0	6.90	0	0	22.10
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2071.89	461.87	1751.46	2072.52	2148.43	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	20.77	26.67	12.30	26.28	1.25	34.43	36.79	31.48
Unplanned unavailable hours	0	0	0	2.38	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	2184.00	2071.89	461.87	1751.46	2072.52	2148.43	2208.00	2160.00
<b>Indicator value</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.2%</b>	<b>1.2%</b>	<b>1.2%</b>

Licensee Comments:

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.

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



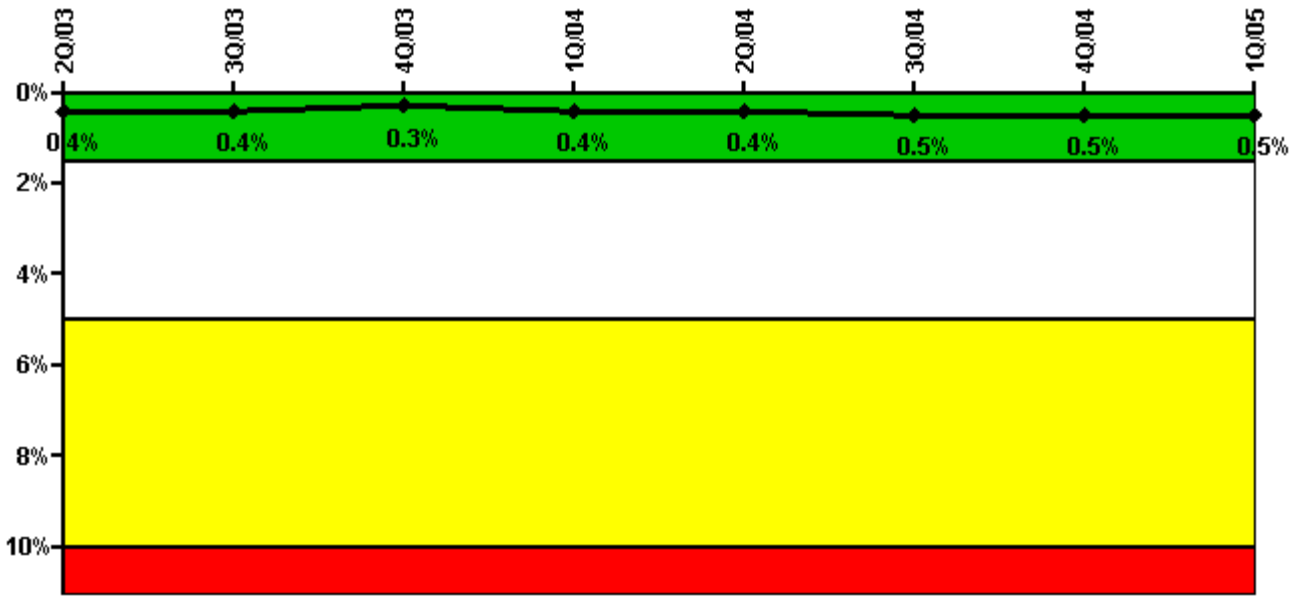
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### 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	5.88	4.53	3.85	5.43	34.42	11.47	1.75	12.53
Unplanned unavailable hours	19.27	0	0	2.93	30.12	0	0	18.62
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2071.89	461.87	1751.46	2072.52	2148.43	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	1.08	8.23	0	11.63	1.23	16.13	34.43	18.18
Unplanned unavailable hours	0	0	0	2.38	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	2184.00	2071.89	461.87	1751.46	2072.52	2148.43	2208.00	2160.00
<b>Train 3</b>								
Planned unavailable hours	0.45	0.33	0	0.93	0.55	1.62	0.83	0.52
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	2184.00	2071.89	461.87	1751.46	2072.52	2148.43	2208.00	2160.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



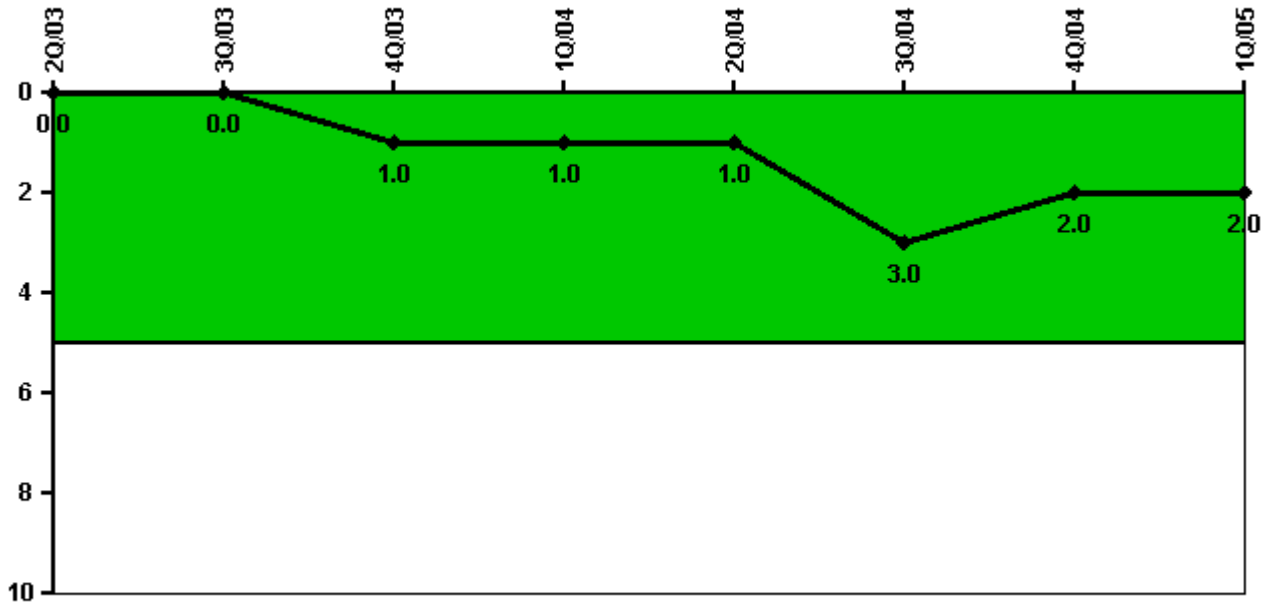
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**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	15.76	10.04	0.82	22.41	22.01	37.24	4.22	19.02
Unplanned unavailable hours	0	0	0	0	0	0	0	22.10
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2126.88	547.78	1818.22	2184.00	2208.00	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	3.41	15.38	2.08	23.36	2.17	32.52	40.65	24.94
Unplanned unavailable hours	0	0	0	2.38	0	43.78	14.97	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	2184.00	2126.88	547.78	1818.22	2184.00	2208.00	2208.00	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	0	81.12	364.45	284.00	0	0	0	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	0	81.12	330.30	299.63	0	0	0	0
<b>Indicator value</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.3%</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

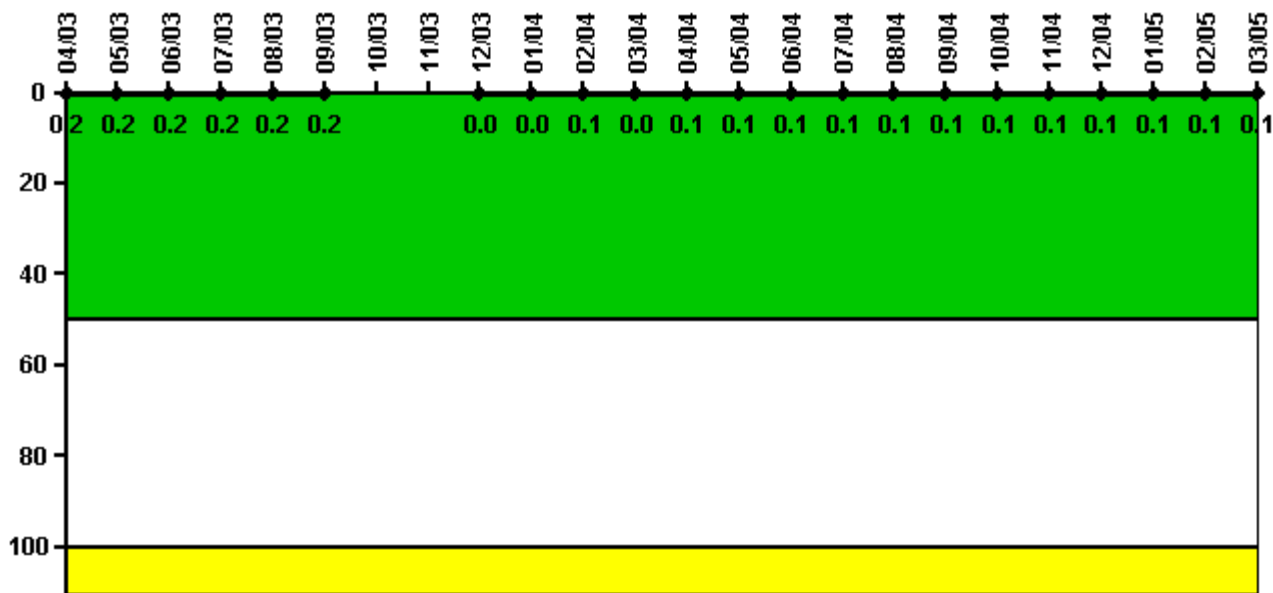
### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

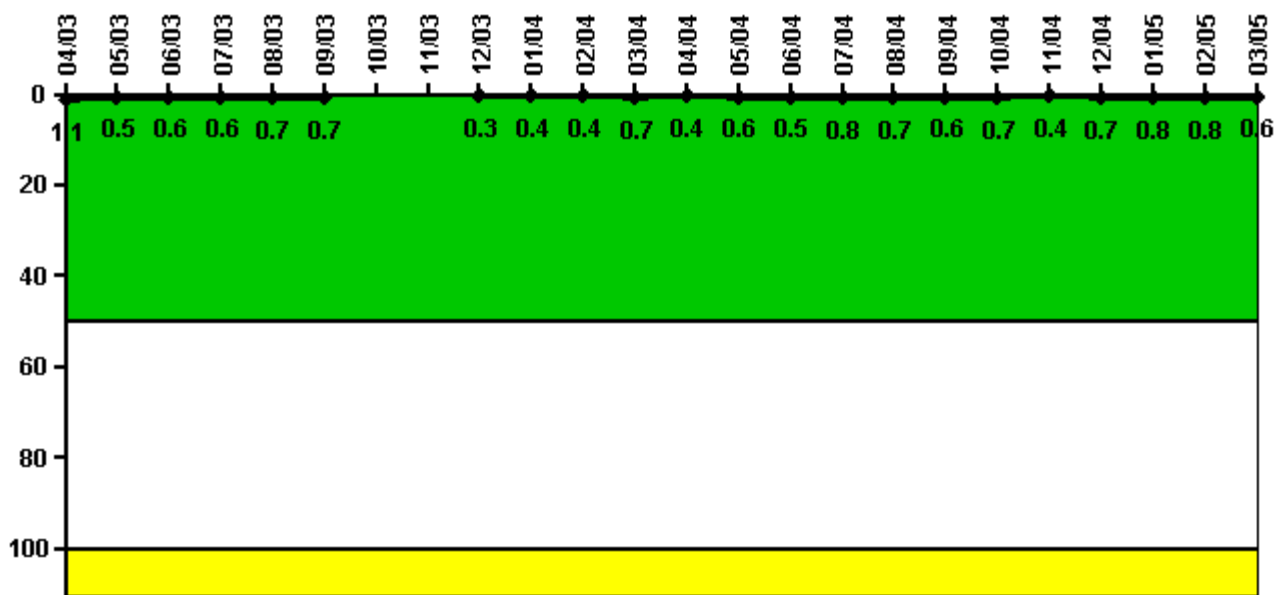
Reactor Coolant System Activity	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum activity	0.002000	0.002000	0.002000	0.002000	0.002000	0.002000	N/A	N/A	0.000490	0.000449	0.000513	0.000461
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.2	0.2	0.2	0.2	0.2	N/A	N/A	0	0	0.1	0

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	0.000511	0.000543	0.000551	0.000536	0.000573	0.000598	0.000597	0.000588	0.000634	0.000617	0.000639	0.000670
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



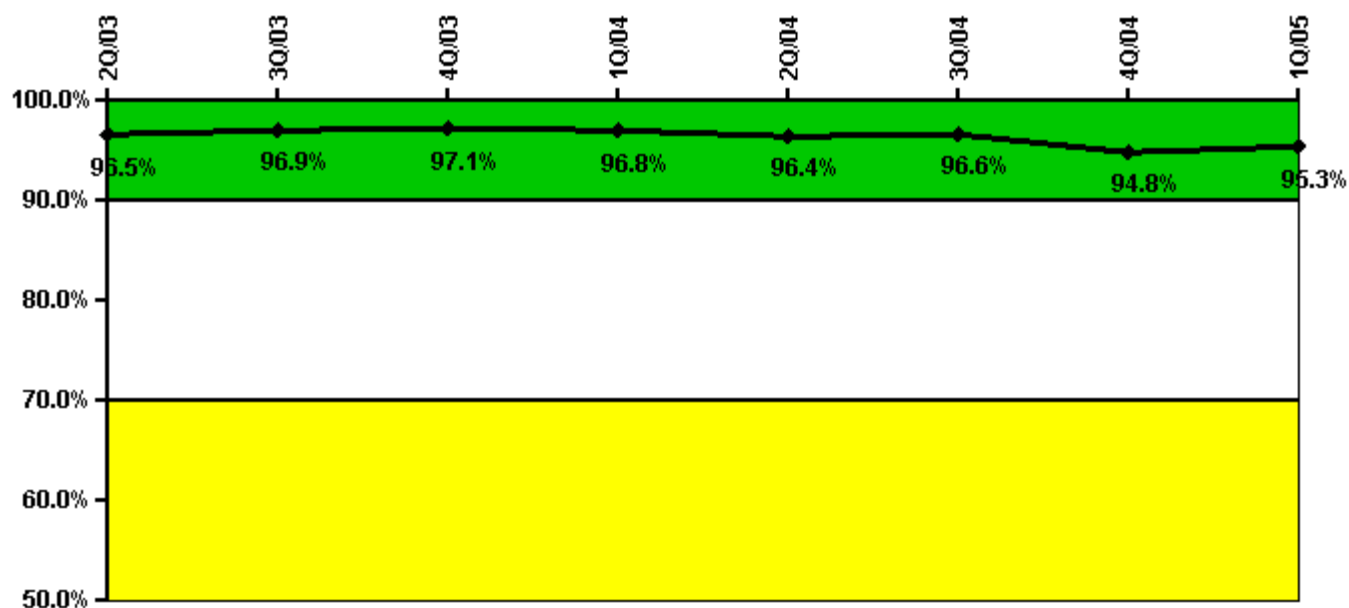
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	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	0.108	0.049	0.055	0.064	0.066	0.069	N/A	N/A	0.028	0.039	0.043	0.069
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	1.1	0.5	0.6	0.6	0.7	0.7	N/A	N/A	0.3	0.4	0.4	0.7
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	0.042	0.056	0.054	0.080	0.074	0.061	0.068	0.038	0.067	0.076	0.082	0.057
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	0.6	0.5	0.8	0.7	0.6	0.7	0.4	0.7	0.8	0.8	0.6

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

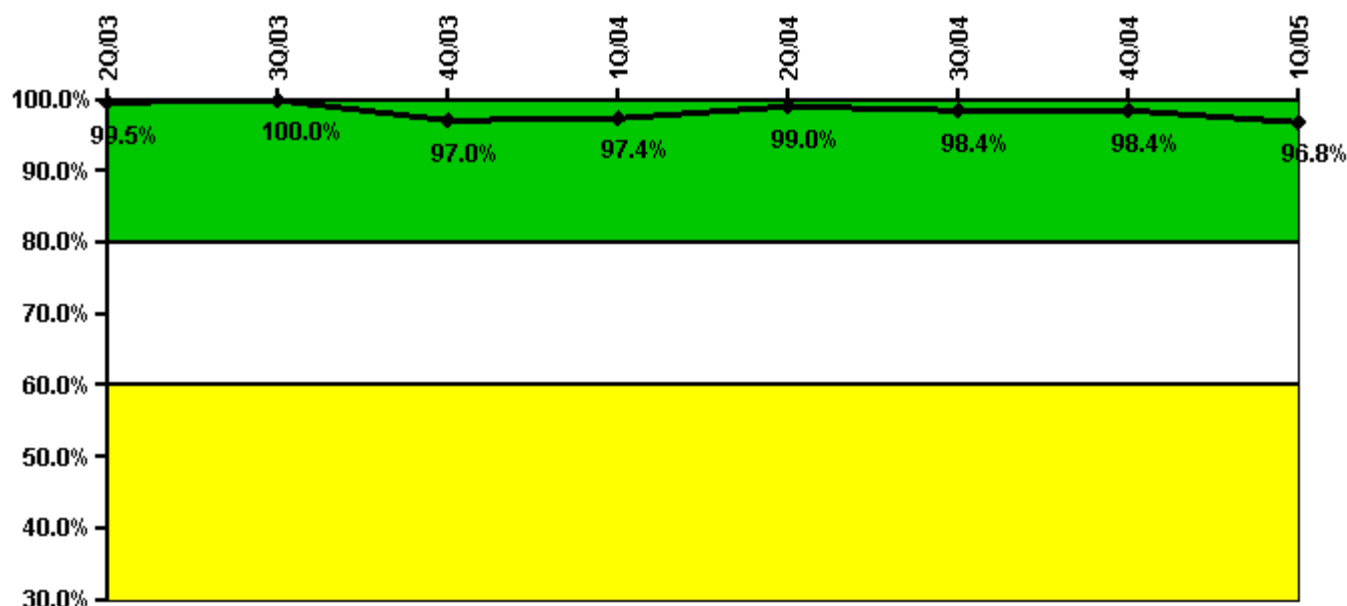
#### Notes

Drill/Exercise Performance	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Successful opportunities	8.0	280.0	38.0	17.0	14.0	111.0	97.0	21.0
Total opportunities	8.0	287.0	38.0	20.0	17.0	112.0	111.0	22.0
Indicator value	96.5%	96.9%	97.1%	96.8%	96.4%	96.6%	94.8%	95.3%

Licensee Comments:

1Q/05: In the 1Q2004 data submittal, credit was incorrectly given for two drill, exercise & event opportunities. The number of successful opportunities was reported as 19 out of 20. The number has been revised to 17 out of 20. This change did not affect the color of the performance indicator.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

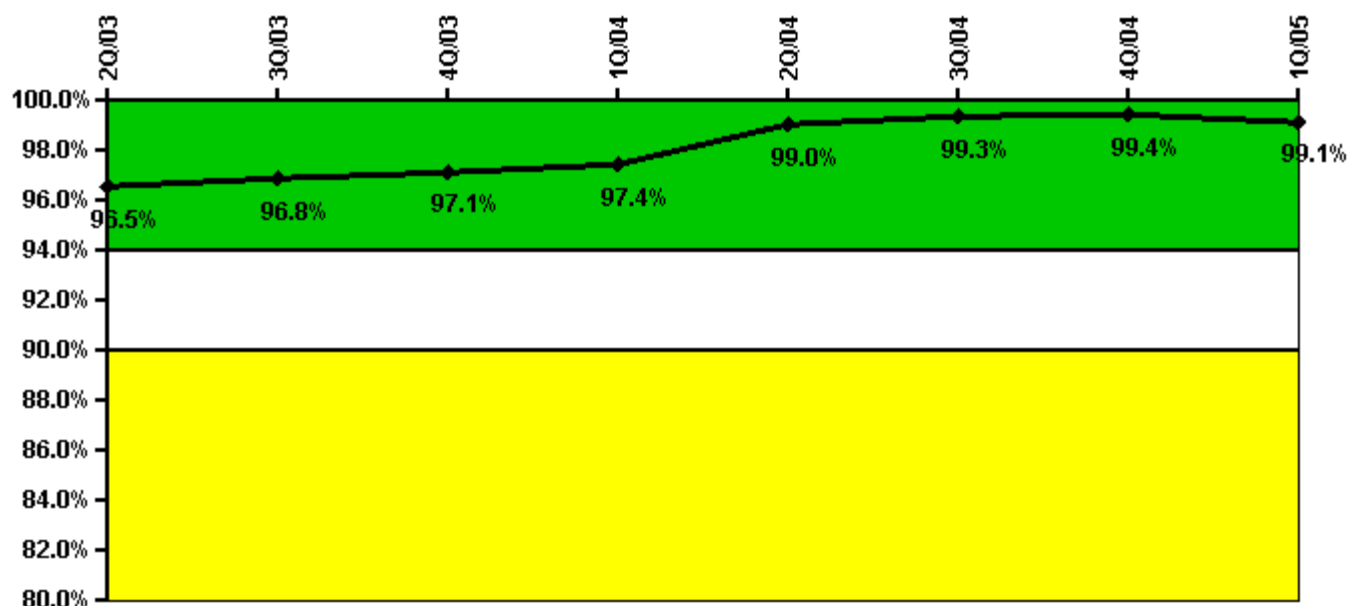
#### Notes

ERO Drill Participation	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05
Participating Key personnel	181.0	182.0	194.0	189.0	193.0	188.0	187.0	184.0
Total Key personnel	182.0	182.0	200.0	194.0	195.0	191.0	190.0	190.0
Indicator value	99.5%	100.0%	97.0%	97.4%	99.0%	98.4%	98.4%	96.8%

Licensee Comments:

1Q/05: In the 4Q2004 data submittal, the number of people being tracked for PI purposes was incorrect. The numbers of participating key personnel and total key personnel were 188 out of 191. The numbers have been revised to 187 out of 190. This change did not affect the color of the performance indicator.

### 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	503	700	867	712	798	792	872	700
Total sirens-tests	546	714	882	714	798	798	882	714
Indicator value	96.5%	96.8%	97.1%	97.4%	99.0%	99.3%	99.4%	99.1%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



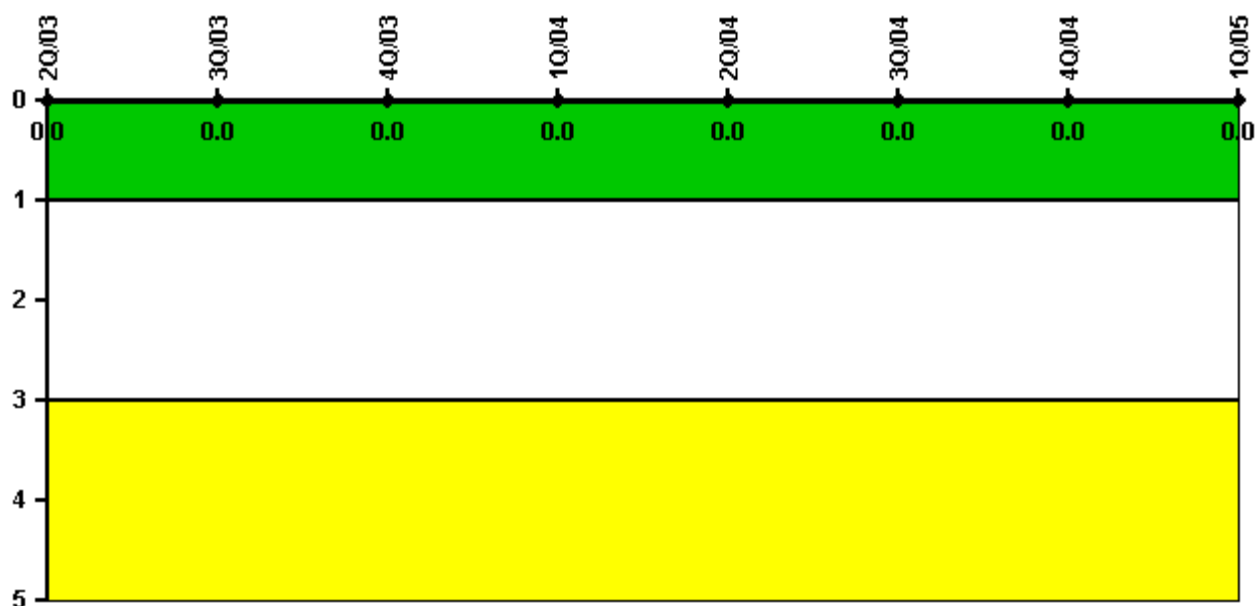
Thresholds: White > 2.0 Yellow > 5.0

#### 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>0</b>	<b>0</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