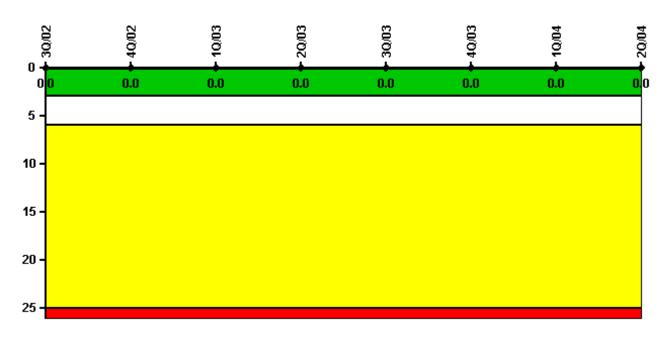
# **Braidwood 1**

### **2Q/2004 Performance Indicators**

Licensee's General Comments: none

# Unplanned Scrams per 7000 Critical Hrs

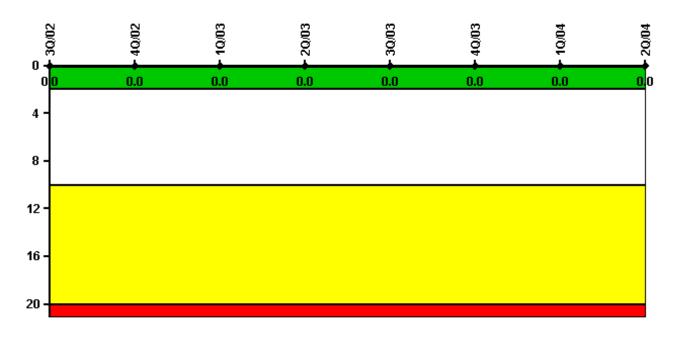


Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	2160.0	1786.1	2208.0	2209.0	2184.0	2183.0
Indicator value	0	0	0	0	0	0	0	О

### Scrams with Loss of Normal Heat Removal

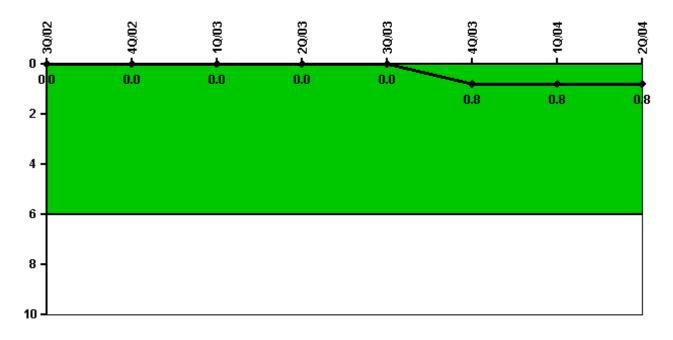


Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

# Unplanned Power Changes per 7000 Critical Hrs

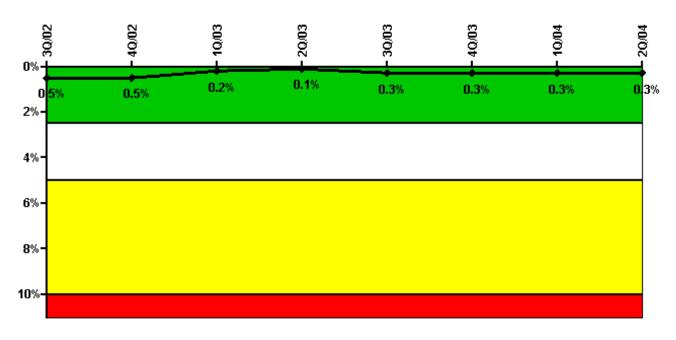


Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned power changes	0	0	0	0	0	1.0	0	0
Critical hours	2208.0	2209.0	2160.0	1786.1	2208.0	2209.0	2184.0	2183.0
Indicator value	О	О	О	О	О	0.8	0.8	0.8

# Safety System Unavailability, Emergency AC Power



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

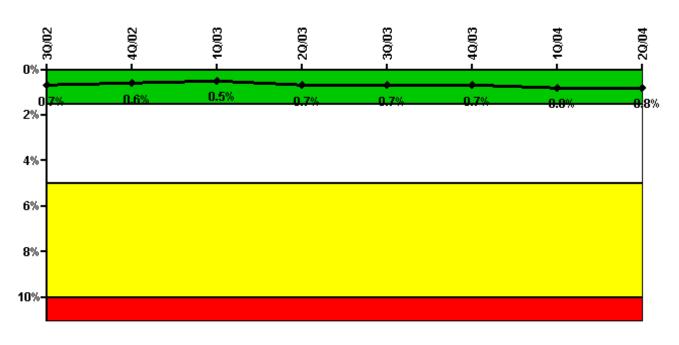
### Notes

Safety System Unavailability, Emergency AC Power	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	20/04
Train 1								
Planned unavailable hours	1.30	2.80	6.60	1.50	94.80	1.27	4.10	2.70
Unplanned unavailable hours	0	0	0	0	9.45	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	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	2.80	1.70	6.10	0.40	2.60	1.40	2.80	2.50
Unplanned unavailable hours	0	0	0.30	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	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value	0.5%	0.5%	0.2%	0.1%	0.3%	0.3%	0.3%	0.3%

Licensee Comments:

2Q/03: 2nd Qtr '04 Change File - comments revised. 1B diesel (Train 2) - 102.9 hrs planned unavailability originally reported 6/03. Hours were due to a planned on-line overhaul/inspection which is allowed by NEI 99-02. Therefore, correction submitted 2Q04. Indicator color does not change.

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



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

### Notes

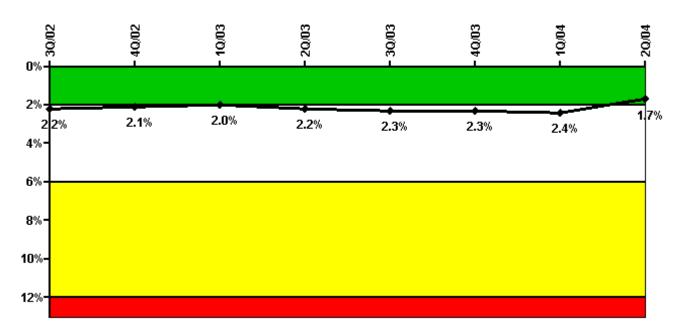
Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	20/04
Train 1								
Planned unavailable hours	1.30	2.90	51.30	1.90	2.90	1.60	17.70	2.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	1786.10	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	12.20	9.70	3.70	89.20	20.10	1.40	35.40	2.50
Unplanned unavailable hours	0	0	0	27.70	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	2209.00	2160.00	1786.10	2208.00	2209.00	2184.00	2183.00
Train 3								
Planned unavailable hours	1.30	2.80	56.50	42.50	2.80	1.30	28.50	2.90
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	2209.00	2160.00	1786.10	2208.00	2209.00	2184.00	2183.00
Train 4								
Planned unavailable hours	2.80	74.40	9.80	0.60	2.80	9.40	49.20	70.00
Unplanned unavailable hours	0	0	1.00	0	0.20	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	2209.00	2160.00	1786.10	2208.00	2209.00	2184.00	2183.00
Indicator value	0.7%	0.6%	0.5%	0.7%	0.7%	0.7%	0.8%	0.8%

Licensee Comments:

2Q/03: 2nd Qtr '04 Change File - comments revised. Review of data determined that 4/03, 0.5 hours of planned unavail. was originally credited to 1A CV train (Train 3), and should have been credited to the 1B CV train (Train 4). Indicator color does not change.

1Q/01: 2nd Qtr '04 change file - comments revised. Review of data review determined that 2/01, 0.1 hours of planned unavailability was over reported for 1B SI (Train 2). Indicator color is not affected.

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



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

#### Notes

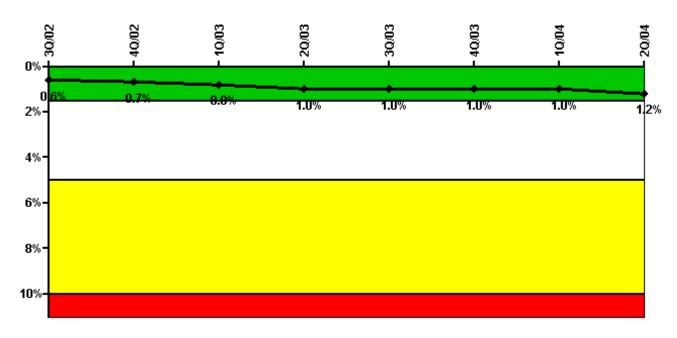
3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
6.40	12.50	9.40	5.90	8.17	6.78	12.20	11.80
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	2209.00	2160.00	1786.10	2208.00	2209.00	2184.00	2183.00
41.60	18.50	13.80	3.30	18.67	20.90	6.80	8.10
0	0	0	22.60	0	0	0	0
0	0	0	54.40	64.20	0	0	0
0	0	0	0	0	0	0	0
2208.00	2209.00	2160.00	1786.10	2208.00	2209.00	2184.00	2183.00
2.2%	2.1%	2.0%	2.2%	2.3%	2.3%	2.4%	1.7%
	6.40 0 0 2208.00 41.60 0 0	6.40 12.50 0 0 0 0 2208.00 2209.00 41.60 18.50 0 0 0 0 2208.00 2209.00	6.40 12.50 9.40 0 0 0 0 0 0 0 2208.00 2209.00 13.80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.40         12.50         9.40         5.90           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           2208.00         2209.00         2160.00         1786.10           41.60         18.50         13.80         3.30           0         0         0         22.60           0         0         0         54.40           0         0         0         0           2208.00         2209.00         2160.00         1786.10	6.40         12.50         9.40         5.90         8.17           0         0         0         0         0         0           0	6.40         12.50         9.40         5.90         8.17         6.78           0	6.40         12.50         9.40         5.90         8.17         6.78         12.20           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0

Licensee Comments:

2Q/03: 2nd Qtr '04 Change File - comments revised. 05/03, 1B AF (Train 2) is reduced by 1.2 hrs due to originally double-counting unavailability time. Indicator color does not change.

2Q/03: The fault exposure hours for May were revised due to performing a more accurate determination of unavailability time.

# Safety System Unavailability, Residual Heat Removal System

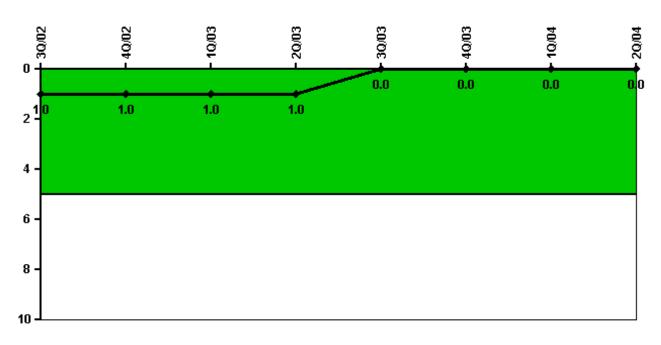


Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

### Notes

Safety System Unavailability, Residual Heat Removal System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	1.70	38.81	6.90	116.50	4.30	2.10	4.20	69.20
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	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	3.00	14.80	176.90	0	4.80	2.00	3.10	3.50
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	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value	0.6%	0.7%	0.8%	1.0%	1.0%	1.0%	1.0%	1.2%

# Safety System Functional Failures (PWR)

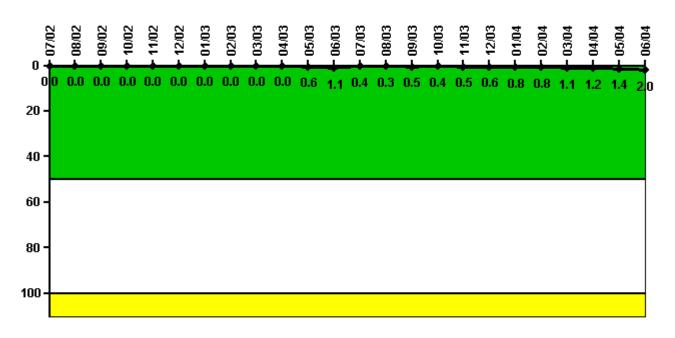


Thresholds: White > 5.0

#### Votes

Safety System Functional Failures (PWR)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Safety System Functional Failures	1	0	0	0	0	0	0	0
Indicator value	1	1	1	1	О	0	О	О

# **Reactor Coolant System Activity**

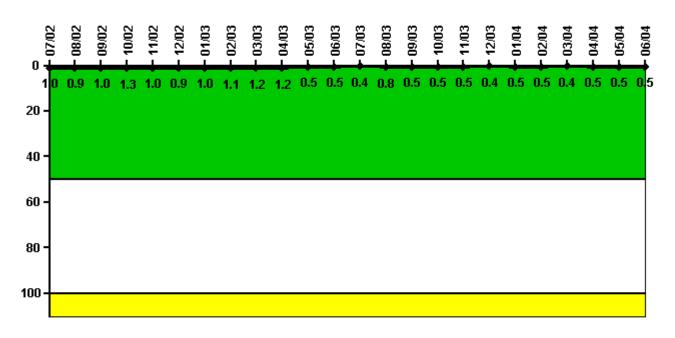


Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Activity	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum activity	0.000257	0.000284	0.000282	0.000296	0.000286	0.000297	0.000310	0.000315	0.000317	0.000312	0.005660	0.011300
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	0	0	0	0	0	0	О	0	О	0.6	1.1
Reactor Coolant System Activity	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum activity	0.003620	0.002750	0.004690	0.003970	0.004590	0.006040	0.007750	0.007920	0.010900	0.011900	0.014200	0.020200
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	0.4	0.3	0.5	0.4	0.5	0.6	0.8	0.8	1.1	1.2	1.4	2.0

# **Reactor Coolant System Leakage**

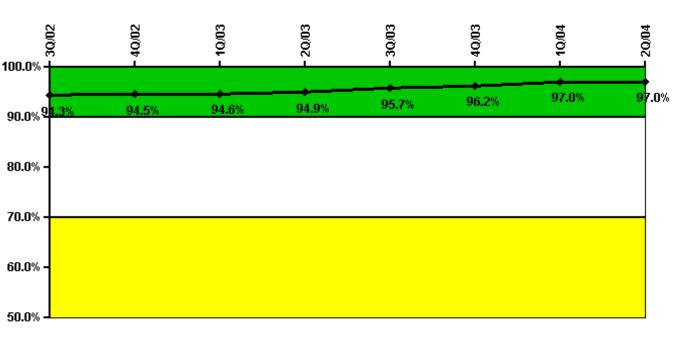


Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum leakage	0.096	0.093	0.099	0.129	0.103	0.094	0.096	0.109	0.115	0.118	0.049	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	1.0	0.9	1.0	1.3	1.0	0.9	1.0	1.1	1.2	1.2	0.5	0.5
Reactor Coolant System Leakage	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum leakage	0.044	0.080	0.049	0.046	0.045	0.037	0.045	0.047	0.037	0.045	0.047	0.053
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

### **Drill/Exercise Performance**

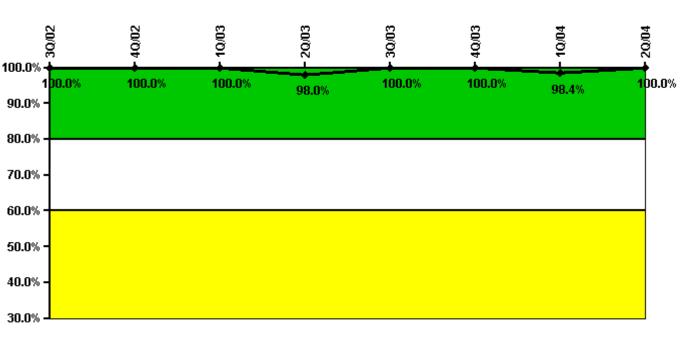


Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful opportunities	46.0	73.0	56.0	61.0	128.0	22.0	52.0	50.0
Total opportunities	50.0	77.0	58.0	62.0	130.0	22.0	52.0	52.0
Indicator value	94.3%	94.5%	94.6%	94.9%	95.7%	96.2%	97.0%	97.0%

# **ERO Drill Participation**

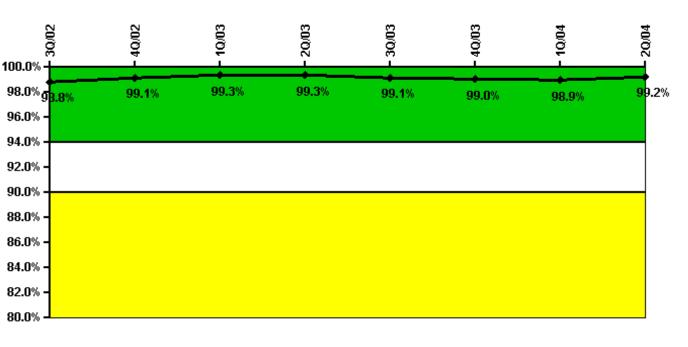


Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	10/04	2Q/04
Participating Key personnel	53.0	51.0	53.0	49.0	52.0	52.0	62.0	62.0
Total Key personnel	53.0	51.0	53.0	50.0	52.0	52.0	63.0	62.0
Indicator value	100.0%	100.0%	100.0%	98.0%	100.0%	100.0%	98.4%	100.0%

# **Alert & Notification System**

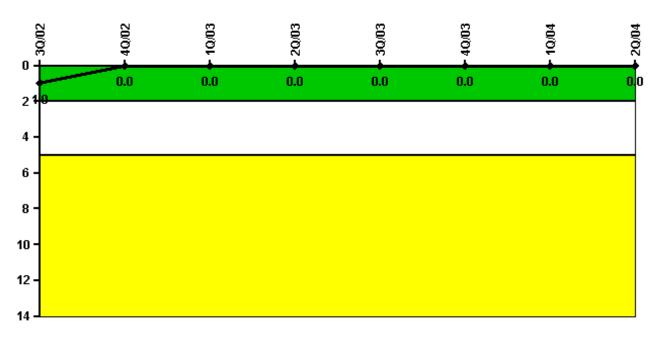


Thresholds: White < 94.0% Yellow < 90.0%

### Notes

Alert & Notification System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful siren-tests	4522	4538	4459	4461	4415	4457	4464	4440
Total sirens-tests	4544	4544	4473	4544	4482	4480	4480	4480
Indicator value	98.8%	99.1%	99.3%	99.3%	99.1%	99.0%	98.9%	99.2%

# **Occupational Exposure Control Effectiveness**

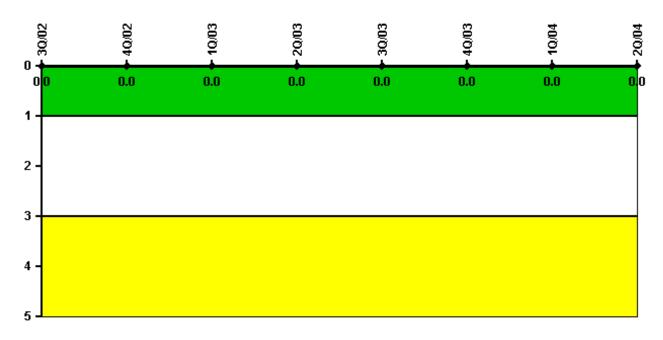


Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	20/04
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	О	0	О	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	1	0	О	О	0	О	0	О

# **RETS/ODCM Radiological Effluent**



Thresholds: White > 1.0 Yellow > 3.0

#### Votes

RETS/ODCM Radiological Effluent	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	20/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	О	0	0	0	0	0	0	О

Licensee Comments: none

Physical Protection information not publicly available.

Action Matrix Summary | Inspection Findings Summary | PI Summary | Reactor Oversight Process

Last Modified: September 8, 2004