

# Byron 1

## 2Q/2004 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



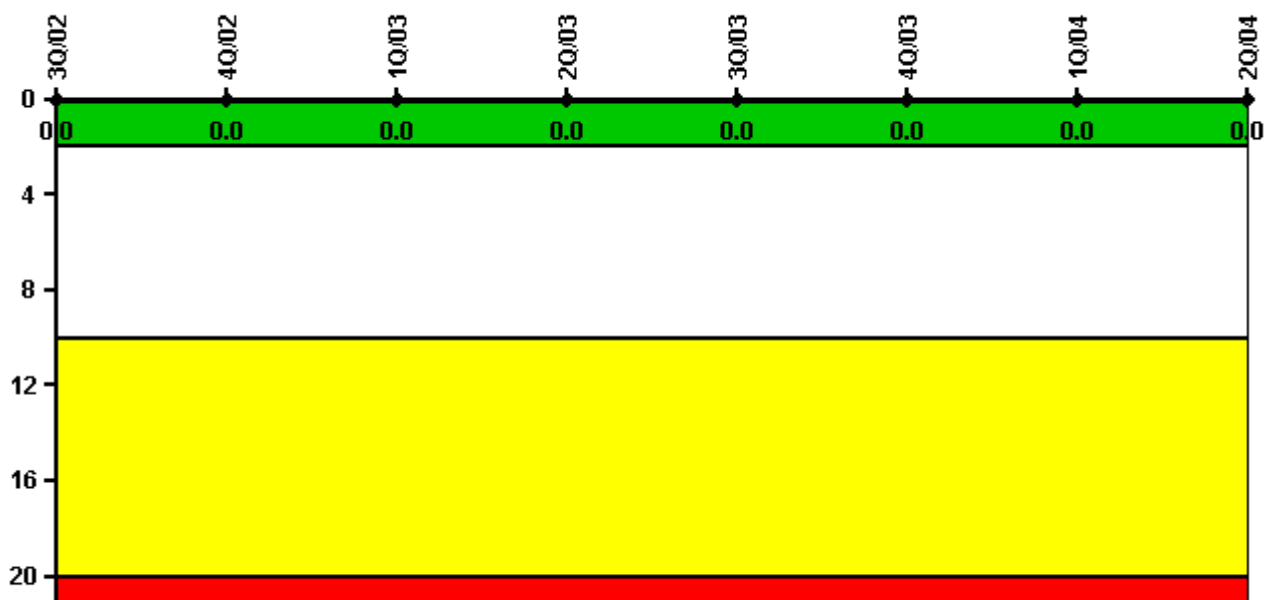
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	2.0	0	0	0	0	0	0
Critical hours	2208.0	2169.9	2160.0	2183.0	2015.2	1910.2	2184.0	2183.0
Indicator value	0	1.7	1.6	1.6	1.6	0	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



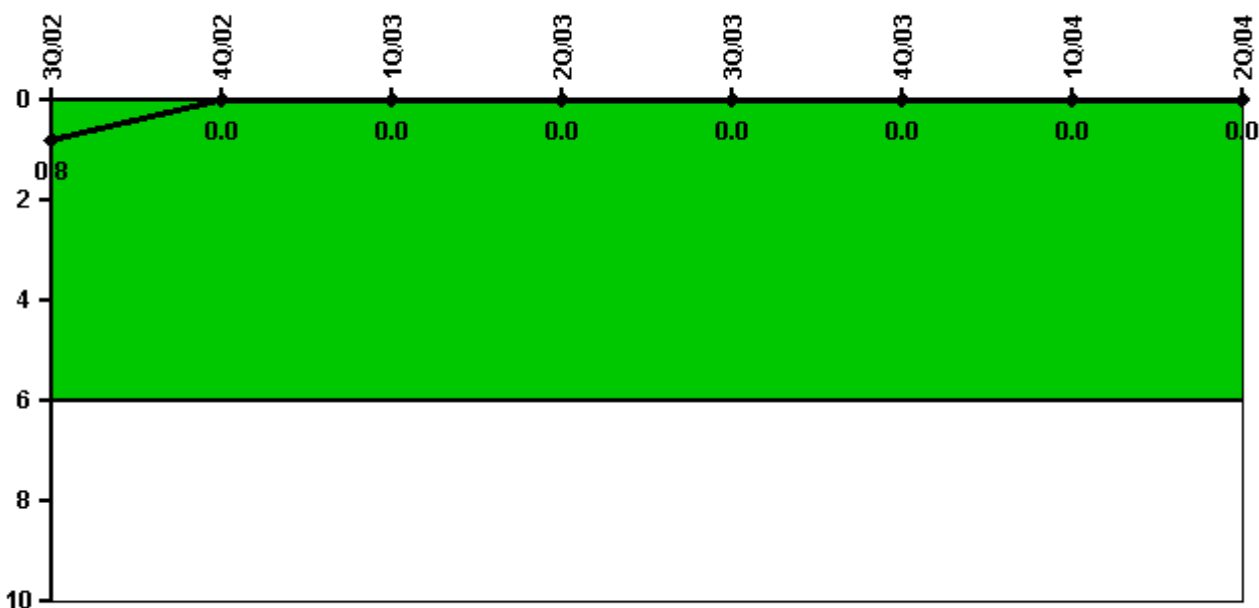
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	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

Licensee Comments: none

### 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	0	0	0
Critical hours	2208.0	2169.9	2160.0	2183.0	2015.2	1910.2	2184.0	2183.0
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



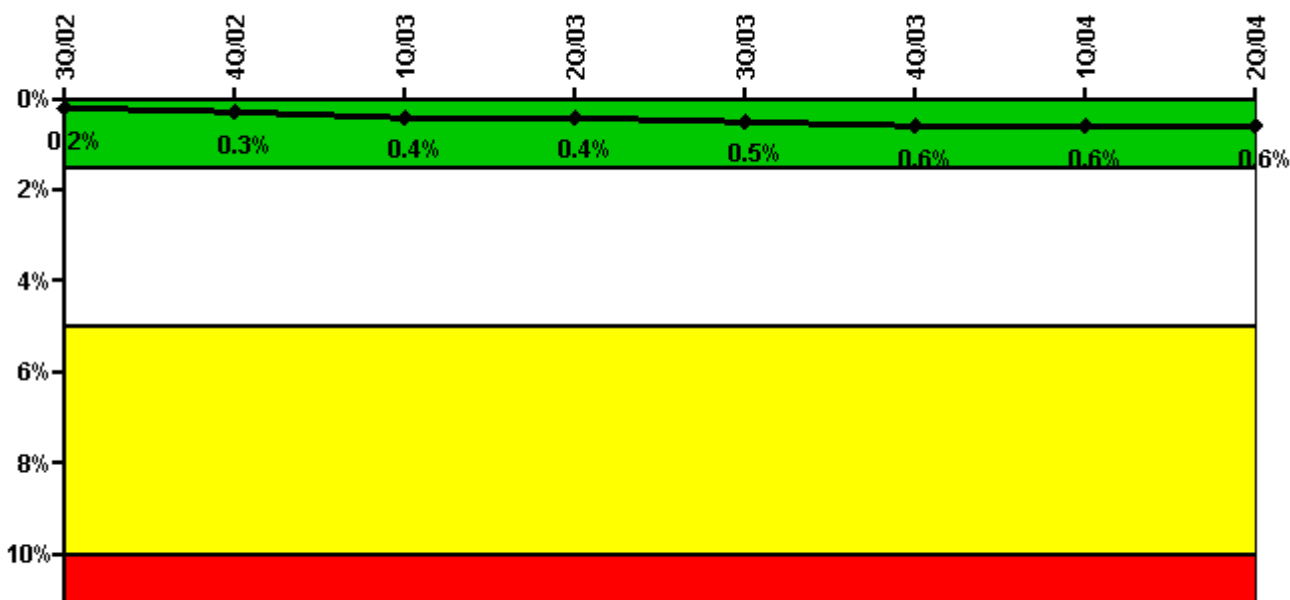
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	1.40	2.90	10.80	4.10	3.00	5.60	76.10	4.20
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
<b>Train 2</b>								
Planned unavailable hours	4.10	1.60	4.40	3.20	5.50	2.00	26.80	1.70
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	2183.00	2208.00	2209.00	2184.00	2183.00
<b>Indicator value</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.7%</b>

Licensee Comments: none

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

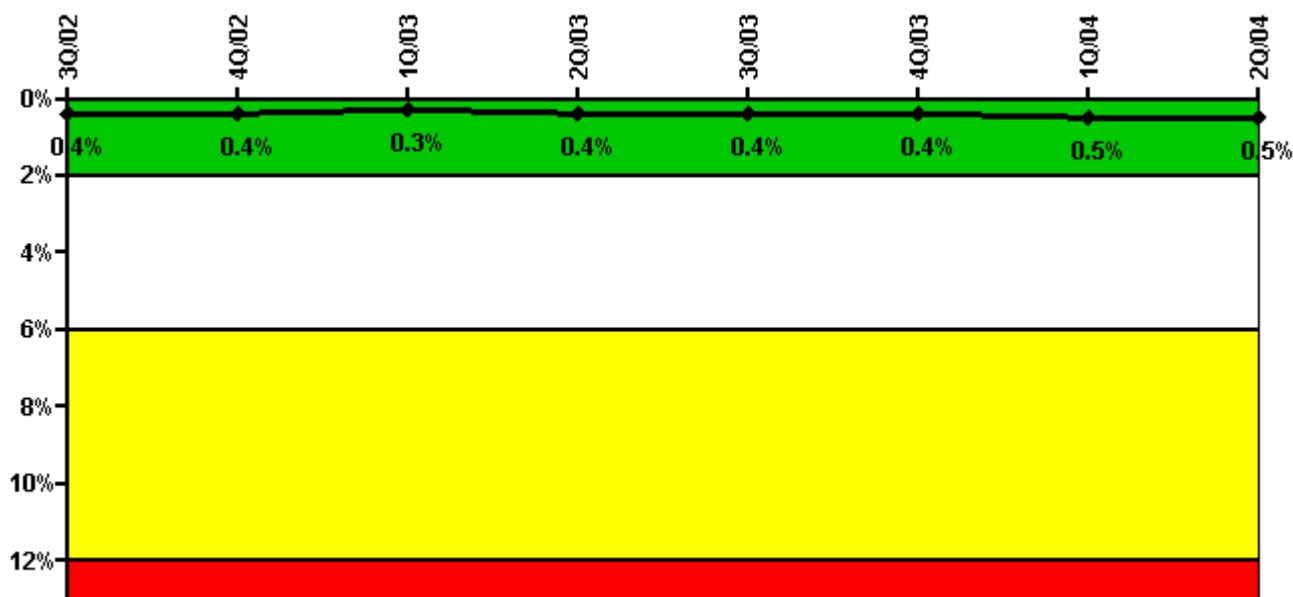


Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	1.40	2.90	49.20	4.10	21.90	77.70	1.50	4.20
Unplanned unavailable hours	0	0	8.10	0	0	50.70	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	2169.70	2160.00	2183.00	2015.22	1910.20	2184.00	2183.00
<b>Train 2</b>								
Planned unavailable hours	4.10	73.70	12.30	1.70	39.90	2.00	3.70	1.70
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	2169.70	2160.00	2183.00	2015.22	1910.20	2184.00	2183.00
<b>Train 3</b>								
Planned unavailable hours	1.40	3.20	2.90	4.10	15.50	3.50	1.50	4.20
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	2169.70	2160.00	2183.00	2015.22	1910.20	2184.00	2183.00
<b>Train 4</b>								
Planned unavailable hours	4.10	1.60	28.30	1.70	2.20	3.80	3.70	1.70
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	2169.70	2160.00	2183.00	2015.22	1910.20	2184.00	2183.00
<b>Indicator value</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>

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



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

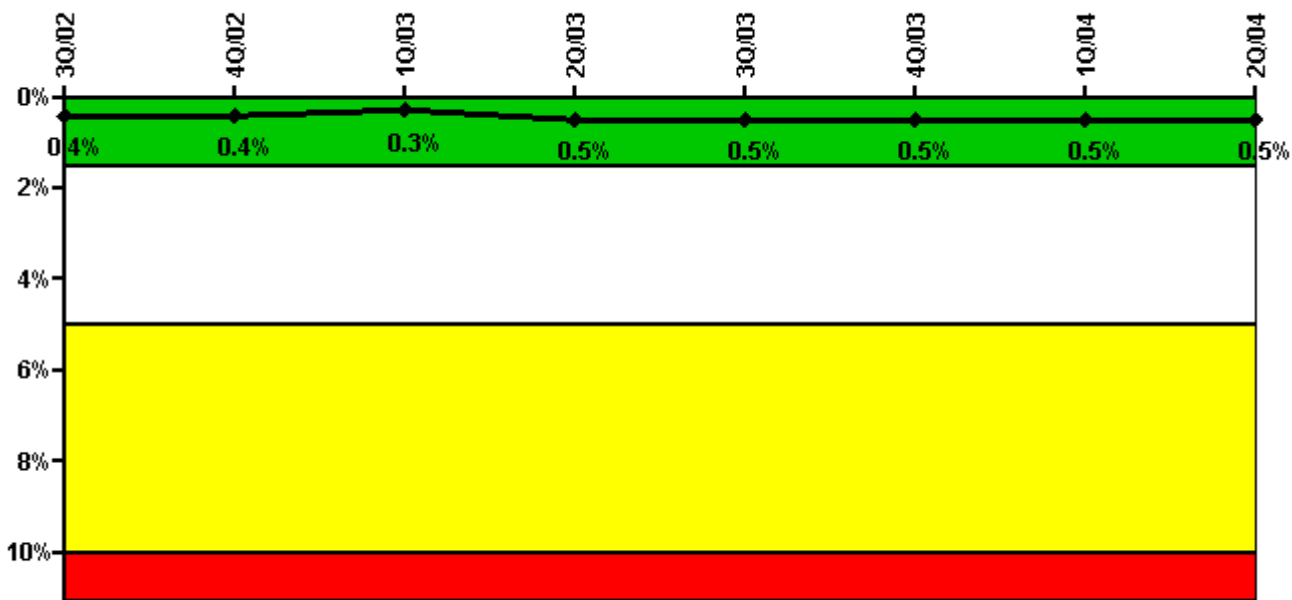
#### Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	3.10	6.10	4.60	6.30	4.50	4.90	2.30	7.00
Unplanned unavailable hours	0	0	0	0	0	0	0	7.50
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	2169.70	2160.00	2183.00	2015.22	1910.20	2184.00	2183.00
<b>Train 2</b>								
Planned unavailable hours	19.80	13.20	6.30	43.30	3.40	3.50	42.30	3.40
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	2169.70	2160.00	2183.00	2015.22	1910.20	2184.00	2183.00
<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>0.4%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments:

2Q/04: 1A Aux Feed Train, 1263 hours of T/2 fault exposure.

## Safety System Unavailability, Residual Heat Removal System



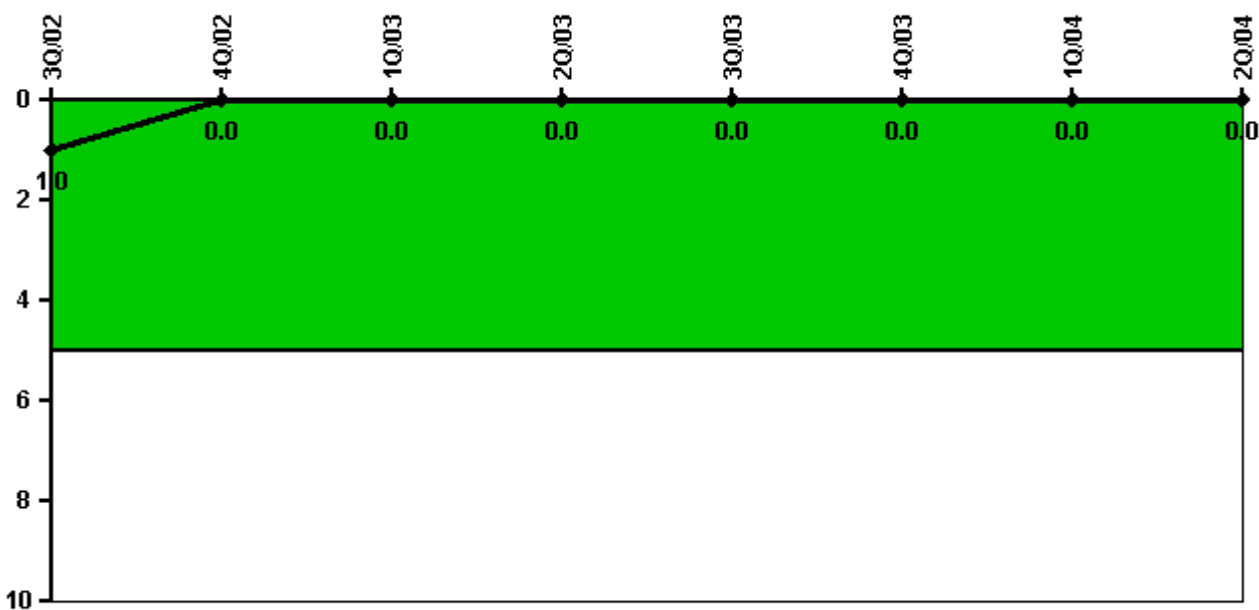
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

### Notes

Safety System Unavailability, Residual Heat Removal System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
<b>Train 1</b>								
Planned unavailable hours	12.30	2.90	2.90	64.70	12.00	4.40	1.50	4.20
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
<b>Train 2</b>								
Planned unavailable hours	4.40	1.60	4.40	51.10	2.20	2.80	3.70	1.90
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	2183.00	2208.00	2209.00	2184.00	2183.00
<b>Indicator value</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.5%</b>	<b>0.5%</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

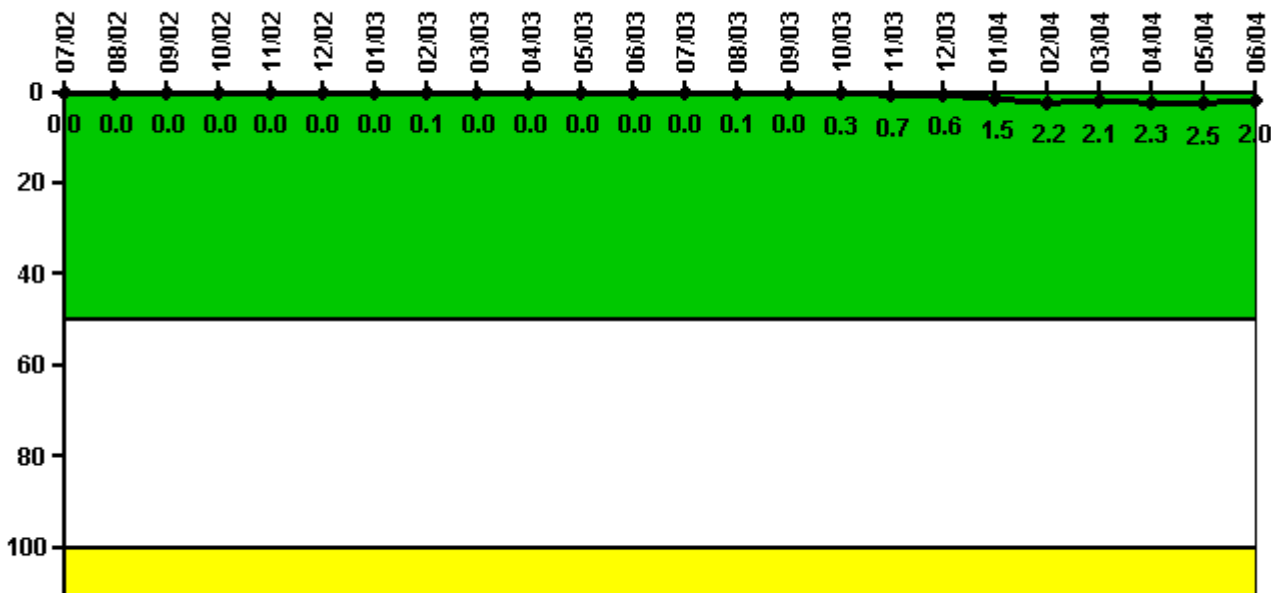
#### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



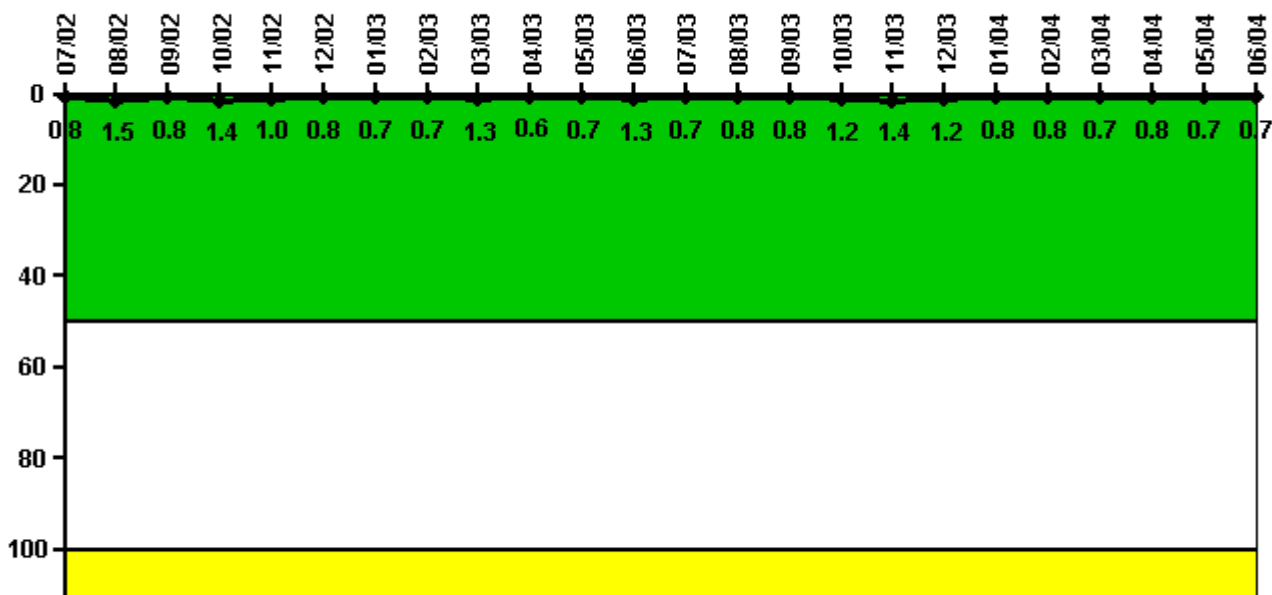
Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.000295	0.000313	0.000334	0.000333	0.000349	0.000364	0.000386	0.000662	0.000478	0.000426	0.000439	0.000420
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	0.1	0	0	0	0
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	0.000427	0.000556	0.000416	0.003380	0.006810	0.006070	0.014500	0.021600	0.021300	0.023100	0.024500	0.019900
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	0.1	0	0.3	0.7	0.6	1.5	2.2	2.1	2.3	2.5	2.0

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

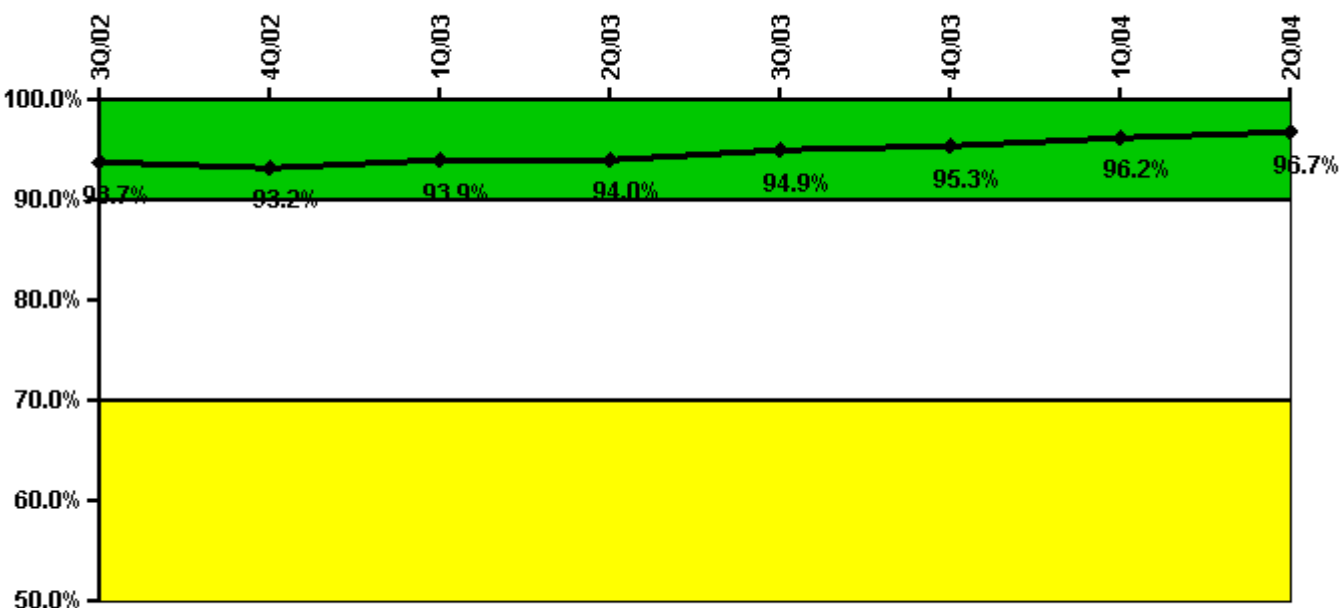
Reactor Coolant System Leakage	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum leakage	0.078	0.151	0.076	0.139	0.097	0.083	0.074	0.074	0.128	0.061	0.075	0.128
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.8	1.5	0.8	1.4	1.0	0.8	0.7	0.7	1.3	0.6	0.7	1.3

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	0.068	0.084	0.076	0.118	0.142	0.122	0.077	0.083	0.071	0.082	0.067	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	0.7	0.8	0.8	1.2	1.4	1.2	0.8	0.8	0.7	0.8	0.7	0.7

Licensee Comments: none

### Drill/Exercise Performance



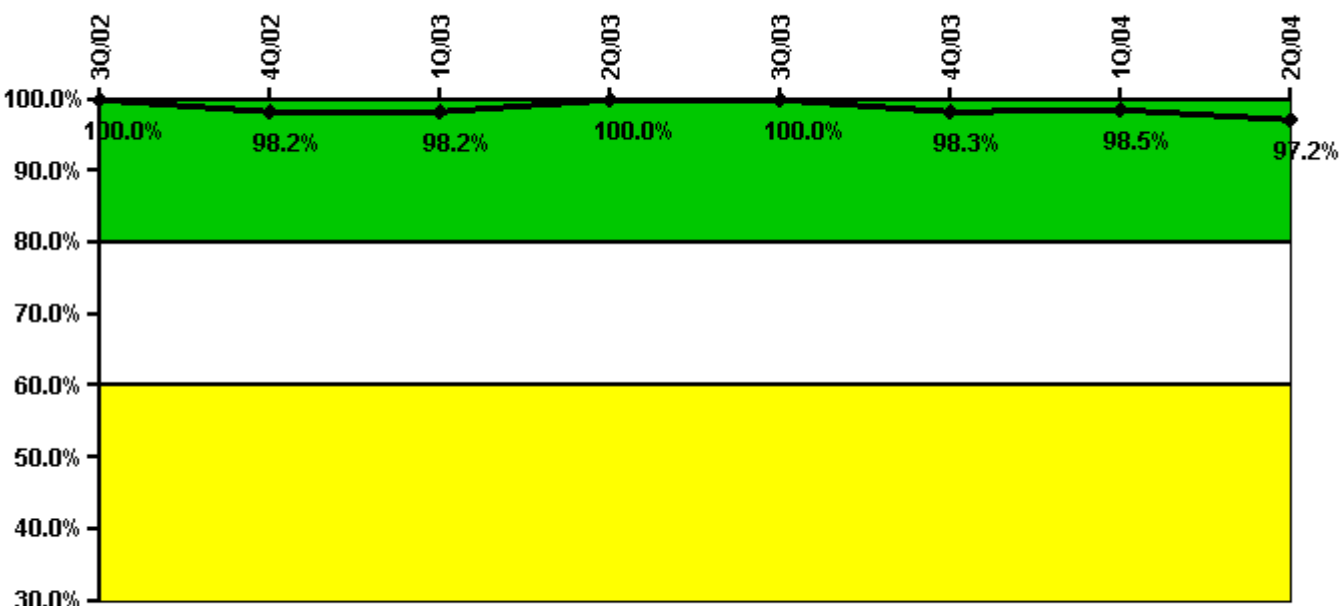
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful opportunities	33.0	43.0	39.0	36.0	45.0	18.0	50.0	62.0
Total opportunities	34.0	47.0	41.0	38.0	47.0	18.0	50.0	62.0
Indicator value	93.7%	93.2%	93.9%	94.0%	94.9%	95.3%	96.2%	96.7%

Licensee Comments: none

### ERO Drill Participation



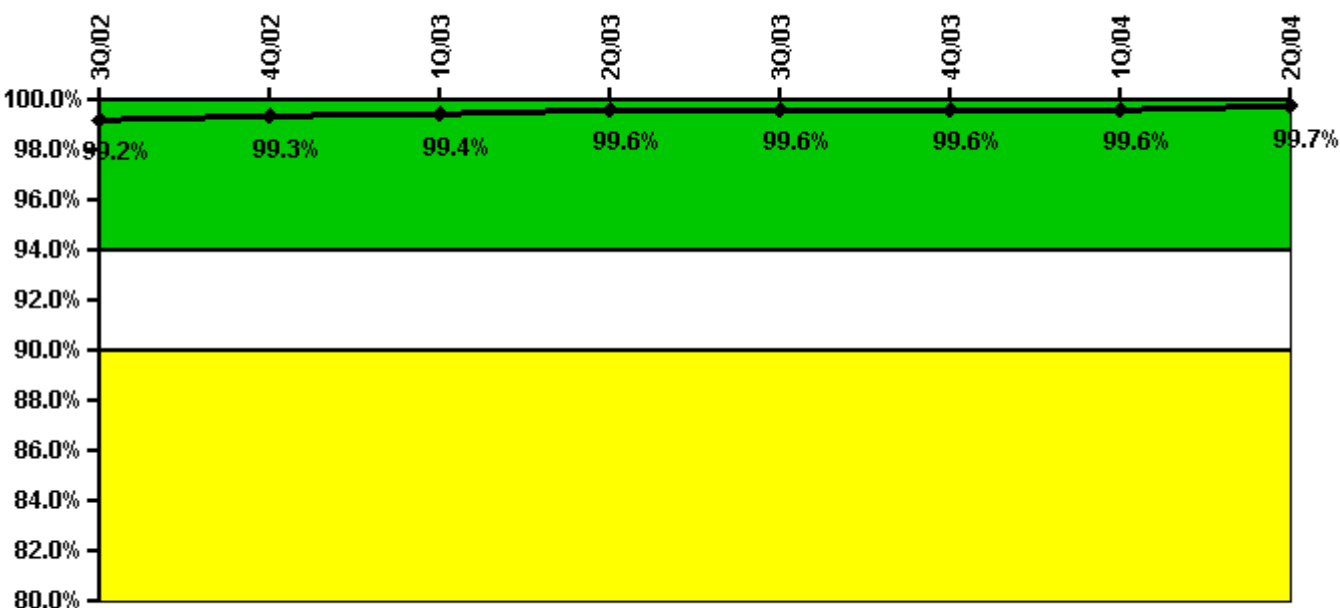
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Participating Key personnel	55.0	54.0	54.0	57.0	59.0	57.0	67.0	70.0
Total Key personnel	55.0	55.0	55.0	57.0	59.0	58.0	68.0	72.0
Indicator value	100.0%	98.2%	98.2%	100.0%	100.0%	98.3%	98.5%	97.2%

Licensee Comments: none

### Alert & Notification System



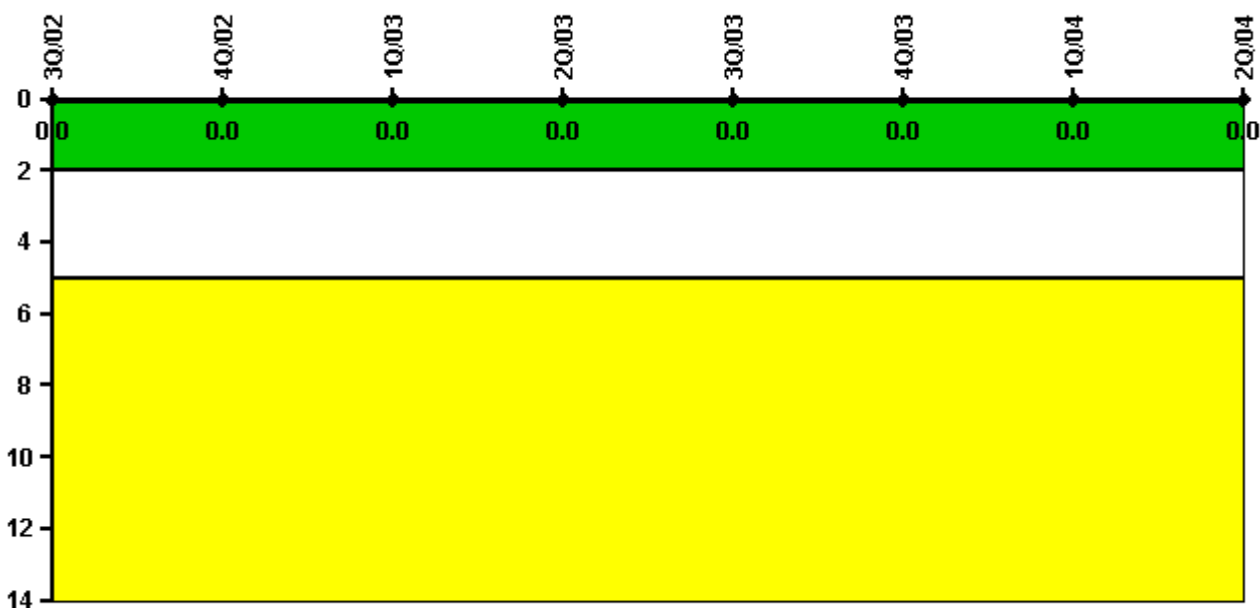
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful siren-tests	5994	5991	5898	5990	5988	5997	6000	5996
Total sirens-tests	6016	6016	5922	6016	6016	6016	6016	6016
Indicator value	99.2%	99.3%	99.4%	99.6%	99.6%	99.6%	99.6%	99.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



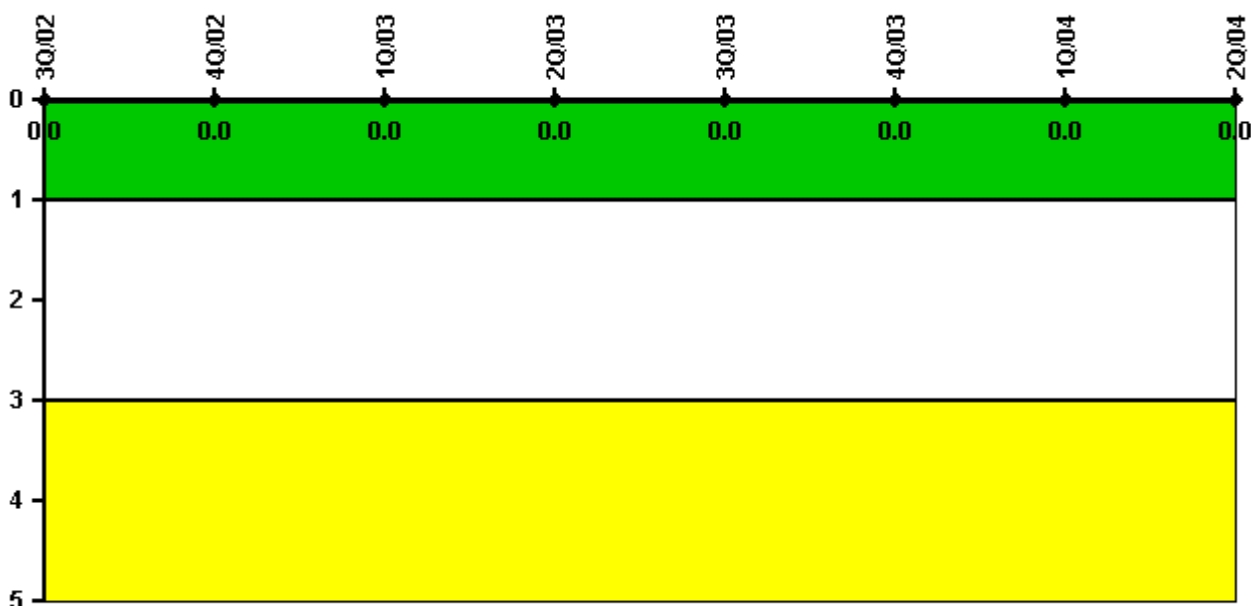
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
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	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/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: September 8, 2004