

# Columbia Generating Station

## 1Q/2003 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



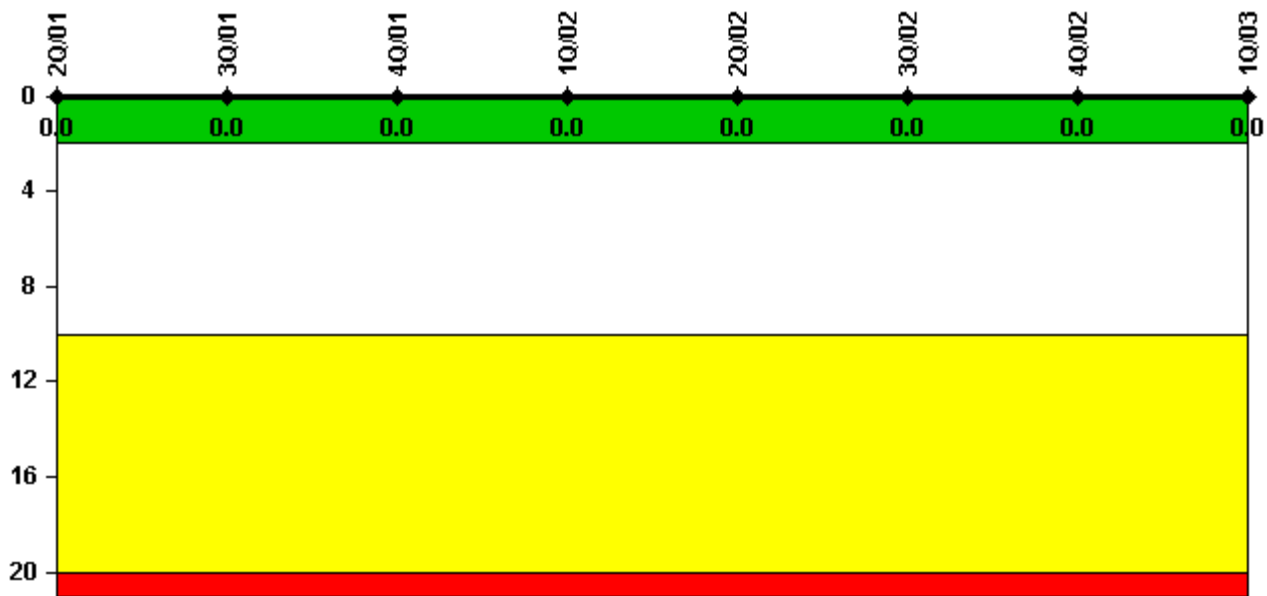
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1265.4	2080.0	2209.0	1944.8	2183.0	2208.0	2209.0	1849.5
Indicator value	0.9	0	0	0	0	0	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



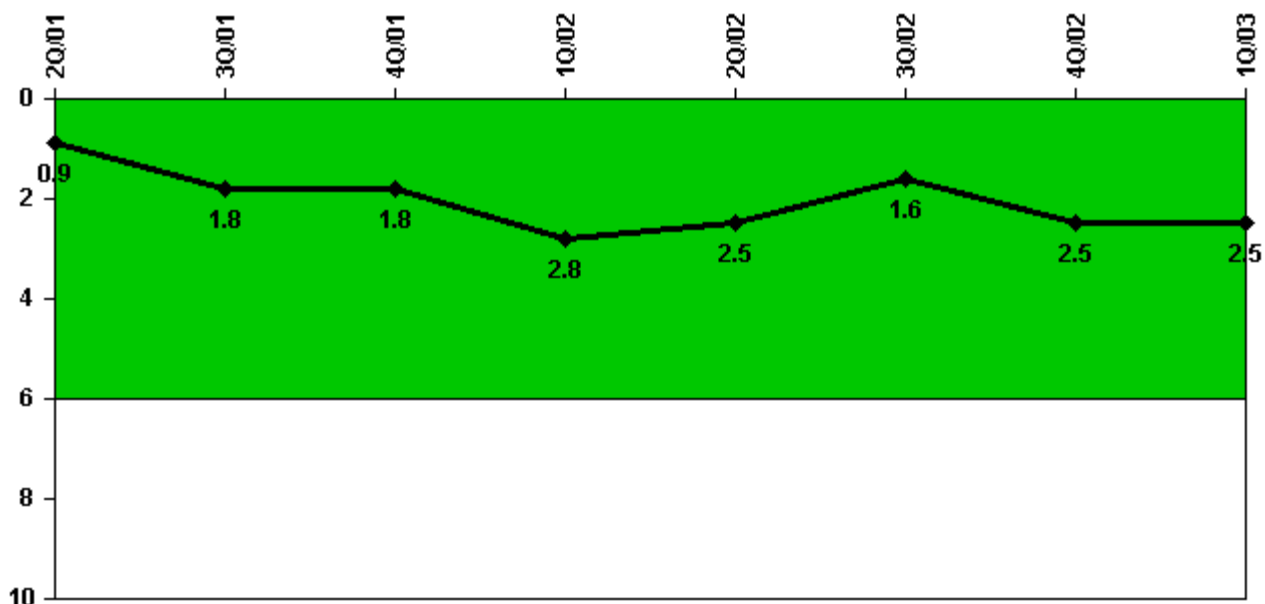
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
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

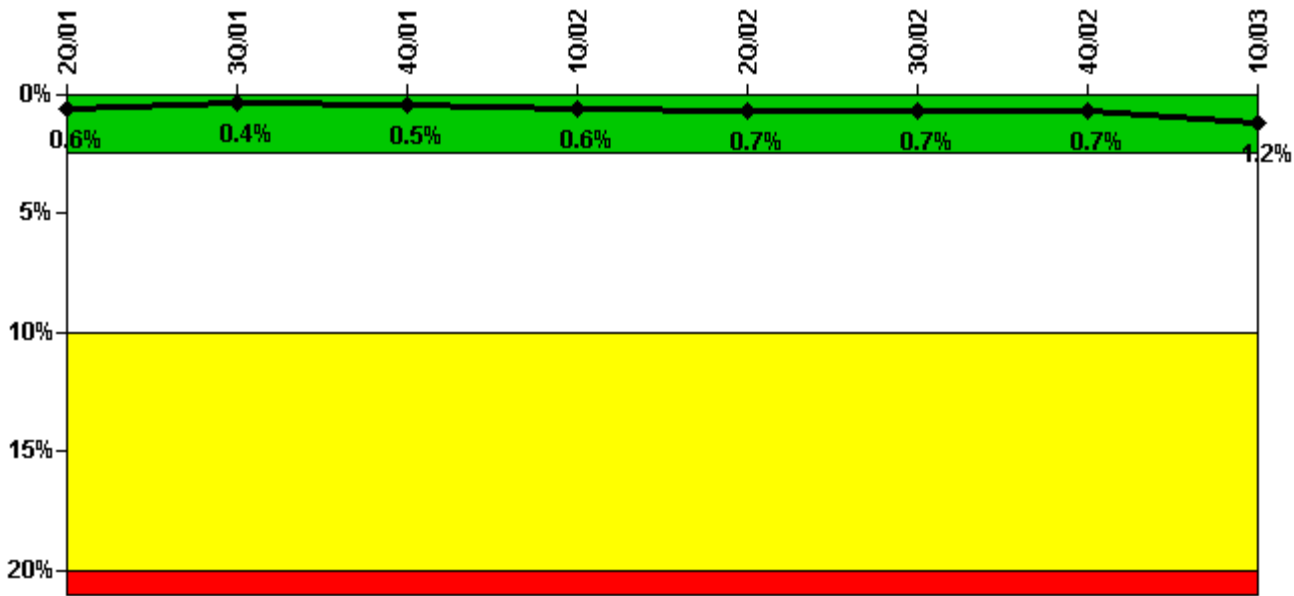
#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Unplanned power changes	0	2.0	0	1.0	0	1.0	1.0	1.0
Critical hours	1265.4	2080.0	2209.0	1944.8	2183.0	2208.0	2209.0	1849.5
Indicator value	0.9	1.8	1.8	2.8	2.5	1.6	2.5	2.5

Licensee Comments:

1Q/03: The NRC granted an NOED during the quarter, which, if not granted, may have resulted in another unplanned power change.

### Safety System Unavailability, Emergency AC Power, >2EDG



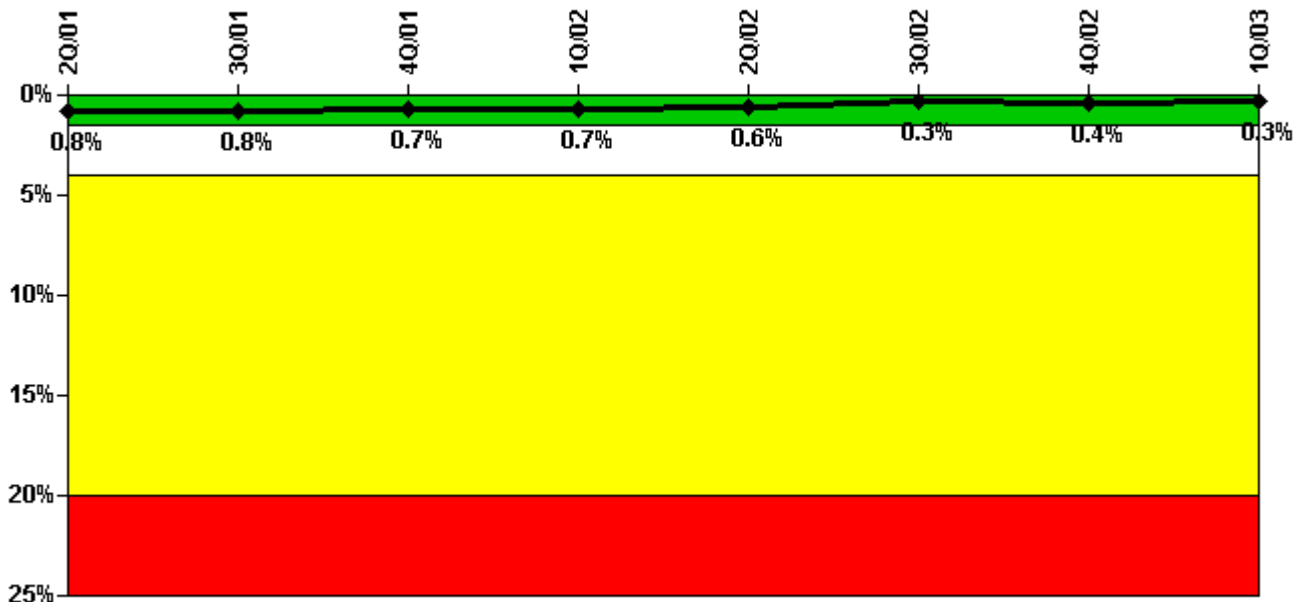
Thresholds: White > 2.5% Yellow > 10.0% Red > 20.0%

**Notes**

Safety System Unavailability, Emergency AC Power, >2EDG	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
<b>Train 1</b>								
Planned unavailable hours	1.10	1.57	21.46	8.02	4.36	2.86	9.47	4.02
Unplanned unavailable hours	0	0	0	0	0	0	0	317.58
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	0.68	2.21	4.17	53.87	5.43	1.87	2.31	77.49
Unplanned unavailable hours	3.72	0	40.96	40.97	0	58.30	0	0
Fault exposure hours	37.88	0	4.31	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
<b>Train 3</b>								
Planned unavailable hours	4.17	7.04	7.12	3.49	9.08	3.42	21.33	8.10
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	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
<b>Indicator value</b>	<b>0.6%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>1.2%</b>

Licensee Comments: none

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



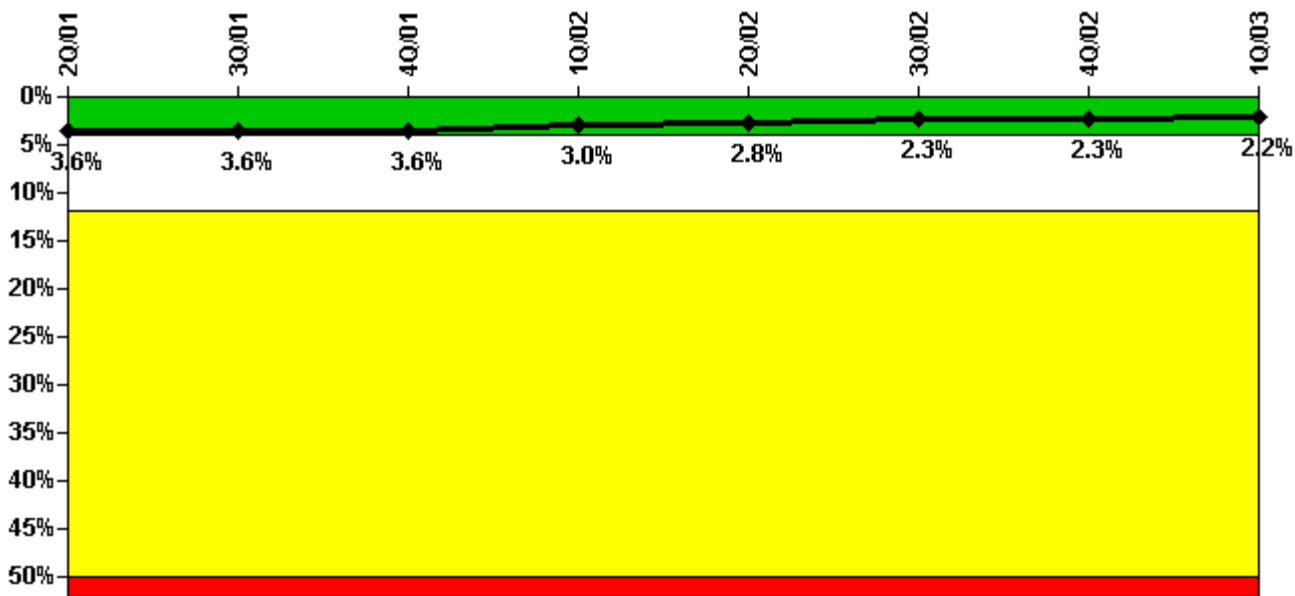
Thresholds: White > 1.5% Yellow > 4.0% Red > 20.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPCS)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Train 1								
Planned unavailable hours	2.19	2.97	2.32	11.86	3.64	1.67	17.46	0.45
Unplanned unavailable hours	0.58	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	1576.53	2094.88	2209.00	1964.50	2183.00	2208.00	2209.00	1865.85
Indicator value	0.8%	0.8%	0.7%	0.7%	0.6%	0.3%	0.4%	0.3%

Licensee Comments: none

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



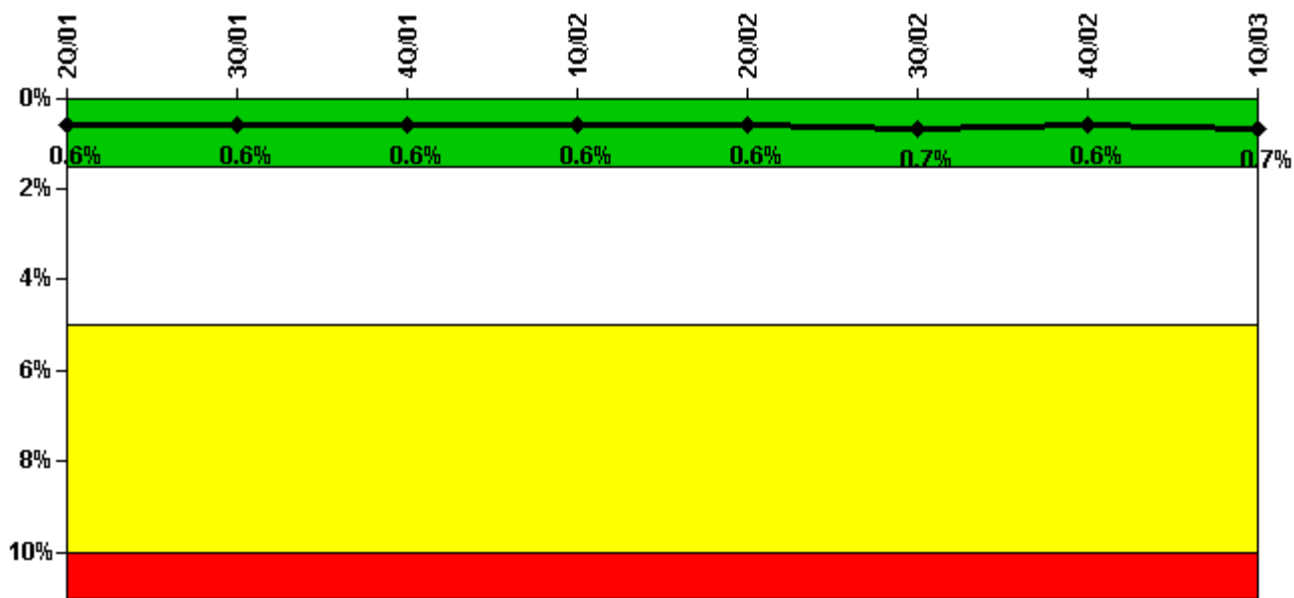
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

**Notes**

Safety System Unavailability, Heat Removal System (RCIC)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Train 1								
Planned unavailable hours	4.94	1.45	10.68	10.23	6.46	40.55	6.48	11.30
Unplanned unavailable hours	159.53	18.23	4.00	0.73	0	3.25	0	1.15
Fault exposure hours	9.56	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1244.70	2075.03	2209.00	1948.83	2183.00	2208.00	2209.00	1851.33
Indicator value	3.6%	3.6%	3.6%	3.0%	2.8%	2.3%	2.3%	2.2%

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



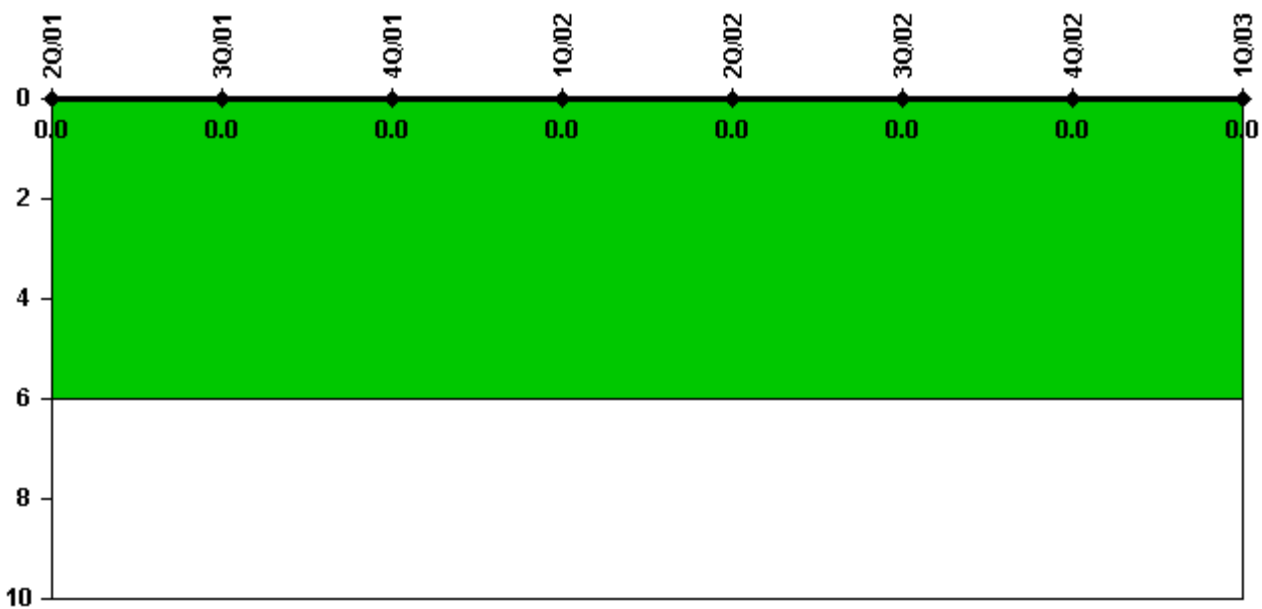
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
<b>Train 1</b>								
Planned unavailable hours	7.81	4.43	7.30	23.42	4.55	1.00	0.48	0.28
Unplanned unavailable hours	0	0	0	0	0	7.70	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	2182.63	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	54.34	1.45	0.63	26.15	16.53	0.67	0.45	47.45
Unplanned unavailable hours	3.72	0	36.80	0	0.25	58.30	0	0
Fault exposure hours	37.88	0	4.31	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1993.08	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2160.00
Indicator value	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.6%	0.7%

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

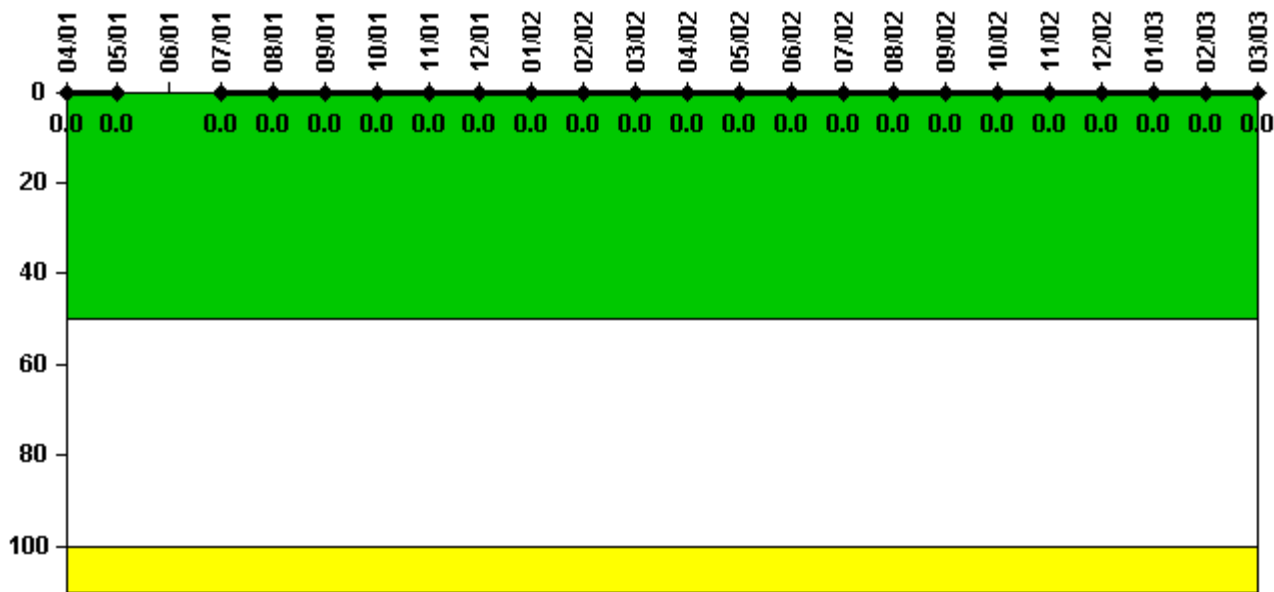
#### Notes

Safety System Functional Failures (BWR)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
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



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

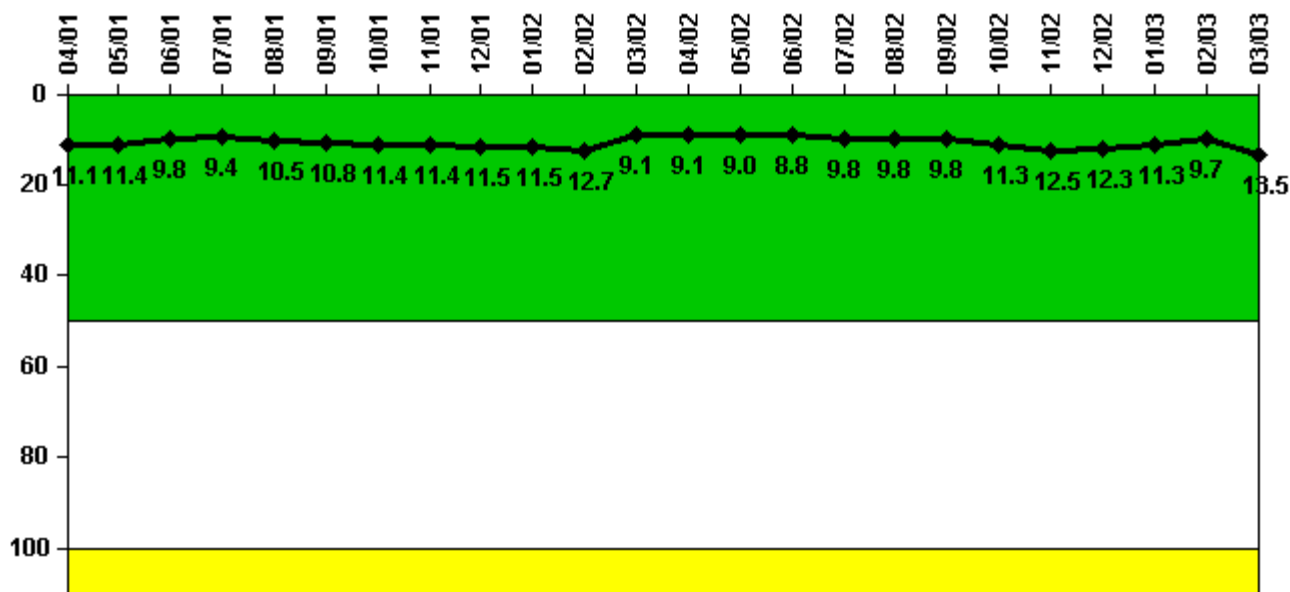
Reactor Coolant System Activity	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum activity	0.000024	0.000022	N/A	0.000015	0.000008	0.000010	0.000013	0.000014	0.000017	0.000018	0.000016	0.000017
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	N/A	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum activity	0.000021	0.000011	0.000016	0.000013	0.000011	0.000010	0.000013	0.000018	0.000014	0.000015	0.000010	0.000018
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum leakage	2.780	2.840	2.440	2.350	2.620	2.690	2.840	2.840	2.870	2.880	3.170	2.270
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	11.1	11.4	9.8	9.4	10.5	10.8	11.4	11.4	11.5	11.5	12.7	9.1

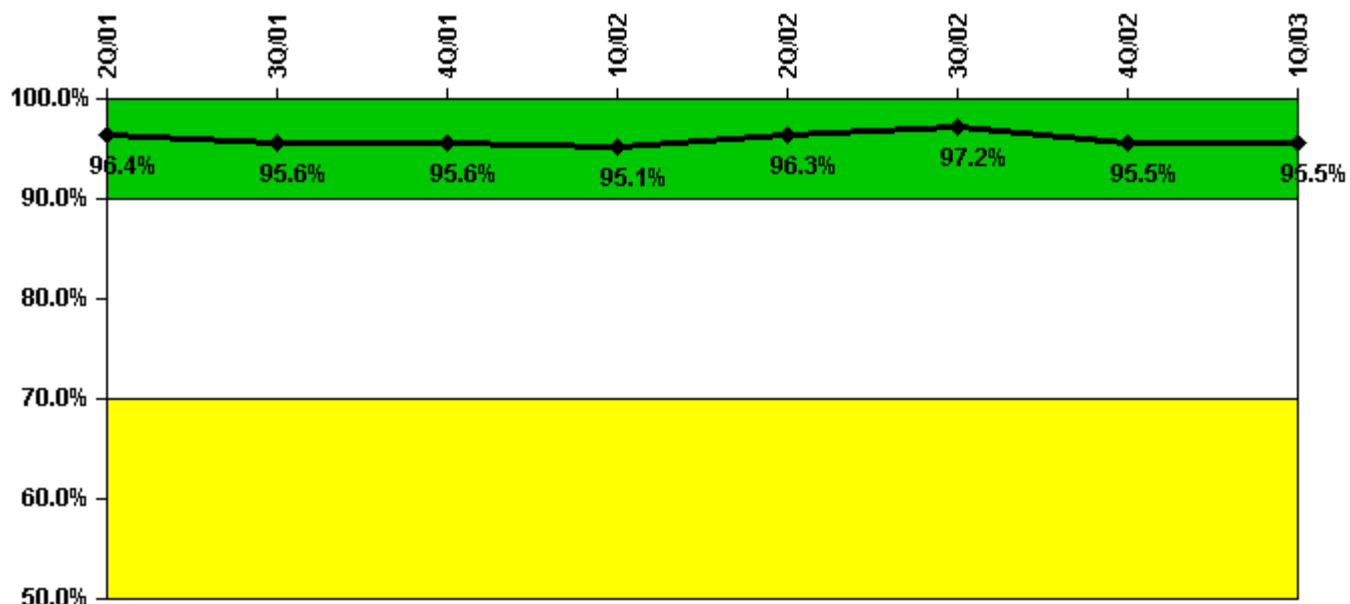
  

Reactor Coolant System Leakage	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum leakage	2.280	2.260	2.210	2.440	2.440	2.460	2.820	3.125	3.070	2.820	2.420	3.370
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	9.1	9.0	8.8	9.8	9.8	9.8	11.3	12.5	12.3	11.3	9.7	13.5

Licensee Comments:

3/03: This indicator data is RCS Total Leakage. Columbia Generating Station Technical Specifications is for Total Leakage.

### Drill/Exercise Performance



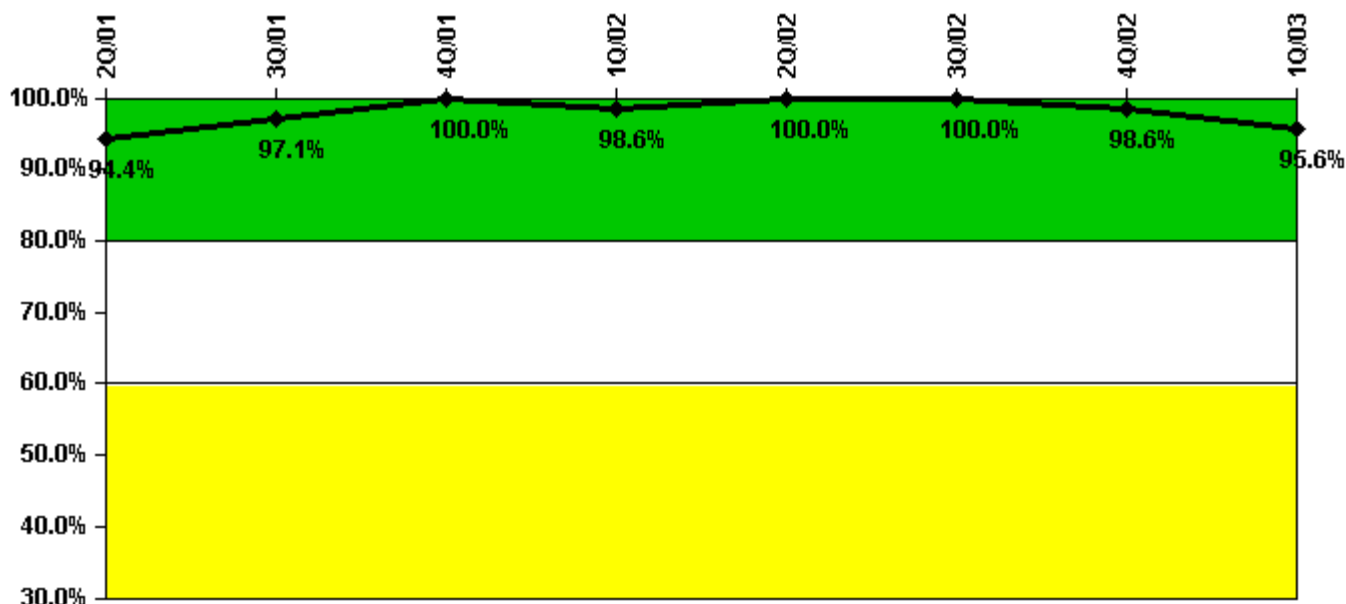
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Successful opportunities	6.0	24.0	8.0	9.0	16.0	20.0	10.0	13.0
Total opportunities	6.0	26.0	8.0	10.0	16.0	20.0	12.0	13.0
Indicator value	96.4%	95.6%	95.6%	95.1%	96.3%	97.2%	95.5%	95.5%

Licensee Comments: none

### ERO Drill Participation



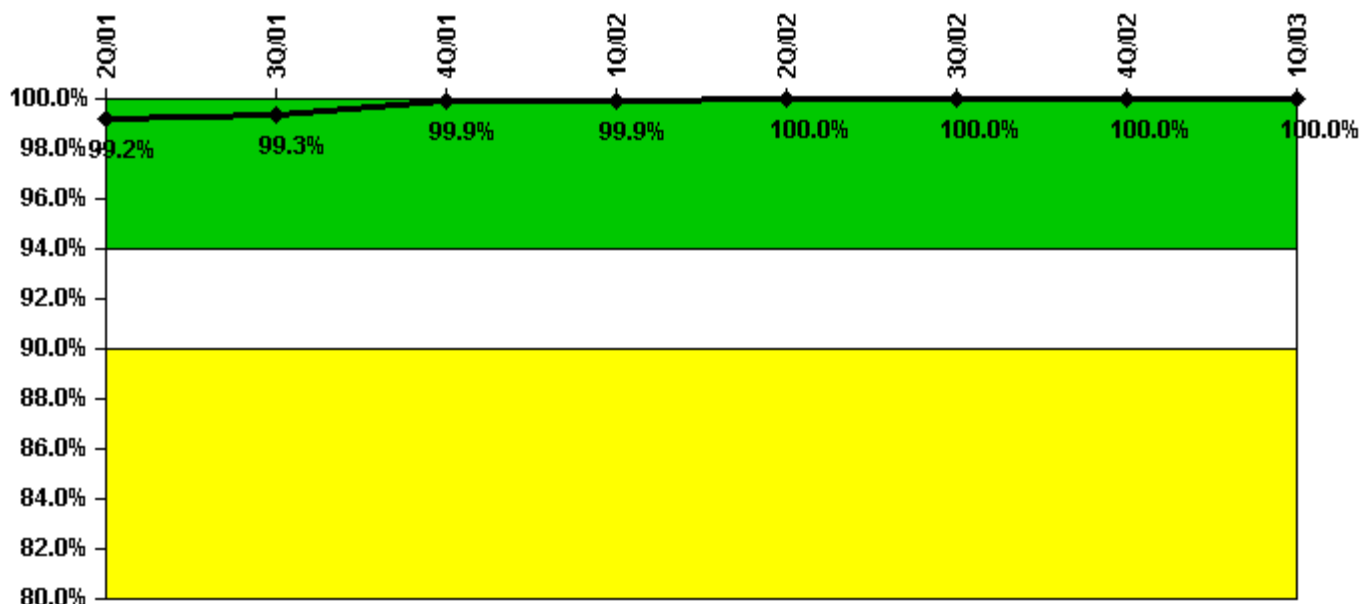
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Participating Key personnel	68.0	67.0	70.0	71.0	74.0	70.0	69.0	65.0
Total Key personnel	72.0	69.0	70.0	72.0	74.0	70.0	70.0	68.0
Indicator value	94.4%	97.1%	100.0%	98.6%	100.0%	100.0%	98.6%	95.6%

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Successful siren-tests	285	286	248	286	286	286	286	286
Total sirens-tests	286	286	248	286	286	286	286	286
Indicator value	99.2%	99.3%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



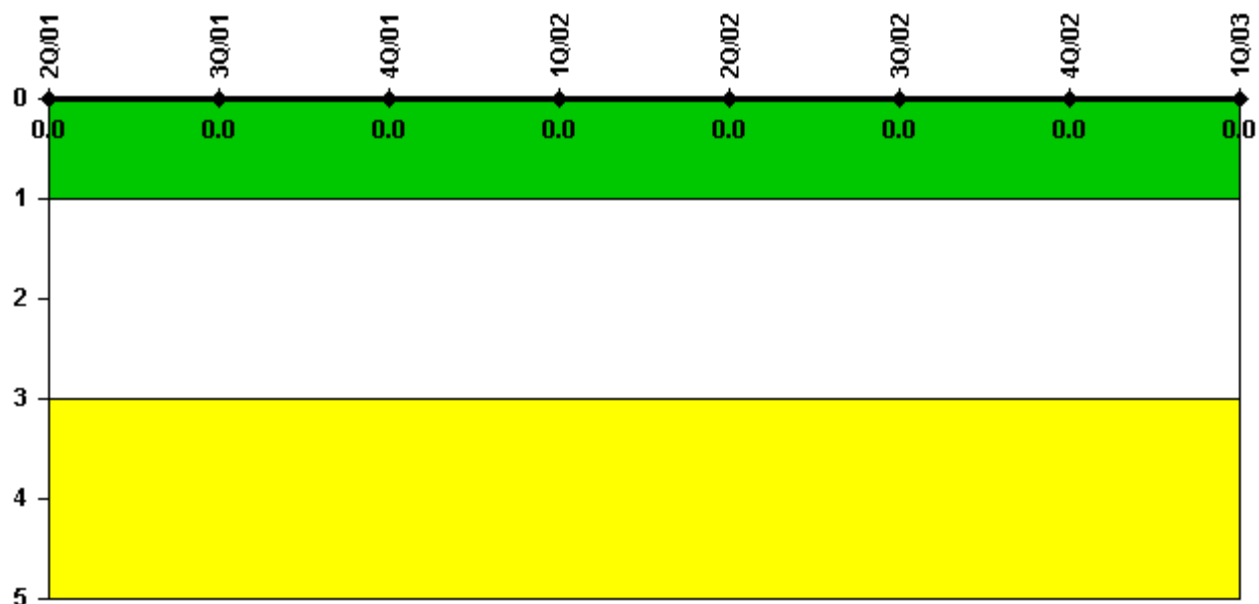
Thresholds: White > 2.0 Yellow > 5.0

**Notes**

Occupational Exposure Control Effectiveness	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
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
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### RETS/ODCM Radiological Effluent



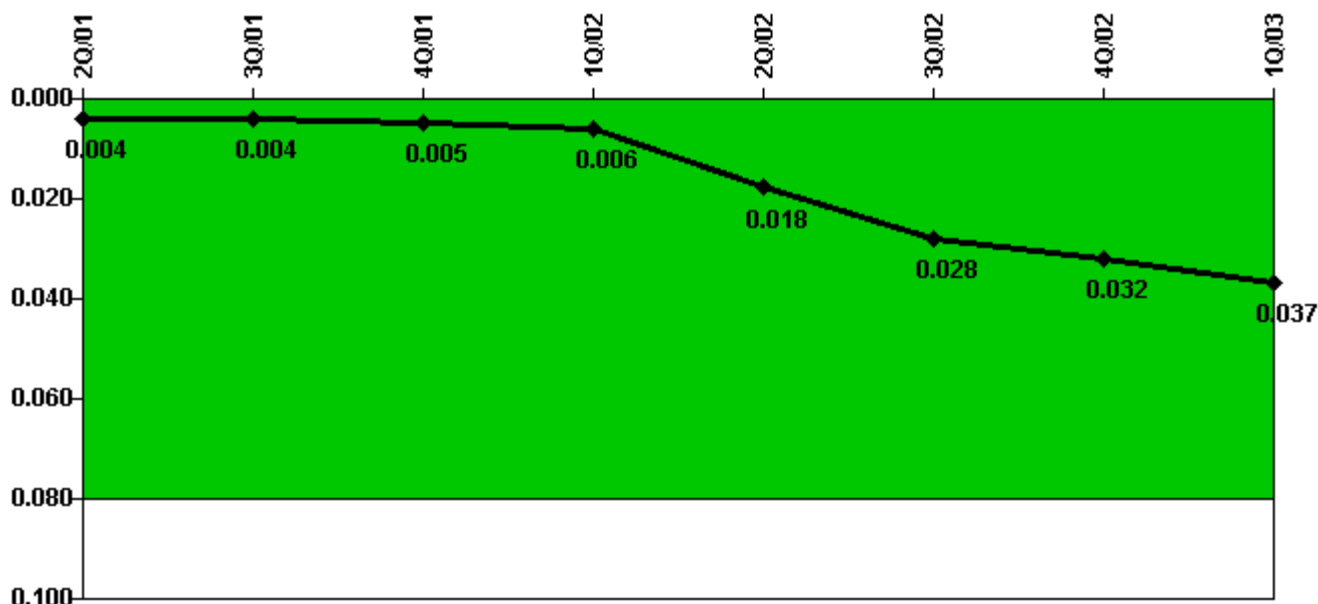
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Protected Area Security Performance Index



Thresholds: White > 0.080

#### Notes

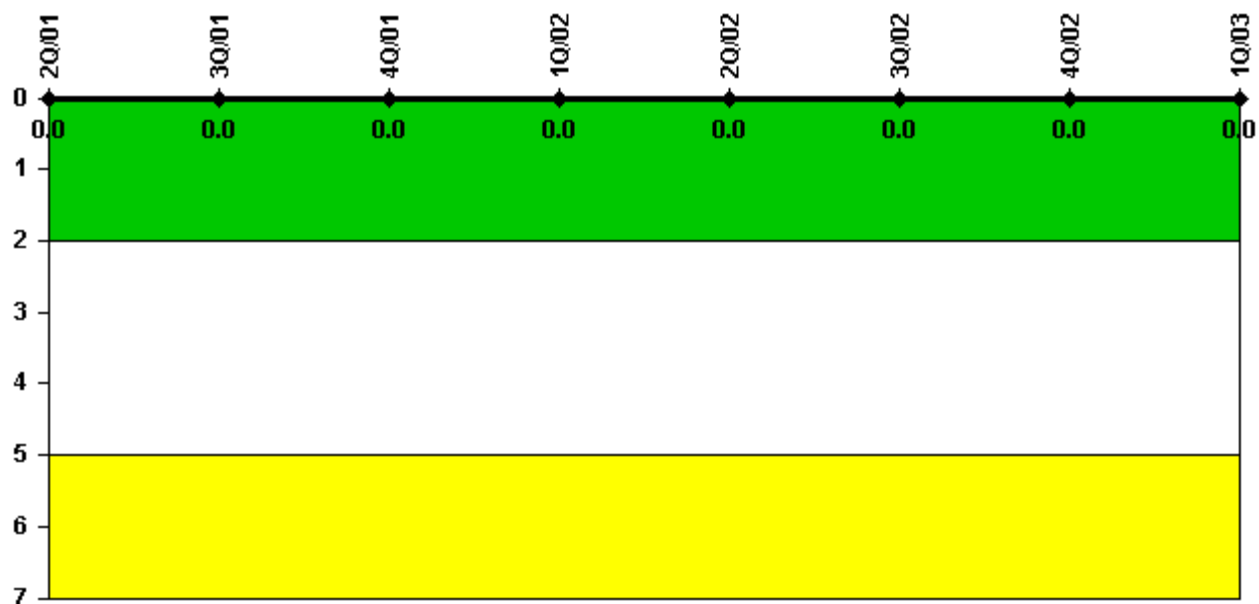
Protected Area Security Performance Index	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
IDS compensatory hours	12.30	47.80	45.20	18.20	360.40	61.20	106.30	98.40
CCTV compensatory hours	0.1	34.7	0	9.0	35.6	204.4	37.8	65.2
IDS normalization factor	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.004	0.004	0.005	0.006	0.018	0.028	0.032	0.037

Licensee Comments:

2Q/02: Revised May and June IDS Compensatory hours. Hours were do to an upgrade verses normal maintenance.



### Personnel Screening Program



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Program failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

FFD/Personnel Reliability	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

Last Modified: April 22, 2003