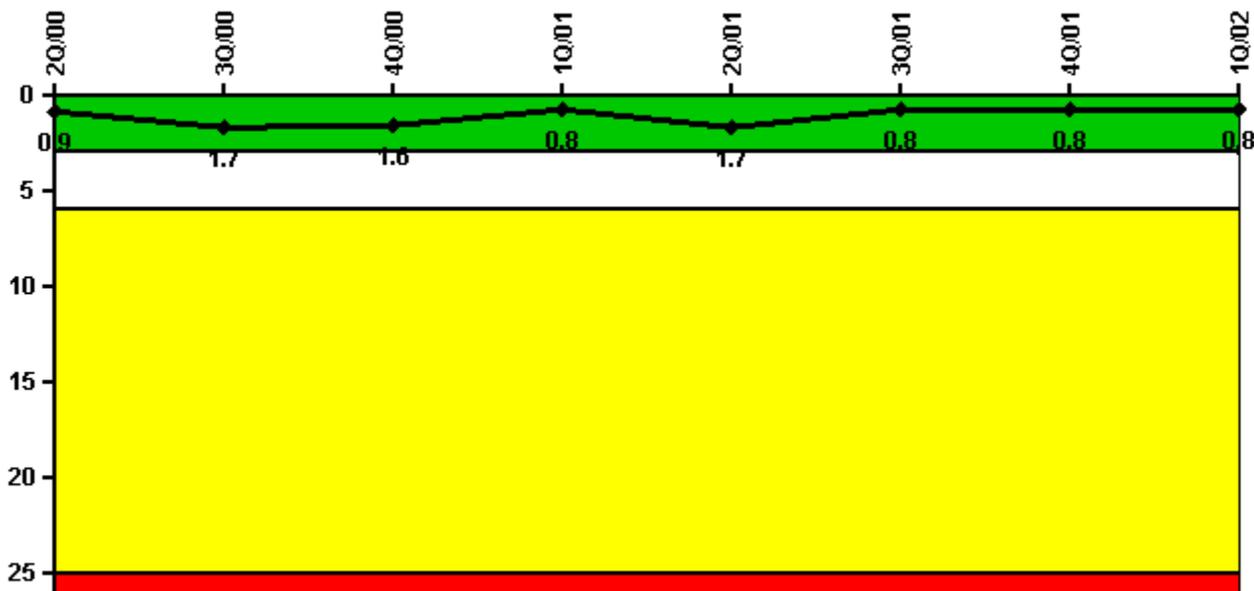


Byron 2

1Q/2002 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



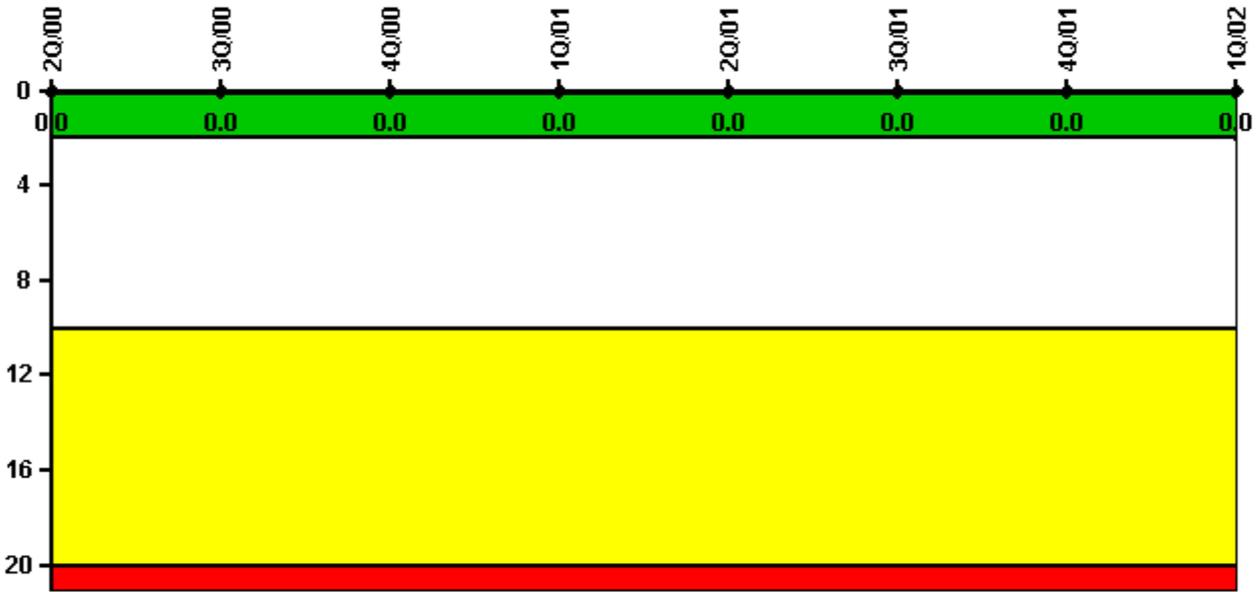
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Unplanned scrams	0	1.0	0	0	1.0	0	0	0
Critical hours	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0
Indicator value	0.9	1.7	1.6	0.8	1.7	0.8	0.8	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



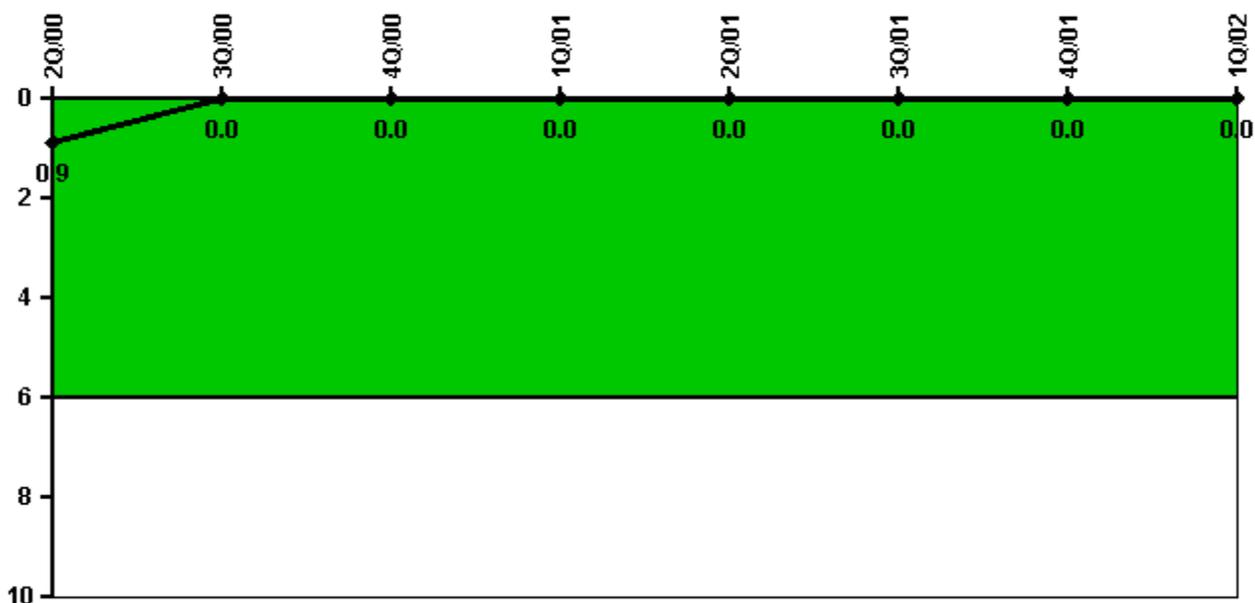
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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

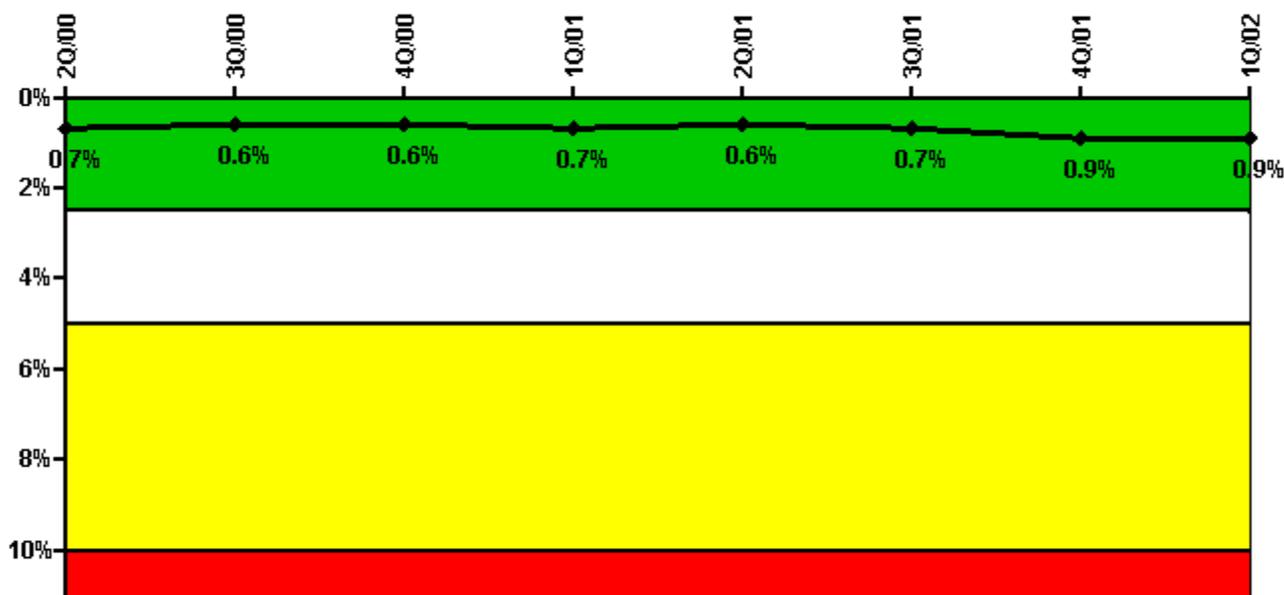
Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2183.0	2192.1	2209.0	2160.0	1795.3	2208.0	2209.0	2160.0
Indicator value	0.9	0	0	0	0	0	0	0

Licensee Comments:

1Q/02: During submittal of fourth quarter 2001 performance indicator (PI) data, a supporting comment was provided for the Unplanned Power Changes per 7000 Critical Hours PI and mentioned a request for and approval of a Notice of Enforcement Discretion (NOED) for Byron Units 1 and 2 during September 2001. The NOED addressed Main Steam Isolation Valves (MSIV) testing in Mode 3 that had not been performed. If the NRC had not granted the NOED, this may have resulted in an unplanned power change on the units involved. The condition was not counted as an unplanned power change during the third quarter because no actual change in reactor power occurred due to this condition. This is consistent with the response to Frequently Asked Question # 305 on this same topic, which was posted on March 21, 2002.

Safety System Unavailability, Emergency AC Power



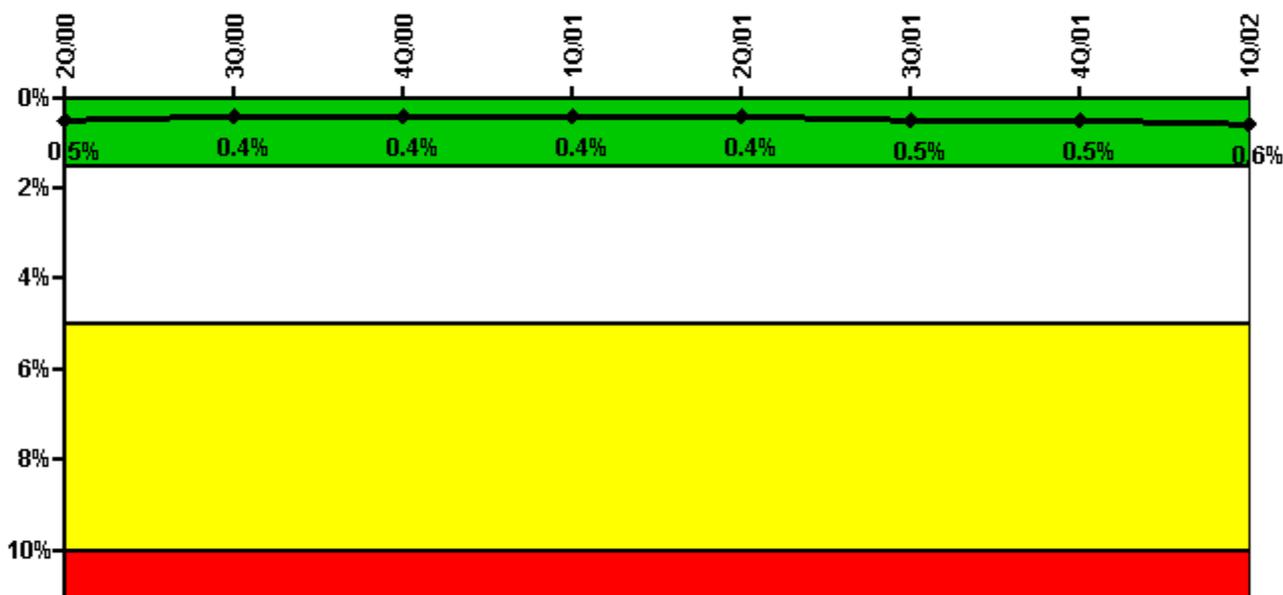
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	0	0	0.20	17.50	0	11.20	11.80	7.80
Unplanned unavailable hours	0	0	0	0	0	0	87.50	0
Fault exposure hours	0	0	0	0	0	0	3.90	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
Train 2								
Planned unavailable hours	8.00	0.32	0	0	6.20	0	18.30	17.60
Unplanned unavailable hours	27.30	0	0	0	0	8.20	15.90	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
Indicator value	0.7%	0.6%	0.6%	0.7%	0.6%	0.7%	0.9%	0.9%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



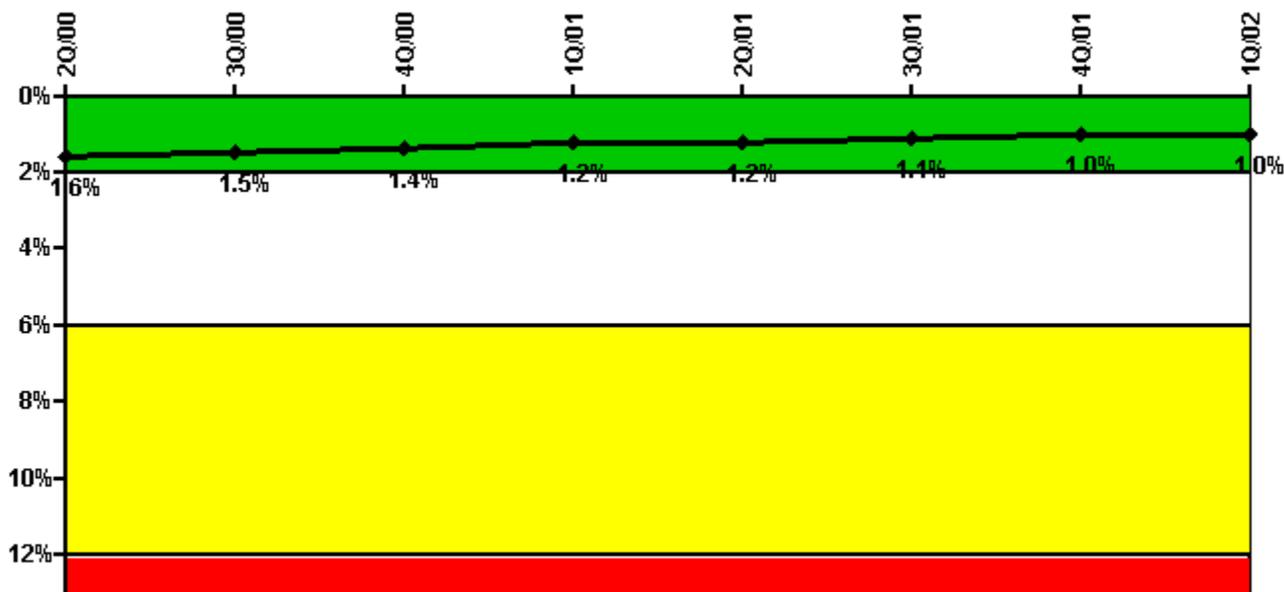
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	1.50	0.50	12.90	42.70	18.50	4.80	10.90	22.00
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	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	0.90	1.10	0.40	13.93	0	17.30	52.20	3.00
Unplanned unavailable hours	0	0	0	0	0	0	0	64.80
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	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 3								
Planned unavailable hours	9.80	0	0	1.60	10.70	27.60	2.90	1.20
Unplanned unavailable hours	0	0	0	0	0	34.30	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	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 4								
Planned unavailable hours	0	0	19.40	9.18	0	0	1.60	3.00
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	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Indicator value	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.6%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



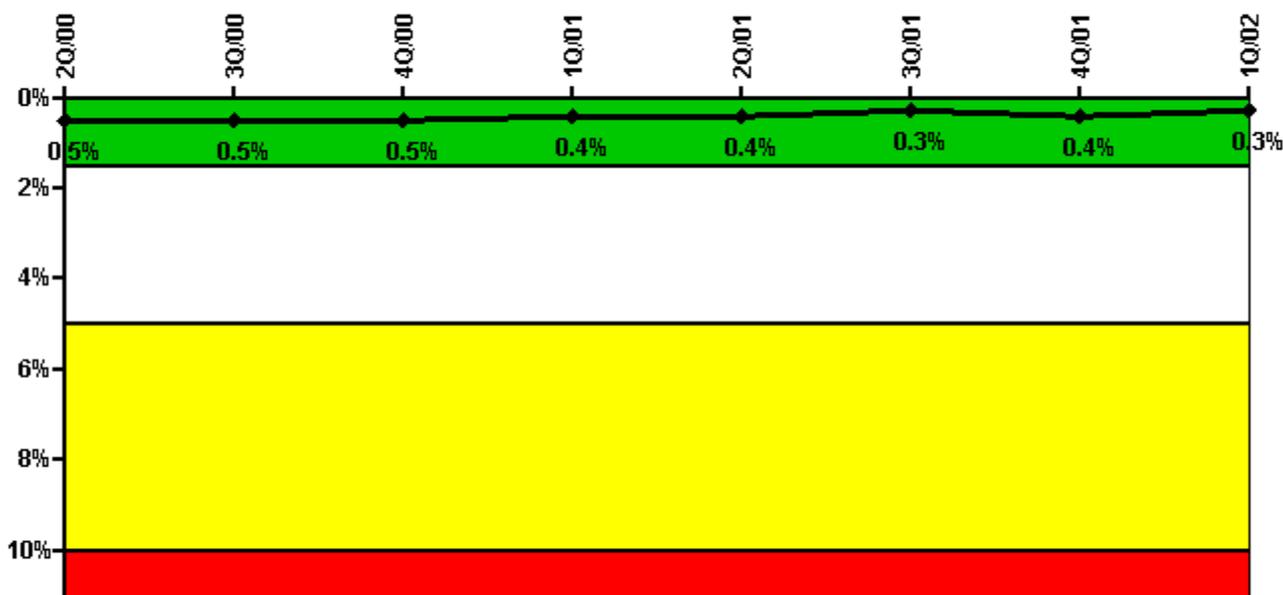
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	1.80	1.80	2.40	2.70	1.80	2.20	4.80	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	2183.00	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Train 2								
Planned unavailable hours	4.40	1.80	2.00	2.70	17.10	3.40	3.50	32.20
Unplanned unavailable hours	0	0	0	0	0	0	1.40	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	2192.13	2209.00	2160.00	1795.32	2208.00	2209.00	2160.00
Indicator value	1.6%	1.5%	1.4%	1.2%	1.2%	1.1%	1.0%	1.0%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



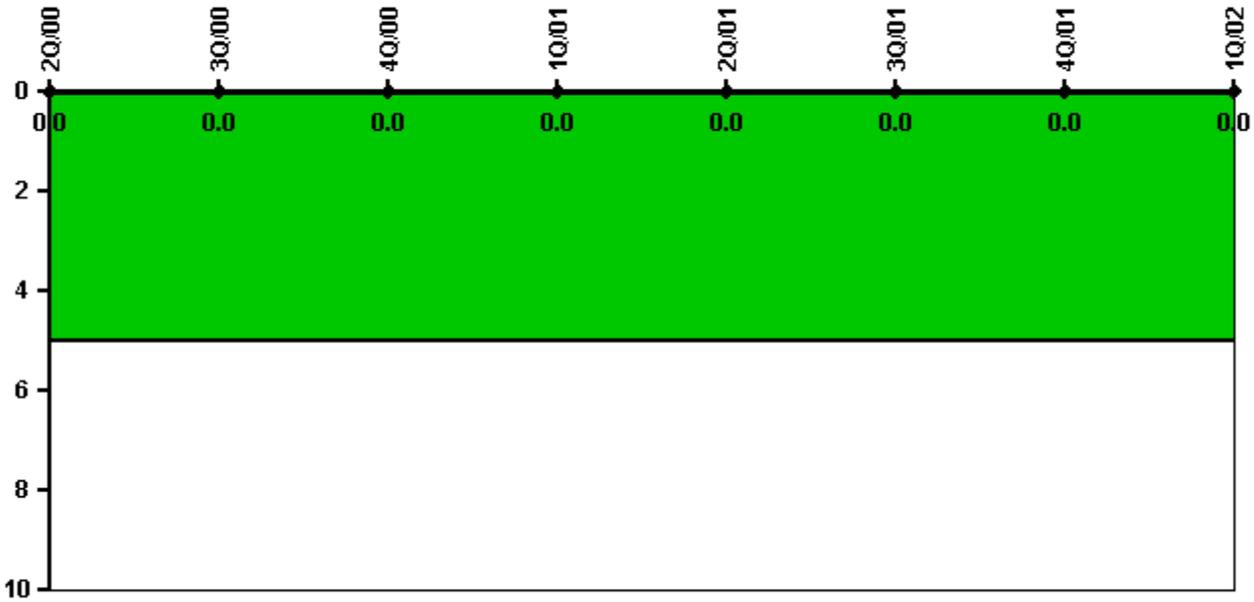
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Train 1								
Planned unavailable hours	8.50	0.40	44.00	0.30	3.00	0.40	2.90	1.30
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
Train 2								
Planned unavailable hours	2.60	1.30	0.60	1.12	1.00	0.50	13.90	26.30
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
Indicator value	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%	0.4%	0.3%

Licensee Comments: none

Safety System Functional Failures (PWR)



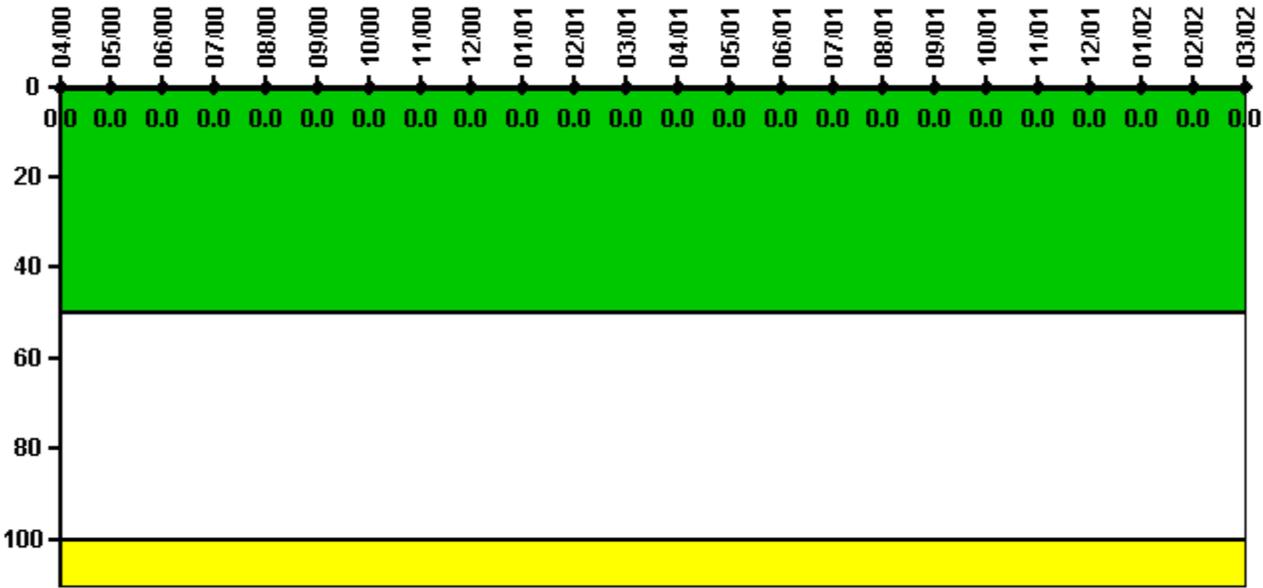
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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

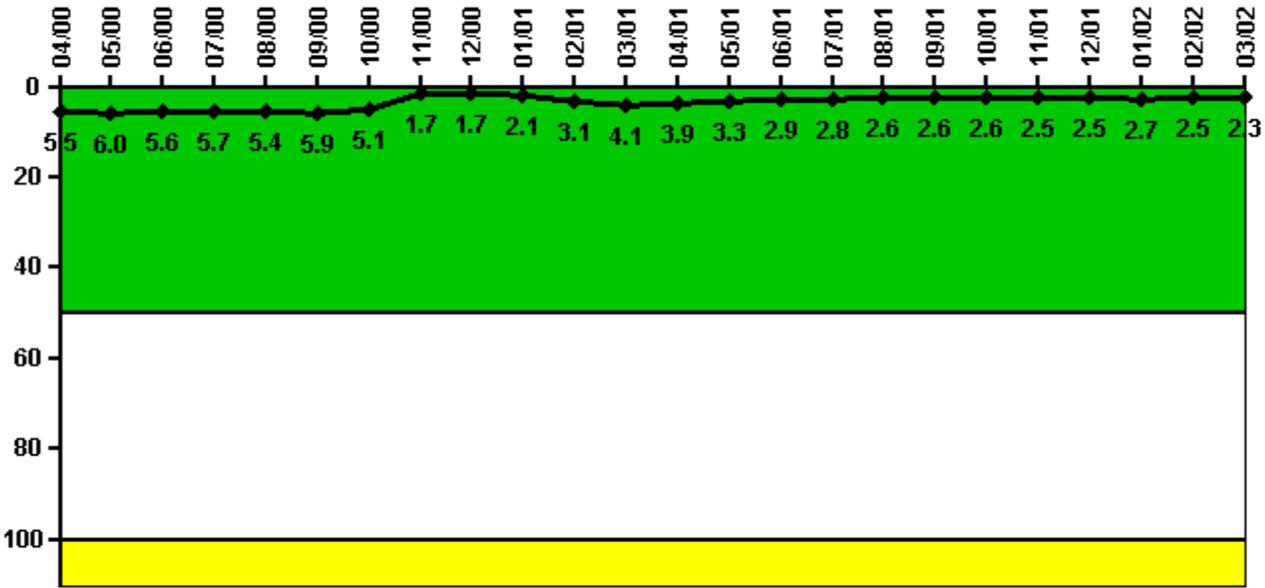
Notes

Reactor Coolant System Activity	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum activity	0.000294	0.000309	0.000334	0.000321	0.000354	0.000354	0.000342	0.000372	0.000366	0.000366	0.000410	0.000438
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	0	0	0	0

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	0.000450	0.000250	0.000277	0.000313	0.000324	0.000337	0.000351	0.000428	0.000393	0.000412	0.000416	0.000398
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	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

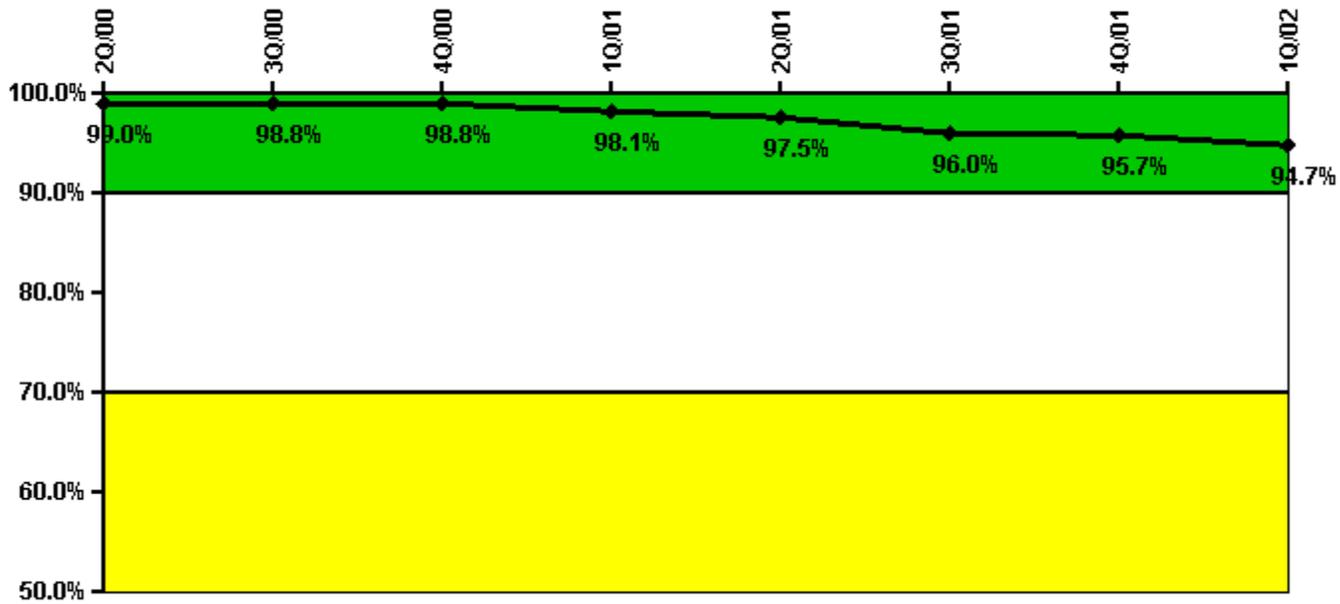
Notes

Reactor Coolant System Leakage	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum leakage	0.550	0.600	0.561	0.567	0.545	0.594	0.514	0.172	0.169	0.209	0.314	0.406
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	5.5	6.0	5.6	5.7	5.4	5.9	5.1	1.7	1.7	2.1	3.1	4.1

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	0.395	0.329	0.289	0.284	0.263	0.256	0.259	0.250	0.252	0.266	0.249	0.234
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	3.9	3.3	2.9	2.8	2.6	2.6	2.6	2.5	2.5	2.7	2.5	2.3

Licensee Comments: none

Drill/Exercise Performance



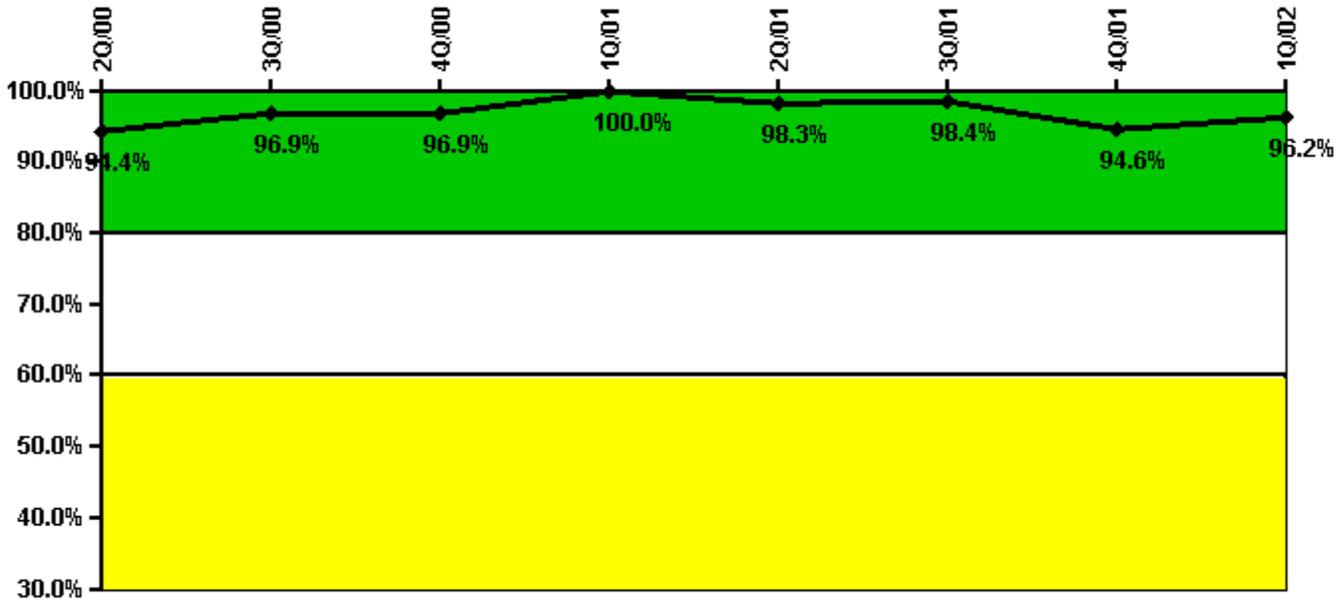
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful opportunities	30.0	49.0	0	14.0	0	31.0	38.0	34.0
Total opportunities	30.0	50.0	0	16.0	0	35.0	40.0	36.0
Indicator value	99.0%	98.8%	98.8%	98.1%	97.5%	96.0%	95.7%	94.7%

Licensee Comments: none

ERO Drill Participation



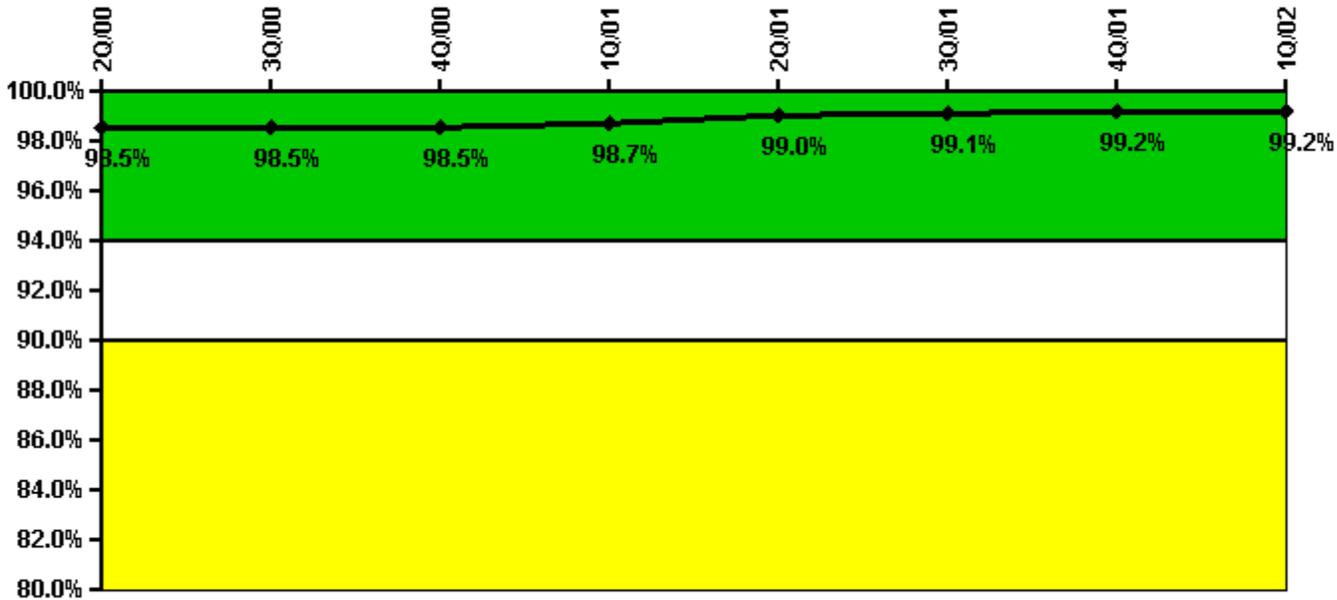
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Participating Key personnel	68.0	63.0	63.0	63.0	59.0	60.0	53.0	50.0
Total Key personnel	72.0	65.0	65.0	63.0	60.0	61.0	56.0	52.0
Indicator value	94.4%	96.9%	96.9%	100.0%	98.3%	98.4%	94.6%	96.2%

Licensee Comments: none

Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful siren-tests	5915	5821	5864	6245	6258	6141	5965	5872
Total sirens-tests	6016	5922	5922	6298	6298	6204	6016	5922
Indicator value	98.5%	98.5%	98.5%	98.7%	99.0%	99.1%	99.2%	99.2%

Licensee Comments:

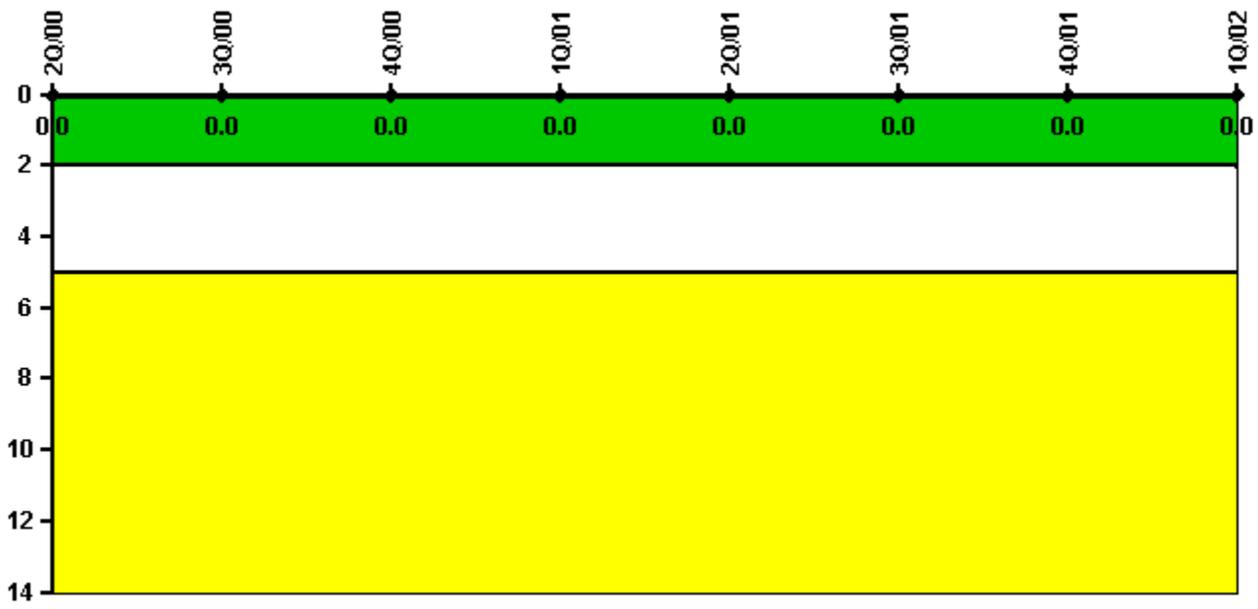
4Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

3Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

2Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

1Q/01: A revision has been made to previously submitted data for the Alert and Notification System (ANS) Reliability indicator. It was determined there was one day each month where both a full test and a silent test of ANS sirens was performed; however, only one of these tests had been reported. Ten months of data in 2001 were affected and have been revised (1-01, 2-01, 3-01, 4-01, 5-01, 6-01, 7-01, 8-01, 9-01, and 11-01). The October data was not revised because the full siren test was not performed in October due to concerns arising from the events of September 11, 2001. The change to the data does not affect the color of the indicator.

Occupational Exposure Control Effectiveness



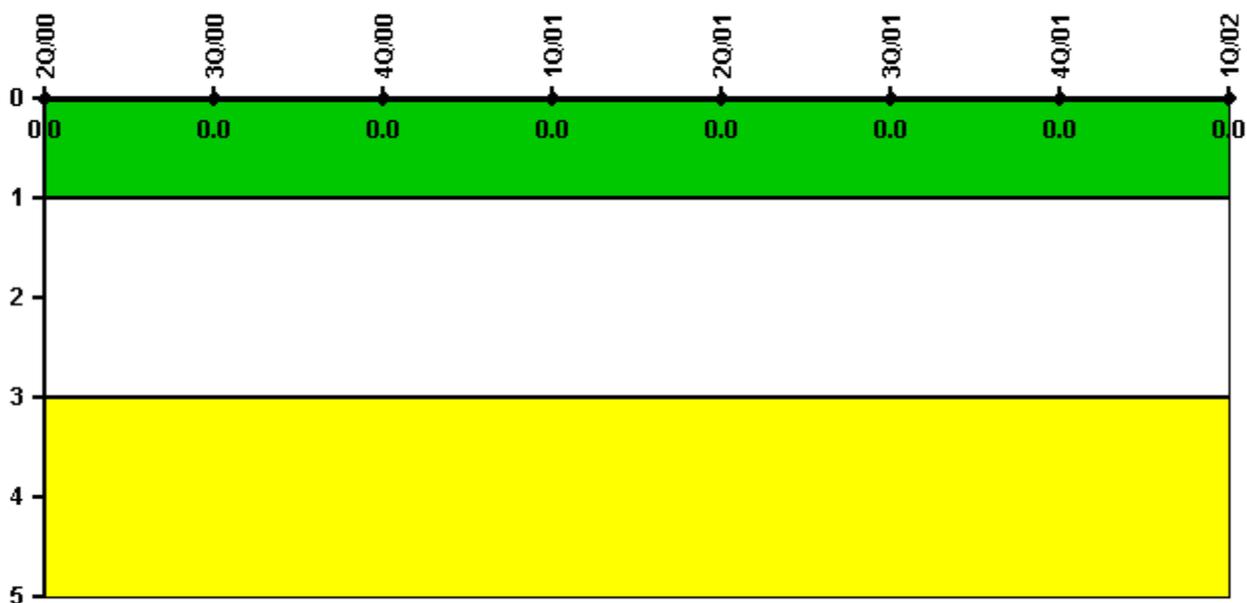
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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



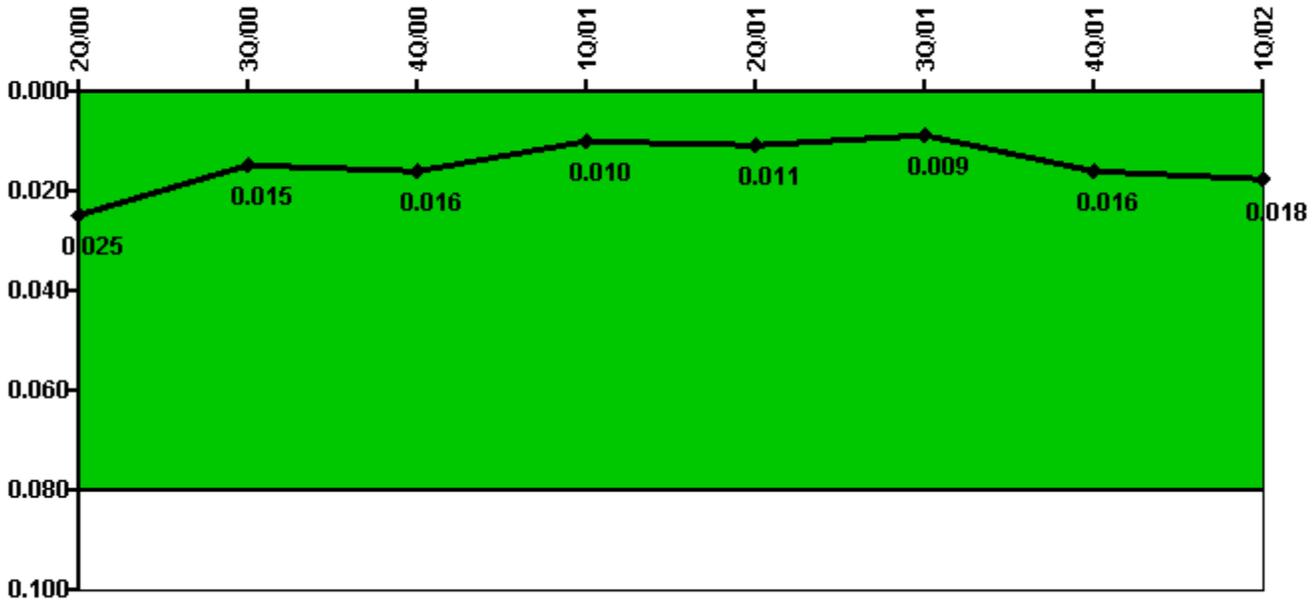
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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



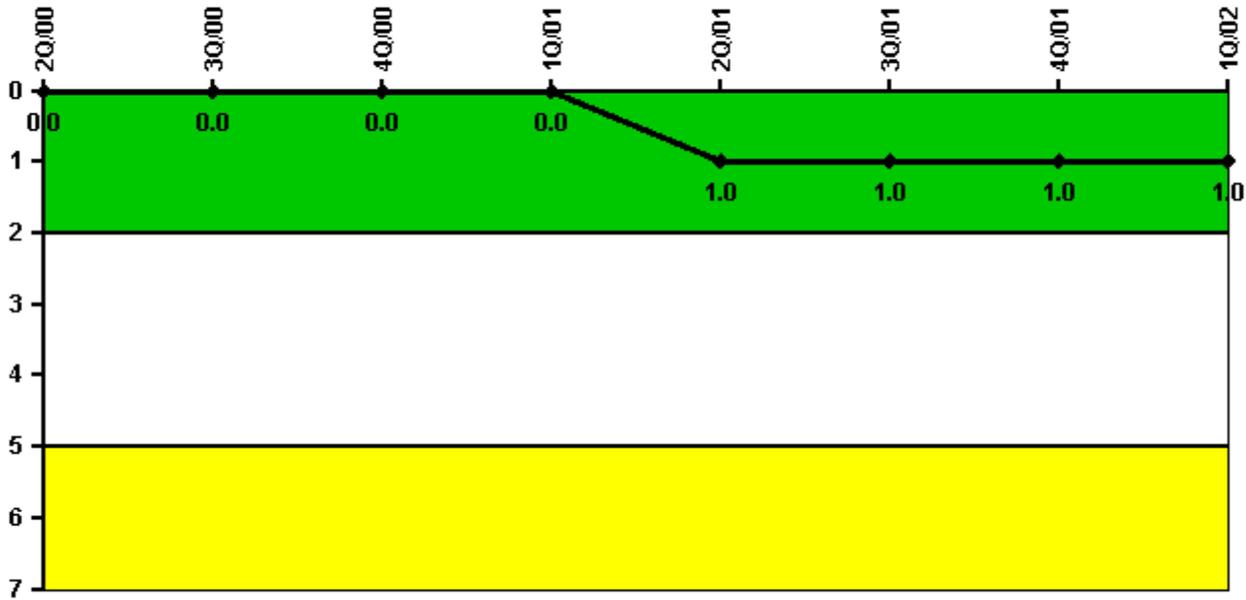
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
IDS compensatory hours	57.60	93.10	17.43	21.85	92.99	29.12	247.72	62.00
CCTV compensatory hours	6.8	0	37.5	2.6	0	0	0	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.025	0.015	0.016	0.010	0.011	0.009	0.016	0.018

Licensee Comments: none

Personnel Screening Program



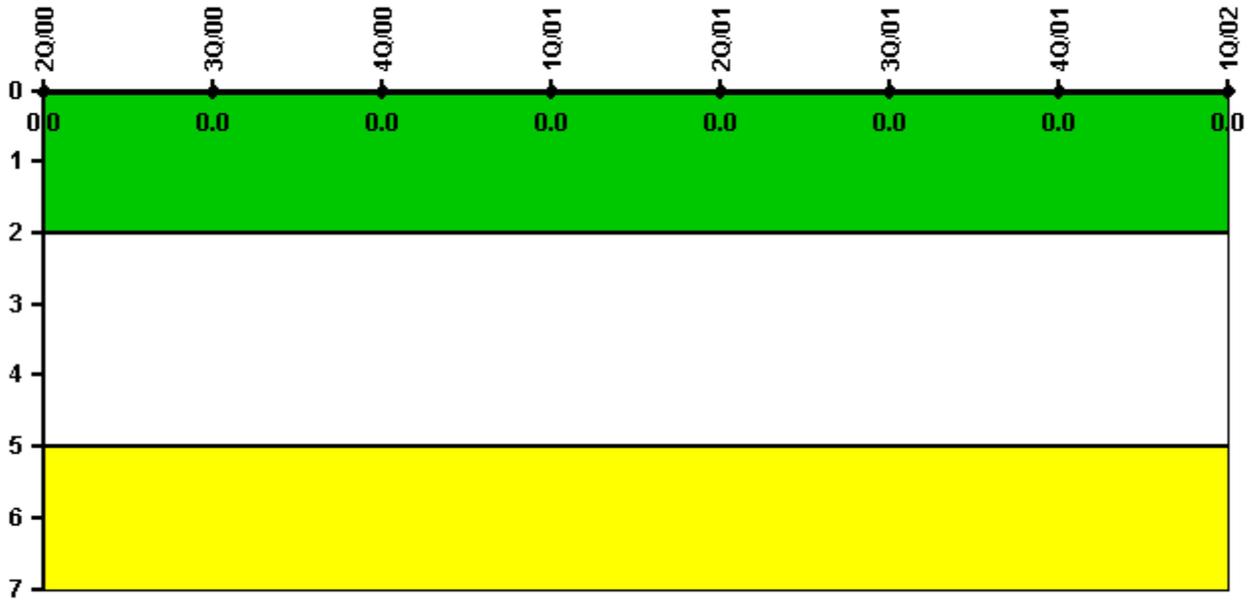
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Program failures	0	0	0	0	1	0	0	0
Indicator value	0	0	0	0	1	1	1	1

Licensee Comments: none

FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

Notes

FFD/Personnel Reliability	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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: May 1, 2002