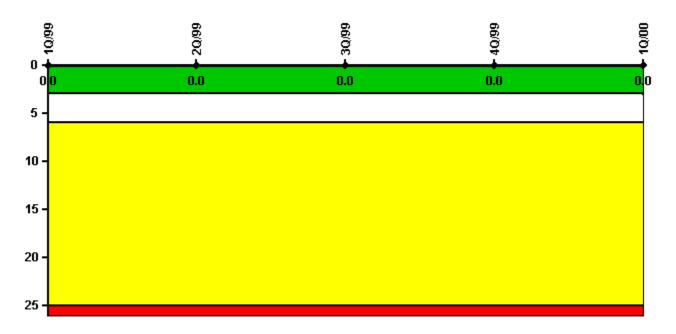
## **North Anna 1**

### 1Q/2000 Performance Indicators

Licensee's General Comments: none

# Unplanned Scrams per 7000 Critical Hrs

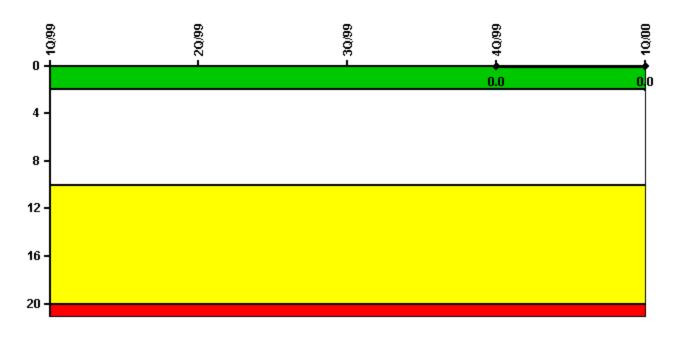


Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Unplanned scrams	0	0	0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	1705.5
Indicator value	0	0	0	0	0

## Scrams with Loss of Normal Heat Removal

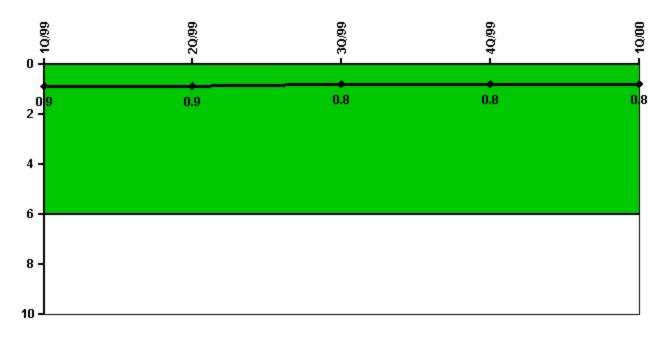


Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

### Notes

Scrams with Loss of Normal Heat Removal	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Scrams	0	0	0	0	0
Indicator value				0	0

# Unplanned Power Changes per 7000 Critical Hrs

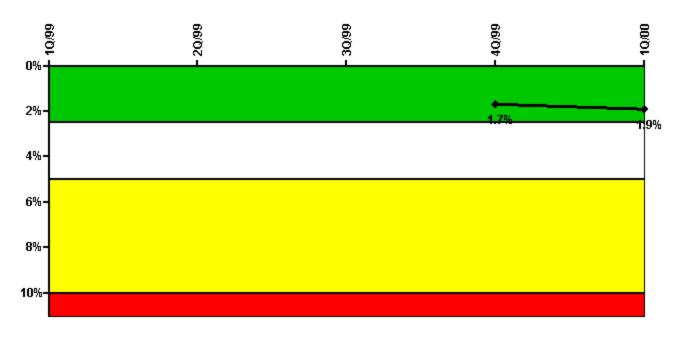


Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Unplanned power changes	0	0	1.0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	1705.5
Indicator value	0.9	0.9	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	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	12.80	11.81	29.68	64.46	14.43
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	95.52
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1815.70
Train 2					
Planned unavailable hours	11.25	11.45	7.83	70.57	12.27
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2088.50
Indicator value				1.7%	1.9%

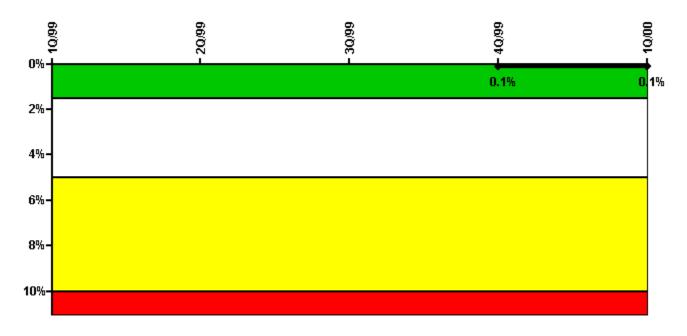
#### Licensee Comments:

1Q/00: Current and historical data changed to exclude planned, TS approved, on-line, Allowed Outage Time EDG overhaul unavailability hours as discussed in NEI 99-02, Rev 0. Changes affecting 1Q/99 and 2Q/99 data had no affect on the Green color assignment.

2Q/99: Data revised to implement NEI 99-02, Rev 0, clarification allowing TS allowed outage time used to perform on-line, planned, EDG overhaul maintenance to be extracted from planned unavailable hours.

1Q/99: Data revised to implement NEI 99-02, Rev 0, clarification allowing TS allowed outage time used to perform on-line, planned, EDG overhaul maintenance to be extracted from planned unavailable hours.

## 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)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	3.95	0.97	0	10.29	0.58
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1720.20
Train 2					
Planned unavailable hours	1.70	0	0	2.43	1.02
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2034.78
Indicator value				0.1%	0.1%

#### Licensee Comments:

1Q/00: Current and historical data changed to reflect North Anna's unique design. Per NEI 99-02, Rev 0, App. D, Low Head Safety Injection unavailability hours have been extracted and included with the Residual Heat Removal System.

4Q/99: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

3Q/99: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

2Q/99: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

1Q/99: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

4Q/98: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

3Q/98: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

2Q/98: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

1Q/98: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

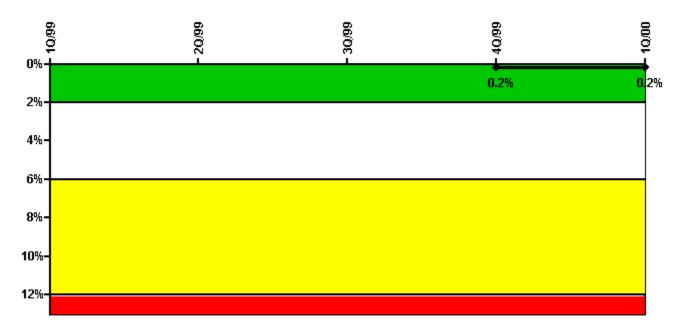
4Q/97: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

3Q/97: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

2Q/97: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

1Q/97: Historical data was revised to reflect North Anna's unique design. Post accident recirculation cooling, as provided by the Low Head Safety Injection and Recirculation Spray systems, has been extracted and included in the Residual Heat Removal system.

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



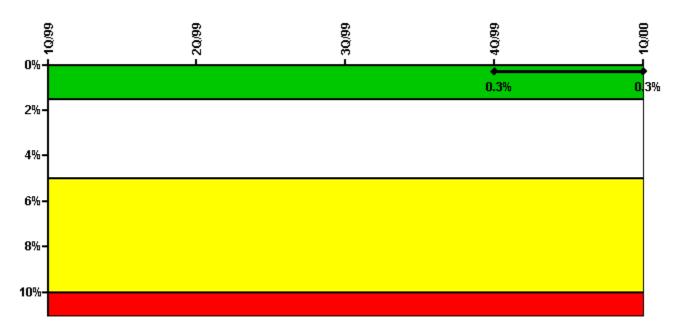
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	9.30	1.50	2.92	2.23	0
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1715.78
Train 2					
Planned unavailable hours	6.30	1.20	2.25	1.58	9.75
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1715.78
Train 3					
Planned unavailable hours	14.00	4.69	4.08	5.15	4.82
Unplanned unavailable hours	0	0	0	0	C
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1715.78
Indicator value				0.2%	0.2%

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	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	2.58	1.20	8.10	0.90	11.40
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1720.20
Train 2					
Planned unavailable hours	4.60	0.30	0	26.20	21.02
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1720.20
Train 3					
Planned unavailable hours	0	0	0	0	2.58
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2034.78
Train 4					
Planned unavailable hours	0	0	0	0	3.67
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2034.78
Indicator value				0.3%	0.3%

#### Licensee Comments:

1Q/00: Current and historical data has been changed to reflect North Anna's unique design. Per NEI 99-02, Rev 0, App. D, Trains 1 & 2 reflect post-accident cooling provided by the Low Head Safety Injection System and Trains 3 & 4 reflect decay heat removal unavailability hours assigned to the Residual Heat Removal System. The changes made in the number of planned unavailable hours since 1Q/97 had no change on the Green indicator color assignment.

4Q/99: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal system.

3Q/99: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal system.

2Q/99: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal system.

1Q/99: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal system.

4Q/98: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal system.

3Q/98: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal system.

2Q/98: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal system.

1Q/98: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal System.

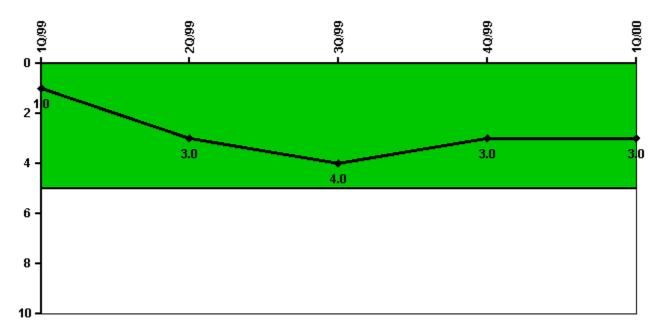
4Q/97: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post accident cooling as provided by the Low Head Safety Injection and Recirculation Spray systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal System.

3Q/97: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post-accident cooling as provided by the Low Head Safety Injection and Recirculation Spray Systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal System.

2Q/97: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post-accident cooling as provided by the Low Head Safety Injection and Recirculation Spray Systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal System.

1Q/97: Current and historical data was revised to reflect North Anna's unique design. Trains 1 & 2 reflect post-accident cooling as provided by the Low Head Safety Injection and Recirculation Spray Systems. Trains 3 & 4 reflect decay heat removal as provided by the Residual Heat Removal System.

## Safety System Functional Failures (PWR)



Thresholds: White > 5.0

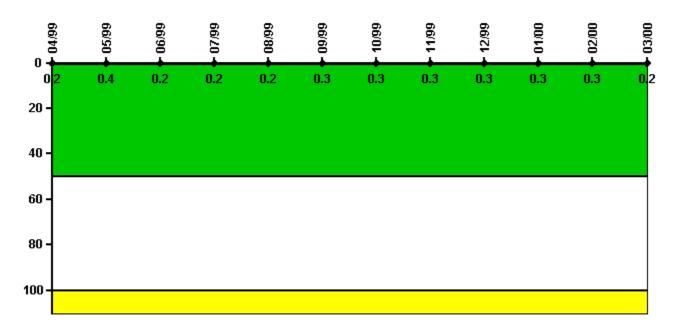
#### Notes

Safety System Functional Failures (PWR)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Safety System Functional Failures	0	2	1	0	0
Indicator value	1	3	4	3	3

Licensee Comments:

3Q/99: Further review determined LER 99-006, dated 09-28-99, should be identified even though it was not included in the NRC Safety System Failure Database for 3Q/99.

# **Reactor Coolant System Activity**

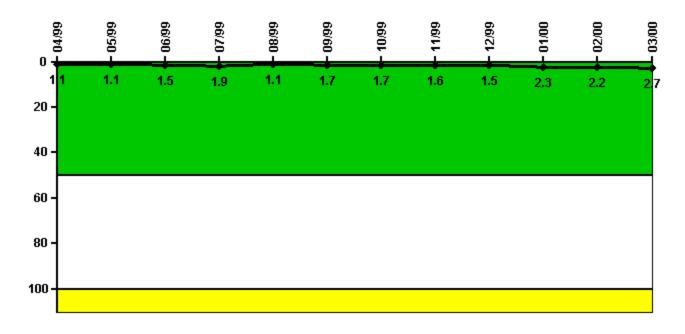


Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Activity	4/99	5/99	6/99	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00
Maximum activity	0.002360	0.004100	0.002270	0.002470	0.002390	0.002720	0.002960	0.002860	0.003070	0.002920	0.003050	0.002040
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	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2

# Reactor Coolant System Leakage

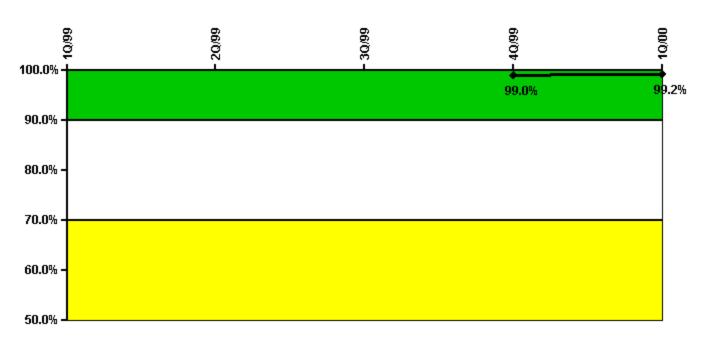


Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	4/99	5/99	6/99	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00
Maximum leakage	0.110	0.112	0.145	0.192	0.108	0.174	0.165	0.159	0.149	0.230	0.222	0.268
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	1.1	1.5	1.9	1.1	1.7	1.7	1.6	1.5	2.3	2.2	2.7

## **Drill/Exercise Performance**

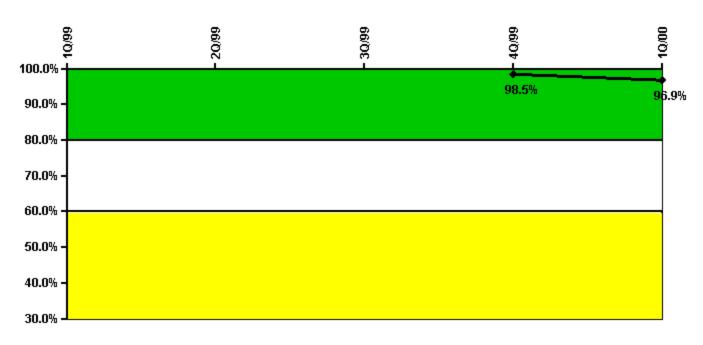


Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Successful opportunities	0	10.0	0	78.0	25.0
Total opportunities	0	10.0	0	78.0	25.0
Indicator value				99.0%	99.2%

# **ERO Drill Participation**

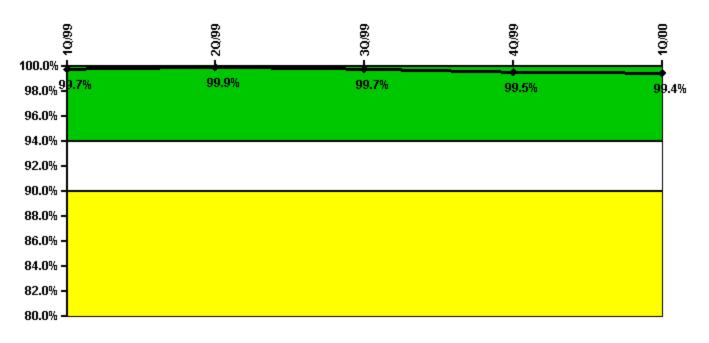


Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Participating Key personnel				128.0	125.0
Total Key personnel				130.0	129.0
Indicator value				98.5%	96.9%

## **Alert & Notification System**



Thresholds: White < 94.0% Yellow < 90.0%

### Notes

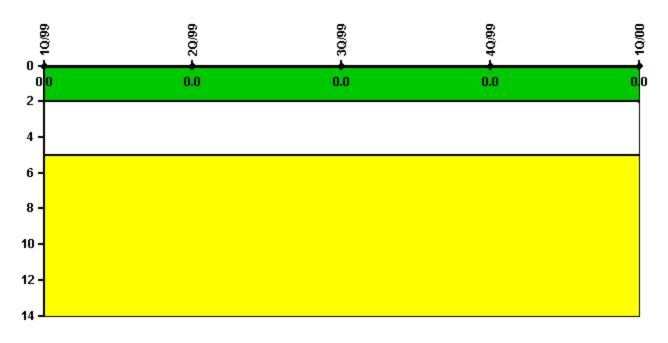
Alert & Notification System	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Successful siren-tests	383	385	382	382	382
Total sirens-tests	385	385	385	385	385
Indicator value	99.7%	99.9%	99.7%	99.5%	99.4%

### Licensee Comments:

1Q/00: 1/2000 data revised to exclude 55 sirens that were part of a non-routine, unscheduled, Y2K siren poll. Deletion of these 55 sirens from the total number had no effect on the "Green" indicator.

1Q/00: 1/2000 data revised to exclude 55 sirens that were part of a non-routine, unscheduled, Y2K siren poll. Deletion of these 55 sirens from the total number had no effect on the "Green" indicator.

# Occupational Exposure Control Effectiveness

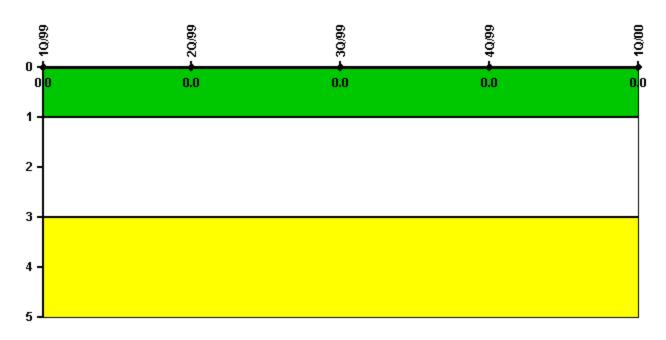


Thresholds: White > 2.0 Yellow > 5.0

### Notes

Occupational Exposure Control Effectiveness	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
High radiation area occurrences	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

# **RETS/ODCM Radiological Effluent**

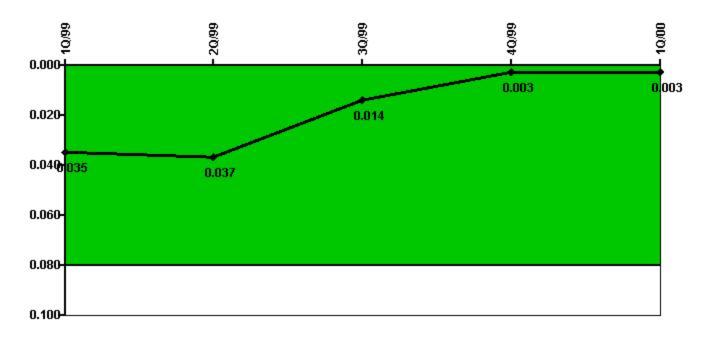


Thresholds: White > 1.0 Yellow > 3.0

### Notes

RETS/ODCM Radiological Effluent	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
RETS/ODCM occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

# **Protected Area Security Performance Index**



Thresholds: White > 0.080

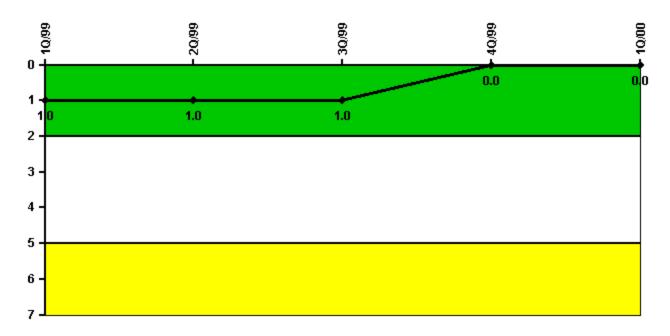
### Notes

Protected Area Security Performance Index	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
IDS compensatory hours	12.00	38.00	0	5.00	5.00
CCTV compensatory hours	0	0	0	0	0
IDS normalization factor	1.00	1.00	1.00	1.00	1.00
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0
Index Value	0.035	0.037	0.014	0.003	0.003

Licensee Comments:

1Q/00: NAPS has 1 CCTV which is used during outages only. Data reflects 617.7 hrs. of CCTV operation during the quarter.

# **Personnel Screening Program**

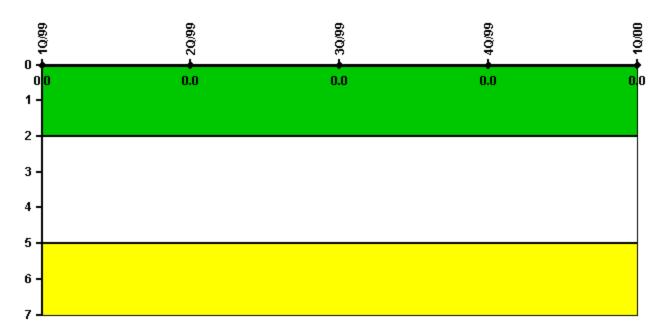


Thresholds: White > 2.0 Yellow > 5.0

## Notes

Personnel Screening Program	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Program failures	0	0	0	0	0
Indicator value	1	1	1	0	0

# FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

### Notes

FFD/Personnel Reliability	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Program Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

A PI Summary | Inspection Findings Summary | Reactor Oversight Process

Last Modified: April 1, 2002