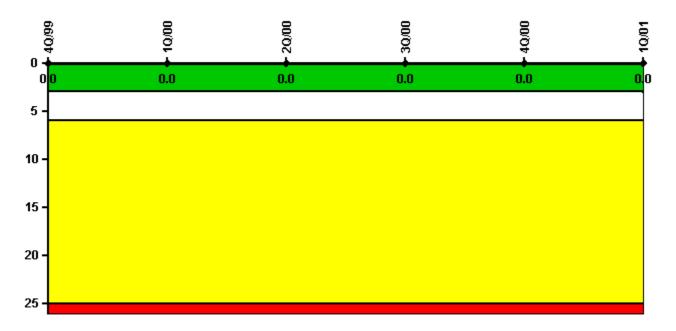
### **Calvert Cliffs 2**

#### 1Q/2001 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs

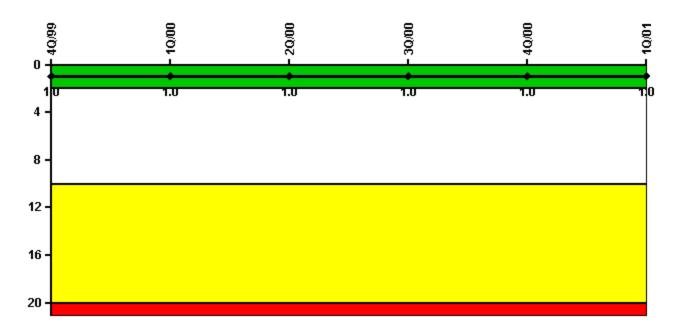


Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Unplanned scrams	0	0	0	0	0	0
Critical hours	2209.0	2019.8	2183.0	2208.0	2209.0	1800.0
Indicator value	0	0	0	0	0	0

### Scrams with Loss of Normal Heat Removal

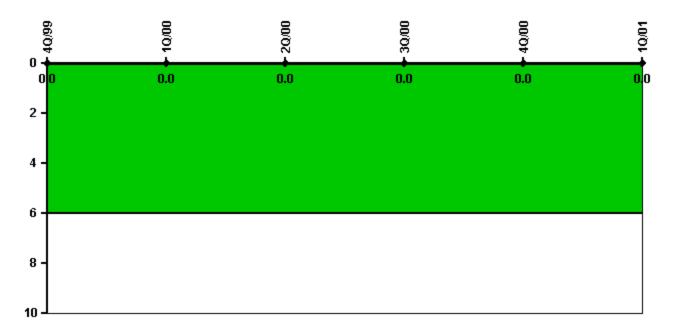


Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

### Notes

Scrams with Loss of Normal Heat Removal	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Scrams	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	1.0	1.0	1.0

# Unplanned Power Changes per 7000 Critical Hrs

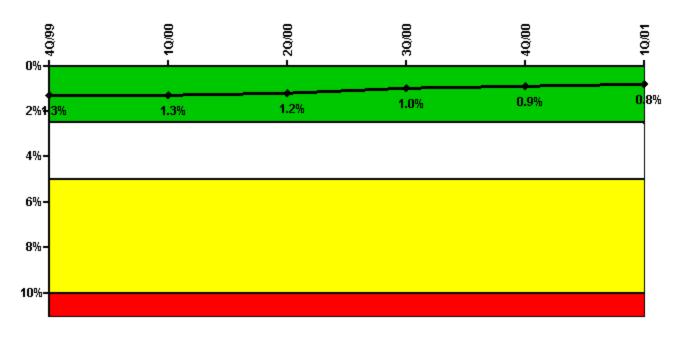


Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Unplanned power changes	0	0	0	0	0	0
Critical hours	2209.0	2019.8	2183.0	2208.0	2209.0	1800.0
Indicator value	0	0	0	0	0	0

### Safety System Unavailability, Emergency AC Power



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

#### Notes

Safety System Unavailability, Emergency AC Power	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	2.15	31.00	0	0	0	15.33
Unplanned unavailable hours	10.83	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Train 2						
Planned unavailable hours	0.12	13.38	0	0	0.50	37.40
Unplanned unavailable hours	8.40	0	0	0	0	0.25
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Indicator value	1.3%	1.3%	1.2%	1.0%	0.9%	0.8%

#### Licensee Comments:

1Q/01: This change removes planned unavailable hours in 1Q/2000 through 1Q/2001 for trains 1 and 2 of the Emergency AC Power system that were previously submitted that accounted for unavailable hours incurred during emergency diesel generator (EDG) testing when performing air barring of the EDG. Calvert Cliffs has reversed its decision and has determined that air barring of the EDG during testing does not render the EDG unavailable because restoration actions are virtually certain to be successful during accident conditions. Excluding air barring as a cause of planned unavailable hours during EDG testing meets all requirements in NEI 99-02. The change does not affect the "color" of the indicator.

4Q/00: This change removes planned unavailable hours in 1Q/2000 through 1Q/2001 for trains 1 and 2 of the Emergency AC Power system that were previously submitted that accounted for unavailable hours incurred during emergency diesel generator (EDG) testing when performing air barring of the EDG. Calvert Cliffs has reversed its decision and has determined that air barring of the EDG during testing does not render the EDG unavailable because restoration actions are virtually certain to be successful during accident conditions. Excluding air barring as a cause of planned unavailable hours during EDG testing meets all requirements in NEI 99-02. The change does not affect the "color" of the indicator.

4Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains

1 and 2 of the Emergency AC Power system has changed to reflect a small increase in unavailable hours incurred during emergency diesel generator (EDG) testing. Specifically, unavailable hours are now incurred when performing barring of the EDG whether it is done manually or through the use of air barring. The change does not affect the "color" of the indicator.

3Q/00: This change removes planned unavailable hours in 1Q/2000 through 1Q/2001 for trains 1 and 2 of the Emergency AC Power system that were previously submitted that accounted for unavailable hours incurred during emergency diesel generator (EDG) testing when performing air barring of the EDG. Calvert Cliffs has reversed its decision and has determined that air barring of the EDG during testing does not render the EDG unavailable because restoration actions are virtually certain to be successful during accident conditions. Excluding air barring as a cause of planned unavailable hours during EDG testing meets all requirements in NEI 99-02. The change does not affect the "color" of the indicator.

3Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains 1 and 2 of the Emergency AC Power system has changed to reflect a small increase in unavailable hours incurred during emergency diesel generator (EDG) testing. Specifically, unavailable hours are now incurred when performing barring of the EDG whether it is done manually or through the use of air barring. The change does not affect the "color" of the indicator.

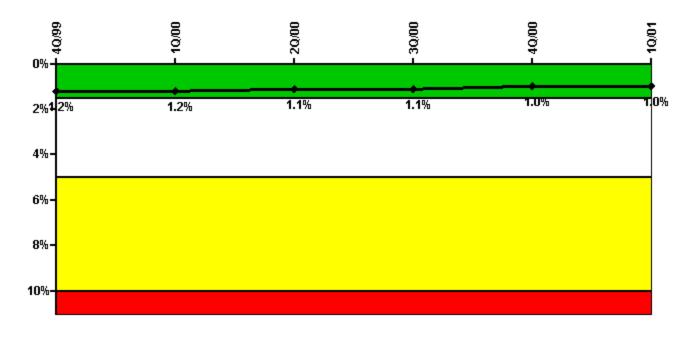
2Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains 1 and 2 of the Emergency AC Power system has changed to reflect a small increase in unavailable hours incurred during emergency diesel generator (EDG) testing. Specifically, unavailable hours are now incurred when performing barring of the EDG whether it is done manually or through the use of air barring. The change does not affect the "color" of the indicator.

2Q/00: This change removes planned unavailable hours in 1Q/2000 through 1Q/2001 for trains 1 and 2 of the Emergency AC Power system that were previously submitted that accounted for unavailable hours incurred during emergency diesel generator (EDG) testing when performing air barring of the EDG. Calvert Cliffs has reversed its decision and has determined that air barring of the EDG during testing does not render the EDG unavailable because restoration actions are virtually certain to be successful during accident conditions. Excluding air barring as a cause of planned unavailable hours during EDG testing meets all requirements in NEI 99-02. The change does not affect the "color" of the indicator.

1Q/00: This change removes planned unavailable hours in 1Q/2000 through 1Q/2001 for trains 1 and 2 of the Emergency AC Power system that were previously submitted that accounted for unavailable hours incurred during emergency diesel generator (EDG) testing when performing air barring of the EDG. Calvert Cliffs has reversed its decision and has determined that air barring of the EDG during testing does not render the EDG unavailable because restoration actions are virtually certain to be successful during accident conditions. Excluding air barring as a cause of planned unavailable hours during EDG testing meets all requirements in NEI 99-02. The change does not affect the "color" of the indicator.

1Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains 1 and 2 of the Emergency AC Power system has changed to reflect a small increase in unavailable hours incurred during emergency diesel generator (EDG) testing. Specifically, unavailable hours are now incurred when performing barring of the EDG whether it is done manually or through the use of air barring. The change does not affect the "color" of the indicator.

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

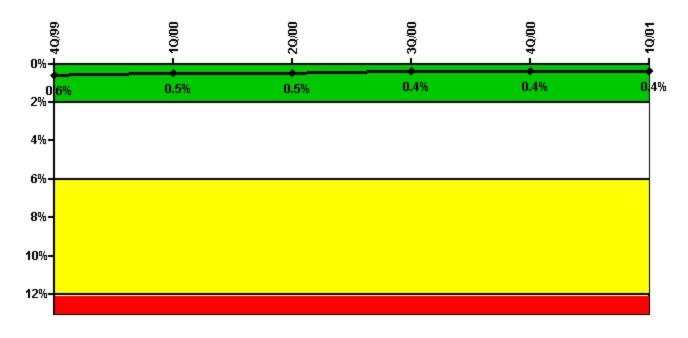


Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	18.03	17.50	0.54	1.35	15.63	36.34
Unplanned unavailable hours	10.83	0	0	0	7.33	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2019.80	2183.00	2208.00	2209.00	1800.00
Train 2						
Planned unavailable hours	1.66	12.84	0.62	26.17	1.13	19.27
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2019.80	2183.00	2208.00	2209.00	1800.00
Indicator value	1.2%	1.2%	1.1%	1.1%	1.0%	1.0%

### 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)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	9.25	1.00	1.00	1.00	2.75	2.33
Unplanned unavailable hours	0	5.12	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2019.80	2183.00	2208.00	2209.00	1800.00
Train 2						
Planned unavailable hours	9.25	1.00	1.00	1.00	2.75	2.33
Unplanned unavailable hours	0	5.12	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2019.80	2183.00	2208.00	2209.00	1800.00
Train 3						
Planned unavailable hours	11.00	0	1.50	5.23	3.83	0
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2019.80	2183.00	2208.00	2209.00	1800.00
Indicator value	0.6%	0.5%	0.5%	0.4%	0.4%	0.4%

### Licensee Comments:

4Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains 1 and 2 of the Auxiliary Feedwater (AFW) system has changed to reflect a small increase in unavailable hours incurred during AFW testing. Specifically, unavailable hours are now incurred when the AFW steam driven pumps are tripped until the steam valves are reset. The change does not affect the "color" of the indicator.

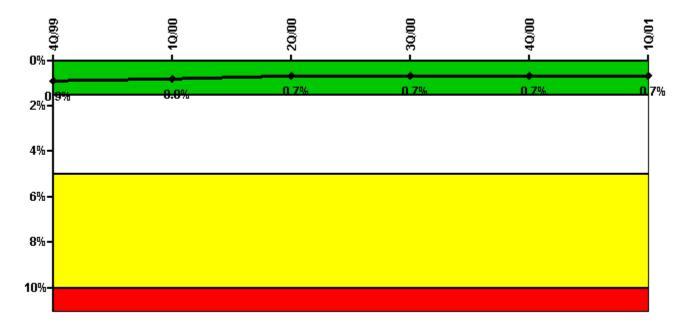
3Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains

1 and 2 of the Auxiliary Feedwater (AFW) system has changed to reflect a small increase in unavailable hours incurred during AFW testing. Specifically, unavailable hours are now incurred when the AFW steam driven pumps are tripped until the steam valves are reset. The change does not affect the "color" of the indicator.

2Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains 1 and 2 of the Auxiliary Feedwater (AFW) system has changed to reflect a small increase in unavailable hours incurred during AFW testing. Specifically, unavailable hours are now incurred when the AFW steam driven pumps are tripped until the steam valves are reset. The change does not affect the "color" of the indicator.

1Q/00: The number of planned unavailable hours previously submitted for the first quarter of 2000 through the fourth quarter of 2000 for trains 1 and 2 of the Auxiliary Feedwater (AFW) system has changed to reflect a small increase in unavailable hours incurred during AFW testing. Specifically, unavailable hours are now incurred when the AFW steam driven pumps are tripped until the steam valves are reset. The change does not affect the "color" of the indicator.

### Safety System Unavailability, Residual Heat Removal System



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

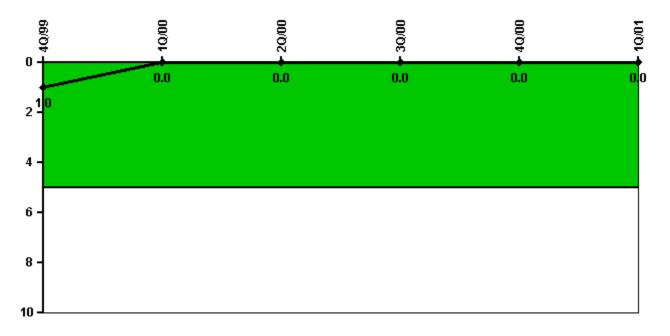
#### Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	0	0	0	0	0	0
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	0	109.90	0	0	0	336.80
Train 2						
Planned unavailable hours	0	0	0	0	0	0
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0

Required hours	0	109.90	0	0	0	336.80
Train 3						
Planned unavailable hours	26.93	18.60	1.88	1.42	17.30	34.49
Unplanned unavailable hours	10.83	0	0	0	7.33	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2074.10	2183.00	2208.00	2209.00	1823.20
Train 4						
Planned unavailable hours	1.43	15.10	1.36	26.41	2.23	28.40
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2074.10	2183.00	2208.00	2209.00	1823.20
Indicator value	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%

Licensee Comments: none

# Safety System Functional Failures (PWR)



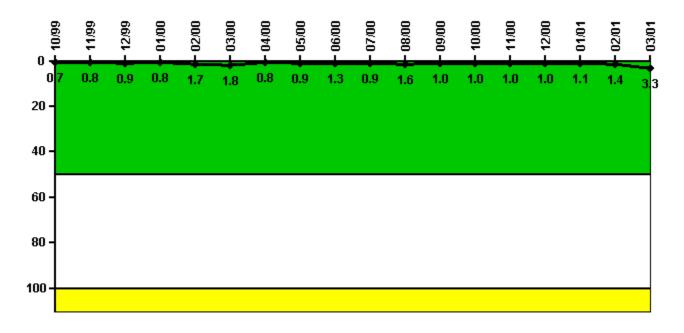
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Safety System Functional Failures	0	0	0	0	0	0
Indicator value	1	0	0	0	0	0

Licensee Comments: none

### **Reactor Coolant System Activity**

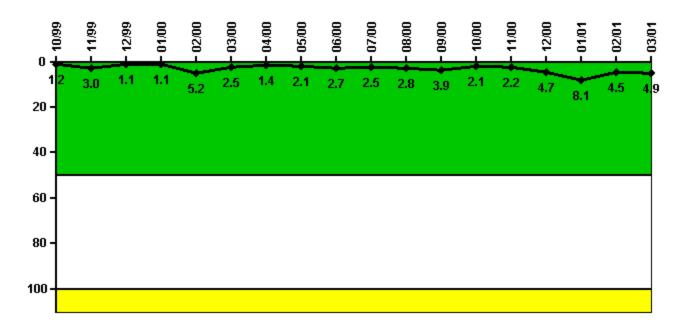


Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.006880	0.007570	0.008840	0.008020	0.017200	0.018400	0.008250	0.008750	0.012700	0.008910	0.016400	0.009940
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	0.7	0.8	0.9	0.8	1.7	1.8	0.8	0.9	1.3	0.9	1.6	1.0
Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01						
	<b>10/00</b> 0.009960			===		<u> </u>						
	=	0.010200	0.010400	0.011200	0.013600	0.032800						
Maximum activity	0.009960	0.010200	0.010400	0.011200	0.013600	0.032800						

# Reactor Coolant System Leakage

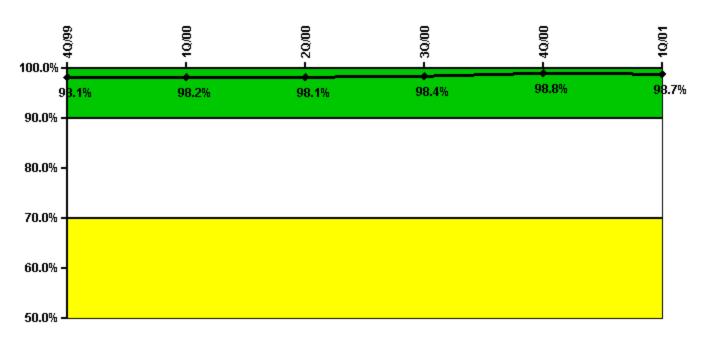


Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum leakage	0.120	0.305	0.110	0.114	0.521	0.254	0.142	0.207	0.267	0.254	0.277	0.393
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	1.2	3.0	1.1	1.1	5.2	2.5	1.4	2.1	2.7	2.5	2.8	3.9
Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01						
Maximum leakage	0.212	0.224	0.471	0.814	0.450	0.488						
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0						
		$\overline{}$	$\overline{}$	8.1	$\overline{}$	4.9	1					

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Successful opportunities	57.0	10.0	19.0	32.0	33.0	11.0
Total opportunities	59.0	10.0	19.0	33.0	33.0	11.0
Indicator value	98.1%	98.2%	98.1%	98.4%	98.8%	98.7%

#### Licensee Comments:

1Q/01: Previously submitted data for both the number of opportunities performed timely and accurately during the quarter, and the number of opportunities during the quarter has been revised from 16 to 11. This change is necessary following discovery that previously reported data included data regarding licensed operators who participated in evaluated scenarios in the role of Shift Manager or Shift Manager Alternate to maintain active Reactor Operator and Senior Reactor Operator licenses, who were not designated as qualified Shift Managers and Shift Manager Alternates. The time periods affected by this change include 3Q/1999 through 1Q/2001. This change does not affect the color of this indicator.

4Q/00: Previously submitted data for the number of opportunities performed timely and accurately during the quarter, and the number of opportunities during the quarter has been revised. This change is necessary following discovery that previously reported data included data regarding licensed operators who participated in evaluated scenarios in the role of Shift Manager or Shift Manager Alternate to maintain active Reactor Operator and Senior Reactor Operator licenses, who were not designated as qualified Shift Managers and Shift Manager Alternates. The time periods affected by this change include 3Q/1999 through 1Q/2001. This change does not affect the color of this indicator.

3Q/00: Previously submitted data for the number of opportunities performed timely and accurately during the quarter, and the number of opportunities during the quarter has been revised. This change is necessary following discovery that previously reported data included data regarding licensed operators who participated in evaluated scenarios in the role of Shift Manager or Shift Manager Alternate to maintain active Reactor Operator and Senior Reactor Operator licenses, who were not designated as qualified Shift Managers and Shift Manager Alternates. The time periods affected by this change include 3Q/1999 through 1Q/2001. This change does not affect the color of this indicator.

2Q/00: Previously submitted data for both the number of opportunities performed timely and accurately during the quarter, and the number of opportunities during the quarter has been revised from 26 to 19. This change is necessary following discovery that previously reported data included data regarding licensed operators who participated in evaluated scenarios in the role of Shift Manager or Shift Manager Alternate to maintain active Reactor Operator and Senior Reactor Operator licenses, who were not designated as qualified Shift Managers and Shift Manager Alternates. The time periods affected by this change include 3Q/1999 through 1Q/2001. This change does not affect the color of this indicator.

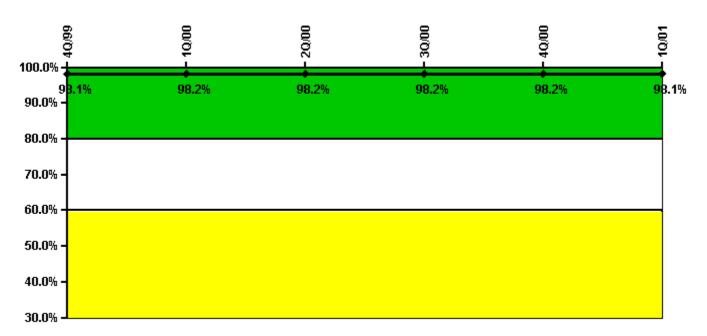
1Q/00: Previously submitted data for both the number of opportunities performed timely and accurately during the quarter, and the number of

opportunities during the quarter has been revised from 16 to 10. This change is necessary following discovery that previously reported data included data regarding licensed operators who participated in evaluated scenarios in the role of Shift Manager or Shift Manager Alternate to maintain active Reactor Operator and Senior Reactor Operator licenses, who were not designated as qualified Shift Managers and Shift Manager Alternates. The time periods affected by this change include 3Q/1999 through 1Q/2001. This change does not affect the color of this indicator.

4Q/99: Previously submitted data for the number of opportunities performed timely and accurately during the quarter, and the number of opportunities during the quarter has been revised. This change is necessary following discovery that previously reported data included data regarding licensed operators who participated in evaluated scenarios in the role of Shift Manager or Shift Manager Alternate to maintain active Reactor Operator and Senior Reactor Operator licenses, who were not designated as qualified Shift Managers and Shift Manager Alternates. The time periods affected by this change include 3Q/1999 through 1Q/2001. This change does not affect the color of this indicator.

3Q/99: Previously submitted data for both the number of opportunities performed timely and accurately during the quarter, and the number of opportunities during the quarter has been revised from 50 to 34. This change is necessary following discovery that previously reported data included data regarding licensed operators who participated in evaluated scenarios in the role of Shift Manager or Shift Manager Alternate to maintain active Reactor Operator and Senior Reactor Operator licenses, who were not designated as qualified Shift Managers and Shift Manager Alternates. The time periods affected by this change include 3Q/1999 through 1Q/2001. This change does not affect the color of this indicator.

### **ERO Drill Participation**

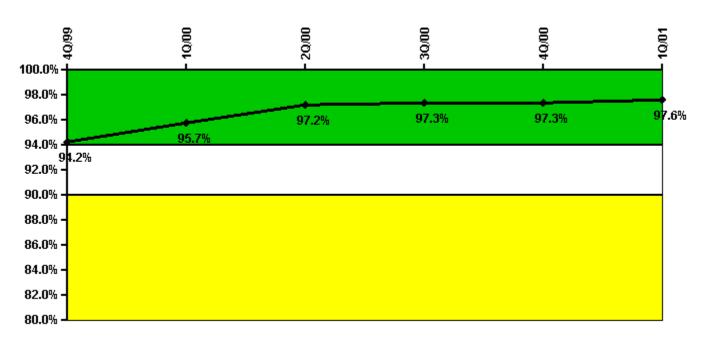


Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Participating Key personnel	52.0	56.0	56.0	55.0	54.0	53.0
Total Key personnel	53.0	57.0	57.0	56.0	55.0	54.0
Indicator value	98.1%	98.2%	98.2%	98.2%	98.2%	98.1%

### **Alert & Notification System**

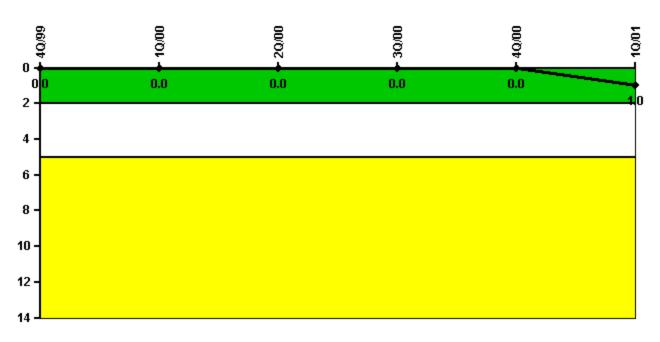


Thresholds: White < 94.0% Yellow < 90.0%

### Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Successful siren-tests	861	929	929	906	1039	990
Total sirens-tests	885	950	955	936	1068	1002
Indicator value	94.2%	95.7%	97.2%	97.3%	97.3%	97.6%

# Occupational Exposure Control Effectiveness

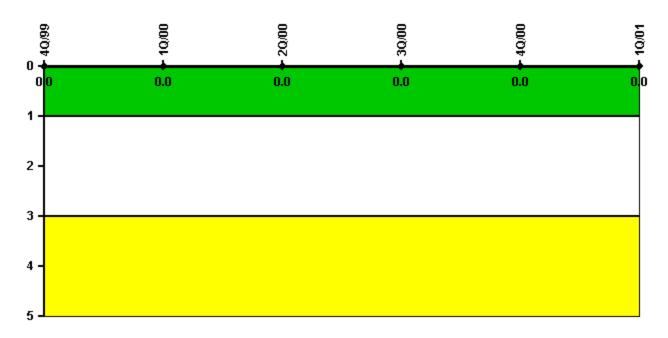


Thresholds: White > 2.0 Yellow > 5.0

### Notes

Occupational Exposure Control Effectiveness	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
High radiation area occurrences	0	0	0	0	0	1
Very high radiation area occurrences	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0
Indicator value	0	0	0	0	0	1

# **RETS/ODCM Radiological Effluent**

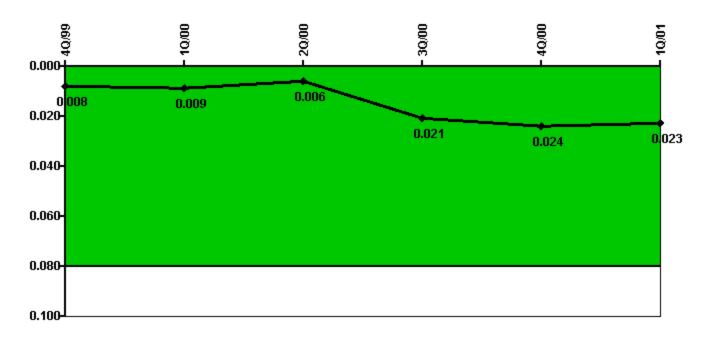


Thresholds: White > 1.0 Yellow > 3.0

### Notes

RETS/ODCM Radiological Effluent	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
RETS/ODCM occurrences	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

# **Protected Area Security Performance Index**

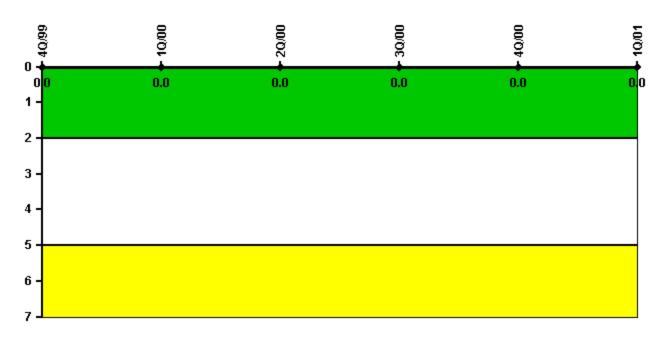


Thresholds: White > 0.080

### Notes

Protected Area Security Performance Index	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
IDS compensatory hours	50.10	46.00	38.60	390.70	116.70	14.80
CCTV compensatory hours	0	0	0	0	0	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.2	1.2	1.2	1.2	1.2	1.2
Index Value	0.008	0.009	0.006	0.021	0.024	0.023

# **Personnel Screening Program**

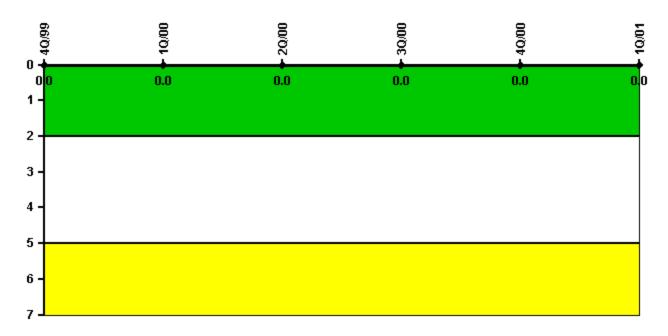


Thresholds: White > 2.0 Yellow > 5.0

### Notes

Personnel Screening Program	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Program failures	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

### Notes

FFD/Personnel Reliability	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Program Failures	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

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

Last Modified: March 28, 2002