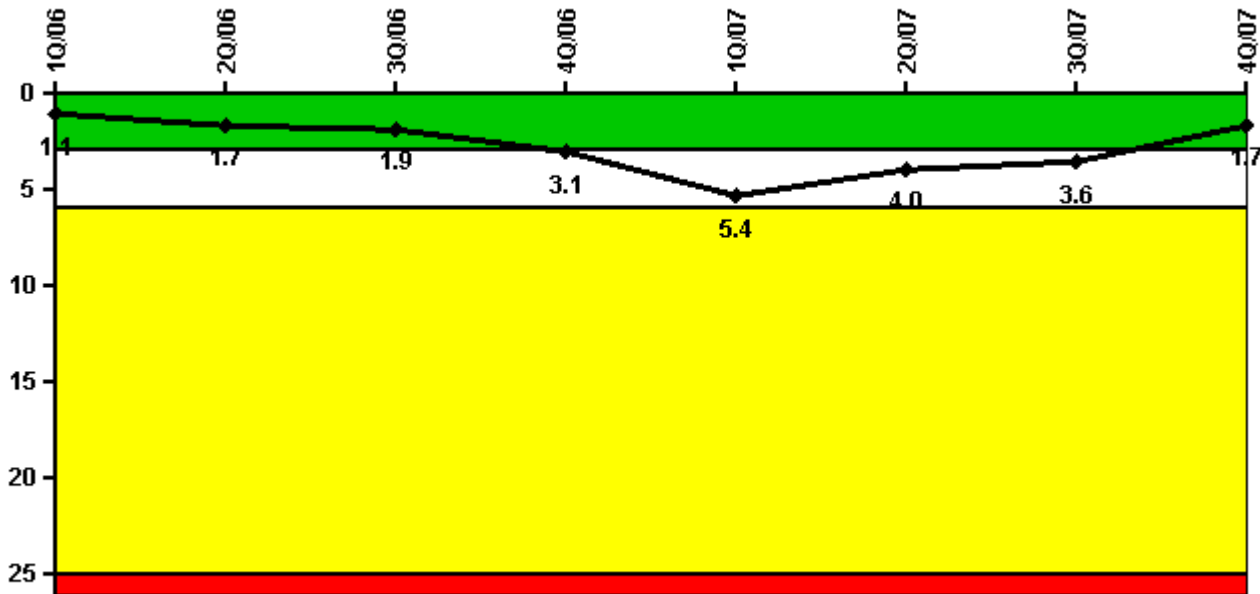


# Kewaunee

## 4Q/2007 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



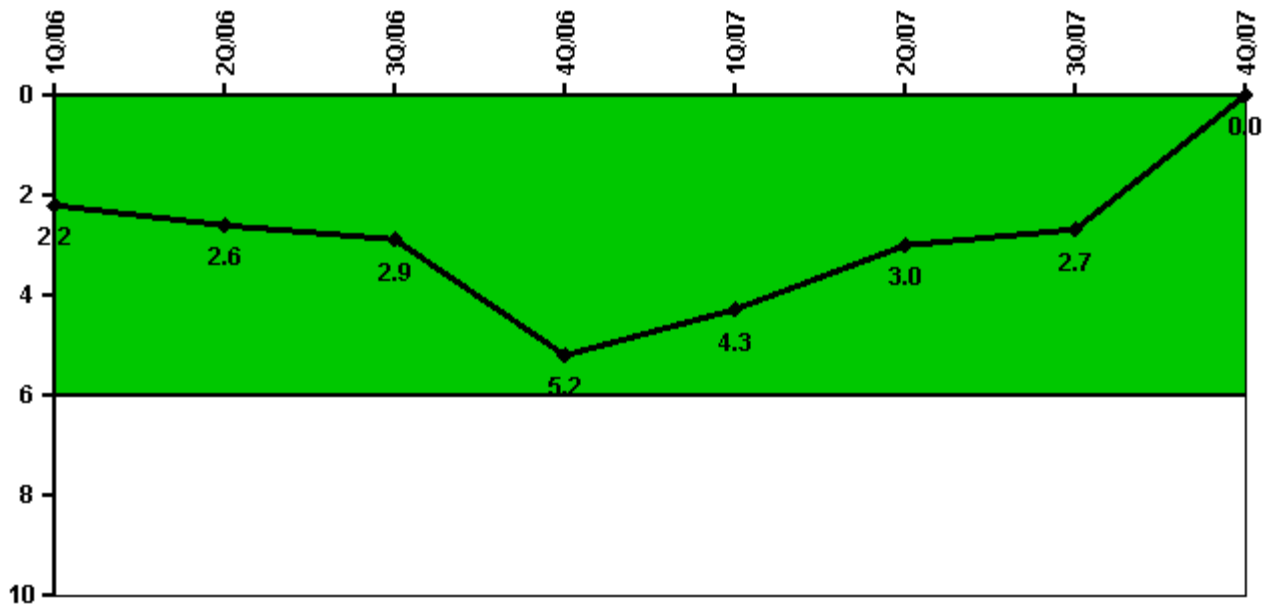
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Unplanned scrams	0	1.0	0	2.0	2.0	0	0	0
Critical hours	2160.0	1575.9	1512.7	1505.1	1870.0	2184.0	2208.0	2025.3
Indicator value	1.1	1.7	1.9	3.1	5.4	4.0	3.6	1.7

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



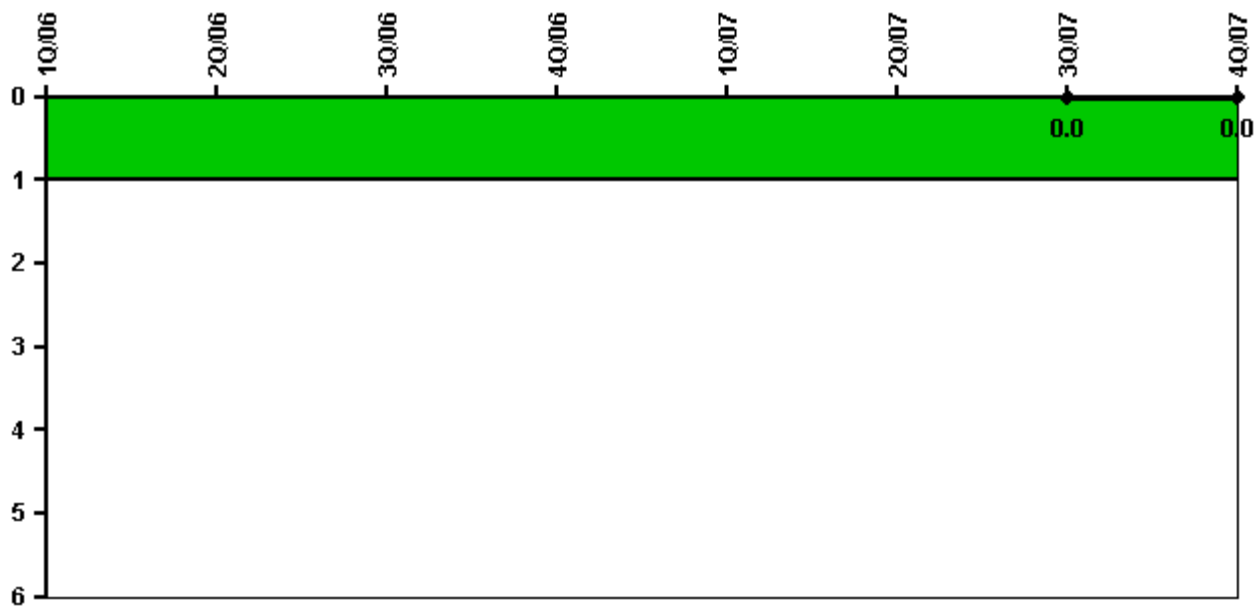
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Unplanned power changes	1.0	1.0	0	3.0	0	0	0	0
Critical hours	2160.0	1575.9	1512.7	1505.1	1870.0	2184.0	2208.0	2025.3
<b>Indicator value</b>	<b>2.2</b>	<b>2.6</b>	<b>2.9</b>	<b>5.2</b>	<b>4.3</b>	<b>3.0</b>	<b>2.7</b>	<b>0</b>

Licensee Comments: none

# Unplanned Scrams with Complications



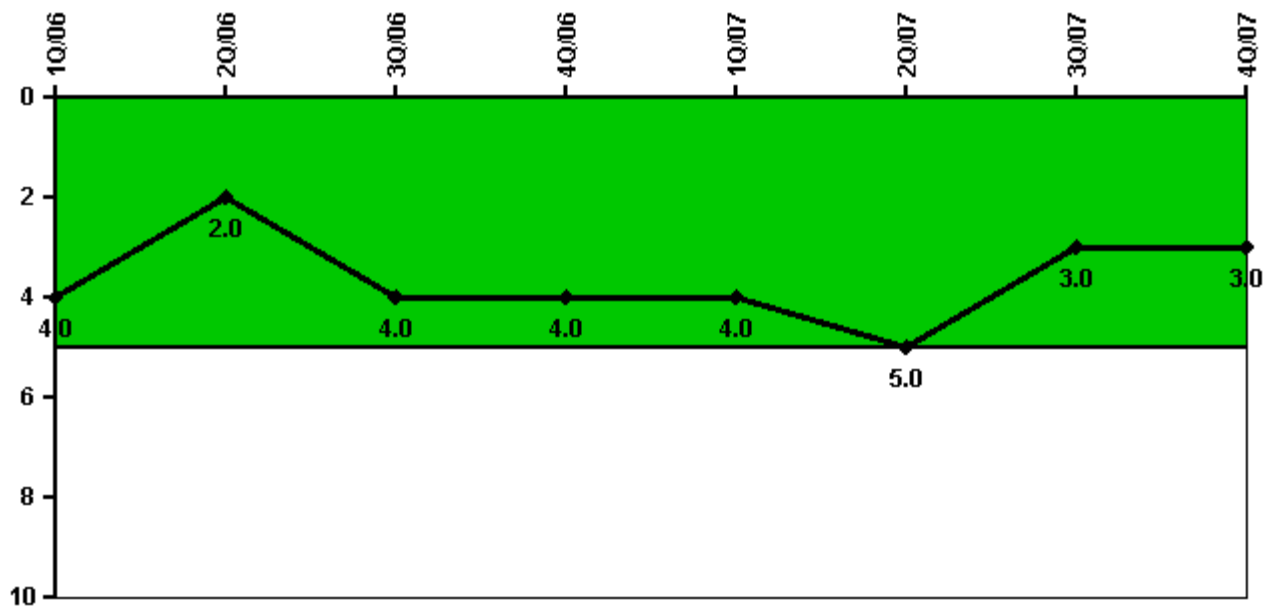
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Scrams with complications				0	0	0	0	0
<b>Indicator value</b>							<b>0.0</b>	<b>0.0</b>

Licensee Comments: none

## Safety System Functional Failures (PWR)



Thresholds: White > 5.0

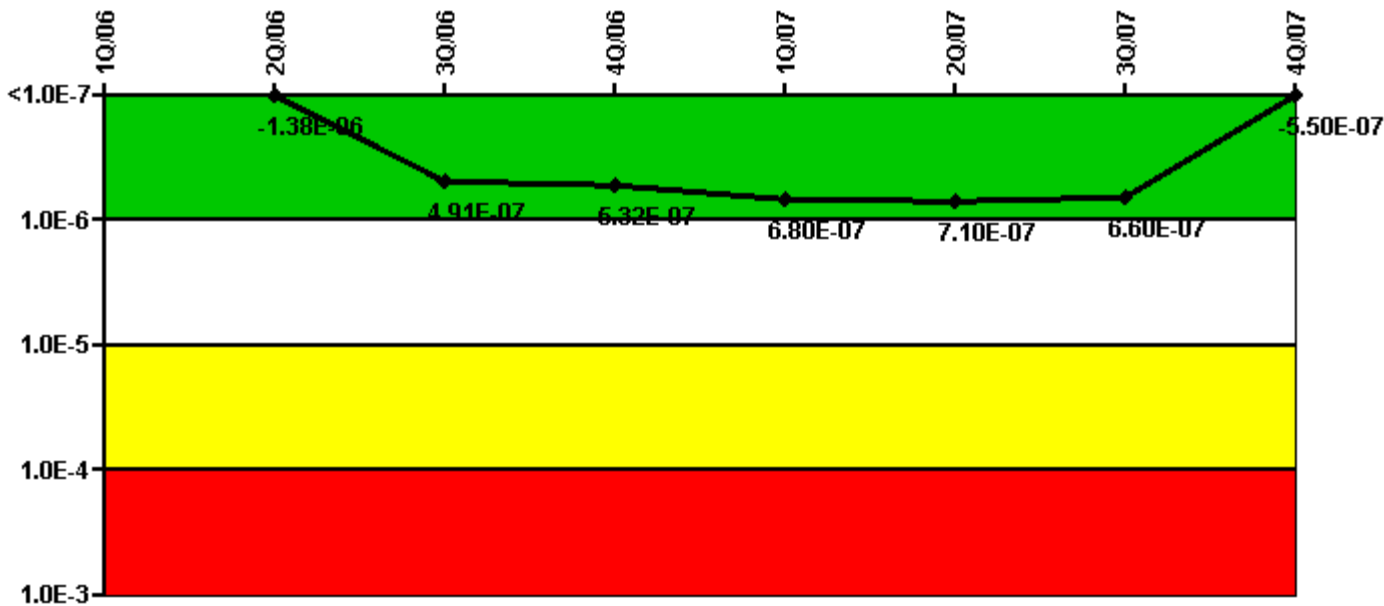
### Notes

Safety System Functional Failures (PWR)	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Safety System Functional Failures	0	1	2	1	0	2	0	1
Indicator value	4	2	4	4	4	5	3	3

Licensee Comments:

4Q/07: LER 2007-009; Both Trains of Shield Building Vent Inoperable

# Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

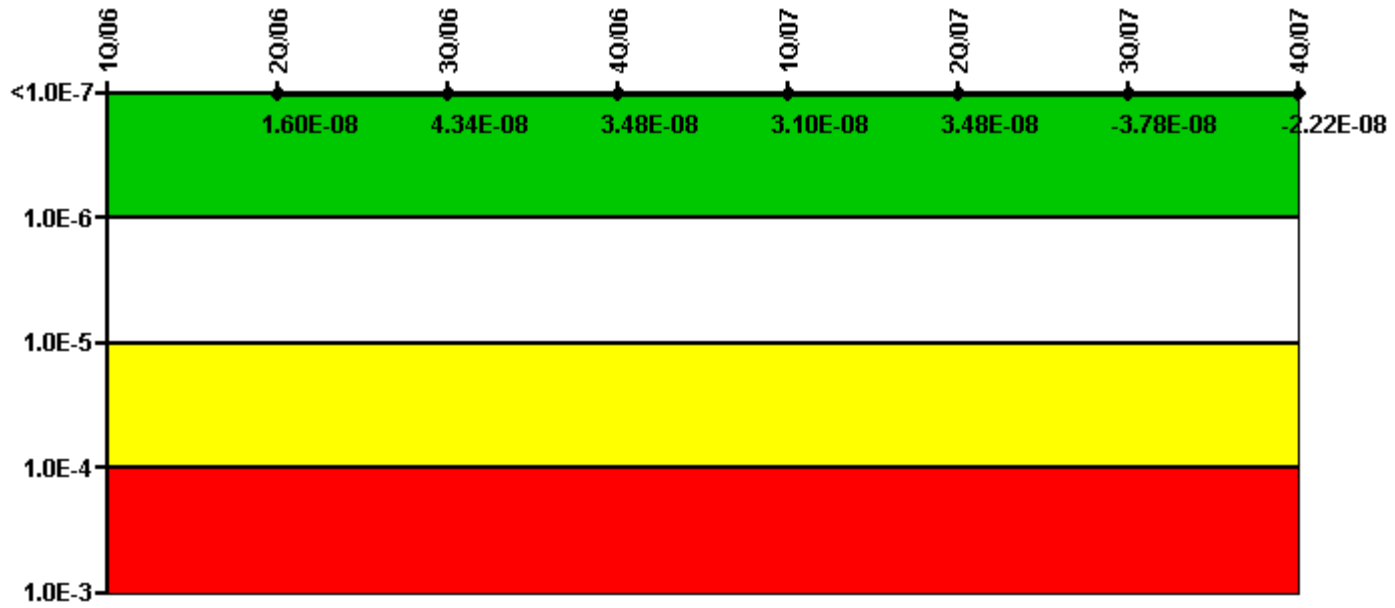
## Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI (ΔCDF)		-8.00E-08	-3.90E-08	-8.30E-09	1.60E-07	1.90E-07	1.40E-07	8.00E-08
URI (ΔCDF)		-1.30E-06	5.30E-07	5.40E-07	5.20E-07	5.20E-07	5.20E-07	-6.30E-07
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		-1.38E-06	4.91E-07	5.32E-07	6.80E-07	7.10E-07	6.60E-07	-5.50E-07

## Licensee Comments:

4Q/07: Risk Cap Invoked. Changed PRA Parameter(s). The PRA coefficients for all functions and devices have been updated for the Fourth Quarter 2007 to reflect revised PRA model K107A. The effective date of PRA revision is August 29, 2007. The PRA change did not result in any MSPI values exceeding the Green/White threshold.

# Mitigating Systems Performance Index, High Pressure Injection System



Thresholds: White >  $1.00E-6$  Yellow >  $1.00E-5$  Red >  $1.00E-4$

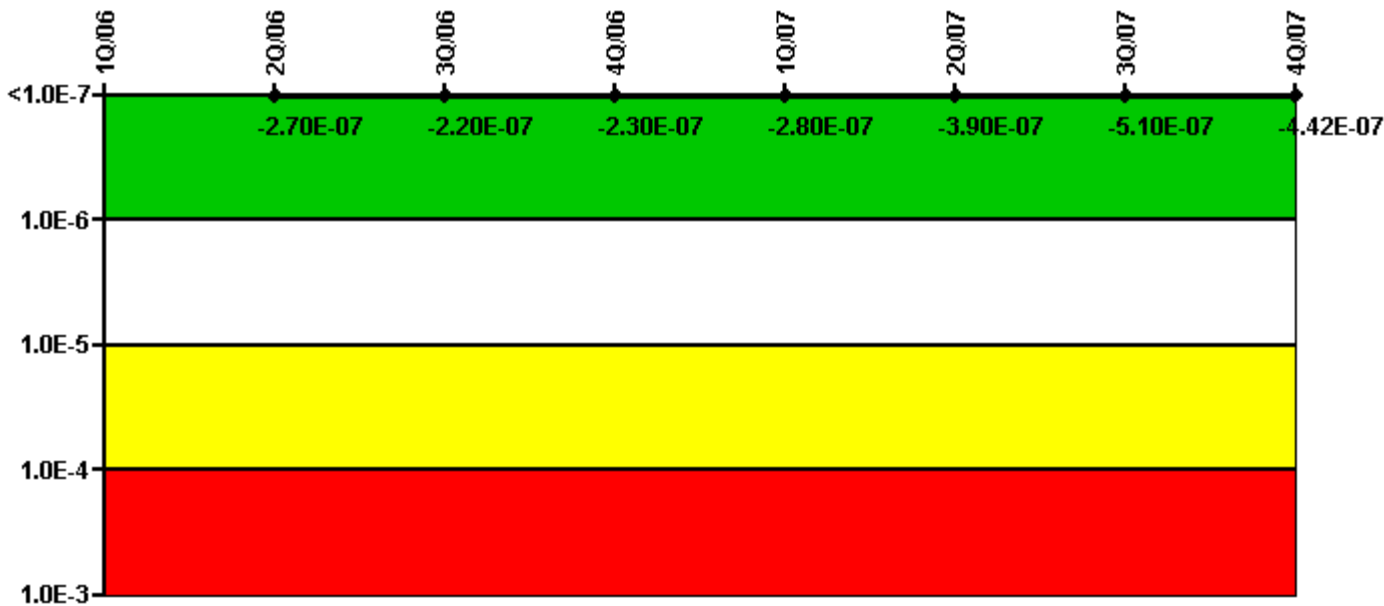
## Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		$-5.00E-09$	$-5.60E-09$	$-6.20E-09$	$-1.00E-08$	$-6.20E-09$	$-2.80E-09$	$-2.20E-09$
URI ( $\Delta$ CDF)		$2.10E-08$	$4.90E-08$	$4.10E-08$	$4.10E-08$	$4.10E-08$	$-3.50E-08$	$-2.00E-08$
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		$1.60E-08$	$4.34E-08$	$3.48E-08$	$3.10E-08$	$3.48E-08$	$-3.78E-08$	$-2.22E-08$

Licensee Comments:

4Q/07: Changed PRA Parameter(s). The PRA coefficients for all functions and devices have been updated for the Fourth Quarter 2007 to reflect revised PRA model K107A. The effective date of PRA revision is August 29, 2007. The PRA change did not result in any MSPI values exceeding the Green/White threshold.

# Mitigating Systems Performance Index, Heat Removal System



Thresholds: White >  $1.00E-6$  Yellow >  $1.00E-5$  Red >  $1.00E-4$

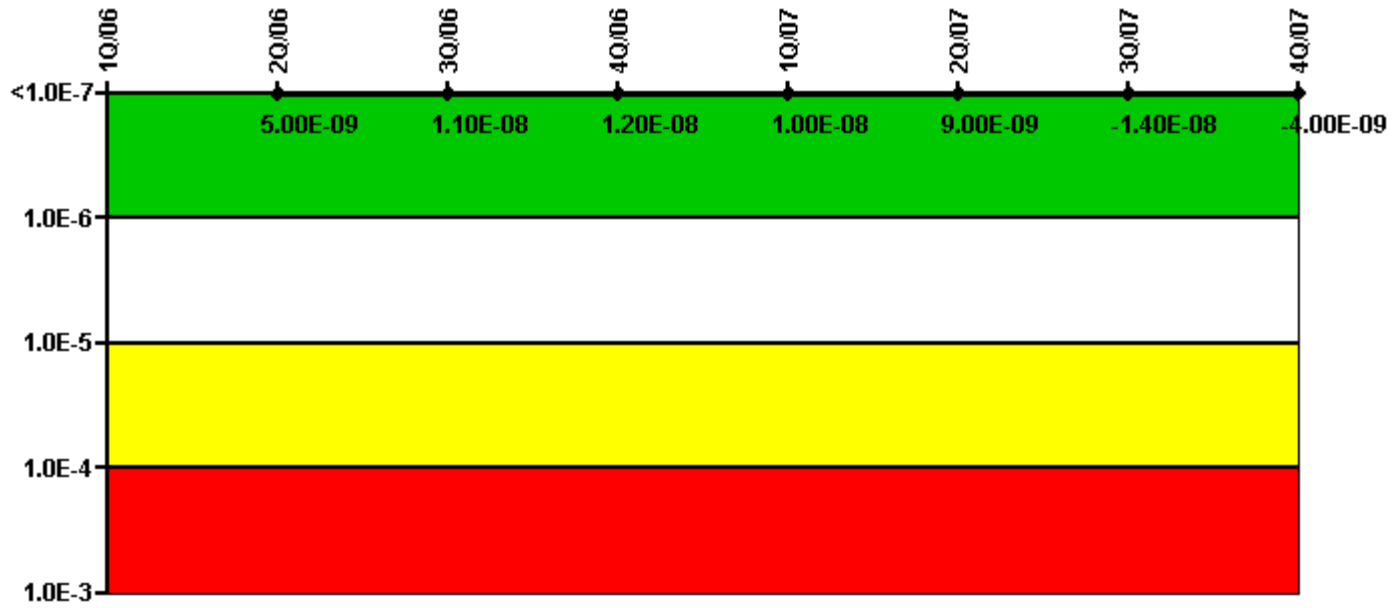
## Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		$2.30E-07$	$2.10E-07$	$2.20E-07$	$2.00E-07$	$1.00E-07$	$4.00E-08$	$1.80E-08$
URI ( $\Delta$ CDF)		$-5.00E-07$	$-4.30E-07$	$-4.50E-07$	$-4.80E-07$	$-4.90E-07$	$-5.50E-07$	$-4.60E-07$
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		$-2.70E-07$	$-2.20E-07$	$-2.30E-07$	$-2.80E-07$	$-3.90E-07$	$-5.10E-07$	$-4.42E-07$

Licensee Comments:

4Q/07: Changed PRA Parameter(s). The PRA coefficients for all functions and devices have been updated for the Fourth Quarter 2007 to reflect revised PRA model K107A. The effective date of PRA revision is August 29, 2007. The PRA change did not result in any MSPI values exceeding the Green/White threshold.

# Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White >  $1.00E-6$  Yellow >  $1.00E-5$  Red >  $1.00E-4$

## Notes

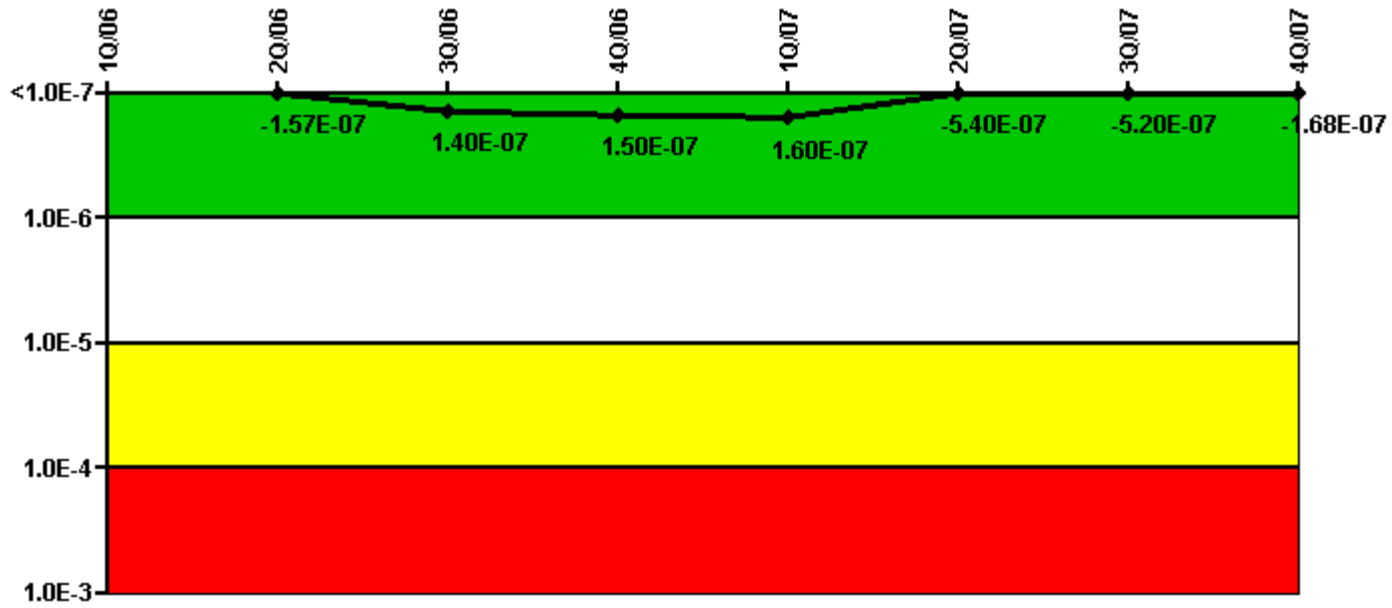
Mitigating Systems Performance Index, Residual Heat Removal System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		$2.90E-08$	$5.90E-08$	$6.40E-08$	$6.10E-08$	$6.00E-08$	$3.60E-08$	$3.10E-08$
URI ( $\Delta$ CDF)		$-2.40E-08$	$-4.80E-08$	$-5.20E-08$	$-5.10E-08$	$-5.10E-08$	$-5.00E-08$	$-3.50E-08$
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		$5.00E-09$	$1.10E-08$	$1.20E-08$	$1.00E-08$	$9.00E-09$	$-1.40E-08$	$-4.00E-09$

Licensee Comments:

4Q/07: Changed PRA Parameter(s). The PRA coefficients for all functions and devices have been updated for the Fourth Quarter 2007 to reflect revised PRA model K107A. The effective date of PRA revision is August 29, 2007. The PRA change did not result in any MSPI values exceeding the Green/White threshold.



# Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White >  $1.00E-6$  Yellow >  $1.00E-5$  Red >  $1.00E-4$

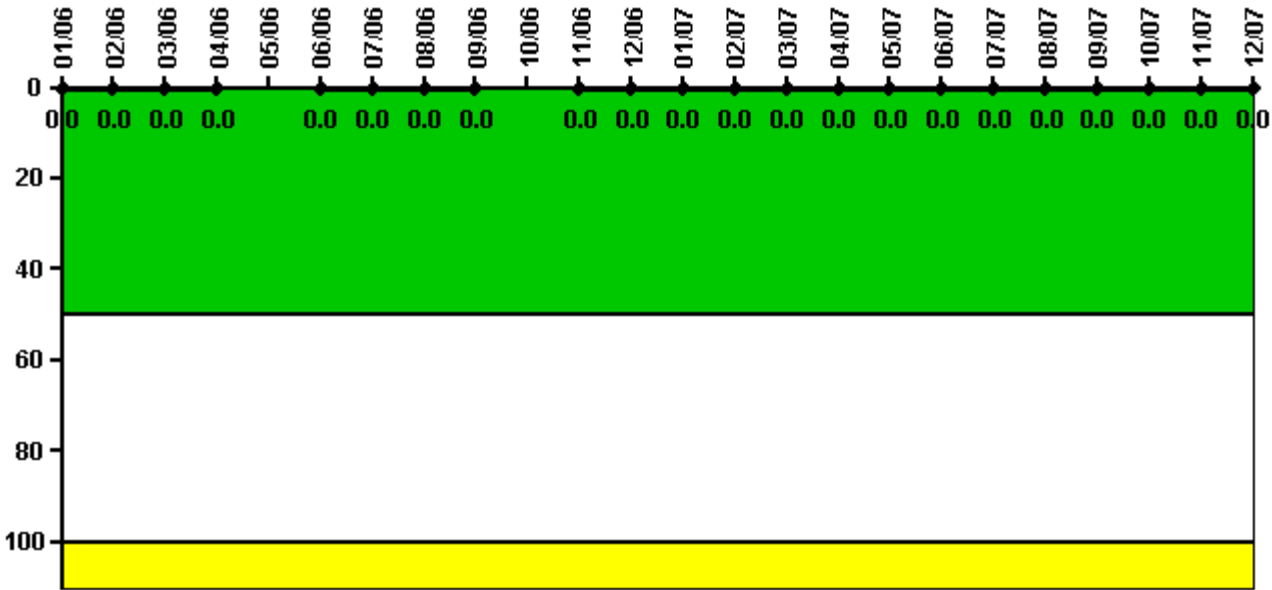
## Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
UAI ( $\Delta$ CDF)		$-7.70E-08$	$-1.40E-07$	$-1.40E-07$	$-1.40E-07$	$-1.40E-07$	$-1.30E-07$	$-1.30E-07$
URI ( $\Delta$ CDF)		$-8.00E-08$	$2.80E-07$	$2.90E-07$	$3.00E-07$	$-4.00E-07$	$-3.90E-07$	$-3.80E-08$
PLE		NO	NO	NO	NO	NO	NO	NO
Indicator value		$-1.57E-07$	$1.40E-07$	$1.50E-07$	$1.60E-07$	$-5.40E-07$	$-5.20E-07$	$-1.68E-07$

## Licensee Comments:

4Q/07: Changed PRA Parameter(s). The PRA coefficients for all functions and devices have been updated for the Fourth Quarter 2007 to reflect revised PRA model K107A. The effective date of PRA revision is August 29, 2007. The PRA change did not result in any MSPI values exceeding the Green/White threshold. The PRA revision resulted in the addition of two monitored components to the Cooling Water System due to their Birnbaum importance is now greater than  $1E-06$ . The MSPI value for the Cooling Water System reflects the addition of these two components. The new components are turbine building service water isolation valves SW-4A and SW-4B.

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

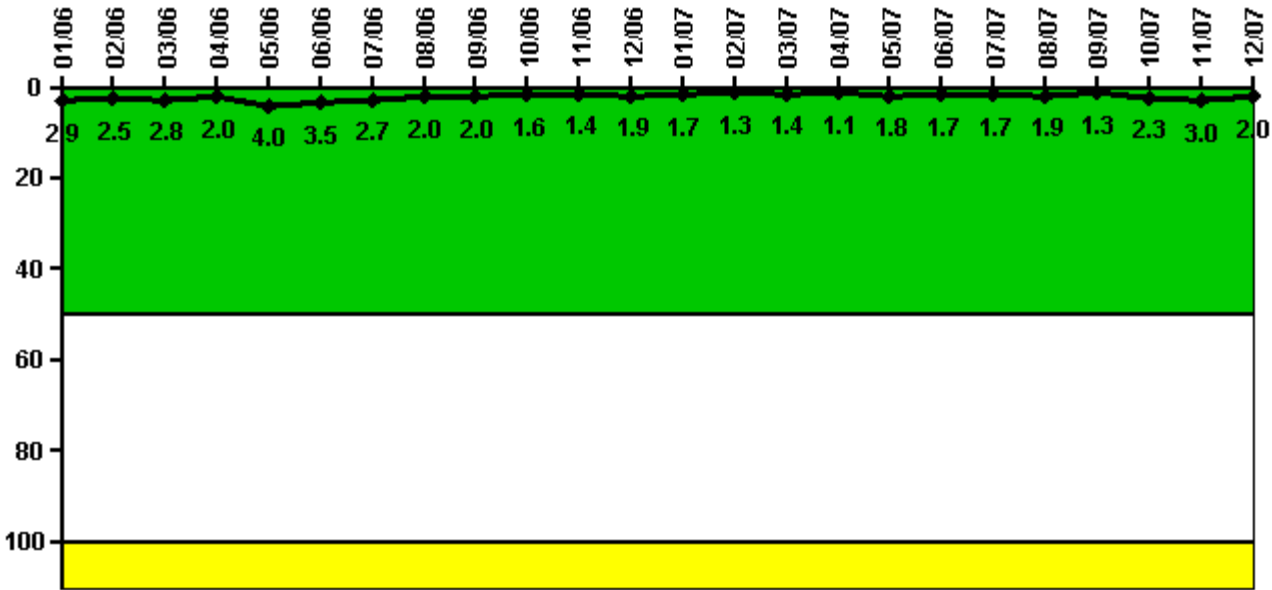
Reactor Coolant System Activity	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum activity	0.000117	0.000101	0.000118	0.000116	N/A	0.000127	0.000125	0.000197	0.000139	N/A	0.000076	0.000103
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	N/A	0	0	0	0	N/A	0	0

Reactor Coolant System Activity	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum activity	0.000078	0.000082	0.000085	0.000096	0.000094	0.000097	0.000098	0.000103	0.000107	0.000105	0.000111	0.000112
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

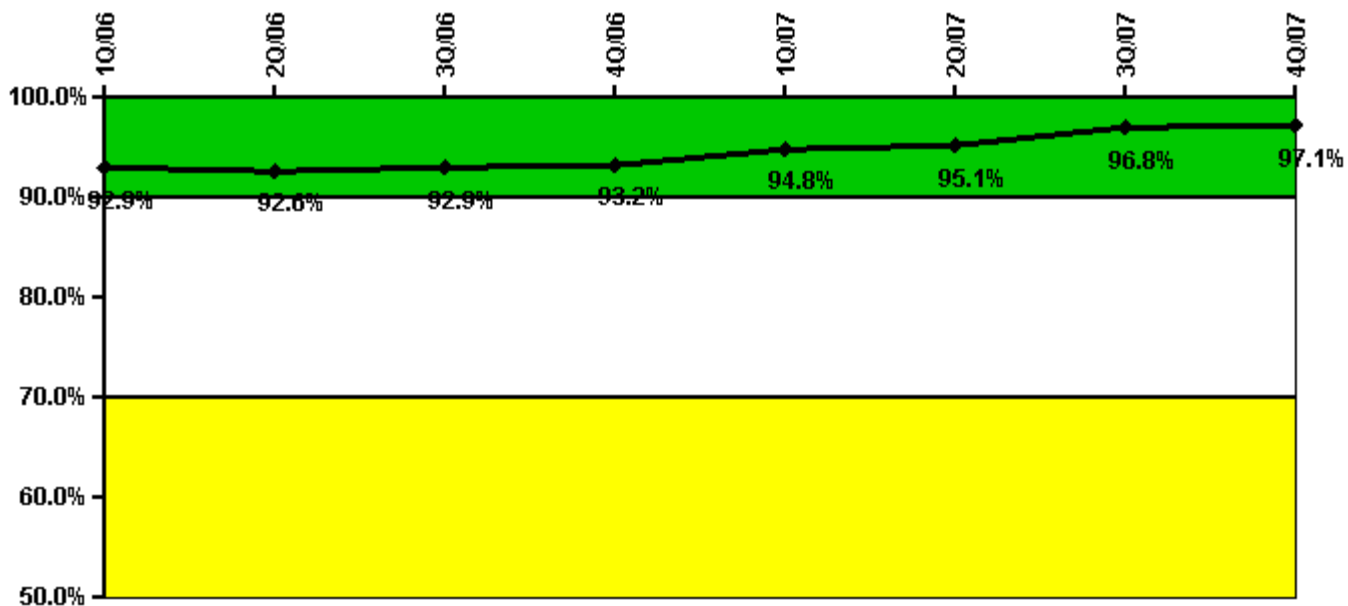
Reactor Coolant System Leakage	1/06	2/06	3/06	4/06	5/06	6/06	7/06	8/06	9/06	10/06	11/06	12/06
Maximum leakage	0.285	0.247	0.279	0.197	0.404	0.345	0.268	0.200	0.200	0.157	0.137	0.191
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.9	2.5	2.8	2.0	4.0	3.5	2.7	2.0	2.0	1.6	1.4	1.9

Reactor Coolant System Leakage	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum leakage	0.171	0.125	0.137	0.114	0.180	0.171	0.166	0.187	0.134	0.231	0.295	0.198
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	1.7	1.3	1.4	1.1	1.8	1.7	1.7	1.9	1.3	2.3	3.0	2.0

Licensee Comments: none

## Drill/Exercise Performance



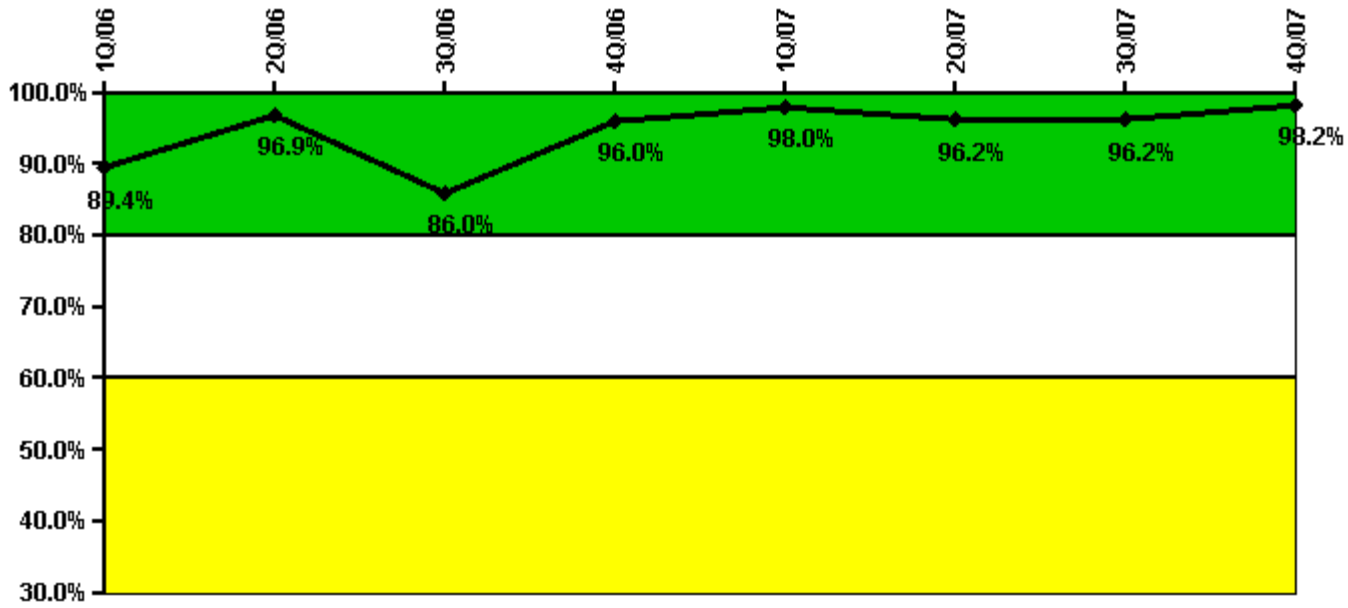
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Successful opportunities	31.0	23.0	6.0	23.0	117.0	34.0	53.0	15.0
Total opportunities	31.0	27.0	6.0	24.0	118.0	35.0	54.0	16.0
<b>Indicator value</b>	<b>92.9%</b>	<b>92.6%</b>	<b>92.9%</b>	<b>93.2%</b>	<b>94.8%</b>	<b>95.1%</b>	<b>96.8%</b>	<b>97.1%</b>

Licensee Comments: none

# ERO Drill Participation



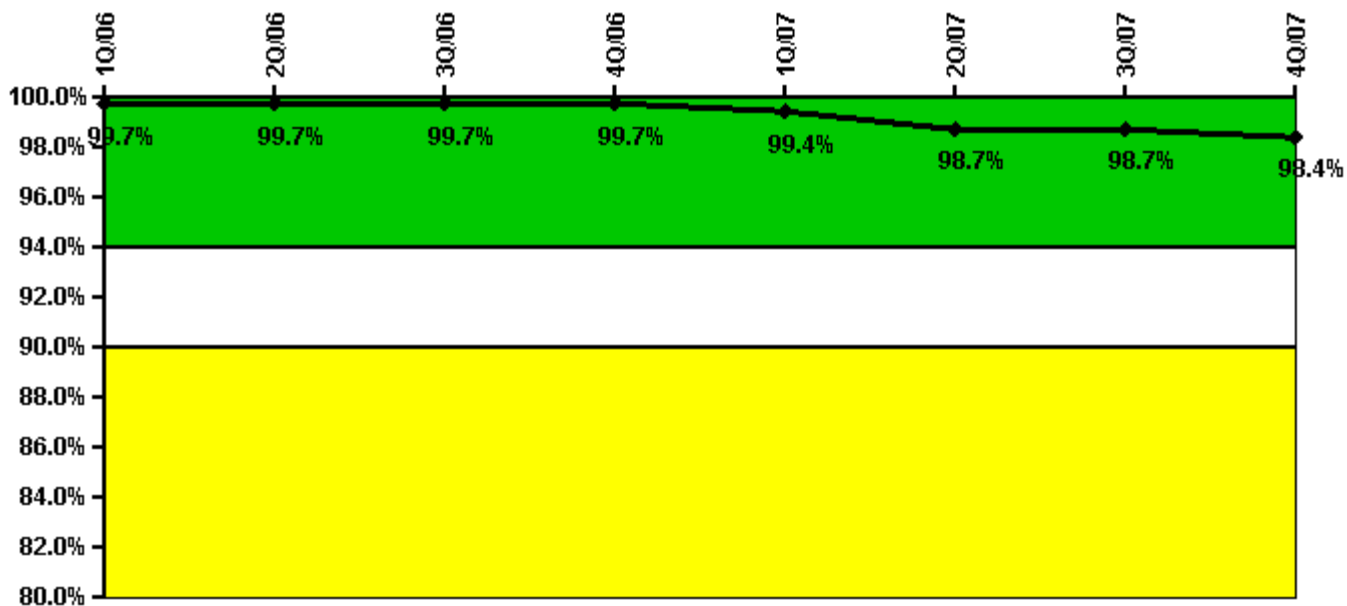
Thresholds: White < 80.0% Yellow < 60.0%

## Notes

ERO Drill Participation	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Participating Key personnel	59.0	62.0	43.0	48.0	50.0	50.0	51.0	54.0
Total Key personnel	66.0	64.0	50.0	50.0	51.0	52.0	53.0	55.0
<b>Indicator value</b>	<b>89.4%</b>	<b>96.9%</b>	<b>86.0%</b>	<b>96.0%</b>	<b>98.0%</b>	<b>96.2%</b>	<b>96.2%</b>	<b>98.2%</b>

Licensee Comments: none

# Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
Successful siren-tests	77	78	78	78	76	76	78	77
Total sirens-tests	78	78	78	78	78	78	78	78
<b>Indicator value</b>	<b>99.7%</b>	<b>99.7%</b>	<b>99.7%</b>	<b>99.7%</b>	<b>99.4%</b>	<b>98.7%</b>	<b>98.7%</b>	<b>98.4%</b>

Licensee Comments: none

# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

## Notes

Occupational Exposure Control Effectiveness	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
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	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07
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: February 4, 2008