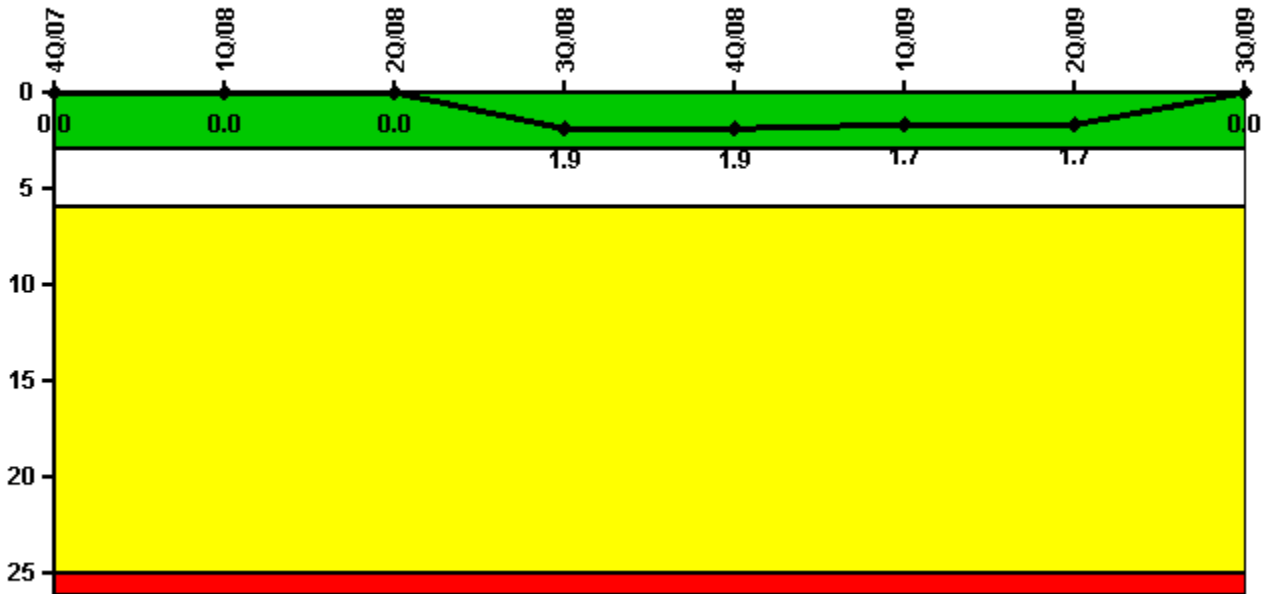


# Watts Bar 1

## 3Q/2009 Performance Indicators

Licensee's General Comments: Failure # 553 and 554 for air intrusion into Essential Raw Cooling Water piping that was the emergency supply to Auxiliary Feedwater Train B was not reported until August 2009 because it was initially considered to be an ERCW issue rather than an AFW problem. These changes do not affect the color of the Performance Indicators.

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

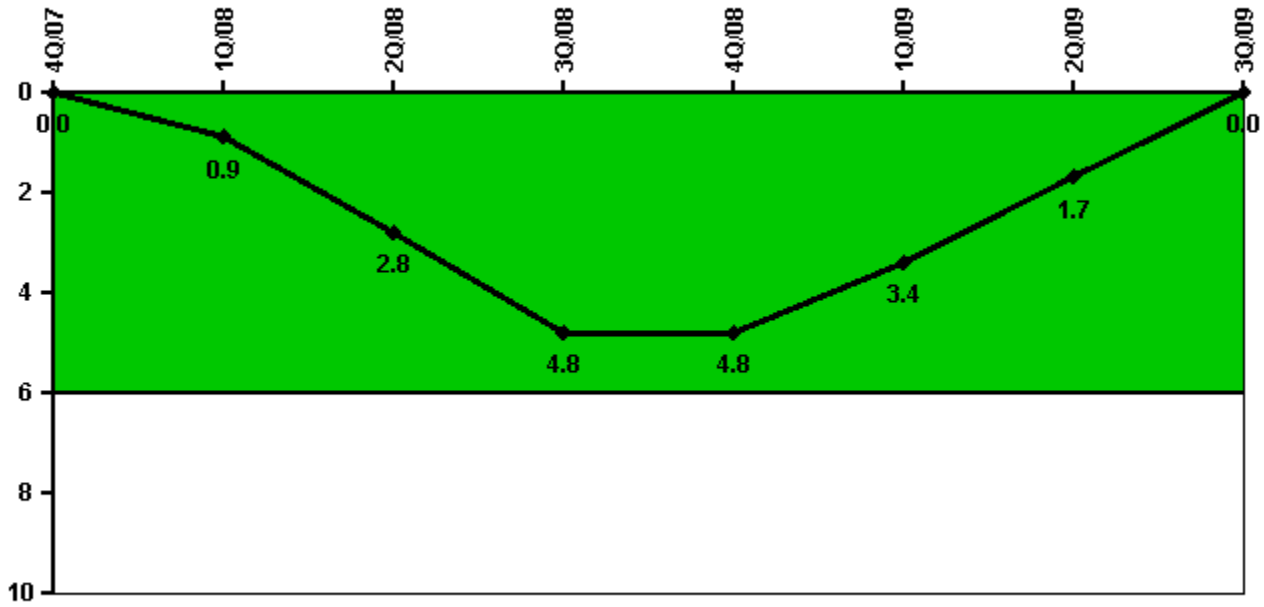
### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Unplanned scrams	0	0	0	2.0	0	0	0	0
Critical hours	2209.0	1164.2	2004.3	1930.2	2209.0	2159.0	2184.0	1968.0
Indicator value	0	0	0	1.9	1.9	1.7	1.7	0

Licensee Comments: none

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## Unplanned Power Changes per 7000 Critical Hrs



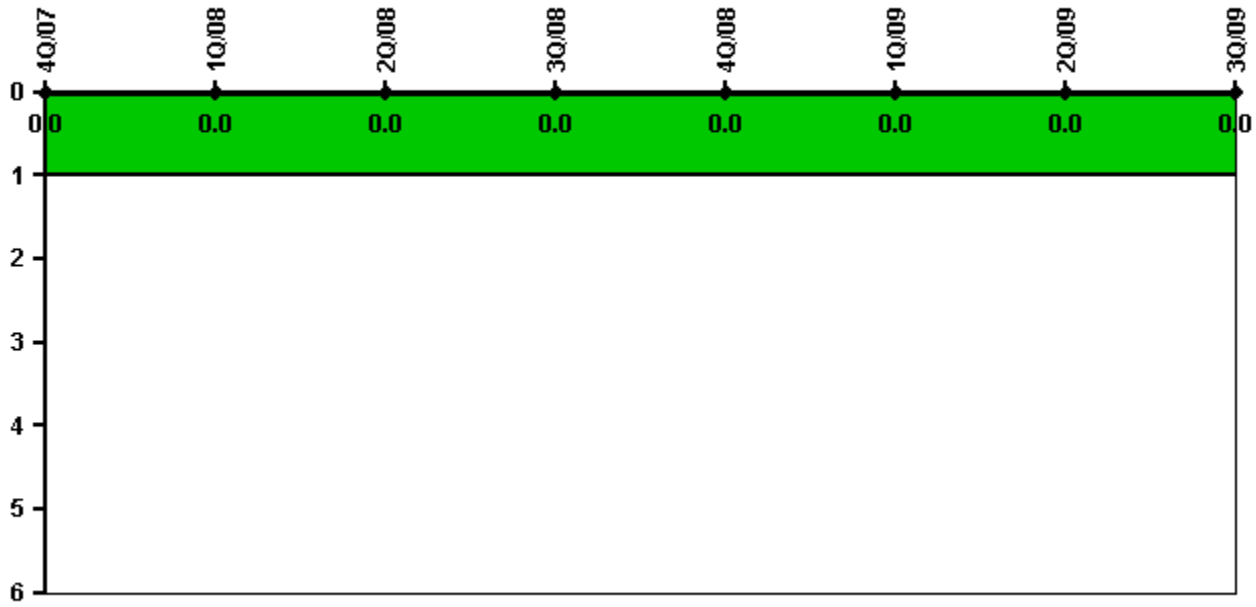
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Unplanned power changes	0	1.0	2.0	2.0	0	0	0	0
Critical hours	2209.0	1164.2	2004.3	1930.2	2209.0	2159.0	2184.0	1968.0
Indicator value	0	0.9	2.8	4.8	4.8	3.4	1.7	0

Licensee Comments: none

## Unplanned Scrams with Complications



Thresholds: White > 1.0

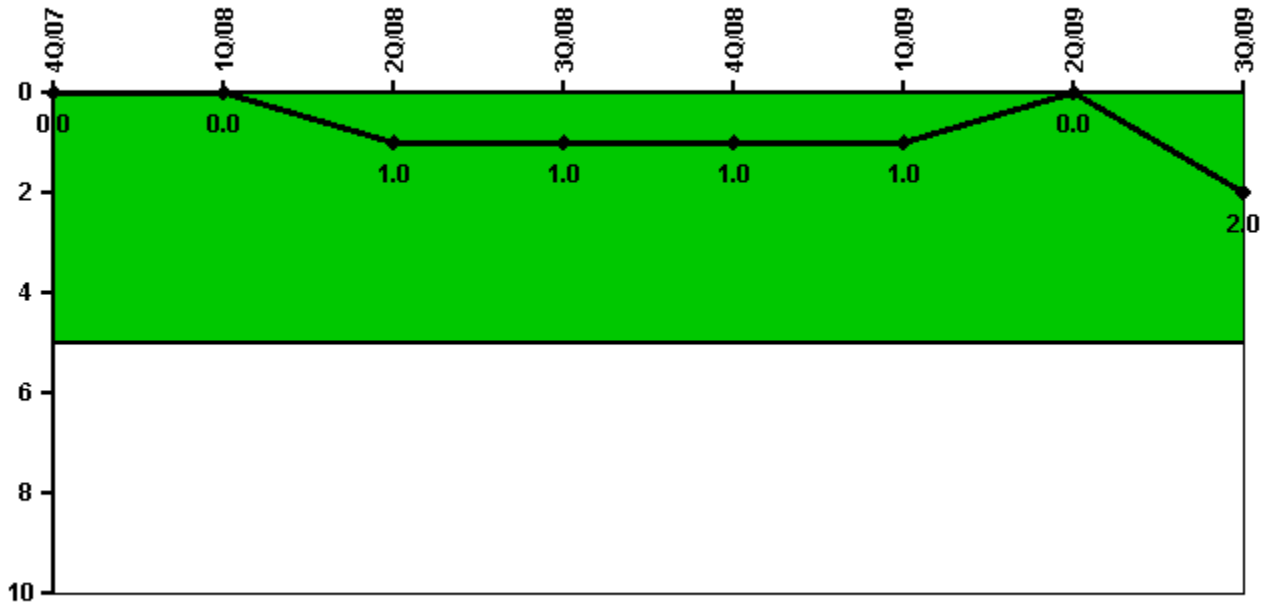
### Notes

Unplanned Scrams with Complications	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

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## Safety System Functional Failures (PWR)



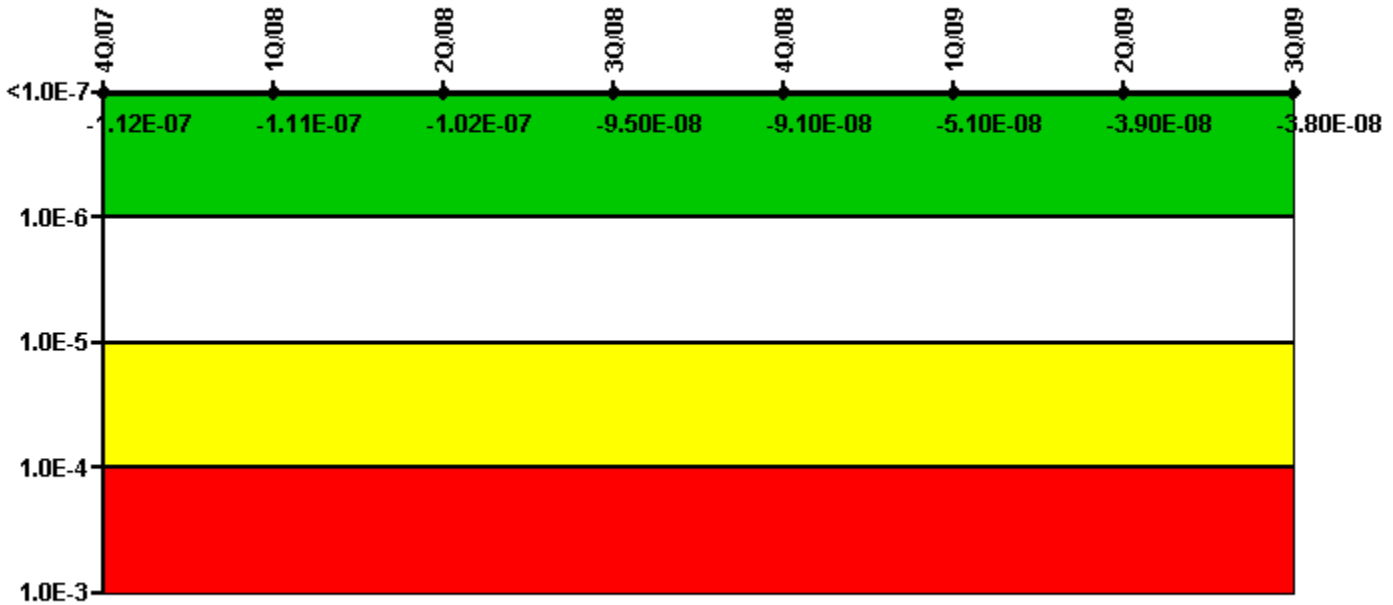
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Safety System Functional Failures	0	0	1	0	0	0	0	2
Indicator value	0	0	1	1	1	1	0	2

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



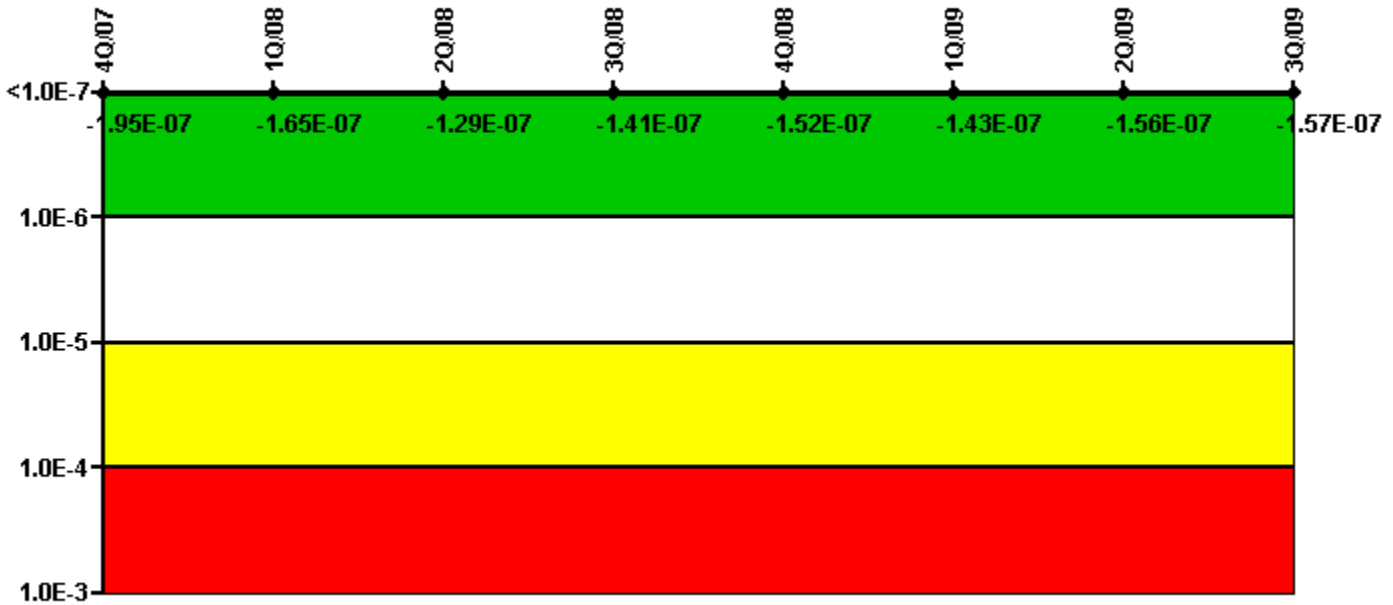
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI ( $\Delta$ CDF)	1.80E-08	1.90E-08	2.80E-08	3.50E-08	3.90E-08	4.20E-08	5.40E-08	5.70E-08
URI ( $\Delta$ CDF)	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-9.30E-08	-9.30E-08	-9.50E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.12E-07	-1.11E-07	-1.02E-07	-9.50E-08	-9.10E-08	-5.10E-08	-3.90E-08	-3.80E-08

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



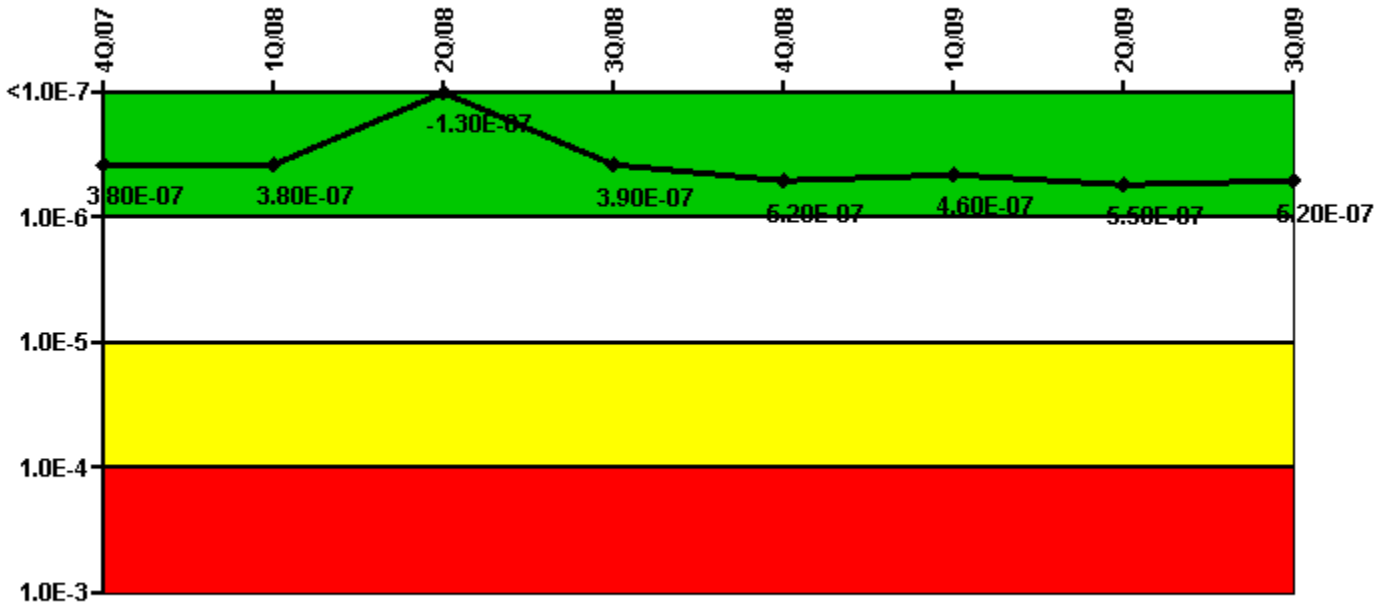
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI ( $\Delta$ CDF)	1.50E-08	1.50E-08	2.10E-08	8.70E-09	-2.10E-09	7.00E-09	-6.00E-09	-7.30E-09
URI ( $\Delta$ CDF)	-2.10E-07	-1.80E-07	-1.50E-07	-1.50E-07	-1.50E-07	-1.50E-07	-1.50E-07	-1.50E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.95E-07	-1.65E-07	-1.29E-07	-1.41E-07	-1.52E-07	-1.43E-07	-1.56E-07	-1.57E-07

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



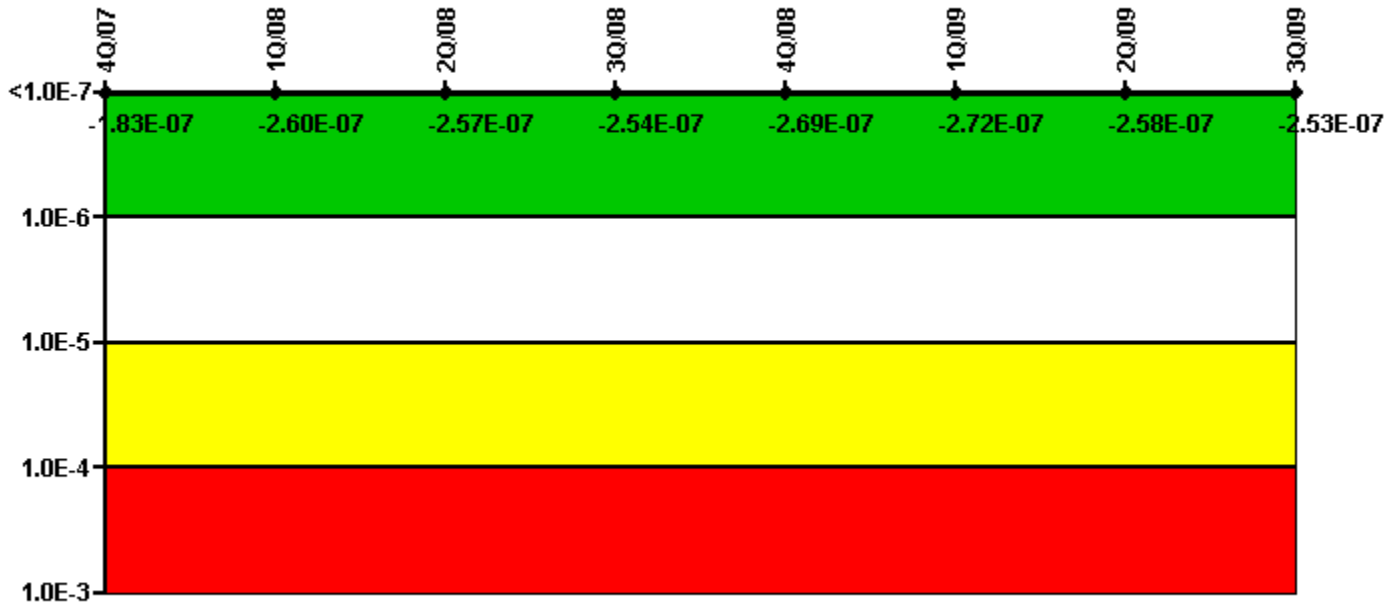
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI ( $\Delta$ CDF)	2.10E-07	2.10E-07	1.60E-07	2.20E-07	2.60E-07	2.00E-07	2.00E-07	1.60E-07
URI ( $\Delta$ CDF)	1.70E-07	1.70E-07	-2.90E-07	1.70E-07	2.60E-07	2.60E-07	3.50E-07	3.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.80E-07	3.80E-07	-1.30E-07	3.90E-07	5.20E-07	4.60E-07	5.50E-07	5.20E-07

Licensee Comments: none

# Mitigating Systems Performance Index, Residual Heat Removal System



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

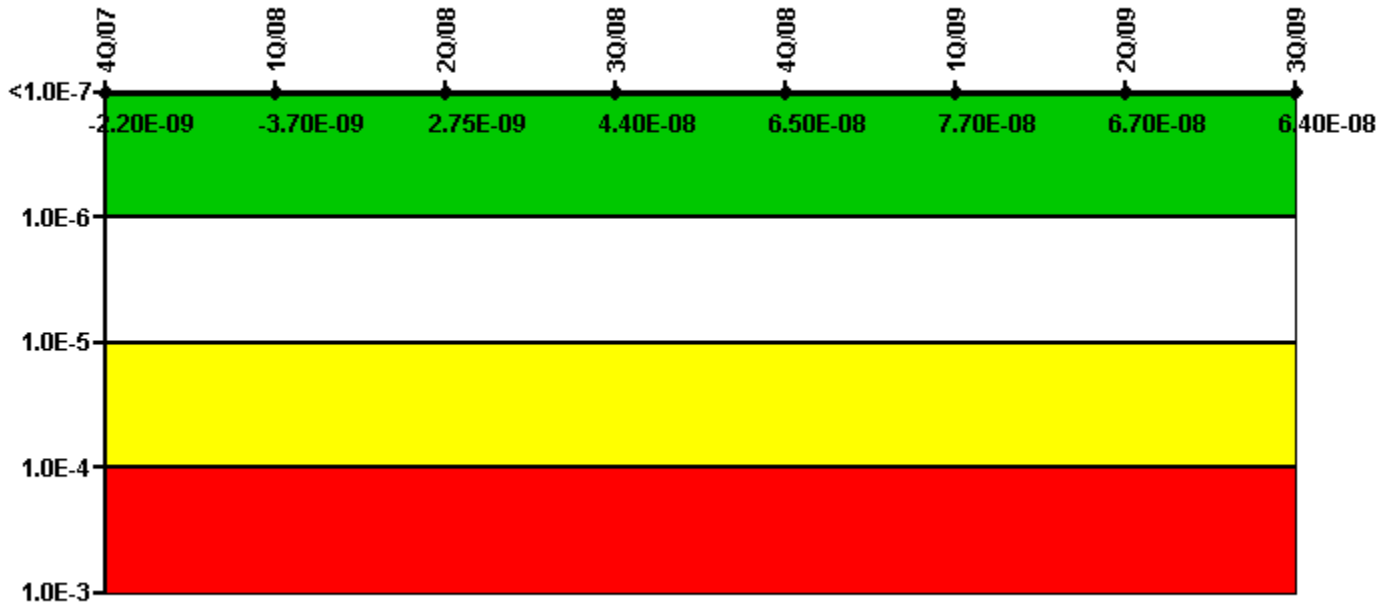
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI ( $\Delta$ CDF)	6.70E-08	-9.50E-09	-6.70E-09	-3.50E-09	-1.90E-08	-2.20E-08	-8.20E-09	-3.00E-09
URI ( $\Delta$ CDF)	-2.50E-07	-2.50E-07	-2.50E-07	-2.50E-07	-2.50E-07	-2.50E-07	-2.50E-07	-2.50E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.83E-07	-2.60E-07	-2.57E-07	-2.54E-07	-2.69E-07	-2.72E-07	-2.58E-07	-2.53E-07

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



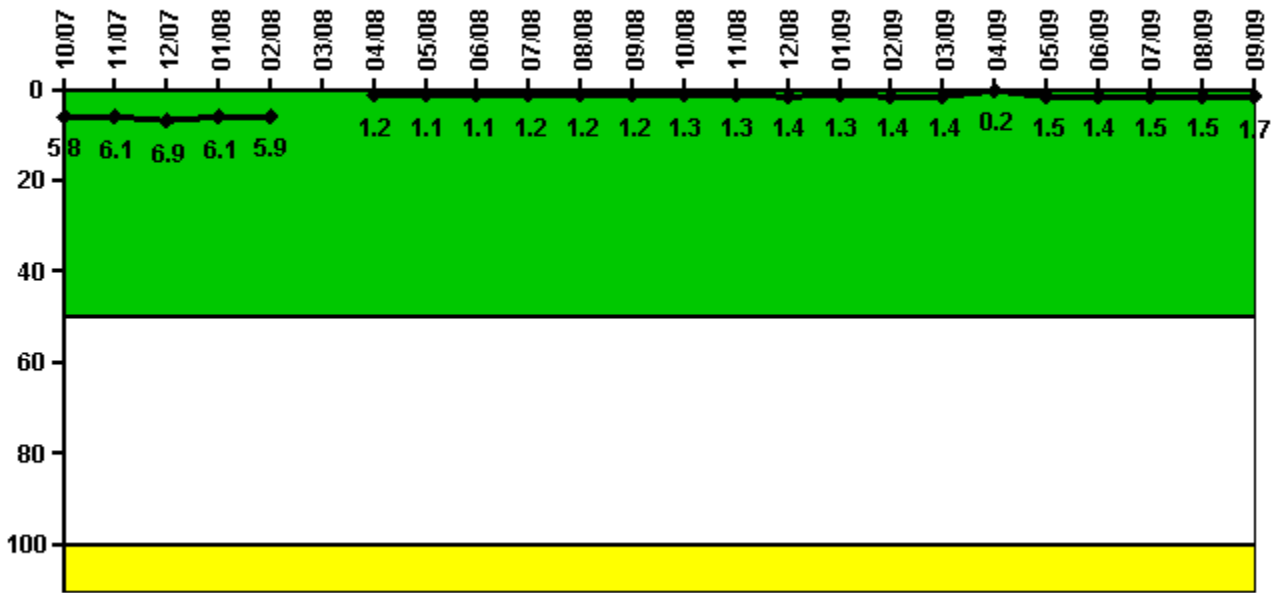
Thresholds: White >  $1.00E-6$  Yellow >  $1.00E-5$  Red >  $1.00E-4$

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
UAI ( $\Delta$ CDF)	$5.80E-09$	$4.30E-09$	$3.00E-09$	$3.20E-08$	$5.30E-08$	$6.50E-08$	$5.50E-08$	$5.20E-08$
URI ( $\Delta$ CDF)	$-8.00E-09$	$-8.00E-09$	$-2.50E-10$	$1.20E-08$	$1.20E-08$	$1.20E-08$	$1.20E-08$	$1.20E-08$
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	$-2.20E-09$	$-3.70E-09$	$2.75E-09$	$4.40E-08$	$6.50E-08$	$7.70E-08$	$6.70E-08$	$6.40E-08$

Licensee Comments: none

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

Reactor Coolant System Activity	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08
Maximum activity	0.015470	0.016290	0.018200	0.016100	0.015600	N/A	0.003098	0.002874	0.003022	0.003092	0.003093	0.003252
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Indicator value	5.8	6.1	6.9	6.1	5.9	N/A	1.2	1.1	1.1	1.2	1.2	1.2

Reactor Coolant System Activity	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09
Maximum activity	0.003368	0.003390	0.003801	0.003479	0.003693	0.003662	0.000411	0.003844	0.003790	0.003882	0.004091	0.004520
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Indicator value	1.3	1.3	1.4	1.3	1.4	1.4	0.2	1.5	1.4	1.5	1.5	1.7

Licensee Comments: none

# Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

## Notes

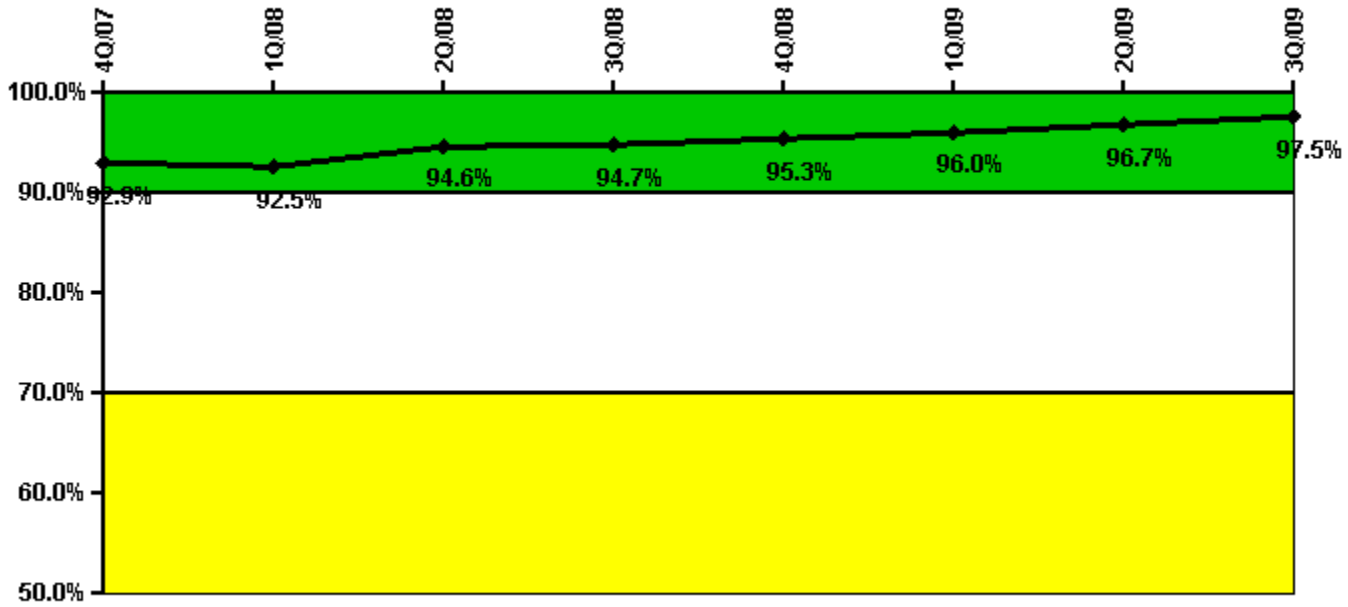
Reactor Coolant System Leakage	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08
Maximum leakage	0	0.020	0.030	0.030	0.020	0.010	0.010	0.010	0.030	0.030	0.040	0.020
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.3	0.3	0.4	0.2

Reactor Coolant System Leakage	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09
Maximum leakage	0.040	0.150	0.030	0.040	0.020	0.030	0.030	0.030	0.040	0.050	0.040	0.040
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	0.4	1.5	0.3	0.4	0.2	0.3	0.3	0.3	0.4	0.5	0.4	0.4

Licensee Comments: none

## Drill/Exercise Performance



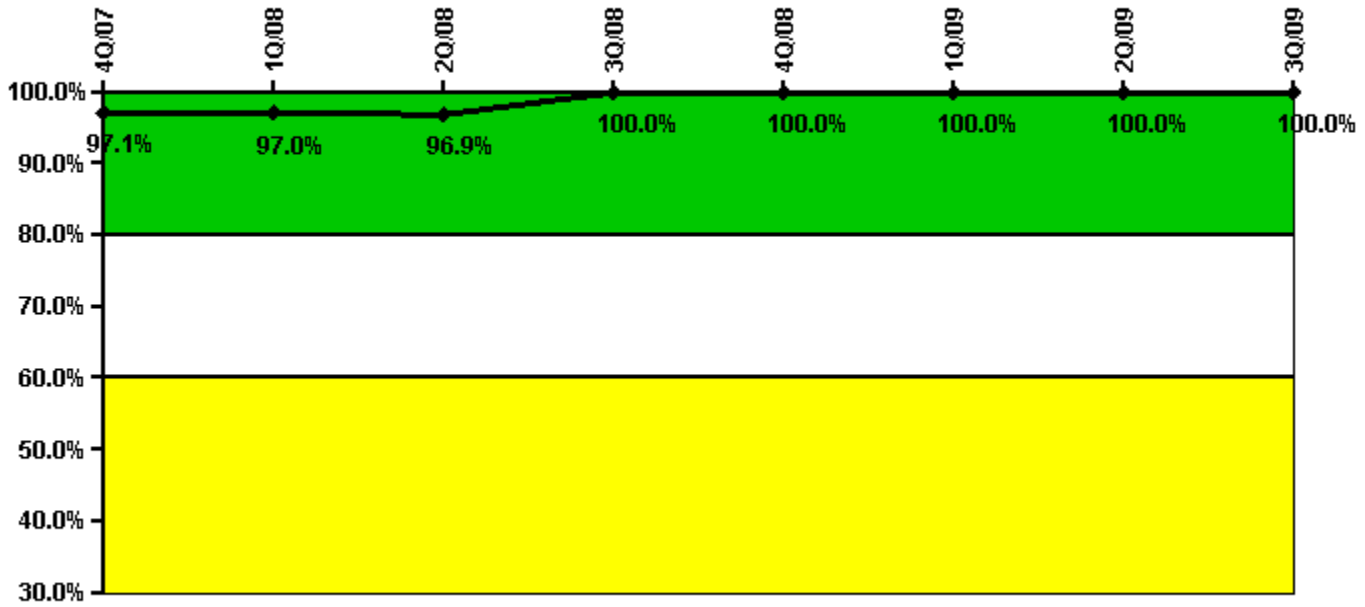
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Successful opportunities	23.0	7.0	47.0	18.0	41.0	54.0	108.0	46.0
Total opportunities	24.0	9.0	48.0	18.0	42.0	56.0	110.0	46.0
Indicator value	92.9%	92.5%	94.6%	94.7%	95.3%	96.0%	96.7%	97.5%

Licensee Comments: none

# ERO Drill Participation



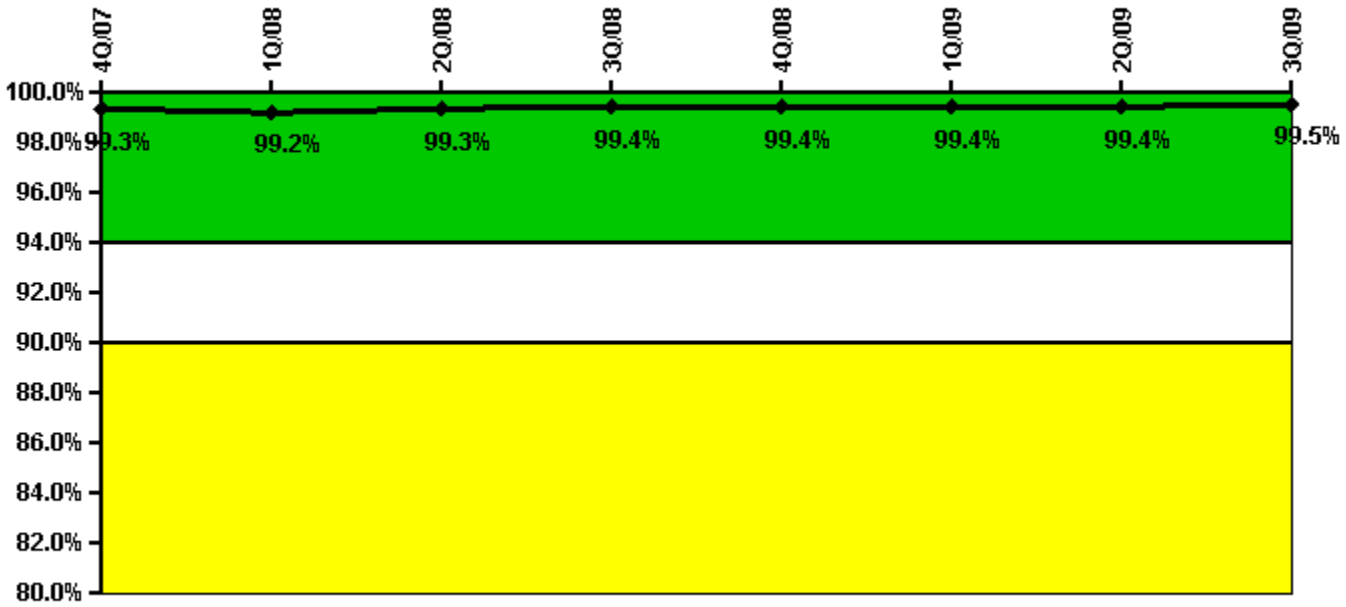
Thresholds: White < 80.0% Yellow < 60.0%

## Notes

ERO Drill Participation	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Participating Key personnel	68.0	64.0	62.0	69.0	73.0	76.0	72.0	65.0
Total Key personnel	70.0	66.0	64.0	69.0	73.0	76.0	72.0	65.0
Indicator value	97.1%	97.0%	96.9%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

# Alert & Notification System



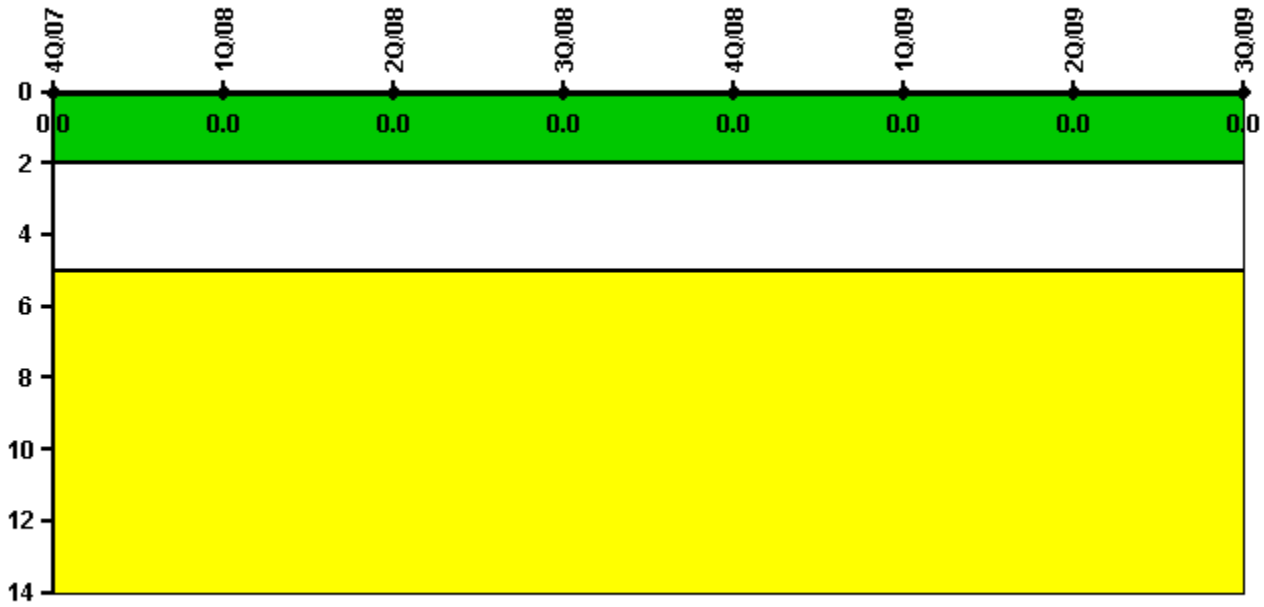
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
Successful siren-tests	887	689	690	687	887	591	887	788
Total sirens-tests	891	693	693	693	891	594	891	792
Indicator value	99.3%	99.2%	99.3%	99.4%	99.4%	99.4%	99.4%	99.5%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

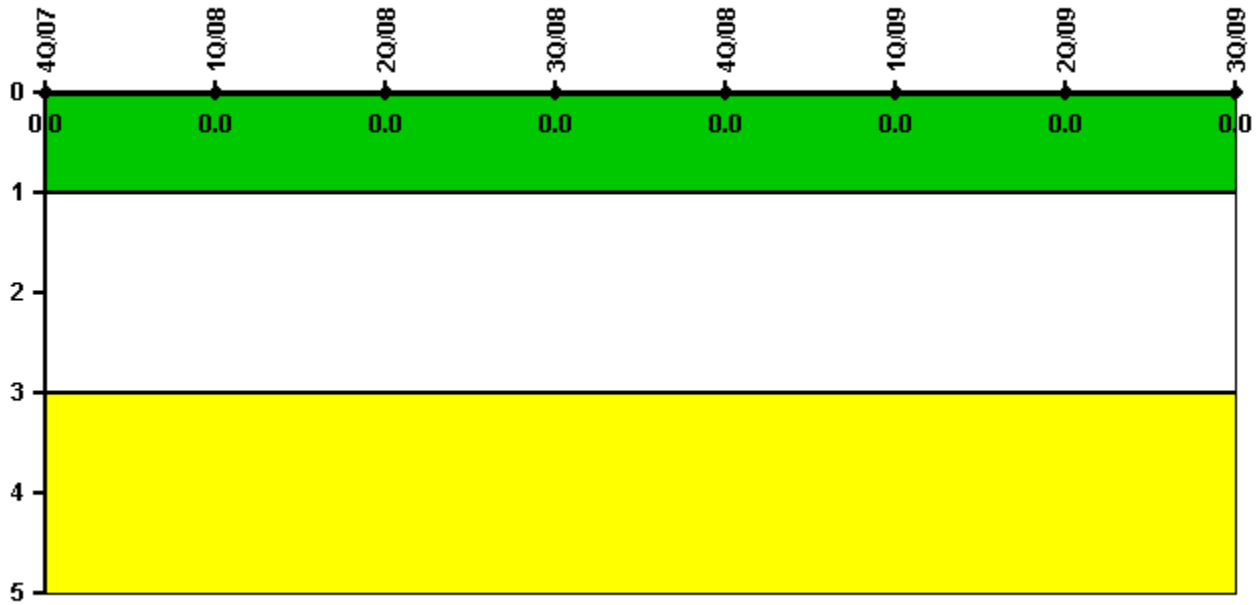
## Notes

Occupational Exposure Control Effectiveness	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
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

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# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

RETS/ODCM Radiological Effluent	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.