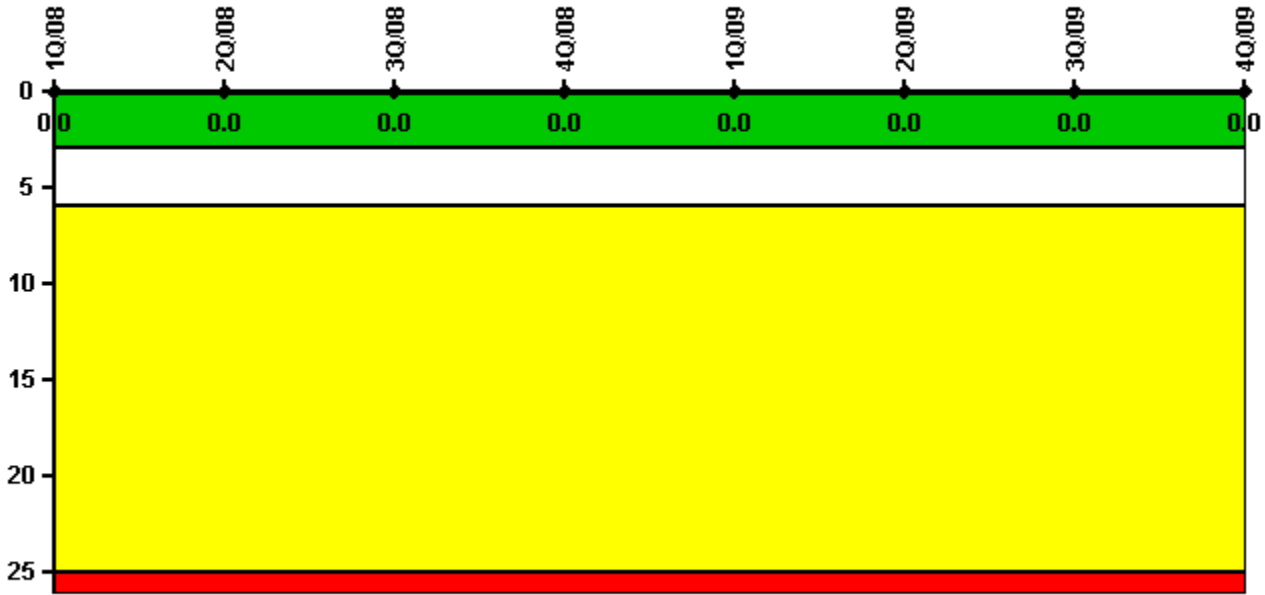


# South Texas 2

## 4Q/2009 Performance Indicators

Licensee's General Comments: 1Q2009 - revised Alert & Notification input; 2Q2009 - revised Successful drill opportunities to 93; 2Q2009 and 3Q2009 - revised Drill Participation to 129

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

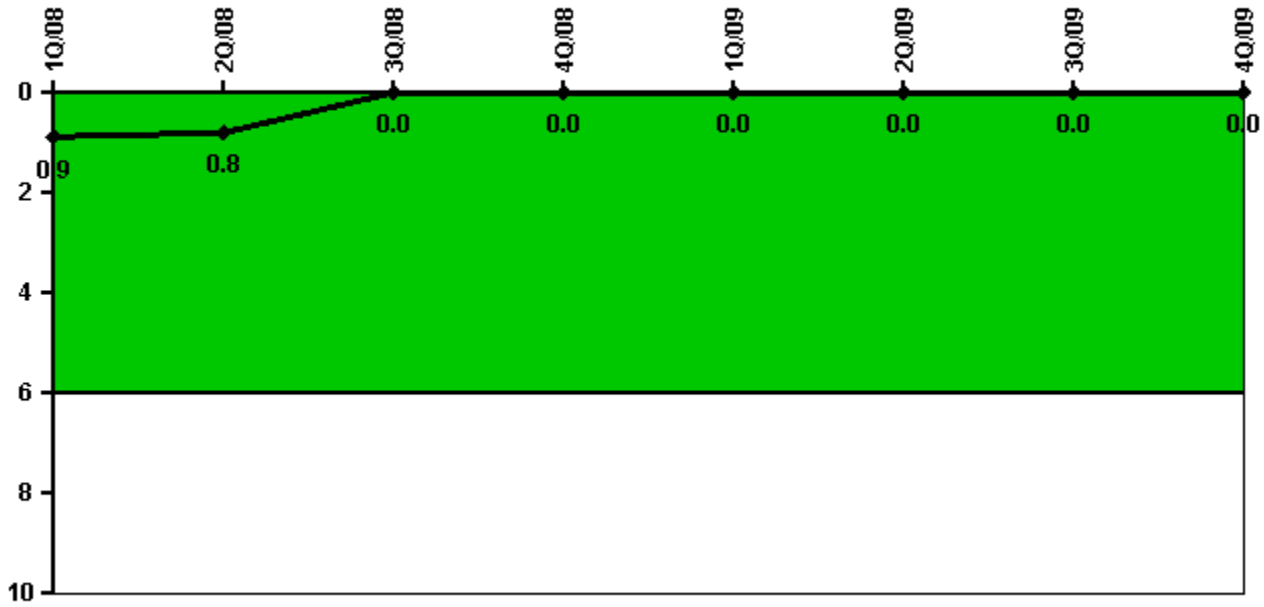
### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2184.0	2208.0	1485.9	2159.0	2184.0	1951.9	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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## Unplanned Power Changes per 7000 Critical Hrs



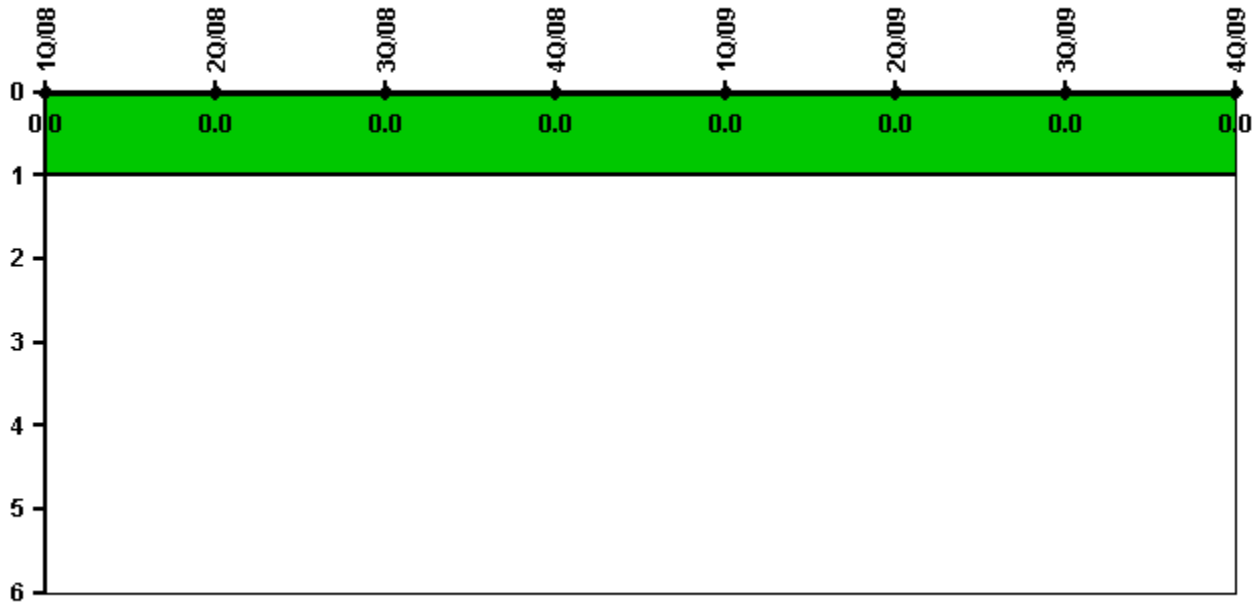
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2183.0	2184.0	2208.0	1485.9	2159.0	2184.0	1951.9	2209.0
Indicator value	0.9	0.8	0	0	0	0	0	0

Licensee Comments: none

# Unplanned Scrams with Complications



Thresholds: White > 1.0

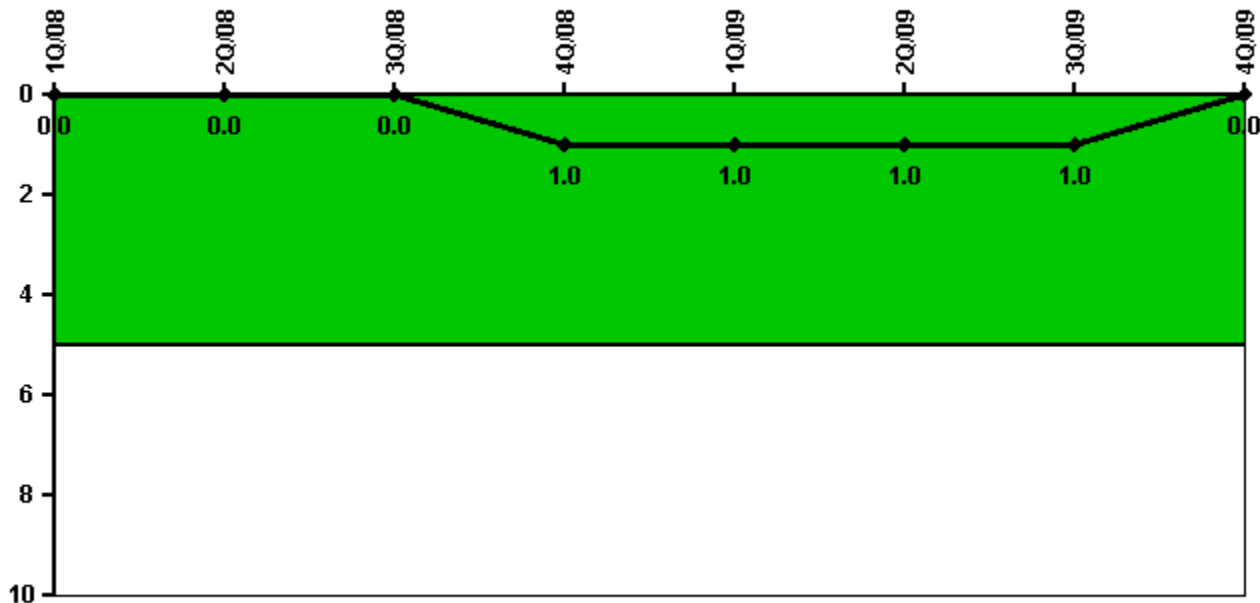
## Notes

Unplanned Scrams with Complications	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/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

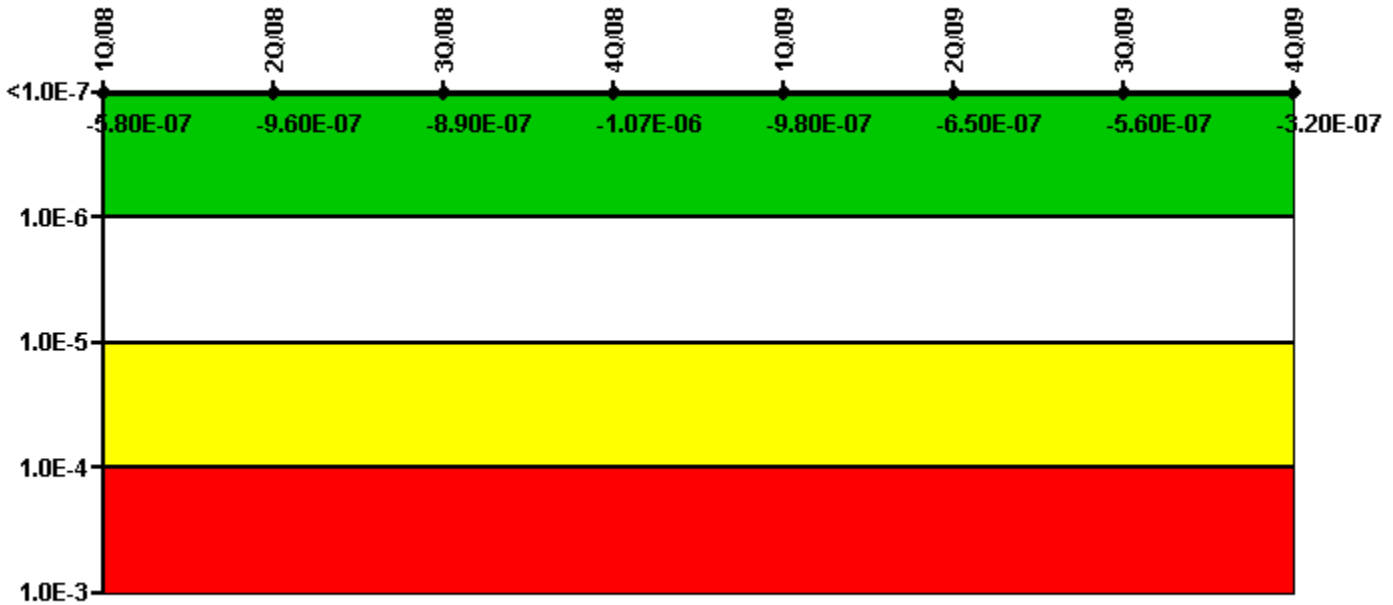
### Notes

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

Licensee Comments:

4Q/08: LERs issued in Dec. - LER 2-08-001 Fuel Assembly Storage, LER 2-08-002 Loss of RHR SSFF\* \*Further review determined that LER 2-08-002, Loss of RHR) and Valid Actuation of Safety Systems submitted in Dec. 2008 should have been SSFF. No color change.

# Mitigating Systems Performance Index, Emergency AC Power System



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

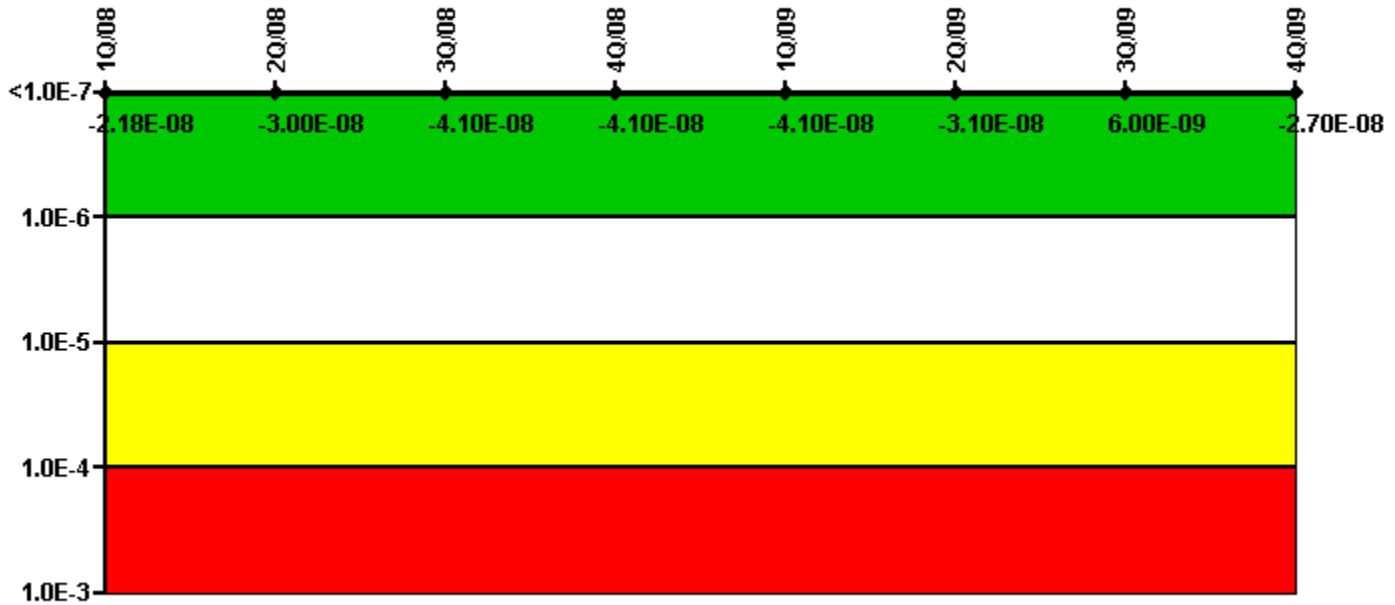
## Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI ( $\Delta$ CDF)	$3.20E-07$	$-8.00E-08$	$-2.00E-08$	$-2.10E-07$	$-1.40E-07$	$1.70E-07$	$2.40E-07$	$2.30E-07$
URI ( $\Delta$ CDF)	$-9.00E-07$	$-8.80E-07$	$-8.70E-07$	$-8.60E-07$	$-8.40E-07$	$-8.20E-07$	$-8.00E-07$	$-5.50E-07$
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	$-5.80E-07$	$-9.60E-07$	$-8.90E-07$	$-1.07E-06$	$-9.80E-07$	$-6.50E-07$	$-5.60E-07$	$-3.20E-07$

Licensee Comments:

4Q/09: PRA Parameters were changed due to PRA Model Rev. 6. in 3Q09.

# Mitigating Systems Performance Index, High Pressure Injection System



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

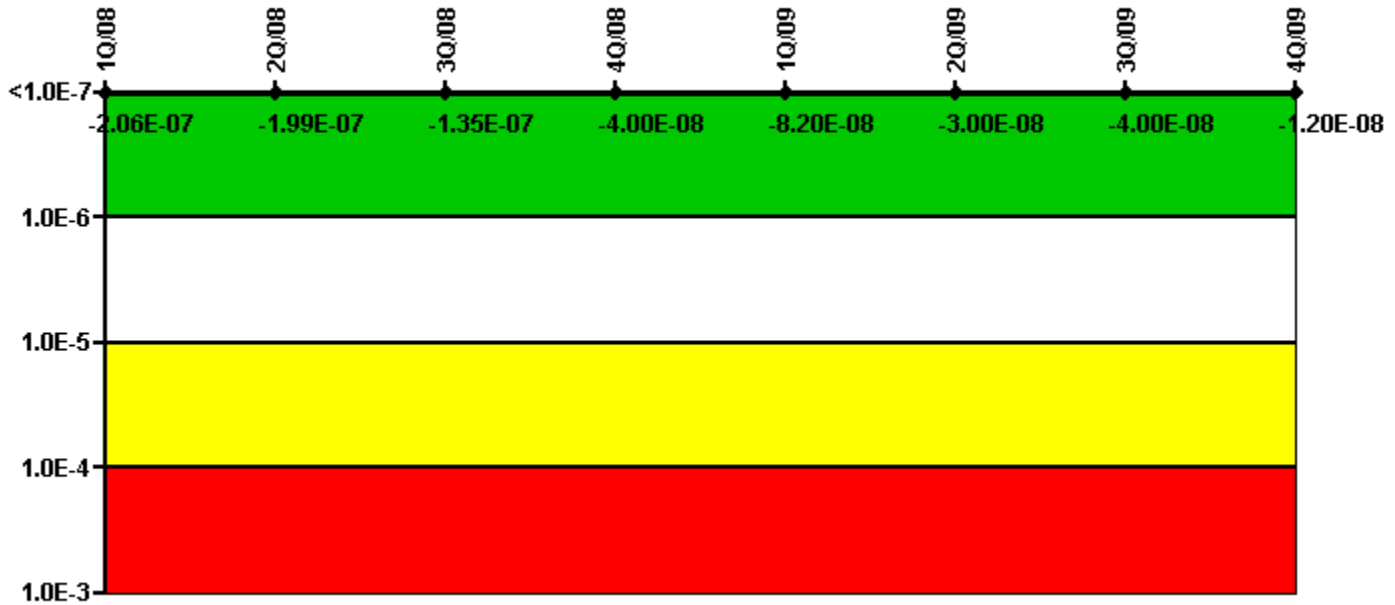
## Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI ( $\Delta$ CDF)	-7.80E-09	-1.60E-08	-2.70E-08	-2.70E-08	-2.70E-08	-1.70E-08	2.00E-08	-1.50E-08
URI ( $\Delta$ CDF)	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.20E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.18E-08	-3.00E-08	-4.10E-08	-4.10E-08	-4.10E-08	-3.10E-08	6.00E-09	-2.70E-08

Licensee Comments:

4Q/09: PRA Parameters were changed due to PRA Model Rev. 6. in 3Q09.

# Mitigating Systems Performance Index, Heat Removal System



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

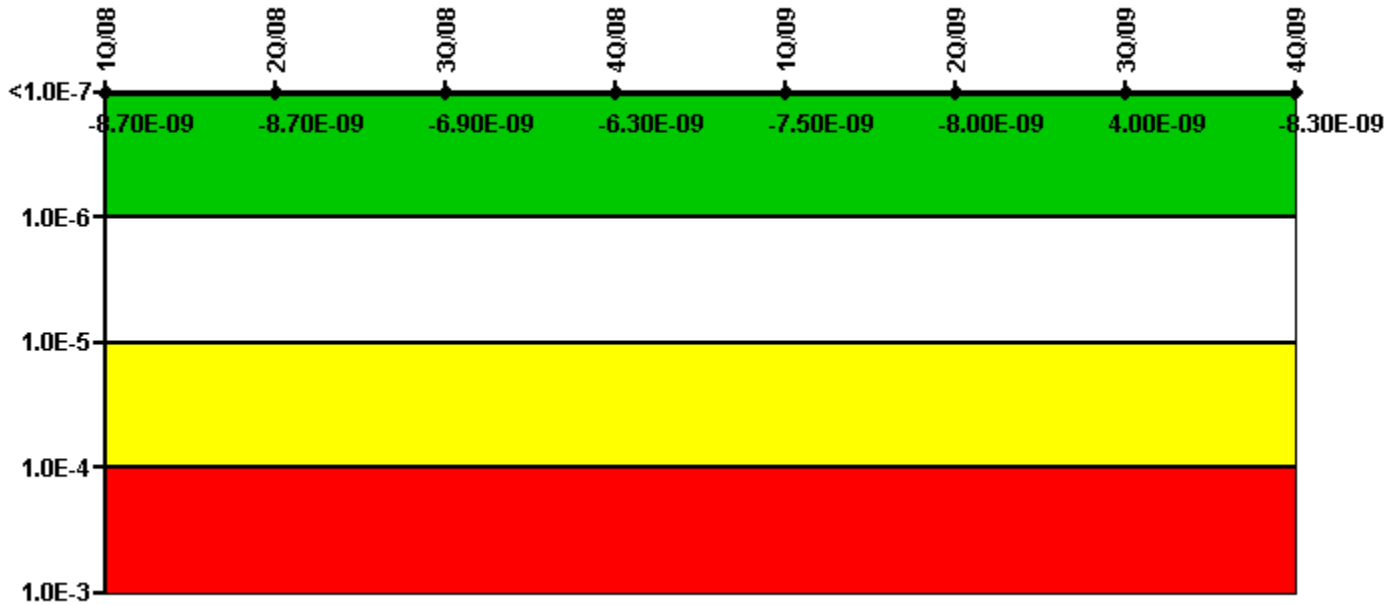
## Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI ( $\Delta$ CDF)	-3.60E-08	-2.90E-08	4.50E-08	1.40E-07	9.80E-08	1.50E-07	1.40E-07	7.40E-08
URI ( $\Delta$ CDF)	-1.70E-07	-1.70E-07	-1.80E-07	-1.80E-07	-1.80E-07	-1.80E-07	-1.80E-07	-8.60E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.06E-07	-1.99E-07	-1.35E-07	-4.00E-08	-8.20E-08	-3.00E-08	-4.00E-08	-1.20E-08

Licensee Comments:

4Q/09: PRA Parameters were changed due to PRA Model Rev. 6. in 3Q09.

# Mitigating Systems Performance Index, Residual Heat Removal System



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

## Notes

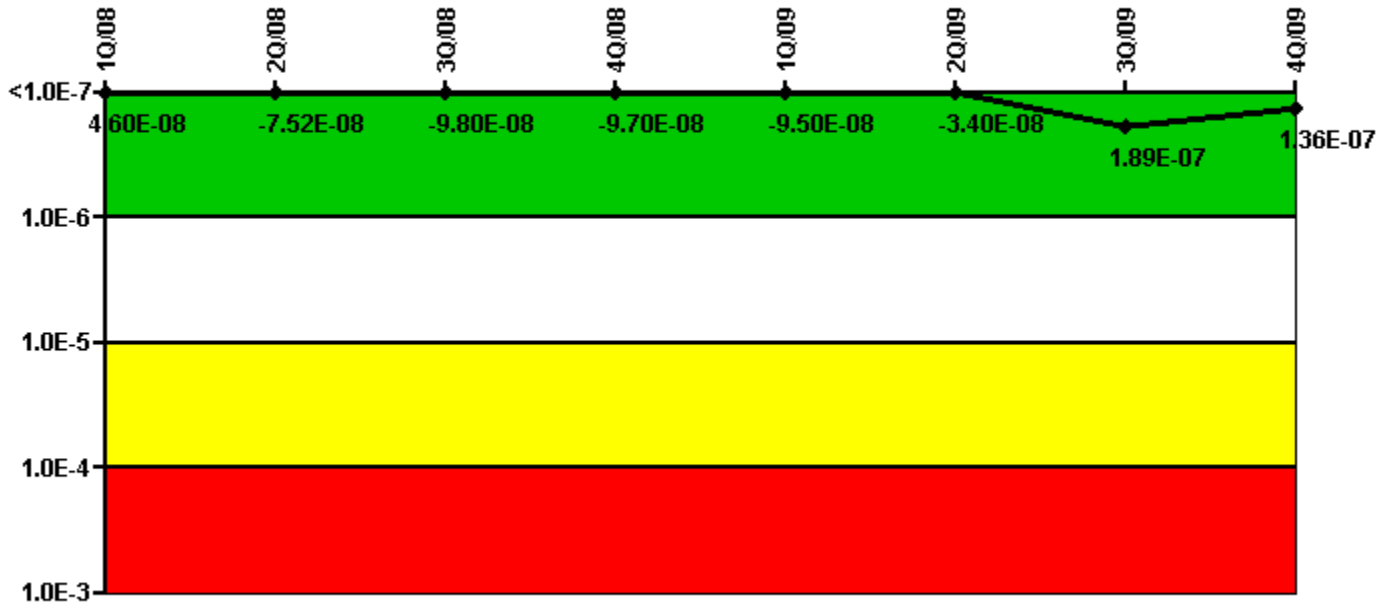
Mitigating Systems Performance Index, Residual Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI ( $\Delta$ CDF)	-5.70E-09	-5.70E-09	-3.90E-09	-3.40E-09	-4.60E-09	-5.10E-09	6.80E-09	-6.00E-09
URI ( $\Delta$ CDF)	-3.00E-09	-3.00E-09	-3.00E-09	-2.90E-09	-2.90E-09	-2.90E-09	-2.80E-09	-2.30E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-8.70E-09	-8.70E-09	-6.90E-09	-6.30E-09	-7.50E-09	-8.00E-09	4.00E-09	-8.30E-09

Licensee Comments:

4Q/09: PRA Parameters were changed due to PRA Model Rev. 6. in 3Q09.



# Mitigating Systems Performance Index, Cooling Water Systems



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

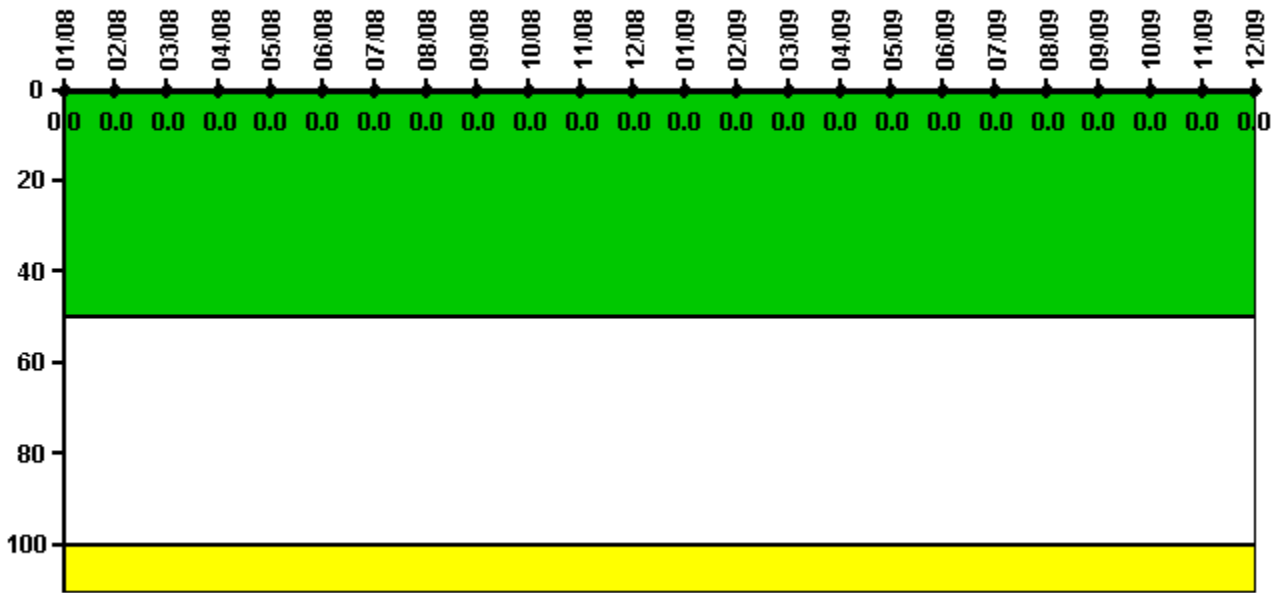
## Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI ( $\Delta$ CDF)	1.10E-07	-2.20E-09	-2.70E-08	-2.70E-08	-2.70E-08	3.20E-08	4.90E-08	3.60E-08
URI ( $\Delta$ CDF)	-6.40E-08	-7.30E-08	-7.10E-08	-7.00E-08	-6.80E-08	-6.60E-08	1.40E-07	1.00E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	4.60E-08	-7.52E-08	-9.80E-08	-9.70E-08	-9.50E-08	-3.40E-08	1.89E-07	1.36E-07

Licensee Comments:

4Q/09: PRA Parameters were changed due to PRA Model Rev. 6. in 3Q09.

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

Reactor Coolant System Activity	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum activity	0.000102	0.000101	0.000107	0.000103	0.000105	0.000113	0.000120	0.000133	0.000138	0.000123	0.000050	0.000065
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	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum activity	0.000060	0.000064	0.000071	0.000066	0.000069	0.000077	0.000083	0.000076	0.000075	0.000090	0.000085	0.000088
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



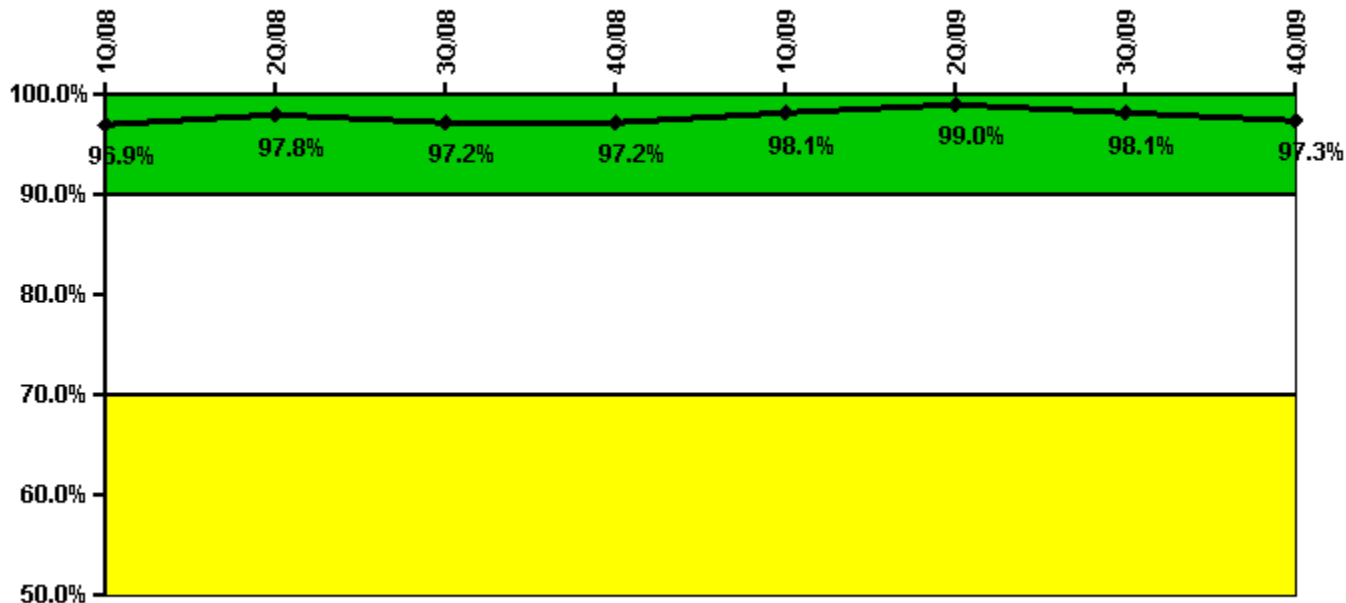
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum leakage	0.059	0.072	0.071	0.070	0.061	0.054	0.054	0.055	0.053	0.045	0.046	0.052
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	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5
Reactor Coolant System Leakage	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum leakage	0.064	0.042	0.045	0.049	0.039	0.045	0.041	0.036	0.048	0.041	0.051	0.044
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	0.6	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.4

Licensee Comments: none

## Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

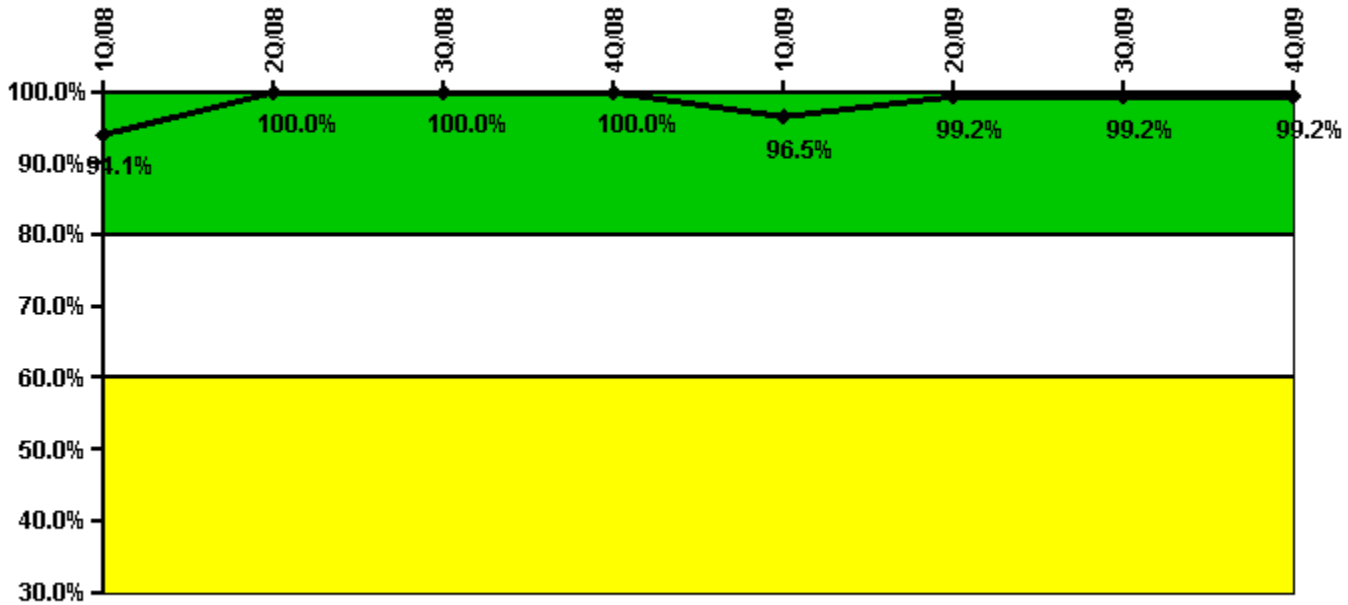
### Notes

Drill/Exercise Performance	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful opportunities	0	23.0	37.0	6.0	3.0	93.0	56.0	0
Total opportunities	0	23.0	40.0	6.0	3.0	93.0	59.0	0
Indicator value	96.9%	97.8%	97.2%	97.2%	98.1%	99.0%	98.1%	97.3%

Licensee Comments:

4Q/09: 2Q09 Successful opportunities were corrected to 93.

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

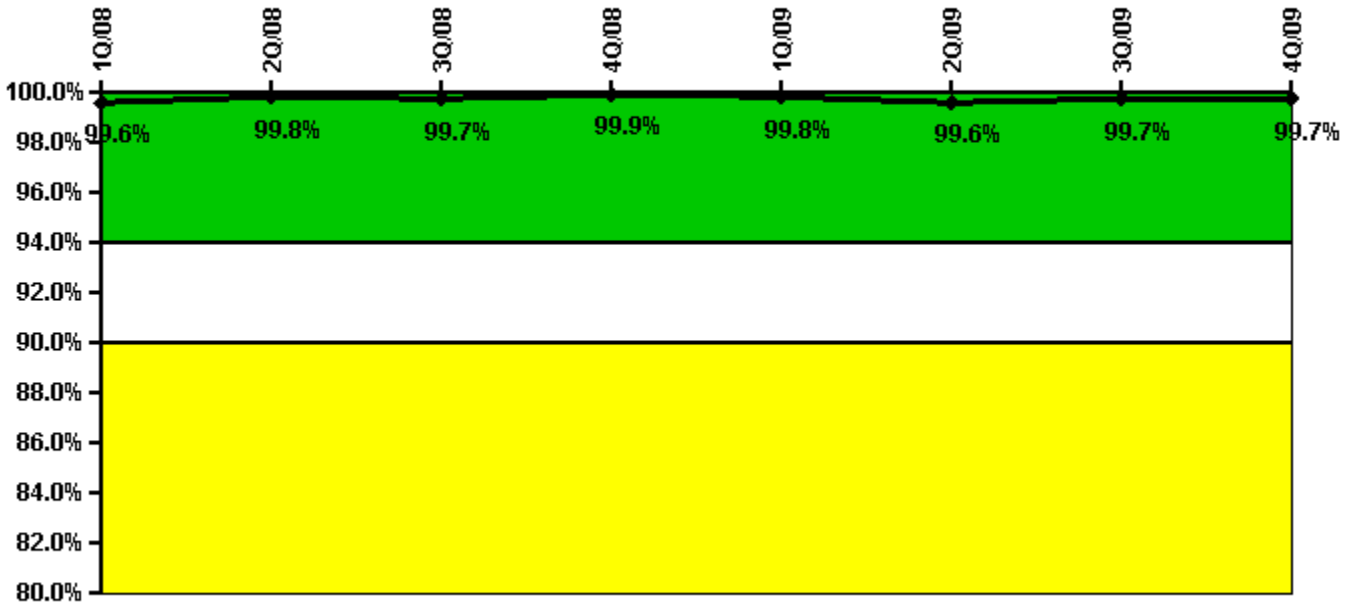
### Notes

ERO Drill Participation	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Participating Key personnel	112.0	118.0	109.0	110.0	111.0	129.0	129.0	129.0
Total Key personnel	119.0	118.0	109.0	110.0	115.0	130.0	130.0	130.0
Indicator value	94.1%	100.0%	100.0%	100.0%	96.5%	99.2%	99.2%	99.2%

Licensee Comments:

4Q/09: 2Q09 and 3Q09 ERO Drill Participation changed to 129 due to error in transferring of EROP credit when TSC Mgr moved to EOF Dir. position.

# Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

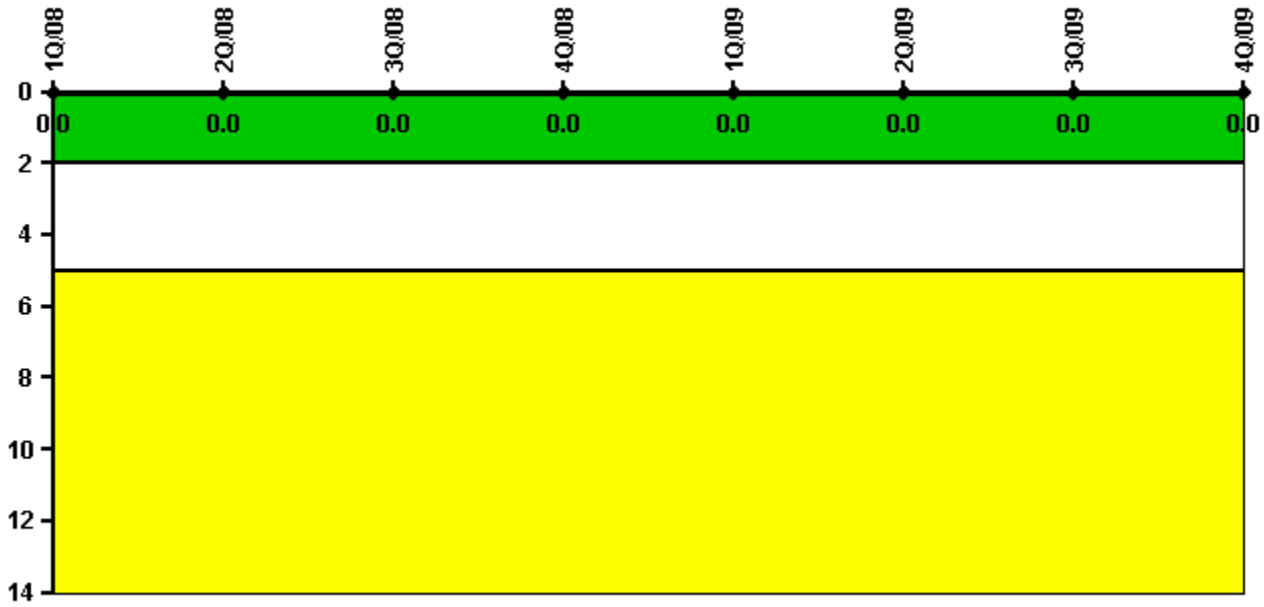
## Notes

Alert & Notification System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful siren-tests	256	256	223	256	255	254	256	224
Total sirens-tests	256	256	224	256	256	256	256	224
Indicator value	99.6%	99.8%	99.7%	99.9%	99.8%	99.6%	99.7%	99.7%

Licensee Comments:

4Q/09: Corrected 1Q09 Alert & Notification System

# Occupational Exposure Control Effectiveness



**Thresholds: White > 2.0 Yellow > 5.0**

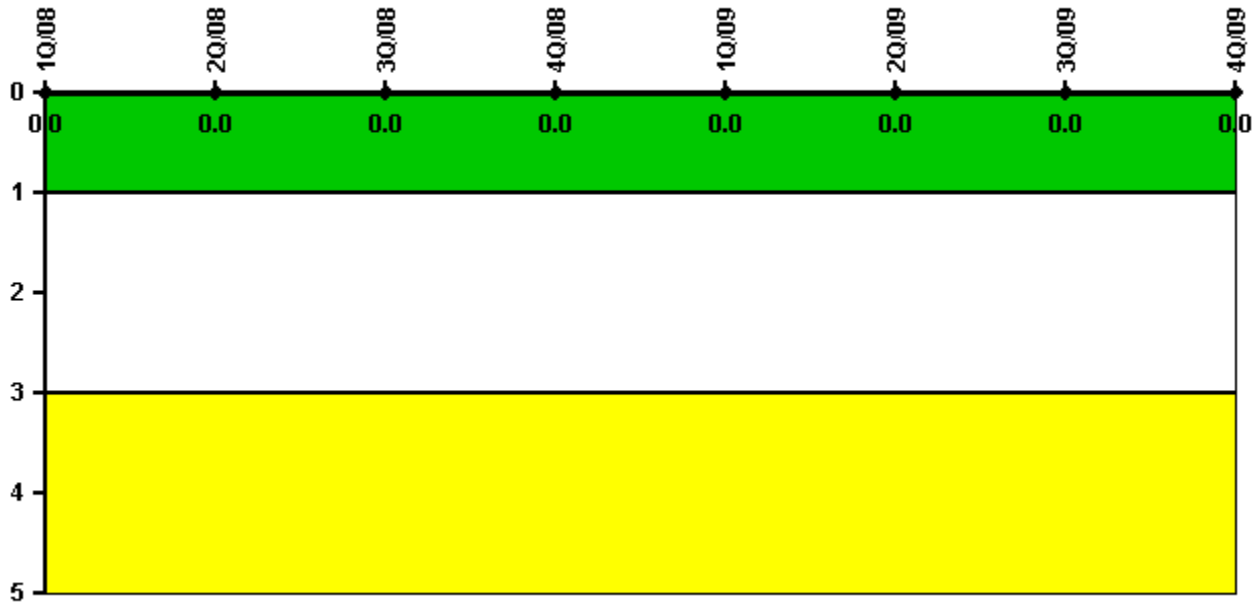
## Notes

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