

# Catawba 2

## 1Q/2012 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

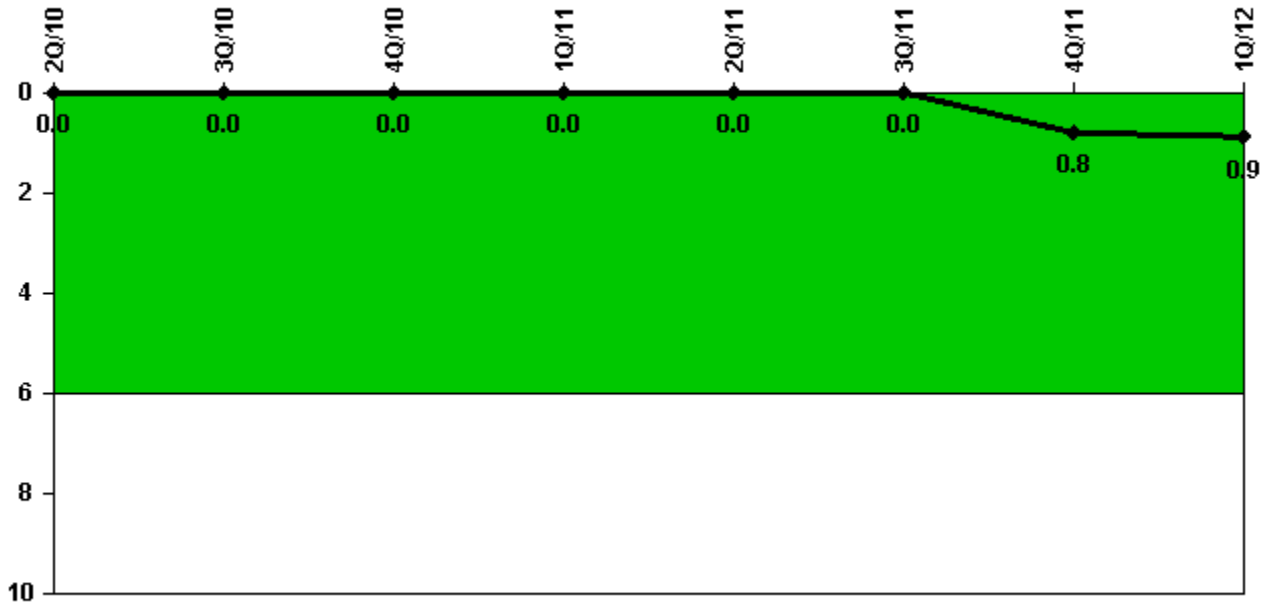
### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	1900.3	1734.9	2159.0	2184.0	2208.0	2177.9	1660.6
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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2184.0	1900.3	1734.9	2159.0	2184.0	2208.0	2177.9	1660.6
Indicator value	0	0	0	0	0	0	0.8	0.9

Licensee Comments: none

# Unplanned Scrams with Complications



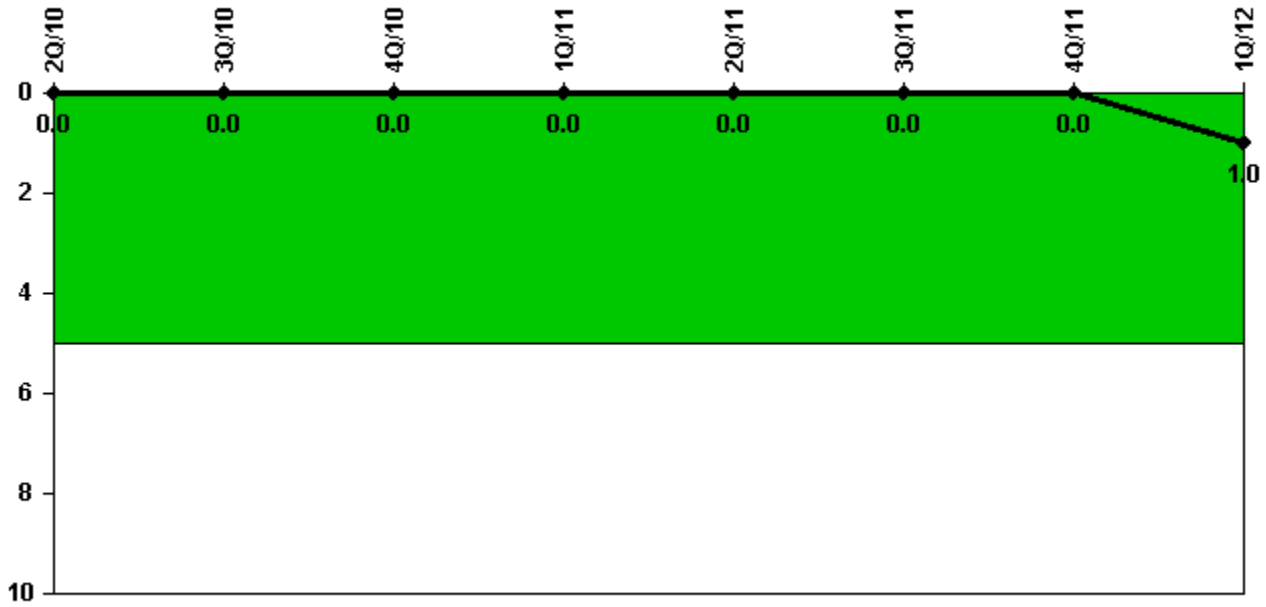
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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

## Safety System Functional Failures (PWR)



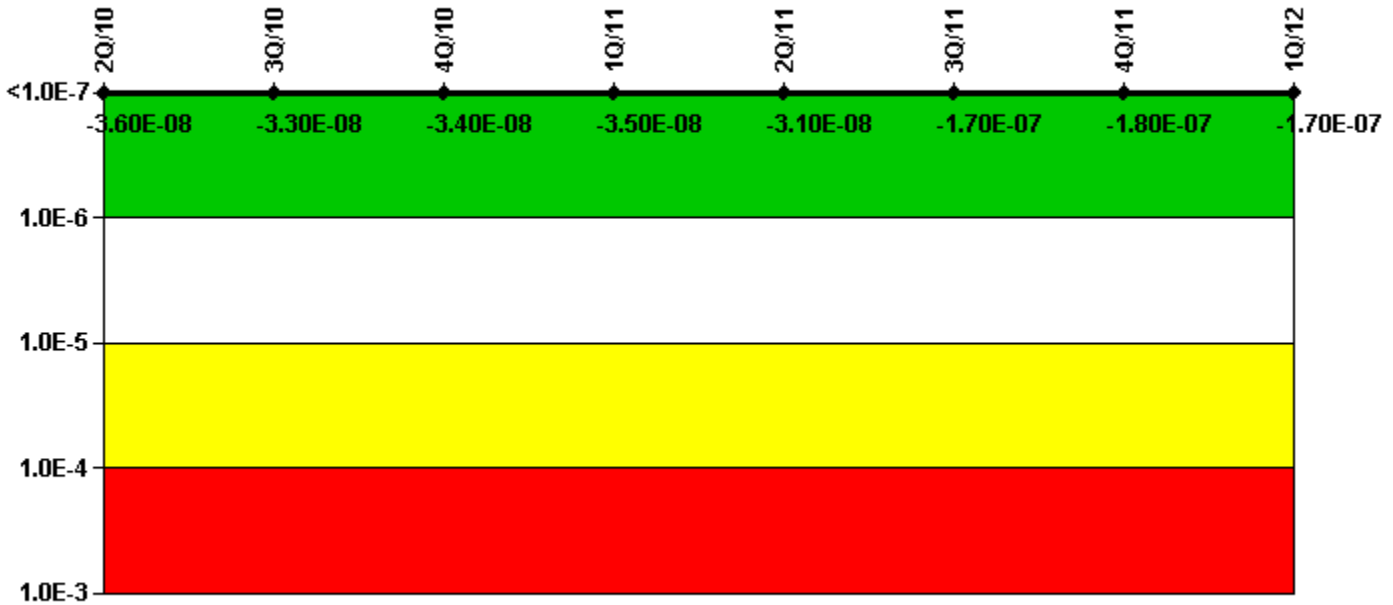
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Safety System Functional Failures	0	0	0	0	0	0	0	1
Indicator value	0	0	0	0	0	0	0	1

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



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

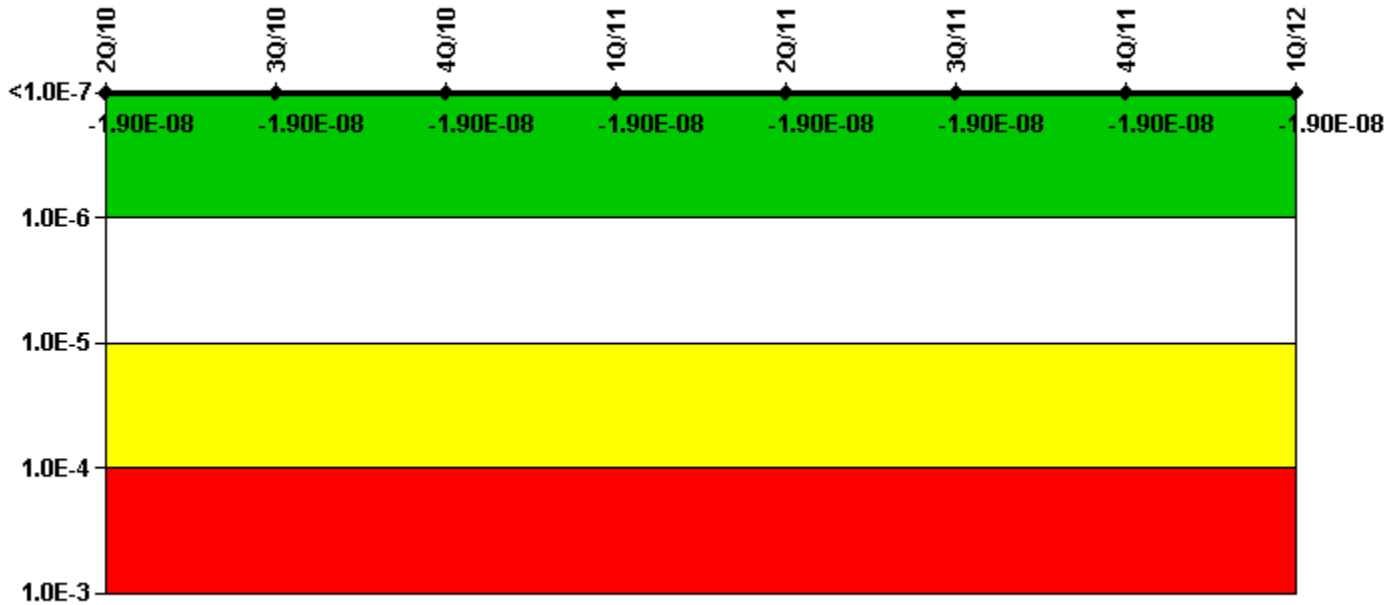
## Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-2.13E-09	-7.82E-10	-2.21E-09	-2.66E-09	1.13E-09	4.71E-09	-3.39E-09	1.44E-08
URI ( $\Delta$ CDF)	-3.35E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.20E-08	-1.78E-07	-1.78E-07	-1.83E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.60E-08	-3.30E-08	-3.40E-08	-3.50E-08	-3.10E-08	-1.70E-07	-1.80E-07	-1.70E-07

Licensee Comments:

- 1Q/12: Changed PRA Parameter(s).
- 4Q/11: Changed PRA Parameter(s).
- 3Q/11: Changed PRA Parameter(s).
- 2Q/11: Changed PRA Parameter(s).
- 1Q/11: Changed PRA Parameter(s).
- 4Q/10: Changed PRA Parameter(s).
- 3Q/10: Changed PRA Parameter(s).
- 2Q/10: Changed PRA Parameter(s).

# Mitigating Systems Performance Index, High Pressure Injection System



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

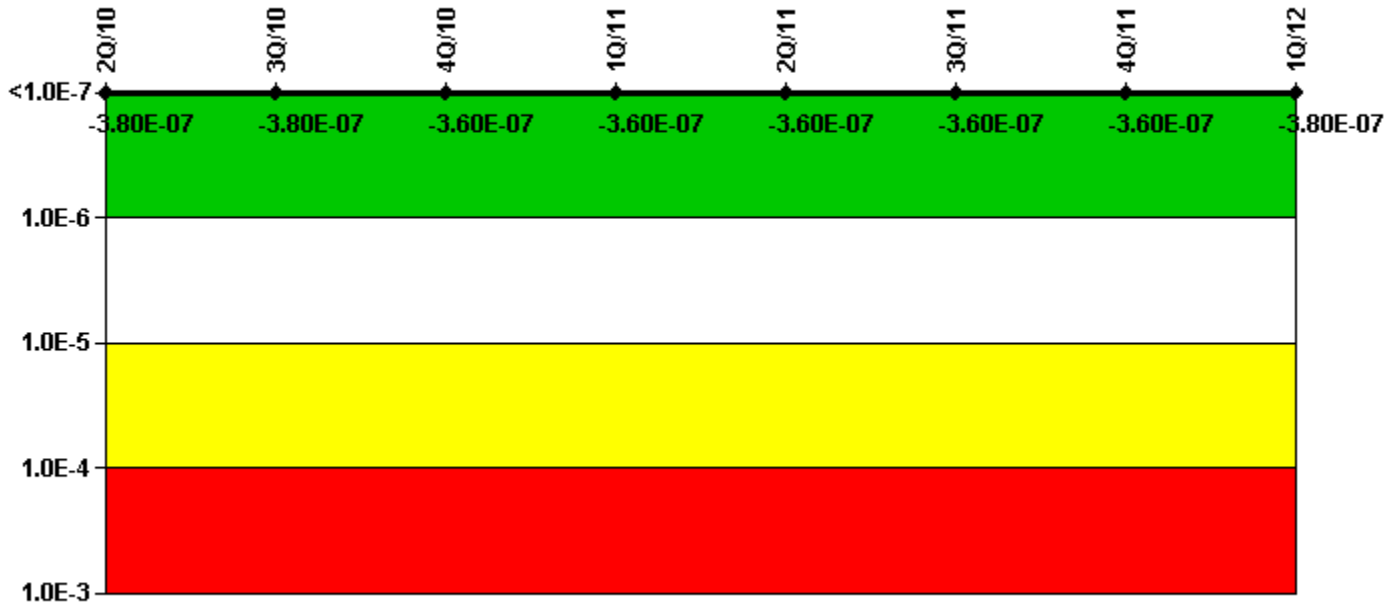
## Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-7.57E-09	-7.57E-09	-7.57E-09	-7.15E-09	-7.15E-09	-7.15E-09	-7.15E-09	-7.31E-09
URI ( $\Delta$ CDF)	-1.14E-08	-1.14E-08	-1.14E-08	-1.14E-08	-1.14E-08	-1.14E-08	-1.14E-08	-1.17E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08

Licensee Comments:

- 1Q/12: Changed PRA Parameter(s).
- 4Q/11: Changed PRA Parameter(s).
- 3Q/11: Changed PRA Parameter(s).
- 2Q/11: Changed PRA Parameter(s).
- 1Q/11: Changed PRA Parameter(s).
- 4Q/10: Changed PRA Parameter(s).
- 3Q/10: Changed PRA Parameter(s).
- 2Q/10: Changed PRA Parameter(s).

# 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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-3.98E-08	-3.98E-08	-2.17E-08	-2.17E-08	-2.17E-08	-2.17E-08	-2.16E-08	-2.67E-08
URI ( $\Delta$ CDF)	-3.43E-07	-3.43E-07	-3.43E-07	-3.43E-07	-3.43E-07	-3.43E-07	-3.43E-07	-3.52E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-07	-3.80E-07	-3.60E-07	-3.60E-07	-3.60E-07	-3.60E-07	-3.60E-07	-3.80E-07

Licensee Comments:

1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: Changed PRA Parameter(s).

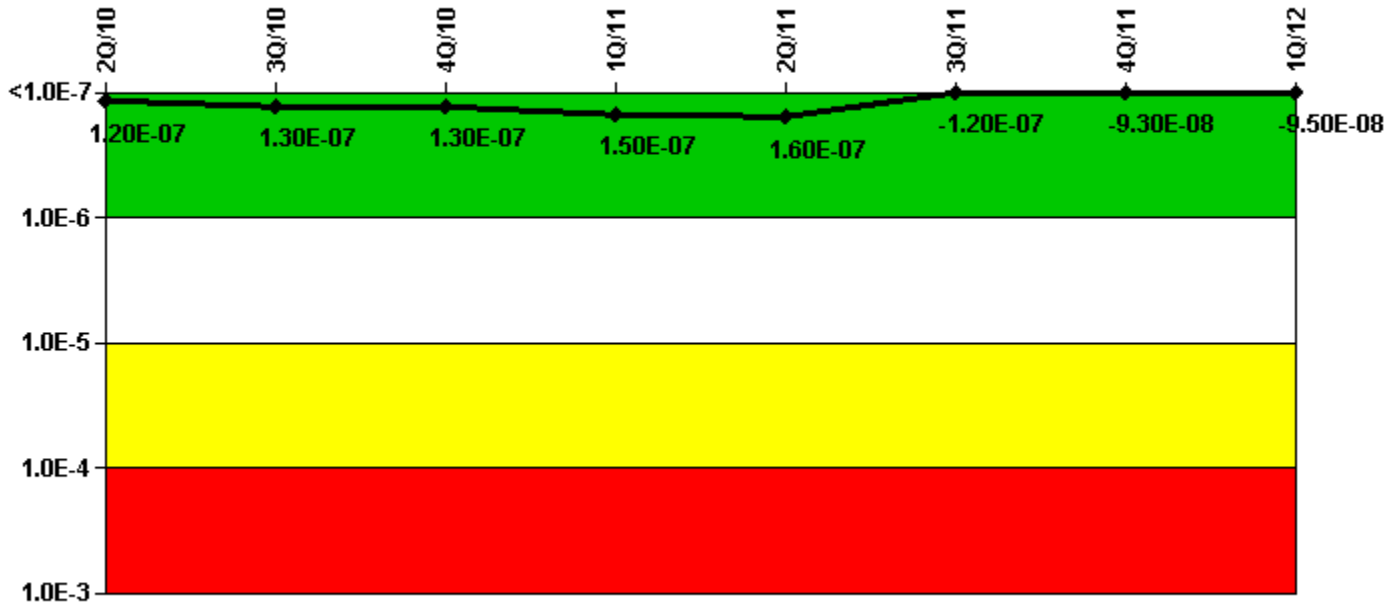
1Q/11: Changed PRA Parameter(s).

4Q/10: Changed PRA Parameter(s).

3Q/10: Changed PRA Parameter(s).

2Q/10: Changed PRA Parameter(s).

# 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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (ΔCDF)	1.07E-08	1.83E-08	1.49E-08	3.44E-08	4.85E-08	3.26E-08	5.91E-08	6.14E-08
URI (ΔCDF)	1.14E-07	1.14E-07	1.14E-07	1.14E-07	1.14E-07	-1.52E-07	-1.52E-07	-1.57E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.20E-07	1.30E-07	1.30E-07	1.50E-07	1.60E-07	-1.20E-07	-9.30E-08	-9.50E-08

Licensee Comments:

1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: Changed PRA Parameter(s).

2Q/11: Risk Cap Invoked.

1Q/11: Risk Cap Invoked.

1Q/11: Changed PRA Parameter(s).

4Q/10: Risk Cap Invoked.

4Q/10: Changed PRA Parameter(s).

3Q/10: Changed PRA Parameter(s).

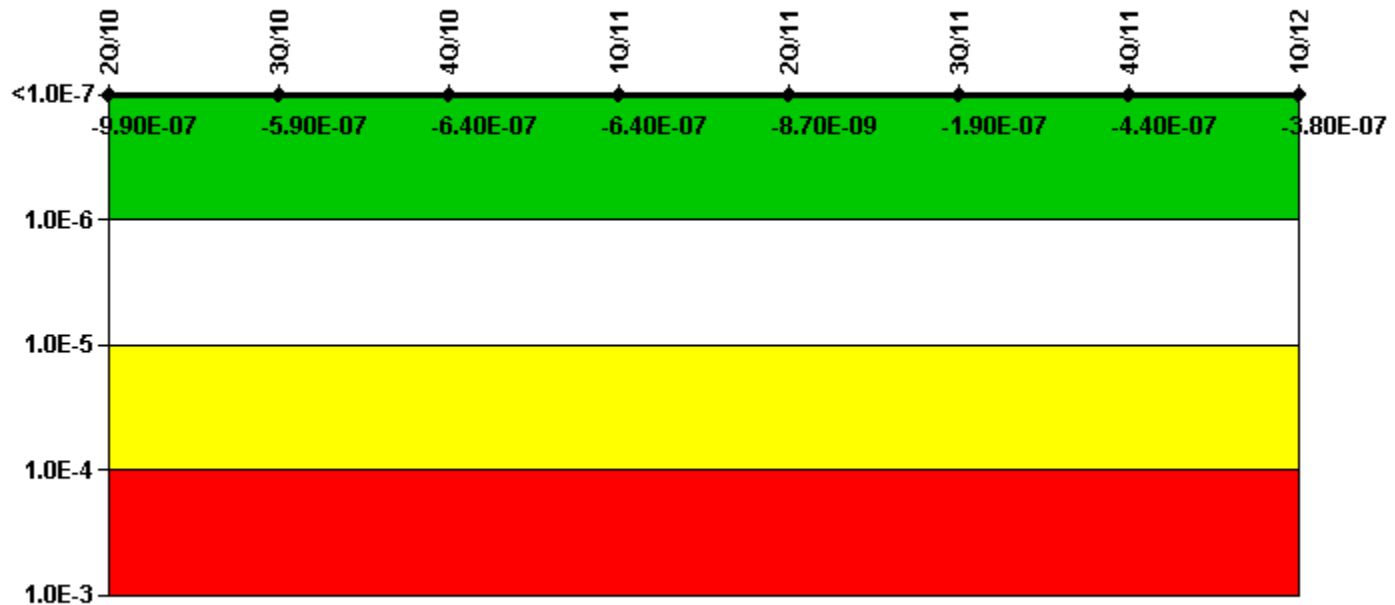
3Q/10: Risk Cap Invoked.



2Q/10: Changed PRA Parameter(s).

2Q/10: Risk Cap Invoked.

### 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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (ΔCDF)	-5.53E-07	-2.22E-07	-2.70E-07	-2.68E-07	3.58E-07	1.75E-07	-1.45E-07	-6.94E-08
URI (ΔCDF)	-4.35E-07	-3.67E-07	-3.67E-07	-3.67E-07	-3.67E-07	-3.67E-07	-3.00E-07	-3.08E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.90E-07	-5.90E-07	-6.40E-07	-6.40E-07	-8.70E-09	-1.90E-07	-4.40E-07	-3.80E-07

Licensee Comments:

1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: Changed PRA Parameter(s).

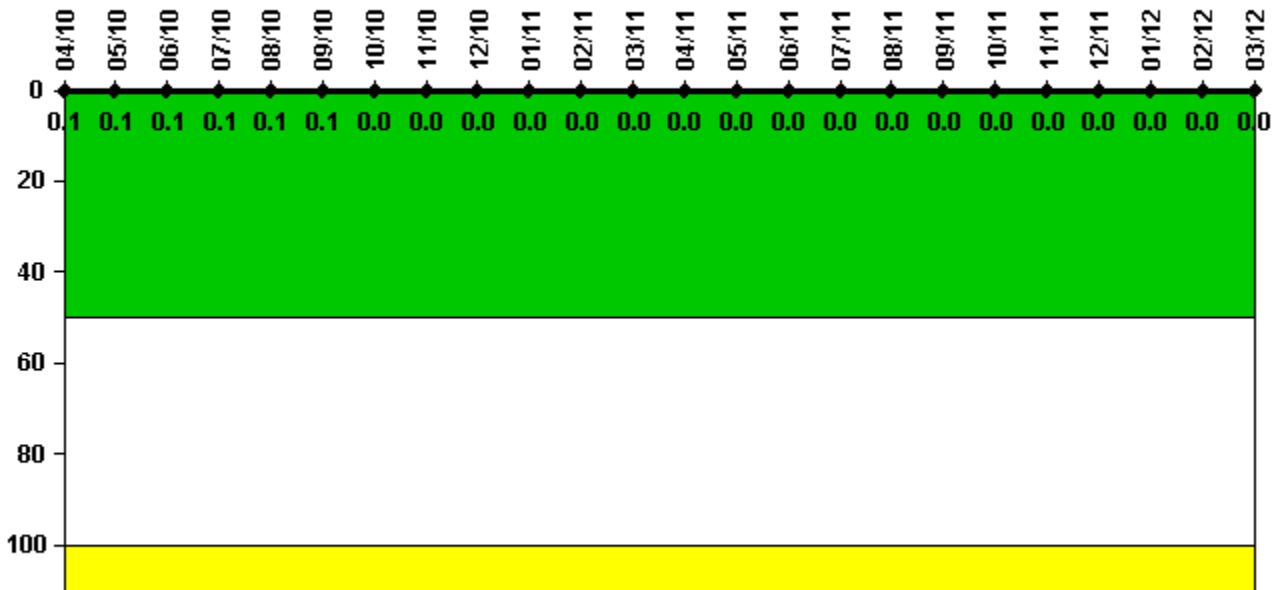
1Q/11: Changed PRA Parameter(s).

4Q/10: Changed PRA Parameter(s).

3Q/10: Changed PRA Parameter(s).

2Q/10: Changed PRA Parameter(s).

### Reactor Coolant System Activity



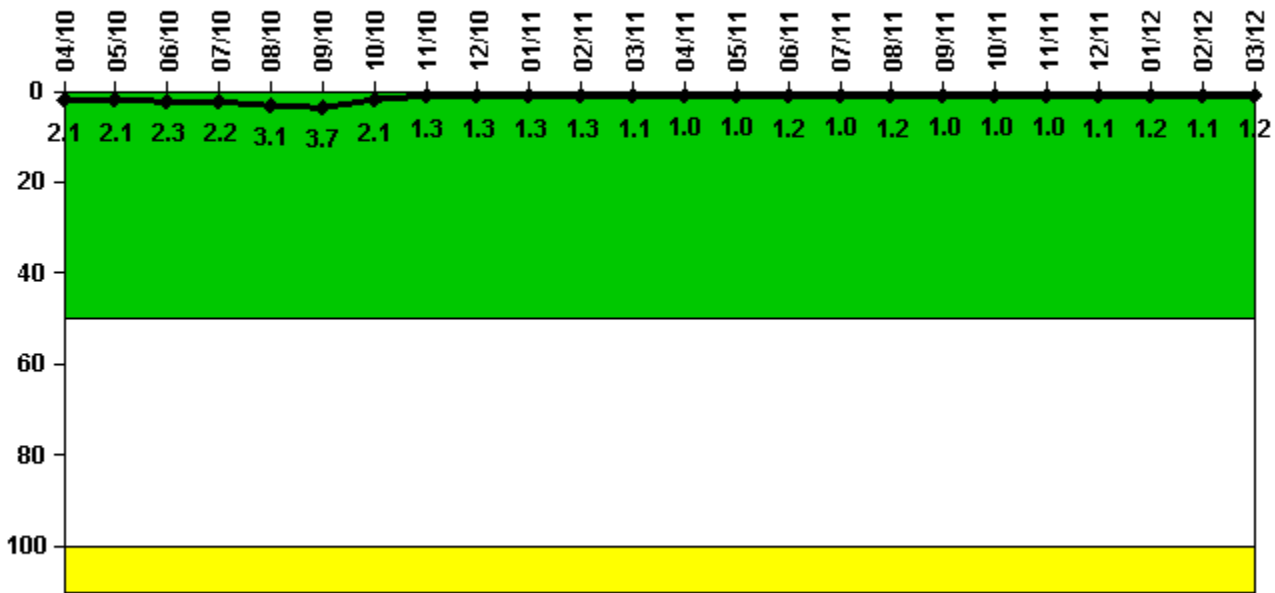
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Activity	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum activity	0.000256	0.000245	0.000262	0.000285	0.000246	0.000230	0.000111	0.000151	0.000140	0.000154	0.000161	0.000168
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0
Reactor Coolant System Activity	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.000170	0.000220	0.000186	0.000199	0.000206	0.000206	0.000201	0.000198	0.000187	0.000204	0.000191	0.000187
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

License Comments: none

## Reactor Coolant System Leakage



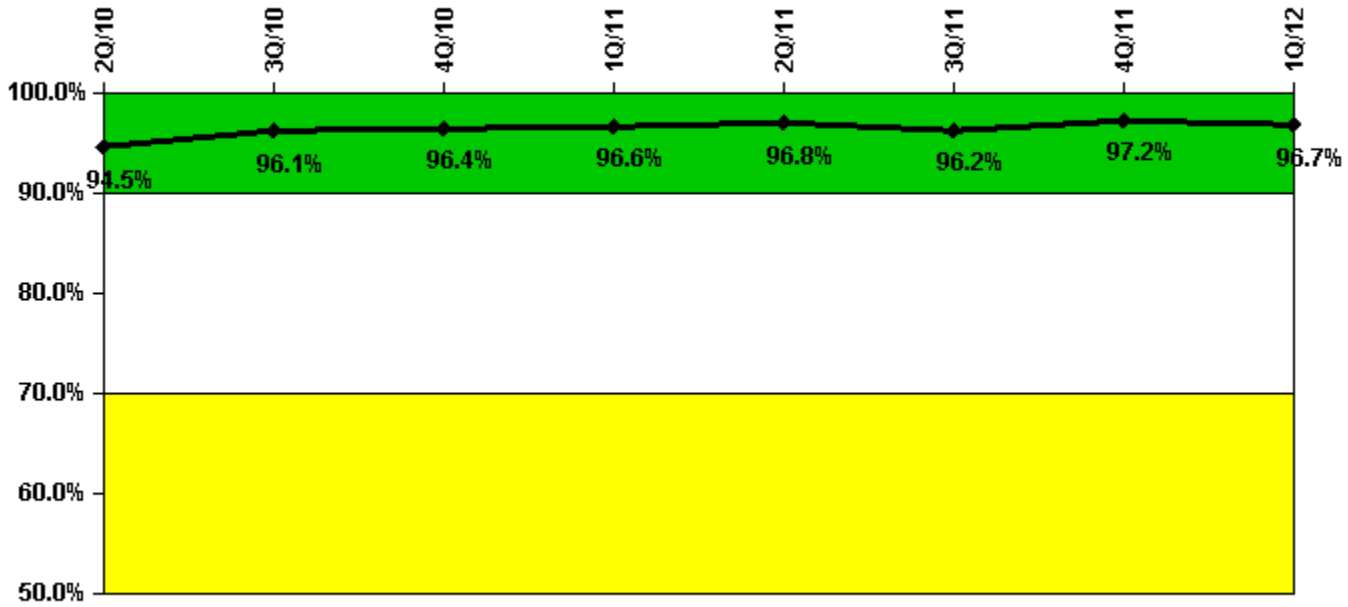
Thresholds: White > 50.0 Yellow > 100.0

### Notes

<b>Reactor Coolant System Leakage</b>	<b>4/10</b>	<b>5/10</b>	<b>6/10</b>	<b>7/10</b>	<b>8/10</b>	<b>9/10</b>	<b>10/10</b>	<b>11/10</b>	<b>12/10</b>	<b>1/11</b>	<b>2/11</b>	<b>3/11</b>
Maximum leakage	0.212	0.208	0.228	0.222	0.305	0.372	0.207	0.130	0.128	0.129	0.128	0.112
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	2.1	2.1	2.3	2.2	3.1	3.7	2.1	1.3	1.3	1.3	1.3	1.1
<b>Reactor Coolant System Leakage</b>	<b>4/11</b>	<b>5/11</b>	<b>6/11</b>	<b>7/11</b>	<b>8/11</b>	<b>9/11</b>	<b>10/11</b>	<b>11/11</b>	<b>12/11</b>	<b>1/12</b>	<b>2/12</b>	<b>3/12</b>
Maximum leakage	0.097	0.097	0.116	0.100	0.116	0.100	0.102	0.102	0.110	0.121	0.114	0.118
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	1.0	1.0	1.2	1.0	1.2	1.0	1.0	1.0	1.1	1.2	1.1	1.2

Licensee Comments: none

## Drill/Exercise Performance



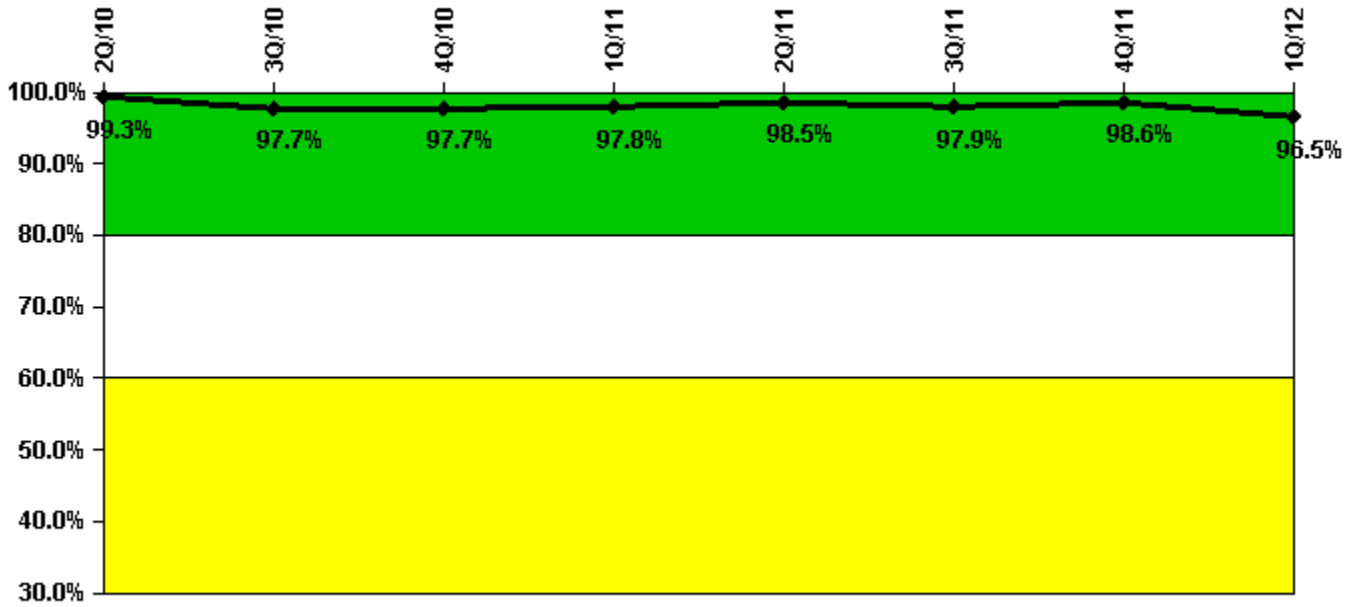
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful opportunities	27.0	41.0	29.0	15.0	6.0	73.0	8.0	8.0
Total opportunities	28.0	42.0	30.0	15.0	6.0	77.0	8.0	8.0
Indicator value	94.5%	96.1%	96.4%	96.6%	96.8%	96.2%	97.2%	96.7%

Licensee Comments: none

## ERO Drill Participation



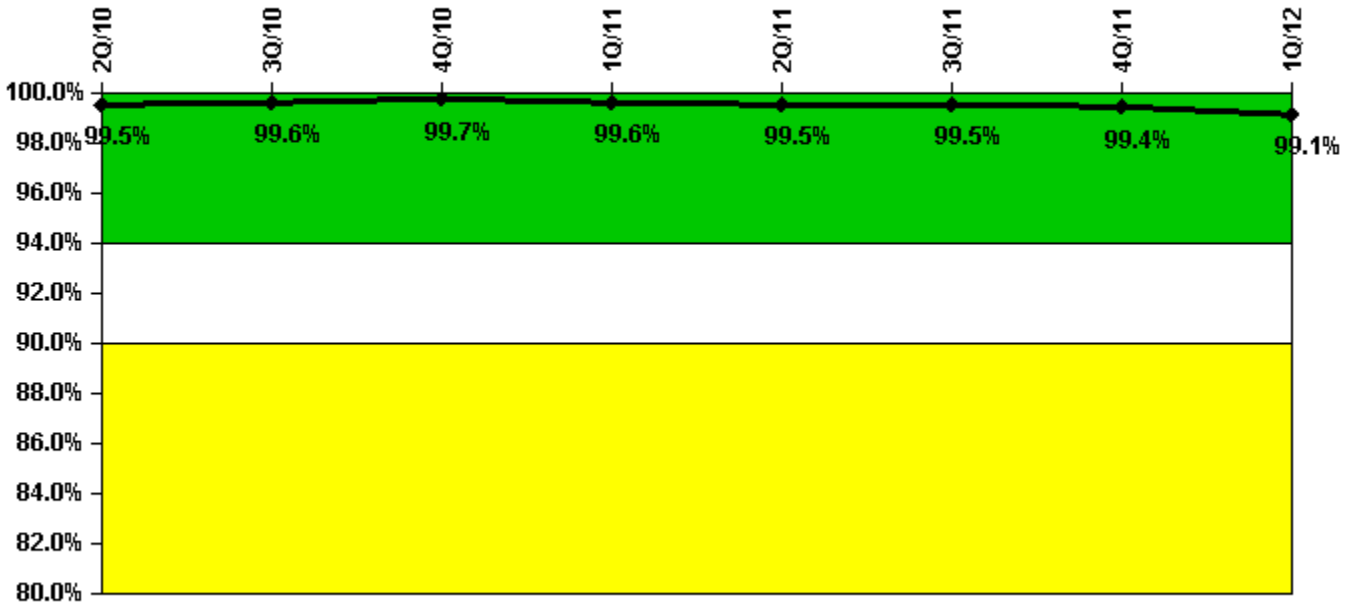
Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Participating Key personnel	136.0	130.0	129.0	131.0	133.0	137.0	141.0	138.0
Total Key personnel	137.0	133.0	132.0	134.0	135.0	140.0	143.0	143.0
Indicator value	99.3%	97.7%	97.7%	97.8%	98.5%	97.9%	98.6%	96.5%

Licensee Comments: none

# Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful siren-tests	2394	2483	2400	2387	2378	2395	2390	2367
Total sirens-tests	2403	2492	2403	2403	2403	2403	2403	2403
Indicator value	99.5%	99.6%	99.7%	99.6%	99.5%	99.5%	99.4%	99.1%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



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

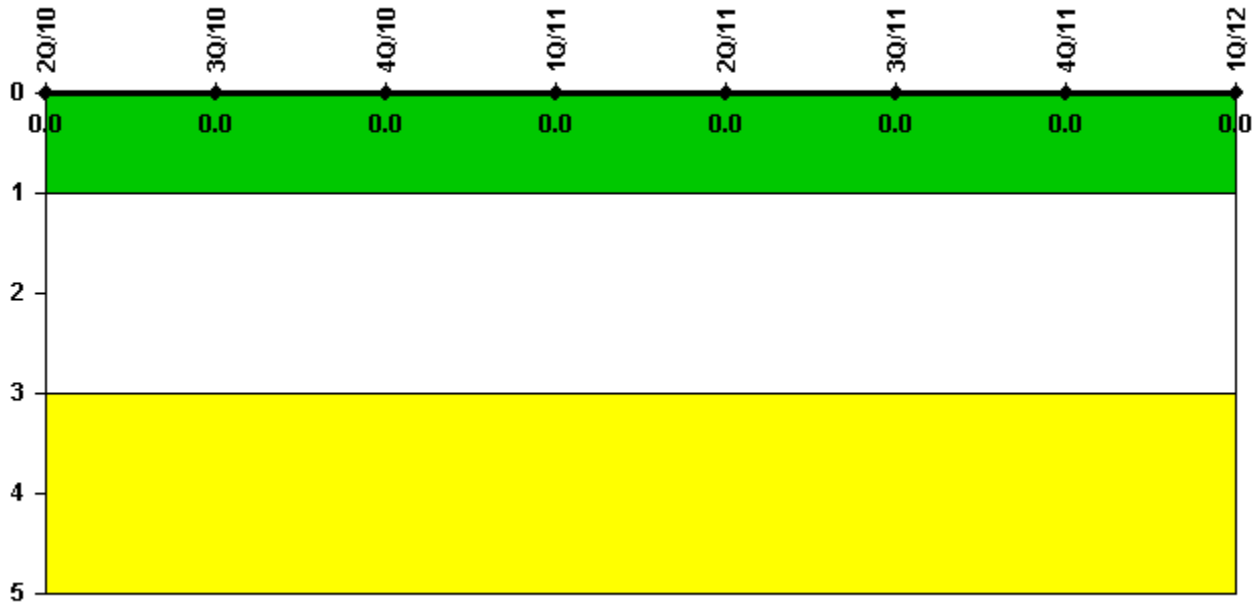
## Notes

Occupational Exposure Control Effectiveness	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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.