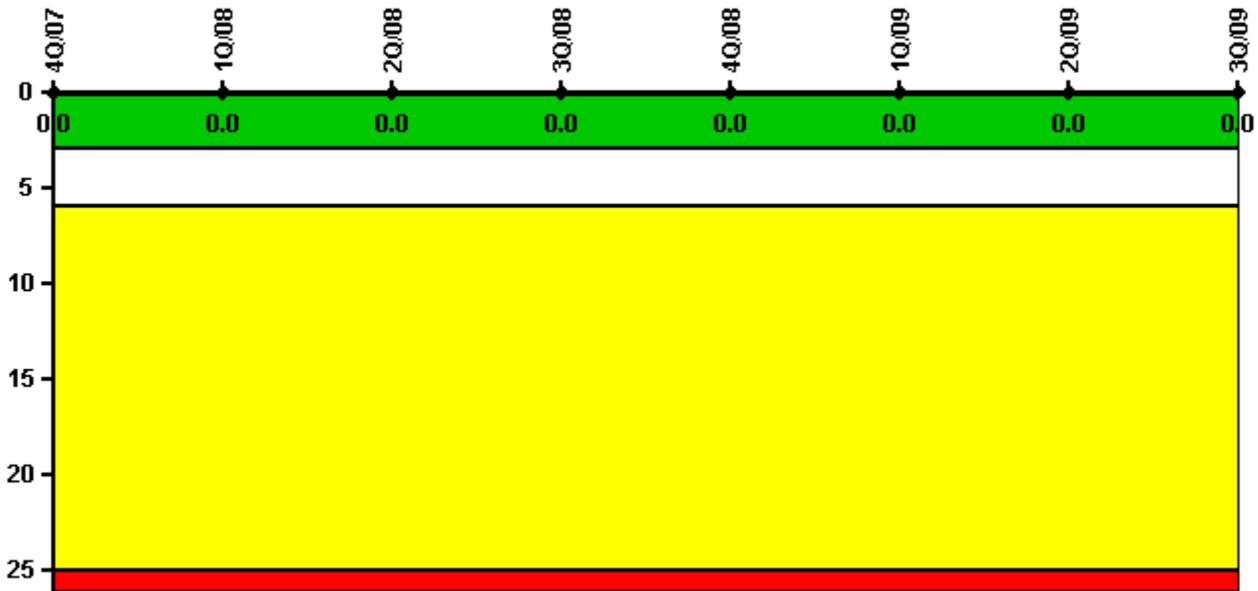


# Three Mile Island 1

## 3Q/2009 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

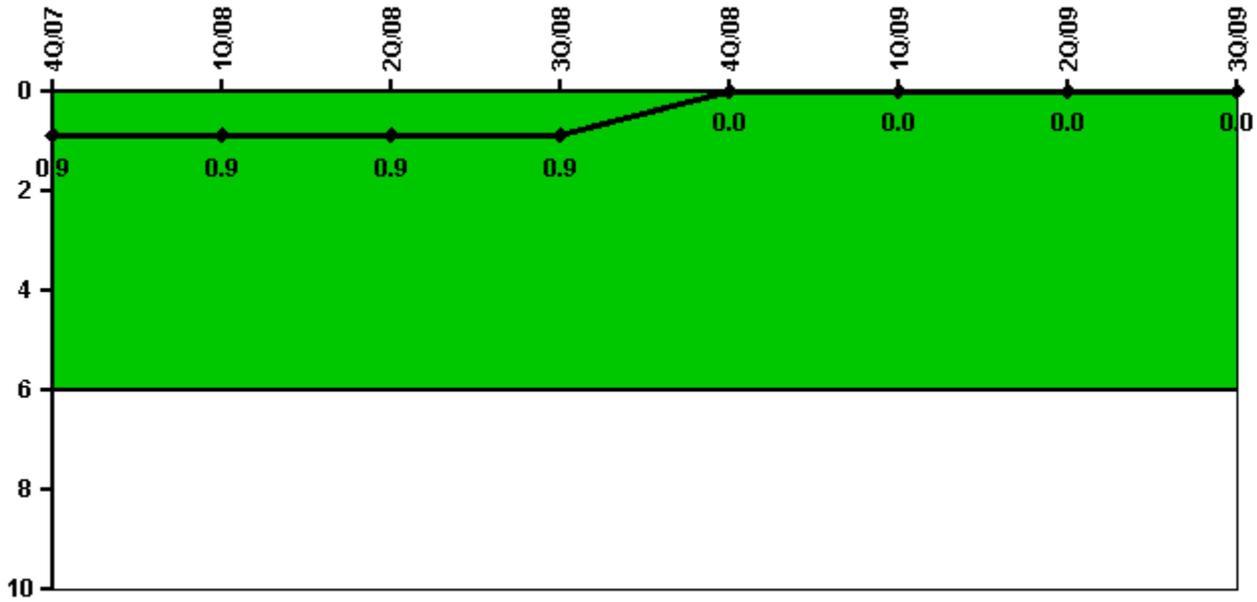
### Notes

| Unplanned Scrams per 7000 Critical Hrs | 4Q/07  | 1Q/08  | 2Q/08  | 3Q/08  | 4Q/08  | 1Q/09  | 2Q/09  | 3Q/09  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned scrams                       | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Critical hours                         | 1503.8 | 2183.0 | 2184.0 | 2208.0 | 2209.0 | 2159.0 | 2184.0 | 2208.0 |
| Indicator value                        | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |

Licensee Comments: none

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## Unplanned Power Changes per 7000 Critical Hrs



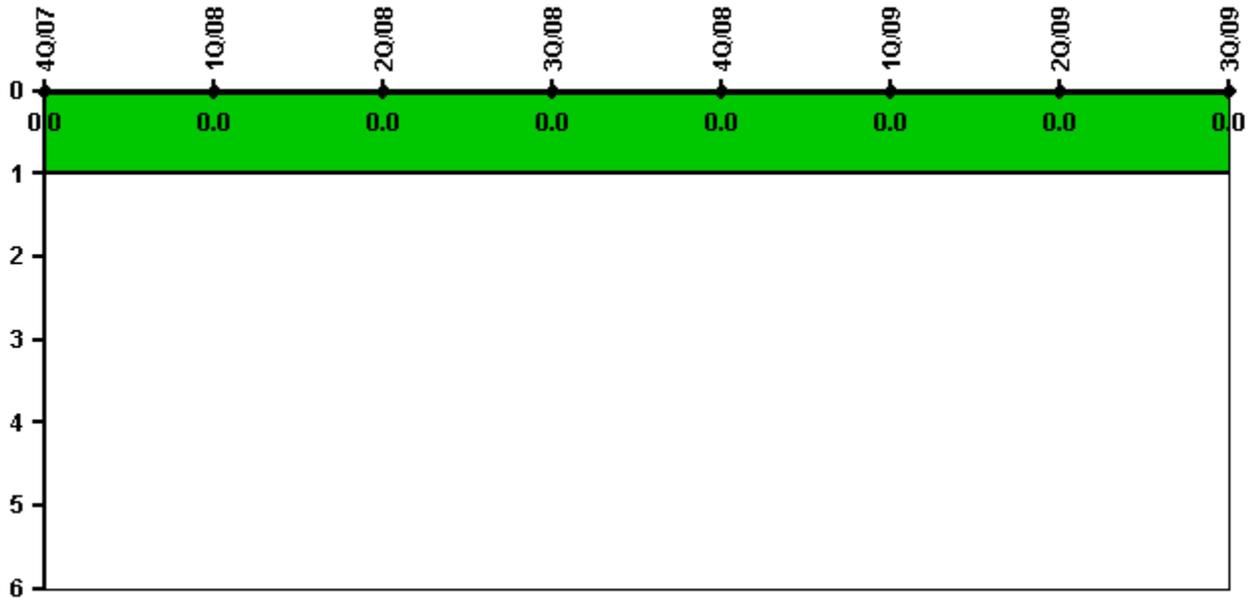
Thresholds: White > 6.0

### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 4Q/07  | 1Q/08  | 2Q/08  | 3Q/08  | 4Q/08  | 1Q/09  | 2Q/09  | 3Q/09  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned power changes                       | 1.0    | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Critical hours                                | 1503.8 | 2183.0 | 2184.0 | 2208.0 | 2209.0 | 2159.0 | 2184.0 | 2208.0 |
| Indicator value                               | 0.9    | 0.9    | 0.9    | 0.9    | 0      | 0      | 0      | 0      |

Licensee Comments: none

# Unplanned Scrams with Complications



Thresholds: White > 1.0

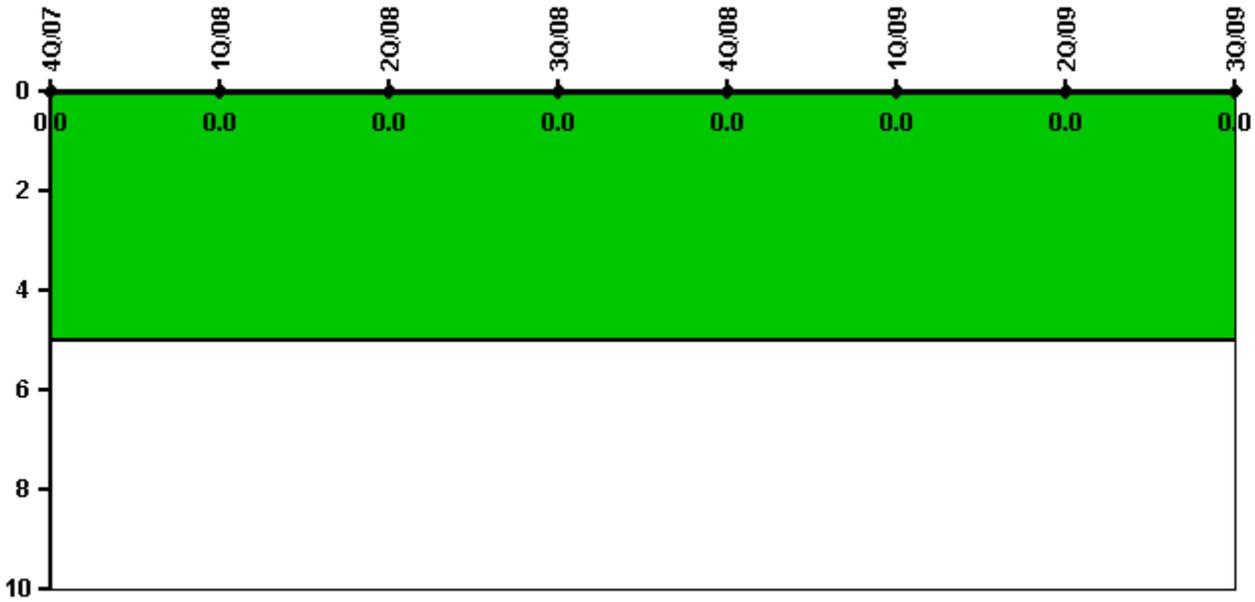
## Notes

| 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

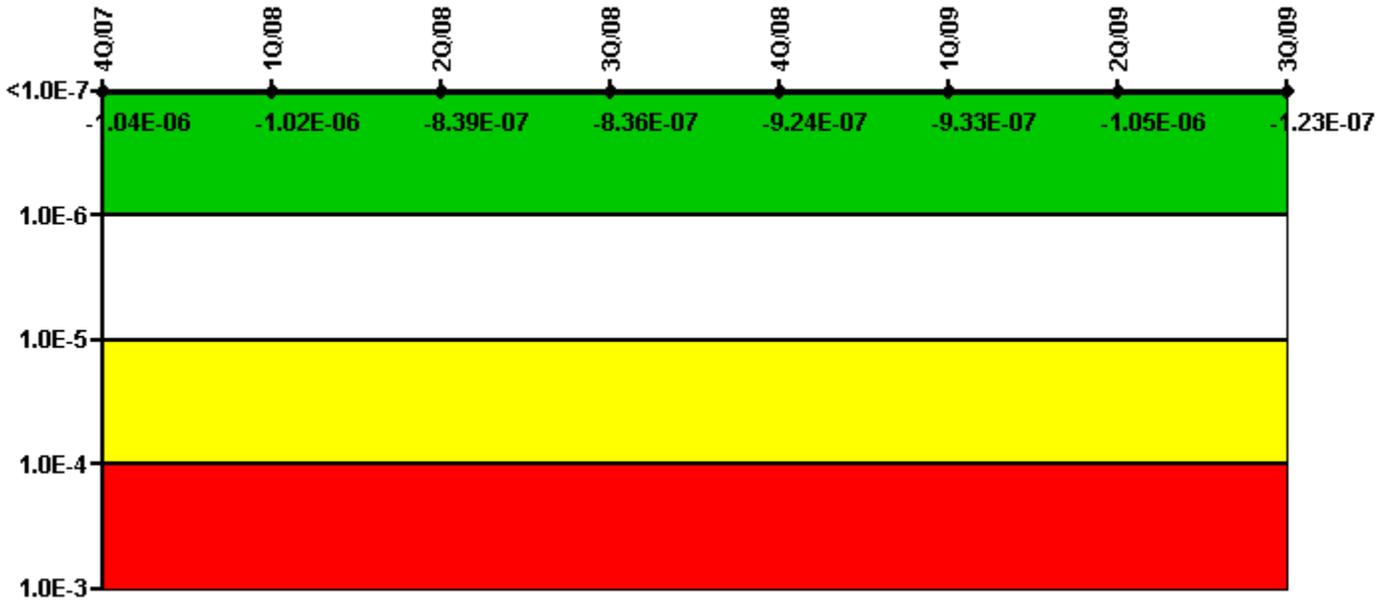
### Notes

| 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     | 0     | 0     | 0     | 0     | 0     | 0     |
| Indicator value                         | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |

Licensee Comments: none

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# Mitigating Systems Performance Index, Emergency AC Power System



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

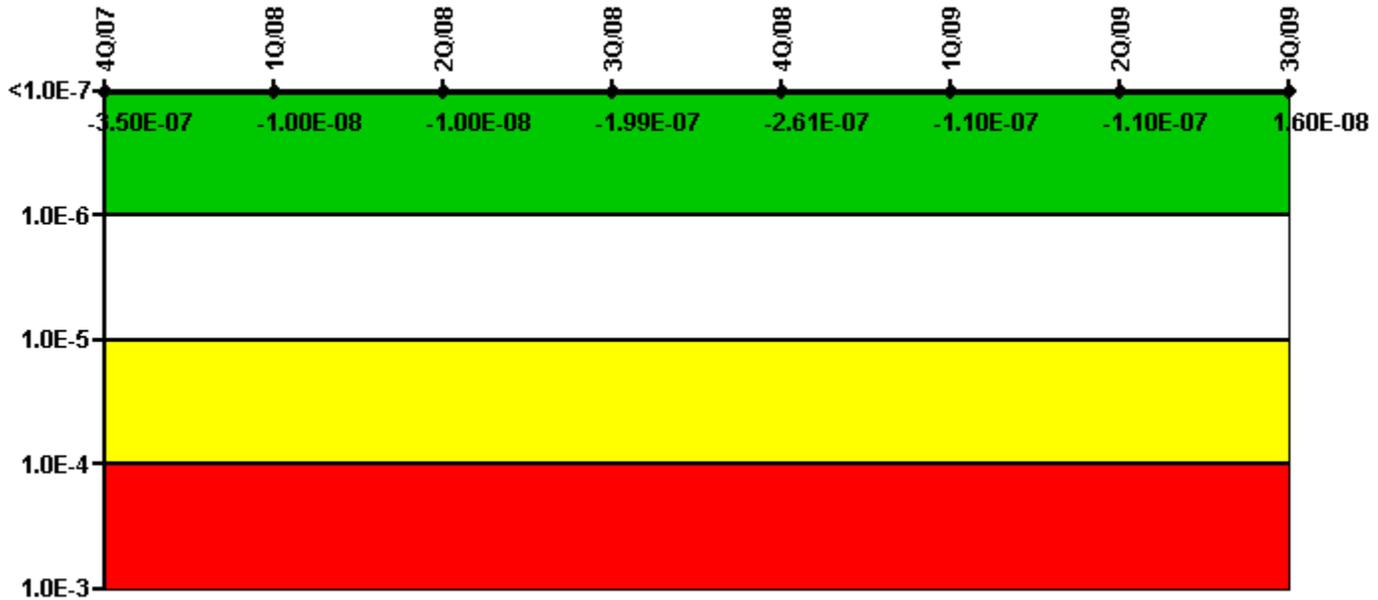
## Notes

| 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)   | -1.60E-07 | -1.20E-07 | 7.10E-08  | 7.40E-08  | -3.90E-09 | -2.30E-08 | -1.70E-07 | -2.90E-08 |
| URI ( $\Delta$ CDF)   | -8.80E-07 | -9.00E-07 | -9.10E-07 | -9.10E-07 | -9.20E-07 | -9.10E-07 | -8.80E-07 | -9.40E-08 |
| PLE   | NO        |
| Indicator value   | -1.04E-06 | -1.02E-06 | -8.39E-07 | -8.36E-07 | -9.24E-07 | -9.33E-07 | -1.05E-06 | -1.23E-07 |

## Licensee Comments:

3Q/09: Changed PRA Parameter(s). TMI-1 PRA model update was completed June 30, 2009. PRA data was incorporated into the plant's MSPI Basis Document on September 18, 2009. The PRA parameters were entered into CDE, and per NEI 99-02 Rev 5 are used for this third quarter 2009 report. Additionally per NRC RAI response to the industry, EDG mission time was changed from 24 to 6 hours this quarter. These changes resulted in significant margin improvement for all systems. Also, planned maintenance hours were added to the next quarter for an infrequent proactive replacement of MU-P-1B motor.

# Mitigating Systems Performance Index, High Pressure Injection System



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

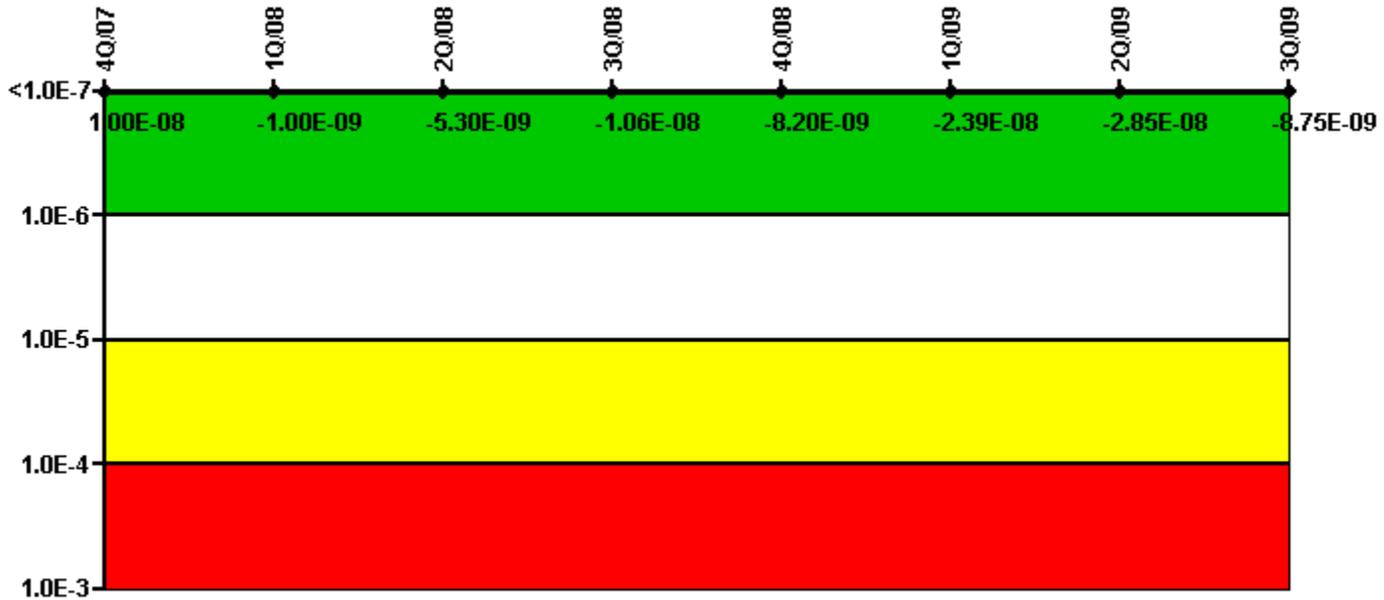
## Notes

| 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)  | -1.30E-07 | 2.10E-07  | 2.10E-07  | 2.10E-08  | -4.10E-08 | 1.10E-07  | 1.10E-07  | 4.30E-08  |
| URI ( $\Delta$ CDF)  | -2.20E-07 | -2.70E-08 |
| PLE  | NO        |
| Indicator value  | -3.50E-07 | -1.00E-08 | -1.00E-08 | -1.99E-07 | -2.61E-07 | -1.10E-07 | -1.10E-07 | 1.60E-08  |

## Licensee Comments:

3Q/09: Changed PRA Parameter(s). TMI-1 PRA model update was completed June 30, 2009. PRA data was incorporated into the plant's MSPI Basis Document on September 18, 2009. The PRA parameters were entered into CDE, and per NEI 99-02 Rev 5 are used for this third quarter 2009 report. Additionally per NRC RAI response to the industry, EDG mission time was changed from 24 to 6 hours this quarter. These changes resulted in significant margin improvement for all systems. Also, planned maintenance hours were added to the next quarter for an infrequent proactive replacement of MU-P-1B motor.

# Mitigating Systems Performance Index, Heat Removal System



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

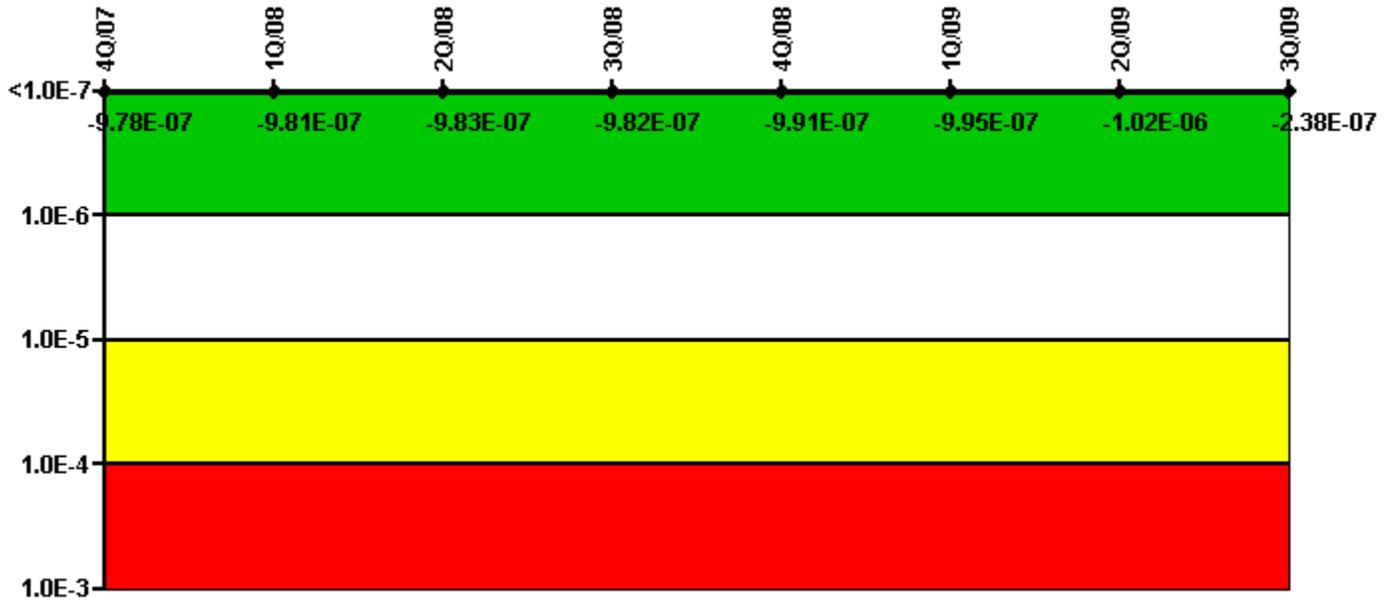
## Notes

| 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)                                       | 2.20E-08  | 1.10E-08  | 6.70E-09  | 1.40E-09  | 3.80E-09  | 7.10E-09  | 2.50E-09  | 9.50E-10  |
| URI ( $\Delta$ CDF)                                       | -1.20E-08 | -1.20E-08 | -1.20E-08 | -1.20E-08 | -1.20E-08 | -3.10E-08 | -3.10E-08 | -9.70E-09 |
| PLE   | NO        |
| Indicator value   | 1.00E-08  | -1.00E-09 | -5.30E-09 | -1.06E-08 | -8.20E-09 | -2.39E-08 | -2.85E-08 | -8.75E-09 |

## Licensee Comments:

3Q/09: Changed PRA Parameter(s). TMI-1 PRA model update was completed June 30, 2009. PRA data was incorporated into the plant's MSPI Basis Document on September 18, 2009. The PRA parameters were entered into CDE, and per NEI 99-02 Rev 5 are used for this third quarter 2009 report. Additionally per NRC RAI response to the industry, EDG mission time was changed from 24 to 6 hours this quarter. These changes resulted in significant margin improvement for all systems. Additionally, planned maintenance hours were added to the next quarter for an infrequent proactive replacement of MU-P-1B motor.

# Mitigating Systems Performance Index, Residual Heat Removal System



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

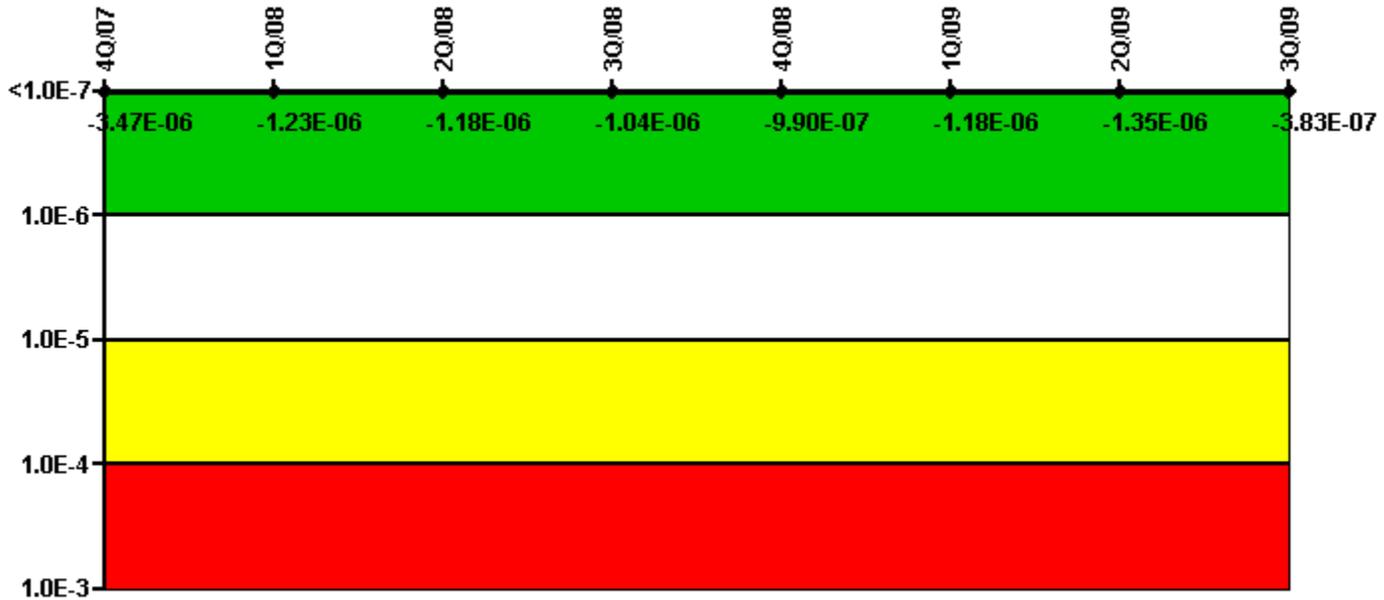
## Notes

| 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)  | -8.20E-09 | -1.10E-08 | -1.30E-08 | -1.20E-08 | -2.10E-08 | -2.50E-08 | -4.60E-08 | -5.80E-08 |
| URI ( $\Delta$ CDF)  | -9.70E-07 | -1.80E-07 |
| PLE  | NO        |
| Indicator value  | -9.78E-07 | -9.81E-07 | -9.83E-07 | -9.82E-07 | -9.91E-07 | -9.95E-07 | -1.02E-06 | -2.38E-07 |

## Licensee Comments:

3Q/09: Changed PRA Parameter(s). TMI-1 PRA model update was completed June 30, 2009. PRA data was incorporated into the plant's MSPI Basis Document on September 18, 2009. The PRA parameters were entered into CDE, and per NEI 99-02 Rev 5 are used for this third quarter 2009 report. Additionally per NRC RAI response to the industry, EDG mission time was changed from 24 to 6 hours this quarter. These changes resulted in significant margin improvement for all systems. Also, planned maintenance hours were added to the next quarter for an infrequent proactive replacement of MU-P-1B motor.

# Mitigating Systems Performance Index, Cooling Water Systems



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

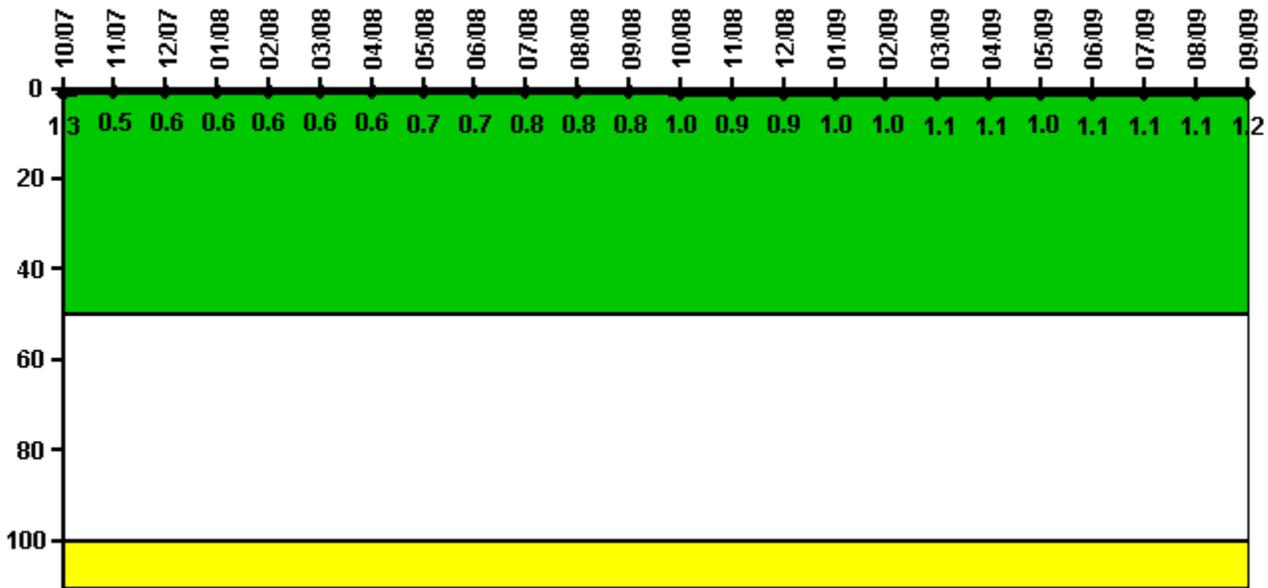
## Notes

| 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)   | 2.30E-07  | 4.70E-07  | 5.20E-07  | 5.60E-07  | 6.10E-07  | 4.20E-07  | 2.50E-07  | 3.70E-08  |
| URI ( $\Delta$ CDF)   | -3.70E-06 | -1.70E-06 | -1.70E-06 | -1.60E-06 | -1.60E-06 | -1.60E-06 | -1.60E-06 | -4.20E-07 |
| PLE   | NO        |
| Indicator value   | -3.47E-06 | -1.23E-06 | -1.18E-06 | -1.04E-06 | -9.90E-07 | -1.18E-06 | -1.35E-06 | -3.83E-07 |

Licensee Comments:

3Q/09: Changed PRA Parameter(s). TMI-1 PRA model update was completed June 30, 2009. PRA data was incorporated into the plant's MSPI Basis Document on September 18, 2009. The PRA parameters were entered into CDE, and per NEI 99-02 Rev 5 are used for this third quarter 2009 report. Additionally per NRC RAI response to the industry, EDG mission time was changed from 24 to 6 hours this quarter. These changes resulted in significant margin improvement for all systems. Also, planned maintenance hours were added to the next quarter for an infrequent proactive replacement of MU-P-1B motor.

# Reactor Coolant System Activity



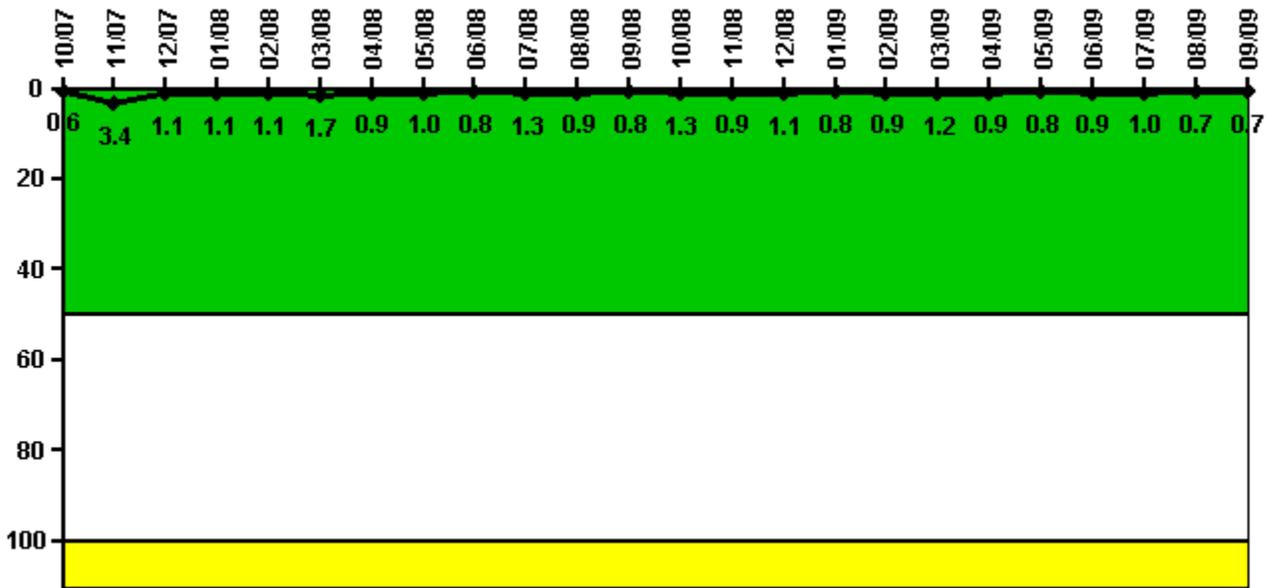
Thresholds: White > 50.0 Yellow > 100.0

## 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                | 0.004710 | 0.001680 | 0.002100 | 0.001940 | 0.002230 | 0.002140 | 0.002220 | 0.002380 | 0.002470 | 0.002770 | 0.002700 | 0.002860 |
| Technical specification limit   | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      |
| Indicator value                 | 1.3      | 0.5      | 0.6      | 0.6      | 0.6      | 0.6      | 0.6      | 0.7      | 0.7      | 0.8      | 0.8      | 0.8      |
| 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                | 0.003640 | 0.003030 | 0.003090 | 0.003390 | 0.003490 | 0.003690 | 0.003730 | 0.003610 | 0.003880 | 0.003930 | 0.003990 | 0.004160 |
| Technical specification limit   | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      | 0.4      |
| Indicator value                 | 1.0      | 0.9      | 0.9      | 1.0      | 1.0      | 1.1      | 1.1      | 1.0      | 1.1      | 1.1      | 1.1      | 1.2      |

Licensee Comments: none

# Reactor Coolant System Leakage



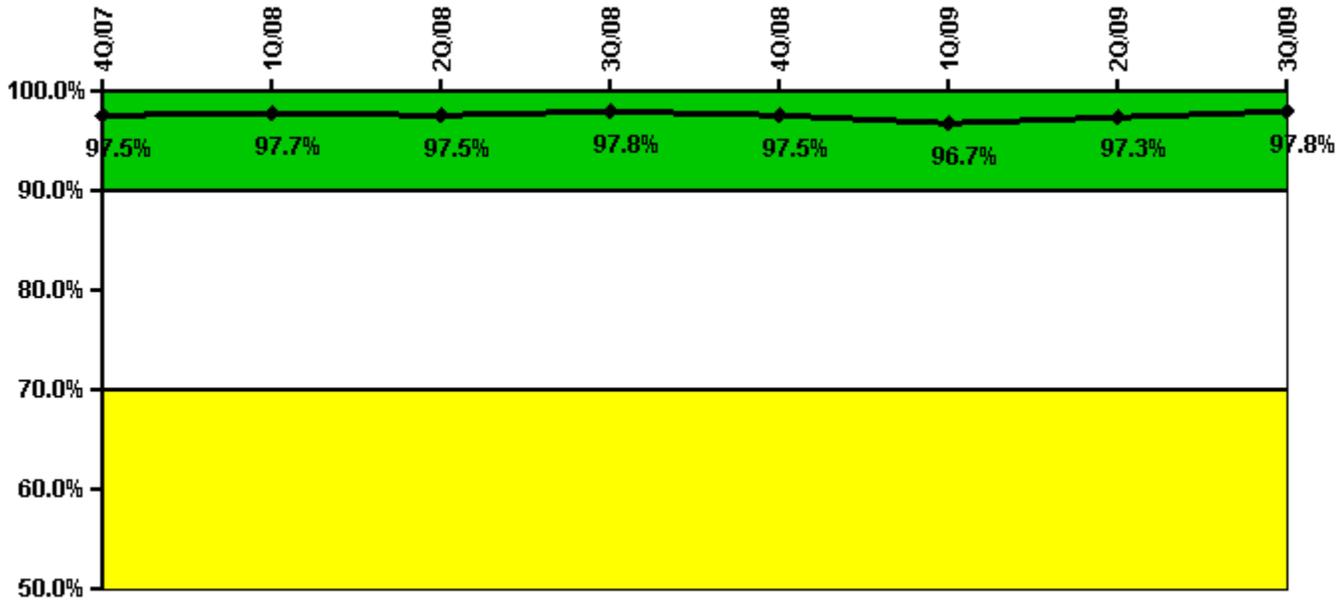
Thresholds: White > 50.0 Yellow > 100.0

## 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                | 0.060 | 0.335 | 0.106 | 0.108 | 0.108 | 0.171 | 0.092 | 0.103 | 0.077 | 0.131 | 0.093 | 0.084 |
| 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   | 3.4   | 1.1   | 1.1   | 1.1   | 1.7   | 0.9   | 1.0   | 0.8   | 1.3   | 0.9   | 0.8   |
| 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                | 0.132 | 0.092 | 0.105 | 0.082 | 0.089 | 0.120 | 0.090 | 0.076 | 0.091 | 0.098 | 0.073 | 0.068 |
| 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                | 1.3   | 0.9   | 1.1   | 0.8   | 0.9   | 1.2   | 0.9   | 0.8   | 0.9   | 1.0   | 0.7   | 0.7   |

Licensee Comments: none

## Drill/Exercise Performance



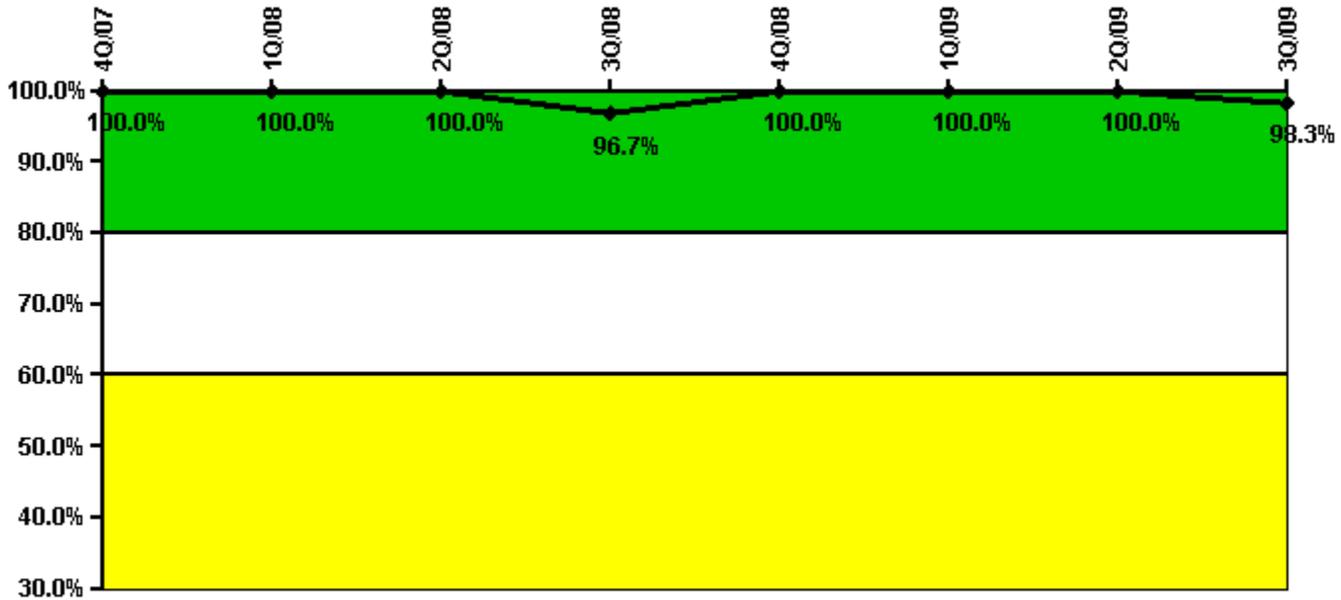
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

| Drill/Exercise Performance | 4Q/07 | 1Q/08 | 2Q/08 | 3Q/08 | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 3.0   | 62.0  | 29.0  | 24.0  | 119.0 | 61.0  | 61.0  | 43.0  |
| Total opportunities        | 4.0   | 63.0  | 30.0  | 24.0  | 121.0 | 65.0  | 61.0  | 43.0  |
|                            |       |       |       |       |       |       |       |       |
| Indicator value            | 97.5% | 97.7% | 97.5% | 97.8% | 97.5% | 96.7% | 97.3% | 97.8% |

Licensee Comments: none

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

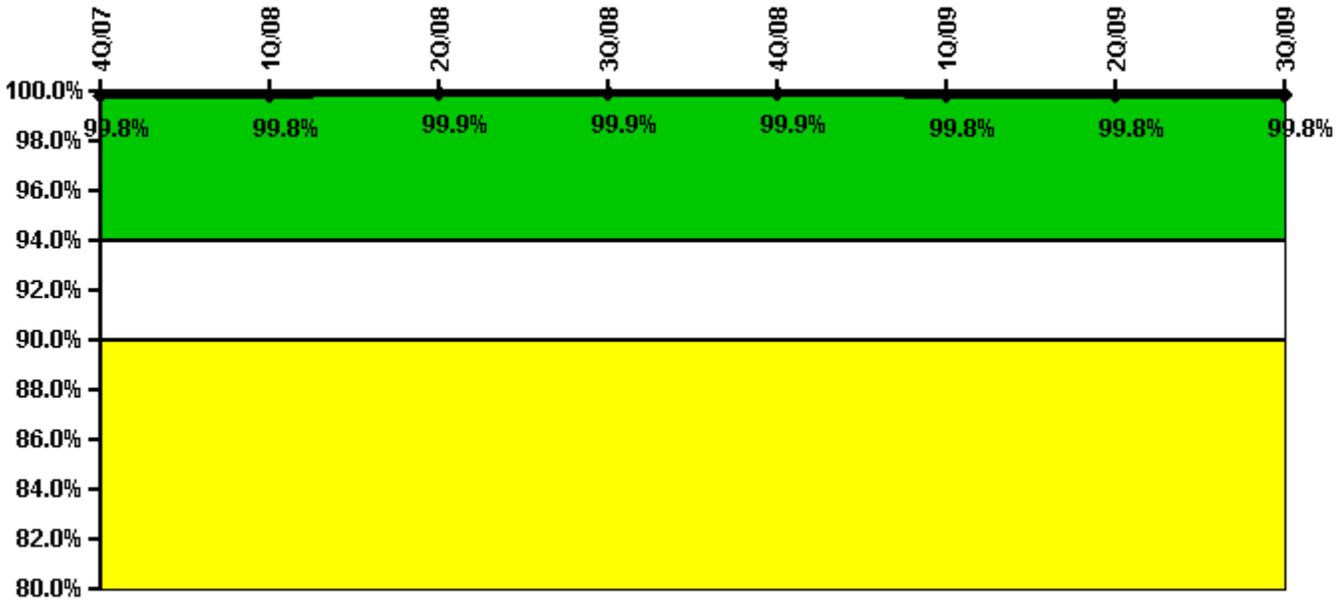
### Notes

| ERO Drill Participation     | 4Q/07  | 1Q/08  | 2Q/08  | 3Q/08 | 4Q/08  | 1Q/09  | 2Q/09  | 3Q/09 |
|-----------------------------|--------|--------|--------|-------|--------|--------|--------|-------|
| Participating Key personnel | 61.0   | 58.0   | 56.0   | 59.0  | 58.0   | 58.0   | 60.0   | 57.0  |
| Total Key personnel         | 61.0   | 58.0   | 56.0   | 61.0  | 58.0   | 58.0   | 60.0   | 58.0  |
| Indicator value             | 100.0% | 100.0% | 100.0% | 96.7% | 100.0% | 100.0% | 100.0% | 98.3% |

Licensee Comments: none

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# Alert & Notification System



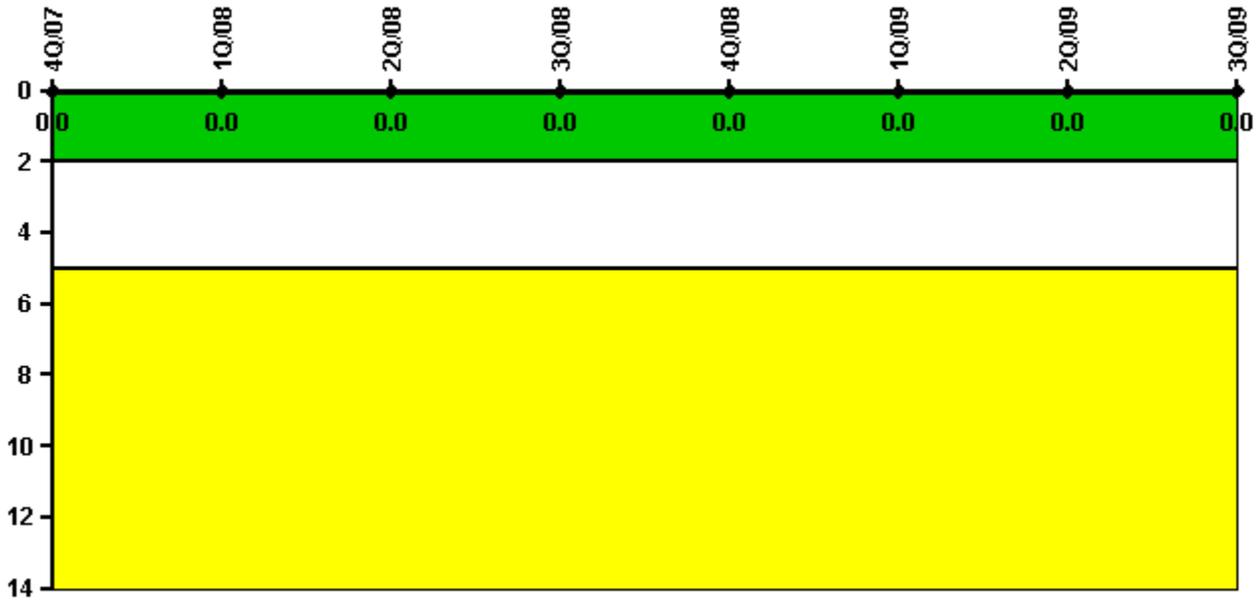
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

| Alert & Notification System | 4Q/07 | 1Q/08 | 2Q/08 | 3Q/08 | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests      | 1245  | 1248  | 1247  | 1246  | 1247  | 1244  | 1246  | 1247  |
| Total sirens-tests          | 1247  | 1248  | 1248  | 1248  | 1248  | 1248  | 1248  | 1248  |
| Indicator value             | 99.8% | 99.8% | 99.9% | 99.9% | 99.9% | 99.8% | 99.8% | 99.8% |

Licensee Comments: none

# Occupational Exposure Control Effectiveness



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

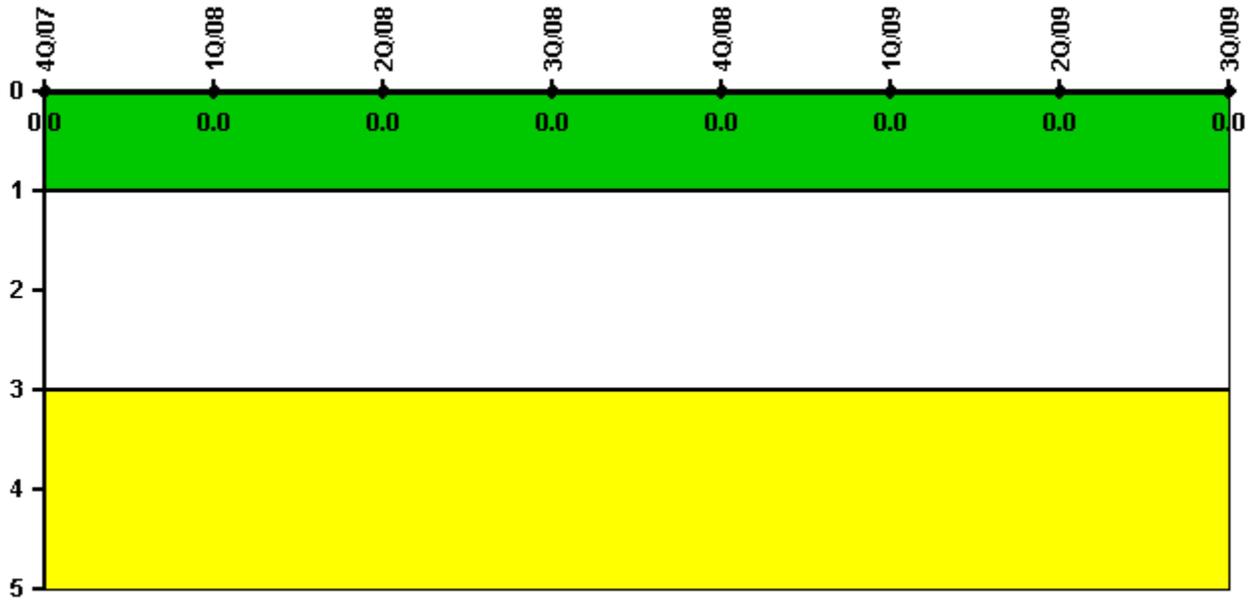
## Notes

| 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> |

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.