#### Byron 2

#### 1Q/2000 Performance Indicators

Licensee's General Comments: 1. An initiative to ensure NEI 99-02 guidelines are consistently applied to Safety System Unavailability (SSU) performance indicators amongst the 10 Commonwealth Edison Company plants was completed. No change to the historical SSU data was required. 2. The first quarter 2000 performance indicator data elements were prepared in accordance with NEI 99-02 {Draft Revision D} and Regulatory Issues Summary 2000-08.

### **Unplanned Scrams per 7000 Critical Hrs**



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Unplanned scrams	0	0	0	0	1.0
Critical hours	2160.0	2183.0	2208.0	1650.1	2156.5
Indicator value	0	0	0	0	0.9

### Scrams with Loss of Normal Heat Removal



Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Scrams	0	0	0	0	0
Indicator value				0	0

# **Unplanned Power Changes per 7000 Critical Hrs**



#### Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Unplanned power changes	0	1.0	1.0	0	0
Critical hours	2160.0	2183.0	2208.0	1650.1	2156.5
Indicator value	0.9	1.6	1.6	1.7	1.7

### Safety System Unavailability, Emergency AC Power



Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	0	27.40	74.00	0	16.30
Unplanned unavailable hours	0	0	0	10.60	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00
Train 2					
Planned unavailable hours	29.70	82.20	0.40	3.20	0
Unplanned unavailable hours	0	1.30	0	1.30	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00
Indicator value				0.7%	0.7%

Licensee Comments:

3Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.

2Q/99: A revision has been made to previously submitted data for the Safety System Unavailability (SSU) performance indicator for the Emergency AC Power system for Byron Unit 2. Data for the months of May 1999, July 1999, September 1999, May 2000, and July 2001 was revised as appropriate for consistency with FAQ 297, which was posted on December 13, 2001. The change to the data does not affect the color of the indicator.



Safety System Unavailability, High Pressure Injection System (HPSI)

Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	2.30	14.00	32.90	1.30	0.90
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 2					
Planned unavailable hours	2.00	1.00	21.30	2.00	1.40
Unplanned unavailable hours	0	0	20.40	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 3					
Planned unavailable hours	25.50	0	0	0	42.00
Unplanned unavailable hours	0	0	0	0	14.80
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 4					
Planned unavailable hours	0	0	21.70	0	0
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48



Licensee Comments: none

## Safety System Unavailability, Heat Removal System (AFW)



Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	20.80	19.90	36.70	10.50	24.00
Unplanned unavailable hours	0.60	0	8.10	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Train 2					
Planned unavailable hours	13.30	34.30	31.60	20.30	23.70
Unplanned unavailable hours	0	1.90	0	10.40	0
Fault exposure hours	0	0	0	180.70	0
Effective Reset hours	0	0	0	0	872.60
Required hours	2160.00	2183.00	2208.00	1650.07	2156.48
Indicator value				3.4%	1.7%

Licensee Comments:

1Q/00: Removed 872.6 fault exposure hours from 5/13/97 event on 2B Auxiliary Feedwater train due to meeting all criteria in NEI 99-02 for

#### removing fault exposure hours

2Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

1Q/99: A change was made to historical data for the Safety System Unavailability (SSU) Heat Removal System performance indicator (PI) for Byron Unit 2. This change was done to address an internal NEI PI website database problem. This change restores the historical database to agree with data as previously submitted to the NRC and does not change any data already sent to the NRC. The months of March 1999, April 1999, and May 1999 were affected. The change has no affect on performance indicator color.

2Q/97: Removed 872.6 fault exposure hours from 5/13/97 event on 2B Auxiliary Feedwater train due to meeting all criteria in NEI 99-02 for removing fault exposure hours.

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process, for removal of 872.6 fault exposure hours from May 13, 1997 event on 2B Auxiliary Feedwater train. The change does not affect current performance indicator color.

### Safety System Unavailability, Residual Heat Removal System



Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Train 1					
Planned unavailable hours	43.40	0.20	5.00	5.40	2.40
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00

Train 2					
Planned unavailable hours	38.90	1.40	5.80	2.30	2.10
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	2184.00
Indicator value				0.7%	0.5%

Licensee Comments: none





#### Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Safety System Functional Failures	0	0	0	0	0
Indicator value	4	3	1	0	0



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	4/99	5/99	6/99	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00
Maximum activity	0.000339	0.000330	0.000343	0.000361	0.000378	0.000368	0.000818	0.000196	0.000213	0.000231	0.000243	0.000263
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	0.1	0	0	0	0	0



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	4/99	5/99	6/99	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00
Maximum leakage	0.215	0.170	0.229	0.238	0.182	0.184	0.205	0.707	0.674	0.659	0.586	0.562
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	2.2	1.7	2.3	2.4	1.8	1.8	2.1	7.1	6.7	6.6	5.9	5.6

### **Drill/Exercise Performance**



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Successful opportunities	0	54.0	39.0	4.0	63.0
Total opportunities	0	54.0	40.0	4.0	64.0
Indicator value				99.1%	98.8%

Licensee Comments:

4Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

3Q/99: A revision has been made to previously submitted data for the Emergency Preparedness Drill and Exercise Performance (DEP) indicator. Credit was given for DEP opportunities during some licensed operator requalification training simulator sets when they should not have been credited. Five months of data are affected and have been revised (8-99, 9-99, 10-99, 5-00, and 8-00). The change to the data does not affect the color of the indicator.

### **ERO Drill Participation**



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Participating Key personnel				56.0	61.0
Total Key personnel				60.0	62.0
Indicator value				93.3%	98.4%

Licensee Comments:

1Q/00: Frequently asked question (FAQ) #22 in FAQ log #3 was reviewed by Commonwealth Edison (ComEd) Company Emergency Planning management and it was determined that no historical data changes were required. Common guidance was developed and implemented at the 10 ComEd plants for the collection of first quarter 2000 Emergency Response Organization Drill Participation performance indicator data.

## **Alert & Notification System**



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Successful siren-tests	5740	5913	5996	5883	6000
Total sirens-tests	5922	6016	6110	5922	6110
Indicator value	98.5%	98.4%	98.2%	98.2%	98.5%

# **Occupational Exposure Control Effectiveness**



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
High radiation area occurrences	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0
Indicator value	2	0	0	0	0

# **RETS/ODCM Radiological Effluent**



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

<b>RETS/ODCM Radiological Effluent</b>	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
RETS/ODCM occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

## **Protected Area Security Performance Index**



#### Notes

Protected Area Security Performance Index	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
IDS compensatory hours	715.00	203.70	330.00	57.60	57.60
CCTV compensatory hours	753.0	10.1	0.8	6.5	67.8
IDS normalization factor	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0
Index Value	0.120	0.097	0.107	0.097	0.031

## **Personnel Screening Program**



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Program failures	0	0	0	0	0
Indicator value	0	0	0	0	0

### **FFD/Personnel Reliability**



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

FFD/Personnel Reliability	1Q/99	2Q/99	3Q/99	4Q/99	1Q/00
Program Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

A <u>PI Summary</u> | <u>Inspection Findings Summary</u> | <u>Reactor Oversight Process</u>

Last Modified: April 1, 2002