DOCKET: 313 PREPARER NAME: Michael K. Hall UNIT\_NME: ANO Unit 1 PREPARER TELEPHONE: 4798584438

RPT\_PERIOD: 201610

Design Electrical Rating: 850
 Maximum Dependable Capacity (MWe-Net) 836

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	6,407.12	301,865.50
4. Number of Hours Generator On-line	0.00	6,407.12	298,633.03
5. Reserve Shutdown Hours	0.00	0.00	817.50
6. Net Electrical energy Generated (MWHrs)	0.00	5,375,649.00	236,965,346.24

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
1R26	9/24/2016	S	744.00	С	4	

SUMMARY The Unit was offline the entire month of October 2016 for the 1R26 refueling outage.

DOCKET: 313 PREPARER NAME: Michael K. Hall UNIT\_NME: ANO Unit 1 PREPARER TELEPHONE: 4798584438

RPT\_PERIOD: 201611

Design Electrical Rating: 850
 Maximum Dependable Capacity (MWe-Net) 836

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	6,407.12	301,865.50
4. Number of Hours Generator On-line	0.00	6,407.12	298,633.03
5. Reserve Shutdown Hours	0.00	0.00	817.50
0 11 151 11 1 0 1 1 (1001)	0.00	E 07E 040 00	000 005 040 0

6. Net Electrical energy Generated (MWHrs) 0.00 5,375,649.00 236,965,346.24

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
1R26	9/24/2016	S	720.00	С	4	

SUMMARY The Unit was offline the entire month of November 2016 for the 1R26 refueling outage.

DOCKET: 313 PREPARER NAME: Michael K. Hall UNIT\_NME: ANO Unit 1 PREPARER TELEPHONE: 4798584438

RPT\_PERIOD: 201612

Design Electrical Rating: 850
 Maximum Dependable Capacity (MWe-Net) 836

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 464.07 6,871.19 302,329.57 4. Number of Hours Generator On-line 413.75 6,820.87 299,046.78 5. Reserve Shutdown Hours 0.00 0.00 817.50 6. Net Electrical energy Generated (MWHrs) 305,488.00 5,681,137.00 237,270,834.24

**UNIT SHUTDOWNS** 

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
1R26	9/24/2016	S	330.25	С	4	

SUMMARY The Unit began the month of December offline for 1R26. On December 12, 2016 the plant was started-up. On December 18, 2016 power was increased to at or near full power. The Unit operated at or near full power for the remainder of the month.

DOCKET: 368 PREPARER NAME: Michael K. Hall UNIT\_NME: ANO Unit 2 PREPARER TELEPHONE: 4798584438

RPT\_PERIOD: 201610

Design Electrical Rating: 1032
 Maximum Dependable Capacity (MWe-Net) 988

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 115.13
 6,427.25
 272,694.84

 4. Number of Hours Generator On-line
 104.08
 6,388.73
 269,842.29

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 89,446.00 6,309,466.00 245,788,114.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
2F16- 03	9/28/2016	S	639.92	D	4	Technical Specification required shutdown to repair red train Emergency Diesel Generator.

SUMMARY The Unit began the month of October offline. On October 27, 2016 the plant was started-up. On October 29, 2016 power was increased to at or near full power. The Unit operated at or near full power for the remainder of the month.

DOCKET: 368 PREPARER NAME: Michael K. Hall UNIT\_NME: ANO Unit 2 PREPARER TELEPHONE: 4798584438

RPT\_PERIOD: 201611

Design Electrical Rating: 1032
 Maximum Dependable Capacity (MWe-Net) 988

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,148.25
 273,415.84

 4. Number of Hours Generator On-line
 721.00
 7,109.73
 270,563.29

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 712,164.00 7,021,630.00 246,500,278.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The Unit began the month of November operating at or near full power. On November 18th, there was a power reduction to ~42% per the Dispatchers request due to an issue on the Mabelvale 500 kV line. On November 20th, power was restored to at or near full power. The Unit operated at or near full power for the remainder of the month.

DOCKET: 368 PREPARER NAME: Michael K. Hall UNIT\_NME: ANO Unit 2 PREPARER TELEPHONE: 4798584438

RPT\_PERIOD: 201612

Design Electrical Rating: 1032
 Maximum Dependable Capacity (MWe-Net) 988

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,892.25
 274,159.84

 4. Number of Hours Generator On-line
 744.00
 7,853.73
 271,307.29

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 751,666.00 7,773,296.00 247,251,944.00

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The Unit operated at or near full power for the entire month of December 2016.

DOCKET: 334 PREPARER NAME: David T. Jones

UNIT\_NME: Beaver Valley Unit 1 PREPARER TELEPHONE: 724-682-4962

RPT\_PERIOD: 201610

Design Electrical Rating: 963
 Maximum Dependable Capacity (MWe-Net) 908

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 188.70
 6,596.00
 272,233.10

 4. Number of Hours Generator On-line
 159.13
 6,566.15
 269,308.16

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 118,182.00 5,969,518.90 216,584,915.80

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1	9/24/2016	S	584.87	С	4	Shutdown for 24th refueling outage on 9/24/16. The Unit was synchronized to the grid on 10/25/16 at 0852 hours.

SUMMARY BVPS-1 was shutdown for its 24th refueling outage on 9/24/16, and was synchronized to the electrical grid at 0852 hours on 10/25/16. The Unit achieved a nominal value of 100% power at 1130 hours on 10/27/16.

DOCKET: 334 PREPARER NAME: David T. Jones

UNIT\_NME: Beaver Valley Unit 1 PREPARER TELEPHONE: 724-682-4962

RPT\_PERIOD: 201611

Design Electrical Rating: 963
 Maximum Dependable Capacity (MWe-Net) 908

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,317.00
 272,954.10

 4. Number of Hours Generator On-line
 721.00
 7,287.15
 270,029.16

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 679,057.00 6,648,575.90 217,263,972.80

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY BVPS-1 operated at a nominal value of 100% power for the entire month of November 2016.

DOCKET: 334 PREPARER NAME: David T Jones
UNIT\_NME: Beaver Valley Unit 1 PREPARER TELEPHONE: 724-682-4962

RPT\_PERIOD: 201612

Design Electrical Rating: 963
 Maximum Dependable Capacity (MWe-Net) 908

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,061.00
 273,698.10

 4. Number of Hours Generator On-line
 744.00
 8,031.15
 270,773.16

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 702,562.00 7,351,137.90 217,966,534.80

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY BVPS-1 operated at a nominal value of 100% power for the entire month of December 2016.

DOCKET: 412 PREPARER NAME: David T. Jones

UNIT\_NME: Beaver Valley Unit 2 PREPARER TELEPHONE: 724-682-4962

RPT\_PERIOD: 201610

Design Electrical Rating: 960
 Maximum Dependable Capacity (MWe-Net) 905

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,123.18
 222,593.40

 4. Number of Hours Generator On-line
 744.00
 7,114.33
 221,589.39

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 687,685.00 6,503,576.00 183,995,249.50

#### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY BVPS-2 operated at a nominal value of 100% power for the entire month of October 2016.

DOCKET: 412 PREPARER NAME: David T. Jones
UNIT\_NME: Beaver Valley Unit 2 PREPARER TELEPHONE: 724-682-4962

RPT\_PERIOD: 201611

Design Electrical Rating: 960
 Maximum Dependable Capacity (MWe-Net) 905

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,844.18
 223,314.40

 4. Number of Hours Generator On-line
 721.00
 7,835.33
 222,310.39

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 670,720.00 7,174,296.00 184,665,969.50

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY BVPS-2 operated at a nominal value of 100% power for the entire month of November 2016.

DOCKET: 412 PREPARER NAME: David T Jones
UNIT\_NME: Beaver Valley Unit 2 PREPARER TELEPHONE: 724-682-4962

RPT\_PERIOD: 201612

Design Electrical Rating: 960
 Maximum Dependable Capacity (MWe-Net) 905

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,588.18
 224,058.40

 4. Number of Hours Generator On-line
 744.00
 8,579.33
 223,054.39

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 694,141.00 7,868,437.00 185,360,110.50

# **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY BVPS-2 operated at a nominal value of 100% power for the entire month of December 2016.

DOCKET: 456 PREPARER NAME: David Johnson

UNIT\_NME: Braidwood Unit 1 PREPARER TELEPHONE: 815-417-2478

RPT\_PERIOD: 201610

Design Electrical Rating: 1268
 Maximum Dependable Capacity (MWe-Net) 1166

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 157.55
 6,612.55
 221,909.86

 4. Number of Hours Generator On-line
 137.65
 6,592.65
 220,776.44

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 134,762.00 7,833,736.00 249,517,277.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
A1R19	9/26/2016	S	606.35	С	4	Unit 1 shutdown for planned refueling outage.

SUMMARY The Unit started the month in a planned refuel outage A1R19, an unplanned outage extension occurred from 10/22/2016 00:00 hrs to 10/26/2016 06:21 when the unit exited the outage. The unit has returned to full power operation.

DOCKET: 456 PREPARER NAME: David Johnson

UNIT\_NME: Braidwood Unit 1 PREPARER TELEPHONE: 815-417-2478

RPT\_PERIOD: 201611

Design Electrical Rating: 1268
 Maximum Dependable Capacity (MWe-Net) 1166

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,333.55
 222,630.86

 4. Number of Hours Generator On-line
 721.00
 7,313.65
 221,497.44

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 879,398.00 8,713,134.00 250,396,675.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated at full power for the entire month, except for an economic load dispatch reduction of 1000 Mwh (not planned not unplanned).

DOCKET: 456 PREPARER NAME: David Johnson UNIT\_NME: Braidwood Unit 1 PREPARER TELEPHONE: 815-417-2478

RPT\_PERIOD: 201612

Design Electrical Rating: 1268
 Maximum Dependable Capacity (MWe-Net) 1166

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,077.55
 223,374.86

 4. Number of Hours Generator On-line
 744.00
 8,057.65
 222,241.44

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 909,610.00 9,622,744.00 251,306,285.00

# **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY The unit operated at full power except for a planned exempt MS drain surveillance.

DOCKET: 457 PREPARER NAME: David Johnson

UNIT\_NME: Braidwood Unit 2 PREPARER TELEPHONE: 815-417-2478

RPT\_PERIOD: 201610

Design Electrical Rating: 1241
 Maximum Dependable Capacity (MWe-Net) 1144

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 226,400.94

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 225,508.53

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 877,225.00 8,497,385.00 251,913,613.00

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated at full power for the entire month.

DOCKET: 457 PREPARER NAME: David Johnson

UNIT\_NME: Braidwood Unit 2 PREPARER TELEPHONE: 815-417-2478

RPT\_PERIOD: 201611

Design Electrical Rating: 1241
 Maximum Dependable Capacity (MWe-Net) 1144

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 227,121.94

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 226,229.53

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 849,825.00 9,347,210.00 252,763,438.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The Unit operated at full power except for two surveillances; Turbine Governor valve (611 Mwh) and Main Steam Drain Valves (10 Mwh).

DOCKET: 457 PREPARER NAME: David Johnson

UNIT\_NME: Braidwood Unit 2 PREPARER TELEPHONE: 815-417-2478

RPT\_PERIOD: 201612

Design Electrical Rating: 1241
 Maximum Dependable Capacity (MWe-Net) 1144

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 227,865.94

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 226,973.53

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 879,317.00 10,226,527.00 253,642,755.00

#### **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY The unit operated at full power except for an unplanned fail open of a turbine throttle valve.

DOCKET: 259 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 1 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201610

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1101

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	11.35	6,451.80	135,860.80
4. Number of Hours Generator On-line	0.02	6,406.22	133,830.95
5. Reserve Shutdown Hours	0.00	0.00	0.00
6. Net Electrical energy Generated (MWHrs)	8.00	6,825,302.30	135,050,022.01

# **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
01	10/1/2016	S	743.98	С	1	U1R11 Refueling Outage

DOCKET: 259 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 1 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201611

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1101

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 667.03
 7,118.83
 136,527.83

 4. Number of Hours Generator On-line
 648.67
 7,054.89
 134,479.62

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 706,119.70 7,531,422.00 135,756,141.71

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
01	10/1/2016	S	72.33	С	4	U1R11 Refueling Outage

DOCKET: 259 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 1 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201612

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1101

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,862.83
 137,271.83

 4. Number of Hours Generator On-line
 744.00
 7,798.89
 135,223.62

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 851,466.30 8,382,888.30 136,607,608.01

### **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 260 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 2 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201610

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1104

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 260,815.91

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 257,485.03

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 805,025.50 8,008,399.80 266,404,417.21

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 260 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 2 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201611

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1104

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 261,536.91

 4. Number of Hours Generator On-line
 676.65
 7,995.65
 258,161.68

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 729,130.20 8,737,530.00 267,133,547.41

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
01	11/29/2016	S	44.35	В	5	Maintenance Outage for 2A Recirc Pump Motor Lower Bearing Oil Level Alarm

DOCKET: 260 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 2 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201612

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1104

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 262,280.91

 4. Number of Hours Generator On-line
 725.60
 8,721.25
 258,887.28

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 785,706.30 9,523,236.30 267,919,253.71

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
01	11/29/2016	S	18.40	В	4	Maintenance Outage for 2A Recirc Pump Motor Lower Bearing Oil Level Alarm

DOCKET: 296 PREPARER NAME: Amanda Ledford

Browns Ferry Unit 3 UNIT\_NME: PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201610

1. Design Electrical Rating: 1120 2. Maximum Dependable Capacity (MWe-Net) 1105

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 6,463.47 216,722.26 4. Number of Hours Generator On-line 744.00 214,622.20 6,441.29 5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 824,857.50 6,658,368.80 225,753,720.94

### **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 296 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 3 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201611

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1105

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,184.47
 217,443.26

 4. Number of Hours Generator On-line
 721.00
 7,162.29
 215,343.20

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 808,849.20 7,467,218.00 226,562,570.14

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 296 PREPARER NAME: Amanda Ledford

UNIT\_NME: Browns Ferry Unit 3 PREPARER TELEPHONE: 729-7914

RPT\_PERIOD: 201612

Design Electrical Rating: 1120
 Maximum Dependable Capacity (MWe-Net) 1105

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,928.47
 218,187.26

 4. Number of Hours Generator On-line
 744.00
 7,906.29
 216,087.20

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 841,554.30 8,308,772.30 227,404,124.44

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

PREPARER NAME: DOCKET: 325 Chris Butler

Brunswick Unit 1 UNIT\_NME: PREPARER TELEPHONE: 910-457-3006

RPT\_PERIOD: 201610

1. Design Electrical Rating: 983 2. Maximum Dependable Capacity (MWe-Net) 938

Cumulative **This Month** Yr-to-Date 3. Number of Hours the Reactor was Critical 744.00 6,557.20 272,464.84 4. Number of Hours Generator On-line 744.00 267,155.20 6,493.23 5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 675,819.00 219,654,825.00 5,950,406.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 325 PREPARER NAME: Chris Butler

UNIT\_NME: Brunswick Unit 1 PREPARER TELEPHONE: 910-457-3006

RPT\_PERIOD: 201611

Design Electrical Rating: 983
 Maximum Dependable Capacity (MWe-Net) 938

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,278.20
 273,185.84

 4. Number of Hours Generator On-line
 721.00
 7,214.23
 267,876.20

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 648,608.00 6,599,014.00 220,303,433.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 325 PREPARER NAME: Chris Butler

UNIT\_NME: Brunswick Unit 1 PREPARER TELEPHONE: 910-457-3006

RPT\_PERIOD: 201612

Design Electrical Rating: 983
 Maximum Dependable Capacity (MWe-Net) 938

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,022.20
 273,929.84

 4. Number of Hours Generator On-line
 744.00
 7,958.23
 268,620.20

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 714,531.00 7,313,545.00 221,017,964.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 324 PREPARER NAME: Chris Butler

UNIT\_NME: Brunswick Unit 2 PREPARER TELEPHONE: 910-457-3006

RPT\_PERIOD: 201610

Design Electrical Rating: 980
 Maximum Dependable Capacity (MWe-Net) 932

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 281,993.14

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 274,912.02

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 668,005.00 6,735,684.00 217,889,491.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 324 PREPARER NAME: Chris Butler

UNIT\_NME: Brunswick Unit 2 PREPARER TELEPHONE: 910-457-3006

RPT\_PERIOD: 201611

Design Electrical Rating: 980
 Maximum Dependable Capacity (MWe-Net) 932

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 282,714.14

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 275,633.02

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 669,504.00 7,405,188.00 218,558,995.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 324 PREPARER NAME: Chris Butler

UNIT\_NME: Brunswick Unit 2 PREPARER TELEPHONE: 910-457-3006

RPT\_PERIOD: 201612

Design Electrical Rating: 980
 Maximum Dependable Capacity (MWe-Net) 932

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 283,458.14

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 276,377.02

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 669,991.00 8,075,179.00 219,228,986.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 454 PREPARER NAME: David Eder
UNIT\_NME: Byron Unit 1 PREPARER TELEPHONE: 815 406-2194

RPT\_PERIOD: 201610

Design Electrical Rating: 1213
 Maximum Dependable Capacity (MWe-Net) 1157

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 244,514.11

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 243,289.68

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

3. Heserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 861,364.00 8,606,343.00 268,247,499.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY unit on line the entire month

PREPARER NAME: DOCKET: 454 David Eder Byron Unit 1 UNIT\_NME: PREPARER TELEPHONE: 815 406-2194

RPT\_PERIOD: 201611

1. Design Electrical Rating: 1213 2. Maximum Dependable Capacity (MWe-Net) 1157

Yr-to-Date **This Month** Cumulative 3. Number of Hours the Reactor was Critical 721.00 8,040.00 245,235.11 4. Number of Hours Generator On-line 721.00 244,010.68 8,040.00 5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 854,753.00 9,461,096.00 269,102,252.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY unit on line the entire month

DOCKET: 454 PREPARER NAME: David Eder
UNIT\_NME: Byron Unit 1 PREPARER TELEPHONE: 815 406-2194

RPT\_PERIOD: 201612

Design Electrical Rating: 1213
 Maximum Dependable Capacity (MWe-Net) 1157

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 245,979.11

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 244,754.68

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 895,627.00 10,356,723.00 269,997,879.00

#### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY unit on line the entire month

DOCKET: 455 PREPARER NAME: David Eder
UNIT\_NME: Byron Unit 2 PREPARER TELEPHONE: 815 406-2194

RPT\_PERIOD: 201610

Design Electrical Rating: 1186.4
 Maximum Dependable Capacity (MWe-Net) 1127

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 729.68
 6,613.35
 237,156.06

 4. Number of Hours Generator On-line
 725.77
 6,598.52
 236,104.64

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 797,132.00 7,528,787.00 258,011,075.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
B2F29	10/12/2016	F	18.23	А	2	Byron Unit 2 Reactor was manually tripped due to a loss of feedwater to the 'B' and 'C' steam generators. The loss of feedwater was caused by a water hammer prevention system (WHPS) actuation, which occurred when MCC 234V4 deenergized. MCC 234V4 feed breaker was replaced as a result of this event.

SUMMARY unit 2 suffered a forced outage 10/12/16 due to a loss power to the Steam Generator water hammer protection circuit that caused main FW isolation valves to close. The unit returned to power operation 10/13/16.

DOCKET: 455 PREPARER NAME: David Eder
UNIT\_NME: Byron Unit 2 PREPARER TELEPHONE: 815 406-2194

RPT\_PERIOD: 201611

Design Electrical Rating: 1186.4
 Maximum Dependable Capacity (MWe-Net) 1127

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,334.35
 237,877.06

 4. Number of Hours Generator On-line
 721.00
 7,319.52
 236,825.64

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 843,069.00 8,371,856.00 258,854,144.00

## **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY unit on line the entire month.

PREPARER NAME: DOCKET: 455 David Eder Byron Unit 2 UNIT\_NME: PREPARER TELEPHONE: 815 406-2194

RPT\_PERIOD: 201612

1. Design Electrical Rating: 1186.4 2. Maximum Dependable Capacity (MWe-Net) 1127

Yr-to-Date **This Month** Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,078.35 238,621.06 4. Number of Hours Generator On-line 744.00 237,569.64 8,063.52

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 871,670.00 9,243,526.00 259,725,814.00

### **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit on line the entire month.

DOCKET: 483 PREPARER NAME: J. P. Kovar

UNIT\_NME: Callaway Unit 1 PREPARER TELEPHONE: 314-225-1478

RPT\_PERIOD: 201610

1. Design Electrical Rating: 1228 2. Maximum Dependable Capacity (MWe-Net) 1190

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 250,449.65 6,424.13 4. Number of Hours Generator On-line 744.00 6,394.55 247,799.48

5. Reserve Shutdown Hours 0.00 0.00 0.00

905,740.00 6. Net Electrical energy Generated (MWHrs) 7,638,047.00 283,133,889.00

### **UNIT SHUTDOWNS**

Method of **Type** F: Forced **Duration Shutting Cause - Corrective Action** No. (Hours) Down 2 **Comments Date** S: Scheduled Reason 1

SUMMARY Power escalation to 100% following the September downpower for troubleshooting and repair of train A digital feedwater controls was completed at 0317 on October 1, 2016. For the remainder of October 2016, Callaway operated at essentially 100% power.

DOCKET: 483 PREPARER NAME: J. P. Kovar

UNIT\_NME: Callaway Unit 1 PREPARER TELEPHONE: 314-225-1478

RPT\_PERIOD: 201611

Design Electrical Rating: 1228
 Maximum Dependable Capacity (MWe-Net) 1190

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,145.13
 251,170.65

 4. Number of Hours Generator On-line
 721.00
 7,115.55
 248,520.48

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 883,658.00 8,521,705.00 284,017,547.00

### **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Callaway operated at essentially 100% power for the month of November 2016.

DOCKET: 483 PREPARER NAME: J. P. Kovar

UNIT\_NME: Callaway Unit 1 PREPARER TELEPHONE: 314-225-1478

RPT\_PERIOD: 201612

Design Electrical Rating: 1228
 Maximum Dependable Capacity (MWe-Net) 1190

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,889.13
 251,914.65

 4. Number of Hours Generator On-line
 744.00
 7,859.55
 249,264.48

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 923,875.00 9,445,580.00 284,941,422.00

### **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Callaway operated at essentially 100% power for the month of December 2016.

DOCKET: 317 PREPARER NAME: Thomas Baummer

Calvert Cliffs Unit 1 UNIT\_NME: PREPARER TELEPHONE: 410-495-4535

RPT\_PERIOD: 201610

1. Design Electrical Rating: 845 2. Maximum Dependable Capacity (MWe-Net) 866

Cumulative This Month Yr-to-Date 3. Number of Hours the Reactor was Critical 744.00 6,702.10 297,744.70 4. Number of Hours Generator On-line 744.00 294,115.28 6,667.39

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 661,883.00 5,868,962.00 246,837,472.00

## **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The unit operated at 100% power for the entire the month.

DOCKET: 317 PREPARER NAME: Thomas Baummer

UNIT\_NME: Calvert Cliffs Unit 1 PREPARER TELEPHONE: 410-495-4535

RPT\_PERIOD: 201611

Design Electrical Rating: 845
 Maximum Dependable Capacity (MWe-Net) 866

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,423.10
 298,465.70

 4. Number of Hours Generator On-line
 721.00
 7,388.39
 294,836.28

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 649,465.00 6,518,427.00 247,486,937.00

### **UNIT SHUTDOWNS**

		Туре		Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

#### SUMMARY The unit operated at 100% power for the entire the month.

On 11/11/2016, condenser waterbox cleaning was performed at 100% power. The generation losses from this activity are Exempt from the ORLF indicator.

On 11/18/2016, condenser tube bulleting was performed at 100% power. The generation losses from this activity are Exempt from the ORLF indicator.

DOCKET: 317 PREPARER NAME: Thomas Baummer

UNIT\_NME: Calvert Cliffs Unit 1 PREPARER TELEPHONE: 410-495-4535

RPT\_PERIOD: 201612

Design Electrical Rating: 845
 Maximum Dependable Capacity (MWe-Net) 866

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,167.10
 299,209.70

 4. Number of Hours Generator On-line
 744.00
 8,132.39
 295,580.28

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 673,313.00 7,191,740.00 248,160,250.00

### **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The unit began the month at 100% power.

On 12/10/2016 at 0800, power was reduced to 81.2% for Main Turbine Valve Testing.

On 12/10/2016 at 1900, power was restored to 100%. The generation losses from this activity are Exempt from the ORLF indicator.

The unit operated at 100% power for the remainder of the month.

DOCKET: 318 PREPARER NAME: Thomas Baummer

Calvert Cliffs Unit 2 UNIT\_NME: PREPARER TELEPHONE: 410-495-4535

RPT\_PERIOD: 201610

1. Design Electrical Rating: 845 2. Maximum Dependable Capacity (MWe-Net) 850

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 7,319.00 292,501.76 290,275.70 4. Number of Hours Generator On-line 744.00 7,319.00 5. Reserve Shutdown Hours 0.00 0.00

0.00

6. Net Electrical energy Generated (MWHrs) 642,694.00 6,321,553.00 242,727,839.00

## **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The unit operated at 99.5% power for the entire month.

DOCKET: 318 PREPARER NAME: Thomas Baummer

UNIT\_NME: Calvert Cliffs Unit 2 PREPARER TELEPHONE: 410-495-4535

RPT\_PERIOD: 201611

Design Electrical Rating: 845
 Maximum Dependable Capacity (MWe-Net) 850

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	721.00	8,040.00	293,222.76
4. Number of Hours Generator On-line	721.00	8,040.00	290,996.70
5. Reserve Shutdown Hours	0.00	0.00	0.00

6. Net Electrical energy Generated (MWHrs) 630,395.00 6,951,948.00 243,358,234.00

### **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

#### SUMMARY The unit began the month at 99.5% power.

On 11/11/2016, condenser waterbox cleaning was performed at 99.5% power. The generation losses from this activity are Exempt from the ORLF indicator.

On 11/19/2016 at 0800, power was reduced to 84% for Main Turbine Valve Testing. On 11/20/2016 at 0000, power was restored to 99.5%. The generation losses from this activity are Exempt from the ORLF indicator.

The unit operated for the remainder of the month at 99.5% power.

DOCKET: 318 PREPARER NAME: Thomas Baummer

UNIT\_NME: Calvert Cliffs Unit 2 PREPARER TELEPHONE: 410-495-4535

RPT\_PERIOD: 201612

Design Electrical Rating: 845
 Maximum Dependable Capacity (MWe-Net) 850

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 718.77
 8,758.77
 293,941.53

 4. Number of Hours Generator On-line
 712.77
 8,752.77
 291,709.47

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 622,606.00 7,574,554.00 243,980,840.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
16-005	12/3/2016	F	31.23	А	3	IR 3949100 - Automatic Reactor trip due to Electro Hydraulic Control (EHC) system leak

SUMMARY The unit began the month at 99.5% power.

On 12/3/2016 at 2224, the unit automatically tripped due to an Electro-Hydraulic Control system leak on the main turbine control system. On 12/5/2016 at 0538, the unit was paralleled to the grid, and on 12/5/2016 at 1730, the unit was restored to 99.5% power. The unit operated for the remainder of the month at 99.5% power.

DOCKET: 413 PREPARER NAME: Carrie Wilson

UNIT\_NME: Catawba Unit 1 PREPARER TELEPHONE: 803-701-3014

RPT\_PERIOD: 201610

Design Electrical Rating: 1174
 Maximum Dependable Capacity (MWe-Net) 1140

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	744.00	7,319.00	238,537.61
4. Number of Hours Generator On-line	744.00	7,319.00	236,235.61
5. Reserve Shutdown Hours	0.00	0.00	0.00

6. Net Electrical energy Generated (MWHrs) 867,983.00 8,509,417.00 265,873,137.00

#### **UNIT SHUTDOWNS**

	Туре				Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Catawba Unit 1 began the month of October 2016 operating at or near 100% Full Power.

At 0809 on 10/15/16, power reduction from 100% Full Power was commenced for performance of Main Turbine Control Valve Movement periodic testing. Power reduction was halted at 98.5% Full Power at 0844 on 10/15/16. At 1115 on 10/15/16, power escalation was commenced from 98.5% Full Power. 100% Full Power was subsequently reached at 1342 on 10/15/16.

At 0039 on 10/22/16, power reduction from 100% Full Power was initiated in response to isolation of Main Feedwater Heater 1A2 due to valve 1HW12 malfunction. Power reduction was halted at 93% Full Power at 0045 on 10/22/16.

At 1601 on 10/23/16, following completion of corrective maintenance, power escalation was commenced from 93% Full Power. 100% Full Power was ultimately reached at 1842 on 10/23/16, and Unit 1 operated at or near 100% Full Power for the remainder of the month.

DOCKET: 413 PREPARER NAME: Carrie Wilson

UNIT\_NME: Catawba Unit 1 PREPARER TELEPHONE: 803-701-3014

RPT\_PERIOD: 201611

Design Electrical Rating: 1174
 Maximum Dependable Capacity (MWe-Net) 1140

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 239,258.61

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 236,956.61

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 851,819.00 9,361,236.00 266,724,956.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Catawba Unit 1 began and concluded the month of November 2016 operating at or near 100% Full Power. No planned or unplanned power reductions were incurred during the month.

DOCKET: 413 PREPARER NAME: Carrie Wilson

UNIT\_NME: Catawba Unit 1 PREPARER TELEPHONE: 803-701-3014

RPT\_PERIOD: 201612

Design Electrical Rating: 1174
 Maximum Dependable Capacity (MWe-Net) 1140

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 240,002.61

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 237,700.61

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 881,129.00 10,242,365.00 267,606,085.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Catawba Unit 1 began and concluded the month of December 2016 operating at or near 100% Full Power. No planned or unplanned power reductions were incurred during the month.

DOCKET: 414 PREPARER NAME: Carrie Wilson

UNIT\_NME: Catawba Unit 2 PREPARER TELEPHONE: 803-701-3014

RPT\_PERIOD: 201610

Design Electrical Rating: 1180
 Maximum Dependable Capacity (MWe-Net) 1150

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	564.50	6,639.68	231,972.01
4. Number of Hours Generator On-line	550.98	6,625.20	230,095.05
5. Reserve Shutdown Hours	0.00	0.00	0.00

6. Net Electrical energy Generated (MWHrs) 612,098.00 7,598,065.00 259,500,438.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1	9/10/2016	S	193.02	С	4	2EOC21 Refueling Outage

SUMMARY Catawba Unit 2 began the month of October 2016 in Mode 6 (following core reload), with the End-of-Cycle 21 Refueling Outage in progress.

Mode 5 was entered at 1621 on 10/2/16.

Mode 6 was reentered at 2242 on 10/2/16 to resolve a Reactor Head Stud tensioning issue.

Mode 5 was reentered at 0202 on 10/3/16.

Mode 4 was entered at 1307 on 10/6/16.

Mode 3 was entered at 0336 on 10/7/16.

Cycle 22 Reactor Startup was commenced (Mode 2 entered) at 1005 on 10/8/16. Criticality was achieved at a rod position of 201 Steps Withdrawn (Control Bank D) at 1130 on 10/8/16.

At 1904, following completion of Zero Power Physics Testing, power escalation was commenced from 0% Full Power, and suspended at 2.5% Full Power at 1945 on 10/8/16.

Power escalation was resumed from 2.5% Full Power at 2107, with Mode 1 subsequently entered at 2121 on 10/8/16.

Power escalation was halted at 14% Full Power at 2256 on 10/8/16 to place the Turbine/Generator on line.

The Turbine/Generator was placed on line at 0101, and power escalation commenced from 14% Full Power at 0120 on 10/9/16.

At 0154 on 10/9/16, power escalation was suspended at 19% Full Power, pending completion of Steam Generator Main Feedwater Nozzles swaps Power escalation was resumed from 19% Full Power at 0235, and halted at 30% Full Power for performance of 2BOC22 Power Ascension Testing (core flux mapping) at 0341 on 10/9/16.

At 0830 on 10/9/16, power escalation was commenced from 30% Full Power.

Power escalation was halted at 47% Full Power at 1034 on 10/9/16 due to Secondary Chemistry being out of spec (high sodium concentration in the Steam Generators).

At 2200 on 10/9/16, following restoration of Secondary Chemistry to within specification, power escalation was commenced from 47% Full Power. At 0840 on 10/10/16, power escalation was suspended at 75% Full Power for performance of 2BOC22 Power Ascension Testing (core flux mapping), and was subsequently resumed at 1206 on 10/10/16.

At 1532, power escalation was suspended at 85% Full Power for performance of Main Turbine Control Valve Movement testing, and was subsequently resumed at 1604 on 10/10/16.

Power escalation was halted at 97.5% Full Power at 2041 on 10/10/16, for adjustment of Reactor Coolant System Loop Full Power Delta Temperature constants.

Power Escalation was commenced from 97.5% Full Power at 1156, on 10/11/16.

100% Full Power was ultimately reached at 1430 on 10/11/16., and Unit 2 operated at or near 100% Full Power for the remainder of the month.

DOCKET: 414 PREPARER NAME: Carrie Wilson

UNIT NME: Catawba Unit 2 PREPARER TELEPHONE: 803-701-3014

RPT\_PERIOD: 201611

1. Design Electrical Rating: 1180 2. Maximum Dependable Capacity (MWe-Net) 1150

**This Month** Yr-to-Date Cumulative 721.00 3. Number of Hours the Reactor was Critical 7,360.68 232,693.01 4. Number of Hours Generator On-line 721.00 7,346.20 230,816.05 5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 843,909.00 8,441,974.00 260,344,347.00

### **UNIT SHUTDOWNS**

	Type				Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Catawba Unit 2 began the month of November 2016 operating at or near 100% Full Power.

At 1026 on 11/10/16, power reduction from 100% Full Power was commenced for performance of corrective maintenance on 2HS49 (Second Stage Reheater Drain Tank 2C Drain to Heater 2A1).

Power reduction was halted at 99% Full Power at 1112 on 11/10/16.

At 1334 on 11/10/16, following completion of the corrective maintenance, power escalation was commenced from 99% Full Power. 100% Full Power was reached at 1444 on 11/10/16, and Unit 2 operated at or near 100% Full Power for the remainder of the month.

DOCKET: 414 PREPARER NAME: Carrie Wilson

UNIT\_NME: Catawba Unit 2 PREPARER TELEPHONE: 803-701-3014

RPT\_PERIOD: 201612

Design Electrical Rating: 1180
 Maximum Dependable Capacity (MWe-Net) 1150

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,104.68
 233,437.01

 4. Number of Hours Generator On-line
 744.00
 8,090.20
 231,560.05

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 873,925.00 9,315,899.00 261,218,272.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Catawba Unit 2 began and concluded the month of December 2016 operating at or near 100% Full Power. No planned or unplanned power reductions were incurred during the month.

DOCKET: 461 PREPARER NAME: Jeff Ufert

UNIT\_NME: Clinton Unit 1 PREPARER TELEPHONE: 217-937-4442

RPT\_PERIOD: 201610

Design Electrical Rating: 1062
 Maximum Dependable Capacity (MWe-Net) 1022

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,072.85
 204,781.88

 4. Number of Hours Generator On-line
 744.00
 7,054.77
 201,634.29

 5. Reserve Shutdown Hours
 0.00
 0.00
 4.00

6. Net Electrical energy Generated (MWHrs) 803,216.86 7,334,653.76 195,569,821.19

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY There were no energy losses for the month of October 2016 for any of the listed categories.

DOCKET: 461 PREPARER NAME: Jeff Ufert
UNIT\_NME: Clinton Unit 1 PREPARER TELEPHONE: 2179374442

RPT\_PERIOD: 201611

1. Design Electrical Rating:10622. Maximum Dependable Capacity (MWe-Net)1022

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,793.85
 205,502.88

 4. Number of Hours Generator On-line
 721.00
 7,775.77
 202,355.29

 5. Reserve Shutdown Hours
 0.00
 0.00
 4.00

6. Net Electrical energy Generated (MWHrs) 778,878.04 8,113,531.80 196,348,699.23

### **UNIT SHUTDOWNS**

	Type				Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were 1,485 MW-hrs lost in November 2016 due to Advanced Nuclear Dispatch (load following)

DOCKET: 461 PREPARER NAME: Jeff Ufert

UNIT\_NME: Clinton Unit 1 PREPARER TELEPHONE: 217-937-4442 RPT\_PERIOD:

1. Design Electrical Rating: 1062 2. Maximum Dependable Capacity (MWe-Net) 1022

201612

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,537.85 206,246.88 4. Number of Hours Generator On-line 744.00 8,519.77 203,099.29 5. Reserve Shutdown Hours 0.00 0.00 4.00

6. Net Electrical energy Generated (MWHrs) 801,966.55 8,915,498.35 197,150,665.78

# **UNIT SHUTDOWNS**

Method of **Type** F: Forced **Duration Shutting Cause - Corrective Action** No. (Hours) Down 2 **Comments Date** S: Scheduled Reason 1

SUMMARY There was 4107 MW-hrs of energy loss due to Turbine Valve Testing. Planned >28 days and exempt.

DOCKET: 397 PREPARER NAME: Darla Johnson

UNIT\_NME: Columbia Gen Sta Unit 2 PREPARER TELEPHONE: 509-377-4570

RPT\_PERIOD: 201610

Design Electrical Rating: 1153
 Maximum Dependable Capacity (MWe-Net) 1107

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 7,271.75 227,785.86 4. Number of Hours Generator On-line 744.00 7,255.87 223,223.36 5. Reserve Shutdown Hours 0.00 0.00 3,357.70 6. Net Electrical energy Generated (MWHrs) 841,002.47 8,153,860.98 231,085,185.09

### **UNIT SHUTDOWNS**

	Туре				Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Columbia operated at 100% during the month of October except for a downpower to 93% due to Scram Time and Settle Time Testing (Exempt - 2.1.11.c Plant Equipment Testing), a downpower to 60% due to Reactor Feedwater Pump Adjustable Speed Drive Maintenance (Not Exempt), and a downpower to 92% for Bypass valve and Control Rod Testing (Exempt - 2.1.11.c Plant Equipment Testing).

DOCKET: 397 PREPARER NAME: Darla Johnson

UNIT\_NME: Columbia Gen Sta Unit 2 PREPARER TELEPHONE: 509-377-4570

RPT\_PERIOD: 201611

Design Electrical Rating: 1153
 Maximum Dependable Capacity (MWe-Net) 1107

This Month Yr-to-Date Cumulative 721.00 3. Number of Hours the Reactor was Critical 7,992.75 228,506.86 4. Number of Hours Generator On-line 721.00 7,976.87 223,944.36 5. Reserve Shutdown Hours 0.00 0.00 3,357.70 6. Net Electrical energy Generated (MWHrs) 819,179.62 8,973,040.60 231,904,364.71

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Columbia operated at 100% during the month of November except for a downpower to 92% for Control Rod and Bypass Valve Testing (Exempt - 2.1.11.c Plant Equipment Testing), a downpower to 70% for Sequence Exchange (Exempt - 2.1.11.c Plant Equipment Testing).

DOCKET: 397 PREPARER NAME: Darla Johnson

UNIT\_NME: Columbia Gen Sta Unit 2 PREPARER TELEPHONE: 509-377-4570

RPT\_PERIOD: 201612

Design Electrical Rating: 1153
 Maximum Dependable Capacity (MWe-Net) 1107

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 602.15 8,594.90 229,109.01 4. Number of Hours Generator On-line 588.02 8,564.89 224,532.38 5. Reserve Shutdown Hours 0.00 0.00 3,357.70 6. Net Electrical energy Generated (MWHrs) 652,580.84 9,625,621.44 232,556,945.55

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
FO- 16-02	12/18/2016	F	155.98	Н	3	Columbia Generating Station experienced a load reject event with automatic SCRAM due to a cold weather-related failure of switchyard equipment at the Bonneville Power Association Ashe Substation. The turbine was manually tripped.

SUMMARY Columbia operated at 100% during the month of December except for a downpower to 85% for Control Rod Exercise, Bypass Valve Testing, and Rod Set (Exempt - 2.1.11.c Plant Equipment Testing), and an Automatic SCRAM due to grid equipment failure (Grid-Related Energy Loss - 2.1.9).

DOCKET: 445 PREPARER NAME: G.D. Lytle

UNIT\_NME: Comanche Peak Unit 1 PREPARER TELEPHONE: (254)897-5455

RPT\_PERIOD: 201610

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 1218
 1205

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,615.00
 208,221.01

 4. Number of Hours Generator On-line
 744.00
 6,595.65
 207,058.13

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 910,466.00 8,018,138.00 233,949,458.00

# **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 1 began the month at 100% reactor, 1267 MWe turbine power. Unit1 ended the month at 100% reactor, 1272 MWe turbine power.

DOCKET: 445 PREPARER NAME: G.D. Lytle

UNIT\_NME: Comanche Peak Unit 1 PREPARER TELEPHONE: 254-897-5455

RPT\_PERIOD: 201611

Design Electrical Rating: 1218
 Maximum Dependable Capacity (MWe-Net) 1205

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,336.00
 208,942.01

 4. Number of Hours Generator On-line
 721.00
 7,316.65
 207,779.13

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 884,880.00 8,903,018.00 234,834,338.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 1 began the month at 100% reactor, 1272 MWe turbine power. On 11/3/16 at 10:21, operators performed OPT-206A, routine TDAFWP 1-01 operability testing satisfactorily. On 11/19/16 at 00:00, operators ramped the unit from 100% reactor, 1272 MWe turbine power to about 71% reactor, 875 MWe turbine power and performed OPT-217A, routine main turbine stop and control valve testing satisfactorily. Unit 1 returned to 100% reactor power at 09:55 the same day. SPEL for the INPO exempt activities = 1483.74 MW-hrs. Unit 1 ended the month at 100% reactor, 1279 MWE turbine power.

DOCKET: 445 PREPARER NAME: G.D. Lytle

UNIT\_NME: Comanche Peak Unit 1 PREPARER TELEPHONE: 254-897-5455

RPT\_PERIOD: 201612

Design Electrical Rating: 1218
 Maximum Dependable Capacity (MWe-Net) 1205

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,080.00
 209,686.01

 4. Number of Hours Generator On-line
 744.00
 8,060.65
 208,523.13

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 918,657.00 9,821,675.00 235,752,995.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 1 began the month at 100% reactor, 1279 MWe turbine power. On 12/02/16 at 10:52, Moisture Separator Reheater B2 Drain Tank normal and alternate level control valves 1-LV-2704A and 1-LV-2705A respectively failed open. In response to the loss of secondary efficiency, operators lowered Main Turbine load about 50 MWe. Subsequently, it was determined that the power supply to the associated level transmitter 1-LT-2704A/2705A had failed. The power supply was replaced and Unit 1 returned to 100% reactor power on 12/03/16 at 05:22. On 12/29/16 at 09:44, operators performed OPT-206A, routine TDAFWP 1-01 operability testing successfully (SPEL = 3.76 MWH). Unit 1 ended the month at 100% reactor, 1279 MWe turbine power.

DOCKET: 446 PREPARER NAME: G.D. Lytle

UNIT\_NME: Comanche Peak Unit 2 PREPARER TELEPHONE: (254) 897-5455

RPT\_PERIOD: 201610

Design Electrical Rating: 1207
 Maximum Dependable Capacity (MWe-Net) 1195

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 188,041.75

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 187,247.96

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 900,530.00 8,892,376.00 213,827,070.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 2 began the month at 100% reactor, 1258 MWe turbine power. On 10/1/16 at 00:00, operators ramped the unit from 100% reactor, 1258 MWe turbine power to about 71% reactor, 875 MWe turbine power to conduct OPT-217B, routine main turbine stop and control valve testing. At 02:27, testing completed and operators commenced ramping the unit to 100% reactor power. At 05:00 the same day, Unit 2 returned to 100% reactor power (SPEL = 1194.33 MW-hr). Unit 2 ended the month at 100% reactor, 1263 MWe turbine power.

DOCKET: 446 PREPARER NAME: G.D. Lytle

UNIT\_NME: Comanche Peak Unit 2 PREPARER TELEPHONE: 254-897-5455

RPT\_PERIOD: 201611

Design Electrical Rating: 1207
 Maximum Dependable Capacity (MWe-Net) 1195

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 188,762.75

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 187,968.96

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 878,977.00 9,771,353.00 214,706,047.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2 began the month at 100% reactor, 1263 MWe turbine power. On 11/23/2016 at 09:23, operators performed OPT-206B, routine TDAFWP 2-01 operability testing satisfactorily. SPEL for INPO exempt activities = 5.92 MW-hrs. Unit 2 ended the month at 100% reactor, 1268 MWe turbine power.

DOCKET: 446 PREPARER NAME: G.D. Lytle

UNIT\_NME: Comanche Peak Unit 2 PREPARER TELEPHONE: 254-897-5455

RPT\_PERIOD: 201612

Design Electrical Rating: 1207
 Maximum Dependable Capacity (MWe-Net) 1195

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 189,506.75

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 188,712.96

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 911,271.00 10,682,624.00 215,617,318.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 2 began the month at 100% reactor, 1270 MWe turbine power. Unit 2 ended the month at 100% reactor, 1269 MWe turbine power.

DOCKET: 315 PREPARER NAME: K. Kohn

UNIT\_NME: Cook Unit 1 PREPARER TELEPHONE: 269-465-5901

RPT\_PERIOD: 201610

Design Electrical Rating: 1084
 Maximum Dependable Capacity (MWe-Net) 1030

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,471.09
 266,134.78

 4. Number of Hours Generator On-line
 744.00
 6,448.67
 262,997.85

 5. Reserve Shutdown Hours
 0.00
 0.00
 321.00

6. Net Electrical energy Generated (MWHrs) 787,146.00 6,728,819.00 254,630,648.40

## **UNIT SHUTDOWNS**

	Type				Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY None

DOCKET: 315 PREPARER NAME: K. Kohn

UNIT\_NME: Cook Unit 1 PREPARER TELEPHONE: 269-465-5901

RPT\_PERIOD: 201611

Design Electrical Rating: 1084
 Maximum Dependable Capacity (MWe-Net) 1030

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,192.09
 266,855.78

 4. Number of Hours Generator On-line
 721.00
 7,169.67
 263,718.85

 5. Reserve Shutdown Hours
 0.00
 0.00
 321.00

6. Net Electrical energy Generated (MWHrs) 771,196.00 7,500,015.00 255,401,844.40

## **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY None.

DOCKET: 315 PREPARER NAME: K. Kohn

UNIT\_NME: Cook Unit 1 PREPARER TELEPHONE: 269-465-5901

RPT\_PERIOD: 201612

Design Electrical Rating: 1084
 Maximum Dependable Capacity (MWe-Net) 1030

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,936.09
 267,599.78

 4. Number of Hours Generator On-line
 744.00
 7,913.67
 264,462.85

 5. Reserve Shutdown Hours
 0.00
 0.00
 321.00

6. Net Electrical energy Generated (MWHrs) 811,730.00 8,311,745.00 256,213,574.40

## **UNIT SHUTDOWNS**

		Туре			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY None.

DOCKET: 316 PREPARER NAME: K. Kohn

UNIT\_NME: Cook Unit 2 PREPARER TELEPHONE: 269-465-5901

RPT\_PERIOD: 201610

Design Electrical Rating: 1107
 Maximum Dependable Capacity (MWe-Net) 1077

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 96.02 6,518.99 250,646.96
4. Number of Hours Generator On-line 96.02 6,509.67 246,223.95

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 73,922.00 7,048,499.00 252,679,628.60

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
240	10/5/2016	S	647.98	С	1	Rx/Gen trip occurred on 10/5/16 at 00:01 to begin planned U2C23 refueling outage.

SUMMARY Rx/Gen trip occurred on 10/5/2016 @ 00:01 to begin planned U2C23 refueling outage.

DOCKET: 316 PREPARER NAME: K. Kohn

UNIT\_NME: Cook Unit 2 PREPARER TELEPHONE: 269-465-5901

RPT\_PERIOD: 201611

Design Electrical Rating: 1107
 Maximum Dependable Capacity (MWe-Net) 1077

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 0.00
 6,518.99
 250,646.96

 4. Number of Hours Generator On-line
 0.00
 6,509.67
 246,223.95

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 0.00 7,048,499.00 252,679,628.60

## **UNIT SHUTDOWNS**

240 10/5/2016 S 720.00 C 4 Rx/Gen trip occurred on 10/5/16 a	3
planned U2C23 refueling outage.	

SUMMARY U2C23 planned outage began with Rx/Gen trip on 10/05/2016 at 00:01 and continued through end of November.

DOCKET: 316 PREPARER NAME: K. Kohn

UNIT\_NME: Cook Unit 2 PREPARER TELEPHONE: 269-465-5901

RPT\_PERIOD: 201612

Design Electrical Rating: 1107
 Maximum Dependable Capacity (MWe-Net) 1077

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 0.00
 6,518.99
 250,646.96

 4. Number of Hours Generator On-line
 0.00
 6,509.67
 246,223.95

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 0.00 7,048,499.00 252,679,628.60

## **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
240	10/5/2016	S	744.00	С	4	Rx/Gen trip occurred on 10/5/16 at 00:01 to begin planned U2C23 refueling outage.

SUMMARY Planned U2C23 refueling outage began on 10/5/2016 at 00:01 and continued through the end of the month of December.

DOCKET: 298 PREPARER NAME: Grant Reynolds

UNIT\_NME: Cooper Unit 1 PREPARER TELEPHONE: 402-825-2726

RPT\_PERIOD: 201610

Design Electrical Rating: 815
 Maximum Dependable Capacity (MWe-Net) 768.88

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	6,427.00	302,820.08
4. Number of Hours Generator On-line	0.00	6,427.00	299,412.27
5. Reserve Shutdown Hours	0.00	0.00	0.00

6. Net Electrical energy Generated (MWHrs) 0.00 4,925,822.48 212,323,169.86

# **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
16-01	9/24/2016	S	744.00	С	4 1	one

SUMMARY None for this reporting period.

DOCKET: 298 PREPARER NAME: Grant Reynolds

UNIT\_NME: Cooper Unit 1 PREPARER TELEPHONE: 402-825-2627

RPT\_PERIOD: 201611

Design Electrical Rating: 815
 Maximum Dependable Capacity (MWe-Net) 768.88

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 574.77 7,001.77 303,394.85
4. Number of Hours Generator On-line 529.70 6,956.70 299,941.97

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 395,757.78 5,321,580.26 212,718,927.64

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2		Cause - Corrective Action Comments
16-01	9/24/2016	S	190.30	С	4	None	

SUMMARY None for this reporting period.

DOCKET: 298 PREPARER NAME: Grant Reynolds

UNIT\_NME: Cooper Unit 1 PREPARER TELEPHONE: 402-825-2627

RPT\_PERIOD: 201612

Design Electrical Rating: 815
 Maximum Dependable Capacity (MWe-Net) 768.88

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,745.77
 304,138.85

 4. Number of Hours Generator On-line
 744.00
 7,700.70
 300,685.97

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 601,220.66 5,922,800.92 213,320,148.30

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY None for this reporting period.

DOCKET: 346 PREPARER NAME: G. R. Munyan

UNIT\_NME: Davis-Besse Unit 1 PREPARER TELEPHONE: 330-436-1394

RPT\_PERIOD: 201610

Design Electrical Rating: 908
 Maximum Dependable Capacity (MWe-Net) 894

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 5,973.46 245,419.96 4. Number of Hours Generator On-line 744.00 5,856.69 241,926.26 5. Reserve Shutdown Hours 0.00 0.00 5,532.00 6. Net Electrical energy Generated (MWHrs) 659,687.00 5,058,049.30 205,891,843.40

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY On October 14, 2016, a planned downpower to approximately 55% power was initiated to perform repairs on the controls for Main Feedwater Pump Turbine 1. Following completion of repairs on October 16, 2016, the plant was returned to 100% power later that same day. The plant remained at approximately 100% power the remainder of the month.

DOCKET: 346 PREPARER NAME: G. R. Munyan

UNIT\_NME: Davis-Besse Unit 1 PREPARER TELEPHONE: 330-436-1394

RPT\_PERIOD: 201611

Design Electrical Rating: 908
 Maximum Dependable Capacity (MWe-Net) 894

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 721.00 6,694.46 246,140.96 4. Number of Hours Generator On-line 721.00 6,577.69 242,647.26 5. Reserve Shutdown Hours 0.00 0.00 5,532.00 6. Net Electrical energy Generated (MWHrs) 658,798.00 5,716,847.30 206,550,641.40

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY On November 5, 2016, a planned downpower to approximately 99.5% power was conducted for Integrated Control System maintenance. The plant remained at approximately 100% power the remainder of the month.

DOCKET: 346 PREPARER NAME: G. R. Munyan

UNIT\_NME: Davis-Besse Unit 1 PREPARER TELEPHONE: 330-436-1394

RPT\_PERIOD: 201612

Design Electrical Rating: 908
 Maximum Dependable Capacity (MWe-Net) 894

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 7,438.46 246,884.96 4. Number of Hours Generator On-line 744.00 7,321.69 243,391.26 5. Reserve Shutdown Hours 0.00 0.00 5,532.00 6. Net Electrical energy Generated (MWHrs) 678,085.00 6,394,932.30 207,228,726.40

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY On December 4, 2016, a planned downpower to approximately 95% power was conducted to support Control Rod Exercise Testing and Main Turbine Valve Testing. The plant remained at approximately 100% power the remainder of the month.

DOCKET: 275 PREPARER NAME: Elijah DeVaughn

UNIT\_NME: Diablo Canyon Unit 1 PREPARER TELEPHONE: 805-545-4418

RPT\_PERIOD: 201610

Design Electrical Rating: 1138
 Maximum Dependable Capacity (MWe-Net) 1122

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 246,328.02

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 244,196.91

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 769,997.00 8,298,729.00 261,461,726.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Except for a planned curtailment to approximately 50 percent power for Circulating Water Tunnel Cleaning from 10/17/16-10/22/16, Diablo Canyon Unit 1 operated at approximately 100 percent power for the month of October 2016.

DOCKET: 275 PREPARER NAME: M. Richardson UNIT\_NME: Diablo Canyon Unit 1 PREPARER TELEPHONE: 805-545-4557

RPT\_PERIOD: 201611

Design Electrical Rating: 1138
 Maximum Dependable Capacity (MWe-Net) 1122

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 247,049.02

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 244,917.91

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 823,161.00 9,121,890.00 262,284,887.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Diablo Canyon Unit 1 operated at approximately 100 percent power for the month of November 2016.

DOCKET: 275 PREPARER NAME: M. Richardson UNIT\_NME: Diablo Canyon Unit 1 PREPARER TELEPHONE: 805-545-4557

RPT\_PERIOD: 201612

Design Electrical Rating: 1138
 Maximum Dependable Capacity (MWe-Net) 1122

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 247,793.02

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 245,661.91

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 852,741.00 9,974,631.00 263,137,628.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Diablo Canyon Unit 1 operated at approximately 100 percent power for the month of December 2016.

DOCKET: 323 PREPARER NAME: Elijah DeVaughn

UNIT\_NME: Diablo Canyon Unit 2 PREPARER TELEPHONE: 805-545-4418

RPT\_PERIOD: 201610

Design Electrical Rating: 1151
 Maximum Dependable Capacity (MWe-Net) 1118

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,571.49
 241,762.45

 4. Number of Hours Generator On-line
 744.00
 6,536.25
 239,745.30

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 837,098.00 7,320,141.00 257,732,269.00

# **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Except for a planned curtailment to 88% power for Turbine Control Valve and Control Rod Drive Tests on 10/27/16, Diablo Canyon Unit 2 operated at approximately 100 percent power for the month of October 2016.

DOCKET: 323 PREPARER NAME: M. Richardson

UNIT\_NME: Diablo Canyon Unit 2 PREPARER TELEPHONE: 805-545-4557

RPT\_PERIOD: 201611

Design Electrical Rating: 1151
 Maximum Dependable Capacity (MWe-Net) 1118

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,292.49
 242,483.45

 4. Number of Hours Generator On-line
 721.00
 7,257.25
 240,466.30

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 803,332.00 8,123,473.00 258,535,601.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Diablo Canyon Unit 2 operated at approximately 100 percent power for the month of November 2016, with the exception of a manual reduction in power on November 10 due to storm seas causing biofouling of the condenser.

DOCKET: 323 PREPARER NAME: M. Richardson

UNIT\_NME: Diablo Canyon Unit 2 PREPARER TELEPHONE: 805-545-4557

RPT\_PERIOD: 201612

Design Electrical Rating: 1151
 Maximum Dependable Capacity (MWe-Net) 1118

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,036.49
 243,227.45

 4. Number of Hours Generator On-line
 744.00
 8,001.25
 241,210.30

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 842,771.00 8,966,244.00 259,378,372.00

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Diablo Canyon Unit 2 operated at approximately 100 percent power for the month of December 2016.

DOCKET: 237 PREPARER NAME: Dave Kijowski UNIT\_NME: Dresden Unit 2 PREPARER TELEPHONE: 815-416-4227

RPT\_PERIOD: 201610

Design Electrical Rating: 894
 Maximum Dependable Capacity (MWe-Net) 870

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 330,898.14

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 321,486.02

 5. Reserve Shutdown Hours
 0.00
 0.00
 4.00

6. Net Electrical energy Generated (MWHrs) 681,101.00 6,700,576.00 237,845,787.00

# **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY With the exception of short periods for routine maintenance and surveillances, the unit operated at full electrical power for the reporting period.

DOCKET: 237 PREPARER NAME: Dave Kijowski UNIT\_NME: Dresden Unit 2 PREPARER TELEPHONE: 815-416-4227

RPT\_PERIOD: 201611

Design Electrical Rating: 894
 Maximum Dependable Capacity (MWe-Net) 870

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 331,619.14

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 322,207.02

 5. Reserve Shutdown Hours
 0.00
 0.00
 4.00

6. Net Electrical energy Generated (MWHrs) 673,042.00 7,373,618.00 238,518,829.00

#### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY On November 28, at approximately 0400 hours, load was reduced to approximately 98% when a Circ Water Pump was secured to support planned maintenance on the C lift station pump. On the same day, at approximately 1400 hours, the unit returned to full power operation.

With the exception of short periods for routine maintenance and surveillances, the unit operated at full electrical power for the remainder of the reporting period.

DOCKET: 237 PREPARER NAME: David Kijowski

UNIT\_NME: Dresden Unit 2 PREPARER TELEPHONE: 8154164227

RPT\_PERIOD: 201612

Design Electrical Rating: 894
 Maximum Dependable Capacity (MWe-Net) 870

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 332,363.14

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 322,951.02

 5. Reserve Shutdown Hours
 0.00
 0.00
 4.00

6. Net Electrical energy Generated (MWHrs) 674,353.00 8,047,971.00 239,193,182.00

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY On December 10, at approximately 0740 hours, the Unit 2 generator was removed from service, marking the start of D2M18 to repair Moisture Separator Drain Tank steam leaks. On December 11, at approximately 1700 hours, the unit returned to full power operation. This maintenance outage was combined with planned quarterly downpower activities: control rod pattern adjustments, scram time testing, and valve testing.

On December 13, at approximately 0130 hours, load was reduced to approximately 99% electrical when a Circ Water Pump was secured for planned maintenance. On the same day, at approximately 2200 hours, the Unit returned to full power operation.

On December 17, at approximately 0000 hours, load was reduced to approximately 88% electrical for a planned control rod pattern adjustment. On the same day, at approximately 0300 hours, the unit returned to full power operation.

With the exception of short periods for routine maintenance and surveillances, the unit operated at full electrical power for the remainder of the reporting period.

DOCKET: 249 PREPARER NAME: Dave Kijowski UNIT\_NME: Dresden Unit 3 PREPARER TELEPHONE: 815-416-4227

RPT\_PERIOD: 201610

Design Electrical Rating: 879
 Maximum Dependable Capacity (MWe-Net) 869

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 722.88
 7,297.88
 319,178.15

 4. Number of Hours Generator On-line
 720.00
 7,295.00
 310,582.11

 5. Reserve Shutdown Hours
 0.00
 0.00
 1.00

6. Net Electrical energy Generated (MWHrs) 504,116.00 6,402,031.00 229,757,284.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action
D3R24 10	0/31/2016	S	24.00	С	1	Refuel

SUMMARY Entering the month, the unit was at approximately 83% electrical due to core coastdown.

On October 20, at approximately 1900 hours, load was reduced from approximately 76% electrical to approximately 62% for planned Isolation Condenser Decay Heat Testing. On the same day, at approximately 1400 hours, the unit returned to 92% operation (max achievable with core coastdown).

On October 28, at approximately 1000 hours, load was reduced from approximately 74% to approximately 73% electrical due to a 'F' Lift Pump column pipe leak.

On October 31, at approximately 0000 hours, Unit 3 generator was removed from service, marking the start of D3R24.

The unit remained shutdown for the remainder of the reporting period.

DOCKET: 249 PREPARER NAME: Dave Kijowski UNIT\_NME: Dresden Unit 3 PREPARER TELEPHONE: 815-416-4227

RPT\_PERIOD: 201611

Design Electrical Rating: 879
 Maximum Dependable Capacity (MWe-Net) 869

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	354.80	7,652.68	319,532.95
4. Number of Hours Generator On-line	336.52	7,631.52	310,918.63
5. Reserve Shutdown Hours	0.00	0.00	1.00
6. Net Electrical energy Generated (MWHrs)	298,679.00	6,700,710.00	230,055,963.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
D3R24	10/31/2016	S	383.48	С	4	Refuel

SUMMARY Entering the month, Unit 3 was shutdown for D3R24. The unit had an unplanned outage extension due to the failure of a Circulating Water Pump Discharge Valve. On November 18, at approximately 1200 hours, unit power returned to approximately 99% electrical, with a Circulating Water Pump secured to complete repairs to the 'F' Lift Pump column pipe leak.

On November 19, at approximately 2200 hours, load was reduced to approximately 84% electrical for a planned control rod pattern adjustment. On November 20, at approximately 0400 hours, the unit returned to 99% operation.

On November 21, at approximately 1400 hours, the unit returned to full power operation after the third Circulating Water Pump was returned to service following the completion of the repairs to the 'F' Lift Pump column pipe leak.

With the exception of short periods for routine maintenance and surveillances, the unit operated at full power for the remainder of the reporting period.

DOCKET: 249 PREPARER NAME: David Kijowski UNIT\_NME: Dresden Unit 3 PREPARER TELEPHONE: 815-416-4227

RPT\_PERIOD: 201612

Design Electrical Rating: 879
 Maximum Dependable Capacity (MWe-Net) 869

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,396.68
 320,276.95

 4. Number of Hours Generator On-line
 744.00
 8,375.52
 311,662.63

 5. Reserve Shutdown Hours
 0.00
 0.00
 1.00

6. Net Electrical energy Generated (MWHrs) 696,872.00 7,397,582.00 230,752,835.00

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY On December 04, at approximately 2030 hours, load was reduced to approximately 99% electrical when a Circ Water Pump was secured for planned maintenance. On December 09, at approximately 0430 hours, the Unit returned to full power operation.

On December 17, at approximately 2200 hours, load was reduced to approximately 86% electrical for a planned control rod pattern adjustment. On December 18, at approximately 0500 hours, the unit returned to full power operation.

With the exception of short periods for routine maintenance and surveillances, the unit operated at full electrical power for the remainder of the reporting period.

DOCKET: 331 PREPARER NAME: Matt Brandt

UNIT\_NME: Duane Arnold Unit 1 PREPARER TELEPHONE: 319-851-7314

RPT\_PERIOD: 201610

Design Electrical Rating: 621.9
 Maximum Dependable Capacity (MWe-Net) 601.6

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 86.52
 6,661.52
 306,842.35

 4. Number of Hours Generator On-line
 56.25
 6,631.25
 301,801.27

 5. Reserve Shutdown Hours
 0.00
 0.00
 192.80

6. Net Electrical energy Generated (MWHrs) 20,861.20 3,825,481.70 153,563,702.49

#### **UNIT SHUTDOWNS**

SUMMARY The DAEC was in coastdown at the beginning of October, 2016. The generator was taken offline for Refueling Outage 25 at 0001 hours on October 3. The generator was placed back on the grid following the refueling outage at 1546 hours on October 31.

DOCKET: 331 PREPARER NAME: Matt Brandt

UNIT\_NME: Duane Arnold Unit 1 PREPARER TELEPHONE: 319-851-7314

RPT\_PERIOD: 201611

Design Electrical Rating: 621.9
 Maximum Dependable Capacity (MWe-Net) 601.6

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 721.00 7,382.52 307,563.35 4. Number of Hours Generator On-line 721.00 7,352.25 302,522.27 5. Reserve Shutdown Hours 0.00 0.00 192.80 6. Net Electrical energy Generated (MWHrs) 417,958.70 4,243,440.40 153,981,661.19

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Power ascension from Refueling Outage 25 was in progress at the start of November. Power was limited due to operation on one feedwater pump from 1149 hours on November 1 until 2219 hours on November 3. Additionally, power was reduced slightly to install a temporary modification on a level instrument for the Moisture Separator Reheater drain tank on November 22. Other reductions during the month were associated with normal power ascension activities and loadline adjustments.

DOCKET: 331 PREPARER NAME: Matt Brandt

UNIT\_NME: Duane Arnold Unit 1 PREPARER TELEPHONE: 319-851-7314

RPT\_PERIOD: 201612

Design Electrical Rating: 621.9
 Maximum Dependable Capacity (MWe-Net) 601.6

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,126.52 308,307.35 4. Number of Hours Generator On-line 744.00 8,096.25 303,266.27 5. Reserve Shutdown Hours 0.00 0.00 192.80 6. Net Electrical energy Generated (MWHrs) 459,228.40 4,702,668.80 154,440,889.59

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The losses for December included the planned losses associated with a loadline adjustment on December 3/4, and two downpowers for feedwater heater maintenance on December 6 and December 8.

DOCKET: 348 PREPARER NAME: Samantha Boswell

UNIT\_NME: Farley Unit 1 PREPARER TELEPHONE: 334-814-4540

RPT\_PERIOD: 201610

Design Electrical Rating: 854
 Maximum Dependable Capacity (MWe-Net) 874

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 5.20
 6,580.20
 293,052.55

 4. Number of Hours Generator On-line
 5.20
 6,580.20
 290,163.51

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 4,806.00 5,825,108.00 237,521,911.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
28	10/1/2016	F	738.80	А	3	U1 started coasting down on 9/28/16 at 1635. On 10/1/2016 at 0512, U1 had an automatic Rx trip with safety injection (complications) due to a malfunction associated with an MSIV on the "A" Steam Generator. 1R27 was scheduled to start on 10/02/16 at 0700. A decision was made by plant management to keep the unit down and start the outage early. 1R27 ended on 11/07/16 at 0908.

SUMMARY U1 experienced an automatic reactor trip on 10/1/16 @ 0512, which started 1R27 (originally scheduled for 10/2/16) and lasted the entire month of October.

DOCKET: 348 PREPARER NAME: Samantha Boswell

UNIT NME: Farley Unit 1 PREPARER TELEPHONE: 334-814-4540

RPT\_PERIOD: 201611

854 1. Design Electrical Rating: 2. Maximum Dependable Capacity (MWe-Net) 874

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 433.32 7,013.52 293,485.87 4. Number of Hours Generator On-line 293.15 6,873.35 290,456.66 5. Reserve Shutdown Hours

0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 198,306.00 6,023,414.00 237,720,217.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
31	11/27/2016	F	63.35	А	2	Unit 1 was manually tripped due to large voltage swings on the Main Generator on 11/27/16 at 0026. Unit 1 synchronized to the grid 11/29/16 at 1547 and was restored to full power by 12/1/16 at 1039.
28	10/1/2016	F	153.13	А	4	U1 started coasting down on 9/28/16 at 1635. On 10/1/2016 at 0512, U1 had an automatic Rx trip with safety injection (complications) due to a malfunction associated with an MSIV on the "A" Steam Generator. 1R27 was scheduled to start on 10/02/16 at 0700. A decision was made by plant management to keep the unit down and start the outage early. 1R27 ended on 11/07/16 at 0908.
30	11/18/2016	F	55.80	Α	1	U1 commenced an unplanned Tech Spec Shutdown due to 2 inoperable steam flow detectors on 1C Steam Generator.
29	11/8/2016	F	154.57	А	2	On 11/8/16, U1 ramped down to investigate water leakage from the main generator drains. While reducing power as part of the shutdown, 1A Steam Generator Feed Pump developed a control issue, therefore the reactor was manually tripped at 1331.

SUMMARY Unit 1 completed 1R27 on 11/7/16 at 0908. A derate occurred on 11/8/16 @ 1034 due to water intrusion into the Main Generator. A forced outage occurred on 11/8/16 @ 1331 due to 1A SGFP complications. Unit 1 synched to the grid on 11/15/16 @ 0005. U1 had a forced shutdown on 11/17/16 @ 1859 due to inoperable "C" Steam Flow Channels. A forced shutdown occurred by Manual Rx Trip occurred on 11/18/16 @ 0041 due to inoperable Steam Flow Detectors. Unit 1 synchronized to the grid on 11/20/16 @ 0830. U1 was manually tripped due to large voltage swings on 11/2716 @ 0026. U1 synchronized to the grid at 1547 on 11/29/16.

DOCKET: 348 PREPARER NAME: Khris Miller
UNIT\_NME: Farley Unit 1 PREPARER TELEPHONE: 334-4549

RPT\_PERIOD: 201612

Design Electrical Rating: 854
 Maximum Dependable Capacity (MWe-Net) 874

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,757.52
 294,229.87

 4. Number of Hours Generator On-line
 744.00
 7,617.35
 291,200.66

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 660,637.00 6,684,051.00 238,380,854.00

## **UNIT SHUTDOWNS**

	Type				Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 364 PREPARER NAME: Samantha Boswell

UNIT\_NME: Farley Unit 2 PREPARER TELEPHONE: 334-814-4540

RPT\_PERIOD: 201610

Design Electrical Rating: 855
 Maximum Dependable Capacity (MWe-Net) 883

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,588.82
 276,199.33

 4. Number of Hours Generator On-line
 744.00
 6,489.15
 273,493.99

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 663,616.00 5,704,783.00 225,945,736.00

#### **UNIT SHUTDOWNS**

	Type				Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 364 PREPARER NAME: Samantha Boswell

UNIT\_NME: Farley Unit 2 PREPARER TELEPHONE: 334-814-4540

RPT\_PERIOD: 201611

Design Electrical Rating: 855
 Maximum Dependable Capacity (MWe-Net) 883

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 7,309.82 276,920.33
4. Number of Hours Generator On-line 721.00 7,210.15 274,214.99

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 643,395.00 6,348,178.00 226,589,131.00

## **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 364 PREPARER NAME: Khris Miller
UNIT\_NME: Farley Unit 2 PREPARER TELEPHONE: 334-814-4549

RPT\_PERIOD: 201612

Design Electrical Rating: 855
 Maximum Dependable Capacity (MWe-Net) 883

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,053.82
 277,664.33

 4. Number of Hours Generator On-line
 744.00
 7,954.15
 274,958.99

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 666,083.00 7,014,261.00 227,255,214.00

# **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 341 PREPARER NAME: E. Sorg

UNIT\_NME: Fermi Unit 2 PREPARER TELEPHONE: 734-586-4294

RPT\_PERIOD: 201610

Design Electrical Rating: 1150
 Maximum Dependable Capacity (MWe-Net) 1094.9

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,104.85 205,478.95
4. Number of Hours Generator On-line 744.00 7,079.43 200,215.77

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 843,167.00 7,722,373.00 206,040,115.92

#### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY The unit operated at full power with the following exceptions:

10/26/16 2015 to 10/27/16 0025 Unplanned downpower to 98% due to single rod scram during surveillance (not exempt) 10/29/16 0911 to 10/29/16 1024 Planned downpower to 91% reactor power for control rod operability surveillance (exempt)

DOCKET: 341 PREPARER NAME: E. Sorg

UNIT\_NME: Fermi Unit 2 PREPARER TELEPHONE: 734-586-4294

RPT\_PERIOD: 201611

Design Electrical Rating: 1150
 Maximum Dependable Capacity (MWe-Net) 1094.9

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 600.25
 7,705.10
 206,079.20

 4. Number of Hours Generator On-line
 572.73
 7,652.16
 200,788.50

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 581,860.00 8,304,233.00 206,621,975.92

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
PO 16-02	11/7/2016	S	148.27	А	1	Shutdown to replace 2B Main Unit Transformer

SUMMARY The unit operated at full power with the following exceptions:

--11/02/16 1358 to 11/06/16 2059: Unplanned downpower to 97% power due to Feedwater DCS issues (non-exempt)

--11/06/16 2100 to 11/07/16 0259: Planned downpower for PO-16-02 (non-exempt)

--11/07/16 0300 to 11/13/16 0716: Planned plant shutdown for PO-16-02 (non-exempt)

--11/13/16 0717 to 11/20/16 0125: Planned power ascension following PO 16-02 (non-exempt)

--11/20/16 1330 to 1459: Planned downpower to 81% for rod pattern adjustment (non-exempt)

--11/29/16 1640 to 1722: Unplanned downpower to 99.5% due to Feedwater DCS Issues (non-exempt)

DOCKET: 341 PREPARER NAME: E. Sorg

UNIT\_NME: Fermi Unit 2 PREPARER TELEPHONE: 734-586-4294

RPT\_PERIOD: 201612

Design Electrical Rating: 1150
 Maximum Dependable Capacity (MWe-Net) 1094.9

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,449.10 206,823.20
4. Number of Hours Generator On-line 744.00 8,396.16 201,532.50

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 849,685.00 9,153,918.00 207,471,660.92

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The unit operated at 99.5% power (due to Feedwater DCS issues) for the entire month with the following exceptions: --12/3/16 0946 to 1219: Planned downpower to 90% reactor power for surveillance. (exempt)

DOCKET: 333 PREPARER NAME: A. Spiridakis

UNIT NME: FitzPatrick Unit 1 PREPARER TELEPHONE: 3153262288

RPT\_PERIOD: 201610

1. Design Electrical Rating: 816 2. Maximum Dependable Capacity (MWe-Net) 813

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 6,911.85 296,340.16 4. Number of Hours Generator On-line 744.00 6,836.67 290,243.99 5. Reserve Shutdown Hours 0.00

0.00 0.00

6. Net Electrical energy Generated (MWHrs) 459,068.00 5,119,709.00 224,029,204.00

#### **UNIT SHUTDOWNS**

Method of **Type** F: Forced **Duration Shutting Cause - Corrective Action** Down 2 **Comments** No. Date S: Scheduled (Hours) Reason 1

SUMMARY There were no unplanned losses during the month of October 2016. A control rod adjustment was made and ST-23B was conducted (control rod coupling test) between 10/5/16 03:09 and 15:24. Rx Power was reduced from 78.3% to 68.16, which was the minimum throughout the evolution. Per INPO 04-004 (Rev. 15), control rod testing is considered exempt energy generation loss. On 10/28/2016, Rx Power was lowered from 72.2% to 70.8% due to a 1% deviation in A Reactor Water Recirc speed indication. Operators conducted the downpower per Rx Engineering instructions. Since the downpower was less than 20% Rx Power, it is not counted as a Generation Occurrence. As this speed indication resulted in an unplanned change in Rx Power, the actual losses due to A RWR issue are reported as unplanned energy losses.

DOCKET: 333 PREPARER NAME: A. Spiridakis

UNIT\_NME: FitzPatrick Unit 1 PREPARER TELEPHONE: 3153262288

RPT\_PERIOD: 201611

Design Electrical Rating: 816
 Maximum Dependable Capacity (MWe-Net) 813

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,632.85
 297,061.16

 4. Number of Hours Generator On-line
 721.00
 7,557.67
 290,964.99

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 387,349.00 5,507,058.00 224,416,553.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were no unit shutdowns, planned, or unplanned power changes affecting generation for the month of November 2016. James A. FitzPatrick is coasting down for a refueling cycle scheduled to begin 1/14/2016. The coastdown is reflected in the low Net Electric Energy output for this month

DOCKET: 333 PREPARER NAME: A. Spiridakis

UNIT\_NME: FitzPatrick Unit 1 PREPARER TELEPHONE: 3153262288

RPT\_PERIOD: 201612

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 813

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,376.85
 297,805.16

 4. Number of Hours Generator On-line
 744.00
 8,301.67
 291,708.99

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 350,901.00 5,857,959.00 224,767,454.00

#### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY There were no unplanned losses during the month of December 2016. On 12/1/2016 ~ 11:22, a LEFM Correction Factor Calculation was made which led to about a 1.2% change in indicated Rx Power. (Note: LEFM corrections do not result in any change to MW Electric Output.) A control rod adjustment was made on 12/7/2016 between 04:11 and 14:04. This evolution caused a 2.5% change in Rx Power (from 62.2% to 59.7%). Per INPO 04-004 (Rev. 15), control rod testing is considered exempt energy generation loss. The power change as a result of this evolution was also < 20% RTP and, therefore, will not be reported as a Generation Occurrence.

DOCKET: 244 PREPARER NAME: John V. Walden UNIT\_NME: Ginna Unit 1 PREPARER TELEPHONE: 315-791-3588

RPT\_PERIOD: 201610

Design Electrical Rating: 585
 Maximum Dependable Capacity (MWe-Net) 560

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 354,268.22

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 350,731.31

 5. Reserve Shutdown Hours
 0.00
 0.00
 8.50

6. Net Electrical energy Generated (MWHrs) 427,365.07 4,193,965.35 170,426,734.18

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated at full power for the entire month of October. Average power for the month was 99.9%.

DOCKET: 244 PREPARER NAME: John V. Walden UNIT\_NME: Ginna Unit 1 PREPARER TELEPHONE: 315-791-3588

RPT\_PERIOD: 201611

Design Electrical Rating: 585
 Maximum Dependable Capacity (MWe-Net) 560

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 354,989.22

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 351,452.31

 5. Reserve Shutdown Hours
 0.00
 0.00
 8.50

6. Net Electrical energy Generated (MWHrs) 417,058.29 4,611,023.64 170,843,792.47

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The unit operated at full power for the entire month of November. Average power for the month was 99.9%.

DOCKET: 244 PREPARER NAME: John V. Walden UNIT\_NME: Ginna Unit 1 PREPARER TELEPHONE: 315-791-3588

RPT\_PERIOD: 201612

Design Electrical Rating: 585
 Maximum Dependable Capacity (MWe-Net) 560

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 355,733.22

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 352,196.31

 5. Reserve Shutdown Hours
 0.00
 0.00
 8.50

6. Net Electrical energy Generated (MWHrs) 431,038.81 5,042,062.45 171,274,831.28

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The unit operated at full power for the entire month of December. Average power for the month was 99.8%.

DOCKET: 416 PREPARER NAME: A. Hollowell

UNIT\_NME: Grand Gulf Unit 1 PREPARER TELEPHONE: 601-437-2318

RPT\_PERIOD: 201610

Design Electrical Rating: 1485
 Maximum Dependable Capacity (MWe-Net) 1428

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	4,602.35	246,331.23
4. Number of Hours Generator On-line	0.00	4,406.87	241,273.15
5. Reserve Shutdown Hours	0.00	243.00	243.00
6. Net Electrical energy Generated (MWHrs)	0.00	5,981,585.00	290,236,905.00

## **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
142	9/8/2016	F	744.00	А	4	The SCRAM on 9/8/2016 at 1104 hrs was a planned SCRAM per IOI-2 in order to repair a problem with RHR 'A'. Plant was shutdown due to RHR 'A' being INOP and repair was scheduled to longer than seven days.

SUMMARY FO 21-04 cont

DOCKET: 416 PREPARER NAME: A. Hollowell

UNIT\_NME: Grand Gulf Unit 1 PREPARER TELEPHONE: 601-437-2318

RPT\_PERIOD: 201611

Design Electrical Rating: 1485
 Maximum Dependable Capacity (MWe-Net) 1428

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	4,602.35	246,331.23
4. Number of Hours Generator On-line	0.00	4,406.87	241,273.15
5. Reserve Shutdown Hours	0.00	243.00	243.00
6. Net Electrical energy Generated (MWHrs)	0.00	5,981,585.00	290,236,905.00

## **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
142	9/8/2016	F	720.00	Α	4	The SCRAM on 9/8/2016 at 1104 hrs was a planned SCRAM per IOI-2 in order to repair a problem with RHR 'A'. Plant was shutdown due to RHR 'A' being INOP and repair was scheduled to longer than seven days.

SUMMARY FO 21-04 cont

DOCKET: 416 PREPARER NAME: A. Hollowell

UNIT\_NME: Grand Gulf Unit 1 PREPARER TELEPHONE: 601-437-2318

RPT\_PERIOD: 201612

Design Electrical Rating: 1485
 Maximum Dependable Capacity (MWe-Net) 1428

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	4,602.35	246,331.23
4. Number of Hours Generator On-line	0.00	4,406.87	241,273.15
5. Reserve Shutdown Hours	0.00	243.00	243.00
6. Net Electrical energy Generated (MWHrs)	0.00	5,981,585.00	290,236,905.00

## **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
142	9/8/2016	F	744.00	А	4	The SCRAM on 9/8/2016 at 1104 hrs was a planned SCRAM per IOI-2 in order to repair a problem with RHR 'A'. Plant was shutdown due to RHR 'A' being INOP and repair was scheduled to longer than seven days.

SUMMARY FO 21-04 continued

DOCKET: 400 PREPARER NAME: Dustin Martin

UNIT\_NME: Harris Unit 1 PREPARER TELEPHONE: 919-362-2679

RPT\_PERIOD: 201610

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 928

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 169.83 6,744.83 230,001.65
4. Number of Hours Generator On-line 169.75 6,744.75 228,473.53

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 136,077.00 6,373,893.00 201,292,916.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
H1120 R1	10/8/2016	S	574.25	С	3	Planned Refueling outage shutdown, RFO 20.

SUMMARY The unit was shutdown on October 8, 2016 for RFO-20.

DOCKET: 400 PREPARER NAME: **Dustin Martin** 

UNIT\_NME: Harris Unit 1 PREPARER TELEPHONE: 9193622679 RPT\_PERIOD: 201611

1. Design Electrical Rating: 973 2. Maximum Dependable Capacity (MWe-Net) 928

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 515.98 230,517.63 7,260.81 472.02 4. Number of Hours Generator On-line 7,216.77 228,945.55

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 416,053.00 6,789,946.00 201,708,969.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
H1120 R1	10/8/2016	S	247.98	С	4	Planned Refueling outage shutdown, RFO 20.

SUMMARY Refueling outage 20 was completed during November, 2016. This included an extension due to repairs needed on the reactor vessel head.

DOCKET: 400 PREPARER NAME: Dustin Martin

UNIT\_NME: PREPARER TELEPHONE: 9193622679

RPT\_PERIOD: 201612

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 928

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,004.81 231,261.63
4. Number of Hours Generator On-line 744.00 7,960.77 229,689.55

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 723,105.00 7,513,051.00 202,432,074.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were no generation loss events in December 2016.

DOCKET: 321 PREPARER NAME: Ben Mosley

UNIT\_NME: Hatch Unit 1 PREPARER TELEPHONE: 912-537-5872

RPT\_PERIOD: 201610

Design Electrical Rating: 885
 Maximum Dependable Capacity (MWe-Net) 876

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 6,683.89 303,790.96
4. Number of Hours Generator On-line 744.00 6,630.30 296,735.17

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 660,776.00 5,693,038.00 231,091,907.00

## **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were no significant (>20% rated thermal power) power change events this month.

DOCKET: 321 PREPARER NAME: Ben Mosley

UNIT\_NME: Hatch Unit 1 PREPARER TELEPHONE: 912-537-5872

RPT\_PERIOD: 201611

Design Electrical Rating: 885
 Maximum Dependable Capacity (MWe-Net) 876

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,404.89
 304,511.96

 4. Number of Hours Generator On-line
 721.00
 7,351.30
 297,456.17

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 634,695.00 6,327,733.00 231,726,602.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Reactor power was reduced to ~58% rated thermal power to swap Steam Jet Air Ejectors on 11/22/2016. Reactor power was returned to ~100% rated thermal power on 11/23/2016. There were no additional significant (>20% rated thermal power) power changes during the month.

DOCKET: 321 PREPARER NAME: Ben Mosley

UNIT\_NME: Hatch Unit 1 PREPARER TELEPHONE: 912-537-5872

RPT\_PERIOD: 201612

Design Electrical Rating: 885
 Maximum Dependable Capacity (MWe-Net) 876

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,148.89
 305,255.96

 4. Number of Hours Generator On-line
 744.00
 8,095.30
 298,200.17

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 663,397.00 6,991,130.00 232,389,999.00

## **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Reactor power was reduced to ~80% rated thermal power for quarterly turbine testing and rod pattern adjustment on 12/10/2016. Reactor power was returned to ~100% rated thermal power on 12/10/2016. There were no additional significant (>20% rated thermal power) power changes during the month.

DOCKET: 366 PREPARER NAME: Ben Mosley

UNIT\_NME: Hatch Unit 2 PREPARER TELEPHONE: 912-537-5872

RPT\_PERIOD: 201610

Design Electrical Rating: 908
 Maximum Dependable Capacity (MWe-Net) 883

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,214.85
 279,108.88

 4. Number of Hours Generator On-line
 744.00
 7,192.07
 273,892.44

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 663,145.00 6,361,946.00 217,692,280.00

## **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were no significant (>20% rated thermal power) power change events this month.

DOCKET: 366 PREPARER NAME: Ben Mosley
UNIT NME: Hatch Unit 2

UNIT\_NME: Hatch Unit 2 PREPARER TELEPHONE: 912-537-5872
RPT\_PERIOD: 201611

Design Electrical Rating: 908
 Maximum Dependable Capacity (MWe-Net) 883

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,935.85
 279,829.88

 4. Number of Hours Generator On-line
 721.00
 7,913.07
 274,613.44

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 642,047.00 7,003,993.00 218,334,327.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Reactor power was reduced to ~77% rated thermal power for quarterly turbine testing and rod pattern adjustment on 11/19/2016. Reactor power was returned to ~100% rated thermal power on 11/19/2016. There were no additional significant (>20% rated thermal power) power changes during the month.

DOCKET: 366 PREPARER NAME: Ben Mosley
UNIT\_NME: Hatch Unit 2 PREPARER TELEPHONE: 912-537-5872

RPT\_PERIOD: 201612

Design Electrical Rating: 908
 Maximum Dependable Capacity (MWe-Net) 883

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,679.85 280,573.88
4. Number of Hours Generator On-line 744.00 8,657.07 275,357.44

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 652,232.00 7,656,225.00 218,986,559.00

## **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit began end of cycle fuel coastdown on 12/09/2016. There were no significant (>20% rated thermal power) power change events this month.

DOCKET: 354 PREPARER NAME: Timothy M Gingerich

UNIT\_NME: Hope Creek Unit 1 PREPARER TELEPHONE: 856 339 2194

RPT\_PERIOD: 201610

Design Electrical Rating: 1228.1
 Maximum Dependable Capacity (MWe-Net) 1172

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 327.37 6,902.37 232,004.87
4. Number of Hours Generator On-line 326.05 6,880.92 228,090.20
5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 375,179.00 8,224,202.00 244,737,998.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
HCR2 0	10/14/2016	S	417.95	С	1	A power reduction of approximately 76.4% (94.4% to 18%) occurred on 10/14/16 at 03:00 as part of the normal sequence for a planned shutdown for a refueling outage. Power was stabilized at 18% on 10/14/16 at 10:17. The main turbine/generator was removed from the grid on 10/14/16 at 14:03 and the reactor was manually scrammed on 10/14/16 at 15:22 to start Hope Creek refueling outage HCR20. This is a planned power reduction IAW NEI 99-02.

SUMMARY The month began with the unit online and the reactor critical at 99.9% CTP

One (1) planned power change greater than 15% occurred in October 2016

A power reduction of approximately 76.4% (94.4% to 18%) occurred on 10/14/16 at 03:00 as part of the normal sequence for a planned shutdown for a refueling outage. Power was stabilized at 18% on 10/14/16 at 10:17. The main turbine/generator was removed from the grid on 10/14/16 at 14:03 and the reactor was manually scrammed on 10/14/16 at 15:22 to start Hope Creek refueling outage HCR20. This is a planned power reduction IAW NEI 99-02.

Zero (0) unplanned power changes greater than 15% occurred in October 2016

The month ended with the unit offline and the reactor shut down due to the continuation of Hope Creek refueling outage HCR20

The SRVs were not challenged by any over pressurization events or transients that would have required the valves to respond automatically.

DOCKET: 354 PREPARER NAME: Timothy M Gingerich

UNIT NME: Hope Creek Unit 1 PREPARER TELEPHONE: 856 339 2194

RPT\_PERIOD: 201611

1228.1 1. Design Electrical Rating: 2. Maximum Dependable Capacity (MWe-Net) 1172

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 503.70 7,406.07 232,508.57 4. Number of Hours Generator On-line 462.47 7,343.39 228,552.67 5. Reserve Shutdown Hours 0.00 0.00 0.00 6. Net Electrical energy Generated (MWHrs) 490,414.00 8,714,616.00 245,228,412.00

#### **UNIT SHUTDOWNS**

	Type				Method of	
No.	Date	F: Forced S: Scheduled	Duration (Hours)	Reason 1	Shutting Down 2	Cause - Corrective Action Comments
HCR2 0	10/14/2016	S	257.53	С	4	A power reduction of approximately 76.4% (94.4% to 18%) occurred on 10/14/16 at 03:00 as part of the normal sequence for a planned shutdown for a refueling outage. Power was stabilized at 18% on 10/14/16 at 10:17. The main turbine/generator was removed from the grid on 10/14/16 at 14:03 and the reactor was manually scrammed on 10/14/16 at 15:22 to start Hope Creek refueling outage HCR20. This is a planned power reduction IAW NEI 99-02.

SUMMARY The month began with the unit shut down due to continuation of planned refueling outage HCR20. The reactor was made critical 11/10/16 at 00:18 and the main generator was synchronized to the grid 11/11/16 at 17:32 as part of startup from the HCR20 refueling outage. This is a planned unit shutdown IAW NEI 99-02

Zero (0) planned power change greater than 15% occurred in November 2016

Zero (0) unplanned power changes greater than 15% occurred in November 2016

The month ended with the unit online and the reactor critical at 99.7% CTP

The SRVs were not challenged by any over pressurization events or transients that would have required the valves to respond automatically.

DOCKET: 354 PREPARER NAME: Timothy M Gingerich

UNIT\_NME: Hope Creek Unit 1 PREPARER TELEPHONE: 856 339 2194

RPT\_PERIOD: 201612

Design Electrical Rating: 1228.1
 Maximum Dependable Capacity (MWe-Net) 1172

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,150.07
 233,252.57

 4. Number of Hours Generator On-line
 744.00
 8,087.39
 229,296.67

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 925,071.00 9,639,687.00 246,153,483.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The month began with the unit online and the reactor critical at 99.7%

Zero (0) planned power change greater than 15% occurred in December 2016

Zero (0) unplanned power changes greater than 15% occurred in December 2016

The month ended with the unit online and the reactor critical at 99.8% CTP

The SRVs were not challenged by any over pressurization events or transients that would have required the valves to respond automatically.

DOCKET: 247 PREPARER NAME: Justin Sledzinski

UNIT\_NME: Indian Point Unit 2 PREPARER TELEPHONE: 914-254-7644

RPT\_PERIOD: 201610

1. Design Electrical Rating: 1035 2. Maximum Dependable Capacity (MWe-Net) 998

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 4,836.72 287,907.29 4. Number of Hours Generator On-line 744.00 4,761.27 283,238.45 5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 755,008.00 4,533,593.95 256,721,877.83

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Indian Point 2 was synchronized to the grid for a total of 744 hours, producing a gross generation of 780,336 MWhrs. The unit operated at full power for the entire month. Monthly planned losses were due to condenser backwashes.

DOCKET: 247 PREPARER NAME: Justin Sledzinski

UNIT\_NME: Indian Point Unit 2 PREPARER TELEPHONE: 914-254-7644

RPT\_PERIOD: 201611

Design Electrical Rating: 1035
 Maximum Dependable Capacity (MWe-Net) 998

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 5,557.72 288,628.29
4. Number of Hours Generator On-line 721.00 5,482.27 283,959.45

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 734,015.00 5,267,608.95 257,455,892.83

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Indian Point 2 was synchronized to the grid for a total of 721 hours, producing a gross generation of 758,350 MWhrs. Planned and exempt energy losses were due to condenser backwashes.

DOCKET: 247 PREPARER NAME: Michael Hasenbein

UNIT\_NME: Indian Point Unit 2 PREPARER TELEPHONE: 914-254-7485

RPT\_PERIOD: 201612

Design Electrical Rating: 1035
 Maximum Dependable Capacity (MWe-Net) 998

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,301.72
 289,372.29

 4. Number of Hours Generator On-line
 744.00
 6,226.27
 284,703.45

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 762,456.00 6,030,064.95 258,218,348.83

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Indian Point 2 was synchronized to the grid for a total of 744 hours for Decemeber, producing a gross generation of 787,137 MWHrs

DOCKET: 286 PREPARER NAME: Justin Sledzinski

UNIT\_NME: Indian Point Unit 3 PREPARER TELEPHONE: 9142547644

RPT\_PERIOD: 201610

Design Electrical Rating: 1048
 Maximum Dependable Capacity (MWe-Net) 1030

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 260,867.78

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 257,388.84

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Treserve Gradowii Tredis

6. Net Electrical energy Generated (MWHrs) 772,260.00 7,552,260.00 244,653,661.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Indian Point 3 was synchronized to the grid for a total of 744 hours, producing a gross generation of 798419 MWhrs. The unit operated at full power for the entire month.

MONTHLY PLANNED LOSSES were due to Condenser Backwashes and the replacement of 33 CWP Motor diode wheel.

MONTHLY UNPLANNED LOSSES: None.

YEAR TO DATE PLANNED LOSSES were due to Condenser Backwashes and FIT-111 Calibration Testing, the Stop and Control Valve Testing and the 34 CWP replacement and the 33 CWP Motor diode wheel replacement.

DOCKET: 286 PREPARER NAME: Justin Sledzinski

UNIT\_NME: Indian Point Unit 3 PREPARER TELEPHONE: 914-254-7644

RPT\_PERIOD: 201611

Design Electrical Rating: 1048
 Maximum Dependable Capacity (MWe-Net) 1030

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 261,588.78

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 258,109.84

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 746,478.00 8,298,738.00 245,400,139.00

### **UNIT SHUTDOWNS**

		Type				
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Indian Point 3 was synchronized to the grid for a total of 721 hours, producing a gross generation of 798,419 MWhrs. The unit remained at full power for the entire month. Unplanned forced losses less than 10 days were due to 35 CWP trouble shooting after motor tripped on the normal and standby drive.

DOCKET: 286 PREPARER NAME: Michael Hasenbein

UNIT\_NME: Indian Point Unit 3 PREPARER TELEPHONE: 914-254-7485

RPT\_PERIOD: 201612

Design Electrical Rating: 1048
 Maximum Dependable Capacity (MWe-Net) 1030

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 262,332.78

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 258,853.84

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 770,460.00 9,069,198.00 246,170,599.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Indian Point 3 was synchronized to the grid for a total of 744 hours during December, producing a gross generation of 796,014 MWHrs.

DOCKET: 373 PREPARER NAME: Adam Pflugshaupt

UNIT\_NME: LaSalle Unit 1 PREPARER TELEPHONE: 815-415-3861

RPT\_PERIOD: 201610

Design Electrical Rating: 1178
 Maximum Dependable Capacity (MWe-Net) 1111

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,620.68
 232,002.41

 4. Number of Hours Generator On-line
 744.00
 6,554.33
 229,260.50

 5. Reserve Shutdown Hours
 0.00
 0.00
 1.00

6. Net Electrical energy Generated (MWHrs) 863,916.00 7,339,815.00 244,551,780.00

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit 1 operated at or near full power for the month of October 2016.

DOCKET: 373 PREPARER NAME: Steve Latimer UNIT\_NME: LaSalle Unit 1 PREPARER TELEPHONE: 815-415-2463

RPT\_PERIOD: 201611

Design Electrical Rating: 1178
 Maximum Dependable Capacity (MWe-Net) 1111

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,341.68
 232,723.41

 4. Number of Hours Generator On-line
 721.00
 7,275.33
 229,981.50

 5. Reserve Shutdown Hours
 0.00
 0.00
 1.00

6. Net Electrical energy Generated (MWHrs) 842,465.00 8,182,280.00 245,394,245.00

## **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 1 operated at or near full power for the entire month.

DOCKET: 373 PREPARER NAME: Steve Latimer
UNIT\_NME: LaSalle Unit 1 PREPARER TELEPHONE: 815-415-2463

RPT\_PERIOD: 201612

Design Electrical Rating: 1178
 Maximum Dependable Capacity (MWe-Net) 1111

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,085.68
 233,467.41

 4. Number of Hours Generator On-line
 744.00
 8,019.33
 230,725.50

 5. Reserve Shutdown Hours
 0.00
 0.00
 1.00

6. Net Electrical energy Generated (MWHrs) 871,814.00 9,054,094.00 246,266,059.00

### **UNIT SHUTDOWNS**

		Type				
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 1 had an unplanned downpower to approximately 965 MWe on December 2nd, 2016 due to a Control Valve #2 indication failure. Unit 1 had a planned downpower to approximately 900 MWe on December 17th, 2016 due to a Sequence Exchange. Unit 1 had an unplanned downpower to approximately 970 MWe on December 31st, 2016 due to a 1A TDRFP speed control repair. Unit 1 operated at or near full power for the remainder of the month.

DOCKET: 374 PREPARER NAME: Adam Pflugshaupt

UNIT\_NME: LaSalle Unit 2 PREPARER TELEPHONE: 815-415-3861

RPT\_PERIOD: 201610

Design Electrical Rating: 1178
 Maximum Dependable Capacity (MWe-Net) 1111

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 224,019.21

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 222,553.59

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 863,188.00 8,378,240.00 239,062,024.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2 had a downpower to approximately 1160 MWe on October 5th, 2016 due to a loss of position indication on control rod 32-47. Unit 2 also had a downpower to approximately 1030 MWe on October 29th, 2016 due to a planned sequence exchange. Unit 2 operated at or near full power for the remainder of the month.

DOCKET: 374 PREPARER NAME: Steve Latimer
UNIT\_NME: LaSalle Unit 2 PREPARER TELEPHONE: 815-415-2463

RPT\_PERIOD: 201611

Design Electrical Rating: 1178
 Maximum Dependable Capacity (MWe-Net) 1111

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 224,740.21

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 223,274.59

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 841,833.00 9,220,073.00 239,903,857.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2 had a downpower to approximately 1170 MWe on November 5th, 2016 due to a loss of position indication on control rod 32-47. Unit 2 operated at or near full power for the remainder of the month.

DOCKET: 374 PREPARER NAME: Steve Latimer
UNIT\_NME: LaSalle Unit 2 PREPARER TELEPHONE: 815-415-2463

RPT\_PERIOD: 201612

Design Electrical Rating: 1178
 Maximum Dependable Capacity (MWe-Net) 1111

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 225,484.21

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 224,018.59

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 870,701.00 10,090,774.00 240,774,558.00

## **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 2 had a planned downpower to approximately 920 MWe on December 10th, 2016 due to a Sequence Exchange. Unit 2 operated at or near full power for the remainder of the month.

DOCKET: 352 PREPARER NAME: Leonard J. Maioriello

UNIT\_NME: Limerick Unit 1 PREPARER TELEPHONE: 610-718-3512

RPT\_PERIOD: 201610

1. Design Electrical Rating: 1205 1099 2. Maximum Dependable Capacity (MWe-Net)

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 246,435.01 6,699.50

4. Number of Hours Generator On-line 744.00 6,667.50 243,812.34 5. Reserve Shutdown Hours 0.00

6. Net Electrical energy Generated (MWHrs) 865,608.00 7,572,324.00 264,140,294.50

## **UNIT SHUTDOWNS**

0.00

0.00

Method of **Type** F: Forced **Duration Shutting Cause - Corrective Action** No. (Hours) Down 2 **Comments Date** S: Scheduled Reason 1

SUMMARY Unit 1 began the month of October 2016 at 100.0% of rated thermal power (RTP).

Unit 1 did not have any derates during the month of October

Unit 1 ended the month of October 2016 at 100.0% RTP.

DOCKET: 352 PREPARER NAME: Leonard J. Maioriello

UNIT\_NME: Limerick Unit 1 PREPARER TELEPHONE: 610-718-3512

RPT\_PERIOD: 201611

Design Electrical Rating: 1205
 Maximum Dependable Capacity (MWe-Net) 1099

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,420.50
 247,156.01

 4. Number of Hours Generator On-line
 721.00
 7,388.50
 244,533.34

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 846,043.00 8,418,367.00 264,986,337.50

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 1 began the month of November 2016 at 100.0% of rated thermal power (RTP).

Unit 1 did not have any derates during the month of November.

Unit 1 ended the month of November 2016 at 99.9% RTP.

DOCKET: 352 PREPARER NAME: Leonard J. Maioriello

UNIT\_NME: Limerick Unit 1 PREPARER TELEPHONE: 610-718-3512

RPT\_PERIOD: 201612

Design Electrical Rating: 1205
 Maximum Dependable Capacity (MWe-Net) 1099

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,164.50
 247,900.01

 4. Number of Hours Generator On-line
 744.00
 8,132.50
 245,277.34

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 876,222.00 9,294,589.00 265,862,559.50

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 1 began the month of December 2016 at 99.9% of rated thermal power (RTP).

On December 17th at 21:00 hours, reactor power was reduced from 99.7% to 89.8% RTP due to a planned load drop for main turbine valve testing and control rod scram time testing.

On December 18th at 05:17 hours, Reactor power was restored to 99.5% RTP.

Unit 1 ended the month of December 2016 at 100.0% RTP.

DOCKET: 353 PREPARER NAME: leonard J. Maioriello

UNIT\_NME: Limerick Unit 2 PREPARER TELEPHONE: 610-718-3512

RPT\_PERIOD: 201610

Design Electrical Rating: 1205
 Maximum Dependable Capacity (MWe-Net) 1108

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,291.03 222,556.35
4. Number of Hours Generator On-line 744.00 7,279.13 220,033.24

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 866,243.00 8,418,076.00 243,489,594.50

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 2 began the month of October 2016 at 99.9% of rated thermal power (RTP).

On October 22nd at 22:01 hours, reactor power was reduced from 99.9% to 80.1% RTP due to a planned load drop for control rod pattern adjustment.

On October 23rd at 04:41 hours, Reactor power was restored to 99.6% RTP.

Unit 2 ended the month of October 2016 at 99.9% RTP.

DOCKET: 353 PREPARER NAME: Leonard. J Maioriello

UNIT\_NME: Limerick Unit 2 PREPARER TELEPHONE: 610-718-3512

RPT\_PERIOD: 201611

Design Electrical Rating: 1205
 Maximum Dependable Capacity (MWe-Net) 1108

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 8,012.03 223,277.35
4. Number of Hours Generator On-line 721.00 8,000.13 220,754.24
5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 848,057.00 9,266,133.00 244,337,651.50

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 2 began the month of November 2016 at 99.9% of rated thermal power (RTP).

Unit 2 did not have any derates during the month of November.

Unit 2 ended the month of November 2016 at 100.0% RTP.

DOCKET: 353 PREPARER NAME: Leonard J. Maioriello

UNIT\_NME: Limerick Unit 2 PREPARER TELEPHONE: 610-718-3512

RPT\_PERIOD: 201612

Design Electrical Rating: 1205
 Maximum Dependable Capacity (MWe-Net) 1108

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	744.00	8,756.03	224,021.35
4. Number of Hours Generator On-line	744.00	8,744.13	221,498.24
5. Reserve Shutdown Hours	0.00	0.00	0.00

6. Net Electrical energy Generated (MWHrs) 878,783.00 10,144,916.00 245,216,434.50

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 2 began the month of December 2016 at 100.0% of rated thermal power (RTP).

On December 6th at 22:01 hours, reactor power was reduced from 99.9% to 95.0% RTP due to a planned load drop for control rod pattern adjustment. Reactor power was restored to 99.7% RTP at 23:21 hours.

On December 7th at 07:11 hours, reactor power was reduced from 99.8% to 99.2% RTP due to an unplanned load drop due to moisture carry over concerns. Reactor power was restored to 100.0% RTP at 13:05 hours.

On December 17th at 00:03 hours, reactor power was reduced from 99.9% to 76.7% RTP due to a planned load drop for control rod scram time testing. Reactor power was restored to 99.5% RTP at 14:29 hours.

On December 30th at 22:02 hours, reactor power was reduced from 99.9% to 84.7% RTP due to a planned load drop for control rod pattern adjustment. Reactor power was restored to 99.5% RTP at 23:30 hours.

Unit 2 ended the month of December 2016 at 100.0% RTP.

DOCKET: 369 PREPARER NAME: Brian H. Richards

UNIT\_NME: McGuire Unit 1 PREPARER TELEPHONE: 980.875.5171

RPT\_PERIOD: 201610

Design Electrical Rating: 1199
 Maximum Dependable Capacity (MWe-Net) 1158

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,637.75
 253,922.36

 4. Number of Hours Generator On-line
 744.00
 6,619.73
 252,258.32

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 874,330.00 7,774,018.00 277,024,829.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 1 began the month of October in Mode 1 at 100% RTP. Unit 1 commenced load reduction to 98.5% RTP at 2000 on 10/1/16 to isolate 1HW16 for planned repair work during the upcoming Turbine Valve Movement Test (TVMT). Once isolated, the unit continued down to 87% RTP for the
planned TVMT which occurred at 0253 on 10/2/16. The TVMT was completed at 1006 and the unit commenced load increase to 100% RTP.
Unit 1 reached 100% RTP at 2200 on 10/2/16 after a three hour hold for inspections on 1HW-16 at ~98% RTP.

DOCKET: 369 PREPARER NAME: Brian H. Richards

UNIT\_NME: McGuire Unit 1 PREPARER TELEPHONE: 980.875.5171

RPT\_PERIOD: 201611

Design Electrical Rating: 1199
 Maximum Dependable Capacity (MWe-Net) 1158

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 7,358.75 254,643.36
4. Number of Hours Generator On-line 721.00 7,340.73 252,979.32

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 855,785.00 8,629,803.00 277,880,614.00

## **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 1 operated at approximately 100% for November 2016.

DOCKET: 369 PREPARER NAME: Brian H. Richards

UNIT\_NME: McGuire Unit 1 PREPARER TELEPHONE: 980.875.5171

RPT\_PERIOD: 201612

Design Electrical Rating: 1199
 Maximum Dependable Capacity (MWe-Net) 1158

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,102.75
 255,387.36

 4. Number of Hours Generator On-line
 744.00
 8,084.73
 253,723.32

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 886,080.00 9,515,883.00 278,766,694.00

### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 1 operated at approximately 100% for the month of December, 2016.

DOCKET: 370 PREPARER NAME: Brian H. Richards

UNIT\_NME: McGuire Unit 2 PREPARER TELEPHONE: 980.875.5171

RPT\_PERIOD: 201610

1. Design Electrical Rating: 1187 2. Maximum Dependable Capacity (MWe-Net) 1158

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 247,867.14 7,319.00 4. Number of Hours Generator On-line 744.00 7,319.00 246,174.57 5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 876,480.00 8,623,503.00 276,193,785.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2 began the month of October in Mode 1 at 100% RTP. Unit 2 commenced load reduction to approximately 87% RTP for a planned Turbine Valve Movement Test (TVMT) at 20:01 on 10/22/2016. Unit 2 TVMT was completed and commenced load increase to 100% RTP at 02:50 on 10/23/2016. Unit 2 reached 100% RTP at 12:00 on 10/23/2016.

DOCKET: 370 PREPARER NAME: Brian H. Richards

McGuire Unit 2 UNIT\_NME: PREPARER TELEPHONE: 980.875.5171

RPT\_PERIOD: 201611

1. Design Electrical Rating: 1187 2. Maximum Dependable Capacity (MWe-Net) 1158

Yr-to-Date Cumulative **This Month** 3. Number of Hours the Reactor was Critical 721.00 8,040.00 248,588.14 4. Number of Hours Generator On-line 721.00 246,895.57 8,040.00

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 857,439.00 9,480,942.00 277,051,224.00

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit 2 operated at approximately 100% for November 2016.

DOCKET: 370 PREPARER NAME: Brian H. Richards

UNIT\_NME: McGuire Unit 2 PREPARER TELEPHONE: 980.875.5171

RPT\_PERIOD: 201612

Design Electrical Rating: 1187
 Maximum Dependable Capacity (MWe-Net) 1158

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 249,332.14

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 247,639.57

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 887,464.00 10,368,406.00 277,938,688.00

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit 2 operated at approximately 100% for December 2016.

DOCKET: 336 PREPARER NAME: S.Claffey

UNIT\_NME: Millstone Unit 2 PREPARER TELEPHONE: 860-447-1791 x2456

RPT\_PERIOD: 201610

Design Electrical Rating: 877.2
 Maximum Dependable Capacity (MWe-Net) 869.5

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 7,279.17 260,843.92 4. Number of Hours Generator On-line 744.00 7,259.78 254,635.39 5. Reserve Shutdown Hours 0.00 0.00 468.20 6. Net Electrical energy Generated (MWHrs) 636,610.30 6,212,962.60 213,880,581.90

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Millstone Unit 2 operated at or near 100% power throughout the month of October 2016.

DOCKET: 336 PREPARER NAME: S. Claffey

UNIT\_NME: Millstone Unit 2 PREPARER TELEPHONE: 860-447-1791 x2456

RPT\_PERIOD: 201611

Design Electrical Rating: 877.2
 Maximum Dependable Capacity (MWe-Net) 869.5

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	721.00	8,000.17	261,564.92
4. Number of Hours Generator On-line	721.00	7,980.78	255,356.39
5. Reserve Shutdown Hours	0.00	0.00	468.20
6. Net Electrical energy Generated (MWHrs)	617,742.10	6,830,704.70	214,498,324.00

# **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Millstone Unit 2 operated at or near 100% power from the beginning of the month until November 19, 2016. On November 19, 2016 at 0706 hours, the unit commenced a down power to 93% power to conduct routine Main Turbine Valve Testing. On November 19, 2016 at 0856 hours, the unit commenced Main Turbine Valve Testing. On November 19, 2016 at 1014, the unit commenced a return to full power, reaching 100% power on November 19, 2016 at 1245 hours. Millstone Unit 2 operated at or near 100% power for the remainder of the month.

DOCKET: 336 PREPARER NAME: Russell Benson

UNIT\_NME: Millstone Unit 2 PREPARER TELEPHONE: (860) 447-1791 x5196

RPT\_PERIOD: 201612

Design Electrical Rating: 877.2
 Maximum Dependable Capacity (MWe-Net) 869.5

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,744.17
 262,308.92

 4. Number of Hours Generator On-line
 744.00
 8,724.78
 256,100.39

 5. Reserve Shutdown Hours
 0.00
 0.00
 468.20

6. Net Electrical energy Generated (MWHrs) 639,183.70 7,469,888.40 215,137,507.70

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Millstone Unit 2 operated at or near 100% power throughout the month of December 2016.

DOCKET: 423 PREPARER NAME: S. Claffey

UNIT\_NME: Millstone Unit 3 PREPARER TELEPHONE: 860-447-1791 x2456

RPT\_PERIOD: 201610

Design Electrical Rating: 1229
 Maximum Dependable Capacity (MWe-Net) 1210

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,153.71
 214,261.99

 4. Number of Hours Generator On-line
 744.00
 6,073.99
 212,021.32

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 909,069.10 7,333,743.20 242,136,583.14

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Millstone Unit 3 operated at or near 100% power from the beginning of the month until October 25, 2016. On October 25, 2016 at 2200 hours, the unit commenced a down power to 93% to conduct feedwater flow oscillation troubleshooting and repairs on feedwater heater components. The unit reached 93% power on October 25, 2016 at 2355. Upon repair of feedwater heater level control and isolation valves, the unit commenced power increase to 95% on October 27, 2016 at 0151 to perform previously scheduled Main Turbine valve testing. On October 27, 2016 at 0308, the unit commenced Main Turbine valve testing. On October 27, 2016 at 0457, the unit commenced a return to full power, reaching 100% power on October 27, 2016 at 0947 hours. Millstone Unit 3 operated at or near 100% power for the remainder of October 2016.

DOCKET: 423 PREPARER NAME: S. Claffey

UNIT\_NME: Millstone Unit 3 PREPARER TELEPHONE: 860-447-1791 x2456

RPT\_PERIOD: 201611

Design Electrical Rating: 1229
 Maximum Dependable Capacity (MWe-Net) 1210

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 6,874.71
 214,982.99

 4. Number of Hours Generator On-line
 721.00
 6,794.99
 212,742.32

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 888,324.90 8,222,068.10 243,024,908.04

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Millstone Unit 3 operated at or near 100% power throughout the month of November 2016.

DOCKET: 423 PREPARER NAME: Russell Benson

UNIT\_NME: Millstone Unit 3 PREPARER TELEPHONE: (860) 447-1791 x5196

RPT\_PERIOD: 201612

Design Electrical Rating: 1229
 Maximum Dependable Capacity (MWe-Net) 1210

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,618.71 215,726.99
4. Number of Hours Generator On-line 744.00 7,538.99 213,486.32

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 918,254.10 9,140,322.20 243,943,162.14

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Millstone Unit 3 operated at or near 100% power throughout the month of December 2016.

DOCKET: 263 PREPARER NAME: Kevin Austin

UNIT\_NME: Monticello Unit 1 PREPARER TELEPHONE: 763-271-5875

RPT\_PERIOD: 201610

Design Electrical Rating: 656.3
 Maximum Dependable Capacity (MWe-Net) 628.2

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 337,681.92

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 333,277.12

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 459,478.00 4,626,961.00 178,112,450.30

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Power ascension which started the previous month was completed on 10/2/16. Power was lowered again to 58% on 10/9/16 to remove 11 Reactor Feed Pump from service for repairs, with full power restored on 10/15/16. A minor rod pattern adjustment was performed on 10/19/16.

DOCKET: 263 PREPARER NAME: Kevin Austin

UNIT\_NME: Monticello Unit 1 PREPARER TELEPHONE: 763-271-5875

RPT\_PERIOD: 201611

Design Electrical Rating: 656.3
 Maximum Dependable Capacity (MWe-Net) 628.2

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 338,402.92

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 333,998.12

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

3. Heserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 478,102.00 5,105,063.00 178,590,552.30

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY There was one planned downpower to 97.5% power on 11/2/16 for a rod pattern adjustment.

DOCKET: 263 PREPARER NAME: Kevin Austin

UNIT\_NME: Monticello Unit 1 PREPARER TELEPHONE: 763-271-5875

RPT\_PERIOD: 201612

Design Electrical Rating: 656.3
 Maximum Dependable Capacity (MWe-Net) 628.2

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 339,146.92

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 334,742.12

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 492,695.00 5,597,758.00 179,083,247.30

## **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY The reactor was operated at 100% power the entire month.

DOCKET: 220 PREPARER NAME: Sean Goodwin

UNIT\_NME: Nine Mile Point Unit 1 PREPARER TELEPHONE: 315-349-1213

RPT\_PERIOD: 201610

Design Electrical Rating: 613
 Maximum Dependable Capacity (MWe-Net) 565

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 319,286.05

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 314,064.93

 5. Reserve Shutdown Hours
 0.00
 0.00
 20.40

6. Net Electrical energy Generated (MWHrs) 456,456.76 4,484,361.15 180,624,044.52

## **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Exempt Losses (360 MWh total):

Feedwater Tech specification surveillance testing - 43 MWh. Load Line Adjustments - 317 MWh.

DOCKET: 220 PREPARER NAME: Sean Goodwin

UNIT\_NME: Nine Mile Point Unit 1 PREPARER TELEPHONE: 315-349-1213

RPT\_PERIOD: 201611

Design Electrical Rating: 613
 Maximum Dependable Capacity (MWe-Net) 565

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 320,007.05

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 314,785.93

 5. Reserve Shutdown Hours
 0.00
 0.00
 20.40

6. Net Electrical energy Generated (MWHrs) 445,646.75 4,930,007.90 181,069,691.27

## **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Exempt Losses (329 MWh total):

Rodline Adjustments - 329 MWh.

DOCKET: 220

PREPARER NAME: Sean Goodwin Nine Mile Point Unit 1 PREPARER TELEPHONE: 315-349-1213

RPT\_PERIOD: 201612

UNIT\_NME:

1. Design Electrical Rating: 613 2. Maximum Dependable Capacity (MWe-Net) 565

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 690.62 8,730.62 320,697.67 680.93 4. Number of Hours Generator On-line 8,720.93 315,466.86 5. Reserve Shutdown Hours 0.00 0.00 20.40

6. Net Electrical energy Generated (MWHrs) 412,970.47 181,482,661.74 5,342,978.37

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
N1F16 01	12/10/2016	F	63.07	А	2	Unit 1 Turbine Vibrations - IR 03951525

SUMMARY Exempt Losses (19 MWh total):

Rodline Adjustment - 19 MWh.

Significant Unplanned Energy Loss (46,846 MWh):

Forced Outage, N1F1601, Unit 1 Turbine Vibrations - IR 03951525 - 46,846 MWh.

DOCKET: 410 PREPARER NAME: Sean Goodwin

UNIT\_NME: Nine Mile Point Unit 2 PREPARER TELEPHONE: 315-349-1213

RPT\_PERIOD: 201610

Design Electrical Rating: 1299.9
 Maximum Dependable Capacity (MWe-Net) 1276.8

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,752.98
 216,863.73

 4. Number of Hours Generator On-line
 744.00
 6,716.69
 213,315.22

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 954,279.99 8,593,364.79 237,419,065.67

### **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Exempt Losses (466 MWh total):

SCRAM Time Testing - 17 MWh.

Expected Thermal Loss - 6th Point Feedwater Heater partition plate leakage - 449 MWh.

DOCKET: 410 PREPARER NAME: Sean Goodwin

UNIT\_NME: Nine Mile Point Unit 2 PREPARER TELEPHONE: 315-349-1213

RPT\_PERIOD: 201611

Design Electrical Rating: 1299.9
 Maximum Dependable Capacity (MWe-Net) 1276.8

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 568.67
 7,321.65
 217,432.40

 4. Number of Hours Generator On-line
 566.62
 7,283.31
 213,881.84

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 704,715.85 9,298,080.64 238,123,781.52

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
N2F16 01	11/24/2016	F	154.38	Α	1	Forced Outage, N2F1601, Reactor Recirculation A Motor Repair (IR 03944724).

SUMMARY Exempt Losses (415 MWh total):

Expected Thermal Loss - 6th Point Feedwater Heater partition plate leakage - 415 MWh.

Significant Unplanned Energy Loss (240,301 MWh):

Reactor Recirculation A Motor High Vibration - Manual Trip (IR 03944724) - 29923 MWh. Forced Outage, N2F1601, Reactor Recirculation A Motor Repair (IR 03944724) - 210,378 MWh.

DOCKET: 410 PREPARER NAME: Sean Goodwin

UNIT\_NME: Nine Mile Point Unit 2 PREPARER TELEPHONE: 315-349-1213

RPT\_PERIOD: 201612

Design Electrical Rating: 1299.9
 Maximum Dependable Capacity (MWe-Net) 1276.8

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 658.18
 7,979.83
 218,090.58

 4. Number of Hours Generator On-line
 652.35
 7,935.66
 214,534.19

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 825,025.81 10,123,106.45 238,948,807.33

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
N2F16 01	11/24/2016	F	91.65	А	4	Forced Outage, N2F1601, Reactor Recirculation A Motor Repair (IR 03944724).

SUMMARY Exempt Losses (305 MWh total):

Expected Thermal Loss - 6th Point Feedwater Heater partition plate leakage - 305 MWh.

Significant Unplanned Energy Loss (148,121 MWh):

Forced Outage, N2F1601, Reactor Recirculation A Motor Repair (IR 03944724) including startup - 148,121 MWh.

DOCKET: 338 PREPARER NAME: W.C.BEASLEY

UNIT\_NME: North Anna Unit 1 PREPARER TELEPHONE: 540-894-2520

RPT\_PERIOD: 201610

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 948

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 382.45
 6,477.05
 284,941.43

 4. Number of Hours Generator On-line
 365.65
 6,459.67
 281,126.00

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 314,321.10 6,196,584.76 248,794,045.21

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
N1- 2016- 001	9/10/2016	S	378.35	С	4	Scheduled refueling outage

#### SUMMARY Began the Month defueled.

At 0133 on 10-16-16, reactor is critical. At 1821 on 10-16-16 unit placed on line. At 0700 on 10-26-16, 99% power, 1022 MWe.

Ended the Month @ 100% Power, 1024 MWe.

Note: Unit held from 10/18/16 @ 2139 to 10/21/16 @ 2139 @ 81% power due to 1-SD-P-1A and 1-CN-P-1C unavailable. (9672 MW Unplanned energy loss forced). Exempt energy loss 32,701 ramping unit up after scheduled refueling outage.

DOCKET: 338 PREPARER NAME: W.C.BEASLEY

UNIT\_NME: North Anna Unit 1 PREPARER TELEPHONE: 540-894-2520

RPT\_PERIOD: 201611

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 948

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,198.05
 285,662.43

 4. Number of Hours Generator On-line
 721.00
 7,180.67
 281,847.00

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 705,856.79 6,902,441.55 249,499,902.00

# **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Began the Month @ 100% Power, 1024 MWe. Ended the Month @ 100% Power, 1030 MWe.

DOCKET: 338 PREPARER NAME: W.C.BEASLEY

UNIT\_NME: North Anna Unit 1 PREPARER TELEPHONE: 540-894-2520

RPT\_PERIOD: 201612

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 948

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,942.05
 286,406.43

 4. Number of Hours Generator On-line
 744.00
 7,924.67
 282,591.00

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 726,960.59 7,629,402.14 250,226,862.59

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Began the Month @ 100% Power, 1030 MWe. Ended the Month @ 100% Power, 1031 MWe.

Note: Unplanned Energy Loss due to 1-SD-P-1A Packing issues on 12-7-16 (386 MWe) and 12-19-17 (899 MWe) for a total of 1285 MWe.

DOCKET: 339 PREPARER NAME: W.C. BEASLEY

UNIT\_NME: North Anna Unit 2 PREPARER TELEPHONE: 540-894-2520

RPT\_PERIOD: 201610

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 944

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,398.95
 272,950.59

 4. Number of Hours Generator On-line
 744.00
 6,369.70
 271,085.19

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 723,008.11 6,059,727.21 241,856,139.06

# **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Began the Month @ 100% Power, 1018 MWe. Ended the Month @ 100% Power, 1027 MWe.

DOCKET: 339 PREPARER NAME: W.C.BEASLEY

UNIT\_NME: North Anna Unit 2 PREPARER TELEPHONE: 540-894-2520

RPT\_PERIOD: 201611

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 944

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,119.95
 273,671.59

 4. Number of Hours Generator On-line
 721.00
 7,090.70
 271,806.19

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 705,030.68 6,764,757.89 242,561,169.74

### **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Began the Month @ 100% Power, 1027 MWe. Ended the Month @ 100% Power, 1029 MWe.

DOCKET: 339 PREPARER NAME: W.C.BEASLEY

UNIT\_NME: North Anna Unit 2 PREPARER TELEPHONE: 540-894-2520

RPT\_PERIOD: 201612

Design Electrical Rating: 973
 Maximum Dependable Capacity (MWe-Net) 944

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,863.95
 274,415.59

 4. Number of Hours Generator On-line
 744.00
 7,834.70
 272,550.19

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 727,215.90 7,491,973.79 243,288,385.64

# **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Began the Month @ 100% Power, 1029 MWe. Ended the Month @ 100% Power, 1029 MWe.

DOCKET: 269 PREPARER NAME: Thomas Hunter UNIT\_NME: Oconee Unit 1 PREPARER TELEPHONE: Thomas Hunter

RPT\_PERIOD: 201610

Design Electrical Rating: 865
 Maximum Dependable Capacity (MWe-Net) 847

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 6,784.07 312,498.33
4. Number of Hours Generator On-line 744.00 6,743.38 308,340.09

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 621,751.00 5,693,319.00 254,749,376.00

# **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit One was at 100% Full Power (FP) at the beginning of October, 2016.

Unit One was at 100% FP at the end of October, 2016.

DOCKET: 269 PREPARER NAME: DOCKET: UNIT\_NME: Thomas Hunter

Oconee Unit 1 PREPARER TELEPHONE: 864-873-3986 RPT\_PERIOD: 201611

2. Maximum Dependable Capacity (MWe-Net)	847		
	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	202.52	6,986.59	312,700.85
4. Number of Hours Generator On-line	182.37	6,925.75	308,522.46
5. Reserve Shutdown Hours	0.00	0.00	0.00
6. Net Electrical energy Generated (MWHrs)	139,894.00	5,833,213.00	254,889,270.00

865

#### **UNIT SHUTDOWNS**

Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
11/4/2016	S	537.63	С	1 n	one
		F: Forced Date S: Scheduled	F: Forced Duration Date S: Scheduled (Hours)	F: Forced Duration Date S: Scheduled (Hours) Reason 1	F: Forced Duration Shutting Date S: Scheduled (Hours) Reason 1 Down 2

SUMMARY Unit One was at 100% Full Power (FP) at the beginning of November, 2016.

11/04/1619:00Began power decrease from 100% FP to ~20% FP for Unit 1 End of Cycle 29 shutdown for refueling outage.

11/04/1621:45Completed power decrease to ~19% FP.

11/04/1622:06Unit 1 Main Turbine Generator offline to start the Unit 1 End of Cycle 29 refueling outage.

11/04/1622:34Began power decrease from ~19% FP to 7% FP.

11/04/1622:40Stopped power decrease at 16.5% FP due to 1Feedwater-44 (1FDW-44, 1B Feedwater Startup Control Valve) failed closed.

11/05/1602:20Repairs to 1FDW-44 valve complete.

11/05/1602:25Resumed power decrease from 16.5% FP to 7% FP.

11/05/1602:48Completed power decrease to 7% FP.

11/05/1602:52Began power decrease from 7% FP to 3% FP.

11/05/1603:08Unit 1 reactor manually tripped.

11/26/1616:37Unit 1 reactor critical.

1. Design Electrical Rating:

11/27/1603:00Began reactor startup to ~15% FP.

11/27/1604:13Completed power increase to ~15% FP.

11/27/1604:30Began power increase from ~15% FP to ~19% FP.

11/27/1605:00Completed power increase to ~19% FP.

11/27/1607:44Unit 1 Main Turbine Generator online to end the Unit 1 End of Cycle 29 refueling outage.

11/27/1608:21Began power increase from ~19% FP to 25% FP.

11/27/1608:49Completed power increase to 25% FP.

11/27/1609:58Reactor power at 25% FP to perform a Nuclear Instrument calibration.

11/27/1613:48Began power increase from 25% FP to 49% FP following completion of Nuclear Instrument calibration.

11/27/1615:44Completed power increase to 49% FP.

11/27/1615:48Began power increase from 49% FP to 73% FP.

11/27/1620:50Completed power increase to 73% FP to perform Nuclear Instrument calibration and Power Imbalance Detector Correlation Testing.

11/28/1601:55Began power increase from 73% FP to 90% FP.

11/28/1605:30Completed power increase to 90% FP.

11/28/1606:00Began power increase from 90% FP to 99.5% FP.

DOCKET: 269 PREPARER NAME: Thomas Hunter UNIT\_NME: Oconee Unit 1 PREPARER TELEPHONE: 8648733986

RPT\_PERIOD: 201612

Design Electrical Rating: 865
 Maximum Dependable Capacity (MWe-Net) 847

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,730.59
 313,444.85

 4. Number of Hours Generator On-line
 744.00
 7,669.75
 309,266.46

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 638,848.00 6,472,061.00 255,528,118.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit One was at 100% Full Power (FP) at the beginning of December, 2016.

12/03/1608:17Began power decrease from 100% FP to 91% FP due to 1D1 Hotwell Drain Pump tripping on emergency low level.

12/03/1608:25Paused power decrease at ~98% FP to place 1B Feedwater Pump in hand.

12/03/1608:32Resumed power decrease to 91% FP.

12/03/1609:07Completed power decrease to 91% FP.

12/04/1619:24Began power increase from 91% FP to 100% FP after 1D1 Hotwell Drain Pump restart.

12/04/1621:13Completed power increase to 100% FP.

Unit One was at 100% FP at the end of December, 2016.

DOCKET: 270 PREPARER NAME: Thomas Hunter

UNIT\_NME: Oconee Unit 2 PREPARER TELEPHONE: Thomas Hunter

RPT\_PERIOD: 201610

Design Electrical Rating: 872
 Maximum Dependable Capacity (MWe-Net) 848

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,319.00 313,826.14
4. Number of Hours Generator On-line 744.00 7,319.00 310,629.57

5. Receive Shutdown Hours

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 636,941.00 6,338,617.00 257,157,252.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit Two was at 100% Full Power (FP) at the beginning of October, 2016.

10/01/1612:34Began power decrease from 100% FP to 96% FP in order to perform Turbine Valve Movement Periodic Test.

10/01/1612:57Completed power decrease to 96% FP.

10/01/1616:35Began power increase from 96% FP to 99.5% FP following completion of Turbine Valve Movement Periodic Test.

10/01/1617:11Completed power increase to 99.5% FP.

10/01/1617:24Began power increase from 99.5% FP to 100% FP.

10/01/1617:30Completed power increase to 100% FP.

Unit Two was at 100% FP at the end of October, 2016.

DOCKET: 270 PREPARER NAME: Thomas Hunter

UNIT\_NME: Oconee Unit 2 PREPARER TELEPHONE: 864-873-3986

RPT\_PERIOD: 201611

Design Electrical Rating: 872
 Maximum Dependable Capacity (MWe-Net) 848

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 314,547.14

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 311,350.57

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 622,847.00 6,961,464.00 257,780,099.00

# **UNIT SHUTDOWNS**

	Type			Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit Two was at 100% Full Power (FP) at the beginning of November, 2016.

Unit Two was at 100% FP at the end of November, 2016.

DOCKET: 270 PREPARER NAME: Thomas Hunter

UNIT\_NME: Oconee Unit 2 PREPARER TELEPHONE: 8648733986

RPT\_PERIOD: 201612

Design Electrical Rating: 872
 Maximum Dependable Capacity (MWe-Net) 848

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 315,291.14

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 312,094.57

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 648,363.00 7,609,827.00 258,428,462.00

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit Two was at 100% Full Power (FP) at the beginning of December, 2016.

12/09/1612:00Began power decrease from 100% FP to 96% FP in order to perform Turbine Valve Movement Periodic Test.

12/09/1612:30Completed power decrease to 96% FP.

12/09/1614:04Began power increase from 96% FP to 100% FP following completion of Turbine Valve Movement Periodic Test.

12/09/1615:00Completed power increase to 100% FP.

Unit Two was at 100% FP at the end of December, 2016.

DOCKET: 287 PREPARER NAME: Thomas Hunter

UNIT\_NME: Oconee Unit 3 PREPARER TELEPHONE: Thomas Hunter

RPT\_PERIOD: 201610

Design Electrical Rating: 881
 Maximum Dependable Capacity (MWe-Net) 859

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 6,774.34 306,602.88
4. Number of Hours Generator On-line 744.00 6,750.95 303,298.74

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 641,037.00 5,814,743.00 254,576,491.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit Three was at 100% Full Power (FP) at the beginning of October, 2016.

10/31/1617:10Operator Aid Computer (OAC) alarm received due to a failed gateway hard drive. Loss of this computer signal resulted in an automatic power reduction of ~0.75% FP. Power decreased from 100% FP to ~99.25% FP.

10/31/1619:22OAC gateway hard drive replaced. Power increased from ~99.25% FP to 100% FP.

Unit Three was at 100% FP at the end of October, 2016.

DOCKET: 287 PREPARER NAME: Thomas Hunter

UNIT\_NME: Oconee Unit 3 PREPARER TELEPHONE: 864-873-3986

RPT\_PERIOD: 201611

Design Electrical Rating: 881
 Maximum Dependable Capacity (MWe-Net) 859

This Month Yr-to-Date Cumulative

3. Number of Hours the Reactor was Critical 721.00 7,495.34 307,323.88

4. Number of Hours Generator On-line 721.00 7,471.95 304,019.74

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 628,026.00 6,442,769.00 255,204,517.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit Three was at 100% Full Power (FP) at the beginning of November, 2016.

11/11/1612:35Began power decrease from 100% FP to 96% FP in order to perform Turbine Valve Movement Periodic Test.

11/11/1612:56Completed power decrease to 96% FP.

11/11/1614:43Began power increase from 96% FP to 99.5% FP following completion of Turbine Valve Movement Periodic Test.

11/11/1615:18Completed power increase to 99.5% FP.

11/11/1615:35Began power increase from 99.5% FP to 100% FP.

11/11/1615:40Completed power increase to 100% FP.

Unit Three was at 100% FP at the end of November, 2016.

DOCKET: 287 PREPARER NAME: Thomas Hunter UNIT\_NME: Oconee Unit 3 PREPARER TELEPHONE: 8648733986

RPT\_PERIOD: 201612

1. Design Electrical Rating: 881 2. Maximum Dependable Capacity (MWe-Net) 859

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,239.34 308,067.88 4. Number of Hours Generator On-line 744.00 8,215.95 304,763.74

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 652,454.00 7,095,223.00 255,856,971.00

### **UNIT SHUTDOWNS**

Method of **Type** F: Forced **Duration Shutting Cause - Corrective Action** No. (Hours) Down 2 **Comments Date** S: Scheduled Reason 1

SUMMARY Unit Three was at 100% Full Power (FP) at the beginning of December, 2016.

Unit Three was at 100% FP at the end of December, 2016.

DOCKET: 219 PREPARER NAME: C. Lefler

UNIT\_NME: Oyster Creek Unit 1 PREPARER TELEPHONE: 609-971-2158

RPT\_PERIOD: 201610

Design Electrical Rating: 650
 Maximum Dependable Capacity (MWe-Net) 619

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 479.60 6,411.49 323,618.43 4. Number of Hours Generator On-line 450.62 6,314.95 318,186.45 5. Reserve Shutdown Hours 0.00 0.00 918.20 6. Net Electrical energy Generated (MWHrs) 274,148.00 3,861,731.00 185,690,858.40

**UNIT SHUTDOWNS** 

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2		
1R26	9/19/2016	S	293.38	С	4	1R26 Refuel Outage	

SUMMARY The unplanned energy loss for October was 0 MWhrs.

The planned and refuel energy losses are as follows:

- 1. 83,608 MWhrs Planned for 1R26, startup, and the follow-up load drop
- 2. 190,196 MWhrs Refuel Outage losses total for 1R26
- 3. 114,796 MWhrs for Outage Extension losses for 1R26
- 4. 8,208 MWhrs Exempt for startup from 1R26 and the follow-up load drop

DOCKET: 219 PREPARER NAME: C. Lefler

UNIT\_NME: Oyster Creek Unit 1 PREPARER TELEPHONE: 609-971-2158

RPT\_PERIOD: 201611

Design Electrical Rating: 650
 Maximum Dependable Capacity (MWe-Net) 619

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	643.92	7,055.41	324,262.35
4. Number of Hours Generator On-line	626.37	6,941.32	318,812.82
5. Reserve Shutdown Hours	0.00	0.00	918.20
6. Net Electrical energy Generated (MWHrs)	376,621.00	4,238,352.00	186,067,479.40

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1F39	11/20/2016	F	94.63	А	3	Reactor Scram on High Flux due to Turbine Control Oscillations IR 3943014

SUMMARY The planned and exempt energy loss for November was 3,770 MWhrs for rod pattern adjustment and turbine control valve testing.

The unplanned energy losses for November were 78,857 MWhrs for the following:

- 1. 64,625 MWhrs for OC1F39 Forced Outage and subsequent ramp-up to 85% power.
- 2. 14,232 MWhrs for reduced power (85%) due to turbine oscillations.

DOCKET: 219 PREPARER NAME: C. Lefler

UNIT\_NME: Oyster Creek Unit 1 PREPARER TELEPHONE: 609-971-2158

RPT\_PERIOD: 201612

Design Electrical Rating: 650
 Maximum Dependable Capacity (MWe-Net) 619

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 632.25
 7,687.66
 324,894.60

 4. Number of Hours Generator On-line
 610.65
 7,551.97
 319,423.47

 5. Reserve Shutdown Hours
 0.00
 0.00
 918.20

6. Net Electrical energy Generated (MWHrs) 346,851.00 4,585,203.00 186,414,330.40

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1M40	12/13/2016	S	133.35	В	1	1M40 Maintenance Outage

SUMMARY The exempt energy loss for December was 276 MWhrs for rod pattern adjustment.

The unplanned energy losses for December were 124,209 MWhrs for the following:

- 1. 25,743.6 MWhrs for reduced power (85%) due to turbine oscillations (IR 3945099).
- 2. 4,804.5 MWhrs for ramp down to OC1M40.
- 3. 86,666.7 MWhrs for OC1M40 Maintenance Outage.
- 4. 6,717.6 MWhrs for ramp up after OC1M40.
- 5. 276.2 MWhrs for rod pattern adjustment

The End of Year (EOY) Online Reliability Loss Factor is 9.16% which is unfavorably above the goal of 0.50% (IR02664708).

DOCKET: 255 PREPARER NAME: E Edwards

UNIT\_NME: Palisades Unit 1 PREPARER TELEPHONE: 269-764-2086

RPT\_PERIOD: 201610

Design Electrical Rating: 805
 Maximum Dependable Capacity (MWe-Net) 777

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 278,103.97

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 271,879.70

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 595,017.22 5,855,517.00 197,023,122.49

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Palisades operated at full power during the month of October, 2016.

DOCKET: 255 PREPARER NAME: Daniel Clemens

UNIT\_NME: Palisades Unit 1 PREPARER TELEPHONE: 269-764-2707

RPT\_PERIOD: 201611

Design Electrical Rating: 805
 Maximum Dependable Capacity (MWe-Net) 777

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 278,824.97

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 272,600.70

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 580,097.54 6,435,614.54 197,603,220.03

#### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Palisades operated at full power during the month of November, 2016.

DOCKET: 255 PREPARER NAME: RLevack

UNIT\_NME: Palisades Unit 1 PREPARER TELEPHONE: 269-764-2068

RPT\_PERIOD: 201612

Design Electrical Rating: 805
 Maximum Dependable Capacity (MWe-Net) 777

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,784.00 279,568.97
4. Number of Hours Generator On-line 744.00 8,784.00 273,344.70

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 605,673.79 7,041,288.33 198,208,893.82

# **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Palisades operated at full power for the month of December 2016.

DOCKET: 528 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 1 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201610

Design Electrical Rating: 1333
 Maximum Dependable Capacity (MWe-Net) 1311

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,374.62
 220,359.13

 4. Number of Hours Generator On-line
 744.00
 6,298.82
 218,145.67

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 985,275.51 8,121,338.12 268,825,724.12

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 528 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 1 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201611

Design Electrical Rating: 1333
 Maximum Dependable Capacity (MWe-Net) 1311

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 720.00
 7,094.62
 221,079.13

 4. Number of Hours Generator On-line
 720.00
 7,018.82
 218,865.67

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 956,922.16 9,078,260.28 269,782,646.28

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

DOCKET: 528 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 1 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201612

Design Electrical Rating: 1333
 Maximum Dependable Capacity (MWe-Net) 1311

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,838.62
 221,823.13

 4. Number of Hours Generator On-line
 744.00
 7,762.82
 219,609.67

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 990,479.38 10,068,739.66 270,773,125.66

# **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

DOCKET: 529 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 2 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201610

Design Electrical Rating: 1336
 Maximum Dependable Capacity (MWe-Net) 1314

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,320.00
 222,812.76

 4. Number of Hours Generator On-line
 744.00
 7,320.00
 220,789.81

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 989,245.15 9,738,956.36 278,588,084.86

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 529 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 2 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201611

1. Design Electrical Rating: 1336 2. Maximum Dependable Capacity (MWe-Net) 1314

Yr-to-Date This Month Cumulative 3. Number of Hours the Reactor was Critical 720.00 8,040.00 223,532.76 4. Number of Hours Generator On-line 720.00 8,040.00 221,509.81

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 961,755.77 10,700,712.13 279,549,840.63

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 529 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 2 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201612

Design Electrical Rating: 1336
 Maximum Dependable Capacity (MWe-Net) 1314

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 224,276.76

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 222,253.81

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 996,238.63 11,696,950.76 280,546,079.26

# **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

DOCKET: 530 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 3 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201610

Design Electrical Rating: 1334
 Maximum Dependable Capacity (MWe-Net) 1312

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 168.00
 6,678.03
 217,204.08

 4. Number of Hours Generator On-line
 168.00
 6,659.53
 215,369.66

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 208,477.64 8,746,201.77 269,211,090.76

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
16-02	10/8/2016	S	576.00	С	1	Manually tripped the RX to commence 19th refueling outage.

SUMMARY The unit began the month in Mode 1 with the reactor at full power. On October 2nd at 1734 the unit began a planned RX power end of cycle coastdown. On October 7th at 2000 the unit began a planned RX power decrease to shutdown the RX for refueling. The reactor was manually tripped from 20% on October 8th at 0000 and entered Mode 3 to commence the R19 outage. The unit entered Mode 4 and Mode 5 on October 8th. The unit entered Mode 6 on October 12th. The unit entered a defueled condition on October 16th. The unit began fuel reload and entered Mode 6 on October 24th and Mode 5 on October 27th. The unit ended the month in Mode 5 with the R19 in progress.

DOCKET: 530 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 3 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201611

Design Electrical Rating: 1334
 Maximum Dependable Capacity (MWe-Net) 1312

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	626.45	7,304.48	217,830.53
4. Number of Hours Generator On-line	597.48	7,257.01	215,967.14
5. Reserve Shutdown Hours	0.00	0.00	0.00

6. Net Electrical energy Generated (MWHrs) 741,900.48 9,488,102.25 269,952,991.24

# **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
16-02	10/8/2016	S	122.52	С	4	Manually tripped the RX to commence 19th refueling outage.

SUMMARY The unit began the month in Mode 5 with R19 refueling outage in progress. The unit entered Mode 4 and Mode 3 on November 1st. The unit entered Mode 2 on November 4th and went critical at 2133. Mode 1 was reached on November 5th and the unit was synchronized to the grid at 1737 the same day in preparation for planned overspeed testing. The turbine was taken off-line on November 6th at 0000 for the test. Testing was completed successfully and the unit was re-synchronized to the grid at 0231. Completed power ascension for 3R19 to full power on November 8th at 1557. The unit ended the month in Mode 1 with the reactor power at full power.

DOCKET: 530 PREPARER NAME: Pete McSparran

UNIT\_NME: Palo Verde Unit 3 PREPARER TELEPHONE: 623-393-6224

RPT\_PERIOD: 201612

Design Electrical Rating: 1334
 Maximum Dependable Capacity (MWe-Net) 1312

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,048.48 218,574.53
4. Number of Hours Generator On-line 744.00 8,001.01 216,711.14

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 989,324.20 10,477,426.45 270,942,315.44

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

DOCKET: 277 PREPARER NAME: Brad Deihl

UNIT\_NME: Peach Bottom Unit 2 PREPARER TELEPHONE: 717-456-4420

RPT\_PERIOD: 201610

Design Electrical Rating: 1308
 Maximum Dependable Capacity (MWe-Net) 1217

This Month Yr-to-Date Cumulative 297,374.04 3. Number of Hours the Reactor was Critical 553.35 7,128.35 4. Number of Hours Generator On-line 552.08 7,104.30 292,524.73 5. Reserve Shutdown Hours 0.00 0.00 0.00 6. Net Electrical energy Generated (MWHrs) 627,338.30 8,899,222.90 305,476,258.80

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
P2R21	10/24/2016	S	191.92	С	1	On October 23, 2016 at 01:08, Unit 2 commenced a planned ramp down to P2R21 Refueling Outage. Turbine Trip/Generator Breaker open on 10/24/16 at 00:05. Reactor entered Mode 3 Hot Shutdown on 10/24/16 at 01:21.  On November 10, 2016 at 04:18, Unit 2 Reactor achieved criticality following P2R21 Refueling Outage. The main generator was synchronized to the Grid on 11/11/16 at 06:08 and full power was reached on 11/13/16 at 04:56.

SUMMARY Unit 2 began the month of October at 3878 MWth, 98.6% of maximum allowable power (3951 MWth) due to P2R21 coast down.

On October 23, 2016 at 01:08, Unit 2 commenced a planned ramp down to P2R21 Refueling Outage. Turbine Trip/Generator Breaker open on 10/24/16 at 00:05. Reactor entered Mode 3 Hot Shutdown on 10/24/16 at 01:21.

Unit 2 ended the month of October at 0.0% of maximum allowable power (3951 MWth) due to P2R21 Refueling Outage.

DOCKET: 277 PREPARER NAME: Brad Deihl

UNIT\_NME: Peach Bottom Unit 2 PREPARER TELEPHONE: 717-456-4420

RPT\_PERIOD: 201611

Design Electrical Rating: 1308
 Maximum Dependable Capacity (MWe-Net) 1217

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 499.70 7,628.05 297,873.74 4. Number of Hours Generator On-line 473.87 7,578.17 292,998.60 5. Reserve Shutdown Hours 0.00 0.00 0.00 6. Net Electrical energy Generated (MWHrs) 590,278.80 9,489,501.70 306,066,537.60

**UNIT SHUTDOWNS** 

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
P2R21 10/	/24/2016	S	246.13	C	4	On October 23, 2016 at 01:08, Unit 2 commenced a planned ramp down to P2R21 Refueling Outage. Turbine Trip/Generator Breaker open on 10/24/16 at 00:05. Reactor entered Mode 3 Hot Shutdown on 10/24/16 at 01:21.  On November 10, 2016 at 04:18, Unit 2 Reactor achieved criticality following P2R21 Refueling Outage. The main generator was synchronized to the Grid on 11/11/16 at 06:08 and full power was reached on 11/13/16 at 04:56.

SUMMARY Unit 2 began the month of November at 0.0% of maximum allowable power (3951 MWth) due to P2R21 refueling outage.

On November 10, 2016 at 04:18, Unit 2 Reactor achieved criticality following P2R21 Refueling Outage. The main generator was synchronized to the Grid on 11/11/16 at 06:08 and full power was reached on 11/13/16 at 04:56.

On November 13, 2016 at 23:01, Unit 2 commenced a planned load reduction for a follow up Rod Pattern Adjustment. Minimum power of 3135 MWth (79.3% CTP) was reached on 11/13/16 at 23:28. The Unit was returned to 100% power on November 14, 2016 at 12:37.

On November 16, 2016 at 09:01, Unit 2 commenced an unplanned load reduction to address hight turbine generator vibration levels. Minimum power of 3551 MWth (89.9% CTP) was reached on 11/16/16 at 14:19. The Unit was returned to 100% power on November 16, 2016 at 17:01.

Unit 2 ended the month of November at 100.0% of maximum allowable power (3951 MWth).

Brad Deihl DOCKET: 277 PREPARER NAME:

UNIT\_NME: Peach Bottom Unit 2 PREPARER TELEPHONE: 717-456-4420

RPT\_PERIOD: 201612

1. Design Electrical Rating: 1308 2. Maximum Dependable Capacity (MWe-Net) 1217

This Month Yr-to-Date Cumulative 298,617.74 3. Number of Hours the Reactor was Critical 744.00 8,372.05 4. Number of Hours Generator On-line 744.00 8,322.17 293,742.60 5. Reserve Shutdown Hours

0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 987,189.50 10,476,691.20 307,053,727.10

### **UNIT SHUTDOWNS**

Method of **Type** F: Forced **Duration Shutting Cause - Corrective Action** No. (Hours) Down 2 **Comments Date** S: Scheduled Reason 1

SUMMARY Unit 2 began the month of December at 100.0% of maximum allowable power (3951 MWth).

There were no planned or unplanned load reductions on Unit 2 for the month of December.

Unit 2 ended the month of December at 100.0% of maximum allowable power (3951 MWth).

DOCKET: 278 PREPARER NAME: Brad Deihl

UNIT\_NME: Peach Bottom Unit 3 PREPARER TELEPHONE: 717-456 -4420

RPT\_PERIOD: 201610

Design Electrical Rating: 1309
 Maximum Dependable Capacity (MWe-Net) 1234

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 296,377.15

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 291,914.05

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 950,242.10 9,459,112.70 303,495,566.30

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 3 began the month of October at the 100% of maximum allowable power (3951 MWth).

On October 15, 2016 at 22:02, Unit 3 commenced a planned load reduction for 3C RFP Venturi Flow Element Leak Repair. Minimum power of 821.1 MWth (20.8% CTP) was reached on 10/16/16 at 08:02. The Unit was returned to 100% power on October 17, 2016 at 10:25.

On October 18, 2016 at 01:02, Unit 3 commenced a planned load reduction for follow up rod pattern adjustment. Minimum power of 3330.2 MWth (84.3% CTP) was reached on 10/18/16 at 01:47. The Unit was returned to 100% power on October 18, 2016 at 06:48.

Unit 3 ended the month of October at the 100% of maximum allowable power (3951 MWth).

DOCKET: 278 PREPARER NAME: Brad Deihl

UNIT\_NME: Peach Bottom Unit 3 PREPARER TELEPHONE: 717-456-4420

RPT\_PERIOD: 201611

Design Electrical Rating: 1309
 Maximum Dependable Capacity (MWe-Net) 1234

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 8,040.00 297,098.15
4. Number of Hours Generator On-line 721.00 8,040.00 292,635.05

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 957,237.80 10,416,350.50 304,452,804.10

#### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 3 began the month of November at the 100% of maximum allowable power (3951 MWth).

There were no planned or unplanned load reductions on Unit 3 for the month of November.

Unit 3 ended the month of November at the 100% of maximum allowable power (3951 MWth).

DOCKET: 278 PREPARER NAME: Brad Deihl

UNIT\_NME: Peach Bottom Unit 3 PREPARER TELEPHONE: 717-456-4420

RPT\_PERIOD: 201612

Design Electrical Rating: 1309
 Maximum Dependable Capacity (MWe-Net) 1234

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,784.00 297,842.15
4. Number of Hours Generator On-line 744.00 8,784.00 293,379.05

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 990,387.50 11,406,738.00 305,443,191.60

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 3 began the month of December at the 100% of maximum allowable power (3951 MWth).

On December 30, 2016 at 23:02, Unit 3 commenced a planned load reduction for HCU maintenance. Minimum power of 3380 MWth (85.5% CTP) was reached on 12/31/16 at 00:12. The Unit was returned to 100% power on December 31, 2016 at 02:05.

Unit 3 ended the month of December at the 100% of maximum allowable power (3951 MWth).

DOCKET: 440 PREPARER NAME: T. Phelps
UNIT\_NME: Perry Unit 1 PREPARER TELEPHONE: 440-280-7660

RPT\_PERIOD: 201610

Design Electrical Rating: 1268
 Maximum Dependable Capacity (MWe-Net) 1240

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,049.70
 212,659.52

 4. Number of Hours Generator On-line
 744.00
 6,969.47
 208,743.58

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 938,957.50 8,557,351.50 246,481,898.20

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The Perry Nuclear Power Plant was on line the entire month of October,2016.

DOCKET: 440 PREPARER NAME: T. Phelps
UNIT\_NME: Perry Unit 1 PREPARER TELEPHONE: 440-280-7660

RPT\_PERIOD: 201611

Design Electrical Rating: 1268
 Maximum Dependable Capacity (MWe-Net) 1240

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,770.70
 213,380.52

 4. Number of Hours Generator On-line
 721.00
 7,690.47
 209,464.58

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 916,911.20 9,474,262.70 247,398,809.40

#### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY The Perry Nuclear Power Plant was on line the entire month of November, 2016.

DOCKET: 440 PREPARER NAME: T. Phelps
UNIT\_NME: Perry Unit 1 PREPARER TELEPHONE: 440-280-7660

RPT\_PERIOD: 201612

Design Electrical Rating: 1268
 Maximum Dependable Capacity (MWe-Net) 1240

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,514.70
 214,124.52

 4. Number of Hours Generator On-line
 744.00
 8,434.47
 210,208.58

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 946,026.07 10,420,288.77 248,344,835.47

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The Perry Nuclear Power Plant was on line the entire month of December, 2016.

DOCKET: 293 PREPARER NAME: Brent Lyons

UNIT\_NME: Pilgrim Unit 1 PREPARER TELEPHONE: 508-830-8270

RPT\_PERIOD: 201610

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 684.7

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,984.10
 296,010.77

 4. Number of Hours Generator On-line
 744.00
 6,903.07
 292,991.81

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 490,223.00 4,550,393.32 181,798,889.85

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Pilgrim entered October 2016 operating at 100% Rated Core Thermal Power (RCTP). On October 18th, 2016 at 04:00, reactor power was reduced to perform a Thermal Backwash of the Main Condenser. On October 19th, 2016 at 08:34, reactor power was once again returned to 100% RCTP. The minimum reactor power level achieved during the evolution was 45.5%. On October 20th, 2016 at 17:00, reactor power was reduced to perform a control rod pattern adjustment. On October 20th, 2016 at 18:11, reactor power was once again returned to 100% RCTP. The minimum reactor power level achieved during the evolution was 84.7%. Reactor power was maintained at 100% RCTP throughout the remainder of the month.

DOCKET: 293 PREPARER NAME: Brent Lyons
UNIT\_NME: Pilgrim Unit 1 PREPARER TELEPHONE: 508-830-8270

RPT\_PERIOD: 201611

Design Electrical Rating: 690
 Maximum Dependable Capacity (MWe-Net) 684.7

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,705.10
 296,731.77

 4. Number of Hours Generator On-line
 721.00
 7,624.07
 293,712.81

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 487,635.00 5,038,028.32 182,286,524.85

# **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Pilgrim entered November 2016 operating at 100% Rated Core Thermal Power (RCTP) and maintained this power level throughout the month.

DOCKET: 293 PREPARER NAME: Brent Lyons
UNIT\_NME: Pilgrim Unit 1 PREPARER TELEPHONE: 508-830-8270

RPT\_PERIOD: 201612

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 684.7

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 615.20
 8,320.30
 297,346.97

 4. Number of Hours Generator On-line
 598.45
 8,222.52
 294,311.26

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 374,804.00 5,412,832.32 182,661,328.85

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
4	12/16/2016	F	145.55	A	1	On December 15th, 2016 at 15:30, active Limited Condition for Operation (LCO) ACT 1-16-265 was entered due to a body to bonnet leak on MSIV AO-203-2D (CR-PNP-2016-10040). On December 16th, 2016 at 16:11 with reactor power at 22% RCTP, a reactor shutdown was initiated and reactor power was reduced. On December 16th, 2016 at 18:38 with reactor power at approximately 11% RCTP, the main turbine was manually tripped and the main generator removed from the grid. On December 16th, 2016 23:42, reactor power was reduced to approximately 5% RCTP and the reactor was manually scrammed in accordance with controlled shutdown procedures. Following the repair of MSIV AO-203-2D, on December 22nd, 2016 at 00:32, operators commenced control rod withdrawl for reactor startup and at 08:30, the reactor was declared critical. On December 22nd, 2016 at 20:11, the Main Turbine Generator was synchronized to the grid. On December 23rd, 2016 at 08:41, the reactor attained 100% RCTP.

SUMMARY Pilgrim entered December 2016 operating at 100% Rated Core Thermal Power (RCTP). On December 14th, 2016 at 19:38, a planned reactor power reduction commenced to verify the functionality of Main Turbine Stop Valve (SV-2). On December 15th, 2016 at 05:00, reactor power was stabilized at 22% RCTP. On December 15th, 2016 at 07:27, reactor power was again reduced and 7.7% RCTP was achieved at 11:05. As part of the SV-2 testing, on December 15th, 2016 at 12:25, the main turbine generator was tripped and removed from the grid. On December 15th, 2016 at 14:25, with reactor power at approximately 7.7% RCTP, reactor power was increased and 22% RCTP was achieved at 17:30 and the Main Turbine Generator was synchronized back onto the grid. On December 15th, 2016 at 15:30, active Limited Condition for Operation (LCO) ACT 1-16-0265 was entered due to a body to bonnet leak on MSIV AO-203-2D (CR-PNP-2016-10040). On December 16th, 2016 at 16:11 with reactor power at 22% RCTP, a reactor shutdown was initiated and reactor power was reduced. On December 16th, 2016 at 18:38 with reactor power at approximately 11% RCTP, the main turbine was manually tripped and the main generator removed from the grid. On December 16th, 2016 23:42, reactor power was reduced to approximately 5% RCTP and the reactor was manually scrammed in accordance with normal controlled shutdown procedures. Following the repair of MSIV AO-203-2D, on December 22nd, 2016 at 00:32, operators commenced control rod withdrawl for reactor startup and at 08:30, the reactor was declared critical. On December 22nd, 2016 at 20:11, the Main Turbine Generator was synchronized to the grid. On December 23rd, 2016 at 09:30, the reactor attained 100% RCTP. On December 23rd, 2016 at 12:30, operators commenced a reactor downpower to adjust the control rod pattern. On December 23rd, 2016 at 15:12, the reactor was returned to 100% RCTP. The minimum reactor power level achieved during the evolution was 69.3% RCTP. On December 24th, 2016 at 11:00, operators once again commenced a downpower to adjust the control rod pattern. On December 24th, 2016 at 13:43, reactor power was once again returned to 100% RCTP. The minimum reactor power level achieved during the evolution was 70.5%. Reactor power was maintained at 100%RCTP throughout the remainder of the month.

DOCKET: 266 PREPARER NAME: R Clark

UNIT\_NME: Point Beach Unit 1 PREPARER TELEPHONE: 920-755-7500

RPT\_PERIOD: 201610

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 576

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,755.47
 342,497.70

 4. Number of Hours Generator On-line
 744.00
 6,730.48
 338,387.41

 5. Reserve Shutdown Hours
 0.00
 0.00
 846.90

6. Net Electrical energy Generated (MWHrs) 443,963.40 3,989,513.40 164,595,773.20

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

PREPARER NAME: DOCKET: 266 R Clark

Point Beach Unit 1 UNIT\_NME: PREPARER TELEPHONE: 920-755-7500

RPT\_PERIOD: 201611

1. Design Electrical Rating: 615 2. Maximum Dependable Capacity (MWe-Net) 576

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 721.00 7,476.47 343,218.70 4. Number of Hours Generator On-line 721.00 7,451.48 339,108.41 5. Reserve Shutdown Hours 0.00 0.00 846.90 6. Net Electrical energy Generated (MWHrs) 433,629.70 165,029,402.90

4,423,143.10

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 266 PREPARER NAME: R Clark

UNIT\_NME: Point Beach Unit 1 PREPARER TELEPHONE: 920-755-7500

RPT\_PERIOD: 201612

Design Electrical Rating: 615
 Maximum Dependable Capacity (MWe-Net) 576

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,220.47
 343,962.70

 4. Number of Hours Generator On-line
 744.00
 8,195.48
 339,852.41

 5. Reserve Shutdown Hours
 0.00
 0.00
 846.90

6. Net Electrical energy Generated (MWHrs) 447,961.90 4,871,105.00 165,477,364.80

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 301 PREPARER NAME: R Clark

UNIT\_NME: Point Beach Unit 2 PREPARER TELEPHONE: 920-755-7500

RPT\_PERIOD: 201610

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 578

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 335,522.65

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 331,959.52

 5. Reserve Shutdown Hours
 0.00
 0.00
 302.20

6. Net Electrical energy Generated (MWHrs) 447,638.40 4,397,898.90 164,277,071.70

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 301 PREPARER NAME: R Clark

UNIT\_NME: Point Beach Unit 2 PREPARER TELEPHONE: 920-755-7500

RPT\_PERIOD: 201611

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 578

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 336,243.65

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 332,680.52

 5. Reserve Shutdown Hours
 0.00
 0.00
 302.20

6. Net Electrical energy Generated (MWHrs) 435,499.70 4,833,398.60 164,712,571.40

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 301 PREPARER NAME: R Clark

UNIT\_NME: Point Beach Unit 2 PREPARER TELEPHONE: 920-755-7500

RPT\_PERIOD: 201612

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 578

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 336,987.65

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 333,424.52

 5. Reserve Shutdown Hours
 0.00
 0.00
 302.20

6. Net Electrical energy Generated (MWHrs) 448,766.90 5,282,165.50 165,161,338.30

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

DOCKET: 282 PREPARER NAME: Jonathan Pomales

UNIT\_NME: Prairie Island Unit 1 PREPARER TELEPHONE: 651-267-6420

RPT\_PERIOD: 201610

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 522.1

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 339.52
 6,914.52
 329,864.80

 4. Number of Hours Generator On-line
 337.08
 6,912.08
 327,198.02

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 176,993.00 3,683,515.00 166,610,113.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1R30	10/15/2016	S	406.92	С	1	On 11/20/2016, Unit 1 Turbine Generator was synchronized to the grid per 1C1.2-M1 after completion of refueling outage 1R30.

SUMMARY Unit 1 offline for refueling outage 1R30.

DOCKET: 282 PREPARER NAME: Jonathan Pomales

UNIT\_NME: Prairie Island Unit 1 PREPARER TELEPHONE: 651-267-6420

RPT\_PERIOD: 201611

Design Electrical Rating: 557
 Maximum Dependable Capacity (MWe-Net) 522.1

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 265.78
 7,180.30
 330,130.58

 4. Number of Hours Generator On-line
 246.60
 7,158.68
 327,444.62

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 113,838.00 3,797,353.00 166,723,951.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1R30	10/15/2016	S	473.40	С	4	On 11/20/2016, Unit 1 Turbine Generator was synchronized to the grid per 1C1.2-M1 after completion of refueling outage 1R30.

SUMMARY 19080 MWHr lost due to outage ramp-up 274203.2 MWHr lost due to outage 30.68 MWhr lost due to SP 1101

DOCKET: 282 PREPARER NAME: Laura Jean Noonan

UNIT\_NME: Prairie Island Unit 1 PREPARER TELEPHONE: 651-267-6449

RPT\_PERIOD: 201612

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 522.1

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,924.30
 330,874.58

 4. Number of Hours Generator On-line
 744.00
 7,902.68
 328,188.62

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 410,350.00 4,207,703.00 167,134,301.00

#### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 1 was baseloaded for the month of December

DOCKET: 306 PREPARER NAME: Jonathan Pomales

Prairie Island Unit 2 UNIT\_NME: PREPARER TELEPHONE: 651-267-6420

RPT\_PERIOD: 201610

1. Design Electrical Rating: 557 2. Maximum Dependable Capacity (MWe-Net) 518.8

Cumulative This Month Yr-to-Date 3. Number of Hours the Reactor was Critical 744.00 6,057.23 325,474.94 323,225.26 4. Number of Hours Generator On-line 744.00 6,034.63

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 409,699.00 3,251,036.00 164,324,571.00

#### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2 was baseloaded for the month of October 2016.

DOCKET: 306 PREPARER NAME: Jonathan Pomales

UNIT\_NME: Prairie Island Unit 2 PREPARER TELEPHONE: 651-267-6420

RPT\_PERIOD: 201611

Design Electrical Rating: 557
 Maximum Dependable Capacity (MWe-Net) 518.8

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 6,778.23
 326,195.94

 4. Number of Hours Generator On-line
 721.00
 6,755.63
 323,946.26

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 400,847.00 3,651,883.00 164,725,418.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY 22.3 MWHrs due to WO 554639 Loop B feedwater flow oscillations on 11/21/16 12.2 MWhrs due to 22 main feedwater regulating valve control

DOCKET: 306 PREPARER NAME: Laura Jean Noonan

UNIT\_NME: Prairie Island Unit 2 PREPARER TELEPHONE: 651-267-6449

RPT\_PERIOD: 201612

Design Electrical Rating: 557
 Maximum Dependable Capacity (MWe-Net) 518.8

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,522.23 326,939.94
4. Number of Hours Generator On-line 744.00 7,499.63 324,690.26

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 414,198.00 4,066,081.00 165,139,616.00

## **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY 76.9 MWhr downpower for CV-31136 troubleshooting

DOCKET: 254 PREPARER NAME: Lisa J Clark

UNIT\_NME: Quad Cities Unit 1 PREPARER TELEPHONE: 309-227-2815

RPT\_PERIOD: 201610

1. Design Electrical Rating: 963.99 2. Maximum Dependable Capacity (MWe-Net) 887.2

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 7,319.00 325,667.88 4. Number of Hours Generator On-line 744.00 7,319.00 319,719.34 5. Reserve Shutdown Hours 0.00 0.00 1,655.20 6. Net Electrical energy Generated (MWHrs) 685,397.00 6,734,325.00 234,670,283.00

## **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit 1

10/29 - 10/30/2016, 1468 MWh, EREL, Turbine Testing (PEL) 10/4, 10/9, 10/10, 10/11, 10/12, 10/13, 10/14, 10/15, 10/17, 10/18, 10/22, 10/23, 10/27, 10/28/2016, 6954 MWh, Not P or U, Advanced Nuclear

Dispatch UPEL - none

DOCKET: 254 PREPARER NAME: Lisa J. Clark

UNIT\_NME: Quad Cities Unit 1 PREPARER TELEPHONE: 309-227-2815

RPT\_PERIOD: 201611

Design Electrical Rating: 963.99
 Maximum Dependable Capacity (MWe-Net) 887.2

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 721.00 8,040.00 326,388.88 4. Number of Hours Generator On-line 721.00 8,040.00 320,440.34 5. Reserve Shutdown Hours 0.00 0.00 1,655.20 6. Net Electrical energy Generated (MWHrs) 674,567.00 7,408,892.00 235,344,850.00

#### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit 1

11/4, 11/18, 11/28/2016, 1559 MWh, Not P or U, Advanced Nuclear Dispatch 11/19/2016, 259 MWh, EREL, Rod Pattern Adjustment (PEL)

UPEL - none

DOCKET: 254 PREPARER NAME: Cindy Berry

UNIT\_NME: Quad Cities Unit 1 PREPARER TELEPHONE: 309-227-2812

RPT\_PERIOD: 201612

Design Electrical Rating: 963.99
 Maximum Dependable Capacity (MWe-Net) 887.2

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 8,784.00 744.00 327,132.88 4. Number of Hours Generator On-line 744.00 8,784.00 321,184.34 5. Reserve Shutdown Hours 0.00 0.00 1,655.20 6. Net Electrical energy Generated (MWHrs) 695,290.00 8,104,182.00 236,040,140.00

#### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit 1

12/4, 12/5/2016, 529 MWh, Not P or U, Advanced Nuclear Dispatch

12/17/2016, 777 MWh, EREL, Turbine Testing (PEL)

12/18/2016, 89 MWh, Feedwater Heater Transient 1C3 IR03954352, (UPEL) 12/23/2016, 2017 MWh, Feedwater Heater Transient 1D1 IR 03956145, (UPEL)

DOCKET: 265 PREPARER NAME: Lisa J Clark

UNIT\_NME: Quad Cities Unit 2 PREPARER TELEPHONE: 309-227-2815

RPT\_PERIOD: 201610

Design Electrical Rating: 957.3
 Maximum Dependable Capacity (MWe-Net) 888

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 6,904.20 317,809.90 4. Number of Hours Generator On-line 744.00 6,870.73 312,516.33 5. Reserve Shutdown Hours 0.00 0.00 2,312.90 6. Net Electrical energy Generated (MWHrs) 687,898.00 6,188,781.00 236,292,391.00

#### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Unit 2

10/8 - 10/9/2016, 1841 MWh, EREL, Turbine Testing (PEL)

10/16, 10/17, 10/22, 10/23/2016, 1177 MWh, Not P or U, Advanced Nuclear Dispatch

UPEL - none

DOCKET: 265 PREPARER NAME: Lisa J. Clark

UNIT\_NME: Quad Cities Unit 2 PREPARER TELEPHONE: 309-227-2815

RPT\_PERIOD: 201611

Design Electrical Rating: 957.3
 Maximum Dependable Capacity (MWe-Net) 888

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 721.00 7,625.20 318,530.90 721.00 4. Number of Hours Generator On-line 7,591.73 313,237.33 5. Reserve Shutdown Hours 0.00 0.00 2,312.90 6. Net Electrical energy Generated (MWHrs) 669,240.00 6,858,021.00 236,961,631.00

#### **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2

11/4, 11/7, 11/10, 11/17, 11/18, 11/21, 11/26, 11/29/2016, 3032 MWh, Not P or U, Advanced Nuclear Dispatch

PEL - none UPEL - none

DOCKET: 265 PREPARER NAME: Cindy Berry

Quad Cities Unit 2 UNIT\_NME: PREPARER TELEPHONE: 309-227-2812

RPT\_PERIOD: 201612

1. Design Electrical Rating: 957.3 2. Maximum Dependable Capacity (MWe-Net) 888

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,369.20 319,274.90 4. Number of Hours Generator On-line 744.00 8,335.73 313,981.33 5. Reserve Shutdown Hours 0.00 0.00 2,312.90 6. Net Electrical energy Generated (MWHrs) 692,852.00 7,550,873.00 237,654,483.00

#### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2

12/4, 12/5, 12/6/2016, 1160 MWh, Not P or U, Advanced Nuclear Dispatch 12/3/2016, 746 MWh, EREL, Turbine Testing (PEL)

UPEL - none

DOCKET: 458 PREPARER NAME: Thomas J. Bolke

UNIT\_NME: River Bend Unit 1 PREPARER TELEPHONE: (225)381-3719

RPT\_PERIOD: 201610

Design Electrical Rating: 967
 Maximum Dependable Capacity (MWe-Net) 967

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 6,139.91 230,829.78
4. Number of Hours Generator On-line 744.00 6,035.82 225,842.65

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 719,965.00 5,677,889.00 208,161,497.00

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

**SUMMARY** 

DOCKET: 458 PREPARER NAME: Thomas J. Bolke

UNIT\_NME: River Bend Unit 1 PREPARER TELEPHONE: (225)381-3719

RPT\_PERIOD: 201611

Design Electrical Rating: 967
 Maximum Dependable Capacity (MWe-Net) 967

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 6,860.91
 231,550.78

 4. Number of Hours Generator On-line
 721.00
 6,756.82
 226,563.65

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 702,590.00 6,380,479.00 208,864,087.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

**SUMMARY** 

DOCKET: 458 PREPARER NAME: Thomas J. Bolke

UNIT\_NME: River Bend Unit 1 PREPARER TELEPHONE: (225)381-3791

RPT\_PERIOD: 201612

Design Electrical Rating: 967
 Maximum Dependable Capacity (MWe-Net) 967

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,604.91
 232,294.78

 4. Number of Hours Generator On-line
 744.00
 7,500.82
 227,307.65

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 728,378.00 7,108,857.00 209,592,465.00

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

**SUMMARY** 

DOCKET: 261 PREPARER NAME: T. Surma

UNIT\_NME: Robinson Unit 2 PREPARER TELEPHONE: 843-857-1086

RPT\_PERIOD: 201610

Design Electrical Rating: 795
 Maximum Dependable Capacity (MWe-Net) 741

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 697.22
 6,993.82
 319,773.23

 4. Number of Hours Generator On-line
 687.50
 6,975.21
 316,026.04

 5. Reserve Shutdown Hours
 0.00
 0.00
 23.20

6. Net Electrical energy Generated (MWHrs) 496,234.00 5,291,994.00 216,194,644.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
R230 M3	10/8/2016	F	56.50	Н	3	Auto Scram due to grid disturbance during Hurricane Matthew (LOOP).

SUMMARY Grid Losses (52,119 MWH) due to auto scram resulting from grid disturbance during Hurricane Matthew (LOOP).

DOCKET: 261 PREPARER NAME: T. Surma

UNIT\_NME: Robinson Unit 2 PREPARER TELEPHONE: 843-857-1086

RPT\_PERIOD: 201611

Design Electrical Rating: 795
 Maximum Dependable Capacity (MWe-Net) 741

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,714.82
 320,494.23

 4. Number of Hours Generator On-line
 721.00
 7,696.21
 316,747.04

 5. Reserve Shutdown Hours
 0.00
 0.00
 23.20

6. Net Electrical energy Generated (MWHrs) 549,817.00 5,841,811.00 216,744,461.00

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY No November losses.

DOCKET: 261 PREPARER NAME: T. Surma

UNIT\_NME: Robinson Unit 2 PREPARER TELEPHONE: 843-857-1086

RPT\_PERIOD: 201612

Design Electrical Rating: 795
 Maximum Dependable Capacity (MWe-Net) 741

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,458.82
 321,238.23

 4. Number of Hours Generator On-line
 744.00
 8,440.21
 317,491.04

 5. Reserve Shutdown Hours
 0.00
 0.00
 23.20

6. Net Electrical energy Generated (MWHrs) 590,377.00 6,432,188.00 217,334,838.00

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY No December plant losses.

DOCKET: 272 PREPARER NAME: Alexander Barch
UNIT\_NME: Salem Unit 1
PREPARER TELEPHONE: (856) 339-2545

UNIT\_NME: Salem Unit 1 PREPARER TELEPHONE: (856) 339-2545
RPT\_PERIOD: 201610

Design Electrical Rating:
 1169

Maximum Dependable Capacity (MWe-Net)
 This Month Yr-to-Date Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 4,790.57
 252,847.77

 4. Number of Hours Generator On-line
 744.00
 4,748.57
 247,020.09

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 877,859.00 5,298,225.00 265,534,843.00

## **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Planned loss for 13B CWP, unplanned losses for 1B HDT Level Controller Degradation, and 14B FWH tuning

DOCKET: 272 PREPARER NAME: Alexander Barch UNIT\_NME: Salem Unit 1 PREPARER TELEPHONE: 856-339-2545

RPT\_PERIOD: 201611

Design Electrical Rating: 1169
 Maximum Dependable Capacity (MWe-Net) 1116

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 5,511.57
 253,568.77

 4. Number of Hours Generator On-line
 721.00
 5,469.57
 247,741.09

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 824,941.00 6,123,166.00 266,359,784.00

#### **UNIT SHUTDOWNS**

		Type		Method of			
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Planned losses from Main Turbine Valve Testing, forced losses from degraded HEater Drain Tank Level controller, Steam Generator Feed Pump control system ground repairs, SGFP seized during startup, and Circ Water Pump trip due to high sodium.

DOCKET: 272 PREPARER NAME: Alexander Barch UNIT\_NME: Salem Unit 1 PREPARER TELEPHONE: 856-339-2545

RPT\_PERIOD: 201612

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 1169
 1116

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,255.57
 254,312.77

 4. Number of Hours Generator On-line
 744.00
 6,213.57
 248,485.09

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 879,147.00 7,002,313.00 267,238,931.00

## **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Major derates for December 2016 were degradation of 1B HDT Level Controller and Condenser Tube Leaks.

DOCKET: 311 PREPARER NAME: Alexander Barch

UNIT\_NME: Salem Unit 2 PREPARER TELEPHONE: (856) 339-2545 RPT\_PERIOD: 201610

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 1181
 1134

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,063.40
 230,822.88

 4. Number of Hours Generator On-line
 744.00
 6,196.46
 225,694.73

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 869,105.00 7,050,900.00 243,154,273.00

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Planned Loss from 22B CWP scheduled maintenance

DOCKET: 311 PREPARER NAME: Alexander Barch

UNIT\_NME: Salem Unit 2 PREPARER TELEPHONE: 856-339-2545

RPT\_PERIOD: 201611

Design Electrical Rating: 1181
 Maximum Dependable Capacity (MWe-Net) 1134

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 7,784.40 231,543.88
4. Number of Hours Generator On-line 721.00 6,917.46 226,415.73

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 846,765.00 7,897,665.00 244,001,038.00

## **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY No planned energy losses for Salem 2 in November 2016. One forced loss for 22B Circ Water Pump OOS for Travelling Water Screen Repairs.

DOCKET: 311 PREPARER NAME: Alexander Barch

UNIT\_NME: Salem Unit 2 PREPARER TELEPHONE: 856-339-2545

RPT\_PERIOD: 201612

Design Electrical Rating: 1181
 Maximum Dependable Capacity (MWe-Net) 1134

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,528.40
 232,287.88

 4. Number of Hours Generator On-line
 744.00
 7,661.46
 227,159.73

 5. Reserve Shutdown Hours
 6.00
 6.00
 6.00

6. Net Electrical energy Generated (MWHrs) 875,501.00 8,773,166.00 244,876,539.00

#### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY No major derates for Salem 2 for December 2016

DOCKET: 443 PREPARER NAME: Kathleen C. Mahoney

UNIT\_NME: Seabrook Unit 1 PREPARER TELEPHONE: 603-773-7077

RPT\_PERIOD: 201610

Design Electrical Rating: 1248
 Maximum Dependable Capacity (MWe-Net) 1246

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,214.72 206,860.73
4. Number of Hours Generator On-line 744.00 7,202.37 203,210.90
5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 928,334.37 8,929,860.95 237,380,524.44

#### **UNIT SHUTDOWNS**

		Type		Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY The unit operated at 100% power 744 out of 744 hours this month. This yielded an availability factor of 100% and a capacity factor of 100.1414% based on the MDC of 1246 MWe.

DOCKET: 443 PREPARER NAME: KAthleen C. Mahoney

UNIT\_NME: Seabrook Unit 1 PREPARER TELEPHONE: 603-773-7077

RPT\_PERIOD: 201611

Design Electrical Rating: 1248
 Maximum Dependable Capacity (MWe-Net) 1246

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,935.72
 207,581.73

 4. Number of Hours Generator On-line
 721.00
 7,923.37
 203,931.90

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 900,873.40 9,830,734.35 238,281,397.84

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated at 100% power 721 out of 721 hours this month. This yielded an availability factor of 100% and a capacity factor of 100.2791% based on the MDC of 1246 MWe.

DOCKET: 443 PREPARER NAME: Kathleen C. Mahoney

UNIT\_NME: Seabrook Unit 1 PREPARER TELEPHONE: 603-773-7077

RPT\_PERIOD: 201612

Design Electrical Rating: 1248
 Maximum Dependable Capacity (MWe-Net) 1246

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,679.72
 208,325.73

 4. Number of Hours Generator On-line
 744.00
 8,667.37
 204,675.90

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 929,819.90 10,760,554.25 239,211,217.74

#### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated at 100% power 739 out of 744 hours this month. This yielded an availability factor of 100% and a capacity factor of 100.3016% based on the MDC of 1246 MWe.

DOCKET: 327 PREPARER NAME: Marlena Northington

UNIT\_NME: Sequoyah Unit 1 PREPARER TELEPHONE: 423-751-2950

RPT\_PERIOD: 201610

Design Electrical Rating: 1184.37
 Maximum Dependable Capacity (MWe-Net) 1152

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,257.22
 235,465.81

 4. Number of Hours Generator On-line
 744.00
 6,182.37
 232,857.34

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 847,406.00 6,986,645.40 258,887,061.60

## **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY U1 NRC Capacity Factor is 98.9% for the month of October 2016.

DOCKET: 327 PREPARER NAME: Wright, Jared

Sequoyah Unit 1 UNIT\_NME: PREPARER TELEPHONE: 423-843-8418

RPT\_PERIOD: 201611

1. Design Electrical Rating: 1184.37 2. Maximum Dependable Capacity (MWe-Net) 1152

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 600.98 6,858.20 236,066.79 4. Number of Hours Generator On-line 600.98 6,783.35 233,458.32 5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 686,973.90 7,673,619.30 259,574,035.50

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
1	11/25/2016	S	120.02	С	1	Refueling Outage Cycle 21

SUMMARY U1 NRC Capacity Factor is 82.7% for the month of November 2016.

DOCKET: 327 PREPARER NAME: Wright, Jared

UNIT\_NME: Sequoyah Unit 1 PREPARER TELEPHONE: 423-843-8418

RPT\_PERIOD: 201612

Design Electrical Rating: 1184.37
 Maximum Dependable Capacity (MWe-Net) 1152

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.38	6,858.58	236,067.17
4. Number of Hours Generator On-line	0.00	6,783.35	233,458.32
5. Reserve Shutdown Hours	0.00	0.00	0.00

6. Net Electrical energy Generated (MWHrs) 0.00 7,673,619.30 259,574,035.50

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1	11/25/2016	S	744.00	С	4	Refueling Outage Cycle 21

SUMMARY U1 NRC Capacity Factor is 0% for the month of December 2016.

DOCKET: 328 PREPARER NAME: Marlena Northington

UNIT\_NME: Sequoyah Unit 2 PREPARER TELEPHONE: 423-751-2950

RPT\_PERIOD: 201610

Design Electrical Rating: 1177.46
 Maximum Dependable Capacity (MWe-Net) 1139.5

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,285.27
 240,850.28

 4. Number of Hours Generator On-line
 744.00
 7,060.80
 237,690.33

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 841,502.00 7,910,058.90 259,849,829.40

#### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced S: Scheduled	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date		(Hours)	Reason 1	Down 2	Comments	

SUMMARY U2 NRC Capacity Factor is 99.3% for the month of October 2016.

DOCKET: 328 PREPARER NAME: Wright, Jared

UNIT\_NME: Sequoyah Unit 2 PREPARER TELEPHONE: 423-843-8418

RPT\_PERIOD: 201611

Design Electrical Rating: 1177.46
 Maximum Dependable Capacity (MWe-Net) 1139.5

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,006.27
 241,571.28

 4. Number of Hours Generator On-line
 721.00
 7,781.80
 238,411.33

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 827,571.10 8,737,630.00 260,677,400.50

#### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY U2 NRC Capacity Factor is 100.7% for the month of November 2016.

DOCKET: 328 PREPARER NAME: Wright, Jared

Sequoyah Unit 2 UNIT\_NME: PREPARER TELEPHONE: 423-843-8418

RPT\_PERIOD: 201612

1. Design Electrical Rating: 1177.46 2. Maximum Dependable Capacity (MWe-Net) 1139.5

This Month Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,750.27 242,315.28 4. Number of Hours Generator On-line 744.00 239,155.33 8,525.80 5. Reserve Shutdown Hours 0.00

0.00 0.00

6. Net Electrical energy Generated (MWHrs) 857,965.60 9,595,595.60 261,535,366.10

#### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY U2 NRC Capacity Factor is 101.2% for the month of December 2016.

DOCKET: 498 PREPARER NAME: R.L.Hill

UNIT\_NME: South Texas Unit 1 PREPARER TELEPHONE: 3619727667

RPT\_PERIOD: 201610

Design Electrical Rating: 1250.6
 Maximum Dependable Capacity (MWe-Net) 1250.6

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,155.37
 210,284.28

 4. Number of Hours Generator On-line
 744.00
 7,133.77
 205,525.86

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 971,697.00 9,343,541.00 260,000,575.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY Normal operation

DOCKET: 498 PREPARER NAME: R.L. Hill

UNIT\_NME: South Texas Unit 1 PREPARER TELEPHONE: 3619727667

RPT\_PERIOD: 201611

Design Electrical Rating: 1250.6
 Maximum Dependable Capacity (MWe-Net) 1250.6

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,876.37
 211,005.28

 4. Number of Hours Generator On-line
 721.00
 7,854.77
 206,246.86

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 952,689.00 10,296,230.00 260,953,264.00

#### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Main turbine inlet valve test.

PREPARER NAME: DOCKET: 498 R.L. Hill

South Texas Unit 1 UNIT\_NME: PREPARER TELEPHONE: 3619727667

RPT\_PERIOD: 201612

1. Design Electrical Rating: 1250.6 2. Maximum Dependable Capacity (MWe-Net) 1250.6

Yr-to-Date Cumulative **This Month** 3. Number of Hours the Reactor was Critical 744.00 8,620.37 211,749.28 4. Number of Hours Generator On-line 744.00 206,990.86 8,598.77

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 991,913.00 11,288,143.00 261,945,177.00

#### **UNIT SHUTDOWNS**

		Type	Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Normal operation

DOCKET: 499 PREPARER NAME: R.L. Hill

UNIT\_NME: South Texas Unit 2 PREPARER TELEPHONE: 3619727667

RPT\_PERIOD: 201610

Design Electrical Rating: 1250.6
 Maximum Dependable Capacity (MWe-Net) 1250.6

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 193.82
 6,768.82
 200,748.47

 4. Number of Hours Generator On-line
 191.00
 6,766.00
 198,129.28

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 236,141.00 8,851,204.00 250,441,542.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
85	10/8/2016	S	553.00	С	1 2	2RE18 Refueling Outage

SUMMARY Normal refueling.

DOCKET: 499 PREPARER NAME: R.L. Hill

UNIT\_NME: South Texas Unit 2 PREPARER TELEPHONE: 3619727667

RPT\_PERIOD: 201611

Design Electrical Rating: 1250.6
 Maximum Dependable Capacity (MWe-Net) 1250.6

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 533.47
 7,302.29
 201,281.94

 4. Number of Hours Generator On-line
 514.22
 7,280.22
 198,643.50

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 607,360.00 9,458,564.00 251,048,902.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2		
85	10/8/2016	S	205.78	С	4	2RE18 Refueling Outage	

SUMMARY Normal refueling and reactor power ascension.

DOCKET: 499 PREPARER NAME: R.L. Hill

UNIT\_NME: South Texas Unit 2 PREPARER TELEPHONE: 3619727667

RPT\_PERIOD: 201612

Design Electrical Rating: 1250.6
 Maximum Dependable Capacity (MWe-Net) 1250.6

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,046.29
 202,025.94

 4. Number of Hours Generator On-line
 744.00
 8,024.22
 199,387.50

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 994,355.00 10,452,919.00 252,043,257.00

#### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Normal operation

DOCKET: 335 PREPARER NAME: K R Boller

UNIT\_NME: St. Lucie Unit 1 PREPARER TELEPHONE: 772 467-7465

RPT\_PERIOD: 201610

Design Electrical Rating: 1062
 Maximum Dependable Capacity (MWe-Net) 981

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	5,878.79	291,850.70
4. Number of Hours Generator On-line	0.00	5,805.92	289,210.32
5. Reserve Shutdown Hours	0.00	0.00	0.00
6. Net Electrical energy Generated (MWHrs)	0.00	5,704,096.00	243,039,731.00

# **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	Cause - Corrective Action Comments
43	9/26/2016	S	744.00	С	4	Scheduled refueling and maintenance SL1-27.

SUMMARY PSL 1 remained offline the entire report period for refueling and maintenance.

DOCKET: 335 PREPARER NAME: K R Boller

UNIT\_NME: St. Lucie Unit 1 PREPARER TELEPHONE: 772 467-7465

RPT\_PERIOD: 201611

Design Electrical Rating: 1062
 Maximum Dependable Capacity (MWe-Net) 981

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 547.12
 6,425.91
 292,397.82

 4. Number of Hours Generator On-line
 509.13
 6,315.05
 289,719.45

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 468,320.00 6,172,416.00 243,508,051.00

#### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
43	9/26/2016	S	210.87	С	4	Scheduled refueling and maintenance SL1-27.

SUMMARY PSL 1 returned to mode 1 operation at 14:20 on 11/9/2016 and remained in mode 1 through the end of the report period.

PREPARER NAME: DOCKET: 335 K R Boller

UNIT\_NME: St. Lucie Unit 1 PREPARER TELEPHONE: 772 467-7465

RPT\_PERIOD: 201612

1. Design Electrical Rating: 1062 2. Maximum Dependable Capacity (MWe-Net) 981

Yr-to-Date **This Month** Cumulative 3. Number of Hours the Reactor was Critical 744.00 7,169.91 293,141.82 4. Number of Hours Generator On-line 744.00 290,463.45 7,059.05

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 746,509.00 244,254,560.00 6,918,925.00

## **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY PSL 1 operated in mode 1 the entire reprort period.

DOCKET: 389 PREPARER NAME: K R Boller

UNIT\_NME: St. Lucie Unit 2 PREPARER TELEPHONE: 772 467-7465

RPT\_PERIOD: 201610

Design Electrical Rating: 1074
 Maximum Dependable Capacity (MWe-Net) 987

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 569.47
 7,144.47
 251,612.07

 4. Number of Hours Generator On-line
 564.10
 7,139.10
 249,018.76

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

5. Heselve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 545,429.00 7,183,759.00 211,474,830.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
44	10/6/2016	F	179.90	Н	1	Unscheduled shutdown due to the approach of Hurricane Matthew. Shutdown characterized as Outside Management Control (OMC) and "excluded" per NEI 99-02 reporting guidelines.

SUMMARY PSL 2 operated in mode 1 until 11:14 on 10/6/2016. PSL 2 returned to mode 1 at 18:58 on 10/13/2016 and remained in mode 1 through the end of the report period.

DOCKET: 389 PREPARER NAME: K R Boller

UNIT\_NME: St. Lucie Unit 2 PREPARER TELEPHONE: 772 467-7465

RPT\_PERIOD: 201611

Design Electrical Rating: 1074
 Maximum Dependable Capacity (MWe-Net) 987

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 7,865.47 252,333.07
4. Number of Hours Generator On-line 721.00 7,860.10 249,739.76

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 730,570.00 7,914,329.00 212,205,400.00

### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY PSL 2 operated in mode 1 the entire report period.

DOCKET: 389 PREPARER NAME: K R Boller

UNIT\_NME: St. Lucie Unit 2 PREPARER TELEPHONE: 772 467-7465

RPT\_PERIOD: 201612

Design Electrical Rating: 1074
 Maximum Dependable Capacity (MWe-Net) 987

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,609.47 253,077.07
4. Number of Hours Generator On-line 744.00 8,604.10 250,483.76

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 755,199.00 8,669,528.00 212,960,599.00

# **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY PSL 2 operated in mode 1 the entire report period.

DOCKET: 395 PREPARER NAME: Wesley R. Higgins

UNIT\_NME: Summer Unit 1 PREPARER TELEPHONE: 8033454042

RPT\_PERIOD: 201610

Design Electrical Rating: 972.7
 Maximum Dependable Capacity (MWe-Net) 966

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,319.00
 248,644.90

 4. Number of Hours Generator On-line
 744.00
 7,319.00
 246,016.96

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 735,016.00 7,207,834.00 225,568,866.00

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The plant operated at full power for the month of October 2016.

DOCKET: 395 PREPARER NAME: Wesley R. Higgins

UNIT\_NME: Summer Unit 1 PREPARER TELEPHONE: 8033454042

RPT\_PERIOD: 201611

Design Electrical Rating: 972.7
 Maximum Dependable Capacity (MWe-Net) 966

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 8,040.00 249,365.90
4. Number of Hours Generator On-line 721.00 8,040.00 246,737.96

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 712,643.00 7,920,477.00 226,281,509.00

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY On 11/11/2016 at 04:17 the unit was down powered to 88.5% due to the malfunction of #1B Feedwater Heater Drain Valve Level Controller. This required the isolation of #1B Feedwater Heater to repair the level controller. The plant was returned to full power on 11/11/2016 at 23:59.

DOCKET: 395 PREPARER NAME: Wesley R. Higgins

UNIT\_NME: Summer Unit 1 PREPARER TELEPHONE: 8033454042

RPT\_PERIOD: 201612

Design Electrical Rating: 972.7
 Maximum Dependable Capacity (MWe-Net) 966

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 8,784.00 250,109.90
4. Number of Hours Generator On-line 744.00 8,784.00 247,481.96

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 737,884.00 8,658,361.00 227,019,393.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The plant operated at full power for the month of December 2016 except for a 12/2/2016 reduction in power to 92% for Turbine Stop Valve testing.

DOCKET: 280 PREPARER NAME: Marlene Haskett UNIT\_NME: Surry Unit 1 PREPARER TELEPHONE: 757-365-2146

RPT\_PERIOD: 201610

Design Electrical Rating: 874
 Maximum Dependable Capacity (MWe-Net) 838

This Month Yr-to-Date Cumulative 504.52 3. Number of Hours the Reactor was Critical 7,079.52 305,411.31 4. Number of Hours Generator On-line 504.50 7,079.50 302,213.26 5. Reserve Shutdown Hours 0.00 0.00 3,736.20 6. Net Electrical energy Generated (MWHrs) 429,088.09 6,087,018.23 234,061,026.27

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1G-22	10/22/2016	S	239.50	С	1	10/22/2016 @ 0031 Unit 1 is off-line for Refueling Outage 11/11/2016 @ 0925 Unit on line. Output breakers closed.

SUMMARY Unit 1 Waterboxes

Start MWe Finish MWe LossStart Time

Finish Time

Total hours

10/10/2016Removing 1-CW-E-1D from service912897 1510/10/16 1:00 AM10/12/16 4:30 AM39.30 10/12/2016Removing 1-CW-E-1A from service914894 2010/12/16 4:40 AM10/13/16 2:00 PM33.20 10/13/2016Removing 1-CW-E-1C from service910897 1310/13/16 4:21 PM10/15/16 12:01 AM31.40 10/15/2016Removing 1-CW-E-1B from service914900 1410/15/16 1:15 AM10/16/16 4:59 PM39.44

U1 2016 RFO

10/22/2016 @ 0031 Unit 1 is off-line for Refueling Outage

DOCKET: 280 PREPARER NAME: Marlene Haskett UNIT\_NME: Surry Unit 1 PREPARER TELEPHONE: 757-365-2146

RPT\_PERIOD: 201611

Design Electrical Rating: 874
 Maximum Dependable Capacity (MWe-Net) 838

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 488.17 7,567.69 305,899.48 4. Number of Hours Generator On-line 470.58 7,550.08 302,683.84 5. Reserve Shutdown Hours 0.00 0.00 3,736.20 6. Net Electrical energy Generated (MWHrs) 395,463.48 6,482,481.71 234,456,489.75

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
1G-22	10/22/2016	S	249.42	С	4	10/22/2016 @ 0031 Unit 1 is off-line for Refueling Outage 11/11/2016 @ 0925 Unit on line. Output breakers closed.

SUMMARY U1 RFO 16

11/10/20161550 - Unit 1 Rx is critical.

11/11/20160925 - Unit on line. Output breakers closed.

11/13/20161000 - U1 Returned to Full Power 100% power, 920 Mwe

Unit 1 Waterbox (MOV Leakage Test)Start MWe Finish MWe LossStart Time Finish Time 11/27/2016Removing 1-CW-E-1A from service 922 913 911/27/16 11:18 PM11/28/16 4:30 AM

DOCKET: 280 PREPARER NAME: Marlene Haskett UNIT\_NME: Surry Unit 1 PREPARER TELEPHONE: 757-365-2146

RPT\_PERIOD: 201612

Design Electrical Rating: 874
 Maximum Dependable Capacity (MWe-Net) 838

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,311.69 306,643.48 4. Number of Hours Generator On-line 744.00 8,294.08 303,427.84 5. Reserve Shutdown Hours 0.00 0.00 3,736.20 6. Net Electrical energy Generated (MWHrs) 628,684.48 7,111,166.18 235,085,174.22

### **UNIT SHUTDOWNS**

		Type		Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY 12/15/2016

@1800 Unit 1 is at 100% power, 923 MWe

@1801 Failure of 1-FW-P-1A - A Main Feed Pump outboard seal

12/18/2016

@1619 Unit 1 has returned to full power 913 MWe

DOCKET: 281 PREPARER NAME: Marlene Haskett UNIT\_NME: Surry Unit 2 PREPARER TELEPHONE: 757-365-2146

RPT\_PERIOD: 201610

Design Electrical Rating: 874
 Maximum Dependable Capacity (MWe-Net) 838

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 653.72
 7,228.72
 303,150.58

 4. Number of Hours Generator On-line
 650.70
 7,225.70
 300,334.30

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 557,497.45 6,216,089.53 232,973,242.15

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
2G-18	10/9/2016	F	93.30	А	3	10/09/16 0254 U2 Reactor Trip on Generator Differential Lockout. 10/13/2016 0012 Closed Output breaker G202 to place Unit 2 Main Generator online

SUMMARY Generator Differential Lockout

10/9/2016

0254 U2 Reactor Trip on Generator Differential Lockout.

10/13/2016

0012 Closed Output breaker G202 to place Unit 2 Main Generator online

1707 U2 Returned to Full Power 100% power 907 MWe

DOCKET: 281 PREPARER NAME: Marlene Haskett
UNIT\_NME: Surry Unit 2 PREPARER TELEPHONE: 757-365-2146

UNIT\_NME: Surry Unit 2 PREPARER TELEPHONE: 757-365-2146 RPT\_PERIOD: 201611

Design Electrical Rating: 874
 Maximum Dependable Capacity (MWe-Net) 838

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,949.72
 303,871.58

 4. Number of Hours Generator On-line
 721.00
 7,946.70
 301,055.30

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 630,273.35 6,846,362.89 233,603,515.51

### **UNIT SHUTDOWNS**

		Type	Method of			
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY Unit 2 Waterbox (MOV Stroke/Timing Testing) Start MWe Finish MWeLossStart Time Finish Time 11/20/2016Removing 2-CW-E-1A from service 915 904 1111/20/16 12:02 AM11/20/16 1:01 AM 11/20/2016Removing 2-CW-E-1B from service 915 904 1211/20/16 2:18 AM11/20/16 2:27 AM

11/20/2016Removing 2-CW-E-1B from service 916 904 1211/20/16 2:18 AM11/20/16 2:37 AM 11/20/2016Removing 2-CW-E-1C from service 914 908 611/20/16 1:27 AM11/20/16 1:54 AM 11/20/2016Removing 2-CW-E-1D from service 916 908 811/20/16 3:00 AM11/20/16 3:22 AM

DOCKET: 281 PREPARER NAME: Marlene Haskett UNIT\_NME: Surry Unit 2 PREPARER TELEPHONE: 757-365-2146

RPT\_PERIOD: 201612

Design Electrical Rating: 874
 Maximum Dependable Capacity (MWe-Net) 838

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,693.72
 304,615.58

 4. Number of Hours Generator On-line
 744.00
 8,690.70
 301,799.30

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 652,990.91 7,499,353.80 234,256,506.42

### **UNIT SHUTDOWNS**

	Type				Method of	f		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>		
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments		

SUMMARY

DOCKET: 387 PREPARER NAME: J. Hennings

UNIT\_NME: Susquehanna Unit 1 PREPARER TELEPHONE: 570-542-3747

RPT\_PERIOD: 201610

Design Electrical Rating: 1287
 Maximum Dependable Capacity (MWe-Net) 1257

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 5,666.06
 250,055.85

 4. Number of Hours Generator On-line
 744.00
 5,550.72
 246,602.69

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 949,019.00 6,874,636.00 270,155,832.70

### **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY On 10/14/16 power was reduced in preparation for a planned Control Rod sequence exchange. Lowest power was 67%. Full power was achieved on 10/15/16.

Generation losses from this routine control rod adjustment, and other testing, contributed to INPO's SPEL (Exempt) loss classification.

While at full power on 10/31/16 21:25, a Reactor Recirc Pump tripped resulting in an Unplanned Power Reduction of approximately 77.2%. The lowest power experienced was 22.8%.

Following repairs, the power ascension ramp to 100% power was completed on 11/03/16.

DOCKET: 387 PREPARER NAME: J. Hennings

UNIT\_NME: Susquehanna Unit 1 PREPARER TELEPHONE: 570-542-3747

RPT\_PERIOD: 201611

Design Electrical Rating: 1287
 Maximum Dependable Capacity (MWe-Net) 1257

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 6,387.06
 250,776.85

 4. Number of Hours Generator On-line
 721.00
 6,271.72
 247,323.69

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 911,346.00 7,785,982.00 271,067,178.70

## **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY Unit 1 began this month with a ramp-up following a 10/31/16 unplanned Reactor Recirc Pump trip. 100% power was achieved on 11/03/16. There were no power reductions greater than 20 % this month.

DOCKET: 387 PREPARER NAME: J Hennings

UNIT\_NME: Susquehanna Unit 1 PREPARER TELEPHONE: 570-542-3747

RPT\_PERIOD: 201612

Design Electrical Rating: 1287
 Maximum Dependable Capacity (MWe-Net) 1257

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,131.06
 251,520.85

 4. Number of Hours Generator On-line
 744.00
 7,015.72
 248,067.69

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 963,682.00 8,749,664.00 272,030,860.70

### **UNIT SHUTDOWNS**

		Type		Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There was one power reduction greater than 20 % this month. On 12/16/16 reactor power was reduced to approximately 72.% for a planned Control Rod pattern adjustment and scram time testing. Full power was achieved on 12/17/16.

DOCKET: 388 PREPARER NAME: J. Hennings

UNIT\_NME: Susquehanna Unit 2 PREPARER TELEPHONE: 570-542-3747

RPT\_PERIOD: 201610

Design Electrical Rating: 1287
 Maximum Dependable Capacity (MWe-Net) 1257

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 607.45
 7,108.52
 246,767.78

 4. Number of Hours Generator On-line
 576.85
 7,057.95
 243,669.55

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 701,195.00 8,824,309.00 269,647,970.30

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
U2- 2016-2	10/1/2016	S	167.15	В	1	The Main Turbine was manually tripped at 10/01/16 04:29 to begin a planned turbine outage. All Control Rods were reported as being inserted 10/01/16 10:17. Following Turbine maintenance, the Reactor was declared critical at 10/07/16 02:50, and the Main Generator was synchronized to the grid at 10/08/16 03:38. 100% power was achieved on 10/10/16 02:47.

SUMMARY On 10/01/16 the Main Turbine was manually tripped from approximately 15% to begin a planned turbine outage. On 10/08/16 the U2 Main Generator was again synchronized to the grid, and full power was achieved on 10/10/16.

On 10/28/16 from 100%, a scheduled down power for Control Rod pattern adjustment was initiated. The lowest power of 71.4% was seen on 10/29/16, and power was increased to full power later that day.

(Note: Generation losses from this power change, other routine control rod adjustments, and testing are classified as SPEL (exempt losses) for INPO Performance Indicator purposes.)

DOCKET: 388 PREPARER NAME: J. Hennings

UNIT\_NME: Susquehanna Unit 2 PREPARER TELEPHONE: 570-542-3747

RPT\_PERIOD: 201611

Design Electrical Rating: 1287
 Maximum Dependable Capacity (MWe-Net) 1257

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	721.00	7,829.52	247,488.78
4. Number of Hours Generator On-line	721.00	7,778.95	244,390.55
5. Reserve Shutdown Hours	0.00	0.00	0.00
6. Net Electrical energy Generated (MWHrs)	900,112.00	9,724,421.00	270,548,082.30

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY On 11/14/16 the 2B Reactor Recirc Pump tripped resulting in and Unplanned Power Change. Power was reduced to as low as 29.1%. The electric power was restored to the system on 11/14/16 and full power was achieved on 11/15/16.

The other power reduction greater than 20% was a planned reduction from 99.8% down to 69.7% to support a scheduled Control Rod pattern adjustment. Unit 2 returned to full power on 11/20/16. (note: This evolution is classified as a SPEL for INPO purposes).

DOCKET: 388 PREPARER NAME: J. Hennings

UNIT\_NME: Susquehanna Unit 2 PREPARER TELEPHONE: 570-542-3747

RPT\_PERIOD: 201612

Design Electrical Rating: 1287
 Maximum Dependable Capacity (MWe-Net) 1257

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,573.52
 248,232.78

 4. Number of Hours Generator On-line
 744.00
 8,522.95
 245,134.55

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 948,894.00 10,673,315.00 271,496,976.30

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY During December there were 2 power reductions greater than 20%. On 12/09/16, Operations began a planned power reduction from 100% for a Control Rod Sequence Exchange. The lowest power during the evolution was 68%. On 12/10/16 100% power was achieved.

On 12/30/16 23:00, Operations lowered power from 98% for a planned Control Rod pattern adjustment to 75.8%. On 12/31/16, full power was achieved.

DOCKET: 289 PREPARER NAME: Mark Fauber

UNIT\_NME: Three Mile Island Unit 1 PREPARER TELEPHONE: 717.948.8787

RPT\_PERIOD: 201610

Design Electrical Rating: 819
 Maximum Dependable Capacity (MWe-Net) 802

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,319.00 281,346.73
4. Number of Hours Generator On-line 744.00 7,319.00 279,479.86

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 622,807.00 6,087,718.00 231,707,064.40

## **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated at nominal full power for the entire month of October.

DOCKET: 289 PREPARER NAME: Mark Fauber

UNIT\_NME: Three Mile Island Unit 1 PREPARER TELEPHONE: 717.948.8787

RPT\_PERIOD: 201611

Design Electrical Rating: 819
 Maximum Dependable Capacity (MWe-Net) 802

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 8,040.00
 282,067.73

 4. Number of Hours Generator On-line
 721.00
 8,040.00
 280,200.86

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 607,486.00 6,695,204.00 232,314,550.40

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY The unit operated at nominal full power through 11/30/16 at 20:02, when a planned power reduction for T1M10 began. The unit shutdown continued through December 2016.

DOCKET: 289 PREPARER NAME: Mark Fauber

UNIT\_NME: Three Mile Island Unit 1 PREPARER TELEPHONE: (717) 948-8787

RPT\_PERIOD: 201612

Design Electrical Rating: 819
 Maximum Dependable Capacity (MWe-Net) 802

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 478.97
 8,518.97
 282,546.70

 4. Number of Hours Generator On-line
 469.98
 8,509.98
 280,670.84

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 387,447.00 7,082,651.00 232,701,997.40

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
T1M10	12/1/2016	S	274.02	В	1	Planned maintenance outage to perform repair / replacement of mechanical seals on reactor coolant pump 1A. Unplanned outage extension to perform weld repairs on mechanical penetration on seal cartridge.

SUMMARY Planned unit shutdown for maintenance outage T1M10. Unplanned maintenance outage extension. Return to nominal full power on 12/12/16 at 23:46.

DOCKET: 250 PREPARER NAME: Colleen Phillips

UNIT\_NME: Turkey Point Unit 3 PREPARER TELEPHONE: 305-246-7106

RPT\_PERIOD: 201610

Design Electrical Rating: 831
 Maximum Dependable Capacity (MWe-Net) 811

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,269.98
 300,841.86

 4. Number of Hours Generator On-line
 744.00
 7,244.22
 297,230.45

 5. Reserve Shutdown Hours
 0.00
 0.00
 121.80

6. Net Electrical energy Generated (MWHrs) 617,149.64 5,957,711.99 200,788,333.26

## **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY PTN Unit 3 was at approximately 100% for the month.

DOCKET: 250 PREPARER NAME: Colleen Phillips

UNIT\_NME: Turkey Point Unit 3 PREPARER TELEPHONE: 3052467106

RPT\_PERIOD: 201611

Design Electrical Rating: 831
 Maximum Dependable Capacity (MWe-Net) 811

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 721.00 7,990.98 301,562.86 4. Number of Hours Generator On-line 721.00 7,965.22 297,951.45 5. Reserve Shutdown Hours 0.00 0.00 121.80 6. Net Electrical energy Generated (MWHrs) 596,333.88 6,554,045.87 201,384,667.14

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY PTN Unit 3 down powered on 11/1/16 to approximately 85% due to 3A HDP flange leak. Unit 3 was returned to 100% on 11/2/16.

DOCKET: 250 PREPARER NAME: Colleen Phillips
UNIT\_NME: Turkey Point Unit 3 PREPARER TELEPHONE: 305-246-7106

RPT\_PERIOD: 201612

Design Electrical Rating:
 Maximum Dependable Capacity (MWe-Net)
 831

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,734.98
 302,306.86

 4. Number of Hours Generator On-line
 744.00
 8,709.22
 298,695.45

 5. Reserve Shutdown Hours
 0.00
 0.00
 121.80

6. Net Electrical energy Generated (MWHrs) 620,123.73 7,174,169.60 202,004,790.87

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY PTN Unit 3 was at approximately 100% for the month.

DOCKET: 251 PREPARER NAME: Colleen Phillips

UNIT\_NME: Turkey Point Unit 4 PREPARER TELEPHONE: 3052467106

RPT\_PERIOD: 201610

Design Electrical Rating: 840
 Maximum Dependable Capacity (MWe-Net) 821

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,602.51
 298,886.93

 4. Number of Hours Generator On-line
 726.90
 6,557.58
 293,509.85

 5. Reserve Shutdown Hours
 0.00
 0.00
 577.20

6. Net Electrical energy Generated (MWHrs) 543,251.95 5,326,994.37 200,448,033.34

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
20160 014	10/29/2016	S	17.10	В	5	4C MSR EHC line repair

SUMMARY PTN Unit 4 down powered to approximately 48% on 10/1/16 due to high vibrations on the 4B SGFP. Unit 4 was returned to 100% on 10/6/16. PTN Unit 4 performed a normal reactor shutdown on 10/28/16 to repair 4C MSR EHC lines. Unit 4 was returned to 100% on 10/30/16.

DOCKET: 251 PREPARER NAME: Colleen Phillips

UNIT\_NME: Turkey Point Unit 4 PREPARER TELEPHONE: 3052467106

RPT\_PERIOD: 201611

Design Electrical Rating: 840
 Maximum Dependable Capacity (MWe-Net) 821

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,323.51
 299,607.93

 4. Number of Hours Generator On-line
 721.00
 7,278.58
 294,230.85

 5. Reserve Shutdown Hours
 0.00
 0.00
 577.20

6. Net Electrical energy Generated (MWHrs) 606,982.89 5,933,977.26 201,055,016.23

## **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY PTN Unit 4 was at approximately 100% for the month.

DOCKET: 251 PREPARER NAME: Colleen Phillips

UNIT\_NME: Turkey Point Unit 4 PREPARER TELEPHONE: 305-246-7106

RPT\_PERIOD: 201612

Design Electrical Rating: 840
 Maximum Dependable Capacity (MWe-Net) 821

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,067.51
 300,351.93

 4. Number of Hours Generator On-line
 744.00
 8,022.58
 294,974.85

 5. Reserve Shutdown Hours
 0.00
 0.00
 577.20

6. Net Electrical energy Generated (MWHrs) 625,312.38 6,559,289.64 201,680,328.61

## **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY PTN Unit 4 was at approximately 100% for the month.

DOCKET: 424 PREPARER NAME: Christopher J. Vachovetz

UNIT\_NME: Vogtle Unit 1 PREPARER TELEPHONE: (706) 826-3467

RPT\_PERIOD: 201610

Design Electrical Rating: 1169
 Maximum Dependable Capacity (MWe-Net) 1150

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 7,319.00 236,227.73
4. Number of Hours Generator On-line 744.00 7,319.00 233,825.96

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 871,497.00 8,543,032.00 266,178,233.50

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were no shutdowns or down powers for the unit in the month of October.

DOCKET: 424 PREPARER NAME: Christopher J. Vachovetz

UNIT\_NME: Vogtle Unit 1 PREPARER TELEPHONE: (706) 826-3467

RPT\_PERIOD: 201611

Design Electrical Rating: 1169
 Maximum Dependable Capacity (MWe-Net) 1150

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 721.00 8,040.00 236,948.73
4. Number of Hours Generator On-line 721.00 8,040.00 234,546.96

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 850,871.00 9,393,903.00 267,029,104.50

# **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were no shutdowns or down powers for the unit in the month of November.

DOCKET: 424 PREPARER NAME: Christopher Vachovetz

UNIT\_NME: Vogtle Unit 1 PREPARER TELEPHONE: 706-826-3467

RPT\_PERIOD: 201612

Design Electrical Rating: 1169
 Maximum Dependable Capacity (MWe-Net) 1150

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,784.00
 237,692.73

 4. Number of Hours Generator On-line
 744.00
 8,784.00
 235,290.96

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 879,248.00 10,273,151.00 267,908,352.50

### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY There were no shutdowns or down powers for the unit in the month of December.

DOCKET: 425 PREPARER NAME: Christopher J. Vachovetz

UNIT\_NME: Vogtle Unit 2 PREPARER TELEPHONE: (706) 826-3467

RPT\_PERIOD: 201610

Design Electrical Rating: 1169
 Maximum Dependable Capacity (MWe-Net) 1152

This Month Yr-to-Date Cumulative
3. Number of Hours the Reactor was Critical 744.00 6,784.87 220,953.86
4. Number of Hours Generator On-line 744.00 6,754.56 219,376.44

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 873,077.00 7,848,169.00 250,556,828.50

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY 10/08/2016:09:47- 10/08/2016 15:45: Load dispatcher requested load reduction due to grid demand/stability issues caused by inclement weather.

DOCKET: 425 PREPARER NAME: Christopher J. Vachovetz

Vogtle Unit 2 UNIT\_NME: PREPARER TELEPHONE: (706) 826-3467

RPT\_PERIOD: 201611

1. Design Electrical Rating: 1169 2. Maximum Dependable Capacity (MWe-Net) 1152

Cumulative **This Month** Yr-to-Date 3. Number of Hours the Reactor was Critical 721.00 7,505.87 221,674.86 4. Number of Hours Generator On-line 721.00 220,097.44 7,475.56

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 855,039.00 8,703,208.00 251,411,867.50

### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

**SUMMARY** 

DOCKET: 425 PREPARER NAME: Christopher Vachovetz

Vogtle Unit 2 UNIT\_NME: PREPARER TELEPHONE: 706-826-3467

RPT\_PERIOD: 201612

1. Design Electrical Rating: 1169 2. Maximum Dependable Capacity (MWe-Net) 1152

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 744.00 8,249.87 222,418.86 4. Number of Hours Generator On-line 744.00 8,219.56 220,841.44

5. Reserve Shutdown Hours 0.00 0.00 0.00

6. Net Electrical energy Generated (MWHrs) 883,760.00 9,586,968.00 252,295,627.50

### **UNIT SHUTDOWNS**

		Type		Method of			
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	<b>Date</b>	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY The unit entered an unplanned Shutdown LCO 12/9/2016 due to the trip NSCW Transfer Pump 8, shutdown and stopped down power due to reevaluation of required actions. Occurrence was approximately 1.68 hours in duration.

DOCKET: 382 PREPARER NAME: Jai Jung

UNIT\_NME: Waterford Unit 3 PREPARER TELEPHONE: 504-739-6405

RPT\_PERIOD: 201610

Design Electrical Rating: 1173
 Maximum Dependable Capacity (MWe-Net) 1152

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 602.33
 7,177.33
 240,222.25

 4. Number of Hours Generator On-line
 582.50
 7,157.50
 238,446.26

 5. Reserve Shutdown Hours
 0.00
 0.00
 80.30

6. Net Electrical energy Generated (MWHrs) 664,881.00 8,385,760.00 263,293,435.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
FO21- 01	10/24/2016	F	161.50	А	1	RCS leakage through RCP pressure sensing tubing line near RC-114B. Degraded tubing was replaced and plant restored to power operation.

SUMMARY In October 2016, the plant experienced unplanned generation losses of 203,697 MWH associated with one unplanned manual Reactor trip on 10/24/2016 at 16:26, due to RCS leakage from Reactor Coolant Pump (RCP) 1B instrument tubing (CR-WF3-2016-6698). On 10/31/2016 at 09:56, the plant was re-synchronized to the grid. Also, there were 106 MWH planned generation losses associated with MS IP0301 A/B calibration.

DOCKET: 382 PREPARER NAME: Jai Jung

UNIT\_NME: Waterford Unit 3 PREPARER TELEPHONE: 504-739-6405

RPT\_PERIOD: 201611

Design Electrical Rating: 1173
 Maximum Dependable Capacity (MWe-Net) 1152

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	721.00	7,898.33	240,943.25
4. Number of Hours Generator On-line	721.00	7,878.50	239,167.26
5. Reserve Shutdown Hours	0.00	0.00	80.30

6. Net Electrical energy Generated (MWHrs) 832,346.00 9,218,106.00 264,125,781.00

### **UNIT SHUTDOWNS**

	Туре			Method of			
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY In November 2016, the plant experienced unplanned generation losses of 14,434 MWH associated with power ascension from the unplanned manual Reactor trip on 10/24/2016 at 16:26, due to RCS leakage from Reactor Coolant Pump (RCP) 1B instrument tubing (CR-WF3-2016-6698). On 10/31/2016 at 09:56, the plant was re-synchronized to the grid and reached 100% power on 11/1/2016 at 03:30. Also, there were 2,873 MWH planned generation losses associated with the planned MTC test and Waterbox B2,A1, and B1 maintenance and cleaning.

DOCKET: 382 PREPARER NAME: Jai Jung

UNIT\_NME: Waterford Unit 3 PREPARER TELEPHONE: 504-739-6405

RPT\_PERIOD: 201612

Design Electrical Rating: 1173
 Maximum Dependable Capacity (MWe-Net) 1152

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,642.33
 241,687.25

 4. Number of Hours Generator On-line
 744.00
 8,622.50
 239,911.26

 5. Reserve Shutdown Hours
 0.00
 0.00
 80.30

6. Net Electrical energy Generated (MWHrs) 877,397.00 10,095,503.00 265,003,178.00

### **UNIT SHUTDOWNS**

Type Method of F: Forced Duration Shutting Cause - Corrective Action No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated at an average reactor power level of 99.9% and experienced no shutdowns or significant power reductions during the period. There were planned losses (646 MWH) due to Waterbox B1/A2 maintenance and cleaning.

DOCKET: 390 PREPARER NAME: Samuel P. Delk

UNIT\_NME: Watts Bar Unit 1 PREPARER TELEPHONE: 423-365-8068

RPT\_PERIOD: 201610

Design Electrical Rating: 1160
 Maximum Dependable Capacity (MWe-Net) 1135

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 7,245.43
 162,745.77

 4. Number of Hours Generator On-line
 744.00
 7,190.85
 161,907.20

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 845,849.00 7,751,825.00 181,229,915.08

### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY NRC Capacity Factor for the month of October 2016 is 100.17%.

DOCKET: 390 PREPARER NAME: Samuel P. Delk

UNIT\_NME: Watts Bar Unit 1 PREPARER TELEPHONE: 423-365-8068

RPT\_PERIOD: 201611

Design Electrical Rating: 1160
 Maximum Dependable Capacity (MWe-Net) 1135

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 721.00
 7,966.43
 163,466.77

 4. Number of Hours Generator On-line
 721.00
 7,911.85
 162,628.20

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 834,656.50 8,586,481.50 182,064,571.58

### **UNIT SHUTDOWNS**

		Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY NRC Capacity factor for the month of November 2016 was 101.99%.

DOCKET: 390 PREPARER NAME: S. P. Delk

UNIT\_NME: Watts Bar Unit 1 PREPARER TELEPHONE: 423-365-8068

RPT\_PERIOD: 201612

Design Electrical Rating: 1160
 Maximum Dependable Capacity (MWe-Net) 1135

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 8,710.43
 164,210.77

 4. Number of Hours Generator On-line
 744.00
 8,655.85
 163,372.20

 5. Reserve Shutdown Hours
 0.00
 0.00
 0.00

6. Net Electrical energy Generated (MWHrs) 869,041.00 9,455,522.50 182,933,612.58

### **UNIT SHUTDOWNS**

	Type				Method of		
		F: Forced	Duration		Shutting	<b>Cause - Corrective Action</b>	
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments	

SUMMARY NRC Capacity Factor for the Month of December 2016 was 102.91%.

DOCKET: 391 PREPARER NAME: Samuel P. Delk

UNIT\_NME: Watts Bar Unit 2 PREPARER TELEPHONE: 423-365-8068

RPT\_PERIOD: 201610

Design Electrical Rating: 1160
 Maximum Dependable Capacity (MWe-Net) 1135

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	147.73	147.73	147.73
4. Number of Hours Generator On-line	88.33	88.33	88.33
5. Reserve Shutdown Hours	0.00	0.00	0.00
6. Net Electrical energy Generated (MWHrs)	81,737.50	81,737.50	81,737.50

# **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
10- 22FO	10/22/2016	F	215.65	Α	1	Shutdown due to gassing on 2A MBT.
PCO 10-19	10/1/2016	S	440.02	Н	1	This Shutdown and related Reactor Shutdown are administrative entries to reflect that WBN2 commenced official commercial operations on 10/19/2016 at 0800 EDT. This action was taken to eliminate pre-commercial RX critical hours.

SUMMARY NRC Capacity Factor for the month of October 2016 is 23.31%.

DOCKET: 391 PREPARER NAME: Samuel P. Delk

UNIT\_NME: Watts Bar Unit 2 PREPARER TELEPHONE: 423-365-8068

RPT\_PERIOD: 201611

Design Electrical Rating: 1160
 Maximum Dependable Capacity (MWe-Net) 1135

Yr-to-Date Cumulative **This Month** 3. Number of Hours the Reactor was Critical 721.00 868.73 868.73 4. Number of Hours Generator On-line 721.00 809.33 809.33 5. Reserve Shutdown Hours 0.00 0.00 0.00 6. Net Electrical energy Generated (MWHrs) 829,577.50 911,315.00 911,315.00

### **UNIT SHUTDOWNS**

	Type			Method of		
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY NRC Capacity Factor for the month of November 2016 was 99.86%.

DOCKET: 391 PREPARER NAME: S. P. Delk

UNIT\_NME: Watts Bar Unit 2 PREPARER TELEPHONE: 423-365-8068

RPT\_PERIOD: 201612

Design Electrical Rating: 1160
 Maximum Dependable Capacity (MWe-Net) 1135

Cumulative **This Month** Yr-to-Date 3. Number of Hours the Reactor was Critical 744.00 1,612.73 1,612.73 4. Number of Hours Generator On-line 744.00 1,553.33 1,553.33 5. Reserve Shutdown Hours 0.00 0.00 0.00 6. Net Electrical energy Generated (MWHrs) 895,055.00 1,806,370.00 1,806,370.00

### **UNIT SHUTDOWNS**

		Type			Method of	
		F: Forced	Duration		Shutting	Cause - Corrective Action
No.	Date	S: Scheduled	(Hours)	Reason 1	Down 2	Comments

SUMMARY NRC Capacity Factor for the Month of December 2016 was 104.41%.

DOCKET: 482 PREPARER NAME: W T Muilenburg

UNIT\_NME: Wolf Creek Unit 1 PREPARER TELEPHONE: 620 364-8831

RPT\_PERIOD: 201610

Design Electrical Rating: 1200
 Maximum Dependable Capacity (MWe-Net) 1164

	This Month	Yr-to-Date	Cumulative
3. Number of Hours the Reactor was Critical	0.00	5,890.98	233,989.38
4. Number of Hours Generator On-line	0.00	5,890.97	232,199.55
5. Reserve Shutdown Hours	0.00	0.00	339.80
6. Net Electrical energy Generated (MWHrs)	0.00	7,093,450.00	267,623,125.00

### **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
16-01	9/2/2016	F	744.00	А	4	Unit shutdown due to unidentified RCS leakage. The source of the leak was identified on Core Exit Thermocouple Nozzle Assembly (CETNA) penetration #77. The unit remained shutdown and the refuel outage began on 9/17/16. A canopy seal clamp assembly was installed on the leaking CETNA penetration during RF21.

SUMMARY On September 17, 2016, Wolf Creek Generating Station began refuel outage 21. The unit remained off line through the month of October 2016.

DOCKET: 482 PREPARER NAME: W T Muilenburg

UNIT\_NME: Wolf Creek Unit 1 PREPARER TELEPHONE: 620 364-8831

RPT\_PERIOD: 201611

Design Electrical Rating: 1200
 Maximum Dependable Capacity (MWe-Net) 1164

**This Month** Yr-to-Date Cumulative 3. Number of Hours the Reactor was Critical 259.27 6,150.25 234,248.65 4. Number of Hours Generator On-line 231.55 6,122.52 232,431.10 5. Reserve Shutdown Hours 0.00 0.00 339.80 6. Net Electrical energy Generated (MWHrs) 245,456.00 7,338,906.00 267,868,581.00

## **UNIT SHUTDOWNS**

No.	Date	Type F: Forced S: Scheduled	Duration (Hours)	Reason 1	Method of Shutting Down 2	
16-01	9/2/2016	F	488.45	А	4	Unit shutdown due to unidentified RCS leakage. The source of the leak was identified on Core Exit Thermocouple Nozzle Assembly (CETNA) penetration #77. The unit remained shutdown and the refuel outage began on 9/17/16. A canopy seal clamp assembly was installed on the leaking CETNA penetration during RF21.

SUMMARY On September 17, 2016, Wolf Creek Generating Station began Refuel Outage 21. The unit remained off line through the month of October and returned to operation on November 21, 2016. The unit continued to operate in Mode 1 at or near 100% power through November 30, 2016.

DOCKET: 482 PREPARER NAME: W T Muilenburg

UNIT\_NME: Wolf Creek Unit 1 PREPARER TELEPHONE: 620 364-8831

RPT\_PERIOD: 201612

Design Electrical Rating: 1200
 Maximum Dependable Capacity (MWe-Net) 1164

 This Month
 Yr-to-Date
 Cumulative

 3. Number of Hours the Reactor was Critical
 744.00
 6,894.25
 234,992.65

 4. Number of Hours Generator On-line
 744.00
 6,866.52
 233,175.10

 5. Reserve Shutdown Hours
 0.00
 0.00
 339.80

6. Net Electrical energy Generated (MWHrs) 912,600.00 8,251,506.00 268,781,181.00

## **UNIT SHUTDOWNS**

Type Method of
F: Forced Duration Shutting Cause - Corrective Action
No. Date S: Scheduled (Hours) Reason 1 Down 2 Comments

SUMMARY The unit operated in mode 1, at or near 100% power from December 1, 2016 through December 31, 2016.