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June 11, 1999

Docket Nos. 50-321  
50-366

HL-5795

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

Edwin I. Hatch Nuclear Plant  
Monthly Operating Reports

Ladies and Gentlemen:

Enclosed are the May 1999 Monthly Operating Reports for Edwin I. Hatch Nuclear Plant Unit 1, Docket No. 50-321, and Unit 2, Docket No. 50-366. These reports are submitted in accordance with Technical Specifications 5.6.4.

Respectfully submitted,

H. L. Sumner, Jr.

IFL/eb

Enclosures:

1. May Monthly Operating Report for Plant Hatch Unit 1
2. May Monthly Operating Report for Plant Hatch Unit 2

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
SNC Document Management (R-Type A02.001)

U. S. Nuclear Regulatory Commission, Washington D. C.  
Mr. L. N. Olshan, Project Manager - Hatch

U. S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. J. T. Munday, Senior Resident Inspector - Hatch

Utility Data Institute, Inc.  
Ms. Barbara Lewis - McGraw-Hill Companies

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Enclosure 1  
Plant Hatch Unit 1  
Monthly Operating Report  
May 1999

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## OPERATING DATA REPORT

Docket No.: 50-321  
 Unit Name: E. I. Hatch Unit 1  
 Date: 6/3/99  
 Completed By: Macon Beard  
 Telephone: (912) 367-7781 x2878

### Operating Status

1. Reporting Period: MAY 1999  
 2. Design Electrical Rating (Net MWe): 822.1  
 3. Maximum Dependable Capacity (Net MWe): 787

	This Month	Year To Date	Cumulative
4. Number of Hours Reactor Was Critical:	724.9	2,285.7	161,026.0
5. Hours Generator On Line:	700.6	2,116.7	155,434.3
6. Unit Reserve Shutdown Hours:	0.0	0.0	0.0
7. Net Electrical Energy Generated:	507,142	1,621,427	109,665,584

### CHALLENGES TO MAIN STEAM SAFETY / RELIEF VALVES

Date	Tag No.	Event Description
		No challenges this month.

## UNIT SHUTDOWNS

Docket No.: 50-321  
 Unit Name: E. I. Hatch Unit 1  
 Date: 6/3/99  
 Completed By: Macon Beard  
 Telephone: (912) 367-7781 x2878

Reporting Period:           MAY 1999          

No.	Date	Type	Duration (Hours)	Reason (1)	Method of Shutting Down (2)	Cause/Corrective Actions Comments
		F: Forced S: Scheduled				
99-002	990429	F	3.8	A	4	Investigation into the cause of the Auto Voltage Regulator not responding properly continued. A blown fuse was replaced and the unit was successfully tied to the grid.
99-003	990501	S	1.8	B	5	The Main Generator was removed from the grid for Turbine Overspeed Trip Testing.
99-004	990507	F	37.8	G	3	The unit experienced an automatic reactor scram on high reactor pressure when the turbine control valves drifted closed due to a loss of EHC system pressure. (continued below)

**(1) Reason:**

- A-Equipment Failure (Explain)
- B-Maintenance or Test
- C-Refueling
- D-Regulatory Restriction
- E-Operator Training/License Examination
- F-Administrative
- G-Operational Error (Explain)
- H-Other (Explain)

**(2) METHOD**

- 1-Manual
- 2-Manual Trip/Scram
- 3-Automatic Trip/Scram
- 4-Continuation
- 5-Other (Explain)

**CAUSE/CORRECTIVE ACTION/COMMENTS:**

99-004 (continued)      The loss of EHC system pressure was caused by a Plant Equipment Operator closing a system supply valve while running a clearance for replacement of an out of service system fluid filter.

**NARRATIVE REPORT**

Activities associated with the 18th Refueling Outage continued into the month of May. Shift tied the unit to the line on May 1 and began power ascension and testing activities associated with Extended Power Uprate. The "B" Circulating Water Pump was removed from service on May 3 to replace a damaged motor bearing. The unit experienced an automatic reactor scram on May 7 due to personnel error (see description of event 99-004 for details). The unit was returned to service on May 8 and activities for power ascension and uprate testing continued. The unit entered Extended Power Uprate operating conditions on May 12 and attained the new rated thermal power of 2763 MWth on May 20. Shift performed a minor load reduction to 2730 MWth late on May 20 to address a high bearing temperature alarm on the "A" Reactor Feed Pump. The unit was returned to rated thermal power on May 22. Shift also performed a load reduction to approximately 55% of rated on May 30 to perform a rod pattern adjustment, remove the "B" Reactor Feed Pump from service for repair of a leak on the seal water line, and repair oil leaks on the "B" Condensate Booster Pump. The unit was returned to rated thermal power operation on May 31. Shift maintained operation at rated thermal power for the rest of the month.

Enclosure 2

Plant Hatch Unit 2  
Monthly Operating Report  
May 1999

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## OPERATING DATA REPORT

Docket No.: 50-366  
 Unit Name: E. I. Hatch Unit 2  
 Date: 6/3/99  
 Completed By: Macon Beard  
 Telephone: (912) 367-7781 x2878

### Operating Status

1. Reporting Period: MAY 1999  
 2. Design Electrical Rating (Net MWe): 859  
 3. Maximum Dependable Capacity (Net MWe): 855

	This Month	Year To Date	Cumulative
4. Number of Hours Reactor Was Critical:	640.5	3,411.7	137,558.6
5. Hours Generator On Line:	548.6	3,280.6	133,379.5
6. Unit Reserve Shutdown Hours:	0.0	0.0	0.0
7. Net Electrical Energy Generated:	439,268	2,822,494	95,458,666

### CHALLENGES TO MAIN STEAM SAFETY / RELIEF VALVES

Date	Tag No.	Event Description
990505	2B21-F013A 2B21-F013B 2B21-F013C 2B21-F013D 2B21-F013F 2B21-F013G 2B21-F013K 2B21-F013L 2B21-F013M	The unit experienced an automatic reactor scram due to turbine control valve fast closure when the generator tripped on a phase to ground fault. The fault occurred when a turning vane, located in the discharge of an isophase bus duct cooling fan, broke loose shorting a generator phase to ground. Nine of eleven safety relief valves lifted to relieve reactor pressure. Pressure did not reach the actuation setpoint for the two remaining valves. Failure of the turning vanes was attributed to a manufacturer error. It was determined that the vanes were not of the proper thickness for the application resulting in failure of some of their connecting points. Pieces of the broken vanes were retrieved and the remaining vanes removed from the isophase bus duct cooling system.

## UNIT SHUTDOWNS

Docket No.: 50-366  
 Unit Name: E. I. Hatch Unit 2  
 Date: 6/3/99  
 Completed By: Macon Beard  
 Telephone: (912) 367-7781 x2878

Reporting Period:     MAY 1999    

No.	Date	Type	Duration (Hours)	Reason (1)	Method of Shutting Down (2)	Cause/Corrective Actions Comments
		F: Forced S: Scheduled				
99-002	990505	F	130.7	A	3	An Automatic reactor scram occurred due to turbine control valve fast closure when the generator tripped on a phase to ground fault. The fault occurred when a turning vane, located in the discharge of the isophase bus duct cooling fan, broke loose shorting a generator phase to ground. Failure of the turning (continued below)
99-003	990522	F	64.7	A	5	The Main Generator was removed from the grid to repair a hydrogen leak at the neutral bushing. The leak was repaired and the unit returned to service. Reactor power was maintained at 10% of rated while the generator was off-line.

**(1) Reason:**

- A-Equipment Failure (Explain)
- B-Maintenance or Test
- C-Refueling
- D-Regulatory Restriction
- E-Operator Training/License Examination
- F-Administrative
- G-Operational Error (Explain)
- H-Other (Explain)

**(2) METHOD**

- 1-Manual
- 2-Manual Trip/Scram
- 3-Automatic Trip/Scram
- 4-Continuation
- 5-Other (Explain)

**CAUSE/CORRECTIVE ACTION/COMMENTS:**

99-002 (continued)      vanes was attributed to manufacturer error. It was determined the vanes were not of the proper thickness for the application. Pieces of the broken vanes were retrieved and the remaining vanes removed from the isophase bus duct cooling system.

**NARRATIVE REPORT**

Unit 2 began the month of May operating at approximately 2708 MWth. The unit experienced an automatic reactor scram on May 5 when the generator tripped on a phase to ground fault (see description of event 99-002 for details). The unit was returned to power operation on May 10 and attained maximum operating power of 2708 MWth on May 12. Shift began reducing load on May 21 to remove the generator from the grid and repair a hydrogen leak on the neutral bushing. The unit was returned to the grid on May 25 and operation at 2708 MWth on May 26. Shift continued to maintain approximately 2708 MWth for the rest of the month.