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February 14, 1992
C311-92-2027

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

Gentlemen:

Subject: Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Monthly Operating Report for January 1992

Enclosed are two copies of the January 1992 Monthly Operating Report for Three Mile Island Nuclear Station, Unit 1.

Sincerely,

T. G. Broughton
Vice President and Director, TMI-1

WGH

Attachments

cc: Administrator, Region I
TMI Senior Resident Inspector

9202200128 920131
PDR ADOCK 05000289
R PDR

OPERATIONS SUMMARY
JANUARY 1992

The unit entered the month operating at 100% power producing 868 MWe. The cause of the high CRDM stator temperatures that resulted in the power reduction documented in the December report was identified. The o-rings found restricting flow in the Intermediate Closed Cooling Water System (ICCS) to the control rod drive mechanisms had dislodged from the quick disconnect fittings installed during the 8R and/or 9R outages. The o-ring material is incompatible with the NALCO rust inhibitor used in the ICCS and results in o-ring swelling.

On 1/22/92, during a planned outage on the "B" inverter, a partial EFW actuation occurred while the "B" vital bus was de-energized. The actuated components were secured within 1 minute. This event was reportable in accordance with 10 CFR 50.72 as a 4 hour report. The actuation was attributed to a wiring error in the HSPS cabinets. The event is being detailed in an LER. As of this writing the HSPS has been correctly wired and successfully tested. The unit completed the month operating at 100% power.

MAJOR SAFETY RELATED MAINTENANCE

During January, the following major safety related maintenance activity was performed:

Station Blackout Diesel Generator EG-Y-4

The Station Blackout Diesel Generator was removed from service to allow installation of a lubricating oil modification kit and to perform various repairs. Work accomplished included the elimination of a water leak at the jacket cooling water pump EG-P-16 seal, an air leak downstream of the air start relief valves EG-V-97A/B and an oil leak at the inspection cover beneath the governor. The diesel generator remained out of service as of the end of this reporting period.

Reactor Vessel Control Rod Drive System

The increased Control Rod Drive Mechanism stator temperatures were ultimately determined to be the result of the material incompatibility between the corrosion inhibitor, Nalco, used in the Intermediate Closed Cooling Water system and the ethylene-propylene compound o-rings (a part in the disconnect fittings). A chemical reaction caused the o-rings to swell. The o-rings eventually dislodged causing a cooling water flow restriction at the disconnect fitting and the resultant increased stator temperatures.

"C" Inverter

The "C" inverter, which normally supplies power to the "C" vital bus, failed twice in January. A technical representative from Solid State assisted in a troubleshooting effort which identified shorted windings in a 15KVA constant voltage transformer (CVT) apparently caused by excessive heat following capacitor replacement during 9R. Pre-service testing of the replacement CVT from the warehouse stock revealed excessive capacitance in the third harmonic filter capacitor band. Two of thirteen capacitors were removed from service. Subsequent to the "C" inverter's return to service, electricians tested the third harmonic filter capacitance of the "B", "D", and "E" inverters. As a result, two of thirteen capacitors were removed from service on the "B" and "E" inverter third harmonic filter circuits and one of thirteen capacitors was removed from service on the "D" inverter third harmonic filter circuit. A 175 amp fuse on the main DC Distribution Panel blew during return of the "B" inverter to service. Investigation revealed no discrepancies on the "B" inverter. The 175 amp DC fuse and the inverter oscillator card were replaced prior to the inverter's return to service. The old oscillator card will be tested at Solid State. The postulated cause for the blown 175 amp fuse was insufficient discharge time for the inverter capacitor bank before being re-energized resulting in an excessive current draw.

Data Acquisition System

When de-energizing the "D" vital bus for "D" Inverter repairs, the Data Acquisition System (DAS) was secured. A feedwater transient resulted when various "ICS" stations were affected by the loss of DAS. DAS was re-energized and restored. Since DAS was designed to preclude the possibility of affecting "ICS", troubleshooting was initiated to determine how "ICS" was affected when DAS was de-energized. During troubleshooting, additional recorders were connected to various "ICS" points before the DAS was de-energized. It was found that more than one or two points were affected with the DAS de-energized and the DAS continued to affect the "ICS" even while de-energized.

B&W was contacted for technical assistance and guidance on additional troubleshooting. During subsequent trouble-shooting, a common ground was installed between the ICS and DAS and several DAS input wires were disconnected. All but two of the inputs can be reconnected during the next outage without further modification. Different input points from the "ICS" are required for the two remaining inputs to monitor the parameters desired. The DAS was returned to service on completion of the trouble-shooting.

On-Line Leak Sealing

On-Line leak sealing tasks performed included sealing a packing leak on a 3/4" globe valve on the "C" Main Steam piping (no tag number) and re-injecting a bonnet leak on valve MS-V-2A.

OPERATING DATA REPORT

DOCKET NO. 50-289
 DATE February 14, 1992
 COMPLETED BY W G HEYSEK
 TELEPHONE (717) 948-8191

OPERATING STATUS

- 1. UNIT NAME: THREE MILE ISLAND UNIT 1
- 2. REPORTING PERIOD: JANUARY 1992
- 3. LICENSED THERMAL POWER: 2568
- 4. NAMEPLATE RATING (GROSS MWe): 871
- 5. DESIGN ELECTRICAL RATING (NET MWe): 819
- 6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWe): 856
- 7. MAXIMUM DEPENDABLE CAPACITY (NET MWe): 808

NOTES:

8. IF CHANGES OCCUR IN (ITEMS 3-7) SINCE LAST REPORT, GIVE REASONS:

9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWe):

10. REASONS FOR RESTRICTIONS, IF ANY:

		THIS MONTH	YR-TO-DATE	CUMMULATIVE
11. HOURS IN REPORTING PERIOD	(HRS)	744.0	744.0	152665.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	744.0	744.0	77475.0
13. REACTOR RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	2245.6
14. HOURS GENERATOR ON-LINE	(HRS)	744.0	744.0	76400.2
15. UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED	(MWH)	1908127	1908127	185777172
17. GROSS ELECTRICAL ENERGY GENERATED	(MWH)	639441	639441	62633700
18. NET ELECTRICAL ENERGY GENERATED	(MWH)	603692	603692	58761017
19. UNIT SERVICE FACTOR	(%)	100.0	100.0	50.0
20. UNIT AVAILABILITY FACTOR	(%)	100.0	100.0	50.0
21. UNIT CAPACITY FACTOR	(USING MDC NET)	100.4	100.4	49.0
22. UNIT CAPACITY FACTOR	(USING DER NET)	99.1	99.1	47.0
23. UNIT FORCED OUTAGE RATE	(%)	0.0	0.0	44.3
UNIT FORCED OUTAGE HOURS	(HRS)	0.0	0.0	60648.7
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE AND DURATION OF EACH):				

25. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-289
UNIT TMI-1
DATE February 14, 1992
COMPLETED BY W G HEYSEK
TELEPHONE (717) 948-8191

MONTH: JANUARY

DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)
1	815	17	811
2	814	18	813
3	810	19	811
4	808	20	809
5	810	21	812
6	812	22	811
7	812	23	810
8	813	24	811
9	812	25	814
10	810	26	813
11	812	27	813
12	812	28	812
13	810	29	811
14	807	30	810
15	813	31	810
16	814		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH January 1992

DOCKET NO. 50-289
 UNIT NAME TMI-1
 DATE February 14, 1992
 COMPLETED BY W. G. Heysek
 TELEPHONE (717) 948-8191

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report#	System Code * & *	Component Code * & *	Cause & Corrective Action to Prevent Recurrence
						NONE			

1
 F Forced
 S Scheduled

2
 Reason
 A-Equipment Failure (Explain)
 B-Maintenance or Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & Licensing Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

3
 Method
 1-Manual
 2-Manual Scram
 3-Automatic Scram
 4-Other (Explain)

4
 Exhibit G - Instructions for preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

5 Exhibit 1 same source

6 Actually used exhibits F & II NUREG 0161

REFUELING INFORMATION REQUEST

1. Name of Facility: Three Mile Island Nuclear Station, Unit 1
2. Scheduled date for next refueling shutdown: September 17, 1993 (10R)
3. Scheduled date for restart following current refueling: NA
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? NA

If answer is yes, in general, what will these be?

If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload (Ref. 10 CFR Section 50.59)?

If no such review has taken place, when is it scheduled?

5. Scheduled date(s) for submitting proposed licensing action and supporting information:

None planned.

6. Important licensing considerations associated with refueling, e.g. new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:

GPU Nuclear has installed four Westinghouse Lead Test Assemblies during the reload of the TMI-1 core for cycle 9 operation. Westinghouse fuel technology will be utilized to the extent possible.

7. The number of fuel assemblies (a) in the core, and (b) in the spent fuel storage pool: (a) 177 (b) 521

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:

The present licensed capacity is 752. Planning to increase licensed capacity through fuel pool reracking is in progress.

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity:

The 9R (1991) refueling discharge was the last to allow full core off-load capacity (177 fuel assemblies).