



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038  
Hope Creek Generating Station

April 12, 1991

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Dear Sir:

MONTHLY OPERATING REPORT  
HOPE CREEK GENERATION STATION UNIT 1  
DOCKET NO. 50-354

In compliance with Section 6.9, Reporting Requirements for the Hope Creek Technical Specifications, the operating statistics for March are being forwarded to you with the summary of changes, tests, and experiments for March 1991 pursuant to the requirements of 10CFR50.59(b).

Sincerely yours,

J. J. Hagan  
General Manager -  
Hope Creek Operations

*RAR*  
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Attachments  
C Distribution

9104180002 910331  
PDR ADOCK 05000354  
R PDR

The Energy People

*IE-24*

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# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-354  
UNIT Hope Creek  
DATE 4/12/91  
COMPLETED BY V. Zabielski  
TELEPHONE (609) 339-3506

MONTH March 1991

## DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

|     |              |
|-----|--------------|
| 1.  | <u>0</u>     |
| 2.  | <u>0</u>     |
| 3.  | <u>408</u>   |
| 4.  | <u>692</u>   |
| 5.  | <u>1082</u>  |
| 6.  | <u>1060</u>  |
| 7.  | <u>1055</u>  |
| 8.  | <u>1062</u>  |
| 9.  | <u>1077</u>  |
| 10. | <u>1039</u>  |
| 11. | <u>1095</u>  |
| 12. | <u>1065</u>  |
| 13. | <u>1045</u>  |
| 14. | <u>1063*</u> |
| 15. | <u>1063*</u> |
| 16. | <u>1068</u>  |

## DAY AVERAGE DAILY POWER LEVEL (MWe-Net)

|     |             |
|-----|-------------|
| 17. | <u>701</u>  |
| 18. | <u>1030</u> |
| 19. | <u>1031</u> |
| 20. | <u>1079</u> |
| 21. | <u>1071</u> |
| 22. | <u>1062</u> |
| 23. | <u>1013</u> |
| 24. | <u>1090</u> |
| 25. | <u>1062</u> |
| 26. | <u>1064</u> |
| 27. | <u>1068</u> |
| 28. | <u>1054</u> |
| 29. | <u>1064</u> |
| 30. | <u>1059</u> |
| 31. | <u>1071</u> |

\*Due to an error in recording the meter readings, the exact average daily power level for March 14 and 15 is unknown. The listed averages for those two days represents the average of the two-day total.

# OPERATING DATA REPORT

DOCKET NO. 50-354  
 UNIT Hope Creek  
 DATE 4/12/91  
 COMPLETED BY V. Zabielski  
 TELEPHONE (609) 339-3506

## OPERATING STATUS

1. Reporting Period March 1991 Gross Hours in Report Period 744
2. Currently Authorized Power Level (MWt) 3293  
 Max. Depend. Capacity (MWe-Net) 1031  
 Design Electrical Rating (MWe-Net) 1067
3. Power Level to which restricted (if any) (MWe-Net) None
4. Reasons for restriction (if any)
5. No. of hours reactor was critical
 

|  | This<br>Month    | Yr To<br>Date    | Cumulative        |
|--|------------------|------------------|-------------------|
| 6. Reactor reserve shutdown hours                                    | <u>0.0</u>       | <u>0.0</u>       | <u>0.0</u>        |
| 7. Hours generator on line   | <u>698.0</u>     | <u>778.7</u>     | <u>30,071.8</u>   |
| 8. Unit reserve shutdown hours                                       | <u>0.0</u>       | <u>0.0</u>       | <u>0.0</u>        |
| 9. Gross thermal energy generated (MWH)                              | <u>2,195,189</u> | <u>2,296,733</u> | <u>94,839,140</u> |
| 10. Gross electrical energy generated (MWH)                          | <u>733,330</u>   | <u>758,580</u>   | <u>31,380,253</u> |
| 11. Net electrical energy generated (MWH)                            | <u>704,994</u>   | <u>711,135</u>   | <u>29,967,819</u> |
| 12. Reactor service factor   | <u>95.9</u>      | <u>39.8</u>      | <u>81.7</u>       |
| 13. Reactor availability factor                                      | <u>95.9</u>      | <u>39.8</u>      | <u>81.7</u>       |
| 14. Unit service factor  | <u>93.8</u>      | <u>36.1</u>      | <u>80.2</u>       |
| 15. Unit availability factor   | <u>93.8</u>      | <u>36.1</u>      | <u>80.2</u>       |
| 16. Unit capacity factor (using MDC)                                 | <u>91.9</u>      | <u>31.9</u>      | <u>77.5</u>       |
| 17. Unit capacity factor (Using Design MWe)                          | <u>88.8</u>      | <u>30.9</u>      | <u>74.9</u>       |
| 18. Unit forced outage rate  | <u>6.2</u>       | <u>21.3</u>      | <u>6.0</u>        |
| 19. Shutdowns scheduled over next 6 months (type, date, & duration): | <u>None</u>      |                  |                   |
| 20. If shutdown at end of report period, estimated date of start-up: | <u>N/A</u>       |                  |                   |

OPERATING DATA REPORT  
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-354  
UNIT Hope Creek  
DATE 4/12/91  
COMPLETED BY V. Zabielski  
TELEPHONE (609) 339-3506

MONTH March 1991

| NO. | DATE | TYPE<br>F=FORCED<br>S=SCHEDULED | DURATION<br>(HOURS) | REASON<br>(1) | METHOD OF<br>SHUTTING<br>DOWN THE<br>REACTOR OR<br>REDUCING<br>POWER (2) | CORRECTIVE<br>ACTION/COMMENTS   |
|-----|------|---------------------------------|---------------------|---------------|--|---|
| 5   | 3/1  | F                               | 46                  | A             | 4  | Continuation of<br>Outage to Repair H <sub>2</sub><br>Leak on Main<br>Generator |
| 6   | 3/16 | F                               | 0                   | A             | 5  | Power Reduction to<br>Repair Condenser<br>Tube Leak                             |

Summary



# REFUELING INFORMATION

DOCKET NO. 50-354  
UNIT Hope Creek  
DATE 4/12/91  
COMPLETED BY S. Hollingsworth  
TELEPHONE (609) 339-1051

MONTH March 1991

1. Refueling information has changed from last month:

Yes ☒ No

2. Scheduled date for next refueling: 9/5/92

3. Scheduled date for restart following refueling: 11/3/92

4. A. Will Technical Specification changes or other license amendments be required?

Yes No ☒

B. Has the reload fuel design been reviewed by the Station Operating Review Committee?

Yes No ☒

If no, when is it scheduled? not currently scheduled

5. Scheduled date(s) for submitting proposed licensing action: N/A

6. Important licensing considerations associated with refueling:

- Amendment 34 to the Hope Creek Tech Specs allows the cycle specific operating limits to be incorporated into the CORE OPERATING LIMITS REPORT; a submittal is therefore not required.

7. Number of Fuel Assemblies:

|   |            |
|---|------------|
| A. Incore                                     | <u>764</u> |
| B. In Spent Fuel Storage (prior to refueling) | <u>496</u> |
| C. In Spent Fuel Storage (after refueling)    | <u>760</u> |

8. Present licensed spent fuel storage capacity: 4006

Future spent fuel storage capacity: 4006

9. Date of last refueling that can be discharged to spent fuel pool assuming the present licensed capacity: July 22, 2007

HOPE CREEK GENERATING STATION

MONTHLY OPERATING SUMMARY

MARCH 1991

At the beginning of March, Hope Creek remained shutdown to repair a Main Generator Hydrogen Seal. The Generator was synchronized at 10:00 PM on March 2nd. On March 16th, power was reduced to repair a Condenser Tube leak. The unit operated for the remainder of the month without shutting down or experiencing any other reportable power reductions. At the end of the month, the unit completed its 29th day of continuous power operation.

SUMMARY OF CHANGES, TESTS, AND EXPERIMENTS  
FOR THE HOPE CREEK GENERATING STATION

MARCH 1991



The following Design Change Packages (DCP's) have been evaluated to determine:

1. If the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or
2. If a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or
3. If the margin of safety as defined in the basis for any technical specification is reduced.

The DCP's did not create a new safety hazard to the plant nor did they affect the safe shutdown of the reactor. The DCP's did not change the plant effluent releases and did not alter the existing environmental impact. The Safety Evaluations determined that no unreviewed safety or environmental questions are involved.

DCPDescription of Design Change Package

- 4EC-1024/02 This DCP added two stairways from the existing catwalk at elevation 77' 5" to the top of the torus. Each set of stairs includes a platform and a landing. The stairways will provide a safe for of access.
- 4EC-3111/05 This DCP replaced two Class HXC, epoxy lined carbon steel Service Water spool pieces with piping Class HZC, 6% Molybdenum stainless steel. The new material is more corrosion/erosion resistant.
- 4EC-3112/01 This DCP replaced 14 Class HXC, epoxy lined carbon steel Service Water spool pieces with piping Class HZC, 6% Molybdenum stainless steel. This DCP also replaced 10 Class HGC, mortar lined carbon steel Service Water Travelling Screenwash Suction Line spool pieces with piping class HZC, 6% Molybdenum stainless steel. The new material is more corrosion/erosion resistant.
- 4EC-3112/05 This DCP replaced two Class HXC, epoxy lined carbon steel Service Water spool pieces with piping Class HZC, 6% Molybdenum stainless steel. The new material is more corrosion/erosion resistant.
- 4EC-3112/06 This DCP replaced Class HXC, epoxy lined carbon steel Service Water spool pieces with piping Class HZC, 6% Molybdenum stainless steel. The new material is more corrosion/erosion resistant. This DCP also replaced Safety Auxiliaries Cooling System balancing valves with aluminum bronze butterfly valves.
- 4EC-3112/09 This DCP modified the Station Service Water System by adding a manual butterfly isolation valve, a manual drain valve, and a standpipe. It also replaced a Class HXC, epoxy lined carbon steel Service Water spool piece. All of the new material is made with piping Class HZC, 6% Molybdenum stainless steel. The new material is more corrosion/erosion resistant.
- 4EC-3112/11 This DCP diverted the Station Service Water System water flow to the Cooling Tower Basin and to the Cooling Tower Bypass Line. This modification permitted the draining of the Cooling Tower during the modifications to the Service Water System Return to Cooling Tower Piping.
- 4EC-3112/12 This DCP replaced seven Class HXC, epoxy lined carbon steel Service Water spool pieces with piping Class HZC, 6% Molybdenum stainless steel. The new material is more corrosion/erosion resistant. It also replaced two butterfly valves to improve the isolation and shutoff capability.

DCP

Description of Design Change Package

4HM-0522

This DCP completed the site grading and paving in the southwestern portion of the Hope Creek yard. The final design is very close to the original design, the differences being minor grading changes.

The following Temporary Modification Requests (TMR's) have been evaluated to determine:

1. If the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or
2. If a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or
3. If the margin of safety as defined in the basis for any technical specification is reduced.

The TMR's did not create a new safety hazard to the plant nor did they affect the safe shutdown of the reactor. The TMR's did not change the plant effluent releases and did not alter the existing environmental impact. The Safety Evaluations determined that no unreviewed safety or environmental questions are involved.

TMRDescription of Temporary Modification Request

- 91-014 This TMR modified the process computer to identify the as-installed positions of the Traversing Incore Probe Stationary Guide Tubes. The tubes were swapped during re-installation during the third refueling outage.
- 91-015 This TMR removed the overload heaters from the breakers for the Reactor Water Cleanup Discharge to Condenser Valve and the Reactor Water Cleanup Discharge to Equipment Drain Valve. Removing the overload heaters from the breakers will prevent the valves from inadvertently opening during an Appendix R fire.
- 91-016 This TMR unpinned a sway strut hanger on the High Pressure Coolant Injection Steam Supply Line to prevent the strut from bending or breaking during the High Pressure Coolant Injection System Steam Line warmup. The TMR was removed when the steam line warmup was completed.
- 91-017 This TMR provided an alternate flowpath for the Offgas Hydrogen Analyzer's Sample Return Line by connecting the existing sample return to the Condenser Return Line. The existing sample return line was plugged, making the hydrogen analyzers inoperable until a flowpath was made available.
- 91-018 This TMR installed a 1" PVC Acid Injection Line to the Makeup Demineralized Water Regenerative Waste Tank. The original line has disintegrated, the PVC is more resistant to the chemical reaction than the original material.



The following procedure revision has been evaluated to determine:

1. If the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or
2. If a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or
3. If the margin of safety as defined in the basis for any technical specification is reduced.

The procedure revision did not create a new safety hazard to the plant nor did it affect the safe shutdown of the reactor. The procedure revision did not change the plant effluent releases and did not alter the existing environmental impact. The Safety Evaluation determined that no unreviewed safety or environmental questions are involved.

Procedure  
Revision

NC.NA-AP.ZZ-0025(Q)  
Rev. 0

Description of Procedure Revision

This procedure supersedes SA-AP.ZZ-025(Q), which is referenced in several places in the UFSAR. This Safety Evaluation identifies where SA-AP.ZZ-025(Q) is referenced so those paragraphs can be revised.