UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report No. 50-416/84-11

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Facility Name: Grand Gulf

Docket No.: 50-416

License No.: NPF-13

Inspection at Grand Gulf site near Port Gibson, Mississippi

Inspectors: C. Julian for — 4/24/84
J. L. Caldwell — Date Signed

C Julian for — 4/24/84
C. W. Hehl — Date Signed

C. Julian — 4/24/84
C. A. Julian — Date Signed

C. Julian for — 4/24/84
A. W. Wagner — Date Signed

Accompanying Personnel: D. S. Brinkman, NRR

Approved by: [signature] — 4/24/84
D. M. Verrelli, Branch Chief — Date Signed
Divison of Project and Resident Programs

SUMMARY

Inspection on March 28-30, 1984

Areas Inspected

This special, announced inspection involved 78 inspector-hours on site in the areas of observation of the Grand Gulf Technical Specification Review Program.

Results

Of the areas inspected, one apparent deviation was found (Failure to test remote shutdown panel as committed in FSAR, see paragraph 6).

REPORT DETAILS

1. Persons Contacted

   Licensee Employees

   J. E. Cross, Plant Manager
   R. F. Rogers, Assistant Plant Manager
   T. H. Cloninger, MP&L Project Manager, Unit 2
   J. F. Pinto, Manager-Nuclear Plant Engineering
   L. F. Daughtery, Compliance Superintendent
   D. W. Stonestreet, Manager, Review Group
   R. C. Fron, MP&L Technical Assistant
   S. M. Feith, Nuclear Site QA Manager
   L. C. Burgess, Administrative Manager, Technical Specification
   C. L. Tyrone, MP&L Project Manager, Technical Specifications
   J. C. Roberts, MP&L Technical Superintendent
   P. R. Hughes, Regulatory Compliance

   Other licensee employees contacted included technicians, operators, engineers, mechanics, security force members and office personnel.

   Other Organizations

   *J. Guibert, IMPELL Corporation
   *D. E. Stewart, Bechtel Power Corporation

2. Exit Interview

   The inspection scope and findings were summarized on March 30, 1984, with those persons indicated in paragraph 1 above. Licensee representatives did not take issue with the deviation. The details of the inspection findings were discussed at length with licensee representatives.

3. Licensee Action on Previous Enforcement Matters

   Not inspected.

4. Unresolved Items

   Unresolved items were not identified during this inspection.

5. Observations on Technical Specifications Review Program

   As described in MP&L letter AECM-84/0183 of March 18, 1984 to NRR, a Technical Specification (TS) review program has been undertaken by MP&L to identify any and all discrepancies in the Grand Gulf TS. The purpose of this inspection was to observe the review program in progress. This was accomplished in two ways.

First inspectors reviewed samples of the review program results and discussed the findings with various program managers. Various program participants were interviewed to fully understand the program and attempt to identify deficiencies in the program or inadequacies in implementation.

Second, certain specific TS items were selected and the item compared with the FSAR, SER, and the as built plant as observed by the inspector. Any TS discrepancies were noted and compared with the review program results in the same TS areas. This section of the report presents observations by the inspectors resulting from the first facet of the inspection. Sections 6, 7, and 8 present the inspector's observations from the second facet.

The licensee divided the Grand Gulf TS (GGTS) as currently approved by NRC into four portions for work by four review groups. These four portions were: (1) the technical specifications and associated bases within the NSSS (GE) scope, (2) the technical specifications and associated bases within the architect engineer's (Betchel) scope, (3) the technical specifications and associated bases concerning radiological effluent and monitoring (RETS), and (4) the technical specifications concerning definitions, design features and administrative controls. This divisions of the technical specifications and their subsequent assignment to appropriate review groups ensured that all the technical specifications were reviewed by at least one, and in some cases, more than one review group. Therefore, it appears that the program covers the entire scope of the TS.

The program requires that the TS be used as a focal point for comparing them with the Final Safety Analysis Report (FSAR), the NRC Safety Evaluation Report (SER), BWR/6-Standard Technical Specifications (STS) and the as-built plant. Such a comparison requirement is desirable, however, there appears to be an inherent deficiency in the program in that by establishing the GGTS as the focal point of the review, the program presumes the GGTS to be sufficient in scope and in mode applicability. In addition to comparing the GGTS with the BWR/6-STS, the program should require consideration of the GGTS to determine if their scope and mode applicability are adequate and if the GGTS contain unnecessary requirements. The BWR/6-STS were prepared in conjunction with the GGTS preparation and their scope and mode applicability have not been proven through use on other plants as have the other STS currently in use. Furthermore, the BWR/6-STS have not yet been officially endorsed by the NRC staff. Therefore, the BWR/6-STS are not considered to provide a sound basis for determining that the GGTS are adequate in scope or mode applicability.

While the program provides for a direct comparison of the GGTS with the as-built plant and with the FSAR, it does not provide for a direct comparison of the as-built plant to the FSAR. In view of the fact that a number of discrepancies between the FSAR and the as-built plant were detected during other recent such comparisons (e.g. during the Region II inspection of February 21-24, 1984, Inspection Report 84-06), such a comparison would have provided added assurance that the as-built plant is accurately described in the FSAR. However, a limited comparison of the as-built plant to the FSAR will be possible through cross comparisons of the

as-built plant to the GGTS and the FSAR to the GGTS. If in this limited comparison, a large number of inconsistencies are detected and are determined to be significant from a safety standpoint, a more direct and thorough comparison should be required.

The licensee established a project-oriented organization reporting to the Senior Vice President-Nuclear to coordinate the review effort. The Project Manager, Technical Specifications Review is an MP&L employee who reports directly to the Senior Vice President-Nuclear. The Review, Priorization and Direction (RPD) Manager, Administrative Manager, RETS Manager, and the NSSS/BOP Manager are all MP&L employees and they report directly to the Project Manager. It appears that the program provides for appropriate MP&L management involvement and oversight.

The RPD Group includes representatives from Nuclear Plant Engineering (NPE), Plant Staff and Nuclear Safety and Compliance. The primary functions of the RPD Group are to: (1) evaluate findings forwarded to it, (2) assign priority to potential changes to the technical specifications, (3) direct necessary corrective action, and (4) concur with findings or adequacy of completed or proposed corrective actions.

The NSSS/BOP Group receives the combined review results from both GE and Bechtel offsite. Also reporting to the NSSS/BOP Manager is an Onsite Review Team whose minimum composition includes: (1) a GE or Bechtel engineer, (2) an MP&L NPE engineer, and (3) an MP&L Senior Reactor Operator. The initial review of TS within the NSSS/BOP Review Group scope of responsibility will be conducted in the GE and Betchel home offices, as appropriate, followed up by some field verification at the plant site.

The Administrative Review Group is directed by an engineer from the MP&L Quality Assurance organization. The RETS Review Group Manager is the MP&L Manager of Radiological and Environmental Services. There is substantial licensee involvement in all appropriate aspects of the program which is considered preferable to delegation of such involvement to a consultant or other organizations.

The program provides for auditing of its implementation and effectiveness by the MP&L Quality Assurance organization. A Quality Engineer is assigned to the program to provide quality control support to the Project Manager. Therefore, it appears the program includes commitments for adequate participation by the licensee's Quality Assurance organization.

Although it was not a formal requirement, the program includes the use of an independent organization to assess the program's effectiveness. The licensee selected the Impell Corporation to perform this independent audit. The Impell Corporation is to review the program, inspect work activities in progress, and provide a report on the adequacy of the program to the Senior Vice President-Nuclear.

The licensee developed a prioritization scheme for all items identified which require resolution and possible technical specification changes. Priority 1 items would be those required to be changed prior to resuming operation of the plant. Priority 2 items are those for which technical specification changes are required but such changes are not immediately required for safe operation of the plant. Priority 3 items are those which are determined after review to not require TS changes. The licensee recommends that all items identified as Priority 1 be approved by the NRC and issued as license amendments prior to resuming critical operation of the plant. The remaining priority 2 items will be resolved on a schedule to be determined later by the licensee and the NRC. The licensee initiated implementation of the Grand Gulf Technical Specification Review Program on March 2, 1984. It is anticipated to be complete by mid April 1984.

During this inspection, several member of the licensee's organization as well as several GE and Bechtel representatives were interviewed. Each individual problem identified is given an item number and documented on a TS problem sheet. All TS problem sheets related to a given TS line item are combined in a single package for review and disposition. Numerous technical specification line item packages were examined during onsite review. From examination of these packages, it was determined that the licensee implementation of the program appears to be as described in its submittal of March 18, 1984. However, certain reviewers particularly in the Betchel areas of review responsibility were apparently using the draft BWR/6-STS as justification for the acceptability of the GGTS. As discussed above, the draft BWR/6-STS have neither been endorsed for use by the NRC staff nor are the BWR/6-STS considered as "mature" as are the other STS currently in use. Therefore, while the BWR/6-STS can serve as a useful guide in evaluating the adequacy of the GGTS, the inspectors concluded that a determination of acceptability of GGTS line items based upon a comparison with the BWR/6-STS is not technically adequate. The licensee stated that in final closure of technical specification packages, the BWR/6-STS will not be used as sole justification for determining the acceptability of the GGTS but that additional justifications will be provided. Region II will followup to confirm this commitment as Inspector Followup Item IFI 416/84-11-01.

Although there are indications that some of the reviewers considered the accuracy of the mode applicability requirements during their reviews of the GGTS, there was no systematic implementation of a clear requirement for the reviewers to determine the accuracy of mode applicability requirements of the GGTS. This appears to be a deficiency in the program and in its implementation. Although the program gives the reviewer a check list of attributes that must be considered during review of each TS line item, the list contains no attribute relating to verification that TS requirements are applicable in the correct plant operating modes. The licensee has made an informal commitment to address and correct this deficiency and Region II will followup on the licensee's commitment. (IFI 416/84-11-02)

It was observed the potential technical specification problems could be identified during reviews by various reviewers and determined to be insignificant by the RPD. When such a determination was made, item numbers were not assigned to the technical specification problem sheets and therefore a potential exists for items which were actually signficant to not be tracked and hence dropped from further consideration. The problem sheets are retained in the review package, however. The inspectors found that this is a deficiency in the program and that a tracking system for such items should be developed and implemented. The licensee has informally committed to consider action on this item. Region II will also followup on this item. (IFI 416/84-11-03)

The inspectors noted that the program does not specifically require a search of the FSAR for additional items that are Grand Gulf specific and are not presently addressed in the TS. The licensee has informally committed to a followup verification program to address this issue. Region II will follow up on this item during a future inspection. (IFI 416/84-11-04)

6. T.S. 3.3.7.4 Remote Shutdown Monitoring Instrumentation

TSTS 077

A review of the current Remote Shutdown Monitoring Instrumentation TS was conducted to audit incorporation of FSAR chapter 7.4 requirements, 10 CFR 50 requirements and agreement with the as built plant systems. A check was made of the surveillance program for this system. The following comment was noted.

The TS does not require in this section that the RHR, SSW, ADS RCIC, and CRD Hydraulic system control switches and flow controller be surveilled. The inspector was informed that the switches have not been tested since the completion of preoperational testing. They are not included in the licensee's surveillance program. FSAR paragraph 7.4.2.4.2 states that "the instrumentation and control components required for remote shutdown, which are not normally in operation, will be periodically tested." The failure to perform periodic testing as required by the FSAR is a deviation from a commitment made to the NRC. This deviation was will be identified as IFI 416/84-11-05, failure to perform periodic testing.

7. TS 3.7.1 Standby Service Water

A review of TS 3/4.7.1.1, 3/4.7.1.2, and 3/4.7.1.3 on the Standby Service Water (SSW) system and the Ultimate Heat Sink (UHS) for adequacy and conformance with the FSAR and SER was conducted. TS 3/4.7.1.1 and 3/4.7.1.2 on the SSW system appear to be adequate but their surveillance requirements do not appear to meet the commitments and requirements of FSAR 9.2.1.4, the SER and 10 CFR part 50 General Design Criteria 46 for testing of cooling water systems. In particular the existing surveillances do not require verifying the repositioning of valves and starting of pumps and fans on a LOCA signal and transfer to an emergency power source on loss of normal power as required by the FSAR, SER and 10 CFR 50. This problem with TS 3/4.7.1.1 and 3/4.7.1.2 surveillance requirements has been previously pointed out to the licensee by NRR. TS 3/4.7.1.3 appears adequate but a

review of the FSAR 9.2.5.1.1 for the UHS revealed an inconsistency in the required time in days that the UHS must be available without make up water under accident conditions. The FSAR para 9.2.5.1.1 states that the UHS is designed for 28 days but an earlier FSAR commitment para 9.2.1.3 stated 30 days as the criteria as does Regulatory Guide 1.27 Rev. 2 January 1976 committed to by the FSAR in Appendix 3A. This item will be identified as IFI 416/84-11-06.

8. Nuclear Instrumentation Review

The inspector performed an independent audit of the Grand Gulf TS with regard to nuclear instrumentation. The facility FSAR and SER were utilized as base documents for determining requirements. The facility TS were then compared to these requirements to identify potential inadequacies and/or omissions. The licensee review findings were then compared to the inspector findings in an attempt qualify the adequacy of the licensee's review. The licensee's TS review findings correlated with those of the inspector's with the following exceptions.

FSAR chapter 7.6 states that the source range monitors (SRMs), the intermediate range monitors (IRM's) and the average power range monitors (APRM's) are aligned to produce a non-coincident scram during refueling by removal of shorting links. TS 3.9.2 requires that the shorting links be verified removed during certain refueling operations but does not contain a surveillance requirement to test the non-coincident scram function.

Table 3.3.1-1, which delineates reactor protection system (RPS) instrumentation, does not identify the SRM's as RPS instrumentation. TS table 4.3.1-1, which delineates surveillance requirements for RPS instrumentation does not identify a requirement to test the non-coincident scram function of the SRMs, IRM's or APRM's with the shorting links removed. This apparent omission of identifying the SRMs as RPS instrumentation in Mode 5 with the shorting links removed and the absence of a surveillance requirement was not identified by the licensee review program. This finding was discussed with the licensee at the exit interview and the licensee committed to reviewing this item. This will be identified as IFI 416/84-11-07.

No violations or deviations were identified in this area.

EG&G Idaho, Inc.

P.O. BOX 1625, IDAHO FALLS, IDAHO 83415

March 27, 1984

Mr. F. L. Sims, Director
Reactor Research and Technology Division
Idaho Operations Office - DOE
Idaho Falls, ID 83401

TRANSMITTAL OF GRAND GULF, UNIT 1, REPORT A6816 - LPL-106-84

Ref: J. M. Fehringer, H. C. Rockhold and T. L. Cook, Audit of Nuclear Plant Technical Specifications Grand Gulf Nuclear Station, Unit 1, Docket No. 50-416, EGG-EA-6542, March 1984

Dear Mr. Sims:

Enclosed is the referenced final report. This report determined that there are inconsistencies between three Technical Specification Sections, the Final Safety Analysis Report, and the Safety Evaluation Report for Grand Gulf Nuclear Station, Unit 1. This report issued under FIN A6816 completes Node 106-D1 on the FY1984 NRC Support Milestone Chart.

Very truly yours,

for

L. P. Leach, Manager
Reactor Evaluation Programs

JMF:jh

Enclosure:
As Stated

cc: J. N. Donohew, NRC/DL (5)
G. C. Meyer, NRC/DL
J. O. Zane, EG&G Idaho (w/o Enc.)

8404050012 PDR

Incomplete

EGG-EA-6542

March 1984

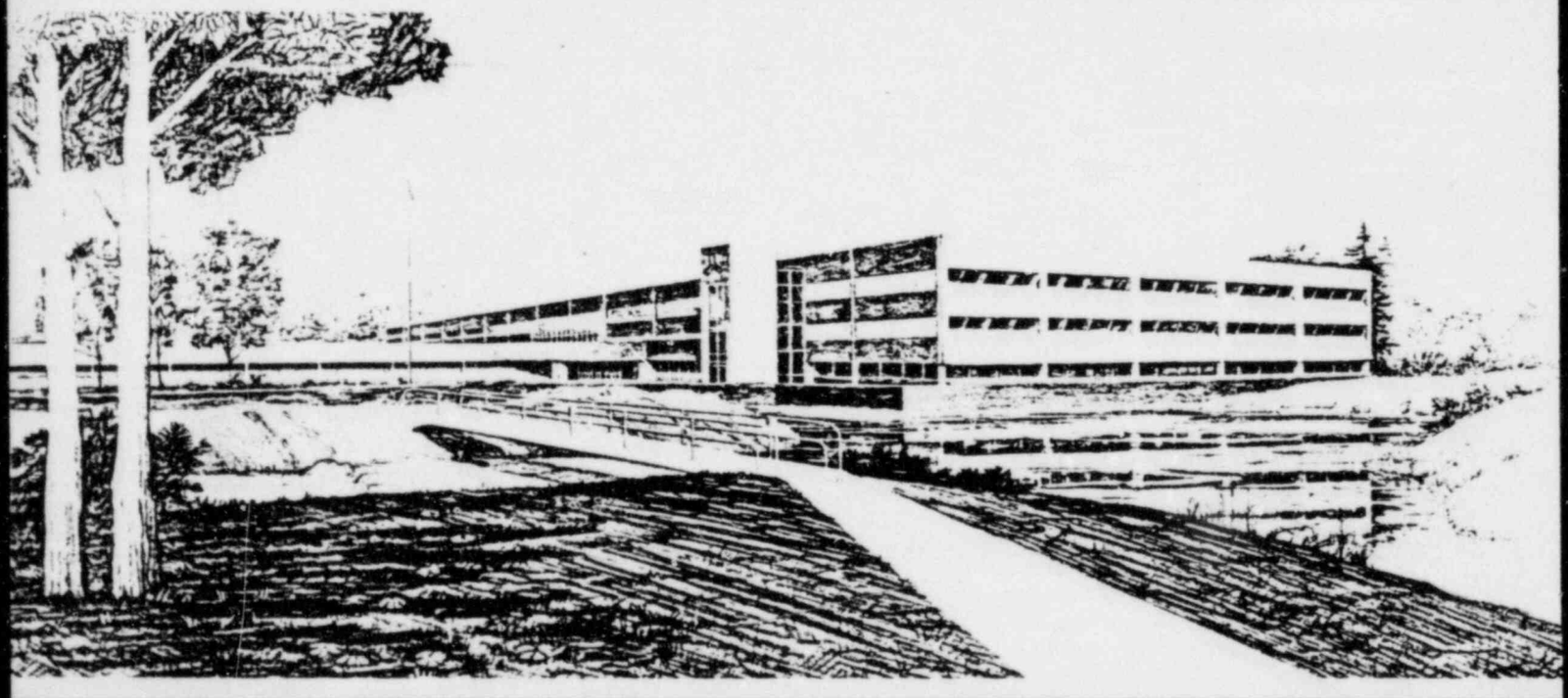
AUDIT OF NUCLEAR PLANT TECHNICAL SPECIFICATIONS

GRAND GULF NUCLEAR STATION, UNIT 1

DOCKET NO. 50-416

J. M. Fehringer
H. C. Rockhold
T. L. Cook

Idaho National Engineering Laboratory
Operated by the U.S. Department of Energy



This is an informal report intended for use as a preliminary or working document

Prepared for the
U.S. NUCLEAR REGULATORY COMMISSION
Under DOE Contract No. DE-AC07-76ID01570

EG&G Idaho

EGG-EA-6542

GRAND GULF NUCLEAR STATION UNIT 1
AUDIT OF NUCLEAR PLANT TECHNICAL SPECIFICATIONS
Docket No. 50-416
TAC No. 54185

Published March 1984

J. M. Fehringer
H. C. Rockhold
T. L. Cook

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

Responsible NRC Individual and Division:
G. C. Meyer/Division of Licensing

Prepared for the
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
Under DOE Contract No. DE-AC07-76ID01570
FIN No. A6816

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AUDIT OF NUCLEAR PLANT TECHNICAL SPECIFICATIONS

1. INTRODUCTION

The Grand Gulf Nuclear Station Unit 1, (Grand Gulf-1) is a boiling water reactor (BWR) plant. It has been selected for an audit to determine if the Grand Gulf-1 Technical Specifications (T/S)[1] are consistent with the Grand Gulf-1 Final Safety Analysis Report (FSAR)[2] as amended and the Grand Gulf-1 Safety Evaluation Report (SER)[3] as supplemented. The specific sections of the T/S selected for audit and summary results are listed in Table I. Inconsistencies between these sections of the T/S and the FSAR and SER were identified but no further evaluation was conducted to determine if the inconsistencies were indications of error in any of the subject documents.

2. REVIEW CRITERIA

The T/S Limiting Conditions for Operation (LCOs) and Action Statements for each technical specification listed in Table I (Section 3) were compared to the FSAR and SER to determine if the T/S are consistent with the FSAR and SER. Emphasis was on the T/S Operational Mode 1, power operation, with exceptions noted in this report. Setpoints and lists of valves, instruments, overcurrent protective devices and electrical buses in the T/S were checked against tables in the FSAR and SER.

The SER was reviewed to ensure that requirements in the SER were addressed in the T/S.

The T/S bases and surveillance requirements were not reviewed in this audit of the T/S.

An explanation of each inconsistency between the T/S and the FSAR and SER is included in this report.

c. Item 2.b of T/S Table 3.3.2-2 (Isolation Actuation Instrumentation Setpoints) identifies the "Main Steam Line Flow-High" setpoint as ≤ 169 psid. A 169 psid signal corresponds to 140% steam flow. The FSAR identifies 140% steam flow as the required "Main Steam Line Flow-High" setpoint.

However, Table 7.3-10 (Containment and Reactor Vessel Control System Instrumentation Specifications) of the FSAR identifies the setpoint as ≤ 133.5 psid.

d. Item 2.b of T/S Table 3.3.2-2 (Isolation Actuation Instrumentation Setpoints) requires an instrument with an indicating range of -50/0/250 psid in order to indicate the ≤169 psid trip setpoint.

However, Table 7.3-10 (Containment and Reactor Vessel Control System Instrumentation Specifications) of the FSAR identifies an instrument with an indicating range of -15/0/150 psid.

2. T/S Section 3/4.6.4 (Containment and Drywell Isolation Valves)

Sections 3.6.4-1.1.b through 3.6.4-1.4.b of T/S Table 3.6.4-1 (Containment and Drywell Isolation Valves)[a] lists valves that are not identified as required in the FSAR Table 6.2-44 (Containment Isolation Valves).

3. T/S Section 3/4.6.6.2 (Secondary Containment Automatic Isolation Dampers/Valves)

The completeness of T/S Table 3.6.6.2-1, (Secondary Containment Isolation Dampers/Valves) cannot be verified by FSAR Table 7.6-12,

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a. Some of the valves are listed in FSAR Tables 7.6-12 (Auxiliary Building Isolation System Actuated Equipment List), 6.2-48 (Primary Containment Integrated Leakage Rate Instrumentation), and Table 6.2-49 (Reactor Containment Penetration and Containment Isolation Valve Leakage Rate Test List).

TABLE I. (Continued)

SECTION		CONSISTENT/INCONSISTENT
3/4.6.2	DRYWELL	
	Drywell Integrity	Consistent
	Drywell Bypass Leakage	Consistent
	Drywell Air Locks	Consistent
	Drywell Structural Integrity	Consistent
	Drywell Internal Pressure	Consistent
3/4.6.3	DEPRESSURIZATION SYSTEMS	
	Suppression Chamber	Consistent
	Primary Containment Spray	Consistent
	Suppression Pool Cooling	Consistent
	Drywell-Suppression Chamber Differential Pressure	Consistent
3/4.6.4	CONTAINMENT AND DRYWELL ISOLATION VALVES	Inconsistent
3/4.6.5	SECONDARY CONTAINMENT	
	Secondary Containment Automatic Isolation Dampers/Valves	Inconsistent
	Standby Gas Treatment System	Consistent
3/4.6.7	ATMOSPHERE CONTROL	
	Containment and Drywell Hydrogen Recombiner Systems	Consistent
	Drywell Purge System	Consistent
3/4.8	ELECTRICAL POWER SYSTEMS	
3/4.8.1	A.C. SOURCES	Consistent
	A.C. Sources-Operating	Consistent

NRC FORM 335 (11-81) U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

1. REPORT NUMBER (Assigned by DDC): EGG-EA-6542

4. TITLE AND SUBTITLE
Audit of Nuclear Plant Technical Specifications
Grand Gulf Nuclear Station, Unit 1

2. (Leave blank)

3. RECIPIENT'S ACCESSION NO.

7. AUTHOR(S)
J. M. Fehringer/H. C. Rockhold/T. L. Cook

5. DATE REPORT COMPLETED
MONTH: March YEAR: 1984

9. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
EG&G Idaho, Inc.
Idaho Falls, ID 83415

DATE REPORT ISSUED
MONTH: March YEAR: 1984

6. (Leave blank)

8. (Leave blank)

12. SPONSORING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
Division of Licensing
Office of Nuclear Reactor Regulations
U.S. Nuclear Regulatory Commission
Washington, DC 20555

10. PROJECT/TASK/WORK UNIT NO.

11. FIN NO.
A6816

13. TYPE OF REPORT
Technical Evaluation Report (TER)

PERIOD COVERED (Inclusive dates)
February 13, 1984 to March 12, 1984

15. SUPPLEMENTARY NOTES

14. (Leave blank)

16. ABSTRACT (200 words or less)

The report documents the review of the Grand Gulf Nuclear Station, Unit 1 (Grand Gulf-1) Technical Specifications (T/S) to determine if selected sections of the T/S are consistent with the Grand Gulf-1 Final Safety Analysis Report (FSAR) as amended, and the Grand Gulf-1 Safety Evaluation Report (SER) as supplemented. Inconsistencies are listed in this report but no further evaluation was conducted to determine if the inconsistency was an indication of an error in any of the subject documents.

17. KEY WORDS AND DOCUMENT ANALYSIS

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L. Kintner
Rec'd May 11, 1984

MISSISSIPPI POWER & LIGHT COMPANY
Helping Build Mississippi
P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

April 19, 1984

JAMES P. McGAUGHY, JR.
VICE PRESIDENT

Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:

SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and 50-417
License No. NPF-13
File: 0260/L-860.0
GGNS Technical Specification
Review Program - Completion
Report
AECM-84/0229

Mississippi Power & Light Company (MP&L) has completed its review of the Grand Gulf Nuclear Station (GGNS) Technical Specifications in accordance with the program submitted to the NRC by AECM-84/0183, dated March 18, 1984. A report on the review program was submitted by AECM-84/0217, dated April 9, 1984. This letter documents the completion of the Technical Specification Review Program and presents the final Program Completion Report.

The Program Completion Report documents that a thorough and in-depth engineering, operations, and licensing review of the GGNS Technical Specifications was conducted in accordance with all programmatic commitments. Twenty-three (23)* priority 1 findings having potential safety significance were discovered and submitted as proposed changes to the Operating License. The remaining findings have minimal or no safety significance. The majority of the changes associated with these lower priority findings pertain to corrections of errors and incorporation of enhancements or clarifications to facilitate the implementation and clear understanding of the GGNS Technical Specifications. These remaining findings will be submitted, as appropriate, as proposed changes to the Operating License on a schedule mutually agreed to with the NRC Staff.

The scope of the review and the nature of the results provide a high degree of confidence that the GGNS Technical Specifications in all material respects accurately and adequately reflect the underlying design analyses and the as-built plant. By incorporating the above noted priority 1 changes, the GGNS Technical Specifications can be relied upon to support safe plant operations at full power.

8404250026 PDR

*One additional item (TSPS 034) is carried as a priority 1 item for tracking purposes and does not represent a Technical Specification change.

MISSISSIPPI POWER & LIGHT COMPANY

The Program Completion Report is enclosed for your review.

Yours truly,

for J. P. McGaughy

JPM:cdm

Attachments - Program Completion Report

cc: Mr. J. B. Richard (w/a)
Mr. R. B. McGehee (w/a)
Mr. T. B. Conner (w/a)
Mr. G. B. Taylor (w/a)

Mr. Richard C. DeYoung, Director (w/a)
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. J. P. O'Reilly, Regional Administrator (w/a)
U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 2900
Atlanta, Georgia 30303

MISSISSIPPI POWER & LIGHT COMPANY

bcc: Mr. A. Zaccaria (w/a)
Mr. R. W. Jackson (w/a)
Mr. R. D. Couse (w/o)
Mr. J. F. Hudson, Jr. (w/o)
Mr. T. H. Cloninger (w/a)
Mr. T. E. Reaves (w/a)
Mr. J. E. Cross (w/a)
Mr. S. M. Feith (w/a)
Mr. A. R. Smith (w/a)
Mr. A. G. Wagner (w/a)
Mr. C. C. Hayes (w/a)
Mr. M. D. Houston (w/a)
Mr. L. L. Kintner (w/a)
Mr. J. F. Pinto (w/a)
Mr. L. F. Daughtery (w/a)
Mr. M. D. Archdeacon (w/o)
Mr. L. F. Dale (w/a)
Mr. W. E. Edge (w/a) (2)
Mr. J. C. Roberts (w/a)
Mr. J. G. Cesare (w/a)
Mr. G. W. Delaney (w/a)
Mr. C. L. Tyrone (w/a)
Middle South Services
Nuclear Activities (w/a)
File (LCTS) (w/a) (2)
File (Plant) (w/a)
File (Project) (w/a) [201]
File (Tech Spec Records) (w/a)

3/30/84
JND

EG&G Idaho, Inc.

P.O. BOX 1625, IDAHO FALLS, IDAHO 83415

March 27, 1984

Mr. F. L. Sims, Director
Reactor Research and Technology Division
Idaho Operations Office - DOE
Idaho Falls, ID 83401

TRANSMITTAL OF WASHINGTON NUCLEAR PROJECT, UNIT 2, REPORT A6816 - LPL-108-84

Ref: J. M. Fehringer and E. V. Mobley, Audit of Nuclear Plant Technical Specifications Washington Nuclear Project, Unit 2, Docket No. 50-397, EGG-EA-6540, March 1984

Dear Mr. Sims:

Enclosed is the referenced final report. This report determined that there are inconsistencies between five Technical Specification Sections, the Final Safety Analysis Report and the Safety Evaluation Report for Washington Nuclear Project, Unit 2. This report issued under FIN A6816 completes Node 106-D1 on the FY1984 NRC Support Milestone Chart.

Very truly yours,

G. A. Hunter for

L. P. Leach, Manager
Reactor Evaluation Programs

JMF:jh

Enclosure:
As Stated

cc: J. N. Donohew, NRC/DL (5)
G. C. Meyer, NRC/DL
J. O. Zane, EG&G Idaho (w/o Enc.)

DISCLAIMER

EGG-EA-6540

WASHINGTON NUCLEAR PROJECT, UNIT 2
AUDIT OF NUCLEAR PLANT TECHNICAL SPECIFICATIONS

Docket No. 50-397
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J. M. Fehringer
E. V. Mobley

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

Responsible NRC Individual and Division:
G. C. Meyer/Division of Licensing

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AUDIT OF NUCLEAR PLANT TECHNICAL SPECIFICATIONS

1. INTRODUCTION

The Washington Nuclear Project, Unit 2, (WNP-2) is a boiling water reactor (BWR) plant. It has been selected for an audit to determine if the technical specifications (T/S) for WNP-2[1] are consistent with the Final Safety Analysis Report (FSAR) for WNP-2[2] as amended and the Safety Evaluation Report (SER)[3] as supplemented. The specific sections of the T/S selected for audit and summary results are listed in Table I. Inconsistencies between these sections of the T/S and the FSAR and SER were identified but no further evaluation was conducted to determine if the inconsistencies were indications of error in any of the subject documents.

2. REVIEW CRITERIA

The T/S Limiting Conditions for Operation (LCOs) and Action Statements for each technical specification listed in Table I (Section 3) were compared to the FSAR and SER to determine if the T/S are consistent with the FSAR and SER. Emphasis was on the T/S Operational Mode 1, power operation, with exceptions noted in this report. Setpoints and lists of valves, instruments, overcurrent protective devices and electrical buses in the T/S were checked against tables in the FSAR and SER.

The SER was reviewed to ensure that requirements in the SER were addressed in the T/S.

The T/S bases and surveillance requirements were not reviewed in this audit of the T/S.

An explanation of each inconsistency between the T/S and the FSAR and SER is included in this report.

3. T/S Section 3/4.5.3 (Suppression Chamber) (conditions 1,2,3)

The T/S 3.5.4.1 Limiting Condition for Operation (LCO) addressed in the SER (page 6-3, Sup. 4) references vacuum breaker operability instead of suppression chamber water volume. Vacuum Breaker Operability is addressed in T/S 3.6.4.1 (LOC). Suppression chamber water volume is correctly addressed in the FSAR.

4. T/S Section 3/4.6.1.8 (Drywell and Suppression Chamber Purge System)

The T/S 3.6.1.8 (Drywell and Suppression Chamber Purge System) LCO states that the chamber purge and exhaust butterfly dampers shall be blocked so as not to open more the 70°. Also, that purging through the Standby Gas Treatment System shall be restricted to ≥ 90 hours per 365 days.

The SER does not identify the restrictions placed on the chamber purge and exhaust butterfly dampers, or the restriction placed on purging through the Standby Gas Treatment System.

5. T/S Section 3/4.6.5.2 (Secondary Containment Automatic Isolation Valves)

The FSAR (Section 6.2.3.3, page 6.2-50) states that a secondary containment isolation shall be completed within 4 seconds. However, Table 3.6.5.2-1 (Secondary Containment Ventilation System Automatic Isolation Valves) allows for supply valves to isolate within 10 seconds and for exhaust valves to isolate within 8 seconds.

Table I contains a summary of the WNP-2 T/S sections reviewed; consistencies and inconsistencies with the FSAR and/or the SER are shown.

TABLE I. (Continued)

SECTION		CONSISTENT/INCONSISTENT
3/4.6.6	PRIMARY CONTAINMENT ATMOSPHERE CONTROL	
	Drywell and Suppression Chamber Hydrogen Recombiner Systems	Consistent
	Drywell and Suppression Chamber Oxygen Concentration	Consistent
3/4.8	ELECTRICAL POWER SYSTEMS	
3/4.8.1	A.C. SOURCES	
	A.C. Sources-Operating	Consistent
3/4.8.2	ONSITE POWER DISTRIBUTION SYSTEMS	
	D.C. Sources - Operating	Consistent
	Distribution - Operating	Consistent
	Primary Containment Penetration Conductor Overcurrent Protective Devices	Consistent

4. CONCLUSION

As shown in Table I, 23 technical specification sections were compared with information in the FSAR and SER for WNP-2. Inconsistencies were identified in five sections of the technical specifications shown in Table I. This review did not determine the significance of the inconsistency or which of the documents was in error.

5. REFERENCES

1. WPPSS Technical Specifications Rev. December 1983
2. WPPSS FSAR up to Ammendment No. 32
3. WPPSS SER up to Supplement No. 4

NRC FORM 335 (11-81) U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

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3. RECIPIENT'S ACCESSION NO.

7. AUTHOR(S): J. M. Fehringer/E. V. Mobley

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U.S. Nuclear Regulatory Commission
Washington, DC 20555

10. PROJECT/TASK/WORK UNIT NO.

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13. TYPE OF REPORT: Technical Evaluation Report (TER)

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15. SUPPLEMENTARY NOTES

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16. ABSTRACT (200 words or less)

This report documents the review of the Washington Nuclear Project, Unit 2(WNP-2) Technical Specifications (T/S) to determine if selected sections of the T/S are consistent with the WNP-2 Final Safety Analysis Report (FSAR) as amended, and the WNP-2 Safety Evaluation Report (SER) as supplemented. Inconsistencies are listed in this report but no further evaluation was conducted to determine if the inconsistency was an indication of an error in any of the subject documents.

17. KEY WORDS AND DOCUMENT ANALYSIS

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Washington Public Power Supply System
P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

March 19, 1984
G02-84-155

Docket No. 50-397

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Schwencer:

Subject: NUCLEAR PLANT NO. 2
TECHNICAL SPECIFICATIONS

References:
1) Letter, D. G. Eisenhut (NRC) to D. W. Mazur (SS), same subject, dated March 8, 1984
2) Letter, G02-84-129, G. C. Sorensen (SS) to A. Schwencer (NRC), "Operating License NPF-21, Request for Amendment", dated March 13, 1984
3) Letter, G02-84-126, G. C. Sorensen (SS) to A. Schwencer (NRC), "Operating License NPF-21, Request for Amendment", dated March 9, 1984
4) Letter, G02-84-033, G. C. Sorensen (SS) to A. Schwencer (NRC), "Operating License NPF-21, Request for Amendment", dated January 20, 1984
5) Letter, G02-84-032, G. C. Sorensen (SS) to A. Schwencer (NRC), "Operating License NPF-21, Request for Amendment", dated January 20, 1984

Reference 1 requested a review of the subject technical specifications and a certification affirming that the technical specifications, to the best knowledge available, accurately reflect the plant, the WNP-2 Final Safety Analysis Report (FSAR), and the Safety Evaluation Report (SER) analyses.

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1/1

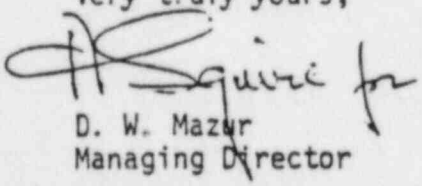
TECHNICAL SPECIFICATIONS

In response, the Supply System considers that the subject technical specifications, to the best knowledge available, do accurately reflect the plant, the FSAR, and the SER. The review process by which the Supply System provided input to the NRC staff relied heavily on a combination of Supply System plant system technical experts, and operators and staff with previous BWR and technical specification experience (attached). The WNP-2 technical specifications were developed using the experiences gained by the Licensing Review Group (LRG-1) with the LaSalle and Susquehanna technical specifications, in addition to the Supply System efforts noted in the attached. Our experiences to date, in applying the technical specifications in our test program, have identified only minor changes required in the technical specifications (References 2, 3, 4, and 5). We anticipate that similar items may be identified as we continue into the power ascension test program. Additionally, the Supply System regards portions of the technical specifications as being overly conservative and restrictive. The Supply System expects to work with the staff to correct these areas.

The Supply System has worked closely with the NRC staff in developing the present technical specifications. The NRC staff effort in concert with the Supply System effort has produced an accurate set of technical specifications for operating WNP-2. The Supply System appreciates the staff effort to date and anticipates working closely with the staff on future technical specification changes.

Should you have any further questions, please contact Mr. P. L. Powell, Manager, WNP-2 Licensing.

Very truly yours,



D. W. Mazur
Managing Director

PLP/tmh
Attachment

cc: R Auluck - NRC
WS Chin - BPA
AD Toth - NRC Site

TECHNICAL SPECIFICATION PREPARATION AND REVIEW

Initial Review Effort

- The WNP-2 Plant Manager assigned preparation of the Technical Specifications to the Plant Technical Staff.
  - Within the Plant Technical Staff, a Technical Specification (T/S) Coordinator was selected to administer the preparation and review process. The individual selected was a degreed engineer, SRO certified, had participated in all the operator training programs at WNP-2 and was well qualified.
- The T/S Coordinator made LCO and other Technical Specification section review/preparation assignments.
  - Lead Technical Reviewers (LTR) within the Plant Technical Staff were selected, based on system assignments and/or technical expertise.
  - Each review was conducted using plant documents, such as the FSAR, System Design Specifications and Data Sheets, Operational Quality Assurance Program Manual, and the Plant Procedures Manual.
  - Upon completion of each assignment, the T/S Coordinator would review and status each task.
  - The Reactor Engineering Supervisor reviewed the entire Technical Specification prior to submittal to the NRC.

First Draft Submittal

- A first draft Technical Specification submittal based on the above review was submitted to NRC-SSPB with some information missing.
  - The type of information missing was primarily limited to setpoints which were being prepared by the A/E and NSSS suppliers.
  - A copy of the submittal was sent to the A/E and GE for review, comment, and completion.
- A meeting was held due to the extent of changes requested at WNP-2 with the NRC-SSPB representative to discuss the submittal.

Iterative Review SS/NRC

- This began the iterative review process with NRC-SSPB.
  - With receipt of a copy of the WNP-2 Technical Specifications resulting from NRC-SSPB review of the first draft, the review process was reinitiated. The review was limited to the T/S Coordinator (with concurrence from the LTRs) and the NRC-SSPB representative. All items were either discussed by telephone, telefaxed, or mailed directly to the NRC-SSPB representative. Changes were initiated from all parties (T/S Coordinator, LTR, and NRC-SSPB) involved.

- Changes stemmed from Startup test results, design modifications, NRC Branch reviews of NUREG-0123, Technical Specification surveillance procedures review process, A/E and GE review, FSAR changes, and Licensing Review Group issues.

- The goal was to provide a complete document for the "Proof and Review" process.

"Proof and Review" Process

- All changes to the Technical Specification were discussed between the T/S Coordinator and NRC-SSPB representative.

- At this time, all LTRs were required to perform a final review of the "Proof and Review" copy of the Technical Specification.

- A meeting was held between NRC-SSPB and Supply System staff at NRR to discuss the final stages of the review process and any outstanding items or issues.

- Region V reviewed and commented on the Technical Specification, interfacing directly with NRR.

- Representatives from NRC-ICSB visited WNP-2 to discuss the I&C Sections of the Technical Specification with the Plant Technical Staff.

- During this effort and prior to the issuance of the WNP-2 operating license, continual minor Technical Specification changes were made as a result of NRC branch reviews and the conduct of surveillance tests.

STATE OF WASHINGTON)
)
County of Benton)

Subject: Response to Letter, D. G. Eisenhut (NRC) to D. W. Mazur (SS), same subject, dated March 8, 1984

I, ALEXANDER SQUIRE, being duly sworn, subscribe to and say that I am the Deputy, Managing Director, for the WASHINGTON PUBLIC POWER SUPPLY SYSTEM, the applicant herein; that I have full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information and belief the statements made in it are true.

DATE March 19, 1984

Alexander Squire

Alexander Squire, Deputy
Mananging Director

On this day personally appeared before me Alexander Squire to me known to be the individual who executed the foregoing instrument and acknowledge that he signed the same as his free act and deed for the uses and purposes therein mentioned.

GIVEN under my hand and seal this 19 day of March, 1984.

Kathryn E. Ford

Notary Public in and for the
State of Washington

Residing at Richland, WA

FROM:	ACTION CONTROL	DATES	CONTROL NO. 14624
Rep. Edward J. Markey, Chairman Subcommittee on Oversight & Investigations	COMPL DEADLINE	7/24/84	DATE OF DOCUMENT 7/12/84
	INTERIM REPLY		
TO: Chairman Palladino	FINAL REPLY	s/Asselstine for Palladino 8/13/84	PREPARE FOR SIGNATURE OF: [X] CHAIRMAN [ ] EXECUTIVE DIRECTOR OTHER
	FILE LOCATION		

DESCRIPTION [X] LETTER [ ] MEMO [ ] REPORT [ ] OTHER

Request more complete response to his 6/1/84 ltr concerning erroneous Technical Specifications for commercial nuclear power reactors

SPECIAL INSTRUCTIONS OR REMARKS

Ref. EDO 14494

PRIORITY

ASSIGNED TO	DATE	INFORMATION ROUTING	
~~Denton, NRR~~	~~7/16/84~~	Dircks	Case/Denton
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Crutchfield		Rehm	
		Stello	
		DeYoung	
		GCunningham	
		Murley	
		~~OP~~ O'Reilly	

NRC FORM 232 (6-80)

EXECUTIVE DIRECTOR FOR OPERATIONS

PRINCIPAL CORRESPONDENCE CONTROL