



OLIVER D. KINGSEY, JR.  
Vice President  
Nuclear Operations

September 16, 1988

U. S. Nuclear Regulatory Commission  
Mail Station P1-137  
Washington, D. C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station  
Unit 1  
Cocket No. 50-416  
License No. NPF-29  
Inservice Inspection Reports  
AECM-88/0182

In a telephone conversation with L. L. Kintner of the NRC staff on August 18, 1988, changes and additions to the Inservice Inspection (ISI) Summary Reports were discussed.

The attached NIS-2 Summary Reports are revisions to the ISI Summary Report for refueling outage 2 (NIS-1-00006, AECM-88/0065 dated April 5, 1988) and the ISI Summary Report for refueling outage 1 (NIS-1-00005, AECM 87/0076 dated April 8, 1987)

The attached NIS-2 Summary Reports include the following:

- o NIS-2-00178, Revision 1 corrects the valve disc material documentation and supersedes Revision 0 of the same document originally included in Report Number NIS-1-00005 (AECM-87/0076 dated April 8, 1987)
- o NIS-2-00200, Revision 1 clarifies the location of a weld repair and supersedes Revision 0 of the same document originally included in Report Number NIS-1-00006 (AECM-88/0065 dated April 5, 1988)
- o NIS-2-00202 documents Recirculation Pump Seal Cartridge replacements during the second refueling outage and should be included in Report Number NIS-1-00006 (AECM-88/0065 dated April 5, 1988)
- o NIS-2-00203 documents all seal cartridge replacements before the second refueling outage and should be included in Report Number NIS-1-00006 (AECM-88/0065 dated April 5, 1988)

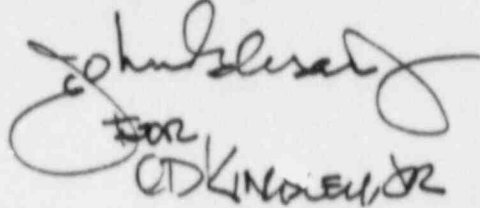
880920060 880916  
PDR ADDCK 05000416  
Q PNU

J14AECM880913 - 1

A047  
1/1

If additional information is needed, please contact this office.

Yours truly,



John Slusark  
for  
ODK/KIN/EN/DR

ODK:ctp  
Attachment

cc: (See Next Page)

cc: Mr. T. H. Cloningor (w/a)  
Mr. R. B. McGehee (w/a)  
Mr. N. S. Reynolds (w/a)  
Mr. H. L. Thomas (w/o)  
Mr. J. L. Mathis (w/a)

Dr. J. Nelson Grace, Regional Administrator (w/a)  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N. W., Suite 2900  
Atlanta, Georgia 30323

Mr. L. L. Kintner, Project Manager (w/a)  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Mail Stop 14B20  
Washington, D.C. 20555



MISSISSIPPI POWER & LIGHT GRAND GULF NUCLEAR STATION

NIS-2 FORM REPAIR AND REPLACEMENT SUMMARY REPORT

NIS-2 00178 REV. 1

PAGE 1 of 2

OWNER: MISSISSIPPI POWER AND LIGHT ELECTRIC BLDG. P.O. BOX 1640 JACKSON, MS 39205

PLANT: MISSISSIPPI POWER AND LIGHT GRAND GULF NUCLEAR STATION P.O. BOX 756 PORT GIBSON, MS 39130

NATIONAL BOARD NO. N/A

COMMERCIAL OPERATING DATE: 7-1-85 UNIT: 1

COMPONENTS INSTALLED, REMOVED & REPLACED

COMPONENT INFORMATION: (Include all applicable information and indicate whether installed, removed or modified) a) name b) size c) capacity d) class e) material f) MPBL No. g) drawings h) location i) manufacturer's name j) manufacturer's address k) manufacturer's I.D. no. l) National Board No.

1. MODIFIED & REPAIRED: a) SWING CHECK VALVES b) 24" N.P.S. c) 900# d) 1 e) CARBON STEEL SA352 GR.LCB f) Q1B21F032A, -F032B g) 9645-M-A242.2-Q1-1.2-4 REV. A h) AUX. BLDG., AREA 8, STEAM TUNNEL, EL. 139' i) ATWOOD & MORRILL CO., INC. j) SALEM, MA. k) -F032A : S/N 10-13615 ; -F032B : S/N 11-13615 l) N/A

(CONTINUED ON PAGE 2)

ABSTRACT OF WORK

ABSTRACT OF REPAIRS/REPLACEMENTS/MODIFICATIONS: (Include types and completion dates of tests, examinations, work completed, and corrective measures taken or recommended)

MODIFICATION, REPAIR & REPLACEMENTS: THE FEEDWATER CHECK VALVE DISCS WERE REPLACED WITH MODIFIED DUAL SEATED DISCS, WHICH CONSIST OF THE EXISTING HARD SURFACED SEATS SUPPLEMENTED BY THE ADDITION OF RESILIENT SOFT SEATS, TO IMPROVE THE SEALING ABILITY OF THE VALVES. THE STUFFING BOX FLANGES OF BOTH VALVES WERE MACHINED TO REMOVE ERODED AREAS AND THE EXISTING DOWEL PIN HOLES OF THE -F032B VAL'VE WERE REDRILLED TO REALIGN THE PIN HOLS FOR INSTALLATION OF THE NEW DISC. THE FOLLOWING TESTS AND EXAMINATIONS WERE PERFORMED.

VISUAL (VT-1) EXAMINATION ON -F032A VALVE'S BEARING COVER STUDS & NUTS FOR INSERVICE EXAMINATION: 11/18/86

VISUAL (VT-3) EXAMINATION ON BOTH VALVES' INTERNALS FOR INSERVICE EXAMINATION: -F032A: 11/18/86, -F032B: 11/8/86

(CONTINUED ON PAGE 2)

OWNER

I certify that the statements made in this report are correct and conform to the rules of the ASME Section XI

Date: 3/30/87 Signed: J.H. Muller Title: MECH. MAINT. SUPT.

Date: REV. 1 6/10/88 Owner Representative: J.H. Muller

AUTHORIZED INSPECTOR

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of MISSISSIPPI and employed by KEMPER GROUP of LONG GROVE, IL, have inspected or verified by supporting documentation the components described in this summary report and state that to the best of my knowledge and belief, the Owner or their agent has performed examinations and taken corrective measures described in this summary report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer make any warranty expressed or implied, concerning the examinations and corrective measures described in the summary report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature: Donald R. Bivins Date: 3-30-87 Commissions: MS 600 National Board, State, Province and Nos.

ORIGINAL

REV. 1

REV. 1

REV. 1

|   |  |  |   |                           |
|---|--|--|---|---------------------------|
| <b>MPL</b>  | MISSISSIPPI<br>POWER & LIGHT<br>GRAND GULF<br>NUCLEAR<br>STATION | NIS-2 FORM<br>REPAIR AND REPLACEMENT<br>SUMMARY REPORT<br>SUPPLEMENTAL SHEET                                 |   | NIS-2 <u>00178 REV.1</u>  |
|   |  |  |   | PAGE <u>2</u> of <u>2</u> |
| OWNER:<br>MISSISSIPPI POWER AND LIGHT<br>ELECTRIC BLDG.<br>P.O. BOX 1640<br>JACKSON, MS 39205 |  | PLANT:<br>MISSISSIPPI POWER AND LIGHT<br>GRAND GULF NUCLEAR STATION<br>P.O. BOX 756<br>PORT GIBSON, MS 39150 | NATIONAL BOARD NO: <u>N/A</u>           |                           |
|   |  |  | COMMERCIAL<br>OPERATING<br>DATE: 7-1-85 |                           |

## COMPONENT INFORMATION: (CONTINUED FROM PAGE 1)

2. REPAIRED: a) STUFFING BOXES b-h) SAME AS ITEM 1 i) QUAKER ALLOY CASTING CO. j) MYERSTOWN, PA. k) F032A : HT.# F3017-6 & F3017-7 ; -F032B : HT# F3017-5 & F3017-8 l) N/A

3. MODIFIED & INSTALLED: a) VALVE DISCS (DUAL SEATED) b-h) SAME AS ITEM 1  
<sup>Card</sup> ~~1, j) SAME AS ITEM 2~~ k) -F032A : S/N 2-13615 ; -F032B : S/N 1-30934 l) N/A  
 6-8-88

4. REMOVED: a) VALVE DISCS b-h) SAME AS ITEM 1 i, j) SAME AS ITEM 2  
 k) -F032A : S/N 10-13615, HT# F2774-6 ; -F032B : S/N 1-20565, HT# F3867-1  
 l) N/A

5.) REPLACED : a) STUFFING BOX STUDS (2 ea.) b) 7/8"-9x4" TFL c) N/A  
 d) 1 e) CARBON STEEL SA193 GR. B7 f) Q1B21F032B g, h) SAME AS ITEM 1  
 i) TEXAS BOLT CO. j) HOUSTON, TX. k) HT# LA-80 l) N/A

## ABSTRACT OF REPAIRS: (CONTINUED FROM PAGE 1)

SYSTEM HYDROSTATIC TEST AND VISUAL (VT-2) EXAMINATION: -F032A : 11/24/86  
 -F032B : 11/14/86

LOCAL LEAK RATE TEST : -F032A : 11/22/86, -F032B : 11/11/85

OPERATIONAL SURVEILLANCE TEST: -F032A : 1/9/87, -F032B : 11/19/86

WORK COMPLETED UNDER MAINTENANCE WORK ORDER M66830 AND MODIFICATION WORK PERMITS 86/1010 AND 86/1011 : 11/25/86

MATERIAL NONCONFORMANCE REPORT 0120-87 DOCUMENTS FAILURE TO PERFORM PRESERVICE EXAMINATIONS ON REPLACEMENT STUFFING BOX STUDS. QDR 145-88 DOCUMENTS THE INCORRECT MATERIAL DESCRIPTION FOR THE -F032B VALVE DISC.

3. MODIFIED & INSTALLED: a) VALVE DISCS (DUAL SEATED) b, c, d) SAME AS ITEM 1  
 e) -F032A: CARBON STEEL SA352 GR. LCB; -F032B: STAINLESS STEEL SA351 CF8M  
 f, g, h) SAME AS ITEM 1 i, j) SAME AS ITEM 2 k) -F032A: S/N 2-13615 HT# 13615;  
 -F032B: S/N 1-30934, HT# 348085 l) N/A

SUPPLEMENTAL INFORMATION

ORIGINAL

ORIGINAL

REV. 1

REV. 1

REV. 1



NIS-2 SUMMARY REPORT FOR REPAIRS/REPLACEMENTS



NIS-2 NO. 00200 REV.1 CORRECTED COPY

OWNER:  
SYSTEM ENERGY RESOURCES, INC.  
ONE JACKSON PLACE  
P.O. BOX 23070  
JACKSON, MS 39225-3070

PLANT:  
SYSTEM ENERGY RESOURCES, INC.  
GRAND GULF NUCLEAR STATION  
P.O. BOX 756  
PORT GIBSON, MS. 39150

UNIT:  
ONE  
COMMERCIAL OPERATION DATE:  
JULY 1, 1985

ABSTRACT OF WORK

ABSTRACT OF REPAIRS/REPLACEMENTS/MODIFICATIONS: (Include types and completion dates of tests, examinations, work completed, and corrective measures taken or recommended.)

REPAIRS/REPLACEMENTS: THE OUTBOARD FEEDWATER LINE A CHECK VALVE HAD DEVELOPED A STEAM LEAK AT THE GASKET SEALING SURFACE BETWEEN THE BODY AND ONE OF THE TWO FLANGED STUFFING BOXES. A VARIETY OF TEMPORARY MEASURES WERE TRIED IN ATTEMPTING TO STOP OR CONTROL THE LEAKAGE UNTIL PERMANENT REPAIRS COULD BE PERFORMED DURING REFUELING OUTAGE NO. 2 (RFO2). THE FOLLOWING TEMPORARY ACTIONS WERE PERFORMED:

- (1) HALF OF THE FLANGE HEX NUTS WERE REPLACED WITH PROPRIETARY CAP NUTS THROUGH WHICH A PROPRIETARY LEAK SEALING COMPOUND WAS INJECTED UNDER MAINTENANCE WORK ORDER (MWO) NO. M73266.
- (2) PROPRIETARY INJECTION RINGS WERE INSERTED BETWEEN THE FLANGE AND NUTS ON ALL 8 FLANGE STUDS UNDER MWO NO. M73399 THROUGH WHICH OTHER PROPRIETARY LEAK SEALING COMPOUNDS WERE INJECTED. (CONTINUED ON PAGE 2)

COMPONENT INFORMATION

COMPONENT INFORMATION: (include all applicable information and indicate whether repaired, replaced or etc.)  
a) name b) size c) capacity d) class e) material f) MPL No. g) drawings h) location i) manufacturer's name  
j) manufacturer's address k) manufacturer's I.D. no. l) National Board No.

1. REPAIRED: a) SWING CHECK VALVE b) 24" N.P.S. c) 900 LB. d) 1 e) BODY: CARBON STEEL, SA-352, GR. LCB f) Q1B21F032A g) A&M DWG. 13615-01-H, REV. 6 (9645-M-A242.2-Q1-1.2-4, REV. 8) h) AUX. BLDG. STEAM TUNNEL, AREA 8, EL. 139' i) ATWOOD & MORRILL CO., INC. j) SALEM, MA k) S/N 1-13615 l) N/A

**ORIGINAL ORIGINAL**

(CONTINUED ON PAGE 3)

REV.1

OWNER

We certify that the statements made in this report are correct and conform to the rules of the ASME Section II. Date: 3/10/88 Signed: J. B. M... Title: MECH. MAINT. Supt. DATE: REV. 1 8/23/88 Owner Representative

AUTHORIZED INSPECTOR

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Providence of Mississippi and employed by Kemper Group of Long Grove, ILL have inspected or verified by supporting documentation the components described in this summary report and state that to the best of my knowledge and belief, the Owner or their agent has performed examinations and taken corrective measures described in this summary report in accordance with the requirements of the ASME Code, Section II. By signing this certificate neither the inspector nor his employer make any warranty expressed or implied, concerning the examinations or corrective measures described in the summary report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature: Donald R. Bivins

Date: 3-18-88

Commissions: MS600  
National Board, State, Province and Nos.

REV.1





NIS-2 SUMMARY REPORT FOR  
REPAIRS/REPLACEMENTS  
SUPPLEMENTAL SHEET  
NIS-2 NO. 00200 REV.1 CORRECTED COPY



OWNER:  
SYSTEM ENERGY RESOURCES INC.  
ONE JACKSON PLACE  
P.O. BOX 23070  
JACKSON, MS 39225-3070

PLANT:  
SYSTEM ENERGY RESOURCES INC.  
GRAND GULF NUCLEAR STATION  
P.O. BOX 756  
PORT GIBSON, MS 39150

UNIT:  
ONE  
COMMERCIAL OPERATION DATE:  
JULY 1, 1985

ABSTRACT OF REPAIRS/REPLACEMENTS (CONTINUED FROM PAGE 1)

(3) TWO EMPTY EXISTING DOWEL PIN HOLES IN THE STUFFING BOX FLANGE WERE THREADED FOR PROPRIETARY INJECTION FITTINGS THROUGH WHICH PROPRIETARY LEAK SEALING COMPOUND WAS INJECTED UNDER MWO NO. M73963

(4) PORTIONS OF THE STUFFING BOX FLANGE EDGE WERE PEENED IN ATTEMPTS TO BLOCK AND SEAL THE STEAM LEAK UNDER MWO NO. M74031

THE ABOVE ACTIONS SIGNIFICANTLY REDUCED THE LEAKAGE BUT DID NOT STOP IT.

DURING RFO2 THE VALVE WAS DISASSEMBLED AND THE SEALING COMPOUND RESIDUE WAS REMOVED. THE STEAM CUT WAS FOUND TO BE ON THE VALVE BODY. THE STEAM CUT AREA WAS WELD REPAIRED AND MACHINED TO THE ORIGINAL DIMENSIONS AND A NEW GASKET GROOVE WAS CUT. THE PEENED AREAS ON THE STUFFING BOX FLANGE WERE MECHANICALLY BLENDED INTO THE SURROUNDING AREAS. THE INNER EDGE OF THE STUFFING BOX SHAFT SLEEVE WAS MACHINED TO PROVIDE PROPER CLEARANCE BETWEEN THE VALVE DISC SLEEVE AND THE STUFFING BOX SLEEVES. THIS WORK WAS COMPLETED UNDER MWO NO. M73383.

THE FOLLOWING TESTS AND EXAMINATIONS WERE PERFORMED UNDER THE MAINTENANCE WORK ORDERS IDENTIFIED BELOW:

MWO# M73266

VISUAL (VT-1) EXAMINATION ON CAP NUTS: 7/1/87  
SYSTEM LEAKAGE TEST AND VISUAL (VT-2) EXAMINATION: 7/3/87  
WORK COMPLETED: 7/3/87

MWO# M73399

VISUAL (VT-1) EXAMINATION ON STUDS, NUTS AND INJECTION RINGS: 7/10/87  
SYSTEM LEAKAGE TEST AND VISUAL (VT-2) EXAMINATION: 7/11/87  
WORK COMPLETED: 7/20/87

MWO# M73963

NO SECTION XI TESTS OR EXAMINATIONS WERE REQUIRED.  
WORK COMPLETED: 8/5/87

ORIGINAL

SUPPLEMENTAL INFORMATION

~~ORIGINAL~~

REV.1

REV.1



NIS-2 SUMMARY REPORT FOR  
REPAIRS/REPLACEMENTS  
SUPPLEMENTAL SHEET  
NIS-2 NO. 00200 REV.1 CORRECTED COPY



OWNER:  
SYSTEM ENERGY RESOURCES INC.  
ONE JACKSON PLACE  
P.O. BOX 23070  
JACKSON, MS 39225-3070

PLANT:  
SYSTEM ENERGY RESOURCES INC.  
GRAND GULF NUCLEAR STATION  
P.O. BOX 756  
PORT GIBSON, MS 39150

UNIT:  
ONE  
COMMERCIAL OPERATION DATE:  
JULY 1, 1985

ABSTRACT OF REPAIRS/REPLACEMENTS (CONTINUED FROM PAGE 2)

MWO# M74031

NO SECTION XI TESTS OR EXAMINATIONS WERE REQUIRED.

WORK COMPLETED: 10/16/87

~~ORIGINAL~~

MWO# M7338?

VISUAL (VE-1) EXAMINATION OF AREA TO BE WELD REPAIRED PRIOR TO MACHINING:

11/28/87

MAGNETIC PARTICLE EXAMINATION OF WELD PREP AREA PRIOR TO WELDING: 11/30/87

MAGNETIC PARTICLE EXAMINATION OF WELD BUILT UP AREA PRIOR TO MACHINING:

11/30/87

MAGNETIC PARTICLE EXAMINATION OF WELD REPAIRED AREA AFTER FINAL MACHINING:

11/30/87

VISUAL (VT-1) EXAMINATION ON REPLACEMENT STUDS AND NUTS: 12/2/87

VALVE LEAK RATE TEST: 12/4/87

VALVE EXERCISING (STROKE) TEST: 12/17/87

SYSTEM LEAKAGE TEST AND VISUAL (VT-2) EXAMINATION: 1/5/88

WORK COMPLETED: 1/5/88

COMPONENT INFORMATION (CONTINUED FROM PAGE 1)

2. REPAIRED: a)STUFFING BOX b,c)N/A d)1 e)SA-352, GR. LCB

f,g,h)SAME AS ITEM 1 ABOVE i)QUAKER ALLOY CASTING CO.

j)MYERSTOWN, PA k)S/N 1-13615 l)N/A

3. INSTALLED (UNDER MWO# M73266) / REMOVED (UNDER MWO# M73399):

a)CAP NUTS (6) b)7/8"-9UNC-2B c)N/A d)1 e)SA-194,

GR.2H f,g,h)SAME AS ITEM 1 ABOVE i)SOUTHERN BOLT & FASTENER

CORP. j)SHREVEPORT, LA k)HT#91974, TRACE CODE NO. S 2HB

A02135-C-4 14655 l)N/A

(CONTINUED ON PAGE 4)

SUPPLEMENTAL INFORMATION

ORIGINAL

REV.1





NIS-2 SUMMARY REPORT FOR  
 REPAIRS/REPLACEMENTS  
 SUPPLEMENTAL SHEET  
 NIS-2 NO. 00200 REV.1 CORRECTED COPY



OWNER:  
 SYSTEM ENERGY RESOURCES INC.  
 ONE JACKSON PLACE  
 P.O. BOX 23070  
 JACKSON, MS 39225-3070

PLANT:  
 SYSTEM ENERGY RESOURCES INC.  
 GRAND GULF NUCLEAR STATION  
 P.O. BOX 758  
 PORT GIBSON, MS 39150

UNIT:  
 ONE  
 COMMERCIAL OPERATION DATE:  
 JULY 1, 1985

COMPONENT INFORMATION (CONTINUED FROM PAGE 3)

4. INSTALLED (UNDER MWO#M73399) / REMOVED (UNDER MWO #M73383):  
 a,b,e,k)SEE TABLE BELOW c)N/A d)1 f,g,h)SAME AS ITEM 1 ABOVE  
 i)TEXAS BOLT CO. j)HOUSTON, TX l)N/A

| a) NAME   | b) SIZE     | e) MATERIAL  | k) MFGR'S ID. NO       |
|-----------|-------------|--------------|------------------------|
| STUDS (2) | 7/8"x4 1/2" | SA-193,GR.B7 | HT#72649, TRACE #LA78  |
| STUDS (3) | 7/8"x5"     | SA-193,GR.B7 | HT#72649, TRACE #LA76  |
| NUTS (5)  | 7/8"        | SA-194,GR.2H | HT#Y34525, TRACE# JB58 |

5. INSTALLED (UNDER MWO# M73383): a,b,e,k)SEE TABLE BELOW  
 c)N/A d)1 f,g,h)SAME AS ITEM 1 ABOVE i,j)SAME AS ITEM 4  
 ABOVE l)N/A

| a) NAME   | b) SIZE     | e) MATERIAL   | k) MFGR'S I.D. NO.     |
|-----------|-------------|---------------|------------------------|
| STUDS (6) | 7/8"x4 1/2" | SA-193, GR.B7 | HT#72649, TRACE #LA78  |
| NUTS (12) | 7/8"        | SA-194, GR.2H | HT#Y34525, TRACE #JB58 |

~~ORIGINAL~~ <sup>0492</sup> ~~ORIGINAL~~  
<sub>8-22-88</sub>

SUPPLEMENTAL INFORMATION

REV.1



NIS-2 SUMMARY REPORT FOR REPAIRS/REPLACEMENTS



NIS-2 NO. 00202

OWNER: SYSTEM ENERGY RESOURCES, INC. ONE JACKSON PLACE P.O. BOX 23070 JACKSON, MS 39225-3070

PLANT: SYSTEM ENERGY RESOURCES, INC. GRAND GULF NUCLEAR STATION P.O. BOX 756 PORT GIBSON, MS. 39150

UNIT: ONE COMMERCIAL OPERATION DATE: JULY 1, 1985

ABSTRACT OF WORK

ABSTRACT OF REPAIRS/REPLACEMENTS/MODIFICATIONS: (Include types and completion dates of tests, examinations, work completed, and corrective measures taken or recommended.)

REPLACEMENT: THE SEAL CARTRIDGE ASSEMBLY FOR THE REACTOR RECIRCULATION PUMP-B WAS REPLACED WITH A REBUILT SPARE AS PREVENTIVE MAINTENANCE.

THE FOLLOWING TEST AND EXAMINATION WERE PERFORMED:

SYSTEM LEAKAGE TEST AND VT-2 EXAMINATION: 1/13/88

WORK COMPLETED: 1/13/88

MAINTENANCE WORK ORDER: M73702

QUALITY DEFICIENCY REPORT (QDR) NO. 142-88 WAS WRITTEN TO DOCUMENT FAILURE TO PREPARE THIS NIS-2 SUMMARY REPORT AND INCLUDE IT WITH

REFUELING OUTAGE NO. 2 ISI SUMMARY REPORT. SEE QDR 142-88 FOR DETAILS AND OTHER CORRECTIVE ACTIONS.

ORIGINAL

COMPONENT INFORMATION

COMPONENT INFORMATION: (include all applicable information and indicate whether repaired, replaced or etc.) a)name b)size c)capacity d)class e)material f)MPL No. g)drawings h)location i)manufacturer's name j)manufacturer's address k)manufacturer's I.D. no. l)National Board No.

REMOVED: a)SEAL CARTRIDGE ASSEMBLY b)PUMP:24" N.P.S. c)N/A d)1

e)SEAL FLANGE: SA-351 GR. CF8M f)Q1B33C001B g)V/M DWG. #IE-3817

h)CTMT., DRYWELL, EL. 93' i)BYRON JACKSON PUMP DIVISION (BORG-WARNER

CORP.) j)LOS ANGELES, CA. k)S/N 741-S-1279 l)N/A

INSTALLED: a-j)SAME AS ABOVE k)S/N 741-S-1277 l)N/A

OWNER

We certify that the statements made in this report are correct and conform to the rules of the ASME Section II.

Date: 7/15/88 Signed: J.K. Miller Title: MECH. MAINT. SUPT.

Owner Representative

AUTHORIZED INSPECTOR

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of MISSISSIPPI and employed by KEMPER GROUP of LONG GROVE, IL. have inspected or verified by supporting documentation the components described in this summary report and state that to the best of my knowledge and belief, the Owner or their agent has performed examinations and taken corrective measures described in this summary report in accordance with the requirements of the ASME Code, Section II. By signing this certificate neither the inspector nor his employer make any warranty expressed or implied, concerning the examinations and corrective measures described in the summary report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature: Arnold R. Bivins

Date: 7-15-88

Commissions: MS-600 National Board, State, Province and Nos.



NIS-2 SUMMARY REPORT FOR REPAIRS/REPLACEMENTS



NIS-2 NO. 00203

OWNER: SYSTEM ENERGY RESOURCES, INC. ONE JACKSON PLACE P.O. BOX 23070 JACKSON, MS 39225-3070

PLANT: SYSTEM ENERGY RESOURCES, INC. GRAND GULF NUCLEAR STATION P.O. BOX 756 PORT GIBSON, MS. 39150

UNIT: ONE COMMERCIAL OPERATION DATE: JULY 1, 1985

ABSTRACT OF WORK

ABSTRACT OF REPAIRS/REPLACEMENTS/MODIFICATIONS: (Include types and completion dates of tests, examinations, work completed, and corrective measures taken or recommended.)

REPLACEMENTS: THE SEAL CARTRIDGE ASSEMBLIES FOR THE REACTOR RECIRCULATION PUMPS HAVE BEEN REPLACED BY REBUILT SEAL CARTRIDGE ASSEMBLIES DUE TO SEAL LEAKAGE OR FOR OTHER REASONS AS DETAILED IN THE TABLE ON PAGE 2. THE SEAL CARTRIDGE ASSEMBLY CONSISTS OF (4) PRESSURE RETAINING PARTS: THE SEAL FLANGE, INNER PIECE-SECONDARY SEAL, SPLIT RING AND PLUG. THE REBUILDING CONSISTS OF DISASSEMBLING AND CLEANING THE SEAL CARTRIDGE ASSEMBLY, TAKING MEASUREMENTS AND RECORDING DIMENSIONS, REPLACING USED PARTS AND REASSEMBLING THE SEAL CARTRIDGE ASSEMBLY.

(CONTINUED ON PAGE 2)

ORIGINAL

COMPONENT INFORMATION

COMPONENT INFORMATION: (Include all applicable information and indicate whether repaired, replaced or etc.)

a)name b)size c)capacity d)class e)material f)MPL No. g)drawings h)location i)manufacturer's name j)manufacturer's address k)manufacturer's I.D.no. l)National Board No.

1. COMPONENT: a)REACTOR RECIRCULATION PUMPS (A&B) b)24x24x35 c)N/A d)1 e)PUMP CASE: SA-351 GR. CF8M f)Q1B33C001A&B g)BYRON JACKSON DWG.#IF-7836 REV. D h)CTMT., DRYWELL, EL. 93' i)BYRON JACKSON PUMP DIVISION (BORG-WARNER CORP.) j)LOS ANGELES, CA. k)Q1B33C001A: S/N 714-S-1276; Q1B33C001B: S/N 714-S-1277 l)N/A

(CONTINUED ON PAGE 4)

OWNER

We certify that the statements made in this report are correct and conform to the rules of the ASME Section II.

Date: 8/29/88 Signed: J.H. Miller Title: MECH. MAINT. SUPT.

Owner Representative

AUTHORIZED INSPECTOR

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Providence of MISSISSIPPI and employed by KEMPER GROUP of LONG GROVE, IL, have inspected or verified by supporting documentation the components described in this summary report and state that to the best of my knowledge and belief, the Owner or their agent has performed examinations and taken corrective measures described in this summary report in accordance with the requirements of the ASME Code, Section II. By signing this certificate neither the inspector nor his employer make any warranty expressed or implied, concerning the examinations and corrective measures described in the summary report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature: Donald H. Bivins

Date: 8-29-88 Commission: MS. 600 National Board, State, Province and Nos.



NIS-2 SUMMARY REPORT FOR  
REPAIRS/REPLACEMENTS  
SUPPLEMENTAL SHEET  
NIS-2 NO. 00203



OWNER:  
SYSTEM ENERGY RESOURCES INC.  
ONE JACKSON PLACE  
P.O. BOX 23070  
JACKSON, MS 39225-3070

PLANT:  
SYSTEM ENERGY RESOURCES INC.  
GRAND GULF NUCLEAR STATION  
P.O. BOX 756  
PORT GIBSON, MS 39150

UNIT:  
ONE  
COMMERCIAL OPERATION DATE:  
JULY 1, 1985

ABSTRACT OR REPAIRS/REPLACEMENTS/MODIFICATIONS: (CONTINUED FROM PAGE 1)

| MAINTENANCE<br>WORK ORDER | PUMP NO.<br>(Q1B33-) | REASON FOR REPLACEMENT     | DATE WORK<br>COMPLETED |
|---------------------------|----------------------|----------------------------|------------------------|
| 812099                    | C001B                | FOUND DEBRIS, SEAL DAMAGED | 10-14-81               |
| M23231                    | C001A                | SEAL LEAKED                | 5-26-82                |
| M2B333                    | C001A                | SEAL LEAKOFF LINE PLUGGED  | 3-26-84                |
| M2B645                    | C001B                | PREVENTIVE MAINTENANCE     | 3-26-84                |
| M60544                    | C001B                | SEAL FAILURE               | 2-18-86                |
| M61952                    | C001A                | SEAL LEAKED                | 4-14-86                |
| M73702                    | C001B                | (SEE NIS-2 #00202)         |                        |

Q1B33C001A HISTORY:

| MAINTENANCE<br>WORK ORDER | SEAL CARTRIDGE ASSY.<br>S/N REMOVED/DATE | SEAL CARTRIDGE ASSY.<br>S/N INSTALLED/DATE |
|---------------------------|--|--|
| M23231                    | 741-S-1276/4-23-82                       | 741-S-1270/4-23-82                         |
| M2B333                    | 741-S-1279/11-2-82                       | 741-S-1276/6-4-83                          |
| M61952                    | 741-S-1276/4-8-86                        | 813-S-6777-2/4-9-86                        |
| M67046                    | 813-S-6777-2/10-27-86                    | REINSTALLED/11-1-86 (SEE NIS-2<br>#00185)  |

Q1B33C001B HISTORY:

| MAINTENANCE<br>WORK ORDER | SEAL CARTRIDGE ASSY.<br>S/N REMOVED/DATE | SEAL CARTRIDGE ASSY.<br>S/N INSTALLED/DATE |
|---------------------------|--|--|
| 812099                    | 741-S-1277/10-13-81                      | 741-S-1278/10-13-81                        |
| M2B645                    | 741-S-1278/5-15-83                       | 741-S-1277/5-28-83                         |
| M60544                    | 741-S-1277/2-14-86                       | 741-S-1279/2-14-86                         |
| M65155                    | 741-S-1279/10-12-86                      | REINSTALLED/10-20-86 (SEE NIS-2<br>#00183) |
| M73702                    | 741-S-1279/12-9-87                       | 741-S-1277/12-10-87 (SEE NIS-2<br>#00202)  |

(CONTINUED ON PAGE 3)

**ORIGINAL**

SUPPLEMENTAL INFORMATION



NIS-2 SUMMARY REPORT FOR  
REPAIRS/REPLACEMENTS  
SUPPLEMENTAL SHEET  
00203



OWNER:  
SYSTEM ENERGY RESOURCES INC.  
ONE JACKSON PLACE  
P.O. BOX 23070  
JACKSON, MS 39225-3070

PLANT:  
SYSTEM ENERGY RESOURCES INC.  
GRAND GULF NUCLEAR STATION  
P.O. BOX 756  
PORT GIBSON, MS 39150

UNIT:  
ONE  
COMMERCIAL OPERATION DATE:  
JULY 1, 1985

ABSTRACT OF REPAIRS/REPLACEMENTS/MODIFICATIONS: (CONTINUED FROM PAGE 2)

SEAL CARTRIDGE ASSEMBLIES REBUILT:

ORIGINAL

| MAINTENANCE<br>WORK ORDER | SEAL CARTRIDGE ASSY.<br>S/N REBUILT/DATE | COMMENTS                      |
|---------------------------|--|-------------------------------|
| M23998                    | 741-S-1276/4-30-82                       | SENT TO WAREHOUSE 4-30-82     |
| M2B333                    | 741-S-1279/11-12-82                      | SENT TO WAREHOUSE 11-18-82    |
| M35969                    | 741-S-1276/6-3-83                        | INSTALLED UNDER M2B333        |
| M35909                    | 741-S-1278/11-4-83                       | SENT TO WAREHOUSE 11-4-83     |
| M35910                    | 741-S-1279/2-21-85                       | SENT TO WAREHOUSE 2-21-85     |
| M60544                    | 741-S-1279/2-5-86                        | INSTALLED UNDER M60544        |
| M60544                    | 813-S-6777-2/2-12-86                     | RETURNED TO WAREHOUSE 2-17-86 |
| M65135                    | 741-S-1279/10-16-86                      | REINSTALLED UNDER M65135      |
| M67046                    | 813-S-6777-2/10-31-86                    | REINSTALLED 11-1-86           |
| M75650                    | 741-S-1277/12-1-87                       | INSTALLED UNDER M73702        |
| M82073                    | 741-S-1279/5-2-88                        | RETURNED TO WAREHOUSE 5-4-88  |

THE FOLLOWING TESTS AND EXAMINATIONS WERE PERFORMED UNDER THE MAINTENANCE WORK ORDERS (MWO) IDENTIFIED BELOW:

MWO #M2B333, M2B645

SYSTEM LEAKAGE TEST & VISUAL (VT-2) EXAMINATION: 10-21-83

MWO #M60544

VISUAL (VT-1) EXAMINATION ON SEAL FLANGE CAPSCREWS (P/N 3-19): 2-14-86

SYSTEM LEAKAGE TEST & VISUAL (VT-2) EXAMINATION: 2-17-87

MWO #M61952

SYSTEM LEAKAGE TEST & VISUAL (VT-2) EXAMINATION: 4-11-86

MWO #M65135

SEE NIS-2 #00183

MWO #M67046

SEE NIS-2 #00185

MWO #M73702

SEE NIS-2 #00202

(CONTINUED ON PAGE 4)

SUPPLEMENTAL INFORMATION





NIS-2 SUMMARY REPORT FOR  
REPAIRS/REPLACEMENTS  
SUPPLEMENTAL SHEET  
NIS-2 NO. 00203



OWNER:  
SYSTEM ENERGY RESOURCES INC.  
ONE JACKSON PLACE  
P.O. BOX 23070  
JACKSON, MS 39225-3070

PLANT:  
SYSTEM ENERGY RESOURCES INC.  
GRAND GULF NUCLEAR STATION  
P.O. BOX 756  
PORT GIBSON, MS 39150

UNIT:  
ONE  
COMMERCIAL OPERATION DATE:  
JULY 1, 1985

ABSTRACT OF REPAIRS/REPLACEMENTS/MODIFICATIONS: (CONTINUED FROM PAGE 3)

THIS NIS-2 REPORT WAS INITIATED AS A CORRECTIVE ACTION UNDER QUALITY DEFICIENCY REPORT (QDR) NO. 142-88. SEE QDR 142-88 FOR DETAILS AND OTHER CORRECTIVE ACTIONS.

**ORIGINAL**

COMPONENT INFORMATION: (CONTINUED FROM PAGE 1)

2. REPLACEMENTS: a)SEAL CARTRIDGE ASSEMBLY b)PUMP: 24" NPS c)N/A  
d)1 e)SEAL FLANGE: SA-351 GR. CF8 f)Q1B33C001A&B g)BYRON JACKSON  
DWG. NO. IE-3817 REV. A h)CTMT., DRYWELL, EL. 93' i)BYRON JACKSON  
PUMP DIVISION (BORG-WARNER CORP.) j)LOS ANGELES, CA. k)S/N 741-S-  
1276, -1277, -1278, -1279 (ORIGINAL PART OF SAME S/N RECIRC. PUMPS AS  
RECEIVED FROM MFR.), 813-S-6777-1, -2 (P. O. M60878) l)N/A

SUPPLEMENTAL INFORMATION