NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Southern Nuclear Operating Company, Inc.
Farley Nuclear Plant

Docket Nos. 50-348, 50-364
License Nos. NPF-2, NPF-8
EA 96-410

During an NRC inspection conducted during the period September 1 through October 12, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. Violation Assessed A Civil Penalty

10 CFR Part 50, Appendix R, Section III.G.2 requires, in part, where cables or equipment, including associated non-safety circuits that could prevent operation or cause maloperation of redundant trains of systems necessary to achieve and maintain hot shutdown conditions, are located within the same fire area outside of containment, the cables and equipment and associated non-safety circuits be separated by a fire barrier having a three-hour rating, or separated by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards, or one redundant train be enclosed in a fire barrier having a one-hour rating.

License No. NPF-2, Condition 2.C(4), for Farley Nuclear Plant (FNP), Unit 1, states, in part, that Southern Nuclear Operating Company, Inc. shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report (FSAR).

FSAR, Appendix 9B, Fire Protection Program, documents an evaluation of the FNP fire protection program as it complies with Appendix R to 10 CFR 50 and embodies the contents of the Fire Protection Program Reevaluation as approved by the NRC. Appendix 9B, Attachment B, 10 CFR 50 Appendix R Exemptions, provides the NRC's discussion and evaluation of the licensee's Appendix R exemption requests, and also identifies those systems and components that require one-hour Kaowool fire barriers to meet Appendix R.

Contrary to the above, the licensee failed to assure that electrical cables associated with systems necessary to achieve and maintain hot shutdown conditions were enclosed in an one-hour fire barrier as required by Appendix 9B of the FSAR as evidenced by the following examples:

1. On October 2, 1996, the NRC identified that the 1B and 1C Safety Injection Pump "B train" power cables in Room 160 of Fire Area

1-004 were not fully enclosed by a Kaowool fire barrier (approximately 18 feet of cable tray was unwrapped).

2. During the period of October 5-8, 1996, the licensee identified that the 1B and 1C Safety Injection Pump "B train" power cables and room cooler cables in Room 175 of Fire Area 1-004 were not fully enclosed by Kaowool fire barriers (approximately 24 inches of cable from four cable trays were unwrapped).

3. During the period of October 5-8, 1996, the licensee also identified that the cables for main steam isolation and auxiliary feedwater flow control in Room 319 of Fire Area 1-042 were not enclosed by an appropriate fire barrier, i.e., Kaowool, (the entire four foot span of cable tray was unwrapped). (01013)

This is a Severity Level III violation (Supplement I).
Civil Penalty - $50,000

II. Violation Not Assessed A Civil Penalty

License No. NPF-2, Condition 2.C(4), and License No. NPF-8, Condition 2.C(6), states, in part, that Southern Nuclear Operating Company, Inc. shall implement and maintain in effect all provisions of the approved fire protection program as described in the FSAR.

FSAR, Appendix 9B, Fire Protection Program, documents the evaluation of the FNP fire protection program against Appendix R to 10 CFR 50 and embodies the contents of the Fire Protection Program Reevaluation as approved by the NRC.

FSAR, Appendix 9B, Section 9B.6.1, requires periodic inspections of fire protection systems and equipment to assure acceptable condition of these items. Administrative Procedure, FNP-0-AP-36, Fire Surveillance Procedures and Inspections, Revision 12, required that fire surveillance procedures are performed as written, by qualified personnel, and that these procedures provide the necessary detailed requirements.

Fire Surveillance Procedure, FNP-0-FSP-43, Visual Inspection of Kaowool Wraps, Revision 5, provided the acceptance criteria, instructions, and references to installation details for conducting periodic inspections of Kaowool wraps used to provide the one-hour rated fire barriers prescribed by the Fire Protection Program of FSAR, Appendix 9B.

Contrary to the above, the licensee failed to implement an adequate periodic inspection program for Kaowool one-hour fire barriers in that:

1. The periodic inspections failed to verify that Kaowool fire barriers were being maintained in conformance with installation drawings and the acceptance criteria specified in

Procedure FNP-0-FSP-43. During the period March 4-7, 1996, licensee personnel inspected Kaowool wraps in accordance with Procedure FNP-0-FSP-43 and did not identify any deficiencies. However, from July 24 - October 2, 1996, the NRC identified multiple examples of installation deficiencies and deteriorating conditions of Kaowool wraps. Subsequent inspections by the licensee conducted during the period October 5-8, 1996, identified over a hundred similar installation and degradation problems with existing Kaowool wraps around electrical raceways.

2. Personnel performing the periodic inspection required by Procedure FNP-0-FSP-43 during March 1996 were not qualified, in that they were not knowledgeable regarding the design, installation, or material condition requirements for Kaowool wraps. These individuals were not adequately trained on Kaowool requirements nor did they have adequate prior experience in installing or inspecting Kaowool.

3. As of October 12, 1996, Procedure FNP-0-FSP-43, Revision 5, did not clearly identify all the critical characteristics to be inspected to assure Kaowool fire barriers were maintained in conformance with installation drawings (e.g., flammastic fire seals and compression). (02014)

This is a Severity Level IV violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, the Southern Nuclear Operating Company, Inc. (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear

Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: Mr. James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II and a copy to the NRC Resident Inspector at the Farley Nuclear Plant.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Atlanta, Georgia
this 4th day of December 1996

LIST OF PREDECISIONAL ENFORCEMENT CONFERENCE ATTENDEES
NOVEMBER 18, 1996

Southern Nuclear Operating Company, Inc. (SNC)

J. Woodard, Executive Vice President, SNC
D. Morey, Vice President, SNC
R. Hill, Plant Manager, Farley Nuclear Plant (FNP)
D. Jones, Engineering Manager, FNP
J. Thomas, Manager, Engineering Support, FNP
J. McGowan, Manager, Safety Assessment and Evaluation Review
L. Bailey, Project Engineer, SNC
J. Love, Bechtel

Nuclear Regulatory Commission

L. Reyes, Deputy Regional Administrator, Region II (RII)
E. Merschoff, Director, Division of Reactor Projects (DRP), RII
J. Jaudon, Deputy Director, Division of Reactor Safety (DRS), RII
C. Evans, Regional Counsel
B. Uryc, Director, Enforcement and Investigations Coordination Staff (EICS), RII
H. Berkow, Director, Projects Directorate II-2, Office of Nuclear Reactor Regulation (NRR)
P. Skinner, Chief, Branch 2, DRP, RII
D. Verrelli, Acting Chief, Special Inspection Branch, DRS, RII
T. Ross, Senior Resident Inspector, FNP
R. Caldwell, Resident Inspector , FNP
R. Wright, Project Engineer, DRP, RII
R. Carroll, Project Engineer, DRP, RII
W. Miller, Reactor Inspector, DRS, RII
A. Boland, Enforcement Specialist, EICS, RII
E. Connell, Fire Protection Engineer, Plant Systems Branch, NRR*

* Participated by Telephone

Enclosure 2

LICENSEE COMMENTS ON INSPECTION REPORT NOS. 50-348, 364/96-09

1. Typographical Error: The date "September 3" referenced on Page 30 in the first and second paragraphs of Section F2.1.b is incorrect. The date should read "September 5."

2. Typographical Error: The cable tray designation "BFDD15" referenced on the last line of the last paragraph on Page 32 is incorrect. It should read "BFDB15".

3. Clarification: The last sentence of the first paragraph of Section F2.1.b on Page 30 states that the licensee "did not consider conducting their own inspections ...." During the November 18, 1996, predecisional enforcement conference, the licensee stated that, in response to NRC concerns, on September 5, 1996, they had conducted an inspection of all motor-operated valve cables/conduits required to be wrapped with Kaowool for 10 CFR 50, Appendix R. This was the first time the NRC became aware of this particular licensee inspection effort.

4. Clarification: Item 5 of Section F2.1.b on Page 33 states that over a hundred instances were identified during the licensee's augmented inspection where the Kaowool fire barriers were not properly sealed with flammastic per Procedure FNP-0-PMP-507, "Kaowool Installation Procedure." During the November 18, 1996, predecisional enforcement conference, the licensee stated that the Kaowool fire barrier wraps in question were originally installed per Drawing No. A-177541, several years before Procedure FNP-0-PMP-507 was initially issued. The NRC acknowledges this distinction; however, Procedure FNP-0-PMP-507 was identified in the inspection report because it was a source of installation criteria used by inspectors during the licensee's augmented inspection of October 4-8, 1996. It should be noted that the design criteria of Procedure FNP-0-PMP-507 were consistent with Drawing No. A-177541.

5. Clarification: The fifth paragraph of Section F2.1.b was not clear in that the inspections prescribed by Procedure FNP-0-FSP-43 were periodic inspections rather than independent inspections to verify installation. Consequently, the qualification of inspectors for periodic inspections (i.e., Procedure FNP-0-FSP-43) is required by Procedure FNP-0-AP-36, and qualification of inspectors for independent inspections is required by Section 9B.6.1.E of the Fire Protection Program.

6. Clarification: The discussion in the second to last paragraph of Section F2.1.b was not clear in that Section 9B.6.1 of the Fire Protection Program requires both periodic and independent inspections, of which Procedure FNP-0-FSP-43 is the periodic inspection procedure.

PREDECISIONAL ENFORCEMENT CONFERENCE AGENDA

FARLEY
NOVEMBER 18, 1996, AT 10:30 A.M.
NRC REGION II OFFICE, ATLANTA, GEORGIA

I. OPENING REMARKS AND INTRODUCTIONS
Luis A. Reyes, Deputy Regional Administrator

II. NRC ENFORCEMENT POLICY
B. Uryc, Director
Enforcement and Investigation Coordination Staff

III. SUMMARY OF THE ISSUES
E. Merschoff, Director
Division of Reactor Projects (DRP)

IV. STATEMENT OF CONCERNS / APPARENT VIOLATIONS
E. Merschoff, Director
Division of Reactor Projects (DRP)

V. LICENSEE PRESENTATION
D. Morey, Vice President - Introduction
D. Jones, Manager of Engineering - Design Issues
R. Hill, Farley General Manager - Field Installations
J. Thomas, Engineering Support Manager - Inspection & Where Utility is Proceeding
D. Morey, Vice President - Conclusion

VI. BREAK / NRC CAUCUS

VII. NRC FOLLOWUP QUESTIONS

VIII. CLOSING REMARKS
Luis A. Reyes, Deputy Regional Administrator

Enclosure 4

ISSUE TO BE DISCUSSED

1. Final Safety Analysis Report (FSAR), Appendix 9, Fire Protection Program (FPP), implemented by License Condition 2.C.(4) for Unit 1, documents the evaluation of the FPP against Appendix R to 10 CFR 50 and identifies the cables and raceways that require a 1-hour fire barrier to meet Appendix R. Appendix R, III.G.2 requires, in part, where cables or equipment that could prevent operation or cause maloperation of redundant trains of systems necessary to achieve and maintain hot shutdown conditions are located within the same fire area outside of containment, that the cables and equipment and associated non-safety circuits are separated by a fire barrier having a 3-hour rating, or separated by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards, or one redundant train is enclosed in a fire barrier having a 1-hour rating.

   - The NRC identified on October 2, 1996, that the IB (swing pump) and IC Charging Pump B train power cables in Room 160 were not fully enclosed in a fire barrier having a 1-hour rating.

   - The licensee identified, during the period October 5-8, 1996, that the 1B and 1C Charging Pump (B train) power cable and room cooler cables were not fully enclosed in a fire barrier having a 1-hour rating.

   - The licensee identified, during the period October 5-8, 1996, that the cables for main steam isolation and auxiliary feedwater flow control were not wrapped at all by a fire barrier having a 1-hour rating.

NOTE: Apparent violations discussed in this predecisional enforcement conference are subject to further review and subject to change prior to any resulting enforcement decision.

2. FSAR, Appendix 9B, Fire Protection Program, License No. NPF-2, Condition 2.C(4), and License No. NPF-8, Condition 2.C(6), documents the evaluation of the FNP fire protection program against Appendix R to 10 CFR 50 and embodies the contents of the Fire Protection Program Reevaluation as approved by the NRC.

FPP, Section 9B.6.1, requires an independent and periodic inspection program to verify fire protection systems conform with installation drawings and test procedures, and are maintained in an acceptable condition.

Fire Surveillance Procedure, FNP-0-FSP-43, Visual Inspection of Kaowool Wraps, Revision 5, provided the acceptance criteria, instructions, and references of installation details for conducting periodic inspections of Kaowool wraps used to provide the 1-hour rated fire barriers prescribed by the Fire Protection Program of UFSAR, Appendix 9B.

- The licensee's periodic and independent inspection program failed to verify that Kaowool fire barriers were installed and maintained in conformance with installation drawings. (During the period March 4-7, 1996, licensee personnel inspected the Kaowool wraps in accordance with FNP-0-FSP-43 and did not identify any deficiencies. However, from July 24 - October 2, 1996, the NRC identified numerous installation and material condition deficiencies.)

- Licensee inspections conducted October 5 - 8, 1996, identified numerous Kaowool wrap deficiencies.

- Personnel performing periodic Kaowool inspections were not knowledgeable and or trained in the installation and design requirements.

- Instructions for periodic inspections failed to provide adequate acceptance criteria for compression of Kaowool or all critical characteristics to be inspected.

NOTE: Apparent violations discussed in this predecisional enforcement conference are subject to further review and subject to change prior to any resulting enforcement decision.

Kaowool at Farley Nuclear Plant

- Mastic Sealant is not Critical for Adequate Fire Protection
- Confident in our As Built Drawings
- Confident in our Configuration Management

G6.05

Farley Nuclear Plant Work Request

W.R. No 22823

1 Unit 1 ☒ 2 ☐ Shared ☐	2 T. P. N. S. Number V43	3 Originator F. BOSWELL	4 Date / Time 03-27-80/1345

5 Reported Condition / Maintenance Requested: INSTALL KAOWOOL FIRE PROTECTION BARRIERS EL. 139' per BE-4515 Part 8 Sheet 5 except West (CABLE CHASE) in accordance with CWR 13.161

6 Inoperable ☐ Yes ☒ No
7 L.C.O. ☐ Yes ☒ No
8 Clearance ☐ Yes ☒ No ☐ OT
9 R.I. & P. ☒ Other
10 Priority ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5
11 Reviewer G. L. Odom

12 Design Change ☒ Yes ☐ No	13 Clearance ☐ Yes ☒ No Number	14 R.W.P. ☒ Yes ☐ No Number 1-80-0155	15 Open Plans ☐ Yes ☒ No Number
16 Work Sequence		16B TFL ☐ Yes ☒ No	16A Inspection Required ☐ Yes ☒ No

1. OBTAIN RELEASE OF MWR FROM SHIFT FOREMAN
2. KEEP WORK AREA CLEAN
3. INSTALL KAOWOOL IN ACCORDANCE WITH A-177541 per BE-4515 & BE-4544 (ALL REVISIONS), BE-4547 (All Rev's)

17 Material Issue No. N/A

Account Number 21-9000 IPL # 21.16	18 Planner Signature F. Boswell J.	19 Approval R C Wuske

20 Plant Conditions: Zoning ESCORTS REQUIRED Room 335

21 Inoperable ☐ Yes ☒ No
22 L.C.O. ☐ Yes ☐ No
23 Release For Work
R C Wuske
3-21-80/1120

24 Maintenance Performed

Installed Kaowool in Accordance with A-177541 per BE-4515 & BE-4544

25 Worker's Signature/ Date/Time Crew #15	26 Man-Hours	27 Foreman W. L. Armistead

28 Test and Restoration

NONE

	29 Functional Acceptance / M	30 Date / Time 10/14/80 1446

31 Review R V Wuske

Farley Nuclear Plant Work Request | G6-05

W.R. № 22825

Unit 1 ☒ 2 ☐ Shared ☐	2 T.P.N.S. Number: V43	3 Originator: F. BOSWELL	4 Date / Time: 03-27-80/1445

Reported Condition / Maintenance Requested: INSTALL KAOWOOL FIRE PROTECTION BARRIERS EL. 100' per BE-4515 & BE-4544 in accordance with CWR 13.161

5 Inoperable ☐ Yes ☒ No
7 L.C.O. ☐ Yes ☒ No
8 Clearance ☐ Yes ☒ No ☐ OT
9 R.I.S.F. ☐ Other
10 Priority ☐1 ☐2 ☐3 ☒4 ☐5
11 Reviewer: [signature] 6-1-80

Design Change ☒ Yes ☐ No | 13 Clearance ☐ Yes ☒ No Number | 14 R.W.P. ☒ Yes ☐ No Number 1-80-0013 | 15 Open Flame ☐ Yes ☒ No Number
16B TFL ☐ yes ☒ NO | 16A Inspection Required ☐ Yes ☒ No

Work Sequence

1. OBTAIN RELEASE OF MWR FROM SHIFT FOREMAN
2. KEEP WORK AREA CLEAN
3. INSTALL KAOWOOL IN ACCORDANCE WITH DWG. A-177541 per BE-4515 & BE-4544 (ALL REVISIONS)

17 Material Issue No. N/A

Account Number	18 Planner Signature	19 Approval
2201-12+21-9000	F H Boswell, Jr.	R. L. Weeks [signature]

Plant Conditions: ESCORTS REQUIRED Rooms 172, 168, ~~175~~, 185, 190

21 Inoperable ☐ Yes ☒ No
22 L.C.O. ☐ Yes ☒ No
23 Release For Work: [signature] 7-17-80 125

Maintenance Performed

Installed Fire Protective Kaowool

Worker's Signature: Date/Time	26 Man-Hours	27 Foreman
		[signature]

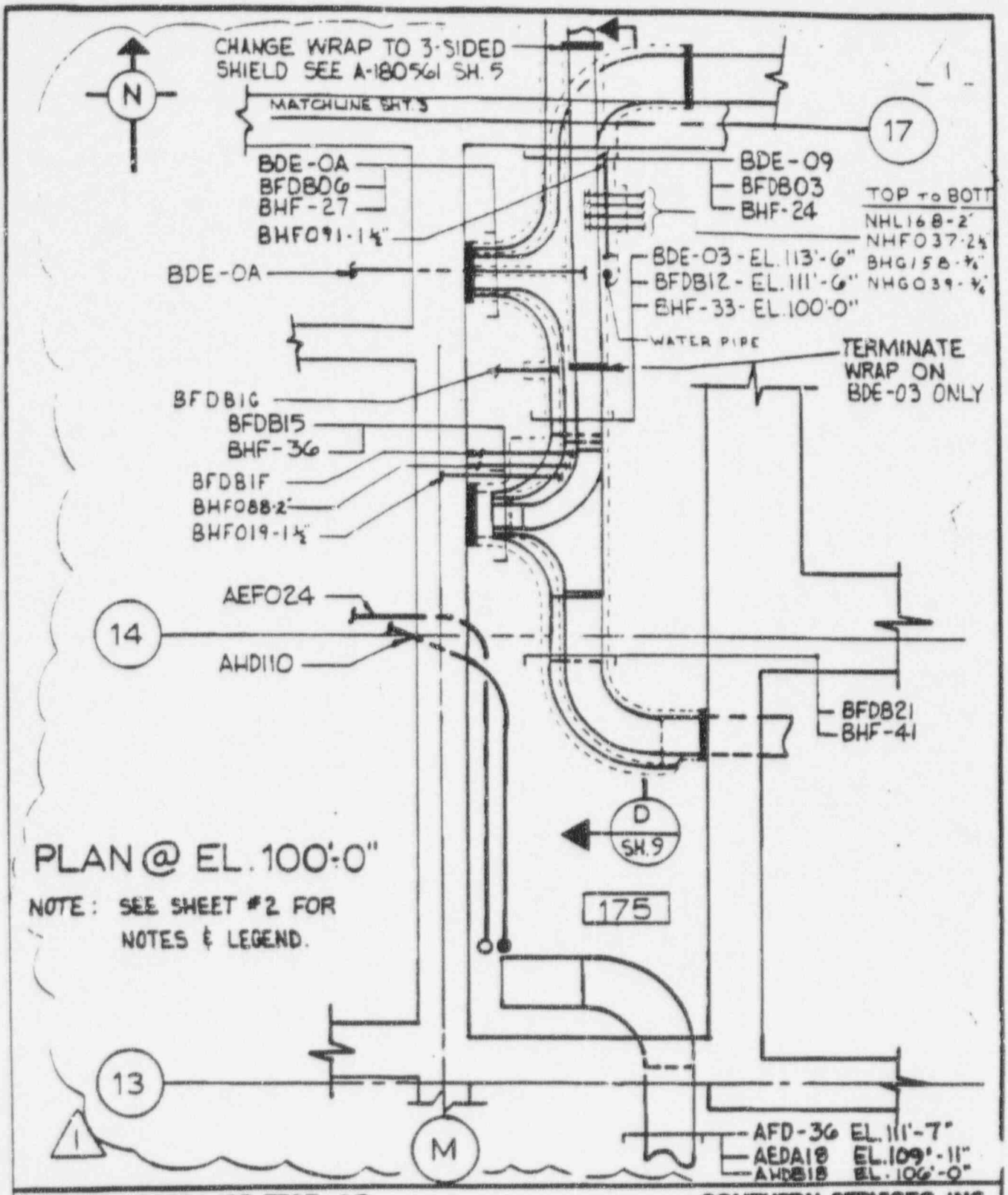
Test and Restoration

NONE

[signature] 10/14/80 102

29 Functional Acceptable	30 Date / Time
[signature]	7-?-80

Review: [signature]



BECHTEL CORP. JOB 7597-03 — SOUTHERN SERVICES INC.

DR L. DE VERA	NO.	DATE	REVISIONS
TR	0	8-7-79	ISSUED FOR CONST PER CCR 16799.16.5
CK C.L.O.	1	1-21-83	INC. BE-4547, BE-4515-3
APP			
DATE 8-1-79			

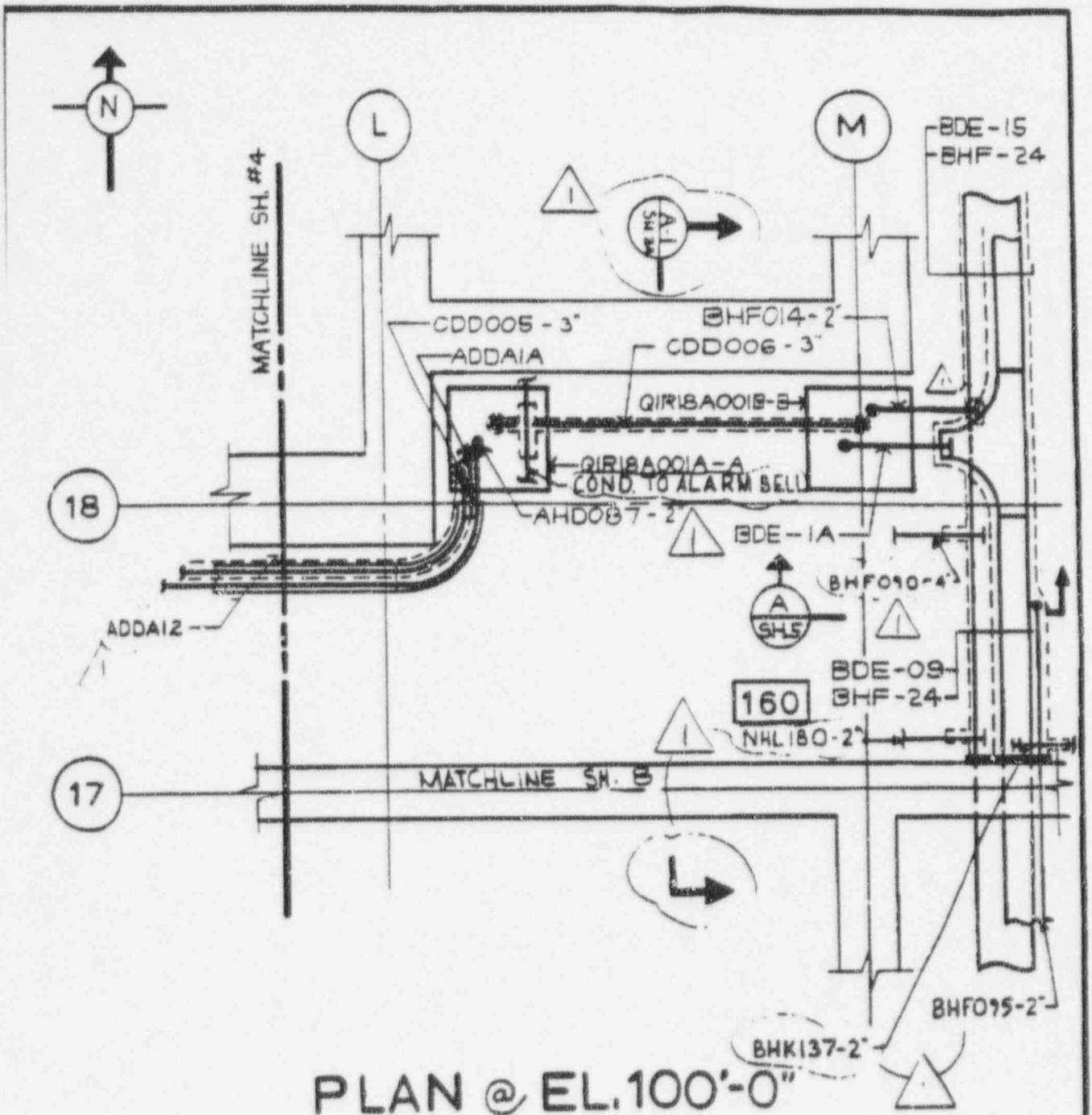
ALABAMA POWER COMPANY

SUBJECT JOSEPH M. FARLEY NUCLEAR PLANT

DETAIL KAOWOOL WRAP LOCATION FOR RACEWAYS AS INDICATED.

SUPERSEDES _____ SCALE 3/16"=1'-0" DR. 8

A-180561 REV 1



PLAN @ EL. 100'-0"

NOTE: SEE SHEET # 2 FOR NOTES & LEGEND

BECHTEL CORP. JOB 7597-03 — SOUTHERN SERVICES INC.

DR L. DE VERA
TR
CK RLP jrr
APP A. Wyatt
DATE 8-9-79

NO.	DATE	REVISION
0	8-7-79	ISSUED FOR CONST. PER OCR 169 & 16.1
1	12-12-79	INCORP. EC-4515-3

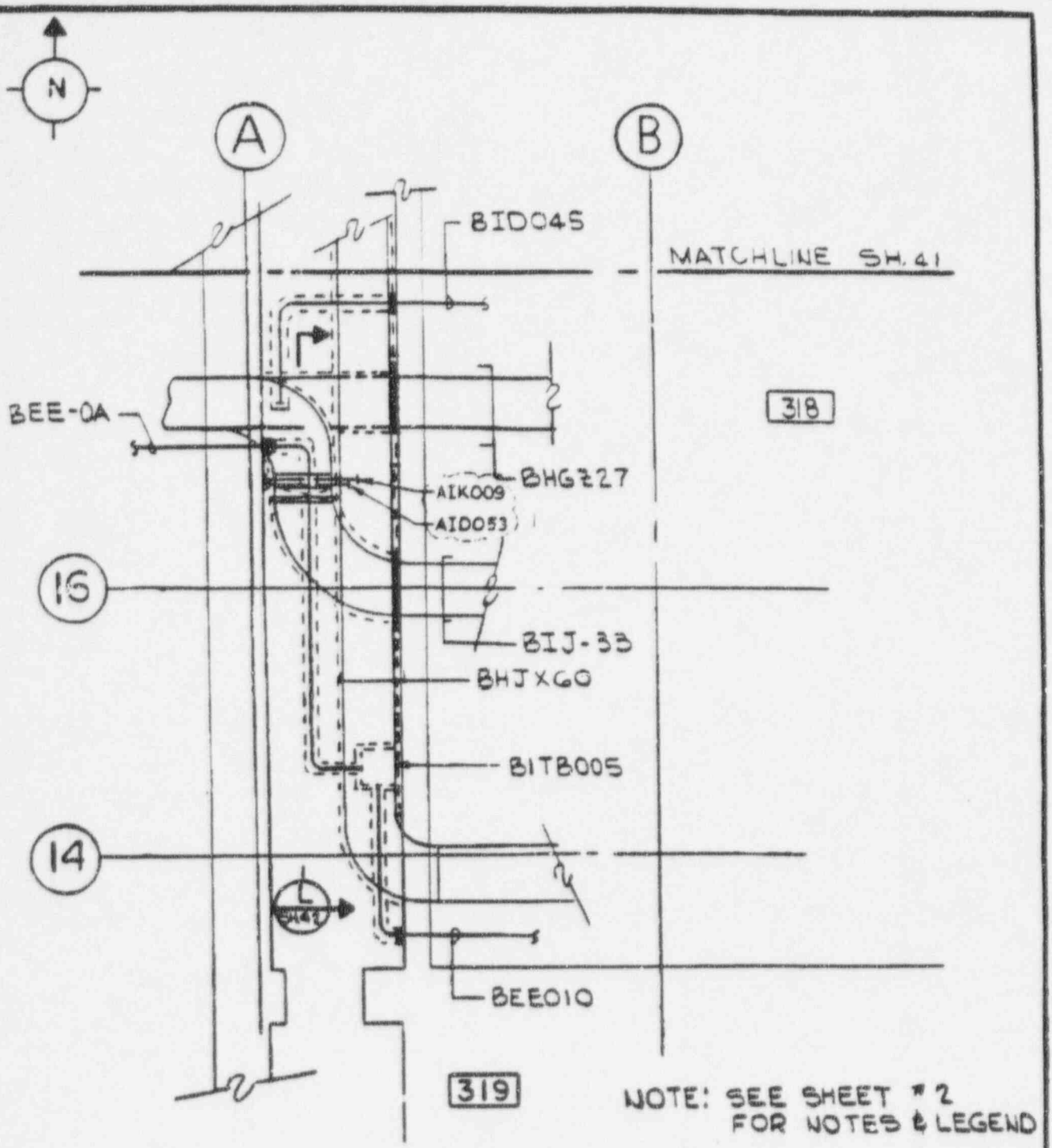
ALABAMA POWER COMPANY

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT

DETAIL: KAOWOOL WRAP LOCATION FOR RACEWAYS AS INDICATED.

SUPERSEDES _____ SCALE 3/16" = 1'-0" SH. 3

A-180561 REV 1



PLAN @ 139'-0"

BECHTEL CORP. JOB 7987-03 — SOUTHERN SERVICES INC.

NO.	DATE	REVISION
0	8-7-79	ISSUED FOR CONST. PER DCR 1699 16 K
1	1-21-85	REF TO BE-4515-3

DR bcw
TR
CK
APP
DATE 8-7-79

ALABAMA POWER COMPANY

SUBJECT JOSEPH M. FARLEY NUCLEAR PLANT
KAOWOOL WRAP LOCATION FOR
DETAIL RACEWAYS AS INDICATED

SUPERVISOR — SCALE 3/16" = 1'-0" DR. 40

A-180561 REV 1

FNP Tray & Conduit, Details and Notes
A 177541 sh. 18J
Step 5.8

Rev / Date	Text of Change	Purpose of Change
0 04-17-80	**"In areas such as floors, walls, ceilings where the blanket wrap ends, fire protection seals shall be installed using mastic coatings as specified.** The sealant shall be trowel or sprayed completely around the wrapped cable tray at the floor, walls or ceiling. The seals shall be not less than 1/4" thick and extend not less than 8" onto the Kaowool wrap, not less than 8" onto the floor, wall or ceiling."	**To give directions for installing a fire protection seal around cable trays when they penetrate floor, walls and ceiling.**

Appendix R

1981 - 1985

- Extension reviews
- Inspections, as necessary
- No significant discrepancies
- No indications for complete inspections

- **SEQUENCE OF EVENTS FOR KAOWOOL CONCERNS**

- **2 SEPARATE INSPECTION PROGRAMS**

SEQUENCE OF EVENTS

- JULY/AUGUST - NRC IDENTIFIED MOV DISCREPANCIES
- 9/5/96 NRC EXIT - SCOPE: MOV TERMINATIONS
- 9/5/96 FNP WALKDOWN OF APPX. R REQ'D MOV'S
- 9/11/96 SCOPE CHANGE TO QUESTIONS ON MASTIC
- 10/2/96 SCOPE CHANGE TO UNWRAPPED RACEWAYS

TWO (2) SEPARATE INSPECTION PROGRAMS

- ORIGINAL INSTALLATION - CONST QC TO VERIFY PER DESIGN
- PERIODIC FSP TO IDENTIFY REQUIRED CORRECTIVE MAINT

VISUAL INSPECTION OF KAOWOOL WRAPS

1.0 Purpose

To inspect the fire protection kaowool wraps.

2.0 Acceptance Criteria

Kaowool wraps are free from physical damage.

3.0 Initial Conditions

None

3.0 Precautions and Limitations

Notify Shift Foreman if damaged kaowool is found.

5.0 Instructions

5.1 Visually inspect the Kaowool wraps in each of the rooms listed on the Table to ensure no physical damage exists (i.e no tears in the outer wrap or damaged Intermastic or Flamemastic around hangers and penetrations).

5.2 If a damaged wrap is discovered notify the Shift Foreman so that an LCO can be initiated.

5.3 Submit a MWR to repair deficiencies.

5.4 Initial checklist upon completion of each room.

NOTE: During this inspection if any damaged marinite board is observed, submit an MWR to have it repaired, however no Shift Foreman notification is required.

6.0 References

FSAR Volume 17

OVHD 1

TABLE II

ROOM NO.	LOCATION/DESCRIPTION	INSPECTED (INITIAL)	KAOWOOL WRAP LOCATION DRAWINGS
2117	Vertical Cable Chase - 100' Unit II		D-203248,D-203249
2159	R.E. Feed Pump Room - 100' Unit II - RCA		D-203281
2160	East Hallway - 100' Unit II - RCA		D-203281
2161	Corridor - 100' Unit II - RCA		D-203267,D-203281
2162	Corridor - 100' Unit II - RCA		D-203267
2163	WDS Control Panel - 100' Unit II - RCA		D-203267
2168	CDT Pump Room - 100' Unit II - RCA		D-203267
2172	Charging Pump Hallway - 100' Unit II - RCA		D-203281
2175	East Hallway - 100' Unit II - RCA		D-203281
2182	Storage Room - 100' Unit II - RCA		D-203281
2185	CCW Hx Room - 100' Unit II		D-203262,D-203266
2186	Boric Acid Area - 100' Unit II - RCA		D-203272
2189	Plant Heat. Equip. Room - 100' Unit II		D-203265 Sht. 1
2190	AFW Control Panel Room - 100' Unit II		D-203265 Sht. 1
2209	Hallway - 121' Unit II - RCA		D-203259,D-203285,D-2032
2210	Hallway - 121' Unit II		D-203246,D-203285
2211	Corridor - 121' Unit II		D-203284
2223	Piping Penetration Room - 121' Unit II - RCA		D-203245
2244	Battery Room Mezzanine - 121' Unit II		D-203284
2245	Battery Room Mezzanine - 121' Unit II		D-203285
2300	West Cable Chase - 139' Unit II		D-203269,D-203270
2312	Hallway - 139' Unit II - RCA		D-203275
2316	Hallway - 139' Unit II - RCA		D-203275
2319	Hallway - 139' Unit II		D-203209,D-203279
2322	Hallway - 139' Unit II - RCA		D-203275
2452	Clean Storage Area - 155' Unit II		D-203215
2462	Non-Rad Vent. Equip. Room - 155' Unit II		D-203214
2466	West Cable Chase - 155' Unit II		D-203269
2500	West Cable Chase - 168' Unit II		D-203269
2-S02	No. 2 Stairway - Unit II		D-203274
2201	Computer Room - 121' Unit II		D-203246

OVHD 2

FARLEY NUCLEAR PLANT
UNIT 1 & 2
FIRE SURVEILLANCE PROCEDURE

VISUAL INSPECTION OF KAOWOOL WRAPS

1.0 Purpose

To inspect the fire protection Kaowool wraps.

2.0 Acceptance Criteria

Kaowool wraps designated by an "R" require at least a 2" thick Kaowool wrap to function properly as a fire barrier. Kaowool wraps designated by an "H" require at least a 1" thick Kaowool wrap to function properly as a fire barrier. There should be no gaps, cuts, breaks or damage such that Kaowool is missing.

3.0 Initial Conditions

3.1 Obtain proper release of work authorization.

4.0 Precautions and Limitations

Notify Shift Foreman if damaged Kaowool is found.

5.0 Maintenance Instructions

5.1 Visually inspect the Kaowool wraps using the referenced drawings for each of the rooms listed on Tables 1 and 2 to ensure no physical damage exits.

5.2 If a Kaowool wrap is determined to be inoperable, notify the Shift Supervisor so that a administrative LCO can be established. Damage to the Zetex (outer wrap) does not render the barrier inoperable, however a Deficiency Report (DR) should be submitted to correct the deficiency. Fire watch requirements will be determined in accordance with FNP-0-SOP-0.4.

5.3 Submit a DR to repair deficiencies.

5.4 Initial checklist upon completion of each room.

NOTE:	**During this inspection if any damaged marinite board is observed, submit a DR to have it repaired, however no Shift Foreman notification is required.**

5.5 For a partial inspection, fill in the required information in the spaces provided on Table 3.

TVHD 2