

Docket No.: 50-382

AUG 29 1984

Applicant: Louisiana Power and Light Company

Facility: Waterford 3

Subject: Meeting Summary

A meeting was held at 10:00 am on August 17, 1984 in Room P-118 of the Phillips Building in Bethesda, Maryland to discuss the status and schedule of the applicant's Program Plan for resolving the staff's 23 areas of concern identified in the June 13, 1984 letter to LP&L. The list of attendees for the meeting is shown on Attachment I.

J. Cain, LP&L's chief executive officer, introduced S. Levine of NUS who was contracted as the individual in charge of the task force to conduct an independent review of LP&L's resolution of the 23 areas. Mr. Levin described the role of the task force and independent review group, the scope of the issues involved, and outlined the approach to be used to reach resolution of the issues. The slides used in the NUS presentation are enclosed as Attachment II.

During the afternoon session, individual presentations were made for each of the 23 issues to allow the NRC staff an opportunity to comment on the scope and details of the program plans for each issue. The slides used in these presentations are enclosed as Attachment III.

As this public meeting was transcribed, further details of the meeting may be found in the meeting transcript, which will be available in the Public Docket Room and the Local Public Docket Room.

151

James H. Wilson, Project Manager
Licensing Branch No. 3
Division of Licensing

Enclosure: As stated

cc: See next page

DL:LB#3 *JW* DL:LB#3 AD:SA
*JWilson/ch *GWKnighton *DCrutchfield
8/23/84 8/ /84 8/ /84

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MEETING SUMMARIES

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Docket File (50-382)

NRC PDR

Loca? PDR

PRC System

NSIC

LB#3 Reading

J. Lee

Project Manager J. Wilson

Attorney, OELD

G. W. Knighton

W. Lovelace (Caseload Forecast Panel Visits)

OPA (Caseload Forecast Panel Visits)

NRC PARTICIPANTS

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D. Crutchfield

J. Wilson

L. Lazo

J. Scinto

L. Shao

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Enclosure I

NRC

D. Eisenhut	R. Shewmaker	J. Ma
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J. Wilson	M. Peranich	T. Ippolito
L. Lazo	D. Thatcher	G. Constable
J. Scinto	E. Blackwood	W. Crossman
L. Shao	L. Yang	

LP&L

J. Cain
R. Leddick
D. Dobson
K. Cook
T. Gerrets
C. Savona
L. Bass
R. Burski
R. Pittman
W. Cross

EBASCO

S. Horton
R. Esnes
E. Stanley
U. Quinby
B. Grant
A. Cutrona
R. Cummings
J. Tompeck
J. Hart
B. Grant
J. DeBruin
M. McGrath
M. Yates

TERA

J. Guibert
H. Levin
D. Davis

NUS

S. Levine
P. Judd
S. Beyers

Shaw, Pittman, Potts & Townbridge

D. Auluck
B. Churchill
J. Charnoff

International Energy Associates

J. Solet

Texas Utilities Generating Company

H. Schmidt

ROLE OF THE PRELICENSING ISSUES TASK FORCE AND
NUS SUPPORT GROUP

0 ROLE OF TASK FORCE

- o UNC AND NUS ACT AS A TASK FORCE IN PROVIDING PROFESSIONAL ASSESSMENT AND ADVICE IN RESPONDING TO NRC 6/23/84 LETTER
- o PROVIDE CEO WITH INDEPENDENT PROFESSIONAL ASSESSMENT OF:
 - A. PROGRAM PLAN AND IMPLEMENTATION SCHEDULE
 - B. ADEQUACY OF LP&L RESPONSES INCLUDING VALIDATION
 - C. SAFETY SIGNIFICANCE OF THE ISSUES
 - D. ADEQUACY OF PAST QA/QC PROGRAM
 - E. RECOMMEND APPROPRIATE INSTITUTIONAL OR PROGRAMMATIC CHANGES IN LIGHT OF LESSONS LEARNED
- o TASK FORCE FORMALIZE ITS ASSESSMENTS AND SEND TO CEO AND NRR AT THE SAME TIME

NUS PROJECT PLAN FOR TASK FORCE

SUPPORT GROUP

- o WORK SCOPE
 - o ASSIST TF IN INDEPENDENT ASSESSMENT AS PER CHARTER
 - o PROVIDE INSPECTIONS, VALIDATION AND OTHER ASSISTANCE TO LP&L ON ITEMS NOT COVERED IN CHARTER

ASSISTANCE TO TF BY NUS SUPPORT GROUP

- o COVERED IN NUS PROJECT PLAN WHICH HAS BEEN FURNISHED TO NRC
- o PARAMOUNT OBJECTIVE - ENSURE INDEPENDENCE OF TF EFFORTS
- o FULL AND OPEN DISCUSSION WITH LP&L FOR INFORMATION ENCOURAGED
- o VALIDATION EFFORTS AND RECOMMENDATIONS TO TF TO BE INDEPENDENT OF LP&L

NUS EFFORT DIRECTED TO

- o ENSURING CORRECT LOGIC IN RESPONSES TO NRC ISSUES
- o INDEPENDENT VALIDATION OF DOCUMENTS TO SUPPORT FACTS
- o INDEPENDENT INSPECTIONS TO VALIDATE FACTS
- o DEVELOPMENT OF SAMPLING APPROACHES THAT ARE SOUNDLY BASED
- o PREPARATION OF RESULTS OF ANALYSES AND RECOMMENDATIONS TO TF

TASK FORCE SUPPORT GROUP

PERSONNEL

0 REVIEWERS OF ISSUES

- EVALUATE THE ISSUES, INCLUDING THEIR SAFETY SIGNIFICANCE AND GENERIC IMPLICATIONS
- DEVELOP PROCEDURES FOR DOCUMENTATION REVIEWS AND INSPECTIONS TO BE USED IN VALIDATING LP&L RESPONSES

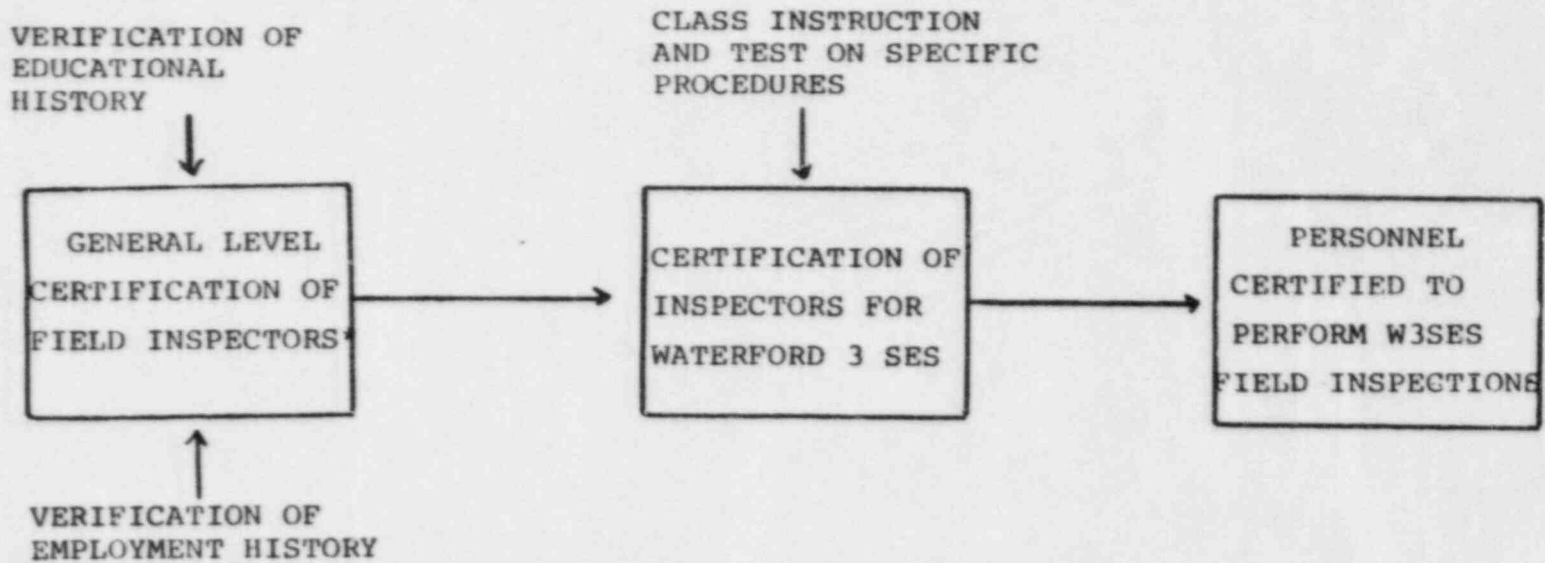
0 DOCUMENTATION REVIEWERS

- CONDUCT DOCUMENTATION REVIEWS IN ACCORDANCE WITH APPROVED PROCEDURES AFTER BEING TRAINED

0 INSPECTORS

- QUALIFIED AND CERTIFIED IN ACCORDANCE WITH ANSI N45.2.6-1973
- PERFORM INSPECTIONS AFTER BEING TRAINED AND TESTED ON INSPECTION PROCEDURES

NUS PROCEDURES FOR CERTIFICATION OF
INSPECTORS



*NUS PROCEDURE 050-105; BASED
ON ANSI 45-26 REV. 1973,
CERTIFICATIONS BY NUS LEVEL III
INSPECTOR

NUS SUPPORT TO LP&L ON OTHER THAN TF WORK

- 0 LP&L HAS REQUESTED NUS TO PROVIDE INSPECTORS TO BACK UP SOME INSPECTION WORK RELATED TO CAT ITEMS
- 0 THIS WORK IS BEING DONE AFTER APPROVAL BY NUS PROJECT MANAGER AND THE TASK FORCE AND UNDER THE DIRECTION OF THE NUS PROJECT MANAGER
- 0 IT IS ALSO BEING DONE IN ACCORDANCE WITH LP&L PROCEDURES WHICH HAVE BEEN REVIEWED AND WILL BE APPROVED BY THE NUS PROJECT MANAGER
- 0 IN NO CASE WILL THE NUS PROJECT MANAGER ASSIGN PERSONNEL TO SUCH WORK IF IT COULD CAUSE A CONFLICT OF INTEREST OR JEOPARDIZE THE INDEPENDENCE OF THE SUPPORT GROUP

INDEPENDENCE OF NUS SUPPORT GROUP FROM LP&L

- 0 REPORTS TO CEO NOT LINE ORGANIZATION
- 0 FREEDOM TO ESTABLISH OWN SCOPE OF WORK WITHIN
FRAMEWORK OF CHARTER
- 0 FREEDOM TO ADD TYPE AND NUMBER OF PERSONNEL NEEDED
TO EXECUTE SCOPE
- 0 VALIDATION WORK WILL BE DOCUMENTED AND AVAILABLE TO
NRC
- 0 FORMAL REPORT TO CEO AND NRC SIMULTANEOUSLY
- 0 REPUTATION OF NUS

AUGUST 17, 1984

AGENDA

INTRODUCTION

OPENING REMARKS

PARTICIPANTS AND ROLES

DETAILED PROCESS ON INDIVIDUAL ISSUES

INDIVIDUAL ISSUES

COLLECTIVE SIGNIFICANCE

AUGUST 17, 1984

PARTICIPANTS/ROLES

- PROJECT PERSONNEL
 - LINE MANAGEMENT
 - PRINCIPAL MANAGERS

- SRC SUBCOMMITTEE
 - MEMBERSHIP
 - ROLE
 - REPORTING

- TASK FORCE

AUGUST 17, 1984

DETAILED PROCESS

- UNDERSTAND REAL CONCERN
- ADDRESS METHODOLOGY
- ROOT CAUSE
- GENERIC IMPLICATIONS
- RESOLUTION OF CONCERN AND GENERICS
- SAFETY SIGNIFICANCE IN TERMS OF
FUEL LOAD AND POWER ASCENSION

AUGUST 17, 1984

DETAILED PROCESS (CONTINUED)

- LP&L DATA VALIDATION PROCESS
 - VALIDATE STATEMENTS OF FACT
 - AUDIT AS APPROPRIATE
 - ASSEMBLE BACKUP

- DETAILED JOINT REVIEW OF WRITTEN RESPONSES FOR CLARITY, LOGIC AND COMPLETENESS
 - PROJECT PRINCIPALS
 - SRC SUBCOMMITTEE
 - TASK FORCE

- TASK FORCE INDEPENDENT VALIDATION

AUGUST 17, 1984

SCOPE OF REVIEWS/REINSPECTIONS

- SCOPE OF REVIEWS DESIGNED TO FULLY ADDRESS
NRC CONCERNS
- SOME UTILIZE SAMPLING PROCESS WHEN JUSTIFIABLE
- ALL NECESSARY REINSPECTIONS MANAGED BY LP&L/
BY FORMAL PROCEDURE/WITH QUALIFIED PERSONNEL/
DOCUMENTED

RESOLUTION SUBMITTAL OBJECTIVES

AUGUST 17, 1984

2 - CLASS BREAK		8-10-84 ACTUAL
3 - EXPANSION LOOP		
8 SHOP WELDS		
16 QA/QC INTERVIEWS		
19 CONDUIT SEEPAGE		
4 UPGRADE TO NCRs		8-27-84
5 CONDITIONAL RELEASES		
7 BACKFILL		
9 J.A. JONES WELDERS		
11 CADWELDING		
14 SPEED LETTERS		
15 'D' LEVEL WELDING		
17 EXPANSION ANCHORS		
21 SYSTEM TRANSFER		
22 WELDER QUALIFICATIONS		
1 MERCURY & T.B. INSPECTORS		9-3-84
6 DISPOSITIONING OF NCRs		
10 JONES & FEGLES INSPECTORS		
12 MAIN STEAM RESTRAINTS		
13 MISSING NCRs		
18 TWO-OVER-ONE WALKDOWNS		
20 GEO TESTING PERSONNEL		
23 MERCURY/EBASCO/LP&L		
COLLECTIVE SIGNIFICANCE		9-19-84

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUES 1, 10 & 20
INSPECTION AND TESTING PERSONNEL QUALIFICATIONS

NRC DESCRIPTION OF CONCERN:

- UNQUALIFIED INSPECTORS MAY HAVE INSPECTED SAFETY-RELATED SYSTEMS

NRC DIRECTION:

- VERIFY CREDENTIALS OF 100% OF SITE QA/QC PERSONNEL
- REINSPECT THE WORK PERFORMED BY INSPECTORS FOUND UNQUALIFIED
- VERIFY CERTIFICATION OF REMAINING SITE QA/QC PERSONNEL TO ANSI 45.2.6 - 1973

- LP&L WILL VALIDATE CREDENTIALS OF ALL SITE QA/QC PERSONNEL
- VALIDATION OF INSPECTOR QUALIFICATIONS WILL BE TO ANSI 45.2.6 - 1973

x THREE LEVELS

x LEVEL II

- GRADUATE OF 4 YR. ENGR/SCIENCE COLLEGE + 2 YRS INSP EXPERIENCE
- H.S. GRADUATE PLUS 4 YEARS INSP EXPERIENCE

- NOT ABSOLUTE
- OTHER FACTORS
- COMPETENTLY PERFORM FUNCTION

SUBJECTIVE

- INSPECTOR QUALIFICATION PROCESS

- FULLY QUALIFIED
- QUESTIONABLE \longrightarrow
- QUALIFICATIONS NOT VERIFIABLE

RESOLVED (EVALUATION CRITERIA NEEDED TO MINIMIZE SUBJECTIVITY)

- REINSPECTION WILL BE PERFORMED AS CONSERVATIVELY APPROPRIATE
- VERIFICATION OF REMAINING QA/QC PERSONNEL TO ANSI 45.2.6 - 1973

ISSUES 1, 10 & 20 (CONT'D)

VALIDATION PROCESS

- EBASCO:
 - REVIEW PROGRAM REQUIREMENTS OF ALL CONTRACTORS
 - REVIEW/COLLECT DATA (ALL EXCEPT LP&L) @ 2110
 - BACKGROUND CHECKS (NO LP&L OR EBASCO) @ 1000 (40/DAY)
 - IDENTIFY INSPECTORS WHOSE QUALIFICATIONS AGAINST 45.2.6 NOT VERIFIABLE

- LP&L
 - AUDITING EBASCO IMPLEMENTATION OF EBASCO PROCEDURE
 - REVIEW ALL LP&L AND EBASCO + 30% SAMPLE OF QUALIFIED @ 1200
 - BACKGROUND CHECKS ALL LP&L AND EBASCO AND REMAINDER @ 1170 (40/DAY)
 - AUDITING EBASCO IMPLEMENTATION OF EBASCO PROCEDURE
 - REIVEW/FINAL DETERMINATION ON ALL INSPECTORS WHOSE QUALIFICATIONS NOT VERIFIABLE

- TASK FORCE
 - VALIDATION
 - REVIEW/COMMENT ON PROCEDURE
 - OVERVIEW PROCESS
 - AUDIT RESULTS (NOT YET INITIATED) (REQUESTED TO REVIEW ALL LP&L)

TO DATE

- 95% FIRST PASS
- ADDITIONAL DATA NEEDED ON ABOUT 45%
- BACKGROUND CHECKS ABOUT 15% COMPLETE
- ABOUT 2% OF FIRST PASS SHOW QUALIFICATIONS MAY NOT BE VERIFIABLE

PROGRESS ON SPECIFIC CONTRACTS:

REVIEW IN PROCESS - LITTLE OR NO PROBLEMS FOUND:

AMERICAN BRIDGE	GEO (NDE)
CB&I	GULF
COMBUSTION ENGINEERING	EBASCO (NDE)

REVIEW IN PROCESS - ADDITIONAL DATA REQUIRED:

B&B	NOOTER
FEGLES	SLINE
FISCHBACH & MOORE	TOMPKINS - BECKWITH
GEO (CMT)	WALDINGER
J A JONES	EBASCO
NISCO	

REVIEW IN PROCESS - REINSPECTIONS IN PROCESS:

MERCURY

LP&L ACTION TO PREVENT RECURRENCE:

- REQUIRE COMPLETE QUALIFICATION PACKAGE PRIOR TO START OF INSPECTION OR INCREASE IN LEVEL INCLUDING:

RESUME

CERTIFICATIONS

VERIFICATION OF CREDENTIALS

- STATUS:

ALL REINSPECTIONS STEMMING FROM THIS & CAT BY QUALIFIED INSPECTORS VERIFIED QUALIFICATIONS OF REMAINING SITE INSPECTORS- CREDENTIAL VALIDATION IN PROCESS

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #2
N1 INSTRUMENT LINE DOCUMENTATION

NRC DESCRIPTION OF CONCERN

- THE LACK OF QUALITY RECORDS FOR LOCALLY MOUNTED SAFETY-RELATED N1 INSTRUMENTS INSTALLED TO ANSI B31.1 CALLS INTO QUESTION THE ACCEPTABILITY OF THESE INSTALLED COMPONENTS.

LP&L ACTION REQUIRED

- PROVIDE MISSING DOCUMENTATION REQUIRED BY 10CFR50 APPENDIX B FOR THE B31.1 INSTRUMENTATION FOR LOCAL MOUNTED INSTRUMENTS.
- REVIEW OTHER DESIGN CHANGES AND DOCUMENTATION FOR ALL SAFETY-RELATED N1 INSTRUMENTATION SYSTEMS TO ASSURE ALL SYSTEM INSTALLATIONS WERE PROPERLY DOCUMENTED AND ACCEPTED.
- IF DOCUMENTATION CANNOT BE LOCATED, ACTION MUST BE TAKEN TO ASSURE AFFECTED PORTION OF SAFETY-RELATED SYSTEMS COMPLY WITH NRC REQUIREMENTS.

ISSUE #2
(CONT'D.)

LP&L PLAN

- COMPLETE THE ON-GOING REVIEW OF THE QUALITY RECORDS OF ALL SAFETY-RELATED N1 INSTRUMENT INSTALLATIONS.
- DETERMINE STATUS OF DOCUMENTATION FOR N1 INSTRUMENT INSTALLATIONS WHICH HAD PORTIONS INSTALLED TO ANSI B31.1 PRIOR TO APRIL 7, 1982.

PROGRESS TO-DATE

- OF THE 192 N1 INSTRUMENTS INSTALLED DURING THAT PERIOD, ONLY 12 N1 INSTRUMENT INSTALLATIONS ARE OF CONCERN.
- THE ANSI B31.1 PORTIONS OF THESE 12 N1 INSTRUMENT INSTALLATIONS WILL BE REWORKED, REINSPECTED AND DOCUMENTED IN ACCORDANCE WITH ASME SECTION III REQUIREMENTS PRIOR TO EXCEEDING 5% POWER.
- ALL OTHER N1 INSTRUMENT INSTALLATION QUALITY RECORDS HAVE BEEN REVIEWED AND FOUND ACCEPTABLE.
- RESPONSE SUBMITTED TO THE NRC AUGUST 10, 1984.

ISSUE #2
(CONT'D.)

LP&L ACTION TO PREVENT RECURRENCE

- AFTER APRIL 7, 1982, ALL N1 INSTRUMENT INSTALLATIONS WERE REQUIRED TO BE INSTALLED TO ASME SECTION III REQUIREMENTS FROM THE PROCESS LINE TO THE INSTRUMENT. THIS PREVENTED THE RECURRENCE OF LACK OF INSTALLATION AND INSPECTION RECORDS FOR N1 INSTRUMENTS.

SAFETY IMPLICATIONS

- THERE IS NO CONSTRAINT TO FUEL LOAD OR POWER OPERATION.

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #3
INSTRUMENTATION EXPANSION LOOP SEPARATION

NRC DESCRIPTION OF CONCERN

- SEPARATION CRITERIA HAD BEEN VIOLATED WHERE INSTRUMENT LINES FROM DIFFERENT TRAINS LEAVE THEIR RESPECTIVE TUBE TRACKS.

LP&L ACTION REQUIRED

- CORRECT THE SEPARATION CRITERIA VIOLATION FOUND IN SYSTEM 52A.
- PROVIDE A PROGRAM FOR REVIEW OF OTHER SAFETY-RELATED SYSTEMS FOR SEPARATION CRITERIA VIOLATIONS AND TAKE NECESSARY CORRECTIVE ACTIONS.

LP&L PLAN

- EVALUATE THE SEPARATION VIOLATION FOUND IN SYSTEM 52A.
- PERFORM A QC VERIFICATION OF ALL INSTRUMENT LINES WHERE REDUNDANT TUBING LINES WERE RUN IN PROXIMITY TO EACH OTHER TO ASSURE COMPLIANCE WITH THE SEPARATION CRITERIA.

ISSUE #3 (CONT'D)

PROGRESS TO DATE

- THE SEPARATION VIOLATION FOUND IN SYSTEM 52A HAS BEEN EVALUATED AND CORRECTIVE ACTION COMPLETED.
- QC VERIFICATION WALKDOWNS ARE COMPLETE.
- THE PRELIMINARY EVALUATION OF THE RESULTS OF THE WALKDOWNS HAS CONCLUDED THAT ONE ADDITIONAL SECTION OF TUBING IS REQUIRED TO BE ENCLOSED IN TUBE TRACK WHICH WILL BE COMPLETED PRIOR TO FUEL LOAD; ALL OTHER SEPARATION DEFICIENCIES DO NOT AFFECT THE SAFE OPERATION OF THE PLANT.

SAFETY IMPLICATIONS

- NO DEVIATIONS AFFECTING SAFETY IDENTIFIED.
- ANY DEVIATIONS FOUND DURING WALKDOWN TO BE CORRECTED PRIOR TO FUEL LOAD.

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #4
LOWER TIER CORRECTIVE ACTIONS
ARE NOT BEING UPGRADED TO NCR'S

NRC DESCRIPTION OF CONCERN

- LOWER TIER DOCUMENTS (FCR's, DCN's, EDN's, DN's) ARE NOT BEING UPGRADED TO NCR's.
- EDN's VOIDED WITH NO ACTION TAKEN.
- QA PROGRAM REQUIREMENTS FOR NONCONFORMANCE IDENTIFICATION, CONTROL AND PROPER ACTION DO NOT APPEAR TO HAVE BEEN COMPLIED WITH.

LP&L ACTION REQUIRED

- REVIEW ALL FCR's, DCN's, EDN's AND T-B DN's TO ASSURE THAT PROPER CORRECTIVE ACTION WAS TAKEN.
- REVIEW SHALL INCLUDE STEPS REQUIRED BY 10CFR50 APPENDIX B, CRITERION XVI AND 10CFR50.55(E).
- REVIEW FOR IMPROPER VOIDING OF ALL OTHER DESIGN CHANGES OR DISCREPANCY NOTICES AND OR MISCLASSIFICATION OF DCN's, FCR's OR DN's.

ISSUE #4 (CONT'D)

LP&L PLAN

- LP&L TO ASSESS LOWER TIER REPORTING SYSTEM.
- LP&L TO REVIEW NRC CITED EXAMPLES:
 - TO ASSURE PROPER CORRECTIVE ACTION WAS TAKEN
 - TO DETERMINE SAFETY SIGNIFICANCE [10CFR50.55 (E)]
- LP&L TO REVIEW AN ADDITIONAL SAMPLE (APPROXIMATELY 700 DOCUMENTS) TO PROVIDE CONFIDENCE THAT PROGRAM WAS ADEQUATE.

PROGRESS TO DATE

- NRC CITED EXAMPLES
 - 5 OF 72 SHOULD HAVE BEEN NCR'S
 - NONE WERE EVALUATED AS REPORTABLE
- ACTUAL SAMPLE (APPROX. 940 DOCUMENTS)
 - 64 (7%) SHOULD HAVE BEEN NCR'S
 - NONE WERE EVALUATED AS REPORTABLE
- IN MOST CASES, DECISION TO UPGRADE IS JUDGEMENTAL.
- DESIGN CHANGE/DISCREPANCY/NONCONFORMANCE SYSTEMS WERE COMPLIED WITH.

ISSUE #4 (CONT'D)

PROGRESS TO DATE (CONT'D)

- BASED ON RESULTS OF THE ADDITIONAL SAMPLE, LP&L:
 - HAS A 95% CONFIDENCE LEVEL THAT 95% OF UNSAMPLED DOCUMENTS CONTAIN NO SAFETY SIGNIFICANT (REPORTABLE) ISSUES.
 - BELIEVES THAT NO ADDITIONAL REVIEWS ARE NECESSARY.

LP&L ACTION TO PREVENT RECURRENCE

- ALL HARDWARE IDENTIFIED PROBLEMS ARE IDENTIFIED USING A COMMON FORM (LCIWA). THESE PROBLEMS ARE EVALUATED FOR NON-CONFORMING CONDITIONS AND REPORTABILITY.
- PROBLEMS ENCOUNTERED DURING THE INSTALLATION OF PLANT MODIFICATIONS WHICH MAY REQUIRE A CHANGE IN DESIGN ARE APPROVED PRIOR TO THE IMPLEMENTATION OF THE CHANGE IN ACCORDANCE WITH THE STATION MODIFICATION PROGRAM.

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #5
VENDOR DOCUMENTATION - CONDITIONAL RELEASE

NRC DESCRIPTION OF CONCERN

- THE STAFF FOUND DEFICIENCIES WITH THE HANDLING OF CONDITIONAL CERTIFICATION OF EQUIPMENT FOR CE
- THE SAFETY SIGNIFICANCE IS THAT PROBLEMS WITH VENDOR QA RECORDS COULD AFFECT INSTALLED SAFETY-RELATED EQUIPMENT

NRC DIRECTION

- "LP&L SHALL EXAMINE THEIR RECORDS AND DETERMINE IF CONDITIONAL CERTIFICATIONS OF EQUIPMENT HAVE BEEN IDENTIFIED, REVIEWED AND PROMPTLY RESOLVED"

LP&L PLAN

- CE CONDITIONAL RELEASES RESOLVED EXCEPT 2 DUE 9/15/84
 - NO ADVERSE CONSEQUENCES FOUND
- REVIEW CONDUCTED IN CASES OF SIMILAR EXPOSURE
 - VQAR CONCERNS PRE-SHIPMENT
 - EBASCO N.Y.O. NCRs
 - MANUFACTURE, DELIVER AND ERECT CONTRACTS

NO SAFETY CONCERNS FOUND

- RECEIPT INSPECTION PROCESS REVIEWED
 - QI-10-006 ADEQUATE
 - 1 OF 148 CE SPARE PARTS ORDERS HAD CONDITIONAL CERT-TAGGED/TRACKED

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #6
NRC DESCRIPTION OF CONCERN

NRC DESCRIPTION OF CONCERN

- o SOME EBASCO AND MERCURY NCRs AND EBASCO DRs WERE QUESTIONABLY DISPOSITIONED

LP&L ACTION REQUIRED

- o PROPOSE A PROGRAM THAT ASSURES THAT ALL NCRs AND DRs ARE
 - APPROPRIATELY UPGRADED
 - ADEQUATELY DISPOSITIONED AND
 - CORRECTIVE ACTION COMPLETED
- o CORRECT ANY PROBLEMS DETECTED

LP&L PLAN

- o ADDRESS SPECIFIC DEFICIENCIES IDENTIFIED BY NRC
- o REVIEW EBASCO NCRs
- o PERFORM INDEPTH VERIFICATION, SAMPLE OF EBASCO NCRs
- o REVIEW MERCURY NCRs
- o REVIEW DR PROCESS AND CITED DRs

ISSUE 6 (CONT'D)

PROGRESS TO DATE

- o REVIEW EBASCO NCRs - COMPLETE
- o IN DEPTH VERIFICATION - IN PROCESS
- o REVIEW MERCURY NCRs - COMPLETE
- o REVIEW DR PROCESS AND CITED DRs - IN PROCESS

ISSUE #7

BACKFILL SOIL DENSITIES

DESCRIPTION OF NRC CONCERN

- o RECORDS MISSING FOR IN-PLACE DENSITY IN AREA 5
- o THESE DOCUMENTS ARE IMPORTANT - SEISMIC RESPONSE A FUNCTION OF SOIL DENSITIES

NRC DIRECTION (PARAPHRASED)

- o REVIEW ALL SOIL PACKAGES FOR COMPLETENESS AND ADEQUACY AND
- o PROVIDE CLOSURE ON TECHNICAL CONDITIONS, OR
- o PERFORM SUITABLE TESTS, OR
- o JUSTIFY BY ANALYSIS

LP&L RESPONSE

- o EBASCO/LP&L/GEO RECORDS CONSOLIDATED
- o DENSITY TESTS LOCATED
- o A FEW INSPECTION RECORDS NOT FOUND
- o THOROUGH DATA REVIEW PERFORMED
- o PERVIOUS AND CURRENT ANALYSES INDICATE SPECS MET

CAUSE

- o DID NOT LEAD INSPECTOR TO RIGHT PLACE
- o A FEW INSPECTION RECORDS NOT SUBMITTED BY CONTRACTOR

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #8
VISUAL EXAMINATION OF SHOP WELDS DURING HYDROSTATIC TESTING

NRC DESCRIPTION OF CONCERN

- LACK OF PROOF OF VISUAL INSPECTION OF ALL SHOP WELDS DURING HYDROSTATIC TESTING, BY TOMPKINS-BECKWITH, OF ASME CLASS 1 AND 2 PIPING SYSTEMS.

LP&L ACTION REQUIRED

- PROVIDE DOCUMENTED EVIDENCE THAT SHOP WELDS WERE INDEED INSPECTED, OR
- SUBMIT A STATEMENT ATTESTING TO SHOP WELD INSPECTION BY RESPONSIBLE PERSONNEL WHO HAD WITNESSED THE HYDRO TESTS.

LP&L PLAN

- REVIEW TO ASSURE ALL CLASS 1 AND 2 PIPING SYSTEMS AND SHOP WELDS HAD BEEN HYDROTESTED AND THAT APPROPRIATE INSPECTION DOCUMENTS DO EXIST, AND
- SUBMIT A STATEMENT FROM RESPONSIBLE PERSONNEL WHO WITNESSED THE TESTING THAT SHOP WELDS WERE INSPECTED.

ISSUE #8 (CONT'D)

PROGRESS TO DATE

- THE REVIEW OF THE HYDROSTATIC TEST RECORDS HAS BEEN COMPLETED. THE REVIEW SUBSTANTIATED THE FOLLOWING:
 - ALL ASME CLASS 1 AND 2 PIPING SYSTEMS WERE TESTED IN ACCORDANCE WITH CODE REQUIREMENTS.
 - ALL TESTS WERE INSPECTED AND ACCEPTED BY TOMPKINS-BECKWITH QC INSPECTORS, AUTHORIZED NUCLEAR INSPECTOR, AND TEST COORDINATOR.
 - TEST DOCUMENTATION WAS IN ACCORDANCE WITH CODE REQUIREMENTS (ASME CODE DOES NOT REQUIRE EACH WELD EXAMINED TO BE LISTED).
 - ASME REQUIREMENTS WERE MET AS ATTESTED TO BY ANI SIGNATURE ON HYDROSTATIC TEST AND N-5 REPORTS.
- A STATEMENT FROM TOMPKINS-BECKWITH'S AUTHORIZED NUCLEAR INSPECTOR HAS BEEN SUBMITTED CONFIRMING THAT SHOP WELDS WERE INSPECTED.

ISSUE #8 (CONT'D)

LP&L ACTION TO PREVENT RECURRENCE

- NONE REQUIRED

SAFETY IMPLICATIONS

- LP&L BELIEVES THAT THIS ISSUE IS OF NO SAFETY SIGNIFICANCE TO FUEL LOAD OR POWER OPERATION SINCE NO DEFICIENCY EXISTS.

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #9
DOCUMENTATION FOR INSTRUMENT CABINETS

NRC DESCRIPTION OF CONCERN

- NRC REVIEW OF INSTRUMENT CABINET SUPPORT INSTALLATION RECORDS INDICATE:
 - SOME DOCUMENTATION ON WELDS APPEAR TO BE MISSING.
 - INVOLVED WELDERS MAY NOT BE CERTIFIED TO ALL POSITIONS USED.

LP&L ACTION REQUIRED

- ATTEMPT TO LOCATE THE MISSING DOCUMENTS
- DETERMINE IF THE WELDERS WERE APPROPRIATELY CERTIFIED

LP&L PLAN

- SPECIFIC PROBLEM -
 - ISSUE NCR-W3-7549 TO IDENTIFY AND RESOLVE DEFICIENCIES
 - DETERMINE IF WELDERS WERE APPROPRIATELY CERTIFIED
 - LOCATE MISSING DOCUMENTS OR TAKE APPROPRIATE ACTION
- GENERIC IMPLICATIONS -
 - DETERMINE IF OTHER WELD RELATED J A JONES WORK HAS MISSING DOCUMENTS

ISSUE #9 (CONT.D)

PROGRESS TO DATE

- SPECIFIC PROBLEM -
 - DOCUMENTATION FOR WELDING 7 OF THE 18 INSTRUMENTATION CABINETS NOT LOCATED. 4 OF THE 7 HAVE PARTIAL DOCUMENTATION, 3 HAD NO DOCUMENTATION.
 - THE 7 INSTRUMENT CABINETS HAVE BEEN REINSPECTED. THE WELDS ARE ACCEPTABLE.
 - J A JONES WELDING INSPECTION REPORTS CONFIRM WELDERS CERTIFIED TO POSITIONS USED.

- GENERIC IMPLICATIONS -
 - REVIEW IDENTIFIED OTHER POTENTIALLY J A JONES WELD RELATED WORK ITEMS.
 - TO DATE, 5 J A JONES WELD RELATED WORK ITEMS LACK DOCUMENTATION.
 - INSPECT/EVALUATE THE 5 WORK ITEMS FOR ACCEPTABILITY, ECD 8/24/84.

PRE-LICENSING ASSESSMENT

ISSUE #11

CADWELDING

NRC DESCRIPTION OF CONCERN

- LP&L HAS PROVIDED ONLY LIMITED DATA (IN OTHER THAN RAW FORM) ON STATISTICS OF THE CADWELD TESTING PROGRAM
- THE NCR DOCUMENTING CADWELD TESTING DEFICIENCIES HAS BEEN REOPENED AS RESULT OF CAT AND ALL ISSUES HAVE NOT BEEN RESOLVED

NRC DIRECTION

- LP&L SHALL PROVIDE CADWELD DATA IN SUCH A FORM THAT IT CAN BE READILY COMPARED TO THE ACCEPTANCE CRITERIA (REQUIREMENTS DETAILED)

LP&L PLAN

PREPARE LISTINGS OF CADWELDS BROKEN DOWN BY ATTRIBUTES SPECIFIED FOR ADMINISTRATION OF TEST CYCLES INCLUDING BY:

- BUILDING OR STRUCTURAL ELEMENT
- TEST PROGRAM TYPE
- BAR SIZE
- BAR POSITION
- CADWELDER

DATA PROVIDED IN EACH CATEGORY WILL INCLUDE:

- TOTAL SPLICES
- VISUAL REJECTS
- PRODUCTION TESTS AND FAILURES
- SISTER TESTS AND FAILURES
- WELDER QUALIFICATION AND REQUALIFICATION INCLUDING DATES

IN ADDITIONAL NCR-W3-6234 WILL BE SUPPLEMENTED TO ADDRESS ANY NEW FINDINGS OF A COMPLETE REVIEW FOR SPECIFICATION COMPLIANCE OF ALL DATA GENERATED.

PROGRESS TO DATE

- THE LISTINGS HAVE BEEN COMPLETED AND SUMMARIZED IN TABULAR FORM. THE REVIEW AND EVALUATION FOR SPECIFICATION COMPLIANCE IS UNDERWAY, WITH ECD OF 8/24/84.

PRE-LICENSING ASSESSMENT
ISSUE #12
MAIN STEAM LINE FRAMING RESTRAINTS

NRC DESCRIPTION OF CONCERN

- NRC STAFF FOUND SEVERAL BOLTED CONNECTIONS HAD NOT BEEN INSPECTED (OR DOCUMENTED) FOR THE FRAMING

NRC DIRECTION

- COMPLETE THE INSPECTIONS OF THE RESTRAINTS REQUIRED BY SCD
- MAKE DOCUMENTATION OF SUCH INSPECTIONS AVAILABLE TO THE STAFF

LP&L PLAN

- ISSUED NCR-W3-7736 TO IDENTIFY AND RESOLVE ALL STEAM GENERATOR BOLT DEFICIENCIES
- PROCEDURES PREPARED AND PERSONNEL TRAINED FOR REVIEW AND CORRECTIVE ACTION PROGRAM
- REVIEW THE SCOPE OF AMERICAN BRIDGE WORK TO ASSURE 100% IDENTIFICATION INCLUDING A REVIEW OF DOCUMENTS RELATED TO AMERICAN BRIDGE (FCRs, DCNs, IRs, ETC)
- REINSPECTION OF ALL AMERICAN BRIDGE BOLTED CONNECTIONS COMPLETE

PROGRESS TO DATE

- SCOPING COMPLETED
- APPROXIMATELY 12,000 BOLTS INVOLVED WITHIN 340 CONNECTIONS
- APPROXIMATELY 700 BOLTS OUT OF APPROXIMATELY 12,000 INSTALLED REPLACED TO DATE
- MAJORITY OF THE DEFICIENCIES ($\approx 60\%$) RELATE TO THE INABILITY TO READILY CONFIRM THE REQUIRED BOLTING MATERIAL
- APPROXIMATELY 150 BOLTS REMAIN TO BE REPLACED

LP&L ACTION TO PREVENT RECURRENCE

- REVIEW TO ASSURE SCOPING IS ACCURATE AND CORRECTIVE ACTION DOCUMENTED

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #13
MISSING NCR'S

NRC DESCRIPTION OF CONCERN

- 10 NCR'S WERE NOT IN CARD INDEX FILE
- OTHERS WERE MISSING FROM EBASCO QA VAULT

LP&L ACTION REQUIRED

- OBTAIN MISSING NCR'S
- EXPLAIN WHY THEY WERE NOT MAINTAINED IN FILING SYSTEM
- REVIEW FOR PROPER VOIDING
- ASSURE NCR'S ARE PROPERLY FILED FOR TRACKING AND CLOSURE

ISSUE #13
(CONT'D.)

LP&L PLAN

- INVESTIGATE/EXPLAIN SOURCE OF PROBLEM
- DETERMINE STATUS OF NCR'S QUESTIONED
- DETERMINE IF ANY ADDITIONAL NCR'S WERE NOT ACCOUNTED FOR
- CORRECT DISCREPANCIES FOUND

LP&L PROGRESS TO-DATE

- ALL ACTIONS COMPLETE

AUGUST 17, 1984

PRE-LENCENSING ASSESSMENT
ISSUE # 14
J.A. JONES SPEEDLETTERS AND EIRS

NRC DESCRIPTION OF CONCERN:

- o DURING THE EBASCO QA REVIEW OF J.A. JONES SPEED LETTERS AND ENGINEERING INFORMATION REQUESTS, SEVERAL ITEMS WHICH COULD AFFECT PLANT SAFETY WERE NOTED. BASED ON ITS SAMPLE OF THESE ACTIONS, THE STAFF DOES NOT EXPECT THAT ANY OF THESE ITEMS WILL SIGNIFICANTLY AFFECT PLANT SAFETY.

LP&L ACTION REQUIRED:

- o THE APPLICANT SHOULD COMPLETE THE ACTIONS IDENTIFIED IN THESE REVIEWS AND ISSUES RAISED SHALL BE RESOLVED PROMPTLY.

LP&L PLAN:

- o LP&L'S APPROACH TO RESOLUTION OF THIS CONCERN CONSISTS OF THE FOLLOWING:
 - o COMPLETE THE REVIEW OF THE J.A. JONES SPEED LETTERS AND ENGINEERING INFORMATION REQUEST (APPROXIMATELY 1100).
 - o MINIMUM 10% REVIEW OF INFORMATION REQUEST DOCUMENTS UTILIZED BY REMAINING SAFETY RELATED CONTRACTORS (15 CONTRACTORS).

ISSUE #14 (CONT'D)

PROGRESS TO DATE

- J. A. JONES REVIEW IS COMPLETE WITH NO ITEMS REQUIRING MODIFICATION
- BASED ON SAMPLE RESULTS, THERE WAS AN EXPANSION OF THE REVIEW PROCESS
 - ANY CONTRACTOR WITH 50 OR LESS DOCUMENTS RECEIVED A TOTAL REVIEW
 - BASED ON THE TYPE OR NUMBER OF FINDINGS, THE REVIEW OF 3 CONTRACTORS DOCUMENTS WAS EXPANDED
- NO FINDINGS TO DATE HAVE RESULTED IN MODIFICATIONS
- TWO CONTRACTORS ARE STILL BEING EVALUATED, OF WHICH ONE CONTRACTOR WILL REQUIRE ADDITIONAL PHYSICAL INSPECTIONS

LP&L ACTION TO PREVENT RECURRENCE

- RETRAINING OF INDIVIDUALS INVOLVED WITH INFORMATION REQUESTS WITH EMPHASIS ON APPROPRIATE DOCUMENTATION OF DESIGN CHANGES

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #15
WELDING OF "D" LEVEL MATERIAL INSIDE CONTAINMENT

NRC DESCRIPTION OF CONCERN

- "D" LEVEL MATERIAL WELDING FOR CONTAINMENT ATTACHMENTS, SPECIFICALLY CONTAINMENT SPRAY PIPING SUPPORTS, LACKS WELD ROD TRACEABILITY AND WELDER IDENTIFICATION AND CERTIFICATION.

LP&L ACTION REQUIRED

- LOCATE THE DOCUMENTATION AND VERIFY THE ADEQUACY OF THE INFORMATION, OR
- PERFORM A MATERIAL ANALYSIS AND NDE WORK, OR
- REWORK THE WELDS

ISSUE #15
(CONT'D.)

LP&L PLAN

- REVIEW SPECIFIC SUPPORTS IDENTIFIED
- SCOPE "D" MATERIAL WELDS
- CONDUCT DOCUMENT SEARCH WITH CONTRACTOR
- PERFORM APPROPRIATE SAMPLE RE-INSPECTION ON WELDS WITHOUT DOCUMENTATION

PROGRESS TO-DATE

- THE SPECIFIC SUPPORTS IDENTIFIED ARE TEMPORARY AND HAVE BEEN ABANDONED
- SCOPING COMPLETE
- DOCUMENT SEARCH COMPLETE. SINCE CB&I QA MANUAL REQUIREMENTS FOR DOCUMENTATION DO NOT APPLY TO "D" MATERIAL WELDS, NOT ALL DOCUMENTATION IS AVAILABLE.
- THE SEISMIC CATEGORY I STRUCTURES OF "D" MATERIAL WERE IDENTIFIED AND A 10% SAMPLE REPRESENTING MAJOR STRUCTURES SELECTED FOR REINSPECTION. INSPECTION COMPLETE. NO STRUCTURALLY SIGNIFICANT DEFICIENCIES IDENTIFIED.

ISSUE #15
(CONT'D.)

PROGRESS TO-DATE (CONT'D)

- UNIQUE HEAT NUMBER TRACEABILITY NOT OBTAINABLE, BUT ALL WELD ROD ACCEPTABLE.
- ALL WELDERS WERE CERTIFIED.

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT

ISSUE #16

SURVEYS AND EXIT INTERVIEWS OF QA PERSONNEL

NRC DESCRIPTION OF CONCERN

- SURVEY AND EXIT INTERVIEWS NOT VIGOROUSLY PURSUED FOR ROOT CAUSE, SAFETY SIGNIFICANCE, GENERIC IMPLICATIONS
- INVESTIGATIONS NOT TIMELY
- LP&L PROGRAM NOT INDEPENDENT OR FORMAL
- LP&L SENIOR MANAGEMENT NOT WELL INFORMED

LP&L INITIAL PROGRAM

- VOLUNTARILY INITIATED IN JANUARY 1984 - 407 INTERVIEWS CONDUCTED
- LIMITED TO QA/QC PERSONNEL
- CONDUCTED BY LP&L QA STAFF
- EXIT INTERVIEW FOLLOW-UP NOT TIMELY
- PROGRAM NOT AUDITABLE, SYSTEMATIC RECORDS NOT MAINTAINED ON FOLLOW-UP
- 72 CONCERNS IDENTIFIED FROM INITIAL INTERVIEWS, 13 OF WHICH REQUIRED CORRECTIVE ACTION:
 - 4 PROCEDURE REVISIONS
 - 5 NCR IMPACT
 - 3 RECORDS REVIEW
 - 1 LIMITED INSPECTION
- AS OF JULY 1, 174 EXIT INTERVIEWS CONDUCTED
 - SEVERAL ADDITIONAL CONCERNS IDENTIFIED, ONE REQUIRED CORRECTIVE ACTION
- REVIEW BY ISEG IN JUNE - DEVELOPED ONE ADDITIONAL SAFETY CONCERN

PROGRAM BENEFITS

- MAJORITY HAD NO CONCERNS
- MANY CONCERNS IDENTIFIED
- FOLLOW-UP AND CORRECTIVE ACTION RESULTED

PROGRAM SHORTCOMINGS

- NOT AUDITABLE
- NO FORMAL PROCEDURES
- NOT INDEPENDENT, UNTRAINED INTERVIEWERS

LP&L PLAN

- QUALITY TEAM ESTABLISHED
 - Q.T.C. INDEPENDENT CONSULTANT
 - TRAINED PERSONNEL

- QUALITY TEAM LEADER REPORTS TO LP&L SENIOR VICE PRESIDENT
 - LP&L QA WILL AUDIT
 - REGULAR REPORTING - WRITTEN AND VERBAL
 - AUDITABLE PROGRAM - FORMAL PROCEDURES
 - CONFIDENTIALITY
 - AGGRESSIVE FOLLOW-UP
 - ALL PERSONNEL - EXIT INTERVIEWS
 - RETROSPECTIVE AND PROSPECTIVE PROGRAM

ITEM #16 (CONT'D)

PROGRESS TO DATE

- EXCELLENT RESULTS ON PROGRAM TO DATE
 - NEW PROGRAM IN PLACE
 - OLD CONCERNS PRIORITIZED AND ADDRESSED
 - NEW CONCERNS BEING ADDRESSED

SAFETY SIGNIFICANCE

- SAFETY CONCERNS RESOLVED PRIOR TO EXCEEDING 5% POWER

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #17
MERCURY INSTALLATION ANCHOR INSTALLATION

NRC DESCRIPTION OF CONCERN

- A REVIEW OF MERCURY PROCEDURE SP-666 REVISION 8, "DRILLED IN EXPANSION ANCHORS . . .", REVEALED THAT IT DOES NOT REQUIRE QC VERIFICATION OF MANY CHARACTERISTICS NECESSARY TO ENSURE PROPER INSTALLATION.

LP&L ACTION REQUIRED

- REVISE MERCURY PROCEDURE SP-666
- INITIATE A REINSPECTION PROGRAM OF SUFFICIENT SIZE AND SCOPE TO INDICATE WHETHER THESE ANCHORS ARE ABLE TO PERFORM THEIR INTENDED FUNCTION.

LP&L PLAN

- REVIEW SP-666 TO DETERMINE ADEQUACY
- REVIEW OF MERCURY DOCUMENTATION AND FIELD VERIFICATIONS DURING TRANSFER REVIEW
- PERFORM SAMPLE RE-INSPECTION TO ENSURE ADEQUACY
- ANALYZE CRITICAL ANCHOR TO EMBEDDED PLATE INSTALLATIONS

ISSUE #17 (CONT'D)

PROGRESS TO DATE

- o SP-666 HAS BEEN REVIEWED FOR ADEQUACY
 - REFERENCES ARE DRAWN TO OTHER DOCUMENTS IN THE PROCEDURE WHICH DELINEATE INSTALLATION/INSPECTION CRITERIA
- o REVIEW OF MERCURY EXPANSION ANCHOR INSTALLATION RECORDS - FROM TRANSFER REVIEW
 - 896 INSPECTION REQUESTS
 - 196 DISCREPANCY NOTICES WRITTEN
 - 15 D.N.'S REQUIRED REWORK
- o EACH INSPECTION BY EBASCO QC CONSISTED OR:
 - WITNESSING TORQUE VERIFICATION
 - CHECK I.D. MARK ON BOLT AND DETERMINE PROPER EMBEDMENT
 - Q.C. PROVIDED A SKETCH OF EXPANSION PLATE AND LOCATION OF THE BOLTS ON THE PLATE
- o REINSPECTION PROGRAM BEGUN 8-15-84 AND INCLUDES:
 - SPACING BETWEEN ADJACENT ANCHORS
 - SPACING BETWEEN AN ANCHOR AND THE EDGE OF A CONCRETE SURFACE
 - MINIMUM ANCHOR EMBEDMENT DEPTH
- o ANALYSIS OF CRITICAL ANCHOR TO EMBEDDED PLATE INSTALLATIONS COMPLETE

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ISSUE #18
DOCUMENTATION OF WALKDOWNS
OF NON-SAFETY RELATED EQUIPMENT

NRC DESCRIPTION OF CONCERN

- FOLLOW-UP DOCUMENTATION OF FINAL WALKDOWNS DID NOT LIST EQUIPMENT IN DETAIL, THEREFORE IT COULD NOT BE CONCLUDED THAT INSTRUMENT AIR PIPING, TUBING AND SUPPORTS HAD BEEN ADEQUATELY ADDRESSED REGARDING POTENTIAL DAMAGE TO SAFETY EQUIPMENT.

LP&L ACTION REQUIRED

- DOCUMENTATION SHOULD BE PROVIDED THAT CLEARLY SHOWS WHAT EQUIPMENT WAS REVIEWED DURING THE WALKDOWNS AND ON WHAT BASIS IT WAS CONCLUDED THAT THE INSTALLATION WAS ACCEPTABLE.

LP&L PLAN

- DESCRIBE DESIGN ACTIONS TAKEN TO PREVENT NON-SEISMIC FAILURES FROM ADVERSELY AFFECTING SAFETY-RELATED COMPONENTS
- PROVIDE DOCUMENTATION ON WALKDOWNS INCLUDING BASES FOR ACCEPTANCE
- REINSPECT NON-SEISMIC PORTIONS OF INSTRUMENT AIR SYSTEM

ISSUE #18 (CONT'D)

PROGRESS TO DATE

- DOCUMENTATION ON WALKDOWNS AND DESCRIPTION OF DESIGN ACTIONS TO BE INCLUDED IN RESPONSE
- REINSPECTION OF INSTRUMENT AIR TO BE COMPLETE 8/31.

PRE-LICENSING ASSESSMENT
ISSUE #19
WATER IN THE BASEMAT INSTRUMENTATION CONDUIT

NRC DESCRIPTION OF CONCERN

- WATER WAS NOTED IN AN ELECTRICAL CONDUIT THAT PENETRATED THE BASEMAT. IF THE SEALS SHOULD FAIL THERE IS A POTENTIAL DIRECT PATH FOR GROUND WATER TO FLOOD THE AUXILIARY BUILDING BASEMAT.

LP&L ACTION REQUIRED

- LP&L SHOULD ASSURE THAT POTENTIAL DIRECT ACCESS PATHS OF WATER ARE PROPERLY SEALED TO PREVENT FLOODING.

LP&L PLAN

- IDENTIFY EACH CONDUIT STUB-UP WHICH SHOWS EVIDENCE OF PAST OR PRESENT LEAKING. LEAKS REVIEW BY ENGINEERING TO DETERMINE WHETHER A SAFETY HAZARD.

ISSUE #19
(CONT'D)

PROGRESS TO-DATE

- o WALKDOWN OF CONDUITS COMPLETE
- o EVALUATION COMPLETE, FINDINGS:
 - PERMANENT CONDUITS ENTIRELY WITHIN BUILDING PRESENT NO DIRECT LEAKAGE PATH FOR GROUNDWATER AND ARE NOT A SAFETY HAZARD.
 - CONDUITS ENTERING THE BASEMAT FROM OUTSIDE HAVE BEEN GROUTED AND THEIR BLOCKOUT PITS FILLED WITH CONCRETE, SO THAT THEY NO LONGER SERVE AS LEAKAGE PATHS FOR GROUND WATER.
- o THE PIEZOMETER RISER WILL BE SEALED.
- o THE PIEZOMETER STANDPIPE WILL BE PRESSURE GROUTED
- o THE SILICONE ELASTOMER SEAL MATERIAL WILL BE USED TO REPLACE THE EXISTING SEAL MATERIAL FOR CONDUIT STUB-UP WHICH BECOMES AN INCONVENIENCE TO PLANT MAINTENANCE ON ACCOUNT OF LEAKAGE OF WATER.

ISSUE #19
(CONT'D.)

LP&L ACTION TO PREVENT RECURRENCE

- THE REPLACEMENT OF INDIVIDUAL CONDUIT SEALS WILL BE UNDERTAKEN BASED ON OPERATING AND MAINTENANCE CONSIDERATIONS.

SAFETY IMPLICATIONS

- THERE IS NO RECOGNIZED REASON THAT THIS ISSUE SHOULD CONSTRAIN FUEL LOAD OR POWER GENERATION.

AUGUST 17, 1984

PRE-LICENSING ASSESSMENT
ITEM #21
LP&L QA CONSTRUCTION SYSTEM STATUS AND TRANSFER REVIEWS

NRC DESCRIPTION OF CONCERN

- THE FINDINGS GENERATED BY LP&L CONSTRUCTION QA AS A RESULT OF DOCUMENTATION REVIEWS AND PHYSICAL WALKDOWNS ON 15 SYSTEMS MAY NOT HAVE BEEN ADEQUATELY DISPOSITIONED.
- OPEN FINDINGS NOT PROPERLY IDENTIFIED TO LP&L OPERATIONS MAY HAVE ADVERSELY AFFECTED THE TESTING CONDUCTED ON THE 15 SYSTEMS.

LP&L ACTION REQUIRED

- COMPLETE THE REVIEW OF ALL SIGNIFICANT LP&L STATUS AND TRANSFER REVIEW FINDINGS TO ENSURE CLOSURE OR PROPER TRACKING.
- FOR ANY LP&L OPEN FINDINGS NOT PROPERLY IDENTIFIED DETERMINE WHETHER THIS CONDITION ADVERSELY AFFECTED THE TESTING CONDUCTED FOR THESE SYSTEMS.

ITEM #21
(CONT'D.)

LP&L PLAN

- LP&L AND EBASCO PERFORM REVIEW TO IDENTIFY CORRESPONDENCE ASSOCIATED WITH THE 15 SYSTEMS LISTED BY THE NRC AS HAVING QUESTIONABLE DISPOSITIONS.
- EBASCO TO PERFORM REVIEW TO DETERMINE IF ALL LP&L COMMENTS HAD BEEN RESPONDED TO AND ACCEPTED BY LP&L. THIS REVIEW WILL APPLY TO SAFETY-RELATED SYSTEMS.
- LP&L WILL PERFORM REVIEW TO DETERMINE GENERIC IMPLICATIONS OR SIGNIFICANT TRENDS OF COMMENTS GENERATED ON SYSTEMS REVIEWED. THIS WILL BE DONE ON A CONTRACTOR BASIS.
- LP&L PERFORM REVIEW TO DETERMINE WHETHER OR NOT THERE WAS IMPACT ON SYSTEM TESTING OR OPERATION BY THE COMMENTS NOT RESPONDED TO BY EBASCO.

ITEM #21
(CONT'D.)

LP&L PROGRESS TO-DATE

- REVIEW COMPLETE ON 15 SYSTEMS IDENTIFIED BY NRC. LP&L COMMENTS HAVE BEEN RESOLVED.
- REVIEW COMPLETED BY EBASCO ON LP&L COMMENTS GENERATED DURING STATUS AND TRANSFER REVIEWS. LP&L COMMENTS HAVE BEEN RESOLVED.
- REVIEW FOR GENERIC IMPLICATIONS OR SIGNIFICANT TRENDS CONTAINED IN COMMENTS GENERATED FROM LP&L QA'S DOCUMENTATION REVIEWS AND WALKDOWNS WAS COMPLETED ON MAY 14, 1984. NONE WERE IDENTIFIED.
- LP&L START-UP PERFORMED A REVIEW OF THE COMMENTS ISSUED BY LP&L QA ON THE 15 SYSTEMS. THIS REVIEW DETERMINED THAT NONE WERE SIGNIFICANT OR WOULD HAVE IMPACTED SYSTEM TESTING OR OPERATION.

AUGUST, 1984

PRE-LICENSING ASSESSMENT
ISSUE #22

- A) WELDER QUALIFICATION (MERCURY)
- B) FILLER MATERIAL CONTROL (SITE WIDE)

ISSUE 22A
WELDER QUALIFICATION (MERCURY)

NRC DESCRIPTION OF CONCERN

- MERCURY WELDERS NOT QUALIFIED TO THE CORRECT WELDING PROCEDURE,
- MERCURY WELDERS QUALIFIED FOR A SPECIFIC PROCESS, EVEN THOUGH THEY WERE NOT TESTED FOR THAT PROCESS,
- ACTUAL DATES ON MERCURY QUALIFICATION RECORDS APPEAR QUESTIONABLE, AND
- ONE MERCURY WELDER MAY HAVE WELDED PRIOR TO BEING TESTED.

LP&L REQUIRED ACTION

- ATTEMPT TO LOCATE THE MISSING DOCUMENTATION AND DETERMINE IF THE WELDERS WERE PROPERLY QUALIFIED.
- IF THIS DOCUMENTATION CANNOT BE LOCATED, LP&L SHALL PROPOSE A PROGRAM TO ASSURE THE QUALITY OF WELDS PERFORMED BY QUESTIONABLY QUALIFIED WELDERS.

ISSUE 22A (CONT'D)
WELDER QUALIFICATION (MERCURY)

LP&L PLAN

- REVIEW THE SPECIFIC MERCURY WELDER QUALIFICATIONS QUESTIONED BY THE NRC STAFF TO DETERMINE ACCEPTABILITY.
- TAKE CORRECTIVE ACTION AS REQUIRED BY THE REVIEW.

PROGRESS TO DATE

- SPECIFIC MERCURY WELDER QUALIFICATIONS QUESTIONED BY NRC STAFF HAVE BEEN REVIEWED. REVIEW DETERMINED THAT QUALIFICATIONS ARE IN ORDER.
- NCR W3-7724 WAS GENERATED TO ADDRESS THREE DOCUMENTATION DISCREPANCIES NOTED BY NRC. A 100% REVIEW OF MERCURY WELDER QUALIFICATIONS FOR SIMILAR PROBLEMS WAS PERFORMED AND NO SIMILAR PROBLEMS WERE FOUND. NCR W3-7724 CORRECTIVE ACTION IS COMPLETE AND THE NCR HAS BEEN CLOSED.
- NCR W3-7218, OPENED TO ADDRESS MERCURY WELDER QUALIFICATION CONCERNS, GIVEN ADDITIONAL REVIEW. THIS REVIEW SHOWED THAT MERCURY WELDERS PERFORMING SAFETY/ SEISMIC WELDMENTS WERE PROPERLY QUALIFIED AND NO ADDITIONAL CORRECTIVE ACTION WAS REQUIRED.

ISSUE #22B
FILLER MATERIAL CONTROL

NRC DESCRIPTION OF CONCERN

- BASED ON NRC STAFF REVIEW, "REBAKING" OF LOW HYDROGEN ELECTRODES DID NOT MEET ASME AND AWS CODE REQUIREMENTS.

LP&L REQUIRED ACTION

- LP&L SHALL PROVIDE ENGINEERING JUSTIFICATION FOR ALLOWANCE OF "REBAKE" TEMPERATURES AND HOLDING TIMES THAT DIFFER FROM REQUIREMENTS OF ASME AND AWS CODES.

LP&L PLAN

- TO CLARIFY THE WELDING MATERIAL STORAGE REQUIREMENTS.
- TO ASSURE THAT TECHNICAL DEVIATION FROM THE CODE WAS PROPERLY EVALUATED AND IMPLEMENTED.

ISSUE #22B (CONT'D)

PROGRESS TO DATE

- SITE PROCEDURES WERE IMPLEMENTED THROUGHOUT THE CONSTRUCTION PHASE TO PRECLUDE THE NEED FOR REBAKING.
- REVIEWS OF ASME REQUIREMENTS FOR HOLDING TEMPERATURE INDICATES THAT SITE PROCEDURES ARE IN COMPLIANCE.
- SITE PROCEDURES DIFFER WITH RESPECT TO AWS D1.1 HOLDING TEMPERATURE REQUIREMENTS, BUT ARE CONSISTENT WITH AWS A5.1 WELDING MATERIAL SPECIFICATIONS. THESE CODE INCONSISTENCIES POSE NO DETRIMENTAL EFFECTS TO THE WELD ROD.

ISSUE #23

QA PROGRAM BREAKDOWN BETWEEN EBASCO & MERCURY

NRC DESCRIPTION OF CONCERN

- o FOLLOWUP ON CORRECTIVE ACTIONS COMMITMENTS TO NRC
- o AUDITING OF MERCURY QA PROGRAMS
- o COMPLETION OF CORRECTIVE ACTIONS FROM AUDITS
- o ROOT CAUSE DETERMINATION/CORRECTIVE ACTION ALLOWED PROBLEM TO PERSIST
- o MANAGEMENT AUDIT CORRECTIVE ACTION

LP&L ACTION REQUIRED

- o DETERMINE CAUSE OF BREAKDOWN
- o ASSESS CORRECTIVE ACTION TO PREVENT RECURRENCE
- o OVERALL QA PROGRAM ASSESSMENT

LP&L PLAN

- o REVIEW CORRECTIVE ACTIONS FROM NRC ENFORCEMENT ACTION
- o REVIEW EFFECTIVENESS OF QA AUDIT PROGRAM
- o IDENTIFY LESSONS LEARNED FOR INCORPORATION INTO "COLLECTIVE SIGNIFICANCE"
- o ASSESS RESPONSE TO MANAGEMENT AUDITS
- o ASSESSMENT OF OVERALL QA PROGRAM - COLLECTIVE SIGNIFICANCE

AUGUST 17, 1984

PAGE 2 OF 6

ISSUE #23 (CONT'D)

PROGRESS TO DATE

MERCURY CORRECTIVE ACTIONS BEING CONFIRMED
AS TO IMPLEMENTATION AND ADEQUACY

LP&L/EBASCO/MERCURY AUDITS OF MERCURY HAVE
BEEN REVIEWED, CORRECTIVE ACTIONS HAVE BEEN
CONFIRMED

MANAGEMENT ASSESSMENT FINDINGS HAVE BEEN
REVIEWED FOR CORRECTIVE ACTION IMPLEMENTATION

ISSUE #23 (CONT'D)

CORRECTIVE ACTIONS FROM NRC ENFORCEMENT ACTION

- o MERCURY RETRAINING PROGRAM *
- o REINSPECTION OF ALL SAFETY CLASS INSTALLATIONS *
- o MERCURY ORGANIZATIONAL CHANGES
- o INCREASE IN MERCURY QA/QC STAFF *
- o EBASCO QA MANAGEMENT TEAM TO OVERSEE MERCURY
- o INCREASE IN LP&L/EBASCO QA STAFF *
- o ESTABLISHMENT OF EBASCO QA SURVEILLANCE * AND QUALITY ANALYSIS GROUPS
- o ENLARGEMENT OF EBASCO QA RECORDS REVIEW GROUP *
- o REDUCTION IN MERCURY WORK SCOPE
- o PROCEDURAL CHANGES IMPLEMENTED
- o RECORDS REVIEW ASSUMED BY EBASCO
- o SCD/INSPECTION REPORT RESPONSIBILITIES SHIFTED TO LICENSING

* COMMITMENT TO NRC

ISSUE #23 (CONT'D)
CORRECTIVE ACTION REVIEW

SYSTEM BY SYSTEM REINSPECTION BY LP&L/EBASCO/MERCURY

- o APPROXIMATELY 90% OF INSTALLATIONS COMPLETED PRIOR TO STOPPING WORK
- o FOUR SYSTEMS INITIALLY - EXPANDED TO ALL SYSTEMS
- o PROJECT DECISION TO STRUCTURE PROGRAM CONSISTENT WITH SEQUENCING OF SYSTEM TURNOVERS UNDER STARTUP PROGRAM
- o SCOPE OF REINSPECTION CENTERED ON TUBING, TUBE TRACK, SUPPORTS AND CONFIGURATION
- o CORRELATION OF OBSERVED DEFICIENCIES TO TIME PERIOD OF INSTALLATION

RECORDS REVIEW PROGRAM

- o REVIEW EFFORT EXPANDED
- o PRIORITY ON TUBING TO SUPPORT SEQUENCED TURNOVER PROGRAM
- o EBASCO INITIATED 100% REVIEW/RE-REVIEW

ADDITIONAL RE-INSPECTIONS

- o RE-INSPECTIONS PERFORMED AS A RESULT OF RECORD DEFICIENCIES
- o CURRENT REINSPECTION PROGRAM AS DISCUSSED IN ISSUE #1

ISSUE #23 (CONT'D)

AUDITS OF MERCURY QA PROGRAM

AUDIT SCHEDULE

- o MERCURY CONDUCTED 75 INTERNAL AUDITS
- o EBASCO CONDUCTED 100 AUDITS OF MERCURY
- o LP&L CONDUCTED 85% OF SCHEDULED AUDITS (24) AND PERFORMED 13 SURVEILLANCES

CORRELATION OF AUDITS TO PROGRAM REQUIREMENTS

COMPLETION OF AUDIT CORRECTIVE ACTIONS

- o MERCURY AUDIT FILES NOT ORGANIZED FOR EASE OF FOLLOWUP
- o CORRECTIVE ACTIONS FOUND TO HAVE BEEN IMPLEMENTED

AUGUST 17, 1984

PAGE 6 OF 6

ISSUE #23 (CONT'D)

MANAGEMENT AUDITS

MANAGEMENT ASSESSMENTS DURING 1977 - 1980 TIME PERIOD

- o IDENTIFIED ORGANIZATION AND STAFFING CONCERNS
- o LP&L SLOW TO RESPOND

AUDIT OF PLANT TRAINING PROGRAM

- o FINDINGS ADDRESSED IN TIMELY MANNER
- o PLANT TRAINING STAFF AND PROGRAM REORGANIZED

COLLECTIVE SIGNIFICANCE

CATEGORIZATION OF 23 ISSUES AND SUBISSUES

- o TRAINING AND QUALIFICATION
- o RECORDS
- o PROCESS CONTROL
- o TECHNICAL

REVIEW OF OTHER PERTINENT ISSUES

ASSESSMENT OF COLLECTIVE SIGNIFICANCE ON PLANT CONFIGURATION
AND HARDWARE

IDENTIFY LESSONS LEARNED

CORRELATE LESSONS LEARNED/CORRECTIVE ACTIONS IMPLEMENTED AND
DEVELOP RECOMMENDED FUTURE ACTIONS FOR THE OPERATION QA PROGRAM