LOUISIANA POWER & LIGHT / 317 BARONNE STREET • P.O. BOX 60340 NEW ORLEANS, LOUISIANA 70160 • (504) 595-2204
MIDDLE SOUTH UTILITIES SYSTEM

October 31, 1984

J.M. CAIN
President

W3P84-3086
3-A1.01.04
A4.05

Director of Nuclear Reactor Regulation
ATTN: Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: WATERFORD 3 SES
REQUEST FOR OPERATING LICENSE

REFERENCES 1) Letter W3A84-0133, J.M. Cain to D.G. Eisenhut, dated October 5, 1984

2) Letter, D.G. Eisenhut to J.M. Cain, dated June 13, 1984

3) Letter W3B84-0807, J.M. Cain to D.G. Eisenhut, dated October 31, 1984

On October 5, 1984, I submitted a request for authorization to load fuel and perform pre-criticality hot functional testing, subject to our completion of the pertinent elements of the Licensing Program Plan and other identified activities. This is to inform you that Waterford-3 is physically complete and ready for fuel loading.

Responses to all of the 23 issues identified by the NRC in Reference 2 have now been submitted. While the responses to Issues 1, 6 and 10 will be supplemented in November (see Reference 3), the current status of our resolution of the issues fully supports issuance of an operating license conditioned to preclude initial criticality until the NRC has fully resolved the 23 issues. This position represents our desire to confirm LP&L's confidence in the hardware acceptability to the NRC and the public served by LP&L prior to going critical and proceeding with the low power testing and power ascension program. The lack of fission products and decay heat, prior to initial criticality, assure that no significant hazard exists for fuel loading and subsequent pre-criticality testing.

The safety reviews of plant systems against each of the 23 NRC issues described in Reference 1 have been completed for the systems required by Technical Specifications for Modes 6 through Mode 3 (Fuel Load and Post-core Hot Functional Testing). As presented in Attachment A, only three instances were determined to require a limited safety review. A limited safety review is defined as a

A001
1/1

safety review in which the basis for the evaluation requires that credit must be taken for lack of fission products and decay heat. An additional safety review would be performed prior to initial criticality. In these instances the resolution of the issues were evaluated to be sufficient to proceed with operation in Modes 6 through 3. Further resolution would be a prerequisite to removing the limitation on initial criticality. Attachment B provides a summary of the safety reviews performed for the systems required by the Technical Specifications for operation in Mode 2 and Mode 1 (initial criticality to full power operation).

Attachment D of Reference 1 included a listing of licensing commitments, significant construction deficiencies, inspection report open items and fuel load prerequisite system completion work items. These items, with the exception of items listed in Attachment C, have been completed by LP&L or have been judged not to be truly prerequisite to fuel load and post-core hot functional testing. These judgements, which are few in number, have been reviewed with the Resident NRC Inspectors.

An additional area which must be addressed relative to actual fuel load is completion of the surveillances required by Technical Specifications prior to entering Mode 6 (Fuel Load). These surveillances are basically complete, as presented in Attachment C. Completion of prerequisite surveillances for Modes 5, 4 and 3 are not expected to impact the performance of post-core hot functional testing.

Your timely action on this matter is requested. With both the plant and its staff in their current state of readiness, our ability to begin fuel loading and pre-criticality testing in the near term will avoid unnecessary delays in the schedule for achievement of commercial operation.

Sincerely,

James M. Cain

J.M. Cain

JMC:KWC:sms

Attachments

cc (with Enclosure): R.S. Leddick, D.E. Dobson, K.W. Cook,
J.T. Collins (NRC), D. Crutchfield (NRC),
G. Knighton (NRC), G. Charnoff, L.L. Humphreys,
R.L. Ferguson, J. Wilson (NRC), L. Constable (NRC),
Project Files

ATTACHMENT A

SAFETY REVIEWS OF PLANT

SYSTEMS REQUIRED BY

TECHNICAL SPECIFICATIONS FOR

FUEL LOADING AND PRECRITICALITY

POST-CORE LOAD HOT FUNCTIONAL

TESTING

LICENSING PLAN FOR
FUEL LOADING AND PRECRITICALITY
POST CORE LOAD HOT FUNCTIONAL TESTING

A Licensing Program Plan has been structured to institute safety reviews of those plant systems required for fuel load and post fuel load testing, criticality and low power testing (to 5% power) and full power operation.

A detailed review of the technical specifications was performed to determine the listing of plant systems required for fuel loading and post-core hot functional testing under the limited license (Table A-1). Forty-nine plant systems have been identified as being required to be operable by Waterford SES #3 technical specifications in modes 6, 5, 4, 3 (refueling through hot standby) and these systems are the subject of this Attachment (Attachment A). These are the modes involved with fuel load and pre-criticality, post fuel load hot functional testing. This is a conservative approach because many of these requirements assume the presence of irradiated fuel and therefore are not of significance to the initial core loading and testing processes. This program will assure LP&L management that the impact of any concern raised is properly assessed and resolved in the context of safe plant operations and protection of the public health and safety as will be specified in our operating license/standard technical specifications and FSAR.

Safety reviews were performed on each of the plant systems in Table A-1, against each of the 23 issues (Table A-2). Table A-3 provides a complete matrix indicating those safety reviews which have been successfully completed. Table A-4 provides the footnotes associated with the Table A-3 matrix indicating outstanding actions required to complete the matrix. Where successful completion of the safety review is indicated in Table A-3, the safety review assures completion of those actions necessary to insure the system is constructed and functions according to the requirements of the FSAR in light of the 23 issues, without consideration of the lack of fission products (due to not having gone critical). In three instances it was judged to be necessary to perform limited safety reviews (credit must be taken for lack of fission products in order to justify safety significance). The matrix references a footnote describing the circumstances and basis for the limited review for each of the instances.

During the safety evaluation of these 49 fuel load systems they were categorized into subgroups that logically represent the potential issue by issue safety impact. The subgroups are defined in Table A-6 as:

A. The issue does not have a safety related effect on the system because:

   a) the contractor in question did not do work on the system under evaluation, or

   b) the procedure or process in question did not apply to the system under evaluation.

B. The issue does not have a safety related effect on the system because:

   a) the contractor in question did not do any safety related work on the system under evaluation, or the procedure or process in question did not apply to any safety related portions of the system under evaluation, and

   b) any non-safety related activities performed on the system of concern does not have any significant effect on the safety related function of the system under evaluation.

C. The issue does have a potential safety related effect on the system because:

   a) the contractor in question did work of safety significance on the system under evaluation, or

   b) the procedure or process in question did apply to safety significant activities of the system under evaluation.

Safety evaluations were performed and verified (as necessary) to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public. The subgroup for each system, as it relates to each of the twenty-three issues, is presented in Table A-6. In performing the evaluations, it was determined that it would be more effective to subdivide the first issue (Inspection Personnel Issues) into three subissues covering 1A - Mercury, 1B - Thompkins-Beckwith and 1C - Other Contractors. This resulted in effectively 25 issues being evaluated for each of the 49 plant systems. Since this results in a total of 1225 safety reviews (each consisting of several pages) it is not feasible to present all of the documentation in this transmittal. The full documentation of the safety reviews is on file at the Waterford SES #3 On-site Licensing Unit offices for inspection and review by the NRC staff. The individual safety reviews were reviewed and summaries prepared, for those falling within Subgroup C. The summaries are included in this attachment (Table A-5) for each issue and subissue.

TABLE A-1

PLANT SYSTEMS REQUIRED BY TECHNICAL SPECIFICATIONS DURING FUEL LOADING AND PRE-CRITICAL POST-CORE LOAD HOT FUNCTIONAL TESTING

ACRONYM	SYS. NO.	DESCRIPTION	MODE OPERABILITY IS REQUIRED
DC	02A	125v DC SAFETY	MODE 1-6
MT	03	SWITCHING STATION	MODE 1-6
ST	04	STARTUP TRANSFORMERS	MODE 1-6
4kv	06A	4.16kv ELEC. DISTRIBUTION SAFETY	MODE 1-6
SSD	07A	480v ELEC. DISTRIBUTION SAFETY	MODE 1-6
LVD	08A	208/120v ELEC. DISTRIBUTION SAFETY	MODE 1-6
ID	09A	INVERTERS & DISTRIBUTION SAFETY	MODE 1-6
	10	COMMUNICATIONS	MODE 1-6
HT	13A-1	HEAT TRACE SAFETY	MODE 1-6
EM	16	ENVIRONMENTAL MONITORING	ALL MODES
SM	17	SEISMIC MONITORING	ALL MODES
ARM/RMC/ PRM	18-1 18-2 18-3 18-4 18-5	RADIATION MONITORING SYSTEM	ALL MODES
SS	20	SECURITY SYSTEM	ALL MODES
FPD	21	FIRE DETECTION	ALL MODES
FP	22	FIRE PROTECTION	ALL MODES
CC	36-1 36-2	COMPONENT COOLING WATER	MODE 1-6
ACC	36-3	AUXILIARY COMPONENT COOLING WATER	MODE 1-4
EG	39	EMERGENCY DIESEL GENERATOR	MODE 1-6
CRN	40-2	CRANE & HOIST FHB	MODE 6 ONLY
CCS	42A	RCB CONTAINMENT COOLING	MODE 1-4
SBV	43B	SHIELD BLDG. VENTILATION	MODE 1-4

TABLE A-1

PLANT SYSTEMS REQUIRED BY TECHNICAL SPECIFICATIONS DURING FUEL LOADING AND PRE-CRITICAL POST-CORE LOAD HOT FUNCTIONAL TESTING

ACRONYM	SYS. NO.	DESCRIPTION	MODE OPERABILITY IS REQUIRED
CVR	43E	CONTAINMENT VACUUM RELIEF	MODE 1-4
HVC	46B	CONTROL ROOM HVAC	ALL MODES
HVR	46D	RAB HVAC	MODE 1-6
CHW	46E	RAB CHILLED WATER	MODE 1-6
FP	46K	FIRE DAMPERS	ALL MODES
CB	48	LRT CONTAINMENT VESSEL	MODE 1-6
PAC	49	PROCESS ANALOG CONTROL	MODE 1-6
IC	50B	MISC. PANELS	MODE 1-6
RCS	52A 52B 52C	REACTOR COOLANT SYSTEM	MODE 1-6
CVC	53A	CHARGING & LETDOWN	MODE 1-6
BAM	53B	BORIC ACID MAKEUP	MODE 1-6
PSL	54-9	PRIMARY SAMPLING	MODE 1-5
GWM	55A	GASEOUS WASTE MANAGEMENT	ALL MODES
LWM	55B 55E	LIQUID & LAUNDRY WASTE MANAGEMENT	ALL MODES
SI	58 60A 60B 60C	SAFETY INJECTION	MODE 1-6
CS	59	CONTAINMENT SPRAY	MODE 1-4
FHS	61	FUEL HANDLING & STORAGE	MODE 6 ONLY
PPS	66 63	PLANT PROTECTION SYSTEM	ALL MODES
ENI	65A-1 65A-2	EXCORE NUCLEAR INST.	MODE 1-6
CMU	71B	CONDENSATE MAKEUP	MODE 1-3
EFW	73	EMERGENCY FEEDWATER	MODE 1-3

TABLE A-1

PLANT SYSTEMS REQUIRED BY TECHNICAL SPECIFICATIONS DURING
FUEL LOADING AND PRE-CRITICAL POST-CORE LOAD HOT FUNCTIONAL TESTING

ACRONYM	SYS. NO.	DESCRIPTION	MODE OPERABILITY IS REQUIRED
SSL	75	SECONDARY SAMPLING	MODE 1-4
SG	76	STEAM GENERATORS & MSIV	MODE 1-4
TUR	88	TURBINE & TURBINE CONTROLS	MODE 1-3
	91	SEISMIC SUPPORTS	ALL MODES
	19-16	WHIP RESTRAINTS	ALL MODES
	19-17	SYSTEM SUPPORTS (HANGERS)	ALL MODES
		SEISMIC STRUCTURES	ALL MODES

TABLE A-2

SAFETY REVIEW ISSUES

ISSUE NO.	
1	(A) Inspection Personnel Issues - Mercury (B) Inspection Personnel Issues - T&B (C) Inspection Personnel Issues - Other Contractors
2	Missing NI Instrument Line Documentation
3	Instrumentation Expansion Loop Separation
4	Lower Tier Corrective Actions are not being Upgraded to NCRs
5	Vendor Documentation - Conditional Releases
6	Dispositioning of Nonconformance and Discrepancy Reports
7	Backfill Soil Densities
8	Visual Examination of Shop Welds During Hyrdrostatic Testing
9	Welder Certification
10	Inspector Qualifications (J. A. Jones & Fegles)
11	Cadwelding
12	Main Steamline Framing Restraints
13	Missing NCRs
14	J. A. Jones Speed Letters and EIRs
15	Welding of "D" Level Material Inside Containment
16	Surveys and Exit Interviews of QA Personnel
17	QC Verification of Expansion Anchor Characteristics
18	Documentation of Walkdowns on Non-Safety Related Equipment
19	Water in Basemat Instruments
20	Construction Materials Testing (CMT) Personnel Qualification Records
21	LP&L QA Construction System Status and Transfer Reviews
22	Welder Qualifications (Mercury) and Filler Material Control (Site Weld)
23	QA Program Breakdown Between Ebasco and Mercury

TABLE A-3

SYSTEMS / ISSUE SAFETY RESOLUTION MATRIX

X Indicates that Team, ISEG, PORC and Plant Manager review completed.

SYSTEM NUMBER	SYSTEM	1				2	3	4	5	6	7	8	9	10 [2]	11	12	13	14	15	16	17	18	19	20 [3]	21	22	23
		A	B	C [1]																							
02A	125V DC	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
03	Switching Station	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
04	SU XFMR	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
06A	4.16 kv Electric	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
07A	480 V Electric	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
08A	208/120V Electric	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
09A	Inverters: Dist.	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	Communications	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13A-1	Heat Trace	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	Environmental Monitoring	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17	Seismic Monitoring	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18	Rad Monitoring	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20	Security	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

TABLE A-3 CON'T

SYSTEMS / ISSUE SAFETY RESOLUTION MATRIX

SYSTEM NUMBER	SYSTEM	1				2	3	4	5	6	7	8	9	10 [2]	11	12	13	14	15	16	17	18	19	20 [3]	21	22	23
		A	B	C [1]																							
21	Fire Detection	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22	Fire Protection	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
36-1.2	Component Cooling Water	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
36-3	Aux. Comp. Cooling	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
39	Diesel Generator	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
40-2	Crane Hoist FHB	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
43A	Containment Cooling	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
43B	Shield Bldg. Vent	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
43E	Containment Vacuum Rel.	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
46B	Control Room HVAC	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
46D	RAB HVAC	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
46E	RAB Chilled Water	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
46K	Fire Dampers	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

SYSTEMS / ISSUE SAFETY RESOLUTION MATRIX

TABLE A-3 (CONT'D)

SYSTEM NUMBER	SYSTEM	1				2	3	4	5	6	7	8	9	10[2]	11	12	13	14	15	16	17	18	19	20[3]	21	22	23
		A	B	C[1]																							
48	LRT Containment Ves.	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
49	Process Analog Control	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
50B	Misc. Panels	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
52 A.B.C	Reactor Coolant	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
53A	Charging Letdown	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
53B	Boric Acid Makeup	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
54-9	Primary Sampling	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
55A	Gas. Waste Manage.	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
55 B,E	Liquid/Landry Waste	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
58,60 A.B.C	Safety Injection	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
59	Containment Spray	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
61	Fuel Handling Storage	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
66,63	Plant Protection	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

TABLE A-3 CON'T

SYSTEMS / ISSUE SAFETY RESOLUTION MATRIX

SYSTEM NUMBER	SYSTEM	1 A	1 B	1 C [1]	1	2	3	4	5	6	7	8	9	10 [2]	11	12	13	14	15	16	17	18	19	20 [3]	21	22	23
65A-1, 2	Excore Nuc. Inst.	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
71B	Condensate Makeup	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
73	Emergency Feedwater	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
75	Secondary Sampling	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
76	Steam Gen. & MSIV	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
88	Turbine Turbine Cont.	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
91	Seismic Supports	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19-16	Whip Restraints	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19-17	System Supports	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Seismic Structures	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

TABLE A-4

SYSTEMS/ISSUES SAFETY REVIEW RESOLUTION MATRIX
FOOTNOTES

NOTE		OUTSTANDING ACTIONS
	ISSUE 1A	NONE
	ISSUE 1B	NONE
(1)	ISSUE 1C	LIMITED SAFETY REVIEW. REQUIRES NEW SAFETY REVIEW PRIOR TO ENTERING MODE 2.
	ISSUE 2	NONE
	ISSUE 3	NONE
	ISSUE 4	NONE
	ISSUE 5	NONE
	ISSUE 6	NONE
	ISSUE 7	NONE
	ISSUE 8	NONE

TABLE A-4

SYSTEMS/ISSUES SAFETY REVIEW RESOLUTION MATRIX
FOOTNOTES

NOTE	OUTSTANDING ACTIONS
	ISSUE 9 NONE
(2)	ISSUE 10 LIMITED SAFETY REVIEW. REQUIRES NEW SAFETY REVIEW PRIOR TO ENTERING MODE 2.
	ISSUE 11 NONE
	ISSUE 12 NONE
	ISSUE 13 NONE
	ISSUE 14 NONE
	ISSUE 15 NONE
	ISSUE 16 NONE
	ISSUE 17 NONE
	ISSUE 18 NONE

TABLE A-4

SYSTEMS/ISSUES SAFETY REVIEW RESOLUTION MATRIX
FOOTNOTES

NOTE		OUTSTANDING ACTIONS
	ISSUE 19	NONE
(3)	ISSUE 20	LIMITED SAFETY REVIEW. REQUIRES NEW REVIEW PRIOR TO ENTERING MODE 2.
	ISSUE 21	NONE
	ISSUE 22	NONE
	ISSUE 23	NONE

TABLE A-5

SAFETY REVIEW SUMMARIES

Issue #1 - Inspection Personnel Issues

This issue was evaluated on a contractor basis.

Issue #1A - Mercury

Subgroup C - Mercury did perform safety related work on the system and safety evaluations were performed to assure LP&L management that Waterford Steam Electric Station #3 can be safely operated without compromising the health and safety of the public.

Issue #1 does have a potential effect on:

System #	System Description	Evaluation
18-3	Radiation Monitoring System	Installation of safety related instrumentation was inspected by potentially unqualified inspectors. The quality of safety related instrumentation associated with this system was verified. Verification was accomplished by reinspection of N1 instrument loops. Satisfactory completion of this program involving Mercury installations verifies acceptance of the installations. Accordingly, this issue does not serve as a constraint to the safe operation of these systems, and has been resolved and closed out by LP&L.
22	Fire Protection	
36-1	Component Cooling Water	
36-2	Component Cooling Water	
36-3	Aux. Component Cooling Water	
39	Emergency Diesel Generator	
43A	RCB Containment Cooling	
43B	Shield Bldg. Ventilation	
43E	Containment Vacuum Relief	
46B	Control Room HVAC	
46D	RAB HVAC	
46E	RAB Chilled Water	
52A	Reactor Coolant System	
52B	Reactor Coolant System	
52C	Reactor Coolant System	
53A	Charging & Letdown	
53B	Boric Acid Makeup	

System #	System Description
55A	Gaseous Waste Management
55B	Liquid Waste Management
58	Safety Injection
60A	Safety Injection
60B	Safety Injection
60C	Safety Injection
59	Containment Spray
66	Plant Protection System
63	Plant Protection System
71B	Condensate Make-up
73	Emergency Feedwater
76	Steam Generator and MSIVs

Issue #1B - Tompkins-Beckwith

Subgroup C - Tompkins-Beckwith did perform safety related work on the system, and safety evaluations were performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #1 does have a potential effect on:

System #	System Description	Evaluation
18-3	Radiation Monitoring	Work performed on this system was inspected by potentially unqualified inspectors. To close out the concern LP&L verified the qualifications of the initial inspectors. LP&L also verified qualifications of the inspectors performing any over-inspection. Over-inspection provided to meet the ASME Code requirements for third party Authorized Nuclear Inspection services and independent Preservice Inspection in conjunction with other inspection programs, hydrostatic testing, and Pre-Core Hot Functional Testing confirm the acceptability of hardware installed by Tompkins-Beckwith.
22	Fire Protection	
36-1	Component Cooling Water	
36-2	Component Cooling Water	
36-3	Aux. Component Cooling Water	
39	Emergency Diesel Generator	
43B	Shield Bldg. Ventilation	
43E	Containment Vacuum Relief	
46B	Control Room HVAC	
46D	RAB HVAC	
46E	RAB Chilled Water	
48	LRT Containment Vessel	
52A	Reactor Coolant System	
52B	Reactor Coolant System	
52C	Reactor Coolant System	
53A	Charging and Letdown	
53B	Boric Acid Makeup	
54-9	Primary Sampling	
55A	Gaseous Waste Management	
55B	Liquid and Laundry Waste Management	

System #	System Description
55E	Liquid and Laundry Waste Management
58	Safety Injection
60A	Safety Injection
60B	Safety Injection
60C	Safety Injection
59	Containment Spray
61	Fuel Handling and Storage
65A-1	Excore Nuclear Instrument
71B	Condensate Make-up
73	Emergency Feedwater
76	Steam Generator and MSIV
88	Turbine and Turbine Controls
19-16	Whip Restraints
19-17	System Supports

Issue #1C - Other Contractors

Subgroup C - Other Contractors (other than Mercury and Tompkins-Beckwith) did perform safety related work on a number of systems and safety evaluations are being performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #1C does have a potential effect on:

System #	System Description	Evaluations
All Table A-1 Systems	See Table A-1	A limited safety review was performed based upon the results of inspector qualification validation to date and the lack of fission products and decay heat prior to initial criticality.

Issue #2 - Missing N1 Instrument Line Documentation

Subgroup C - Instrumentation installations that were identified to have adequate documentation to support the quality of the installations but a decision was made to rework the installations to comply with ASME III documentation requirements are contained in this system and a safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #2 does have an effect on:

System #	System Description	Evaluation
36-1	Component Cooling Water	
36-2	Component Cooling Water	
36-3	Aux. Component Cooling Water	These systems were reworked to correct documentation to demonstrate system operability and remove tube class breaks from ASME III to ANSI B31.1. All work is complete.
39	Emergency Diesel Generator	
43B	Shield Building Ventilation	
66	Plant Protection System	
63	Plant Protection System	
73	Emergency Feedwater	
76	Steam Generator and MSIV	

Issue #3 - Instrumentation Expansion Loop Separation

Subgroup C - It has been determined that there is identified installation deficiency regarding tubing separation criteria in the system and a safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #3 does have a potential effect on:

System #	System Description	Evaluation
66	Plant Protection System	New tube tracks and supports were installed to correct the deficiencies. Accordingly, this issue does not serve as a constraint to the safe operation of these systems, and has been resolved and closed out by LP&L.
63	Plant Protection System	

Issue #4 - Lower Tier Corrective Actions Are Not Being Upgraded to NCR's

Subgroup C - DCN's, FCR's, EDN's and T-B DN's have been reviewed and it was determined that some documents should have been upgraded to NCR's. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #4 does have a potential effect on all systems in Table A-6.

The Evaluation reveals that a statistically acceptable number of lower tier documents were reviewed showing no significant quality impact (no cases were detected which were safety significant and would be reportable under 10CFR50.55e). Therefore it is possible to conclude with a 95% confidence level that 95% of the unsampled documents contain no significant deficiencies. Accordingly, this issue does not serve as a constraint to safe operation of the systems.

Issue #5 - Vendor Documentation - Conditional Releases

Subgroup C - With a review of QA/QC records it is concluded that there are no unresolved items which affect the systems, however Issue #5 does have a potential effect on all systems in Table A-6.

The Evaluation reveals that during the review of QA/QC records conditional release items which affected systems were evaluated and closed out by LP&L with receipt of the "unconditional" paperwork. No items exist to affect the safety function of the systems.

Issue #6 - Dispositioning of Non-Conformance and Discrepancy Reports

Subgroup C - It was noted during a review of NCR's that some of the reports had questionable dispositioning potentially rendering the quality of installation indeterminate.

Issue #6 does have a potential effect or all systems in Table A-6.

The Evaluation included a combination screening and sampling method to review EBASCO NCR's including NCR's identified by the NRC and no items were identified which had significant safety impact on the systems. Mercury NCR's were reviewed for upgrade and sampled to determine reportability to support the conclusion that the safety review is not effected.

Issue #7 - Backfill Soil Densities

Subgroup C - Data from the in-place density tests on the class A fill was potentially not traceable relative to the technical adequacy of the placements, therefore the impact on the the quality of the system may have been indeterminate. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #7 does have a potential effect on all systems in Table A-6.

The Evaluation reveals that the data for the in-place density tests performed on the class A fill has been located and has been transmitted to the QA records vault. Review and analysis of the records indicates that the Class A backfill soil densities are in accordance with specifications and FSAR requirements except for analytically non-significant deficiencies and does provide the required design structural capacity for the plant under seismic loadings. Accordingly, this issue does not serve as a constraint to safe operation of the system, and has been resolved and closed out by LP&L.

Issue #8 - Visual Examination of Shop Welds During Hydrostatic Testing

Subgroup C - The system does include ASME Class 1 & 2 welds (shop and field) that were inspected during total system hydro in the field. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #8 does have a potential effect on:

System #	System Description	Evaluation
18-1	Radiation Monitoring System	ASME Class 1 & 2 welds (shop and field) were inspected and documented on ASME N-5 code data reports during total system hydro in the field. The ASME Class 1 & 2 welds (shop and field) were tested and inspected in accordance with ASME code, in the field. There is no deviation from FSAR requirements. Accordingly, this issue does not serve as a restraint to safe operation of these systems, and has been resolved and closed out by LP&L.
18-2	Radiation Monitoring	
18-3	Radiation Monitoring	
18-4	Radiation Monitoring	
18-5	Radiation Monitoring	
36-1	Component Cooling Water	
36-2	Component Cooling Water	
36-3	Aux. Component Cooling Water	
52A	Reactor Coolant System	
52B	Reactor Coolant System	
52C	Reactor Coolant System	
53A	Charging And Letdown	
53B	Boric Acid Makeup	
54-9	Primary Sampling	
55A	Gaseous Waste Management	
55B	Liquid and Laundry Waste Management	
55E	Liquid and Laundry Waste Management	
58	Safety Injection	

System #	System Description
60A	Safety Injection
60B	Safety Injection
60C	Safety Injection
59	Containment Spray
71B	Condensate Makeup
73	Emergency Feedwater
76	Steam Generator and MSIV

Issue #9 - Welder Certification

Subgroup C - During the NRC Staff review of the records for the installation of the supports for certain instrumentation cabinets in the RCB, it was determined the same documentation was apparently missing. This apparent missing documentation pertained to support welds and certification of some welders. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public:

Issue #9 does have a potential effect on:

System #	System Description	Evaluation
48	Containment Vessel	The review and evaluation of the welding for the RCB instrument cabinets in question is complete with confirmation of its capability to adequately perform its safety function under design conditions. The welding on instrumentation cabinets supports that affect these systems has been reinspected and verified as acceptable with no rework required. No further corrective action is required.
52A	Reactor Coolant System	
52B	Reactor Coolant System	
52C	Reactor Coolant System	
55B	Liquid and Laundry Waste Management	
55E	Liquid and Laundry Waste Management	
58	Safety Injection	
60A	Safety Injection	
60B	Safety Injection	
60C	Safety Injection	
66	Plant Protection System	
63	Plant Protection System	
76	Steam Generators and MSIV	
---	Seismic Structures	

Issue #10 - Inspector Qualifications - (J.A. Jones and Fegles)

Subgroup C - J.A. Jones and Fegles were responsible for the construction of the basemat and all structural concrete on the basemat. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #10 does have a potential effect on:

System #	System Description	Evaluation
---	Seismic Structures	A limited safety review was performed based upon the results of inspector qualification verification to date, lack of fission products and decay heat prior to initial criticality and low probability of a seismic event during the time period from Fuel Load to initial criticality.

Issue #11 - Cadwelding

Subgroup C - Data from the cadweld testing program was potentially not traceable relative to the technical adequacy; therefore the impact on the system could have been indeterminate. A safety evaluation was performed to assure LP&L management the Waterford SES No. 3 can be safely operated without compromising the health and safety of the public.

Issue #11 does have a potential effect on all systems in Table A-6.

The Evaluation of cadweld records concluded that discrepancies noted were not significant to safety and would not have had any effect on the structural capability of the NPIS during operation and safe shutdown. The probability of an accident previously evaluated in the FSAR is not increased. Accordingly, this issue does not serve as a constraint to the safe operation of the systems, and has been resolved and closed out by LP&L.

Issue #12 - Main Streamline Framing Restraints

Subgroup C - Apparent failure to inspect the installation of the main streamline framing restraints may rendered the quality of the system indeterminate. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #12 does have a potential effect on:

System #	System Description	Evaluation
76	Steam Generators and MSIV	The deficiencies noted during the reinspection have been corrected and all hardware corrective actions have been completed and verified by LP&L. Accordingly, this issue does not serve as a constraint to safe operation of these systems, and has been resolved and closed out by LP&L.
91	Seismic Supports	
19-16	Whip Restraints	
19-17	System Supports (Hangers)	
---	Seismic Structures	

Issue #13 - Missing NCRs

Subgroup C - It was noted that there were missing reports in the consecutively numbered EBASCO and Mercury NCRs implying missing NCRs that may have rendered system quality indeterminate. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the heath and safety of the public.

Issue #13 does have a potential effect on all systems in Table A-6.

The Evaluation includes reviews of EBASCO and Mercury NCR documentation completed by LP&L QA. EBASCO and Mercury missing/voided NCRs and Mercury NCRs closed administratively have been determined to be properly dispositioned and closed. There are no unreviewed safety questions for this system pertinent to this issue.

Issue #14 - J.A. Jones Speed Letters and EIRs

Subgroup C - Contractors performing safety related work generated EIRs and Speedy Memos which transmitted design information that could potentially affect system quality. A safety review was performed to assure LP&L management that the system can be safely operated without compromising the health and safety of the public.

Issue #14 does have a potential effect on all systems in Table A-6.

The Evaluation included a sampling program to evaluate informal documents requesting engineering information from safety related contractors. Of all the samples reviewed those that resulted in design change deficiency had no safety significance. The program provides reasonable assurance that informal documents were not used to transmit design changes which have safety significance.

Issue #15 - Welding of "D" Level Material Inside Containment

Subgroup C - Class "D" material installation inside containment does have a potential effect on:

System #	System Description	Evaluation
08A	208/120v Elec. Distribution Safety	During the evaluation of Class "D" material installation inside containment the work and material under review was verified by LP&L. Contractor QA is of satisfactory quality, and this issue does not have an adverse effect on the safety analysis, system operability or margin to safety on these systems.
17	Seismic Monitoring	
18-1	Radiation Monitoring System	
18-2	Radiation Monitoring System	
18-3	Radiation Monitoring System	
18-4	Radiation Monitoring System	
18-5	Radiation Monitoring System	
21	Fire Detection	
22	Fire Protection	
36-1	Component Cooling Water	
36-2	Component Cooling Water	
40-2	Crane & Hoist FHB	
43A	RCB Containment Cooling	
43E	Containment Vacuum Relief	
48	LRT Containment Vessel	
52A	Reactor Coolant System	
52B	Reactor Coolant System	
52C	Reactor Coolant System	
53A	Charging & Letdown	
54-9	Primary Sampling	

System #	System Description
58	Safety Injection
60A	Safety Injection
60B	Safety Injection
60C	Safety Injection
59	Containment Spary
61	Fuel Handling & Storage
65A-1	Excore Nuclear Inst.
65A-2	Excore Nuclear Inst.
71B	Condensate Makeup
76	Steam Generators & MSIV
91	Seismic Supports
19-16	Whip Restraints
19-17	System Supports (Hangers)
---	Seismic Structures

Issue #16 - Surveys and Exit Interviews of QA Personnel

Subgroup C - An interview program was instituted by LP&L to provide an additional avenue of communication to elicit information on quality concerns from personnel prior to leaving the Waterford SES No. 3 project. The concern was that the LP&L program may not have promptly or thoroughly examined the specific areas of concern and the programmatic implications of these systems. Issue #16 does have a potential effect on all systems in Table A-6.

The Evaluation reveals that all concerns are being reviewed under an improved quality concern program. Where there are issues not previously identified with potential safety related consequences, these issues are promptly reported to LP&L management. These concerns are properly addressed under LP&L required and approved management programs in a timely fashion. The program does not involve unreviewed safety issues.

Issue #17 - QC Verification of Expansion Anchor Characteristics

Subgroup C - Mercury, the subject of this concern, did install safety related instrumentation expansion anchors in these systems. A safety evaluation was performed to assure LP&L management that the system can be safely operated without compromising the health and safety of the public.

Issue #17 does have a potential effect on:

System #	System Description	Evaluation
18-1	Radiation Monitoring System	Inspection forms were used that do not explicitly cover all inspection attributes. The reinspection of all Mercury installed N1 instrumentation and subsequent engineering evaluations indicates that the issue of expansion anchor characteristic inspection forms have no safety significance for these systems.
18-2		
18-3		
18-4		
18-5		
36-1	Component Cooling Water	
36-2	Component Cooling Water	
36-3	Aux. Component Cooling Water	
39	Emergency Diesel Generator	
43A	RCB Containment Cooling	
43B	Shield Bldg. Ventilation	
43E	Containment Vacuum Relief	
46B	Control Room HVAC	
46D	RAB HVAC	
46E	RAB Chilled Water	
50B	Misc. Panels	
52A	Reactor Coolant System	
52B	Reactor Coolant System	
52C	Reactor Coolant System	
53A	Charging and Letdown	
53B	Boric Acid Makeup	
55A	Gaseous Waste Management	

Issue #18 - Documentation of Walkdowns on Non-Safety Related Equipment

Subgroup C - Documentation of walkdown on non-safety related equipment does have a potential effect on:

System #	System Description	Evaluation
02A	125v DC Safety	Area inspections where the system is present indicate no interactions of safety significance. Accordingly, this issue does not serve as a restraint to safe operation of these systems, and has been resolved and closed out by LP&L.
06A	4.16kv Elec. Distribution Safety	
07A	480v Elec. Distribution Safety	
08A	208/120v Elec. Distribution Safety	
09A	Inverters & Distribution Safety	
10	Communications	
13A-1	Heat Trace Safety	
16	Environmental Monitoring	
17	Seismic Monitoring	
18-1	Radiation Monitoring System	
18-2	Radiation Monitoring System	
18-3	Radiation Monitoring System	
18-4	Radiation Monitoring System	
18-5	Radiation Monitoring System	
20	Security System	
21	Fire Detection	
22	Fire Protection	

System #	System Description
36-1	Component Cooling Water
36-2	Component Cooling Water
36-3	Aux Component Cooling Water
39	Emergency Diesel Generator
40-2	Crane & Hoist FHB
43A	RCB Containment Cooling
43B	Shield Bldg. Ventilation
43E	Containment Vacuum Relief
46B	Control Room HVAC
46D	RAB HVAC
46E	RAB Chilled Water
46K	Fire Dampers
48	LRT Containment Vessel
49	Process Analog Control
50B	Misc. Panels
52A	Reactor Coolant System
52B	Reactor Coolant System
52C	Reactor Coolant System
53A	Charging & Letdown
53B	Boric Acid Makeup
54-9	Primary Sampling
55A	Gaseous Waste Management

System #	System Description
55B	Liquid & Laundry Waste Management
55E	Liquid & Laundry Waste Management
58	Safety Injection
60A	Safety Injection
60B	Safety Injection
60C	Safety Injection
59	Containment Spray
61	Fuel Handling & Storage
66	Plant Protection System
63	Plant Protection System
65A-1	Excore Nuclear Inst.
65A-2	Excore Nuclear Inst.
71B	Condensate Makeup
73	Emergency Feedwater
75	Secondary Sampling
76	Steam Generators & MSIV
91	Seismic Supports
19-16	Whip Restraints
19-17	System Supports (Hangers)
---	Seismic Structures

Issue #19 - Water in Basemat Instruments

Subgroup C - Water in basemate instruments does have a potential effect on:

System #	System Description	Evaluation
08A	208/120 v Elec. Distribution Safety	The present analysis for moderate energy pipe rupture flooding per the FSAR envelopes the concern for water seepage since this flow rate would be minimal. Accordingly, this issue does not serve as a restraint to safe operation of these systems, and has been resolved and closed out by LP&L.
10	Communications	
13A-1	Heat Trace Safety	
17	Seismic Monitoring	
18-1	Radiation Monitoring System	
18-2	Radiation Monitoring System	
18-3	Radiation Monitoring System	
18-4	Radiation Monitoring System	
18-5	Radiation Monitoring System	
20	Security System	
36-1	Component Cooling Water	
36-2	Component Cooling Water	
36-3	Aux Component Cooling Water	
43A	RCB Containment Cooling	
46D	RAB HVAC	
46E	RAB Chilled Water	
53A	Charging & Letdown	
53B	Boric Acid Makeup	

System #	System Description
55A	Gaseous Waste Management
55B	Liquid & Laundry Waste Management
55E	Liquid & Laundry Waste Management
58	Safety Injection
60A	Safety Injection
60B	Safety Injection
60C	Safety Injection
59	Containment Spray
71B	Condensate Makeup
73	Emergency Feedwater
---	Seismic Structures

Issue #20 - Construction Materials Testing (CMT) Personnel Qualifications Records

Subgroup C - Construction Material Testing (CMT) personnel did do work on the system and a safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #20 does have a potential effect on:

System #	System Description	Evaluation
---	Seismic Structures	An Engineering Evaluation of CMT for backfill soils indicates no defective work of safety significance was accepted as a result of testing personnel actions. A limited safety review was performed based upon the results of inspector qualification verification to date, lack of fission products and decay heat prior to initial criticality and low probability of a seismic event during the time period from Fuel Load to initial criticality.

Issue #21 - LP&L QA Construction System Status and Transfer Reviews

Subgroup C - Open walkdown comments did have a potential impact on the system even though startup and system engineering evaluated the walkdown concerns and determined that there is no adverse impact on system/testing or operability.

Issue #21 does have a potential effect on:

System #	System Description	Evaluation
71	Condensate Makeup	All open walkdown comments have been resolved/closed.
91	Seismic Supports	All significant construction QA findings have been identified and properly dispositioned. Accordingly, this review does not serve as a constraint to safe operation of these systems, and has been resolved and closed out by LP&L.

Issue #22 - Welder Qualifications (Mercury) and Filler Materials Control (Site Wide)

Subgroup C - The LP&L review of qualifications status documentation for all Mercury welders has been completed and the program does have a potential impact on the system. The weldment filler material controls did apparently deviate from code requirements.

Issue #22 does have a potential effect on all systems in Table A-6.

The Evaluation contains a clarification of the review finding on welder qualifications, and there are no potential unreviewed safety questions pertinent to this issue. "Rebaking" of low hydrogen electrodes was not practiced on the site and engineering justification demonstrates that while there were limited deviations from code specifications however this did not cause degradation of quality of weldment filler material.

Issue #23 - QA Program Breakdown Between EBASCO And Mercury

The concern is not directly related to the systems under review and is considered to be programmatic in nature.

There are no Subgroup C systems.

TABLE A-6

ISSUES

SYSTEM	No. 1 Inspection Personnel Issues (A)(B)(C)	No. 2 Missing N1 Instrument Line Documentation	No. 3 Instrumentation Expansion Loop Separation	No. 4 Lower Tier Corrective Actions are not being Upgraded to NCRs	No. 5 Vendor Documentation - Conditional Releases	No. 6 Dispositioning of Nonconformance and Discrepancy Reports	No. 7 Backfill Soil Densities	No. 8 Visual Examination of Shop Welds During Hydrostatic Testing
02A - 125v DC Safety	A B C	A	A	C	C	C	C	A
03 - Switching Station	A B C	A	A	C	C	C	C	A
04 - Startup Transformers	A B C	A	A	C	C	C	C	A
06A - 4.16kv Elec. Distribution Safety	A B C	A	A	C	C	C	C	A
07A - 480v Elec. Distribution Safety	A B C	A	A	C	C	C	C	A
08A - 208/120v Elec. Distribution Safety	A B C	A	A	C	C	C	C	A
09A - Inverters & Distribution Safety	A B C	A	A	C	C	C	C	A
10 - Communications	A B C	A	A	C	C	C	C	A
13A-1 - Heat Trace Safety	A B C	A	A	C	C	C	C	A
16 - Environmental Monitoring	A B C	A	A	C	C	C	C	A
17 - Seismic Monitoring	A B C	A	A	C	C	C	C	A

TABLE A-6

ISSUES

SYSTEM	No. 1 Inspection Personnel Issues (A)(B)(C)	No. 2 Missing N1 Instrument Line Documentation	No. 3 Instrumentation Expansion Loop Separation	No. 4 Lower Tier Corrective Actions are not being Upgraded to NCRs	No. 5 Vendor Documentation - Conditional Releases	No. 6 Dispositioning of Nonconformance and Discrepancy Reports	No. 7 Backfill Soil Densities	No. 8 Visual Examination of Shop Welds During Hydrostatic Testing
18-1 - Radiation Monitoring System	B B C	A	A	C	C	C	C	C
18-2	B B C	A	A	C	C	C	C	C
18-3	C C C	A	A	C	C	C	C	C
18-4	A B C	A	A	C	C	C	C	C
18-5	A B C	A	A	C	C	C	C	C
20 - Security System	A B C	A	A	C	C	C	C	A
21 - Fire Detection	A B C	A	B	C	C	C	C	A
22 - Fire Protection	C C C	A	B	C	C	C	C	B
36-1 - Component Cooling Water	C C C	C	B	C	C	C	C	C
36-2	C C C	C	B	C	C	C	C	C
36-3 - Aux Component Cooling Water	C C C	C	B	C	C	C	C	C
39 - Emergency Diesel Generator	C C C	C	B	C	C	C	C	B
40-2 - Crane & Hoist FH3	A B C	A	A	C	C	C	C	A
43A - RCB Containment Cooling	C B C	A	B	C	C	C	C	A

TABLE A-6

ISSUES

SYSTEMS	No. 1 Inspection Personnel Issues (A)(B)(C)	No. 2 Missing NI Instrument Line Documentation	No. 3 Instrumentation Expansion Loop Separation	No. 4 Lower Tier Corrective Actions are not being Upgraded to NCRs	No. 5 Vendor Documentation - Conditional Releases	No. 6 Dispositioning of Nonconformance and Discrepancy Reports	No. 7 Backfill Soil Densities	No. 8 Visual Examination of Shop Welds During Hydrostatic Testing
43B - Shield Bldg. Ventilation	C C C	C	B	C	C	C	C	A
43E - Containment Vacuum Relief	C C C	A	B	C	C	C	C	A
46B - Control Room HVAC	C C C	A	B	C	C	C	C	A
46D - RAB HVAC	C C C	A	B	C	C	C	C	A
46E - RAB Chilled Water	C C C	A	B	C	C	C	C	B
46K - Fire Dampers	A B C	A	A	C	C	C	C	A
48 - LRT Containment Vessel	A C C	A	B	C	C	C	C	A
49 - Process Analog Control	A B C	A	B	C	C	C	C	A
50B - Misc. Panels	A B C	A	B	C	C	C	C	A
52A - Reactor Coolant System	C C C	A	B	C	C	C	C	C
52B	C C C	A	B	C	C	C	C	C
52C	C C C	A	B	C	C	C	C	C

TABLE A-6

ISSUES

SYSTEMS	No. 1 Inspection Personnel Issues (A)(B)(C)	No. 2 Missing NI Instrument Line Documentation	No. 3 Instrumentation Expansion Loop Separation	No. 4 Lower Tier Corrective Actions are not being Upgraded to NCRs	No. 5 Vendor Documentation - Conditional Releases	No. 6 Dispositioning of Nonconformance and Discrepancy Reports	No. 7 Backfill Soil Densities	No. 8 Visual Examination of Shop Welds During Hydrostatic Testing
53A - Charging & Letdown	C C C	A	B	C	C	C	C	C
53B - Boric Acid Makeup	C C C	A	B	C	C	C	C	C
54-9 - Primary Sampling	B C C	A	B	C	C	C	C	C
55A - Gaseous Waste Management	C C C	A	B	C	C	C	C	C
55B - Liquid & Laundry Waste Management	C C C	A	B	C	C	C	C	C
55E	B C C	A	B	C	C	C	C	C
58 - Safety Injection	C C C	A	B	C	C	C	C	C
60A	C C C	A	B	C	C	C	C	C
60B	C C C	A	B	C	C	C	C	C
60C	C C C	A	B	C	C	C	C	C
59 - Containment Spray	C C C	A	B	C	C	C	C	C
61 - Fuel Handling & Storage	A C C	A	B	C	C	C	C	B

TABLE A-6

ISSUES

SYSTEMS	No. 1 Inspection Personnel Issues (A)(B)(C)	No. 2 Missing NI Instrument Line Documentation	No. 3 Instrumentation Expansion Loop Separation	No. 4 Lower Tier Corrective Actions are not being Upgraded to NCRs	No. 5 Vendor Documentation - Conditional Releases	No. 6 Dispositioning of Nonconformance and Discrepancy Reports	No. 7 Backfill Soil Densities	No. 8 Visual Examination of Shop Welds During Hydrostatic Testing
66 - Plant Protection System	C B C	C	C	C	C	C	C	A
63	C B C	C	C	C	C	C	C	A
65A-1 - Excore Nuclear Inst.	A C C	A	A	C	C	C	C	A
65A-2	A B C	A	A	C	C	C	C	A
71B - Condensate Makeup	C C C	A	B	C	C	C	C	C
73 - Emergency Feedwater	C C C	C	B	C	C	C	C	C
75 - Secondary Sampling	B B C	A	B	C	C	C	C	B
76 - Steam Generators & MSIV	C C C	C	B	C	C	C	C	C
88 - Turbine & Turbine Controls	B C C	A	B	C	C	C	C	A
91 - Seismic Supports	A B C	A	A	C	C	C	C	A
19-16 - Whip Restraints	A C C	A	A	C	C	C	C	A
19-17 - System Supports (Hangers)	A C C	A	A	C	C	C	C	A
--- - Seismic Structures	A B C	A	A	C	C	C	C	A

TABLE A-6

ISSUES

SYSTEM	No. 9 Welder Certification	No. 10 Inspector Qualifications (J.A. Jones & Fegles)	No. 11 Cadwelding	No. 12 Main Steam-line Framing Restraints	No. 13 Missing NCRs	No. 14 J.A. Jones Speed Letters and EIRs	No. 15 Welding of "D" Level Material Inside Containment	No. 16 Surveys and Exit Interviews of QA Personnel
02A - 125v CD Safety	A	A	C	A	C	C	A	C
03 - Switching Station	A	A	C	A	C	C	A	C
04 - Startup Transformers	A	A	C	A	C	C	A	C
06A - 4.16kv Elec. Distribution Safety	A	A	C	A	C	C	A	C
07A - 480v Elec. Distribution Safety	A	A	C	A	C	C	A	C
08A - 208/120v Elec. Distribution Safety	A	A	C	A	C	C	C	C
09A - Inverters & Distribution Safety	A	A	C	A	C	C	A	C
10 - Communications	A	A	C	A	C	C	A	C
13A-1 - Heat Trace Safety	A	A	C	A	C	C	A	C
16 - Environmental Monitoring	A	A	C	A	C	C	A	C
17 - Seismic Monitoring	A	A	C	A	C	C	C	C

TABLE A-6

ISSUES

SYSTEM	No. 9 Welder Certification	No. 10 Inspector Qualifications (J.A. Jones & Fegles)	No. 11 Cadwelding	No. 12 Main Steam-line Framing Restraints	No. 13 Missing NCRs	No. 14 J.A. Jones Speed Letters and EIRs	No. 15 Welding of "D" Level Material Inside Containment	No. 16 Surveys and Exit Interviews of QA Personnel
18-1 - Radiation Monitoring System	A	A	C	A	C	C	C	C
18-2	A	A	C	A	C	C	C	C
18-3	A	A	C	A	C	C	C	C
18-4	A	A	C	A	C	C	C	C
18-5	A	A	C	A	C	C	C	C
20 - Security System	A	A	C	A	C	C	A	C
21 - Fire Detection	A	A	C	A	C	C	C	C
22 - Fire Protection	A	A	C	A	C	C	C	C
36-1 - Component Cooling Water	A	A	C	A	C	C	C	C
36-2	A	A	C	A	C	C	C	C
36-3 - Aux Component Cooling Water	A	A	C	A	C	C	A	C
39 - Emergency Diesel Generator	A	A	C	A	C	C	A	C
40-2 - Crane & Hoist FHB	B	A	C	A	C	C	C	C
43A - RCB Containment Cooling	A	A	C	A	C	C	C	C

TABLE A-6

ISSUES

SYSTEMS	No. 9 Welder Certification	No. 10 Inspector Qualifications (J A. Jones & Fegles)	No. 11 Cadwelding	No. 12 Main Steamline Framing Restraints	No. 13 Missing NCRs	No. 14 J.A. Jones Speed Letters and EIRs	No. 15 Welding of "D" Level Material Inside Containment	No. 16 Surveys and Exit Interviews of QA Personnel
43B - Shield Bldg. Ventilation	A	A	C	A	C	C	A	C
43E - Containment Vacuum Relief	A	A	C	A	C	C	C	C
46B - Control Room HVAC	A	A	C	A	C	C	A	C
46D - RAB HVAC	B	A	C	A	C	C	A	C
46E - RAB Chilled Water	A	A	C	A	C	C	A	C
46K - Fire Dampers	A	A	C	A	C	C	A	C
48 - LRT Containment Vessel	C	A	C	A	C	C	C	C
49 - Process Analog Control	A	A	C	A	C	C	A	C
50B - Misc. Panels	B	A	C	A	C	C	A	C
52A - Reactor Coolant System	C	A	C	A	C	C	C	C
52B	C	A	C	A	C	C	C	C
52C	C	A	C	A	C	C	C	C

TABLE A-6

ISSUES

SYSTEMS	No. 9 Welder Certification	No. 10 Inspector Qualifications (J.A. Jones & Fegles)	No. 11 Cadwelding	No. 12 Main Steamline Framing Restraints	No. 13 Missing NCRs	No. 14 J.A. Jones Speed Letters and EIRs	No. 15 Welding of "D" Level Material Inside Containment	No. 16 Surveys and Exit Interviews of QA Personnel
53A - Charging & Letdown	A	A	C	A	C	C	C	C
53B - Boric Acid Makeup	A	A	C	A	C	C	A	C
54-9 - Primary Sampling	A	A	C	A	C	C	C	C
55A - Gaseous Waste Management	A	A	C	A	C	C	A	C
55B - Liquid & Laundry Waste Management	C	A	C	A	C	C	A	C
55E	C	A	C	A	C	C	A	C
58 - Safety Injection	C	A	C	A	C	C	C	C
60A	C	A	C	A	C	C	C	C
60B	C	A	C	A	C	C	C	C
60C	C	A	C	A	C	C	C	C
59 - Containment Spray	A	A	C	A	C	C	C	C
61 - Fuel Handling & Storage	B	A	C	A	C	C	C	C

TABLE A-6

ISSUES

SYSTEMS	No. 9 Welder Certification	No. 10 Inspector Qualifications (J.A. Jones & Fegles)	No. 11 Cadwelding	No. 12 Main Steamline Framing Restraints	No. 13 Missing NCRs	No. 14 J.A. Jones Speed Letters and EIRs	No. 15 Welding of "D" Level Material Inside Containment	No. 16 Surveys and Exit Interviews of QA Personnel
66 - Plant Protection System	C	A	C	A	C	C	A	C
63	C	A	C	A	C	C	A	C
65A-1 - Excore Nuclear Inst.	A	A	C	A	C	C	C	C
65A-2	A	A	C	A	C	C	C	C
71B - Condensate Makeup	A	A	C	A	C	C	C	C
73 - Emergency Feedwater	A	A	C	A	C	C	A	C
75 - Secondary Sampling	A	A	C	A	C	C	A	C
76 - Steam Generators & MSIV	C	A	C	C	C	C	C	C
88 - Turbine & Turbine Controls	A	A	C	A	C	C	A	C
91 - Seismic Supports	B	A	C	C	C	C	C	C
19-16 - Whip Restraints	B	A	C	C	C	C	C	C
19-17 - System Supports (Hangers)	B	A	C	C	C	C	C	C
---- - Seismic Structures	C	C	C	C	C	C	C	C

TABLE A-6

ISSUES

SYSTEM	No. 17 QC Verification of Expansion Anchor Characteristics	No. 18 Documentation of Walkdowns on Non-Safety Related Equipment	No. 19 Water in Basemat Instruments	No. 20 Construction Materials Testing (CMT) Personnel Qualification Records	No. 21 LP&L QA Construction System Status and Transfer Reviews	No. 22 Welder Qualifications (Mercury) and Filler Material Control (Site Wide)	No. 23 QA Program Breakdown Between Ebasco and Mercury
02A - 125v DC Safety	A	C	A	A	A	C	A
03 - Switching Station	A	A	A	A	A	C	A
04 - Startup Transformers	A	A	A	A	A	C	A
06A - 4.16kv Elec. Distribution Safety	A	C	A	A	A	C	A
07A - 480v Elec. Distribution Safety	A	C	A	A	A	C	A
08A - 208/120v Elec. Distribution Safety	A	C	C	A	A	C	A
09A - Inverters & Distribution Safety	A	C	A	A	A	C	A
10 - Communications	A	C	C	A	A	C	A
13A-1 - Heat Trace Safety	A	C	C	A	A	C	A
16 - Environmental Monitoring	A	C	A	A	A	C	A
17 - Seismic Monitoring	A	C	C	A	A	C	A

TABLE A-6

ISSUES

SYSTEM	No. 17 QC Verification of Expansion Anchor Characteristics	No. 18 Documentation of Walkdowns on Non-Safety Related Equipment	No. 19 Water in Basemat Instruments	No. 20 Construction Materials Testing (CMT) Personnel Qualification Records	No. 21 LP&L QA Construction System Status and Transfer Reviews	No. 22 Welder Qualifications (Mercury) and Filler Material Control (Site Wide)	No. 23 QA Program Breakdown Between Ebasco and Mercury
18-1 - Radiation Monitoring System	C	C	C	A	B	C	A
18-2	C	C	C	A	B	C	A
18-3	C	C	C	A	B	C	A
18-4	C	C	C	A	B	C	A
18-5	C	C	C	A	B	C	A
20 - Security System	A	C	C	A	A	C	A
21 - Fire Detection	A	C	A	A	A	C	A
22 - Fire Protection	A	C	A	A	A	C	A
36-1 - Component Cooling Water	C	C	C	A	B	C	A
36-2	C	C	C	A	B	C	A
36-3 - Aux Component Cooling Water	C	C	C	A	B	C	A
39 - Emergency Diesel Generator	C	C	A	A	A	C	A
40-2 - Crane & Hoist FHB	A	C	A	A	A	C	A
43A - RCB Containment Cooling	C	C	C	A	A	C	A

TABLE A-6

ISSUES

SYSTEMS	No. 17 QC Verification of Expansion Anchor Characteristics	No. 18 Documentation of Walkdown on Non-Safety Related Equipment	No. 19 Water in Basemat Instruments	No. 20 Construction Materials Testing (CMT) Personnel Qualification Records	No. 21 LP&L QA Construction System Status and Transfer Reviews	No. 22 Welder Qualifications (Mercury) and Filler Material Control (Site Wide)	No. 23 QA Program Breakdown Between Ebasco and Mercury
43B - Shield Bldg. Ventilation	C	C	A	A	B	C	A
43E - Containment Vacuum Relief	C	C	A	A	A	C	A
46B - Control Room HVAC	C	C	A	A	B**	C	A
46D - RAB HVAC	C	C	C	A	A	C	A
46E - RAB Chilled Water	C	C	C	A	B	C	A
46K - Fire Dampers	A	C	A	A	A	C	A
48 - LRT Containment Vessel	A	C	A	A	A	C	A
49 - Process Analog Control	A	C	A	A	A	C	A
50B - Misc. Panels	C	C	A	A	A	C	A
52A - Reactor Coolant System	C	C	A	A	A	C	A
52B	C	C	A	A	A	C	A
52C	C	C	A	A	A	C	A

** This system was incorrectly identified as 43B9 in this issue.

TABLE A-6

ISSUES

SYSTEMS	No. 17 QC Verification of Expansion Anchor Characteristics	No. 18 Documentation of Walkdowns on Non-Safety Related Equipment	No. 19 Water in Basemat Instruments	No. 20 Construction Materials Testing (CMT) Personnel Qualification Records	No. 21 LP&L QA Construction System Status and Transfer Reviews	No. 22 Welder Qualifications (Mercury) and Filler Material Control (Site Wide)	No. 23 QA Program Breakdown Between Ebasco and Mercury
53A - Charging & Letdown	C	C	C	A	A	C	A
53B - Boric Acid Makeup	C	C	C	A	A	C	A
54-9 - Primary Sampling	A	C	A	A	A	C	A
55A - Gaseous Waste Management	C	C	C	A	B	C	A
55B - Liquid & Laundry Waste Management	A	C	C	A	A	C	A
55E	A	C	C	A	A	C	A
58 - Safety Injection	C	C	C	A	B	C	A
60A	C	C	C	A	B	C	A
60B	C	C	C	A	B	C	A
60C	C	C	C	A	B	C	A
59 - Containment Spray	C	C	C	A	B	C	A
61 - Fuel Handling & Storage	C	C	A	A	A	C	A

TABLE A-6

ISSUES

SYSTEMS	No. 17 QC Verification of Expansion Anchor Characteristics	No. 18 Documentation of Walkdowns on Non-Safety Related Equipment	No. 19 Water in Basemat Instruments	No. 20 Construction Materials Testing (CMT) Personnel Qualification Records	No. 21 LP&L QA Construction System Status and Transfer Reviews	No. 22 Welder Qualifications (Mercury) and Filler Material Control (Site Wide)	No. 23 QA Program Breakdown Between Ebasco and Mercury
66 - Plant Protection System	C	C	A	A	A	C	A
63	C	C	A	A	A	C	A
65A-1 - Excore Nuclear Inst.	A	C	A	A	A	C	A
65A-2	A	C	A	A	A	C	A
71B - Condensate Makeup	C	C	C	A	C	C	A
73 - Emergency Feedwater	C	C	C	A	A	C	A
75 - Secondary Sampling	A	C	A	A	A	C	A
76 - Steam Generators & MSIV	C	C	A	A	A	C	A
88 - Turbine & Turbine Controls	A	A	A	A	A	C	A
91 - Seismic Supports	A	C	A	A	C	C	A
19-16 - Whip Restraints	A	C	A	A	A	C	A
19-17 - System Supports (Hangers)	C	C	A	A	A	C	A
--- - Seismic Structures	C	C	C	C	A	C	A

ATTACHMENT B

SAFETY REVIEWS FOR PLANT

SYSTEMS REQUIRED BY

TECHNICAL SPECIFICATIONS FOR

CRITICALITY, LOW POWER

TESTING AND FULL POWER OPERATION

LICENSING PLAN FOR CRITICALITY, LOW POWER TESTING AND FULL POWER OPERATION

The program discussed in Attachment C and applied to Fuel load and Precriticality Post Core-Load Hot Functional Testing in Attachment A is being applied to those systems required for Criticality, Low Power Testing and Full Power Operation. These systems are listed in Table B-1. This process has been completed to the extent feasible pending final resolution of Issue #1C.

Summaries have been prepared (as described in Attachment A, Table A-4) and full documentation will be filed in the Waterford 3 On-Site Licensing Unit offices for inspection and review by the NRC staff.

TABLE B-1

PLANT SYSTEMS REQUIRED FOR CRITICALITY AND LOW POWER TESTING TO FIVE PERCENT, AND FULL POWER OPERATION

ACRONYM	SYS. NO	DESCRIPTION	OPERABILITY REQUIRED
PMC	15	PLANT MONITORING COMPUTER	MODE 1 (20%)
FP	22-3	FIRE PROTECTION - HALON	MODE 1 (20%)
HRA	43H	RCB HYDROGEN RECOMBINERS/ ANALYZER	MODE 1-2
CEC	64	CONTROL ELEMENT ASSY. CALCULATOR	MODE 1-2
INI	65B	INCORE NUCLEAR INSTRUMENTATION	MODE 1 (20%)
MNI	65C	MOVABLE INCORE NUCLEAR INSTR.	MODE 1 (20%)
VLP	69	VIBRATION & LOOSE PARTS MONITOR	MODE 1-2

Table B-2

SYSTEMS / ISSUES SAFETY RESOLUTION MATRIX

/X/ Indicates that Team, ISEG, PORC and Plant Manager review completed.

SYSTEM NUMBER	SYSTEM	1				2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		A	B	C (I)	D																						
15	PLANT MONITORING COMPUTER	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22-3	FIRE PROTECTION - HALON	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
43H	RCB HYDROGEN RECOMBINERS/ ANALYZER	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
64	CONTROL ELEMENT ASSY. CALCULATOR	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
65B	INCORE NUCLEAR INSTRUMENTATION	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
65C	MOVABLE INCORE NUCLEAR INSTRUMENTATION	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
69	VIBRATION & LOOSE PARTS MONITOR	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

TABLE B-4

SAFETY REVIEW SUMMARIES

Issue #1 - Inspection Personnel Issues

This issue was evaluated on a contractor basis.

Issue #1A - Mercury

Subgroup C - Mercury did perform safety related work on the system and safety evaluations were performed to assure LP&L management that Waterford Steam Electric Station #3 can be safely operated without compromising the health and safety of the public.

Issue #1 does have a potential effect on:

System #	System Description	Evaluation
43-H	RCB Hydrogen Recombiners/ Analyzers	Installation of safety related instrumentation was inspected by potentially unqualified inspectors. The quality of safety related instrumentation associated with this system was verified. Verification was accomplished by reinspection of N1 instrument loops. Satisfactory completion of this program involving Mercury installations verifies acceptance of the installations. Accordingly, this issue does not serve as a constraint to the safe operation of these systems, and has been resolved and closed out by LP&L.
64	Control Element Assy. Calculator	

Issue #1B - Tompkins-Beckwith

Subgroup C - Tompkins-Beckwith did perform safety related work on the system, and safety evaluations were performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #1 does have a potential effect on:

System #	System Description	Evaluation
43-H	RCB Hydrogen Recombiners/ Analyzers	Work performed on this system was inspected by potentially unqualified inspectors. To close out the concern LP&L verified the qualifications of the initial inspectors. LP&L also verified qualifications of the inspectors performing any over-inspection. Over-inspection provided to meet the ASME Code requirements for third party Authorized Nuclear Inspection services and independent Preservice Inspection in conjunction with other inspection programs, hydrostatic testing, and Pre-Core Hot Functional Testing confirm the acceptability of hardware installed by Tompkins-Beckwith.

Issue #1C - Other Contractors

Subgroup C - Other Contractors (other than Mercury and Tomkins-Beckwith) did perform safety related work on a number of systems and safety evaluations are being performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #1C impact beyond initial criticality remains to be evaluated.

Issue #2 - Missing N1 Instrument Line Documentation

None of the instrument installations to be reworked to comply fully with ASME III requirements are contained in the systems.

There are no Subgroup C systems.

Issue #3 - Instrumentation Expansion Loop Separation

There are no instrument expansion loop separation violations of safety significance in these systems.

There are no Subgroup C systems.

Issue #4 - Lower Tier Corrective Actions Are Not Being Upgraded to NCR's

Subgroup C - DCN's, FCR's, EDN's and T-B DN's have been reviewed and it was determined that some documents should have been upgraded to NCR's. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #4 does have a potential effect on all systems in Table B-5.

The Evaluation reveals that a statistically acceptable number of lower tier documents were reviewed showing no significant quality impact (no cases were detected which were safety significant and would be reportable under 10CFR50.55e). Therefore it is possible to conclude with a 95% confidence level that 95% of the unsampled documents contain no significant deficiencies. Accordingly, this issue does not serve as a constraint to safe operation of the systems.

Issue #5 - Vendor Documentation - Conditional Releases

Subgroup C - With a review of QA/QC records it is concluded that there are no unresolved items which affect the systems, however Issue #5 does have a potential effect on all systems in Table B-5

The Evaluation reveals that during the review of QA/QC records conditional release items which affected systems were evaluated and closed out by LP&L with receipt of the "unconditional" paperwork. No items exist to affect the safety function of the systems.

Issue #6 - Dispositioning of Non-Conformance and Discrepancy Reports

Subgroup C - It was noted during a review of NCR's that some of the reports had questionable dispositioning potentially rendering the quality of installation indeterminate.

Issue #6 does have a potential effect on all systems in Table B-5.

The Evaluation included a combination screening and sampling method to review EBASCO NCR's including NCR's identified by the NRC and no items were identified which had significant safety impact on the systems. Mercury NCR's were reviewed for upgrade and sampled to determine reportability to support the conclusion that the safety review is not effected.

Issue #7 - Backfill Soil Densities

Subgroup C - Data from the in-place density tests on the class A fill was potentially not traceable relative to the technical adequacy of the placements, therefore the impact on the the quality of the system may have been indeterminate. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #7 does have a potential effect on all systems in Table B-5.

The Evaluation reveals that the data for the in-place density tests performed on the class A fill has been located and has been transmitted to the QA records vault. Review and analysis of the records indicates that the Class A backfill soil densities are in accordance with specifications and FSAR requirements except for analytically non-significant deficiencies and does provide the required design structural capacity for the plant under seismic loadings. Accordingly, this issue does not serve as a constraint to safe operation of the system, and has been resolved and closed out by LP&L.

Issue #8 - Visual Examination of Shop Welds During Hydrostatic Testing

Subgroup C - The system does include ASME Class 1 & 2 welds (shop and field) that were inspected during total system hydro in the field. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #8 does have a potential effect on:

System #	System Description	Evaluation
43-H	RCB Hydrogen Recombiner/ Analyzer	ASME Class 1 & 2 welds (shop and field) were inspected and documented on ASME N-5 code data reports during total system hydro in the field. The ASME Class 1 & 2 welds (shop and field) were tested and inspected in accordance with ASME code, in the field. There is no deviation from FSAR requirements. Accordingly, this issue does not serve as a restraint to safe operation of these systems, and has been resolved and closed out by LP&L.

Issue #9 - Welder Certification

Subgroup A - The instrumentation cabinet support welding performed by J.A. Jones does not have an effect on the systems in Table B-5.

There are no Subgroup C systems.

Issue #10 - Inspector Qualifications - (J.A. Jones and Fegles)

No work was performed on these systems by J.A. Jones and Fegles.

There are no Subgroup C systems.

Issue #11 - Cadwelding

Subgroup C - Data from the cadweld testing program was potentially not traceable relative to the technical adequacy; therefore the impact on the system could have been indeterminate. A safety evaluation was performed to assure LP&L management the Waterford SES No. 3 can be safely operated without compromising the health and safety of the public.

Issue #11 does have a potential effect on all systems in Table B-5.

The Evaluation of cadweld records concluded that discrepancies noted were not significant to safety and would not have had any effect on the structural capability of the NPIS during operation and safe shutdown. The probability of an accident previously evaluated in the FSAR is not increased. Accordingly, this issue does not serve as a constraint to the safe operation of the systems, and has been resolved and closed out by LP&L.

Issue #12 - Main Streamline Framing Restraints

The main streamline framing restraints do not impact these systems.

There are no Subgroup C systems.

Issue #13 - Missing NCRs

Subgroup C - It was noted that there were missing reports in the consecutively numbered EBASCO and Mercury NCRs implying missing NCRs that may have rendered system quality indeterminate. A safety evaluation was performed to assure LP&L management that Waterford SES #3 can be safely operated without compromising the health and safety of the public.

Issue #13 does have a potential effect on all systems in Table B-5.

The Evaluation includes reviews of EBASCO and Mercury NCR documentation completed by LP&L QA. EBASCO and Mercury missing/voided NCRs and Mercury NCRs closed administratively have been determined to be properly dispositioned and closed. There are no unreviewed safety questions for this system pertinent to this issue.

Issue #14 -- J.A. Jones Speed Letters and EIRs

Subgroup C - Contractors performing safety related work generated EIRs and Speedy Memos which transmitted design information that could potencially affect system quality. A safety review was performed to assure LP&L management that the system can be safely operated without compromising the health and safety of the public.

Issue #14 does have a potential effect on all systems in Table B-5.

The Evaluation included a sampling program to evaluate informal documents requesting engineering information from safety related contractors. Of all the samples reviewed those that resulted in design change deficiency had no safety significance. The program provides reasonable assurance that informal documents were not used to transmit design changes which have safety significance.

Issue #15 - Welding of "D" Level Material Inside Containment

Subgroup C - Class "D" material installation inside containment does have a potential effect on:

System #	System Description	Evaluation
43H	RCB Hydrogen Recombiners/ Analyzer	During the evaluation of Class "D" material installation inside containment the work and material under review was verified by LP&L. Contractor QA is of satisfactory quality, and this issue does not have an adverse effect on the safety analysis, system operability or margin to safety on these systems.
64	Control Element Assy. Calculator	
65B	Incore Nuclear Instrumentation	
65C	Movable Incore Nuclear Instrumentation	
69	Vibration & Loose Parts Monitor	

Issue #16 - Surveys and Exit Interviews of QA Personnel

Subgroup C - An interview program was instituted by LP&L to provide an additional avenue of communication to elicit information on quality concerns from personnel prior to leaving the Waterford SES No. 3 project. The concern was that the LP&L program may not have promptly or thoroughly examined the specific areas of concern and the programmatic implications of these systems. Issue #16 does have a potential effect on all systems in Table B-5.

The Evaluation reveals that all concerns are being reviewed under an improved quality concern program. Where there are issues not previously identified with potential safety related consequences, these issues are promptly reported to LP&L management. These concerns are properly addressed under LP&L required and approved management programs in a timely fashion. The program does not involve unreviewed safety issues.

Issue #17 - QC Verification of Expansion Anchor Characteristics

Subgroup C - Mercury, the subject of this concern, did install safety related instrumentation expansion anchors in these systems. A safety evaluation was performed to assure LP&L management that the system can be safely operated without compromising the health and safety of the public.

Issue #17 does have a potential effect on:

System #	System Description	Evaluation
43H	RCB Hydrogen Recombiner/ Analyzer	Inspection forms were used that do not explicitly cover all inspection attributes. The reinspection of all Mercury installed NI instrumentation and subsequent engineering evaluations indicates that the issue of expansion anchor characteristic inspection forms have no safety significance for these systems.
64	Control Element Assy.	

Issue #18 - Documentation of Walkdowns on Non-Safety Related Equipment

Subgroup C - Documentation of walkdown on non-safety related equipment does have a potential effect. A safety review was performed to assure LP&L Management that the System can be safely operated without compromising the health and safety of the public.

Issue #18 does have a potential effect on all systems in Table B-5.

The Evaluation included area inspections where the system is present and indicate no interactions of safety significance. Accordingly, this issue does not serve as a restraint to safe operation of these systems, and has been resolved and closed out by LP&L.

Issue #19 - Water in Basemat Instruments

Subgroup C - Water in basemat instruments does have a potential effect on:

System #	System Description	Evaluation
15	Plant Monitoring Computer	The present analysis for moderate energy pipe rupture flooding per the FSAR envelopes the concern for water seepage since this flow rate would be minimal. Accordingly, this issue does not serve as a restraint to safe operation of these systems, and has been resolved and closed out by LP&L.

Issue #20 - Construction Materials Testing (CMT) Personnel Qualifications Records

The contractor in question did not do work on these systems.

There are no Subgroup C systems.

Issue #21 - LP&L QA Construction System Status and Transfer Reviews

All significant documentation and hardware dispositions were identified at the time status and transfer letters were transmitted for these systems. There are no unreviewed safety questions pertinent.

There are no Subgroup C systems.

Issue #22 - Welder Qualifications (Mercury) and Filler Materials Control (Site Wide)

Subgroup C - The LP&L review of qualifications status documentation for all Mercury welders has been completed and the program does have a potential impact on the system. The weldment filler material controls did apparently deviate from code requirements.

Issue #22 does have a potential effect on all systems in Table B-5.

The Evaluation contains a clarification of the review finding on welder qualifications, and there are no potential unreviewed safety questions pertinent to this issue. "Rebaking" of low hydrogen electrodes was not practiced on the site and engineering justification demonstrates that while there were limited deviations from code specifications however this did not cause degradation of quality of weldment filler material.

Issue #23 - QA Program Breakdown Between EBASCO And Mercury

The concern is not directly related to the systems under review and is considered to be programmatic in nature.

There are no Subgroup C systems.

TABLE B-5

ISSUES

SYSTEM	No. 1 Inspection Personnel Issues (A)(B)(C)	No. 2 Missing N1 Instrument Line Documentation	No. 3 Instrumentation Expansion Loop Separation	No. 4 Lower Tier Corrective Actions are not being Upgraded to NCRs	No. 5 Vendor Documentation - Conditional Releases	No. 6 Dispositioning of Nonconformance and Discrepancy Reports	No. 7 Backfill Soil Densities	No. 8 Visual Examination of Shop Welds During Hydrostatic Testing
15 - Plant Monitoring Computer	A B	A	B	C	C	C	C	A
22-3 - Fire Protection - Halon	A B	A	B	C	C	C	C	A
43H - RCB Hydrogen Recombiner/ Analyzer	C C	A	B	C	C	C	C	C
64 - Control Element Assy. Calculator	C B	A	B	C	C	C	C	A
65B - Incore Nuclear Instrumentation	A B	A	B	C	C	C	C	A
65C - Movable Incore Nuclear Instrumentation	A B	A	B	C	C	C	C	A
69 - Vibration & Loose Parts Monitor	A B	A	B	C	C	C	C	A

TABLE B-5

ISSUES

SYSTEM	No. 9 Welder Certification	No. 10 Inspector Qualifications (J.A. Jones & Fegles)	No. 11 Cadwelding	No. 12 Main Steamline Framing Restraints	No. 13 Missing NCRs	No. 14 J.A. Jones Speed Letters and EIRs	No. 15 Welding of "D" Level Material Inside Containment	No. 16 Surveys and Exit Interviews of QA Personnel
15 - Plant Monitoring Computer	A	A	C	A	C	C	A	C
22-3 - Fire Protection - Halon	A	A	C	A	C	C	A	C
43H - RCB Hydrogen Recombiner/ Analyzer	A	A	C	A	C	C	C	C
64 - Control Element Assy. Calculator	A	A	C	A	C	C	C	C
65B - Incore Nuclear Instrumentation	A	A	C	A	C	C	C	C
65C - Movable Incore Nuclear Instrumentation	A	A	C	A	C	C	C	C
69 - Vibration & Loose Parts Monitor	A	A	C	A	C	C	C	C

TABLE B-5

ISSUES

SYSTEM	No. 17 QC Verification of Expansion Anchor Characteristics	No. 18 Documentation of Walkdowns on Non-Safety Related Equipment	No. 19 Water in Basemat Instruments	No. 20 Construction Materials Testing (CMT) Personnel Qualification Records	No. 21 LP&L QA Construction System Status and Transfer Reviews	No. 22 Welder Qualifications (Mercury) and Filler Material Control (Site Wide)	No. 23 QA Program Breakdown Between Ebasco and Mercury
15 - Plant Monitoring Computer	A	C	C	A	A	C	A
22-3 - Fire Protection - Halon	A	C	A	A	A	C	A
43H - RCB Hydrogen Recombiner/ Analyzer	C	C	A	A	A	C	A
64 - Control Element Assy. Calculator	C	C	A	A	A	C	A
65B - Incore Nuclear Instrumentation	A	C	A	A	A	C	A
65C - Movable Incore Nuclear Instrumentation	A	C	A	A	A	C	A
69 - Vibration & Loose Parts Monitor	A	C	A	A	A	C	A

ATTACHMENT C

STATUS OF COMPLETION

OF FUEL LOAD ITEMS

STATUS OF COMPLETION OF FUEL LOAD ITEMS

LICENSING COMMITMENTS

All licensing commitment action required by LP&L are completed.

SIGNIFICANT CONSTRUCTION DEFICIENCIES

Final reports or interim reports with justifications for interim operation will be complete and submitted to Region IV by COB this date.

INSPECTION REPORT ITEMS

Completion of LP&L required actions for inspection report items is complete with the exception of five (5) items from a recent inspection report (84-31) which are expected to be complete by 11/5/84.

FUEL LOAD (MODE 6) PREREQUISITE WORK ITEMS

Work items required for Mode 6 will be complete by COB this date.

TECHNICAL SPECIFICATION SURVEILLANCES

Surveillances required by technical specifications prior to entering into Mode 6 will be complete by COB this date with the exception that specific items which are related to being performed within 8 hours prior to fuel load and 72 hours prior to fuel load. These exceptions will be completed on the required schedule following a licensing decision and establishment of a fuel load date.