UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

Christine N. Kohl, Chairman
Dr. W. Reed Johnson
Howard A. Wilbur

In the Matter of	)	
LOUISIANA POWER & LIGHT COMPANY	)	Docket No. 50-382 OL
(Waterford Steam Electric Station, Unit 3)	)	

JOINT INTERVENORS' MOTION TO REOPEN THE RECORD AND TO ADMIT FOR LITIGATION THREE CONTENTIONS CONCERNING APPLICANT'S QUALITY ASSURANCE BREAKDOWN AND LACK OF CHARACTER AND COMPETENCE TO OPERATE THE WATERFORD 3 STEAM ELECTRIC PLANT

Joint Intervenors, pursuant to 10 CFR 2.1714 and the Atomic Safety and Licensing Appeal Board Order of April 11, 1984, move to reopen the record for litigation of three contentions. Litigation of Joint Intervenors' proposed contentions will demonstrate Applicant Louisiana Power and Light Company's ("LP&L") failure to maintain an adequate quality assurance program over the life of construction of the Waterford Steam Electric Station ("Waterford 3") which now prevents it from ensuring the plant has been constructed and can be operated in a manner to protect the public health and safety.

More importantly, LP&L has demonstrated over the life of construction of Waterford, and currently, that it lacks the basic character and competence to operate Waterford safely. Despite the NRC staff's intensive inspection and enforcement efforts over the last year, it has failed to impress on LP&L the necessity for a program to verify the quality of Waterford's construction and the integrity of LP&L's management.

I. BACKGROUND

On February 22, 1984, Joint Intervenors filed a motion to reopen the record to litigate a quality assurance contention relying primarily on newspaper articles describing whistleblowers' allegations of a quality assurance ("QA") breakdown at Waterford and LP&L's responsibility for that breakdown.

On February 28, 1984, the Appeal Board denied the motion for reopening but permitted the Joint Intervenors until March 30, 1984, "to perfect" their motion by submitting adequate documentation and by complying in all other respects with the Commission's rules and precedents.

On March 28, 1984, the Joint Intervenors requested an extension of time of six months to file their motion to reopen. On April 11, 1984, the Appeal Board denied Joint Intervenors' motion for extension of time but indicated that if an operating license had not yet been authorized for Waterford, Joint Intervenors would be free to file a motion to reopen at a later date.

By this motion, supported by affidavits and documentation, Joint Intervenors request that the Appeal Board reopen the licensing hearings to decide the following contentions:

(1) The breakdown in Applicant's quality assurance program over the life of construction of the Waterford 3 and LP&L's failure adequately to address that breakdown up to the current time, has left the quality of construction of the Waterford plant indeterminate such that LP&L cannot now assure that the plant has been constructed and can be operated in accordance with all regulatory requirements and in a manner to protect the public health and safety;

(2) LP&L lacks the necessary character, integrity and competence to operate Waterford in accordance with all regulatory requirements and in a manner to protect the public health and safety; and

(3) the Nuclear Regulatory Commission ("NRC" or "Commission") Staff through its inspection and investigation efforts and the review and reinspection program it has required of LP&L has not provided the necessary degree of confidence that Waterford 3 has been constructed and may in the future be operated in a manner which protects the public health and safety.

II. JOINT INTERVENORS' THREE CONTENTIONS AND SUPPORTING SPECIFIC BASES FOR THEIR CONTENTIONS

Joint Intervenors move that this Appeal Board admit for litigation three contentions that LP&L's current and past QA breakdown and its current and past lack of character, integrity and competence demonstrate that LP&L has not constructed and will not operate Waterford 3 in accordance with all regulatory requirements and in a manner which assures protection of the

public health and safety.

A. CONTENTION ON QUALITY ASSURANCE BREAKDOWN

The first contention Joint Intervenors propose is the following:

> LP&L has failed to establish and implement an adequate quality assurance program in accordance with 10 CFR Part 50, Appendix B, throughout the life of construction of Waterford, which led to a serious, systematic breakdown of quality assurance. LP&L cannot now provide the required assurance that Waterford 3 has been constructed in accordance with all NRC requirements or that Waterford's construction is verified to be of adequate quality to protect the public health and safety. Therefore, the Commission cannot make the finding required by 10 CFR 50.57(a) necessary for issuance of an operating license for Waterford 3.

(1) Specifically, LP&L has failed to comply with Criteria I and II of 10 CFR Part 50, Appendix B, by failing to develop and implement a QA program independent of cost and scheduling, which covers all activities affecting quality:

(a) LP&L has failed to ensure adequate independence of QA program in that;

(i) Cost and scheduling decisions took priority over and influenced decision on quality assurance. See July 31, 1979, MAC. Construction Monitoring Memo, attached and incorporated herein as Exhibit 1; Ebasco Services QA Program Manual, Instructions, Procedures and Drawings, attached and incorporated herein as Exhibit 2; and Preoperational QA Manual, attached and incorporated herein as Exhibit 3.

(ii) The QA manager and organization did not have the authority or organizational freedom to do their job. See Exhibits 1 and 2.

(iii) Construction had effective control over both the day-to-day operations of the QA Department and the major policy decisions. See LP&L Preoperational Manual, attached and incorporated herein as Exhibit 4.

(b) LP&L, throughout the construction of Waterford 3, has failed to maintain adequate staff for its QA program, even after warnings from its own internal audits of the harm caused the program by inadequate staffing. See Exhibit 1; Waterford 3 Task Force Inspection Report No. 50-382/84-34 (July 20, 1984), attached and incorporated herein as Exhibit 5; Inspection Report, and Notice of Violation, Report No. 50-382/82-14 (December 6, 1982), attached and incorporated herein as Exhibit 6; Memo from A.E. Henderson Jr. to D.L. Aswell (February 16, 1978),

Re: Request for Addition to Quality Assurance Group General Office, Associate Engineer, attached and incorporated herein as Exhibit 7.

(c) LP&L, throughout the construction of Waterford 3 nuclear plant, has failed to ensure QA and quality control ("QC") personnel are properly trained and qualified to perform their jobs. See Affidavit A, attached and incorporated herein as Exhibit 8; June 13, 1984 Letter from Darrell Eisenhut, Director, Division of Licensing, NRR, NRC, to J.M. Cain, President of LP&L, attached and incorporated herein as Exhibit 9; August 17, 1984 Transcript of Public Meeting, attached and incorporated herein as Exhibit 10.

(d) LP&L failed to assure that special processes such as welding are properly controlled and performed by qualified personnel working to qualified procedures. See Exhibits 1 and 8.

(e) LP&L gave priority to management objectives which were not related to quality assurance principles over mandated QA and NRC requirements. See "Management by Objectives," attached and incorporated herein as Exhibit 11.

(f) LP&L delegated all QA responsibilities to the QA Department instead of ensuring that QA be applied to all design, construction, and procurement activities affecting quality. See Exhibit 3 at Figure QC-2.4.

(g) LP&L took retaliatory action against QA personnel who persisted in adhering strictly to QA rules and procedures. See Affidavit B, attached and incorporated herein as Exhibit 12.

(h) LP&L effectively abdicated all of of its QA responsibilities to Ebasco Services, the Architect/Engineer for Waterford 3, and exercised minimal oversight of early design and construction work. LP&L's failure to oversee Ebasco's QA program was revealed when during Ebasco's turnover of systems to LP&L, it was unable to provide required QA documentation of its work. See Exhibits 3 and 6.

(i) LP&L failed to ensure that Combustion Engineering-Chattanooga, which supplied the Nuclear Steam Supply System for Waterford, established and implemented a QA program which met NRC requirements from 1971 through 1976. See December 7, 1976 Memo from Project Manager Mawhinney, to R.K. Stampley Re: Quality Assurance, attached and incorporated herein as Exhibit 13; Memo from R. Hastings to A. Henderson Jr. (December 28, 1976) concerning problems encountered during a records audit at CE-Chattanooga, attached and incorporated herein as Exhibit 14; Memo from Galligan to Stampley (December 17, 1976), Re: CE's Need to Meet QA requirements, attached and incorporated herein as Exhibit 15; May 31, 1977, Letter from Project Manager Mawhinney to Stampley (May 31, 1977) Re: CE Quality Assurance

Claim, attached and incorporated herein as Exhibit 16; Memo from R. Hastings: Comments on CE Quality Assurance Claim (June 8, 1977), attached and incorporated herein as Exhibit 17.

(j) LP&L's QA organization had conflicting lines of authority. The off-site and on-site groups often duplicated each other's work. See Exhibit 1.

(k) QA programs at Waterford were sometimes contradictory. Corporate and site QA practices varied significantly. See Memo Re: Evaluation of Ebasco Audit Responses (March 1, 1978), attached and incorporated herein as Exhibit 18.

(l) Ebasco project purchasing personnel and auditors were not adequately trained. See Exhibit 18; Memo from R. Hastings to D. Aswell (September 15, 1977) Re: Open Audit Items, attached and incorporated herein as Exhibit 19; September 30, 1976, Audit Report, attached and incorporated herein as Exhibit 20.

(m) LP&L failed to hire qualified workers to do welding and instrumentation work. In some cases, individuals with no experience in the nuclear field, including bartenders and cab drivers, were brought in to do maintenance work in the reactor building and given no formal training. See Exhibit 8.

(n) Alchohol and drug abuse was common at the Waterford site. See Exhibit 8; March 18, 1981, PNO-RIV-81-09, Re: Use of Controlled Substances, attached and incorporated herein as Exhibit 21.

(o) LP&L provided no QC coverage for work done on the night shift for most of the construction of Waterford 3. See Exhibits 1 and 8; August 29, 1979 Memo from: D. Lester to D. Aswell (August 29, 1979) Re: MAC Recommendations, attached and incorporated herein as Exhibit 22.

(p) LP&L failed to trend problems so that oftentimes it did not identify pervasive, widespread or generic deficiencies in its QA program. See Exhibit 12; Letter from R. DeYoung to M. Leddick (May 14, 1984) Re: CAT Inspection Report No. 50-382/84-07, attached and incorporated herein as Exhibit 23.

(2) In violation of Criterion III of 10 CFR Part 50, Appendix B, LP&L has failed to establish measures to assure that regulatory requirements and the design bases of Waterford 3 have been correctly translated into specifications, drawings, procedures and instructions; appropriate quality standards are specified and included in design documents; and deviations from such standards are controlled. Specific examples include:

(a) Combustion Engineering's ("CE") work lacked a design control program. See Exhibits 15 and 16; December 10, 1976 Letter, attached and incorporated herein as Exhibit 24.

(b) LP&L's Office Support Group failed to perform reviews of Ebasco's drawings. See Memo from J. Podalino to R. Teal (October 5, 1979) Re: Errors on Manufacturers' Drawings, attached and incorporated herein as Exhibit 25; Letter from Aswell to Stampley, Re: Errors on Controlled Drawings, attached and incorporated herein as Exhibit 26.

(c) LP&L failed to ensure identification and correction of significant errors in the design drawings, including incorrect design numbers, lack of current revisions, mislabeling of components, controlled drawings which had not been properly reviewed and approved. See Exhibit 25.

(d) Whip restraints and temporary hangers were installed first and then drawings were done to conform to the installation of the pipe supports and restraints. See Exhibit 8.

(e) Workers at Waterford 3 found that design drawings were not accurate. For example, installation of instrumentation in accordance with approved drawings interfaced with installation of hangers according to approved design drawings. Ibid.

(f) Installation of Hilti bolts often violated or ignored design requirements. Although the design drawings required the installation of four Hilti bolts on the baseplates, often only two Hilti bolts were used. Also, Hilti bolts were welded to the bottom of the baseplates even though approved procedures and drawings did not permit such welding. See Exhibit 8; Affidavit C, attached and incorporated herein as Exhibit 27.

(3) In violation of Criteria IV and VI of 10 CFR Part 50, Appendix B, LP&L has failed to establish measures to assure applicable regulatory requirements, design bases, and other requirements necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment and services; to ensure contractors and subcontractors implement adequate QA programs with required documentation of material, equipment and services; to establish measures to control the issuance of documents including instructions, procedures and drawings (and all changes to instructions,

procedures and drawings) which prescribe activities affecting quality; and to ensure that these documents are reviewed for changes and distributed to those who perform the required activities. Examples of these violations include the following:

(a) Incomplete or missing Ebasco procurement documentation. See Exhibit 1; Memo from Haas to Lester (July 11, 1980) Re: Processing of Procurement Documents, attached and incorporated herein as Exhibit 28.

(b) Lack of LP&L oversight of procurement activities, including subcontractor documentation. See Letter from Aswell to Stampley (July 14, 1977), attached and incorporated herein as Exhibit 29.

(c) Lack of records index as committed to in LP&L's PSAR and as required by ANSI N. 45.2.9. See Exhibits 25 and 26.

(d) Maintenance of a confidential or secret records system outside the system of controlled documents which includes sensitive or embarrassing documents about problems of LP&L's QA system. See Exhibit 15; Memo from Mourin to Aswell (July 14, 1980) Re: Waterford 3 Document Control, attached and incorporated herein as Exhibit 30.

(e) QA training of Ebasco procurement officials was seriously deficient. See Exhibit 21; LP&L Non-Conformance Item Summary Sheet, attached and incorporated herein as Exhibit 31.

(f) LP&L failed to establish a program of any sort to review subcontractor procurement documentation. See Exhibits 24 and 29.

(g) LP&L failed to ensure that documents, such as design drawings, were controlled. Therefore, LP&L could not retrieve or maintain these documents as accurate revisions. See Exhibits 25 and 26.

(h) LP&L resisted efforts to establish a records management system using a suitable computer. See Memo from R. Hastings to D. Lester (September 6, 1978) concerning Records Management Task Force, attached and incorporated herein as Exhibit 32; Memo from R. Hastings to D. Lester (September 7, 1978) Re: Records Management Task Force, attached and incorporated herein as Exhibit 33; Memo from R. Hastings to D. Lester (September 8, 1978) Re: Records Management Task Force, attached and incorporated herein as Exhibit 34.

(i) LP&L failed to provide Systems Coordination Incorporated ("SCI") with adequate support to establish a Master Tracking System ("MTS") for documents at Waterford 3. SCI left the job because it did not want its reputation to be

damaged by LP&L management's inability to establish an MTS. See Letter from ECI Vice-President Porter to Project Manager Drummond (April 16, 1980), attached and incorporated herein as Exhibit 35.

(4) In violation of Criterion V, LP&L has failed throughout the construction of Waterford 3 to prescribe by documented instructions, procedures or drawings those activities affecting quality. Examples include the following:

(a) LP&L failed to ensure approved procedures were instituted for the central records department. See Exhibits 30 and 35; Memo from D. Aswell to L. Maurin (July 7, 1978) Re: Waterford 3 Document Control, attached and incorporated herein as Exhibit 36.

(b) LP&L lacked adequate procedures for Class A backfills, completed after concrete pours. See Memo from J. Ehasz to J. Booth (August 11, 1977) Re: Repair of Class "A" Backfill, attached and incorporated herein as Exhibit 37; Comments on Ebasco Fill Material, Damage to Class "A" Backfill, attached and incorporated herein as Exhibit 38.

(c) LP&L failed, even after notification, to ensure adminstrative procedures were instituted to cover the interface between on-site Waterford 3 staff and the Office Site Support Group. See Exhibit 1.

(d) Records management personnel worked without procedures for most of the construction of Waterford 3. See Exhibit 1.

(e) From 1980 to 1981, 300 or more "temporary" pipe supports were installed but never replaced with permanent hangers. These temporary supports may leave the permanent plant structure too rigid because they were installed with channel steel which does not permit thermal expansion. See Exhibit 8.

(5) In violation of Criterion VII of 10 CFR Part 50, Appendix B, LP&L has failed to establish measures to assure that purchased material, equipment and services conform to procurement documents; to provide necessary source evaluation and selection and selection at contractor or subcontractor sites; or to perform adequate receipt inspections. Examples include

the following:

(a) LP&L has failed to control delegations of responsibility to contractors and subcontractors including CE and Systems Coordination, Inc., which LP&L retained to set up and manage a Master Tracking System at Waterford. See Exhibit 35.

(b) Specifications for prints lacked detail, were incomplete, and failed to include the relevant functional and legal requirements. See Exhibits 25 and 26.

(c) LP&L failed to ensure Ebasco program procured spare parts of adequate quality with proper certification and traceability documentation. See Exhibits 1, 24, 29, 32 and 33.

(6) In violation of Criterion VIII of 10 CFR Part 50, Appendix B, LP&L failed to ensure that measures were established for the identification and control of materials, parts and components, including measures to ensure traceability and repair of incorrect or defective material, parts and components. Examples include the following:

(a) LP&L failed to establish a consistent system component numbering system. See November 30, 1978, Memo from R. Hastings to Armington (November 30, 1978) Re: Records Numbering System for Plant Equipment, attached and incorporated herein as Exhibit 39.

(b) LP&L failed to ensure that safety-related hangers were fabricated from the correct steel and included all the required parts and components. See Exhibit 8.

(c) Weld rod traceability records are not trustworthy, in part because the weld rod room was not open at night. Ibid.

(7) In violation of Criterion IX, 10 CFR Part 50, Appendix B, LP&L failed to establish measures to assure control of special processes such as welding, heat treating and non-destructive testing, and that such processes were done by qualified personnel using qualified procedures. Examples include:

(a) LP&L's failure to ensure welders were certified and qualified to do the work they performed. LP&L permitted pipefitters to substitute as welders in order not to slow down production. See Exhibit 8.

(b) LP&L failed to maintain adequate welding procedures, for, inter alia, Class I installations, as documented in a July 1979 MAC Report. See Exhibit 1.

(c) LP&L failed to control weld rods in the field. See Exhibit 8.

(d) Weld rod traceability records were not trustworthy, in part because the weld rod room was not open at night. Ibid.

(e) Half of the stainless steel welding was not "purged" of aumospheric contamination for two million feet of tubing for the containment instrumentation lines. Tiny pockets of "sugaring" formed on the weld surface. This contamination can lead to cracking of the welds in the future. Ibid.

(f) Mercury welders often made two "passes" on welds without pausing to allow the first pass to cool down. Management pressured the welders to speed up on their work. Ibid.

(8) In violation of Criteria X and XIV, 10 CFR Part 50, LP&L has failed to estblish and execute a program for inspection of activities affecting quality in order to verify these activities conform with documented instructions, procedures and drawings; to provide monitoring of work operations to ensure their quality; to monitor processing methods, equipment and personnel for indirect control where inspection is impossible or disadvantageous; to provide both inspection and process monitoring when control is inadequate without both; and to ensure inspection is performed by independent and qualified inspectors.

LP&L has also failed to establish measures to indicate the status of inspections and tests performed on individual items by marking and identification of items which had satisfactorily passed inspection and the operating status of structures, systems and components.

Examples include the following:

(a) LP&L failed to provide QC coverage for the night shift work which left certain work and processes without proper inspection and monitoring. See Exhibit 1.

(b) LP&L failed to generate and maintain proper documentation for concrete tests, backfill compaction tests and compressive strength tests. See Handwritten Concrete Compression Tests, attached and incorporated herein as Exhibit 40.

(c) Ebasco ignored concrete tests which failed to meet acceptance criteria on the ground that the concrete would pass the "final test." In some cases, Ebasco accepted concrete work even though it failed to meet the final test. Ibid.; Statement of R. Philleo Consulting Engineer, Enclosure 1 to June 21, 1984 NRC Staff Motion, attached and incorporated herein as Exhibit 41.

(d) QC inspectors did not check safety-related work such as the main steam valves even though QA documentation verified that they completed these inspections. See Exhibit 8.

(e) Many QC inspectors did not thoroughly inspect safety-related work, including not monitoring fitups on Mercury instrumentation as it was performed. Ibid.

(9) In violation of Criterion XIII, LP&L has failed to establish adequate measures to control the handling, storage, shipping, cleaning and preservation of material and equipment in accordance with work and inspection instructions to prevent damage or deterioration.

Examples include the following:

(a) LP&L failed to establish and follow procedures to ensure that electrical equipment was not damaged by flooding resulting from the cold hydrostatic test run in the summer of 1981. Ibid.

(b) Unqualified personnel responsible for maintenance of the plant in 1981 opened up valves which flooded room containing sensitive electrical equipment. The equipment, which was soaked, may not have been retested and reinspected for possible damage. Ibid.

(c) Repairs to valves were not performed according to controlled procedures. Ibid.

(10) In violation of Criteria XV and XVI, LP&L has failed to establish measures to control materials, parts or components which do not conform to requirements, and to prevent their use of installation. LP&L also failed to establish measures to

assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment and nonconformances, be properly identified and corrected; the cause be determined that the corrective action preclude repetition and all the above be properly documented and reported to appropriate levels of management.

Examples of the following include:

(a) LP&L failed to identify through NCR's serious nonconforming conditions, as, for example, deficiencies in concrete testing. See Exhibits 9 and 40.

(b) LP&L failed properly to describe and resolve the problems identified in NCR's as noted in the June 13, 1984 letter written by the NRC Staff to LP&L management. See Exhibit 9.

(c) LP&L failed to upgrade lower-tier documents to NCR's to ensure corrective action was determined at the proper management level, the NCR's were trended, and LP&L determined the generic implications and root causes of the problems identified on the NCR's. Ibid.

(d) LP&L failed, and in some cases intentionally refused, to report significant safety problems to the NRC, including CE's lack of a QA program identified in an internal audit and LP&L's own failure to audit its and Ebasco's compliance with reporting requirements pursuant to 10 CFR Part 21 and 10 CFR 50.55(e). See Exhibits 14 and 15.

(e) LP&L failed to trend nonconformance or to ensure Ebasco trended nonconformances to identify patterns of violations to facilitate systematic management responses. See Exhibit 9.

(f) LP&L failed to employ reasoned engineering judgement prior to dispositioning NCR's "use-as-is." See Exhibit 9; Nonconformance Report No. 48, attached and incorporated herein as Exhibit 43.

(g) LP&L failed to respond to the 1979 MAC Audit, to other recommendations of the Nuclear Records Management Task Force or to the longstanding deficiencies in the components numbering systems. The result was that the problems which audits identified were never corrected. The deficiencies which were indentified in the MAC Report but continued included problems with mechanical installation of hanger snubber embed and Class 1 installations; welding of Class 1 installations; and cable pulling. See Exhibits 1 and 5.

(h) LP&L's main concern was usually cost and not the quality of the work. In October, 1979, LP&L management determined it would not correct certain design errors because it was not "cost beneficial." One result was that errors continued to occur on the drawings, including inaccurate drawing numbers, inaccurate revision numbers and mislabeled components. See Exhibits 25 and 26.

(11) In violation of Criterion XVII of 10 CFR Part 50, Appendix B, LP&L has failed to maintain records evidencing activities affecting quality, including records concerning inspections, tests, audits, work performance, and qualifications of personnel, procedures and equipment. Further, LP&L has failed to maintain records in a controlled system so that they are identifiable, retrievable, and maintained in accordance with regulatory requirements for record retention. Examples include the following:

(a) LP&L's failure to develop a records index or a legible microfiche system. See Exhibit 19.

(b) LP&L's failure to hire adequate staff to implement a permanent records system. See Exhibits 1 and 30; Coordination of Data Collection and Numbering (Otober 5, 1979), attached and incorporated herein as Exhibit 44.

(c) LP&L's failure to develop adequate procedures for the central records vault even though as early as 1977 Ebasco acknowledged the need for significant corrective action in this area. See Exhibit 1.

(d) LP&L's failure, despite notice of deficiencies in the 1979 MAC Report, to ensure that Ebasco vendor QA records and Ebasco and other contractor site records were maintained and organized in a controlled and auditable system. Ibid.

(12) In violation of Criterion XVIII of 10 CFR Part 50, Appendix B, LP&L has failed to establish a comprehensive system of planned and periodic audits to verify compliance with the QA program and the effectiveness of the program; to perform audits in accordance with approved, written procedures; to document and review audit results; and to perform all follow-

up action required by the audits.

Examples include the following:

(a) LP&L failed over the construction of Waterford 3 to do audits of its own work. See Exhibit 6 at 7-8.

(b) LP&L failed to maintain proper QA documentation even for safety-related work which prevented effective audits of that work. Id., at 7.

(c) LP&L failed to ensure audits were conducted in accordance with written procedures and check lists. Ibid.

B. SECOND CONTENTION ON LP&L'S FUNDAMENTAL LACK OF CHARACTER AND COMPETENCE TO OPERATE WATERFORD 3

Joint Intervenors' second contention is:

LP&L does not have the necessary character and competence to operate Waterford 3 in accordance with all NRC requirements and in a manner which protects the public health and safety. Therefore, the Commission cannot make the findings required by 10 CFR 50.57(a) needed to issue a license to operate Waterford 3.

LP&L's fundamental lack of the required character and competence is demonstrated by the following:

(1) The NRC's Office of Investigation ("OI") is currently investigating allegations of falsification of records and harassment of QA/QC personnel at the Waterford site. OI, which investigates only deliberate or intentional violations of the Atomic Energy Act or NRC regulations, has prepared and is ready to refer to the Department of Justice for possible criminal prosecution over four cases. See July 31, 1984, Wall Street Journal article, attached and incorporated as Exhibit 45.

In conversations between NRC Staff and LP&L management and attorneys, LP&L has admitted that management is potentially involved or targeted in the allegations being investigated, and verified to some degree, by OI investigators. See July 13, 1984, Transcript, at 8-9, 32, attached and incorporated herein as Exhibit 46.[1/]

LP&L requested in this meeting that the NRC Staff reveal the targets of the OI investigation so that those individuals could be removed from major duties in LP&L's review and reinspection program imposed on LP&L by the NRC Staff's June 13, 1984 letter. As is clear from the discussion, LP&L has been told, and believes, that Ebasco and LP&L employees in critical positions in its review program are currently targets of OI's investigation into falsification of QA records and harassment and intimidation of QA and QC personnel.

(2) LP&L has made a significant number of misstatements and misleading statements in financial statements submitted to the Securities and Exchange Commission ("SEC") about the status and schedule of the Waterford project. LP&L made these

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[1/] According to this transcript, LP&L President and Chief Executive Officer James Cain, LP&L Senior Vice-President R. Leddick, and LP&L attorney Gerald Charnoff met with Darrell Eisenhut, Director of Licensing, NRR, Ben Hayes, Director of OI, and Dennis Crutchfield, Director of the Special Investigative Team established to ensure proper resolution of the QA breakdown and potentially safety-significant problems at Waterford which the NRC Staff outlined in its letter of June 13, 1984. LP&L, in three separate submissionsto the NRC Staff, presented its program plan to the review group. The NRC Staff has not approved any program plan at this time, and indicated it continues to find serious flaws in LP&L's last submission of August 10, 1984. See 10 at 52.

statements at a time when the NRC Staff clearly informed the utility of the serious QA and construction deficiencies which would have to be examined and resolved prior to issuance of a license.

Following is a short summary of LP&L's statements about Waterford 3 in filings made to the SEC and a comparison to the NRC Staff's comments to LP&L for the same time periods.

In its 1983 Annual Report, LP&L stated that by the end of 1983 construction activity at Waterford 3 was essentially complete, and that fuel load was expected in the second quarter of 1984. LP&L also stated that, "The NRC's most recently published comprehensive report on licensee performance on Waterford 3 was generally favorable to LP&L." See Annual Report at 3, attached and incorporated herein as Exhibit 47.

In fact, LP&L knew in February 1984, when the Annual Report was issued, that the NRC had been actively investigating falsification of documents and massive QA failures since August of the preceding year, and had asked the company to verify that the cracks recently found in the basemat were not of safety significance. Moreover, only a year before the NRC had fined LP&L $20,000 for its failure to properly oversee Ebasco in its QA responsibilities.

LP&L stated in a Form 10-K for the sale of common and preferred stock with the SEC, filed on March 30, 1984, that it expected to receive a license to load fuel and for five percent operation in April 1984. See Form 10-K, attached and incorporated herein as Exhibit 48. At that time, LP&L knew that the CAT Team Inspection, which started in February, had found substantial

QA problems and that it would be required to carry out extensive reinspection and some rework to resolve those problems. LP&L also knew that allegations of QA records irregularities had led to the opening of an NRC Office of Investigation inquiry which could not be expected to be completed by the end of April. In other words, LP&L was rejecting all indications from the NRC on a projected fuel load date when it stated it expected a license by April 1984. (The NRC Staff wrote to LP&L President James Cain on April 2, asking LP&L to respond and to propose corrective action where appropriate, to 39 allegations of QA and hardware deficiencies.)

In a May 25, 1984 Prospectus filed with the SEC, LP&L stated that the company anticipated that Waterford 3 would be granted a license to load fuel and operate up to five percent power in late May 1984. LP&L, on that date, had no reasonable expectation that the NRC would grant it a license within the last six days of May. The NRC Staff had already informed LP&L that as a result of a Special Task Force inspection at Waterford, it would require LP&L to resolve prior to fuel loading those allegations which had been confirmed and were considered of potential safety significance, including qualifications of QC and QA personnel. See June 8 NRC Meeting Transcript at 9, 13, 16, 40-41, 44, attached and incorporated herein as Exhibit 49.

Further, on May 14, 1984, the NRC Staff had issued its formal Construction Appraisal Team Inspection Report, No. 50-382/84-07. In the cover letter to the Report, Mr. DeYoung stated that problems had been identified by regional inspectors

and by CAT inspectors in the areas of heating, ventilating and air conditioning (HVAC) and electrical raceway seismic supports; American Bridge structural steel welding; as-built verification of piping supports and restraints; maintenance of equipment transferred to operations; and pipe to structure clearances. See Exhibit 24. The CAT Team also identified problems with electrical raceway and conduit installations that did not conform to FSAR commitments or separation of Class 1E equipment and circuits. Mr. DeYoung reminded LP&L that the Special Task Force which was reviewing allegations concerning Waterford 3 was also anticipated to discover new and different problems. Id. at 2.

On June 7, 1984, LP&L issued a prospectus for the sale of its preferred stock. In that prospectus LP&L stated that it believed Waterford 3 was ready for fuel loading. See June 7, 1984 Prospectus at 5, attached and incorporated herein as Exhibit 50. At that time, LP&L knew that the NRC would require of the company extensive reinspection prior to granting a license to load fuel. The NRC Staff in a June 8, 1984 meeting stated clearly that LP&L should take the problems the CAT Team and the Task Force has pointed out seriously and plan to conduct an extensive program to verify the quality of construction at the Waterford plant.

In a July 24, 1984 Amendement to its Registration Statement, LP&L acknowledged that the NRC had notified the company by a letter of June 13, 1984 of problems LP&L would have to resolve prior to issuance of a license. However, LP&L stated

that it had already submitted a program plan to the NRC for resolution of these issues. In fact, LP&L only submitted a preliminary plan, which the NRC had clearly stated by July 24, 1984 was inadequate. As late as August 17, 1984, in an NRC Meeting in Bethesda, the NRC Staff told LP&L that it had failed to provide the kind of detailed program plan with an independent reviewer which the Staff had required by its June 13, 1984 Letter. See Exhibit 10 at 15.

In addition, LP&L also stated in this Amendment that the program of ultrasonic testing of the Waterford 3 basemat then currently in progress would provide final assurances to the NRC about the structural integrity of the plant's concrete foundation. However, the NRC in an August 7, 1984 filing before this Licensing Board state that even by that date it would require further efforts by LP&L to ensure civil/structural problems with the basemat of potential safety significance had been resolved.

In a July 30, 1984 Memorandum to "Members of the Financial Community," LP&L repeated that it had submitted a program plan to the NRC and that it believed Waterford 3 was then ready for fuel loading. The NRC at that time had indicated that it had not accepted the LP&L program and was requiring a more specific proposal. See July 30, 1984 Memorandum attached and incorporated herein as Exhibit 51 a.

In July 1984, a Middle South Utilities' Report to Stockholders, the company stated that none of the large number of allegations concerning faulty plant construction required any corrective work by the company at Waterford 3. See Report to

Stockholders, July, 1984, at 5, attached and incorporated herein as Exhibit 52. Apparently, LP&L did not consider the corrective action required by the NRC in its CAT Team and Task Force reports to be mandatory. Certainly the program instituted by LP&L in response to the Task Force's June 13, 1984 letter must be considered corrective action since if LP&L had provided adequate assurance of the quality of Waterford's construction, it would not find such an extraordinary reinspection and review necessary.

LP&L's frequent optimistic statements about its schedule and misstatement of the severity and significance of the NRC findings must be seen as other indications of its lack of honesty with regulatory bodies. If the company makes misleading statements to the SEC in filings required under the Securities Exchange Act of 1934, it cannot be trusted to make accurate and forthright statements about the issues affecting the safety of Waterford.

(3) LP&L made inaccurate and misleading statements in its April 27, 1984, letter to the NRC which was its formal response to allegations the NRC was investigating through its construction Appraisal Team Inspection, its Waterford Task Force inspection, and other routine inspections. In that letter, LP&L made the following false statements which up to the date of filing this motion have never been corrected:

(a) The first allegation listed in the NRC Staff's letter of April 2, 1984, is the following:

> It has been alleged that civil/structural and piping QC inspectors were not certified in accordance with appropriate requirements.

See NRC April 2, 1984 Letter, at 3, Item 1, attached and incorporated herein as Exhibit 53.

LP&L stated without qualification that the allegation was invalid and that "Civil/Structural and Piping Inspectors were qualified to perform their assigned functions." See LP&L April 27, 1984 Letter at 5, attached and incorporated herein as Exhibit 54. LP&L further stated "deficiencies . . . which may have existed were identified and corrected . . ." Id.

In fact, LP&L knew at the time of writing this letter that it could not certify or demonstrate as qualified a large number of its and its contractors' QC inspectors.

The NRC Staff's June 13, 1984 letter to LP&L pointed out the following breakdown in the certification of QC inspectors:

> (i) Thirty to 40 percent of the inspectors for Mercury of Norwood and Thompkins-Beckwith had questionable certifications, and neither contractor could demonstrate their proper certification from QA records;
>
> (ii) The NRC Staff found that four out of five J.A. Jones' inspectors and two out of eight Fegles' inspectors failed to meet ANSI N45.2.6-1973 requirements;
>
> (iii) When the NRC Staff examined disposition of the generic problems identified during the Task Force inspection concerning GEO Construction Training (nondestructive testing), it found widespread improper certification practices and lack of proper documentation. Many individuals were verified as inspectors and test personnel simply on the basis of another individual vouching for them. See Exhibit 9 at 12.

The latter finding was also reported in the Waterford Task Force Inspection Report No. 50-382/84-34(July 20, 1984), which noted as a potential enforcement action item that

sufficient QA records had not been maintained for some period prior to 1982 to demonstrate the qualification of GEO construction testing personnel.

Even prior to the NRC findings, however, LP&L was informed of problems with the certification and qualification of contractor QC inspectors by its internal document review team. In the Spring and Summer of 1983, an Ebasco document review team found missing or faulty documentation for the certification of QC inspectors working for J.A. Jones. Moreover, the document review team's discovery that 30 percent of documentation for the work of American Bridge and later 30 percent of American Bridge's work was defective, must have put LP&L on notice of serious qualification problems with American Bridge QC inspectors.

(b) The NRC Staff states in allegation six that the basemat concrete was not placed in accordance with ACI Codes. See Exhibit 53 at 3, Item 6.

Again, LP&L states without qualification that this allegation is invalid. See Exhibit 54 at Response 6.

An affidavit of Robert Philleo, an NRC consultant, lists 17 different areas in which LP&L has failed to comply or ensure compliance with applicable codes:

(i) air content outside permitted range;

(ii) slump outside permitted range;

(iii) concrete accepted when too long a period had elapsed after adding cement to water;

(iv) inadequate mixing after adding retempering water;

(v) mixer revolutions not recorded;

(vi) discrepancy in records of added water;

(vii) discrepancy in air content reading;

(viii) error in recording time of batching or discharging;

(ix) use of an unapproved concrete mix design;

(x) deficiencies in curing and maintenance of both moisture and temperature;

(xi) concrete dropped vertically more than five feet;

(xii) irregularities in cadweld inspection including inspections done prior to proper certification of inspectors and missing documentation for inspection qualifications;

(xiii) waterstop inspectors who were not properly certified;

(xiv) vertical cracks and rock pockets in vertical surfaces of hardened blocks;

(xv) incorrect testing frequency;

(xvi) incorrect placement practices;

(xcii) irregularities in placing and handling reinforcement steel.

See Phillec Evaluation Enclosure, NRC Staff's Motion for Additional Extension of Time (June 21, 1984).

The CAT Inspection Team also found inspection and test records deficient for two concrete placment samples. See Exhibit 24 at V.B.I.

(c) The NRC states in allegation seven that "a complete (100%) review of all concrete placement packages was not performed thoroughly in that all NCR's, Nasty Grams, EDN's and letters were not included in the review."

LP&L states that the allegation is invalid and represents that it has reviewed all quality documents written on concrete placement packages. See Exhibit 54 at Response 7, p. 1.

However, the NRC Staff discovered on or about August 9, 1984, Deficiency Reports ("DR's") which were written by Ebasco's document review team on 70 concrete pour packages in the Ebasco vault. These comments by the document review team were apparently lost since they were written on or about June 1983, and not produced to the NRC until August despite repeated requests. Obviously, neither LP&L nor Ebasco could have reviewed these DR's, as is stated in LP&L's April 27, 1984, Response to the NRC, if neither LP&L nor Ebasco knew the location of these comments. See Affidavit of Lynne Bernabei, attached and incorporated herein as Exhibit 55.

LP&L's inability to find these documents, despite numerous NRC Staff requests in the previous year, raises additional doubts about LP&L's forthrightness and honesty with the staff.

(d) The NRC states in allegation eleven that extra supports for instrumentation cabinets covered by the Field Change Request and mounted on grating inside the containment were fabricated with materials for which there was no heat number traceability; were completed by uncertified welders; and were examined by uncertified inspectors. Although LP&L states that this allegation is only partially valid, it provides no evidence to back up its response.

In fact, in its presentation to the NRC Staff on August 17, 1984, LP&L admitted that the allegation was valid in its entirety: seven of 18 cabinets had improper or no documentation and five items of J.A. Jones' weld work lacked adequate documentation.

See August 17, 1984 LP&L Submittal (Viewgraphs), at Issue 9, attached and incorporated herein as Exhibit 56.

LP&L also failed to list in its response its own NCR W3-7549, dated February 1, 1984, which recorded many of the problems found by the NRC Staff.

(e) The NRC Staff states in allegation 21(b) that welders and QC weld inspectors were not adequately qualified. LP&L responds that this allegation is invalid and that only technical deficiencies exist in certification of welders and welding QC inspectors.

In fact, LP&L admitted in the August 17 meeting with the NRC that it could establish the verification of only about 51 percent of its QC inspectors, and had committed to doing a substantial inspection of the work of Mercury, the contractor who has completed perhaps the greatest amount of welding work at the site. Certainly LP&L's April 27, 1984 Response was either ill-informed or deliberately misleading. See Exhibit 54 at Response 21, p. 2.

(4) LP&L historically has failed to comply with NRC regulations and when cited by the NRC has failed adequately to respond to correct noncompliances and prevent their recurrence.

The NRC Staff, in its June 13, 1984, letter cited as the most significant potential safety problem at Waterford the QA breakdown at the Waterford site. See Exhibit 9 at 14. The Staff cited LP&L's failure to correct deficiencies even after

it promised to take corrective action. For example, the Review Team found, contrary to commitments made in LP&L's response to the Notice of Violation ("NOV"), LP&L had failed to audit its entire QA program. Further, LP&L failed to analyze or even complete interviews it took of current and past QA personnel in a suppposed attempt to detect and resolve serious QA problems. See Exhibit 9 at 10.

The Construction Appraisal Team Inspection, NRC Inspection Report No. 50-382/84-07, ("CAT Report") issued on May 14, 1894, indicated that LP&L failed to correct problems despite its commitments to do so.

(a) Eighteen of 28 electric cable trays and HVAC supports had loads beyond those permitted by the approved design. Six of 15 tray supports contained loads in excess of that allowed with no evidence that engineering had analyzed these loads to be permissible. See Exhibit 24 at II-4-II-5.

On May 17, 1983, LP&L in response to an NOV issued in connection with NRC Inspection Report No. 50-382/83-13, promised that it would take action to ensure in the future HVAC supports did not hold loads not shown on design drawings.

(b) The CAT Report found numerous problems with as-built pipe supports and whip restraints, Exhibit 24 at III-5III-9, even though LP&L, in response to the NOV and NRC issued on December 6, 1982, promised to take corrective action to preclude further findings of improper installation and documentation of instrument impulses piping, and emergency core cooling system hanger orientation problems.

(c) The CAT Team found problems with maintenance of safety-related motors, which was cited as a violation in NRC Inspection Report No. 5-0382/82-05, and that electrical maintenance procedures were not always followed. See Exhibit 24 at II-13-II-14.

(d) the CAT Report documented weld deficiencies in shop welds fabricated by Peden Steel, an American Bridge subcontractor. See Exhibit 24 at IV-10-IV-11.

Significant Construction Deficiencies ("SCD") 73 and 78 were issued on April 11 and April 28, 1983, respectively. In response to these SCD's, LP&L promised to address the welding deficiencies found in American Bridge work in the reactor building and auxiliary buiding through a comprehensive reinspection and rework of American Bridge work.

(e) The CAT Team found clearance between piping and adjacent structures did not meet approved criteria. See Exhibit 24 at III-1-III-5.

On May 17, 1983, in response to an NOV issued for its failure to identify and correct clearance problems between piping and adjacent structures, LP&L promised to take action to prevent recurrence.

(5) LP&L failed to take necessary action to upgrade its staff after repeated warnings by the NRC that its staffing was too low and affected the readiness of the utility to begin operations. In Summer, 1981, the NRC Staff stated that it was unable to conduct an evaluation audit of LP&L staffing because the "present level of staffing and management readiness is so low . . ." See Memorandum from S. Hanauer to R. Tedesco (May

7, 1981), at 1, attached and incorporated herein as Exhibit 57.

Further, in a comparison study of the staffing of a number of nuclear power plants prepared for the ACRS, the NRC Staff found Waterford had the lowest level of all plants studied and that the staff it did maintain lacked commercial experience. See Comparison of Organizational Structures and Staffs: TMI-1, Fermi-2, Susquehanna 1 and 2, and Waterford 3, attached and incorporated herein as Exhibit 58.

(6) LP&L failed to ensure that Ebasco site management was competent, trustworthy, and dedicated to quality principles, even after the NRC issued an NOV and Civil Penalty against LP&L for its failure to monitor Ebasco's work in December, 1982.

In fact, Ebasco Site Manager Robert Marshall, who came to the Waterford site in May, 1983, had previously been found by Region III NRC Staff to have contributed to the QA breakdown at the Zimmer nuclear power plant in Ohio. 2/

The Region III Staff documented Mr. Marshall's failings in Inspection Report No. 50-358/81-13, issued in November, 1981. This "interim" report of the NRC's Office of Inspection and Enforcement on Zimmer's QA failures led to a $200,000 fine against the Cincinnati Gas & Electric Company, the highest fine ever imposed against a utility for a nuclear plant under construction.

This massive inspection report documented the following concerning Mr. Marshall:

2/ After NRC complaints about Mr. Marshall circulated at Waterford, he was removed from his position and moved to Ebasco corporate headquarters in Lindhurst, N.J., as Vice-President for Nuclear and Defense.

(a) Marshall, as Kaiser Construction Superintendent, pressured QC inspectors to accept pipe support hangers which construction had previously accepted on "punch lists." Oftentimes the QA inspectors had found nonconforming conditions which they recorded on nonconformance reports ("NR's") but were told to void the NR's.

(b) Marshall pressured Kaiser QA Manager Phillip Gittings to terminate one QC inspector when he was reported to have used a magnifying glass to inspect a weld on a pipe support hanger in the diesel generator room. Use of a magnifying glass is an approved inspection procedure.

(c) Upon Marshall's urging, Gittings instructed a QC inspector to reinspect at item which had been previously rejected. Marshall also apparently directed that the NCR written on that item be voided.

(d) A pipefitter working with the contractor responsible for radiographic examination of pipe welds informed Marshall that about 20 percent of prefabricated welds at Zimmer were "bad." Marshall agreed with that evaluation but did nothing to ensure that these problem welds were identified and reworked. 3/

(e) Marshall coerced Gittings and other QA personnel illegally to void NCR's written on nonconforming welds on cantilever beams located in the Primary Containment Building. In clear violation of QA requirements, Marshall stated that the NCR's should be voided because Kaiser was going to cut out the welds on the cantilever beams in any event. (Marshall pushed this approach in February, 1981, even though he knew at the time

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3/ Marshall denied that he had made any such statement.

that the NRC was investigating irregularities in the Kaiser nonconformance reporting system.)

A QA engineer stated that Marshall also successfully pressured Gittings to rework the beams on a case-by-case basis and perform a visual inspection of the welds rather than an inspection of record. When the QA engineer inspected the reworked cantilever beams, he discovered that no QC inspection had been done on any of the 27 beams and no fitup inspection had been performed on four beams. More importantly, he identified the same nonconforming conditions identified on the voided NCR's, including lack of weld filler metal and backing strip traceability and lack of evidence of qualified welds.

A visual inspection of these welds indicated they did not meet Code requirements. When the QA engineer informed Marshall of the nonconforming conditions, he said he did not want to correct nonconforming conditions because it would involve reinspection of currently inaccessible welds.

(f) Marshall pressured QC inspectors to accept welds. When an inspector wrote up NCR's on welds, Marshall would have construction rework the welds to pass minimum visual inspection and then pressure Gittings to void the NCR's or accept the welds "as is".

In a November, 1979, meeting with QC inspectors, Marshall told them they were being too critical and that he did not approve of holding up construction by QA's rejection of work.

(g) Marshall directed QA personnel to remove nonconforming vendor welds from NCR's.

(h) Numerous QA personnel told the NRC about Marshall's attempts to intimidate them.

(i) Marshall pressured QA Manager Gene Knox to void an NRC issued on June 23, 1980, which placed a QC hold on construction. Mr. Knox told a QC inspector who had written the NR imposing the hold point that QA had to build a case against Marshall to have hold points honored.

(j) Only those Kaiser QA personnel who succumbed to Marshall's pressure were promoted. When inspectors told their superiors that Marshall had intimidated them, their superiors often failed to support them. In some cases, construction workers were permitted, without disciplinary or other action being taken against them, physically to abuse QC inspectors by dumping water on them or hosing them.

C. THIRD CONTENTION ON INADEQUACY OF NRC STAFF EFFORTS TO RESOLVE QUALITY ASSURANCE BREAKDOWN

Joint Intervenors' third proposed contention is the following:

> The NRC Staff's special CAT inspection, Special Inquiry Team inspection, Task Force inspection and Office of Investigation inquiry, and the corrective action, including reinspection and rework, which the Staff has required of LP&L, are not adequate to ensure that construction deficiencies of potential safety significance at Waterford have been resolved and that LP&L will be able to operate Waterford 3 in accordance with all regulatory requirements and to protect the public health and safety.

The NRC Staff has engaged in an unprecedented inspection effort at the Waterford 3 plant, beginning in the summer, 1983. A Special Inquiry Team first began investigating allegations of new cracks in the basemat and falsification of QA documentation at that time. In addition, the Team looked into whether

LP&L had fulfilled its promise to carry out certain corrective actions required by NRC in December, 1982 to remedy LP&L's longstanding failure to monitor Ebasco's QA program.

The Inquiry Team verified many of the allegations and was generally unsatisfied with LP&L's response to its questions.

In February, 1984 the NRC Staff began a CAT Team Inspection, which it conducts only at those plants which have QA and construction problems. In a report issued in May, 1984, the Staff outlined numerous problems which collectively must be characterized as a QA breakdown. It demanded a comprehensive corrective action program by LP&L. See Exhibit 24.

Finally, in March, 1984, the Waterford 3 Task Force was composed of 22 inspectors from various NRC regions and numerous NRR and outside consultants, headed by Dennis Crutchfield, NRR. It conducted a comprehensive three-week inspection of Waterford 3. Corroborating a QA breakdown, the Team called a meeting with LP&L in Washington on June 8, 1984 in which it outlined the numerous areas in which it had found recurring QA and construction deficiencies. Among the most serious problems outlined by the team leaders at that meeting were the following:

(1) lack of documentation for the training and certification of concrete material personnel;

(2) walkdown of 15 systems turned over to LP&L showed

hardware deficiencies were not being adequately resolved prior to turnover;

(3) lack of testing records on soil density for certain layers of soil which could affect the facility's seismic response;

(4) lack of documentation to show shop welds in Tompkins & Beckwith piping had been inspected during hydrotests;

(5) lack of documentation demonstrating the qualification of QA and QC personnel;

(6) incomplete inspection records for restraint framing for the main steam line;

(7) lack of documentation of welding on instrumentation cabinet supports;

(8) lack of documentation indicating the base metals, welding material, and inspector qualification for instrumentation;

(9) violation of separation criteria for instrumentation expansion loop;

(10) lower tier corrective action documents not properly upgraded to NCR's;

(11) improper dispositioning of NCR's;

(12) lack of documentation to demonstrate qualification of Mercury welders.

See Exhibit 49.

Mr. Eisenhut, who is heading this review effort, told LP&L that it needed to consider if only a small fraction of them were corroborated, what the NRC findings told LP&L about the quality of QA at Waterford over the last few years. Id. at 37. He emphasized that LP&L had to address the root cause of the

problems as well as the generic questions raised by the NRC findings. Mr. Eisenhut emphasized to LP&L management that it should not be surprised by the findings since the questions were the same ones he had brought up with them in January, 1984.

The NRC Staff formalized its findings in a June 13, 1984 letter to LP&L in which it informed the utility it would have to remedy problems in 23 areas of potential safety significance prior to issuance of a license to load fuel and low-power operation.

LP&L failed to take the NRC Staff seriously. In three separate filings to the NRC Staff, the utility failed to institute a corrective action program with adequate detail and guarantees of independent review. The Staff, in a meeting with LP&L officials, on August 17, 1984, in Bethesda, stated clearly that LP&L's efforts to date had been inadequate. Mr. Eisenhut made the following points:

(a) LP&L had not indicated that its proposed reviewer was independent and could ensure an independent check of LP&L's corrective actions;

(b) LP&L had not submitted an adequately detailed program to ensure that when implemented it would satisfy the NRC's demands; in fact, LP&L's proposal in many areas fell far short of the NRC Staff's directives.

(c) LP&L had an attitude that it would do whatever was necessary to satisfy the NRC Staff, but did not indicate any

managerial capacity to identify and correct problems on its own. Mr. Eisenhut indicated that it was essential for LP&L to develop that capacity if he was to have confidence that the utility could opearte Waterford 3 safely. See Exhibit 10 at 118-120.

D. LP&L'S PROPOSED CORRECTIVE STRATEGY FAILS SATISFY MINIMAL NRC STANDARDS

LP&L's latest proposals still fall short of minimal compliance with NRC directives. Joint Intervenors point out the following as serious deficiencies in the latest proposals presented at the August 17 meeting:

(1) The NRC Staff in item 5 of its June 13, 1984 letter found deficiencies with LP&L's handling of conditional certification of equipment for CE. It demanded that LP&L examine its records to determine if problems with conditional certification of equipment, presumably all vendor-supplied equipment, had been identified and promptly resolved.

The problem identified was neither the vendor nor the site personnel at the time of receipt had completed a visual inspection of safety-related equipment. The vendor inspection was in the nature of surveillance. Similarly, site inspectors only check to determine if the equipment received had documentation of some sort, and did not check the quality of materials, whether the equipment matched design requirements, or whether the vendors had performed adequate inspections.

The so-called VQAR records have never been submitted to a technical review of such items as the qualification of welders doing shop welds on vendor-supplied equipment or the qualification of vendor inspectors.

LP&L proposes to resolve this issue by conducting a sample review of vendor documentation, even though it is obvious that these records do not demonstrate visual inspection of the equipment, welder qualifications, or vendor inspectors' qualifications. See Exhibit 10 at 136-138.

(2) Items 1, 10 and 20 in the June 13 letter list unresolved problems with the qualifications of inspection and testing personnel.

The NRC demanded that LP&L verify the qualification of 100 percent of all QA inspectors and conduct a reinspection of the work of those inspectors who cannot be demonstrated to be qualified.

This is the same requirement imposed on the utilities which owned the troubled Zimmer and Midland nuclear plants and were responsible for similar quality assurance breakdowns.

At Waterford, LP&L has proposed that it be allowed to verify the qualification of QC inspectors, not as is required by Appendix B, by formal QA documentation, but in those cases when such documentation is not available, by contractor certification of their qualification or by background checks. This appears to be especially inappropriate at Waterford where the NRC and internal review groups have already found that up to 50 percent of the QC inspectors cannot be demonstrated to be qualified. LP&L, at the August 17, 1984, meeting with the NRC Staff in Bethesda, itself admitted that even using more lenient methods of qualifying inspectors, it could only qualify about 51 percent of inspectors whose credentials had up to that point been examined.

Similarly, LP&L has adamantly refuused to do a 100 percent reinspection of the work of those inspectors who cannot be demonstrated to be qualified. Instead it has agreed only to do an undefined sample reinspection of these inspectors' work or to rely on prior reinspections. Certainly given what the NRC knows of the QA breakdown at the plant over Waterford's history, it should be obvious that no confidence can be placed in past reinspections of hangers, cables or other contractor work at the plant. LP&L may be proposing to fulfill its reinspection requirement to use the work of other unqualified inspectors.

Moreover, the NRC Staff has no reason to put into effect more lenient standards for the Waterford plant than has been enforced at plants experiencing similar QA breakdowns whose quality, as Waterford's, has been labeled "indeterminate."

(3) Item 4 is LP&L's failure properly to upgrade lower-tier QA records to nonconformance reports. The NRC directed the utility to do a 100 percent review of all lower-tier documents to assure proper dispositioning and corrective action for nonconforming conditions noted. It also demanded that LP&L reviewed all such documents to determine if the conditions noted should be reported under 10 CFR 50.55(e). LP&L has stated that it will only conduct a three percent review. Mr. Gerretts, who apparently is heading the LP&L review effort on this item, did not note any significant problems with lower-tier documents which by August 17 had been reviewed. He stated that no determination had been made as to whether additional corrective action was needed, or, if taken, had

been properly documented.

(4) The NRC documented in items 6 and 13 that NCR's were improperly dispositioned and that LP&L had failed to maintain a complete NCR system.

It proposed that LP&L provide assurance that all NCR's and DR's were properly upgraded and dispositioned, and that all corrective action had been taken.

Again, LP&L proposed a less than 100 percent review of the NCR's, including the Mercury NCR's with which the NRC had found serious problems. Moreover, LP&L's review of the NCR's, up to the time of the August 17, 1984, meeting, had found no serious problems with their dispositioning, in stark contrast to the NRC's findings which led to inclusion of items 6 and 13 in the June 13 letter as of potential safety significance.

In short, LP&L has not yet presented a serious program plan, and has to this date refused to follow NRC direction on ensuring the quality of Waterford's construction.

Moreover, the company's efforts to undermine the OI investigation does not reveal an attitude of putting quality before cost and schedule. Instead it reveals LP&L's brazen attempts to ensure the fastest licensing of Waterford, at the expense of verifying the quality of its construction and that management has the integrity required to operate the plant.

E. LP&L HAS FAILED TO IDENTIFY, ANALYZE OR CORRECT CRACKS IN THE BASEMAT

LP&L's failure to identify seriuos problems with the basemat at Waterford over the past year and its even more

serious failing to follow mandated mapping and surveillance programs raise fundamental questions about LP&L's willingness and ability to comply with NRC directives. These failings also point out the NRC Staff's inability over the past year to take effective enforcement action against LP&L concerning the basemat cracks. In fact, the Appeal Board's Order of October 3, 1984, asking the NRC Staff to answer questions raised by its recent filings on the basemat issue, emphasizes the current inability of the NRC Staff to ensure that the basemat problems are adequately resolved.

Joint Intervenors believe it is significant that the new cracks were brought to the attention of the NRC not by LP&L but by articles which appeared in Gambit. Moreover, LP&L has consistently failed over the past year to acknowledge the nature or seriousness of the cracks and resisted all NRC efforts that it take corrective action beyond those already in effect. For example, in a May 16, 1984, letter to the NRC Staff, LP&L characterized the cracks as "hairline" and stated that it had concluded, along with Ebasco, that a structural interrelationship cannot be established between cracks on surfaces of walls and basemat. See May 16, 1984, LP&L Letter, attached and incorporated herein as Exhibit 59.. LP&L also claimed that only a few vertical cracks were in close proximity to cracks on the mat. Ibid. at 7.

Dr. Ma, however, found in March, 1984, that "/s/ome of the cracks were inclined to the vertical axis (perpendicular to the mat) and were joined by a crack on the mat. This type of crack seems to be more complicated and severe than the

flexural cracks on top of the mat as previously reported." See Memo from R. Vollmer to D. Crutchfield, (undated) Attachment II, attached and incorporated herein as Exhibit 60.

Similarly, LP&L's Harstead Reports stand alone in their refusal to acknowledge that the basemat cracks will continue to expand. The NRC Review by the Structural and Geotechnical Engineering Branch, Division of Engineering, NRR, dated April 27, 1984, concluded that the cracks will continue to grow. It called for specification of an alert level beyond which LP&L would be required to conduct structual repairs. Id. at 11.

Neither the NRC Staff nor LP&L have factored into their evaluations of the adequacy of Waterford's basemat the newly-found QA problems, which the NRC Staff has labeled as of potential safety significance in its June 13, 1984 Letter. The NRC consultants have made clear that they based their analyses on the assumption that construction of the basemat proceeded in accordance with design. Dr. Ma stated, for example, that he had made a previous determination that the analysis and design of the mat were adequate based on reports that the cracks were "hairline" in size and believed to be flexural cracks. However, he could not give that same evaluation in light of additional factors which have been brought to his attention, including quality control problems experienced during concrete placement; new information of differential settlements of foundation soils; and new discovery of additional floor cracks which extend to and up the wet cooling

tower wall and ring wall. Id. at 6.

This Board too has commented on the fact that problems outlined in the NRC Staff's Letter of June 13, 1984, must be considered in evaluating the adequacy of design and construction of the basemat, specifically LP&L's failure to maintain proper backfill records and the documented lack of qualification of J. A. Jones' inspectors. In addition to LP&L's inability at this time to verify the quality of backfill and other foundation work due to the historic QA breakdown, it has also failed to fulfill its clear obligation to monitor and report new or more serious cracks in the basemat. For example, Dr. Ma in a March 27, 1984 visit to the site observed cracks on the ring wall and wet cooling tower walls which had not been previously mapped or brought to the attention of the NRC. Obviously LP&L failed to implement its crack mapping program with care or deliberately failed to report these cracks.

Further, LP&L has even failed to review, much less address, the problems outlined by Ebasco's own document review team in 1983, concerning concrete records. Although LP&L flatly represented to the NRC that it had conducted a review of all concrete records, in fact it did not maintain within its QA system the DR's written by the Hill document review team in June 1983. See Exhibit 56.

Given LP&L's misrepresentation to the NRC about its review of concrete records, and the fact that whatever review it did complete of concrete records did not identify the problems found by Hill's review team in 1983, this Board cannot have any

confidence in the quality of LP&L's foundation records or subsequent review of those records. Only the most rigorous forms of testing and reinspection will verify the quality of the basemat. In addition, nothing short of a truly independent analysis of its design and construction can ensure its adequacy in light of LP&L's historic failure to identify the basemat cracks; deliberate distortion of the seriousness of the cracks; and failure today to follow the NRC's mandated crack mapping and monitoring programs. Unfortunately, the NRC Staff does not appear prepared to demand this rigorous corrective action or independent review.

The NRC Staff's reports do not support the mild corrective action the staff has imposed as LP&L or the Staff's conclusion that the cracks are not of safety significance.

The nondestructive testing conducted to obtain information on the basemat cracks and potential voids determined that a number of the cracks were at least 10 feet deep and perhaps run through the basemat. These test results are in clear contradiction of the Brookhaven Reports on which the NRC Staff largely relied to recommend against reopening the record.

The Brookhaven Reports appear to be based largely on two reports of Harstead Engineering Associates, Nos. 8304-1 and 8304-2. See Brookhaven Memorandum to file from G. Lear to D. Crutchfield, dated May 8, 1984, Enclosure 3 eview of Waterford 3 Basemat Analysis dated April 16, 1984, t 2, attached and incorporated herein as Exhibit 61; Review of Waterford 3 Basemat Analysis, Structural Analysis Division, dated

June 21, 1984, at 2, attached and incorporated herein as Exhibit 62. In addition, BNL acknowledged that the validity of its conclusions depend on information supplied to it by Ebasco, Harstead and LP&L, either verbally or in reports and computer outputs. Further, Brookhaven stated that it cannot attribute cracking on the top surface to "benign" causes, and did not credit the Harstead analysis with analytical validity.

BNL also stated that Harstead has failed to do calculations in three important areas, concluding that four areas require additional analysis:

(a) dynamic coupling in the vertical direction between the reactor and the basemat;

(b) dynamic effects of lateral soil/water loadings;

(c) artificial boundary constraints in finite element models; and

(d) fineness of loose mat mesh. See Exhibit 62, at 7, 14.

Because the BNL Reports appear to rely largely on Harstead reports and because their conclusions differ from the actual results of the nondestructive testing, Joint Intervenors urge the Appeal Board to reject them. The NRC's referral of Harstead Associates, Inc. to the Department of Justice for possible criminal prosecution for conflict of interest should place into question not only the validity of the Harstead reports, but the BNL and all other NRC commissioned reports which rely on the Harstead reports.

III. JOINT INTERVENORS HAVE SATISFIED THE STANDARD FOR ADMISSION OF THREE PROPOSED CONTENTIONS ON QUALITY ASSURANCE AND CHARACTER AND COMPETENCE

The Appeal Board, in considering whether to admit late-filed contentions, must consider the following factors as set out in 10 CFR 2.714(a):

(i) good cause, if any, for failure to file on time;

(ii) the availability of other means whereby the petitioner's interest will be protected;

(iii) the extent to which the petitioner's participation may reasonably be expected to assist in developing a sound record;

(iv) the extent to which the petitioner's interest will be represented by existing parties; and

(v) the extent to which the petitioner's participation will broaden the issues or delay the proceeding.

This Appeal Board must determine whether in weighing the five factors, the balance favors admission of the contentions Consumers Power Co. (Midland Plants, Units 1 and 2), LBP-84-20, NRC (May 7, 1984), slip. op. at 10; Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041 (1983). Where a proponent demonstrates "good cause" for late filing, the showing required on the other factors is decreased. Florida Power and Light Co. (St. Lucie Nuclear Power Plant, Unit 2), ALAB-420, 6 NRC 8, 22 (1977). In addition, the Commission requires that contentions be set forth with reasonable specificity. 10 CFR 2.714(b).

Here all five factors listed above weigh in Joint Intervenors' favor. In addition, the contentions are set forth with specificity and supported by affidavits and voluminous documents.[4/]

[4/] Joint Intervenors have sought a protective order to prevent the three workers who have submitted affidavits in support of

A. Joint Intervenors Have Demonstrated "Good Cause" for Late Filing.

Joint Intervenors have good cause for submission of their quality assurance and "character and competence" contentions beyond the permitted time. First, these contentions allege a quality assurance breakdown and lack of character and competence which cannot be remedied through the NRC's mandated reform programs. Joint Intervenors are alleging a pattern of failings which only within the last year have become evident.

LP&L, if it had been chosen to respond and implement the corrective actions to which it committed in response to the February 1983 Notice of Violation, could not now be charged with a systematic failure to carry out its QA program. Similarly, LP&L had a second chance in the fall and winter of 1983 to respond fully and completely to the criticisms of the Special Inquiry Team. In the spring of 1984, LP&L failed a third time to respond adequately to the CAT Team's inspection and has yet to propose and implement a detailed program plan responsive to the NRC Staff's letter of June 13, 1984. The utility has continually promised to complete reforms which it has not done; refused to acknowledge the nature and seriousness of QA

(Footnote 4 continued)

this motion from being publicly identified. Because of the demonstrated harassment of QA/QC personnel at Waterford and the particular harassment and retaliation two of the three individuals have suffered, Joint Intervenors believe protection of their identity is necessary. However, the substance of their allegations is readily available to this Appeal Board, the licensee, and the NRC Staff. Moreover, the voluminous documents submitted by Joint Intervenors independently verify or corroborate many of the allegations.

Joint Intervenors are not aware of any case law which prohibits establishing a basis for a contention through affidavits submitted under a protective order in order to protect the affiants from harassment and intimidation.

problems; and even today focused on rushing Waterford to completion instead of verifying the quality of its construction. LP&L's systematic refusal to comply with NRC directives; follow QA principles; develop the managerial capacity to identify and correct its past failings, illustrate its basic lack of character and competence to operate Waterford 3.

The NRC Staff tried to deal with LP&L's recalcitrance by imposition of increasingly strict reinspection programs on the utility. At this point, it is obvious that LP&L will not reform.

Joint Intervenors worked with the NRC in encouraging it to impose an independent third party review and reinspection on LP&L to ensure a thorough verification of the quality of Waterford's construction. Similarly, Joint Intervenors have worked to ensure that OI's investigation into deliberate or willfull harassment and intimidation and falsification of QA documentation is not compromised. Its counsel has attended NRC meetings in Bethesda in an attempt to work with the NRC Staff. Joint Intervenors filed this motion to reopen only after they became convinced that LP&L does not possess the necessary character and integrity to run Waterford 3 and the NRC Staff has not been effective in ensuring that LP&L develops that capacity prior to issuance of a license.

Moreover, the NRC Staff, even after expending considerable effot in identifying QA failures has failed to determine the root cause for the QA breakdown--LP&L's lack of character and competence. The staff has also failed to impose the

type of corrective action which will verify the quality of Waterford construction and ensure that LP&L can be trusted to operate the plant safely and in accordance with NRC regulations.

Several of the witnesses whose affidavits support this motion came forward only when they realized that the NRC's latest efforts to institute reforms at Waterford were not working. See Exhibit 12 at 1-2. They believed that the NRC Staff should be given a chance before supporting litigation of these issues in an adjudicatory forum. Certainly these former LP&L and Ebasco employees, as well as Joint Intervenors, have the right to expect that the NRC staff will do an adequate job in ensuring the quality of Waterford's construction and LP&L management. Only when the Staff failed in its efforts did it become necessary for Joint Intervenors to move to litigate these issues. As the Appeal Board noted in its Order of October 3, 1984, in which it deferred ruling on Joint Intervenors' Motion to Reopen on the Basemat Crack Issue, the NRC Staff's recent responses have raised more questions than they have resolved. Similarly, here, the NRC Staff's efforts, while identifying a seriuous QA breakdown, have failed to provide the public or Commission with assurance that these problems will be adequately resolved and LP&L will develop the required managerial competence to run Waterford 3. Joint Intervenors reasonably relied on the NRC Staff's intensive inspection and reform efforts and participated in that effort. Only when it appeared to falter did Joint Intervenors move to reopen. Joint Intervenors' prior reliance on the NRC Staff's effort constitutes "good cause" for late filing. See Puget

Sound Power & Light Co. (Skagit Nuclear Power Project, Units 1 and 2), ALAB-559, 10 NRC 162,165 (1979).

B. Joint Intevenors Have No Other Means Available To Protect Their Interests.

Joint Intervenors have no other means availabe to protect their interests. Clearly they expected that the NRC Staff, through its inspection and investigative capabilities and through enforcement actions, would protect the public's interest in ensuring the plant has been constructed and will be operated to protect the public health and safety. In this case, the NRC Staff, although struggling to identify the massive QA breakdown at Waterford, has failed to develop a program to resolve the problems it has found.

At this late date, LP&L has yet to propose to the NRC a detailed program plan for resolution of the 23 items outlined in the NRC Staff's June 13, 1984, letter, or to institute a truly independent review team. The NRC Staff's experimental approach of allowing LP&L the opportunity on its own to develop an independent review and inspection program has failed.

In addition, LP&L through its attempts to undermine the OI investigation, has again revealed its main interest is rushing Waterford to completion instead of rooting out corrupt or incompetent managers or establishing credible management for the project. The NRC Staff, although apparently not disclosing the names of individuals under investigation, have failed to ensure that the third party review is conducted

by individuals above suspicion. In fact it appears that the NRC has admitted to LP&L that some of those in charge of the review are targeted in the falsification of records and harassment investigations. Clearly the NRC Staff has failed, as LP&L has failed, to ensure that the review and reinspection program is free of the taint of past QA failings.

Joint Intervenors' interests therefore cannot be protected through the NRC Staff's inspection efforts. Even if the NRC's Office of Investigations refers to the Department of Justice cases for criminal prosecution, the public's interest in verification of the quality of Waterford's construction will not be satisfied. At this point the NRC has refused to represent that it will not recommend issuance of a license to Waterford until after OI has completed its investigation into alleged willful and deliberate violations of NRC regulations. Surely, the NRC Staff's default in this respect illustrates the need for full adjudicatory examination and resolution of these issues.

Finally, the NRC has illegally withheld numerous documents concerning its inspection and investigative efforts which preclude Joint Intervenors from scrutinizing the Staff's efforts and providing needed public input. Joint Intervenors' counsel has brought suit against the NRC in seven separate Freedom of Information Act suits seeking the following documents:

(1) interviews the company has conducted to determine past and current workers' concerns about QA failures;

(2) NRC studies or investigations into basemat cracking and water seepage at Waterford 3;

(3) NRC reports or investigations on problem contractors at Waterford, including Mercury of Norwood, Tompkins & Beckwith and Chicago Bridge & Iron;

(4) documents related to the NRC's February 1984 CAT inspection;

(5) documents related to the NRC's SSER issued on October 1, 1984; and

(6) documents generated in connection with a June 8, 1984, meeting with the NRC Staff in Bethesda. See Government Accountability Project v. Nuclear Regulatory Commission (D.D.C., filed August 20, 1984), C.A. Nos. 84-2554, 84-2555, 84-2556, 84-2557, 84-2558, 84-2559, and 84-2560.

Joint Intervenors have requested these documents in order to scrutinize the NRC Staff's work and be able to participate in an informed fashion in the NRC process. Because the NRC Staff has illegally refused to release most of the documents requested, without asserting any exemption for such refusal, Joint Intervenors are forced to seek to adjudicate these issues publicly. Because of the Staff's barring of public participation in the enforcement process, Joint Intervenors' only opportunity to scrutinize the agency's enforcement actions and to ensure that the public interest is protected is through the licensing process.

C. Joint Intervenors Can Be Expected To Assist Developing a Sound Record.

As can be seen from the affidavits and douments submitted in support of this motion, Joint Intervenors have carefully collected and analyzed the evidence brought to them which demonstrates a systematic QA breakdown at Waterford and LP&L's lack of character and competence. Joint Intervenors' analysis of LP&L's proposals to resolve the 23 problem areas outlined in the Staff's June 13 letter and scrutiny of OI's investigation has already illuminated problems with LP&L's response to the Staff's enforcement efforts. Joint Intervenors can certainly be expected to examine effectively, in discovery and through the hearing, the adequacy of LP&L's QA program; the adequacy of LP&L's reform efforts; and the central issue of whether LP&L has developed, or is capable of developing, the character and competence necessary to operate Waterford safely.

D. Joint Intervenors' Interests Will Not Be Represented by Other Parties.

It is clear that Joint Intervenors' interest will not be represented by any other party to this proceeding. As argued above, the NRC Staff has not demonstrated its ability to determine the root cause of the QA breakdown at Waterford or to force the utility to develop an adequate review and reinspection program.

1. The NRC Task Force has not provided reasoned and documented evaluations to indicate LP&L's QA and management failures have been resolved.

The most telling examples are the deficiencies in the recent NRC Task Force efforts. Joint Intervenors will point out only illustrative examples of the flaws in the Task Force's "Safety Evaluation Report", NUREG-0787, Supp. No. 7, issued October 1, 1984 ("SSER"). Overall, the SSER only addresses those allegations which the Task Force has deemed to be not safety significant. The 23 problem areas laid out in the Eisenhut Letter of June 13, including the quality assurance breakdown, are being handled by the NRC Staff outside the formal SSER process at this point. Therefore, the SSER itself does not address the areas of greatest significance to this Board, including the QA breakdown over the life of the Waterford project.

Second, in very few instances has the NRC Staff indicated what if any corrective action it will require of LP&L to resolve open items, either in the SSER or in the NRC Inspection Report No. 50-382/84-34, which is Attachment 6 to the SSER. For example, in the Report, although the NRC Staff, even in a "cursory review" determined that LP&L QA Construction reviews do not list all the items to be examined during the review process; LP&L has not demonstrated it does reviews of items not on the list; LP&L has not indicated that it conducts an additional 10 percent sample review of rejected systems or that it reviews QA inspection findings for generic implications, it does little more than indicate that the item is unresolved and the inspection in the area is closed. SSER, Attachment 6 at III-59-61.

Similarly, in the main body of the SSER the NRC Staff has not indicated what if any action it will require of LP&L to close an open item. For example, Allegation A-141, SSER at 149, focuses on LP&L's failure to locate 70 concrete placement packages until August 10, 1984, at which time the packages were found in an Ebasco vault. Apparently, nonconforming conditions in the concrete placement which were identified in these 70 concrete pour packages were not detected in LP&L's re-review of all the packages. Therefore, the NRC has now to evaluate the quality of LP&L's review program given the fact that it did not catch the problem caught by the Ebasco QAIRG team in 1983. The only statement in the documented portion of the SSER about this allegation is "Actions Required: Additional NRC staff work is required." There is no mention made of the subject of further NRC review, the significance of the fact that the 70 concrete pour packages were lost since 1983 or that LP&L's review program had not detected the problems itself. See Exhibit 55.

In addition at many points in the SSER the NRC Staff makes little effort to interpret the allegation properly, much less determine if the problem is of safety significance or if it has been resolved. As one example, Allegation A-136 states that Ebasco QA personnel found it difficult to obtain approval to initiate nonconformance reports in the civil-structural area from 1975 to 1977. The NRC staff states however that it will not "directly assess" the difficulty of initiating a noncon-

formance report since its emphasis is on a determination of unresolved safety issues. It further indicates that it only reviewed the Ebasco procedure for writing NCR's; concrete, soils, and structural steel construction packages; and sample DN's written during these three years. After conducting this entirely "paper review" the NRC Staff determined that the allegation had no direct safety significance.

It is clear that the NRC Staff did not effectively investigate to determine if the system as implemented, not the system on paper, made it difficult for QA personnel to obtain approval to initiate formal nonconformance reports. In addition, there is no reason to believe that the concrete or construction packages which the Staff reviewed would in any way indicate problems which were not identified or documented. Further, since the allegation was that it was difficult to write NCR's, there is little reason to believe QA personnel would not have similar difficulty in writing up informal quality inspection records such as DN's. Therefore, a review of DN's will not necessarily lead to a determination of whether nonconforming conditions failed to be identified and documented on NCR's.

The NRC Staff refers then to allegations A-49, A-53, and A-283. However a reading of these allegations indicates that the NRC Staff handled them in a similarly offhanded fashion. Allegation A-49 is that individuals were prevented from writing NCR's and subsequent QA documentation may be falsified. The Staff found that the procedures were adequate; that the allegations

on their face did not indicate pressure or coercion by contractors; and that nonconforming conditions had later been entered into the NCR system. The Staff thereby concluded that the allegations had no safety significance or generic implications. Again the NRC Staff only looked at the paper procedure, which the allegation, on its face charges does not work as written. Again, the NRC Staff went no further than to determine that the allegation was deficient. Again, the NRC Staff did no physical inspection but merely looked to see if the nonconforming conditions, or a portion of them, at some later time were entered into the NCR system. SSER at 101. A similar cursory review, aimed at finding flaws in the allegations, was done for allegations A-53 and A-283. SSER at 103, 246.

The NRC Staff, further, has failed to indicate the basis for its findings and conclusions, except for some of the findings noted for the QA allegations. Therefore, neither the public nor this Appeal Board has the opportunity to scrutinize the Staff's inspection to determine if it adequately addresses the allegers' concerns.

This might be of less concern if the Task Force were not set up and aimed at ensuring that Waterford would be licensed in an expeditious manner. On March 12, 1984, William J. Dircks, Executive Director for Operations, laid out a plan to ensure that all the problems detected at the Waterford and Comanche Peak plants were resolved "so as not to delay the licensing decisions" for those plants. SSER at Attachment 1. Certainly the SSER indicates that although a large number of NRC and consultant personnel was used to conduct the inspection, the NRC Staff has not

adequately identified the problems brought out by the allegers; in many cases failed to examine, much less resolve, whether they are of safety significance; and at no point adequately documented their findings and conclusions that the problems identified in the SSER are not of safety significance and have no general implications.[5/]

Further, it appears that the Staff has put under contract to the NRC many of the allegers who originally brought forth quality assurance allegations, including the mose serious charge of falsification of documents. By putting the witnesses on the NRC payroll, the Staff has ensured that they will have control over any evaluation of the Staff's efforts to resolve these allegations. At this point, the public and the Appeal Board cannot look to the allegers who originally brought forward these problems to the NRC Staff to evaluate independently whether or not the problems have been resolved, since they have effectively been hired to be part of the NRC Staff.

This becomes especially disturbing in light of the NRC Staff's attempt to keep the basis for its findings from public scrutiny. The Task Force's experimental approach at Waterford ensured that the large part of its findings and conclusions, even about the 23 problems of safety significance, will not be documented in an inspection report. In addition, the NRC Staff has resisted any disclosure, under the Freedom of Information Act, of documentation related to the Task Force efforts.

5/ Joint Intervenors will address the deficiencies in the NRC Staff's handling of the basemat allegations in their comments on that issue, to be sumitted on November 14, 1984.

The NRC Staff's failure to document the basis for its findings and conclusions in the SSER and for the 23 areas laid out in the June 13 Eisenhut letter does not provide an adequate factual record for this Board to determine that the QA and "character and competence" problems at Waterford have been resolved.

Joint Intervenors therefore request an adjudicatory, on-the-record hearing, to ensure an adequate "public record" is established that LP&L has resolved its QA failures and now possesses the necessary character and competence to operate Waterford.

(2) The NRC Staff has not adequately examined the deficiencies in the basemat and has not ensured that its consultants are independent.

The NRC Staff has failed to take steps to ensure the independence and thoroughness of those consultants it has chosen to evaluate the adequacy of the design and construction of the basemat at Waterford. This also raises disturbing questions about the Staff's ability to ensure Waterford is constructed safely. Only after prompting from this Appeal Board did the NRC Staff determine that Mr. Harstead and his company Harstead Engineering Associates, Inc., in working both for the NRC Staff and on Waterford matters for LP&L may have violated the Commission's conflict of interest regulations and 18 U.S.C. §§ 203, 205. The NRC has referred the matter to the U.S. Department of Justice for possible criminal prosecution. Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), _____NRC_____(October 3, 1984).

BNL and other NRC Staff "independent" evaluations of the Waterford basemat relied, at least in part, on Mr. Harstead's work. As argued earler, supra at II, E, these evaluations become su spect in light of Mr. Harstead's potential conflict of interest. In any event, the NRC Staff showed poor judgement in not ensuring that its independent consultants, including BNL, did not rely on Mr. Harstead's work.

IV. JOINT INTERVENORS HAVE SATISFIED THE STANDARD FOR RE-OPENING OF THE RECORD.

The standard for reopening of the record is as previously stated by this Appeal Board:

> "(1) Is the motion timely? (2) Does it address significant safety...issues? (3) Might a different result have been reached had the newly proffered material been considered initially?"

Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-753, 18 NRC 1321, 1322 (1983).

As Joint Intervenors argued above, although they did not submit their proposed contentions within the permitted time, they have demonstrated good cause for late filing.

It is clear that the three contentions, considered collectively, address a signficant safety issue, and perhaps the basic question facing the NRC in its decision whether to license Waterford for operation. The issue is whether LP&L, in light of the quality assurance breakdown at Waterford 3 and LP&L's inability to design and implement an adequate program plan to ensure the adequacy of the plant's construction, has the necessary character and competence to operate Waterford. Joint Intervenors have provided extensive affidavit and documentary evidence which indicate that on the record so far before this Appeal Board, and certainly on the record before the NRC Staff, the answer is no.

The NRC Staff and LP&L can be expected to argue that under the new reform program imposed by the NRC Staff, and increased scrutiny by the Staff, LP&L will verify the quality of Waterford's construction and develop the managerial capacity to operate the plant safely. However, it is clear under NRC precedent that

without a proper management attitude, what has been described as a "willingness--indeed, desire--on the part of the responsible officials to carry it out to the letter, no program is likely to be successful." Consumer Power Co. (Midland Plant, Units 1 and 2), ALAB-106, 6 AEC 182, 184 (1973). Other Licensing Boards have called this essential management attitude "commitment", Virginia Electric and Power Co. (North Anna Nuclear Power Station, Units 1 and 2) LBP-77-68, 6 NRC 1127, 1151 (1977), and "capability" Carolina Power and Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 and 4), LPB-79-19, 10 NRC 37 (1979).

Even if Joint Intervenors were to agree with the NRC Staff that the preliminary and ill-defined program plan of LP&L on paper was adequate, LP&L's implementation of that plan cannot be trusted. Recent NRC enforcement efforts to bring LP&L to an understanding of the seriousness of its QA problems at Waterford have not worked. Without the proper management attitude and commitment to QA principles no NRC-mandated program will work at Waterford. If LP&L cannot be trusted to carry out a crack mapping program for the basemat, or a program to verify the quality of work of those QA and QC personnel who were not properly certified, how can it be entrusted with the responsibility of operating Waterford safely? Similarly, if some of the top QA officials at Waterford are potentially under investigation for intentional violations of the Atomic Energy Act or NRC regulations, how can LP&L management be entrusted to resolve the QA failures of the past? Finally, how can a utility which fails to acknowledge a QA breakdown, much less develop a concrete program to correct it, be expected to understand the importance

of complying with NRC regulations in the operation of Waterford?

LP&L's record of managing the construction of Waterford speaks for itself. LP&L has not demonstrated currently that it possesses the character and competence to operate Waterford to protect the public health and safety. One only need look at the utility's past lack of compliance with NRC regulations; its failure to respond to noncompliances and to carry out those commitments it does make; its deliberate or negligent false statements to the SEC and to the NRC; and its failure to answer questions propounded by the NRC Staff with candor. Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), ASLB No. 79-421-07, ___NRC___(March 14, 1984), Slip Op. at 19-20.

Joint Intervenors believe that their contentions raise an important safety issues which if resolved on an adjudicatory record might well lead to a different conclusion as to whether an operating license should be authorized to LP&L to operate Waterford.

V. CONCLUSION

In consideration of the foregoing arguments, the affidavit and documentary evidence submitted in support of this motion, and the record in this case, Joint Intervenors urge this Appeal Board to reopen the record for litigation of their three contentions that LP&L lacks the requisite character and competence to operate Waterford; the long history of QA failures at Waterford indicate there is not the requisite assurance that Waterford has been constructed and can be operated in a manner which protects the public health and safety; and that the NRC Staff's inspection,

investigation, and enforcement efforts will not provide adequate assurance of Waterford's safe construction and future safe operation.

Respectfully submitted,

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DATED: November 7, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	)	
	)	
LOUISIANA POWER AND LIGHT COMPANY	)	Docket No. 50-382
	)	
(Waterford Steam Electric Station, Unit 3)	)	

Joint Intervenors' Motion to Reopen to Litigate Three New Contentions; Joint Intervenors' Motion for Protective Order; ~~and Notice of Appearance of Counsel~~ have been served this 8th day of November, 1984 by mailing a copy, first class, postage pre-paid, to the following:

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