

09/10/81

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

LOUISIANA POWER & LIGHT COMPANY

(Waterford Steam Electric Station,
Unit 3)

Docket No. 50-382



NRC STAFF'S RESPONSE TO APPLICANT'S MOTION
TO DISMISS JOINT INTERVENORS' CONTENTION 28
(HYDROGEN CONTROL)

On August 21, 1981, Louisiana Power & Light Company ("Applicant") filed its "Motion to Dismiss Joint Intervenor's Contention 28 (Hydrogen Control)" ("Motion"). In its Motion, the Applicant asserted that the issues raised by Contention 28 "have now become the subject of a general rulemaking" by the Commission and, accordingly, that those issues "cannot be litigated in this individual operating license proceeding" (Motion, at 1). For the reasons set forth below, the NRC Staff ("Staff") opposes the Applicant's Motion and recommends that it be denied.

Background and Introduction

Contention 28 was filed along with five other TMI-related contentions by Intervenor Oystershell Alliance, Inc. and Save Our Wetlands, Inc. ("Joint Intervenor's"), on December 10, 1979. It asserts as follows:

28. Applicant has not presently provided adequate plans which demonstrate how it will 1) prevent the creation and accumulation of free hydrogen from forming in the primary system during a Nuclear Emergency; 2) alleviate the accumulation of dangerous quantities of hydrogen within the containment.

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On December 26, 1979, the Applicant filed its response to the Joint Intervenors' TMI-related contentions,^{1/} in which it stated that it "has no present objection to these additional contentions but reserves the right at a later date to move to strike Contention 28" on the grounds, in part, that it raises a generic issue which would more appropriately be addressed in a new rulemaking proceeding recommended by the Final Report of the Lessons Learned Task Force, if such a rulemaking proceeding were to be adopted by the Commission.^{2/} On January 11, 1980, the Atomic Safety and Licensing Board ("Licensing Board") admitted as issues in controversy all of the Joint Intervenors' TMI-related contentions, including Contention 28, and noted that it was allowing the Applicant to reserve the right later to move to strike Contention 28.^{3/}

On October 2, 1980, the Commission published in the Federal Register a proposed rule entitled "Interim Requirements Related to Hydrogen Control

^{1/} "Applicant's Response to Joint Intervenors' Additional Contentions," dated December 26, 1979.

^{2/} Id., at 2.

^{3/} Order dated January 11, 1980, at 1. As indicated by the Licensing Board, the Staff had supported the admission of the Joint Intervenors' TMI-related contentions. See "NRC Staff Response to Amended Contentions of the Louisiana Consumer's League, Inc. and Joint Intervenors (Save Our Wetlands, Inc. and Oystershell Alliance, Inc.)," dated December 31, 1979.

and Certain Degraded Core Considerations" (45 Fed. Reg. 65,466), which would amend 10 C.F.R. § 50.44 and introduce a new § 50.44a. At the same time, the Commission published an advance notice of proposed rulemaking, entitled "Consideration of Degraded or Melted Cores in Safety Regulation" (45 Fed. Reg. 65,474), which was to include consideration of whether systems for controlling hydrogen combustion should be incorporated into containment design.

Discussion

An analysis of Contention 28 and of the brief elaboration upon that contention provided by the Joint Intervenors^{4/} leads the Staff to conclude that many issues raised by the contention are to be addressed by the rule-making proceeding announced by the Commission. Thus, Contention 28 questions the adequacy of Applicant's design for "prevent[ing] the creation and accumulation of free hydrogen ... during a Nuclear Emergency" and its means of "alleviat[ing] the accumulation of dangerous quantities of hydrogen within the containment." In their Answers to the Applicant's Interrogatories,^{5/} the Joint Intervenors indicate that the amount of hydrogen generated during the TMI-2 accident must be anticipated to occur at the

^{4/} See "Joint Intervenors Answers to Applicant's Supplemental Interrogatories" ("Answers"), dated April 24, 1980. Those Answers were provided in response to interrogatories filed by the Applicant after the Joint Intervenors' TMI-2 related contentions were admitted for litigation. See "Applicant's Interrogatories on TMI-2 Related Contentions of Joint Intervenors" ("Interrogatories"), dated February 19, 1980.

^{5/} See n.4, supra.

Waterford facility.^{6/} In addition, the Joint Intervenors state that the Applicant's FSAR is inadequate, as follows:^{7/}

Section 6.2.5 of the FSAR does not adequately provide plans for the elimination of dangerous hydrogen quantities in the following areas:

(1) Containment Hydrogen Indication 2.1.9 of "Discussion of Lessons Learned Short Term Requirements."

(2) Dedicated H₂ Control Penetrations 2.1.5a of the same reference.

(3) The Combustible Gas Control System is designed to control a 4% cladding reaction [FSAR 6.2.5.3(b)]. This gives an error factor of 5 over the accident design level of 10 CFR 50.46(3). However, Three Mile Island, Unit 2 suffered cladding failure of 44°-63° (Kemeny Commission Report, page 30). The CGCS is underdesigned, therefore, by an order of magnitude.

As noted by the Applicant (Motion, at 4), each of the concerns raised by the Joint Intervenors is addressed by the Commission's proposed rule: Hydrogen indication is addressed at 45 Fed. Reg. 65,470-71; hydrogen control penetration is addressed at 45 Fed. Reg. 65,468; and the percentage of cladding reaction is addressed at 45 Fed. Reg. 65,466-68. Similarly, the advance notice of proposed rulemaking published by the Commission indicates that hydrogen combustion control is to be addressed in that proceeding on a generic basis. 45 Fed. Reg. 65,476.

Notwithstanding the pendency of rulemaking in this area, the Staff believes that the Applicant incorrectly relies upon the Appeal Board's decision in Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79 (1974), as a basis for dismissing Contention 28.

^{6/} Joint Intervenors' Answers to Applicant's Interrogatories, n.4 supra, Answer to Interrogatory No. 28-1.

^{7/} Id., Answer to Interrogatory No. 28-3.

Thus, while the Appeal Board stated that "licensing boards should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission" (8 AEC at 85),^{8/} the mere fact that a rulemaking proceeding has commenced does not lessen an applicant's obligation to comply with existing regulatory requirements or the Licensing Board's duty to make a finding as to such compliance upon any properly admitted contention. Accordingly, the Applicant's compliance with existing regulations such as 10 CFR §50.44 is litigable.

Under present regulatory requirements related to hydrogen issues, the Commission has clearly indicated that the issue of hydrogen generation and control is litigable also under the provisions of 10 CFR Part 100, notwithstanding the fact that an applicant may have complied with 10 CFR §50.44. Thus, the Commission has stated that the issue of post-accident hydrogen control may be litigated under 10 CFR Part 100, if it is determined that there is "a credible loss-of-coolant accident scenario entailing hydrogen generation, hydrogen combustion, containment breach or leaking, and offsite radiation doses in excess of Part 100 guideline values." Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), CLI-80-16, 11 NRC 674, 675 (1980). In the present proceeding, however, it is not clear to the Staff whether the contention

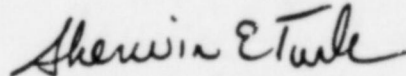
^{8/} See also, Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-76-28, 4 NRC 618 (1976), aff'd ALAB-355, 4 NRC 397, 417-18 (1976); Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B and 2B), ALAB-367, 5 NRC 92, 107 (1977).

seeks to litigate the likelihood of radiation releases under 10 CFR Part 100 or compliance with existing regulations, or solely compliance with proposed rules now the subject of rulemaking. The Staff intends to give further consideration to this matter and if warranted, will file an appropriate motion with the Licensing Board. At this time, however, the Staff believes that the grounds for dismissal asserted by the Applicant do not support the dismissal of the contention.

CONCLUSION

For the reasons set forth in greater detail above, the Staff opposes the Applicant's Motion and recommends that it be denied.

Respectfully submitted,

A handwritten signature in cursive script, reading "Sherwin E. Turk".

Sherwin E. Turk
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 10th day of September, 1981

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S RESPONSE TO APPLICANT'S MOTION TO DISMISS JOINT INTERVENORS' CONTENTION 28 (HYDROGEN CONTROL)" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 10th day of September, 1981:

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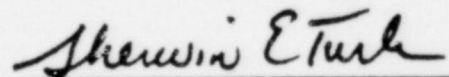
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