UNITED STATES

NUCLEAR REGULATIONY COMMISSION

WASHINGTON 0.0.2000

NO. 50-357

Mr. H. P. Lyle, Vice President
Electric Production & Englineering
Northern Indiana Public Service Company
5255 Hohman Avenue
Hammond, Indiana 46325

Gentlemen:

SUBJECT: MARK II GENERIC ACCEPTANCE CRITERIA FOR LEAD PLANTS
Substantial progress was made at our meeting of October 19, 1978,
with the Mark II owners toward resolution of the issues related to pool
dynamics for the lead Mark II plants and allocation of staff technical
resources for review of the generic Mark II Intermediate Program. The
purpose of this letter is to summarize the meeting results and to state
our intent on future efforts leading to the completion of staff review
of these matters.

The most significant developments relate to the method of combining loads and acceptability of the pool dynamics load criteria as discussed below:

- The staff believes that further extension of the approval for SRSS methods to include combining SRV and Q88 loads appears possible and certainly worth the investment of staff and applicant resources to review and develop a technically justifiable basis for licensing. We anticipate completion of our review of this matter before the end of the year, at which time we will specify conditions for the use of SRSS in the Mark II program.
- The Mark II owners agreed to adopt the NRC lead plant pool dynamic load acceptance criteria with a limited number of exceptions. This agreement, in several cases, was based on favorable consideration of SRSS methods by the staff. The exceptions and the program to resolve the exceptions on a generic basis are described in Enclosure 1. Resolution of these exceptions to the NRC criteria is to be accomplished before the end of 1978.

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The Mark II owners identified the Intermediate Program tasks where a priority review by the staff is needed. The staff agreed to schedule a November meeting to discuss staff concerns related to those tasks where sufficient information has been submitted to warrant a meeting (see enclosure 2).

While this course of action will help to maintain the near term licensing schedules for the lead plants, resolution of those exceptions taken by the Mark II owners to the staff generic acceptance criteria would require a substantial portion of the staff's resources. As a result, we anticipate some delay in our overall review of the Intermediate Program Tasks through the end of 1978.

In recent weeks we have received several requests for plant-unique review of tasks already included in the Mark II owner's Intermediate Program. We will not give as high priority to such meetings as we do to generic program meetings. Recognizing the limitations on staff resources, we reiterate the need for the Mark II owners to utilize the generic Intermediate Program to the maximum extent possible. The generic approach to resolution of the pool dynamics issues provides the greatest potential for completing the licensing activities in a timely manner for the plants utilizing Mark II containments.

Sincerely,

Poster C. Roud Diversion

Roger S. Boyd, Director ... Division of Project Management Office of Nuclear Reactor Regulation

Enclosures:

1. Exceptions to the MRC
Mark II Pool Dynamic
Load Acceptance Criteria

2. Priority Intermediate Program Tasks

cc: See next page

Englosure 1

Exceptions to NRC Mark II Pool Dynamic Load Acceptance Criteria

1. Pool Swell Elevation (1.3.1.b)*

The staff will identify before October 30, 1978 additional information to be provided by the Mark II owners to support their new methodology described in response to Question 020.68. The Mark II owners will provide a schedule for responding to the NRC's information request.

2. Small Structure Impact Loads (1.8.3.a)

The Mark II owners will notify the staff of a time when they will be ready to discuss and justify their revised methodology.

3. Asymmetric Pagl Swell Loads (I.B.5)

The Mark II owners will send a letter report to the staff including the description and justification of a more realistic methodology for this load than the bounding methodology described in the NRC acceptance criteria.

4. SRV Bubble Phasing (II.8.b)

The owners of the lead Mark II plants will propose a time when they will be ready to discuss and justify a generic methodology for establishing bubble phasing for the "T" quencher discharge device.

^{*}Load designation based on Load Summary Table and Acceptance Criteria in letter dated September 14, 1973 from R. S. Boyd to lead Mark II plants.

5. SRV Bubble Frequency (II.8.c)

The owners of the lead Mark II plants will propose a time when they will be ready to discuss and justify a new methodology for defining bubble frequency.

6. LOCA/SRY Submarged Drag Loads (III)

The staff will notify the Mark II owners of an acceptable meeting time with our consultants to discuss the Mark II owners revised methodology. Emphasis will be placed on items III.A.1 and III.A.2 related to the LOCA jet drag load and the "T" quencher zone of influence.

7. Submerged Boundary Load During Vent Clearing (I.A)

The Mark II owners will send a letter report to the NRC clarifying the application of this load to the containment walls. Reference will be made to observed loads on the walls of the 47 facility.

Northern Indiana Public Service Company - -

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