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Docket No. 50-322

Mr. M. S. Pollock
Vice President - Nuclear
Long Island Light Company
175 East Old Country Road
Hicksville, New York 11801

Dear Mr. Pollock:

SUBJECT: INTERGRANULAR STRESS CORROSION CRACKING IN RECIRCULATION SYSTEM
AND RESIDUAL HEAT REMOVAL SYSTEM PIPING

Reference: LILCo Letter dated July 7, 1982 regarding Induction Heating
Stress Improvement Program

The Commission has recently been briefed on the results of inspections and tests conducted on BWR recirculation system and residual heat removal system piping. Based upon these discussions, the NRC has concluded that it is important to obtain additional information regarding the susceptibility of the system piping at your facility to intergranular stress corrosion cracking (IGSCC).

You should be aware that as a result of inspections conducted at 18 operating Boiling Water Reactors (BWRs) in conformance to recent IE Bulletins (IE Bulletin No. 82-03, Revision 1, "Stress Corrosion Cracking in Thick-Wall, Large-Diameter, Stainless Steel, Recirculation System Piping at BWR Plants" and IE Bulletin No. 83-02, "Stress Corrosion Cracking in Large-Diameter Stainless Steel Recirculation System Piping at BWR Plants"), extensive IGSCC in large-diameter recirculation and residual heat removal system piping has been discovered. These bulletins requested licensees to perform a number of actions to include inspections and, where necessary, repairs, analysis and/or additional surveillance conditions for pipe welds.

The NRC has concluded that other BWR facilities with non-conforming (service sensitive per NUREG-0313, Rev. 1) materials may be susceptible to IGSCC, which may be unacceptable for continued safe operation without stress mitigation, augmented inservice inspection, repair of the affected pipes and additional surveillance requirements. The Commission is therefore considering actions relating to the need for the mitigation of stresses, replacement of susceptible piping and augmented inservice inspection.

For facilities which have recently received their operating license and near-term operating license facilities, the Commission is requesting information to determine a future course of action in order to minimize or mitigate IGSCC and to ascertain whether or not licenses shall be modified. Therefore, we are requesting that you provide the information identified below.

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1. Identify the materials used and special fabrication methods employed (both in the shop and in the field) to minimize or mitigate IGSCC in piping systems which form the reactor coolant pressure boundary. For non-conforming materials describe, by piping systems, the actions taken or planned and methods utilized (e.g., solution annealing, your induction heat stress improvement program, etc.) to mitigate potential IGSCC in the reactor coolant pressure boundary.
2. Provide a justification for operation with non-conforming materials in the reactor coolant pressure boundary, if applicable.
3. Describe what preservice inspections have been accomplished which would serve as the baseline for further identification of IGSCC.
4. Describe what programs are to be implemented in water chemistry control to minimize or mitigate IGSCC.

Upon receipt of the information requested above, we would like to arrange a meeting to discuss your submittal. The schedule for the meeting will be arranged by the NRC Project Manager for your facility.

Your response to this letter is needed by August 17, 1983 to assure resolution prior to the issuance of an operating license. Thank you for your cooperation regarding this very important issue.

Sincerely,

Original signed by
Darrell G. Eisenhut

Darrell G. Eisenhut, Director
Division of Licensing

cc: See next page

	LB #2	G-2 B #2	AD/L	C:ORAB:DL	AD/SA:DL	AD/MCET	D/DL
OFFICE	RCa case:dm	ASchwencer	TNovak	GHolahan	EMiraglia	WJohnston	D/DE
SURNAME	07/12/83	07/15/83	07/1/83	07/10/83	07/26/83	07/29/83	07/27/83
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