

## LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION P.O. BOX 618, NORTH COUNTRY ROAD • WADING RIVER, N.Y. 11792

Direct Dial Number

January 28, 1983

SNRC-829

Mr. Ronald C. Haynes Office of Inspection and Enforcement, Region I U. S. Nuclear Regulatory Commission 631 Park Avenue King of Prussia, PA 19406

## LONG ISLAND LIGHTING COMPANY SHOREHAM NUCLEAR POWER STATION - UNIT 1 DOCKET NO. 50-322

Dear Mr. Haynes:

On December 30, 1982, in accordance with 10CFR50.55(e), we reported verbally to Region I a reportable deficiency involving converse instrument line slopes for those instruments which sense the primary containment atmosphere pressure. Our engineering review of this condition has been completed and the appropriate corrective actions initiated. Therefore, this letter will serve as our 30 day written report pertaining to this deficiency.

## Description of Deficiency

During a routine inspection by LILCO's Independent Safety Evaluation Group (ISEG) a condition was discovered whereby a configuration of impulse tubing for certain primary containment atmospheric sensing lines allows for the potential of undrainable condensate accumulation. The problem with the subject lines evolves from the condition that every Primary Containment instrument line penetration plate has the lines sloping down in the outward direction. In the Secondary Containment, the outer end of the penetration pipe mates with the instrument line which, according to specification, must slope up towards the instrument. As a result, approximately seven feet of the instrument line slopes down (Penetration pipe) and the remaining instrument line slopes up. This condition provides a low point (which is not drainable) of approximately eight inches in height. If this low point should fill with condensation, a pocket of water or "loop seal" would develop. Pressure pulses would still be transmitted to the transducer, however the resultant signal would be erroneous, variable, and delayed all in a nonconservative direction. This condition cannot be "calibrated

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out" and is not tolerable because the lines are for the numerous pressure transmitters required for RPS and ECCS functions. The condition, had it remained uncorrected, would be expected to result in higher than allowable pre-LOCA pressure, delays in SCRAM initiaton, and erroneous containment pressure indication in the control room.

## Corrective Action

Our corrective action involves installation of self-draining tubing configurations, activation of four spare containment penetrations, and review of all other atmosphere sensing lines from the Primary Containment. The required modifications are currently being implemented according to CCF E11/19 and E&DCR P-4305. The engineering documents referenced are reflective of only the four instrument lines cited by LILCO's ISEG team. The review of all other atmospheric sensing lines has been completed by Stone & Webster and the resultant conclusion is that there are no other lines with this problem. Specifically, all other lines are either heat traced, self-draining, equipped with moisture separators or configured such that moisture condensation possibilities are extremely remote and would result in a <u>conservative</u> error. Therefore, no other modifications are required. This work will be completed by April 30, 1983.

Very truly yours,

Jr. 99. april

M. H. Milligan Project Engineer Shoreham Nuclear Power Station

BWC/spg

cc: Mr. Victor Stello, Director NRC Office of Inspection and Enforcement Div. of Reactor Operations Inspection Washington, D.C.

> Mr. J. C. Higgins USNRC Resident Inspector NRC Site Office (TSC)

All Parties