

LILCO, June 10, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
)
LONG ISLAND LIGHTING COMPANY) Docket No. 50-322 (OL)
)
(Shoreham Nuclear Power Station,)
Unit 1)

Affidavit of John F. Alexander

John F. Alexander, being duly sworn, deposes and says as follows:

1. My name is John F. Alexander. I am employed by the Long Island Lighting Company as the Independent Safety Engineering Group (ISEG) Supervisor. In this capacity, I supervise the activities of six (6) engineers whose full-time responsibility is to improve the safety and reliability of Shoreham. A statement of my professional qualifications has been submitted previously to the Board with LILCO's testimony on quality control/quality assurance issues. On November 17, 1982, I testified on behalf of LILCO before the Atomic Safety and Licensing Board regarding ISEG's evaluation of industry problems. In particular, I discussed an ISEG Project related to check valves (Transcript at 14,419).

2. The purpose of this Affidavit is to provide certain information requested by the Board in its "Memorandum and Order

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Directing Clarification of Certain Matters Related to Contention SC 11" (May 26, 1983). Specifically, this Affidavit addresses the following question, from ISEG's perspective, which is presented on page 5 of the Order:

Suffolk County asserts in Contention SC 11 that LILCO has not demonstrated that the valves used in the safety-related systems at Shoreham will not fail in an undetectable or unsafe mode. With regard to "latent" or "undetectable" safety-related passive mechanical valve failures, the Board wishes to know the extent, if any, of ongoing Staff or LILCO efforts aimed at identifying the causes associated with such failures.

3. Presently, ISEG's efforts in identifying causes of passive mechanical valve failure consist of analyzing specific instances of such failures. ISEG has underway or has completed twenty (20) projects related to valves. Approximately half deal with passive mechanical valve failures. The projects presently underway are:

PROJECT #	PROJECT TITLE
82-033	Loose Motor Operator Bolts on Valves
82-097	HPCI/RCIC Exhaust Line Check Valve
82-114	Velan Swing Check Valve Problems
82-116	Generic Problems with Crane Check Valves
82-137	Inoperative Shutdown Cooling System - Valve Operator Failure
83-009	Loose Stem Clamp on A-D Valves

PROJECT #	PROJECT TITLE
83-019	Examination of Plant Operating Characteristics - Review LDR File for Check Valve Problem
83-020	Operating Experience Review of Bulletins, Circulars and Notices
83-023	Plant Survey for Valve Problems
83-025	A/D Gate Valve Stem Failure
83-030	Failure of Safety-Relief Valve Discharge Line Vacuum Breakers
O&MR 78	Check Valve Failure in EDG Cooling Water (now in 83-020)
COR 40-82	Velan Stop Check Valve Problems

4. ISEG efforts in evaluating industry experience fall generally within one of two categories: industry problems which are the subject of an NRC or some other industry document, or Shoreham-specific problems. ISEG evaluates each and every NRC Bulletin, Notice or Circular that deals with valve failures. Additionally, ISEG investigates other valve-related operating experiences which originate with sources other than the NRC. The major source of this information is the Institute for Nuclear Power Operation's (INPO) Significant Event Evaluation Information Network (SEE-IN) Program. Additional information has been provided by the General Electric's Service Information Letter (SIL) Program. ISEG regularly screens and investigates SEE-IN and SIL issuances. In my April 21, 1983 Affidavit, I presented a list of some of the NRC I.E. documents that were being evaluated by ISEG. IE Information Notice No. 83-26

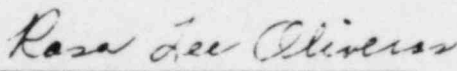
"Failure of Safety-Relief Valve Discharge Line Vacuum Breakers" (May 12, 1983) is presently undergoing ISEG review.

5. In addition to reviewing reported experiences on other plants, ISEG also evaluates the causes of passive mechanical valve failures that occur at Shoreham. For example, ISEG Project No. 82-009 was established in response to a report received from Operations personnel. This failure resulted when the valve stem clamp setscrew loosened, permitting the stem clamp to slide along the stem and allowing the key to fall from its keyway. ISEG independently evaluated the incident and established a cause of the failure, and concurred with the proposed remedy. This incident along with the proposed fix was reported to the NRC in SNRC-880.


John F. Alexander

STATE OF NEW YORK)
COUNTY OF NASSAU)

Subscribed and sworn to
before me this 7th day
of June, 1983.


Notary Public

My Commission Expires on 3/30/84

ROSA LEE OLIVEROS
Notary Public, State of New York
No. 20-4708263
Qualified in Nassau County
Commission expires Mar. 30, 1984.

LILCO, June 10, 1983

CERTIFICATE OF SERVICE

In the Matter of
LONG ISLAND LIGHTING COMPANY
(Shoreham Nuclear Power Station, Unit 1)
Docket No. 50-322 (OL)

I hereby certify that copies of LILCO's Response to the Board's Memorandum and Order Directing Clarification of Certain Matters Related to Contention SC 11 were served this date upon the following by first-class mail, postage prepaid, or by hand (as indicated by *).

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DATED: June 10, 1983