



STATE OF NEW YORK
EXECUTIVE DEPARTMENT
STATE CONSUMER PROTECTION BOARD

RICHARD M. KESSEL
CHAIR AND EXECUTIVE DIRECTOR

March 12, 1985

□ REPLY TO:

99 WASHINGTON AVENUE
ALBANY, NEW YORK 12210
(518) 474-3514

□ REPLY TO:

250 BROADWAY, 17th FLOOR
NEW YORK, NEW YORK 10007
(212) 587-4482

Hon. Samuel J. Chilk
Secretary
Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Chilk:

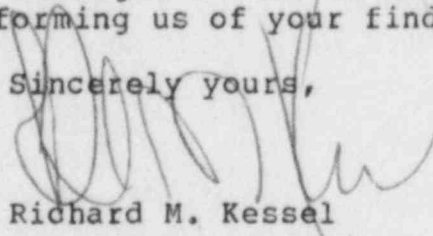
The New York State Consumer Protection Board has received the enclosed correspondence concerning Long Island Lighting Company's Shoreham Nuclear Generation Station. We ask that the Nuclear Regulatory Commission consider this material in its Shoreham hearing proceeding.

Although the letter indicates that some of these matters may have previously been brought to the attention of the NRC during the hearings, others may not have.

While the Consumer Protection Board has no means of independently evaluating the allegations contained in the attached correspondence, these allegations appear to seriously affect the plant's prospects for safe operation. The letter not only alleges technical defects in the plant's control systems, but also indicates a failure by LILCO to detect these problems and an attitude of pressing forward towards commercial operation regardless of defects. There are also allegations that NRC inspectors have apparently failed to uncover or to order correction of these deficiencies.

We request that these allegations be investigated and that appropriate steps taken in light of the investigation. We would also appreciate your informing us of your findings.

Sincerely yours,


Richard M. Kessel

ATT.



8506030140 850513
PDR ADOCK 05000322
P PDR

P.O. Box 207
St. James, New York 11780
February 5, 1985

Mr. Richard M. Kessel, Executive Director
New York State Consumer Protection Board
250 Broadway Room 1725
New York, New York 10007

Dear Mr. Kessel:

As per our conversation yesterday, enclosed are recent allegations about design and construction flaws, fudged documentation, and inadequate preparation of Quality Assurance personnel provided by Instrumentation, and Control technicians at the Shoreham Nuclear Power Station.

The worker who gave the listed systems numbers on the enclosed sheet added the following details and said that to his knowledge, except for the G11 system (which may have been repaired), there has been no resolution to problems brought to the attention of his supervisors:

"G11 System Radwaste Laundry Tank #20 A and 20 B. Data sheets gave alarm points as 8'6". The operator was asked what level he had. Answer was 9'. When the level was checked, using the operator's indicator, it was found to read out in gallons and showed 9', which was 9x100 or 900 gallons, or less than 1/4 full. Later, the calibration data on the level transmitter was found to be wrong. The zero had been suppressed 10 1/2" and the tanks would run over before reading 100%.

1N11. The head correction factor was not calculated into the calibration data. The original calibration is invalid because of this, and one switch would be over-ranged if the head correction was added. No action taken by technical support.

1E41. Sensing line installation created traps which could cause false indications to the switch which would keep the HPCI pump off. Calculated head correction was applied wrong to the seppoint. I was told by the foreman that management did not want to hear about things like this now. Requested review by technical department.

1N35. Generic problem identified by our I and C group and solutions recommended. Could be serious problem if no action taken, because these relays are also used on the diesels and I was told by the engineer that some had already failed because of this problem."

An additional 70 worker allegations are contained in my testimony before the NRC. There was no response from them to questions I raised. John Huber, a former Shoreham worker who offered to take inspectors through the plant -- pointing out problem sites -- was not contacted for this service. His allegations, as well as those I gathered, were dismissed as "not important to safety." Certainly, I am not technically sophisticated, but it would seem to me that the issues raised by all those who spoke out, and by the technician quoted in this letter, are, most assuredly, important to safety.

If you haven't seen the statements made before the Suffolk County Legislature by the two former Quality Assurance inspectors at Shoreham, and they would be helpful, I can get copies to you. There is an additional discrepancy in

George Henry's qualifications -- thus far not noted. He was certified for a Level II position having 1 year's experience, when, in fact, he had had only 10 months' training. While not a major issue, perhaps, according to workers, it is this very shoddiness that typifies design and construction throughout the plant.

Please do use the information in this letter in the most beneficial way.

Again, I want to thank you for the excellent work you have done for all of us.

If I can be of further help, feel free to contact me at the number below.

Sincerely yours,

Patricia Bower

Patricia Bower
(516) 862-9706

On the turbine deck, a motor operated valve (MOV) continued to cycle after being powered. It had been signed-off as approved, but there was no way that approval could have been given, because later check-out and testing demonstrated the design error that allowed cycling rather than the required closing OR opening of the MOV.

The act of tapping instrumentation invalidates what is known as the "hysteresis effect." Yet tapping is done routinely in order to obtain designated calibration (and in the presence of Quality Control, who seem not to realize this act invalidates the very thing to be tested), with sign-off of fudged data noted on required documentation.

For example, I would estimate that most of the Weston Indicators (which are on instruments throughout the plant, including Cat. I - safety related - systems) would fail a proper calibration. These meters could only be calibrated by tapping on them at each calibration step. This act eliminates what is called the "hysteresis effect" (which is what you're trying to document) and should invalidate the calibration. QA watched instruments calibrated in this manner and never knew it should not be acceptable.

There is an on-going problem in the Bailey 24V DC current supply to instruments such as Rosemont transmitters (too many instruments powered from the same source). As instruments to be tested were powered, the load became too great for the supply, causing a voltage drop. As voltage dropped, Rosemonts would not calibrate accurately. The situation became so serious, some instruments had to be turned off in order to do and sign-off required

Additional problems occurred because LISCO allowed technicians who are not qualified in this capacity to function as start-up technicians (there are considerable differences between start-up and maintenance technicians). Therefore, design errors that should have first been picked up on system walk-downs, then surely by start-up technicians, made it through to the maintenance group. Because of my start-up experience, I have been able to pick up many design errors. However, most maintenance technicians do not even have the experience to recognize them when they're obvious, and, therefore, just perform whatever calibration tests are called for. As a result, documentation looks fine, despite the reality of potentially serious problems in the system.

To provide one example: at the J/J' level in the turbine building, there is a switch for an interlock on a steam system. When initially calibrated, the head pressure had not been figured into the calibration. The effect of this situation is that the pressure switch will be "made" all the time. Although I brought it to the attention of technical support, this design error has not been corrected.

NRC technical have not required re-evaluation or re-design of systems that compromise plant safety. Specifically, the NRC has not demanded an engineering re-evaluation of the following conditions: the Reactor Cooling Water System in which the flow indicator does not meet required specifications, re-piping requirements for sensing lines in the High Pressure Cooling Injection System, generic design problems in Radiation Waste Feedline Expansion Joints

Contrary to your statement, "...determination of the plant's safety by various federal bodies," Shoreham workers claim that were the NRC doing its job, SNPS could never pass audit. In clear violation of NRC directives and standards: technicians have not been given annual eye tests, required reading has not been mandated, orientation classes have not been made current, non-certified technicians have been allowed to run tests and sign-off on work as completed, and, perhaps most important, those technicians have changed calibration on instrumentation without authorization and without noting reasons for the changes. Data cards have not been made historically correct and, in some cases, have never been filled out.

(W) I have talked about unqualified personnel -- a situation that may present great problems in the discovery and resolution of design errors and in plant operation. Some of these men have been employed on the basis of resumes that did not match their security clearance papers. Yet they have not been reprimanded or fired for fudging information. Also, there are systems that have design errors so obvious they could not have been approved -- and yet the approval is noted

- Many workers had corrected at least a half dozen instances of fudged data, and agreed fudging was a generic problem at Shdrenham.

(W) Quality Control has been in violation of code by signing-off paper work without on-site review of systems in question, and instrumentation supervisory personnel do not have nuclear experience; so have asked workers to short-cut procedures, especially on surveillances.

In addition, these referential system numbers have been provided:

1N11 - PS - 124 and 125
RH ST to LP turbine

1E41 PS-121L
Pump Suction Pressure - HPCI

1N35 LC - 31W
12 in N35 system 185 relays -- possible wide spread

*see
enclosed
letter*

The material was given over a period of more than three years by the Shoreham workers who are responsible for the heart of operations -- its instrumentation and controls. Although experience has demonstrated the NRC does not protect whistle blowers, making them understandably reluctant to speak out publicly, nonetheless they were willing to share their worries about the plant with me.

Known as "rent-a-techs," with little commitment to any plant or any community, they laughingly referred to Shoreham as the worst, the "dirtiest" (if on-line, saturated with free floating radiation) facility in which they'd worked.

Why did they laugh? Because Shoreham has been especially good to them, providing hours of overtime with only sporadic work requirements and an income of between \$65,000 and \$100,000/year. They laughed because they believe the plant would have, at its best, an operating efficiency like that of the Salem Plant in New Jersey, which, this year, produced electricity at 1% of operating capacity. They laughed because they believe Long Island residents are being duped, that the prime concern of both LIUO and the NRC is not to correct the design flaws that compromise safety at the plant, but to get Shoreham on-line as quickly as possible -- an act that will transfer the burden of payment from LIUO's financial backers to the ratepayers.

In a recent advertisement in favor of opening the Shoreham Nuclear Power Station ("Newsday," September 18, 1984), Long Island Trust substantiated its position by establishing a nuclear power race between the United States and, among other countries, Sweden, stating that 40% of Sweden's energy needs are met by use of nuclear power.

In fact, in 1980, after a public referendum on issues of health and well-being, the Riksdag (Sweden's Parliament) voted to phase out its entire nuclear industry within the next 25 years. Simultaneously, it allocated additional funding for development of alternative energy resources (Resolution NU 1979/80:70).

The reason for Long Island Trust's misinformation is simple. Until now, and only in the "Suffolk County Solar Energy Newsletter," a free paper available in schools and libraries throughout the county, this important decision received NO press coverage.