

RE: PHILA. ELEC. CO. Limerick Gen.Sta. Units 1 & 2. Docket No. 50-352,353 *ac*
November 12, 1985

MOTION BY R.L. ANTHONY/FOE TO THE APPEAL BOARD TO REOPEN THE RECORD ON OUR CONTENTIONS V-3a and 3b IN THE LIGHT OF NEW INFORMATION IN PECO's LETTER OF 10/31/85 to the BOARD, AND MOTION FOR A STAY OF OPERATION OF UNIT 1 REACTOR.

A letter to the Board from PECO, dated 10/31/85, enclosed a copy of Licensee Event Report # 85-80 which was recorded on 10/8/85. The new matter recorded was that (p.A-2) "a potential existed for the occurrence of an operating condition not covered by the plant's operating or emergency procedures, specifically the loss of both redundant Control Structure Chilled Water Systems".

EXISTING SAFETY HAZARD We wish to inform the Board that this potential is one which threatens us and the public because of the possible failure of cooling for the control structure and resultant loss of essential equipment for safe shutdown of the plant. As the LER warns (A-2):

Because the loss of both of the chilled water systems had not previously been postulated, plant procedures did not address actions to be taken to assure the existence of appropriate environmental conditions within the Control Structure following the event.

We concur in PECO's admission of the gravity of this situation by its letter and forwarding of the LER, but we emphatically disagree with PECO "that no further consideration of this matter by the Atomic Safety and Licensing Appeal Board is necessary". We assert that the decision of the Licensing Board in the second PID in favor of the Licensee, (LEP-84-31) in so far as it was based on findings from the evidence presented on our contentions V-3a and V-3b, is now disqualified because of the new information included in LER 85-80. LB's authorization of a license to operate the plant for the same reason is not now valid since LB found that flooding of the Control Building and the disabling of the cooling system equipment, essential for safe shutdown, was not a possibility. LER 85-80 now finds this possibility an immediate one, without any sure procedure for offsetting its effects.

Since the Board in its decision, ALAB -819, affirmed LEP-84-31 on 10/22/85, it must also reconsider its decision and suspend it until there have been further hearings on contentions V-3a, 3b based on the information in LER 85-80. We move that the Board suspend ALAB-819 and reopen the record on V-3a, 3b, and we move, further, that the Board stay the operation of Unit 1 until there is a determination from this renewed hearing that flooding will not prevent safe shutdown of the reactor.

CRITERIA FOR REOPENING THE RECORD. We assert that our motion to reopen ^(1.) is timely since it was not until 10/31/85 we or the Board knew of this potential threat which is not covered by the plant's operating or emergency procedures. ^(2.) The disabling of the chilled water pumps could leave the control building with uncertain cooling facilities for the Main Control Room, Auxiliary Equipment Room, Emergency Switchgear Rooms and Battery Rooms. ^(85-80, p. A-3) The loss of these rooms and the

equipment and personnel involved, because of excessive heat, could prevent safe shutdown in an emergency and prevent the possibility of the reactor operating out of control. There could be no more significant and fundamental safety issue than this. (3.) A different decision would have been reached on contentions V 3a, 3b if the hearing had revealed this new potential for the disabling of the Control Building cooling by flooding from breaching of the cooling tower basins through collapse of the towers. LB would have had to consider mitigating action to prevent this by accepting two of the remedies called for in our conclusions (See Anthony/POE Findings, submitted to LB 5/2/84, p. 8)

2. Remove the hazard of the pipeline explosions by ordering their relocation..
4. Protect the turbine building and the reactor building from flooding from cooling tower pond rupture by a dike across between towers and plant.

PREVIOUS TESTIMONY ON BREACHING OF BASINS AND FLOODING OF CONTROL BUILDING .

During the crossexamination and testimony before LB on 3/22/84 four NRC staff witnesses, Kuo, Romney, Wescott, and Lefave, recorded in the notes of testimony significant consequences that would result from a pipeline explosion (or from a railroad explosion or tornado of similar force). (Transcript pp. 9240 to 9394.) Both cooling towers would collapse and the falling sections would open breaches in both tower basins 50 feet wide. Each basin holds 7 million gallons of water. The basins would lose half of their contents in 6 minutes; some water would drain east and some west, the rest would flow down to the plant and pool at the turbine building. The NRC witnesses testified that there would be no adverse effects on the control building because the water could not enter.

Our contentions V 3a, 3b must now be reconsidered because PECO says in LER 85-80 that water can enter and disable the chilled water pumps, especially via unit 2 construction openings. The effect of cooling tower basin breaches has to be evaluated in new hearings. This subject also encompasses an aspect of our contentions which concerned the tensions and hazards to safe operation of unit 1, in operation, while unit 2 is not loaded and partially constructed. It now has been revealed by PECO that pathways and entrances exist which can allow flooding from unit 2 to unit 1. This hazard to safe operation and safe shutdown of unit 1 is a part of our contentions. It must be a part of reopened hearings .

INADEQUATE PECO REMEDIES AND PROCEDURES VS FLOODING AND LOSS OF CONTROL BLDG. COOLING.

The following analysis demonstrates that the protection PECO has provided against the flooding of the control building, as set forth in LER 85-80, as a result of a pipeline explosion, collapse of both cooling towers and the breaching of the tower basins is not capable of holding back the release of 7 million gallons in six minutes. Nor is the use of "purge" fan operation a reliable alternative to protect the sensitive control equipment from overheating and failure, (85-80, p. A-3)

thereby eliminating the means for safe shutdown. In the hearings before LB on our contentions (above) the NRC witnesses accepted our scenario of simultaneous effects from a pipeline explosion (or tornado, or railroad explosion) which would combine the collapse of both towers, the breaching of both basins and other damage to structures such as the turbine building. The new information in PECO's LER 85-80 shows the vulnerability of the unit # 2 structure, (p.A-2) in that

During the evaluation for the proposed modification, the incomplete construction of certain barriers to water intrusion in Unit 2 was recognized.

The possibility of this intrusion of water into the control building through flooding into unit # 2 was not considered by the NRC witnesses because the openings in unit #2 were not an issue. PECO now says that (LER 85-80, p.A-4)

The cause of the condition was personnel error in incorrectly evaluating and deferring the grading and failing to recognize the safety significance of temporary construction openings.

The hearing record must be reopened and evidence weighed on this new safety hazard. Furthermore, the corrective measures have to be evaluated in a hearing.

There is no present assurance that PECO has considered simultaneous effects from a pipeline explosion nor that such an explosion would not blow openings despite (85-80, p.A-5)

Necessary engineered barriers (having) have been installed in the Unit 2 construction openings and higher curbs (have been) installed at permanent plant accessways to assure that floodwaters will not enter the control structure to the extent (emp. added) that the loss of safety-related equipment will result.

PECO appears to accept the inevitability (above) of floodwaters in the control building, merely trying to limit the "extent" of flooding. This does not seem to us to be a responsible approach to protecting vital plant shutdown equipment. And sandbags set up as a temporary barrier in expectation of unusual rain, as in September for hurricane Gloria (85-80, p.A-5) is not a solution of the threat of flooding which satisfies NRC's safety regulations. Nor could a sandbag barrier be expected to withstand the force of 7 million gallons in six minutes released from the tower basins. Our proposal of a permanent barrier must be reconsidered in re-opened safety hearings.

Further evidence of the vulnerability of openings between Unit 1 and Unit 2 is included in NRC inspection 85-30, dated 10/21/85 (para. 6.1.1-3) which describes a leak of radioactive water from unit 1 radwaste to unit 2 pipe tunnel and access room, to the depth of 18 inches, 8/1-2/85. The report includes these alarming comments: (6.1.3) "...it was not determined how or when this valve had been opened ... (it) may have been overlooked in the valve lineup procedures because it was thought to be a Unit 1 valve..." (6.1.4) the potential for more serious concerns existed..."

There is no substantiation in 85-80 (p.A-3) for PECO assertions: "alternative means and sufficient time would have been available to remove heat from critical areas of the control structure" and "these peak temperatures would only be sustained for a few hours...the electrical components...would be able to function as designed." We assert that a scenario of 90° outdoor temperature for 10 to 20 hours must be assessed as one of the factors against such cooling, in a renewed hearing.

cc: NRC Staff Counsel, LB, Docketing, PECO,
F. Romano, Others on Serv. List,

Respectfully submitted,
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