

OCT 5 1982

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Docket Nos.: 50-352/353

APPLICANT: Philadelphia Electric Company  
FACILITY: Limerick Generating Station  
SUBJECT: SUMMARY OF JUNE 24-25, 1982 PRA MEETING

A meeting was held with Philadelphia Electric Company on June 24 and 25, 1982 at the Holiday Inn in Pottstown, PA to discuss the applicant's responses to the NRC information request of March 23, 1982. These responses are documented in Revision 4 of the PRA, issued June 11, 1982. A list of meeting attendees is provided in Enclosure 1. The following is a summary of the meeting:

- Regarding event tree quantification, the MSIV closure and the loss of offsite power (LOOP) event trees were discussed in detail. GE noted that quantification of accident sequences required development of functional level fault trees which have already been developed for reactor subcriticality, poison injection, pressure relief, coolant injection, depressurization, and containment heat removal. GE also noted that quantification of system level fault trees required conditional probabilities of a system operating given a particular accident sequence.
- In the area of systems and accident sequence modeling, the discussion covered 1) use of Peach Bottom technical specifications and Susquehanna test frequencies in the Limerick PRA, 2) use of realistic core heating conditions rather than more conservative licensing analysis for all success criteria for transients and LOCA's, 3) the Rev. 4 exclusion of the RCIC steam condensing mode of operation, 4) a procedure to establish natural ventilation in the HPCI and RCIC rooms following loss of room cooling, and 5) the high likelihood of hostile environmental conditions (following core melt) disabling the solenoids of three ADS valves.
- The discussion of core-melt phenomenology addressed core heating and degradation, vessel attack by core debris, release of core debris, ex-vessel steam explosion, and dispersal of debris on containment floor. BNL noted that uncertainties in phenomenology are not reflected in the PRA and that these uncertainties impact containment event trees and release fractions. Regarding the relationship between containment failure by leakage and by overpressure, GE stated that a study could be performed to determine the sensitivity of consequences to the containment leakage/overpressure split fraction for values ranging

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from 0.7 to 0.9. Additionally, mean values of core melt frequency were computed in the Limerick PRA while median values are given in Wash-1400. To enable comparison of results, mean values were estimated from the Wash-1400 median values using a lognormal distribution.

- ° Concerning the consequence analysis area, the staff noted that 1) the PRA did not consider the effect of delay time (from accident initiation to start of evacuation) on risk, 2) the applicant has not provided the estimated population distribution corresponding to plant midlife, 3) the thyroid effect on latent fatalities was inadequately estimated, 4) the effect of fog on atmospheric dispersion of the plume needs further consideration, and 5) values of integrated risk are needed for comparison to Wash-1400 results.
- ° At the conclusion of the meeting, the staff noted that any additional issues and questions relevant to the review of Revision 4 would be documented and forwarded to the applicant within a month's time.

*HS*

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Enclosure:  
 As stated

cc: See next page

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