

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:

HOUSTON LIGHTING & POWER CO.  
(Allens Creek Nuclear Generating  
Station, Unit 1)

Docket No. 50-236



INTERVENOR DOHERTY'S FIRST SET OF INTERROGATORIES TO STAFF  
ON CONTENTION #21.

On August 12, 1981, the Board admitted as an issue in Controversy this Contention, and specified in its Order of that date, that discovery be for 35 days. Pursuant to 10 CFR 2.740(b), Intervenor requests they be answered in writing, and the person answering is requested to identify themselves.

- 
1. How much reactivity is calculated to be introduced from the pressure spike observed as a result of the following transients? In addition, please give the per-cent void collapse if it is determined.
    - a. Main Steam Isolation Valve Closure.
    - b. Turbine trip with 10% bypass.
    - c. Electric Load Rejection without bypass.
    - d. Recirculation Control Failure- Increasing Flow
    - e. Loss of offsite power.
    - f. Turbine trip without bypass.
    - g. Pressure regulator fails Closed.
  2. What was the power core density of the Peach Bottom-II plant when the turbine trip tests (1977) were done as reported in EPRI-NP-563?
  3. Does Staff believe this Intervenor through this issue has raised Task Action Plan (TAP) B-19? What differences are there if not?
  4. Why was the Applicant for the La Salle County nuclear plant not required to analyze the MSIV closure with ODYN but allowed to use the feedwater controller and turbine events for thermal limit determination? This party believes the MSIV closure transient is the most severe.



D503  
S  
1/0

Note: See p. 4-23 of NUREG-0549, SER for LaSalle Cty. Plant

5. Why was the RLDY code rejected by the NRC?
6. Have any Commission licensed energy producing reactors ever been derated due to suspected inability to insert negative reactivity sufficient to assure no more than .1% of the fuel rods go into boiling transition?
7. What (if any) conservations are built into the ODYN code?
8. Does Staff believe power core density is an unimportant variable in the calculation of reactivity insertion by collapse of voids? On what documents does Staff rely?
9. (A) What is a Haling mode of operation? (B) Why is Haling mode of operation an important assumption sensitive for ODYN modeling? (See Attachment to Staff Response relevant to Contention #21 of 7/13/81)
10. What is the CREAB safety limit for all transients stated in the Minimum Critical Power Ratio (MCPR) "units"?
11. Does ODYN use the SCAT code to calculate the change in CPR for transient events?
12. Does Staff believe that the ODYN code will accurately predict the pressure and power spike above 69% power for the trubine trip event? Were any Peach Bottom tests at higher power conditions?
13. Will the NEKIN code be cited in Staff testimony on this Contention?

\* \* \* \* \*

CERTIFICATE OF SERVICE

Copies of "INTERVENOR DOHERTY'S FIRST SET OF INTERROGATORIES TO STAFF ON CONTENTION #21" were served on the below parties via First Class U. S. Postal Service this 24<sup>th</sup> of August, 1981, from Houston, Texas; those marked with an asterisk (\*) were served by hand.

Sheldon J. Wolfe, Esq.\*, Dr. E. Leonard Cheatum\*, Gustave A. Linenberger\*, Administrative Judges; J. Gregory Copeland, Esq.\*, Robert Culp, Esq.\*, Counsel for Applicant; Steven Schiski, Esq.\*, Counsel for Staff; Atomic Safety Licensing and Appeal Board, U.S.N.R.C. Docketing & Service Branch, the Several Intervening Parties.

Respectfully Submitted,



John F. Doherty, Intervenor