

(NRTS) recommended in 1970, a special research program to resolve this underprediction, (IN-1370, p. 18).

Hence, Intervenor contends that Applicant's one dimensional time code (described in Supp. No. 2 to the SER for this system because the product generated is too small compared to data resulting from the neutron burst experiments reported in IN-1370 (supra), as is the data generated by WIGLE. (Note: This Intervenor does not contend Applicant's NSSS vendor uses WIGLE or relies upon it, but rather that Applicant's analytic method generates the scram reactivity function for the DB-PEA theory as does WIGLE.)

Hence, Applicant or Applicant's NSSS provider should be required to provide data from power excursion tests from full scale reactors as was recommended by the AEC's test laboratory in 1954 (See "International Report," PTR-738, "A Review of the Generalized Reactivity for Water-Cooled and -Moderated UO₂ Fueled Power Reactor," G. O. Bright, et al.), and the BWR system be redesigned to reduce its reactivity potential.

Q. To be sure that the matter is clarified, is the WIGLE code used in the analysis of the design basis power excursion accident?

A. It is not.

Q. Is the WIGLE code used in the analysis of any transient or accident?

A. It is not.

Q. Is the WIGLE code used to obtain the scram curve for the design basis power excursion accident?

A. It is not.

Q. Is any one-dimensional space-time transient code used to obtain the scram curve for the design basis power excursion accident?

A. No. Let me explain. Mr. Doherty appears to have been confused by the Staff's reference to a one-dimensional code in the section of the

Allens Creek SER which he cites in the contention. That SER section presents a brief outline of the physics calculational models used by the Applicant. In the Staff's discussion of these models, we noted that a one-dimensional, time-dependent, spatial calculation was used to generate the scram reactivity. The Applicant uses that scram reactivity, derived in the manner described, in his point-kinetics plant transient analyses. These scram reactivity results were not used by the Applicant in performing his control-rod-drop accident analyses. Instead, the scram curve for the design basis power excursion (rod drop) accident is obtained from a three-dimensional static code described in NEDO-10527 entitled "Rod Drop Accident Analysis For Large Boiling Water Reactors." That code would underpredict the amount of reactivity inserted by scram and would thus be conservative.

Q. Is the WIGLE code comparable at all, as Mr. Doherty suggests, to the analytical method used by the Applicant to generate the scram reactivity results for the design basis power excursion accident?

A. No. The NEDO report cited above, together with its two supplements involve, as stated, multi-dimensional calculations and complex calculational procedures necessary to obtain a conservative, bounding type analysis for the design basis power excursion event. This analysis has little semblance to the rather simplistic WIGLE code.