



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555



May 18, 1979

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In the Matter of
Virginia Electric and Power Company
(North Anna Nuclear Power Station, Units 1 and 2)
Docket Nos. 50-338 OL and 50-339 OL

Gentlemen:

The attached Board notification material regarding the analysis of a single rod drop event in Westinghouse three loop plants is being provided for your information. This single rod drop is a DNB-limited transient considered to be a moderate frequency event. The calculated consequences of this transient, as discussed in the attached memoranda, are dependent upon whether the reactor is being operated in the automatic or manual control mode. This notification pertains to the analysis of a single rod drop event with the reactor in the automatic control mode.

The consequence of the event as now analyzed by Westinghouse is that the single rod drop could, if the reactor did not trip, create a nominal increase in the overall power level of the reactor (i.e. by a few percent). This slight increase in power would not be expected to create a turbine overspeed situation, due to the increase in power level of only a few percent over normal power levels, and the existence of two sets of pressure relief valves and three sets of redundant overspeed control systems that would prevent an overspeed situation. Nevertheless, there exists a theoretical relationship between the single rod drop event and turbine overspeed, which in turn is a factor in the generation of turbine missiles. Accordingly, the Board notification information is being

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provided because of the potential relationship between the information and one of the issues in the referenced proceeding.

As noted in the memoranda, the Staff has recommended that for operating reactors, such as North Anna Unit 1, a change be made to the set-point and rate-lag time constant in the negative flux rate trip feature, which would eliminate the referenced consequence of the single rod drop event. The Appeal Board will be notified when a resolution of the matter has been accomplished.

Sincerely,

for Stewart A. Truby
Daniel T. Swanson
Counsel for NRC Staff

Enclosure: As stated

cc w/enclosure:
Service List

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