

PDR

SNUPPS

Standardized Nuclear Unit
Power Plant System

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SLNRC 80-21 FILE: 0278.3.1
SUBJ: ATWS - Comments of Westing-
house Owners' Group on
NUREG-0460, Vol. 4

✓ Mr. Ashok Thadani
Reactor Systems Branch
Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Thadani:

The utilities with Westinghouse plants in operation and under construction share the desire of the NRC to resolve the ATWS issue. We believe that Vol. 3 of NUREG-0460 provided a generally satisfactory basis for resolution of ATWS for Westinghouse plants. We agree that some of the concerns expressed by the NRC staff in Vol. 4 are valid and we are prepared to discuss those concerns. But we do not believe that those concerns justify the additional requirements proposed by Vol. 4.

Unquestionably, prevention of an ATWS event is the first line of defense. If the ATWS issue could be resolved by prevention alone, we would be interested in exploring that possibility. Reliability studies by EPRI, and apparently also by the NRC Staff, have shown that the of the Westinghouse scram system is very high. However, the very uncertainties that are inherent in quantification of the system reliability apparently prevent a definitive assessment of the effect on reliability of modifications to the scram system. According to the NRC Staff's evaluation, the modified scram system (MSS) proposed by the NRC Staff for Westinghouse plants provides only a marginal improvement (factor of 2) in the already high reliability of the Westinghouse reactor protection system (RPS). Yet a MSS would require additional equipment, diverse and independent from the RPS, that would have to be added to control rooms that have little available space, particularly after implementation of TMI requirements. We are not persuaded that a MSS would add to safety. We note that the ACRS in its letter of April 16, 1980 concurs with our judgement.

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The calculations submitted by Westinghouse in response to Vol. 3 of NUREG-0460 are referred to by the NRC Staff as "realistic analyses". In fact, they contain significant conservatisms, two of which are: (1) application of an 0.9 multiplier to the homogenous equilibrium model for flow through safety and relief valves, and (2) a moderator coefficient that is conservatively high 95% of the time. Even so, the calculated peak pressure in the reactor coolant system (RCS) of a Westinghouse PWR is several hundred psi below the pressure that could threaten the functionability of the RCS. We do not believe it is necessary to perform additional calculations with additional conservatisms as proposed by the NRC Staff in Vol. 4 of NUREG-0460, given the safety margin in Westinghouse plants and the low probability of an ATWS event. We also think that stress limits consistent with retaining functionability, rather than the lower service level C limits, are appropriate.

We agree that the possibility of operating with blocked PORV's must be considered and concur that appropriate limiting conditions for operation be written into plant Technical Specifications.

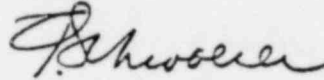
As we interpret the NRC Staff's concern for containment isolation after an ATWS event, we believe that this is resolved by the requirement of NUREG-0578 for diverse containment isolation. We would be pleased to discuss this issue further with the NRC Staff.

We concur that operating procedures should be developed for taking a plant to safe shutdown after an ATWS event. A procedures subcommittee of the Westinghouse ATWS Owners' Group has been appointed and is studying this issue.

The Westinghouse ATWS Owners' Group has developed a proposed generic design of an ATWS mitigating system (AMSAC) that we are prepared to discuss with the NRC Staff. The system would be designed to IEEE-279 requirements to the extent practicable and consistent with providing diversity from the RPS. In many plants, particularly operating and near-term OL plants, diversity of AMSAC from the RPS can best be achieved by interfacing AMSAC with BOP equipment in the turbine building. Although this is quality equipment, it does not have an IEEE-279 pedigree. Therefore, though new circuitry could incorporate redundancy and other IEEE-279 requirements, rigorous adherence to IEEE-279 for the total system might be impossible to achieve. We believe that the NRC Staff's resolution of AMSAC requirements should allow for this divergence from IEEE-279 requirements.

We believe that a meeting between representatives of the Westinghouse Owners' Group and NRC Staff prior to approximately May 20 would be beneficial. I plan to contact you or Dr. Mattson in the near future about a proposed agenda and date for a meeting.

Very truly yours,



F. Schwoerer
Chairman, Westinghouse ATWS
Owners' Group

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cc: Dr. R. Mattson