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May 15, 1980

ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

Honorable John F. Ahearne
Chairman
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Anticipated Transients Without Scram (ATWS)

Dear Dr. Ahearne:

This letter is sent to you on behalf of the owners of Combustion Engineering (C-E) designed and operating NSSS power plants. The recent precipitant release of Volume 4 of NUREG-0460 has left us with unsettling concern that the NRC staff is on a course that will prescribe a "resolution" to the ATWS issue without due regard to outstanding industry comments on the issue and on a schedule which precludes our review of the NRC proposals. The sense of anxiety which pervades this entire issue centers on the fact that there may be some potential for the Volume 4 "resolution" actually decreasing overall nuclear plant safety. It is most important that ATWS be placed in proper perspective with other unresolved issues while taking into consideration existing plant design criteria. In this manner, an integrated systems approach to nuclear safety can be pursued.

Over the period of years that the ATWS issue has been discussed, the nuclear industry has demonstrated the probability of an ATWS event, in the existing PWR designs, to be sufficiently low that ATWS provides only a small contribution to the total risk to the health and safety of the public. If equipment modifications were to be imposed to further reduce the total risk contribution from ATWS events, these modifications should be preventive measures which will ensure that overall nuclear plant safety is being significantly improved.

It appears that the staff's intention is to impose hardware modifications on operating plants to provide an "expeditious safety increment" even though such actions would be accomplished prior to a full evaluation of the prescribed changes for possible generic or plant specific systems interactions. Sound engineering approach to such effort makes it imperative that proper attention be paid to:

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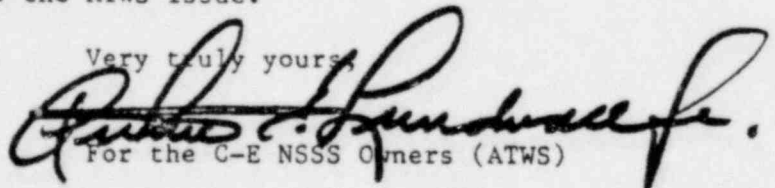
- (a) The interrelationships among various plant transients, the design features which negotiate those transients, and normal system/equipment operation such that overlapping areas of concern can be treated simultaneously and parades of superseding changes can be avoided;
- (b) The possibility that system/equipment changes on the one hand may cause adverse interactions with existing design features on the other hand or may actually worsen the consequences of an as yet unforeseen operational anomaly; and
- (c) The fact that the logical way to assure ourselves that the proper action is being taken is to bring the full available expertise to bear on the issue. In the case of ATWS modifications, the normal rulemaking review process is probably the best way to properly vent the issue.

Resolution of ATWS should be pursued with the appropriate priority relative to other issues to conserve time and the resources of both the industry and NRC. Such priority should be assigned after careful consideration of the relative contribution of each issue to overall risk.

You will recall that the Staff's pre-Volume 4 approach to ATWS was to try to establish a resolution benchmark through what came to be known as the Early ATWS Verification Program. We feel that sufficient analytical results and documentation are now available to successfully complete this Program. We are providing Mr. Denton with our specific comments on the NRC staff conclusions which were expressed in Volume 4 of NUREG-0460. A more comprehensive and detailed discussion of NUREG-0460, Volume 4 is now in preparation and will be delivered in July, 1980.

We urge that your consideration be given to the concerns identified in this letter. We look forward to the opportunity to work with the NRC staff to achieve a suitable resolution to the ATWS issue.

Very truly yours,



For the C-E NSSS Owners (ATWS)

cc: Commissioner Bradford
Commissioner Gilinsky
Commissioner Hendrie
Commissioner Kennedy
Dr. Milton S. Plesset, ACRS
Dr. William Kerr, ACRS Subcommittee on ATWS
Mr. H. R. Denton, US NRC