Consumers Power Company

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ANTICIPATED TRANSIENTS WITHOUT SCRAM FOR LIGHT WATER REACTORS
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The following comments concerning NUREG-0460, Volume 4, "Anticipated Transients Without Scram for Light Water Reactors," are presented for your consideration:

1. The issuance of Volume 4 of NUREG-0460 resulted from the NRC's evaluation of the early verification program as a failure. In fact, the program has not been a failure although it has slipped behind the original schedule. This slippage was caused by the impact of the Three Mile Island accident on industry and NRC resources and the voluminous amount of information that was required to be supplied. In issuing Volume 4, the NRC effectively gave up on the program before all information had been received and evaluated. Specifically, it was written prior to the receipt and review of the main submittal by B&W. Additionally, sufficient clarifying interchanges between the NRC and industry were not conducted. Many of the technical concerns expressed in NUREG-0460 Volume 4 are of a type which could be resolved by such a dialogue.

2. Expeditious resolution of the ATWS issue, the goal of NUREG-0460 Volume 4, appears to be more motivated by its protracted history as an "unresolved safety issue" than by an evaluation concluding that ATWS is a safety problem requiring immediate action. The NRC has stated previously and reiterated in Volume 4 of NUREG-0460 that ATWS does not currently impose an unacceptable risk to the public. From a risk perspective, the expected increase in the number of operating plants does not justify issuance of orders until a thorough and systematic evaluation of plant designs and the total impact of potential changes can be fully evaluated. It is recommended that resolution of ATWS be placed in perspective with the myriad of other issues contained in the NRC's Action Plan (Draft NUREG-0660) and efforts be prioritized based upon relative safety improvements. The implementation schedule for ultimate resolution should also be based upon the relative improvement in overall risk afforded and where hardware changes are necessary should allow for an orderly procurement and installation during scheduled plant outages.

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3. The requirements for ATWS resolution described in Volume 4 are prescriptive in nature disregarding significant differences in the design of individual plants. Plant specific design features may significantly impact the appropriateness and overall plant safety of certain required modifications. Plant designers are most qualified to evaluate this concern and to develop proper changes to achieve desired goals while assuring interactions adversely affecting overall plant safety are not created (eg installation of automatic AFW initiation which may create an unreviewed safety question with respect to steamline break events). The NRC should not detail requirements for specific hardware fixes but should establish acceptance criteria which industry may satisfy through any acceptable means.

4. The resolution of the ATWS concern should result from the establishment of an acceptable level of risk from ATWS events followed by design review and modification as necessary to achieve the established goal. Necessary modifications could be either preventative or mitigative in nature, but would be at the designer's option. Lessons learned from the Three Mile Island accident, along with increased small break LOCA risks associated with additional relief valve capacity, would appear to favor preventive over mitigative fixes.

5. Volume 4 of NUREG-0460 concludes that the future likelihood of severe ATWS consequences could become unacceptably large and proposes design requirements for assuring continuance of the desired level of safety in the future. Since this safety goal is not specified, it is not clear how it will be violated by operation of current design plants or how it will be assured by modifications specified in this document.

Please consider these comments in your future deliberations on this issue.

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