Duke Power Company
P.O. Box 1006
Charlotte, NC 28201-1006

M. S. Tuckman
Senior Vice President
Nuclear Generation
(704)382-2200 Office
(704)382-4360 Fax

DUKE POWER

August 7, 1995

Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Proposed Advanced Reactor Design Certification Rules; Duke Power Company Comments

Introduction

The NRC has taken two major strides in its effort to revitalize the process by which nuclear plants are licensed in the U. S. First, in 1989, the NRC issued 10 CFR Part 52, which provides for early site permits, certification of standard designs, and a combined construction permit and operating license (COL). Safety issues are to be resolved prior to construction and are not subject to re-review and re-litigation in subsequent proceedings. The second stride occurred in April of 1995, when the NRC issued Notices of Proposed Rulemaking (NOPRs) regarding the design certifications of the GE Advanced Boiling Water Reactor and ABB-CE System 80+ designs. The NOPRs state that the rules seek to achieve: 1) the early resolution of safety issues, 2) enhanced safety and reliability of future nuclear power plants, 3) a more predictable and stable licensing process, and 4) standardization of future plants; goals that apply broadly to the whole Part 52 licensing process, not just design certification. Unfortunately, the implementation of the Part 52 process, as set forth in the NOPRs, falls fatally short of these goals. Duke Power hereby expresses strong affirmation for the comments submitted by both ABB-CE and the Nuclear Energy Institute; the major points of which are summarized below.

Lack of finality in designs

Part 52 states that "the Commission shall treat as resolved those matters resolved in connection with the issuance or renewal of a design certification." (10 CFR 52.63(a)(4)) In contrast with these words, the NOPRs provide that only those nuclear safety issues

D510

associated in the Final Safety Evaluation Report (FSER) or Design Control Document (DCD) have finality. Clearly, a design certification becomes significantly less meaningful if "certified" issues lack finality. This issue alone would be enough to deter a utility from undertaking to license a new reactor. To ensure the viability of the Part 52 licensing process, finality must be provided to a substantially broader scope of matters than those described in the proposed rules. Finality must be accorded to **all** matters within the scope of the approved designs. It is self-evident that 10 CFR 52.63(a)(4), quoted above, means that all issues related to the adequacy of the standard design and all matters resolved on the rulemaking docket, including matters discussed in the applicant's Standard Safety Analysis Report (SSAR) or raised in design certification rulemaking, should be considered resolved and not subject to further consideration in a license proceeding.

Additional "applicable regulations"

SECY-90-016 and SECY-93-087 identified a number of NRC positions on severe accident and other technical issues that are not embodied in current NRC regulations. The NOPRs propose that more than a dozen of these be designated as "applicable regulations"; thus giving them a status similar to the Commission's regulations in Part 50. The Staff's stated purpose for their proposal is to facilitate issuance and renewal of design certifications and to ensure compliance with existing design requirements. These additional "applicable regulations" are unnecessary, are duplicative of requirements already stated in the design certifications, and create potential for destabilizing backfits. For example, the proposed "applicable regulations" require the use of "best available methods" to ensure equipment survivability during accident conditions. The "best available method" will almost certainly change over time. As a result, the applicant or licensee could be required to perform new evaluations or make backfits to its plant(s) to reflect changes in state-of-the-art analytical methods or hardware, even though changes are not necessary to provide or maintain adequate protection for the public health and safety, and even though backfits would not result in any increase in safety. Adoption of the proposed "applicable regulations" will introduce a large and unfortunate element of risk into the licensing process.

Adherence to ITAAC in the Part 50 licensing process

It would be doubly unfortunate if the NRC chose to adopt the proposed rule as is - which substantially diminishes the intended force of Part 52 - and at the same time made it extremely difficult to license the advanced designs under Part 50 by requiring adherence to ITAAC (inspections, tests, analyses, and acceptance criteria). In order to provide future applicants the option to utilize 10 CFR Part 50, with its two-step process, it makes absolutely no sense to specify that ITAAC must be met.

Conclusion

Duke Power Company shares the concerns expressed by ABB-CE and NEI in their comments. Whether an advanced reactor design certification is ever referenced by a U. S. utility will depend largely on how the NRC staff resolves industry comments on the NOPRs. Accordingly, Duke Power encourages the NRC to review these comments carefully and take the measures necessary to ensure that the goals of 10 CFR Part 52; i.e., to create a stable and predictable licensing process, are achieved.

Very truly yours,

M. S. Tuckman

M. S. Tuckman

cc: Mr. V. Nerses, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 14H25, OWFN
Washington, D. C. 20555

Mr. L. A. Wiens, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 14H25, OWFN
Washington, D. C. 20555

Mr. R. E. Martin, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 14H25, OWFN
Washington, D. C. 20555

Stuart D. Ebneter, Regional Administrator
U.S. Nuclear Regulatory Commission - Region II
101 Marietta Street, NW - Suite 2900
Atlanta, Georgia 30323

Mr. G. F. Maxwell
Senior Resident Inspector
McGuire Nuclear Station

Mr. R. J. Freudenberger
Senior Resident Inspector
Catawba Nuclear Station

Mr. P. E. Harmon
Senior Resident Inspector
Oconee Nuclear Station