



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

ACRSR-1406

FDR

October 11, 1990

Mr. James M. Taylor  
Executive Director for Operations  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Taylor:

SUBJECT: DRAFT IMPLEMENTATION DOCUMENTS FOR THE PROPOSED LICENSE  
RENEWAL RULE

During the 366th meeting of the Advisory Committee on Reactor Safeguards, October 4-6, 1990, we reviewed draft Regulatory Guide, Task DG-1009, "Standard Format and Content of Technical Information for Applications to Renew Nuclear Power Plant Operating Licenses," and associated draft NUREG-1299, "Standard Review Plan - License Renewal." Our Subcommittee on Plant License Renewal also reviewed this matter during its meeting on October 2, 1990. During this review, we had the benefit of discussions with representatives of the NRC staff and of the documents referenced. These documents are an important part of the program to implement the proposed license renewal rule, 10 CFR Part 54, that was published for public comment on July 17, 1990. We commented to the Commission on this proposed rule in our report of April 11, 1990.

We believe that the general approach proposed by the staff for implementation of the license renewal process is reasonable, and we agree that both of the subject documents should be published at this time for public comment. However, we have a concern, discussed below, about control of the process for selecting structures and components important to license renewals (SCITLRs). We believe that this matter should be considered further as public comments on the rulemaking are evaluated. We also offer several comments on the implementing documents.

There is justification for the general philosophy of the proposed license renewal rule. Aging-degradation issues should be dealt with by more explicit programs as the plant age passes beyond the general target age for which it was designed. Our understanding is that a 40-year operating life has been used for most structures and components in nuclear power plants. However, that target age and the design were not so precisely defined that there should be a step increase in licensing requirements as the plant passes its 40th anniversary of operation. As we said in our April 11, 1990 report, "no specific form of plant aging becomes magically decisive at forty." We have a concern that the license renewal process under the proposed 10 CFR Part 54 will permit or encourage a

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significant expansion of regulatory requirements as a plant phases into operation under a renewed license. We had hoped and expected that the implementing documents would provide some clear indications of how such regulatory expansion would be constrained. They do not. Introductory material in the proposed 10 CFR Part 54 indicated that the backfit rule would somehow be used in controlling the extent to which regulatory requirements would be expanded. However, the rule itself does not make it clear how this is to be done, nor do the draft implementing documents. We recommend that the rule or the implementing documents be revised to ensure that the process for selecting SCITLRs and developing new requirements is sufficiently disciplined.

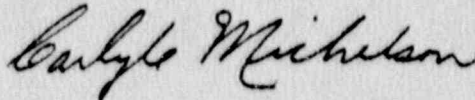
In addition, we have several specific comments on the proposed implementing documents:

- (1) In the proposed process for evaluating age-related degradation, the draft Regulatory Guide indicates that a decision about classification of a given structure or component should be made on the basis of whether the structure or component is routinely replaced or refurbished (see Block 12 of Figure 1B in the draft Regulatory Guide). We recommend that satisfactory results of inspection or monitoring should also be credited at this decision point.
- (2) Many of the unresolved safety issues and generic safety issues that have been analyzed over the past several years have had assumptions about expected plant life factored into their resolution. The staff has indicated that, in general, an expected life of 60 years instead of 40 years would make little difference in cost-benefit analyses, given the large uncertainty inherent in the calculated results. However, the staff also indicated that a review of all such resolutions will be made, in the light of new expectations about plant lifetimes, given the changes of 10 CFR Part 54. We would like to be kept informed about the results of this review.
- (3) Certain industry topical reports on the subject of aging degradation are being developed by NUMARC, and are expected to be approved by the staff as acceptable references in license renewal applications. We encourage the development of these industry reports as a means of providing a comprehensive technical base for license renewal reviews. Because the license renewal process can be expected to extend over many years, much technical information about aging will be in need of revision, and some means for formally updating these industry reports and their approval by the NRC should be provided.
- (4) Perspectives gained from applicable risk assessment should be used in the selection of SCITLRs.

- (5) Consideration should be given to including physical security systems in the SCITLR program.

We plan to continue our review of this important subject after public comments on this proposed rule, the Regulatory Guide, and the proposed Standard Review Plan are received and assimilated.

Sincerely,



Carlyle Michelson  
Chairman

References:

1. U.S. Nuclear Regulatory Commission, Office of Nuclear Regulatory Research, Draft Regulatory Guide, Task DG-1009, "Standard Format and Content of Technical Information for Applications to Renew Nuclear Power Plant Operating Licenses," Revision 5A dated August 1990, and U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Draft NUREG-1299, "Standard Review Plan, License Renewal," dated August 1990, transmitted by memorandum dated August 31, 1990, from Eric S. Beckjord, RES, and Thomas E. Murley, NRR, to Raymond F. Fraley, ACRS
2. U.S. Nuclear Regulatory Commission, Rules and Regulations, 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants," Proposed Rule Making, Published July 17, 1990