



**NUCLEAR MANAGEMENT AND RESOURCES COUNCIL**

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**Robert W. Bishop**  
Vice President &  
General Counsel

May 25, 1993

Mr. Samuel J. Chilk  
Secretary,  
Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

**SUBJECT:** SECY-92-287A, *Form and Content for a Design Certification Rule*

Dear Mr. Chilk:

The Nuclear Management and Resources Council (NUMARC)<sup>1</sup> has reviewed SECY-92-287A, *Form and Content for a Design Certification Rule*, and has significant reservations concerning the NRC staff's proposed recommendations. A number of the recommendations are unnecessary, unduly burdensome, or inconsistent with Part 52. We are submitting the comments for the Commission's consideration as it decides the important issues addressed in SECY-92-287A.

Part 52 was created to provide an improved, more efficient, effective, stable and predictable regulatory regime for the licensing of new commercial nuclear power plants. The industry is concerned that a number of the staff positions articulated in SECY-92-287A will negatively impact the realization of these goals of Part 52. The areas of most concern are:

- The proposal to adopt an array of NRC staff positions as additional "applicable regulations" in design certification rules;
- The asserted loss of finality for Tier 2 matters changed through the § 50.59 process;

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<sup>1</sup>NUMARC is the organization of the nuclear power industry that is responsible for coordinating the combined efforts of all utilities licensed by the NRC to construct or operate nuclear power plants, and of other nuclear industry organizations, in all matters involving generic regulatory policy issues and on the regulatory aspects of generic operational and technical issues affecting the nuclear power industry. Every utility responsible for constructing or operating a commercial nuclear power plant in the United States is a member of NUMARC. In addition, NUMARC's members include major architect/engineering firms and all of the major nuclear steam supply system vendors.

- The proposed use of the Part 50 backfit standard to govern staff proposed changes to Tier 2;
- The proposed Tier 2 exemption process;
- The suggestion that selected requirements from the first design certification rule would be applicable to subsequent certification rules; and
- The proposed specification of NRC staff positions in Tier 2 that, if changed, would constitute unreviewed safety questions.

Further amplification of these concerns is provided in the enclosure to this letter.

The industry supports the NRC staff recommendation that a COL applicant should be afforded the option to utilize a process similar to § 50.59 to change Tier 2 material without prior NRC approval unless the change involves a change to the certified design (Tier 1), the technical specifications, or results in an unreviewed safety question as defined in § 50.59. We believe this is a constructive recommendation that will enable Part 52 to be implemented in a more practical manner.

SECY-92-287A states that after the NRC staff receives the Commission's final comments or preliminary conclusions on the requested recommendations, it will revise SECY-92-287 and publish a proposed certification rule framework in the Federal Register for public comment. We believe that early public input will be productive, and we commend the NRC staff for proposing this course. However, we understand that this Federal Register notice may be in the form of an Advance Notice of Proposed Rulemaking (ANPR), and we are concerned with the formality, potential confusion and delay that may result from conducting an ANPR process at this time. Instead, we recommend that the Commission follow the successful process and format used to receive wide public input to SECY-92-381: a notice of availability of the staff paper, a public workshop, an opportunity to submit written comments, and NRC consideration of the comments received in its on-going deliberations on Part 52 implementation.

NUMARC appreciates the opportunity to provide its views to the NRC on these important Part 52 implementation issues. We believe it is important for the NRC to resolve the issues described above to ensure that Part 52 can be implemented in a practical manner and further delays to the design certification schedules avoided. The

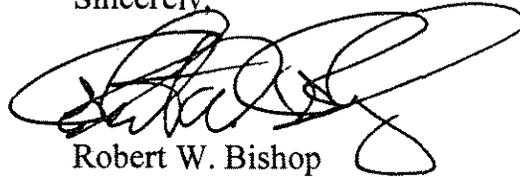
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industry will continue to work with the NRC staff to resolve these issues to enable Part 52 to become an improved, more efficient, effective and predictable licensing process.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert W. Bishop", written over a large, stylized, circular flourish.

Robert W. Bishop

RWB/acm  
Enclosure

c: Chairman Ivan Selin  
Commissioner Kenneth C. Rogers  
Commissioner James R. Curtiss  
Commissioner Forrest J. Remick  
Commissioner E. Gail de Planque  
James M. Taylor, Executive Director of Operations, NRC  
Thomas E. Murley, Director, NRR

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Joseph Gray, Esq.  
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Myron Karman, Esq.  
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b: J. Colvin  
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A. Heymer  
R. Bell

Detailed Comments on SECY-92-287A,  
Form and Content for a Design Certification Rule

The proposal to adopt an array of NRC staff positions as additional "applicable regulations" in design certification rules

The NRC staff has proposed that "staff positions" (such as those in SECY-90-016 and SECY-93-087) which deviate from or are not embodied in current regulations, should be "stated broadly" and added to the design certification rule as free standing "applicable regulations" as that term is used in § 52.48, 52.54, 52.59, and 52.63. The industry strongly disagrees with the NRC staff's proposal.

The NRC staff's motivation in recommending this approach, as we understand it, is to assure the applicability of these Commission-approved positions as governing regulations at three process junctures: (1) when issuing a design certification rule; (2) when considering possible backfits; and (3) when considering design certification renewals. We submit that the approach proposed by the NRC staff is not needed to achieve those purposes, that its implementation unduly complicates an already intricate design certification rule structure and more importantly, will result in the creation of instability and unpredictability in the Part 52 certification and licensing processes -- an outcome which is at odds with a fundamental purpose of Part 52. Further, the current process contains suitable restraints on a licensee's ability to change its plant design; elevating selected staff positions to become "applicable regulations" is neither necessary nor appropriate to accomplish that goal.

There is, to begin with, a lack of need for creating within the design certification rule a free-standing collection of additional "applicable regulations." Commission-approved staff positions that are imposed on a design certification will be approved by the NRC staff in the issuance of the SER on the design and will be reflected in the design provisions contained in Tier 1 and Tier 2 of the rule's Design Control Document (DCD). As integral elements of a design certification rule, those provisions become part of an "applicable regulation" for all three of the purposes noted above, i.e., they will govern issuance of the design certification rule, constitute "applicable regulations" in considering subsequent compliance backfits pursuant to § 52.63(a), and comprise part of the regulatory base for making design certification renewal determinations.

The final design, which the NRC staff must conclude meets all applicable requirements, will have appropriate elements of the staff positions listed in SECY-93-087 reflected in Tier 1 and Tier 2 of the design. These features will be verified through the normal Part 50 quality assurance program and through ITAAC for Tier 1. These activities will be confirmed through the Sign-As-You-Go (SAYGO) inspection program currently under development by the NRC staff. Part 52 controls generic changes from Tier 1 through rulemaking, and controls Tier 1 plant-specific changes through the use of

the exemption process. Furthermore, plant-specific changes in the Tier 2 design cannot be made by a licensee without prior Commission approval if such changes involve an unreviewed safety question, a change in the technical specifications, or a change to Tier 1. Thus, the current process provides the NRC with legally enforceable mechanisms for assuring that the staff positions that have been reflected in Tier 1 and Tier 2 will continue to be complied with throughout the lifetime of a plant that references the certified design, even in the absence of additional "applicable regulations."

In addition, formulating independently-stated "applicable regulations" to include in a certification, which is itself a rule, generates needless duplication, complexity, and delay. After achieving agreement on the specifics of the design, the staff's proposed approach would result in yet another round of extensive discussion to reach agreement on matters that have already been agreed to in detail, but now must be formulated in more "broadly stated" positions. The specific wording of those positions will likely be a subject of controversy if those positions are to become free-standing "applicable regulations." Such debates present the prospect of further delays in certification schedules and a prolonging of the certification proceedings, even though there is agreement that the specifics of the design incorporate the salient features of the staff positions being debated. Experience teaches that the recasting of technical positions into "broadly stated" regulations is not a routine or mechanical task. The challenge will be particularly great where there are numerous technically complex issues, as is the case in design certification. In an era where both industry and the government are seeking ways to use their resources more effectively, the recasting of technical positions into formal regulations would introduce additional complexities into an already complex process, resulting in a need for increased resources with no safety benefit.

Moreover, the inclusion in the design certification rule of this new category of "applicable regulations," coupled with the additional staff proposal to include within Tier 2 a category of matters that would be designated "unreviewed safety questions" for purposes of applying the § 50.59-type change process, transforms an already complicated two-tier structure into a four-tier maze.

Finally, these "broadly stated," free-standing, "applicable regulations" carry the potential for new and diverse interpretations thereof by the NRC staff during the life of the design certification -- interpretations which are at odds with the understandings that were translated into specific Tier 1/Tier 2 requirements in the DCD. The injection of this factor into the Part 52 process runs counter to the objective of design stability and, indeed, the standardization ethic. In sum, we see the staff proposal as destabilizing, rather than adding greater certainty to the Part 52 design certification and facility licensing process.

### The asserted loss of finality for Tier 2 matters changed through the § 50.59 process

Changes from Tier 2 that require NRC approval would, of course, be subject to a hearing opportunity, as specified in Part 52. We disagree, however, with the staff assertion in response to Question Q2(a) that changes under the § 50.59-type process will no longer be considered matters resolved in connection with the issuance or renewal of a design certification within the meaning of § 52.63(a) (4). Such changes are sanctioned by, and consistent with, the rule containing Tier 2. Such changes made by a COL holder can be challenged in the Part 52 proceedings preceding fuel load authorization only on the basis of non-compliance with applicable acceptance criteria. For there to be a hearing based upon a design change processed under § 50.59, it would have to be demonstrated that the questioned § 50.59 change resulted in an ITAAC not being satisfied. The only issue that is permitted to be challenged in a subsequent hearing proceeding is whether the § 50.59-type process had been properly conducted.

In the NUMARC response to SECY-92-287 dated October 5, 1992, we addressed the degree of finality accorded to § 50.59 changes to Tier 2. Those changes will be performed in compliance with Commission guidance and regulations and, just as in current operating facilities, there is finality associated with those changes along with the rest of the design as long as the process has been properly conducted. We agree that if an incorrect assumption or conclusion is reached and an unreviewed safety question does exist, then an appropriate proceeding should address that specific change.

### The proposed use of the Part 50 backfit standard to govern staff proposed changes to Tier 2

SECY-92-287A raises several concerns regarding the ability of a licensee to change Tier 2 via a § 50.59 process on the impact of Tier 2 changes on standardization. The industry believes the issues associated with standardization were largely resolved by the issuance of the SRM on SECY-90-377, *Requirements for Design Certification under Part 52*. The new Part 52 certification and licensing process, through Tier 1 and Tier 2, engender a high degree of procedural and technical standardization. Consistent with that goal, the industry is developing extensive standardization programs covering design, construction and operations for those aspects outside the regulatory environment through the *NPOC Strategic Plan for Building New Nuclear Power Plants*. The industry believes that standardization, as envisaged in Part 52, will be attained through the stringent criteria described in § 52.63 for Tier 1 changes, through the § 50.59 criteria for controlling changes to Tier 2 by a COL applicant and holders, and through rigorous commercial standardization practices and criteria now being established by the industry for the next generation of nuclear power plants. In this manner, an effective standardization process, procedural and technical, will be incorporated into the design, construction and operating regimen for future nuclear power plants licensed under Part 52.

The NRC staff proposes that it be authorized to impose new staff positions or requirements pursuant to § 50.109(a)(3). As stated in its October 5, 1992, comments on SECY-92-287, the industry agrees with the Commission's position that the NRC should be able to change Tier 2 requirements only if the change meets the more stringent "adequate protection" backfit standard in § 52.63(a), rather than, as proposed by the staff, the backfit standard in § 50.109(a)(3). SECY-92-287A presents no justification for a change in the Commission's guidance given in the SRM on SECY-90-377. As observed by Commissioner Curtiss at the September 8, 1992, staff briefing of the Commission, applying the § 50.109 standard to such Tier 2 changes would amount to a mechanism for rolling ostensibly cost-justified improvements into the Tier 2 design.

While the staff-proposed backfit standard is a permissible interpretation of Part 52 -- as recognized in the 1990 NUMARC comment letters cited by the staff -- the industry believes that the later SRM directive of the Commission directs a preferable course because it furthers the Part 52 goals of standardization and licensing predictability and stability. We therefore urge the Commission to adhere to its earlier SRM guidance which directed that § 52.63(a) govern both Tier 1 and Tier 2 backfitting, and that this be expressly prescribed in individual design certification rules.

#### The proposed Tier 2 exemption process

The industry also disagrees with the NRC staff recommendation to add an exemption process -- to be defined later by the staff -- for making facility-specific changes to Tier 2. Section 52.63(b) governs plant-specific changes by a licensee. In particular, § 52.63(b) divides plant-specific changes into two categories, and identifies a different change process for each category. For changes in the "design certification" (i.e., Tier 1), § 52.63(a) prescribes a special exemption process. In contrast, for other "changes to the design" (i.e., Tier 2), § 52.63(b)(2) states in part:

Subject [to] § 50.59, a licensee who references a standard design certification may make changes to the design of the nuclear power facility, without prior Commission approval, unless the proposed change involves a change to the design as described in the rule certifying the design.

The Commission's Staff Requirements Memorandum (SRM) dated February 15, 1991, endorsed use of "a process similar to 10 CFR 50.59 for making changes to Tier 2 information." The purpose of both § 52.63(b)(2) and the Commission's SRM is to enable a licensee to make facility-specific changes from Tier 2 pursuant to § 50.59. If a proposed change from Tier 2 requires NRC approval because it involves an unreviewed safety question or a change in the technical specifications, § 50.59 prescribes that it be processed as a license amendment under § 50.90. Thus, Part 52 already provides a

mechanism for a licensee seeking facility-specific Tier 2 changes that require NRC approval, i.e., through an amendment to a combined license. We urge that the Commission confirm this conclusion in the SRM on SECY-92-287A and that this approach be expressly sanctioned in individual design certification rules.

The staff proposes, and we support, the availability to combined license applicants of a § 50.59-type process for making changes from Tier 2. Should such an applicant-proposed change require NRC approval (because, e.g., it involves a change to a technical specification), an exemption from Tier 2 rather than a license amendment would be needed. For purposes of consistency, we urge that the standard for NRC approval of such an exemption be the same as the standard that would apply for granting NRC approval of a license amendment, if the change had been sought after a combined license had been issued.

The suggestion that selected requirements from the first design certification would be applicable to subsequent certification rules

The industry has significant reservations over the suggestion that technical requirements from the first rule certifying a design should apply to all subsequent design certification rules. Each certification is a rulemaking specific to that design and, as we have stated in past correspondence and comments on SECY-92-262, SECY-92-287 and on the Advance Notice of Proposed Rulemaking (ANPR), *Acceptability of Plant Performance for Severe Accidents; Scope of Consideration in Safety Regulations*, (52 Federal Register 44513, dated September 28, 1992), the imposition of generic technical requirements is not necessary, would be difficult to implement for varying complex designs and, as a result, should be addressed on an application-by-application basis. The imposition of any substantive technical requirements from the first design certification on subsequent designs, even in selected areas, is inappropriate, and will significantly and negatively impact the current design certification schedules. We do believe, however, that experience gained in the procedural aspects of design certification during the first design certification proceeding(s) may be of generic applicability and result in more efficient processes for subsequent certification proceedings. It would be appropriate for those "procedural lessons learned" to be incorporated, although certain procedural requirements may not be applicable to all certification rulemakings.

The proposed specification of NRC staff positions in Tier 2 that, if changed, would constitute unreviewed safety questions.

SECY-92-287A states that a design certification rule will identify "selected staff positions from the final safety evaluation report that will be treated as 'unreviewed safety questions' for purposes of the '50.59-like' change process." In interactions with the NRC staff on Tier 1/Tier 2 content for the evolutionary plants that took place from December 1992 to February 1993, a reasonable and practical balance was established for the few issues that the NRC staff concluded pertained (e.g., design acceptance criteria). However, the supposedly limited list of items falling within this new category appears to be ever growing. The industry now has significant concerns that the scope and content of this addition to the two tier approach is expanding. Further, the introduction of another significant tier of design information and associated change process is inconsistent with the fundamental Tier 1/Tier 2 concept. Accordingly, we reserve judgment on the feasibility of the staff proposal until a definite set and scope of such "staff positions" has been finalized.