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PROPOSED RULE **PR 52**  
(66FR 49324)

OFFICE OF THE SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

November 13, 2001

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
Attention: Rulemakings and Adjudications Staff  
Mail Stop O-16C1

Subject: Comments Regarding Draft Rule Wording for 10 CFR 52 "Early Site Permits;  
Standard Design Certification; and Combined Licenses for Nuclear Power Plants," 66  
Federal Register 49324, September 27, 2001

By notice in Volume 66 of the Federal Register, page 49324 (i.e., 66 FR 49324), dated September 27, 2001, the NRC requested comments on the draft wording of a possible amendment to its regulations. Exelon Generation Company (EGC), LLC submits these comments in response to the above subject September 27, 2001 NRC request for comments regarding NRC draft wording affecting 10 CFR 52 "Early Site Permits; Standard Design Certification; and Combined Licenses for Nuclear Power Plants." EGC appreciates the opportunity to provide the following comments on the draft rule language.

The draft rule wording represents the culmination of a series of interactions between the NRC staff and stakeholders on possible revisions to 10 CFR 52. In a letter dated September 3, 1999, the NRC requested comments from the Nuclear Energy Institute (NEI) and other stakeholders based on experience gained from design certification reviews and discussions with the stakeholders on the early site permit (ESP) and combined construction permit and operating license (i.e., COL). The NRC held public meetings with the NEI 10 CFR 52 Licensing Issues Task Force and other stakeholders to solicit their feedback over an eleven-month period beginning in October 2000. Additionally, in a letter dated April 3, 2001, the NEI Task Force provided comments and proposed rule language in response to NRC's letter of September 3, 1999. EGC is a member of this Task Force and has been actively involved in these interactions.

EGC commends the NRC for the openness of its process regarding the potential amendment of 10 CFR 52. This process has allowed early stakeholder input and should result ultimately in an improved final rule. EGC is currently engaged in pre-application activities with the NRC regarding the Pebble Bed Modular Reactor (PBMR), NRC assigned Project No. 713, and is evaluating the feasibility of licensing the PBMR in the United States. EGC is anticipating applying for an ESP and then a COL only if the PBMR design is judged to be licensable and the project is economically viable. EGC considers that 10 CFR 52 should be revised to enhance the efficiency of the process and reduce any unnecessary regulatory burden.

As drafted, the NRC's rule wording does not appear to address many of the improvements recommended by NEI and the Task Force members that were contained in its letter of April 3, 2001. Furthermore, the draft rule includes several new changes that were not previously discussed in the NRC's letter of September 3, 1999 or during meetings with stakeholders, and we have concluded that some of the new proposed changes would impose additional burdens on applicants of new plants.

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In particular, EGC is concerned about the new provision contained in the draft rule that would impose the same prototype testing requirements upon a COL applicant that are currently imposed on a design certification applicant. As explained in more detail in Attachment 1 to this letter, such a change is inconsistent with the Commissioners' expressed directions that the prototype test requirements in 10 CFR 52 only be applied to the design certification process. Furthermore, such a change could make it almost impossible for an applicant to obtain a COL for an advanced reactor. The NRC has stated that it will likely require prototype testing for certification of an advanced reactor. If the NRC were to impose that same requirement for obtaining a COL for an advanced reactor, NRC may never license an advanced reactor because it would create an untenable situation - - prototype testing cannot be performed without a license, but a license could not be issued until completion of prototype testing. Therefore, EGC strongly urges the NRC to delete this provision from the proposed rule wording in order to preserve the option of licensing an advanced reactor and limiting prototype testing to design certification which was the underlying purpose of the original rule.

EGC also recommends that the NRC revise the draft rule wording for 10 CFR 52 to include the improvements recommended by the NEI 10 CFR 52 Licensing Issues Task Force. The opportunity to include these enhancements and clarifications at this time will benefit near term potential applicants and the NRC by providing a more efficient process. NRC should also delete or modify other new burdensome provisions contained in the NRC draft wording. Attachment 2 to this letter discusses our recommended changes to these other draft provisions.

EGC has concluded that the draft rule wording in its current form does not accomplish its intended purpose and can actually create stakeholder confusion and result in an inefficient process, thereby, increasing the resources required of licensees to prepare applications, and of the NRC to review them.

In summary, EGC appreciates the opportunity to submit these comments and supports the NRC's effort to make changes at this time to enhance the 10 CFR 52 process, but considers that substantial changes are warranted regarding the NRC draft rule wording.

Respectfully,



R. M. Krich  
Vice President – Licensing Projects  
Attachments

cc:

Thomas King, Office of Nuclear Reactor Research  
James Lyons, Office of Nuclear Reactor Research  
Ronald Simard, Nuclear Energy Institute

## **ATTACHMENT 1**

### **EXELON GENERATION COMPANY, LLC COMMENTS REGARDING DRAFT RULE WORDING FOR 10 CFR 52, "EARLY SITE PERMITS; STANDARD DESIGN CERTIFICATION; AND COMBINED LICENSE FOR NUCLEAR POWER PLANTS"; 66 FEDERAL REGISTER 49324, SEPTEMBER 27, 2001 IMPOSITION OF PROTOTYPE TEST REQUIREMENTS ON COL APPLICANTS**

The NRC draft rule wording would modify 10 CFR 52.79, "Contents of applications, technical information," paragraph (b), to add a reference to the requirements in 10 CFR 52.47 "Contents of applications," paragraph (b)(2)(i), which requires a design certification applicant to demonstrate performance by analysis, testing, or experience or by testing on a full-scale prototype. Addition of this provision to Section 52.79 would require an applicant for a combined construction permit and operating license (i.e. COL) to make the same type of demonstration, including testing on a full-scale prototype as necessary, as required of a design certification applicant. As discussed below, this is inconsistent with the NRC's underlying purpose when it created 10 CFR 52 "Early Site Permits; Standard Design Certification; and Combined Licenses for Nuclear Power Plants." Furthermore, such a change would represent an unnecessary escalation of existing requirements, and could potentially prevent licensing of new advanced reactors. As a result, Exelon Generation Company (EGC), LLC strongly urges the NRC to eliminate this provision from the proposed rule.

The significance of the NRC's draft change to Section 52.79 can be appreciated when viewed in the context of the overall structure of 10 CFR 50 "Domestic Licensing of Production and Utilization Facilities," and 10 CFR 52. In general, 10 CFR 52 does not contain technical requirements for reactors. Instead, in general, 10 CFR 52 references the technical requirements in 10 CFR 50. 10 CFR 50 itself does not contain any requirements for full-scale prototype testing as a prerequisite to issuance of either a construction permit or operating license. In fact, at the time 10 CFR 50 was issued, many new types of reactors were being developed, and it was contemplated that demonstration units would be licensed under 10 CFR 50 and that their design and operating principles would be confirmed through startup and power ascension testing and operation. Because the requirements for a COL are based upon the requirements in 10 CFR 50, this principle has been incorporated by reference in NRC's regulations governing COLs in Subpart C, "Combined Licenses," to 10 CFR 52. In particular, 10 CFR 52.79(b) states that a COL application "must contain the technically relevant information required of applicants for an operating license in 10 CFR 50.34," and 10 CFR 52.83, "Applicability of part 50 provisions," states that all of the provisions of 10 CFR 50 apply to COLs.

10 CFR 52 as a whole does contain some exceptions to this general principle. In particular, 10 CFR 52.47 contains a number of new technical requirements for an application for a design certification, including requirements in the following paragraphs.

- Section 52.47(a)(1)(ii) – Three Mile Island (TMI) action item requirements
- Section 52.47(a)(1)(iii) – Site parameters
- Section 52.47(a)(1)(iv) – Unresolved safety issues and generic safety issues
- Section 52.47(a)(1)(v) – Probabilistic risk assessment (PRA)
- Section 52.47(a)(1)(vi) – Inspections, tests, analyses, and acceptance criteria (ITAAC)
- Section 52.47(a)(1)(vii) and (viii) – Interface requirements between the certified design and the remainder of the plant
- Section 52.47(a)(1)(ii) – Conceptual design for the remainder of the plant
- Section 52.47(a)(2) – Level of design detail
- Section 52.47(b)(1) – Need for an essentially complete design for evolutionary plants
- Section 52.47(b)(2)(i) – Need for analysis, testing, or experience, or for full-scale prototype tests, for advanced reactors
- Section 52.47(b)(3) – Requirements related to modular designs

10 CFR 52.79(b) states that a COL application must contain the technically relevant information required for an operating license under 10 CFR 50. In addition, Section 52.79(b) requires a COL application to include some, but not all, of the additional information required for a design certification application in Section 52.47. In particular, Section 52.79(b) states that a COL application must include “the technical information required by §§ 52.47(a)(1)(i), (ii), (iv), and (v), and, if the design is modular, § 52.47(b)(3).” Conspicuously, Section 52.79(b) does not reference the testing requirements in Section 52.47(b)(2)(i). Thus, the addition of the reference to Section 52.47(b)(2)(i) in Section 52.79 would create a new technical requirement for a COL and a new burden for license applicants.

The fact that Section 52.79 does not currently reference Section 52.47(b)(2)(i) was clearly intentional and not an oversight. The Statements of Consideration for both the proposed 10 CFR 52 (i.e., 53 Fed. Reg. 32060, August 23, 1988) and the final 10 CFR 52 (i.e., 54 Fed. Reg. 15372, April 18, 1989) clearly indicate that design certification and licenses are to be treated differently with respect to prototype testing. For example, in issuing the proposed and final versions of 10 CFR 52, the NRC stated the following.

- “Certification of a reactor design which differs significantly from a reactor design which has been built and operated may be granted only after the design has been shown to be sufficiently mature.” (53 Fed. Reg. at 32063-64)
- In order to demonstrate maturity, “[p]rototype testing is likely to be required for certification of advanced non-light water designs.” (54 Fed. Reg. at 15375)

- In contrast, the NRC recognized that it may “licens[e] the prototype for commercial operation.” (54 Fed. Reg. at 15374)
- Furthermore, the NRC expressly rejected a proposal that would allow a COL to be issued only for a standard design, stating: “The final rule does not contain this restriction because there may be circumstances in which a combined license would properly utilize a non-standard design and because such a restriction would mean, among other things, that every prototype would have to be licensed in a fully two-step process.” (54 Fed. Reg. at 15383)
- Thus, “[i]t is well to remember also that, under the rule, prototype testing is only required for certification or an unconditional final design approval, if at all.” (54 Fed. Reg. at 15374).

In summary, 10 CFR 52.47(b)(2) contains provisions for full-scale prototype testing prior to certification of a standard design because the NRC wanted to ensure that only mature designs are certified. In contrast, the NRC deliberately did not impose such a requirement for COLs, because it wanted the flexibility to license a non-standardized plant that may not have a mature design. In fact, the NRC expressly stated that it wanted to be able to issue a COL for a prototype plant itself. As a result, prototype testing cannot be a prerequisite for licensing because such testing cannot occur until after the COL is issued and generally not until the plant is in startup and power ascension testing.

As indicated above, the NRC has stated that prototype testing will likely be required for design certification of advanced reactors. The reason for such a requirement is readily apparent - - a certified design is effective for 15 years, may be incorporated by reference by any license applicant without further review and approval by the NRC, and is subject to broad protection against backfits under the change control process in 10 CFR 52.63, “Finality of standard design certifications.” Because a certified design is not subject to further NRC review and approval and has broad backfit protection, there is a sound basis for requiring that the maturity of the design be fully demonstrated before certification (e.g., by restricting design certification of advanced reactors to those designs that have successfully completed prototype testing).

In contrast, the arguments for requiring prototype testing for *certification* of advanced reactors do not apply to *licensing* of advanced reactors. Unlike a design certification, licensing represents approval of only a single facility. Licensing of subsequent facilities, even if identical in design, is still subject to NRC review and approval including possible design changes to account for any unfavorable results of startup and power ascension testing and operating experience from previously licensed facilities. Furthermore, unlike a design certification, the NRC has fairly broad authority under 10 CFR 50.109, “Backfitting,” to impose backfits on a licensed facility to account for any unfavorable results of startup and

power ascension testing and operating experience. Finally, in lieu of prototype testing, the NRC has authority to impose special license conditions that might not be necessary or appropriate if applied to all plants with a standard design (e.g., a license condition can require special design, procedural, or testing provisions to provide adequate protection of safety until the design is demonstrated to perform as intended through testing or operation). Thus, unlike a design certification, there is no compelling reason to require prototype testing for licensing of an advanced reactor.

By proposing to add a reference to the design certification testing provisions in Section 52.47(b)(2)(i) to the COL application requirements in Section 52.79(b), the draft rule would have the effect of indicating that prototype testing will likely be required for licensing of an advanced reactor. Not only would such an action be inconsistent with the NRC's prior deliberate decision not to require prototype testing for a COL, it could prevent an applicant from obtaining a COL for a new advanced reactor.

Any plant, including an advanced reactor, needs a license in order to be able to conduct startup and power ascension testing. Thus, the draft rule could have the effect of creating an untenable situation - it would have the effect of requiring prototype testing prior to licensing of advanced reactor designs, but full prototype testing, which includes tests performed during startup and power ascension, could not occur without a license.

The draft rule is also inconsistent with the NRC's past practice on licensing new types of plants. NRC guidance and past precedent both indicate that prototype testing is not a prerequisite for licensing. For example, NRC Regulatory Guide 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants - LWR Edition," which provides the standard format and content for safety analysis reports, explicitly states that special, unique, or first of a kind design features may be verified through startup test as follows.

"14.1.2 Plant Design Features That Are Special, Unique, or First of a Kind

A summary description of preoperational and/or startup testing planned for each unique or first-of-a-kind principal design feature should be included in the PSAR [Preliminary Safety Analysis Report]. The summary test descriptions should include the test method and test objectives."

Similarly, NUREG-0800, "Standard Review Plan," Section 14.2, Paragraph III.8 recognizes that the initial test program in Final Safety Analysis Reports may include provisions for "testing for special, unique, or first-of-a-kind design features." Thus, NRC guidance clearly allows for testing of unique and first-of-a-kind design features through the startup and power ascension test program, and does not require prototype testing prior to issuance of a license for a plant involving such features.

This principle is exemplified by NRC's handling of prototype testing for the Modular High Temperature Gas Reactor (MHTGR). In the Preapplication Safety Evaluation Report for the MHTGR, NUREG-1338, "Preapplication Safety Evaluation Report for the Modular High-Temperature Gas-Cooled Reactor (MHTGR)," dated December 1995, p. 4-5, the NRC stated that prototype testing might be necessary for design certification of the MHTGR. However, prior to performance of the prototype testing, NRC indicated that it would issue a license for the MHTGR "based on a higher postulated fuel failure and lower leakage containment" than proposed for design certification of the MHTGR.

As recently as August 23, 2001, the NRC sent a letter informing EGC that "the regulations in 10 CFR Part 52 do not require the use of a full-scale, prototype reactor to demonstrate the performance of a design's safety features." However, if a COL applicant were subject to the same testing requirements as a design certification applicant, full-scale prototype testing would essentially be required, given the NRC's preference for full-scale prototype testing for design certification of advanced reactors.

Finally, we note that, in a licensing proceeding, the NRC has alternatives other than the methods specified in Section 52.47(b)(2)(i) (i.e., other than analysis, testing, experience, or prototype testing) for ensuring the safety of the plant. In particular, the NRC may impose special design or monitoring requirements, or may establish special license conditions, to ensure the safety of the plant pending completion of startup and power ascension tests. While such requirements would not be appropriate to apply on a generic basis through a design certification, they could be applied in a licensing proceeding as an alternative to Section 52.47(b)(2)(i).

The draft rule would impose a new technical requirement for prototype testing on COL applicants that does not currently exist on applicants for operating licenses. Such a requirement would be inconsistent with the NRC's intent when it created 10 CFR 52. Furthermore, it could create an untenable situation, in which a new advanced reactor could not obtain a COL without first performing prototype testing, which in turn requires a license. Finally, the draft rule is inconsistent with past NRC practice, in which the NRC has indicated that it would issue a license for a new advanced reactor that had not been previously licensed or certified, subject to appropriate license conditions or requirements for startup and power ascension tests. Therefore, in order to preserve the opportunity of issuing a COL for new advanced reactors, the NRC should delete the reference to Section 52.47(b)(2)(i) in the proposed revision to Section 52.79(b).

## **ATTACHMENT 2**

**EXELON GENERATION COMPANY, LLC  
COMMENTS REGARDING DRAFT RULE WORDING FOR 10 CFR 52, "EARLY  
SITE PERMITS; STANDARD DESIGN CERTIFICATION; AND COMBINED  
LICENSE FOR NUCLEAR POWER PLANTS";  
66 FEDERAL REGISTER 49324, SEPTEMBER 27, 2001  
OTHER COMMENTS ON THE NRC's  
DRAFT REVISION TO 10 CFR 52**

1. The Nuclear Energy Institute's (NEI's) letter to the NRC dated April 3, 2001 identified a number of recommended changes to 10 CFR 52 that would reduce regulatory burden without impacting safety or the environment. These recommended changes include the following.
  - Allowing a person to request an exemption from 10 CFR 52 (i.e., NEI's proposed Section 52.7)
  - Allowing an applicant for an early site permit (ESP) to use the current licensing basis for an existing reactor site without duplicative NRC review and hearings (i.e., NEI's proposed Section 52.16)
  - Allowing an applicant for a combined construction permit and operating license (i.e., COL) to use the current licensing basis for an existing reactor without duplicative NRC review and hearings (i.e., NEI's proposed Section 52.30)
  - Allowing an ESP applicant to provide bounding site parameters corresponding to a number of different reactor types, rather than a single reactor type (i.e., NEI's proposed Section 52.17(a)(2))
  - Deleting requirements for evaluations of need for power, alternatives sites, and alternative energy sources (i.e., NEI's proposed changes to Sections 52.17 and 52.18)
  - Allowing the transfer of ESPs (i.e., NEI's proposed Section 52.36)
  - Allowing an applicant under 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," to reference a design certification (i.e., NEI's proposed Section 52.62)
  - Allowing several plant licenses to be combined into one license (i.e., NEI's proposed Section 52.82)
  - Stating that the backfit rules in Section 50.109, "Backfitting," apply as soon as the COL is issued rather than upon commencement of operation (i.e., NEI's proposed change to Section 52.83)
  - Stating that the requirements for annual fees begin with the commencement of operation rather than upon issuance of the COL (i.e., NEI's proposed change to Section 52.83)

- Providing for a modified Final Safety Analysis Report (FSAR) change for COLs, such that changes that affect the evaluations of severe accidents in the FSAR are subject to criteria that are less restrictive than Section 50.59, “Changes, tests, and experiments,” and that are similar to the severe accident change control process in paragraph (B)(5)(c) to Section VIII, “Processes for Changes and Departures,” of the design certification rules (i.e., NEI’s proposed Section 52.98)

The NRC should include these changes in the proposed rule. At the very least, the proposed rule should request public comments on these changes to enable NRC to include the changes in the final rule.

2. In addition to the changes recommended by NEI, Exelon Generation Company (EGC), LLC considers that the proposed rule should include other beneficial changes.

**A. Effectiveness of Licensing Board Decisions on an ESP**

10 CFR 52.21, “Hearings,” states that ESP is “subject to all procedural requirements in 10 CFR 2 which are applicable to construction permits.” Currently, 10 CFR § 2.764, “Immediate effectiveness of initial decision directing issuance or amendment of construction permit or operating license,” paragraph (e), states that a licensing board decision authorizing issuance of a construction permit is not effective until the NRC has reviewed the decision. This level of NRC involvement is not warranted for a licensing board decision on an ESP, because an ESP does not authorize the applicant to commence any safety-related construction activities. Therefore, EGC recommends that 10 CFR 52 be revised to allow a licensing board decision on an ESP application to be immediately effective notwithstanding a pending review by the NRC.

In order to accomplish this objective, EGC suggests that the last sentence of 10 CFR 52.21, “Hearings,” be revised as follows:

All hearings conducted on applications for early site permits filed under this part are governed by the procedures contained in subpart G of part 2, except that the provisions in 10 CFR 2.764(e) do not apply to early site permit proceedings.

**B. Electronic Filings**

The NRC’s draft rule would add a new Section 52.4 governing written communications with the NRC. The draft language is modeled after the language in 10 CFR § 50.4, “Written communications.” EGC recommends that this language be updated to authorize electronic filings.

3. In a number of areas, the draft revision would make 10 CFR 52 more burdensome to applicants and licensees or provide them with less flexibility. However, none of the NRC proposed changes is necessary to ensure adequate protection of the public health

and safety, or to protect the environment. Therefore, for the reasons discussed below, NRC should delete or modify these provisions from the proposed rule.

**A. Change Process for Evaluations of Severe Accidents**

Paragraph (B)(5)(c) of Section VIII of the design certification rules states that changes may be made in the resolution of a severe accident issue in Tier 2 of the design certification without prior NRC approval, unless the change would result in a “substantial” increase in the consequences or probability of a severe accident. The draft rule would modify this provision to require prior NRC approval if there is “more than a minimal increase” in the consequences or probability of a severe accident.

The proposed change in the draft rule is not justified and would impose significant new burdens on applicants and licensees. The language in the draft rule appears to be based upon the language in the 1999 revision to 10 CFR 50.59. However, it has long been recognized that Section 50.59 applies to design basis accidents, not severe accidents. In fact, that recognition was the very basis for creating a two-part change process in Section VIII(B)(5) of the design certification rules.

- Section VIII(B)(5)(b) of the design certification rules establishes the change process for accidents other than severe accidents, and that change process is patterned after the pre-1999 version of Section 50.59.
- Section VIII(B)(5)(c) of the design certification rules establishes the change process for severe accidents. That process allows licensees more flexibility to make changes affecting severe accidents since severe accidents are beyond the scope of 10 CFR 50.59.

The draft rule would blur the distinction between severe accidents and design basis accidents, and essentially would apply the standard in Section 50.59 to severe accidents. Such a provision is without basis and would undermine the carefully fashioned change process in the design certification. Additionally, such a provision would impose an undue burden on both licensees and the NRC, since it would require prior NRC approval for significantly more changes than the current rule.

Finally, and most importantly, the provision in the draft rule is not necessary for adequate protection of safety, and would require prior NRC approval for changes that have an insignificant impact upon risk. For example, NEI-96-07, “Guidelines for 10 CFR 50.59 Evaluations,” provides guidance on the definition of “more than a minimal increase” as used in Section 50.59. Sections 4.3.1 and 4.3.3 of NEI-96-07 state that an increase that does not exceed 10% of the original value or, in the case of consequences, 10% of the original margin to the regulatory limit, may be considered as no more than minimal. However, many of the severe accidents evaluated for the design certifications have very low probabilities of occurrence, in some cases, E-10/yr or lower, and therefore pose an extremely small risk. An increase of more than 10% in either the probability or consequences of such severe accidents would have no significance, because the increase in risk would be trivial given the low probability of the accident. Therefore, it is not appropriate to apply the “more than minimal

increase” standard in Section 50.59 to severe accidents. Instead, the NRC should continue to use the “substantial increase” standard in the current design certification rules.

**B. Change Process for the Design Certification Rules**

10 CFR § 52.63, “Finality of standard design certifications,” paragraph (a)(1) currently states that the NRC may not modify, rescind, or impose new requirements on a design certification except to bring the plant into compliance with the regulations applicable to the certification or assure adequate protection of the public health and safety. The draft rule would revise Section 52.63(a)(1) to state that the NRC may not modify, rescind, or impose new *substantive* requirements, except for purposes of compliance or adequate protection.

This proposed revision is unnecessary and may be about confusion and abuse. The term “substantive” is undefined and subjective, and could lead to extensive interactions and possibly litigation on whether a change is “substantive.” Furthermore, this change would appear to lessen the high threshold that has been set for processing changes to design certifications. Therefore, this provision should be deleted in the proposed rule.

**C. Duration of a COL**

The draft rule would modify 10 CFR 52.83, “Applicability of part 50 provisions,” to state that the 40-year licensed lifetime of a COL begins upon the date of issuance of a COL rather than the date NRC makes its Inspections, Tests, and Acceptance Criteria (ITAAC) finding leading to authorization to operate the plant. This change appears to be based upon the NRC’s position in SECY-00-092, “Combined License Review Process,” in which the NRC staff stated that the duration of a COL should be 40 years based upon the NRC’s interpretation of Section 103(c) of the Atomic Energy Act (AEA). We consider that the NRC’s interpretation of the AEA is unjustifiably restrictive, and that the current provisions in Section 52.83 are fully in accordance with the AEA.

Section 103, “Commercial Licenses,” paragraph (a), of the AEA authorizes the NRC to issue licenses for utilization facilities (i.e., construction permits and operating licenses), and Section 103(c) of the AEA states that such licenses may not exceed 40 years. However, Section 103 does not explicitly discuss the permissible duration of COLs. Therefore, Section 52.83 is not inconsistent with any express provision in Section 103 of the AEA.

The Energy Policy Act added paragraph (b) to Section 185, “Construction Permits and Operating Licenses,” to the AEA, which provides for the issuance of “a combined construction and operating license” which this section refers to as a “combined license.” The NRC appears to have concluded that because a COL is a license for the purposes of Section 103(c), the duration of a COL should be limited to forty years from the date of COL issuance. For several reasons, this conclusion is unsound and unwarranted.

When the NRC first implemented Section 103(c), it applied the 40-year duration to the combined terms of the construction permit and operating license, such that the period of operation authorized by the operating license was always less than 40 years. The NRC

subsequently determined that the 40-year duration in Section 103(c) did not need to encompass the period covered by both the construction permit and the operating license, but only to the period covered by the operating license. See Memorandum dated August 16, 1982, from William J. Dircks to Commissioners, entitled "Issuance of Operating Licenses with a 40-Year Duration." Since a COL is a *combined* construction permit and operating license, and since an operating license itself may extend for 40 years, it is apparent that the portion of the COL associated with the operating license (i.e., that period following issuance of the NRC's ITAAC finding) may extend for 40 years.

10 CFR 52, including Section 52.83, was promulgated prior to the Energy Policy Act. The Energy Policy Act was enacted because there were legal challenges to the power of the NRC to issue COLs (See *Nuclear Information Resource Service v. NRC*, 969 F.2d 1169 (D.C. Cir. 1992) and 918 F.2d 189 (D.C. Cir. 1990)), and Congress desired to remove any doubt regarding the validity of 10 CFR 52. In particular, at several places in the legislative history of the Energy Policy Act, Congress made it clear that the purpose of the Energy Policy Act was to approve and confirm the statutory basis for 10 CFR 52. See, e.g., *Legislative History of the Energy Policy Act of 1992*, Committee Print S. Prt. 103-91, pp. 936, 939, 1303, 1404, 1406-7, 1710-1, and 1973. For example, during the congressional debates, Senator Johnston, one of the sponsors of the Energy Policy Act, stated:

So what we do in our licensing proposal, Mr. President, is to ratify legislatively what the Nuclear Regulatory Commission did in 10 CFR 52. (*Id.*, at 1710).

Thus, the enactment of the Energy Policy Act had the effect of providing legislative sanction to all of 10 CFR 52, including Section 52.83.

In summary, there is solid legal support for the existing provisions in Section 52.83. There is no statutory reason for changing Section 52.83. Furthermore, the draft rule is not necessary for any safety or environmental reasons, and would only serve to make 10 CFR 52 more burdensome and less attractive to a potential COL applicant.

Finally, we note that the NRC has repeatedly requested Congress to modify Section 103(c) of the AEA to clarify that the 40-year duration of a COL may begin upon commencement of operation, and there is a bill currently before Congress (i.e., S. 472) that would achieve that purpose. It makes little sense for the NRC to engage in rulemaking to modify Section 52.83, when the NRC would only have to change Section 52.83 back to its original form, or something similar, once Congress acts in response to the NRC's request.

#### **D. Duration of a Final Design Approval (FDA)**

The draft rule would add a provision to Appendix O, "Standardization of Design: Staff Review of Standard Designs," to 10 CFR 52 that would limit the duration of an FDA to five (5) years. Such a provision is contrary to an express Commissioners' direction on this matter.

When the NRC first proposed to issue the FDA for the Advanced Boiling Water Reactor (ABWR), the NRC proposed a five-year duration. Upon review, the NRC disapproved of the five-year duration and directed that the FDA be in effect for the duration of the certification for the ABWR (i.e., for 15 years) (i.e., Staff Requirements Memorandum dated June 30, 1994 on COM-SECY-94-025, "Final Safety Evaluation Report (FSER) for the Advanced Boiling Water Reactor (ABWR) Design"). As a result, the NRC staff was compelled to revise the initial FDA for the ABWR to provide for a 15 year for the FDA (i.e., letter dated November 23, 1994, from William T. Russell (NRC) to Joseph Quirk (GE).

In accordance with the NRC's previous decision, the draft rule should be changed to provide a 15-year duration for a FDA, not a five-year duration.