NUCLEAR MANAGEMENT AND RESOURCES COUNCIL

1776 Eye Street, N.W. • Suite 300 • Washington, DC 20006-2496
(202) 872-1280

Byron Lee, Jr.
President & Chief
Executive Officer

November 7, 1988

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

Attention: Docketing and Service Branch

Re: 10 CFR Part 52 - Early Site Permits;
Standard Design Certifications; and
Combined Licenses for Nuclear Power
Reactors - 53 FR 32060 (August 23, 1988) -
Proposed Rule

Dear Mr. Chilk:

The enclosed comments are submitted on behalf of the Nuclear Management and Resources Council, Inc. (NUMARC) in response to the referenced proposed rule. 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.

NUMARC and its member organizations have maintained an active interest in and given full support to the Commission's standardization efforts. We participated in the October 20, 1987 NRC Workshop on Nuclear Power Plant Standardization and subsequently submitted comments on the Commission's Nuclear Power Plant Standardization Policy Statement. Additionally, we were participants in the nuclear power industry's testimony before the Congress in support of provisions in the NRC-proposed "Nuclear Power Plant Standardization and Licensing Act of 1987." More recently, we represented the nuclear industry in the NRC's September 16, 1988 public meeting on the proposed rule. For many years prior to NUMARC's establishment, a predecessor industry organization, the Atomic Industrial Forum, Inc., actively supported regulatory process reforms intended to further design standardization.

We strongly support the establishment of a licensing framework matched to the needs of nuclear power plant standardization. Such a framework, in the words of the Commission's notice of proposed rulemaking, must provide for "early identification and resolution of safety issues" and a "more predictable licensing process." Without that framework, the safety and other benefits that standardization can bring will simply not be realized. We

understand it to be the Commission's objective to make full use of its existing statutory authority to build an effective licensing process around the concepts of early site approval, preapproval of standardized designs and the issuance of combined licenses. We endorse that objective and find merit in those provisions of the proposed rule which further its realization, particularly the provisions facilitating preconstruction resolution of site and design issues with accompanying public participation.

We are deeply troubled, however, by basic deficiencies in the proposed rule's combined license and finality provisions -- deficiencies which undermine the regulatory foundation for standardization. An effective combined license process which accords finality to issues previously resolved is critical to making standardization a working reality. We believe the Commission has the authority to establish such a process and have urged it to exercise that authority fully. As written, however, proposed Part 52 falls far short of that goal. In practical effect, it maintains today's two-stage licensing process under another name -- with two sequential license applications, two sequential license authorizations, and a preoperational proceeding that invites relitigation of issues decided in prior proceedings. Proposed Part 52, in short, fails to accord adequate finality to decisions taken at earlier stages of the site permit-standard design-combined license process. In these regards, the proposed rule is clearly not adequate. The process which it would establish would inevitably discourage the resource commitments needed for the development and approval of standardized final designs since no utility could seriously consider ordering a new plant with the licensing uncertainties it would face. These deficiencies and the rule changes we believe necessary to remedy them are addressed in detail in the attachments to this letter.

We have recommended revisions in regard to the foregoing which are based on the declared intention of the Commission in the proposed rule to provide the opportunity for a second hearing after a facility for which a combined license was issued has been constructed. We wish to make it clear, however, that we believe a hearing at that point is not warranted given the fact of final design and site approval before construction begins and of the further fact that the combined license incorporates the tests, inspections, analyses and acceptance criteria that will assure conformance with license requirements, i.e., that the facility has been constructed and will operate in conformity with the combined license. Accordingly, we would urge elimination of this second hearing, by legislation if necessary.

The extensive comments we are submitting on proposed Part 52 should be taken by the Commission as a mark of the importance we attach to establishing an effective licensing framework for nuclear power plant standardization. We welcome this rulemaking initiative and emphasize again our endorsement of the objectives stated by the Commission in its rulemaking notice. The improvements we believe necessary are fully consistent with those objectives. We urge the Commission to pursue this rulemaking to a constructive and expeditious conclusion and assure it of our commitment to working cooperatively toward achievement of that goal.

Sincerely,

Byron Lee Jr.

Byron Lee, Jr.

Attachments

Attachment 1	Summary of Key Issues
Annex I	Key Issues
Annex II	Responses to NRC Questions
Annex III	Part 52 Detailed Analysis

cc: Chairman Lando Zech
Commissioner Thomas Roberts
Commissioner Kenneth Carr
Commissioner Kenneth Rogers
Commissioner James Curtiss
Mr. Victor Stello, Jr.

Attachment 1

Summary of Key Issues

- Issue A. Two-Stage Licensing. The need to establish a single-stage licensing process is imperative, and an effective combined license process can be established under existing statutory authority. The proposed regulation, however, does not provide the needed licensing changes. In practical effect, it maintains today's anachronistic two-stage licensing process and, in so doing, becomes a disincentive for industry efforts to develop and obtain regulatory pre-approval of final standardized facility designs.

- Issue B. Need for Effective Finality Provisions. The creation of a more predictable licensing process is essential to industry's motivation to proceed with future nuclear power plants. The proposed rule contains appropriate provisions governing a Commission determination that a modification is necessary to assure adequate protection of the public health and safety or the common defense and security before imposing additional requirements on early site permits or design certifications. However, the proposed rule lacks adequate finality provisions where early site permits or designs certifications are referenced in combined license applications.

- Issue C. Use of Tests, Inspections, Analyses and Acceptance Criteria. An element essential to the practical implementation of design standardization and a meaningful combined license process is the effective use of tests, inspections, analyses and acceptance criteria in the design certification and combined license process. The proposed rule does not make it sufficiently clear that successful completion of such tests, inspections and analyses and compliance with the related acceptance criteria by the holder of a combined license provide a requisite demonstration that the plant has been constructed and will operate in conformance with the requirements of the combined license.

- Issue D. Standard Design Certification Renewal. A period longer than ten years would be justifiable, and preferable, for the term of a design certification. A ten-year initial term for the certified design is reasonable only if there is a practicable basis for renewal at the end of the initial term. As currently drafted, proposed Part 52 does not contain practicable provisions for renewal of a design certification.

- Issue E. Advanced Reactors. Proposed Part 52 would permit certification of "reactor designs which differ[] significantly from reactor designs which have been built and operated" and would make its procedural provisions applicable thereto. NUMARC agrees in general with this approach. However, the requirement for "full sized" prototypes or "full-scale" testing to demonstrate "maturity" of a design is unwarranted and may not necessarily be the preferable approach. Such a requirement will present significant and unwarranted impediments to design

certification. In addition, the term "significantly different" is imprecise and there is concern that it might be construed as being applicable to some of the ALWR designs which are being developed under industry and DOE programs.

- Issue F. Applicability of Part 50 Provisions. Four provisions in proposed Part 52 contain general cross-references to 10 CFR Chapter I, Part 50, the appendices to Part 50 or Parts 20, 73 and 100. The method for incorporating existing NRC regulations into Part 52 by reference needs greater specificity. The rule should specifically cross-reference those existing NRC regulations that apply, respectively, to early site permits, standard design certifications and combined licenses.

- Issue G. Application of Severe Accident Policy and Safety Goals. Proposed Part 52 contains provisions which incorporate certain aspects of the Commission's policy statements on Severe Accidents and Safety Goals. The industry is committed to comply with these Policy Statements; however, lacking a clearer statement of the criteria which would be applied by the staff in review of applications, we see no significant advantage to incorporating such provisions in the Commission's regulations.

KEY ISSUES

In reviewing Proposed Part 52, NUMARC has identified certain issues which we consider of sufficient importance to warrant fuller discussion. These issues are:

A. Two-Stage Licensing
B. Need for Effective Finality Provisions
C. Use of Tests, Inspections, Analyses and Acceptance Criteria
D. Standard Design Certification Renewal
E. Advanced Reactors
F. Applicability of Part 50 Provisions
G. Application of Severe Accident Policy and Safety Goals

Our discussion of these Key Issues follows.

Issue A. Two-Stage Licensing

The need to establish a single-stage licensing process is imperative. The current two-stage process thwarts application of the design and construction discipline which is warranted by today's technology and experience, it frustrates timely public participation in the licensing process and it stands as a barrier to achieving design standardization and realizing its enormous public benefits. It is worth emphasizing that establishment of a single-stage licensing process is one major recommendation of the post-TMI Kemeny and Rogovin reports that has yet to be implemented.

An effective combined license process can be established under existing statutory authority. We understand that to be the Commission's rulemaking objective and our comments on proposed Part 52 are intended to further that objective.

Proposed Part 52 falls well short of the Commission's goal; as now written, it does not provide an adequate basis for standardization. The provisions of the proposed regulation relating to the combined construction permit and operating license (combined license), and in particular the provisions relating to the preoperational events before a licensee may commence operation, are unsatisfactory and must be changed. As the Commission itself recognizes in the material introducing the proposed rule, the nuclear industry has matured to the point where it is possible "to combine the construction permit proceeding with much of the operating license proceeding into a single proceeding for the issuance of a combined construction permit and conditional operating license." (53 Fed. Reg. 32065 3rd column). The Commission comment goes on to state that "[f]ull-power operation can then be authorized under the combined license following an opportunity for a hearing on a more limited set of carefully defined issues." We believe that all issues relating to construction and operation can be resolved before the combined license is issued, and that full power operation can be authorized based on the licensee's satisfactorily performing the tests, inspections, and analyses required by the license and satisfactorily meeting the acceptance criteria, also required by the license. A modification to the proposed regulation along the lines suggested above would allow the Commission, should it determine that a hearing is required prior to operation, to limit the issues in such hearing to those of license conformance.

The proposed regulation does not provide the needed licensing changes. In practical effect, it maintains today's anachronistic two-stage licensing process and, in so doing, becomes a disincentive for industry efforts to develop and obtain regulatory pre-approval of standardized facility designs.

Pertinent Provisions of Proposed Part 52

Proposed Part 52 provides as follows, in pertinent part:

§ 52.97 Issuance of combined licenses

(a) The Commission may issue a combined license for a nuclear power facility upon finding that the applicable requirements of §§ 50.40, 50.42, 50.43, 50.47, and 50.50 have been met, and that there is reasonable assurance that the facility will be constructed and operated in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations.

(b) The Commission shall identify in the license the inspections, tests, and analyses that the licensee shall perform and the acceptance criteria therefor which provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations.

§ 52.99 Inspection during construction

After issuance of a combined license, the Commission shall assure through inspections, tests, and analyses that construction of the facility is completed in conformity with the combined license, the provisions of the Atomic Energy Act, and the Commission's regulations. The Commission shall apply to holders of combined licenses the same inspection program applied to holders of nuclear power plant construction permits. Holders of combined licenses shall comply with the provisions of §§50.70 and 50.71.

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§ 52.103 Authorization to operate under a combined license

(a) Before the facility may operate, the holder of the combined license shall apply for authorization of operation under the combined license. If the combined license is for a modular design, each module is the subject of a separate authorization. The Commission shall publish a notice of the proposed authorization in the Federal Register under 10 CFR 2.105. Within 30 days, any person whose interests may be affected may request a hearing on the basis either (1) that there has been a nonconformance with the license, the licensee's written commitments, the Atomic Energy Act, or the Commission's regulations and orders, which has not been corrected and which could materially and adversely affect the safe operation of the facility; or (2) that significant new information shows that some modification to the site or the design is necessary to assure adequate protection of public health and safety or the common defense and security. The petitioner shall set forth with reasonable specificity the facts and arguments which form the basis for the request.

(b) If a hearing is not requested, or if all requests are denied, the Commission may authorize operation under the combined license, as provided in § 50.56, upon making the findings in § 50.57.

Deficiencies in NRC Rulemaking Proposal

While ostensibly establishing a combined licensing process, the proposed NRC rule essentially maintains two-stage licensing. Such an outcome would severely damage the prospects for further standardization efforts since no utility could seriously consider ordering a new plant with the licensing uncertainties it would face.

In order to obtain a combined license, it will be necessary for an applicant (and the vendor/AE whose design certification the applicant references) to perform far more work and provide much more information than currently is in the case with a construction permit application. Establishment in the combined license of the tests, inspections, analyses and acceptance criteria -- entailing still further work and information than is currently the case for a construction permit -- makes it possible to resolve all issues (other than compliance with the license) before the combined license is issued. Any process which then allows for a second hearing -- particularly one which permits the relitigation of previously resolved issues -- is thereby suspect as being simply the old two-stage process in a different garb despite the heavy additional burdens assumed by the applicant before it received its combined license. We think it important the Commission understand that the combined license provisions in proposed Part 52 generate those very concerns.

To give those concerns specific focus, we would point to the following basic deficiencies in the proposed regulation:

- The NRC rulemaking contemplates that two sequential applications for license authorization must be filed: the first, for the issuance of a "combined license" before construction begins (proposed §52.97), and the second, for authorization to operate the facility following

completion of construction (proposed §52.103). Only a single application should be required -- and this, at the preconstruction stage. (Alternatively, two applications -- encompassing construction and operational authorization -- could be required to be filed, but both applications should be filed simultaneously at the preconstruction stage and thereafter be consolidated for review and decisionmaking purposes.)* The result should be a combined license authorizing construction and operation, the latter being subject to the licensee's satisfaction of conditions prescribed in the license -- essentially, conformance of the as-built facility with the requirements of the combined license.

o The NRC rulemaking proposal requires the issuance of a new "authorization of operation" (proposed §52.103(a)) or the "conversion of a combined license to an operating license" (as described in the proposed rule's explanatory materials). Moreover, the NRC proposal obliges the Commission to make §50.57 findings prior to its authorization of facility operation; and these are the findings currently required for operating license issuance. Those requirements, individually and collectively, are at odds with the concept of a consolidated (combined) licensing process: They maintain the central elements of two-stage licensing. Favorable

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* Section 161(h) of the Act authorizes the Commission to:

consider in a single application one or more of the activities for which a license is required by this Act [and] combine in a single license one or more of such activities ....

See also, 10 CFR §50.52 and Note to §50.35(a); cf. 10 CFR §2.105(c).

resolution of residual issues at the preoperational stage (see below) should lead to removal of the conditions on operation contained in the combined license, rather than the issuance of a new license authorization based on an omnibus set of traditional operating license findings.

o The NRC rulemaking proposal would allow a request for a preoperational hearing on either of two bases: (1) that there has been a nonconformance with the combined license, the licensee's written commitments, the Atomic Energy Act or Commission regulations or orders, which has not been corrected and which could materially and adversely affect safety; or (2) that "significant new information shows that some modification to the site or the design is necessary to assure adequate protection of the public health and safety or the common defense and security." The second basis for requesting a hearing is a lesser threshold than even the current regulatory provisions permit and could lead to reopening or reconsidering many issues in the license. Seemingly overlooked is the fact that many of the issues as to which there is such alleged new information may be subject to regulations of the Commission, including the rule, if any, for a certified standard design applicable to the plant under consideration. Treatment of licensing proceeding contentions addressed to such issues has been, and should remain, governed by the provisions of 10 CFR §2.758.

- The NRC determinations at the preoperational stage -- and any hearing NRC determines it is required to hold -- should focus solely on (a) whether the facility as built conforms to the requirements of the combined license and (b) any issues that could not be decided in the earlier proceeding(s). Since we believe that all issues can be definitively resolved prior to or at the preconstruction stage, or be made subject to later resolution against acceptance criteria approved at that stage (see our comments on license-prescribed tests, inspections and analysis), these two criteria should, as a practical matter, merge into a single criterion (i.e., conformance with the combined license) at the preoperational stage. A licensing process embodying such an approach should, moreover, appropriately apply the "inspections, tests" exception from adjudications contained in the Administrative Procedure Act (5 U.S.C. 554(a)(3)). In sharp contrast, the NRC rulemaking proposal contemplates consideration not only of conformance issues but also of contentions that additional requirements should be imposed on site or design matters resolved prior to or in the combined license proceeding. Coupled with the low threshold for convening a preoperational hearing (e.g., no "good cause" requirement), the scene is set for potentially open-ended regulatory review and hearing re-examination of issues previously decided.

- There is no provision in proposed §52.103 that requires the NRC to allow facility operation if the licensee builds the plant in conformance with the combined license, the Atomic Energy Act and

Commission regulations. (Contrast this with Section 185 of the Act and with 10 CFR §50.56). In any event, the Commission should be obliged to issue a combined license, and later to sanction facility operation, if the rule's requirements are met rather than giving the Commission discretion (i.e. "may") to do so.

Recommended Revision to Part 52

NUMARC urges the Commission to adopt provisions dealing with the consideration and issuance of a combined license which, at the very least, track the analogous provisions of the legislative licensing reform proposal submitted by the Commission to the 100th Congress (see Section 101 of H.R. 2106). As tailored to proposed Part 52, those provisions might be restated as follows:**

§52.97 Issuance of Combined Licenses.

(a) The Commission shall issue a combined license for a nuclear power facility upon finding that the applicable requirements of §§50.40, 50.42, 50.43, 50.47, and 50.50 have been met, and that there is reasonable assurance that the facility will be constructed and operated in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations.

(b) The Commission shall identify in the license the tests, inspections, and analyses that the licensee shall perform and the acceptance criteria therefor which are necessary and sufficient to provide

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** We have recommended revisions in regard to the foregoing which are based on the declared intention of the Commission in the proposed rule to provide the opportunity for a second hearing after a facility for which a combined license was issued has been constructed. We wish to make it clear, however, that we believe a hearing at that point is not warranted given the fact of final design and site approval before construction begins and of the further fact that the combined license incorporates the tests, inspections analyses and acceptance criteria that will assure conformance with license requirements, i.e., that that facility has been constructed and will operate in conformity with the combined license. Accordingly, we would urge elimination of this second hearing, by legislation if necessary.

reasonable assurance that if performed and met the facility has been constructed and will be operated in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations.

§52.99 Inspection During Construction

(a) After issuance of a combined license, the Commission shall assure that the required inspections, tests, and analyses have been performed and that the prescribed acceptance criteria have been met.

(b) The Commission staff will develop and utilize an inspection plan appropriate to document in a timely manner during construction of the plant that the tests, inspections and analyses set forth in the combined license have been performed properly and that the acceptance criteria relating thereto set forth in the license have been met. Holders of combined licenses shall comply with the provisions of §§50.70 and 50.71.

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§52.103 Commencement of Facility Operation Under a Combined License.

(a) Not less than 180 days prior to the date on which the holder of a combined license expects to commence operation, the holder shall notify the Commission in writing of the proposed date on which that operation is expected to commence. Upon receipt of this notice, the Commission shall publish in the Federal Register a notice of the intended operation of the facility, and shall provide a thirty-day period during which any person may file a written objection to the commencement of operation on the basis that the facility has not been constructed or will not operate in conformity with the license. Such objection shall set forth with reasonable specificity the facts and arguments upon which the objection is based, and may be accompanied by a request for a hearing.

(b) If a hearing is requested, the Commission shall determine whether good cause exists therefor and, if so, the issues to be heard. The Commission may designate an issue for hearing only if the issue consists of a substantial dispute of material fact, necessary for the Commission's decision, that cannot be resolved with sufficient accuracy except at a hearing and:

(i) a showing has been made that the issue was not and could not have been raised and resolved in any prior proceeding for the issuance, modification or amendment of a license, permit or approval for that facility, its site or design; or

(ii) a showing has been made that there has been a nonconformance with the license which has not been corrected and which could materially and adversely affect the safe operation of the facility. Matters covered by the exemption from adjudications contained in 5 U.S.C. §554(a)(3) shall not be eligible for hearing consideration.

The showing required shall be made by means of sworn affidavits by individuals having personal knowledge of the facts, and the licensee and the staff may file counter affidavits. No issue may be designated for hearing unless the Commission determines that there is a likelihood of success on the merits for any issue on which a hearing is requested.

Following completion of any hearing held, the Commission shall decide whether the combined license to construct and operate should be modified.

(c) Prior to commencement of facility operations, the Commission shall determine based upon the tests, inspections, analyses and acceptance criteria prescribed in the combined license, that the facility has been constructed and will operate in conformity with the combined license and consistent with the Act and the Commission's regulations.

(d) If the combined license is for a modular design, each module shall be the subject of a separate determination.

The Commission has full authority to adopt such provisions (see NUMARC's response to Question 1 in Annex II of these comments) and such a course would be consistent with the stated rulemaking intention of the Commission, i.e., to put into effect now those provisions of its legislative proposal which are compatible with the NRC's existing statutory authority. Unless the Commission adopts provisions creating a true combined license, the standardization goals it seeks and the attendant public benefits will not be realized.

Issue B. Need for Effective Finality Provisions

Proposed Part 52 lacks adequate finality provisions where early site permits or standard design certifications are referenced in combined license applications. This issue is discussed more fully in NUMARC's response to

Question 8 in Annex II of these comments. NUMARC's recommendations regarding the addition of finality provisions are contained in our Detailed Analysis of Part 52 in connection with proposed Sections 52.39 and 52.63 (Annex III at pages 33 and 72-73, respectively).

Issue C. Use of Tests, Inspections, Analyses and Acceptance Criteria

An element essential to the practical implementation of design standardization and a meaningful combined license process is the effective use of tests, inspections, analyses and acceptance criteria in the design certification and licensing processes. Specification of the inspections, tests, analyses and related acceptance criteria in the combined license will establish a clearly defined set of requirements governing both the licensee and the NRC in discharging their respective responsibilities to demonstrate that the commitments of the license have been met during the construction of the plant. As such, early licensee specification and NRC approval of the inspections, tests, and analyses and the related acceptance criteria would enhance regulatory certainty by prescribing what is required to provide assurance that the requirements of the license are being met. Successful completion of these inspections, tests and analyses and compliance with the related acceptance criteria provide specific demonstration that the plant has been constructed and will operate in conformance with the requirements of the combined license. This is discussed in Key Issue A (Two-Stage Licensing), supra, and further elaborated on in NUMARC's response to Question 10, contained in Annex II of these comments.

Issue D. Standard Design Certification Renewal

A period longer than ten years would be justifiable, and preferable, for the term of a standard design certification. The ten-year limitation makes an effective renewal process especially critical. As currently drafted, proposed Part 52 does not contain a practical and realistic provision for renewal of a design certification. Rather, the provisions in Sections 52.57 and 52.59 require renewal steps essentially equivalent to the requirements that would be applicable if an application for a new certification were filed. The principal reasons for this are that a renewal application under the proposed rule must conform to requirements in effect at the time of renewal and that a full-scale new rulemaking must be conducted under Section 52.51.

A ten-year initial term for the certified design is reasonable only if there is a realistic opportunity for renewal at the end of the initial term. This will assure that there is sufficient time for the holder of the design certification to market the certified design and recoup its investment. The Commission should allow for renewal of the certified design based on the same criteria applied to the initial approval. Changes to the design at the time of renewal would be governed by the provisions of the Commission's backfit rule. It should be emphasized that during the initial term of the approval as well as the renewal period, Section 52.63 would allow the Commission to require changes to the design if necessary to assure adequate protection of the public health and safety.

Issue E. Advanced Reactors

Proposed Part 52 would permit certification of "reactor designs which differ[] significantly from reactor designs which have been built and

operated." As indicated in the preamble to the rule, the intent is that such "advanced reactors" would be covered by the procedural aspects of Part 52. The preamble to Part 52 states that the NRC staff is currently developing safety criteria for the review of advanced reactor designs and will advise prospective applicants for certification precisely what information is required for NRC consideration.

NUMARC agrees in general with this approach. The procedures applicable to design certification and issuance of combined licenses should be made available to these advanced designs. In our detailed analysis of Part 52 (Annex III), we have made some suggestions for clarifying language to specifically accomplish this limited objective. (See pages 41-42).

We are concerned, however, about the manner in which full-size prototype testing has been included as a demonstration of the "maturity" of a design. Although prototype testing of an appropriately sized reactor should be retained as an option for an applicant to demonstrate "maturity" of a design, it should not be made a regulatory requirement; nor do we think it to be a necessarily preferable approach. Maturity of a design can be satisfactorily demonstrated by an appropriate combination of analysis, testing, or experience. Furthermore, acceptable "testing" should not be restricted to "full scale testing." The type and scale of testing should be selected as appropriate for the design feature being considered. The requirements for "full sized" prototypes or "full-scale" testing will present significant and unnecessary impediments to design certification. NUMARC has suggested specific revisions to Section 52.45(c) to address these concerns. (See Detailed Analysis at pages 41-44).

The term "significantly different" is imprecise and there is some concern that it might be construed as being applicable to the ALWR designs which are being developed and certified consistent with EPRI and DOE programs. Rather than attempt to incorporate a more explicit definition in Part 52, we suggest that the Commission clarify this point in the Statement of Considerations which will accompany the final rule. Such a clarification could be based on the discussion in NUREG 1226 concerning the Advanced Reactor Policy Statement that acknowledges that certain reactor designs with improved safety features are considered to be within the realm of current generation reactors. The General Design Criteria of Appendix A to 10 CFR Part 50 will also provide guidance for determining if a design is "significantly different".

Issue F. Applicability of Part 50 Provisions

Four provisions in proposed Part 52 (Sections 52.18, 52.47(a), 52.81 and 52.83) contain general cross-references to the provisions of either 10 CFR Chapter I, Part 50, the appendices to Part 50, or Parts 20, 73 and 100. We find this method for incorporating existing NRC regulations into Part 52 by reference to be unworkable. We believe it will lead to uncertainty in the future regarding the applicability of particular regulatory requirements. The Commission will need to identify those provisions in Part 50 and its appendices which apply, respectively, to early site permits, standard design certifications and combined licenses.

We have reviewed each provision contained in Part 50, and each Appendix to Part 50, for the purpose of determining which of the requirements contained therein are applicable to early site permits, to standard design certifications or to combined licenses. We have incorporated our findings into our detailed analysis of Part 52 by recommending the specific cross-references to existing

NRC regulations which should be added to various Part 52 provisions, including Sections 52.18, 52.47(a) and 52.83. In addition, two new provisions are included in our Detailed Analysis (§§52.40 and 52.66) which identify those additional Part 50 provisions which are applicable to early site permits and standard design certifications. (See Detailed Analysis, Annex III at pages 34-35 and 74-75). No general references to Part 20, 73 or 100 have been suggested by NUMARC. Specific references to these Parts appear to be appropriately made in the Commission's proposed rule. Any further application of the requirements of Parts 20, 73 and 100 are appropriately invoked through the various provisions of Part 50 we have identified.

Issue G. Application of Severe Accident Policy and Safety Goals

Incorporation in proposed Part 52 of provisions of the Severe Accident Policy Statement and of a requirement to provide "a realistic assessment of the degree to which the design conforms to the Commission's Safety Goals" are unnecessary. NUMARC's views on these issues are discussed in response to Question 12 in Annex II of these comments. The related NUMARC recommendations for revision of proposed Part 52 are contained in our Detailed Analysis, Annex III at page 49.

NUMARC Comments
Annex II

RESPONSES TO NRC QUESTIONS

Question 1: In implementing by rulemaking the Commission's legislative proposals on standardization, does this proposed rule take full advantage of the Commission's authority under the Atomic Energy Act? Does it in any way exceed the Commission's authority?

NUMARC Response

The Commission's rulemaking proposal does not, in any way, exceed its statutory authority. To the contrary, proposed Part 52 does not take full advantage of the Commission's present authority under the Atomic Energy Act.

Consistency with Statutory Authority. At the NRC's September 16, 1988 Public Meeting on proposed Part 52, the staff requested that commenters specifically address the authority of the Commission to make dispositive findings on licensing issues when issuing a combined license and its authority to limit, in consequence, the issues to be considered in any later preoperational hearing.

We think it clear that the Commission would be acting within its statutory authority in both respects. We would initially emphasize that what the Commission proposes in formally establishing a combined license process is grounded on concepts long embodied in the Atomic Energy Act and the NRC's implementing licensing regulations. Section 161h. of the Act empowers the Commission to:

> ... consider in a single application one or more of the activities for which a license is required by this Act [and] combine in a single license one or more of such activities ...

This authority is presently given regulatory expression as respects the licensing of production and utilization facilities in 10 CFR 50.52.

Further, the Commission's current licensing regulations specifically contemplate, and accommodate, definitive findings at the preconstruction stage when a construction permit applicant furnishes all of the requisite technical information, including the final design of the facility. Section 50.35(a) of the Commission's regulations (Issuance of Construction Permits) provides for qualified safety findings when an applicant has not supplied all of the technical information required for the approval of all proposed design features. The accompanying Note specifies, however, that:

> When an applicant has supplied initially all of the technical information required to complete the application, including the final design of the facility, the [qualified] findings required above will be appropriately modified to reflect that fact.*

Thus, under current NRC regulations, the issues for preoperational determination are properly shaped by the scope and character of the applicant's submission at the preconstruction stage and the Commission's findings in authorizing facility construction. Where construction authorization rests on approval of the final design of the facility, and on companion safety findings, the Commission's preoperational determinations should properly be confined to licensee conformance with the requirements of that authorization. As applied to a combined license process, submission and approval of a final design in support of the issuance of a combined license leaves open for consideration only those matters which bear on conformance of the as built facility with the requirements of the combined license (and such other issues, if any, which were not resolved at the time of combined license issuance).

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* See also 10 CFR §2.105(c).

Proposed Part 52 contemplates that conformance will be measured by the licensee's compliance with the tests, inspections, analyses and acceptance criteria approved in the combined license proceeding and incorporated in the combined license itself. The consequence of applying that approach is that there would be no re-review or relitigation of matters previously resolved; that, in short, would be the only "limitation" imposed on the preoperational review and any hearing thereon. Such a "limitation", we submit, is fully consonant with good regulatory practice** as well as common sense.

Such a combined license process is also fully consistent with Section 185 of the Act. Section 185 provides for issuance of a license to operate a facility upon (i) the completion of facility construction, (ii) the filing of any additional information needed to bring the original application up to date, (iii) a finding that the facility authorized has been constructed and will operate in conformity with the application as amended and in conformity with the provisions of the Act and the Commission's regulations and (iv) the absence of good cause being shown why license issuance will not be in accordance with the Act. As summarized below, all of these steps are provided for in proposed Part 52 in connection with removal of the conditions precedent to operation which are contained in the combined license.

Proposed §52.97 requires, as a prerequisite for combined license issuance, that the Commission find, inter alia, that there is reasonable assurance that the facility "will be constructed and operated" in conformity with the license, the provisions of the Act and the Commission's regulations. The section further provides that the combined license shall identify the tests,

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** See, e.g., Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2, ALAB-804, 21 NRC 587, 591 (1985) citing ALAB-785, 20 NRC 848, 870-71 (1984).

inspections, and analyses that the licensee is to perform and the acceptance criteria therefor which provide reasonable assurance that the facility "has been constructed" and "will be operated" in conformity with the aforementioned requirements. Proposed §52.99 goes on to mandate that, after issuance of the combined license, the Commission shall assure through the measures identified in the license that the construction of the facility "is completed" in conformity with the requirements of the combined license. Correspondingly, conformance with those requirements (together with such other matters, if any, that were not resolved in the combined license proceeding) provides the framework for issues which may legitimately be considered in any preoperational hearing, if such a hearing is required.

We believe, in sum, that the Commission would be fully within its statutory authority in adopting such a combined license process.

Statutory Latitude for Additional Commission Action.

Proposed Part 52 does not take full advantage of the Commission's present authority under the Atomic Energy Act (and under the Administrative Procedure Act) to implement by rulemaking its legislative proposals on standardization. The specific areas in which additional regulatory provisions can, and should, be adopted are the following:

- The proposed rule unnecessarily requires two sequential license applications and two sequential license authorizations. Only a single application should be required -- at the preconstruction stage. Alternatively, two applications -- encompassing construction and operational authorization -- could be required to be filed, but both applications should be filed simultaneously at the

preconstruction stage and thereafter be consolidated for review and decisionmaking purposes. The result should be a true combined license authorizing construction and operation, the latter being subject to the licensee's satisfaction of conditions prescribed in the license -- essentially, conformance of the as-built facility with the requirements of the combined license.

- The proposed rule does not limit preoperational review and any hearing thereon to issues of conformance with the requirements of the combined license. NRC determination at the preoperational stage, and any attendant hearing, should focus solely on whether the as-built facility conforms to the requirements of the combined license and issues, if any, that could not be decided in the earlier proceedings. Relatedly, the rule should expressly provide for appropriate application of the "inspection, tests" exception from adjudications contained in the Administrative Procedure Act (5 U.S.C. 554(a)(3)).***

- The proposed rule does not accord finality at the combined license and preoperational stages to issues resolved in prior related proceedings. The rule should provide that issues resolved by prior Commission authorizations (early site permit, design certification) will not be subject to challenge in a subsequent related (combined license or preoperational) proceeding.

*** We note again our earlier stated position that a second hearing is unwarranted after the issuance of a combined license and that such a hearing should be eliminated, by legislation if necessary.

- There is no provision in the proposed rule that requires the NRC to allow facility operation if the licensee builds the plant in conformance with the combined license, the Atomic Energy Act and Commission regulations. The Commission should be obliged to issue a combined license, and later to sanction facility operation, if the rule's requirements are met, rather than giving the Commission discretion (i.e., "may") to do so.****

- The proposed rule does not provide adequate protection of design certification proprietary information. If design certification is to be accomplished through rulemaking, the NRC must -- and has the authority to -- modify Section 2.790 of its rules to accord the same protection to proprietary information in design certification proceedings as is currently provided for proprietary information in licensing proceedings. (See further, in this regard, the response to Question 2, infra.)

- The proposed rule does not provide that modification of a design certification may only be considered and effected in a rulemaking proceeding to amend the certification; rather, proposed Part 52 allows such matters to be entertained and adjudicated in facility licensing proceedings. Consistent with the objective of maintaining uniformity in standardized designs -- and consistent also with long-standing NRC constraints on allowing departures from previously

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**** See further, as respects the above points, the NUMARC comments in Annex I dealing with the Key Issue of Two-Stage Licensing.

issued rules in licensing proceedings governed by those rules -- Part 52 should provide that requests made in combined license proceedings to modify referenced design certifications should be dealt with in accordance with the provisions of Section 2.758 of the Commission's rules. In essence, Section 2.758 precludes collateral attack on an NRC regulation in a licensing proceeding governed by the regulation, absent a specific Commission waiver determining that special circumstances make application of the regulation in that proceeding inconsistent with the regulation's purposes.

- The proposed rule does not adequately reflect the NRC's obligations to current holders of Final Design Approvals. The Commission has the authority to and as a matter of policy should, impose the requirements of the backfit rule on NRC-proposed changes to an approved final design which is the subject of an application for certification.

- The proposed rule does not deal adequately with design certification fees. NUMARC's letter to the Commission of June 21, 1988 states that "One disincentive to development of standardized designs is the prospect of imposition of large, uncapped fees for design review and certification." NUMARC went on to state that "The NRC can make a meaningful contribution in promoting standardization by either waiving the fees or establishing a reasonable and fixed fee for design review and certification." The proposed NRC rule does

neither, although either a fee waiver or a fee cap would be fully within NRC's statutory authority. In fact, in a related rulemaking action (pending revisions to 10 CFR Part 170), the Commission is proposing that design certification and renewal fees be recovered at full cost. Further, proposed Part 52 adds fee requirements for design certifications and their renewals that go beyond the pending Part 170 fee revisions which proposed Part 52 professes to track. (See e.g., §52.49(c), which provides -- contrary to proposed Part 170 -- that if an application for the issuance or renewal of a certified standard design is denied, any fees associated with the review of the application are immediately due and payable by the applicant.)

Question 2: Should a design certification take the form of a license rather than a rule? Does the Commission have the authority under existing law to license a design? NUMARC believes that the rights and obligations which attach to a license may be more clearly understood than those which would attach to a certification which took the form of a rule. The proposed rule accords with paragraph 7 of Appendix O to 10 CFR Part 50 in treating the certification as a rule. Rulemaking may provide greater procedural flexibility than a license proceeding does, and certification by rule would be open to a wider pool of applicants than certification by license (see 10 CFR 50.38).

NUMARC Response

The NRC has authority under existing law to adopt a design certification process based either on rulemaking or license issuance. NUMARC supports rulemaking as the preferred approach, subject to the clarifications we recommend below.

Design Certification by Rulemaking

NUMARC believes the Commission should select a single format for design certification. That format, in our view, should be rulemaking -- the course chosen by proposed Part 52. NUMARC believes that rulemaking best fits the generic character of standardized design certification, a fact already recognized by the Commission in Appendix O to 10 CFR Part 50. Further, as the Commission's question suggests, rulemaking provides greater procedural flexibility than does a conventional NRC licensing proceeding -- accommodating, we would emphasize, a broad range of public participation, a hearing process which can tailor procedures to resolution of technical issues involved, and appropriate provision for adjudicatory resolution of any residual issues of disputed fact which are necessary for a Commission decision.

To be practicable and effective, however, the relevant provisions of Part 52 must be carefully drawn. The needs specific to design certification and the rights and obligations which attach to a design certification holder require express treatment -- a treatment going beyond the present provisions

of proposed Part 52. In particular, additional provisions need to be included in Part 52 for the protection of proprietary information and to specify certain rights and obligations of the design certification holder.

Protection of Proprietary Information. It is of paramount importance that effective protection be afforded to proprietary information submitted in design certification proceedings. It is essential that the Commission apply the same protective regime to such proprietary information as it does to like information in licensing proceedings. Such protection is a sine qua non for willingness on the part of the private sector to pursue applications for design certification approval. To afford the necessary protection, the proviso with regard to rulemaking proceedings contained in 10 CFR §2.790(c) must be revised. (See, in this regard, the recommended revision contained on pages 59-60 of the Part 52 Detailed Analysis appended to NUMARC's comments as Annex III.) There is Commission precedent for not releasing certain proprietary information involved in rulemaking proceedings. The "forms the basis for" test contained in 10 CFR §2.790(c) for disclosure of proprietary information submitted in a rulemaking was based on procedures which evolved during the course of the Emergency Core Cooling System rulemaking. In that rulemaking, the Commission withheld from public disclosure certain proprietary information received from two firms which helped form the basis of the ECCS rule because such information would "apply only to an individual company's evaluation models, and [were] more akin to matters involved in individual licensing proceedings..." In the Matter of Rulemaking Hearing, Acceptance Criteria for Emergency Core Cooling Systems for Light Water-Cooled Nuclear Power Reactors, CLI-73-39, 6 AEC 1085, 1089 (Dec. 28, 1973). The rationale underlying that declaration is particularly apt as regards proprietary

information submitted by applicants in a design certification proceeding. The recommended revision to §2.790(c) should be made in parallel with the issuance of Part 52 regulations providing for design certification by rulemaking.

Rights and Obligations of a Design Certification Holder. As the Commission's question recognizes, the rights and obligations of a licensee have become fairly clearly defined over the years by virtue of statutory provisions, NRC regulations and judicial decisions. For design certification via rulemaking to be effective and equitable, Part 52 must define within its four corners certain basic obligations and rights of the design certification holder.

The proposed regulation already contains the foundation recognition that a design certification rule is different in certain important respects from the conventional generically applicable rule. The fact that there is an "applicant" for design certification and the further fact that a successful "applicant" becomes a design certification "holder" are emblematic of that qualitative difference. The applicant/holder shoulders specific obligations (see, e.g., proposed §§52.45, 52.47, 52.49), and is accorded specific rights (see, e.g., proposed §§52.49, 52.57, 52.59, 52.63) that are unique to it. We believe, however, that the currently proposed provisions require enlargement. Thus, we think it important that there be specific recognition in the regulations that the technical and other qualifications of the "holder" of a design certification constitute elements in the certification's issuance to that entity. Similarly, provisions analogous to those contained in Section 50.80 (governing transfer of licenses) should be made applicable to any proposed transfer of a design certification from the initial "holder" to a subsequent one. Further, specific provision should be made for the grounds

upon which the conduct of the holder of a design certification could lead to revocation, suspension or modification of the holder's rights, with further specification of the procedural protections governing same. (cf. §50.100 and §2.200).

In sum, Part 52 (and the other NRC regulations that it specifically incorporates by reference) should be an integrated expression of the rights and obligations of design certification "holders" as well as a description of the process for obtaining such Commission approvals and for their subsequent use in combined license proceedings.

Authority to Issue A License

It is axiomatic that the Commission has broad authority as respects the manner for carrying out its statutory mandate. The Commission's discretion in selecting between rulemaking and adjudication has been upheld both in situations where it has chosen rulemaking over adjudication and in cases where it has chosen adjudication rather than rulemaking. Thus, the courts have held that a Commission decision to treat safety issues generically in rulemaking proceedings rather than on a case-by-case basis in various licensing dockets was an appropriate exercise of this broad discretion. Nader v. Ray, 363 F. Supp. 946 (D.D.C. 1973). Conversely, where a contention was made that a rulemaking proceeding should have been conducted to authorize issuance of a license to operate a nuclear reactor, rather than a adjudicatory licensing proceeding, such a contention was rejected. The court held that the decision to conduct an adjudicatory proceeding rather than one for rulemaking is for the agency to make since that is where the expertise to make such a determination resides. Morningside Renewal Council, Inc. v. AEC, 482 F.2d 234 (2d Cir. 1973).

Under Section 161(i) of the Atomic Energy Act, the Commission is authorized to "prescribe such regulations or orders as it may deem necessary ... (3) to govern any activity authorized pursuant to this Act, including standards and restrictions governing the design, location and operation of facilities used in the conduct of such activity, in order to protect health and to minimize danger to life or property." (Emphasis added). Under the law, an order, as opposed to a regulation, is the result of a proceeding other than a rulemaking -- i.e., a licensing proceeding or adjudication. Thus, Section 551(6) of the Administrative Procedure Act states that an order "means the whole or any part of the final disposition ... of an agency in any matter other than rulemaking but including licensing." By authorizing the Commission to prescribe "orders" governing the "design" of nuclear power facilities, Section 161(i) provides the Commission with authority to license a design. Section 161(p) of the Atomic Energy Act, which authorizes the Commission to promulgate such rules and regulations as may be necessary to carry out the purposes of the Act, lends support to the proposition that the Commission has the power to promulgate rules authorizing a license for design certification. This is especially true in light of the Commission belief, as expressed in the Background of the current rulemaking notice, that standardized plant designs could significantly enhance the safety and reliability of nuclear power plants -- the ultimate goal of the regulatory process entrusted to the Commission.

We believe, in sum, that the broad authority given the Commission under the Atomic Energy Act, when read in conjunction with the specific statutory provisions cited, allows the Commission to employ the procedural format which it believes to be most appropriate for standardization.

Question 3. What procedures are appropriate for design certification by rulemaking?

NUMARC Response

The certification procedures in the proposed rule (section 52.51) are a combination of rulemaking by notice and comment complemented by a mandatory legislative-type hearing -- with provision made for "formal adjudication on discrete issues involving substantial disputes of fact, necessary for the Commission's decision, that cannot be resolved with sufficient accuracy except in formal adjudication." Convening an adjudicatory proceeding (or use of adjudicatory procedures, such as discovery, in the legislative-type hearing) would require Commission authorization.

While we have specific suggestions to offer for the improved implementation of this "hybrid hearing" approach,* the basic procedural framework appropriately accommodates both the needs of generic rulemaking and the interests of effective public participation in the certification process.

We believe, however, that design certification renewal should not be attended by a mandatory hearing -- whether of a legislative, hybrid or other type. A notice and comment requirement should be applied, as for other types of rulemaking actions; however, whether a hearing should be held in connection with renewal, and if so what its format would be, should be left to the Commission to decide on a case-by-case basis.

As emphasized in NUMARC's response to Question 2. the Commission's proposal to treat design certification proprietary information in accordance

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* Specific recommendations, in this regard, are included in Annex III, "Detailed Analysis of Part 52", appended to NUMARC's comments (pages 56-59).

with the current provisions of 10 CFR §2.790 will not be adequate for such information's protection. Section 2.790 must be amended to accord such information the same protection that proprietary information is accorded in licensing proceedings. A recommended amendment is set forth in the NUMARC Detailed Analysis (Annex III at pages 59-60).

Question 4: Should the Commission require, as part of a certified standard design, the standardization of construction practices, operation and maintenance practices, quality assurance, and personnel training?

NUMARC Response

These subjects should not be part of the Commission's requirements. The process of standardization itself, particularly certified standard designs, will lead to more uniform construction, operation, maintenance, quality assurance and personnel training practices. To the extent that these practices are dependent upon the facility design, the existence of a uniform standard design will naturally lead to standardization of practices. For example, it is expected that operation and training practices would exhibit significant similarities since they would be based on consistent, standardized technical information and guidelines that would be provided by the designer of the certified design. Construction and maintenance practices would be improved by the fact that the standardization of designs will result in a larger common base of experience. Construction methods that result in higher quality or reduce construction times, as well as maintenance practices which result in improved performance and plant availability, will be directly applicable to other facilities of the same design. The economic and safety benefits to plant owners to incorporate this experience will be significant.

As evidence that this is in fact happening, industry can point to the many current programs and actions taken by the Institute of Nuclear Power Operations which directly contribute to standardized practices. These actions include:

- evaluation criteria for all plants including those under construction
- training program accreditation criteria
- maintenance procedure writers' guidelines

- plant radiation access requirements

The Commission's rules already require some degree of uniformity in these areas. For example, 10 CFR Part 50, Appendix B provides a standard basis for quality assurance practices, and the Commission has adopted rules concerning operator qualifications and staffing levels. It is impractical and inappropriate for the Commission to require further standardization of construction, operation, maintenance, quality assurance, and personnel training practices. Despite the standardization which will result from the common design base, many aspects of these practices must be tailored to individual utility organizations, capabilities and cultures if they are to be fully effective.

Construction practices will, and should, vary depending on the expertise of the constructor, the geology of the site, and advances in construction techniques. Detailed operating procedures, even where based on standard guidelines, must incorporate utility-specific considerations that should be provided by the individual operators. There is no single correct formula that is applicable to all organizations. Such considerations as the size of the organization, the number and types of plants operated and the strengths and weakness of specific functions must be addressed.

Question 5: Section 52.45(d) of the proposed rule says that the NRC will entertain an application for certification of a design of only a major portion of a plant only if that portion contains all buildings, structures, systems, and components that can "significantly affect the safe operation of the plant." The intent of this language is to rule out of consideration for certification any incomplete design in which events in the balance of plant could have an adverse impact on the safety of that portion of the plant for which certification is sought. Would some phrase other than "significantly affect the safe operation of the plant" better serve as a standard by which to determine whether to accept an application for certification of an incomplete design? Should the NRC, in addition, require of any such application a showing of good cause, or the like, for seeking certification of a design of less than full scope?

On the other hand, should the language of §52.45(d) be more lenient and permit an application for certification of a design of a major portion of a plant, as long as the application contains the requirements for the interface between the portion for which certification is sought and all buildings, structures, systems and components which can "significantly affect the safe operation of the plant," but does not contain the detailed design for such buildings, structures, systems, and components? Such an approach would be more consistent with the legislation the Commission proposed in March of 1987. Section 104 of the proposed legislation would entertain an application for certification of "any major subsystem which represents a discrete element" of a nuclear power facility.

NUMARC Response

The Commission should, as suggested in Question 5, permit certification of a major portion of a plant, as long as the application contains the requirements for the interface between the portion for which certification is sought and all buildings, systems and structures and components which can significantly affect safety.

The rule, as written, ostensibly permits certification of "major portions" of a nuclear power plant. The definition of "major portion" however -- "all buildings, structures, systems, and components that can significantly affect the safe operation of the plant..." -- is not clearly distinguishable from the term "essentially complete nuclear power plant." The Commission should include a provision in the rule that realistically allows for certification of a "major portion" of the plant.

NUMARC recognizes that the Commission has given this matter much consideration. We would agree that certification of an entire plant design, to the extent that can be accomplished, would maximize many of the benefits of standardization. We do not agree, however, that certification of entire plants is required for the Commission to discharge its statutory obligations to protect the public health and safety. That can be done as the Commission has suggested: by requiring that the application define the safety related interfaces between the certified portion and the remainder of the plant.

The Commission should not preclude certification of major portions of a nuclear power plant. We believe this approach will have an important beneficial effect: it will open the certification process to the largest potential pool of designers and result in an earlier implementation of the standardization process.

Question 6: What are the appropriate standards to apply to a request by a holder of a design certification to amend the certification? If the amendment is granted, should all plants which reference the certification be required to backfit to comply with the amended certification, or only some, as required by the proposed rule?

NUMARC Response

Any amendment request by the holder of a design certification should be allowed if the Commission determines that the amendment will comply with the Atomic Energy Act and the Commission's regulations. Thus, the standard set forth in Section 52.63 is appropriate. It would allow, for example, changes in the design which increase the degree of protection of the public health and safety or the common defense and security, or result in an economic or operational benefit in connection with design, construction, or operation of the plant. It must be recognized that during the lifetime of a design certification continuing engineering and design work will be performed on the design of the plant. Indeed, such continuing work should be encouraged by the Commission. Where such engineering or design work leads to improvements which increase the protection of the public health and safety or the common defense and security, the Commission should be amenable to amending the certified design at the behest of the certified design holder even in those situations where no modification is necessary to bring the certified design into compliance with Commission regulations or orders or is necessary to assure adequate protection of the public health and safety or the common defense and security. Similarly, proposed changes should be permitted where they have no adverse impact on the degree of protection afforded to the public from a health and safety standpoint, but where they offer worthwhile economic benefits relating to the design, construction or operation of the plant.

If an amendment is granted, only plants referencing the design after the amendment is granted should be required to adopt the amendment, unless such amendment is necessary for adequate protection of the public health and safety or the common defense and security. The proposed regulation (10 CFR §52.63(b)) is in line with this.

Question 7: In order to prevent continual regression from standardization among plants initially built according to the same design, should stricter standards than those in 10 CFR 50.12 be applied to requests for exemptions from a design certification rule?

NUMARC Response

The criteria for exemptions contained in 50.12 are appropriate for design certifications and will allow the Commission the flexibility to respond to unforeseen circumstances which warrant the grant of an exemption.

Utilizing the standards in 10 CFR §50.12 will not lead to "continual regression from standardization." Moreover, the requirement for specific Commission approval is a safeguard against such regression. It also should be understood that there are clear and compelling incentives for plant owners incorporating a certified design to minimize requests for exemptions, thus maximizing the regulatory stability accorded to a certified design.

Question 8: The proposed rule generally permits the NRC to impose modifications on site permits and design certifications only for the sake of compliance or adequate protection. Under the proposed rule, only when an early site permit or a design certification comes up for renewal would the NRC be able to impose modifications which went beyond requiring adequate protection. Does the proposed rule provide a reasonable degree of finality to early site permits and design certifications?

NUMARC Response

The proposed rule contains appropriate finality provisions governing a Commission determination that a modification is necessary to assure adequate protection of the public health and safety or the common defense and security before imposing more stringent requirements on early site permits or standard design certifications. However, the proposed rule lacks adequate finality provisions where early site permits or standard design certifications are referenced in combined license applications.

Modification of Site Permits and Design Certifications. Proposed Part 52 contains provisions in Sections 52.39 and 52.63 designed to bring finality to early site permit determinations and standard design certifications, respectively. Under Section 52.39, the Commission may not impose more stringent requirements on the early site permit or the site for which it was issued "unless the Commission determines either that ...[s]ignificant new information shows that a modification is necessary to bring the permit or the site into compliance with the Commission's regulations and orders in effect at the time the permit was issued; or ... [a] modification is necessary to assure adequate protection of the public health and safety or the common defense and security." Section 52.63 provides a similar standard with respect to the imposition of more stringent safety requirements on standard design certifications. In essence, these provisions mirror that portion of the Commission's backfit rule (10 CFR §50.109) relating to backfits which provide

an exception where a modification is necessary to bring a facility into compliance with a license or the rules or orders of the Commission, or where the regulatory action is necessary to ensure that the facility provides adequate protection to the health and safety of the public and is in accordance with common defense and security. In this regard, the provisions in the proposed rule provide a reasonable degree of finality for early site permits and design certifications.

Modification of the proposed rule to require a documented evaluation before a site permit or design certification may be modified would improve the rule and bring it in line with the Commission's current backfit regulation (10 CFR §50.109). Under that backfit rule the Commission or the staff, as appropriate, must find and declare with appropriate documented evaluation for its findings that the exception to the backfit rule is applicable. We believe this requirement should be written into Sections 52.39 and 52.63 so that prior to imposition of more stringent safety requirements on a site permit or standardized plant an appropriate documented evaluation must take place. (The provisions of 10 CFR §50.109 should be applicable in their entirety at the time of renewal). The same underlying philosophy of the need for discipline in making modifications which led to the inclusion of this provision in the backfit rule is present and calls for inclusion of such a provision in connection with standardization.

Finality of Site Permits and Design Certifications for Purposes of Later Proceedings. The proposed rule lacks a finality provision for early site permits which make clear that issues resolved in connection with an early site permit may not be challenged when issuance of a combined license is sought. Similarly, the proposed rule lacks a finality provision which makes

clear that issues involved in connection with a standard design certification may not be challenged when issuance of a combined license is sought. What is needed are provisions stating that in making findings required for issuance of a combined license or in any preoperational proceeding, the Commission will treat as resolved those matters resolved in connection with the issuance or renewal of an early site permit or a design certification. Moreover, Part 52 should provide that requests made in a combined license proceeding, or any preoperational proceeding, to modify a standard design certification should be dealt with in accordance with 10 CFR §2.758 (See NUMARC's response to Question 1).

The proposed rule also does not make it clear that the tests, inspections, analyses and acceptance criteria which are contained in a standard design certification apply to those portions of the design covered by the design certification where an application for a combined license references the certified standard design. In the absence of clarifying language to proposed §52.79, that section might be read to require that a new set of tests, inspections, analyses and acceptance criteria could be formulated for a certified standard design referenced in a combined license. No additional tests, inspections, analyses and acceptance criteria should be required for that portion of the design covered by the design certification, and the proposed rule should be modified to make this clear.

Question 9: The proposed rule places a term of twenty years on early site permits and allows for an unlimited number of renewals of up to twenty years each. Should a longer or shorter term be placed on the permit? What should the respective burdens of the permit holder and the NRC be at renewal?

NUMARC Response

An initial term of twenty years for an early site permit, as proposed by the rule, is reasonable. It provides sufficient flexibility to allow long-range utility planning for additional generating capacity with reasonable assurance that an acceptable plant site will be available. It also takes appropriate account of the considerable expense incurred by an applicant in preparing the application, including an environmental report, undergoing staff and ACRS reviews and participating in the hearing process.

Renewals of ten to twenty years also are reasonable, if the opportunity for renewal is based on the criteria applied to the original site permit.

The respective burdens of the applicant and the NRC at the time of renewal should be as follows: The provisions made for the permittee's submissions in Section 52.29 are reasonable in terms of the burden to be shouldered at the time of renewal. The NRC should review the application at the time of renewal against the criteria applied to the original site permit, together with those additional modifications imposed during the initial term of the permit. Any additional requirements that the Commission would propose to apply would be evaluated in accordance with the criteria and procedures of the backfit rule.

Question 10: How might the proposed rule provide for a "sign-as-you-go" process of NRC inspection of a plant being constructed according to a certified design? NUMARC suggested instituting such a process in order to secure the earliest possible resolution of quality assurance and design conformance questions. The NRC encourages the earliest possible resolution of these questions. To this end, the rule requires applications for design certifications and combined licenses to propose for inclusion in the certification or license inspections, tests, analyses, and related acceptance criteria which will help provide reasonable assurance that the facility has been well constructed. See §§52.47 and 52.79 of the proposed rule. Moreover, the NRC would, during construction authorized by this part, devote the resources necessary to achieve the earliest possible staff-level identification and resolution of quality assurance and design conformance questions. However, the NRC does not see how Commission-level finality can be afforded the resolution of such questions without risking an almost continual hearing on the construction of the plant.

NUMARC Response

In answer to this question, it is first necessary to briefly review the industry thinking with respect to the requirements for inclusion of inspections, tests, analyses and the related acceptance criteria in the standardization licensing process.

Under the current two-step process, the inspections, tests and analyses which are required to assure that the constructed plant complies with the license requirements are not fully defined until the operating license review is complete. As a result, the operating license is often delayed until additional tests and inspections are completed.

During the evolution of nuclear plant designs it was appropriate to establish general criteria at the construction permit stage and review the adequacy of the design at the operating license stage. To the extent it is possible to establish the final design in detail before construction begins, it is also possible to establish the inspections, tests and analyses that will need to be performed to assure that the requirements of the license are being met as the plant is being constructed.

Specification of the inspections, tests, analyses and related acceptance criteria in the combined license would establish a clearly defined set of requirements enabling a demonstration that the commitments of the license are being met during the construction of the plant. As such, early licensee specification and NRC approval of the inspections, tests and analyses and the related acceptance criteria would enhance regulatory certainty by prescribing what is required to provide assurance that the requirements of the license are being met. Successful completion of these inspections, tests and analyses and compliance with the related acceptance criteria provide specific demonstration that the plant has been constructed and tested in such a way as to conform with the combined license.

The proposed rule should provide that the Commission staff develop an inspection plan for use by the staff throughout construction. Such an inspection plan would be designed to detail the nature of the inspections and tests which the staff would carry out in order to assure that the tests, inspections and analyses set forth in the combined license have been properly performed and the acceptance criteria relating thereto have been met. This inspection plan would serve as the regulatory basis for implementing a "sign-as-you-go" program. Appropriate documentation by the staff would be required as part of the inspection plan. This would provide a basis for the ultimate NRC determination that construction has been completed in conformance with the combined license.

We do not believe that the process described above would risk "an almost continual hearing on the construction of the plant." Staff development and implementation of an inspection plan would not, in and of itself, require such continual hearings. Moreover, we believe, as contained in our recommended

revisions to Section 52.103, the Commission can and should make appropriate use of the "inspections, tests" exception to the adjudications requirement contained in the Administrative Procedure Act (5 U.S.C. §554(a)(3)).

Question 11: The National Governors' Association adopted the following Recommendation, among others, at its 79th annual meeting, July 26-28, 1987: "In the future, emergency plans should be approved by the NRC before it issues the construction permit for any new nuclear power plant." To what extent should approval of emergency plans be required before an early site permit or a combined license is issued? Are the provisions of the proposed rule adequate in this regard? See §§52.17(c) and 52.79(d).

NUMARC Response

Early site permits. The Commission's proposed regulation (§52.17(c)) would require that an early site permit applicant demonstrate that the area surrounding the site is "amenable to emergency planning which would provide reasonable assurance that adequate protection measures could be taken in the event of a radiological emergency at the site". The applicant would also be required to describe contacts and arrangements made with local, state and federal governmental agencies with responsibility for coping with emergencies.

We encourage the resolution of off-site emergency planning issues at the earliest possible stage in the licensing process. We recognize, however, that full resolution of such issues at the early site permit stage may not be practical in many cases. For example, in circumstances where a utility wishes to "bank" a site for future use without making the decision to construct a nuclear power facility on that site, or where a person other than a utility is seeking an early site permit, there may be justifiable reluctance to commit the resources necessary to secure NRC and FEMA approval of full-scale off-site emergency plans. We believe that the "amenability" provision proposed in §52.17(c) is a reasonable and responsible means to accommodate such situations. Since, however, we believe it desirable to encourage the resolution of off-site emergency planning issues at the earliest possible stage in the licensing process, we would also recommend that early site permit applicants have the option of securing NRC and FEMA approval of fully developed off-site emergency

plans. An additional option, which we believe the rule should afford, would be to permit early site permit applicants to obtain NRC and FEMA approval of postulated emergency planning parameters (such as resources required for evacuation) which, if satisfied by off-site emergency plans subsequently submitted by a combined license applicant, will demonstrate the acceptability of those plans. To implement these recommendations, modification of the Commission's proposed rule is necessary. (See, in this regard, pages 14-15 of the Detailed Analysis, appended as Annex III.)

Combined Licenses. The Commission's proposed regulation (§52.79(d)) requires a combined license application to "contain emergency plans which provide reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency at the site." Our recommendations regarding treatment of emergency planning issues in connection with early site permits dictate our views on proposed §52.79(d). For a combined license applicant who has not previously secured approval of fully developed off-site emergency plans by referencing an early site permit which includes such plans, the requirements of §52.79(d) are appropriate -- all outstanding emergency planning issues should be finally resolved before a combined license is issued. Where a combined license applicant obtained approval of off-site emergency plans in connection with a referenced early site permit, those plans should govern; there should be no reopening of emergency planning issues resolved in connection with an early site permit. Where postulated emergency planning parameters have been approved, the adequacy of emergency plans subsequently submitted should be judged against those parameters. If the parameters are satisfied, the emergency plans should be judged acceptable, enabling the Commission to find, as proposed §52.79(d) requires, that th re

is "reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency at the site." As stated in our detailed analysis of Part 52, we recommend that proposed §52.79(d) be modified consistent with proposed §52.17(c) (See page 84).

Question 12: The staff is considering whether there is a need for further rulemaking or guidance for future reactors, both light-water reactors and other types, to assure that future license applications adequately address the Commission's Safety Goal Policy Statement (51 FR 30028; August 21, 1986), and the licensing criteria set forth in the Commission's Severe Accident Policy Statement (50 FR 32138; August 8, 1985), particularly the criteria that call for demonstration of compliance with the applicable parts of 10 CFR 50.34(f) and completion of a probabilistic risk assessment (PRA) together with a systematic consideration of any severe accident vulnerabilities the PRA might expose. Is the language in §§52.47(a) and 52.47(b) sufficient to assure that future applications adequately address these matters? Given the Commission's guidance, in its Policy Statement on Safety Goals for the Operation of Nuclear Power Plants, that the Safety Goals should not be used to make individual licensing decisions (51 FR at 30031-32), should the rule contain the requirement in §52.47(b)(3) that an applicant provide "a realistic assessment of the degree to which the design conforms to the Commission's Safety Goals"?

NUMARC Response

Proposed Part 52 contains in Section 52.47 provisions which incorporate certain aspects of the Commission's Severe Accident Policy Statement. The industry is committed to compliance with the Policy Statement. However, we can see no significant advantages to incorporating these Policy Statement provisions in Part 52. We also note that the Commission is separately considering whether, or to what extent, Severe Accident Policy Statement considerations should be incorporated into the Commission's regulations or be the subject of other regulatory guidance. Incorporation of these provisions into Part 52 appears to anticipate the Commission's decision in this area and is premature.

Although the overall objectives of the Severe Accident Policy Statement are generally understood, the industry has noted the absence of sufficiently definitive criteria which an applicant (or the staff) can use to develop designs and assess compliance with the objectives of the Policy. We continue to urge that the Commission, in conjunction with on-going industry/DOE programs, develop such criteria. The general language proposed for Part 52

does not contribute to meeting the need for specific criteria, but rather restates the general objectives of the Policy Statement.

An additional concern is the reference to "technical resolutions of the Unresolved Safety Issues and medium-to-high priority Generic Safety Issues." The industry is committed to aggressive action to develop technical resolutions of these issues and to supporting NRC efforts to resolve them conclusively. Although significant progress has been made under the EPRI Regulatory Stabilization Program, the fact remains that the "list" of applicable issues is still subject to change (particularly in assignment of priority). In that context, we would suggest it is inappropriate to include within the rule a reference to such a variable list.

The rule also incorporates a requirement to provide "a realistic assessment of the degree to which the design conforms to the Commission's Safety Goals." During development of the Safety Goal Policy Statement, the Commission gave explicit consideration to the application of current PRA practices and concluded that, for the present, safety goals should not be used to make individual licensing decisions. We continue to support the Commission's position in this regard, and we are concerned that the inclusion of this provision in Part 52 may lead to just such a use of the Commission's safety goals. In any event, a design-specific PRA will be provided in accordance with current regulations. We believe this will be sufficient to satisfy the Commission's needs in this area.

Footnote 1 (53 Fed. Reg. 32061): The NRC's current policy on replication appears in this Federal Register notice after this Supplementary information. The Commission welcomes comment on this policy, in particular on whether the NRC should continue to offer the option of replication.

NUMARC Response

With regard to the Replicate Plant Concept discussion in the Federal Register (53 Fed. Reg. 32067-68), NUMARC agrees that the option to replicate one or more nuclear power plants of essentially the same design as one already licensed should remain. We agree that a qualification review of the application for a replicate plant, as described in the notice, is appropriate. However, the stated requirement that the application must be submitted within five years of the date of issuance of the staff safety evaluation report for the base plant is too restrictive.

Some utilities have twin unit sites where they have completed one unit but have deferred the second unit until power needs justify its completion. In these cases, and perhaps in other cases, it is reasonable to allow a plant of a design that has been found to be safe by the staff to be replicated at a later date.

Having two or more replicate plants provides many of the safety benefits as having standardized designs, particularly those benefits associated with training of operating staffs. The NRC licensing process should allow for this by eliminating the time allowed from the date of the staff safety evaluation of the base plant and using a test that relates to the ability of the replicate plant to comply with the requirements applicable to the base plant. The base plant, it should be remembered, would have incorporated any changes needed to assure the public health and safety as imposed by the Commission under the backfit rule. Thus, the base plant that is being replicated would be in compliance with the Commission's regulations to the extent that these changes were warranted under the backfit rule.

NUMARC COMMENTS
ANNEX III

PART 52
DETAILED ANALYSIS

CONTENTS

ANNEX III

Part 52 Detailed Analysis

Proposed Part 52	NUMARC Comments	Suggested Revisions
GENERAL PROVISIONS		
§ 52.1 Scope.		
This part governs the issuance of early site permits, standard design certifications, and combined construction permits and conditional operating licenses for nuclear power facilities under the Atomic Energy Act of 1954, as amended (68 Stat. 919), and Title II of the Energy Reorganization Act of 1974 (88 Stat. 1242).	"Combined license" is defined by §52.3(a). To make Part 52 internally consistent, use of the defined term is suggested.	This part governs the issuance of early site permits, standard design certifications, and combined ~~construction permits and conditional operating~~ licenses for nuclear power facilities under the Atomic Energy Act of 1954, as amended (68 Stat. 919), and Title II of the Energy Reorganization Act of 1974 (88 Stat. 1242).
§ 52.3 Definitions.		
(a) As used in this part-		
"Combined license" means a	Use of the word	"Combined license" means a combined

combined construction permit and conditional operating license for a nuclear power facility issued pursuant to Subpart C of this part.	"conditional" is confusing and should be deleted. Operating licenses are typically issued with conditions incorporated therein.	construction permit and ***conditional*** operating license for a nuclear power facility issued pursuant to Subpart C of this part.
"Early site permit" means a Commission approval, issued pursuant to Subpart A of this part, for a site or sites for one or more nuclear power facilities.		
"Standard design" means a design which is sufficiently detailed and complete to support licensing of a nuclear power facility or approval of a major portion of such a facility when referenced in an application for a construction permit, combined construction and conditional operating license, or standard design certification, as appropriate, and which is usable for a multiple number of units or at a multiple number of sites without reopening or	To make Part 52 internally consistent, use of the defined term "combined license" is suggested.	"Standard design" means a design which is sufficiently detailed and complete to support licensing of a nuclear power facility or approval of a major portion of such a facility when referenced in an application for a construction permit, combined ***construction/and/conditional/operating*** license, or standard design certification, as appropriate, and which is usable for a multiple number of units or at a multiple number of sites without reopening or repeating the review.

repeating the review.

"Standard design certification" means a Commission approval, issued pursuant to Subpart B of this part, of a standard design for a nuclear power facility, or a major portion of such a facility.	The terms "design certification" and "certification" are at times used in place of "standard design certification" in Subpart B. For clarity, expansion of this definition is suggested.	"Standard design certification", "design certification" or "certification" means a Commission approval, issued pursuant to Subpart B of this part, of a standard design for a nuclear power facility, or a major portion of such a facility.
A design so approved may be referred to as a "certified standard design."		
(b) All other terms in this part have the meaning set out in 10 CFR 50.2, or Section 11 of the Atomic Energy Act, as applicable.		
	Part 52 lacks a provision regarding interpretations of regulations contained therein. Such a provision (which is identical to §50.3) is appropriate for inclusion at this point.	§52.5 Interpretations Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 52.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et seq.).

OMB has approved the information collection requirements contained in this part under control number 3150(b) --

(b) The approved information collection requirements contained in this part appear in §§ 52.15(b), 52.17, 52.29(a), 52.35, 52.37 52.39(b), 52.45, 52.47, 52.57(a), 52.63(b), 52.63(c), 52.75, 52.77, 52.79, 52.83, 52.91(a), 52.93, 52.99, 52.101, and 52.103.

Subpart A — Early Site Permits

§ 52.11 Scope of subpart.

This subpart sets out the requirements and procedures applicable to Commission issuance of early site permits for approval of a site or sites for one or more nuclear power facilities separate from and prior to the filing of an application for a construction permit or combined license for such a facility.	Proposed §52.27 allows an applicant to reference, at its own risk, a site for which an early site permit application has been docketed but not granted. The change suggested makes §52.11 consistent with §52.27.	This subpart sets out the requirements and procedures applicable to Commission issuance of early site permits for approval of a site or sites for one or more nuclear power facilities separate from and prior to the filing of an application for a construction permit or combined license for such a facility.

§ 52.13 Relationship to Subpart F of 10 CFR Part 2.

The procedures of this subpart do not replace those set out in Subpart F of 10 CFR Part 2.

Subpart F applies only when early review of site suitability issues is sought in connection with a forthcoming application for a permit to construct certain power facilities.

The phrase "forthcoming" should be deleted to make this provision consistent with 10 CFR §2.600.

Subpart F applies only when early review of site suitability issues is sought in connection with ~~a forthcoming~~ an application for a permit to construct certain power facilities.

This subpart applies when any person who may apply for a construction permit under 10 CFR Part 50 or for a combined license under 10 CFR Part 52 seeks an early site permit separately from and prior to an application for a construction permit for a facility.

Limiting the persons eligible to apply for early site permits to persons who may apply for construction permits under Part 50 or for combined licenses under Part 52 unnecessarily restricts the pool of early site permit applicants, and fails to take into account the potential for innovative commercial arrangements. This restrictive language should thus be deleted.

Deletion of the phrase

This subpart applies when any person ~~who may apply for a construction permit under 10 CFR Part 50 or for a combined license under 10 CFR Part 52~~ seeks an early site permit separately from ~~and prior to~~ an application for a construction permit or a combined license for a facility.

	"and prior to" makes this section consistent with §52.27. Obtaining an early site permit should be an option available to applicants for construction permits and applicants for combined licenses. As drafted, this provision suggests otherwise.	
This subpart may not be used once an application has been docketed pursuant to 10 CFR 2.603.	This provision is unclear and could be construed to be in conflict with §52.27. In any case, the sentence seems redundant in view of the second sentence of this provision.	~~This subpart may not be used once an application has been docketed pursuant to 10 CFR 2.603.~~
§ 52.15 Filing of applications.		
(a) Any person who may apply for a construction permit under 10 CFR Part 50, or for a combined license under 10 CFR Part 52, may file with the Director of Nuclear Reactor Regulation an application for an early site permit.	The eligibility requirements contained in §52.15 may be read to require early site permit applicants to satisfy the same requirements, such as demonstration of financial qualification, imposed on construction permit and combined license	(a) Any person ~~who may apply for a construction permit under 10 CFR Part 50 or for a combined license under 10 CFR Part 52~~ may file with the Director of Nuclear Reactor Regulation an application for an early site permit.

	applicants. Imposition of such requirements unnecessarily restricts the pool of early site permit applicants, and fails to take into account the potential for innovative commercial arrangements.	
An application for an early site permit may be filed notwithstanding the fact that an application for a construction permit or a combined license has not been filed in connection with the site or sites for which a permit is sought.		
(b) The application must comply with the filing requirements of 10 CFR 50.30 (a), (b), and (f).	As a result of our Part 50 review (see discussion of Key Issue F in Annex I), additional cross-references are recommended.	(b) The application must comply with the filing requirements of 10 CFR 50.30(a),(b), and (f)/ as they would apply to an application for a construction permit. With regard to §50.4, which is referenced by §50.30(a)(1), the following portions are applicable: §§50.4(a), 50.4(b)(1) - (b)(3), 50.4(c)-50.4(e).

§ 52.17 Contents of applications.

(a)(1) The application must contain the information required by 10 CFR 50.33 (a)-(d) and 50 34(a)(1).

The reference to §50.34(a)(1) should be deleted. That section incorporates by reference the technical information specified by §50.34(a)(2)-(8), which in large part covers information relating to the proposed design of a particular nuclear power facility. Such information will not be available to the applicant at the time an early site permit is sought. In other cases, some of the information required by §50.34(a)(2) - (8) (e.g. operator requalification) is simply not pertinent to early site permits. The residual information required by §50.34(a)(1) is adequately encompassed by §52.17(a)(1)(i) - (vii). As a result of our Part 50 review (see discussion of Key Issue F in Annex I), additional cross-references are recommended.

(a)(1) The application must contain the information required by 10 CFR 50.33 (a)-(d) and ~~50.34(a)(1)~~, to the extent approval of emergency plans is sought under subsection (c) below, the information required by §§50.33(g) and 50.34(b)(6)(v).

In particular, the application should describe the following:	The technical information identified by the Commission is appropriate and sufficient to support an application for an early site permit. For clarity, a rephrasing of the introductory clause is suggested.	~~In particular, the application should describe the following:~~ The application must also include:
(i) The number, type, and thermal power level of the facilities for which the site may be used;		
(ii) The boundaries of the site;		
(iii) The proposed general location of each facility on the site;		
(iv) The anticipated maximum levels of radiological and thermal effluents each facility will produce;		

(v) The type of cooling systems, intakes, and outflows that may be associated with each facility;

(vi) The seismic, meteorological, hydrologic, and geologic characteristics of the proposed site (see Appendix A to 10 CFR Part 100); and

(vii) The existing and projected future population profile of the area surrounding the site.

(2) A complete environmental report as required by 10 CFR 51.45 and 51.50 must be included in the application.

§51.45 specifies the contents of an environmental report submitted in connection with a rulemaking proceeding; a

(2) A complete environmental report as required ~~by 10 CFR 51.45 and 51.50~~ of applicants for a construction permit by Subpart A of 10 CFR Part 51 must be included in the application; provided,

cross-reference to this regulation is confusing. Reference to the requirements of Subpart A of Part 51 is sufficient to inform an applicant as to the contents of the environmental report. This approach is also consistent with that used for other sections of Part 52.

The addition of qualifying language is necessary to make clear that the information submitted in the environmental report need not account for a particular reactor design, but is to describe, in general terms, the construction and operation of reactor(s) having characteristics that fall within postulated site parameters. Paragraph 3 of Appendix M to Part 50 is the source of the proposed language. It is recognized that a subsequent construction permit or combined license application referencing an early site permit must contain information demonstrating that the

however, that such environmental report shall be directed, in general terms, at the construction and operation of reactor(s) at the site having characteristics that fall within the postulated site parameters. The related draft and final environmental impact statement prepared by the Commission's regulatory staff will be similarly directed.

	site parameters contained in the environmental report have been met.	
(b) The application must propose a plan for redress of the site in the event that the activities permitted by §52.25(a) are performed and the site permit expires before it is referenced in an application for a construction permit or a combined license issued under Subpart C of this part.	Development of a site redress plan of this nature is a new requirement not otherwise imposed by Part 50. The imposition of this new requirement is a marked departure from the Commission's stated objectives in promulgating Part 52. Any effort on the part of the Commission to require a site redress plan is more appropriately handled through a Part 50 rulemaking. This provision should be deleted.	*(b) The application must propose a plan for redress of the site in the event that the activities permitted by §52.25(a) are performed and the site permit expires before it is referenced in an application for a construction permit or a combined license issued under Subpart C of this part.*
The application must demonstrate that there is reasonable assurance that redress carried out under the plan will achieve a self-maintaining, environmentally stable, and aesthetically acceptable site suitable for whatever non-nuclear use may conform with local zoning laws.	The standard used to assess the adequacy of a site redress plan -- achievement of a "self-maintaining, environmentally stable, and aesthetically acceptable site" -- is inherently unworkable. The additional standard of "whatever non-nuclear use may conform with local zoning laws" is unclear, impracticable and would require the Commission to	*The application must demonstrate that there is reasonable assurance that redress carried out under the plan will achieve a self-maintaining, environmentally stable, and aesthetically acceptable site suitable for whatever non-nuclear use may conform with local zoning laws.*

become involved in matching redress against a variety of local zoning laws. This provision should also be deleted.

(c) The application must demonstrate that the area surrounding the site is amenable to emergency planning which would provide reasonable assurance that adequate protective measures could be taken in the event of a radiological emergency at the site.

The early site permit applicant, at its option, should be permitted to submit offsite emergency plans for review and approval. Alternatively, the applicant may seek approval of postulated emergency planning parameters (such as resources required for evacuation) which, if satisfied by offsite emergency plans subsequently submitted by an operating license or combined license applicant, will demonstrate the acceptability of those plans. Refer to our response to Question 11 (Annex II) for a discussion of these recommendations.

Further guidance is needed from the Commission as to the showing an applicant must make to demonstrate

Language to add to this provision should be drafted by NRC which includes the following points:

1. Providing the early site permit applicant with two additional options regarding emergency planning:

a. Submission of fully developed emergency plans for review and approval by NRC and FEMA.

b. Submission of postulated emergency planning parameters for NRC and FEMA review and approval. Conformance with these parameters will be deemed sufficient to judge the adequacy of offsite emergency plans in any subsequent operating license or combined license proceeding.

2. A description of the parameters to be used by NRC in assessing whether the area surrounding the site is amenable to emergency planning.

	that an area surrounding a site is "amenable" to emergency planning.	
The application must include a description of contacts and arrangements made with local, state and federal governmental agencies with responsibility for coping with emergencies.	The failure of state and/or local governments to cooperate in emergency planning should not constitute a ground for rejecting a site as not amenable to emergency planning.	The application must include a description of any contacts and arrangements made with local, state and federal governmental agencies with emergency planning responsibilities. ~~for coping with emergencies~~
§ 52.18 Standards for review of applications.		
Applications filed under this subpart will be reviewed according to the applicable standards set out in 10 CFR Part 50 and its appendices as they apply to applications for construction permits for nuclear power plants.	As drafted, this provision is unworkable. (See discussion of Key Issue F in Annex I.) The addition of specific cross-references is based upon our review of Part 50.	Applications filed under this subject will be reviewed according to the ~~applicable~~ standards ~~set out in 10 CFR Part 50 and its appendices as they apply to applications for construction permits for nuclear power plants~~ of §50.40(a), 50.40(c), 50.40(d) and, to the extent that approval of emergency plans is sought under §52.17(c), the standards of §50.47.
In particular, the Commission shall prepare an environmental impact statement during review of the application, and the	For clarity, a reference to the Part 51 regulations dealing with preparation of environmental impact statements is suggested.	~~In particular,~~ The Commission shall prepare an environmental impact statement during review of the application, in accordance with the applicable provisions of 10 CFR

Commission shall determine, after consultation with the Federal Emergency Management Agency in accord with the applicable portions of 10 CFR 50.47(a)(2), whether the information required of the applicant by §52.17(c) demonstrates that the area surrounding the site is amenable to emergency planning which would provide reasonable assurance that adequate protective measures could be taken in the event of a radiological emergency at the site.

Consistent with the comment made regarding §52.17(a)(2), qualifying language reflecting the "site parameter" nature of the Commission's environmental impact statement is needed.

The only emergency planning finding imposed by this provision is a finding as to the site's amenability to emergency planning. Thus, the reference to §50.47(a)(2) is confusing and is appropriately deleted. For clarity, use of the phrase "submitted by" in place of "required of" is suggested. The Commission will need to work closely with FEMA to insure that the "amenability" finding does not evolve into a determination on the adequacy of emergency planning for the site, unless the applicant requests such a determination.

§§ 51.70 - 51.95; provided, however, the draft and final environmental impact statement prepared by the Commission's regulatory staff shall be directed, in general terms, to the construction and operation of reactor(s) at the site having characteristics that fall within the postulated site parameters. ~~and/~~The Commission shall determine, after consultation with the Federal Emergency Management Agency ~~in accord with the applicable portions of 10 CFR 50.47(a)(2)~~ whether the information ~~required of~~ submitted by the applicant ~~by~~ under §52.17(c) demonstrates that the area surrounding the site is amenable to emergency planning which would provide reasonable assurance that adequate protective measures could be taken in the event of a radiological emergency at the site.

§ 52.19 Permit and renewal fees.

The fees charged for the review of an application for the initial issuance or renewal of an early site permit are those for special projects, as defined in 10 CFR 170.3 and set forth in 10 CFR 170.21.

Part 52 and Part 170 should be made consistent.

In addition to deferring fees, it is also appropriate for the Commission to establish reasonable and fixed fees for early site permit reviews. Such a policy regarding fees will encourage applications for early site permits, and enhance predictability in the regulatory process.

There is no application fee.

All fees for the review of an application are deferred as follows:

(a) If an application is filed for a construction permit or combined license

for a facility to be located at a site for which an early site permit has been issued, the permit holder shall pay the applicable fees for the permit at the time the facility application referencing the early site permit is filed.		
If, at the end of the initial period of the permit, no facility application referencing the early site permit has been docketed, the permit holder shall pay any outstanding fees for the permit.	Use of defined term "early site permit" is suggested.	If, at the end of the initial period of the early site permit, no facility application referencing the early site permit has been docketed, the early site permit holder shall pay any outstanding fees for the permit.
(b) If the permit is renewed, the permit holder shall pay any outstanding fees for the renewal at the time a facility application referencing the early site permit is filed.	This provision apparently requires the payment of renewal fees when an application referencing the renewed permit is filed; use of the word "outstanding" is confusing.	(b) If the early site permit is renewed, the permit holder shall pay ~~any outstanding~~ the applicable fees for the renewal at the time a facility application referencing the early site permit is filed.
If, at the end of the renewal period, no .	Use of the defined term is suggested.	If, at the end of the renewal period, no facility application

facility application referencing the permit has been filed, the permit holder shall pay any outstanding fees for the renewal.		referencing the early site permit has been filed, the permit holder shall pay any outstanding fees for the renewal.
(c) If an application for the issuance or renewal of an early site permit is denied or withdrawn, any outstanding fees associated with the review of the application are due immediately and payable by the applicant for the permit or renewal.	Requiring an applicant whose application has been denied to immediately pay all outstanding fees goes beyond the proposed revisions to Part 170 under consideration by the Commission, and is opposed on this basis.	(c) If an application for the issuance or renewal of an early site permit is ~~denied/or~~ withdrawn, any outstanding fees associated with the review of the application are due immediately and payable by the applicant for the permit or renewal.
§ 52.21 Hearings.		
An early site permit is a partial construction permit and is therefore subject to all procedural requirements in 10 CFR Part 2 which are applicable to construction permits, including the requirements for docketing in §§2.101(a) (1)-(4), and the requirements for	The reference to 10 CFR 2.104(b)(1)(iv) is inapplicable to early site permits. §2.104 (b)(1)(iv) identifies the common defense and security/ public health and safety findings made by the Commission prior to issuance of a construction permit; the limited	An early site permit is a partial construction permit and is therefore subject to all procedural requirements in 10 CFR Part 2 which are applicable to construction permits, including the requirements for docketing in §§2.101(a) (1)-(4), and the requirements for issuance of a notice of hearing in §§2.104(a), (b)(1)~~(i)/and~~ (v), and (b)(2) to the extent it runs

issuance of a notice of hearing in §§2.104(a), (b)(1)(iv) and (v), (b)(2) to the extent it runs parallel to (b)(1)(iv) and (v), and (b)(3).	construction authority permitted under an early site permit does not require a determination on these issues. Early site permit findings are more appropriately focused on the acceptability of a site as the location of a nuclear power facility. Paragraph 5(d) of Appendix M to Part 50 is the source of the proposed language.	parallel to (b)~~(1)(iv) and~~ (v), and (b)(3). Any hearing shall also consider, taking into consideration the site criteria contained in Part 100 of this chapter, whether reactor(s) having characteristics that fall within the site parameters for the site can be constructed and operated without undue risk to the health and safety of the public.
All hearings conducted on applications for early site permits filed under this part are governed by the procedures contained in Part 2.	This provision appears to require that all hearings be conducted in accordance with the Commission's procedural rules of general applicability. Clarifying language to this effect is recommended.	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.
§ 52.23 Referal to the ACRS.		
The Commission shall refer a copy of the application to the Advisory Committee on Reactor Safeguards (ACRS).		

The ACRS shall report on those portions of the application which concern safety.	For clarity, revision of this provision is suggested.	The ACRS shall report on those ~~portions of the application~~ matters which concern the public health and safety.
	Subpart A lacks a provision which identifies the standards for issuance of an early site permit. Such a provision, incorporating the language used in §50.50, is appropriate for inclusion at this point.	**§ 52.24 Issuance of early site permit.** Upon determination that an application for an early site permit meets the standards and requirements of the Atomic Energy Act and the Commission's regulations, and that notifications, if any, to other agencies or bodies have been duly made, and upon receipt of a report from the Advisory Committee on Reactor Safeguards, the Commission shall issue an early site permit, in such form and containing such conditions and limitations, as it deems appropriate and necessary.
§ 52.25 Extent of activities permitted. (a) The holder of an early site permit may		

perform the activities at the site allowed by 10 CFR 50.10(e).") without first obtaining the separate authorization required by that section.

(b) If the activities permitted by paragraph (a) of this section are performed at a given site and the permit is not renewed for that site and not referenced in an application for a construction permit or a combined license issued under Subpart C of this part, then the permit remains in effect solely for the purpose of site redress, and the holder of the permit shall redress the site in accord with the terms of the site redress plan required by §52.17(b).

For clarity, use of the defined terms "early site permit" and "combined license" are suggested. Several other changes to clarify this provision are also recommended.
As stated in connection with §52.17(b), development of a site redress plan of this nature is a new requirement not otherwise imposed by Part 50. Any effort to require a site redress plan is more appropriately handled through a Part 50 rulemaking. This portion of the provision should be deleted.

(b) If the activities permitted by paragraph (a) of this section are performed at any ~~a/given~~ site for which an early site permit has been granted and the early site permit is not renewed for that site and not referenced in an application for a construction permit or a combined license ~~issued/under/Subpart/C/of/this/part~~, then the early site permit shall remains in effect solely for the purpose of site redress~~,/and/the/holder/of/the/permit/shall/redress/the/site/in/accord/with/the/terms/of/the/site/redress/plan/required/by/§52.17(b)~~, of any adverse environmental impact from the activities conducted should such activities be recessary.

If, before redress is complete, a use not envisaged in the redress plan is found for the site

~~If,/before/redress/is/complete,/a/use/not/envisaged/in/the/redress/plan/is/found/for/the/site/of/parts/therefor,/the/holder/of/the/permit/~~

or parts thereof, the holder of the permit shall carry out the redress plan to the greatest extent possible consistent with the alternate use.

shall carry out the redress plan to the greatest extent possible consistent with the alternate use.

§ 52.27 Duration of permit.

An early site permit issued under this subpart is valid for twenty years from the date of issuance.

An applicant for a construction permit or combined license may, at its own risk, reference in its application a site for which an early site permit application has been docketed but not granted.

§ 52.29 Application for renewal.

(a) Not less than twelve nor more than thirty-six months prior to the end of the initial twenty-year period, or any later renewal period, the permit holder may apply for a renewal of the permit.

An application for renewal must contain all information necessary to bring up to date the information and data contained in the previous application.

(b) Any person whose interests may be affected by renewal of the permit may request a hearing on the application for renewal.

The request for a hearing must comply with 10 CFR 2.714.

If a hearing is granted, notice of the hearing will be published in accord with 10 CFR 2.703.

(c) An early site permit, either original or renewed, for which a timely application for renewal has been filed, remains in effect until the Commission has determined whether to renew the permit.

If the permit is not renewed, it continues to be valid in proceedings on an application for a construction permit or combined license referencing the permit and docketed before the end of the initial period of the permit, or a later renewal period.

An unrenewed permit also continues to be valid in proceedings on an application for an operating license which is based on a construction permit referencing the permit and docketed prior to expiration of the permit or renewal.

(d) The application for renewal must be forwarded to the Advisory Committee on Reactor Safeguards (ACRS), which shall review the application and report its findings and recommendations to the Commission.

Modification of this provision to conform with §52.23 is suggested.

For clarity, the provision which precludes reconsideration of resolved issues should be expressed in the affirmative and combined with the sentence describing the scope of the ACRS review.

(d) The Commission shall refer a copy of ~~T~~the application for renewal ~~shall be forwarded~~ to the Advisory Committee on Reactor Safeguards (ACRS). ~~which shall review the application and report its findings and recommendations to the Commission~~ The ACRS shall report on those matters which concern the public health and safety and which were not the subject of any earlier reviews by it of the site which is the subject of the application.

The ACRS need not reconsider issues on which it has made findings and recommendations in any earlier review of the site which is the subject of the application.

~~The ACRS need not reconsider shall only consider issues on which it has made findings and recommendations in any earlier review of the site which is the subject of the application.~~

§ 52.31 Criteria for renewal.

(a) The Commission shall grant the renewal if the Commission determines that the site complies with the Atomic Energy Act and the Commission's regulations and orders in effect at the time of the renewal and any more stringent requirements the Commission may wish to impose after a determination that there is a substantial increase in overall protection of the public health and safety or the common defense and security to be derived from the more stringent requirements and that the direct and indirect costs of implementation of those requirements are justified in view of this increased protection.	Use of the Commission's requirements in effect at the time of renewal as the basis for determining whether to renew the early site permit is inappropriate; the requirements in effect at the time of issuance of the initial permit, together with those additional requirements imposed pursuant to §52.39 during the term of the permit, should be used. The criteria used by §52.31(a) to determine whether to impose more stringent requirements are the same as those identified in the backfit rule. To simplify the provision, a cross-reference to §50.109, without further elaboration of the criteria, is recommended.	(a) The Commission shall grant the renewal if the Commission determines that the site complies with the Atomic Energy Act and the Commission's regulations and orders in effect at the time of issuance of the initial early site permit, together with such modifications made in accordance with 10 CFR § 52.39. The Commission may impose additional requirements at the time of renewal subject to the provisions of 10 CFR 50.109. *The renewal and any more stringent requirements the Commission may wish to impose after a determination that there is a substantial increase in overall protection of the public health and safety of the common defense and security to be derived from the more stringent requirements and that the direct and indirect costs of implementation of those requirements are justified in view of this increased protection.*
(b) A denial of renewal	This provision should be	(b) A denial of renewal on this

on this basis does not bar the permit holder or another applicant from filing a new application for the site which proposes changes to the site or the way in which it is used which correct the deficiencies cited in the denial of the renewal.

modified to clearly allow deficiencies to be corrected through an amended application.

basis does not bar the permit holder or another applicant from filing ~~a/new/~~an amended application for renewal or a new application for the site which proposes changes to the site or the way in which it is used which correct the deficiencies cited in the denial of the renewal.

§ 52.33 Duration of renewal.

Each renewal of an early site permit will be for not less than ten nor more than twenty years.

§ 52.35 Use of site for other purposes.

A site for which an early site permit has been issued under this subpart may be used for purposes

other than those described in the permit, including the location of other types of energy facilities.

The permit holder shall inform the Director of Nuclear Reactor Regulation of any significant non-nuclear activities for which the site is to be used.

The information about the activities must be given to the Director in advance of any actual construction or site modification for the activities.

If the Director finds that a particular non-nuclear use may have a significant adverse effect on the suitability of the site for the purposes described in the early site permit, the Director may issue an order to show cause why

the permit should not be revoked or modified.		
§ 52.37 Reporting of defects and noncompliance; revocation, suspension, modification of permits for cause.	The applicability of Part 21 to early site permits is questionable. As stated in NUREG-0302 (Revision 1) with respect to nuclear facilities, applicability of Part 21 commences when an applicant first engages in enumerated construction activities, including safety-related design work (but not conceptual design) for a Part 50 facility. If such activities are authorized by an early site permit, Part 21 would apply. If, however, such activities are not authorized by an early site permit, Part 21 would not apply. Thus, the title of §52.37 should be modified and the reference to Part 21 deleted. In all events, 10 CFR §50.9 (made applicable to early site permits by our proposed addition of §52.40) is sufficiently broad to ensure that the Commission is informed of all significant	§52.37 ~~Reporting of defects and noncompliance~~ [Revocation, suspension, modification of permits for cause.
For purposes of Part 21 and 10 CFR 50.100, an early site permit is a construction permit.		For purposes of ~~Part 21 and~~ 10 CFR 50.100, an early site permit is a construction permit.

information regarding the site.

§ 52.39 Finality of early site permit determinations.

(a)(1) Notwithstanding any provision in 10 CFR 50.109, during the initial period in which a permit issued under this subpart is in effect, the Commission may not impose more stringent requirements, including more stringent emergency planning requirements, on the early site permit or the site for which it was issued unless the Commission determines either that

(i) Significant new information shows that a modification is necessary to bring the permit or the site into compliance with the Commission's regulations and orders in effect at the time the permit was issued; or

(ii) A modification is necessary to assure adequate protection of the public health and safety or the common defense and security.		
(2) Similarly, notwithstanding any provisions in CFR 50.109, during any renewal period in which an early site permit issued under this subpart is in effect, the Commission may not impose more stringent requirements, including more stringent emergency planning requirements, on the permit or the site for which it was issued unless the Commission determines either that	The publication error has been corrected.	(2) Similarly, notwithstanding any provisions in 10 CFR 50.109, during any renewal period in which an early site permit issued under this subpart is in effect, the Commission may not impose more stringent requirements, including more stringent emergency planning requirements, on the permit or the site for which it was issued unless the Commission determines either that
(i) Significant new information shows that a modification is necessary to bring the permit or the site into compliance with the Commission's regulations and orders in effect at the time the permit was renewed; or	This provision should be modified to conform to our proposed revisions to §52.31(a).	(i) Significant new information shows that a modification is necessary to bring the permit or the site into compliance with the Commission's regulations and orders ~~in effect at the time the permit was renewed~~ applied to the renewal pursuant to §52.31(a); or

(ii) A modification is necessary to assure adequate protection of the public health and safety or the common defense and security.	The backfit process set forth in §50.109(a)(4) should be made applicable to determinations made by the NRC staff under this provision. Refer to our response to Question 8 (Annex II).	(ii) A modification is necessary to assure adequate protection of the public health and safety or the common defense and security. In reaching the determination required under subsections (a)(1) and (a)(2) above, the Commission shall require that the staff make the findings and declarations, with appropriate documented evaluations for its findings, as specified in 10 CFR §50.109(a)(4).
	§52.39(a) lacks a finality provision which makes clear that issues resolved in connection with an early site permit may not be challenged in a subsequent licensing proceeding. Such a provision should be added. Refer to our response to Question 8 (Annex II) for further discussion on this point.	(3) In making the findings required for issuance of a construction permit, operating license, combined license, or any preoperational proceeding, the Commission will treat as resolved those matters resolved in connection with the issuance or renewal of an early site permit.
(b) An applicant for a construction permit, operating license, or combined license, or any amendment to this type of license, who has filed an		

application referencing an early site permit issued under this subpart may include in the application a request for a variance from one or more elements of the permit.

In determining whether to grant the variance, the Commission shall be guided by the considerations set forth in 10 CFR 50.92, which guide the Commission's determinations on applications for amendments to construction permits.

The criteria contained in §50.92 do not appear directly applicable to variances, and are ackward when applied. We suggest that a more appropriate standard is that contained in §50.12(a)(1), and have modified this provision accordingly.

In determining whether to grant the variance, the Commission shall be guided by ~~the considerations set forth in 10 CFR 50.92 which guide the Commission's determinations on applications for amendments to construction permits~~ whether the variance is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security.

As stated in our discussion of Key Issue F (Annex I), Subpart A lacks a provision which identifies those provisions in Part 50 applicable to early site permits. Such a provision is appropriate for inclusion at this point.

§ 50.40 Applicability of Part 50 Provisions.

In addition to those provisions of 10 CFR Part 50 specifically referenced in this Subpart A, the following provisions of Part 50 are applicable to the extent the provisions apply to an applicant for or a holder of a construction permit: §§50.7, 50.9, 50.12 provided that exemptions to this Part 52 may also be requested, 50.13, 50.31, 50.32, 50.33(j), 50.37, 50.38, 50.39, 50.52, 50.53,

50.54(e) - (h), 50.54(aa), 50.54(cc), 50.70(a), 50.71, 50.80, 50.81, 50.82 to the extent that the holder of an early site permit may voluntarily request that the permit be terminated, 50.90, 50.109 as applied by §§52.31 and 52.39, and 50.110.

Unless otherwise provided, no other portions of Part 50 apply.

Subpart B — Standard Design Certifications.

§ 52.41 Scope of subpart.

This subpart sets out the requirements and procedures applicable to Commission issuance of rules granting standard design certifications for nuclear power facilities, or major portions thereof, separate from the filing of an application for a construction permit or combined license for such a facility.

§ 52.43 Relationship to 10 CFR Part 50, Appendices M, N and O.

(a) Appendix M to 10 CFR Part 50 governs the issuance of licenses to manufacture nuclear power reactors to be installed and operated at sites not identified in the manufacturing license application.

Appendix N governs licenses to construct and operate nuclear power reactors of duplicate design at multiple sites.

These appendices may be used independently of the provisions in this subpart unless the applicant also wishes to use a certified standard design approved under this subpart.

(b) Appendix O governs the staff review and approval of preliminary and final standard designs.

These designs may be challenged in individual licensing proceedings.

This subpart governs Commission approval, or certification, of standard

designs by rulemaking, as set forth in paragraph 7 of Appendix O.		
A final design approval under Appendix O is a prerequisite for certification of a standard design under this subpart.		
An application for a final design approval must state whether the applicant intends to seek certification of the design.		
If the applicant does so intend, the application for the final design approval must, in addition to containing the information required by Appendix O, comply with the applicable requirements of 10 CFR Chapter I, particularly §§52.45 and 52.47..	Part 52, Subpart B is a more appropriate reference than 10 CFR Chapter I.	If the applicant does so intend, the application for the final design approval must, in addition to containing the information required by Appendix O, comply with the applicable requirements of Part 52, Subpart B ~~10 CFR Chapter I~~, particularly §§52.45 and 52.47.
	A "grandfather" provision	An applicant who holds a Final

for present holders of final design approvals is needed to insure that the staff will not repeat its previous review of the design.

Design Approval as of [Effective Date of Rule] may apply for certification of the design by providing supplementary information pursuant to §52.45. The Commission may not impose changes on the portion of the design covered by the Final Design Approval unless such changes meet the criteria of 10 CFR §50.109. Upon review of the supplemental information and a finding that this supplemental information meets the criteria of Appendix O to 10 CFR Part 50 and the applicable requirements of this Part, the Commission shall amend the Final Design Approval.

§ 52.45 Filing of applications.

(a)(1) Any person may seek a standard design certification for an essentially complete nuclear power facility, or a major portion of such a facility.

An application for certification may be filed notwithstanding the fact that an application for a construction permit or combined license for such

a facility has not been filed.		
Applications for certification of less than a complete facility must meet the criteria set forth in paragraph (d) of this section.	In view of the specificity of paragraph (d), this sentence is repetitious, and should be deleted. If the sentence is retained, for clarity, use of the term "essentially complete facility" is recommended.	Applications for certification of less than ~~a~~ an essentially complete facility must meet the criteria set forth in paragraph (d) of this section.
(2) Because a final design approval under Appendix O of 10 CFR Part 50 is a prerequisite for certification of a standard design, a person who seeks such a certification and does not hold, or has not applied for, a final design approval, shall file with the Director of Nuclear Reactor Regulation an application for certification.	This provision seemingly has internal inconsistencies. We believe this provision is intended to require an applicant for a design certification to file for a Final Design Approval if the applicant, at the time of the filing for certification, does not already possess a Final Design Approval. Our suggested modification is intended to remedy the provision's inconsistencies.	(2) Because a final design approval under Appendix O of 10 CFR Part 50 is a prerequisite for certification of a standard design, a person who seeks such certification and does not hold, or has not applied for, a final design approval, shall file with the Director of Nuclear Reactor Regulation an application for ~~certification~~ a Final Design Approval.
Any person who seeks certification but already		

holds, or has applied for, a final design approval, also shall file with the Director of Nuclear Reactor Regulation an application for certification, because the NRC staff may require that the information before the staff in connection with the review for the final design approval be supplemented for the review for certification.		
(b) The applicant shall comply with the filing requirements of 10 CFR 50.30 (a) and (b) as they would apply to an application for a nuclear power plant construction permit.	As a result of our Part 50 review (see discussion of Key Issue F in Annex I), additional cross-references are recommended.	(b) The applicant shall comply with the filing requirements of 10 CFR 50.30 (a)(1)-(4), (6) and 50.30 (b) as they would apply to an application for a nuclear power plant construction permit. With regard to §50.4, which is referenced by §50.30(a)(1), the following portions are applicable: §50.4(a), 50.4(c)-(e).
(c) The NRC will entertain an application for certification of a reactor design which differs significantly from reactor designs which have been built and operated.	In its preamble to Part 52, the Commission states that: "The NRC Staff is currently developing safety criteria for application in the review of advanced reactor	(c) ~~The NRC will entertain an application for~~ The procedures for design certification ~~of a~~ will be available to reactor designs with features which differ significantly from reactor designs which have been built and operated.

	designs.... Part 52 deals only with the procedural aspects of the certification of reactor designs. The staff will advise the prospective applicant for certification on precisely what information is required for the staff's consideration of the application." 53 Fed. Reg. 32060, 32063 (August 23, 1988). The conclusion drawn from these statements is the availability of design certification procedures to significantly different reactor designs. Our suggested modifications are intended to clarify this point. Pefer to our discussion of Key Issue E (Annex I).	
However, certification of such a design will be given only after the design has been shown to be sufficiently mature.	The Commission should provide applicants with the option of demonstrating the maturity of a design by either satisfying the criteria contained in §52.45(c)(1)(i)-(iii) or by means of an appropriately sited and sized prototype. Refer to our discussion of Key Issue E (Annex I).	~~However,~~ Certification of ~~such~~ a design with such features will be given ~~only after the design has been shown to be sufficiently mature~~ where the following criteria have been met demonstrating that the design is sufficiently mature. The maturity of a design can be demonstrated by:

(1) The maturity of such a design must be demonstrated by means of an appropriately sited, full-size, prototype reactor, unless the following criteria are satisfied:

(i) The performance of each safety feature of the design has been demonstrated through either previous experience or full-scale testing;

(ii) Interdependent effects among the safety features of the plant have been found acceptable by analysis, testing, or previous experience; and

(iii) Sufficient data exist on the performance of the safety features of the plant to assess analytical tools used for

~~(1) The maturity of each design must be demonstrated by means of an appropriately sited, full-size, prototype reactor, unless the following criteria are satisfied:~~

(1) An appropriate combination of analysis, testing and experience such that:

(i) The performance of ~~each~~ such safety features ~~of the design~~ has been ~~demonstrated~~ established either through analysis, ~~either previous experience of full-scale~~ ~~testing~~ appropriate test programs, or experience or a combination thereof;

(ii) Interdependent effects among the safety features of the plant have been found acceptable by analysis, ~~testing or previous~~ ~~experience~~ appropriate test programs, or experience or a combination thereof; and

(iii) Sufficient data exist ~~on the performance of the safety features of the plant~~ to assess the analytical tools used for safety analyses ~~over a full range of~~

safety analsyes over a full range of operating and accident conditions, including equilibrium core conditions and the response of the safety features over the lifetime of the plant.		~~operating and accident conditions, including equilibrium core conditions and the response of the safety features over the lifetime of the plant~~ over a range of operating and design basis accident conditions.
		(2) Alternatively, the maturity of a design may be demonstrated by means of an appropriately sited and sized prototype reactor.
(2) The Appendix O final design approval of such a design must identify the specific testing required for certification of the design.		(23) The Appendix O final design approval of such a design must identify the specific testing required for certification of the design.
(d) Designs should be essentially complete in scope.	Refer to our response to Question 5 (Annex II) for a discussion of this provision.	
The NRC will entertain an application for certification of a design of only a major portion of a plant only if that portion contains all buildings, structures,	The second alternative posed by the Commission in Question 5 -- that the language of §52.45(d) be more lenient and permit an application for certification of a design	The NRC will entertain an application for certification of a design of ~~only~~ a major portion of a plant ~~only~~ if the application for the major portion to be certified also contains the requirements for its interface with all buildings,

systems, and components that can significantly affect the safe operation of the plant and are not fixed by site-specific considerations or parameters. In any case, site-specific elements, such as the service water intake structure or the ultimate heat sink, may be excluded from the scope of the design.

However, excluded site-specific elements that can significantly affect safe operation must be addressed by the application in the technical information which §§ 52.47(b) and 52.47(d) require the application to provide on the site parameters and interface requirements for the design.

§ 52.47 Contents of applications.

The application must

of a major portion of a plant, as long as the application contains interface and other requirements -- should be allowed.

structures, systems and components which can significantly affect the safe operation of the plant ~~that portion containing all buildings, structures, systems, and components that can significantly affect the safe operation of the plant~~ and are not fixed by site-specific considerations or parameters. ~~In any case~~ In either case, site-specific elements, such as the service water intake structure or the ultimate heat sink, may be excluded from the scope of the design.

contain a level of design information equivalent to that required for a final design approval under Appendix O.

The information submitted for a design certification must include performance requirements and design specifications sufficiently detailed to permit the preparation of procurement specifications and acceptance and inspection requirements.

As presently drafted, this provision is unduly broad, and will result in the submittal of a voluminous amount of information which will create a burden on the applicant not outweighed by the usefulness of the information to the staff. Revision of this language to identify a more manageable body of information is necessary.

The information submitted for ~~a design certification must include performance requirements and design specifications sufficiently detailed to permit the preparation of procurement specifications and acceptance and inspection requirements~~ the portion of the design to be certified must include functional and performance requirements for buildings, structures, systems, and components that can significantly affect the safe operation of the plant and are not fixed by site-specific conditions or parameters sufficiently detailed to become part of associated procurement specifications.

The information must also be sufficient to enable the staff to judge the applicant's proposed means of assuring that construction conforms to design and to reach an [sic] final conclusion on all matters which must be

decided before the certification can be granted.		
In particular,		
(a) The application must contain the technical information which is required of applicants for construction permits or operating licenses by Part 20, Part 50 and its appendices, and Parts 73 and 100, and which is not site-specific or irrelevant to the design for which the applicant is seeking certification.	As drafted this provision is unworkable. (See discussion of Key Issue F in Annex I.) The addition of specific cross-references is based upon our review of Part 50.	(a) The application must contain the technical information which is required of applicants for construction permits or operating licenses by ~~Part 20, Part 50 and its appendices, and Parts 73 and 100, and which is not site-specific or irrelevant to the design for which the applicant is seeking renewal~~ 10 CFR 50.33(a)-(d), 50.34(b)(2)-(b)(5), 50.34(b)(7), 50.34(b)(9), 50.34(c), 50.34(f); §50.34(b)(6)(vi), 50.34(g) and 50.34a to the extent that the information specified therein is technically relevant to the design for which certification is sought.
In particular, the application must demonstrate compliance with any applicable portions of the Three Mile Island requirements set forth in 10 CFR 50.34(f).	In view of our recommended changes to the previous sentence, this section is repetitious and should be deleted.	~~In particular, the application must demonstrate compliance with any applicable portions of the Three Mile Island requirements set forth in 10 CFR 50.34(f).~~
The staff shall advise the	A reference to "this	The staff shall advise the

prospective applicant for certification on whether the information required by the listed portions of 10 CFR Chapter I is appropriate to the staff's consideration of the application, and on whether any additional technical information on the design is required.	subsection" in place of "listed portions of 10 CFR Chapter I" makes this provision consistent with our other revisions. Deletion of the language authorizing the staff to request information of an applicant beyond that required by NRC regulations is recommended. Providing such an authorization to the staff would effectively impose new requirements without rulemaking.	prospective applicant for certification on whether the information required by ~~the listed portions of 10 CFR Chapter I~~ this subsection is appropriate to the staff's consideration of the application~~, and on whether any additional technical information on the design is required~~.
(b) The application must also include		
(1) The site parameters postulated for the design, and an analysis and evaluation of the design in terms of such parameters;		
(2) Proposed technical resolutions of the Unresolved Safety Issues and medium- and high-priority Generic	It is inappropriate to include within this provision submittal of "technical resolutions of the Unresolved Safety	~~(2) Proposed technical resolutions of the Unresolved Safety Issues and medium- and high-priority Generic Safety Issues applicable to the design~~

Safety Issues applicable to the [sic] desion;	Issues and medium-to-high priority Generic Safety Issues." Refer to our response to Question 12 (Annex II) for a discussion of this issue.	
(3) A design-specific probabilistic risk assessment ("PRA"), together with a consideration of any severe accident vulnerabilities that the PRA exposes and a realistic assessment of the degree to which the design conforms to the Commission's Safety Goals for plant operations; and	The requirement to perform a design-specific PRA is required by §50.34(f), which is incorporated by reference in our suggested revisions to §52.47(a). Accordingly, this PRA provision is redundant, and should be deleted. The incorporation in this section of provisions of the Severe Accident Policy Statement and of a requirement to provide a realistic assessment of the degree to which the design conforms to the Commission's Safety Goals is unnecessary. Refer to our response to Question 12 (Annex II) for a discussion of these issues.	*(3) A design-specific probabilistic risk assessment ("PRA") together with a consideration of any severe accident vulnerabilities that the PRA exposes and a realistic assessment of the degree to which the design conforms to the Commission's Safety Goals for plant operations; and*
(4) Proposed tests, analyses, inspections and acceptance criteria which are necessary to provide reasonable assurance that	For purposes of consistency and to enhance clarity, revision of this sentence is suggested.	*(4)*(2) Proposed tests, inspections, analyses, *inspections* and acceptance criteria which are necessary and sufficient to provide reasonable assurance that if

a plant which references the design is built and operated within the specifications of the design.

performed and met a plant which references the design is built and will operate in accordance with the design certification ~~and/operated/within/the/specifications/of/the/design~~.

(c) An application seeking certification of a modular design must describe the various options for the configuration of the plant and site, including variations in common systems, interface requirements, and system interactions.

The final safety analysis and the probabilistic risk assessment should, when necessary, take into account differences among the various options, and the analysis should set forth any restrictions which will be necessary during the construction and startup of a given module to ensure the safe operation of any module already on line.

(d) An application for a design certification must meet the following criteria:		
(1) The application must contain interface requirements to be met by those portions of the plant for which the application does not seek certification.		
These requirements must be sufficiently detailed to allow completion of the final safety analysis and design-specific probabilistic risk assessment required by paragraph (b) of this section.	For consistency with comments made in connection with §§52.47(b)(3), paragraph "b" should be replaced by paragraph "a".	These requirements must be sufficiently detailed to allow completion of the final safety analysis and design-specific probabilistic risk assessment required by paragraph ~~(b)~~(a) of this section.
(2) The application must demonstrate that compliance with these interface requirements is verifiable through inspection, testing (either in the plant or	For consistency with other sections, the word "previous" has been deleted. Interface compliance is part of the inspection	(2) The application must demonstrate that compliance with these interface requirements is verifiable through inspection, testing (either in the plant or elsewhere), ~~previous~~ experience, or analysis. The method to be used for

elsewhere), previous experience, or analysis.	tests and analyses that is required; this provision has been modified accordingly.	verification of interface requirements must be included as part of the proposed tests, inspections, analyses and acceptance criteria required in 10 CFR §52.47(b)(4).
Compliance with interface requirements dealing with reliability of components must be verifiable through previous experience or testing.	Interface requirements dealing with reliability are a subset of all interface requirements, and do not require special treatment. Accordingly, this sentence should be deleted. If the sentence is retained, "analysis" should be added as an acceptable method to compliance.	Compliance with interface requirements dealing with reliability of components must be verifiable through previous experience, analysis or testing.
(3) The application must also contain a representative design for those portions of the plant for which the application does not seek certification.	The provision that an application contain a representative design is unnecessary and inappropriate. To provide a representative design for those portions of the plant outside the design certification would require an applicant to perform design work far in excess of that which is practicable. In order to	~~(3) The application must also contain a representative design for those portions of the plant for which the application does not seek certification.~~

provide a representative design, an applicant would have to perform a substantial portion of the design work for portions of the plant not included in the certification.

The representative design must illustrate how the interface requirements can be met, so as to aid the staff in its review of the final safety analysis and probabilistic risk assessment required by paragraph (b) of this section.

The interface requirements contained elsewhere in Subpart B are sufficient to insure that the design and NRC's safety determination will be complete. This provision should thus be deleted.

~~The representative design must illustrate how the interface requirements can be met, so as to aid the staff in its review of the final safety analysis and probabilistic risk assessment required by paragraph (b) of this section.~~

The addition of a provision is recommended which allows an applicant for a design certification to include in its application information relating to aspects of the design which might justify a reduction in size of the emergency planning zone. An application would be required to spell out the design features and limitations, if any, on the sites for which such a design would be suitable.

(3) An applicant for a design certification may include in its application information relating to aspects of the design which might justify a reduction in the size of the emergency planning zone. Such information shall identify the design features and limitations, if any, on the sites for which such a design would be suitable.

§ 52.49 Fees for design certification and certification renewal.

The fees charged for the review of an application for the initial issuance or renewal of a standard design certification are set out in 10 CFR Part 170, together with a schedule for their phased recovery as the certified standard design is referenced.

As stated in connection with §52.19, Part 52 and Part 170 should be made consistent.

A significant disincentive to development of standardized designs is the prospect of imposition of large, uncapped fees for design review and certification. The NRC can promote standardization by either waiving fees or establishing reasonable and fixed fees for design review and certification.

There is no application fee.

All fees for review of an application are deferred as follows:

(a) Each time an application is filed for a construction permit or combined license for a

facility referencing the design for which a standard design certification has been issued, the holder of the design certification shall pay the specified portion of the applicable fees for the approval at the time the facility application referencing the certified standard design is filed.

If, at the end of the initial period of the certification, no facility application referencing the certified standard design has been filed, the holder of the design certification shall pay any outstanding fees for the certification.

(b) If the standard design certification is renewed, the holder of the design certification shall pay the specified portion of any outstanding fees for the renewal each time a facility application

As stated in connection with §52.19(b), this provision apparently requires the payment of renewal fees when a combined license application referencing the renewed design

(b) If the standard design certification is renewed, the holder of the design certification shall pay the specified portion of ~~any outstanding~~ the applicable fees for the renewal each time a facility application referencing the certified standard design is

referencing the certified standard design is filed.	certification is filed; use of the word "outstanding" is confusing.	filed.
If, at the end of the renewal period, a facility application referencing the certified standard design has not been filed, the holder of the design certification shall pay any outstanding fees for the renewal.		
(c) If an application for the issuance or renewal of a certified standard design is denied or withdrawn, any fees associated with the review of the application are immediately due and payable by the applicant for the design certification or renewal.	As stated in connection with §52.19(c), requiring an applicant whose application has been denied to immediately pay all outstanding fees goes beyond the proposed revisions to Part 170 under consideration by the Commission.	(c) If an application for the issuance or renewal of a certified standard design is denied/or withdrawn, any fees associated with the review of the application are immediately due and payable by the applicant for the design certification or renewal.
§ 52.51 Administrative review of applications.		
A standard design certification is a rule that will be issued in accordance with the	For clarity, additional language is needed reflecting the supplementary character of	A standard design certification is a rule that will be issued in accordance with the provisions of Subpart H of 10 CFR Part 2, as

provisions of Subpart H of 10 CFR Part 2.	the rulemaking provisions in Part 52.	supplemented by the provisions herein.
The Commission shall initiate the rulemaking after an application has been filed under § 52.45(a) and shall specify in detail the procedures to be used for the rulemaking.		
The rulemaking procedures must provide notice and comment and an informal hearing before an Atomic Safety and Licensing Board.		
The procedures for the hearing must include the opportunity for written presentations made under oath or affirmation and for oral presentations and questioning if the Board finds them either necessary for the creation of an adequate record or the most expeditious way to resolve controversies.		

Ordinarily, the questioning will be done by members of the Board, using either the Board's question or questions submitted to the Board by the parties.	Questioning in the quasi-legislative phase of the hearing should be conducted by the Board, using their own questions or questions submitted by members of the public. This provision does not contain standards for conferring "party" status. The Commission should adopt standards which admit as "parties" persons who make a showing that their interests may be affected, and have the ability to contribute to the resolution of issues. We suggest that references to §§2.714, 2.714a and 2.715a be added, and in addition, that limited appearances be permitted in accordance with the provisions of §2.715(a). In all events, any member of the public should have the opportunity to submit written comments on the application.	The questioning in the quasi-legislative phase of the hearing will be done by members of the Board, using either the Board's questions or questions submitted to the Board by the parties or by members of the public. Petitions to intervene as a party and the disposition thereof shall be governed by the applicable provisions of 10 CFR §§2.714, 2.714a and 2.715a. Limited appearances may be allowed in accordance with the provisions of §2.715a.
The Board may also request authority to use additional procedures,	In any adjudicatory phase of the hearing, discovery should be limited to	The Board may also request authority from the Commission to allow cross-questioning by the

such as discovery, or may request that the Commission convene a formal adjudication on discrete issues involving substantial disputes of fact, necessary for the Commission's decision, that cannot be resolved with sufficient accuracy except in formal adjudication.	issues involving substantial disputes of material fact.	parties and may recommend that the Commission commence a formal adjudication on discrete issues of material fact. ~~Use additional procedures, such as discovery, or cross-questioning, by the parties, or may request that the Commission convene a formal adjudication on discrete issues involving substantial disputes of fact~~ necessary for the Commission's decision, that cannot be resolved with sufficient accuracy except in formal adjudication. Discovery shall be limited to the adjudicatory phase of the hearing.
The staff will be a party in the hearing.	The Commission is urged to review its ex parte rules carefully to insure that nothing therein will bar the Commission from consulting with staff experts on technical issues which arise in the course of a design certification rulemaking.	
During the rulemaking, the treatment of proprietary information will be governed by 10 CFR 2.790 and applicable Commission case law.	It is essential that the Commission should treat proprietary information in design certification rulemakings in the same manner as in licensing proceedings. The proviso	10 CFR §2.790(c) is to be revised as follows: Provided, That information submitted in a rulemaking proceeding other than a design certification under Part 52 which

with regard to rulemaking proceedings contained in 10 CFR 2.790 (c) should be revised.

There is prior Commission precedent for not releasing certain proprietary information involved in rulemaking proceedings. The "forms the basis for" test for disclosure of proprietary information submitted in a rulemaking contained in 10 CFR §2.790 was based on procedures which evolved during the course of the Emergency Core Cooling System (ECCS) rulemaking. In that rulemaking the Commission withheld from public disclosure certain proprietary information received from two firms which helped form the basis of the ECCS rule because such information would "apply only to an individual company's evaluation models, and [were] more akin to matters involved in individual licensing proceedings..." In the Matter of Rulemaking Hearing, Acceptance

subsequently forms the basis for the final rule will not be withheld from public disclosure by the Commission and will not be returned to the applicant after denial of any application for withholding submitted in connection with that information.

Criteria for Emergency Core Cooling Systems for Light Water-Cooled Nuclear Power Reactors, CLI-73-39, 6 AEC 1085, 1089 (Dec. 28, 1973).

The decision in such a hearing will be based only on information on which all parties have had an opportunity to comment.

As stated above, Subpart B does not presently contain standards for conferring party status.

§ 52.53 Referral to the ACRS.

The Commission shall forward the application to the Advisory Committee on Reactor Safeguards (ACRS).

§52.53 should be revised in conformance with §52.23 and §52.29 (d).

The Commission shall refer a copy of ~~forward~~ the application to the Advisory Committee on Reactor Safeguards (ACRS).

The ACRS shall review the application and report its findings and recommendations to the Commission.

The ACRS shall report on those matters which concern the public health and safety ~~review the application and report its findings and recommendations to the Commission~~ and which were not the subject of any earlier reviews by

it of the design which is the subject of the application.

The ACRS need not reconsider issues on which it has made findings and recommendations in any earlier review of the design which is the subject of the application.

The ACRS shall only consider need not reconsider issues on which it has made findings and recommendations in any earlier review of the design which is the subject of the application.

Subpart B lacks a provision which identifies the standards for issuance of a design certification. Such a provision, incorporating the language used in the Commission's legislative proposal in the 100th Congress (H.R. 2106), is appropriate for inclusion at this point.

§ 52.54 Issuance of standard design certification.

After considering all information submitted in the application, and after conducting a rulemaking proceeding under §52.51 of this Part, the Commission shall issue a standard design certification if it determines that such certification will not be inimical to the common defense and security or to the health and safety of the public.

§ 52.55 Duration of certification.

A standard design certification issued

A period longer than ten years would be

pursuant to this subpart is valid for ten years from the date of issuance.

justifiable, and preferable, for the term of a standard design certification. The ten-year limitation makes an effective renewal process especially critical. Refer to our discussion of Key Issue D (Annex I).

An applicant for a construction permit or combined license may, at its own risk, reference in its application a design for which a design certification application has been docketed but not granted.

§ 52.57 Application for renewal.

(a) Not less than twelve nor more than thirty-six months prior to expiration of the initial ten-year period, or any later renewal period, the holder of the design

certification may apply for renewal of the certification.

An application for renewal must contain all information necessary to bring up to date the information and data contained in the previous application.

The procedures to be used for a rulemaking proceeding on the application for renewal must be those required by § 52.51 for rulemakings on applications for initial certification of a design.

The requirement that a full rulemaking hearing be conducted in connection with every renewal of a design certification is unnecessary. Notice and comment procedures should be followed in all such cases, leaving to the discretion of the Commission whether to require additional procedures in individual proceedings.

~~The~~ Notice and comment procedures shall be used for a rulemaking proceeding on the application for renewal ~~must be required by § 52.51 for rulemakings on applications for initial certification of a design~~. The Commission, in its discretion, may require the use of additional procedures in individual renewal proceedings.

(b) A design certification, either original or renewed, for which an application for renewal has been timely

filed remains in effect until the Commission has determined whether to renew the certification.		
If the certification is not renewed, it continues to be valid in proceedings on an application for a construction permit, combined license, or operating license referencing the certified design and docketed prior to expiration of the certification or renewal.		
(c) The Commission shall forward application for renewal to the Advisory Committee on Reactor Safeguards (ACRS).	§52.57(c) should be revised in conformance with §§53.23, 52.29(d) and 52.53.	(c) The Commission shall ~~forward~~ refer a copy of the application for renewal to the Advisory Committee on Reactor Safeguards (ACRS).
The ACRS shall review the application and report its findings and recommendations to the Commission.		The ACRS shall ~~review~~ report on those matters ~~and report its findings and recommendations to the Commission~~ which concern the public health and safety and which were not the subject of any earlier reviews by it of the design which is the subject of the application.

The ACRS need not reconsider issues on which it has made findings and recommendations in any earlier review of the design which is the subject of the application.		*The ACRS need not reconsider issues on which it has made findings and recommendations in any earlier review of the design which is the subject of the application.*
§ 52.59 Criteria for renewal.		
(a) The Commission shall issue a rule granting the renewal if the design, either as originally certified or as modified during the rulemaking on the renewal, complies with the Atomic Energy Act and the Commission's regulations and orders in effect at the time of the renewal, and any more stringent safety requirements the Commission may wish to impose after a determination that there is a substantial increase in overall protection of	As stated in connection with §52.31, use of Commission's requirements in effect at the time of renewal as the basis for determining whether to review the certification is inappropriate; the requirements in effect at the time of issuance of the initial certification, together with those additional requirements imposed pursuant to §52.63 during the initial term of the certification, should be used. The criteria used to	(a) The Commission shall issue a rule granting the renewal if the design, either as originally certified or as modified during the rulemaking on the renewal, complies with the Atomic Energy Act and the Commission's regulations and orders applicable to the initial design certification, together with such modifications as made in accordance with 10 CFR §52.63. The Commission may impose additional requirements at the time of renewal subject to the provisions of §50.109. *In effect at the time of the renewal and any more stringent safety requirements the Commission may wish to impose after a determination that there is a*

the public health and safety or the common defense and security to be derived from the more stringent requirements and that the direct and indirect costs of implementation of those requirements are justified in view of this increased protection.	determine whether to impose more stringent requirements are the same as those identified in the backfit rule. As stated in connection with §52.31, to simplify the regulation, a cross-reference to §50.109, without further elaboration of the criteria, is recommended.	substantial increase in overall protection of the public health and safety or the common defense and security to be derived from the more stringent requirements and that the direct and indirect costs of implementation of those requirements are justified in view of this increased protection.
(b) Denial of renewal does not bar the holder of the design certification or another applicant from filing a new application for certification of the design which proposes design changes which correct the deficiencies cited in the denial of the renewal.	As stated in connection with §52.31(b), this provision should be modified to clearly allow deficiencies to be corrected through an amended application. In addition, we see no basis for allowing "another applicant" to file a new application for certification of a design for which renewal is denied to the initial holder.	(b) Denial of renewal does not bar the holder of the design certification or another applicant from filing a new <u>an amended application for renewal or a new application</u> for certification of the design which proposes design changes which correct the deficiencies cited in the denial of the renewal.
§ 52.61 Duration of renewal.		
Each renewal of certification for a standard design will be	A renewal period of less than ten years will serve as a disincentive to the	Each renewal of certification for a standard design will be for not less than five not more than ter

for not less than five nor more than ten years.	filing of renewal applications.	years.
§ 52.63 Finality of standard design certifications.		
(a)(1) Notwithstanding any provision in 10 CFR 50.109, during the initial period in which a design certification issued under this Subpart is in effect, the Commission may not impose more stringent safety requirements on the certification unless the Commission determines in a rulemaking either that significant new information shows that a modification is necessary to bring the certification or the referencing plants into compliance with the Commission's regulations and orders in effect at the time the certification was issued, or that a modification is necessary to assure adequate protection of the public health and safety or the common defense and security.	The same backfit standard applicable to early site permits should also apply to design certifications. The suggested modifications are intended to make §52.63 consistent with §52.39.	(a)(1) Notwithstanding any provision in 10 CFR 50.109, during the initial period in which a design certification issued under this Subpart is in effect, the Commission may not impose more stringent safety requirements on the certification unless the Commission determines in a rulemaking either that (i) significant new information shows that a modification is necessary to bring the certification or the referencing plants into compliance with the Commission's regulations and orders in effect at the time the certification was issued, or that (ii) a modification is necessary to assure adequate protection of the public health and safety or the common defense and security.

(2) Similarly, notwithstanding any provision in 10 CFR 50.109, during any renewal period in which a design certification issued under this Subpart is in effect, the Commission may not impose more stringent safety requirements on the certification unless the Commission determines in a rulemaking either that significant new information shows that a modification is necessary to bring the certification or the referencing plants into compliance with the Commission's regulations and orders in effect at the time the certification was renewed, or that a modification is necessary to assure adequate protection of the public health and safety or the common defense and security.

(3) Any modification the NRC imposes on a design certification rule under paragraphs (a)(1) and

These revisions will conform this provision to its counterpart in §52.39 and our proposed revisions to §52.59(a). In addition, language has been added which makes the process set forth in §50.109(a)(4) applicable to determinations made by the NRC staff under this provision. Refer to our response to Question 8 (Annex II).

(2) Similarly, notwithstanding any provision in 10 CFR 50.109, during any renewal period in which a design certification issued under this Subpart is in effect, the Commission may not impose more stringent safety requirements on the certification unless the Commission determines in a rulemaking either that (i) significant new information shows that a modification is necessary to bring the certification or the referencing plants into compliance with the Commission's regulations and orders ~~in effect at the time the certification was renewed~~ applied to the renewal pursuant to §52.59(a) or that (ii) a modification is necessary to assure adequate protection of the public health and safety or the common defense and security.

In reaching the determination required under subsections (a)(1) and (a)(2) above, the Commission shall require that the staff make the findings and declarations, with appropriate documented evaluations for its findings, as specified in 10 CFR §50.109(a)(4).

(a)(2) of this section will be applied to all plants referencing the certified design.

(b) The holder of a standard design certification issued under this Subpart may file a request for an amendment to the design certification by way of notice and comment rulemaking.

The Commission shall grant the amendment request if it determines that the amendment will comply with the Atomic Energy Act and the Commission's regulations.

The amendment will be applied to all plants referencing the design only if the amendment is necessary for adequate protection of the public health and safety or the common defense and security.

Any other amendment will apply only to plants referencing the design after the amendment is granted.	Additional language is needed to clarify that this provision is applicable only to subsequent applications. Refer to our response to Question 6 (Annex II) for further discussion on this point.	Any other amendment will apply only to plants for which a subsequent application referencing the design is filed after the amendment is granted.
(c) An applicant for a construction permit, operating license, or combined license, or a licensee whose license references a certified standard design issued under this subpart, may request an exemption from one or more elements of the design certification.		
The Commission shall grant such a request if it determines that the exemption complies with the Atomic Energy Act, the Commission's regulations and orders, and the requirements of 10 CFR 50.12(a).		

Exemptions apply only to the license for which the exemption was requested.

(d) The licensee of a plant built according to a standardized design may make a change to the standardized portion of the plant, without prior Commission approval, only if the change does not involve changes to the design as described in the rule certifying the design, or in the certifying rule together with any exemption which may have been granted the licensee under § 52.63(c).

Given the practicalities of facility construction, and to avoid unnecessary burdens on staff resources, licensees of standardized plants need the flexibility to make certain changes consistent with the standards prescribed in 10 CFR §50.59. Such changes, by their nature, do not involve unreviewed safety questions or changes to facility technical specifications.

(d) The licensee of a plant ~~built according to a standardized design~~ referencing a certified design may make a change to the standardized portion of the plant, without prior Commission approval, ~~only if the change does not involve changes to the design as described in the rule certifying the design, or in the certifying rule together with any exemption which may have been granted the licensee under § 52.63(c)~~ in accordance with 10 CFR 50.59.

As stated in response to Question 8 (Annex II), §52.63 lacks a finality provision which makes clear that issues resolved in connection with a standard design certification may not be challenged when issuance of a combined license referencing a certified design is sought. Such a

(e) In making the findings required by this Part for issuance of a combined license, or any preoperational proceeding, the Commission will treat as resolved those matters resolved in connection with issuance or renewal of a design certification, unless otherwise determined by the Commission in accordance with the provisions of 10 CFR §2.758.

provision should be added; this subsection should also provide for the specific applicability of the provisions of 10 CFR §2.758.

As stated in response to Question 2 (Annex II), Subpart B lacks a provision governing the transfer of a standard design certification from the initial holder to a subsequent holder. Such a provision, incorporating the procedures and standards of §50.80(b), is appropriate for inclusion at this point.

§52.64 Transfer of Standard Design Certifications.

(a) No standard design certification shall be transferred, assigned, or in any manner disposed of, directly or indirectly except at the request of the holder and unless the Commission shall give its consent in writing.

(b) The procedures and standards of 10 CFR 50.80(b) shall be applied to an application for transfer of a standard design certification.

As stated in response to Question 2 (Annex II), Subpart B lacks a provision describing the Commission's authority to revoke, suspend or modify a standard design certification. Such a provision is appropriate for inclusion at this point.

§52.65 Revocation, Suspension, Modification of Standard Design Certifications.

A rule for a standard design certification issued under this Subpart B may be revoked, suspended, or modified in whole or in part, for any material false statement in the application for design certification, or in a supplemental or other statement of fact required of the applicant; or because of conditions revealed by the application for certification

or statement of fact or any report, inspection, or other means, which would warrant the Commission to refuse to grant a certification on the original application. In any proceeding for such revocation, suspension or modification specified above, the procedures of 10 CFR §§2.200-2.204 shall apply.

As stated in our discussion of Key Issue F (Annex I), Subpart B lacks a provision which identifies those provisions in Part 50 applicable to standard design certifications. Such a provision is appropriate for inclusion at this point.

§52.66 Applicability of Part 50 Provisions.

In addition to those provisions of 10 CFR Part 50 specifically referenced in this Subpart B, the following provisions of Part 50 are applicable:

(a) To the extent the provisions would apply to an applicant for or a holder of a construction permit: §§50.9, 50.13, 50.32, 50.33(j), 50.37, 50.39, 50.49(a)-(f), 50.55a, Appendix B.

(b) To the extent the provisions would apply to an applicant for or a holder of a construction permit and the requirements contained therein are technically relevant to the design for which certification is sought: §§50.44, 50.46, 50.60, 50.61, 50.62, 50.63, Appendix A, Appendix G, Appendix H, Appendix I,

Appendix J, Appendix K.

(c) To the extent that the holder of a standard design certification is also a contractor or subcontractor of a Commission licensee, permittee or an applicant for a Commission license or permit: §50.7.

Unless otherwise provided, no other portions of Part 50 or its appendices apply.

Subpart C - Combined Licenses

§ 52.71 Scope of subpart.

This subpart sets out the requirements and procedures applicable to Commission issuance of combined construction permits and conditional operating licenses ("combined licenses") for nuclear power facilities.	Use of the defined term is suggested.	This subpart sets out the requirements and procedures applicable to Commission issuance of combined *construction/permits/ and/conditional/operating/*licenses *("combined/licenses")* for nuclear power facilities.

§ 52.73 Relationship to Subparts A and B.

An application for a combined license under this subpart may, but need not, reference a standard design certification issued under Subpart B of this part or an early site permit issued under Subpart A of this part.	Addition of the word "and" makes clear that both a certified design and an early site permit may be referenced in a combined license application.	An application for a combined license under this subpart may, but need not, reference a standard design certification issued under Subpart B of this part and/or an early site permit issued under Subpart A of this part.

§ 52.75 Filing of applications.

Any person except one excluded by 10 CFR 50.38 may file an application for a combined license for a nuclear power facility with the Director of Nuclear Reactor Regulation.

The applicant shall comply with the filing requirements of 10 CFR 50.4 and 50.30(a) and (b) as they would apply to an application for a nuclear power plant construction permit.

The fees associated with the filing and review of the application are set out in 10 CFR Part 170.

The applicant shall include an environmental report with the application if it does not reference an early site

§52.89 contains detailed requirements for the environmental review, if any, to be performed in connection with a combined

The applicant shall comply with the filing requirements of 10 CFR §50.30(f) and include an environmental report prepared in accordance with the provisions of

permit.	license; this sentence would appear to be out of place. If the sentence is to remain, for consistency with other provisions of Part 52 a reference to Part 51 is suggested. As stated in our comment to §52.17(a)(2), an applicant for a combined license referencing an early site permit must demonstrate that the site continues to satisfy the site parameters identified at the time the permit was issued. The suggested modifications clarify this point.	Subpart A of 10 CFR Part 51 with the application if it does not reference an early site permit. If an early site permit is referenced, the application shall include information which demonstrates that the site remains within the postulated site parameters of that permit.
§ 52.77 Contents of applications; general information.		
The application must contain all of the information required by 10 CFR 50.33 and 50.33a as those sections would apply to an applicant for a nuclear power plant construction permit.	As a result of our Part 50 review (see discussion of Key Issue F in Annex I), additional clarifying language is recommended.	The information must contain all of the information required by 10 CFR 50.33 as would apply to an applicant for a construction permit or an operating license and 50.33a as ~~those sections~~ would apply to an applicant for a nuclear power plant construction permit.
In particular, the	This sentence is	~~In part, all of the applicant shall~~

applicant shall comply with the requirements of §50.33a(b) regarding the submission of antitrust information.	redundant; its contents are encompassed by the previous sentence.	~~comply with the requirements of §50.33a(b) regarding the submission of antitrust information.~~
§ 52.79 Contents of applications; technical information.		
(a) The application must contain the final safety analysis report required by 10 CFR 50.34(b).	For clarity, modification of the first and second sentences of §52.79(a) is suggested.	(a) The application must contain the information required of applicants for an operating license ~~final safety analysis report required~~ by 10 CFR 50.34(b)~~,~~ -(g).
The report may incorporate by reference the final safety analysis report for a certified standard design, but must be supplemented to include, as appropriate, the information required of applicants for operating licenses by 10 CFR Part 50.	As a result of our Part 50 review (see discussion of Key Issue F in Annex I), additional cross-references and clarifying language are recommended.	~~The report~~ The Final Safety Analysis Report and other required information may incorporate by reference the final safety analysis report for a certified standard design~~.~~ ~~But must be supplemented to include, as appropriate, the information required of applicants for operating licenses by 10 CFR Part 50~~
In particular, an application referencing a certified design must describe those portions of the design which are site-specific, such as the		

service water intake structure or the ultimate heat sink.

An application referencing a certified design must also demonstrate compliance with the interface requirements established for the design under §52.47(d) of this part.

If the application does not reference a certified design, the application must comply with the requirements of §52.47 of this part for level of design information, and shall contain the technical information required by §§ 52.47(a), 52.47(b)(2) and (3), and, if the design is modular, 52.47(c).

As drafted, this provision is confusing, and does not appear to account for all combinations of certified designs and/or early site permits which might be referenced in a combined license application. For greater clarity, this provision should be redrafted to specify the information requirements associated with each of the four possible application "scenarios" described below.

If the present structure of §52.79 is retained, for clarity, each sentence of the section should be

If the application does not reference a certified design, the application must comply with the requirements of the introductory paragraph of §52.47 of this part for level of design information. ~~and shall contain the technical information required by §§ 52.47(a), 52.47(b)(2) and (3), and~~ If the design is modular, the application shall contain the information required by §52.47(c).

It is recommended that a revised provision be drafted by NRC which describes, in separate sections, the contents of and technical information to be submitted in connection with the following types of applications:

separately lettered.

In addition, the references to §52.47(a), (b)(2) and (3) are unnecessary in view of the earlier reference to §50.34(b) (in §52.79(a)), which requires the same information.

The four application scenarios are as follows:

1. combined license applications referencing certified standard designs and early site permits;

2. combined license applications referencing certified standard designs only;

3. combined license applications referencing early site permits only;

4. combined license applications which do not reference either certified standard designs or early site permits.

1. combined license applications referencing certified standard designs and early site permits;

2. combined license applications referencing certified standard designs only;

3. combined license applications referencing early site permits only;

4. combined license applications which reference neither certified standard designs nor early site permits.

	The contents of the application and required technical information will be considerably easier to understand if each type of application is treated in a separate subsection of §52.79, with maximum cross-reference made to specific subsections of §50.34, rather than general references to Subpart B of Part 52.	
The application must also include proposed technical specifications prepared in accordance with the requirements of 10 CFR Part 50.	This sentence is redundant in view of the reference to §50.34(b) in §52.79(a). §50.34(b)(6)(vi) requires the preparation of technical specifications.	*The application must also include proposed technical specifications prepared in accordance with the requirements of 10 CFR Part 50.*
(b) The application for a combined license must include the proposed inspections, tests, and analyses which the licensee shall perform and the acceptance criteria therefor which will provide reasonable assurance that the facility has been constructed and will	In the absence of clarifying language, this section might be read to require that a whole new set of tests, inspections, analyses and acceptance criteria could be formulated for a certified standard design referenced in a combined license. No additional tests, inspections, analyses and	(b) The application for a combined license must include the proposed tests, inspections, *tests,* and analyses which the licensee shall perform and the acceptance criteria therefor which will provide reasonable assurance that the facility has been constructed and will operate in conformity with the application, the provisions of the Atomic Energy Act, and the Commission's regulations. Where the

operate in conformity with the application, the provisions of the Atomic Energy Act, and the Commission's regulations.	acceptance criteria should be required for that portion of the facility design covered by the design certification. The suggested modifications clarify this point.	application references a certified standard design, the tests, inspections, analyses and acceptance criteria contained therein shall apply to portions of the facility design covered by the design certification.
(c) If the application references an early site permit, the application must demonstrate the suitability of the site for the design and must discuss any other significant environmental issue not considered in any previous proceeding on the site or the design.	Site suitability is not the appropriate standard to be used when an early site permit is referenced in a combined license application. A more appropriate standard is one which demonstrates that the site parameters specified in the permit are satisfied. Paragraph 9 of Appendix M to Part 50 is the source of the proposed language.	(c) If the application references an early site permit, the application ~~must demonstrate the suitability of the site for the design and must discuss any other significant environmental issue not considered in any previous proceeding on the site or the design~~ need not contain such information or analyses as have been previously submitted to the Commission in connection with the early site permit, but shall contain, in addition to the information and analyses otherwise required, sufficient information to demonstrate that the reactor to be operated falls within the postulated parameters specified in the early site permit.
If the application does not reference an early site permit, then the application must contain the information required by §52.17(b) of this part	As stated in our comment to §52.17(b), development of a site redress plan of this nature is a new requirement not otherwise imposed by Part 50, and is	~~If the application does not reference an early site permit, then the application must contain the information required by §52.17(b) of this part on redress of the site in the event that the~~

on redress of the site in the event that the activities permitted by §52.91(a) of this subpart are performed.	a marked departure from the Commission's stated objectives in promulgating Part 52. Any effort by the Commission to require a site redress plan is more appropriately handled through a Part 50 rulemaking. This provision should be eliminated.	~~activities permitted by §52.91(a) of this subpart are performed.~~
(d) The application must contain emergency plans which provide reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency at the site.	This sentence is redundant. §52.79(a) requires an applicant for a combined license to comply with §50.34(b); §50.34(b)(6)(v) requires the submission of emergency plans. If this provision ir retained, modifications are necessary to make clear that in cases where an early site permit references emergency plans or postulated emergency planning parameters for emergency plans (as proposed in our comments on §52.77(c)), those plans or parameters apply.	(d) The application must contain emergency plans which provide reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency at the site. Where the application references an early site permit which references emergency plans or postulated emergency planning parameters for emergency plans, the plans or parameters referenced in that permit shall apply.
(1) The applicant shall make good faith efforts to	Obtaining "certifications" from state and local	(1) The applicant shall make good faith efforts to obtain

obtain certification by the responsible local and State governmental agencies that:	officials with regard to emergency plans goes beyond current NRC practice and is not otherwise required by 10 CFR §50.47.	~~certification by~~ agreement with the responsible local and State governmental agencies that:
(i) The proposed emergency plans are practicable;		
(ii) These agencies are committed to participating in any further development of the plans, including any required field demonstrations; and		
(iii) These agencies are committed to executing their responsibilities under the plans in the event of an emergency.		
(2) The application must contain any certifications that have been obtained.	As stated above, certifications are not presently required by the Commission. This provision should be deleted.	~~(2) The application must contain any certifications that have been obtained.~~
If these certifications	This provision is	~~If these certifications cannot be~~

cannot be obtained, the application must demonstrate that the proposed plans nonetheless provide reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency at the site.	confusing and should be deleted. Under all circumstances (not only where certifications cannot be obtained), a "reasonable assurance" finding must be made with regard to emergency planning.	obtained, the application must demonstrate that the proposed plans nonetheless provide reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency at the site.
§ 52.81 Standards for review of applications.		
Applications filed under this subpart will be reviewed according to, as appropriate, the pertinent standards set out in 10 CFR Part 50 and its appendices as they apply to applications for construction permits and operating licenses for nuclear power plants.	As drafted, this provision is unworkable. (see discussion of Key Issue F in Annex I). It is also unnecessary. §52.97 contains the standards for issuance (and thus, for review) of combined license applications; our proposed revisions to §52.83 list appropriate cross-references to Part 50. This provision should be deleted.	Applications filed under this subpart will be reviewed according to, as appropriate, the pertinent standards set out in 10 CFR Part 50 and its appendices as they apply to applications for construction permits and operating licenses for nuclear power plants.

§ 52.83 Applicability of Part 50 provisions.

Unless otherwise specifically provided in this subpart, all provisions of 10 CFR Part 50 and its appendices applicable to holders of construction permits for nuclear power reactors also apply to holders of combined licenses issued under this subpart.

As drafted, this provision is unworkable. (See discussion of Key Issue F in Annex I). The addition of specific cross-references is based upon our review of Part 50.

Holders/otherwise/specifically/provided/in/this/subpart,/all/provisions/of/10/CFR/Part/50/and/its/appendices/applicable/to/holders/of/construction/permits/for/nuclear/power/reactors/also/apply/to/holders/of/combined/licenses/issued/under/this/subpart.

Similarly, all provisions of 10 CFR Part 50 and its appendices applicable to holders of operating licenses also apply to holders of combined licenses issued under this subpart who have received written authorization for full-power operation under §52.103.

Similarly,/all/provisions/of/10/CFR/Part/50/and/its/appendices/applicable/to/holders/of/operating/licenses/also/apply/to/holders/of/combined/licenses/issued/under/this/subpart/who/have/received/written/authorization/for/full-power/operation/under/§52.103.

However, any limitations contained in Part 50 regarding applicability of the provisions to certain classes of facilities continue to apply.

However,/any/limitations/contained/in/Part/50/regarding/applicability/of/the/provisions/to/certain/classes/of/facilities/continue/to/apply.

In addition to those provisions of 10 CFR Part 50 specifically referenced in this Subpart C, the following provisions of Part 50 are applicable:

(a) To the extent the provisions would apply to an applicant for or holder of a construction permit or operating license: §§ 50.7, 50.9, 50.10(a), 50.13, 50.20, 50.22, 50.31, 50.32, 50.37, 50.39, 50.49(a)-(f), 50.49(j), 50.49(l), 50.52, 50.53, 50.54(a)-(h), 50.54(v)-(w), 50.54(aa), 50.54(cc), 50.59 provided that in the case of a combined license that references a certified design, §50.59 will apply to those matters covered by the design certification as specified in §52.63(d), 50.75, 50.80, 50.81, 50.82, 50.90 provided that amendments which would require a change from a certified design will be subject to the exemption procedures of §52.63(c), 50.92, 50.100, 50.101, 50.103, 50.109 provided that combined licenses that reference early site permits and/or certified designs shall be subject to the provisions of §§52.39 and 52.63 respectively, 50.110, Appendix B, Appendix E.

(b) To the extent the provisions would apply to an applicant for or a holder of a construction permit

or operating license and the requirements contained therein are technically relevant to the design proposed for the facility: §§50.36, 50.36a, 50.36b, 50.44, 50.46, 50.60, 50.61, 50.62, Appendix A, Appendix G, Appendix H, Appendix I, Appendix J, Appendix K.

(c) To the extent the provisions would apply to an applicant for or holder of a construction permit: §§50.10(c) if an early site permit is not referenced in the combined license application, 50.10(e)(4), 50.34a, 50.55, 50.55a(a)-(e) and (h), 50.78, Appendix C, Appendix L.

(d) To the extent the provisions would apply to an applicant for or a holder of an operating license and become applicable at the time of the Commission determination made pursuant to §52.103(c): §§50.51 provided that the period of time specified in the license shall not exceed 40 years from the date of the Commission's determination pursuant to §52.103(c), 50.54(i)-(n), 50.54(p)-(q), 50.54(t), 50.54(x)-(z), 50.54(bb), 50.55a(g), 50.72, 50.73, 50.74, 50.91, 50.102.

(e) To the extent the provisions would apply to an applicant for or a holder of an operating license and the requirements contained

		therein are technically relevant to the design proposed for the facility: §50.54(o), 50.63. Unless otherwise provided, no other portions of Part 50 or its appendices apply.
§ 52.85 Administrative review of applications.		
A combined license is subject to all applicable procedural requirements contained in 10 CFR Part 2, including the requirements for docketing (§2.101) and issuance of a notice of hearing (§2.104). All hearings on combined licenses are governed by the procedures contained in Part 2.	The first clause of this sentence is sufficiently specific, making the second clause unnecessary.	A combined license is subject to all applicable procedural requirements contained in 10 CFR Part 2. ~~including the requirements for docketing (§2.101) and issuance of a notice of hearing (§2.104).~~
§ 52.87 Referral to the ACRS.		
The Commission shall	Modification of this	The Commission shall ~~forward~~ refer

forward the application to the Advisory Committee on Reactor Safeguards (ACRS).	provision is suggested to conform with similar provisions contained in §§52.23, 52.29(d), 52.53 and 52.57(c).	a copy of the application to the Advisory Committee on Reactor Safeguards (ACRS).
The ACRS shall review the application and report its findings and recommendations to the Commission.		The ACRS shall report on those matters *review the application and report its findings and recommendations to the Commission* which concern the public health and safety and which were not the subject of any earlier reviews by it of the site or of the design which may be referenced in the application.
The ACRS need not reconsider issues on which it has made findings and recommendations in any earlier review of the site or the design which is the subject of the application.		*The ACRS need not reconsider issues on which it has made findings and recommendations in any earlier review of the site or the design which is the subject of the application.*
§ 52.89 Environmental review.		
If the application references an early site permit or a certified standard design, the environmental review must	An environmental report should not be required in connection with design certification applications. Accordingly,	If the application references an early site permit *or a certified standard design,* the environmental review *must focus on* shall be directed at the suitability of the

focus on the suitability of the site for the design and any other significant environmental issue not considered in any previous proceeding on the site or the design.	deletion of the phrase "certified standard design" is recommended. For clarity, the second clause of the provision should be revised.	site for the design ~~and/any/other/significant/environmental/issue/not/considered/in/any/previous/proceeding/on/the/site/or/the/design/~~ proposed for that site and any significant new circumstances or information relevant to environmental concerns and bearing on the site.
The results of this limited review must be presented at the hearing on the application.	This sentence is out of place and seemingly unnecessary.	~~The/results/of/this/limited/review/must/be/presented/at/the/hearing/on/the/application/~~
However, the Commission may not modify any final determination on an issue that has been considered and decided in any earlier proceeding on the referenced site or design, except as provided in § 52.39 and 52.63 regarding finality of early site permit determinations and finality of standard design certifications, respectively.		
If the application does	Additional language is	If the application does not

not reference an early site permit or a certified standard design, all of the environmental review procedures set out in 10 CFR Part 51 must be followed, including the issuance of a final environmental impact statement.	needed to make clear that the supplemental environmental report and environmental impact statement required at the operating license stage by Part 51 are unnecessary where the initial environmental review is conducted in connection with issuance of a combined license.	reference an early site permit ~~or a certified standard design~~, the environmental review procedures set out in 10 CFR Part 51 must be followed, ~~including the issuance of a final environmental impact statement~~ except that a single environmental report and single environmental impact statement shall be prepared.
§ 52.91 Authorization to conduct site activities.		
(a) If the application references an early site permit, the applicant may perform the site preparation activities authorized in § 52.25 after the application for a combined license has been docketed.	This provision is inconsistent with §52.25. §52.25 authorizes an early site permit holder to perform certain site preparation activities, regardless of whether a combined license application has been docketed.	NRC should resolve the apparent inconsistencies between §§52.25 and 52.91(a).
Otherwise, the applicant shall request authorization to conduct site preparation activities pursuant to 10 CFR 50.10(e)(1) and (2).	For clarity, this provision should be modified.	~~Otherwise,~~ If the applicant does not reference an early site permit, the applicant shall request authorization to conduct site preparation activities pursuant to 10 CFR 50.10(e)(1) and (2).

In either case, authorization to conduct the activities described in 10 CFR 50.10(e)(3)(i) may be granted only after the presiding officer in the combined license proceeding makes the additional finding required by 10 CFR 50.10(e)(3)(ii).	For clarity, deletion of the phrase "In either case" is suggested.	In either case, authorization to conduct the activities described in 10 CFR 50.10(e)(3)(i) may be granted only after the presiding officer in the combined license proceeding makes the additional finding required by 10 CFR 50.10(e)(3)(ii).
(b) If, after an applicant for a combined license has performed the activities permitted by paragraph (a) of this section, the application for the license is withdrawn or denied, and the early site permit referenced by the application expires or the holder of the early site permit so requests, then the applicant shall redress the site in accord with the terms of the site redress plan required by §52.17(b).	As stated in the comments to §§52.17(b) and 52.79(c), development of a site redress plan of this nature is a new requirement not otherwise imposed by Part 50, and is a marked departure from the Commission's stated objectives in promulgating Part 52. Any effort by the Commission to require a site redress plan is more appropriately handled through a Part 50 rulemaking. This provision, and the one which follows, should be deleted.	(b) If, after an applicant for a combined license has performed the activities permitted by paragraph (a) of this section, the application for the license is withdrawn or denied, and the early site permit referenced by the application expires or the holder of the early site permit so requests, then the applicant shall redress the site in accord with the terms of the site redress plan required by §52.17(b).
If, before redress is		If, before redress is completed, a

complete, a use not envisaged in the redress plan is found for the site or parts thereof, the applicant shall carry out the redress plan to the greatest extent possible consistent with the alternate use.

§ 52.93 Exemptions and variances.

(a) Applicants for a combined license under this subpart, or any amendment to a combined license, may include in the application a request, under 10 CFR 50.12, for an exemption from one or more of the Commission's regulations, including any part of a design certification rule.

The Commission shall grant such a request if it determines that the exemption will comply with

the Atomic Energy Act, the Commission's regulations, and the requirements of 10 CFR 50.12(a).		
(b) An applicant for a combined license, or any amendment to a combined license, who has filed an application referencing an early site permit issued under this subpart may include in the application a request for a variance from one or more elements of the permit.		
In determining whether to grant the variance, the Commission will be guided by the considerations set forth in 10 CFR 50.92, which guide the Commission's determinations on applications for amendments to construction permits.	As stated in the comments to §52.39(b), the criteria contained in §50.92 do not appear directly applicable to variances, and are ackward when applied. We suggest that a more appropriate standard is that contained in §50.12(a)(1), and have modified this provision accordingly.	In determining whether to grant the variance, the Commission will be guided by ~~the considerations set forth in 10 CFR 50.92, which guide the Commission's determinations on applications for amendments to construction permits~~ whether the variance is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security.

§ 52.97 Issuance of combined licenses.

(a) The Commission may issue a combined license for a nuclear power facility upon finding that the applicable requirements of §§50.40, 50.42, 50.43, 50.47, and 50.50 have been met, and that there is reasonable assurance that the facility will be constructed and operated in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations.	Use of the word "may" suggests that even if an applicant has satisfied the enumerated requirements, issuance of a combined license is discretionary on the part of the Commission.	(a) The Commission ~~may~~ shall issue a combined license for a nuclear power facility upon finding that the applicable requirements of §§50.40, 50.42, 50.43, 50.47, and 50.50 have been met, and that there is reasonable assurance that the facility will be constructed and operated in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations.
The Commission shall ify in the license nspections, tests, analyses that the ensee shall perform and he acceptance criteria therefor which provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Atomic	The suggested modifications conform to those recommended for §52.47(b)(4).	(b) The Commission shall identify in the license the ~~inspections~~ tests, inspections, and analyses that the licensee shall perform and the acceptance criteria therefor which are necessary and sufficient to provide reasonable assurance that if performed and met the facility has been constructed and will be operated in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's regulations.

Energy Act, and the Commission's regulations.

§ 52.99 Inspection during construction.

After issuance of a combined license, the Commission shall assure through inspections, tests, and analyses that construction of the facility is completed in conformity with the combined license, the provisions of the Atomic Energy Act, and the Commission's regulations.

The Commission shall apply to holders of combined licenses the same inspection program applied to holders of nuclear power plant construction permits.

As drafted, §52.99 inappropriately applies to combined licenses. The inspection program now utilized in connection with a construction permit (described in proposed §52.99) fails to take into account that the tests, inspections, analyses and acceptance criteria necessary to assure that the plant conforms to the license will be established in the combined license. The "combined license" inspection program is to focus on those inspections, tests, analyses and acceptance criteria. The inspection is not intended to independently assess whether the facility under construction satisfies the Commission's requirements -- that determination has already been made in

(a) After issuance of a combined license, the Commission shall assure ~~through~~ that the required inspections, tests, and analyses have been performed and that ~~construction of the facility is completed in conformity with the combined license, the provisions of the Atomic Energy Act, and the Commission's regulations~~ the prescribed acceptance criteria have been met.

~~The Commission shall apply to holders of combined licenses the same inspection program applied to holders of nuclear power plant construction permits.~~

(b) The Commission staff will develop and utilize an inspection plan appropriate to document in a timely manner during construction of the plant that the tests, inspections and analyses set forth in the combined license have been performed properly and that the

	connection with issuance of the combined license. The refocusing of the Commission's combined license inspections will necessitate adjustments to the staff's inspection practices, and will require the staff to develop an inspection plan for utilization throughout construction. Refer to our response to Question 10 (Annex II) for further discussion of this issue.	acceptance criteria relating thereto set forth in the license have been met.
Holders of combined licenses shall comply with the provisions of §§50.70 and 50.71.		
§ 52.101 Pre-operational antitrust review.		
Prior to conversion of a combined license to an operating license, the NRC staff shall conduct an antitrust review pursuant to §50.42(b) to determine whether significant	Modifications are needed to conform §52.101 to the antitrust review requirements for operating licenses contained in 10 CFR §50.42. This provision also reflects comments	~~Prior to conversion of a combined license to an operating license,~~ The NRC ~~staff~~ may ~~shall~~ conduct an antitrust review pursuant to §50.42(b) prior to commencement of facility operation. ~~to determine whether significant changes in the~~

changes in the licensee's activities or proposed activities have occurred subsequent to the previous review by the Attorney General and the Commission in connection with the issuance of the combined license.

made in connection with §52.103, below.

~~licensee's activities or proposed activities have occurred subsequent to the previous review by the Attorney General and the Commission in connection with the issuance of the combined license.~~ Such a review shall not be required unless the Commission, after consultation with the Attorney General, determines that a review is advisable on the ground that significant changes in the combined license holder's activities have occurred subsequent to the previous review by the Attorney General and the Commission. Upon receipt of the Attorney General's advice, the Commission will cause such advice to be published in the Federal Register.

If the Commission determines that significant changes have occurred, the antitrust review required by section 105c(1) of the Atomic Energy Act must be completed prior to commencement of commercial operation of the facility.

~~If the Commission determines that significant changes have occurred, the antitrust review required by section 105c(1) of the Atomic Energy Act must be completed prior to commencement of commercial operation of the facility.~~ After consideration of these antitrust aspects, the Commission, if it finds that commencement of facility operation would create or maintain a situation inconsistent with the antitrust laws as specified in Section 105a of the Atomic Energy Act, will consider, in determining

		whether facility operations should commence, such other factors as the Commission in its judgment deems necessary to protect the public interest, including the need for power in the affected area.
Upon completion of this review, and following receipt of the advice of the Attorney General, the Director of Nuclear Reactor Regulation may impose any additional license conditions needed to avoid creating or maintaining a situation inconsistent with the antitrust laws as specified in section 105a of the Atomic Energy Act.		Upon completion of this review, and following receipt of the advice of the Attorney General, the Director of Nuclear Reactor Regulation may impose any additional license conditions needed to avoid creating or maintaining a situation inconsistent with the antitrust laws as specified in section 105a of the Atomic Energy Act.
§ 52.103 Authorization to operate under a combined license.	Refer to our discussion of Key Issue A, Two-Stage Licensing (Annex I) for a discussion of this issue and an explanation of our proposed modifications to §52.103.	§/52.103//Authorization/to/operate/under/a/combined/license/
(a) Before the facility may operate, the holder of the combined license shall apply for authorization of		(a)//Before/the/facility/may/operate,/the/holder/of/the/combined/license/shall/apply/for/authorization/of/operation/under/

operation under the combined license.

the combined license

If the combined license is for a modular design, each module is the subject of a separate authorization.

If the combined license is for a modular design, each module is the subject of a separate authorization.

The Commission shall publish a notice of the proposed authorization in the Federal Register under 10 CFR 2.105.

The Commission shall publish a notice of the proposed authorization in the Federal Register under 10 CFR 2.105.

Within 30 days, any person whose interest may be affected may request a hearing on the basis either (1) that there has been a nonconformance with the license, the licensee's written commitments, the Atomic Energy Act, or the Commission's regulations and orders, which has not been corrected and which could materially and adversely affect the safe operations of the facility; or (2) that significant new

Within 30 days, any person whose interest may be affected may request a hearing on the basis either (1) that there has been a nonconformance with the license, the licensee's written commitments, the Atomic Energy Act, or the Commission's regulations and orders, which has not been corrected and which could materially and adversely affect the safe operations of the facility; or (2) that significant new information shows that modification to the site of the design is necessary to assure adequate protection of public health and safety of the common

information shows that some modification to the site or the design is necessary to assure adequate protection of public health and safety or the common defense and security.

The petitioner shall set forth with reasonable specificity the facts and arguments which form the basis for the request.

(b) If a hearing is not requested, or if all requests are denied, the Commisison may authorize operation under the combined license, as provided in § 50.56, upon making the findings in § 50.57.

§ 52.103 Commencement of Facility Operation Under a Combined License.

(a) Not less than 180 days prior to the date on which the holder of a combined license expects to commence operation, the holder shall notify the Commission in writing of the proposed date on which operation is expected to

commence. Upon receipt of this notice, the Commission shall publish in the Federal Register a notice of the intended operation of the facility, and shall provide a thirty-day period during which any person may file a written objection to the commencement of operation on the basis that the facility has not been constructed or will not operate in conformity with the license. Such objection shall set forth with reasonable specificity the facts and arguments upon which the objection is based, and may be accompanied by a request for a hearing.

(b) If a hearing is requested, the Commission shall determine whether good cause exists therefor and, if so, the issues to be heard. The Commission may designate an issue for hearing only if the issue consists of a substantial dispute of material fact, necessary for the Commission's decision, that cannot be resolved with sufficient accuracy except at a hearing and:

(i) a showing has been made that the issue was not and could not have been raised and resolved in any prior proceeding for the issuance, modification or amendment of a license, permit or approval for that facility, its site or design; or

(ii) a showing has been made that there has been a nonconformance with the license which has not been corrected and which could materially and adversely affect the safe operation of the facility. Matters covered by the exemption from adjudications contained in 5 U.S.C. §554 (a)(3) shall not be eligible for hearing consideration.

The showing required shall be made by means of sworn affidavits by individuals having personal knowledge of the facts, and the licensee and the staff may file counter affidavits. No issue may be designated for hearing unless the Commission determines that there is a likelihood of success on the merits for any issue on which a hearing is requested.

Following completion of any hearing held, the Commission shall decide whether the combined license to construct and operate should be modified.

(c) Prior to commencement of facility operations, the Commission shall determine based upon the tests, inspections, analyses and acceptance criteria prescribed in the combined license, that the facility has been constructed and will operate in conformity with the combined license and consistent

with the Act and the Commission's regulations.

(d) If the combined license is for a modular design, each module shall be the subject of a separate determination.