Department of Energy
Washington, DC 20585

August 7, 1995

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

Attention: Docketing and Service Branch

Re: Proposed Rules–Standard Design Certifications for the U.S. Advanced Boiling Water Reactor and System 80+ Designs

Dear Sir:

On April 7, 1995, the Nuclear Regulatory Commission (NRC) published notices of proposed rulemakings on the Standard Design Certification for the U.S. Advanced Boiling Water Reactor (ABWR) Design and the Standard Design Certification for the System 80+ Design (60 Fed. Reg. 17902 and 60 Fed. Reg. 17924). The Department of Energy (DOE) is pleased to provide comments on the proposed rules and the Standard Design Certifications.

The DOE believes that such designs can significantly complement this Nation's energy strategy. To achieve this end, we have joined our considerable resources with those of the NRC, the nuclear utilities, and the design-certification applicants in years of effort to bring the ABWR and the System 80+ designs to the certification stage. As the result of all parties' extensive efforts, the designs embody hundreds of operating years of experience and will provide the safest commercial nuclear plants ever available, as evidenced by the NRC's issuance of the final design approvals (FDAs) and the related Environmental Assessments, the latter of which state, in part, that the estimated core-damage frequencies and risks for these designs are ". . . very low both relative to operating plants and in absolute terms."

The proposed NRC certification of the two standardized designs by rulemaking represents the first step toward implementation of the combined-licensing process established in 1989 in 10 C.F.R. Part 52. Part 52 was designed as an efficient licensing framework to assure adequate protection of the public health and safety and provide interested parties with appropriate opportunities to participate in the nuclear plant licensing process. In this context, DOE has evaluated the proposed Design Certification Rules (DCRs) against the standardization goals underlying Part 52 and the Energy Policy Act of 1992: to achieve safety and reliability, enhance standardization, establish stability and predictability in the licensing process, and provide early resolution of issues that arise in the licensing process.

The NRC has concluded that the designs meet all technical safety standards, and DOE agrees with this conclusion. The DOE also concludes that the standardized designs have the potential to provide nuclear plants of exceptional reliability as sources of power for meeting future needs. Nonetheless, DOE believes that much yet remains to be accomplished in terms of the important nonsafety goals underlying Part 52 and the Energy Policy Act, and that, in their proposed form, the DCRs have not achieved a full measure of success in terms of simplicity or stability and cost-effectiveness in administration.

DOE, therefore, suggests that the NRC consider initiating a rulemaking leading to the further revision of Part 52 to address these issues. DOE would be pleased to participate, with other interested parties, in this process and would plan to submit detailed proposals for improving Part 52 to achieve these goals. We appreciate that implementation of this suggestion could result in a major restructuring of Part 52. However, the achievement of a truly workable, efficient, and cost-effective licensing system for standardized plants is, in our view, critical to the preservation of nuclear energy as a viable power option for the future. The initiatives that we believe should be undertaken to improve Part 52 and the DCRs are summarized below.

First, Part 52 authorizes the NRC to issue a DCR "upon determining that the application meets the applicable standards and requirements of the Atomic Energy Act and the Commission's rules." In particular, section 52.47(a)(2) requires that a DCR application include information "sufficient to enable the Commission to judge and reach a final conclusion on all safety questions associated with the design." In our view, the proposed DCRs do not clearly and explicitly make the findings required by Part 52 on the safety issues and, therefore, do not provide finality. To rule out the possibility of relitigation in the future, we believe that a specific statement of the findings on the safety of the design and its compliance with applicable existing legal requirements must be included in the DCRs.

A corollary involves the potential for future relitigation of issues associated with the proprietary and safeguards information and secondary references reviewed and relied upon by the NRC staff in reviewing and recommending approval of the standardized designs. The current rulemaking proceedings do not provide finality of these issues with respect to subsequent licensing proceedings and, therefore, creates an element of uncertainty in the process.

The second major issue concerns the finality of Tier 2 changes. Section 52.63(b)(2) generally permits changes to Tier 2 information without prior NRC approval if they do not involve (a) a change to Tier 1 and Tier 2* information or the technical specifications, or (b) an unreviewed safety question. The proposed DCRs effectively limit this authority, however, by providing that changes to Tier 2 information without prior NRC approval will no longer be considered "matters resolved in connection with the issuance or renewal of a design certification"

within the meaning of section 52.63(a)(4). This throws open Tier 2 changes to challenges in future individual proceedings and may require hearings on a potentially large number of small changes having no safety significance. We believe that, given the fact that Tier 2 information is less safety significant than Tier 1 and, possibly, Tier 2* as well, a 10 C.F.R. 50.59-type process, which places upon the applicant or licensee the responsibility for determining whether a proposed change involved an "unreviewed safety question" and when NRC approval is required, should be used to bring an appropriate balancing of interests into the process.

The third major concern involves the proposed DCRs requirement that severe accident evaluations be performed for all facility changes involving severe accident and probabilistic risk assessment information in the DCD. We believe that these evaluations should be reserved for important design features, eliminating consideration of changes having no safety significance. This would avoid the possibility that such minor changes might be considered to be "unreviewed safety questions" if the evaluations show even small increases in insignificantly low accident probabilities or consequences.

Finally, the inclusion in section 5(c) of the proposed DCRs of new "applicable regulations" that require safety enhancements exceeding those applicable to all nuclear power reactors in 10 C.F.R. Parts 20, 50, 73, and 100, inject into the licensing process rules that lack the extensive body of technical bases, analyses, and justifications normally associated with NRC substantive rulemaking. Further, the "applicable regulations" are unspecific and in many instances do not indicate what constitutes compliance. This situation poses a substantial risk that the interpretation of and compliance with these rules will be the subject of extensive and delaying future disputes and litigation. Accordingly, DOE recommends the "applicable regulations" be deleted from the final DCRs.

In addition to these major concerns, we also believe that Part 52 and the proposed rules leave unresolved several significant issues that will impact the successful licensing of a plant referencing a certified design. These include interaction between Part 50 and Part 52 following issuance of the combined license and before operation is authorized, the mechanisms for verifying construction, and the process for ascertaining compliance with inspections, tests, analyses and acceptance criteria (ITAAC).

Finally, the DCRs should be revised to address other important issues such as:

- The need to provide for generic Tier 2 changes by the design certification applicant to promote standardization;

- Affording finality to information in the DCD introductions (such as ITAAC compliance, changes to Tier 2* information, and interface requirements), which is important to the process and was approved by the NRC staff; and

- Clarification of inconsistent and incomplete provisions on the use of DCRs in Part 50 licensing.

For the DCRs, DOE recommends that the process be simplified by eliminating the DCD, which is essentially a repetition of the Standard Safety Analysis Report (SSAR) and creates a needlessly burdensome and redundant set of documents to be maintained and updated. In its place, DOE recommends that NRC incorporate the two-volume into the DCRs by reference, with the SSAR as a secondary reference. Neither the CDM nor the SSAR would be subject to challenge in individual licensing proceedings. The CDM could only be changed by rulemaking or by NRC-approved exemption. Changes to the SSAR, which do not involve changes to the CDM, would be controlled by the same process that currently governs operating plants, i.e., 10 CFR 50.59, with a modified 50.59 process for changes to the probabilistic risk assessment information in the SSAR. Challenges to 50.59 changes would be available via the same enforcement process that is currently applicable to Part 50 licenses.

Acceptance of our recommendations would resolve DOE's concerns. At the same time, DOE wants to make clear that these procedural recommendations in no way affect the safety determinations reached by the NRC as reflected by the FDAs.

Sincerely,

Ray A. Hunter
for
Terry R. Lash, Director
Office of Nuclear Energy,
Science and Technology

Enclosure

DETAILED COMMENTS ON
MAJOR DESIGN CERTIFICATION RULE (DCR) ISSUES

I. SAFETY FINDINGS AND FINALITY

Part 52 authorizes the NRC to issue a DCR "upon determining that the application meets the applicable standards and requirements of the Atomic Energy Act at the Commission's regulations" (10 CFR 52.54). Similarly, section 52.47(a)(2) requires that a DCR application must include information "sufficient to enable the Commission to judge and reach a final conclusion on all safety questions associated with the design." The proposed DCRs do not clearly explicitly make the safety findings contemplated by Part 52. Furthermore, the DCRs do not provide finality (and thereby protect against relitigation) for several categories of information reviewed by the Staff and relied upon in their approval of the certified designs. These deficiencies undercut standardization, reduce stability and predictability, and prevent early issue resolution.

Section 6(a) contains the only safety finding in the DCR:

> All nuclear safety issues associated with the information in the Final Safety Evaluation Report (FSER) or Design Control Document (DCD) are resolved within the meaning of the 10 CFR 52.63(a)(4).

It is not clear that this finding fully meets the requirements of 10 CFR §§ 52.54 and 52.47(a)(2). It is also not clear that this finding provides finality with respect to the adequacy of the facility design. As to the first point, the wording of DCR § 6(a) is much narrower than the findings required by 10 CFR §§ 52.47(a)(2) and 52.54. The differences in language raise the question of whether the DCR meets the requirements of Part 52, thus creating the opportunity for legal challenge.

As to the second point, the Department's concern is that some may try to interpret DCR § 6(a) as reflecting the resolution of only a portion of the safety issues relating to the certified design, i.e. only those "safety issues associated with the information in the FSER or DCD." Under this argument, it might be claimed that a component not covered by "information in the FSER or DCD," such as an extra pump beyond those in the design, was needed for safety and could be litigated in the combined licensing hearing. When rewritten, the DCR should include a clear statement that no part of the certified design may be relitigated, as well as a comprehensive safety finding consistent with §§ 52.47(a) and 52.54. In other words, the finding should make clear that the certified design is both necessary and sufficient.

In addition to the need to strengthen the DCR's safety findings, there is also the need to provide finality for all the information on which the design review is based. The Supplementary Information accompanying the DCRs explicitly allows challenges based on proprietary and safeguards information in the design certification application as well as those secondary references cited in the DCD, which are intended as requirements. In reviewing the application, the NRC Staff considered and evaluated this information. Its approval of the certified design in part is based on this information. Yet the proposed rule would require proprietary information to be included in a combined license application and subject it to challenge in construction permit or combined license proceedings. Similarly, while the Supplementary Information requires applicants and licensees to treat those secondary references as requirements, it denies them issue preclusion in licensing hearings.

Not only does the denial of issue preclusion for this information fail to make sense, it is also easily avoidable. The express justification for denying issue preclusion to proprietary information is that such information, under the rules of the Federal Register, could not be included in the DCD. For secondary references, the explanation is that they will not be incorporated by reference in the DCR. Even if these restrictions were immutable, the information could still be accorded finality. The only conceivable reason to treat this information differently from the DCD is that the information is not publicly available. But that limitation could be readily overcome. Secondary reference material could simply be supplied to any interested party requesting it (or the Commission could identify reasonably convenient locations where the material could be reviewed). For proprietary information, the Commission or the applicant could make the information available to interested parties under the same proprietary agreements or protective orders that would be used in individual license hearings. Denying finality and issue preclusion to any information included in the design certification applications risks the unnecessary and costly scenario that combined license hearings will become the forum for reopening certified design information which had been reviewed and was available for comment during the DCR process.

Another area where finality needs to be afforded is the Introductions to the DCD or to the Introduction to the Certified Design Material (CDM), as proposed by the Department. These sections contain many substantive provisions, including status of inspectons, tests, analysis and acceptance criteria (ITAAC) during plant operation, Tier 2* changes and ITAAC compliance. Yet the Supplementary Information accompanying the DCR states that the Introductions are neither Tier 1 nor Tier 2 information, are not incorporated in the rule by reference, and in the event of conflict are subordinate to the Supplementary Information. The Introductions were agreed upon word-for-word between the NRC Staff and the applicants. There is no reason why their substantive provisions should not be incorporated into the DCR by reference.

II. FINALITY OF TIER 2/SSAR CHANGES

Section 8(b)(5) of the DCR allows an applicant or licensee referencing the certified design to make a change to Tier 2 information without prior NRC approval unless the change involves a change to Tier 1 and Tier 2* information, a change to the technical specifications, or an unreviewed safety question. This authority generally tracks the authority provided by 10 CFR § 52.63(b)(2). The proposed DCR has gone beyond Part 52 by adding a limitation, which could seriously cripple the usefulness of Part 52. This provision states that changes to Tier 2 information without prior NRC approval will no longer be considered "matters resolved in connection with the issuance or renewal of a design certification" within the meaning of 10 CFR 52.63(a)(4).

As a result, these changes may be challenged in individual combined license proceeding. The NRC Staff's justification for this undermining of finality is the need "to restrain Tier 2 changes in order to maintain the benefits of standardization." Whether the Tier 2 designation remains, or as proposed by the Department is replaced by the Standard Safety Analysis Report (SSAR), the absence of finality for changes to information in Tier 2 or the SSAR is a major deficiency in the proposed DCR. (For the sake of simplicity, "Tier 2" is used throughout this discussion synonymous with "SSAR)."

The Commission has long conceded the need for flexibility with respect to Tier 2 information. Since Tier 2 information is less safety significant than Tier 1 (and in the NRC Staff's view Tier 2*) information, it is appropriate that less restrictive procedures and standards be used for Tier 2 changes. The Department believes that the § 50.59-type process, which is defined in the DCR, represents an appropriate balancing of interests. Under these procedures, the applicant or licensee must determine whether a proposed Tier 2 change involves an "unreviewed safety question.[1] If it does, NRC approval is required. If the applicant or licensee, applying § 50.59 type procedures, determines that the change does not involve an unreviewed safety question, no prior NRC approval is required.

By definition, a Tier 2 change that has been determined not to involve an unreviewed safety question does not call into question the safety determination underlying the DCR. For this reason alone, depriving that change of finality and considering it an unresolved issue for purposes of § 52.63(a)(4) is not justified. Nor is there any justification for increasing instability and unpredictability in the licensing process and weakening early issue resolution based on the claimed need to "restrain Tier 2 changes in order to maintain the benefits of standardization." Applicants and licensees are not likely to propose Tier 2 changes frivolously. In

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[1] A modified § 50.59 standard is proposed for certain severe accident information. DCR § 8(b)(5)(iii). See discussion in § IV below.

the vast majority of cases, the applicant/licensee will have no choice but to propose the change. The changes will result from resolving interface issues, the need to resolve minor inconsistencies within the large body of engineering information in Tier 2, and the practical requirement to achieve consistency between the licensing documentation and the as-built facility. To make each one of these safety insignificant changes the potential subject of a licensing hearing would unduly burden the licensing process without any associated benefit in terms of standardization or safety.

The proposed treatment of Tier 2 changes which do not involve unreviewed safety questions, is also inconsistent with the § 50.59 process itself. Under § 50.59, if a change is found to involve an unreviewed safety question, prior NRC approval is required. With that prior approval goes the opportunity for a hearing by an interested party. If the § 50.59 process determines that the change does not involve an unreviewed safety question, there is no opportunity for hearing. If someone is dissatisfied with the § 50.59 evaluation process, that may be raised as an enforcement matter. To be consistent with § 50.59, the § 50.59-like process outlined in section 8b)(5) of the DCR should allow challenges to the implementation of the process through existing NRC enforcement mechanisms, not by allowing a hearing opportunity.

As proposed, DCR § 8(b)(5) also leaves open for argument whether a Tier 2 change that does not involve an unreviewed safety question automatically generates a hearing opportunity at the pre-operational stage or even after the plant goes into operation. Under § 52.103, a request for hearing must include a showing that one or more ITAAC have not been or will not be met. Similarly, § 52.103 specifies the NRC's preoperational finding as whether the ITAAC in the combined license are met. It would thus be totally inconsistent for the preoperational hearing issues to include Tier 2 changes not involving unreviewed safety questions. The only possible exception would be a Tier 2 change that resulted in the ITAAC not being met. The final rule should make this clear. Finally, in the postoperational period, the application of the 50.59-like process can only be challenged as an enforcement matter. Any other result would turn the 50.59-like process on its head. This, too, must be clarified in the final rule.

Given the scope and complexity of the standardized designs, it would be unreasonable to expect that no changes will be necessary in the details of Tier 2 design information. Many of the changes will result from common engineering implementation functions inevitably arising because of the scope and detail of Tier 2 information. Most of these changes will be unavoidable. To deny finality to those changes that do not involve unresolved safety questions creates a substantial potential of delay and uncertainty with no offsetting benefits to the public health and safety.

III. CHANGE CONTROL FOR SEVERE ACCIDENT/PROBABLISTIC RISK ASSESSMENT (PRA) INFORMATION

The proposed DCRs' change control process for Tier 2 information requires that any Tier 2 changes be evaluated against "all matters described in the DCD." § 8(b)(5)(1). Chapter 19 of the DCD contains severe accident evaluations and results of the PRAs for the standardized designs. As a result, any changes in Tier 2 information must be evaluated against the full range of severe accident and PRAs, regardless of how low the occurrence probabilities and how insignificant the risk. In the Department's proposed reformulation of the DCR, the same analysis would apply to Chapter 19 of the SSAR.

The process for evaluating Tier 2 changes is patterned after 10 CFR § 50.59. In general terms, changes can be made without NRC approval unless there is an unreviewed safety question, i.e. if the probability or consequences of an accident may be increased, there is a possibility of an accident or malfunction of a different type then evaluated previously, or the margins of safety defined in technical specifications are reduced.

The proposed DCRs recognized that severe accident analyses and PRAs involve unique considerations for the 50.59-like process. Section 8(b)(5)(iii) proposed a modification of the criteria to determine whether a Tier 2 change involves an unreviewed safety question. Under the revised criteria, only a "substantial increase" in the probability or consequences of a severe accident would result in an unresolved safety question. However, the proposed DCRs made this revised standard applicable to only a portion of Chapter 19, Section 19E (ABWR) and Section 19.11 (System 80+). The remainder of Chapter 19 would be subject to existing 50.59 criteria, i.e. any increase in the probability or consequences and any reduction in a safety margin would result in an unresolved safety question.

The proposed treatment of changes affecting the remainder of Chapter 19 is inappropriate and likely to impose substantial burdens on applicants. The plant evaluations in Chapter 19 cover a wide spectrum of design basis and beyond design basis accidents. Many of these evaluations take credit for nonsafety related systems, structures, and components. Furthermore, many of the events discussed in Chapter 19 have very low probabilities of occurrence and are inconsequential to safety. And because Chapter 19 addresses so much of the facility design, a high proportion of all proposed changes will require an assessment for the impact on Chapter 19 events.

As a consequence, the Department believes that a substantial number of design changes with no significant safety consequences may cause the accident probability or consequences for low probability events evaluated in Chapter 19 to increase from one very small number or another very small but slightly larger

number. As a result, the changes would be categorized as "unreviewed safety questions." This will compound the burden facing applicants, increasing instability and unpredictability, and raising the risk of unnecessary but time-consuming and costly, licensing hearings.

The lack of need for "strict" control of changes to almost the entire Chapter 19 is based on an understanding of the role of severe accident analysis and PRA in the design process. The plants addressed by the DCR are technologically the most advanced available. These designs have been founded on hundreds of years of successful operation of numerous existing nuclear power plants, and the extensive design reviews that have been conducted both by the applicants and the NRC, making these the most thoroughly reviewed plants in the history of U.S. commercial nuclear power. The designs are based on the existing NRC regulations, rules, standards, guides, and other requirements which are deterministically based, and the designs proposed meet all the NRC requirements. Further, the designs incorporate features to mitigate accidents beyond the design basis as determined by both the probabilistic risk assessment and other safety studies of beyond design basis hypothetical scenarios. Thus, not only do these plant designs meet all current U.S. standards with regard for providing for health and safety of the public, but the designs go beyond the deterministic design bases to consider a wide range of important severe accident scenarios.

PRAs, by definition, consider scenarios that are beyond the design basis. For the designs being certified, the insights derived from the PRA have already been considered in the design process, and the essential safety features of the design already reflect those insights. Since the major safety features of the plant are Tier 1 (or the Department's reformulation, CDM) information, any change to that information would be strictly controlled under existing Part 52 requirements. However, since PRA, its databases and methodological improvements are in a constant state of change, it is to be expected that minor changes to the PRA information would develop. These changes, while affecting the numerical values of the (highly probable) accident sequences, are not going to change the basic design of the systems defined in Tier 1. The requirement for strict control on the details of the PRA is not essential in that any changes which do not affect the safety features (or other Tier 1 information) will not change the insights derived from the PRA.

To resolve this deficiency in the proposed DCR, the Department recommends that changes to Tier 2 information (or that contained in the SSAR under the Department's formulation) only be evaluated against Chapter 19's summary table of important design features. (Table 19.8 (ABWR); Table 19.5 (System 80+). By definition the summary table captures plant characteristics that contribute significantly to the prevention and mitigation of various accident sequences. The Department also believes the revised 50.59 criteria proposed in section 8(b)(5)(iii) of the DCR should be applied to this more limited category of

Chapter 19 information. Use of the "substantial" criterion is consistent with the nature of severe accident and PRA analyses which use realistic, best estimate approaches. The inevitable uncertainties in severe accident analyses justify the modification of the "any increase" criterion in § 50.59.

Another reason justifying the limitation of § 50.59 to the summary table of important features in Chapter 19 is that much of the plant design information appearing in Chapter 19 appears in other sections of the DCD. Thus, changes that impact that information will thus be subject to the DCR change process as it applies to all other sections of the DCD.

IV. APPLICABLE REGULATIONS

Section 5(c) of the proposed DCRs sets forth more than a dozen new "applicable regulations" (14 for the ABWR; 15 for the System 80+). These proposed new regulations extend beyond the NRC regulations currently applicable to all nuclear power reactors, which are codified in 10 CFR Parts 20, 50, 73 and 100. The new "applicable regulations" appear to represent the NRC Staff's attempt to capture many of the design features in the two certified designs, which are safety enhancements not found in existing plants.

These new "applicable regulations" represent perhaps the most potentially destabilizing feature of the proposed DCRs. They create significant risks to the viability of the DCRs by adding scheduler and economic uncertainties, licensing risks, and unnecessary litigation opportunities. They do not increase public health and safety. Nor are they needed to maintain the safety features in the standardized designs.

Historically, every NRC safety and design regulation has been issued following extensive analysis of the underlying safety issue, the alternatives for protecting against or mitigating the consequences posed by that issue, and the proposed resolution. Once adopted, licensees are then required to implement the regulatory requirement. The proposed new "applicable regulations", on the other hand, have almost a reverse history. First, the design certification applicants included in their designs numerous safety enhancements beyond those found in current plants. Next, the NRC Staff reviewed and approved those designs. Finally, the NRC Staff drafted the "applicable regulations" in an attempt to codify the enhancements already included in the designs and approved by the Staff.

Perhaps as a consequence of this reverse rulemaking, the "applicable regulations" do not have the extensive body of technical bases, analyses, and justifications normally associated with substantive rulemaking. The "applicable regulations" themselves are unspecific and in many cases do not indicate what constitutes compliance. This vagueness and lack of explanation and support

creates a substantial risk that disputes and litigation will arise over the interpretation of these rules and the compliance of the standardized designs with them.

The proposed inclusion of "applicable regulations" as a new category of generic requirements to be considered in issuing the design certifications, imposing backfits, and renewing the design certifications leaves the designs open to challenges for the life of the designs. Specifically:

contentions could be raised at the design certification or combined license stage that one or more "applicable regulations" are not adequately met,

some of the requirements are vague and open ended, and some are not fully applicable to the design stage certification,

the proposed regulations are generic, not plant specific, and

the proposed regulations are bereft of the usual background justifications and issue definitions that result from Committee to Review Generic Requirements, backfit, and regulatory flexibility analyses.

The addition of "applicable regulations" to the DCRs is inconsistent with the Commission's request to the Staff in its September 14, 1993, Staff Requirements Memorandum that generic rulemaking be deferred until after certification of the two designs. There can be no doubt that the "applicable regulations" are generic. Except for section 5(c)(15), which deals with steam generator tube rupture, each of the other 14 "applicable regulations" is identical in the two DCRs. Yet, these new requirements have not been subject to the scrutiny required for generic rules. It is likely, for example, that many of the "applicable regulations" would not meet the NRC and statutory tests for new generic safety regulations.

None of the reasons advanced in the Supplementary Information accompanying the DCRs to justify the "applicable regulations" adequately supports their need or overcomes the significant drawbacks which they impose. They are not needed for the NRC review of the designs; that review is complete. They are not needed for public input on the DCRs; interested parties can comment on the design adequacy absent "applicable regulations". And they are not needed for renewal of the DCRs; that step is many years away and NRC has ample flexibility under 10 CFR § 52.59 to consider requirements beyond existing regulations in the renewal context.

The Department respectfully requests that the NRC delete section 5(c) from the DCRs and explain in the Supplementary Information accompanying the revised rule the higher level of severe accident performance, which the new designs incorporate and the Commission's conclusion that these designs adequately resolve severe accident issues.