

NOTATION VOTE

RESPONSE SHEET

RELEASED TO THE PDR

10/28/96

date

initials

TO: John C. Hoyle, Secretary

FROM: CHAIRMAN JACKSON

SUBJECT: SECY-96-190 - FINAL RULEMAKING ON
"ENVIRONMENTAL REVIEW FOR RENEWAL OF
NUCLEAR POWER PLANT OPERATING LICENSES,"
10 CFR PART 51

Approved XX with comments Disapproved _____ Abstain _____

Not Participating _____ Request Discussion _____

COMMENTS:

- I approve the Final Rulemaking with the addition of OGC comments in the memorandum dated 9/13/96, and with the incorporation of the attached editorial changes to the Federal Register Notice.

Shirley Ann Jackson

SIGNATURE

Release Vote / XX /

October 3, 1996

DATE

Commission NRCC
Withhold Vote / /

Entered on "AS" Yes _____ No _____

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[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Part 51

RIN 3150-AD63

Environmental Review for Renewal of Nuclear Power Plant Operating Licenses

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule; Effective date.

SUMMARY: The Nuclear Regulatory Commission is amending its regulations on the environmental review of applications to renew the operating licenses of nuclear power plants to make minor clarifying and conforming changes and add language inadvertently omitted from Table B-1 of the rulemaking published June 5, 1996 (61 FR 28467). This final rule also presents an analysis of the comments received and the staff responses to the comments requested in the final rule published June 5, 1996. After reviewing the comments received, the NRC has determined that no substantive changes to the final rule is warranted.

DATES: This final rule shall be effective on [30 days after publication].

ADDRESSES: Copies of comments received and all documents cited in the supplementary information section of 61 FR 28467 may be examined at the NRC Public Document Room, 2120 L Street NW, (Lower Level) Washington, DC, between the hours of ~~2:45~~ am and 4:15 pm on Federal workdays.

7:30

Commission has reviewed the comments submitted and finds no need to amend the substantive provisions of the rule.

- This direct final rule amends the June 5, 1996 rule with minor nonsubstantive changes. The changes are: addition of five Ground-water Use and Quality issues inadvertently left out of Table B-1 in the June 5, 1996 notice (see, 61 FR 29278, July 29, 1996); minor conforming changes to reflect recent amendments to §§ 51.53 and 51.95 effected by a separate rulemaking ("Decommissioning of Nuclear Power Reactors," July 29, 1996 (61 FR 39278)); substitution of one sentence under Findings for the issue Offsite radiological impacts (spent fuel and high-level waste disposal) in Table B-1, in order to more accurately represent a U. S. Environmental Protection Agency (EPA) regulatory position; and addition of a sentence to 10 CFR 51.53(c)(3)(ii)(M), in order to clarify the information on the environmental effect of transportation of fuel and waste to and from a nuclear power plant that is to be submitted with a license renewal application.

II. Analysis of Public Comments

A. Commenters.

In response to the Federal Register notice for the final rule published on June 5, 1996 (61 FR 28467), 11 organizations and 1 private citizen submitted written comments. The 11 organizations included the EPA; the States of Maryland, Massachusetts, and Vermont; the Nuclear Energy Institute, and 6 licensees. Commenters expressed concerns about specific aspects of the rule and several commenters referred to material in NUREG-1437 which they believe

view of one state that each renewal applicant should come forward with an analysis of the HLW storage and disposal environmental effects; this is a national problem of essentially the same degree of complexity and uncertainty for every renewal application and it would not be useful to have a repetitive reconsideration of the matter.

The Commission further believes that the provisions in the present rule and elsewhere in the Commission's regulations adequately provide for the introduction and consideration of new significant information in license renewal reviews, and that the 10 year review cycle for the rule and the GEIS adequately provides for Commission reassessment of the status of LLW and HLW disposal programs. The Commission recognizes that the possibility of significant unexpected events remains open. Consequently, the Commission will review its conclusions on these waste findings should significant and pertinent unexpected events occur (see also, 49 FR 34658 (August 31, 1984)). In view of the Commission's favorable conclusions regarding prospects for safe and environmentally acceptable waste disposal, it sees no need for

- conditioning licenses as recommended. The Category 1 designations for these
- three issues [low-level waste storage and disposal, offsite radiological
- impacts (spent fuel and high-level waste disposal), and on-site spent fuel] in

the final rule has not been changed in response to these comments.

Comment. Six industry organizations specifically commented on the treatment of the LLW and HLW issues in 61 FR 28467 and in the GEIS. Except for the treatment of the environmental impacts of transportation of radiological material to and from the plant, the industry commenters agree with the Commission's findings on waste issues. Transportation (radiological

Part 51 in this rulemaking do not alter the existing provisions of § 51.52.

If an applicant's reactor meets all the conditions in § 51.52(a) the applicant may use the environmental impacts of transportation ^{of} fuel and waste to and from the reactor set forth in Summary Table S-4 to characterize the transportation impacts from the renewal of its license. However, because Table S-4 does not take into account the generic and cumulative (including synergistic) impacts of transportation infrastructure construction and operation in the vicinity of the Yucca Mountain repository site, such information would have to be provided by these applicants.

For reactors not meeting the conditions of paragraph § 51.52(a), the applicant must provide a full description and detailed analysis of such environmental effects associated with transportation in accordance with § 51.52(b). Industry commenters pointed out that the conditions in paragraph (a) are not likely to be satisfied by many plants now using higher burn-up fuel. In such cases, applicants may incorporate in their analysis the discussion presented in the GEIS in Section 6.2.3 "Sensitivity to Recent Changes in the Fuel Cycle," and Section 6.3 "Transportation." This category of applicants would also have to consider the generic and cumulative impacts of transportation infrastructure construction and operation in the vicinity of the Yucca Mountain repository site. These impacts may be attributed to an individual plant on a reactor-year basis.

As part of its efforts to develop regulatory guidance for this rule, the Commission will consider whether further changes to the rule are desirable to generically address: 1) the issue of cumulative transportation impacts and 2) the implications that the use of higher burn-up fuel have for the conclusions in Table S-4. After consideration of these issues, the Commission

far below the regulatory limits, limits that represent a small risk. As the Commission's dose limits are based on radiation protection standards established by interagency committees and reflects international scientific consensus on the adequacy of protection standards, the Commission chooses to define radiological risk resulting from these standards as being "small."

Comment. EPA takes issue with the Commission's assumptions, in Section 6.2.2.2 of the GEIS, about regulatory limits for off-site releases of radionuclides for the candidate repository at Yucca Mountain. EPA stated that the Commission should not presume that EPA will adopt the National Academy of Science recommendation regarding a 100 millirem annual dose limit. Further, EPA believes that the GEIS should assume a smaller dose limit as a more conservative bounding estimate, consistent with the stated objective of Table S-3 to represent the worst case or bounding estimate of the potential release from the uranium fuel cycle [GEIS page 6-1].

Response. The Commission does not assume that EPA will adopt a 100 millirem annual dose limit. The discussion in Section 6.2.2.2 is clear that this limit is recommended by the Academy as a starting point for consideration, and that there is some measure of consensus among national and international bodies that the limits should be a fraction of the 100 mrem/year. ~~If it is expected that the limit ultimately to be adopted will be lower than 100 mrem/year, then 100 mrem/year provides a bounding or "worst case" estimate, which is what EPA suggests.~~ AT THIS TIME, THE COMMISSION IS NOT PREPARED TO SPECULATE AS TO WHAT THE FINAL LIMIT WILL BE.

Comment. EPA states: "The NRC has mis-stated the Agency's expectations regarding the performance of a high-level waste repository, and in doing so

Response. Several considerations led to the Commission's decision to require a supplemental EIS in license renewal reviews. The proposed rule and supporting GEIS would have included a preliminary conclusion of a favorable cost-benefit balance. The function of an EA would have been to consider the impacts associated with a limited set of environmental issues and whether these impacts would overturn the favorable preliminary cost-benefit finding in the GEIS and codified in the rule. Because there was a possibility that the impacts for the limited set of environmental issues would be found to be nonexistent or insignificant (no significant impacts), use of an EA was provided for in the proposed rule. In addition, a finding of no significant impact and the supporting EA may be issued in draft for comment at the discretion of the appropriate NRC staff director. The proposed rule was challenged with respect to preliminary cost-benefit findings and procedural hurdles to public input to the license renewal review. To resolve these concerns, the Commission modified the rule to eliminate the preliminary license renewal finding and to make that finding only after consideration of all impacts within the plant-specific review. The Commission believes that the sum of all the individual impacts that are to be considered in the decision whether to renew a nuclear power plant operating license for an additional 20 years, especially given the controversy over various aspects of nuclear power, exceeds the Commission's threshold for a finding of no significant impact. This and the desire to ensure public access to the license renewal review process led to the requirement of a supplemental EIS for license renewal.

about the treatment of alternatives to license renewal, the Commission believes that the final GEIS and rule adequately accommodate these concerns. The consideration of alternative energy sources in individual license renewal reviews will consider those alternatives that are reasonable for the region, including power purchases from outside the applicant's service area. Also, in assessing the environmental impacts of new generating capacity it will not necessarily be assumed that the capacity would be constructed on the site under review. Finally, consideration of the economic merits of renewing a plant operating license is eliminated only from the Commission's decision whether to renew. The decision about the economic merits of continued operation of a nuclear power plant will be made by the owners and the State regulators.

III. Procedural Background

Because this rule makes only minor clarifying and conforming changes and adds language inadvertently omitted from Table B-1 of the rulemaking published June 5, 1996, and because public comments were solicited on that rulemaking the NRC is approving this rule without seeking public comments on proposed amendments.

IV. No Change in Supplemental Information

No change to the Supplemental Information that was provided in 61 FR 28467, July 5, 1996, is required. The discussions and conclusions made in VII. Finding of No Significant Environmental Impact: Availability; VIII.

(A) If the applicant's plant utilizes cooling towers or cooling ponds and withdraws make-up water from a river whose annual flow rate is less than 3.15×10^{12} ft³/year (9×10^{10} m³/year), an assessment of the impact of the proposed action on the flow of the river and related impacts on instream and riparian ecological communities must be provided. The applicant shall also provide an assessment of the impacts of the withdrawal of water from the river on alluvial aquifers during low flow.

(B) If the applicant's plant utilizes once-through cooling or cooling pond heat dissipation systems, the applicant shall provide a copy of current Clean Water Act 316(b) determinations and, if necessary, a 316(a) variance in accordance with 40 CFR Part 125, or equivalent State permits and supporting documentation. If the applicant can not provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from heat shock and impingement and entrainment.

(C) If the applicant's plant uses Ranney wells or pumps more than 100 gallons ^(TOTAL ONSITE) of ground water per minute, an assessment of the impact of the proposed action on ground-water use must be provided.

(D) If the applicant's plant is located at an inland site and utilizes cooling ponds, an assessment of the impact of the proposed action on groundwater quality must be provided.

(E) All license renewal applicants shall assess the impact of refurbishment and other license-renewal-related construction activities on important plant and animal habitats. Additionally, the applicant shall assess the impact of the proposed action on threatened or endangered species in accordance with the Endangered Species Act.

(F) If the applicant's plant is located in or near a nonattainment or

environmental review. The supplement will only cover matters that differ from the final environmental impact statement or that reflect significant new information concerning matters discussed in the final environmental impact statement. Unless otherwise determined by the Commission, a supplement on the operation of a nuclear power plant will not include a discussion of need for power, or of alternative energy sources, or of alternative sites, or of any aspect of the storage of spent fuel for the nuclear power plant within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b), and will only be prepared in connection with the first licensing action authorizing full-power operation.

(c) Operating license renewal stage. In connection with the renewal of an operating license for a nuclear power plant under Part 54 of this chapter, the Commission shall prepare a^{EIS, which is a} supplement to the Commission's NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (May 1996).

(1) The supplemental environmental impact statement for the operating license renewal stage shall address those issues as required by § 51.71. In addition, the NRC staff must comply with 40 CFR 1506.6(b)(3) in conducting the additional scoping process as required by § 51.71(a).

(2) The supplemental environmental impact statement for license renewal is not required to include discussion of (1) need for power or (2) the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, the supplemental environmental impact statement prepared at the license renewal