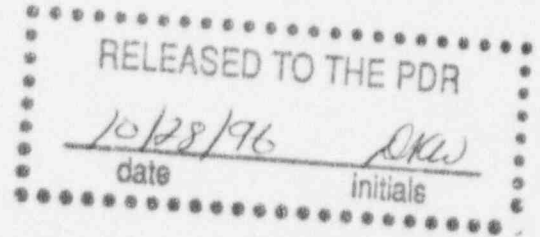


NOTATION VOTE

RESPONSE SHEET



TO: John C. Hoyle, Secretary

FROM: COMMISSIONER MCGAFFIGAN

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

Approved ☒ Disapproved ☐ Abstain ☐

Not Participating ☐ Request Discussion ☐

COMMENTS:

See attached comments.

Edward M. McGaffigan Jr.

SIGNATURE

10/8/96

DATE

Release Vote ☒

Comms - NRCC
Withhold Vote ☐

Entered on "AS" Yes ☒ No ☐

11/0
DFP2

Commissioner McGaffigan's Comments on SECY-96-190:

I approve the proposals in SECY-96-190, subject to the following:

1. I agree with the changes recommended by the General Counsel in her September 13, 1996 memorandum, and I agree with the changes recommended by Chairman Jackson. I also propose several additional editorial and typographical corrections, as noted on the attached marked-up pages, and I suggest that the staff thoroughly proof-read the package before publication.
2. On page 17 of the proposed notice, the Commission proposes to respond to industry comments on the treatment of chronic health effects of transmission line electromagnetic fields by stating, inter alia, that

[t]he Commission recognizes that some, possibly many, experts would believe that the scientific evidence could support a Category 1 determination.

From my experience with Congressional inquiries on this issue, I believe that the Commission substantially understates the body of scientific evidence and expert views on this matter. In fact, I believe that the preponderance of credible scientific evidence and most studies to date have shown that transmission line electromagnetic fields do not pose health problems. For that reason, I am troubled that we can not support a Category 1 determination on the chronic human health effects of transmission line electromagnetic fields. Nevertheless, I recognize that studies on the issue continue and that the Commission may find it prudent to take a conservative approach on the issue. Consequently, I will not object to the proposal not to categorize the issue at this time.

At the same time, I strongly suggest that we more accurately characterize what I believe to be the current state of scientific views on this matter. In this vein, I would note that we may be inconsistent in our statements in the response to comments and in the rule itself about the current state of scientific knowledge. For example, the response to comments seems to indicate that there is substantial scientific evidence that would support a Category 1 determination. On the other hand, the rule at Table B-1, page 50 indicates that "the state of the science is currently inadequate", and footnote 5 states that the "scientific evidence . . . is inconclusive." To more accurately characterize this issue and to eliminate possible inconsistencies, I suggest the following changes to the Notice and the Rule:

- (a) replace the second and third sentences in the Response paragraph on page 17 with:

The Commission recognizes that biological and physical studies of electromagnetic fields have not found consistent evidence linking harmful effects with field exposures and that much of the scientific evidence and many experts in the field arguably would support a Category 1 determination for this issue. However, the Commission also recognizes that research is continuing in this area, and that a scientific consensus on the issue has not yet emerged.

Consequently, the Commission believes that a more conservative position on the matter is appropriate at this time.

(b) replace the "Findings" on electromagnetic fields and footnote 5 to those "Findings" in Table B-1 with:

UNCERTAIN. Biological and physical studies of 60-Hz electromagnetic fields have not found consistent evidence linking harmful effects with field exposures. However, research is continuing in this area and a consensus scientific view has not been reached.⁵

⁵ If, in the future, the Commission finds that, contrary to current indications, a consensus has been reached by appropriate Federal health agencies that there are adverse health effects from electromagnetic fields, the Commission will require applicants to submit plant-specific reviews of these health effects as part of their license renewal applications. Until such time, applicants for license renewal are not required to submit information on this issue.

[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 ^{are} 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.

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 Commissions 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 the 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 Commissions findings on waste issues. Transportation (radiological

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

X If an applicant's reactor meets all the conditions in § 51.52(a) the applicant may use the environmental impacts of ^{transportation} ~~transportation~~ 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

Table B-1. Summary of findings on NEPA issues for license renewal of nuclear power plants¹

Issue	Category ²	Findings ³
<p>Offsite radiological impacts (spent fuel and high level waste disposal)</p>	<p>1</p>	<p>have some statistical adverse health effect which will not ever be mitigated (for example no cancer cure in the next thousand years), and that these doses <i>projected</i> projection over thousands of years are meaningful. However, these assumptions are questionable. In particular, science cannot rule out the possibility that there will be no cancer fatalities from these tiny doses. For perspective, the doses are very small fractions of regulatory limits, and even smaller fractions of natural background exposure to the same populations.</p> <p>Nevertheless, despite all the uncertainty, some judgement as to the regulatory NEPA implications of these matters should be made and it makes no sense to repeat the same judgement in every case. Even taking the uncertainties into account, the Commission concludes that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the collective effects of the fuel cycle, this issue is considered Category 1.</p> <p>For the high level waste and spent fuel disposal component of the fuel cycle, there are no current regulatory limits for offsite releases of radionuclides for the current candidate repository site. However, if we assume that limits are</p>

Table B-1. Summary of findings on NEPA issues for license renewal of nuclear power plants¹

Issue	Category ²	Findings ³
<p>100 premature cancer deaths with an upper limit</p> <p>Nonradiological impacts of the uranium fuel cycle</p>	<p>1</p>	<p>bound of 1,000 premature cancer deaths world-wide for a 100,000 metric tonne (MTHM) repository.</p> <p>Nevertheless, despite all the uncertainty, some judgement as to the regulatory NEPA implications of these matters should be made and it makes no sense to repeat the same judgement in every case. Even taking the uncertainties into account, the Commission concludes that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated. Accordingly, while the Commission has not assigned a single level of significance for the impacts of spent fuel and high level waste disposal, this issue is considered Category 1.</p> <p>SMALL. The nonradiological impacts of the uranium fuel cycle resulting from the renewal of an operating license for any plant are found to be small.</p>