



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 4, 2009

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-09-0034

TITLE: PROPOSED RULEMAKING - ENVIRONMENTAL
PROTECTION REGARDING THE UPDATE OF THE 1996
GENERIC ENVIRONMENTAL IMPACT STATEMENT FOR
NUCLEAR POWER PLANT LICENSE RENEWAL

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of May 4, 2009.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in black ink, appearing to read "Annette Vietti-Cook", written over a horizontal line.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Klein
Commissioner Jaczko
Commissioner Lyons
Commissioner Svinicki
OGC
EDO
PDR

VOTING SUMMARY - SECY-09-0034

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	X				X	4/6/09
COMR. JACZKO	X				X	4/24/09
COMR. LYONS	X				X	4/8/09
COMR. SVINICKI	X				X	4/28/09

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on May 4, 2009.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: CHAIRMAN KLEIN

SUBJECT: SECY-09-0034- PROPOSED RULEMAKING - ENVIRONMENTAL PROTECTION REGARDING THE UPDATE OF THE 1996 GENERIC ENVIRONMENTAL IMPACT STATEMENT FOR NUCLEAR POWER PLANT LICENSE RENEWAL

Approved xx Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached xx None ___



SIGNATURE

4/6/09

DATE

Entered on "STARS" Yes XX No _____

Chairman Klein's Comments on SECY-09-0034

I approve of the staff's recommendation to publish, for public comment, the proposed rule amending Title 10, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," of the Code of Federal Regulations (10 CFR Part 51), and the associated draft regulatory analysis and guidance documents.

I commend the staff for its hard work in drafting this rulemaking effort, which is important in meeting our obligations for providing clear guidance for the efficient submission of license renewal applications, as well as our performance of license renewal application reviews.

The staff should consider including in the guidance documents being published with this proposed rule a reference to the National Academy of Science, Biological Effects of Ionizing Radiation (BEIR) VII Report, "Health Risks From Exposure to Low Levels of Ionizing Radiation," indicating how the staff utilized this report in drafting the proposed rule.

I also have two minor editorial comments; In Enclosure 1, page 3, remove the "--" after "(800)" in the second sentence, and on page 29, add the word "issue" after "Category 1", in issue number 47.



Dale E. Klein

4/6/09

Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER JACZKO
SUBJECT: SECY-09-0034 – PROPOSED RULEMAKING –
ENVIRONMENTAL PROTECTION REGARDING THE
UPDATE OF THE 1996 GENERIC ENVIRONMENTAL
IMPACT STATEMENT FOR NUCLEAR POWER PLANT
LICENSE RENEWAL

Approved Disapproved Abstain

Not Participating

COMMENTS: Below Attached None



SIGNATURE

04/24 /2009

DATE

Entered on "STARS" Yes No

Commissioner Jaczko's Comments on SECY-09-0034
Proposed Rulemaking – Environmental Protection Regarding Update of the 1996
Generic Environmental Impact Statement for Nuclear Power Plant
License Renewal

I approve of the publication of the proposed rule updating the findings in 10 CFR Part 51 associated with the National Environmental Policy Act issues for license renewal. I look forward to hearing from our stakeholders on some of the changes proposed for this rule and the associated Generic Environmental Impact Statement.

I also join my colleagues in applauding the staff for their efforts on this project, despite budgetary obstacles. I have been troubled by the continued low prioritization that rulemakings receive in implementation of the NRC's budget and hope that, in the future, we can do a better job of ensuring that one of our most critical public processes – that of rulemakings – receives the attention and focus that it should. The Commission indicated its intent to revisit this generic analysis on a 10-year cycle and I believe it is important for public confidence that the agency try harder to hold itself to its commitments.

I believe it would also be helpful for the statements of consideration (SOC) to explain that in complying with the agency's environmental regulations, pursuant to section 51.34(c)(3)(iv), a utility is required to provide any new and significant information to the agency, even on a category 1 issue. I recognize this is captured in regulation and that specific regulation is not being changed by these amendments, but I think that a short explanation in the SOC in this regard may eliminate some confusion for those not as familiar with our environmental review process.

Finally, I understand the staff intends to hold 4 public meetings, one in each region, during the comment period on this rule. It is unfortunate that the Commission has not yet provided the staff with the capability to webstream meetings from offsite locations. This is precisely the type of generic issue that lends itself to webstreaming since participant interest is not based upon geography. Thus, I encourage the staff to consider hosting an additional public meeting here at headquarters where we do have the ability to webstream so that we maximize the potential to include all interested stakeholders in this important rulemaking effort.



Gregory B. Jaczko 9/24/09
Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER LYONS
SUBJECT: SECY-09-0034 – PROPOSED RULEMAKING – ENVIRONMENTAL PROTECTION REGARDING THE UPDATE OF THE 1996 GENERIC ENVIRONMENTAL IMPACT STATEMENT FOR NUCLEAR POWER PLANT LICENSE RENEWAL

Approved X Disapproved Abstain

Not Participating

COMMENTS: Below Attached X None



Peter B. Lyons
SIGNATURE

4/ 8 /09
DATE

Entered on "STARS" Yes X No

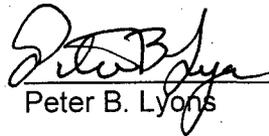
Commissioner Lyons' Comments on SECY-09-0034

**Proposed Rulemaking – Environmental Protection Regarding the Update of the 1996
Generic Environmental Impact Statement for Nuclear Power Plant License Renewal**

I approve the publication of the proposed rule and draft regulatory analysis in the *Federal Register*, as recommended by the staff in SECY-09-0034, subject to the attached editorial corrections.

I would also like to thank the staff for their efforts to develop this proposed rule. I believe that the proposed restructuring of table B-1 by resource area is a notable example of improving the usability of our regulations and will lead to greater efficiencies and effectiveness.

Editorial corrections in attached file.

 4/8/09
Peter B. Lyons Date

Environmental issues in the revised GEIS are arranged by resource area. This perspective is a change from the 1996 GEIS in which environmental issues were arranged by power plant systems (e.g., cooling systems, transmission lines) and activities (e.g., refurbishment). The structure of the revised GEIS adopts the NRC's standard format for EISs as established in Part 51, Appendix A to Subpart A of Part 51—"Format for Presentation of Material in Environmental Impact Statements." The environmental impacts of license renewal activities, including plant operations and refurbishment along with replacement power alternatives, are addressed in each resource area. The revised GEIS summarizes environmental impact issues under the following resource areas: (1) land use and visual resources; (2) meteorology, air quality, and noise; (3) geology, seismology, and soils; (4) hydrology (surface water and groundwater); (5) ecology (terrestrial ecology, aquatic ecology, threatened, endangered, and protected species and essential fish habitat); (6) historic and cultural resources; (7) socioeconomics; (8) human health (radiological and nonradiological hazards); (9) environmental justice; and (10) waste management and pollution prevention. The proposed rule revises Table B-1 in Appendix B to Subpart A of Part 51 to follow the organizational format of the revised GEIS.

Environmental impacts of license renewal and the resources that could be affected were identified in the revised GEIS. The general analytical approach for identifying environmental impacts was to (1) describe the nuclear power plant activity that could affect the resource, (2) identify the resource that is affected, (3) evaluate past license renewal reviews and other available information, (4) assess the nature and magnitude of the environmental impact on the affected resource, (5) characterize the significance of the effects, (6) determine whether the results of the analysis apply to all nuclear power plants (whether the impact issue is Category 1 or Category 2), and (7) consider additional mitigation measures for adverse impacts. Identifying ^{ation} of environmental impacts (or issues) was conducted in an iterative rather than a stepwise manner.

with the requirements of § 51.53(c)(iv), an applicant would only be required to describe in its environmental report any "new and significant information" of which it is aware.

(4) *Existing Issue Category Change from Category 1 to Category 2:* These would include issues that were considered as Category 1 in the 1996 GEIS and would now be considered as Category 2 in the revised GEIS. An applicant that previously did not have to provide an analysis on the environmental impacts associated with these issues would now be required to conduct an assessment of the environmental impacts and include it in the environmental report.

V. Proposed Actions and Basis for Changes to Table B-1.

The revised GEIS which is concurrently issued for public comment and publicly available (ADAMS Accession No. ML090220654) provides a summary change table comparing the ninety-two environmental issues in the 1996 GEIS with the seventy-eight environmental issues in the revised GEIS. The proposed rule amends Table B-1 in Appendix B to Subpart A, "Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants," to reflect the changes made in the revised GEIS. The changes to Table B-1 are described below:

(i) Land Use

(1) **Onsite Land Use** – "Onsite land use" remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B-1 for this issue.

(2) **Offsite Land Use** – The proposed rule language combines two Category 2 issues, "Offsite land use (refurbishment)" and "Offsite land use (license renewal term)" reclassifies this combined issue as a Category 1 issue, and names it, "Offsite land use." The finding column of the current Table B-1 for "Offsite land use (refurbishment)" indicates that impacts may be of moderate significance at plants in low population areas. The finding column of the current Table B-1 for "Offsite land use (license renewal term)" indicates that significant changes in land use may be

~~their~~ given the similar nature and to streamline the review process. The proposed rule revises the finding column of Table B-1 accordingly.

(59) Human Health Impact from Chemicals – The proposed rule adds a new Category 1 issue, "Human health impact from chemicals," to evaluate the potential impacts of chemical hazards to workers and chemical releases to the environment.

The evaluation addresses the potential impact of chemicals on human health resulting from normal operations of a nuclear power plant during the license renewal term. Impacts of chemical discharges to human health are considered to be small if the discharges of chemicals to water bodies are within effluent limitations designed to ensure protection of water quality and if ongoing discharges have not resulted in adverse effects on aquatic biota.

The disposal of essentially all of the hazardous chemicals used at nuclear power plants is regulated by Resource Conservation and Recovery Act or National Pollutant Discharge Elimination System (NPDES) permits, thereby minimizing adverse impacts to the environment and on workers and the public. It is anticipated that all plants would continue to operate in compliance with all applicable permits and that no mitigation measures beyond those implemented during the current license term would be warranted as a result of license renewal.

A review of the documents, as referenced in the GEIS; operating monitoring reports; and consultations with utilities and regulatory agencies that were performed for the 1996 GEIS, indicated that the effects of the discharge of chlorine and other biocides on water quality would be of small significance for all power plants. Small quantities of biocides are readily dissipated and/or chemically altered in the body of water receiving them, so significant cumulative impacts to water quality would not be expected. Major changes in the operation of the cooling system are not expected during the license renewal term, so no change in the effects of biocide discharges on the quality of the receiving water is anticipated. Discharges of sanitary wastes and heavy metals are regulated by NPDES. Discharges that do not violate the permit limits are considered to be of small

of spent fuel and high-level waste;" it remains a Category 1 issue. The proposed rule summarizes the discussion in the Table B-1 finding column entry for this issue.

(76) Nonradiological Impacts of the Uranium Fuel Cycle – Nonradiological impacts of the uranium fuel cycle" remains a Category 1 issue. The proposed rule makes minor clarifying changes to the finding column of Table B-1 for this issue.

(77) Transportation – "Transportation" remains a Category 1 issue. The proposed rule revises the Table B-1 finding column entry for this issue by retaining the significance level assigned to this environmental issue as applicable to the uranium fuel cycle. The specific technical discussion supporting these findings is retained in the GEIS.

(xiv) Termination of Nuclear Power Plant Operations and Decommissioning

(78) Termination of Nuclear Power Plant Operations and Decommissioning – The proposed rule combines one new Category 1 issue, "Termination of nuclear power plant operations" with six other Category 1 issues, "Radiation doses," "Waste management," "Air quality," "Water quality," "Ecological resources," and "Socioeconomic impacts," listed in the 1996 GEIS under the resource area, "Decommissioning" and names the combined issue, "Termination of plant operations and decommissioning." This combined issue is a Category 1 issue.

The 1996 GEIS analysis indicates that the six decommissioning issues are expected to be small at all nuclear power plant sites. The new issue addresses the impacts from terminating nuclear power plant operations prior to plant decommissioning. Termination of nuclear power plant operations results in the cessation of activities necessary to maintain the reactor, as well as a significant reduction in plant workforce. It is assumed that termination of plant operations would not lead to the immediate decommissioning and dismantlement of the reactor or other power plant infrastructure.

~~These issues current~~ environmental issues and the termination of nuclear power plant operations issue would be combined into one Category 1 issue to simplify and streamline the NRC review process. These issues are also addressed in the "2002 Generic Environmental Impact

include the information required in § 51.53(c)(2), but is not required to contain analyses of the environmental impacts of certain license renewal issues identified as Category 1 (generically analyzed) issues in Appendix B to Subpart A of Part 51. The environmental report must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2 (plant specific analysis required) issues in Appendix B to Subpart A of Part 51 and must include consideration of alternatives for reducing adverse impacts of Category 2 issues. In addition, the environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware. The required analyses are listed in §§ 51.53(c)(3)(ii)(A) (P).

The proposed language for §§ 51.53(c)(3)(ii)(A), (B), and (E) consists of changes to conform to the proposed changes in Table B-1, which in turn, reflects the revised GEIS. The NRC proposes to modify these paragraphs to more accurately reflect the specific information needed in the environmental report that will help the NRC conduct the environmental review of the proposed action.

Section 51.53(c)(3)(ii)(A) is revised to incorporate the findings of the revised GEIS and to require applicants to provide information in their environmental reports regarding water availability and competing water demands and related impacts on instream (aquatic) and riparian (terrestrial) communities.

Section 51.53(c)(3)(ii)(B) is revised to replace "heat shock" with "thermal changes" to reflect the proposed changes made in the revised Table B-1 as described earlier in this document under "(ix) Aquatic Resources," environmental impact issue, "(39) Thermal Impacts on Aquatic Organisms (Plants with Once-Through Cooling Systems or Cooling Ponds)."

Section 51.53(c)(3)(ii)(E) is revised to expressly include power plant continued operations within the scope of the impacts to be assessed by license renewal applicants. The paragraph is

the impact of the proposed action on local transportation during periods of license renewal refurbishment activities.

Proposed § 51.53(c)(3)(ii)(K)

The proposed language for § 51.53(c)(3)(ii)(K) deletes the phrase, "or archaeological." This term is encompassed by the use of the term "historical," as defined in the proposed rule language under § 51.14, "Definitions."

Proposed § 51.53(c)(3)(ii)(N)

The NRC proposes to add a new paragraph (c)(3)(ii)(N) in § 51.53 to conform with the proposed changes made in the revised Table B-1. A new Category 2 issue, "Minority and low-income populations" under resource area, "Environmental Justice" addresses the issue of determining the effects of nuclear plant operations and refurbishment on minority and low-income populations living in the vicinity of the plant. This issue is listed in the current Table B-1, but was not evaluated in the 1996 GEIS. The finding stated that: "The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews." Guidance for implementing E.O. No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," (Section 1-101) (59 FR 7629) and dated February 16, 1994 was not available before the completion of the 1996 GEIS.

In August 2004, the Commission issued a policy statement on
As stated in NRC's Policy Statement on the Treatment of Environmental Justice Matters in
Implementation of E.O. 12898. As stated therein
 NRC Regulatory and Licensing Actions (69 FR 52040), "the NRC is committed to the general goals of E.O. 12898, it will strive to meet those goals through its normal and traditional NEPA review process." To accomplish these goals, NRC requires the assistance of applicants in identifying minority and low-income populations and communities residing in the vicinity of the nuclear power plant and determine if there would be any disproportionate and adverse human health and environmental impacts on these populations. *The NRC will then assess the information provided by the applicant.*

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER SVINICKI

SUBJECT: SECY-09-0034 – PROPOSED RULEMAKING – ENVIRONMENTAL PROTECTION REGARDING THE UPDATE OF THE 1996 GENERIC ENVIRONMENTAL IMPACT STATEMENT FOR NUCLEAR POWER PLANT LICENSE RENEWAL

Approved XX Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below XX Attached _____ None _____

Approved subject to the edits of Commissioner Lyons and the edits attached.



SIGNATURE

04/28/09

DATE

Entered on "STARS" Yes No _____

resource. A large impact means that the environmental effects are clearly noticeable, and are sufficient to destabilize important attributes of the resource.

Table B-1 in Appendix B to Part 51, summarizes the findings of the analyses conducted for the 1996 GEIS. Issues and processes common to all nuclear power plants having generic (i.e., the same or similar) environmental impacts are considered Category 1 issues. Category 2 issues are those issues that cannot be generically dispositioned and would require a plant-specific analysis to determine the level of impact.

X The 1996 GEIS has been effective in focusing NRC resources on important environmental issues and increased the efficiency of the environmental review process. X
Currently, 51 nuclear units at 29 plant sites have received renewed licenses.

Revised GEIS

The GEIS revision evaluates the environmental issues and findings of the 1996 GEIS. Lessons learned and knowledge gained during previous license renewal reviews provided a significant source of new information for this assessment. Public comments on previous plant-specific license renewal reviews were analyzed to assess the existing environmental issues and identify new ones. The purpose of this evaluation was to determine if the findings presented in the 1996 GEIS remain valid. In doing so, the NRC considered the need to modify, add to, or delete any of the 92 environmental issues in the 1996 GEIS. After this evaluation, the staff carried forward 78 impact issues for detailed consideration in this GEIS revision. Fifty-eight of these issues were determined to be Category 1 and would not require additional plant-specific analysis. Of the remaining twenty issues, nineteen were determined to be Category 2 and one remained uncategorized. No environmental issues identified in Table B-1 and in the 1996 GEIS were eliminated, but several were combined or regrouped according to similarities.

contaminants on aquatic organisms;" it remains a Category 1 issue. The proposed rule makes clarifying changes to the finding column of Table B-1 for this issue.

(43) Exposure of Aquatic Organisms to Radionuclides – The proposed rule adds a new Category 1 issue, "Exposure of Aquatic Organisms to Radionuclides," to evaluate the potential impact of radionuclide discharges upon aquatic organisms. This issue has been raised by members of the public as well as Federal and State agencies during the license renewal process for various plants.

The revised GEIS evaluates the potential impact of radionuclides on aquatic organisms at nuclear power plants from continued operations during the license renewal term. A radiological assessment was performed using effluent release data from 15 NRC-licensed nuclear power plants chosen based on having a range of radionuclide concentrations in environmental media. Site-specific radionuclide concentrations in water and sediments, as reported in the plant's radioactive effluent and environmental monitoring reports, were used in the calculations. The data is representative of boiling water reactors and pressurized water reactors. The calculated radiation dose rates to aquatic biota were compared against radiation acceptable radiation safety guidelines issued by the U.S. Department of Energy, the International Atomic Energy Agency, the National Council of Radiation Protection and Measurement, and the International Commission on Radiological Protection. The NRC concludes that the impact of radionuclides on aquatic biota from past and current operations would be small for all nuclear power plants, and would not be expected to change appreciably during the license renewal term.

(44) Effects of Dredging on Aquatic Organisms – The proposed rule adds a new Category 1 issue, "Effects of dredging on aquatic organisms," to evaluate the impacts of dredging on aquatic organisms. Licensees conduct dredging to maintain intake and discharge structures at nuclear power plant facilities and in some cases, to maintain barge slips. Dredging may disturb or remove benthic communities. In general, maintenance dredging for nuclear power plant operations would occur infrequently, would be of relatively short duration, and would affect relatively small

the impact of the proposed action on local transportation during periods of license renewal refurbishment activities.

Proposed § 51.53(c)(3)(ii)(K)

The proposed language for § 51.53(c)(3)(ii)(K) deletes the phrase, "or archaeological." This term is encompassed by the use of the term "historical," as defined in the proposed rule language under § 51.14, "Definitions."

Proposed § 51.53(c)(3)(ii)(N)

The NRC proposes to add a new paragraph (c)(3)(ii)(N) in § 51.53 to conform with the proposed changes made in the revised Table B-1. A new Category 2 issue, "Minority and low-income populations" under resource area, "Environmental Justice" addresses the issue of determining the effects of nuclear plant operations and refurbishment on minority and low-income populations living in the vicinity of the plant. This issue is listed in the current Table B-1, but was not evaluated in the 1996 GEIS. The finding stated that: "The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews." Guidance for implementing E.O. No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," (Section 1-101) (59 FR 7629) and dated February 16, 1994 was not available before the completion of the 1996 GEIS.

As stated in NRC's Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040), "the NRC is committed to the general goals of E.O. 12898, it will strive to meet those goals through its normal and traditional NEPA review process." To accomplish these goals, NRC requires the assistance of applicants in identifying minority and low-income populations and communities residing in the vicinity of the nuclear power plant and determine^{ing} if there would be any disproportionate and adverse human health and environmental impacts on these populations.

X
X

The proposed language for § 51.71(d) consists of minor conforming word changes to clarify the readability and to include the analysis of cumulative effects. Cumulative impacts ^{were} ~~were~~ not addressed in the 1996 GEIS, but ^{are} ~~is~~ currently being evaluated by the NRC in plant-specific supplements to the GEIS. The NRC proposes to modify this paragraph to more accurately reflect the cumulative impacts analysis conducted for environmental reviews of the proposed action.

X
X

Proposed § 51.95(c)

The proposed language changes for § 51.95(c) is administrative in nature, and replaces the reference to the 1996 GEIS for license renewal of nuclear plants with a reference to the revised GEIS.

Proposed § 51.95(c)(4)

The proposed language for § 51.95(c)(4) consists of minor grammatical word changes to enhance the readability of the regulation.

VII. Specific Request for Comments.

The NRC seeks comments on the proposed Part 51 provisions described in this document and on the regulatory analysis and the information collection aspects of this proposed rule.

The NRC also seeks voluntary information from industry about refurbishment activities and employment trends at nuclear power plants. Information on refurbishment would be used to evaluate the significance of impacts from this type of activity. Information on employment trends