NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER OSTENDORFF

SUBJECT: SECY-09-0090 – FINAL UPDATE OF THE COMMISSION'S WASTE CONFIDENCE DECISION

Approved __XX__ Disapproved __XX__ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached __XX__ None ___

SIGNATURE

8/10/10
DATE

Entered on "STARS" Yes __XX__ No ___

Commissioner Ostendorff's Additional Comments on SECY-09-0090
Final Update of the Commission's Waste Confidence Decision

I approve publication of the Waste Confidence update and final rule in the Federal Register. Specifically, for reasons stated below, I approve Finding 2 and § 51.23 as revised in my vote, and I approve Finding 4 as recommended by the staff. The Commission's deliberations on this matter must be informed by the current state of events and most up-to-date technical knowledge. The Commission also has an obligation to meet its safety, security and environmental responsibilities in the context of being a consistent and reliable regulator. Keeping these considerations in mind, completion of this rulemaking at this time is critical. I believe we can issue the update and final rule based on the information we have on hand. I think it is also prudent to initiate the technical and environmental studies to evaluate longer-term storage of high-level radioactive waste and spent nuclear fuel.

In addition to the excellent work done by the staff, I appreciate the work that the Chairman and Commissioner Svinicki have done on this rule prior to the arrival of the three new Commissioners. I also acknowledge Dr. Klein's efforts on this rulemaking prior to his departure. It was invaluable to have had the benefit of their insights.

For the reasons set forth below, I support adoption of the following versions of § 51.23(a), Finding 2, and Finding 4:

> **§ 51.23: Temporary storage of spent fuel after cessation of reactor operation – generic determination of no significant impact.**
> (a) The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life of operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that sufficient mined geologic repository capacity will be available when necessary.
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> **Finding 2**: The Commission finds reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level waste and spent nuclear fuel generated by any reactor when necessary.
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> **Finding 4**: The Commission finds reasonable assurance that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life of operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and either onsite or offsite independent spent fuel storage installations.

With respect to the type of disposal capacity in which the Commission can have confidence, I believe that the term "mined geologic repository" is most appropriate. The nation's current understanding of the technical feasibility of the disposal of high-level waste and spent nuclear fuel is based nearly exclusively on information related to a mined geologic repository. For this reason, Finding 2 should refer narrowly to the assurance of the availability of a mined geologic repository.

I would also eliminate a target repository availability date in the final rule and Finding 2. I believe that predicting a target date for the availability of a geologic repository would be premature and does not provide any additional value for three reasons. First, I understand that the law does not require the NRC to determine or guess when a repository will be available. Throughout its history in dealing with the Waste Confidence Rule, the Commission has taken care to avoid relying on the success of a particular repository program. In both the 1984 and 1990 rulemakings, for instance, the determination of safe and secure storage was made without dependence on the timing of repository availability, and in fact assumed that the Yucca Mountain project would be abandoned. Rather than focusing on predicting repository availability, the appropriate inquiry is whether the Commission has reasonable assurance that the spent fuel can be safely stored onsite beyond the expiration of the operating licenses of nuclear power plants. The specific repository date used in past rules has never been associated with a health, safety, or environmental concern. This is still the case today.

Second, some stakeholders who commented on the proposed rule suggested that elimination of the target date would remove any incentive for the Federal Government to meet its responsibilities for the disposal of high-level waste. However, there is no evidence that keeping a target repository availability date as part of the rule has ever had the motivational effect on the development of a repository that these stakeholders desire.

Third, I think that asserting a prediction in the form of a repository availability date arguably undermines the validity of this rule. Notwithstanding the Commission's repeated explanation that the purpose of the target date is to establish a bounding time period for the environmental analysis, some stakeholders have viewed the target date as a binding prediction on the availability of the repository. Therefore, each time the Commission revises the target date, the Commission's credibility unnecessarily comes into question.

Instead of attempting to predict repository availability through the use of a target date, I join Commissioner Svinicki in recommending that Finding 2 and the rule apply the caveat "when necessary" to qualify when sufficient mined geologic repository capacity will be available. The term "when necessary" acknowledges our confidence that there will be no gap between the time when a repository will be necessary due to safety or other reasons and the availability of a repository. This is consistent with what the Commission proposed as an alternative approach in the proposed rule. Having reviewed the history of this rule, I do not see use of the phrase "when necessary" as a significant departure from the underlying rationale in past rules. In previous iterations of this rulemaking, the Commission has recognized the limitations of predicting a specific date of repository availability. Ultimately, the predictions were based on a belief that a repository would be available "when needed" or "in due course."

I believe that "when necessary" contemplates a wide array of situations that could ultimately trigger the need to dispose of high-level waste in a repository. Most importantly, a change in the political or societal elements necessary for acceptance of a national repository could mark this moment. Alternatively, although unlikely, a repository could become necessary because of some unforeseen safety, security, economic, legal, or capacity issue that could arise in the future. It is difficult to imagine a scenario which would necessitate disposal on the basis of safety or security, but I would not want to dismiss at least the possibility that some change of events would create a more urgent need for a repository.

I also approve the staff's recommendation to revise Finding 4 to reflect our assurance that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life of operation (which may

include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and either onsite or offsite independent spent fuel storage installations. I believe that the basis provided by the staff in the draft Federal Register Notice for extending the time period in Finding 4 from 30 years to 60 years is sound. Spent fuel has been stored safely for decades, and the staff currently has a technical basis, as evidenced by the studies referenced in the draft final rule, that suggests that it could continue to be stored as such for more than 60 years. From a security perspective, spent fuel storage locations are secure, and better protected than ever.

While a strong technical basis exists to issue this rule, the NRC and its federal partners continue research in this area to evaluate the feasibility of storage of spent fuel for longer timeframes. Therefore, I agree with the Chairman and Commissioner Svinicki's proposal to engage in a longer-term rulemaking that would provide greater longevity to the Waste Confidence Rule. The Commission should direct an Environmental Impact Statement (EIS) be completed to supplement the rulemaking using its discretionary authority under 10 CFR 51.20(a)(2). To provide the staff with flexibility in determining the appropriate period of review, I would propose that the staff be directed to analyze the storage of spent nuclear fuel at onsite storage facilities, offsite storage facilities, or both, for up to or beyond 300 years from the end of license operation of any nuclear power reactor, with the ultimate timeframe determined by the staff's technical judgment during the course of the analysis. The staff should provide the Commission with the resources needed for such a rulemaking.

While I support the technical analysis to determine the feasibility of spent fuel storage for up to or beyond 300 years from licensed life of operation, I would emphasize two points. First, I have complete confidence in the Commission's justification for issuance of this rule at the present time. Second, my support for the timeframe associated with this analysis should not be interpreted as advocating long-term onsite storage of spent nuclear fuel as a solution. The intent of directing the staff to analyze the impacts of storage for extended periods is to provide flexibility, and ensure that the Commission is prepared to respond to any future changes in the technical or political environment.

Addressing our confidence in the safe and secure management of nuclear waste has forced us into the very challenging business of considering the effects of our actions over extremely long periods of time. Nevertheless, I am confident in the Commission's basis for issuing this final rule now. I commend the staff for their continued diligence and my fellow Commissioners for their thoughtful attention to this rule. I look forward to reviewing the staff's future recommendations in this area.

William C. Ostendorff

8/10/2010