NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER APOSTOLAKIS

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

Approved __XX__ Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached __XX__ None ___

SIGNATURE

8/13/10
DATE

Entered on "STARS" Yes _X_ No ___

COMMISSIONER APOSTOLAKIS' COMMENTS ON SECY-09-0090: FINAL UPDATE OF THE COMMISSION'S WASTE CONFIDENCE DECISION

I approve staff's recommendation to publish the revised Commission's Waste Confidence decision and to make a conforming change to 10 CFR 51.23(a), subject to the following comments. I appreciate the extensive staff analysis and well developed proposal that are before the Commission. I also have had the opportunity of reviewing the thoughtful analyses and recommendations in the votes of my fellow Commissioners and former Chairman Klein.

I concur in the assessment of Chairman Jaczko and my fellow Commissioners that the Commission should now proceed to make its determination on the draft final waste confidence update and final rule. It appears that the Commission is close to consensus on immediate and longer term action. I understand the desire of former Chairman Klein, as well as Commissioner Svinicki, to move cautiously in their initial votes last year, given the uncertainties regarding changes in national policy at that time. Although the draft final rule that the staff submitted in 2009 assumed that Yucca Mountain would not be built, I appreciate the prudence of pausing to become better informed about current developments in the national policy on disposal of high-level waste and spent nuclear fuel.

At this juncture, the Administration has moved forward and has established the Blue Ribbon Commission on America's Nuclear Future. The Blue Ribbon Commission is chartered to conduct and is engaged in a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel, high-level waste, and materials derived from nuclear activities. It is also to make recommendations for a new plan to address these issues. In addition, the Administration has moved to terminate the Yucca Mountain project, submitted a motion to the NRC to withdraw the construction authorization application for Yucca Mountain, and is in litigation concerning these actions. Thus, it appears that it will be several years at least before the Commission would have the benefit of any additional information and recommendations that might be of significant interest to the Commission as it assesses its continuing confidence in the safe management and disposal of high level waste and spent nuclear fuel.

Until such time as a disposal site is made available by the federal government, I am confident that NRC's licensing and inspection programs will continue to ensure the safe and secure management of spent nuclear fuel by licensees in either a spent fuel pool or in dry cask storage systems. I am also confident that storage can be accomplished without significant environmental impacts for many decades. In particular, I join my fellow Commissioners in supporting the staff's proposed updated Finding 4.

I also support modification of Finding 2 and the final rule to provide that a mined geologic repository will be available "when necessary" rather than offering a target date for repository availability. The federal government remains obligated to provide permanent disposal capacity for high-level radioactive waste and spent fuel, an obligation accepted and affirmed by the current Secretary of Energy. The Commission has confidence (as expressed in Finding 1) that safe disposal of HLW and spent fuel in a mined geologic repository is technically feasible, and I believe the NRC has, and will continue to have, the ability to require safe and secure storage of spent nuclear fuel until disposal is necessary. A federal imperative to shift to disposal may be premised upon a variety of reasons, including increased development of social and political acceptance for disposal as outlined in the supplementary information or some ultimate

determination of when temporary storage should end for technical, environmental, or policy reasons.

In summary, I support issuance of the final rule and Waste Confidence update with the following revisions:

10 C. F. R. § 51.23, **Temporary storage of spent fuel after cessation of reactor operation—generic determination of no significant environmental 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 for 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. Further, the Commission believes there is reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of commercial high-level waste and spent fuel when necessary.

Waste Confidence Finding 2:

> The Commission finds reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated by any reactor when necessary.

Waste Confidence 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 for 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.

Both Finding 4 and the final rule refer to storage of spent fuel for at least 60 years beyond the licensed life for operation (which may include the term of a revised or renewed license). I think it should be clear in the supplementary information that these statements are premised on and bounded in part by the existing licensing limit of 60 years of operation when a renewed license is obtained and that the current regulatory regime allows for initial licensing of reactor operation for 40 years and renewal of the license for an additional 20 years. Thus, the updated Finding 2 reflects confidence in safe storage (supported by technical studies), without significant environmental effects for at least 120 years. The intent of this clarification is to ensure that the literal language is not interpreted as reflecting an assessment of safe storage without environmental effects for 60 years beyond the licensed life for operation, *whatever* the licensed life for operation. In this regard, I also note that efforts have begun on research that could contribute to an assessment of feasibility of licensing reactors for an additional 20 year period beyond 60 years. Thus, I think it would be useful if the supplementary information also explained that the Commission may need to revisit this finding and its technical bases if the

Commission eventually were to establish a regulatory program for such an additional period of operation.

I also support my fellow Commissioners' desire to direct staff to reassess the waste confidence decision with consideration of a longer time frame for storage and potential disposal, such as from 100 to up to 300 years, and to direct preparation of an Environmental Impact Statement (EIS) as an exercise of the Commission's discretion as part of a future rulemaking effort. My support for this effort should not be considered in any sense an endorsement of extended long-term or permanent spent fuel storage. Rather, I believe that the additional technical studies and environmental review of longer term storage would enhance future decision-making. At the same time, it will bolster the Commission's ability to respond to the possibility of future modifications in national policy regarding spent fuel storage and disposal, such as a shift toward centralized interim storage. I also agree with my fellow Commissioners that the lead for this effort should be assigned to the Office of the Executive Director for Operations with support from the Office of General Counsel.

In addition, I suggest that staff be directed to propose a time frame, and a rulemaking plan, based in part on its planning for the extended storage and transportation and regulatory program review discussed in COMSECY-10-0007. Integrated planning should be beneficial in establishing the scope of the studies, EIS, and future rulemakings. This approach should include consideration of the schedule for the activities and recommendations of the Blue Ribbon Commission.

The federal government is charged with providing for permanent disposal of high-level radioactive waste such as spent fuel. In exercising this responsibility, it is conceivable that the future path for the disposal of high level waste such as spent fuel may not even involve a mined repository. It might include, for example, a deep borehole. This approach would not be, as I would define it, a "mined repository." However, it most certainly could be considered under some reprocessing and transmutation scenarios for the remaining amount of waste. Therefore, staff should continue to monitor closely the activities of the Department of Energy's Blue Ribbon Commission on America's Nuclear Future to ensure that we can respond to potential modifications of national policy.

George Apostolakis 8/13/10