# DR. KLEIN'S SUPPLEMENTAL COMMENTS ON SECY-09-0090: FINAL UPDATE OF THE COMMISSION'S WASTE CONFIDENCE DECISION

In these supplemental comments, I offer my perspective on recent developments that I believe bear on the timing and nature of the Commission's actions on the waste confidence update. In particular, I believe that the Commission can reasonably proceed to finalize the update and revised rule in the near future on the basis of current assessments while also setting the groundwork for further review that would take account of the potential for longer-term approaches to management, storage, and disposal of high-level radioactive waste (HLW) and spent nuclear fuel (SNF).

In my vote last September 16, 2009, I expressed concern about the effect on the credibility of the Commission if the Commission finalized a predicted target date for repository availability without more information, and I recommended a limited re-noticing for comment on how the Commission should take account of the Administration's announced intent to terminate the Nation's Yucca Mountain project and pursue alternative approaches. I believed that additional information and insights could be gathered for a more informed decision. In my view, the events of the past year or so clearly warranted a pause.

Other options have also been explored, and I believe that the Commission could have come to a consensus on a path forward some time ago. However, the opportunity for a full five-member Commission to review and reach a decision on the staff's draft final waste confidence update and revised rule should make the Commission's decisions stronger and more enduring.

At the outset, I note that last month, on February 18, 2010, the Commission approved staff direction on my proposal (COMDEK-09-0001) that the agency revisit the paradigm for the agency's spent fuel storage and transportation regulatory programs and evaluate their adequacy for safe and secure storage and transportation of spent nuclear fuel for extended periods beyond 120 years. I offered this proposal on August 3, 2009, in the expectation that this evaluation would help the Commission address potential challenges of such longer-term alternatives as centralized interim storage.

Also, when I voted last September 16, I noted that the Department of Energy (DOE) had not submitted comments on the proposed rule and waste confidence update and that the concept of an expert commission to review options for HLW storage and disposal was far from settled. Now, we know that DOE seeks to terminate with prejudice its license application for a HLW repository at Yucca Mountain. We also know that various interests are raising legal challenges, both before the NRC and in the courts, in response to DOE's actions, and it may be years before these legal challenges are finally resolved.

Now we also know that an Advisory Committee Charter, filed with Congress on March 1, 2010, sets the objectives and scope of activities for the "Blue Ribbon Commission on America's Nuclear Future." The stated purpose is "to conduct a comprehensive review of the 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." The Blue Ribbon Commission is to provide advice, evaluate alternatives, and make recommendations on a variety of issues, including "[o]ptions for permanent disposal of used fuel and/or high-level nuclear waste, including deep geologic disposal." A draft report is due within 18 months and a final report within 24 months.

Last September, I also stated that this agency would benefit from more knowledge about the status of DOE's efforts to put into place contracts with current and potentially new commercial reactor licensees that would continue to carry out, at least in part, the Government's obligation to handle the ultimate disposal of high level radioactive waste and spent nuclear fuel. Now, more information is becoming available on the status of DOE's activities in this area.

The fact that at least several years are likely to pass before the Commission receives any final decisions on key issues about possible changes in the management and disposal of HLW and SNF suggests that the Commission should proceed to finalize now its current waste confidence update on the basis of the current information and assessments. As stated in the draft final update, the Commission has grounds to believe that SNF generated in any reactor can be stored safely without significant environment impacts for at least 60 years beyond the reactor's licensed life for operation (including the term of a renewed license), in a combination of storage in its spent fuel storage basin and either an onsite or offsite independent spent fuel storage installation. That period may be extended as new studies are completed.

I have been very mindful that setting an exact date by which a repository is expected or predicted to be available is a complicated task. This leads me to believe it may be preferable to remove from Finding 2 the predicted target date of 50 to 60 years beyond a reactor's licensed life for operation and to conclude instead that such disposal capacity will be available when needed. This does not mean the agency should assume indefinite storage. The underpinnings for the predicted target date of 50 to 60 years would still offer material support for a more general finding, and the more general finding would also be supported by the current technical assessments regarding management, storage and disposal of SNF, the Government's legal obligation to take SNF from commercial nuclear reactor, and this Government's and other Governments' past and ongoing pursuit of approaches to disposal. Furthermore, the Nation has demonstrated the capability to develop and operate a geologic repository for certain wastes at the Waste Isolation Pilot Project in New Mexico, and other nations are making significant progress in developing geologic repository programs for SNF.

The Commission has already sought public comment on this alternative approach, and both the proposed update and revised rule and the draft final update and revised rule were premised on the assumption that the Yucca Mountain program did not go forward to completion. I recognize, however, that the response to comments on removal of a predicted target date from Finding 2 would need to be reassessed and revised as appropriate.

Consistent with my recommendations in COMDEK-09-0001, I also encourage consideration of a longer term assessment of the safety and environmental impacts of storage of spent fuel in central interim storage or otherwise for periods well beyond 120 years, in recognition of the possibility that such alternative approaches might be pursued. This is not to say that the Commission takes a position for or against longer term storage, but only that the Commission should be well positioned to address such options if they are pursued and to support a future waste confidence update and potential rule revision.

Dale E. Klein 03/ /10