

## Spent Fuel Storage and Transportation (SFST) Regulatory Conference

### Introduction

Thank you for the introduction. I'm pleased to have the opportunity today to address the Spent Fuel Storage and Transportation Conference. In bringing together NRC and industry technical experts and other interested stakeholders, this event provides a valuable forum for the exchange of technical and scientific expertise. In my remarks, I hope to contribute to your dialogue by providing a broad overview of the NRC's recent activities relating to high-level waste management.

I believe it is always helpful, right at the start, to make sure we all share the same understanding of the nature of the NRC's regulatory role. As an independent safety regulator, the NRC is responsible for ensuring the safety and security of the storage, transportation, and ultimately, the disposal of spent fuel. It is not the role or responsibility of the NRC to promote or advance one option for storing, transporting, or disposing of spent fuel over other options. That is, in the end, a decision for the public to make through the policies and actions of the Administration, the Congress, and private industry. The NRC's responsibility is to ensure that whatever course is chosen is implemented in a manner that complies with the agency's regulations and ensures protection of public health and safety.

### Recent Developments Related to Low Level Waste Transportation

You have likely been following some recent developments that may affect the transportation of low level radioactive wastes in the near future. The new WCS low level waste disposal site in Texas will be able to accept out of compact waste. This may lead to increased shipments of Class B and C waste as generators look to dispose of waste that they've been storing since the closure of Barnwell in 2008.

Also, there has been increased interest in the licensing of new medical isotope production facilities in the U.S., in order to produce Mo-99 for use in medical procedures. This could lead to increased shipments of isotopes to and from these new facilities. Although the agency has certainly provided adequate oversight of these types of materials and shipments, we, in conjunction with the States, want to ensure that we remain focused on the safety and security of these shipments.

### Yucca Mountain and Blue Ribbon Commission

As we all know, over the past year, the issues related to Yucca Mountain have garnered considerable attention in the media and on Capitol Hill. Over the past year, the NRC staff has transparently and comprehensively completed an orderly closure of the Yucca Mountain license review, consistent with Commission policy and our appropriations from Congress. In September, the agency issued the last of three Technical Evaluation Reports (TERs) on the Department of Energy's license application for the nuclear waste repository. The three TERs

are now available on our public website, and they represent the staff's primary knowledge management records of its technical review of the DOE's license application.

The work for orderly closure of the licensing review process was completed in September. As part of this orderly closure process, the NRC staff conducted a comprehensive effort to collect and capture knowledge to ensure that the agency's 25 years of technical work is preserved. This effort included documenting the agency's review and other knowledge about the program through technical reports, as well as videotaped interviews of technical staff. By thoroughly documenting the staff's technical review and preserving it as appropriate for publication and public use, the agency's deep expertise can continue to provide value in the future.

In September, the Commission directed the Atomic Safety and Licensing Board holding the public hearing on the Yucca Mountain license application to complete its case management activities, and to comprehensively document the full history of the adjudicatory proceeding.

The Blue Ribbon Commission on America's Nuclear Future, was established in January 2010 by the Secretary of Energy, at the request of the President, to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle and recommend a new plan. The Commission released its Draft Report at the end of July 2011, and it presented a preliminary set of recommendations for public review and input. The comment period for the report has just come to a close, and the final report will be presented to the Secretary of Energy on or before January 29, 2012. The draft report includes recommendations for a consent-based approach to siting future nuclear waste management facilities; a new organization for implementing the waste management program; the development of one or more geologic disposal facilities; the development of one or more consolidated interim storage facilities; and more.

Beginning in March of this year, the work of the Blue Ribbon Commission was placed under a much brighter spotlight by the nuclear emergency at Fukushima Dai-ichi, which caused the issue of dealing with spent fuel to gain new attention and concern. We don't know what the final Blue Ribbon Commission's final report will recommend in January, but as the nuclear safety regulator, we are closely monitoring its progress.

### Waste Confidence

While the nation continues to grapple with how best to permanently dispose of high level waste, our agency has remained focused on the safety of spent fuel and high-level waste management. One issue that I know has been of significant interest to many of the NRC's licensees and stakeholders, and on which the Commission took action last year, is the agency's revision to the Waste Confidence Rule. Under that most recent update, the Commission has stated that, if necessary, spent fuel storage can be accomplished safely and without significant environmental effects for at least 60 years after a plant's licensed operation. In finalizing the revision of this rule, the agency provided a measure of certainty in an important and high-visibility area. The NRC believes that the new Waste Confidence Rule has a solid legal foundation that is clearly explained in the Commission's decision and is in full accord with earlier

court decisions interpreting the Commission's obligations under the National Environmental Policy Act (NEPA).

Let me be clear about what the Waste Confidence Rule does and does not do. The Waste Confidence Rule is a generic finding by the NRC – and by that I mean, a finding that is not site-specific – that there will not be significant environmental impacts from storage of spent fuel. The NRC has not authorized the continued licensing of nuclear power plants or authorized storage of spent fuel through this decision. Rather, the 2010 Waste Confidence update resolves generically, and removes from case-by-case consideration, one aspect of the environmental analysis required under NEPA. In order to meet our statutory requirements under NEPA and the Atomic Energy Act and to enable the agency to make an informed licensing decision about a nuclear power plant, the NRC will still conduct a comprehensive and site-specific environmental and safety analysis. The Waste Confidence Rule alone is not sufficient to meet this obligation, and does not pre-approve extended storage of spent fuel at particular reactor sites.

### Longer-term Review

In coordination with this effort, the agency also is moving forward with its long-term review of the regulatory framework for spent fuel storage and transportation. Although this regulatory framework has ensured safe and secure storage and transportation for decades, the NRC is committed to continuous improvement and believes that it's important to evaluate its programs and look for ways to strengthen them. As part of this thorough review of our spent fuel regulations, we will assess the adequacy of the agency's efforts for ensuring safe and secure storage and transportation for extended periods beyond 120 years.

Although this initiative is still in its early stages, the agency has developed a plan for conducting this comprehensive, multi-year effort. The plan aims to enhance the regulatory programs for both interim storage and extended storage and transportation by identifying and implementing near-term regulatory improvements to current licensing, inspection, and enforcement programs. Additionally, it seeks to enhance the technical and regulatory basis of the existing regulatory framework, and identify possible changes that may be needed to continue ensuring safe storage and transportation in extended periods.

As part of this effort, the agency also will undertake research regarding the safety and security of extended storage and transportation. The agency is adjusting research plans, and performing gap assessments to identify areas of additional research, relative priorities, and potential policy issues. The NRC believes that the priority and scope of these research activities will be determined by several factors, including: (1) the potential impacts of long-term aging phenomena and site environments on spent nuclear fuel and key storage and transportation cask components; (2) the staff's knowledge of aging phenomena and capabilities to monitor and detect long-term degradation; (3) the relative importance of key components in maintaining long-term safety under an enhanced aging management framework; and (4) the potential impacts of significant aging management activities on the environment.

Throughout these efforts, the NRC has engaged a broad range of stakeholders groups through public meetings, workshops, conferences, and other outreach efforts to ensure the

agency benefits from their perspectives. To continue this dialogue, the agency held a series of public workshops this fall to solicit input on technical and regulatory issues related to extended storage and transportation, as well as work to conduct other proactive outreach efforts. The NRC has long believed that the agency and its stakeholders benefit from this type of open, constructive dialogue.

### Japan Task Force

Along with the comprehensive, multi-year effort that was already underway, a greater sense of urgency now colors these issues due to the Fukushima Daiichi emergency in Japan. As you know, there was substantial concern over a long period of time about the condition of the spent fuel pools at the Fukushima site.

Less than two weeks after the March 11 tsunami and earthquake, the NRC launched a senior level task force to conduct a systematic and methodical review of the Fukushima nuclear accident and its implications for our domestic fleet of nuclear power reactors and the NRC's work as a regulator. While we were confident that the agency has a robust and effective regulatory approach, this review was initiated to determine whether the agency needs to take any immediate actions or make other improvements to our regulatory system.

The Near-Term Task Force submitted its report to the Commission in July. That report included a comprehensive set of 12 recommendations – many with both short- and long-term elements – to increase safety and redefine what level of protection of public health is regarded as adequate. It also recommended additional study of some issues.

In August, the Commission directed the staff to provide us with a series of vote papers within 21 days, 45 days, and 18 months addressing different aspects of the Task Force recommendations. We have received the first two of these requested papers and held public Commission meetings with stakeholder and staff presentations to discuss them.

The second staff paper, released on October 3, and which focused on prioritizing the Task Force's July recommendations, said the NRC should move "without unnecessary delay" to require installation of fuel pool instrumentation. And, the staff report stated that they were still considering several additional recommendations, including addressing the transfer of spent fuel to dry cask storage.

Since the Japan emergency, there has been a lot of attention in the media and in Congress about spent fuel pool cooling and the transfer of spent fuel from pools to casks, and I expect these issues will continue to be a focus of post-Fukushima public concerns.

### Agency Budget and Outreach

In this era of great challenges and flat budgets, as an agency, we must take a hard look at how we use our resources. We must remain forward-thinking and encourage an innovative approach to make sure we can address stakeholder needs and concerns. Over the past year

we have instituted new forms of public outreach, adding an external blog and wading into Twitter, YouTube, RSS feeds and webinars. It will take some time to see how these new communications approaches are working and to be sure that they are effective in reaching broader audiences and adding value. But we must keep looking for ways to strengthen our communications both within the agency and with our diverse range of stakeholders. Transparency and openness are core values of our agency, and we are committed to building public confidence through public understanding and involvement.

### Conclusion

The NRC is keenly aware of its important regulatory responsibilities regarding spent fuel and high-level waste and the agency has undertaken a number of important initiatives to ensure that our licensees manage these materials safely and securely. As you know, these issues involve technically complex questions that often cut across multiple disciplines. Conferences like this encourage and enable the dialogue that is so important to identifying and working through issues. I appreciate the opportunity to speak with you today, and hope that you will find the Conference this week to be both interesting and enlightening. Thank you.