NRC COMMUNICATION PLAN

NRC STAFF RECOMMENDATION FOR THE DISPOSITION OF RECOMMENDATION 1 OF THE NEAR-TERM TASK FORCE REPORT

Revised 12/20/13 Contact: Richard Dudley, 301-415-1116

KEY MESSAGES

- On December 6, 2013, the NRC staff delivered a SECY paper (<u>SECY-13-0132</u>) to the Commission presenting its recommendations for the disposition of Recommendation 1 in the Fukushima Near-Term Task Force report (NTTF report).
- Recommendation 1 of the <u>NTTF report</u> is to establish "a logical, systematic, and coherent regulatory framework for adequate protection that appropriately balances defense-in-depth and risk considerations."
- In its August 2011 SRM on the NTTF report, the Commission directed the staff to
 undertake the short-term actions in response to Fukushima using the NRC's existing
 regulatory framework. The Commission then directed the staff to pursue
 Recommendation 1 "independent of any activities associated with the review of the other
 Task Force recommendations" and to "provide options and a staff recommendation to
 disposition [Recommendation 1]."
- It is important to note that the term used by the Commission was "disposition"
 Recommendation 1, which the staff interpreted as direction to consider a wide range of actions, including the "no action" alternative.
- The staff has completed its review of possible actions to disposition Recommendation 1.
 We have concluded that the current regulatory framework is robust and flexible. It can effectively maintain the safety of nuclear power reactors and implement the Fukushima-related regulatory improvements.
- Nevertheless, the staff is recommending three improvement activities to enhance the clarity, efficiency, and effectiveness of NRC regulatory processes. These improvements are consistent with NRC's Principles of Good Regulation which establish a philosophy of continuous improvement in our regulatory processes.
- Although the improvement activities are not needed to maintain safety, the staff expects
 that implementing them now would result in modest safety enhancements in the future
 from using the improved regulatory practices.
- The staff working group for this effort included members from all NRC program offices and OGC. Oversight was first provided by the JLD Steering Committee and later by a smaller Recommendation 1 Steering Committee.

- The recommendations were developed with substantial public outreach:
 - Three white papers; three public meetings; two opportunities for written public comments
 - o Six meetings with the Advisory Committee on Reactor Safeguards
- Reaching a consensus on the recommendations was difficult, with diverse and strongly
 held views and concerns among staff and Steering Committee members. The
 recommendations represent a balance of different views which some see as a good but
 limited start on a larger, longer term plan; while others are concerned about the nearterm NRC resource needs for implementation.
- The three improvement activities are:
 - 1. Establish a design-basis extension category of events and associated regulatory requirements.
 - 2. Establish Commission expectations for defense-in-depth.
 - 3. Clarify the role of voluntary industry initiatives in the NRC regulatory process.
- The recommended activities are not mutually exclusive options. The Commission could approve none of these activities (which would maintain the current regulatory framework) or could approve one or more of the activities in any combination. The staff recommends approval of all three activities because their implementation would be synergistic (e.g., Improvement Activity 2 on defense-in-depth may increase the effectiveness of Improvement Activities 1 and 3).
- The staff believes that these activities would improve the NRC's decisionmaking process. For example, the NRC already has guidance describing a risk-informed, integrated decisionmaking process in Regulatory Guide 1.174, and has integrated risk considerations into the regulatory framework through the use of the Reactor Oversight Process. However, the staff lacks substantial guidance related to the defense-in-depth principle, and while there is literature about defense-in-depth, it is not fully (or consistently) defined. Recent examples of where staff would have benefitted from more guidance on defense-in-depth include the mitigation strategies rulemaking and containment venting. Should the Commission approve improvement activities 1 and 2, the staff would develop guidance to enhance decisionmaking about defense-in-depth, bringing efficiency and consistency to the staff's efforts on activities that further populate the design-basis extension category.
- A key component of Improvement Activity 1 involves guidance on quality treatment
 availability; reliability; and periodic testing of systems, structures and components
 required by design-basis extension regulations; such guidance has been identified by
 the industry as an immediate need to support the ongoing Fukushima rulemakings.
- In selecting these activities, the staff tried to maximize their potential benefits while minimizing impacts on both NRC and licensee resources.
- Initial resource costs to licensees from these activities would be minimal, but could increase over time depending on implementation of Improvement Activity 3.

- Within six months of when the SRM on Recommendation 1 is received, the staff will
 assess the resource needs of any improvement activities approved by the Commission
 and then evaluate available resources and provide the Commission with implementation
 plans and schedules for the approved improvement activities.
- The working group for NTTF Recommendation 1 is coordinating with the working group for the Risk Management Regulatory Framework. The staff's recommendations in the NTTF Recommendation 1 SECY paper will include consideration of NUREG-2150 power reactor regulatory framework recommendations. The Risk Management Regulatory Framework SECY paper is due to the Commission 6 months after the SRM on the NTTF Recommendation 1 SECY paper.

QUESTIONS AND ANSWERS

- Q. How does the staff's proposal differ from the status quo?
- A. Under Improvement Activity 1, the NRC would ensure that future design-basis extension requirements are written in a consistent, logical, and complete manner. Under Improvement Activity 2, the NRC would define defense-in-depth as applied to nuclear power reactor safety, and the NRC would develop implementation guidance to support regulatory decisionmaking about whether there is sufficient defense-in-depth for a given situation. Under Improvement Activity 3, the NRC would enhance confidence that future industry initiatives that form the basis for an NRC decision not to take regulatory action will be implemented and maintained over time.
- Q. What are the benefits of the proposed improvement activities?
- A. If implemented, these proposed improvement activities would increase safety:
 - Indirectly, by providing a better framework and guidance for promulgating new design basis extension rules
 - By incorporating the defense-in-depth process developed under Activity 2
 - By addressing any inconsistently implemented industry voluntary initiatives under Activity 3

Improvement Activity 1 would increase the coherency, thoroughness, and efficiency of future design-basis extension category regulations.

- Q. What is the timeline for implementing the recommended regulatory framework improvement activities?
- A. If approved by the Commission, the estimated timeline for implementation for each activity is:
 - Activity 1: 3 4 years
 - Activity 2: 3 4 years
 - Activity 3: 2 years

- Q. Will implementing these improvement activities result in increased costs or increased regulatory burden for nuclear power plant licensees?
- A. The NRC staff believes that these improvement activities represent real improvements that can be accomplished without undue burden on current nuclear power plant licensees and applicants. The proposed activities would involve mostly NRC resources.
- Q. Why does the NRC staff not recommend revising the existing beyond design basis rules to conform to the improved practices described in the internal rulemaking guidance to be developed?
- A. The NRC staff believes that re-visiting the legacy rules and potentially changing the associated treatment requirements could impose a significant burden on licensees without significant safety benefit. The legacy rules have already been implemented by licensees and are well-understood by NRC and licensees alike. The NRC staff's proposal is that future rules addressing design-basis extension category issues be written in a consistent manner and include explicit treatment and reporting criteria.
- Q. What is the relationship between NTTF Recommendation 1 and the staff's review of NUREG-2150?
- A. The working group for NTTF Recommendation 1 is coordinating with the working group for the Risk Management Regulatory Framework. The staff's recommendations in the NTTF Recommendation 1 SECY paper will include consideration of NUREG-2150 power reactor recommendations. The Risk Management Regulatory Framework SECY paper is due to the Commission 6 months after the SRM on the NTTF Recommendation 1 SECY paper.
- Q. How will the NRC, in the future, distinguish between design basis accidents and events, versus the proposed new design-basis extension category? If the NRC is not going to define what this category is, then how will this activity effectively result in a "logical, systematic, and coherent regulatory framework" as recommended by NTTF Recommendation 1?
- Α. The staff notes that Improvement Activity 1 is limited to establishing the new category of design-basis extension conditions. It does not involve re-evaluating the existing regulatory construct for design-basis accidents and events, including formally defining the characteristics, elements or risk thresholds for both design basis accidents and events and for the new design basis extension category. The staff acknowledges that the portion of the NRC's existing regulatory framework addressing design-basis events and accidents for nuclear power plants, as well as its de facto practice of addressing matters which would fall into the proposed new design-basis extension category, is complex. The regulatory framework has evolved over time and may not be as logical. consistent, or coherent as might be a framework developed all at once. Nonetheless. the existing framework for design-basis events and accidents is reasonably well understood by NRC and licensees. Developing characteristics, elements, and risk thresholds would be complex, and the benefits of this developmental effort would be directed, for the most part, at NRC decisionmakers in determining the categorization of future regulatory requirements. Applicants and licensees, for the most part, would not directly benefit from the developmental effort, except as potential commenters on NRCproposed categorization of new or amended regulatory requirements. The staff believes

that it would not be cost-justified to use additional NRC resources to re-visit the existing framework for design-basis events and accidents, and define the characteristics, elements, or risk thresholds for either the design-basis accidents or the new design basis extension category. Given these considerations, the staff did not include a proposed action for developing the characteristics, elements, or risk thresholds for both design-basis accidents and events and for the new design basis extension category as part of Improvement Activity 1.

- Q. Does the staff's recommendation include a requirement for operating power reactor licensees to perform and maintain plant-specific PRAs?
- A. No. Based on currently available information, the staff estimated that the safety benefits of issuing a regulation requiring operating reactor licensees to perform, update, and maintain plant-specific PRAs in order to support Improvement Activities 1 and 2 would be small in comparison to the costs of developing and maintaining PRAs sufficient for these purposes.
- Q. Did the staff identify regulatory framework improvements that would result in larger increases in the level of safety than those associated with any of the three improvement activities?
- A. Yes. The staff evaluated a regulatory framework approach for Improvement Activity 1 under which licensees would be required to perform, update, and maintain plant-specific PRAs meeting standards specified by the NRC. Licensees would be required to analyze the PRA results to identify plant-specific event sequences which exceeded threshold criteria also specified by the NRC. Event sequences exceeding the thresholds would be required to be mitigated by licensees to reduce risk to meet acceptance criteria established by the NRC.

The NRC did not recommend this approach because (1) its potential safety benefits to support Improvement Activity 1 by identifying new requirements for the design-basis extension category of events and associated requirements were not judged to be cost-effective due to the substantial costs of updating and maintaining PRAs (estimated to range from \$700 to \$800 million) and (2) public stakeholder comments on lack of confidence in PRA findings indicated that a PRA-based approach might result in decreased public confidence.

- Q. Why are the costs of upgrading and maintaining PRAs so high; given that licensees of all currently operating power reactors have already developed some type of PRA, many are developing fire PRAs to support risk-informed fire protection programs under NFPA 805, and others are also performing seismic and flooding PRAs?
- A. Nuclear power plant licensees would need to upgrade their existing PRAs to an acceptable level of quality (i.e., scope, level of detail, and technical adequacy) sufficient to support making fundamental plant-specific changes to the current licensing basis of individual plants. The NRC staff believes a PRA that meets Phase 4 of the Commission's phased approach to PRA quality would be necessary to support the establishment of a plant-specific licensing basis. This standard is well above that needed for specific applications such as NFPA 805; and, the cost of achieving it is high for a number of reasons. About one-half of all power reactor sites will require major upgrades to the internal events PRA, the fire PRA and the seismic PRA to achieve this

standard. These upgrades account for slightly less than 90% of the total cost of upgrades for the fleet. In addition, all 61 power reactor sites will require: (1) minor upgrades to their PRAs to appropriately clean up and develop final documentation of the technical adequacy of their PRAs; (2) a new Peer Review, which is not currently required but would be needed for swift and efficient NRC PRA quality determination based on recent NRC experience with implementation of NFPA 805; (3) annual PRA maintenance to maintain the quality level over the remaining licensed lifetime of the facility.

- Q. Will the staff's recommendation on a new design-basis extension category include a recommendation that the NRC search for new events and issues that would fall into this new category?
- A. No. The staff believes that the current processes being used by the NRC to search for new events and issues that should be regulated are sufficient. The staff also believes that the proposed improvement activities will help the NRC make regulatory decisions when future events and issues are identified.
- Q. Why did the staff not prepare a detailed regulatory analysis?
- A. The staff prepared estimates of the costs and schedules for undertaking these activities, as well as a discussion of the possible safety benefits. These cost estimates and safety benefit discussions are roughly analogous to a regulatory analysis, and provide sufficient detail to support the Commission's decision whether to approve action to develop and implement the recommended improvement activities.

Communication Plan

Publication of the Continued Storage Rule and NUREG-2157 Generic Environmental Impact Statement (Waste Confidence)

ML13162A756

(Last updated August 26, 2014)

Communication Lead: Paul Michalak, Chief, NMSS/WCD/EISB (301) 287-9216

PLAN OBJECTIVE

The objective of this plan is to promote effective, coordinated communication for the Continued Storage (formerly Waste Confidence) Generic Environmental Impact Statement (GEIS; NUREG-2157) and Rule (10 CFR 51.23) after affirmation of the final rulemaking package and subsequent publication of the final Rule and GEIS. This plan includes:

- Key messages for NRC stakeholders
- A brief status of the Continued Storage rulemaking
- A description of communication tools
- · A timeline for final GEIS and Rule publication activities and outreach
- Questions and answers

For more detailed information on the Waste Confidence rulemaking, including background and public participation during the rulemaking, please see earlier versions of this Communication Plan in ADAMS (ML13162A756).

COMMUNICATION TEAM

Keith McConnell	Director, Waste Confidence Directorate (WCD)	Phone (301) 287-9210
Paul Michalak	Chief, Environmental Impact Statement Branch	(301) 287-9216
Merri Horn	Rulemaking Project Manager (PM)	(301) 287-9167
Sarah Lopas	Communications PM	(301) 287-0675
David McIntyre	Public Affairs Officer	(301) 415-8206
Jenny Weil	Congressional Affairs Officer	(301) 415-1691
Tison Campbell	Lead Counsel—Waste Confidence	(301) 415-8579
Lisa London	Attorney	(301) 415-3233

KEY MESSAGES

- On August 26, 2014, the Commission approved publication of the Continued Storage final Rule and GEIS, subject to changes directed in the <u>Staff Requirements</u> <u>Memorandum</u> (SRM).
- The Waste Confidence Directorate (WCD) is making the SRM-directed changes and anticipates that it will publish the final Continued Storage Rule and GEIS in September 2014.

- The Continued Storage Rule will take effect 30 days after publication of the final Rule in the Federal Register.
- In a separate adjudicatory order <u>CLI-14-08</u>, the Commission lifted the suspension on final licensing decisions that was imposed in a 2012 decision (CLI-12-16) and authorized the NRC staff to issue final licensing decisions as appropriate once the Continued Storage final Rule becomes effective. The Order also provided direction on the resolution of related contentions pending in several adjudications before the Commission and the Atomic Safety and Licensing Boards.
- Under the final Rule, the environmental impacts of continued storage are generically
 determined in NUREG-2157, Generic Environmental Impact Statement for Continued
 Storage of Spent Nuclear Fuel, and codified in the NRC's regulations at 10 CFR 51.23,
 and therefore those impacts do not need to be determined on a site-specific basis.
- Continued Storage is an important part of the NRC's regulatory framework addressing spent fuel storage. It applies to future licensing actions for reactors and spent fuel storage facilities.
- The impacts documented in NUREG-2157 will be incorporated into affected
 Environmental Impact Statements (EISs) and considered in affected Environmental
 Assessments (EAs) for licensing actions going forward. NRC offices are developing
 methods and approaches to ensure that, in each affected licensing action, the staff's
 site-specific review appropriately considers all of the environmental impacts codified in
 the final Continued Storage Rule.
- When published, the final Rule and GEIS will be distributed via e-mail or mail to all
 commenters, and will be posted on the Waste Confidence website at
 http://www.nrc.gov/waste/spent-fuel-storage/wcd.html.
- The final Rule and GEIS are not open to public comment.
- Appendix D of the final GEIS contains summaries of and responses to all comments received on the proposed Rule and draft GEIS during the public comment period, which took place in the fall of 2013.
- Among other changes to the Rule language and GEIS, the title of the Rule was changed from "Waste Confidence" to "Continued Storage" in response to public comments.
- The Continued Storage Rule does not authorize storage of spent fuel at any site.
- The NRC's current regulations and oversight ensure the continued safe storage of spent
 fuel in pools and dry casks. In the future, if the NRC identifies a safety concern, it would
 evaluate the issue and take any action necessary to protect public health and safety.

STATUS UPDATE

The Continued Storage draft final rulemaking package (Commission paper, Federal Register notice, and final GEIS – ML14177A482) was sent to the Office of the Secretary on July 21, 2014, for Commission review. On August 26, 2014, the Commission approved publication of

the final Rule and GEIS, subject to the changes specified in Attachment 5 of the <u>SRM</u>. The staff is making those changes and will publish the final Rule and GEIS in September 2014. The final Rule will become effective 30 calendar days after publication in the *Federal Register*. Please see the Timeline of Events for additional details.

COMMUNICATION TOOLS

External Stakeholders

- Email List serve at <u>WCOutreach@nrc.gov</u> to notify the public of the affirmation and to electronically distribute the final Rule and GEIS.
 - WCOutreach e-mails will discontinue after distribution of the final Rule.
- The final GEIS and Rule will be distributed via mass e-mail (<u>noreply@nrc.gov</u>) and postal mail to those who commented on the documents (and provided contact information).
- Availability of the final GEIS and Rule (as well as other documents important to the rulemaking docket) on www.Regulations.gov (http://www.regulations.gov/#!docketDetail;D=NRC-2012-0246).
- Press releases announcing both the <u>affirmation and adjudicatory order</u>, and publication of the final Rule and GEIS.
- The Waste Confidence website (http://www.nrc.gov/waste/spent-fuel-storage/wcd.html) will provide links to the final documents.
 - After the effective date of the Rule the Waste Confidence website will be reduced to one page that contains links to documents important to the rulemaking. However, all materials related to the rulemaking will continue to be publicly available in ADAMS.

Internal Stakeholders

- Monthly Status Updates, which are e-mailed to Commissioners and senior managers.
 This update will be discontinued after September 2014.
- Waste Confidence SharePoint site, which contains a high-level schedule for the rulemaking, one-pagers, recent WCD PowerPoint presentations, archived Monthly Status Updates, and other pertinent information
- This Communication Plan, including Q's & A's, which will remain on the <u>EDO's</u> <u>Communication Plan SharePoint site</u>

TIMELINE OF EVENTS

Activity	Planned	Actual
Deliver draft final rulemaking package to SECY	7/21/14	7/21/14
Draft final rulemaking package publicly released (SECY)	8/5/14	7/24/14
WCOutreach e-mail and Waste Confidence website updated with draft final rulemaking package	8/5/14	7/24/14
Commission Review/Vote, Affirmation, and SRM issuance	7/21/14 — 8/22/14	7/21/14 8/26/14
WCOutreach e-mail and Waste Confidence website updated	8/26/14	8/26/14
OPA Press Release for Affirmation and SRM	8/26/14	8/26/14

SRM resolution; publication review, and printing	8/26/14 - 9/12/14
Distribution of final GEIS; Waste Confidence/NRC website updated with final GEIS; submission of GEIS to EPA	9/15/14 - 9/19/14
EPA FRN for final GEIS	9/26/14
NRC FRN for final GEIS	9/26/14
NRC FRN for final Rule	9/26/14
OPA Press Release for publication of final Rule and GEIS	9/26/14
Distribution of final Rule; Waste Confidence website updated with final Rule and EPA FRN	9/26/14 - 9/30/14
Rule effective date (30 days after publication)	Monday, 10/27/14

Q's & A's

Someone just called me about Waste Confidence, whom should I refer them to?

Please refer questions regarding the Continued Storage rulemaking, including requests for copies of the Rule and GEIS, to Sarah Lopas, WCD NEPA Communications Project Manager, (301) 287-0675 or Sarah.Lopas@nrc.gov, or Paul Michalak, WCD Branch Chief, at (301) 287-9216 or Paul.Michalak@nrc.gov.

Someone just called me with questions about the contentions dicussed in Commission Order CLI-14-8, whom should I refer them to?

All questions regarding Commission Order CLI-14-8 should be directed to the Office of Public Affairs at (301)415-8200 or OPA.Resource@nrc.gov.

What is the impact of the August 26 affirmation of the final Rule and GEIS on my projects?

In an affirmation session on August 26, 2014, the Commission approved publication of the final Rule and GEIS subject to changes directed in the <u>SRM</u>. NRC staff will make those changes and will publish the final Rule and GEIS in September, with the final Rule taking effect 30 days after publication. As directed in <u>Commission Order CLI-14-8</u>, after the effective date of the rule, staff is authorized to issue final licensing decisions as appropriate, however, the results of the Continued Storage rulemaking must be accounted for before finalizing licensing decisions. Once the staff has completed it review of the affected applications and has implemented the Continued Storage Rule, it may make decisions regarding final license issuance.

What happened to all of the related contentions that the Commission put on hold?

Commission Order CLI-14-8 also provided direction on the resolution of related contentions pending in several adjudications before the Commission and the Atomic Safety and Licensing Boards; please see the Order for these directions. For questions regarding how Commission Order CLI-14-8 impacts any contentions involving your project, please contact your project attorney.

Is there still a moratorium on NRC licensing?

Commission Order CLI-14-8, issued August 26, 2014, lifted the suspension on final licensing decisions that was imposed in back in August 2012 in <u>CLI-12-16</u>, in view of the issuance of a revised Continued Storage Rule. After the effective date of the revised Rule (30 days after publication in the Federal Register), staff is authorized to issue final licensing decisions as appropriate, however, the staff must implement the Continued Storage Rule for affected licensing actions prior to finalizing licensing decisions.

How does issuance of the Continued Storage final GEIS and Rule affect my project?

Under the final Rule, the environmental impacts of continued storage are generically determined in the Continued Storage GEIS, and codified by the revision to 10 CFR 51.23, therefore those impacts do not need to be determined on a site-specific basis. However, the environmental impacts of continued storage represent only a small portion of the overall environmental impacts of a proposed licensing action. Accordingly, before making its final recommendation about the licensing action's impacts, staff still must consider the environmental impacts of continued storage, together with the other potential environmental impacts of that licensing action, in affected EISs and EAs. The Continued Storage Rule is incorporated into affected EISs and considered in affected EAs. Affected EISs and EAs include those where a final EIS or EA has not yet been published, or has been published but a decision not yet been made on the licensing action; and all EISs and EAs for future reactor and fuel storage facility licensing actions. Completed licensing actions are not affected.

Are the conclusions in the Continued Storage GEIS new and significant information? Why would the NRC supplement an EIS? How would this affect my project?

For individual licensing actions the NRC staff will determine whether supplementation is warranted on a case-by-case basis. As stated earlier by the staff in <u>SECY-12-0132</u> (October 3, 2012), if the revised Waste Confidence Decision and Rule leaves issues unaddressed, then staff would perform any necessary additional NEPA review for those issues before the NRC makes a final licensing decision. See the criteria in <u>51.72</u> and <u>51.92</u>. Questions regarding schedule implications for specific projects should be directed to the appropriate project manager.

The Continued Storage GEIS has some conclusions that are greater than SMALL. What does this mean?

While the NRC's previous Waste Confidence decisions examined the impacts of continued storage and included a Finding of No Significant Impact (FONSI), the Continued Storage GEIS now concludes that, at least for certain scenarios and timeframes considered, the impacts for some resource areas wouldbe something other than SMALL. For example, over very long time frames, the uncertainties associated with the degree of licensee activity (e.g. if a DTS or ISFSI is built, where would it be?) and the uncertainties associated with the environmental resources (e.g. what environmental resources are present?) are what led the NRC staff to reasonably

conclude, that in some cases a range of impacts was more appropriate than a single finding in the GEIS.

Can the public comment on the final Rule and GEIS?

The NRC considered—and responded to—all timely submitted comments on the draft GEIS and proposed Rule in the course of developing the final GEIS and final Rule. No additional comments or clarifications are being solicited or accepted at this time.

How can members of the public let the Commission know how they feel about the rule and GEIS?

Members of the public may contact the Office of the Secretary of the Commission or individual Commissioners' offices if they wish to express their views on the rule and GEIS. (See http://www.nrc.gov/about-nrc/organization/commfuncdesc.html for contact information for the Commission.)

What is Continued Storage?

The Continued Storage Rule codifies the Commission's generic determination of the environmental impacts associated with the storage of spent fuel after the end of a reactor's licensed life for operation and prior to ultimate disposal. This generic analysis is found in <u>Title 10 of the Code of Federal Regulations</u>, <u>Section 51.23</u>.

Why was Waste Confidence renamed Continued Storage?

The NRC asked for comment on naming the rule and received a many comments from the public that clearly supported changing the name of the rule from the old title of "Waste Confidence." That sentiment was nearly unanimous. After considering the comments, the NRC staff is recommending that the Commission change the rule to "Continued Storage of Spent Nuclear Fuel." We believe the new title more accurately reflects the nature and content of the rule.

What is the purpose of the Continued Storage rulemaking?

The NRC's use of a rule to generically satisfy National Environmental Policy Act (NEPA) obligations with respect to continued storage will enhance efficiency in individual licensing reviews. The Continued Storage rule codifies the results of the generic assessment of environmental impacts of continued spent fuel storage in NUREG-2157 so that it's not necessary to repeat the identical or substantially similar analysis in individual licensing actions.

Why didn't you consider continued storage on a site-by-site basis? How can this be analyzed on a generic basis?

Historically, the Commission has chosen to address issues considered in past Waste Confidence proceedings generically since 1984, and this approach was reaffirmed by the D.C. Circuit Court of Appeals in the same decision that vacated and remanded the 2010 Waste Confidence update. For this effort, the NRC used existing information and data on

environmental resources to analyze impacts in the Continued Storage GEIS. Site-specific information from across the commercial fleet of reactors informed the Continued Storage generic analysis.

The facilities and activities associated with spent fuel storage are sufficiently well understood as a result of operating experience, and subsequently the environmental impacts can be reasonably predicted; and changes in the environment around spent fuel storage facilities are sufficiently gradual and predictable to be addressed generically.

Will the Continued Storage Rule authorize the storage of spent nuclear fuel at the reactor near me?

No, the Continued Storage Rule will not authorize the storage of spent nuclear fuel at any site, and it is not a substitute for site-specific NEPA and safety analyses for individual licensing actions.

How can I request that the NRC require a change to the way spent fuel is stored at a nuclear power plant near me, or request that a plant be closed?

As part of its responsibilities, the NRC assesses all potential health and safety issues related to licensed activities and encourages members of the public to bring safety issues to its attention.

Section 2.206 of Title 10 of the Code of Federal Regulations describes the petition process—the primary mechanism for the public to request enforcement action by NRC in a public process. This process permits anyone to petition the NRC to take enforcement action related to NRC licensees or licensed activities. Depending on the results of its evaluation, NRC could modify, suspend, or revoke an NRC-issued license or take any other appropriate enforcement action to resolve a problem. The 2.206 process is separate and distinct from the processes for rulemaking and licensing. Under the 2.206 process, the petitioner submits a request in writing to the NRC's Executive Director for Operations, identifying the affected licensee or licensed activity, the requested enforcement action to be taken, and the facts the petitioner believes provide sufficient grounds for the NRC to take enforcement action.

Why didn't the NRC consider shutting down all nuclear power plants and stopping all licensing as an alternative to the Continued Storage rulemaking?

Congress has mandated, through the Atomic Energy Act, that the NRC establish criteria to allow the licensing of nuclear power plants. Therefore, without Congressional direction to do so, the NRC may not deny a reactor license unless it determines that a license applicant has not met the NRC's regulatory standards for issuance of a license. Further, without a threat to the public health and safety or the common defense and security, the NRC has no authority to deprive current licensees of their vested interest in licenses already issued in compliance with those regulatory standards. In separate rulemaking actions, the Commission has already established criteria that provide reasonable assurance of public health and safety and due consideration of environmental impacts in the construction and operation of nuclear power plants, including facilities for continuing storage of spent fuel.

If the NRC is extending the timeframe of safe storage, how is that not de facto on site disposal?

The Continued Storage Rule codifies the environmental impacts of continued storage of spent fuel, it does not authorize the storage of spent nuclear fuel. Storage of spent fuel is authorized in site-specific licensing actions under Title 10 of the Code of Federal Regulations, Parts 50, 52, or 72.

The National policy for spent nuclear fuel remains the same—disposal in a deep geologic repository. Given the uncertainty regarding the development of a repository, the NRC has analyzed different timeframes for continued storage of spent fuel. This analysis enables the NRC to comply with NEPA, and does not, in any way, endorse an extended timeframe for storage of spent nuclear fuel. The NRC does not create national policy for disposal of spent nuclear fuel. That responsibility lies exclusively with Congress and the President. The NRC implements national policy set by Congress and the President by evaluating, in the context of its licensing and regulatory actions, how that policy will affect continued storage of spent fuel after the licensed life of a reactor's operation.

Where will the money come from to manage all this spent fuel for long periods of time?

NRC requires licensees to provide notification to the NRC of how they intent to provide funding to manage spent fuel until a repository becomes available. Therefore, in the GEIS, the NRC assumes that these funds will be available to ensure continued safe storage of spent fuel. In some cases, licensees have pursued lawsuits against the Federal Government for partial breaches of contracts to dispose of spent fuel. Such lawsuits have allowed licensees to recover from the Federal Government costs incurred in managing spent fuel. The cost of the Federal Government's liability for partial breach of contracts with nuclear utilities is paid from the Judgment Fund of the U.S. Government. Furthermore, the NRC acknowledges that, because of delays in the siting and licensing of a repository, the Federal government bears an increasing financial responsibility for spent fuel storage costs, and it may become responsible for paying all costs associated with spent fuel storage at some time in the future.

Does the Commission still have reasonable assurance about the safety of spent fuel storage?

The Commission makes safety findings with respect to storage of spent fuel in the context of licensing proceedings for nuclear power plants and independent spent fuel storage installations for the terms of those specific licenses.

Technical understanding and experience continues to support the technical feasibility of safe storage of spent nuclear fuel in spent fuel pools and in dry casks, based on their physical integrity over long periods of time (e.g., slow degradation of spent fuel during storage in spent fuel pools and dry casks; and engineered features of storage pools and dry casks to safely withstand accidents caused by either natural or man-made phenomena). Additionally, enhanced regulations, safety designs, and operations have evolved as concerns and information have developed over time (e.g., security and safety enhancements made after the

September 11, 2001, terrorist attacks and the March 2011 Fukushima Dai-ichi disaster; and corrective actions to address spent fuel pool leaks).

If necessary, there is no technical reason that storage of spent fuel in either spent fuel pools or dry casks cannot continue beyond 60 years after the end of the reactor's licensed life for operation. Storage of spent fuel beyond this time would continue under an approved aging management program to ensure that monitoring and maintenance are adequately performed.

How can the NRC allow nuclear waste to be stored in dry casks that are *known* to fail? How can the NRC have confidence in casks that have been proven to fail?

Spent fuel has been safely stored in dry casks for more than 25 years. The NRC requires nuclear power plants to implement monitoring and surveillance programs, and they are expected to take the necessary actions to ensure dry casks are repaired or replaced before safety is compromised.

When would the NRC not have confidence in nuclear power/safe storage of spent nuclear fuel?

If at some time in the future, the NRC were to identify a concern with the safe storage of spent fuel, the NRC would evaluate the issue and take whatever action or make whatever change in its regulatory program necessary to protect public health and safety. The NRC will continue to monitor the ongoing research and if warranted, the NRC will consider updating its Continued Storage rule, which would be supported by a new environmental analysis that would fully consider any new developments.

How can the NRC complete this rulemaking when the research on extended storage of spent fuel is years away from being finished?

The GEIS and the NRC's ongoing research are two separate efforts that are not directly related to one another. In the GEIS, the NRC has concluded that sufficient information exists to perform an analysis of spent fuel storage for periods beyond an ISFSI's initial licensing and first renewal. Furthermore, under NEPA, an EIS need only consider currently available information.

If at some time in the future, the NRC were to identify a concern with the safe storage of spent fuel, the NRC would evaluate the issue and take whatever action or make whatever change in its regulatory program necessary to protect public health and safety. The NRC will continue to monitor the ongoing research and if warranted, the NRC will consider updating its Continued Storage Rule, which would be supported by a new environmental analysis that would fully consider any new developments.

How was NEPA implemented for Continued Storage?

The NRC chose, as a matter of discretion, to develop a GEIS as its method of complying with NEPA in support of the Continued Storage rulemaking. The revised 10 CFR 51.23 codifies the environmental impacts analyzed in the Continued Storage GEIS. Public participation in the environmental review process was an essential part of the NRC's NEPA review of the

Continued Storage rulemaking. The NRC conducted an environmental scoping period from October 25, 2012, through January 2, 2013, and published the <u>scoping summary report</u> on March 5, 2013. The NRC asked for comments on the draft GEIS and proposed Rule during the 98-day public comment period in the fall of 2013, and during that comment period, conducted 13 public meetings and received over 33,000 comments on the draft documents. The NRC considered all comments received and made changes to the documents as required by the comments. Response to comments are contained in Appendix D of the final GEIS. The NEPA review concludes with publication of the final GEIS and record of decision (which is contained in the Federal Register notice for the rule).

Where are the comments I submitted on the Waste Confidence draft GEIS and proposed rule and what is the NRC doing with them?

The comment period on the <u>Waste Confidence draft GEIS</u> and <u>proposed rule</u> closed on December 20, 2013. All comments received prior to the deadline were considered in the NRC's preparation of the Continued Storage final generic environmental impact statement (GEIS) and rule. Comment summaries and responses will be included as Appendix D in the final GEIS, which is scheduled for publication in the fall of 2014. The final GEIS and rule will contain any changes made as a result of public comments.

Public comments are available in the NRC's <u>Agencywide Document Access and Management System</u> (ADAMS). To find your comment, do a content search using the term "NRC-2012-0246" (the Waste Confidence rulemaking docket number) and the name under which you submitted comments. If you encounter problems in accessing documents located in <u>ADAMS</u>, please contact the NRC's Public Document Room reference staff at 1-800-397-4209, or via e-mail at pdr@nrc.gov. Public comments submitted to the Waste Confidence docket are also available on the Federal rulemaking Website, <u>Regulations.gov</u>. Search public submissions for Docket ID NRC-2012-0246. Furthermore, the final GEIS includes a reference to a separate comment report that will list the author and ADAMS accession number for each comment received during the public comment period.

How did the NRC pay for this rulemaking?

The Waste Confidence effort was paid for by annual fees assessed to Part 50 power reactors licensees, and Part 72 licensees who do not hold a Part 50 license. The NRC's Fiscal Year 2013 fee rule was published in the Federal Register at <u>78 FR 39461</u> on July 1, 2013; and the NRC's Fiscal Year 2014 fee rule was published in the Federal Register at <u>79 FR 37124</u> on June 30, 2014.