



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 4, 2010

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-10-0031

TITLE: REVISING THE FUEL CYCLE OVERSIGHT PROCESS

The Commission (with Chairman Jaczko approving, Commissioners Svinicki and Apostolakis disapproving, and Commissioners Magwood and Ostendorff approving in part and disapproving in part) acted on the subject paper as recorded in the Staff Requirements Memorandum (SRM) of August 4, 2010.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in black ink, appearing to read "Annette L. Vietti-Cook", written over a horizontal line.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
EDO
PDR

VOTING SUMMARY - SECY-10-0031

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACZKO	X				X	6/11/10
COMR. SVINICKI		X			X	7/21/10
COMR. APOSTOLAKIS		X			X	7/8/10
COMR. MAGWOOD	X	X			X	7/20/10
COMR. OSTENDORFF	X	X			X	7/16/10

COMMENT RESOLUTION

In their vote sheets, Chairman Jaczko approved, Commissioners Svinicki and Apostolakis disapproved, and Commissioners Magwood and Ostendorff approved in part and disapproved in part. All Commissioners provided additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on August 4, 2010.

NOTATION VOTE

RESPONSE SHEET

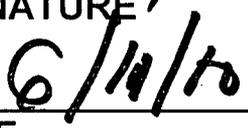
TO: Annette Vietti-Cook, Secretary
FROM: Gregory B. Jaczko
SUBJECT: SECY-10-0031 – REVISING THE FUEL CYCLE
OVERSIGHT PROCESS

Approved X Disapproved Abstain

Not Participating

COMMENTS: Below Attached X None



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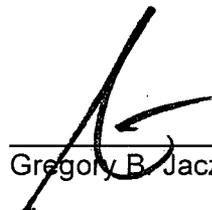
DATE

Entered on "STARS" Yes x No

**Chairman Jaczko's Comments on SECY-10-0031,
"Revising the Fuel Cycle Oversight Process"**

The revision of the fuel cycle oversight process will allow for a more risk-informed, transparent, objective, and predictable assessment of licensee or certificate holder performance. It will also allow the agency, the licensees, the public, and other stakeholders to better understand the performance of the licensees as well as the agency's resultant actions. I commend the staff for the effort and thought that they have put into this project to date.

I approve of the staff's moving forward with revising the fuel cycle oversight process; however, this is a multi-year effort that should be undertaken in appropriate steps. In the Staff Requirements Memorandum (M100429) for the April 29, 2010, Commission meeting on the fuel cycle oversight process, the staff was directed to provide the Commission a concise paper comparing Integrated Safety Analyses (ISA) for fuel cycle facilities with Probabilistic Risk Assessments (PRAs) for reactors. This paper will help to inform the Commission on whether the qualitative or the quantitative approach is best for the oversight of these facilities. Therefore, I have not at this time decided which approach the staff should use. The staff should prepare the ISA/PRA comparison in conjunction with those activities described in SECY-10-0031 that will help to develop the foundation for revision of the fuel cycle oversight process, such as the technical bases for: 1) the Significance Determination Process (SDP) for ISA-areas short of developing the methodology for creating risk thresholds; 2) the SDP for non-ISA areas; and 3) the baseline, supplemental, and reactive inspections and the assessment of licensee performance. Staff should return to the Commission in one year with an update of the progress that has been made.



Gregory B. Jaczko



Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER SVINICKI
SUBJECT: SECY-10-0031 – REVISING THE FUEL CYCLE
OVERSIGHT PROCESS

Approved _____ Disapproved XX Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached XX None _____



SIGNATURE

07/21/10

DATE

Entered on "STARS" Yes No _____

Commissioner Svinicki's Comments on SECY-10-0031
Revising the Fuel Cycle Oversight Process

I disapprove the staff's recommendation and plan (outlined in the enclosure to SECY-10-0031) to develop a revised fuel cycle oversight process. As noted by the staff, "the existing oversight process is effective and ensures safety and security." Consequently, although I am willing to consider modest adjustments to the current process to enhance its effectiveness and efficiency, such as a revision to the enforcement policy to provide credit for existing licensee corrective action programs and revisions to the baseline inspection program to credit licensee problem identification and resolution programs, I do not believe that a comprehensive revision and overhaul is a near-term priority. Finally, I join Commissioner Apostolakis in awaiting the staff's systematic comparison of integrated safety analyses and probabilistic risk assessment, along with the accompanying review and letter report of the Advisory Committee on Reactor Safeguards, to better inform any future proposed enhancements to the oversight process.



Kristine L. Svinicki 07/21/10

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: Commissioner Apostolakis
SUBJECT: SECY-10-0031 – REVISING THE FUEL CYCLE
OVERSIGHT PROCESS

Approved _____ Disapproved X Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached X none _____



SIGNATURE

7/8/10

DATE

Entered on "STARS" Yes X No _____

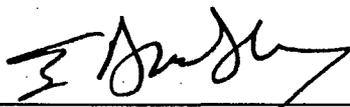
Commissioner Apostolakis Vote on SECY-10-0031 – Revising the Fuel Cycle Oversight Process

I disapprove, at this time, staff's recommendation for the Commission to approve the plan that is attached to SECY-10-0031. I do not agree with the stated pros and cons of the two options. I have serious doubts that a qualitative process will result in "risk-informed, objective, predictable, and transparent risk determinations and thresholds of significance." Regarding Option 2, I find the statement that "[t]he process will be based on numerical analyses using human and equipment reliability tools and thus will be more complex and less transparent" inconsistent with the ROP experience.

The two major elements of a risk-informed performance-based oversight process are the set of cornerstones and the significance determination process (SDP). The cornerstones provide the metrics that are used to evaluate performance and the basis for the development of the action matrix. They are derived from the agency's mission and strategic goals. The SDP assesses the impact on the cornerstones of inspection findings.

It is the SDP technical basis that is controversial for fuel cycle facilities. For historical reasons, safety evaluations of these facilities are performed using integrated safety analyses (ISA). On the reactor side, the preferred method is probabilistic risk assessment (PRA). The Commission has directed the staff with ACRS support to provide a systematic comparison of the two methods. Until the staff's report and the ACRS letter report are issued, I believe it would be prudent to refrain from any efforts to develop a technical basis for the SDP.

In the interim, I propose that the staff work on developing a set of cornerstones for the fuel cycle oversight process (FCOP) that address the diverse hazards and exposed populations covered by the Commission's regulations.



SIGNATURE

7/8/10

DATE

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MAGWOOD
SUBJECT: SECY-10-0031 – REVISING THE FUEL CYCLE
OVERSIGHT PROCESS

Approved X Disapproved X Abstain

Not Participating

COMMENTS: Below Attached X None



SIGNATURE

20 July 2010

DATE

Entered on "STARS" Yes X No

**Commissioner Magwood's Vote on
SECY-10-0031- Revising the Fuel Cycle Oversight Process**

I disapprove staff's proposal to develop a fuel cycle oversight process as described in the attachment of SECY-10-0031. I understand the NRC's current oversight of fuel cycle facilities consists of both planned and reactive inspections, with enforcement and periodic assessments based on the findings of those inspections. I also understand that over the last decade, the staff has implemented incremental revisions to inspection procedures and limited changes to the oversight process. This existing oversight process is effective and ensures safety and security. While a revised process may offer some advantages, I do not believe that a comprehensive revision is an immediate priority. I believe that we need to develop the best possible oversight program in a deliberate and measured way with stakeholder involvement at each step in the planning, development, and implementation of the process.

Therefore, in the interim, I recommend that staff revise both the enforcement policy to provide credit for an effective corrective action program as appropriate and revise the baseline inspection program to give credit to licensees for identification and resolution of issues and for incorporating the findings into their Corrective Action Program.

Nevertheless, I find that the staff has performed very well in carrying out the Commission's guidance with regard to the development of a revised oversight process and I find considerable merit in many of the objectives articulated by the staff in this endeavor. I am, therefore, quite willing to consider additional changes to the current process that will result in a more risk informed, performance based inspection regime. However, no such consideration is possible until the Commission receives the PRA/ISA comparison paper requested in the Staff Requirements Memorandum (M100429), which resulted from the April 29, 2010, Commission meeting on the fuel cycle oversight process.

In addition to the PRA/ISA comparison paper, I believe the staff should undertake work to provide more detailed information in support of future Commission review of this matter. Such a project should result in the development of sample elements of risk informed, performance based processes. In this context, I approve of a project in which staff will work with stakeholders to develop the Significance Determination Process (SDP) for Criticality Safety using both the ISA and PRA methodology. When this work is complete, staff should be prepared to discuss with the Commission the difficulties, advantages, and disadvantages of each methodology. Staff should also recommend, for Commission consideration, a program of pilot testing of these approaches.

At the completion of the project, staff should report all results and conclusions to the Commission. The Commission may then consider what, if any, next steps should be taken.



William D. Magwood, IV

20 July 2010

Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER OSTENDORFF
SUBJECT: SECY-10-0031 – REVISING THE FUEL CYCLE
OVERSIGHT PROCESS

Approved X Disapproved X Abstain

Not Participating

COMMENTS: Below Attached X None

Mark Kudoff
SIGNATURE

7/16/10
DATE

Entered on "STARS" Yes X No

**Commissioner Ostendorff's Comments on SECY 10-0031
"Revising the Fuel Cycle Oversight Process"**

I approve revision of the fuel cycle oversight process (FCOP) with a risk-informed performance based approach under Option 1 and I approve the conceptual FCOP framework (Attachment 2a). While I believe there is merit in including quantitative metrics, where appropriate, in a risk determination process, I do not believe that the power reactor approach taken in the Reactor Oversight Process (ROP) is directly applicable to fuel cycle oversight given the nature of these one-of-a kind facilities and diverse hazards in the fuel cycle industry. Nevertheless, I welcome the input from the pending PRAs/ISAs comparison paper that may better inform the FCOP under Option 1. I appreciate the staff's hard work and professional approach to improve the fuel cycle oversight process.

As noted in the staff's paper, the existing FCOP is effective and ensures safety and security. That said, in reviewing SECY 10-0031, visiting fuel cycle facilities, and listening to stakeholders, it is evident that selected improvements to the current oversight process are warranted and should be made but with the use of selected pilots to ensure a cautious, informed approach. There appears to be agreement that the current process is not based on a risk-informed approach and lacks predictability and transparency. In addition, licensees have considerable regulatory burden to address violations that are of very low safety significance. To address these challenges, I find the staff's recommendations under Option 1 that call for development of an Action Matrix, development of a Significance Determination Process (SDP), and a system for allowing credit for licensee Corrective Action Programs (CAP) appropriate. Taking these specific, discrete steps would fundamentally enhance transparency, predictability, and reliability of regulatory decisions and would improve decisions on allocation of inspection resources. I believe that these attributes of a revised FCOP are consistent with the Principles of Good Regulation – independence, openness, efficiency, clarity, and reliability.

Regarding the SDP, a principal aim of a new oversight process is to use the best-available information for regulatory decision-making. For fuel cycle oversight, that means use of Integrated Safety Analysis (ISA) information which contains a blend of qualitative and quantitative approaches, with noted exception for the two licensees who have used a PRA based approach. The ISA serves as the foundation for the existing fuel facility safety approach. The Commission should neither depart from this existing ISA foundation nor lessen the role of the ISA's as we seek to improve the existing FCOP. Systematic use of the ISAs in NRC inspections and licensee performance assessment through the SDP allows examination of the rigor and completeness of ISAs and development of insights to further our understanding of the risks and margins of fuel cycle facilities. For SDP purposes, I look forward to the staff's PRAs vs. ISAs paper to inform how PRA technology may complement an ISA driven approach for the staff's risk assessment of inspection findings. I note that the Commission currently has before it proposed revisions to the NRC Enforcement Policy that includes ISAs to characterize the severity level of violations. Development of the SDP will also provide additional technical capability to support the pending revision to the NRC Enforcement Policy.

I find that the staff's project plan could benefit from better clarity and more realistic schedules. Therefore, I disapprove the project plan. The staff should provide the Commission with a revised project plan implementing Option 1, modified to address the following:

1. An updated phased approach is needed given the complexity, potential resource implications for NRC and the industry, and considering other regulatory activities occurring in the fuel cycle area. A detailed, prioritized, and living project plan should be

developed and provided for stakeholder comment. When resource loaded, the project plan and an implementation schedule should appropriately balance FCOP enhancements vice other regulatory changes occurring simultaneously in the fuel cycle arena. For Commission approval, the revised plan should have a realistic date for long-term implementation of the revised FCOP.

2. The staff should work on those areas that would provide the most immediate and significant improvements in FCOP: development of an Action Matrix, Corrective Action Program (CAP) credit, and SDP.
3. Given most fuel cycle licensees are not required to have a Corrective Action Program (CAP) but have voluntarily developed them, the staff should consider how to best reflect this voluntary initiative in the regulatory Action Matrix logic or through an alternative approach. The revised FCOP should provide incentives for licensees to maintain strong CAPs as this is an important facet of sustaining high safety and security performance, and would be consistent with the Commission's ongoing safety culture initiatives.
4. With stakeholder involvement, the staff should pilot test SDPs for Emergency Preparedness (non-ISA area) and Criticality Safety (ISA based area). The revised FCOP should clearly and prominently emphasize that SDP results for matters believed to be of greater than very low safety significance should be based on best-estimate and realistic risk assessments. The staff should describe technical guidance that will be provided to analysts and decision-makers when more rigorous SDP analysis is necessary to provide better estimates of risk significance of an inspection finding (e.g., akin to guidance manuals that Senior Reactor Analysts use for the ROP).