



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

November 8, 2011

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-11-0076

TITLE: IMPROVING THE PUBLIC RADIATION SAFETY  
CORNERSTONE OF THE REACTOR OVERSIGHT  
PROCESS

The Commission (with Chairman Jaczko and Commissioner Ostendorff approving, Commissioners Svinicki and Magwood approving in part and disapproving in part, and Commissioner Apostolakis disapproving) acted on the subject paper as recorded in the Staff Requirements Memorandum (SRM) of November 8, 2011.

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

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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-11-0076

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACZKO	X				X	7/12/11
COMR. SVINICKI	X	X			X	10/5/11
COMR. APOSTOLAKIS		X			X	10/7/11
COMR. MAGWOOD	X	X			X	9/29/11
COMR. OSTENDORFF	X				X	6/28/11

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: Chairman Gregory B. Jaczko  
SUBJECT: SECY-11-0076 – IMPROVING THE PUBLIC RADIATION SAFETY CORNERSTONE OF THE REACTOR OVERSIGHT PROCESS

Approved  X  Disapproved   Abstain

Not Participating

COMMENTS: Below   Attached  X  None



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SIGNATURE

7/12/11  
DATE


Entered on "STARS" Yes  x  No

**Chairman Jaczko's comments on SECY-11-0076, "Improving the Public Radiation Safety Cornerstone of the Reactor Oversight Process"**

I support the staff's efforts to enhance the Reactor Oversight Process to emphasize defense in depth through prevention, detection, and mitigation of groundwater contamination. I also support the staff's commitment to work with internal and external stakeholders on this enhancement to the performance indicator program. I continue to believe that periodic updates to the agency's performance indicators are necessary in order to revitalize the NRC's oversight and ensure better insights into a licensee's performance.

Over the past several years, instances of buried piping leaks have led to inadvertent ground water contamination at 65 operating nuclear power plants. The Environmental Protection Agency set a maximum contaminant level of drinking water at 20,000 picocuries per liter (pCi/L) for tritium. Thirty-eight of these plants have had leaks or spills that involved tritium in excess of 20,000 pCi/L at some time during their operating history. Fourteen plants are currently reporting tritium, from a leak or spill, in excess of 20,000 pCi/L. Although many plants have had leaks or spills involving tritium, no plant is currently detecting tritium in the offsite environment, or in drinking water, in excess of 20,000 pCi/L. The fact that these events have not had offsite impacts does not mean it is acceptable for licensees to have accidental releases of radiation – even onsite. In some cases, the releases have not had offsite consequences because the plumes have migrated to much larger bodies of water in which there is sufficient dilution to reduce the concentration levels. While this fact has positive impacts on the overall health effect, it is simply inappropriate for the regulator to base its inaction on the dilution strategy. The NRC's response should, however, be objective and commensurate with the risk significance of the leak – not the level of public outcry. That is precisely what a performance indicator will do. As with all our performance indicators, there will be a need to properly establish the white, yellow, and possibly red threshold using a strong focus on risk significance. It may in fact turn out that most of the events we are currently tracking will simply be green findings. Having the performance indicator will allow for an effective method of communicating the significance of these events to the public and reduce the use of ROP deviations and other subjective reactions to these events.

The staff's current practice of deviating from the Reactor Oversight Process to address licensee performance involving groundwater contamination does little to help our stakeholders' understanding of the significance of the leakage and the licensee's performance. I agree with some of our stakeholders that the current practice of applying the deviation process compromises the predictability and objectivity of the Reactor Oversight Process. While I appreciate the industry's efforts to address underground leakage and groundwater contamination, I believe it is necessary for the agency to objectively and independently monitor licensees' performance and openly provide that information to the public. Therefore, I approve the staff's recommendation of modifying one or more key program areas of the Reactor Oversight Process to minimize reliance on Action Matrix deviations and yield more consistent, reliable regulatory outcomes.

  
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Gregory B. Jaczko      7/12/11  
Date

**NOTATION VOTE**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER SVINICKI  
SUBJECT: SECY-11-0076 – IMPROVING THE PUBLIC RADIATION SAFETY CORNERSTONE OF THE REACTOR OVERSIGHT PROCESS

Approved XX In Part Disapproved XX In Part Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS: Below \_\_\_\_\_ Attached XX None \_\_\_\_\_

  
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10/5/11  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

**Commissioner Svinicki's Comments on SECY-11-0076**  
**Improving the Public Radiation Safety Cornerstone of the Reactor Oversight Process**

I approve in part, and disapprove in part, the staff's proposal described in SECY-11-0076. I approve the staff's commitment to work with stakeholders on groundwater protection consistent with Commission policy, which was most recently articulated in the staff requirements memorandum for SECY-11-0019, "Senior Management Review of Overall Regulatory Approach to Groundwater Protection."

Consistent with my vote on SECY-11-0019, I continue to disapprove changes to the radiological effluent performance indicator or other modifications to the reactor oversight process (ROP) related to groundwater contamination control. As noted by the staff in SECY-11-0019, the current radiological effluent performance indicator is set to a small fraction of the regulatory limit and licensees' performance with respect to this indicator has not approached this fraction of the regulatory limit. Consequently, the staff concluded that licensees' radiological effluent control programs have been satisfactory. NRC inspections of groundwater and environmental monitoring and radioactive effluents should continue to focus on assessing licensee compliance with NRC regulatory requirements.

As noted by Commissioner Magwood in his vote on this paper, the staff has previously been directed to monitor the effectiveness of the ongoing industry initiatives and to inform the Commission if that monitoring reveals that the initiatives are not being conducted in a committed and enduring fashion. If the staff identifies such findings, the staff has been directed by the Commission to revisit the regulatory activities of the NRC in this area. Any proposed revisions to the NRC's regulatory program in this area should be provided to the Commission in a notation vote paper.

In engaging industry stakeholders, the staff should share its expertise in developing objective and repeatable performance assessment tools that licensees could consider implementing in self-assessments of their voluntary groundwater monitoring and protection initiatives. Finally, and just as important, the staff should continue efforts to enhance public education and awareness of issues related to groundwater contamination.

  
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Kristine L. Svinicki                      10/5/11

**NOTATION VOTE**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary  
**FROM:** COMMISSIONER APOSTOLAKIS  
**SUBJECT:** SECY-11-0076 – IMPROVING THE PUBLIC RADIATION SAFETY CORNERSTONE OF THE REACTOR OVERSIGHT PROCESS

Approved \_\_\_\_\_ Disapproved  x  Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

**COMMENTS:** Below  x  Attached \_\_\_\_\_ None \_\_\_\_\_

Consistent with my vote on SECY-11-0019, I disapprove the staff recommendation to use the Reactor Oversight Process and to revise the radiological effluent performance indicator to address groundwater contamination. I also continue to approve staff monitoring of the industry's voluntary initiatives. As directed in the SRM of August 15, 2011, on SECY-11-0019, the staff should inform the Commission if it finds that the voluntary initiatives are "not conducted in a committed and enduring fashion," such that the staff believes additional regulatory action may be warranted.

  
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10/7/11  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  ✓  No \_\_\_\_\_

NOTATION VOTE


RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MAGWOOD  
SUBJECT: SECY-11-0076 – IMPROVING THE PUBLIC RADIATION  
SAFETY CORNERSTONE OF THE REACTOR  
OVERSIGHT PROCESS

Approved  Disapproved  Abstain

Not Participating

COMMENTS: Below  Attached  None

  
\_\_\_\_\_  
SIGNATURE

29 September 2011  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No



**Commissioner Magwood's Comments on SECY-11-0076:  
"Improving the Public Radiation Safety  
Cornerstone of the Reactor Oversight Process"**

I commend the staff for providing a very informative paper proposing changes to the Reactor Oversight Program (ROP) intended to address more effectively the issue of groundwater contamination. I agree with staff's observation that the current practice of deviating from the ROP to address licensee performance involving groundwater contamination does little to help our stakeholders' understand the significance of the leakage and the regulatory response appropriate to the incident. I believe that if we are to address this matter effectively, we will need a clear, objective regulatory approach.

This is a very challenging issue for the NRC. As the Chairman noted in his vote, thirty-eight of the 65 sites with operating nuclear power plants in the United States have reported leaks or spills that involved tritium concentrations in excess of the Environmental Protection Agency's maximum contamination level for drinking water (20,000 pCi/L). While this agency has concluded that there have been no impacts on public health and safety resulting from these contamination events, this is a matter of great concern to many external stakeholders. Moreover, it is my view that a licensee's lack of attention to even low levels of radiological effluent is a sign of poor environmental stewardship and, very possibly, a questionable safety culture. As such, it is an appropriate area for assessment under the ROP.

Nevertheless, our legal mandate is clear in that the NRC's ability to regulate environmental releases that do not impact human health is very limited. As a result, this may be a case in which coordinated industry action has a greater probability of improving licensee performance than a regulatory response. For that reason, it has been encouraging to observe the implementation industry-wide voluntary groundwater initiative. An inspection conducted between August 2008 and August 2010 of all 65 nuclear power plant sites (Temporary Instruction 2515/173, "Industry Groundwater Protection Initiative") indicated that about 92% of the 42 program elements of the initiative had been implemented. As highlighted in the SRM for SECY-11-0019, staff has been directed to monitor the effectiveness of the industry initiative and to inform the Commission if that monitoring reveals that the initiative is not being conducted in a committed and enduring fashion. If industry proves unable to demonstrate sustained improvement, we can and should act accordingly.

However, as the Commission stated in the SRM for SECY-11-0019, staff should not, at this time, consider imposing a regulatory footprint over the industry's voluntary effort to address groundwater contamination issues. This effort is still quite new and may yet evolve and lead to improved performance across the industry as best practices are disseminated. Oyster Creek, for example, has implemented an excellent program to deal with environmental effluents; it would be very beneficial if other licensees, upon learning of the efforts made at this plant, would seek to follow its example. I am concerned that the staff's proposal could inhibit such a development. As a result, I disapprove staff's recommended approach.

Nevertheless, the arguments to modify the ROP to address radiological effluents from licensee facilities in a more consistent manner are very compelling and I remain supportive of pursuing this goal. I believe staff should continue to work with internal and external stakeholders to identify a performance indicator that is based on an objective, physical metric. When ready, staff should present its revised approach to the Commission for its evaluation via a new notation vote.



9/29/11

William D. Magwood, IV

Date

NOTATION VOTE


RESPONSE SHEET

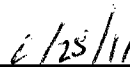
TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER OSTENDORFF  
SUBJECT: SECY-11-0076 – IMPROVING THE PUBLIC RADIATION  
SAFETY CORNERSTONE OF THE REACTOR  
OVERSIGHT PROCESS

Approved  Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS: Below \_\_\_\_\_ Attached  None \_\_\_\_\_

  
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DATE

Entered on "STARS" Yes  No \_\_\_\_\_

**Commissioner Ostendorff's Comments on SECY 11-0076,  
"Improving the Public Radiation Safety Cornerstone of the Reactor Oversight Process"**

I endorse the staff's efforts to enhance reactor oversight process (ROP) performance assessment tools within the Public Radiation Safety cornerstone. I agree with the staff's proposal to refine the ROP to ensure reliable and transparent outcomes and minimize reliance on the ROP Action Matrix deviation process. The staff should focus changes on risk insights and sound scientific principles.

As stated by the staff, the industry voluntary initiatives emphasize early prevention, detection, and mitigation before exceeding public radiation thresholds measured by the NRC's current performance indicators. I support development of a consistent process for directing supplemental inspections in response to declining licensee performance in prevention or mitigation of leaks, commensurate with the safety significance of the issue. I also support providing appropriate corrective action credit to licensees that take strong action in response to releases tracked under the voluntary program. Because the ROP already has assessment tools for potentially serious dose impacts to the public, changes to the SDP or PIs to assess a licensee's adherence to the industry's groundwater protection initiatives should not exceed a low significance (White) outcome. In addition, the staff should inform the Commission of associated pending changes to the ROP Public Radiation Safety cornerstone.