

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: Chairman Gregory B. Jaczko

SUBJECT: SECY-11-0019 – SENIOR MANAGEMENT REVIEW OF
OVERALL REGULATORY APPROACH TO
GROUNDWATER PROTECTION

Approved X Disapproved Abstain

Not Participating

COMMENTS: Below Attached X None



SIGNATURE
7/12/11

DATE

Entered on "STARS" Yes x No

Chairman Jaczko's comments on SECY-11-0019, "Senior Management Review Of Overall Regulatory Approach to Groundwater Protection"

I approve of the Senior Management Review Group's overall regulatory approach to groundwater protection. I think the Groundwater Task Force and the SMRG have done an excellent job in reaching out to stakeholders and considering a broad range of regulatory options. I commend Commissioner Svinicki for her interest in converting the staff's paper to a Commission vote. I value the open and transparent discussion that the Commission must have on this issue of high interest to the public. However, I disagree with Commissioner Svinicki's position to turn over addressing groundwater contamination to the industry. The wisdom of relying upon voluntary initiatives is being questioned as the accident in Japan continues to unfold. Now is not the time to forego our responsibility as additional information suggests mitigation strategies similar to our voluntary initiatives may not have been as successful as anticipated.

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.

In light of these events, the NRC established a task force to evaluate our regulatory framework for buried piping and the adequacy of past agency actions to address buried piping leaks. With nine nuclear power plants now operating beyond their initial 40 year operating license term and over 40 more approved for extended operation, the agency must be vigilant in our oversight of material degradation and radioactive releases to the environment. As licensees continue to express interest in extended operation, the NRC must remain focused on the effects of aging on plant materials.

The Groundwater Task Force report identified potential policy issues that could impact the regulatory framework. These issues include: 1) incorporating the voluntary industry initiative on groundwater protection into the regulatory framework, 2) revising the current radiological effluent performance indicator in the Reactor Oversight Process (ROP), 3) considering immediate remediation of leaks/spills at NRC-licensed facilities, and 4) participating in consensus standards development. Even though the Senior Management Review Group did

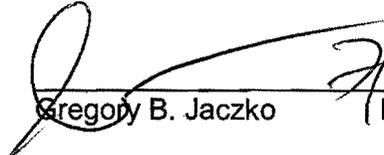
not support the first item, I support all of these recommendations. I think there is significant value in, at a minimum, codifying the industry's initiatives to ensure consistent identification and timely reporting of leakage leading to groundwater contamination. Additionally, in my vote on SECY-11-0076, "Improving the Public Radiation Safety Cornerstone of the Reactor Oversight Process," I supported 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.

While I appreciate the industry's voluntary efforts to address underground leakage and groundwater contamination, voluntary initiatives do not relieve the regulator from consistently and appropriately enforcing its regulatory requirements to monitor, control, and limit releases of radioactive materials from nuclear power plants. As we've recently seen from our inspections following the events in Japan, voluntary initiatives do not get rigorous oversight by either the NRC or licensees. The results of our Temporary Instruction 184 reviews on the voluntary use of severe accident management guidelines (SAMGs) – frequently touted by industry as a means of improving reactor safety – revealed inconsistent implementation by licensees. For example, many licensees have not consistently updated, trained, and exercised on the use of SAMGs, and in some cases, even referred to equipment that was no longer required to be functional. With regards to the industry's groundwater protection initiatives, there is no consistency in the quality, quantity, and frequency for sampling, and consequence, or possibility of using the critical tool of enforcement for allowing an adopted standard to lapse. I believe this illustrates the inherent weakness of allowing voluntary initiatives. Rather than the NRC providing clear and consistent regulatory requirements as a strong and decisive regulator, it abdicates our responsibility as the regulator to licensees.

In her vote, Commissioner Svinicki argues against routine inspections of voluntary initiatives as being improper in the absence of regulatory requirements. I suggest that we consider the significant insights and impact the NRC has through its use of performance indicators, such as unplanned scrams, as an objective measure of safety performance. There is no regulatory requirement that a nuclear power plant once placed into operation may not have an unplanned automatic or manual shutdown to correct a potentially unsafe reactor condition. Quite the contrary. Through our performance indicators, the agency gains insights into how well (or poorly) a licensee's performance is depending upon the frequency of unplanned scrams. It provides information into our reactor oversight process that a deeper look into a licensee's performance may be warranted, to evaluate the potential for the extent of similar conditions and to determine whether corrective actions are appropriate and effective. Furthermore, the Commission has, as a matter of policy, directed the staff to perform inspections relating to industry's voluntary practices. A risk significant aspect of safety during shutdown operations is currently controlled through voluntary industry practices. In its Staff Requirements Memorandum for SECY-97-168, "Issuance for Public Comment of Proposed Rulemaking Package for Shutdown and Fuel Storage Pool Operation," the Commission directed the staff to monitor licensee performance through inspections and other means in the area of shutdown operations to ensure that the current level of safety was maintained.

I commend the staff for working with consensus standards organizations, such as the ASME Code committees and NACE, to gain a better understanding of inspections of nonsafety-related piping incorporated into ASME code cases and to evaluate the need for corrosion protection standards specific to the configuration of piping at nuclear power plants. I believe this type of collaboration provides many opportunities that could also enhance our understanding of safety-related piping as well.

I continue to believe that the agency should conduct as much of its responsibilities as possible in an open and transparent manner. This philosophy, in concert with the agency's regulatory processes, provides extensive opportunities for public and stakeholder participation, and is far more open and transparent than voluntary initiatives to guide the agency's actions.


Gregory B. Jaczko
Date 7/22/14