



**REQUEST REPLY BY:** 11/16/06  
 UNITED STATES

**NUCLEAR REGULATORY COMMISSION**  
 WASHINGTON, D.C. 20555

COMMISSIONER

November 1, 2006

Disapproved.

MEMORANDUM TO: Chairman Klein  
 Commissioner McGaffigan  
 Commissioner Merrifield  
 Commissioner Lyons

*Dale E. Klein* 11/8/06  
 Dale E. Klein Date

FROM: Gregory B. Jaczko *Gregory B. Jaczko*

SUBJECT: IMPROVING THE AWARENESS AND RESPONSE TO UNPLANNED  
 RELEASES

The existence of preexisting leaks and unmonitored releases at nuclear power plants around the country requires additional Commission attention. In the short term, these events complicate the day-to-day operation of the plant and damage public confidence in the agency. In the long term, they pose decommissioning challenges.

To address these issues, the Executive Director for Operations established the Liquid Radioactive Release Lessons Learned Task Force. The task force conducted a comprehensive evaluation of plant events involving unplanned and unmonitored releases as well as an evaluation of NRC processes to determine areas for improvement. The task force ultimately concluded that the recent tritium releases did not result in any instances where the health of the public was impacted. But the task force did identify that the potential exists for unplanned and unmonitored releases of radioactive liquids to migrate offsite into the public domain undetected. The agency should be able to assure the public that this will not occur and explain the steps that we plan to take to prevent such a possibility. Our inability to do so thus far has not only eroded public confidence, but has also consumed vast agency resources. I believe it is precisely this type of issue that the agency would benefit from following in the Lessons Learned Program.

The Lessons Learned Oversight Board reviewed the recommendations provided by the task force against the four criteria necessary for submission into the Lessons Learned Program (LLP). Eighteen of the 30 recommendations met three of the four criteria, but none of the recommendations met all four of the criteria. Thus, none of the recommendations were entered into the LLP. While I understand that all the recommendations will nonetheless be tracked and ultimately closed out under the staff's traditional tracking system, none of the recommendations will receive the "gold-plating" associated with treatment of an item followed through the LLP. Entry into the LLP would require implementation of a formal corrective action program and documented follow-through, thus enabling the public to easily follow the agency's response to this issue. Moreover, it would allow the agency to be able to ensure that we not only correct the problem, but that we learn from it as well. It was this lack of visible oversight that raised so many concerns regarding the tritium leaks in the first place.

Therefore, I believe the 18 task force recommendations that met three of the four criteria, including the first criteria - that of the item having significant organizational, safety, security, emergency preparedness, or generic implications - should be entered into the Lessons Learned Program. In doing so, the Commission will ensure that a formal corrective action program is established for these items making the public more informed and the NRC more aware of these issues now and into the future.

SECY, please track.

cc: EDO  
OGC

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*I approved.*  
*See attached comments*  
*E. Mc Gaffigan Jr.*  
*11/2/06*

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## Commissioner McGaffigan's Comments on COMGBJ-06-0006

I could not be more opposed to Commissioner Jaczko's proposal.

The events explored by the Liquid Radioactive Release Lessons Learned Task Force were of no public health and safety significance. The precipitating events were at the Braidwood facility, where Exelon failed to follow up on leaks in the circulating water blowdown line which is also used for liquid effluent discharge, after failure of vacuum breakers. The failure to follow up was a violation of NRC's existing rules. According to the staff's analysis, the maximum theoretical dose to an adult member of the public from that Exelon failure was 70 microrem per year if that member of the public consumed two liters of water per day from an identified well. To our staff's knowledge, no such theoretical member of the public exists. But even assuming the worst, the safety consequences of this event are equivalent to spending two hours in the Capitol, about ten minutes in an aircraft at 30,000 feet, or five hours in my brick home in Arlington.

Now let's turn to Davis-Besse. According to the staff's accident sequence precursor analysis, that event was found to have  $6 \times 10^{-3}$  conditional core damage probability, the only significant precursor during my ten years on the Commission. That event of potentially profound public health and safety significance properly led to deep soul-searching on the part of NRC about how it could and should have been avoided. The results of NRC's efforts clearly belong in the Lessons Learned Program so they are never forgotten, particularly as we go through a sea change in senior staff (and the Commission) in the coming years.

If we are going to equate a 70 microrem/year maximum theoretical dose event with  $6 \times 10^{-3}$  conditional core damage frequency event, we are deeply off course. Commissioner Jaczko claims that 18 of the 30 recommendations of the Liquid Radioactive Release Lessons Learned Task Force report met 3 of the 4 criteria for inclusion in the Lessons Learned Program. Whoever did that scoring must have taken a few liberties. In my view none of the recommendations meet criterion 1, involving "significant" implications unless the definition of the word "significant" has been changed. None meet criterion 2, involving challenging the ability to meet strategic outcomes designated in the NRC Strategic Plan, unless someone has amended the plan without my knowledge. And finally, while many may meet criterion 4 because we can write memos to ourselves about the trivial, none would meet criterion 4 if "actionable" is connoted to mean "impose a new requirement on licensees," as Commissioner Jaczko implies with his reference to "steps we plan to take to prevent such a possibility" (emphasis added). NRC does have a backfit rule (10 CFR 50.109) for reactor licensees and a backfit rule (10 CFR 70.76) for fuel cycle facility licensees. No recommendation of this task force will ever pass the substantial increase in public health and safety test or the benefits exceeding costs test for backfits under those rules. There will never be new requirements generated for existing licensees as a result of this task force.

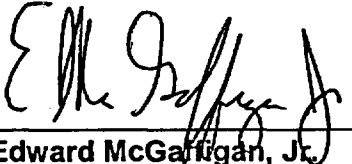
Obviously, some members of the public have exploited the general population's fear of radiation in the Braidwood case and in similar events elsewhere of no public health and safety significance. We cannot bend to such manipulations. We should instead be prepared to characterize the public health and safety significance of events promptly and clearly, and not be diverted by manipulation of public fear. We must maintain our focus on safety. Preventing the possibility of events of no public health and safety significance can never be our goal. Such a goal would be completely inconsistent with the "reasonable assurance of adequate protection" standard set by the Atomic Energy Act.

I have been lucky enough to serve for almost a decade on a Commission which consistently tried to target our staff's actions to areas with the greatest safety and security impact whether in our licensing processes, or oversight processes, or rulemaking efforts. The shorthand for safety-focused regulation has been "risk-informed regulation," although I have always preferred the former because we can be safety-focused even in the absence of elaborate risk calculation tools such as probabilistic risk assessments.

I have been lucky enough to serve on a Commission that has valued regulatory stability and has only made changes, such as in our security program after 9/11/2001, that were clearly justified based on sound analysis. The changes have been enormous over the decade: the 10 CFR 50.59 rule change, the 10 CFR 50.65(a)(4) rule change, the new Part 35 rule, the new Part 70 rule, the major revision to Part 2, the reactor oversight process, improvements in our licensing and decommissioning programs, etc. But each change made by the Commission solved previous problems of instability and brought about greater regulatory stability going forward.

If Commissioner Jaczko prevails in his desire to override the staff's judgment and put various task force recommendations of no public health and safety significance into the Lessons Learned Program, the era of safety-focused regulation and regulatory stability would be over. A new era of regulation by whim based on scientifically unfounded manipulation of public radiophobia by anti-nuclear advocates, and a new era of regulatory instability would have begun. Since the staff will ultimately take its cues from the Commission, particularly at a time of tremendous staff turnover, a new era of the sort of staff abuses documented in the 1994 Towers-Perrin report will inevitably follow.

I urge my colleagues not to sound the death knell for safety-focused regulation and regulatory stability at NRC.

  
Edward McGaffigan, Jr.      11/2/06  
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(Date)

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Approved/Disapproved, with comments.



COMMISSIONER

November 1, 2006

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 Commissioner Lyons

*Peter B. Lyons* 11/7/06  
 Peter B. Lyons Date

FROM: Gregory B. Jaczko *Gregory B. Jaczko*

SUBJECT: IMPROVING THE AWARENESS AND RESPONSE TO UNPLANNED RELEASES

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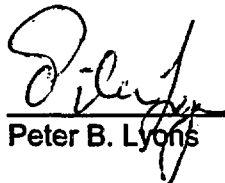
**Commissioner Lyons' Comments on COMS-06-0006-GBJ**

I approve the general direction of the Commissioner Jaczko's memorandum regarding the need to learn from these unplanned releases through use of a lessons learned program. However, I disapprove Commissioner Jaczko's recommended Commission action to require staff to enter 18 issues from the Liquid Radioactive Release Lessons Learned Task Force (LRLLTF) into the Agency's Lessons Learned Program.

I share Commissioner Jaczko's concern that there is value in the Agency learning from such a collection of highly specific issues. We should learn how our Openness goal was not met in the Braidwood case that catalyzed the LRLLTF, specifically as it relates to the importance of maintaining public confidence, the importance of "obtaining early public involvement on issues most likely to generate substantial interest ...," and the importance of "improving communications about licensee operating events ... using easily understood risk comparisons ...".

I agree with Commissioner McGaffigan that the Braidwood case and other releases studied by the LRLLTF have not adversely impacted public health and safety, but as I've noted in previous votes, the Braidwood case was nonetheless significant from the perspective of its impact on Agency openness and on public confidence.

I support the Lessons Learned Oversight Board position not to include the specific recommendations in the LRLLTF in the Agency's Lessons Learned Program. However, as I stated in my vote to the draft SRM for M061025A, while these items should not be individually screened into the Agency program, I believe the staff should capture a single broad, over-arching lesson from collection of the highly specific issues. Therefore, I disapprove the inclusion of the 18 specific LRLLTF recommendations into the Agency's Lessons Learned Program.

  
Peter B. Lyons      11/7/06  
Date