



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

February 11, 2014

COMMISSIONER

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy
and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

The Honorable John Shimkus
Chairman, Subcommittee on Environment
and the Economy
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Whitfield and Chairman Shimkus:

Thank you for the opportunity to appear before the Subcommittee on Energy and Power and the Subcommittee on Environment and the Economy at the December 12, 2013, hearing entitled "Oversight of NRC Management and the Need for Legislative Reform." By letter dated January 15, 2014, you provided additional questions for the record related to this hearing; my responses to these questions are enclosed.

Please do not hesitate to contact me should you or the members of your subcommittees have any additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "William D. Magwood, IV".

William D. Magwood, IV

cc: The Hon. Bobby L. Rush, Ranking Member, Subcommittee on Energy and Power
The Hon. Paul Tonko, Ranking Member, Subcommittee on Environment and the Economy

Enclosure

Questions from the Honorable Ed Whitfield

1. **According to the NRC staff's FY 2012 report on adverse trends in the industry's safety performance: "...the staff identified no statistically significant adverse trends in industry safety performance." In fact, a closer inspection of the long-term trend graphs in that report show that the industry is improving safety in 10 out of the 14 graphs. The staff indicated the remaining four: "...did not have a statistically significant trend." However, the nuclear reactor safety budget has grown 48% over the last ten years even though the number of licensing actions and tasks has decreased 40%. Four reactors permanently shut down last year, another one will this year, and reports persist that others may also.**
 - a. **Please describe what actions you believe the Commission should take to ensure the budget is commensurate with a decreased workload, a shrinking fleet, and improving industry safety performance.**

First, I will note that the safety performance trends you cite are an important and very positive indicator of the operational maturity of most licensees. This is a trend that has been in evidence for more than a decade and reflects the industry's successful efforts to improve performance in many areas. At the same time, we and the industry recognize that excellent performance is, in practice, difficult to maintain over time and some plants that had once been viewed as good performers can develop safety performance issues. Additionally, some plant operators struggle to meet the high performance standards set by their peers. For this reason, NRC's efforts remain essential even as overall performance continues to improve.

In our budget process, my fellow Commissioners and I oversee the agency budget formulation and execution processes to ensure resource requests are commensurate with workload. This oversight includes the annual budget formulation process of developing a two-year projected workload in the Nuclear Reactor Safety and Nuclear Materials and Waste Safety Programs, including the anticipated number of licensees and the number and complexity of anticipated license applications. On an annual basis, the Commission oversees the review of the baseline budget and adjusts resource allocations based on several factors, including letters of intent from current and prospective licensees, changes in regulatory requirements, and prior year expenditures. The year prior to executing the budget, the Commission oversees the review of requested resources and associated workload that was previously requested and adjusts them based on the most current information. Lastly, in the year of budget execution, the agency adjusts resources commensurate with the level of work actually received. The most recent budget that was formulated (FY2015) is based on current assumptions regarding the projected workload for FY2014. The agency will begin to develop the FY2016 budget in the coming months using updated assumptions about operating plants, COL applications, and other indicators of the projected workload.

As of November 16, 2013, the NRC has 3871 staff, including the Office of the Inspector General. This is a decrease of 368 employees from FY2010. The staffing increases in past years, while generally characterized as part of the agency's preparation for increased workload, in reality proved to be an effective preparation for the retirement bow-wave that is now being experienced at the NRC. I expect that staff numbers will continue to decrease through attrition. In addition, the NRC has many efforts ongoing to streamline the organization. For example, the Commission initiated efforts to reduce agency overhead by centralizing and consolidating corporate support functions, an effort which is being implemented through the Transforming Assets into Business Solutions (TABS) initiative. This effort has resulted in a reduction of Office Support FTE of 273 (25%) from FY2011 to FY2015.

- b. **Please describe any recommendations you believe would improve the prioritization and application of resources to matters that are safety significant.**

In late 2012, Commissioner Apostolakis and I offered a new approach to prioritization in our memo to the Commission entitled "Proposed Initiative to Improve Nuclear Safety and Regulatory Efficiency" (COMGEA-12-0001/COMWDM-12-0002). In our concept, the agency would develop a framework to enable licensees to prioritize regulatory actions on a site-specific basis. I believe such a framework, informed by quantitative assessments of safety, represents a highly promising evolution in nuclear regulation that both focuses resources on the most safety significant matters and increases efficiency for both the agency and our licensees,

The Commission approved a staff effort to explore this approach and the staff has been tasked to develop a proposed path forward for Commission consideration. Both members of the Commission and the staff have engaged industry on this matter and promising steps have and are being taken—including the development of industry-led "tabletop" exercises to explore the implementation of prioritization processes.

Questions from the Honorable John Shimkus

1. **Given the DC Circuit Court of Appeals reaffirmed the NRC's obligation under the Nuclear Waste Policy Act to review the Yucca Mountain license application, do you as an individual commissioner believe it is incumbent upon the NRC to request the funding necessary to complete the license review?**

The writ of mandamus issued by the Court of Appeals ordered the NRC to promptly continue with the legally mandated licensing process for DOE's high level waste repository construction authorization application for Yucca Mountain unless and until Congress authoritatively says otherwise or there are no appropriated funds remaining. The NRC is complying with that order by using currently appropriated Nuclear Waste Fund money to complete the Safety Evaluation Report, ask DOE to prepare the

Supplemental Environmental Impact Statement and make Licensing Support Network documents publicly available. The current schedule estimate from the staff shows completion of those activities by early CY 2015.

The funds available are not sufficient to complete the license review. The agency does not have a budget quality estimate available of the funds needed to complete the review. I requested that agency legal experts review all applicable law and guidance to consider whether a legal imperative exists which would require the NRC to pursue funding—including appropriations law and the writ of mandamus issued by the Court of Appeals. No such imperative has been identified. As a result, this issue is a policy matter to be considered by the Commission in the context of its normal budgeting process. As such, we must consider whether such a request should be a higher priority than other regulatory work affecting a range of nuclear safety and security issues.

Given the state of the Yucca Mountain review as it exists today, previous budget plans do not provide a defensible basis for a budget request. As an individual Commissioner, I cannot make a decision to request resources until staff presents a general project plan and budget estimate that is reflective of the review as it exists today and as it will exist once work already directed by the Commission is completed. Development of an estimate that takes into account the progress made in the completion of the court ordered activities will allow for an informed budgetary decision process. I anticipate that the Commission will discuss this in detail in the very near future.

2. Do you as an individual commissioner believe the NRC should propose a supplemental budget request to the Office of Management and Budget to support full resumption of the license review? If not, why not?

The staff has developed and is executing the plan developed to comply with the writ of mandamus. The initial steps were focused on assembling the organization of individuals to complete the activities directed by the Commission. This effort requires creating multiple teams of people with previous experience as well as key skills necessary to complete the activities. This work will require the reallocation of considerable agency resources. With the effort to carry-out currently directed work still in a formative stage, staff has not developed any plans or budget estimates to continue the license review beyond what is required by the writ of mandamus. As discussed above, I do not believe the agency can make a defensible request in the absence of such a plan and budget estimate. Once such information is available, the Commission will be in a position to consider a defensible request to continue the licensing process.

3. If the Commission fails to request funding for completing the Yucca Mountain licensing process, do you as an individual commissioner believe that would weaken the basis for Waste Confidence findings?

The “waste confidence” rulemaking that the Commission is undertaking right now seeks to adopt the Commission’s generic assessment of the environmental impact of several scenarios, including the need for continued storage of spent fuel at reactor sites for an indefinite period of time due to continued uncertainty concerning the licensing and construction of a repository. Although the Commission is currently considering comments it has received on the generic environmental impact statement (GEIS) that it has prepared, it is confident not only that it is technologically feasible to license and construct a repository, but also that the final GEIS will adequately address the impacts of continued storage under each of these scenarios, without regard to whether additional funds are sought for the Yucca Mountain licensing process. It was always the agency’s approach that, with the completion of the GEIS, the basis of the NRC’s Waste Confidence findings will be independent of the completion of the Yucca Mountain licensing process. It is my view that this is a superior posture in any case that perhaps should have been adopted long ago.

4. Given the fact that the NRC routinely issues draft SERs during other license reviews and later revises them, do you as an individual commissioner believe the Commission should utilize the same approach on the Yucca Mountain license review for the sake of transparency? If not, why not?

The Commission directed the staff to complete the Safety Evaluation Report (SER) using the approach that was used when work on the SER was suspended—that is, the staff should work on the completion of all remaining volumes concurrently but issue each SER volume upon completion. The Commission noted that release of completed volumes serially will ensure transparency as to the staff’s activities.

This approach is the most expeditious in that it allows the staff to focus the resources appropriately but does not delay public release of any volume.

5. Recently, the NRC staff provided a 400-page report to the Commission: “Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark I Boiling Water Reactor.” The cover memo for that report states:

“This study shows the likelihood of a radiological release from the spent fuel after the analyzed severe earthquake at the reference plant to be very low (about 1 time in 10 million years or lower).”

The staff has provided the Commission with a 200-page report entitled “***Staff Evaluation and Recommendation for Japan Lessons-Learned Tier 3 Issue on Expedited Transfer of Spent Fuel.***” In this report, the staff concluded that:

- ***“The costs of expedited transfer of spent fuel to dry cask storage outweigh the benefits”;***
 - ***“Additional studies are not needed”;*** and
 - ***“No further regulatory action is recommended for the resolution of this issue and this Tier 3 item should be closed.”***
- a. **As an individual commissioner, do you have any reason to doubt the staff's competence in this regard?**

As a general matter, while I may sometimes disagree with the staff's recommendations, I have never had occasion to doubt the competence and professionalism of the staff or the quality of its work. Because the Commission is still finalizing its decision with regard to the staff's recommendations on expedited transfer of spent fuel, I am not able to comment on this specific issue at this time (although my vote, along with the vote of each of my colleagues, will be made public once the decision is finalized). However, whatever decision is reached by the Commission about staff's conclusions and recommendations, it is my view that staff's work on the study reflects the same high degree of competence I have come to expect from the dedicated people of the NRC.

Questions from the Honorable Joe Barton

1. **In November 2013, NRC released a report entitled “A comparison of U.S. and Japanese regulatory requirements in effect at the time of the Fukushima accident.”**
- a. **Do you support all of the findings of the staff report?**

I believe that the staff report represents a thorough examination of the issues the Commission asked staff to address, and I do not take issue with the report's findings. I continue to support the overall conclusion of the Near Term Task Force that U.S. plants are safe and that a sequence of events like those occurring in the Fukushima accident is unlikely to occur in the US and could be mitigated, reducing the likelihood of core damage and radiological releases. As has been noted in other reviews of the Fukushima accident, there are many factors unique to the situation in Japan in early 2011 that contributed to the accident.

While our technologies are very similar, the regulatory and nuclear operations practices in the U.S. and Japan were clearly very different in March 2011. Most importantly, the U.S. made significant changes over the years based on experience. For example, in the aftermath of the accident at the Three Mile Island plant, the United States placed great focus on operational excellence, the training of plant operators, emergency preparedness, and the ongoing effort to learn from operating experience. These changes, along with a variety of specific regulatory changes since TMI have provided additional defense in depth which enhance the ability of U.S. plants to respond to a beyond design basis event.

b. The authors of the report acknowledge that the staff's comparison was not an exhaustive review. Do you think it is appropriate for the Commission to consider revising the NRC's regulatory framework without having an exhaustive review as a solid basis for such a revision?

First, it is important to point out that the staff comparison was not intended to be an exhaustive review. Such a review would be very resource-intensive and require the translation of a significant number of Japanese regulatory documents as well as detailed interviews with Japanese regulatory staff and plant operators. The Commission directed the staff to focus its review on those areas that were most relevant to the sequence of events and accident mitigation capabilities at Fukushima. Within this scope, the staff's review was complete.

While the staff comparison provides interesting and instructive information, it is my view that the response of the NRC and the U.S. industry to the lessons of Fukushima cannot be based entirely upon the specific circumstances and sequence of events that led to the accident in Japan. For example, the lack of a credible earthquake-tsunami threat to U.S. plants should not distract from the lesson from Fukushima that a lack of preparation for all extreme natural events—including threats more common to the U.S. mainland such as floods and powerful storms—can lead to disaster. Nor can we take comfort in the fact that all U.S. nuclear plants were equipped with mobile pumps and power systems after the terrorist attacks of September 11, 2001. This equipment was installed in order to allow plants to cope with large fires and explosions. While Japanese plants did not have this equipment in 2011 and it might have helped in responding to the extended loss of electrical power and core cooling capability that occurred at Fukushima, this equipment was not intended to address multi-unit events or to survive extreme natural phenomena, such as a beyond design basis flood.

Based on the larger lessons of Fukushima, the NRC's response has been to order U.S. plants to install additional portable power supplies and pumps that would survive extreme natural phenomena to ensure that equipment would be available to cool the reactors if all electrical power is lost, no matter what causes the loss of power. My view is that the lessons of Fukushima relate more to the need to equip plants to deal with extreme events. An appropriate response to this lesson need not be based on a comparison of U.S. and Japanese regulatory practices.

c. What differences between U.S. and Japanese regulatory framework were left out of the final report? Why were they not deemed to merit further analysis?

A detailed comparison of the regulatory systems in Japan and the U.S. would require a review of governing legislation and regulations, government oversight, plant specific licenses, technical specifications, and guidance documents prepared by standards developing organizations, regulators, and industry groups. Such a review, in

combination with other factors such as cultural and societal influences, would be necessary to fully understand how the differences between the regulatory systems are actually reflected in differences in plant design and operation.

Given the resource implications of such a major study and the availability of insights from a variety of Japanese and international reviews, the NRC's comparison focused on those areas most relevant to the sequence of events and accident mitigation capabilities at Fukushima. For example, the comparison did not assess differences in administrative requirements, plant licensing or license amendment processes, reporting and inspection programs, or technical areas unrelated to the sequence of events at Fukushima. Nor did the comparison consider technical areas that were not directly related to the sequence of events and therefore not included in the comparison are fire protection, security, and design basis accidents (*e.g.*, losses of heat removal or inventory with AC power available). While a review of these various factors would enhance our understanding of the differences between the U.S. and Japanese systems, it would not assist in the development of a regulatory response to the Fukushima experience.

Questions from the Honorable Lee Terry

- 1. Prior to this hearing did Chairman Macfarlane inform you of her intention to declare her opposition to H.R. 3132?**

At the time of the prior hearing, the Commission as a body had not been asked for official views on H.R. 3132, and no Commission policy regarding the bill had been formulated. Consequently, prior to the hearing, my discussions of the bill with my colleagues, including the Chairman, were rather limited.

- 2. Do you support or oppose the policy goals of H.R. 3132? Would you be willing to work with staff to perfect it?**

I do support the general policy goals of HR 3132, particularly as they relate the necessity of clarifying Commission authorities. That said, there are specific provisions of the bill that I believe would benefit from clarification or revision and others that are not needed. I am always prepared to work with Congress to improve any legislation relevant to the mission and operations of the NRC.

- 3. The June 26, 2012 NRC IG Report, "*Possible Violations of the Reorganization Plan No. 1 of 1980 and NRC's Internal Commission Procedures by NRC Chairman*" (2012 IG Report) states:**

"President Carter said that the Chairman has a functional duty under the Reorganization Plan to declare emergency authority, and if he enacted emergency authority without a declaration, he would have been in violation of the Reorganization Plan. President Carter envisioned a Chairman exercising emergency authority for a specific transient emergency lasting a matter of days, not emergency authority for a matter of months."

a. Do you agree with President Carter that a chairman has a functional duty to declare emergency authority? If not, why not?

I agree that the Chairman has a duty to notify the rest of the Commission; Congressional and Federal officials; local, state, and tribal officials; and members of the public when an emergency has been declared. Not doing so generates unnecessary confusion and uncertainty that can distract and has distracted the agency during a time of crisis. In any event, it is now a statutory requirement, under the new Appropriations Act, that the NRC Chairman provide notification to the Commission and Congress within one day after beginning to exercise emergency authority.

b. How long do you believe a chairman should be allowed to exercise emergency authority?

The appropriate length of an emergency declaration will vary based on the specific facts of each situation warranting an exercise of emergency authority. Therefore, I do not believe that the length of an exercise of emergency authority should be limited in advance by statute, regulation, or procedure. However, I believe that a requirement that the Chairman keep the Commission, Congress, and the public informed at regular intervals regarding the progress of the emergency situation will help ensure that emergency authority is applied appropriately.

4. The 2012 IG Report states:

“President Carter stated that it would have been inappropriate for the Chairman to exercise emergency authority for a nuclear incident in Japan. Absent a domestic emergency, the authority lies with the full Commission and any review of the nuclear incident in Japan should have been in the hands of the full Commission.”
Do you believe the use of emergency authority for foreign events is warranted? Why or why not?

In general, it is my opinion that an NRC Chairman should be able to respond appropriately and effectively to a foreign nuclear emergency without needing to use any emergency authority under Section 3 of the Reorganization Plan. The Chairman exercises existing authority as official spokesman and principal executive officer in supervising the agency staff responding to the emergency. It is only when there is a need to establish new policy, issue an order on a matter not delegated to the NRC staff, or perform any other function normally assigned to the Commission, that the Chairman would need to invoke emergency powers in order to resolve the matter herself. For an emergency involving a foreign country, this is less likely to arise. However, it is conceivable that the use of emergency authority for foreign events may be warranted in some situations difficult to anticipate today. As a result, I would be reluctant to categorically exclude overseas events from potential exercises of emergency authority.

While it is debatable whether emergency authority was required during the Fukushima crisis, the Chairman was required to take many unusual actions during the crisis and was required to respond quickly to an evolving situation about which information was limited. As a result, the Commission provided the Chairman its full support to take action as necessary. While this was done without any discussion of the use of emergency authority, it was clearly understood that the Chairman would need considerable latitude to manage the agency's response.

5. **During an emergency, the chairman or a designee acts as the Executive Team Director. NRC briefing materials list the Executive Team Director's key responsibilities for an activated operations center as the following:**
- *Receive initial and periodic briefings on the nature and progression of the incident*
 - *Ensure other Commissioners are kept informed*
 - *Manage external interface (Federal agencies, White House, States, Congressional officials, State Department, IAEA, tribal organizations)*
 - *Call to Governor's designee and DHS Secretary*
 - *Review and approve Situation Report (SITREP) and Press Releases*
 - *Determine if Site Team (expanded activation mode) is necessary*
 - *Prepare/Act as agency spokesperson for news center and interagency events (e.g. WH briefings)*

Please explain whether you think the inclusion of an emergency declaration would be burdensome considering these key responsibilities already exist and procedures have been established for managing necessary communications.

I do not believe that the inclusion of an emergency declaration would be burdensome, particularly as such a declaration could be prepared in advance for the signature of the Chairman and could be disseminated by the staff. However, as noted in the answer to question 5 above, it is now a statutory requirement that the NRC Chairman provide notice within one day after beginning to exercise emergency authority.

6. **The 2012 IG Report states:**

“Several officials commented that NRC has no procedures to follow for the Chairman to assert his emergency authority.”

Do you believe the NRC should have a procedure that clearly articulates the circumstances or actions that would require a chairman to exercise emergency authority and describes the process for doing so?

- a. **If so, please describe what you believe should be included in such a procedure.**

I believe there would be benefit to developing general guidelines that describe the very limited circumstances under which an emergency might need to be declared along with a brief process description of what steps to follow and what resources can be relied

upon if such a situation arose. However, I do not believe detailed procedures are appropriate in this case. It might be more appropriate for the Commission to establish a policy statement to describe how and when emergency authority will be applied.

b. If not, why not?

The types of circumstances that would necessitate an exercise of emergency authority are by definition unexpected, rare, and potentially unique. Attempting to strictly define such circumstances in advance of an exercise of emergency authority may inadvertently result in a situation where an event occurs that requires the declaration of an emergency, but the event is excluded from the definition. However, I believe that requiring the Chairman to publicly declare an exercise of emergency authority and to provide periodic updates on the use of emergency authority will help ensure that such powers are exercised appropriately.

- 7. According to NRC briefing materials, licensees are required to notify the NRC of an event within 15 minutes. The NRC then expects to notify—within one hour—EPA, DOE, DHS, HHS, USDA, and FEMA. For what length of time do you believe a chairman should be allowed to unilaterally exercise the power of the full commission before notifying the public, the Congress, and fellow commissioners?**

I believe that it would be appropriate for the Chairman to notify the public, the full Commission, Congress, and other appropriate parties that he or she is exercising emergency powers soon after the event notification is made to the listed Federal agencies. In any event, the Appropriations Act requires Commission notification no later than 24 hours after the start of the emergency.

- 8. The Office of Public Affairs leads one of the teams staffing the operations center during an emergency. Wouldn't this be an appropriate and efficient manner to notify the public in the event a chairman decides to exercise emergency authority? If not, why not?**

Yes, I believe that using the team led by the Office of Public Affairs would be an appropriate and efficient conduit to notify the public in the event a chairman decides to exercise emergency authority.

- 9. One of the chairman's responsibilities as the Executive Team Director is to keep the commissioners informed. Do you believe the procedures in place to meet that responsibility would be adequate to notify fellow commissioners in the event a chairman decides to exercise emergency authority? If not, why not?**

I believe that the current procedures could benefit from clarifying the requirement that the Chairman notify the Commission of the use of emergency powers and provide

periodic updates to the Commission and other appropriate parties regarding the course of the emergency event. The Commission is currently conducting its biannual review of its internal procedures, which will afford the opportunity to make appropriate changes—and will allow the Commission to ensure that its procedures are consistent with the Appropriations Act.

- 10. The Office of Congressional Affairs participates on one of the teams staffing the operations center during an emergency. Do you believe this to be an appropriate and efficient manner to notify Congressional officials in the event a chairman decides to exercise emergency authority? If not, why not?**

Yes, use of the team members from the Office of Congressional Affairs would be an appropriate and efficient conduit to notify Congressional officials in the event a chairman decides to exercise emergency authority.

- 11. NRC's procedures reference communications that are pre-planned. Do you believe developing preplanned notifications of a chairman's decision to exercise emergency authority might be an effective way to ensure the timeliness and efficiency of such notifications? If not, why not?**

Yes, I agree that developing preplanned notifications of a chairman's decision to exercise emergency authority would be an effective way to ensure the timeliness and efficiency of such notifications.

- 12. In the hearing, Chairman Macfarlane testified that the agency's budget is developed by NRC staff. Section 201 of the Energy Reorganization Act of 1974 states:**

"Each member of the Commission, including the Chairman, shall have equal responsibility and authority in all decisions and actions of the Commission, shall have full access to all information relating to the performance of his duties or responsibilities, and shall have one vote."

The prior NRC chairman asserted budget authority to unilaterally close down the legally-mandated review of the Yucca Mountain repository license application. Since the budget is a major instrument of policymaking, which is the purview of the Commission, please describe whether you believe the Chairman should be allowed to influence budget development prior to consideration by the full Commission.

Under the current Commission procedures—which were approved by the entire Commission and were extensively revised in 2011—the Chairman works with staff and formulates a draft final budget that is then transmitted to the rest of the Commission for review and approval. This draft final budget is based upon input from staff offices, and, per our revised procedures, the entire Commission has access to the staff input after the

Chairman submits the draft final budget. Under Chairman Macfarlane, these procedures are working very well and I do not believe that they require any substantive revision at this time.

13. Section 201 of the Energy Reorganization Act of 1974 states:

“In carrying out any of his functions under the provisions of this section the Chairman shall be governed by general policies of the Commission and by such regulatory decisions, findings, and determinations as the Commission may by law be authorized to make.”

Section 2 of the Reorganization Plan of the 1980 states:

“The Chairman as principal executive officer and the Executive Director for Operations shall be governed by the general policies of the Commission and by such regulatory decisions, findings, and determinations, including those for reorganization proposals, budget revisions, and distribution of appropriated funds, as the Commission may by law, including this plan, be authorized to make.”

If a majority of the Commission believes that the Chairman is failing to operate in accordance with internal commission procedures, what action do you think commissioners should take? Do you believe legislation authorizing such action would provide clarity to such a situation?

The actions the Commission should take in response to the Chairman—or any other Commissioner—who fails to operate in accordance with Internal Commission Procedures and the law may vary based upon the specific circumstances. However, over the course of the agency’s history, the Commission has shown that it is willing and able to take appropriate and necessary action if it finds that the Chairman is acting in a manner contrary to the internal procedures or the agency’s governing regulations. I do not believe that legislation specifically authorizing actions such as those taken in the past is necessary at this time.

14. The NRC Inspector General issued a report “NRC Chairman’s Unilateral Decision to Terminate NRC’s Review of DOE Yucca Mountain Repository License Application” on June 6, 2011 (2011 OIG Report):

“OIG reviewed the Commissioners’ voting process associated with SECY-10-0102 and learned that the Internal Commission Procedures were not followed relative to voting deadlines, extension requests, or polling of other Commissioners to determine whether they agree with extension requests.”

And:

“Although the notational voting process associated with SECY-10-0102 was complete as of October 29, 2010, as of the date of this report the Commission has not held an affirmation vote on the matter and the draft order continues to sit in deliberation before the Commission for affirmation.”

a. Please indicate how long you believe a chairman or commissioner should be allowed to prevent an adjudicatory decision from being finalized.

I believe that the only appropriate purpose to delay final affirmation of an adjudicatory order is if one or more Commission offices are still endeavoring in good faith to propose or reconcile edits to the order. As long as the Commissioner or Commissioners proposing the changes are doing so based upon a good faith belief that the proposed changes are necessary to the final order, the process should continue. However, once this process is complete, the final order should be scheduled for affirmation. The Commission's internal procedures allow—if necessary—for Commissioners to participate in affirmation by telephone, and the current Commission has at times utilized this method. Given the allowances the current procedures make to enable a Commissioner who is out of the office to participate in affirmation, absent extraordinary circumstances, no individual Commissioner should delay affirmation.

b. Please describe what you believe would be the best mechanism to ensure Internal Commission Procedures are enforced.

The Internal Commission Procedures (the ICP's) provide that Commissioners' votes on Commission papers – including adjudicatory papers – are normally requested in 10 business days. The ICPs further provide that approval of extensions of time to vote on an adjudicatory paper must be given by a Commission majority. Once voting is complete on an adjudicatory paper, the NRC adjudicatory staff will submit the draft final order to establish a majority position on the decision. Commissioners at that time have an opportunity to make changes to the order and/or incorporate additional views. As soon as a majority position on the decision has been established, the Secretary of the Commission will poll the Commission on scheduling the affirmation of the decision, and an affirmation will then be scheduled to obtain a formal vote of the Commission. These provisions, if followed, are adequate to ensure that timely actions are taken.

c. Please provide any other resolution to such a situation that you believe would be effective at ensuring adjudicatory decisions are not unnecessarily delayed.

The ICPs provide a comprehensive, clear process to guide Commission action on adjudicatory matters. In view of the robust internal procedures already in place, no revisions to the ICPs – or other mechanisms – are needed to ensure that the ICPs are enforced.

15. Please describe any unintended consequences you believe H.R. 3132 presents. For each postulated consequence please provide legislative language you believe would adequately mitigate it.

I agree with the policy objectives of the bill, and also agree with much of the language of the bill. However, I believe that there are several provisions in the bill that could be clarified:

- Section 101(a) states that “[a]ll members of the Commission shall have full, unfettered, timely, and equal access to information pertaining to its functions.” In contrast, Section 102(c)(2) states that “[t]he Chairman and Executive Director for Operations shall have joint responsibility insuring that the Commission is fully and currently informed about matters within its functions. Because they include slightly different language, these two provisions could be read as conflicting. The language in Section 102(c)(2) is closest to current language in the Commission’s internal procedures. The meaning of this language is well understood by the Commission and the staff. Therefore, I recommend using the following wording in Section 101(a): “All members of the Commission shall have the right to full and current information about matters within its functions.”
- Section 101(a)(4) states that the Commission is responsible for “approving the distribution of appropriated funds according to programs and purposes proposed by the Executive Director for Operations[.]” The Commission, through its internal procedures, has established that the Commission shall be “informed of all significant reallocation and reprogramming actions at a threshold of \$500,000 in contract costs or 4 FTE; and approv[e] all resource reallocations/reprogramming actions that establish or modify policy.” This process currently works very well and strikes the appropriate balance between ensuring that the Commission is fully aware of major staff activities and recognizing the statutorily mandated distinction between the Chairman’s administrative responsibilities and the Commission’s policy responsibilities. Therefore, I do not believe that Section 101(a)(4) is necessary.
- Section 102(b) seems to be aligned with Section 2(b) of the 1980 Reorganization Plan. However, Section 102(b) does not include a provision directing the Chairman to prepare and provide to the Commission a budget estimate. This language may result in some uncertainty regarding how the budget is to be prepared. The current Internal Commission Procedures reflect a budget process that is both consistent with the language from the 1980 Reorganization Plan and is satisfactory to all members of the Commission. Retaining the 1980 language would allow the Commission to continue to establish the detailed process for budget preparation through its internal procedures.

- Section 102(c)(2) states that the Chairman and EDO have joint responsibility for keeping the Commission fully informed. However, there are a number of offices that report directly to the Commission, rather than to the Chairman via the EDO. I suggest that this section be revised as follows: “The Chairman, the Executive Director for Operation, and the directors of all Commission-level offices shall have joint responsibility for insuring that the Commission is fully and currently informed about matters within its functions.”
- Section 102(c)(3) requires that “[i]f a majority of Commissioners determine that the Chairman has not acted in accordance with [Section 102(c)(1) and (2)], such Commissioners shall provide written notice of the determination to the President,” with copies of the notice to the House Committee on Energy and Commerce and the Senate Committee on Environment and Public Works. However, the Commission has shown in the past that it is willing and able to take appropriate and necessary action if it finds that the Chairman is acting in a manner contrary to the agency’s internal procedures, regulations, or governing legislation. Therefore, I do not believe that this provision is necessary.
- Section 201 requires that the Commission certify that documents transmitted “to a member of Congress in his or her capacity as chairman or ranking member of a Committee of Congress, shall include a certification that the letter or document is being sent to both the Chairman and ranking minority member of that Committee...” While I do not agree with this provision, I note that the Commission’s current practice includes copying the Chairman or ranking member, as appropriate, on correspondence. Therefore, this provision may not be necessary.
- Section 202 outlines time limits for Commission review of Atomic Safety and Licensing Board decisions. I do not believe this provision is necessary. Both 10 CFR Part 2 and the Internal Commission Procedures govern the Commission’s adjudicatory activities, including timeframes for Commission action and the appropriate procedures to be followed to bring adjudicatory issues to closure. The Commission’s regulations and procedures also include mechanisms whereby the Commission may extend deadlines for voting on adjudicatory issues where appropriate—for example, where the Board decision being appealed is particularly lengthy or complex or where the Commission is engaged in active negotiations on the content of the final order. There is no such provision for extensions of deadlines in the bill language. Because this subject is well covered by the Internal Commission Procedures and 10 CFR Part 2, I do not believe that Section 202 of H.R. 3132 is necessary.
- Section 204 concerns approval of Commissioner international travel by the Chairman. Under the Commission’s internal procedures, each Commissioner

approves his or her own travel—both foreign and domestic—as well as the travel of his or her personal staff. The procedures also explain how international invitations made to the entire Commission are addressed. These procedures were revised and approved by the Commission in 2011, and so far are working quite well. For this reason, I do not believe Section 204 is necessary at this time.

16. Please provide any other opinions you believe may further inform the Committee's consideration of H.R. 3132.

I support the provisions in H.R. 3132 regarding the appointment and reporting relationships of the Directors of the Office of Congressional Affairs and Office of Public Affairs. Their role is important, and the provisions in H.R. 3132 will ensure that these offices will always remain accessible to the wider Commission.

Questions from the Honorable Cathy Castor

- 1. During the hearing, I raised the issue of official international travel by the Commissioners. As I requested during the hearing, please provide an explanation of why your international travel is worth the expense and time away from your responsibilities at the Commission.**

First and foremost, it is important to emphasize that, in my experience, the responsibilities of an NRC Commission cannot be deferred because of travel away from the office. While on either domestic or international travel, I continue to conduct my domestic responsibilities and continue to review, edit, and write important Commission documents. I am also able to participate in voting on issues before me and regularly interact with my personal staff and the larger NRC staff, Commissioners, as well as with interested stakeholders when necessary via email and conference calls, even if this requires working late into the night or very early in the morning. As a Commissioner, I ensure that my priority is on nuclear safety and security in the United States and globally.

Further, I firmly believe that the agency's international activities are an integral part of the NRC's work, and are managed in a manner consistent with NRC's domestic organizational and programmatic priorities. The Commission's foreign travel is guided by the importance of engagement with a nuclear community that grows more global every day. Ranging from the sharing of nuclear power plant operating experience, collaborating with regulatory counterparts on the import and export of nuclear materials and equipment, fulfilling nonproliferation objectives, and supporting international conventions and treaties, Commissioners dedicate time and resources to overseas travel in order to get a first-hand appreciation of the many pressing issues that are or will affect nuclear safety and security the United States.

NRC's international activities and the Commission's foreign travel focus on engagement with countries to exchange experience related to both radiological materials and nuclear power plant operating, construction and licensing activities that are directly applicable to nuclear safety and security in the United States. By traveling overseas to engage with senior international regulatory counterparts, I have been able to share regulatory insights concerning both radioactive materials and operating experience information from other countries that can be applied to the domestic program. I have observed how NRC's program of assistance helps to strengthen regulatory programs and build relationships with senior nuclear regulatory officials around the world.

As statutorily mandated, and in support of United States Government (USG) nonproliferation objectives, the NRC is responsible for the safe and secure export and import of nuclear materials and equipment. For example, the Commission seeks opportunities for close collaboration with counterpart regulators to ensure that the NRC is in compliance with the International Atomic Energy Agency's Code of Conduct on the Safety and Security of Radioactive Sources, which the Energy Policy Act of 2005 adopted into U.S. law. In addition, as obligated by the USG, the NRC also implements key provisions in various international legal instruments.

In the last fifteen years, several events have significantly changed the landscape within which NRC conducts its domestic and international activities. These events include the terrorist attacks of September 11, 2001, and the subsequent focus on securing radioactive materials of concern, the resurgence of new build for commercial power plants in the United States and abroad, including the significant number of "new entrant" countries seeking nuclear power programs, and the March 2011 Fukushima Daiichi accident following the Tōhoku earthquake and tsunami. In addition, the manufacture of nuclear parts and the provision of nuclear services have been significantly reduced in the United States for domestic nuclear power plant construction, which has created a dependence on the global marketplace among U.S. nuclear power plant owners/operators.

In particular, the Fukushima Daiichi disaster has impacted the pace of my international travel since this tragedy occurred in 2011. Many complex technical and regulatory issues have been brought to the fore since this event and some have prompted me to travel overseas to learn about experience overseas and how it might be applied in the U.S. For example, I have visited both the Fukushima Daiichi site, where the core melt events, occurred as well as the Fukushima Daini plant, where core melts were avoided. Both sites provide valuable insights that apply directly to how the NRC responded to the lessons of March 2011.

In addition, while there is great commonality in how most countries have responded to this disaster, there are important differences that we should seek to understand. For example, the NRC has considered whether to follow the example of many European countries and require the installation of venting filters for nuclear power plants. I visited

sites in Europe where this equipment has been installed and laboratories where it is being further developed. Reviewing these activities directly informed my decisions regarding the use of this equipment in the U.S.

There is strong support for the NRC's international activities from the Congress as well as other Federal agencies. For example, the Congress authorized and appropriated funding in 2004 for NRC to conduct international assistance activities relating to both new nuclear power plants and the safety and security of radioactive materials. Commission travel is coordinated with, and is frequently directly responsive to, USG foreign policy priorities, at a level seen as appropriate for an independent agency. Participation by Commissioners in international conferences and bilateral meetings enhances the USG and NRC's influence with nuclear regulatory officials around the world.

This has been only more the case since the Fukushima disaster. I have traveled to Japan and other countries in the region as they seek to improve their nuclear safety practices and organizations in the wake of Fukushima. The views of the U.S. NRC as related by Commissioners is very influential in these cases and we have been impactful in encouraging nations in the region to strengthen their nuclear regulatory approaches—which, we hope, will make future “Fukushimas” less likely.