

EDO Principal Correspondence Control

FROM: DUE: 03/30/06

EDO CONTROL: G20060269  
DOC DT: 03/20/06  
FINAL REPLY:

Sen. George V. Voinovich  
Sen. Thomas R. Carper  
Sen. James Inhofe  
Sen. James M. Jeffords  
Sen. Isakson  
Sen. Obama

TO:

Chairman

FOR SIGNATURE OF :

\*\* PRI \*\*

CRC NO: 06-0148

EDO

DESC:

Post Hearing Qs & As from the March 9, 2006  
Oversight Hearing

ROUTING:

Reyes  
Virgilio  
Kane  
Silber  
Dean  
Burn, OGC  
Dunn Lee, OIP  
Paperiello, RES  
Bell, OIG  
Caldwell, RIII

DATE: 03/21/06

ASSIGNED TO:

CONTACT:

NRR	Dyer
OGC	Cyr
HR	McDermott
CFO	Funches
NMSS	Strosnider
NSIR	Zimmerman
RII	Travers
ADM	Hagan
OPA	Brenner
EDO	Shoop
RIII	Caldwell

SPECIAL INSTRUCTIONS OR REMARKS:

OEDO POC: Undine Shoop

Provide Qs & As to Undine Shoop, OEDO by 3/30/06  
using the attached format. OEDO is currently  
reviewing previous testimony and developed Qs & As  
and will inform the offices if an answer to a  
question does not been to be prepared.

Undine Shoop to prepare a memo to OCA from the EDO  
providing the finalized Qs & As by 4/4/06.

Template: EDO-01

E-RDS: EDO-01

OFFICE OF THE SECRETARY  
CORRESPONDENCE CONTROL TICKET

Date Printed: Mar 21, 2006 11:43

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PAPER NUMBER: LTR-06-0148                      LOGGING DATE: 03/21/2006  
ACTION OFFICE: EDO

AUTHOR: SEN Thomas Carper  
AFFILIATION: SEN  
ADDRESSEE: Nils Diaz  
SUBJECT: Post hearing Q's from the March 9, 2006 hearing on oversight on the NRC

ACTION: Signature of Chairman  
DISTRIBUTION: RF, OCA to Ack

LETTER DATE: 03/20/2006

ACKNOWLEDGED No  
SPECIAL HANDLING: EDO...coordinate response with OCA....Response due by April 10, 2006

NOTES: Commission Correspondence

FILE LOCATION: ADAMS

DATE DUE: 04/04/2006                      DATE SIGNED:

EDO --G20060269

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# United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

ANDREW WHEELER, MAJORITY STAFF DIRECTOR  
 KEN CONNOLLY, MINORITY STAFF DIRECTOR

March 20, 2006

The Honorable Nils Diaz  
 Chairman  
 Nuclear Regulatory Commission  
 Mail Stop 016D1  
 Washington D.C. 20555

Dear Chairman Diaz:

Thank you for appearing before the Senate Subcommittee on Clean Air, Climate Change, and Nuclear Safety on Thursday, March 9, 2006. We appreciate your testimony in our effort to conduct oversight on the Nuclear Regulatory Commission. Your testimony was helpful and we know that your input will prove valuable as the Committee continues its work on this important topic.

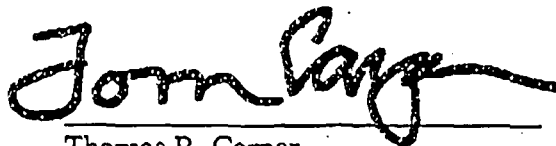
Enclosed are questions that have been submitted by Senators Voinovich, Jeffords, Isakson, and Obama for the hearing record. Please submit your answers to these questions by 5 pm Monday, April 10, 2006 to the attention of David Lungren, Senate Committee on Environment and Public Works, 415 Hart Senate Office Building, Washington, D.C. 20510. In addition, please provide the Committee with a copy of your answers via electronic mail to [David\\_Lungren@epw.senate.gov](mailto:David_Lungren@epw.senate.gov). To facilitate the publication of the record, please reproduce the questions with your responses.

Again, thank you for your assistance. Please contact Brian Mormino at (202) 224-8098 or Tom Lawler at (202) 224-3168 with any questions you may have. We look forward to reviewing your answers.

Sincerely,



George V. Voinovich  
 Chairman



Thomas R. Carper  
 Ranking Member

Senator Inhofe Questions for NRC Commissioners  
EPW Subcommittee Oversight Hearing on the NRC  
March 9, 2006

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NRR/OGC Q1 As you know, for many years, I have been advocating that a stable and predictable licensing process is an absolute must if we are to proceed with constructing new nuclear plants in this country. In fact, we changed the law in the Energy Policy Act of 1992 to address the problem of a utility having to get a Construction Permit and then an Operating License. Although we have made numerous changes to improve this process and a number of utilities have already begun developing their application for Combined Operating License, the Commission is still tinkering with the rule on the licensing process. During the hearing, the Commission stated that the Part 52 rule will not be finalized until mid-January. What do you suggest to those utilities that are currently in the middle of developing their applications?

NRR/OGC Q2 I agree completely that it is the responsibility of each applicant to submit a complete and quality application that meets all of the NRC's requirements and guidance. Having said that, I understand that the nuclear industry has been working for several years with the NRC and is currently in its fifth round of revisions to develop guidelines on what a "complete and quality" application entails. When do you expect this regulatory guidance to be finalized? Also, what steps are you taking to ensure that your Standard Review Plan is developed to match the application guideline? When will your Standard Review Plan be available?

OGC/NRR Q3 One of the problems that caused the licensing process to bog down in the late 1970s and the 1980s was that there was no end to reopening issues during the licensing process. What steps is the NRC taking to ensure that legitimate safety and technical issues get resolved promptly, as required by your safety mandate, but that once they are resolved, they do not get reopened?

NRR/OGC Q4 As I mentioned in my opening statement, I am concerned about the length of time it takes to issue new risk related regulations. What can you do to address this problem?

Senator Voinovich Questions for NRC Commissioners  
 EPW Subcommittee Oversight Hearing on the NRC  
 March 9, 2006

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1. New Plant Licensing:

In your testimony, you stated that the Commission may receive 11 or more applications for new nuclear plants in the next few years, beginning in 2007. At the same time, NRC will have to review two Design Certification applications for new reactor designs.

- NRR/HR* a) How many NRC staff (or FTEs) is needed in FY2007 and FY2008 to deal with this workload without delays?
- CFD/NRR* b) Does the Commission's proposed FY 2007 budget reflect the preparatory work necessary for receiving 11 or more combined license (COL) applications?
- NRR* c) Has the Commission considered more staff to these projects as a way to gain scheduling efficiencies?
- NRR/HR* d) Has the Commission devised a specific training program to get the new employees qualified to work on these applications? If yes, then please describe it for the Committee.
- NRR/OGC* e) Delays in the licensing process make nuclear power a less attractive investment to utilities and Wall Street. What is the NRC doing to reduce the risk of delay in the licensing process?
- NRR/DIP* f) Currently, the NRC estimates that a design certification process could take as long as 60 months to complete. Could a multinational design approval program (MDAP) allow the NRC to shorten the schedule for completion of design certifications? What are the resource and budgetary implications of MDAP in terms of costs and benefits?
- NRR/OGC* g) I am encouraged by the NRC's plan for a new "design-centered approach" to help move applications along by allowing common issues for the three new reactor types to be resolved generically. To what extent will this approach speed up the schedule for licensing a new plant? Are there any legislative changes needed to help establish an expedited licensing process?

2. Human Capital & Infrastructure Challenges:

Your budget proposal for FY2007 projects staffing at 3,309 employees.

- HR/NRR/*  
*NMSS/NSIR/*  
*RES* a) What is your best current projection for total FTEs at the NRC for the next five years? To the extent possible, please explain the projected increases/decreases in the aggregate and by function including new reactor licensing, Yucca Mountain licensing, nuclear security, license renewal, power uprate application and others that are appropriate.

HR

- b) What steps are you taking to train and assimilate new hires into your organization? Is there a formal training/qualification program to ensure that they understand the formal regulatory processes used by the NRC?

HR

- c) Presumably, the majority of new employees that you are bringing on board to replace the retiring employees are recent college graduates with little or no relevant work experience. What is the NRC doing to compensate for the inevitable "brain drain"?

RI/OEDD

- d) I am encouraged by the agency's ongoing effort to institutionalize the lessons learned as mentioned in your testimony. I think this is absolutely necessary considering that hundreds of new people that you are bringing onboard may not have even heard of "the Davis-Besse incident" for which the agency went through such an extensive corrective action program. When do you expect to complete this program so that new employees will benefit from a collection of corporate knowledge?

ADM

- e) I understand that NRC has a goal of hiring 350 people annually for the next several years, and as result, the agency will need additional office space to support this growth. During the hearing, you and other Commissioners stated that the agency may need support from this Committee in working with the General Services Administration in acquiring additional space in close proximity to the agency's Rockville campus. Please explain the situation and how the Committee can help.

HR

- f) During the hearing, I mentioned middle management as one of the problems in the Federal government that I have observed from my other committee chairmanship [Subcommittee on Oversight of Government Management, the Federal Workforce and the District of Columbia]. We do not do a very good job of bringing people in from outside, who can bring different ideas and approaches to problem solving. How is the agency doing in this regard?

3. Implementation of the Energy Policy Act of 2005 Provisions:

NMSS/NSIR

- a) The NRC has taken measures on radioactive materials licenses, through orders and rulemaking changes, to enhance the security of radioactive materials in quantities of concern. There must be a coordinated effort in the regulation of radioactive materials security. How does NRC intend to address this need in its ongoing effort to regulate materials security? Does the NRC plan to expand on its current enhanced security requirements to include Category 3 and other materials?

NMSS/NSIR

- b) The NRC has announced and asked for public comment on their plans to establish a Radiation Source Protection and Security Task Force, with the NRC as its chair, to evaluate and provide recommendations relating to the security of radiation sources in the United States. Is the NRC planning to involve individuals and organizations outside of the government into this task force?

4. Reactor Oversight Process (ROP):

4.

NRR.

During the hearing, you testified that the revised ROP, which was implemented in April 2000, has matured and improved. Separately, during our private meeting on January 30, you mentioned that there has been a significant improvement in overall safety at nuclear power plants as demonstrated by the number of plant events, shutdowns, and extended shutdowns in the last few years. Please quantify for the Committee this improvement. Additionally, does the Commission believe there is a correlation between the improved safety records at nuclear plants and the implementation of the ROP? Do recent trends in inspection findings and performance indicators support your conclusion?

5. Public Confidence:

OPA

During the hearing, I emphasized the importance of the NRC's redoubling its efforts to shore up public confidence. Chairman Diaz briefly summarized the Congressional district office outreach program as an example of the NRC's recent public relations efforts. Please describe the NRC's current public relations programs so that the Committee can better assess the agency's efforts in this very important area.

6. Organizational Performance and Efficiency:

CFO

During the hearing, one of the management issues I highlighted for the Commission was the need to apply the "Total Quality Management" concept to continually improve the agency's performance and productivity. The NRC has to be more efficient in order to meet the unprecedented challenges associated with the anticipated workload. Please describe the Commission's effort to improve the organizational performance and efficiency. What metrics do you have in place to assure you are making progress in this area and what feedback have you received from stakeholders?

7. Nuclear Security:

NSIR

In your testimony, you stated that the Commission is making good progress in implementing the security provisions that this Committee passed as part of the Energy Policy Act of 2005, such as a rulemaking on the revised Design Basis Threat. However, I want to make sure that after the rulemaking is completed NRC does not continue to require security changes without going through the appropriate process. According to a report (OIG-05-A-19) from the NRC Inspector General, the NRC has issued a series of safeguards advisories (total of 65) from September 11, 2001 to January 26, 2005. The OIG determined that 40 advisories, out of 65, were used for requesting or requiring information or licensee action, containing regulatory guidance, and conveying apparent requirements, without going through the established process required by the Administrative Procedures Act. What steps has the NRC taken to respond to the concerns identified in that report?

8. Research and Test Reactors:

NRR

It is my understanding that the Massachusetts Institute of Technology had submitted an application for a power uprate of its research and test reactor in 2001, but the NRC has

yet to act on it. What is the current status of the agency's review of this application? When do you expect to complete the review?

9. USEC:

OGC/NMSS

USEC's planned American Centrifuge Plant (ACP) will be located on the DOE Portsmouth reservation, will utilize the GCEP buildings constructed by DOE, and will use centrifuge technology developed by DOE. There are on-going DOE remediation efforts throughout that site and DOE is also constructing a DUF6 conversion facility adjacent to the planned ACP. I understand that DOE will lease the GCEP buildings to USEC under an amendment to the existing lease for the enrichment site. It is also my understanding that DOE has concluded that it is appropriate to continue the DOE Price Anderson indemnification for the ACP. Does NRC agree with DOE's decision to continue the DOE Price Anderson indemnification of those areas leased for the ACP?



**Questions by Senator James M. Jeffords from the March 9, 2006 NRC Oversight Hearing**

Chairman Diaz

*NRR* 1. You state in your written testimony that the NRC has approved 108 power uprates to date, with approximately 17 more applications pending. How much power is that exactly, and what was the regulatory cost associated with the application review and other NRC actions that were necessary to get that power?

*NRR* 2. Several organizations argue that the Independent Safety Assessment (ISA) that was done at Maine Yankee in 1996 is the "gold standard" of plant inspections. They say this because of the length of time it took, and because of the systems that were examined at the plant. I understand that after the NRC's experience at Maine Yankee it changed its inspection procedures to incorporate lessons learned from that experience and to focus inspections on safety issues. Am I correct in my understanding that since 1996 the NRC now focuses more inspection attention on plants with known safety problems?

*NRR* 3. Is it also correct that the Maine Yankee suffered from an inspection deficit which is why a team of 24 people were needed to do the ISA?

*NRR* 4. Will you provide the Committee with a document that lists the systems, procedures, and particular equipment inspected at Maine Yankee at 1996 during the Independent Safety Assessment and in 2004 during the independent engineering assessment at Vermont Yankee?

*NRR* 5. Constituents have also argued that the Independent Safety Inspection done at Maine Yankee in 1996 should be repeated at other plants because it was independent of the NRC. Constituents liken it to having an outside audit of a plant. My understanding is that the inspectors that did the inspection were independent of the plant and of the region, but only few were contractors. Most were NRC employees. Is that correct?

*NRR* 6. Senator Clinton has asked the NRC to conduct an Independent Safety Assessment at the Indian Point plant in her state. As you know, a similar request was made by citizen groups during the power update process at Vermont Yankee. The Advisory Committee on Reactor Safeguards determined that this level of inspection was not needed at Vermont Yankee in order to determine the power update could proceed. My understanding of your commitment during the hearing to Senator Clinton is that the NRC will conduct an engineering inspection at Indian Point, similar to that done at Vermont Yankee during the power update. Is my understanding accurate? Will you provide me with a copy of the letter you agreed to send Senator Clinton during the hearing summarizing the inspection commitment you announced for Indian Point?

*NRR/DGC* 7. When the Independent Safety Assessment was conducted at Maine Yankee in 1996, legislation was not required. The NRC had sufficient legal authority to conduct such an inspection. Several House members have introduced legislation to require an

Independent Safety Assessment at Indian Point. Does the NRC now need legal authority to conduct such an inspection? Does the NRC support plant-specific legislation to set inspection protocols?

NRR/OGC  
OIG 8. I understand that NRC conducted the inspection at Maine Yankee because, in December 1995, anonymous allegations were sent to the State of Maine and to the NRC regarding falsification of computer modeling in the plant's power update analysis. The plant's power had been boosted in 1989, several years earlier. It was alleged that the NRC staff knew the modeling was faulty, and colluded with the plant owners to conceal that fact. The NRC Inspector General did an investigation. The NRC Chairman at the time, in response to the IG report, and a request from the Governor of the State of Maine, ordered the Independent Safety inspection. Are you aware of any possible criminal activity or collusion between NRC staff and the operators at Indian Point over modeling or any other aspect of plant operation?

NRR 9. I also want to ask a question about the scope of the Maine Yankee Independent Safety Assessment. I have also been told that this was a superior inspection because it was a thorough top to bottom look at the plant's operation. My understanding is that it was an in-depth look at some safety systems, but not an entire audit in the popular sense. The inspectors did not look at the entire plant, and they did not look at external issues, such as emergency evacuation plans. They did not examine every nut and bolt and every piece of paper. Is that correct?

NRR 10. There are repeated calls among New Englanders to revive a 10 year old inspection procedure that was used once. What can be done to give the public more confidence in NRC's current inspections, and particularly the inspections of older plants that may have changes to their license conditions?

OGC/NSIR 11. The NRC recently released a draft rule on the design basis threat for public comment. In the Energy Policy Act of 2005, Congress clearly directs NRC to consider 12 factors as part of its DBT rulemaking, including the need to defend against attacks by large groups, attacks by air, and other types of attacks. Instead, the Commission has chosen not to address 6 of the 12 factors as directed by Congress and has solicited public comment on "whether or how" all 12 matters should in fact be addressed. I am concerned that deferring the analysis to the final rule is contrary to the rulemaking process, because it makes genuine comment impossible. How does the NRC legally justify its decision not to examine in its draft all of the 12 factors identified in the Energy Policy Act of 2005?

NSIR 12. Will you commit to informing the public how you considered these 12 factors, and whether you will revise the design basis threat to address them?

OGC 13. I continue to hear from constituents that changes to the hearing process have made requests more difficult and less likely to be granted. Since the changes, are you seeing a reduction in the number of hearing requests overall, and particularly in the number of successful requests that result in a hearing being granted?

NMSS/OGC 14. The Yucca Mountain repository is designed to house 70,000 metric tons of nuclear waste. By the year 2035, the U.S. is projected to produce 105,000 metric tons of nuclear waste from existing plants. Since the Nuclear Waste Policy Act requires the government to assume responsibility for permanently disposing of the nation's nuclear waste, we need to fully understand the impact of the current waste situation on the future of nuclear power generation?

NRC has said it wouldn't license reactors without reasonable confidence spent fuel can be safely disposed. Has NRC ever said success at Yucca was necessary for such confidence, and to keep licensing old and new reactors?

NMSS/OGC 15. In our full Committee hearing the week of March 1, 2006, we learned that DOE now does not have a firm deadline for submitting the Yucca Mountain application to the NRC. Is the NRC able to decide whether storage or disposal of high-level nuclear waste at Yucca Mountain will be safe without reviewing a full license application?

NMSS/OGC 16. The Administration is pursuing a new nuclear waste reprocessing program called the Global Nuclear Energy Partnership that could impact the amount and type of nuclear waste generated in the U.S. This new program relies on reprocessing technologies that are currently under development. Existing reprocessing technologies produce a byproduct which is a highly radioactive sludge-like residue that must be solidified and sealed in stainless steel canisters before it is shipped. Wouldn't this waste require special handling and wouldn't new regulations be required to govern its management?

NMSS/OGC 17. DOE is proposing to develop reprocessing technologies and build a reprocessing demonstration plant in the next 10 years. What is your position on whether the NRC would be responsible for licensing such a facility?

NRR 18. The first nuclear plant operating license will expire this year; approximately 10 percent will expire by the end of the year 2010 and more than 40 percent will expire by the year 2015. The Atomic Energy Act and NRC regulations limit commercial power reactor licenses to an initial 40 years but also permit such licenses to be renewed. Due to this selected period, however, some structures and components may have been engineered on the basis of an expected 40-year service life. How does the fact that some plants have an engineered design life of 40 years impact their ability to perform safely for potentially another 20 years?

Senator Isakson Questions for NRC Commissioners  
EPW Subcommittee Oversight Hearing on the NRC  
March 9, 2006

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OEDO/MSIR

During the hearing, I brought up the issue of potassium iodide, but didn't get a chance to pursue my question with the Commission. It is my understanding that the Department of Health and Human Services (HHS) has made a recommendation to expand the stockpiling of potassium iodide beyond the 10-mile radius around a nuclear facility which is the current requirement. Please provide the Commission's position on the HHS's recommendation for the record.

**Additional questions of Senator Obama  
To the Nuclear Regulatory Commission  
Regarding Tritium Discharges at the Exelon Braidwood Generating Station**

NRR

- Will you please provide me with a list of the other tritium leak incidents elsewhere in the country over the past 10 years, including location, and level of radiation?

OGC

- Will you please provide me with the NRC's views on the Nuclear Release Notice Act (S. 2348), which I introduced earlier this month?

NRR

- Mr. Diaz, you stated that the NRC is taking a comprehensive look at the tritium problem, including the way it is monitored, the environmental situation, and communication between the NRC and state environmental protection agencies. Do you expect this analysis to be completed by Memorial Day? Upon completion of this analysis, will you please submit it to the members of this Committee?

NRR/RII

- On March 13, 2006, almost days after our hearing, approximately 200 gallons of water spilled at the Exelon Braidwood station from an on-site tank where radioactive liquids are temporarily being stored in the wake of the recent issue on tritiated water leaks. I am told that testing onsite of the water in the berm area showed about 255,000 pCi/l of tritium. Testing of water that escaped onto the ground/pavement showed 183,000 pCi/l. I understand that the leakage was not reportable to the NRC, but the licensee informed State and local officials and issued a news release.
    - Why was this leakage not reportable to the NRC? What thresholds for reporting were not met that otherwise would require NRC reporting?
    - Are there reporting thresholds that differentiate between releases that occur on the licensee property as opposed to off-site?
-

If succeeding pages are required in answering the question, the question number and page number should be typed in the header margin text area, so that it appears at the top of each succeeding page (as shown above).

If enclosures are to be included with a response, indicate on Q&A (as shown below) and type question number and part (A, B, C, etc., as appropriate) on each enclosure. Three copies of each enclosure are required. Also, provide an electronic copy of the enclosure, if possible.

Enclosure:

Sample Q&A Format

## FORMAT FOR CONGRESSIONAL Q&As

QUESTION 6. Congressional questions are assigned to various offices for preparation of the answers.

(A) What is the typing format for responding to Congressional questions?

ANSWER.

Q&As are to be typed on word processing equipment (WordPerfect) and provided to the EDO both by hard copy and a 3.5 inch diskette (as directed on Green Control Ticket under Special Instructions or Remarks). Type each Q&A as a separate job (including multiple parts, [A, B, C, etc.]) to aid in later revisions and transmission of Q&As to Congressional Affairs. Use 11 pitch, Arial type style, initial caps only, and double spacing. Use four spaces between each paragraph. Side margins are 1-inch for both left and right; and 1-inch for the top and bottom margins. Do not use a required return after each typed line.

At the bottom right margin on each page in the footer text, indicate Committee, originating Office (not Division or Branch). Current date should appear directly below the Committee/Office. Subsequent revisions should reflect the revised date.

Inhofe/NRR  
08/06/98