

EDO Principal Correspondence Control

FROM: DUE: 05/31/06 EDO CONTROL: G20060532  
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FINAL REPLY:

Senator Pete V. Domenici

TO:

Chairman Diaz

FOR SIGNATURE OF : \*\* GRN \*\* CRC NO: 06-0268

DESC:

Post Q's from the May 22, 2006 Hearing on the  
Nuclear Power Provisions Contained in the Energy  
Policy Act of 2005

ROUTING:

Reyes  
Virgilio  
Kane  
Silber  
Dean  
Burns  
Schmidt, OCA  
Shoop, OEDO

DATE: 05/26/06

ASSIGNED TO:

CONTACT:

NRR	Dyer
OGC	Cyr
HR	McDermott

SPECIAL INSTRUCTIONS OR REMARKS:

Prepare response to Qs using the attached format  
and provide to Undine Shoop, OEDO by May 31, 2006.  
Note: OCA is negotiating an extension for due  
date. OGC to review Sen. Domenici Questions 1-5  
that were previously provided (see attached).

POC: Undine Shoop, OEDO

Template: SECY-017

E-RIDS: SECY-01

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CORRESPONDENCE CONTROL TICKET

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PAPER NUMBER: LTR-06-0268 LOGGING DATE: 05/26/2006  
ACTION OFFICE: 7 EDO / OGC

AUTHOR: SEN Pete Domenici  
AFFILIATION: CONG  
ADDRESSEE: CHRM Nils Diaz  
SUBJECT: Questions from May 22, 2006 Senate Committee on Energy and Natural Resources Hearing

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

LETTER DATE: 05/25/2006

ACKNOWLEDGED No  
SPECIAL HANDLING: EDO/OGC...coordinate response with OCA...Response due by June 8

NOTES: Commission Correspondence

FILE LOCATION: ADAMS

DATE DUE: 05/31/2006 DATE SIGNED:

EDO --G20060532

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# United States Senate

COMMITTEE ON  
ENERGY AND NATURAL RESOURCES

WASHINGTON, DC 20510-6150

ENERGY.SENATE.GOV

May 25, 2006

The Honorable Nils Diaz  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Chairman Diaz:

I would like to take this opportunity to thank you for testifying before the Senate Committee on Energy and Natural Resources on Monday, May 22, 2006, to give testimony regarding the nuclear power provisions contained in the Energy Policy Act of 2005.

Enclosed herewith please find a list of questions which have been submitted for the record. If possible, I would like to have your response to these questions by Thursday, June 8, 2006.

Thank you in advance for your prompt consideration.

Sincerely,



Pete V. Domenici  
Chairman

PVD: saw

Enclosure

## Questions for the Record Senator Domenici

The licensing and construction of new nuclear power plant takes between six and eight years in other countries like Japan. The licensing and construction process in the U.S. is estimated to take between twelve and thirteen years.

1. What steps can be taken by the NRC to make licensing process as efficient as the licensing process in other countries?

In the case of license renewal, the NRC provided guidance to the Atomic Safety and Licensing Board (ASLB) on the hearings associated with license renewal proceedings.

2. What guidance will the Commission be giving to the ASLBs that are formed for combined license applications, with regard to the conduct of the hearing, admissibility of contentions, disposition of contentions, and schedules?

The Part 52 licensing process is meant to be more efficient. NRC review schedules indicate that it will take 42 months to review a combined license application, even if the applicant referenced a certified nuclear power plant design and an early site permit.

3. What is the basis for this estimate?
4. What can be done to reduce the schedule after that initial first plant has received its combined license?
5. What NRC activities are being performed to ensure that there will be an efficient implementation of the ITAAC (inspections, tests, analyses and acceptance criteria) process, including consistent application and interpretation of ITAAC sign-off criteria between different inspectors and different projects?

- NRR/OGC 6. Why is NRC proposing such a substantial revision to Part 52 on the eve of so many new plant applications?

- NRR/OGC 7. Doesn't the scope of the proposed revision inject regulatory uncertainty and confusion at a critical time? Isn't it likely that plant applications may be delayed for no reason other than potential applicants will take time to try to understand so many changes to the rule?

- NRR/OGC 8. Why is it necessary to have such a complex and substantial revision to Part 52? Why can't the NRC implement the Rule as presently structured?

- NRR/OGC 9. Do any of the proposed revisions to Part 52 conflict with Congress' goal in the Energy Policy Act of 1992 to achieve efficiency and certainty in the regulatory process. Do you agree with me that the number of applications currently planned demonstrates public confidence in the reliability and regulatory certainty of the current rule?

Input  
already  
provided  
to OCA.

(see  
attached)

OGC to  
review.

NRR/OGC a. In particular, do any of the proposed revisions increase the probability that issues that would have been finalized at an early stage in the process under the current version of Part 52, such as at the early site permit stage, will be subject to another review at the COL stage if the proposed revisions are adopted? Is that a desired result?

OGC/NRR b. What can Congress do to help NRC conduct its reviews of the various stages of the plant licensing process more efficiently? Would legislation according finality to NRC's findings at various stages of the process be something that NRC would welcome?

NRR/OGC 10. Would you also agree that substantial revisions to Part 52 that are perceived to eliminate some of the regulatory certainty might cause potential applicants and the financial to lose some of that confidence. Do you agree that public confidence that the licensing process is efficient and reliable is important?

NRR/OGC 11. Would you also agree that the efficiency of the licensing process, particularly the potential for duplicative reviews at the COL stage of issues that should have been foreclosed at an earlier stage, such as the early site permit or design certification stage, cause NRC to need more reviewers and is generally an inefficient way to do business?

NRR/OGC 12. Several potential applicants have indicated that they would like to consider a hybrid approach for a COL application, where the COL application references either an application for Design Certification or ESP application. I understand that the reference of an application is explicitly authorized in your Part 52, but there is no guidance on how the processing of such a COL application would be accomplished. Why don't the proposed revisions to Part 52 expressly provide guidance to the industry and the Commission regarding how to process such applications in an efficient, straightforward way?

NRR/OGC 13. Wasn't there a provision for a phased licensing approach under the old Construction Permit – Operating License process? Is NRC prepared to allow the same flexibility under the Part 52 process? Can Congress assist NRC in giving it direction to pursue these kinds of efficiencies in its processes?

OGC 14. Does NRC have firm milestone schedules for completing hearings on early site permits and COLs? Why aren't the suggested milestones in Appendix B to Part 2 of your rules binding on the Atomic Safety and Licensing Boards? How can we make sure that the milestone schedules for hearings are realistic and enforceable?

**Questions for the Record**  
**Senator Craig**

HR/NRR

1. Please explain how well NRC's projected workforce needs compare with projections for graduates in nuclear engineering and sciences.

# Previous Q's Submitted Prior to Hearing

Additional questions for the May 22, Senate Energy and Natural Resources hearing

Question 1. With the combination of incentives from EPACT 2005, what do the witnesses estimate the cost per Kw of new plant construction to be? Various references estimate this to be between \$110 and \$1400 per Kw for capital plant costs. Are these estimates still valid?

Answer:

The NRC's mission is to protect public health and safety and the environment. Factors that are not needed in the development of the safety case are not tracked. We believe that economic decisions are best left to the industry.

Question 2. How many units are needed before the installed capital cost of each plant levels out to a stable value? Will the incentives be enough to cover the nth plant before the final levelized cost is achieved, given the various plant designs that are under contemplation and the finite level of incentives?

Answer:

The number of announced prospective COL applicants continues to increase, even with the current limited incentives. To meet the current application projections the NRC has developed the design centered approach for reviewing COL applications. We believe this approach is crucial to achieving effective, efficient, and timely reviews for multiple applications.

Question 3. The NRC now has letters of intent for 10-14 combined operating licenses yet the production tax credit only covers the first 6000 MW of plants and the standby support covers only 6 plants. Again, are the incentives enough to cover the number of plants expected along with the various designs expected to be submitted for the combined operating license.

Answer:

The incentives provided by EPACT are not required to make a safety case for a COL application. Factors that are not needed in the development of the safety case are not considered by the NRC. We believe that economic decisions are best left to the industry.

Question 4. Will these incentives outweigh the uncertainties regarding the ill-defined dates for the final disposition of spent nuclear fuel?

Answer:

Incentives are part of the economic decision making process, not part of the safety decision making process. The NRC only considers factors related to the safety and security of a plant.

If they press or ask for your personal opinion:

As an independent regulator, it would be inappropriate for me to speculate on something that may come before the NRC in the future application. (Since the final disposition method would be reviewed by the NRC, we should not comment on it because it could be perceived that we have pre-judged the repository application since this question involves the date of a future repository.)

Question 5. The Part 52 licensing process is meant to be more efficient. NRC review schedules indicate that it will take 42 months to review a combined license application, even if the applicant referenced a certified design and an early site permit.

What is the basis for this estimate?

Answer:

The 42 month schedule includes 30 months for the technical review and an estimated 12 months for the mandatory hearing. The review schedule is based on the NRC staff and industry experience with other complex technical safety reviews including the four completed Design Certifications and takes into account the expected efficiencies associated with standardized reviews.

What can be done to reduce the schedule after that initial first plant has received its combined license?

Answer:

The 30 month technical review includes a significant period of time for NRC questions and applicant answers to address incomplete or inadequate elements of the COL application. More complete and higher quality applications are therefore an obvious area for reducing the schedule. To facilitate the quality of COL applications, the NRC staff is developing a proposal to clarify the regulations for COLs (i.e. the Part 52 rulemaking) and working closely with stakeholders on COL application guidance. Several workshops and meetings have already been held and more are planned.

In addition, the NRC staff has recently accelerated its efforts on the staff's review guidance (i.e. the Standard Review Plans) and expects to complete all necessary updates by the Spring of 2007, well in advance of the expected applications.

What NRC activities are being performed to ensure that there will be an efficient implementation of the ITAAC (inspections, tests, analyses and acceptance criteria) process, including consistent application and interpretation of ITAAAC sign-off criteria between different inspectors and different projects?

Answer:

ITAAC are part of the combined license and define specific requirements to be met prior to operation. To gain staff efficiencies, facilitate knowledge transfer, and ensure consistency, all construction inspection management and resources will be located in a single region which will schedule all construction inspectors nationwide.

Question 6. The licensing and construction of new nuclear power plant takes between six and eight years in other countries. The licensing and construction process in the U.S. is estimated to take between twelve and thirteen years. What steps can be taken by the NRC to make licensing process as efficient as the licensing process in other countries?

Answer:

Staff is working on this answer and will have a response on Monday.

The NRC's licensing process involves comprehensive technical review of safety, security and environmental issues and a mandatory hearing to provide an appropriate opportunity for public participation. The NRC staff plans to complete its technical reviews within 30 months and the mandatory hearings are expected to take an additional 12 months. The NRC regulations allow site preparation and preliminary construction activities to take place before the completion of COL licensing through the use of Limited Work Authorizations. If requested and approved, the use of Limited Work Authorizations could significantly reduced the total plant construction time.

Following the issuance of a COL, the NRC has no responsibility for construction schedules and is not in a position to suggest mechanisms to reduce that construction time. Moreover, potential COL applicants have not submitted nor shared their construction plans and schedules with the NRC.

Question 7. In the case of license renewal, the NRC provided guidance to the Atomic Safety and Licensing Board (ASLB) on the hearings associated with license renewal proceedings. What guidance will the Commission be giving to the ASLBs that are formed for combined license applications, with regard to the conduct of the hearing, admissibility of contentions, disposition of contentions, and schedules?

Answer:

The Commission adopted comprehensive improvements to its hearing procedures in 2004 to address these matters and, more recently, adopted in 2005 model milestones for the conduct of proceedings. I anticipate that the Commission may find it appropriate to provide additional guidance to its Boards to ensure fair and expeditious conduct of proceedings. The additional guidance might be in the form of an updated adjudicatory policy statement. In addition, the Commission may provide specific guidance in individual cases by issuing case specific orders (similar to those issued at the start of the LES and USEC enrichment facility adjudications and the order issued to set up the three ESP adjudications) that establish deadlines, emphasize the use of expediting processes, and provide early guidance on particular policy matters that may be involved in the case.

## 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.

**QUESTION 6.(A).**

**2**

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. Provide an electronic copy of the enclosure, if possible.

Enclosure:

Sample Q&A Format