





UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

COMSECY-07-0018

April 20, 2007

Disapproved, subject to the

ättäched comments.

MEMORANDUM TO:

Chairman Klein

Commissioner McGaffigan

Commissioner Merrifield

Commissioner Jaczko

Commissioner Lyon

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FROM:

Luis A. Reyes

Executive Director for Operations

SUBJECT:

COST ESTIMATE FOR DAVIS-BESSE REACTOR VESSEL

HEAD DEGRADATION DISPLAY

By way of this memorandum, I am informing the Commission of the cost of procuring a model of the Davis-Besse reactor pressure vessel head degradation for display in the NRC headquarter's lobby, as requested in staff requirements memorandum, "Briefing on Institutionalization and Integration of Agency's Lessons Learned," dated November 21, 2006 (M061025A). The Office of Nuclear Regulatory Research has determined that this model would cost approximately \$35K.

The concept includes a display similar to one used in trade shows or museums consisting of a model on a display table that could be viewed and touched from all sides. The display would require a space of approximately 8 ft. by 8 ft. and would cost approximately \$35K. All information conveyed by the final display would be from NRC sources previously approved for public release.

The staff will engage a graphics design firm to provide the final design and fabricate the display, and will engage the Office of Administration to determine space availability.

An estimated \$35K of FY 2007 funds for this display will be taken from Activity 11AACa, "Environmentally-Assisted Degradation of Reactor Pressure Boundary Components and Vessel Internals." The impact of this reprogramming would be to delay testing on irradiated assisted stress corrosion cracking for about one month. Office of Nuclear Reactor Regulation review of licensees' aging management programs for reactor internals under the license renewal program will not be impacted by this delay. This delay has been coordinated with the Office of Nuclear Reactor Regulation, Division of Component Integrity.

CONTACT: Eric M. Focht, RES/DFERR

Chairman Klein's Comments on COMSECY-07-0018

One lesson that Davis-Besse reactor vessel head degradation teaches is that complacency is a major challenge for us and our licensees. The first step toward combating complacency and forgetfulness is continually being reminded of what can go wrong. A model display of the Davis-Besse reactor vessel head degradation can serve this purpose. As Commissioner McGaffigan stated, the model can serve as a focal point for discussions of this very significant event – discussions and reflections that I hope will spur one's continued dedication to vigilance and excellence.

I support Commissioner Lyons' view that the cost of this model should be no greater than \$14K and that it should occupy no more than 3 ft. by 3 ft. floor space. I also support other detailed features for the model that are prescribed in his vote. However, with respect to a poster-board, it should be capable of being a stand-alone or a wall-mounted display to allow for more flexibility in space accommodation. In addition, the poster-board's text should include a description of the reactor coolant leak path.

Dále E. Klein

Date



MEQUEST REPLY BY:

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

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The concept includes a display similar to one used in trade shows or museums consisting of a model on a display table that could be viewed and touched from all sides. The display would require a space of approximately 8 ft. by 8 ft. and would cost approximately \$35K. All information conveyed by the final display would be from NRC sources previously approved for public release.

The staff will engage a graphics design firm to provide the final design and fabricate the display, and will engage the Office of Administration to determine space availability.

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CONTACT: Eric M. Focht, RES/DFERR

Commissioner McGaffigan's Comments on COMSECY-07-0018

I support the staff's plan.

I regard the model as a monument to avoiding complacency in everything we do and our licensees do. As the Commission was so strongly reminded during the 25th anniversary of TMI meeting on March 3, 2004 and at the Regulatory Information Conference on March 11, 2004, NRC must never allow ourselves to believe that either we or any licensee are any better than we have documented.

Avoiding complacency is in the bones of NRC's long-term staff, a small number of whom date back to the 1979 TMI accident. We are, however, facing a huge demographic transition as my generation retires and new staff are brought in. Close to 40 percent of our staff has been with us fewer than four years. This model, properly done, will be a focal point for discussions of the only significant precursor event during my almost 11 years with the Commission. The scale seems appropriate to catch the eye and serve as a focal point in the Two White Flint lobby. I regularly blow past lesser exhibits on my way to and from the cafeteria. This display should be a teaching tool and a focal point that one simply cannot blow past.

If the \$35,000 price tag for the model is an issue for any Commissioner, I would gladly make up the difference by reprogramming funds from my travel budget to fully fund the staff's proposal.

Edward McGaffigan Jr

(Date)



NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

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MEMORANDUM TO:

Chairman Klein

Commissioner McGaffigan Commissioner Merrifield

Commissioner_Jaczko_

Commissioner Lyons

FROM:

Luis A. Reves

Executive Director for Operations

SUBJECT:

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The concept includes a display similar to one used in trade shows or museums consisting of a model on a display table that could be viewed and touched from all sides. The display would require a space of approximately 8 ft. by 8 ft. and would cost approximately \$35K. All information conveyed by the final display would be from NRC sources previously approved for public release.

The staff will engage a graphics design firm to provide the final design and fabricate the display. and will engage the Office of Administration to determine space availability.

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CONTACT: Eric M. Focht, RES/DFERR

Commissioner Merrifield's Comments on COMSECY-07-0018

I appreciate the staff's efforts and diligence on developing a model display of the Davis-Besse reactor vessel head degradation. I agree with Commissioners McGaffigan and Lyons on the usefulness of this display as an educational tool for the growing number of new NRC staff and, I would add, the public. However, I do not support the proposal by the staff, mainly because of the problematic size of the proposed display which limits its portability and thus limits the possibilities for its use in educational training opportunities for HQ staff as they become more widely dispersed due to office space issues, regional staff, colleges and universities, and industry seminars.

I support instead the alternative proposal offered by Commissioner Lyons. I believe that this alternative approach provides greater flexibility for use of the model display. In addition, I believe that ensuring the full scale nature of the display is a necessity for full appreciation of the degradation and this alternative approach preserves that scale. I also believe that the proposed size of the display will help to preclude potential obstruction of the degradation by limiting the modeling of additional instrumentation and control features on the reactor vessel head.



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UNITED STATES **NUCLEAR REGULATORY COMMIS** WASHINGTON, D.C. 20555-0001

April 20, 2007

COMSECY-07-0018

Approve subject to attached

comments.

Gregory B. Jaczko

MEMORANDUM TO:

Chairman Klein

Commissioner McGaffigan Commissioner Merrifield

Commissioner Jaczko.

Commissioner Lyons

FROM:

uis A. Reves

Executive Director for Operations

SUBJECT:

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The concept includes a display similar to one used in trade shows or museums consisting of a model on a display table that could be viewed and touched from all sides. The display would require a space of approximately 8 ft. by 8 ft. and would cost approximately \$35K. All information conveyed by the final display would be from NRC sources previously approved for public release.

The staff will engage a graphics design firm to provide the final design and fabricate the display. and will engage the Office of Administration to determine space availability.

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CONTACT: Eric M. Focht, RES/DFERR

Commissioner Jaczko's Comments on COMSECY-07-0018 Cost Estimate for Davis-Besse Reactor Vessel Head Degradation Display

I agree with Commissioner Lyons' desire to obtain a high quality model of the Davis-Besse head degradation as a visible reminder of the collective lessons learned from this incident. I support the staff's plan to procure a model of the Davis-Besse reactor pressure vessel head, but I have concerns about the source of funding proposed to pay for the display. I think there are other sources where the money could be reprogrammed that are not related to pressure vessel degradation. I support and appreciate Commissioner McGaffigan's generous offer to spend his unused travel funds.

Éregory B. Jaczko

Date



REQUEST REPLY BY: 666

UNITED STATES MUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

COMSECY-07-0018

April 20, 2007

Disapproved, subject to the attached comments.

MEMORANDUM TO:

Chairman Klein

Commissioner McGaffigan Commissioner Merrifield Commissioner Jaczko

Commissioner Lyons

Peter B. Ky

5/80 /07

FROM:

Luis A. Reyes

Executive Director for Operations

SUBJECT:

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The concept includes a display similar to one used in trade shows or museums consisting of a model on a display table that could be viewed and touched from all sides. The display would require a space of approximately 8 ft. by 8 ft. and would cost approximately \$35K. All information conveyed by the final display would be from NRC sources previously approved for public release.

The staff will engage a graphics design firm to provide the final design and fabricate the display, and will engage the Office of Administration to determine space availability.

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CONTACT: Eric M. Focht, RES/DFERR

Commissioner Lyons' Comment on COMSECY-07-0018

I very much appreciate the staff's efforts and resourcefulness to date on the development of a model display of the Davis-Besse reactor vessel head degradation as outlined in the EDO's April 20, 2007, memorandum to the Commission, which was in response to the Staff Requirements Memorandum dated November 21, 2006.

I have been perhaps the most vocal proponent of such a display for the purpose of ensuring that the lessons of this incident are not lost from our collective NRC memory, particularly as we infuse large numbers of new employees into the staff. However, to address concerns that have been raised regarding the staff's projected cost, and to help ensure the success of this initiative, I would like to further direct the staff as follows.

An acceptable model display will have the following features:

- 1) full scale model of the head section immediately surrounding the degraded area, including several CRDM nozzles.
- 2) model to fit within a space of approximately 3' x 3' x 3' cube and placed on a suitable table allowing viewing from all sides except the bottom.
- 3) model to be professionally constructed and realistic-looking, with dimensions, shapes, and textures rendered from available computer-aided-design files obtained from the actual reactor vessel head.
- 4) costs for the procurement of a model with the above features should not be greater than \$14K. Any model cost that exceeds \$14K requires additional Commission approval.
- 5) a stand-alone durable poster-board display should be designed and assembled to provide a visual high-level context using photos, graphics, and text. The display should inform the viewer as to the general nature of the incident, the factors that led to it, and the lessons that industry and NRC employees should learn from it. A handout holder with suitable handouts providing further details and references should also be provided.
- 6) the poster-board display should be produced by the NRC graphics department, if possible, or from outside sources for a modest cost that is reasonable for such services.
- 7) the combination of the model and poster-board should be easily moveable and provide a compelling visual image and story that will attract attention to its principal messages.

Peter B I v

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