

From: Jennifer Golder
 To: Joel Dorfman; Karen Fitch
 Date: 3/28/01 3:58PM
 Subject: paper on PBMR

Hi,

Attached is the final OCFO concurrence paper that I drafted on the PBMR. It has been sent to Tim and is being forwarded to Pete and Jesse for comment and concurrence this afternoon.

Thanks
 Jennifer

NAR - (revised)

Kathy Marce - Janice Moore
 - Chandler
 ↓
 provide
 info

See next

Don Hall

"take out the word

modular where

not needed"

model

is the proposal that
to Res?

C/19

| | |
|------------------|---------------|
| | Initials/Date |
| Approved (BC) | _____ |
| Disapproved (BC) | _____ |

NOTE TO: Timothy Pulliam

FROM: Jennifer Golder

SUBJECT: Plan for the Pre-Application Activities on the Pebble Bed Modular Reactor (PBMR)

REF: DPBA - 2001-056, OCFO 2001-101

Background:

The Office of Research is requesting Commission approval to proceed with pre-application activities on the PBMR. Depending on Commission approval, work would begin in late April of 2001, over an 18 month time period. Work supports technical assessment and transfer activities and pre-application activities. DOE is willing to cover a majority of the costs associated with the generic technical assessment activities. Pre-application activities will be fee recoverable.

Resources:

7 FTE and \$1 million over an 18 month period estimated to begin in late April 2001, depending on Commission approval.

Coordination:

Paper includes the standard OCFO coordination statement.

The comments in this paper have been coordinated between the Division of Planning, Budgeting and Analysis (Jennifer Golder, Joel Dorfman, Karen Fitch), and the Division of Accounting and Finance (Glenda Jackson).

Recommendation:

OCFO concurrence with the following revisions:

Resources:

~~“The activities, schedule, and resource needs are based upon the staff’s previous experience with a pre-application review of a DOE-sponsored modular HTGR conducted in the late 1980s. The technology assessment, regulatory framework and regulatory process assessment activities described in the attached plan would build upon that work and other previous advanced reactor work. Currently, these resources are not in the FY 2001 or the FY 2002 budget, nor are resources to conduct an actual licensing review of the PBMR, if an when such a review is requested.”~~ **Resources to conduct an actual licensing review of the PBMR will be prioritized in the FY 2003 budget during the PBPM process.**

The U.S. Department of Energy (DOE) also considers an NRC safety and technology assessment of modular HTGRs, like the PBMR, as providing fundamental input for evaluating their advanced reactor program. Accordingly, DOE has recently inquired into the feasibility of NRC conducting such an assessment and has indicated that they would be willing to fund (FTE and contractor support) a portion of the work. DOE funding would support technology assessment and transfer activities that are generically applicable to modular HTGRs, including the PBMR. It is expected that most of the work for DOE would benefit the staff by developing the understanding, expertise and capabilities it would need to conduct future licensing reviews of modular HTGRs, including the PBMR. However, the DOE funding scope would not include safety and technology assessment work that is applicable only to the PBMR.

It is estimated that 7 FTE and approximately \$1 million in contractor support (RES) would be required to perform the pre-application activities over an 18 month time period, as described in Attachment 2. This includes four FTE in RES, two FTE in NRR, and one FTE in NMSS.

18 Month Time Period Beginning late April 2001

| | Reimbursable | Non-Reimbursable | Total |
|----------------------------|--------------|------------------|------------|
| Contract Support (RES) | \$800K | \$200 | \$1Million |
| FTE (RES 4, NRR 2, NMSS 1) | 3 FTE | 4 FTE | 7 FTE |

The \$1 million in contract support (reimbursable and non-reimbursable) will cover RES activities over the 18 month time period. No contract support costs have been identified in NRR and NMSS for the safety and technology assessment and pre-application activities. Before the DOE reimbursable agreement is finalized, staff will determine which parts of the activities are fee recoverable or reimbursable through the DOE agreement.

It is estimated that the pre-application activities will require 2 FTE and \$300K in FY 2001 and 5 FTE and \$700K in FY 2002 for NRC. It is estimated that the total technology assessment and transfer activities to be funded by DOE would comprise approximately \$800K for contractor support and 3 FTE of the total estimated cost. DOE funding would begin in FY 2001, (through a reimbursable agreement between DOE and NRC) if the Commission approves proceeding with this work. DOE has indicated that they would make \$500K available in FY 2001 (\$300K for contractor support and \$200K for 1 FTE) to initiate the work. The 1 FTE in FY 2001, not covered by the DOE reimbursable agreement will be funded from within RES, NRR, and NMSS and will be realigned from lower priority activities. DOE will provide the remainder of the funding in FY 2002, subject to the availability of funds (\$500K for contractor support and \$400K for 2 FTE). The non-DOE funded work in FY 2002 totals \$200K and 3 FTE and will be requested during the FY 2003 PBPM process from RES, NRR, and NMSS.

~~Exelon would be charged a fee in accordance with 10 CFR Part 170.21 for NRC resources (FTE and contractor support) expended for assessment activities that are specific to the PBMR design and for all of the staff's PBMR regulatory framework and regulatory process assessment activities. Additionally, an actual license application for a modular HTGR such as the PBMR would be conducted on a fee recoverable basis in accordance with 10 CFR Part 170.21."~~

Exelon would be assessed fees under 10 CFR Part 170, consistent with the Commission's 1995 fee policy for advanced reactor designs, for NRC's pre-application activities that are specific to the PBMR. Additionally, 10 CFR Part 170 fees would be assessed for the review of any license application for a modular HTGR, such as the PBMR."

Comments on the attached Plan for Pre-Application Activities on the PBMR

- Suggest revising the first major bullet under "Technology Assessment and Transfer" on page 4 to read as follows:
 - familiarization with the design, safety, and research issues via:
 - interaction with foreign partners and domestic organizations, including Exelon, with HTGR or modular HTGR design, safety or operating experience
 - interaction with the RSA regulatory organization"

The purpose of this change is to downplay the focus on interactions with Exelon for work activities which would be reimbursed by DOE.

- Suggest revising the last two sentences of Page 11 of Attachment 2 as follows:

“DOE funds to cover the technology assessment and transfer activities are estimated to amount to \$800K and 3 FTE over the 18-month period. Exelon would be assessed fees under 10 CFR Part 170, consistent with the Commission’s 1995 fee policy for advanced reactor designs, for NRC’s pre-application activities that are specific to the PBMR.”