

From: Amy Cabbage
To: Gilles, Nanette *NM*
Date: Tue, Aug 7, 2001 2:38 PM
Subject: Fwd: PBMR pre-application resources

Nan,

Joe asked for some background on the NRR PBMR pre-application resources. I sent him the attached info. I'm sending a copy to you for your info. Please let me know if I can provide any additional information.

Amy

0/31

From: Amy Cabbage *NRR*
To: Williams, Joseph
Date: Tue, Aug 7, 2001 1:21 PM
Subject: PBMR pre-application resources

BACKGROUND FOR PBMR PRE-APPLICATION RESOURCE TABLE

RES has the lead for the PBMR pre-application. NRR plays a significant role in the legal/financial issues, the licensing plan, and the licensing approach. On the technology issues NRR is in a support role. RES has the lead on all Gas reactor technology issues. The scope of the pre-application review is being driven by what information Exelon can/will provide to the staff, and what issues they are interested in discussing. The technical issues to be introduced at the monthly meetings with Exelon are as follows:

*June Fuel
 *July Codes and standards
 August Analytical codes
 Core design (steady state/transients)
 Shutdown cooling capability and shutdown capability
 Confirmatory test program/ITAAC
 High Temperature Materials
 Fuel Handling System
 source term
 October Graphite Chemical attack
 Security/Safeguards
 Control room design/habitability
 November Waste characteristics
 Brayton Cycle/Power conversion system
 December Open

* meetings already occurred

The meetings listed above are for introduction of the topics with follow on discussion to occur at future meetings as necessary. In addition, containment vs. confinement and EP will be discussed in the context of policy issues.

The support role of NRR on the technical topics listed above is to attend the meetings and to be aware of the issues. In some limited cases like fire protection codes and standards, NRR has lead review responsibility. During the pre-application phase NRR will also be expending resources to bring staff up to speed on key gas reactor issues (fuel, graphite, high temperature materials, source term etc.) so the NRR staff will be prepared to review a license application for PBMR. With the exception of Codes and standards (we already had the meeting with Exelon to discuss the codes and standards that PBMR will reference. NRR staff attended the meeting but resources were not significant) the only issues with substantial DE involvement are high temperature materials and graphite (from a structural component basis not fuel design).

In developing the resource estimated in the table, I considered the issues that will be focused on during pre-application interactions with Exelon, the role of NRR in the pre-application review, and the areas where NRR needs preparation in order to be efficient and effective in its review of a PBMR license application.

1