From: Carey, Christopher [redacted]
Sent: Tuesday, September 14, 2010 2:30 PM
To: Eichner, John M.
Cc: Owens, Kirk W.; Dimarzio, John A.
Subject: RE: TVA reactors

John,

The BFN & SQN PRAs are level 2 PRAs. That is, they predict frequency of various fission product release classes (small early, large late, etc), but they do not contain specific fission product release information for severe accidents. However, the BFN License renewal EIS and the draft SQN License renewal EIS, which I sent in a previous email, discuss severe accidents. My recollection is they used representative source terms.

There are not any studies of intentional destructive acts that have determined fission product release information for either BFN & SQN. We may need to use a severe accident as a surrogate. Please look over the BFN & SQN license renewal EISs and see if there is enough information in them for SAIC to proceed with the evaluation. We'll probably need to talk about this.

I mailed a CD today that has all the supporting files referenced in the data call, plus the BFN SAR and SQN SAR. The data call was intended to be complete, that is, SAIC should not need to go back to any of the references I cite for the information that has been requested. As you noted, I often put additional information in the data call for my own use in retracing my logic.

The normal operational dose for the MEI at BFN includes the immersion dose. The internal dose due to the air pathway is included in the normal operational doses (reference BFN & SQN ODCM).

The fuel assembly information is on a per unit basis.

From: Eichner, John M. [redacted]
Sent: Monday, September 13, 2010 10:09 AM
To: Carey, Christopher
Cc: Owens, Kirk W.; Dimarzio, John A.
Subject: FW: TVA reactors

Chris,

In addition to the copies of the FSARs, please provide any PRA or severe accident analyses that evaluate beyond-design-basis accident(s). If it is not readily apparent in the FSAR, identify the assumed location of the public MEI for accidents (the point of release assumed and the direction and distance to the public MEI). Also, could you provide analysis of intentional destructive acts (e.g., terrorist attacks) that have been performed.

In addition, here are a couple of follow-up requests/clarificaitons related to your data call response:

In the Irradiation Datacall, there are references to other documents or sources of information in many of the responses. In some cases, the needed data are provided and the reference appears to be for traceability. In other cases, the response appears to rely on the availability of the referenced document. Can you provide copies of the referenced documents (electronic versions preferred).

The datacall response regarding Dose to MEI from normal operations indicates an immersion dose for a recipient at Sequoyah. A similar dose receptor is not mentioned for Browns Ferry. Is there an air pathway analyzed and is the dose included in the 4.3E-2 reported for Browns Ferry? Regarding both plants, is there any internal dose associated with the air pathway?

The datacall response regarding Number of spent nuclear fuel assemblies reports 312/cycle for Browns Ferry and 81/cycle for Sequoyah (for LEU); these number go up to 336 and 89, respectively for use of MOX fuel. Is this per unit or for the entire plant site?

I will be out the next 2 weeks but please send this information to Kirk Owens who is handling this part of the analysis. His contact info is:

Kirk Owens | SAIC
Sr. Environmental Engineer | ILPSG
Energy, Environment, and Infrastructure

[redacted]

The address to send information to is:

SAIC, [redacted]

Thanks for your help,

John