
From: PDR Resource
Sent: Monday, August 05, 2013 11:46 AM
To:
Cc:
Subject: ML13133A132

I work at Public Document Room serving public. We received questions about this document. I thought document contact and originators are better candidate to answer to his questions. Can you help by answering to his comments. Please see e-mail below for detail.

Thanks

Reference Librarian
E-mail
☎ Office:
☎ Office:

-----Original Message-----

From: [REDACTED]
Sent: wednesday, July 31, 2013 11:49 AM
To: PDR Resource
Subject: Response from "Contact the Public Document Room Staff"

PDR Category: Other

comments: Dear mister ,

I have read the following study 'Consequence Study of a Beyond Design Basis Earthquake Affecting the Spent Fuel Pool for a US Mark I Boiling Water Reactor - Draft Report June 2013' and found this study very interesting. I would like to ask you some questions for a better understanding of the study:

- 1) the study is performed for a BWR nuclear reactor, can you give us the characteristics of the fuel assembly (type, pitch, enrichment, weight) and the name of the nuclear power plant?
- 2) we would like to know the irradiation history of the fuel assemblies (burnup, number of irradiation cycle and intercycle, length of irradiation and intercycle in days)
- 3) the study considers configuration 1x4 and 1x8 (one hot fuel surrounded by 4 or 8 cold fuel), according to you is it possible to store spent fuel like these configurations (are all the permutations of fuels practically manageable in exploitation) ?
- 4) for the configuration 1x4 high density, could you give us the spent fuel heat (KW) for hot and cold fuel?

5) the study concludes that for BWR fuel assemblies, the latent cancer fatal risk is very low. According to you, would the conclusion be similar if the study had been performed for PWR fuel assemblies? Is BWR more conservative than PWR for this study ?

6) Figure ES-1 shows that for small leak without mitigation measures, maximum release are 42% Cs for high density and 3.1% for low density. How can you explain that the latent cancer fatal risk is similar and very low for the two cases although there is a great release of Cs for high density? What are your assumptions for the radiological consequences study on the population?

7) did the study take into account a propagation of zirconium fire (Sandia National Laboratory experiment)?

8) could you briefly explain what the 10 CFR 50.54(hh)2 mitigation measures are?

9) Finally, in your conclusion you say that 'Analysis also shows that for the scenarios and spent fuel pool studied, spent fuel is only susceptible to a radiological release within a few months after the fuel is moved from the reactor into the spent fuel pool. After that time the spent fuel is coolable by air'. Can you explain this phenomena and particularly the assumptions that you made to conclude that the spent fuel is coolable by air? What are the spent fuel heat after a few month of storage in the pool?

10) Is there any containment protection in the pool?

Thank you very much for your answers

Best regards

organization

address1: _____

address2:

city:

state: ---

zip: _

country: FRANCE

phone: _____