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**Subject:** DEC-SAMA

Here is section 9.5 of Rev.4.2 of our PSA. Do you want to share this with DEC, or do you want this to come from us? I understand that by sending this to you, I am docketing this portion of the PSA.

#### 9.5 Loss of SFP Cooling and Fuel Handling Accidents

Because a loss of Spent Fuel Pool (SFP) cooling or a Fuel Handling Accident (FHA) could have radiological consequences, these types of events have been evaluated in the Ginna Station PSA. The total frequency of loss of SFP cooling or FHA events is  $6.71E-06$ /yr, of which  $5.54E-06$ /yr occurs during power operations and  $1.17E-06$ /yr occurs during shutdown. For power operations, loss of SFP cooling events contribute  $4.93E-06$ /yr (89.0%) while FHAs contribute the remaining  $6.10E-07$ /yr (11.0%). During shutdown, loss of SFP cooling events contribute  $8.37E-07$ /yr (71.6%), FHAs in the Auxiliary Building contribute  $2.07E-07$  (17.6%), and FHAs in containment contribute  $1.27E-07$ /yr (10.8%). A fuel handling accident initiating event is assumed to cause significant fuel damage. The initiating event frequency accounts for this assumption (see Sections 7.3.4.4 and 7.3.4.5). Thus, no further failures are required.

For loss of SFP cooling at power, the dominant contributors are floods, especially those in the Auxiliary Building which flood the basement and disable the SFP pumps (contributing 51.9% of at power losses of SFP); failures within the SFP system itself, excluding flood and fire scenarios (18.0%); and fires (15.3%). For loss of SFP cooling during shutdown, the dominant contributor is the loss of SFP cooling initiator itself, due to combinations of failures of the SFP recirculation pumps to start and/or run, valves in the SFP recirculation system transferring closed, and valves in the service water lines to the SFP heat exchangers failing closed. This is followed by a failure of operators to restore SFP cooling prior to boil-off. These scenarios contribute 71.3%.

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