

**From:** Charles Tinkler *RES*  
**To:** jhs1, Jnr  
**Date:** Mon, Mar 22, 1999 8:02 AM  
**Subject:** Fwd: User need memo

Is this doable?

*m/1*

**From:** Joseph Staudenmeier, *NRN*  
**To:** Charles Tinkler  
**Date:** Fri, Mar 19, 1999 2:32 PM  
**Subject:** User need memo

Charlie,  
Attached is a draft of a user need for the calculations we talked about. Let me know if you want any changes. I will try to get it over by the end of next week.

Joe Staudenmeier

**CC:** Christopher Gratton, Diane Jackson, George Hubba...

MEMORANDUM TO: Thomas L. King, Director  
Division of System Technology/RES

FROM: Gary M. Holahan, Director  
Division of Systems Safety and Analysis/NRR

SUBJECT: TECHNICAL SUPPORT FOR SPENT FUEL POOL  
ZIRCONIUM FIRE CONSEQUENCE ANALYSIS

On March 16, 1999 staff from DSSA met with staff from DST/AEB to discuss the progression and consequences of a zirconium fire in a spent fuel pool. DSSA is specifically interested in the offsite doses that result from a zirconium fire in a spent fuel pool. The information is needed to support proposed rulemaking for relaxing emergency planning and insurance requirements for permanently shutdown reactors. x x

DSSA is therefore requesting that your staff perform offsite dose calculations assuming that a zirconium fire progresses to fuel melting. The base case should be for a time of one year after shutdown and use the same fission product inventory and release fractions as the calculations performed in NUREG/CR-4982 Severe Accidents in Spent Fuel Pools in Support of Generic Safety Issue 82. A small to moderate number of sensitivity calculations may also be needed. The time frame for completion of these calculations is approximately two months. x x

Any questions on this matter may be addressed to Diane Jackson or Joseph Staudenmeier.

CONTACT: Joseph Staudenmeier, NRR/DSSA/SRXB  
415-2869