

April 22, 1996

NOTE TO: FILE

FROM: *TWA* Tom Alexion

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING INCREASE IN SPENT FUEL
POOL HEAT LOADS APPLICATION, SOUTH TEXAS UNITS 1 AND 2 (TACS M92575
AND M92576)

The attached questions were recently provided to the licensee.

The purpose of this memo is to place them in the PDR.

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REQUEST FOR ADDITIONAL INFORMATION
INCREASE IN SPENT FUEL POOL HEAT LOAD
SOUTH TEXAS PROJECT, UNITS 1 AND 2

1. For the proposed 'Normal Maximum' and 'Rapid Refueling' cases of thermal loadings (Ref. 1), show that (1) the spent fuel pool (SFP) walls and floors meet the licensing basis load combinations and acceptance criteria; and (2) the SFP liner and its anchors will not experience significant deformations, for example, relative expansion of the liner from the concrete wall or slab causing stresses at the anchor points to the liner in the plane of the liner. For the liner evaluation, consider the effects of the expected thermal cycling.

For the purpose of the liner assessment, you may use the acceptance criteria in Tables CC-3720-1 and CC-3730-1 (Service and Normal Categories) of Ref. 2. In utilizing the acceptance criterion for displacement of Table CC-3730-1, the maximum strains and displacements generated by the Operating Basis Earthquake should be combined with those due to the steady state temperature gradients.

2. For the proposed 'Peak SFP Temperature,' and 'Abnormal Maximum Case' of the thermal loadings (Ref.1), show that (1) the SFP floor and walls meet the licensing basis load combinations and acceptance criteria; and (2) the integrity of the SFP liner and its anchors will be maintained. For the liner evaluation consider the effects of duration of the thermal loads.

For the purpose of the liner assessment, you may use the acceptance criteria in Tables CC-3720-1 and CC-3730-1 (Factored and Abnormal/Extreme Environmental Categories) of Ref. 2. For this evaluation, the maximum strains and displacements generated by the Safe Shutdown Earthquake should be combined with those due to the temperature transients.

References:

1. Attachment 1 to the Proposed License Amendment from Houston Lighting and Power Company Concerning an Increase in Spent Fuel Pool Heat Loads, Undated, Ref. ST-HL-AE-5015.
2. Section III, Division 2 of the ASME Boiler and Pressure Vessel Code, 1995 Edition.