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Energy Systems

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DCP/NRC0656
Docket No.: STN-52-003

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Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTENTION: T. R. QUAY

SUBJECT: REPORTS IN SUPPORT OF THE IN-VESSEL STEAM EXPLOSION
TOPIC FOR AP600

Dear Mr. Quay:

Enclosed with this letter is a copy of three DOE-supported Advanced Reactor Severe Accident Program reports entitled "The Study of Steam Explosions in Nuclear Systems" (DOE/ID-10489, January 1995), "Premixing of Steam Explosions: PM-ALPHA Verification Studies" (DOE/ID-10504, September 1996), and "Propagation of Steam Explosions: ESPROSE.m Verification Studies" (DOE/ID-10503, August 1996).

These reports are referenced in the "Lower Head Integrity Under In-Vessel Steam Explosion Loads Report" (DOE/ID-10541) and are being transmitted for NRC staff review in support of the AP600 in-vessel retention (IVR) and in-vessel steam explosion topics.

These reports enable the staff to complete their review of these topics.

Please contact Cynthia L. Haag on (412) 374-4277 if you have any questions concerning this transmittal.

Brian A. McIntyre, Manager
Advanced Plant Safety and Licensing

/nja
Enclosures

cc: J. Sebrosky, NRC (enclosure)
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