

April 19, 2002

Dr. George E. Apostolakis, Chairman
Advisory Committee on Reactor Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

SUBJECT: PHASE 2 PRE-APPLICATION REVIEW FOR AP1000 PASSIVE PLANT
DESIGN

Dear Dr. Apostolakis:

Thank you for your letter of March 14, 2002, regarding the presentation to the Advisory Committee on Reactor Safeguards (ACRS) on March 8, 2002, of the staff's assessment of the AP1000 standard plant design pre-application review. The staff also had the opportunity to present a more detailed assessment to the ACRS subcommittees on Thermal-Hydraulic Phenomena and Future Plant Designs on February 14 and 15, 2002.

As presented on March 8, 2002, the scope of the staff's pre-application review was limited to assessing: (1) the applicability of the AP600 test program and analysis codes to the AP1000; (2) the applicability to AP1000 of three exemptions that were granted for the AP600; and (3) the acceptability of using design acceptance criteria (DAC) in lieu of detailed design information in the instrumentation and controls (I&C), control room (human factors engineering), and piping design areas.

The staff will document its assessment of the DAC issue in a Commission paper that should be made publicly available in April 2002. The staff documented its assessment of the other issues in a letter to Westinghouse Electric Company, dated March 25, 2002.

Your letter of March 14, 2002, conveyed ACRS conclusions and recommendations regarding the staff's pre-application review (Phase 2) and the planned design certification review (Phase 3) of the AP1000. In general, you indicated that ACRS agrees with the staff's conclusions regarding the pre-application review.

You also offered the recommendation that the Office of Nuclear Regulatory Research (RES) should further investigate acceptable ranges of ratios of Pi-groups for use in scaling. You stated that "[a]lthough we do not believe that this work is needed for AP1000 certification, this issue is likely to arise with certification of future reactor designs and such a study could tie down this loose end of the code, scaling, applicability, and uncertainty (CSAU) process." The Office of Nuclear Reactor Regulation conveyed this recommendation to RES which plans to present its response at a future Thermal-Hydraulic Phenomena subcommittee meeting.

Dr. G. E. Apostolakis

-2-

The staff will continue to engage ACRS during the design certification review. If you should have any questions or comments regarding the AP1000 standard plant design, please contact Mr. Lawrence J. Burkhart, the AP1000 Project Manager, at 301-415-3053 or ljb@nrc.gov.

Thank you for your continued support of the staff's review of the AP1000 standard design.

Sincerely,

/RA by Carl J. Paperiello Acting For/

William D. Travers
Executive Director
for Operations

Project No. 711

cc: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield
SECY

The staff will continue to engage ACRS during the design certification review. If you should have any questions or comments regarding the AP1000 standard plant design, please contact Mr. Lawrence J. Burkhart, the AP1000 Project Manager, at 301-415-3053 or ljb@nrc.gov.

Thank you for your continued support of the staff's review of the AP1000 standard design.

Sincerely,
/RA by Carl J. Paperiello Acting For/

William D. Travers
 Executive Director
 for Operations

Project No. 711

cc: Chairman Meserve
 Commissioner Dicus
 Commissioner Diaz
 Commissioner McGaffigan
 Commissioner Merrifield
 SECY

Distribution:
 Hard Copy
 NRLPO Rdg.
 LBurkhart
 MGamberoni
 JLyons

E-Mail	JStrosnider	JHannon
WTravers	JWermiel	GHolahan
CPaperiello	EImbro	WJensen
WKane	RCaruso	FAkstulewicz
PNorry	RBarrett	JRosenthal
JCraig	SBajorek	RIDSNNRRWpcmail (G20020160)
SBurns/KCyr	YHsii	
ATHadani	EThrom	
ISchoenfeld	RHagar	
ACRS R/F	DTerao	
SCollins/JJohnson	RBorchardt	

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML021020297.wpd
 PACKAGE ACCESSION NO. ML021060046 Incoming Accession No. ML020800740
 Response Accession No. ML021020297

OFFICE	NRLPO/PM	TechEd	NRLPO/DD	DSSA/D	DE/D	RES
NAME	LBurkhart:cn	PGarrity	JSebrosky for MGamberoni	JWermiel for GHolahan	RBarrett for JStrosnider	JRosenthal
DATE	4/12/02	4/10/02	4/09/02	4/12/02	4/10/02	4/10/02
OFFICE	NRLPO/D	ADIP	NRR/D	DEDO	EDO	
NAME	JSebrosky for JLyons	RBorchardt	SCollins/JJohnson	WKane	WTravers	
DATE	4/12/02	4/16/02	4/16/02	4/19/02	4/19/02	

OFFICIAL RECORD COPY