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

SUBJECT: PHEBUS-FP PROGRAM

Dear Dr. Apostolakis:

This letter is the staff response to the Advisory Committee on Reactor Safeguards (ACRS) letter dated May 8, 2002, to Chairman Richard A. Meserve on the "PHEBUS-FP Program."

The staff attended the ACRS briefing on PHEBUS-FP and plans for the PHEBUS-2K and PHEBUS-LOCA by representatives of the Institut de Radioprotection et de Sûreté Nucléaire (IRSN) on May 3, 2002. We concur with the ACRS view that the PHEBUS-FP international cooperative research program provided valuable data for validating severe accident analysis computer codes. IRSN has discussed the proposed follow-on program PHEBUS-2K and PHEBUS-LOCA with the staff. Currently, the staff is evaluating the technical aspects of these follow-on programs to ascertain their importance to our overall efforts to obtain experimental data on degradation of high burnup fuel, degradation of and fission product release from MOX fuel, and the effects of air ingression on core degradation and fission product release. We expect to conduct more discussions with IRSN on this matter. We appreciate ACRS view and support of our undertaking. We will keep ACRS apprised of our decisions to participate in the proposed follow-on programs, PHEBUS-2K and PHEBUS-LOCA.

Sincerely,

/RA/

William D. Travers Executive Director for Operations

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

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

SUBJECT: PHEBUS-FP PROGRAM

Dear Dr. Apostolakis:

This letter is the staff response to the Advisory Committee on Reactor Safeguards (ACRS) letter dated May 8, 2002, to Chairman Richard A. Meserve on the "PHEBUS-FP Program."

The staff attended the ACRS briefing on PHEBUS-FP and plans for the PHEBUS-2K and PHEBUS-LOCA by representatives of the Institut de Radioprotection et de Sûreté Nucléaire (IRSN) on May 3, 2002. We concur with the ACRS view that the PHEBUS-FP international cooperative research program provided valuable data for validating severe accident analysis computer codes. IRSN has discussed the proposed follow-on program PHEBUS-2K and PHEBUS-LOCA with the staff. Currently, the staff is evaluating the technical aspects of these follow-on programs to ascertain their importance to our overall efforts to obtain experimental data on degradation of high burnup fuel, degradation of and fission product release from MOX fuel, and the effects of air ingression on core degradation and fission product release. We expect to conduct more discussions with IRSN on this matter. We appreciate ACRS view and support of our undertaking. We will keep ACRS apprised of our decisions to participate in the proposed follow-on programs, PHEBUS-2K and PHEBUS-LOCA.

Sincerely,

/RA/

William D. Travers Executive Director for Operations

cc: Chairman Meserve Commissioner Dicus Commissioner Diaz

Commissioner McGaffigan Commissioner Merrifield

SECY

PACKAGE ML021780114

<u>Distribution</u>: See attached list C:\ORPCheckout\FileNET\ML021550291.wpd *See previous concurrence

OAR in ADAMS? (Y or N) ___Y__ ADAMS ACCESSION NO.: ML021550291 ____ TEMPLATE NO. EDO-002-Publicly Available? (Y or N) __Y__ DATE OF RELEASE TO PUBLIC __5___ SENSITIVE? __N___

To receive a copy of this document, indicate in the box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

OFFICE	SMSAB		C:SMSAB		D:DSARE		DD:RES		D:RES	
NAME	RLee:mmk:mb		JRosenthal		FEltawila		JStrosnider		AThadani	
DATE	05/30/02*		05/30/02*		05/30/02*		05/31/02*		06/03/02*	

OFFICE	DEDMRS	EDO	
NAME	CPaperiello	WTravers	
DATE	06/24/02	06/25/02	

Letter dated: 06/25/02

SUBJECT: PHEBUS-FP PROGRAM

Distribution:

CPaperiello, OEDO WKane, OEDO SCollins, NRR OEDO R/F G20020286/LTR-02-0349 DSARE R/F SMSAB R/F JCraig, AO

PNorry, DEDM SBurns/KCyr, OGC MVirgilio, NMSS

ISchoenfeld, OEDO

HNieh, OEDO

ACRS File

JStrosnider, RES

MMayfield, RES

SNewberry, RES

CAder, RES

PNorian, RES

RES 2002356

DSARE 2002-22

RLee R/F