April 21, 1994

Docket No. 52-003

MEMORANDUM FOR: R. W. Borchardt, Director
Standardization Project Directorate
Associate Directorate for Advanced Reactors
and License Renewal, NRR

FROM: Thomas J. Kenyon, Project Manager
Standardization Project Directorate
Associate Directorate for Advanced Reactors
and License Renewal, NRR

SUBJECT: NOTICE OF AUDIT TO REVIEW THE SHIELDING DESIGN OF THE AP600

DATE AND TIME: May 3 and 4, 1994 - 8:30 a.m. - 4 p.m.

LOCATION: Bechtel Offices
50 Beal Street
San Francisco, California

PURPOSE: To review the shielding design of the AP600, including leakage paths after a design basis accident. See enclosed agenda items.

PARTICIPANTS*:

NRR	Westinghouse	ORNL
D. Carter	J. Sejvar	B. Broadhead
T. Kenyon, et al.	N. Alper	
	D. Lindgren, et al.	

Original Signed By:

Thomas J. Kenyon, Project Manager
Standardization Project Directorate
Associate Directorate for Advanced Reactors
and License Renewal, NRR

Enclosure:
As stated

cc w/enclosure:
See next page

*Meetings between NRC technical staff and applicants or licensees are open for interested members of the public, petitioners, intervenors, or other parties to attend as observers pursuant to the "Open Meetings and Statement of NRC Staff Policy," 43 Federal Register 20858, June 28, 1978. However, portions of this meeting may be closed to protect Westinghouse proprietary information. Members of the public who wish to attend should contact me at (301) 504-1120.

DISTRIBUTION:
See next page

OFC:	LA:PDST:ADAR	PM:PDST:ADAR	SC:PDST:ADAR
NAME:	PShea	TKenyon:sg	RArchitzel
DATE:	04/20/94	04/21/94	04/21/94

OFFICIAL RECORD COPY:
DOCUMENT NAME: SHIELD.NOT

250039

D403

cc: Mr. Nicholas J. Liparulo
Nuclear Safety and Regulatory Analysis
Nuclear and Advanced Technology Division
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, Pennsylvania 15230

Mr. B. A. McIntyre
Advanced Plant Safety & Licensing
Westinghouse Electric Corporation
Energy Systems Business Unit
Box 355
Pittsburgh, Pennsylvania 15230

Mr. John C. Butler
Advanced Plant Safety & Licensing
Westinghouse Electric Corporation
Energy Systems Business Unit
Box 355
Pittsburgh, Pennsylvania 15230

Mr. M. D. Beaumont
Nuclear and Advanced Technology Division
Westinghouse Electric Corporation
One Montrose Metro
11921 Rockville Pike
Suite 350
Rockville, Maryland 20852

Mr. Sterling Franks
U.S. Department of Energy
NE-42
Washington, D.C. 20585

Mr. S. M. Modro
EG&G Idaho Inc.
Post Office Box 1625
Idaho Falls, Idaho 83415

Mr. Steve Goldberg
Budget Examiner
725 17th Street, N.W.
Room 8002
Washington, D.C. 20503

Mr. Frank A. Ross
U.S. Department of Energy, NE-42
Office of LWR Safety and Technology
19901 Germantown Road
Germantown, Maryland 20874

Mr. Victor G. Snell, Director
Safety and Licensing
AECL Technologies
9210 Corporate Boulevard
Suite 410
Rockville, Maryland 20850

Mr. Raymond N. Ng, Manager
Technical Division
Nuclear Management and
Resources Council
1776 Eye Street, N.W.
Suite 300
Washington, D.C. 20006-3706

WESTINGHOUSE AP600 SHIELDING DESIGN AGENDA ITEMS

- Trace/explain the leakage of the containment source term from the reactor primary containment to the auxiliary building (radioactive aux. building area cloud) after a design base accident. Include a description of the following:

  - core source term inventory (STI)
  - amount of STI released from the core
  - amount that crosses the containment boundary
  - assumptions and calculations involved
  - recirculation factors
  - containment building leakage and depletion factors

- Describe the following radiation sources as shown on your radiation zone post accident drawings:

  - RAC (Radioactive Auxiliary Building Area Cloud)
  - SCC (Shielded Containment Cloud)
  - UCC (Unshielded Containment Cloud)
  - PAS (Post-Accident Sample Piping)

- Provide the total shielding thickness (line of sight) between the containment source and the PASS sample room?

- Describe how much, if any additional shielding was provided under the upender section of the fuel transfer canal to reduce the radiation levels in the corridor below the upender as discussed in our last meeting.

Enclosure

DISTRIBUTION:
Docket File
PDR
PDST R/F
WRussell/FMiraglia, 12G18
AThadani, 12G18
DCrutchfield
WTravers
RBorchardt
RArchtizel
PShea
OPA
BGrimes, 11E2
EJordan, MNBB 3701
WDean, EDO
ACRS (11)
JMoore, 15B18
NRR Mailroom, 12G18
AChaffee, EAB
DCarter