

JUN - 7 1994

Docket Nos.: 50-424, 50-425
License Nos.: NPF-68, NPF-81

Georgia Power Company
ATTN: Mr. C. K. McCoy
Vice President
Vogtle Electric Generating Plant
P. O. Box 1295
Birmingham, AL 35201

Gentlemen:

SUBJECT: ENFORCEMENT CONFERENCE SUMMARY - VOGTLE UNITS 1 AND 2
(NRC INSPECTION REPORT NOS. 50-424/94-15, AND 50-425/94-15)

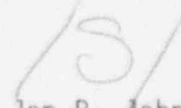
This letter refers to the Enforcement Conference held at our request on June 2, 1994, at the Region II office in Atlanta, Georgia. This meeting concerned activities authorized for your Vogtle facility. The issues discussed at this conference related to an event where the Unit 1 Piping Penetration Area Filtration and Exhaust System was in a degraded condition for approximately 54 days. This conference was to discuss the apparent violations, the causes and safety significance of this event, and to provide you the opportunity to point out any errors in the inspection report. A list of attendees and a copy of your enforcement conference handout are enclosed.

Your presentation provided additional information and clarification of the issues associated with the apparent violations and the items identified in our inspection report. We are continuing our review of these apparent violations to determine the appropriate enforcement action.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice", a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this letter, please contact us.

Sincerely,


Jon R. Johnson, Acting Director
Division of Reactor Projects

Enclosures:

1. List of Attendees
2. Handout

cc w/encls: (See page 2)

240040
9406270101 940607
PDR ADOCK 05000424
Q PDR

IF 45

cc w/encls:

J. D. Woodard
Senior Vice President-Nuclear
Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

J. B. Beasley
General Manager, Plant Vogtle
Georgia Power Company
P. O. Box 1600
Waynesboro, GA 30830

J. A. Bailey
Manager-Licensing
Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

Nancy G. Cowles, Counsel
Office of the Consumer's
Utility Council
84 Peachtree Street, NW, Suite 201
Atlanta, GA 30303-2318

Office of Planning and Budget
Room 615B
270 Washington Street, SW
Atlanta, GA 30334

Office of the County Commissioner
Burke County Commission
Waynesboro, GA 30830

Harold Reheis, Director
Department of Natural Resources
205 Butler Street, SE, Suite 1252
Atlanta, GA 30334

Thomas Hill, Manager
Radioactive Materials Program
Department of Natural Resources
4244 International Parkway
Suite 114
Atlanta, GA 30354

Attorney General
Law Department
132 Judicial Building
Atlanta, GA 30334

(cc w/encls cont'd - See page 3)

Georgia Power Company

3

JUN - 7 1994

(cc w/encls cont'd)
Ernie Toupin
Manager of Nuclear Operations
Oglethorpe Power Corporation
2100 E. Exchange Place
Tucker, GA 30085-1349

Charles A. Patrizia, Esq.
Paul, Hastings, Janofsky & Walker
12th Floor
1050 Connecticut Avenue, NW
Washington, D. C. 20036

bcc w/encls:
D. Seymour, RII
D. Hood, NRR
P. Skinner, RII
M. V. Sinkule, RII
Document Control Desk

NRC Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 572
Waynesboro, GA 30830

RII	RII	RII	RII	RII
<i>DS</i> DSeymour	<i>PS</i> PSkinner	<i>CE</i> CEvans	<i>BU</i> BUryc	<i>MS</i> MSinkule
06/3/94	06/3/94	06/3/94	06/3/94	06/3/94

ENCLOSURE 1

LIST OF ATTENDEES

U.S. Nuclear Regulatory Commission

- E. W. Merschoff, Acting Deputy Regional Administrator, Region II (RII)
- J. R. Johnson, Acting Director, Division of Reactor Projects (DRP), RII
- B. S. Mallett, Deputy Director, Division of Radiation Safety and Safeguards (DRSS), RII
- L. L. Wheeler, Sr., Project Manager, Project Directorate II-3, Office of Nuclear Reactor Regulation (NRR)
- P. H. Skinner, Section Chief, Reactor Projects Branch 3B, DRP, RII
- B. Uryc, Director, Enforcement and Investigation Coordination Staff, RII
- C. F. Evans, Regional Counsel, RII
- L. J. Watson, Enforcement Specialist, RII
- B. R. Bonser, Senior Resident Inspector, Vogtle, DRP, RII
- R. D. Starkey, Resident Inspector, Vogtle, DRP, RII
- T. Decker, Chief Radiation Effluent and Chemistry, DRSS, RII

Georgia Power Company

- W. Hairston, Jr., Executive Vice President
- J. Woodard, Senior Vice President
- C. McCoy, Vice President
- J. Beasley, General Manager, Vogtle Electric Generating Plant (VEGP)
- J. Bailey, Manager Licensing
- T. Wright, Manager Public Information
- J. Gasser, Unit Superintendent, Operations (VEGP)
- C. Williams, Shift Superintendent, Operations (VEGP)
- W. Stephens, Jr., Unit Shift Supervisor, (VEGP)
- W. Evans, Reactor Operator (VEGP)
- J. Wehrenberg, Principal Engineer, Southern Company Services
- K. Rubin, Engineer, Westinghouse

NRC ENFORCEMENT CONFERENCE PIPING PENETRATION AREA FILTRATION AND EXHAUST SYSTEM INOPERABILITY

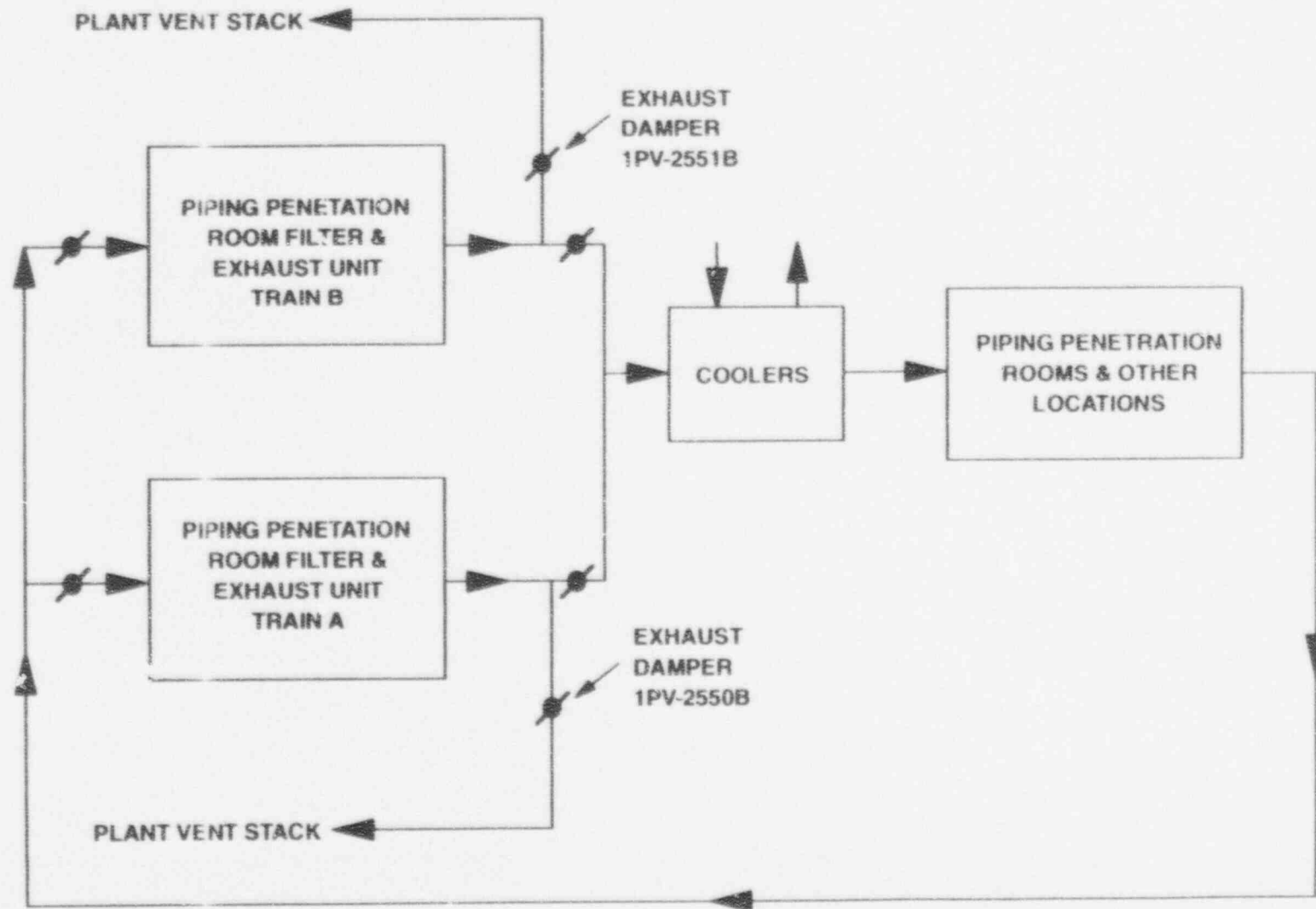
- | | |
|---------------------------|-----------------|
| * OPENING STATEMENT | GPC / NRC |
| * DESCRIPTION OF SYSTEM | BARNIE BEASLEY |
| - PURPOSE | |
| - TECHNICAL SPECIFICATION | |
| * CHRONOLOGY OF EVENT | BARNIE BEASLEY |
| * CAUSES OF EVENT | BARNIE BEASLEY |
| * SAFETY SIGNIFICANCE | ANDY WEHRENBERG |
| * CORRECTIVE ACTIONS | BARNIE BEASLEY |
| * SUMMARY | KEN McCOY |

PURPOSE OF PIPING PENETRATION FILTRATION SYSTEM

- * Limit/Reduce releases due to ECCS recirculation and component leakage during a LOCA.
 - Maintain negative pressure in piping penetration areas.
 - Additional filtration through charcoal filters.
 - Sends exhaust to plant vent stack.

- * Acceptance Criteria
 - Iodine leakage to both offsite and control room locations during post-LOCA will meet 10CFR 100 limit and GDC 19 acceptance criteria

PIPING PENETRATION AREA FILTRATION AND EXHAUST SYSTEM (SIMPLIFIED DIAGRAM)



TECHNICAL SPECIFICATION

T.S. 3.7.7 Two independent Piping Penetration Area Filtration and Exhaust Systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4

ACTION:

With one Piping Penetration Area Filtration and Exhaust System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

TECHNICAL SPECIFICATION SURVEILLANCE REQUIREMENT

TECHNICAL SPECIFICATION 4.7.7a SURVEILLANCE REQUIREMENT:

- * Once per 31 days, initiate flow through the HEPA filters and charcoal adsorbers
- * Verify that the system operates for at least 10 continuous hours with the heater control circuit energized

PURPOSE:

To verify the system operates for 10 continuous hours to reduce moisture buildup in the adsorber and HEPA filters

EVENT CHRONOLOGY

- 2/1/94 Clearances prepared by work planner for use during electrical penetration filter units deletion.
- 2/23/94 Clearances reviewed by Support Shift Supervisor.
- 2/28/94 Train 'A' Clearance authorized and installed.
- 3/1/94 Train 'B' Clearance authorized and installed.
- 3/15/94 Train 'A' Piping Penetration Filter Unit surveillance test completed and documented as satisfactory.
- 3/28/94 Train 'B' Piping Penetration Filter Unit surveillance test completed and documented as satisfactory with damper indication discrepancy observed
- 4/11/94 Train 'A' Piping Penetration Filter Unit surveillance test performed. WRTs on damper indications written
- 4/20/94 Electrician, during troubleshooting, discovered that the clearances removed the power supply for the light indicators - USS notified, but he did not realize that the dampers were not operable
- 4/24/94 During Work Order closeout, Piping Penetration Filter Unit impact recognized, dampers energized and operability/reportability evaluation initiated.
- 4/25/94 Engineering review of configuration and impact on piping penetration filtration system functions begun.
- 4/26/94 Reportability/operability determination completed; NRC notified.

CAUSES OF EVENT

- * **Inadequate Reviews of Circuit Breaker Clearances**
 - Personnel errors due to inadequate reviews of Train 'B' drawings

- * **Drawing Discrepancies**
 - Exhaust damper not shown on Train 'A' drawing & load list

- * **Failure to Discover Event Earlier -- Personnel Errors**
 - Operators not resolving the position indication problem

- * **Surveillance Guidance Unclear for Damper Position**

PREVIOUS SIMILAR EVENTS

- * No previous events were found with both trains of piping penetration filtration system inoperable at the same time due to exhaust dampers being deenergized
- * One occurrence was found with one train of piping penetration filtration system inoperable for longer than the 7 days allowed out of service time due to an exhaust damper being deenergized. The train 'A' exhaust damper was deenergized from October 28 - November 9, 1988, when an Electrical Penetration Filter System circuit breaker was opened.

SAFETY SIGNIFICANCE

System Acceptance criteria

- Limit/reduce releases to both offsite and control room locations due to leakage from the piping penetration rooms and ECCS components during post-LOCA condition to meet:
 - 10 CFR 100 Limit
 - GDC 19 Criteria

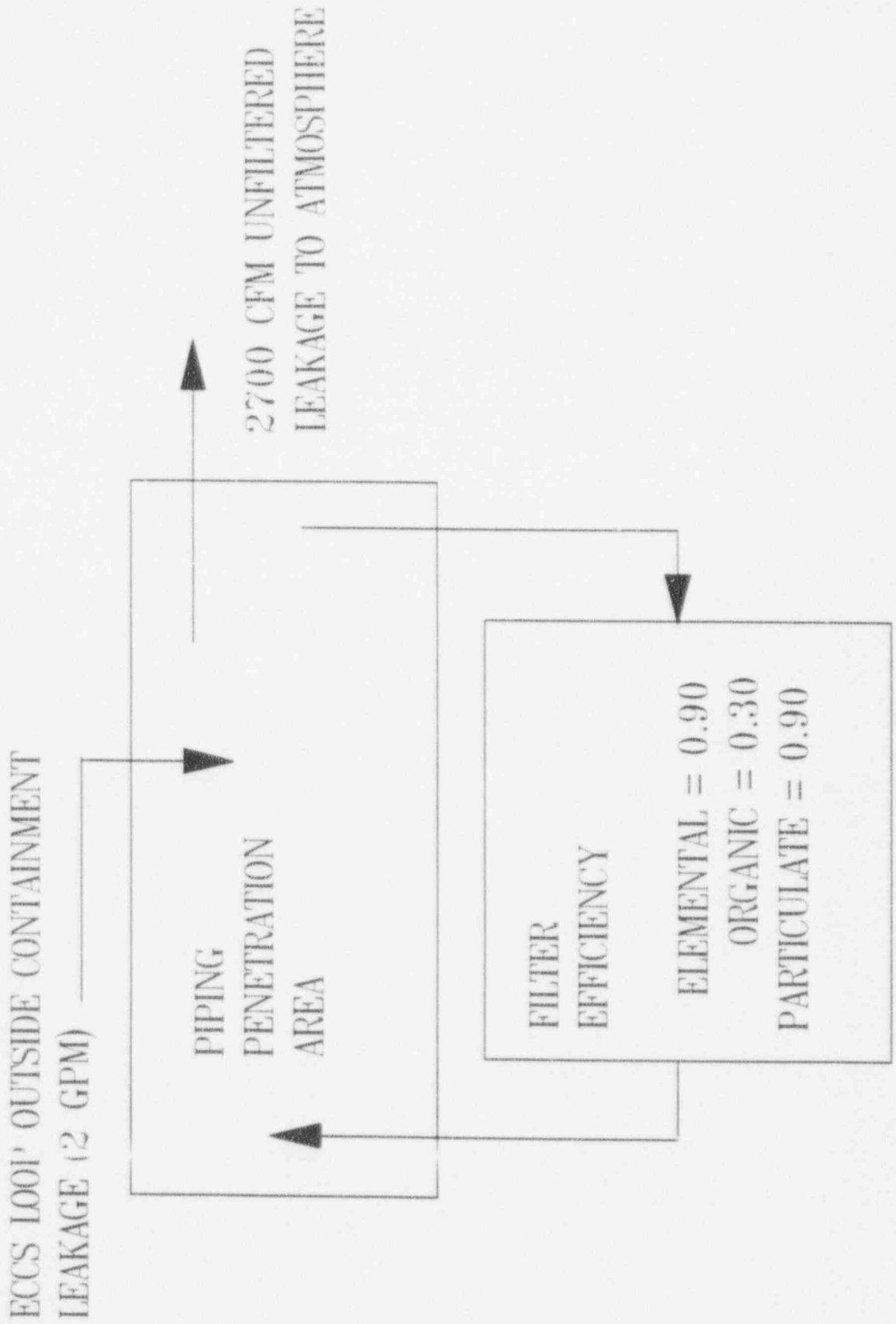
CORRECTIVE ACTIONS

- * Involved personnel have been counseled on significance of plant configuration control
- * Review event with work planners, system engineers & licensed operators, emphasizing configuration control
- * Drawings and load lists corrected
- * Tech. Spec. surveillance procedures being reviewed to determine if improvement is needed
- * Sample of drawings revealed no similar drawing/load list problem
The drawing review is continuing

SUMMARY

- * GPC considers this a significant event due to failure of administrative controls.
- * The piping penetration filtration system was degraded due to personnel errors and drawing error.
- * Problem discovered by licensee during performance of surveillance testing .
- * Dampers restored to service as soon as system impact realized. Reportability determination made.
- * Minimal safety significance since the GDC 19 and 10 CFR 100 acceptance criteria were satisfied.

PIPE PENETRATION AREA LEAKAGE EVALUATION MODEL



FILTERED RECIRCULATION FLOW = 14460 CFM

RESULTANT THYROID DOSES (REM)

CURRENT FSAR ANALYSIS	EAB	IPZ	CONTROL ROOM
CONTAINMENT LEAKAGE	50.6	57.2	26.0
CONTAINMENT PURGE	0.3	0.1	0.0
FILTERED EXHAUST (2700CFM)			
ECCS LEAKAGE	1.0	1.5	0.3
TOTAL	51.9	58.8	26.3
REVISED ANALYSIS			
UNFILTERED LEAKAGE (2700CFM)			
ECCS LEAKAGE			1.4
TOTAL			27.4

CONSERVATIVE MODEL PARAMETERS

SOURCE TERM	ANALYZED	EXPECTED
– CORE FRACTION (%)	50	10
– IODINE FORM (%) (ELEMENTAL, ORGANIC, PARTICULATE)	91, 4, 5	NO ORGANIC
ECCS LEAKAGE (GPM)	2	< 0.1
PIPE PENETRATION AREA LEAKAGE (CFM)	2700	1800–2600
PPAFES FILTER EFFICIENCY (%)	90, 30, 90	>= 98.8
PPAFES FILTER RH (%)	95	<= 74
CONTROL ROOM FILTER EFFICIENCY (%)	99, 99, 99	>= 99.8
CONTROL ROOM INTAKE (CFM)	1500	< 1000
RELEASE PATHWAY	DIRECT TO ATMOSPHERE	AUXILIARY BUILDING
– PLATEOUT	NONE	YES
– SETTLING	NONE	YES
– HOLDUP/DECAY	NONE	YES

SAFETY SIGNIFICANCE SUMMARY

	EAB	LPZ	CONTROL ROOM
THYROID DOSE ACCEPTANCE CRITERIA (REM)	300	300	30
RE-ANALYSIS RESULTS	WELL WITHIN	WELL WITHIN	27.4

CONCLUSION: THE PPAFES REMAINED CAPABLE OF MEETING THE
ACCEPTANCE CRITERIA DURING THIS EVENT.