10 CFR 50.55a(a)(3)

PECO ENERGY

PECO Energy Company
Nuclear Group Headquarters
965 Chesterbrook Boulevard
Wayne, PA 19087-5691

September 5, 1995

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Subject: Peach Bottom Atomic Power Station, Units 2 and 3
Submittal of Additional Information Concerning the Proposed Alternative Repair Plan In Accordance with 10 CFR 50.55a(a)(3)

References:

1. Letter from G. A. Hunger, Jr. (PECO Energy Company) to U. S. Nuclear Regulatory Commission (USNRC), dated September 16, 1994
2. Letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC, dated September 26, 1994
3. Letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC, dated February 14, 1995
4. Letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC, dated June 22, 1995
5. Letter from J. W. Shea (USNRC) to G. A. Hunger, Jr. (PECO Energy Company), dated July 27, 1995
6. Letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC, dated August 17, 1995
7. Letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC, dated August 28, 1995

Dear Sir:

In the above Referenced letters, PECO Energy Company supplied information regarding the approval of a proposed repair plan for the Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3 core shroud, in accordance with 10 CFR 50.55a(a)(3), in the event that such a repair is determined to be necessary. Attachments 1 and 2 to this letter contain additional information supporting this request. Attachments 1 and 2 contain dimensional changes made to aid installation, and incorporates lessons learned from other General Electric installations. The revised documents include the modification drawing and parts list, and the Field Disposition Instruction (FDI).

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Ltr. Encl.
1 INP

Drawings located in Central Files change: NRC ADC

Attachment 2 contains information proprietary to General Electric. General Electric requests that the Attachment 2 information be withheld from public disclosure in accordance with 10 CFR 2.790(a)(4). In accordance with 2.790(b)(1), an affidavit supporting this request is provided in Attachment 2.

If you have any questions, please contact us.

Very truly yours,

G. A. Hunger, Jr.

G. A. Hunger, Jr.,
Director - Licensing

Attachment

cc: T. T. Martin, Administrator, Region I, USNRC
W. L. Schmidt, USNRC Senior Resident Inspector, PBAPS

General Electric Company

AFFIDAVIT

I, George B. Stramback, being duly sworn, depose and state as follows:

(1) I am Project Manager, Licensing Services, General Electric Company ("GE") and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.

(2) The information sought to be withheld is contained in the GE drawing *Reactor Modification & Installation Drawing,* 105E1455 Revision 3. This document and the supporting documents for the individual parts of the modification, taken as a whole, constitutes a proprietary compilation of information, some of it also independently proprietary, prepared by the General Electric Company. The independently proprietary elements that are drawings are delineated by the GE drawings, being marked as proprietary information.

(3) In making this application for withholding of proprietary information of which it is the owner, GE relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4), and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR 9.17(a)(4), 2.790(a)(4), and 2.790(d)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).

(4) Some examples of categories of information which fit into the definition of proprietary information are:

a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by General Electric's competitors without license from General Electric constitutes a competitive economic advantage over other companies;

b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product;

c. Information which reveals cost or price information, production capacities, budget levels, or commercial strategies of General Electric, its customers, or its suppliers;

d. Information which reveals aspects of past, present, or future General Electric customer-funded development plans and programs, of potential commercial value to General Electric;

e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

Both the compilation as a whole and the marked independently proprietary elements incorporated in that compilation are considered proprietary for the reason described in items (4)a., (4)b. and (4)e., above.

(5) The information sought to be withheld is being submitted to NRC in confidence. That information (both the entire body of information in the form compiled in these drawings, and the marked individual proprietary elements) is of a sort customarily held in confidence by GE, and has, to the best of my knowledge, consistently been held in confidence by GE, has not been publicly disclosed, and is not available in public sources. All disclosures to third parties including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

(6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within GE is limited on a "need to know" basis.

(7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his delegate), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GE are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.

STATE OF CALIFORNIA)
) ss:
COUNTY OF SANTA CLARA)

George B. Stramback, being duly sworn, deposes and says:

That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

Executed at San Jose, California, this 28th day of August 1995.

George B. Stramback
George B. Stramback
General Electric Company

Subscribed and sworn before me this 28th day of August 1995.

Paula F. Hussey
Notary Public, State of California

(8) The information identified in paragraph (2), above, is classified as proprietary because it constitutes a confidential compilation of information, including detailed design drawing results of a hardware design modification (stabilizers for the shroud horizontal welds) intended to be installed in a reactor to resolve the reactor pressure vessel core shroud weld cracking concern. The development and approval of this design modification utilized systems, components, and models and computer codes that were developed at a significant cost to GE, on the order of several hundred thousand dollars.

The detailed results of the analytical models, methods, and processes, including computer codes, and conclusions from these applications, represent, as a whole, an integrated process or approach which GE has developed, and applied to this design modification. The development of the supporting processes was at a significant additional cost to GE, in excess of a million dollars, over and above the large cost of developing the underlying individual proprietary drawings information.

(9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GE's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GE's comprehensive BWR technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology and includes development of the expertise to determine and apply the appropriate evaluation process. In addition, the technology base includes the value derived from providing analyses done with NRC-approved methods.

GE's competitive advantage will be lost if its competitors are able to use the results of the GE experience to avoid fruitless avenues, or to normalize or verify their own process, or to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

While some of the underlying analyses, and some of the gross structure of the process, may at various times have been publicly revealed, enough of both the analyses and the detailed structural framework of the process have been held in confidence that this information, in this compiled form, continues to have great competitive value to GE. This value would be lost if the information as a whole, in the context and level of detail provided in the subject GE drawings, were to be disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure would unfairly provide competitors with a windfall, and deprive GE of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing its analytical process.

ATTACHMENT 1

DOCUMENT DESCRIPTION	DOCUMENT NUMBER	PREVIOUS SUBMITTAL REVISION	CURRENT SUBMITTAL REVISION	REASON FOR CHANGE (SEE NOTE)
REPAIR HARDWARE, DESIGN SPEC.	25A5579	3	3	1
STABILIZER CODE, DESIGN SPEC.	25A5580	4	4	1
FABRICATION SPEC.	25A5601	2	2	1
CLEANING AND CLEANLINESS CONTROL	21A2040	1	1	1
INSTALLATION SPECIFICATION	25A5581	2	2	1
REACTOR VESSEL STRESS REPORT	25A5607	4	4	1
SHROUD & REPAIR HARDWARE STRESS ANALYSIS	771-58-0994	4	4	1
STABILIZER INSTALLATION , DESIGN REPORT	771-59-0994	4	4	1
SEISMIC ANALYSIS	771-60-0994	2	2	1
FIELD DISPOSITION INSTRUCTION - UNIT 2	0257-71067	1	1	1
FIELD DISPOSITION INSTRUCTION - UNIT 3	0183-71067	0	1	8
PARTS LIST	PL112D6347	1	1	1
PARTS LIST	PL112D6348	2	2	1
PARTS LIST	PL112D6349	0	0	1
PARTS LIST	PL112D6358	0	0	1
PARTS LIST	PL112D6359	0	0	1
PARTS LIST	PL112D6360	0	0	1
PARTS LIST	PL112D6495	0	0	1
PARTS LIST	PL105E1455	2	3	8
NUT, TIE ROD	112D6313	0	0	1
NUT, TOP SUPPORT	112D6321	3	3	1
BOLT, TOP SUPPORT	112D6322	0	0	1
NUT, TOP SUPPORT	112D6323	0	0	1
RETAINER	112D6324	1	1	1
SPRING, RETAINER	112D6325	1	1	1
SLEEVE, JACK	112D6327	0	0	1
WASHER, JACK	112D6328	0	0	1
RING, MID SUPPORT	112D6331	2	2	1
SCREW, MID SUPPORT	112D6332	0	0	1
LATCH	112D6338	0	0	1
UPPER STABILIZER	112D6347	2	2	1
STABILIZER SUPPORT ASSEMBLY	112D6348	4	4	1
TIE ROD ASSEMBLY	112D6349	1	1	1
ROD, TIE	112D6350	3	3	1
SPRING, LOWER	112D6351	1	1	1
SPRING, UPPER	112D6352	2	2	1
SUPPORT, UPPER	112D6353	3	3	1
SUPPORT	112D6354	3	3	1
CONTACT, LOWER	112D6355	1	1	1
SUPPORT, MID	112D6356	1	1	1
CONTACT, UPPER	112D6357	1	1	1
TIE ROD / SPRING ASSEMBLY	112D6358	1	1	1
MID SUPPORT	112D6359	1	1	1
LOWER STABILIZER	112D6360	1	1	1
BOLT, TOGGLE	112D6489	2	2	1
SUPPORT, LOWER	112D6490	2	2	1
TOGGLE	112D6491	2	2	1
PIN, TOGGLE BOLT	112D6492	1	1	1
WASHER, TOGGLE BOLT	112D6493	1	1	1
NUT, TOGGLE BOLT	112D6494	2	2	1
TOGGLE BOLT ASSEMBLY	112D6495	1	1	1
BOLT, JACK	112D6496	1	1	1
SPRING, RETAINER	112D6497	1	1	1
BRACKET, UPPER SPRING	112D6498	3	3	1
SCREW, TOP SUPPORT BOLTING	112D6501	1	1	1
COUPLING, TOP SUPPORT BOLTING	112D6502	3	3	1
EXTENSION, LOWER SPRING	112D6503	1	1	1
PIN	112D6504	1	1	1
PIN, CLEVIS	112D6505	1	1	1
ARM, TORSION	112D5242	1	1	1
BOLT, TORSION ARM	112D5243	1	1	1
NUT, LOCK	112D5244	0	0	1
MODIFICATION DRAWING	105E1455	2	3	8
SPACER, UPPER SUPPORT	112D6752	1	1	1
NUT, TIE ROD	112D6777	0	0	1
BOLT, TOP SUPPORT	112D6788	0	0	1
RETAINER	112D6789	0	0	1
GE RESPONSES TO NRC QUESTIONS (GENERIC)	DRF B13-01732	0	0	1
RESPONSES TO NRC QUESTIONS FOR PBAPS	GENE-B13-01732-001	0	0	1

NOTES:
1. NO CHANGE SINCE LAST SUBMITTAL.
2. DRAWING CORRECTIONS, NO CHANGE IN DESIGN.
3. INCORPORATED UNIT 3 SEISMIC ANALYSIS INFORMATION.
4. MINOR MODIFICATION TO IMPROVE LOAD CAPACITY, FABRICATION, OR ASSEMBLY.
5. DELETED HEAT TREATMENT REQUIREMENT FOR THREADS.
6. INCORPORATED ANALYSIS OF CORE SPRAY PIPING INSIDE THE VESSEL
7. SCOPE INCREASE TO ADD WELD H8 EVALUATION
8. INCORPORATE LESSONS LEARNED IMPROVEMENTS
9 INPROCESS REVISION DUE TO PECO/GE COMENTS AND APPROVAL

GE Nuclear Energy

Field Disposition Instruction

ORIGINAL WHEN STAMPED IN RED

FDI NO. HE3-0183-71067-1

REVISION 1

SHEET 1 OF 5

PROJECT PEACH BOTTOM UNIT 3

EQUIPMENT SHROUD

MPL NO. 2-1-26 (B13-D070)

DATE OF ISSUE SEP 01 1995

J TROVATO J. Trovato

ECN/IR/DDR/FDDR

N.A.

This Revision will supersede Revision 0 of this FDI in its entirety.

I. Purpose

This FDI documents the design, requirements, and material required to install the stabilizers for the shroud horizontal welds.

II. Required Documents (supplied by Engineering)

A. 105E1455, Rev. 3, "Reactor Modification Drawing"
B. PL105E1455, Rev. 3, "Modification Drawing Parts List"
C. 25A5581, Rev. 3, "Installation Specification"
D. 21A2040, Rev. 1, "Cleaning and Cleanliness Control"
E. 25A5579, Rev. 3 "Shroud Repair Hardware, Design Specification"
F. 25A5580, Rev. 3 "Shroud Stabilizer, Code Design Specification"
G. 10CFR50.59 Review for Modification P00435, Rev. 1
H. 25A5607, Rev. 4, "Reactor Vessel Stress Report"
I. GENE-771-58-0994, Rev. 4, "Shroud and Shroud Repair Hardware Stress Analysis"
J. GENE-771-60-0994, Rev. 2, "Seismic Analysis"
K. QAM-001, Rev. 4, "GE Quality Assurance Manual"
L. 25A5601, Rev. 1 "Fabrication Specification"
M. GENE-771-59-0994, Rev. 4, "Design Report for the Installation of Stabilizers on the Core Shroud"

Paul F Wise 9-1-95

	DATE	APPROVALS	DATE
M.O. LENZ			
Mark O. Lenz FDI ORIGINATOR	9/1/95	M.O. Lenz FOR W.G. JAMESON	9/1/95
M P Gaertner QUALITY	9-1-95	M.O. Lenz FOR R.W. WHITUNG	9/1/95
Mark O. Lenz M.O. LENZ MATL APPL ENGR	9/1/95		
A.L. FINNEY A. Lynn Finney ENGRG MANAGER	1SEP95		
A. Lynn Finney FOR D.W. SAWYER RESPONSIBLE ENGR	1SEP95		
PROJECT MANAGER D.W. SMITH	9/1/95		

THIS EQUIPMENT IS SAFETY RELATED [X] YES [ ] NO

SAFETY FUNCTION IS AFFECTED [ ] YES [X] NO

FIELD WORK ORDER NO.

COMPLETION RECORD REQUIRED BY R.E. YES [X] NO [ ]

DISTRIBUTION CODE

INTERNAL	EXTERNAL

FDI TASK COMPLETED — DATE

SITE QUALITY CONTROL

FIELD MANAGER

MS WORD

GE Nuclear Energy

Field Disposition Instruction

ORIGINAL WHEN STAMPED IN RED

FDI NO. 0183-71067-1
REVISION 1
SHEET 2 OF 5

DESCRIPTION OF TASK

III. Material Required (per Paragraph II.A and II.B)

				QTY.	P.L.
A.	112D6347	Rev. 2	Upper Stabilizer Assembly	4	Rev. 1
B.	112D6348	Rev. 4	Stabilizer Support assembly	4	Rev. 2
C.	112D6349	Rev. 1	Tie Rod Assembly	4	Rev. 0
D.	112D6350	Rev. 3	Rod, Tie	4	No
E.	112D6777	Rev. 0	Nut, Tie Rod	4	No
F.	112D6351	Rev. 1	Spring, Lower	4	No
G.	112D6352	Rev. 2	Spring, Upper	4	No
H.	112D6498	Rev. 3	Bracket, Upper Spring	4	No
I.	112D6353P1	Rev. 3	Support, Upper	4	No
J	112D6353P2	Rev. 3	Support, Upper	4	No
K.	112D6354	Rev. 3	Support	4	No
L.	112D6355	Rev. 1	Contact, Lower	4	No
M.	112D6505	Rev. 1	Pin, Clevis	4	No
N	112D6321P1	Rev. 3	Nut, Top Support	16	No
O.	112D6321P2	Rev. 3	Nut, Top Support & Pin	16	No
P.	112D6321P3	Rev. 3	Nut, Top Support & Pin	8	No
Q.	112D6321P4	Rev. 3	Nut, Top Support & Pin	16	No
R.	112D6321P5	Rev. 3	Nut, Top Support & Pin	4	No
S.	112D6788	Rev. 0	Bolt, Top Support	8	No
T.	112D6323	Rev. 0	Nut, Top Support	8	No
U.	112D6789	Rev. 0	Retainer	4	No
V.	112D6325	Rev. 1	Spring Retainer	16	No
W.	112D6496	Rev. 1	Bolt, Jack	4	No
X.	112D6327	Rev. 0	Sleeve, Jack Bolt	4	No
Y.	112D6328	Rev. 0	Washer, Jack Bolt	4	No
Z.	112D6497	Rev. 1	Spring, Retainer	4	No
AA.	112D6356	Rev. 1	Support, Mid	4	No
BB.	112D6331	Rev. 2	Ring, Mid Support	4	No
CC.	112D6332	Rev. 0	Screw, Mid Support	4	No
DD.	112D6501	Rev. 1	Screw, Top Support	8	No
EE.	112D6502	Rev. 3	Coupling, Top Support Bolting	4	No
FF.	112D6338P1	Rev. 0	Latch	4	No
GG.	112D6338P2	Rev. 0	Latch	4	No
HH.	112D6357	Rev. 1	Contact, Upper	4	No
II.	112D6358	Rev. 1	Tie Rod-Spring Assembly	4	Rev. 0
JJ.	112D6359	Rev. 1	Mid Support Assembly	4	Rev. 0

KK.	112D6360	Rev. 1	Lower Stabilizer Assembly	4	Rev. 0
LL.	112D6489	Rev. 2	Bolt, Toggle	8	No
MM.	112D6490	Rev. 2	Support, Lower	4	No
NN.	112D6491	Rev. 2	Toggle	8	No
OO.	112D6492	Rev. 1	Pin, Toggle Bolt	8	No
PP.	112D6493	Rev. 1	Washer, Toggle Bolt	8	No
QQ.	112D6494	Rev. 2	Nut, Toggle Bolt	8	No
RR.	112D6495	Rev. 1	Toggle Bolt Assembly	8	Rev. 0
SS.	112D6503	Rev. 1	Extension, Lower Spring	4	No
TT.	112D6504P1	Rev. 1	Pin	8	No
UU.	112D6504P2	Rev. 1	Pin	4	No
VV.	112D5242P1	Rev. 1	Arm, Torsion	4	No
WW.	112D5242P2	Rev. 1	Arm, Torsion	4	No
XX.	112D5243	Rev. 1	Bolt, Torsion Arm	4	No
YY.	112D5244	Rev. 0	Nut, Lock	8	No
ZZ.	112D6321P6	Rev. 3	Nut, Top Support & Pin	4	No
AAA.	112D6752	Rev. 1	Spacer, Upper Support	8	No

IV. Repair Procedure

All of the stabilizer installation shall be performed underwater. All work shall be performed in accordance with the documents of Paragraph II.A and II.C.

1.0 Pre-Installation Visual Examination.

a. Perform a VT-1 examination of the RPV wall and shroud wall at the expected contact locations with the installed shroud stabilizer assemblies.

b. Perform a VT-1 examination of the circumfrential weld (H9) between the shroud support plate and the RPV, adjacent to the installation location for the shroud stabilizer lower support.

c. Perform an enhanced VT-1 visual inspection or UT inspection of the vertical shroud welds V3 through V6, for a minimum length of 12 1/2 inches from the intersection with horizontal H4 weld.

2.0 Shroud Head and Shroud Support Plate.
Machine the required slots in the shroud head and the holes in the shroud support plate, per II.A.

3.0 Repair Clamp Installation
Install the four stabilizers in accordance with the requirements in Paragraph II.A.

4.0 Post-Installation Examination

A visual examination of the completed repair shall be performed. The television camera shall be capable of resolving a .001 inch diameter wire on a neutral gray background.

a. Examine each clevis pin, 112D6505, to assure that it is properly located and in contact with the bottom of the slot in the lower spring.

b. Examine the stabilizer assembly for contact between the RPV wall and the upper contact (1 contact point), mid support (2 contact points), and lower contact (1 contact point).

c. Examine the stabilizer assembly for contact between the shroud and the upper support (3 contact points minimum) and lower spring (1 contact point minimum).

d. Examine the Lock Nut (112D5244) on each of eight toggle bolt assemblies, to verify that crimping has occurred.

e. Examine to confirm that all locking devices are engaged.

V. Quality Requirements

1.0 GE site Quality Control Representatives shall provide QC surveillance and document the field work performed, to insure that the requirements of this FDI and Modification drawing 105E1455 have been met. All work is to be performed in accordance with GE Quality Assurance Manual QAM-001, Rev. 4

2.0 The following shall be the minimum Quality Control Documentation requirements:

a. Video tape of the completed repair.
b. Process documentation and inspection data sheets as applicable.
c. As-built dimensions per II.A.

3.0 The following procedures and supporting documentation shall be submitted to GE Site QA and Plant Owner (as applicable) for review, and approval obtained prior to use. Previously approved GENE procedures may be used in satisfying the requirements of this paragraph provided they are approved by the Plant Owner.

a. Installation procedures, travelers, or sequence data sheets, measurement data sheets, drawings, sketches, instructions, etc. These procedures or travelers shall include cleaning and cleanliness, tool control, machining process, and visual inspection methods.

b. Hardware certifications.

VI. Safety/Reliability

Safety and reliability have been considered in the issue of the design documents this project. The requirements for this design are contained in the Design Specifications 25A5579 and 25A5580. The seismic analysis of the repair is documented in GENE-771-60-0994. The structural analysis of the repair is documented in GENE-771-58-0994 and 25A5607. The safety evaluation for the repair is contained in 10CFR50.59 Review for Modification P00435. No new safety requirements, reviews or technical specifications are required by this FDI.