



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

50-277

September 15, 1995

Mr. Richard Ochs
Maryland Safe Energy Coalition
P.O. Box 33111
Baltimore, MD 21218

Dear Mr. Ochs:

In William T. Russell's letter of December 2, 1994, the NRC acknowledged receipt of your press release of October 6, 1994, in which you requested that the NRC (1) immediately shut down both reactors at Peach Bottom until the risk of fire near electrical control cables due to combustible insulation is corrected; (2) suspend the Peach Bottom license until an analysis of the synergistic effects of cracks in multiple parts is conducted; (3) immediately shut down both reactors at Peach Bottom until all safety class component parts in both reactor vessels, including the cooling system, the heat transfer system and the reactor core, are inspected; and (4) immediately shut down both reactors at Peach Bottom pending correction of numerous equipment problems identified in recent NRC inspection reports. In his letter, Mr. Russell stated that your press release was being treated as a petition in accordance with 10 CFR 2.206 of the NRC's regulations. In addition, Mr. Russell denied your requests for immediate action and indicated that the remaining issues raised in the petition would be addressed within a reasonable time.

I am writing to update you on staff efforts to review your petition. In my letter of June 20, 1995, I forwarded the licensee's response to certain staff questions regarding Thermo-lag. The staff sent additional questions to PECO by letter dated May 30, 1995 and PECO responded on August 2, 1995. The August 2, 1995 letter is included as Enclosure 1. The staff is reviewing the latest information provided by PECO.

In his December 2, 1994 letter, Mr. Russell discussed the recent core shroud inspections at Peach Bottom Units 2 and 3. By letter dated June 16, 1995 (Enclosure 2), PECO provided plans to inspect the Unit 3 core shroud during a refueling outage which is currently scheduled to begin September 22, 1995. In that letter, PECO stated that "if the results of the shroud inspections do not satisfactorily demonstrate structural integrity of the shroud, a contingency repair option has been planned." The staff is currently reviewing PECO's proposed contingency repair. Information on the repair design is contained in letters dated February 14, 1995 (forwarded to you previously), June 22, 1995 (Enclosure 3), and August 17, 1995 (Enclosure 4).

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Please feel free to contact me, as the petition manager, at (301) 415-1428, if you have any questions. I will provide you with additional periodic updates while the staff prepares its final response to your petition.

Sincerely,

/s/

Joseph W. Shea, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

- Enclosures:
1. Letter from G. Hunger, PECO, to NRC, dated August 2, 1995
 2. Letter from G. Hunger, PECO, to NRC, dated June 16, 1995
 3. Letter from G. Hunger, PECO, to NRC, dated June 22, 1995
 4. Letter from G. Hunger, PECO, to NRC, dated August 17, 1995

cc w/o enclosures:
 Mr. George A. Hunger, Jr.
 Director-Licensing, MC 62A-1
 PECO Energy Company
 Nuclear Group Headquarters
 Correspondence Control Desk
 P.O. Box No. 195
 Wayne, PA 19087-0195

OFFICE	PDI-2/AA	PDI-2/PM	PDI-2/PD			
NAME	M. Brien	J. Shea	J. Solz			
DATE	9/14/95	9/15/95	9/15/95			

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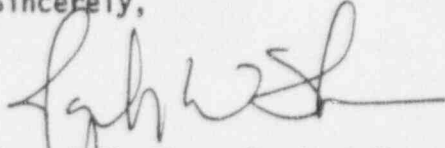
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Mr. R. Ochs

- 2 -

Please feel free to contact me, as the petition manager, at (301) 415-1428, if you have any questions. I will provide you with additional periodic updates while the staff prepares its final response to your petition.

Sincerely,



Joseph W. Shea, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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cc w/o enclosures:
Mr. George A. Hunger, Jr.
Director-Licensing, MC 62A-1
PECO Energy Company
Nuclear Group Headquarters
Correspondence Control Desk
P.O. Box No. 195
Wayne, PA 19087-0195

DISTRIBUTION: Letter to Mr. Richard Ochs, Maryland Safe Energy Coalition
from Joseph Shea, NRC, Dated: September 15, 1995

Docket File 50-277/50-278 (Reference GT 0010547)

PUBLIC

PDI-2 Reading

S. Varga (w/o attachments)
J. Zwolinski (w/o attachments)
J. Stolz (w/o attachments)
J. Shea
M. O'Brien
C. Anderson, RGN I
G. Longo, OGC
M. Gamberoni (w/o attachments)
C. Norsworthy (w/o attachments)
R. Cooper, RGN I (w/o attachments)

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PECO ENERGY

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

August 2, 1995

Docket Nos. 50-277
50-278
50-352
50-353

License Nos. DPR-44
DPR-56
NPF-39
NPF-85

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

Subject: Peach Bottom Atomic Power Station, Units 2 and 3,
Limerick Generating Station, Units 1 and 2,
Request for Additional Information Regarding
Generic Letter 92-08, "Thermo-Lag 330-1 Fire Barriers"

- References:
- 1) Letter from G. A. Hunger, Jr. to USNRC
Document Control Desk dated April 16, 1993
 - 2) Letter from G. A. Hunger, Jr. to USNRC
Document Control Desk dated December 29, 1993
 - 3) Letter from G. A. Hunger, Jr. to USNRC
Document Control Desk dated February 4, 1994
 - 4) Letter from G. A. Hunger, Jr. to USNRC
Document Control Desk dated December 19, 1994
 - 5) Letter from G. A. Hunger, Jr. to USNRC
Document Control Desk dated March 29, 1995
 - 6) Letter from G. A. Hunger, Jr. to USNRC
Document Control Desk dated June 26, 1995

Dear Sirs:

The subject request for additional information (RAI) regarding Generic Letter (GL) 92-08, "Thermo-Lag 330-1 Fire Barriers," dated May 30, 1995, requested that PECO Energy Company, (PECO Energy), respond in a timely manner with additional information regarding Thermo-Lag 330-1 fire barrier systems. PECO Energy had previously responded on April 16, 1993 (reference letter 1), December 29, 1993 (reference letter 2), February 4, 1994 (reference letter 3), December 19, 1994 (reference letter 4), and March 29, 1995 (reference letter 5) to this GL. In addition, the Individual Plant Examination of External Events (IPEEE) was submitted by Reference 6.

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Enclosure 1

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Attachment I to this letter includes our response to the latest RAI. This response is being submitted under oath or affirmation as requested in the RAI.

If you have any questions please feel free to contact us.

Very truly yours,

G. A. Hunger, Jr.

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

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

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COMMONWEALTH OF PENNSYLVANIA

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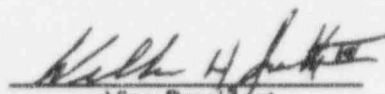
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COUNTY OF CHESTER

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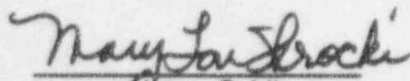
W. H. Smith, III, being first duly sworn, deposes and says:

That he is Vice President of PECO Energy Company; that he has read the attached response to the Request for Additional Information regarding Generic Letter 92-08 for Peach Bottom Facility Operating Licenses DPR-44 and DPR-56, and Limerick Facility Operating Licenses NPF-39 and NPF-85, and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.


Vice President

Subscribed and sworn to

before me this *2nd* day
of *August* 1995.


Notary Public

Notarial Seal
Mary Lou Skrocki, Notary Public
Tredyffrin Twp., Chester County
My Commission Expires May 17, 1999

Member, Pennsylvania Association of Notaries

Introduction

The request for additional information (RAI) regarding Generic Letter (GL) 92-08, "Thermo-Lag 330-1 Fire Barriers," dated May 30, 1995, requested that PECO Energy respond in a timely manner with additional information regarding Thermo-Lag 330-1 fire barrier systems. PECO Energy has reviewed the subject RAI, and each of the requested items is restated below along with our response.

1. A schedule for completion of all corrective actions is requested. Any changes to the schedule deemed necessary should be submitted to the staff for information only.

Response

PECO Energy has developed a comprehensive program to address the concerns with Thermo-Lag 330-1, and we have presented details of this program to the NRC in the previous responses to RAIs. In summary, the program will minimize our reliance on the use of Thermo-Lag 330-1, through a detailed safe shutdown re-analysis, which relies on operator actions, and economically justified plant modifications. This re-analysis will identify the population of cables that require some form of protection (i.e., encapsulation). The safe shutdown re-analysis, including identifying operator actions and the preliminary design of modifications, is complete for LGS, and scheduled to be completed for PBAPS by November 1995. To perform these activities, and the Thermo-Lag 330-1 construction parameter identification and analysis provided in the previous RAIs, PECO Energy has spent approximately 1.5 million dollars.

The implementation of the re-analyzed safe shutdown analyses, and the analysis to qualify the required fire barrier configurations will be completed by December 1997 at an estimated cost of 1.6 million dollars.

The cost of final design and installation of the modifications and required fire barriers associated with the safe shutdown re-analysis has not been developed. The modification work and installation of fire barriers is contingent on unit outage schedules, and is currently scheduled to be completed by April of 1999 for LGS, and October of 1999 for PBAPS.

2. Additional information regarding the validation, verification, and application of the enhanced FIVE methodology for resolution of the Thermo-Lag 330-1 issue at Peach Bottom and Limerick should be submitted for staff review.

Response

The Fire Induced Vulnerability Evaluation (FIVE) methodology was used to develop the fire risk portion of the Individual Plant Examination of External Events (IPEEE). The IPEEE for LGS was submitted on June 26, 1995 (Reference 6) and is scheduled to be submitted in November 1995 for PBAPS. The FIVE methodology was described in the June 26, 1995 submittal. The insights regarding the fire risks for plant areas will be used to prioritize the development of encapsulations for cables identified as being required to support the re-analyzed safe shutdown. The FIVE methodology will also be used to ensure that any exemption requests that PECO Energy submits in the future will not create an unanticipated risk. PECO Energy recognizes that probabilistic safety analyses and fire modeling techniques cannot be used as the sole justification for deviations or exemption requests.

3. PECO Energy is requested to submit their ampacity derating evaluations, including any applicable test reports in order to provide an adequate response to the GL 92-08 reporting requirement 2.(c).

Response

Our previous responses to GL 92-08 acknowledged that ampacity concerns could be resolved independently of the fire endurance concerns. However, until the recent publication of the Safety Evaluation (SE) by the office of Nuclear Reactor Regulation ("Ampacity Issues Related to Thermo-Lag Fire Barriers, Texas Utilities Electric Company [TUEC], Comanche Peak Steam Electric Station, Unit 2" dated June 14, 1995) there was no agreement on an appropriate testing protocol. The TUEC ampacity testing was performed using the Institute of Electrical and Electronics Engineers (IEEE) Standard P848, "Procedure for the Determination of the Ampacity Derating of Fire Protected Cables," Revision 11, dated April 6, 1992 as a basis for their own test methodology. This revision of IEEE Standard P848 was not endorsed by the NRC. The TUEC SE, along with subsequent revisions of IEEE P848, are being reviewed for generic industry applicability to identify an appropriate test protocol for ampacity derating testing. PECO Energy will use an appropriate test protocol to develop a derating factor when designing the required encapsulation assemblies. As discussed in Response 1, the design of the required encapsulation assemblies is scheduled to be completed by December 1997.

4. In the December 29, 1994 RAI PECO Energy was directed to submit a schedule for completion of the chemical verification effort for Thermo-Lag 330-1 materials. A schedule was not provided in your March 29, 1995 response. Please provide a schedule.

Response

PECO Energy is participating in the industry testing program conducted by Nuclear Energy Institute (NEI). The chemical testing program, including performance of testing for organic and inorganic material, issuance of utility specific test reports, and completion of a summary assessment, will be completed by September 15, 1995. NEI will forward the assessment to utilities, and the NRC.

5. The NRC staff requested information on the material weight and density of Thermo-Lag 330-1 installed at PBAPS and LGS. PECO Energy responded that Thermo-Lag 330-1 material from both plants will be tested for density and that an appropriate test and sampling methodology will be developed. Please provide the methodology and schedule for completion.

Response

PECO Energy provided samples to NUCON Labs as part of the chemical verification effort. In addition to the chemical verification effort, PECO Energy requested density testing be performed; however, we did not attempt to control the moisture content in the samples. The samples selected for chemical and density verification were representative of the spectrum of sizes, applications and vintages of Thermo-Lag 330-1 material installed at PBAPS and LGS. The laboratory performed density testing through the use of standard laboratory techniques (i.e., volume and mass) and did not standardize the moisture content of the samples prior to determining the density. The samples ranged in density from a low of 67.4 lbs/ft³ to a high of 86.8 lbs/ft³, with an average density of 77.2 lbs/ft³. The average density of 77.2 lbs/ft³ for the manufactured forms (i.e., panels and pre-shapes) of Thermo-Lag material was consistent with the weight values documented in the acceptance criteria of the receipt inspections. The acceptance criteria for weight was calculated from the TSI supplied density value of "circa 78 lbs/ft³." Trowel grade material was primarily used as a binding agent, and installation techniques may effect the density of the sample; therefore, it was not considered in determining the average density. The shipping documentation, acceptance criteria for weight and thickness, and the average density are intended to provide a reasonable assurance that the Thermo-Lag material installed at LGS and PBAPS has a consistent density; however, it is not intended to provide a statistically justified confidence in the density of the material.

6. PECO Energy responded that at PBAPS, installation records showed that the prefabrication inspections included a requirement for inspecting the assembly for voids. PECO Energy did not address the presence of cracks and delaminations for PBAPS. At LGS, PECO Energy is developing a destructive examination effort program that will include a visual inspection for voids, cracks, and delaminations. Please submit the requested information regarding the presence of cracks and delaminations in Thermo-Lag 330-1 barriers installed at PBAPS and the details of the destructive examinations program for LGS.

Response

For PBAPS, the prefabrication inspections were adequate to detect the presence of voids, cracks, and delaminations prior to the installation of Thermo-Lag 330-1. The inspection was performed to determine if the Thermo-Lag 330-1 was suitable for installation, and specifically addressed voids; however, the presence of cracks and delaminations would have rendered the material unsuitable for installation. According to PECO Energy documentation, unsuitable Thermo-Lag 330-1 was rejected. PECO Energy has reviewed the documentation and interviewed people who performed the inspections and installation. These efforts confirm that the prefabrication inspection would have resulted in voids, cracks, or delaminations being identified, and the Thermo-Lag 330-1 being rejected.

At LGS a similar prefabrication inspection was performed. PECO Energy has determined as a result of interviews with people involved in the installation of Thermo-Lag 330-1 that the prefabrication inspection would have identified and rejected the material not suitable for construction. The documentation for the results of these inspections is no longer available; therefore, to confirm that Thermo-Lag 330-1 with cracks, voids and delaminations was not installed at LGS, samples of installed Thermo-Lag will be removed and inspected. The samples will be obtained from the destructive examination program being developed. The results of the inspection will be used to provide reasonable assurance that unsuitable Thermo-Lag 330-1 was not installed at LGS, and is not intended to provide a statistically justified confidence in the absence of voids, cracks and delaminations.

7. PECO Energy responded that the critical parameters that cannot be identified by walkdown will be determined through destructive examination of a sample of barriers. Please describe the methodology for the destructive examinations and a schedule for completion.

Response

At LGS, the destructive examination program will be used to determine critical construction parameters that cannot be identified or conservatively assumed. The destructive examination program includes the partial or complete disassembly of an existing Thermo-Lag 330-1 assembly such that the construction techniques used to build the assembly can be reasonably concluded.

At PBAPS, extensive Thermo-lag 330-1 design documentation exists, and the installation was performed in accordance with the PECO Energy Quality Assurance program; therefore, the vast majority of critical parameters are known. A destructive examination program will only be implemented if a critical construction parameter cannot be identified.

The destructive examination program, at LGS and if necessary at PBAPS, will examine those assemblies that, because of the safe shutdown re-analysis, are not required, and which share common construction techniques to required assemblies. Through this examination, a reasonable assumption about the unidentifiable parameters can be developed; however, it is not intended to provide a statistically justified confidence in these assumptions.

The destructive examination program will not be completed until Thermo-Lag 330-1 fire barriers required by the current safe shutdown analysis are no longer required. Our current licensing basis assumes that these assemblies are unanalyzed; however, even in their unanalyzed

condition the assemblies provide a degree of protection. To avoid the costs associated with reconstructing the barriers to maintain our current licensing basis, the destructive examination program will not begin until the Thermo-Lag assemblies are determined to no longer be required.

The destructive examination program is scheduled to be completed by January 1997 at LGS, and, if necessary by September 1997 at PBAPS.

**PECO ENERGY**

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

June 16, 1995

Docket No. 50-278

License No. DPR-56

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

Subject: Peach Bottom Atomic Power Station, Unit 3
Submittal of Inspection Plan In Response to
Generic Letter 94-03, "Intergranular Stress
Corrosion Cracking of Core Shrouds in Boiling
Water Reactors"

Dear Sir:

On August 24, 1994, PECO Energy Company responded to Generic Letter (GL) 94-03, dated July 25, 1994. Reporting Requirement 2 of the GL requested that an inspection plan of the core shroud be submitted to the U. S. Nuclear Regulatory Commission (USNRC) no later than 3 months prior to performing the inspections except for those plants whose inspections would occur less than three months from the receipt of the GL. Accordingly, attached is the inspection plan for PBAPS, Unit 3.

It should be noted that the attached inspection plan represents the first comprehensive inspection of the PBAPS, Unit 3 core shroud conducted in accordance with the Boiling Water Reactor Vessel and Internals Project (BWRVIP) guidance. As discussed in our August 24, 1994 response, an augmented core shroud inspection was performed at PBAPS, Unit 3 during the Fall of 1993 Refueling Outage 9. A final report documenting this inspection, and an evaluation of its results, was forwarded to the USNRC in a letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC dated March 14, 1994. Additionally, these results were reviewed with the USNRC in a meeting on November 3, 1993. These limited augmented shroud inspections consisted of enhanced visual examinations only, which were implemented as a response to GE Nuclear Energy Service Information Letter (SIL) 572.

If you have any questions, please contact us.

Very truly yours,

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

Attachments

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

Enclosure 2

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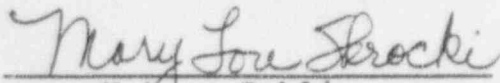
COUNTY OF CHESTER :

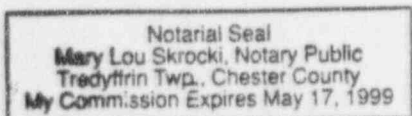
W. H. Smith, III, being first duly sworn, deposes and says:

That he is Vice President of PECO Energy Company; that he has read the enclosed additional response to Generic Letter 94-03, for Peach Bottom Facility Operating License DPR-56, and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.


Vice President

Subscribed and sworn to
before me this 16th day
of June 1995.


Notary Public



Member, Pennsylvania Association of Notaries

PEACH BOTTOM ATOMIC POWER STATION, UNIT 3
SECOND RESPONSE TO NRC GENERIC LETTER 94-03

CORE SHROUD INSPECTION PLAN

BACKGROUND:

In accordance with Reporting Requirement Number 2 of NRC Generic Letter (GL) 94-03, dated 7/25/94, the following inspection plan, for Peach Bottom Atomic Power Station (PBAPS), Unit 3, is provided. This plan has been developed for implementation during the next refueling outage of PBAPS, Unit 3 (3R10), which is scheduled to begin on September 16, 1995.

The inspection methods, scope, and flaw evaluation criteria of this inspection plan satisfy the recommendations of the Boiling Water Reactor Vessel and Internals Project (VIP), as specified in the "BWR Core Shroud Inspection And Flaw Evaluation Guidelines" - GENE-523-113-0894, Rev. 1, dated March 1995 (Reference 3).

This inspection plan has been developed in response to "Requested Licensee Actions," Number 3, of the GL. It has been developed using the ongoing guidance provided by the VIP, recommendations of General Electric Nuclear Energy (GENE) Co., and site specific experience gained through previous shroud inspections at PBAPS, Unit 2. The key factors considered in the development of the plan include: hot operating years, materials of fabrication, and water chemistry history as described in Reference 3.

The PBAPS, Unit 3 shroud is considered to be highly susceptible to Intergranular Stress Corrosion Cracking (IGSCC); due primarily to material, age, and water chemistry history. Additionally, some shroud weld indications were visually identified during the last refueling outage of PBAPS, Unit 3 (3R09), in October 1993. These inspection results and their evaluations were submitted to the NRC via Reference 1, and were reviewed with the NRC in a meeting on November 3, 1993. However, the PBAPS, Unit 3 shroud was fabricated using seamless, roll-forged rings, which have consistently shown an immunity to severe stress corrosion cracking in the weld heat affected zone (HAZ) in these applications (e.g. no plant which has inspected has found extensive cracking in forged rings). This mitigating factor has been acknowledged by the VIP, as documented in Section 2.1 of Reference 3.

Since the PBAPS, Unit 3 core shroud has experienced more than 6 hot operating years, and is fabricated primarily with higher carbon content stainless steel, it has been identified by Reference 3 as an Inspection Category C facility. For Inspection Category C, Reference 3 recommends a comprehensive inspection of shroud welds. This comprehensive inspection includes inspection of all circumferential shroud welds (i.e. H-1 through H-7).

PEACH BOTTOM ATOMIC POWER STATION, UNIT 3
SECOND RESPONSE TO NRC GENERIC LETTER 94-03

CORE SHROUD INSPECTION PLAN

SCOPE OF INSPECTION:

The PBAPS, Unit 3 shroud welds can be divided into four groups:

1. Shroud attachment welds (e.g. shroud head bolt lugs)
2. Shroud vertical welds
3. Shroud support structure welds
4. Shroud circumferential welds

The attachment welds, vertical welds, and support structure welds have been excluded from this initial inspection plan. The basis for exclusion of these welds from the initial inspection plan is addressed in Section 3.1 and Appendix A of Reference 3.

Therefore, the scope of welds included in this initial shroud baseline inspection plan for PBAPS, Unit 3 include shroud circumferential welds H-1 through H-7.

EXTENT OF INSPECTION:

The extent of inspection of each of these seven welds is based on accessibility for state-of-the-art inspection equipment.

The inspection technique planned for these initial inspections is Ultrasonic Testing. This technique is intended to interrogate the volume of the subject welds and associated heat affected zones for cracking initiating on the inside surface and the outside surface (OD). The equipment planned for use during these inspections includes the GE OD Tracker. This equipment will maximize the ability to access the shroud welds. This NDE technology has already been successfully demonstrated at several BWR core shrouds inspections in the last 18 months, including PBAPS, Unit 2. The evaluation of inspection results will be suitable for the inspection technique and delivery system used.

The extent of inspection of each circumferential weld may vary, depending on the specific weld characteristics (i.e. accessibility relative to in vessel components, unexpected interferences). The initial extent of inspections planned, using the inspection system described above, is as follows:

<u>Weld Number</u>	<u>Extent Of Inspection Planned</u>
H-1 through H-7	Accessible length in a 360° segment

PEACH BOTTOM ATOMIC POWER STATION, UNIT 3
SECOND RESPONSE TO NRC GENERIC LETTER 94-03

CORE SHROUD INSPECTION PLAN

EVALUATION:

The evaluation of the results of the inspections will include a combination of fracture mechanics methodologies. As recommended in Reference 3, for welds which have a projected neutron exposure (fluence) level greater than 3×10^{20} N/CM² through the next two operating cycles, the analysis will include both the Limit Load and Linear Elastic Fracture Mechanics (LEFM) methodologies. For welds with an exposure level below this threshold, the Limit Load technique will be used exclusively. The planned application of fracture mechanics analysis is as follows:

<u>WELD NUMBER</u>	<u>METHODOLOGIES</u>
H-1	Limit Load only
H-2	Limit Load only
H-3	Limit Load and LEFM
H-4	Limit Load and LEFM
H-5	Limit Load only
H-6	Limit Load only
H-7	Limit Load only

The initial evaluations will consider all identified indications to be through-wall cracks. A minimum of two cycles of crack growth and an NDE uncertainty factor will be included in the evaluation. Detailed evaluations, including flaw depth sizing, in accordance with Reference 3, may be conducted, based on inspection results.

REPAIR:

If the results of the shroud inspections do not satisfactorily demonstrate structural integrity of the shroud, a contingency repair option has been planned. This option includes a complete shroud repair (Modification P-00435), consisting of tie rods and horizontal stabilizers. The complete repair is being designed by GENE to fully replace the function of the H-1 through H-7 welds, using the VIP Core Shroud Repair Design Criteria (Reference 4). All details relative to the design, fabrication, materials, installation, examination, and testing of the contingency repair are being submitted to the NRC under a separate submittal.

REFERENCES:

1. Letter from G. A. Hunger Jr. (PECO Energy Company) to USNRC, dated March 14, 1994.
2. PECO Energy Response to Generic Letter 94-03, dated August 24, 1994.
3. BWR Core Shroud Inspection and Flaw Evaluation Guidelines, GENE-523-113-0894, Rev. 1, dated March 1995.
4. BWR Core Shroud Repair Design Criteria, Revision 1, dated September 12, 1994.