



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

Withhold Enclosure 1 from Public Disclosure in Accordance with
10 CFR 2.390.

March 9, 2020
NOC-AE-20003716
10 CFR 50.55a
10 CFR 2.390
File No. D43.01

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

South Texas Project Unit 1 & 2
Docket No. STN 50-498 and STN 50-499
Request for Additional Information for Proposed Alternative to ASME Section XI Requirements
for the Repair/Replacement of Essential Cooling Water System Class 3 Buried Piping
(Relief Request RR-ENG-3-24) (EPID: L 2019-LLR-0096)

References:

1. Letter; R. Dunn to U.S. NRC Document Control Desk; "Proposed Alternative to ASME Boiler & Pressure Vessel Code Section XI Requirements for Repair/Replacement of Essential Cooling Water (ECW) System Class 3 Buried Piping in accordance with 10 CFR 50.55a(z)(a) (Relief Request RR-ENG-3-24)"; September 26, 2019; (NOC-AE-19003684) (ML19274C393).
2. Letter; D. Galvin to G. T. Powell; "South Texas Project Units 1 and 2 – Supplemental Information needed for acceptance of requested licensing action RE: Proposed alternative to ASME code requirements for the repair of essential cooling water system class 3 buried piping (EPID: L 2019-LLR-0096)"; November 13, 2019; (AE-NOC-19003235) (ML19312A096).
3. Letter; R. Dunn to U.S. NRC Document Control Desk; "Supplemental Information for Proposed Alternative to ASME Code Requirements for the Repair/Replacement of Essential Cooling Water System Class 3 Buried Piping (Relief Request RR-ENG-3-24) (EPID: L 2019-LLR-0096)"; November 26, 2019; (NOC-AE-19003696) (ML19331A202).
4. E-mail; D. Galvin to A. M. Richards; "South Texas Project - Request for Additional Information - Proposed Alternative to ASME Section XI Requirements for the Repair of Essential Cooling Water System Class 3 Buried Piping (EPID: L 2019-LLR-0096)"; February 4, 2020; (AE-NOC-200003246) (ML20036F586)

By Reference 1, STP Nuclear Operating Company (STPNOC) submitted a proposed alternative to the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) at South Texas Project Units 1 and 2. The proposed alternative to ASME Code, Section XI, IWA-4000, applies a carbon fiber reinforced polymer system for the internal repair of buried essential cooling water piping. Reference 3 is the supplemental information provided to the NRC in response to the request in Reference 2. By Reference 4, the NRC staff identified additional information that would be needed to complete its review. The STPNOC RAI responses providing this additional information are in Enclosure 1.

Withhold Enclosure 1 from Public Disclosure in Accordance with
10 CFR 2.390.

STI: 34993227

The information provided in Enclosure 1 was prepared by Structural Group, Inc. and Simpson Gumpertz & Heger, Inc., and includes information proprietary to these two companies. The affidavits set forth the bases by which the information may be withheld from the public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR 2.390. Accordingly, it is respectfully requested that the information, which is proprietary to Structural Group, Inc., and Simpson Gumpertz & Heger, Inc., be withheld from public disclosure in accordance with 10 CFR 2.390. A non-proprietary version of the RAI responses is provided in Enclosure 2. The affidavits are included in Enclosure 3.

There are no commitments in this letter.

If there are any questions or if additional information is needed, please contact Nic Boehmisch at (361) 972-8172 or me at (361) 972-7743.



Roland Dunn
General Manager, Engineering

Enclosures:

1. Response to Request for Additional Information **[Proprietary]**.
2. Response to Request for Additional Information **[Non-Proprietary]**.
3. Applications for Withholding Proprietary Information from Public Disclosure

cc:

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
1600 E. Lamar Boulevard
Arlington, TX 76011-4511

Enclosure 2
Response to Request for Additional Information
[Non-Proprietary]

SOUTH TEXAS PROJECT UNITS 1 AND 2
DOCKET NUMBERS 50-498 AND 50-499
REQUEST FOR ADDITIONAL INFORMATION PROPOSED ALTERNATIVE TO ASME
SECTION XI REQUIREMENTS FOR REPAIR/REPLACEMENT OF ESSENTIAL COOLING
WATER CLASS 3 BURIED PIPING IN ACCORDANCE WITH 10 CFR 50.55A(Z)(1)

By letter dated September 26, 2019 (Agencywide Documents and Access Management System (ADAMS) Accession No. ML19274C393), as supplemented by letter dated November 26, 2019 (ADAMS Accession No. ML19331A202), STP Nuclear Operating Company (the licensee) requested Nuclear Regulatory Commission (NRC) approval of a proposed alternative to Section XI, IWA-4221(b) of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), which requires repaired/replacement piping to meet the original Construction Code requirements. The proposed alternative is to allow the use of a carbon fiber reinforced polymer (CFRP) composite system for the internal repair of the buried Essential Cooling Water (ECW) piping during the third and fourth 10-year ISI intervals at South Texas Project Electric Generation Station (STP), Units 1 and 2.

To complete its review, the NRC staff requests the following additional information. The proprietary information in this document is marked with double brackets and bold font such as **[[Example]]**.

NPHP RAI 1 *Enclosure 1, Section 4, page 5 of 21 of the request states that the ECW piping is fabricated of aluminum-bronze material. Discuss what measures have been conducted to demonstrate that CFRP can be applied to the inside surface of aluminum-bronze pipes with adequate adhesion and strength for the intended application (e.g. mockup tests).*

RESPONSE to NPHP RAI 1:



NPHP RAI 2



RESPONSE to NPHP RAI 2:



NPHP RAI 3 *Discuss whether a pressure test will be performed in accordance with the ASME Code, Section XI, IWA-5000 and IWD-5000 after the CFRP repair is installed and prior to system startup.*

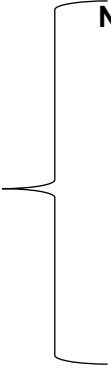
RESPONSE to NPHP RAI 3:

System start-up testing will be in accordance with ASME B&PVC, Section XI, IWA-5244(2), which directs that the system pressure test for non-isolable buried components shall consist of a test to confirm that flow during operation is not impaired. This testing will demonstrate and document performance of VT-2 examinations on the ECW System flow paths that support the required safety functions.

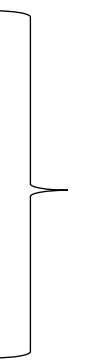
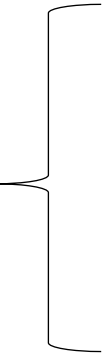
NPHP RAI 4

RESPONSE to NPHP RAI 4:

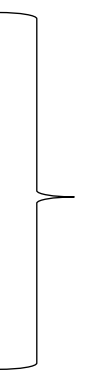
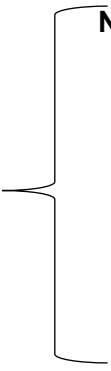
NPHP RAI 5



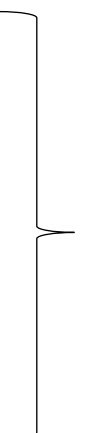
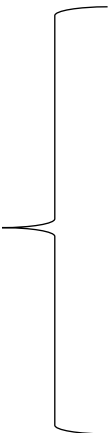
RESPONSE NPHP RAI 5:



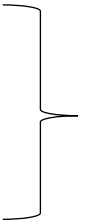
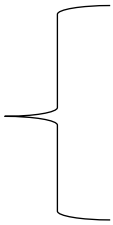
NPHP RAI 6



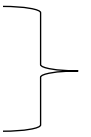
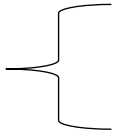
RESPONSE NPHP RAI 6:



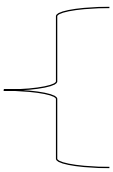
RESPONSE to NPHP RAI 7:



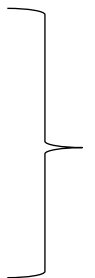
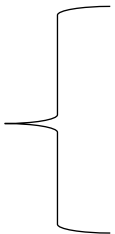
EMIB RAI 1



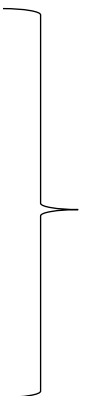
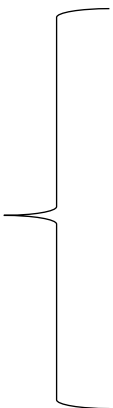
RESPONSE to EMIB RAI 1:



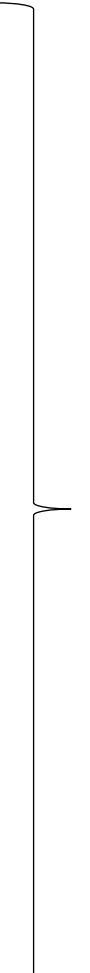
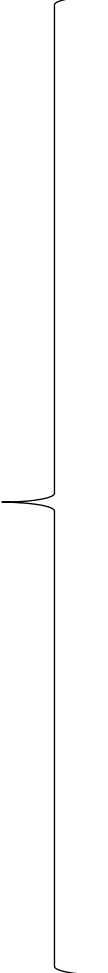
EMIB RAI 2



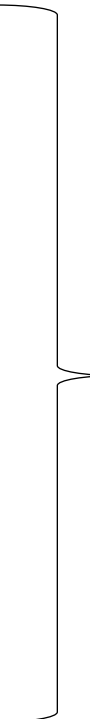
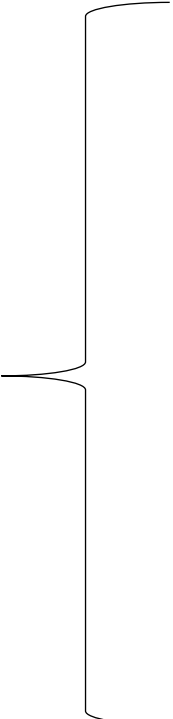
RESPONSE to EMIB RAI 2:



EMIB RAI 3



RESPONSE to EMIB RAI 3:



EMIB RAI 4 *Section 5B.6 of Attachment 5B to Enclosure 5 of the request discusses CFRP composite system termination detail at straight ends. Repair terminations at host pipe substrate at the ends of repair with a good bond are critical to maintain structural integrity so that the CFRP composite system can transfer loads to the host pipe. Provide information or a sketch to address the following related to the intact or non-repaired side of terminations:*

- (a) Address whether the intact piping on the non-repaired side of terminations is buried, or whether all non-repaired side is exposed. If buried, discuss whether credit is taken for attenuation along the buried length.*
- (b) The distance from termination end to the end of buried portion of pipe or to the beginning of aboveground piping in the buildings.*
- (c) The distance from termination end to the piping supports or anchors in the vicinity for the aboveground piping.*
- (d) Repair terminations interface with the repaired and the non-repaired sides of the piping. It appears that the loads from the repaired side are considered. Provide a discussion on structural integrity of the terminations from any dead weight, thermal, seismic, and any other applicable loadings from the non-repaired side.*

RESPONSE to EMIB RAI 4:

- (a) The intact piping on the non-repaired side of terminations may be buried or exposed within the structures, depending on the scope of repair. The non-repair side pipe is considered sufficient to be taking all the design forces and other demands and no attenuation is considered.
- (b, c) The location of terminations and the distance from termination end to the end of buried portion of pipe or to the beginning of above ground piping in the buildings (and supports and anchors of above ground piping in the buildings) will be determined during inspections. Regardless of the location of termination, the metal pipe within the terminal end and beyond the CFRP repair will meet the requirements for the aluminum bronze piping. The minimum distance between the termination end and the end of the buried portion at building wall is zero as the repair may end at the building wall.
- (d) If the repair end is buried and away from the buildings, the forces and demands considered on the repair design in longitudinal direction are the highest forces that can occur anywhere along the buried pipeline, including any demands originating in the non-repaired portions of the buried pipeline. If the repair end is close to a building, forces from the non-repair building side are resisted by the supports inside and the building wall, except that the longitudinal force is resisted by pipe soil friction per original Bechtel design calculation. This longitudinal force is smaller than the force for which the repair is designed and can therefore be resisted by the CFRP repair.

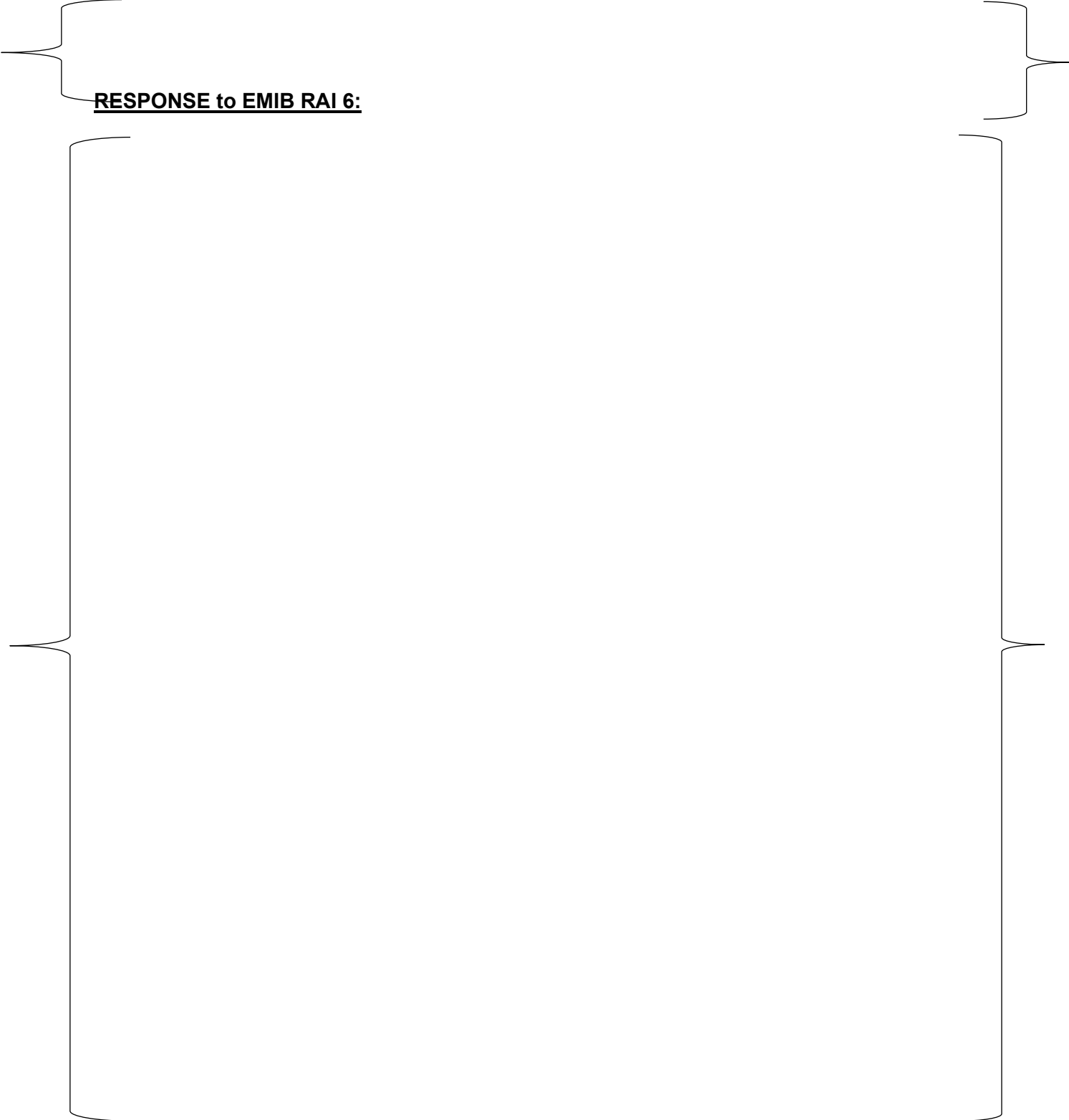
EMIB RAI 5 *Table 1 in Attachment B of Enclosure 4 of the request lists Mechanical Property Tests Required for V-Wrap CFRP Composite System. ASTM Standard D3526 does not address testing of Shear Bond Strength Between CFRP and aluminum-bronze. Please provide the applicable ASTM Standard for testing this property.*

RESPONSE to EMIB RAI 5:

The applicable standard is ASTM D3528, "Standard Test Method for Strength Properties of Double Lap Shear Adhesive Joints by Tension Loading".

EMIB RAI 6

RESPONSE to EMIB RAI 6:



EMIB RAI 7



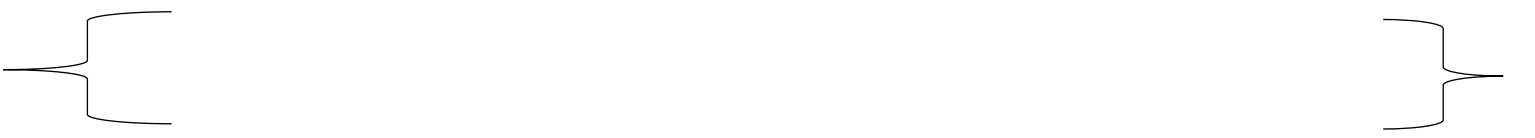
RESPONSE to EMIB RAI 7:



EMIB RAI 8



RESPONSE to EMIB RAI 8:



EMIB RAI 9

RESPONSE to EMIB RAI 9:

EMIB RAI 10

RESPONSE to EMIB RAI 10:

EMIB RAI 11

RESPONSE to EMIB RAI 11:

Enclosure 3

Applications for Withholding Proprietary Information from Public Disclosure

March 5, 2020

U.S. Nuclear Regulatory
Commission Document
Control Desk
11555 Rockville Pike
Rockville, MD 20852

Subject: Application for Withholding Proprietary Information from Public

References:

1. STPNOC Letter to Nuclear Regulatory Commission (NRC), *Proposed Alternative to ASME Section XI Requirements for Repair/Replacement of Circulating and Service Water Class 3 Buried Piping in Accordance with 10 CFR 50.55a(z)(1)*, September 26, 2019, NOC-AE-19003684, ML 19274C393, Docket Nos. 50-498/499
2. NRC letter to STPNOC, *South Texas Project Units 1 and 2, Supplemental Information Needed for Acceptance of Request Licensing Action, (EPID:L2019-LLR-0096)*, November 13, 2019; AE-NOC-19003235, ML 19312A096, Docket Nos. 50-498/499
3. Email from NRC (Dennis Galvin, Dennis.Galvin@nrc.gov) to STP (Drew Richards, amrichards@STPEGS.com), Tuesday, February 4, 2020 at 4:25 PM, subject *South Texas Project-Request for Additional Information*, NOC-AE-20003246, STI: 34981524, Docket Nos. 50-498/499
4. STPNOC Letter to Nuclear Regulatory Commission, *Response to Request for Additional Information for Proposed Alternative to ASME Code Requirements for the Repair/Replacement of Essential Cooling Water System Class 3 Buried Piping (Relief Request RR-ENG-3-24) (EPID: L 2019-LLR-0096)*, March 5, 2020, STI: 34993227, NOC-AE-20003716, Docket Nos. 50-498/499
5. 10 CFR 2.390, *Public Inspections, Exemptions, Requests for Withholding*

Ladies and Gentlemen:

Structural Group, Inc., (SGI) has provided certain proprietary information to STP Nuclear Operating Company (STPNOC) in connection with a response by STPNOC for RAI from the U.S. Nuclear Regulatory Commission (NRC) to use an alternative to the requirements of 10 CFR 50.55a(z)(1). This application requests that proprietary information of SGI provided in reference 4 be protected from public disclosure.

The proprietary information for which withholding is being requested identified in the attached affidavit signed by the owner of the proprietary information, SGI, on behalf of itself and any wholly-owned subsidiaries or affiliated companies. An affidavit accompanies this letter, setting forth the basis on which the information may be withheld from public disclosure by the NRC and addressing with specificity the considerations listed in paragraph (b)(4) of 10 CFR 2.390 of the NRC's regulations.

Accordingly, this letter authorizes the utilization of the accompanying Affidavit by STPNOC.

Correspondence with respect to the proprietary aspects of the Application or the Affidavit should reference this letter and be addressed to Scott Greenhaus, Executive Vice President, Structural Group, Inc., 10150 Old Columbia Road, Columbia, MD 21046.

Sincerely;

A handwritten signature in black ink, appearing to read "Scott Greenhaus", with a long horizontal flourish extending to the right.

Scott Greenhaus
Executive Vice President
O (410) 859-6458, M (410) 340-3205
SGreenhaus@structuralgroup.com

AFFIDAVIT

I, Scott Greenhaus, am Executive Vice President of Structural Group, Inc. (SGI). In my capacity as Executive Vice President I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in conjunction with nuclear plant licensing and rulemaking proceedings and am authorized to apply for its withholding on behalf of SGI and its affiliates.

I am making this Affidavit in conformance with the provisions of 10 CFR 2.390 of the U.S. Nuclear Regulatory Commission (NRC) regulations and in conjunction with SGI's Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.

I have personal knowledge of the criteria and procedures utilized by SGI in designating information as a trade secret, privileged or as confidential commercial or financial information.

Pursuant to the provisions of paragraph (b) (4) of 10 CFR 2.390 of the NRC's regulations, the following is furnished for consideration by the NRC in determining whether the information sought to be withheld from public disclosure should be withheld.

The information sought to be withheld from public disclosure is owned by and has been held in confidence by SGI. Specific portions of the response to the NRC's "Request for Additional Information" (RAI) which include SGI proprietary information are:

1. NPHP RAI 1
2. NPHP RAI 2
3. NPHP RAI 4
4. NPHP RAI 5
5. NPHP RAI 7
6. EMIB RAI 1
7. EMIB RAI 5
8. EMIB RAI 6

The information is of a type customarily held in confidence by SGI and not disclosed to the public. SGI has a rational basis for determining the types of information customarily held in confidence by it and utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system provides a rational basis for maintaining confidentiality and justifies the NRC withholding the information from public disclosure.

Under SGI's system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- 1) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by a competitor of SGI without license constitutes a competitive advantage over other companies.
- 2) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.

- 3) Its use by a competitor would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- 4) It reveals cost or price information, production capacities, budget levels, or commercial strategies of SGI, their customers or suppliers.
- 5) It reveals aspects of past, present, or future development plans funded by SGI or its customer, and programs of potential commercial value to SGI.
- 6) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the SGI system which include the following;

- 1) The use of such information by SGI gives it a competitive advantage over competitors. It is, therefore, withheld from disclosure to protect SGI's competitive position.
- 2) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes SGI's ability to sell products and services involving the use of the information.
- 3) Use by a competitor would put SGI at a competitive disadvantage by reducing the competitor's expenditure of resources and capital.
- 4) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire process, thereby depriving SGI of its competitive advantage.
- 5) Unrestricted disclosure would jeopardize the position of prominence of SGI in the world marketplace, and thereby give a market advantage to competitor in those countries in which SGI operates.
- 6) SGI's capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.

The information is being transmitted to the NRC in confidence and, under the provisions of 10 CFR 2.390, it is to be received in confidence by the NRC. The information sought to be protected is not available in public sources and, to the best of our knowledge and belief, available information has not been previously employed in the same original manner or method.

The proprietary information sought to be withheld in this submittal is that which is appropriately marked in STPNOC RAI responses to the NRC being transmitted by STPNOC letter and reflected in SGI's Application for Withholding Proprietary Information from Public Disclosure dated March 5, 2020 addressed to the NRC Document Control Desk. The proprietary information as submitted by SGI is that associated with the *Proposed Alternative to ASME Section XI Requirements for Repair/Replacement of Circulating and Service Water Class 3 Buried Piping in Accordance with 10 CFR 50.55a(z)(1)* for STP Units 1 and 2 and may be used only for that purpose.

This information is part of that which will enable SGI to:

- 1) Provide input to STPNOC to provide to the NRC for review of the STP Unit 1 and 2, 10 CFR 50.46 submittal; and
- 2) Provide licensing support for the STPNOC submittal.

SGL owns or is permitted to use the proprietary information referenced in this Affidavit under agreements that include SGL's maintaining the confidentiality of such information, as contemplated in this Affidavit.

Further this information has substantial commercial value as follows;

- 1) The SGL plan to sell the use of this information to their customers for the purpose of installing Carbon Fiber Reinforced Polymer (CFRP) in safety related piping.
- 2) That SGL can sell support and defense of the technology to their customers in the licensing process.
- 3) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by SGL.
- 4) Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of SGL because it would enhance the ability of competitors to provide similar licensing services for commercial power reactors without commensurate expenses.
- 5) Public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.
- 6) The development of the technology described in part by the proprietary information is the result of applying the results of many years of experience in an intensive effort by SGL and the expenditure of a considerable sum of money and resources. In order for competitors to duplicate this information, similar technical programs would have to be performed including a significant expenditure money and resources.

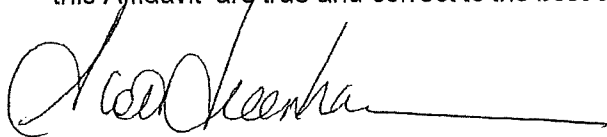
Further the deponent sayeth not.

struc'tur'al
group
AFFIDAVIT

State of Maryland)

County of Howard)

Before me, the undersigned authority, personally appeared Scott Greenhaus, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Structural Group, Inc. and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief.

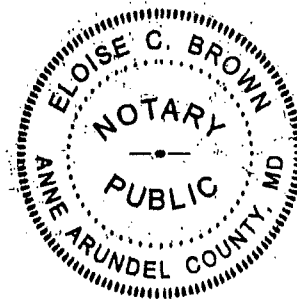
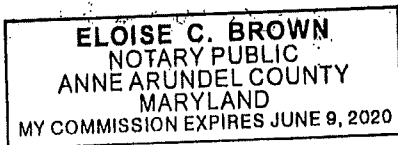


Scott Greenhaus
Executive Vice President

Sworn to and subscribed before me this 3rd day of March 2020



Notary Public



3 March 2020

SIMPSON GUMPERTZ & HEGER

Engineering of Structures
and Building Enclosures

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Subject: Withholding of Certain Proprietary Information Pursuant to 10 CFR 2.390

Reference: (1) Letter from STP Nuclear Operating Company to US NRC, "Proposed Alternative to ASME Boiler & Pressure Vessel Code Section XI Requirements for Repair /Replacement of Essential Cooling Water System Class 3 Buried Piping in Accordance with 10 CFR 50.55a(z)(1)," Docket Nos. 50-498 and 50-499, Document No. NOC-AE-19003684.

(2) Letter from Structural Group, Inc. to NRC, "Application for Withholding Proprietary Information from Public Disclosure," dated 11 September 2019.

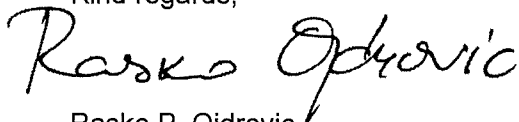
Document No.: 190801-SGH-L-002

In Reference (1), the STP Nuclear Operating Company will provide a submittal to the U.S. Nuclear Regulatory Commission (NRC) that contains certain proprietary information owned by Simpson Gumpertz & Heger Inc. (SGH). SGH provided the information to STP Nuclear Operating Company or a STP Nuclear Operating Company affiliate to support the request made in Reference (1), and STP Nuclear Operating Company is authorized to use this information. As explained in the attached affidavit, SGH's proprietary information contained in Reference (1) qualifies for withholding under the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 U.S.C. Section 552(b)(4), the Trade Secrets Act, 18 U.S.C. Section 1905, and NRC regulations 10 CFR 9.17(a)(4) and 2.390(a)(4) for trade secrets and commercial information. SGH respectfully requests that the NRC withhold this information from public disclosure. An affidavit supporting this request is attached.

In Reference (2), STP Nuclear Operating Company consultant Structural Group, Inc. also made a similar request for certain other information contained in Reference (1).

Please contact me by phone at 781.907.9231 or email at RPOjdrovic@sgh.com if you have any questions concerning this request.

Kind regards,



Rasko P. Ojdrovic
Vice President and Senior Principal
Simpson Gumpertz & Heger Inc.

\\sgh.com\offices\BOS\Projects\2019\190801.00-STPNWP\002RPOjdrovic-L-190801.00.kri.docx

Attachment: 10 CFR 2.390 Affidavit

SIMPSON GUMPERTZ & HEGER INC.

480 Toffen Pond Road, Wallham, MA 02451

main: 781.907.9000 fax: 781.907.9009 www.sgh.com

Boston | Chicago | Houston | New York | San Francisco | Southern California | Washington, DC

10 CFR 2.390 Affidavit

**SIMPSON GUMPERTZ & HEGER INC.
10 CFR 2.390 AFFIDAVIT OF RASKO P. OJDROVIC**

AFFIDAVIT

I, Rasko P. Ojdrovic, hereby state as follows:

- (1) I am a Vice President and Senior Principal of Simpson Gumpertz & Heger Inc. (SGH), and I have been authorized to execute this affidavit on behalf of SGH.
- (2) STP Nuclear Operating Company will submit a transmittal to the US NRC entitled "Proposed Alternative to ASME Boiler & Pressure Vessel Code Section XI Requirements for Repair /Replacement of Essential Cooling Water System Class 3 Buried Piping in Accordance with 10 CFR 50.55a(z)(1)," Docket Nos. 50-498 and 50-499, Document No. NOC-AE-19003684. Certain portions of that transmittal contain proprietary information that is owned by SGH and should be held in confidence and withheld from public disclosure by the NRC. Specifically, the SGH proprietary information that SGH requests be withheld is contained in the following sections of the RAI submitted in the STP Nuclear Operating Company's transmittal:

Responses by request for additional information sections:

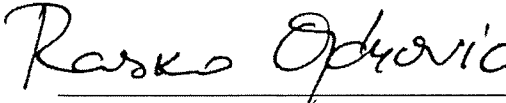
- RAI 2
 - RAI 6
 - EMIB-RAI-1
 - EMIB-RAI-2
 - EMIB-RAI-3
 - EMIB-RAI-4
 - EMIB-RAI-6
 - EMIB-RAI-7
 - EMIB-RAI-8
 - EMIB-RAI-9
 - EMIB-RAI-10
 - EMIB-RAI-11
 - Attachment A
- (3) In making this application for withholding of proprietary information of which it is the owner, SGH believes that the information qualifies for withholding under the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 U.S.C. Section 552(b)(4), the Trade Secrets Act, 18 U.S.C. Section 1905, and NRC regulations 10 CFR 9.17(a)(4) and 2.390(a)(4) for trade secrets and commercial information because:
 - i. This information is and has been held in confidence by SGH.
 - ii. This information is of a type that is customarily held in confidence by SGH, and there is a rational basis for doing so because the information includes proprietary information that was developed and compiled by SGH at a

significant cost to SGH. This information is classified as proprietary because it contains information relevant to analytical approaches and methodologies not available elsewhere.

- iii. The information is being transmitted to the NRC voluntarily and in confidence.
- iv. This information is not available in public sources and could not be gathered readily from other publicly available information.
- v. A substantial effort has been expended by SGH to develop and evaluate this information. Public release of this information could lead to additional significant cost to SGH and is likely to cause substantial harm to SGH's competitive position and foreclose or reduce the availability of profit-making opportunities. The value of this information to SGH would be lost or devalued if the information were disclosed to the public.
- vi. Public disclosure of the information sought to be withheld would provide other parties, including competitors, with valuable information. SGH's competitive advantage would be lost if its competitors are able to use the results of SGH's activities to aid their own commercial activities. For example, SGH's competitive advantage would be lost if its competitors are able to use the results of SGH's analyses to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall and deprive SGH of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment.
- vii. The commercial value of the information extends beyond the original development cost and includes development of the expertise to determine and apply the appropriate evaluation process to the information. The research, development, engineering, and analytical costs that went into generating this information comprise a substantial investment of time and money by SGH. The precise value of this information is difficult to quantify, but clearly is substantial.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on 3 March 2020.



Rasko P. Ojdrovic