March 29, 2022
L-2022-051
10 CFR 50.55a

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555-0001

Re: Turkey Point Unit 3
Docket Nos. 50-250
Fifth Ten-Year Inservice Inspection Interval Relief Request No. 10 Part-II, Supplement
Information and Response to Request for Additional Information

References:

1. Florida Power & Light Company letter L-2021-183, Fifth Ten-year Inservice Inspection Interval Relief Request Number 10, September 30, 2021 (ADAMS Accession Nos. ML21273A240, ML21273A241)
2. Florida Power & Light Company letter L-2021-197, Response to Request for Additional Information for ISI Relief Request No. 10 Dated October 15, 2021 (ADAMS Accession ML21288A544)
3. Florida Power & Light Company letter L-2021-207, Response to Request for Additional Information for ISI Relief Request No. 10 Dated October 25, 2021 (ADAMS Accession ML21298A201)
4. NRC, Verbal Authorization read by David Wrona, Chief of the Plant Licensing Branch II-2, Office of Nuclear Reactor Regulation, Relief Request No. 10 Use of ASME CODE CASE N-513-4 for extended period not to exceed six months, October 29, 2021
5. Florida Power & Light Company letter L-2022-035, Fifth Ten-Year Inservice Inspection Interval Relief Request No. 10 Part-II, Dated March 10, 2022 (ADAMS Accession ML22069B128, ML22069B129)
6. NRC email from Mr. Michael Mahoney to Mr. Hess, “Turkey Point Nuclear Generating Unit No. 3 - Request for Additional Information - ICW Alternative,” dated March 21, 2022.

In Reference 1, Pursuant to 10 CFR 50.55a(z)(2), Florida Power & Light Company (FPL) requested Nuclear Regulatory Commission (NRC) for relief from the applicable American Society of Mechanical Engineers Section XI Code (ASME Code) requirements to repair a section of the degraded Unit 3 Intake Cooling Water (ICW) pipe spool by installing a proprietary repair device, with new pressure boundary material and without removing the sections of degraded piping, and to extend the use of Code Case N-513-4 for six months until final design is complete and repair is implemented. In References 2 and 3, FPL provided response to NRC’s request for additional information to address the extension of ASME Code Case N-513-4 to demonstrate that structural integrity of the ICW discharge pipe spool piece will continue for the requested period of six months. In Reference 4, NRC authorized in the first part of the Relief Request 10, the use of relief with enhanced frequent periodic examinations of the flaw and leakage monitoring beyond what is required by ASME Code Case N-513-4 for the extended period of six months or until April 29, 2022.

The second part of the Relief Request No. 10, Part II was submitted to NRC on March 10, Reference 5. The NRC Staff reviewed Part II of the relief and determined that additional information is needed to complete their review. FPL received the request for additional information (RAI) from the NRC through electronic mail on March 21, 2022, Reference 6.

The enclosures to this letter provide FPL's response to RAIs as well as supplemental information. Enclosures 1 and 2 contain the proprietary RAIs and the related proprietary FPL responses. Enclosures 3 and 4 contain the non-proprietary RAIs and the related FPL responses respectively. Enclosures 5 contains the affidavit of Mr. Paul Manzon of PMC Engineering, supporting the request for withholding of proprietary information.

If you have any questions, please contact Robert J. Hess, Licensing Manager, at (305) 246-4112.

Sincerely,

Robert J. Hess
Licensing Manager
Turkey Point Nuclear Plant

Enclosures

cc: USNRC Regional Administrator, Region II, USNRC
USNRC Senior Resident Inspector, USNRC, Turkey Point Nuclear Plant
USNRC Project Manager, Turkey Point Nuclear Plant

L-2022-051

Enclosure 3

TURKEY POINT UNIT 3

Relief Request No. 10 Part II

Request for Additional Information

Non-Proprietary (Redacted)

Four Pages Attached

REQUEST FOR ADDITIONAL INFORMATION

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT NUCLEAR GENERATING UNIT NO. 3

DOCKET NO. 50-250

FIFTH TEN-YEAR INSERVICE INSPECTION INTERVAL RELIEF REQUEST NO. 10 PART-11

By application dated March 10, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22069B128), pursuant to Title 10 *Code of Federal Regulations* (10 CFR), Section 50.55a(z)(2), Florida Power and Light Company (FPL) requested relief from the applicable American Society of Mechanical Engineers Section XI Code (ASME Code) requirements to repair a section of the degraded Unit 3 Intake Cooling Water (ICW) pipe spool by installing a proprietary repair device, with new pressure boundary material without removing the sections of degraded piping.

The U.S. Nuclear Regulatory Commission (NRC) staff requests the following additional information.

Note that proprietary information is shown in **[[bolded brackets]]**.

1. Relief Request No. 10 Part II (RR10-II) states “The welded attachment on the installed clips to gussets to the new Restoration Hardware Assembly (RHA) shall be visually examined per ASME Section XI, Class 3, VT-1 requirements (Ref. ASME XI, Table IWD-2500 (D-A).”

    a. Please clarify whether the notes in Table IWD-2500 (D-A) of ASME Code, Section XI allowing sampling during inservice inspection (ISI) will be used, or whether all attachment welds will be inspected.

    b. There is no ISI specified in RR10-II for the full penetration weld (cylinder plates 101a and 101b to flange welds) that will be pressure boundary. Provide the proposed ISI for these welds, including the type of inspection, frequency, and acceptance criteria.

2. RR10-II states that “Regarding provision (l), a system pressure test in accordance with IWA-5000 cannot be performed on the installed RHA. The RHA will be hydrostatically tested at the vendor shop prior to shipment to Turkey Point. Following the installation of the RHA, in lieu of system leakage test, for this open ended portion of the discharge line beyond the last shutoff valve, confirmation of adequate flow during system operation (full flow test) with no leakage observed by a VT-2 qualified examiner at the welded and mechanical connections of the modification shall be an acceptable alternative. Similarly, future periodic tests will be conducted by subjecting the RHA to a full flow test with no acceptable leakage observed by a VT-2 qualified examiner at the welded and mechanical connections of the modification.”

The RHA drawing in Enclosure 2 of RR10-II also states that **[[**
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a. For ISI leak testing, please specify the frequency of this inspection and be consistent with question 1b above.

b. Pressure test for installation:

i. Discuss how upon sealing the leak with Belzona, that a leak test with flow through the system (with the leak stopped by Belzona) provides any assurance of the leak tightness of the installed RHA. Also, since there are threaded plugs in the RHA that were used for shop hydrostatic testing, discuss whether a pneumatic pressure test using the threaded plugs of the RHA (upon installation - after welding parts 701and 702) would provide adequate assurance of leak tightness of the installed RHA.

ii. Clarify whether this leakage test will also be performed after welding of the attachment welds (parts 701 and 702) to the RHA since welding of the attachment gussets could move the cylinder plates of the RHA and effect its leak tightness.

3. RR10-II made reference to ADAMS Accession Number ML20287A551, as precedence. However, the RHA in ML20287A551 is a welded RHA, while the RHA for RR10-II is a mechanical gasketed RHA with some welds. However, the information for weld requirements could be used as precedence for the welds in the RR10-II RHA. It is noted that the ML20287A551 safety evaluation stated that “Because the welds will receive visual and surface examinations of the root pass and final pass for all fabrication and installation groove welds, the NRC staff finds the licensee’s proposed installation plans acceptable.”

a. Currently, there is no specified construction/installation inspection of the attachment welds and the full penetration welds for the RR10-II RHA. Based on this precedent in ML20287A551, clarify whether the attachment welds and the cylinder plates 101a and 101b to flange welds for the RR10-II RHA will also receive this type of examination. Please specify the type of examinations for each of the welds and acceptance criteria in RR10-II.

b. Enclosure 2 of RR10-II specifies that **[[**

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4. RR10-II states “Instead, the RHA replaces the pipe portion of the defective spool piece with a new corrosion resistant, gasketed pressure boundary that distributes all applied loads within the piping system by use of structural attachments, welds, and high-strength bolting.” RR10-II also states “Styrene Butadiene Rubber (SBR), will be installed at circumferential and longitudinal locations on the RHA.” However, RHA drawing in enclosure 2 states **[**

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5. RR10-II stated that “validation of the projected flaw growth into the flange during future outage is not practicable by examination without removal of the RHA. In lieu of the inspections specified in IWA-4340(g) and (i) Turkey Point performed an analysis to determine a conservative corrosion rate of the pipe spool flange and determined that the structural integrity will not be impacted for the proposed life of the modification.” Enclosure 1 to RR10-II provides the corrosion assessment for the cast iron piping to have a conservative corrosion rate of 10 Mils per year. This was based on numerous assumptions from tests with carbon steel. However, it is noted that the subject piping had an average corrosion rate of 15 mils per year during its 48 years of operation until the leak in 2020.

    a. Therefore, explain why 15 mils per year, at a minimum, would not be a more reasonable corrosion assumption and why it could not be higher based on the new configuration.

    b. Since the corrosion evaluation includes numerous assumptions and there is no specified gasket life/degradation, clarify whether a monitoring program should be specified for ensuring the evaluation/analysis is still applicable.

    c. Discuss if a best effort ultrasonic thickness measurement of the flange be performed to validate the flange material thickness is adequate.

6. Enclosure 2 states **[[**

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7. RR10-II states “ASTM A193/194 fasteners are applied on external portions of the RHA. High grade corrosive resistant fasteners are applied on the internal/inaccessible portion of the RHA. The Inservice Inspection program will continue with inspections for the externally applied fasteners.” Please specify the type of inspection, frequency, and acceptance criteria for the ISI of the bolting in RR10-II.

8. RR10-II states “The licensee requests approval of the proposed alternative for the remaining life of the plant, as supported by the RHA design documentation, or until such time that further repair/replacement activities are required for the affected portions of the ICW system piping, whichever occurs first.” Please specify the criteria for requiring the performance of a repair/replacement for the affected portion.

9. Enclosure 2, **[**

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L-2022-051

Enclosure 4

TURKEY POINT UNIT 3

Relief Request No. 10 Part II

FPL Response to Request for Additional Information

Non-Proprietary Response (Redacted)

Eight Pages Attached

L-2022-051
Enclosure 4
Turkey Point Unit 3
Relief Request No. 10 Part II Supplement and
FPL Response to Request for Additional Information

RAI Responses with Non- Proprietary Information

Note that redacted questions and responses are shown as **[[bolded brackets]]**.

1. Relief Request No. 10 Part II (RR10-II) states "The welded attachment on the installed clips to gussets to the new Restoration Hardware Assembly (RHA) shall be visually examined per ASME Section XI, Class 3, VT-1 requirements (Ref. ASME XI, Table IWD-2500 (D-A)."

   a. Please clarify whether the notes in Table IWD-2500 (D-A) of ASME Code, Section XI allowing sampling during inservice inspection (ISI) will be used, or whether all attachment welds will be inspected.

   FPL Response:
   Upon installation of the RHA, all attachment welds will be inspected with a visual, VT-1. Thereafter, they will be re-inspected with a visual, VT-1, once per ISI period.

   b. There is no ISI specified in RR10-II for the full penetration weld (cylinder plates 101a and 101b to flange welds) that will be pressure boundary. Provide the proposed ISI for these welds, including the type of inspection, frequency, and acceptance criteria.

   FPL Response:
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2. RR10-II states that "Regarding provision (I), a system pressure test in accordance with IWA-5000 cannot be performed on the installed RHA. The RHA will be hydrostatically tested at the vendor shop prior to shipment to Turkey Point. Following the installation of the RHA, in lieu of system leakage test, for this open ended portion of the discharge line beyond the last shutoff valve, confirmation of adequate flow during system operation (full flow test) with no leakage observed by a VT-2 qualified examiner at the welded and mechanical connections of the modification shall be an acceptable alternative. Similarly, future periodic tests will be conducted by subjecting the RHA to a full flow test with no acceptable leakage observed by a VT-2 qualified examiner at the welded and mechanical connections of the modification."

The RHA drawing in Enclosure 2 of RR10-II also states that **[[**

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a. For ISI leak testing, please specify the frequency of this inspection and be consistent with question 1b above.

FPL Response:
Please see response to 1b above.

b. Pressure test for installation:

i. Discuss how upon sealing the leak with Belzona, that a leak test with flow through the system (with the leak stopped by Belzona) provides any assurance of the leak tightness of the installed RHA. Also, since there are threaded plugs in the RHA that were used for shop hydrostatic testing, discuss whether a pneumatic pressure test using the threaded plugs of the RHA (upon installation - after welding parts 701and 702) would provide adequate assurance of leak tightness of the installed RHA.

FPL Response
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ii. Clarify whether this leakage test will also be performed after welding of the attachment welds (parts 701 and 702) to the RHA since welding of the attachment gussets could move the cylinder plates of the RHA and effect its leak tightness.

FPL Response:
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3. RR10-II made reference to ADAMS Accession Number ML20287A551, as precedence. However, the RHA in ML20287A551 is a welded RHA, while the RHA for RR10-II is a mechanical gasketed RHA with some welds. However, the information for weld requirements could be used as precedence for the welds in the RR10-II RHA. It is noted that the ML20287A551 safety evaluation stated that "Because the welds will receive visual and surface examinations of the root pass and final pass for all fabrication and installation groove welds, the NRC staff finds the licensee's proposed installation plans acceptable."

   a. Currently, there is no specified construction/installation inspection of the attachment welds and the full penetration welds for the RR10-II RHA. Based on this precedent in ML20287A551, clarify whether the attachment welds and the cylinder plates 101a and 101b to flange welds for the RR10-II RHA will also receive this type of examination. Please specify the type of examinations for each of the welds and acceptance criteria in RR10-II.

      FPL Response:
      ASME XI, IWA-4220 requires the construction code of a repair/replacement activity to be no earlier than the earliest construction code used for construction of the system. As noted in the relief request, the original construction code for the ICW system was USAS B31.1, 1955, and PTN has reconciled the design code for all safety related piping to ANSI B31.1 1973 edition through Winter 1976 Addenda.

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      Both of the aforementioned codes require only visual examination of the subject welds; however, the FPL weld control manual exceeds these requirements by specifying a final surface exam for all Class C Safety Related full penetration piping butt welds.

      In the referenced Relief Request precedent, it was specified only as a conservative measure since the welds were being performed in the field and not in a shop environment.

FPL Response:
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b. Enclosure 2 of **[[**

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FPL Response:
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4. RR10-II states “Instead, the RHA replaces the pipe portion of the defective spool piece with a new corrosion resistant, gasketed pressure boundary that distributes all applied loads within the piping system by use of structural attachments, welds, and high-strength bolting.” RR10-II also states “Styrene Butadiene Rubber (SBR), will be installed at circumferential and longitudinal locations on the RHA.” However, RHA drawing in enclosure 2 states **[[**

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FPL Response:
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5. RR10-II stated that "validation of the projected flaw growth into the flange during future outage is not practicable by examination without removal of the RHA. In lieu of the inspections specified in IWA-4340(g) and (i) Turkey Point performed an analysis to determine a conservative corrosion rate of the pipe spool flange and determined that the structural integrity will not be impacted for the proposed life of the modification." Enclosure 1 to RR10-II provides the corrosion assessment for the cast iron piping to have a conservative corrosion rate of 10 Mils per year. This was based on numerous assumptions from tests with carbon steel. However, it is noted that the subject piping had an average corrosion rate of 15 mils per year during its 48 years of operation until the leak in 2020.

a. Therefore, explain why 15 mils per year, at a minimum, would not be a more reasonable corrosion assumption and why it could not be higher based on the new configuration.

FPL Response:

It is believed that the reason for the through wall leak on the subject piping is due to a combination of a manufacturer's casting defect (inclusion) and partially due to inner diameter wall loss (corrosion).

As explained in previous Relief Request No. 10 correspondence, the through wall leak was discovered during the pipe coating preparation work. A section (9/16 inches x 13/16 inches) of the outer diameter of the pipe dislodged creating a crater. Two small weep holes were present inside this crater. The crater depth was measured to be 0.344 inches. Based on the results of several Code Case N-513 NDE examinations, the area examined around the circumference of this pipe did not show a similar wall loss.

The pipe wall thickness under the cavity is 0.386 inches (Pipe wall thickness 0.730 inches – 0.344 inches = 0.386 inches). Accordingly, the estimated corrosion rate is 0.008 inches/year (corrosion rate: 0.386 inches/48 years = 0.008 in/year). With the added conservatism of times 4 used in 10CFR50.55a(b)(2)(xxv) provision (B)(2), the corrosion rate is 0.032 inches/year.

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b. Since the corrosion evaluation includes numerous assumptions and there is no specified gasket life/degradation, clarify whether a monitoring program should be specified for ensuring the evaluation/analysis is still applicable.

FPL Response:
To ensure gasket life/degradation is monitored, gasket inspections will be included as part of the quarterly system walkdowns and the periodic system pressure leakage tests.

c. Discuss if a best effort ultrasonic thickness measurement of the flange be performed to validate the flange material thickness is adequate.

NDE personnel have attempted to take Ultrasonic thickness measurements of the flanges on the pipe spool piece. The attempts have not been successful due to the cast iron material and geometrical limitations.

6. Enclosure 2 states **[[**

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a. [[

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FPL Response:
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b. [[

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FPL Response:
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7. RR10-II states “ASTM A193/194 fasteners are applied on external portions of the RHA. High grade corrosive resistant fasteners are applied on the internal/inaccessible portion of the RHA. The Inservice Inspection program will continue with inspections for the externally applied fasteners.” Please specify the type of inspection, frequency, and acceptance criteria for the ISI of the bolting in RR10-II.

FPL Response:
The subject fasteners are parts 901 (ASTM A193 Gr B7 studs) and 902 (SA194 Gr 2H nuts) identified on PMC drawing 202111-M-0001 rev 3, Restoration Hardware Assembly Fabrication Details. After the RHA has been installed and tested, these external fasteners will be inspected during the System Leakage Test, once per ISI Period, in accordance with ASME Section XI, IWA 5000.

In addition, the ASTM A193/194 fasteners that are externally placed on the RHA will be inspected quarterly during the system walkdowns by both Operations and System Engineers. Regarding protecting these fasteners from the environment, a site approved coating will be applied following RHA installation and testing. Any corrosion that could potentially develop in the future, will be evaluated and repair/replacement will be documented in the site's Corrective Action Program.

8. RR10-II states "The licensee requests approval of the proposed alternative for the remaining life of the plant, as supported by the RHA design documentation, or until such time that further repair/replacement activities are required for the affected portions of the ICW system piping, whichever occurs first." Please specify the criteria for requiring the performance of a repair/replacement for the affected portion.

FPL Response:
The conditional statement "until such time that further repair replacement activities are required" reflects the potential that the RHA is rendered obsolete due to future system modifications/updates.

9. Enclosure 2, **[[**

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FPL Response:
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L-2022-051

Enclosure 5

TURKEY POINT UNIT 3

Relief Request No. 10 Part II

Affidavit for Withholding of Proprietary Information

272 Grubb Rd • Pottstown, PA 19465 | tel. 610.495.9750 | fax. 440.425.9750 | www.pmcengineering.com

U3 AFFIDAVIT, Rev. 4

I, Paul S. Manzon, state as follows:

1. I am the owner of PMC Engineering Solutions, Inc., Pottstown, PA, 19465. I am the inventor and owner of United States Patent 6,860,297, "Local degraded area repair and restoration component for pressure retaining items" and am addressing the proprietary documents listed in (2) below, containing information which is sought to be withheld, and am applying for its withholding.

2. The information sought to be withheld is contained in the following PMC Engineering Solutions, Inc. documents:

   a. PMC Engineering Drawing – Restoration Hardware Assembly Fabrication Details, Drawing No. 202111-M-0001, R3, Sheets 1 through 5.
   b. Presentation Slides from the PMC Engineering Design Calculation 202111-S-01, R1, Figures B-1, B-2, B-3, and B-5.
   c. PMC Engineering Design Report, ANSI B31.1 Calculation for Intake Cooling Water (ICW) Discharge Piping Spool Piece Restoration, PMC Restoration By Encapsulation, Calculation No. 202111-S-01, R0
   d. PMC Engineering Drawing – Restoration Hardware Assembly Installation Details, Drawing No. 202111-M-0002, R0, Sheets 1 through 13
   e. PMC Engineering Work Scope and Design Input Document for Intake Cooling Water Discharge Pipe Spool Restoration, Design Input Document No. 202111-DID-01, R1
   f. PMC Engineering's proprietary information included in FPL's response to NRC's RAIs, provided in Enclosure 2 of FPL Letter L-2022-051, dated 3-29-2022.

3. In making this application for withholding of proprietary information of which it is the owner, PMC Engineering Solutions, Inc. 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), and 2.390(a)(4) for "trade secrets" (Exemption 4). The information for which exemption from disclosure is here sought also qualifies 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 analysis, where prevention of its use by PMC Engineering Solutions, Inc.'s competitors without license from PMC Engineering Solutions, Inc. constitutes an economic advantage over other companies

   b. Information which, if used 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 of a similar product

   c. Information which reveals aspects of past, present, or future PMC Engineering Solutions, Inc. customer funded development plans and programs, resulting in potential products to PMC Engineering Solutions, Inc.

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

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4) a., (4) b., and (4) d., above.

5. To address 10 CFR 2.390 (b) (4), the information sought to be withheld is being submitted to the NRC in confidence. The information is of a sort customarily held in confidence by PMC Engineering Solutions, Inc., and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by PMC Engineering Solutions, Inc. No public disclosures to third parties including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions which provide for the maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are set forth in paragraphs (6) and (7) following.

6. Approval of proprietary treatment of a document is made by me, Paul S. Manzon, owner of PMC Engineering Solutions, Inc. I am the person most acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within PMC Engineering Solutions, Inc. is limited on a "need to know" basis.

7. The procedure for approval of external release of such a document requires review by me, Paul S. Manzon, owner, PMC Engineering Solutions, Inc., for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside PMC Engineering Solutions, Inc. are limited to regulatory bodies, customers, potential customers, and their agents, suppliers, and business and licensees, Authorized ASME Code Nuclear Inspectors, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.

8. The documents identified in paragraphs 2.a., 2.c., 2.d., 2e, and 2.f. above, are classified as proprietary because they contain "know-how" and "unique information" developed by PMC Engineering Solutions, Inc. within our product development programs. The development of this document, supporting methods, and information constitutes a major PMC Engineering Solutions, Inc. asset in this current market. Supporting aspects for the application to withhold information specific to the document containing proprietary information are as follows:

   a. PMC Engineering Drawing - shop fabrication details drawing, “Restoration Clamp Assembly Details”, Drawing No. 202111-M-0001, R3, Sheets 1 through 5
   b. PMC Engineering Design Report, ANSI B31.1 Calculation for Intake Cooling Water (ICW) Discharge Piping Spool Piece Restoration, PMC Restoration By Encapsulation, Calculation No. 202111-S-01, R0
   c. PMC Engineering Drawing – Restoration Hardware Assembly Installation drawing, “Restoration Assembly Hardware Installation Details”, Drawing No. 202111-M-0002, R0, Sheets 1 through 13
   d. PMC Engineering Work Scope and Design Input Document for Intake Cooling Water Discharge Pipe Spool Restoration, Design Input Document No. 202111-DID-01, R1
   e. PMC Engineering’s proprietary information included in FPL’s response to NRC’s RAIs, provided in Enclosure 2 of FPL Letter L-2022-051, dated 3-29-2022.

      i. The above documents in paragraph 8.a., 8.b., 8.c., 8.d.,and 8.e. contain specific design, fabrication, and installation details required to design, fabricate, and install ASME B31.1 Code Safety-Related restoration hardware (*PMCaps).* The development of these document details applicable to and supporting ASME B31.1 Code Safety-Related material, design, fabrication, examination, testing, and installation requirements are a major PMC Engineering Solutions, Inc. asset in this current market. These details were developed at a very high level of effort and expense over the past several years during which PMC Engineering Solutions, Inc. has been offering the nuclear power industry its comprehensive PMC Restoration Method (U.S. Patent 6,860,297) products and services which include those protected by U.S. Patent 6,860,297.

9. The entirety of the information contained in the documents listed in paragraphs 2.a., 2.c., 2.d., 2.e., and 2.f. above, is sought to be withheld from Public Disclosure under 10 CFR 2.390:

10. Public disclosure of the information sought to be withheld is likely to cause substantial harm to PMC Engineering Solutions, Inc.'s competitive position and foreclose or reduce availability of profit-making opportunities. The information is part of PMC Engineering Solutions, Inc.'s comprehensive PMC Restoration Method products and services offerings which include those protected by U.S. Patent 6,860,297, and its commercial value extends beyond the original development costs. The value of the technology base goes beyond the information contained in the documents and includes development of the expertise to determine and apply the appropriate data, requirements, criteria, limitations, approaches, and methodologies used in the development and preparation of the design, design details, and supporting documentation for the restoration covered by the information sought to be withheld.

The research, development, engineering, and analytical costs comprise substantial investment of time and money by PMC Engineering Solutions, Inc.

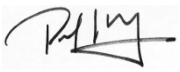
The precise value of the expertise to devise a restoration method and apply the appropriate and correct Code and regulatory requirements to the restoration is difficult to quantify, but it clearly is substantial.

PMC Engineering Solutions, Inc.'s competitive advantage will be lost if its competitors are able to use the results of the PMC Engineering Solutions, Inc. experience to develop or modify their own restoration method or if they are able to claim an equivalent understanding by demonstrating that they can develop the same or similar restoration method.

The value of this information to PMC Engineering Solutions, Inc. would be lost if the information were disclosed to the public. Making such information available to competitors without them having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive PMC Engineering Solutions, Inc. of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information, and belief.

Sincerely,



Paul S. Manzon
Owner
PMC Engineering Solutions, Inc.

03.29.2022
Date