### **Lockheed Martin**

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LOCKHEED MARTIN

NuPAC\_ED610000-47-P, Revision A Project Number 780

January 19, 2012

Document Control No.: NS-LTA-2012-000006-0

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

SUBJECT:

Submittal of Topical Report NuPAC\_ED610000-47-P, Revision A,

"Generic Qualification of the NuPAC Platform for Safety-related

Applications (Proprietary)"

REFERENCE:

Project 780

## **Request for Review**

Lockheed Martin Corporation, acting through its Nuclear Systems & Solutions business unit (Lockheed Martin), is requesting formal review of Topical Report (TR) NuPAC\_ED610000-47-P, Revision A, in accordance with the Nuclear Regulatory Commission (NRC) TR program for review and acceptance for referencing in regulatory actions. Lockheed Martin, in support of the review, provides Enclosures (1), (2), and (3) herewith.

Lockheed Martin is submitting this TR to the NRC for review of our Nuclear Protection and Control (NuPAC) platform. The NuPAC platform is a generic digital safety instrumentation and control (I&C) platform designed to implement Class 1E safety-related applications in United States (US) nuclear power plants (NPPs). The TR is for a generic platform, not a plant-specific implementation; consequently, approval of the TR will not require a change to a plant-specific Technical Specification.

The Office of Nuclear Reactor Regulation's (NRR) TR Prioritization Scheme Matrix previously provided as Table 1 in our June 28, 2011 submittal remains unchanged and has not been repeated herein.

This TR is a technical artifact developed under a cooperative development project between Lockheed Martin and State Nuclear Power Automation Systems Engineering Company (SNPAS).

This letter transmits five copies of the TR, NuPAC\_ED610000-47-P, Revision A, in hard copy format, Enclosure (2). In addition, this letter transmits five copies of the TR, NuPAC\_ED610000-47-P, Revision A, in CD-ROM format, Enclosure (3). One CD-ROM is

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submitted to the NRC Document Control Desk (DCD) for electronic submission. Five hard copies and four CD-ROMs are provided, via courtesy copy, to the NRC project manager.

## Application for Withholding Proprietary Information from Public Disclosure

Enclosure (2) and Enclosure (3) contain Lockheed Martin trade secrets and commercial or financial information that is privileged or confidential. Enclosure (2) and Enclosure (3) contain technical data whose export, transfer, disclosure, and further publication are restricted by the applicable export laws and regulations of the United States of America.

In accordance with 10 CFR § 2.390(a)(4) and other applicable clauses in 10 CFR § 2.390, Lockheed Martin respectfully requests that Enclosure (2) and Enclosure (3), both titled "Generic Qualification of the NuPAC Platform for Safety-related Applications (Proprietary)" (in hard copy and CD-ROM format, respectively), be withheld from public disclosure. The accompanying affidavit, Enclosure (1), sets forth the basis on which the information identified as proprietary may be withheld from public disclosure.

Lockheed Martin recognizes only certain parts of the TR may contain information which Lockheed Martin considers proprietary. Therefore, to assure the document is appropriately available in the public record, Lockheed Martin is requesting a withholding determination by NRC. In Enclosure (2) and Enclosure (3) proprietary information is contained/marked within boxes drawn with dashed lines. The marking includes an associated identifier ("a", "b", "c", "d") indicating the reason(s) for withholding as defined in the accompanying affidavit, Enclosure (1). Upon receiving the withholding determination from the NRC, it is Lockheed Martin's intent to prepare and submit a non-proprietary version of the TR, which will be provided under separate cover.

Lockheed Martin closely guards its Confidential and Proprietary Information. Even within Lockheed Martin, distribution of such information is limited to employees involved in the development of the information, senior management, program management, and selected other personnel. Lockheed Martin's Confidential and Proprietary Information thus is closely guarded and distributed on a "need to know" basis. Furthermore, Lockheed Martin does not publicly disclose the type of information at issue. Lockheed Martin carefully protects this type of Confidential and Proprietary Information and does not disclose it outside the Company, except to the U. S. Government.

Lockheed Martin generates and retains a wide variety of Sensitive Information and materials that are valuable assets of Lockheed Martin, its collaborators, and Customers, including information that is Proprietary to Lockheed Martin or a third party, export controlled, protected, or attorney-client and/or work product privileged. It is Lockheed Martin policy to properly identify, effectively manage, and diligently protect all such Sensitive Information. Lockheed Martin requires that specific measures be taken in the protection and handling of Sensitive Information.

As discussed in the Affidavit, Enclosure (1), release of Confidential and Proprietary Information is likely to cause Lockheed Martin substantial competitive harm. This could result in a loss of future business and jobs.

Should you desire further information and/or clarification, please do not hesitate to contact me at (570) 803-2123 or via email at pat.troy@lmco.com.

**Lockheed Martin Nuclear Systems & Solutions** 

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Patrick Troy

LTR Licensing Manager

**ENCLOSURES:** 

- (1) Lockheed Martin Affidavit of Patrick J. Troy
- (2) Five copies of Lockheed Martin Document NuPAC\_ED610000-47-P, Revision A, titled "Generic Qualification of the NuPAC Platform for Safetyrelated Applications (Proprietary)" in hard copy format
- (3) Five copies of Lockheed Martin Document NuPAC\_ED610000-47-P, Revision A, titled "Generic Qualification of the NuPAC Platform for Safety-

related Applications (Proprietary)" in CD-ROM format

cc:

Mr. Andrew Hon (NRC)

### Enclosure #1 to NS-LTA-2012-000006-0

# **Lockheed Martin Corporation**

## Affidavit of Patrick J. Troy

- I, Patrick J. Troy, state as follows:
- Lockheed Martin Corporation (Lockheed Martin) seeks to withhold the enclosed document number NuPAC\_ED610000-47-P, Revision A, titled "Generic Qualification of the NuPAC Platform for Safety-related Applications (Proprietary)", from public disclosure under 10 CFR § 2.390.
- 2. My official position is LTR Licensing Manager for the Nuclear Systems & Solutions (NS&S) line of business at Lockheed Martin in Archbald, Pennsylvania. I am responsible for leading the Contracts Management organization for the NS&S business. I have been delegated the function of reviewing the information sought to be withheld and authorized to apply for its withholding on behalf of the company
- 3. I understand that in accordance with U.S. Nuclear Regulatory Commission (NRC) regulations in 10 CFR § 2.390 that in order for such information to be withheld from the public requires the submission of an affidavit particularly identifying the information which Lockheed Martin considers proprietary and the reasons why its release would cause Lockheed Martin substantial competitive harm.
- 4. I have reviewed the enclosed documents and have determined that they contain Lockheed Martin Proprietary Information and request that they be withheld from public disclosure based on the following considerations:

Specifically, the design process and tools described in the documents reveal distinguishing aspects of NS&S processes that were developed by Lockheed Martin, using Lockheed Martin funds. Distinguishing disciplines applied in these processes could be used by any of NS&S's competitors to improve or enhance their own products and processes. Such use, without a license by NS&S, would cause competitive and economic harm to NS&S and its parent company, Lockheed Martin Corporation.

Furthermore, NS&S considers the structuring of a product development and licensing plan by submitting product development processes to the NRC prior to submitting product-specific plans and design control documentation as constituting a proprietary advantage that NS&S strongly desires to protect.

Specifically, the processes and tools described in the documents have been and are being developed by and for the use of NS&S in order to improve our competitive position in the design, qualification, documentation, assurance of quality, and licensing of our products. Revealing this information to our competitors would give them knowledge that they could use for similar purposes, but without the same expenditure of resources. Use of this knowledge would improve their competitive position against providers of similar products, including and at the expense of NS&S.

Specifically, the disciplines identified in these processes provide a strategy for future product licensing that will ultimately favor marketing of said future product. The revealing of internal development and design processes at this time will allow competitors to structure similar processes prior to NS&S's products reaching the market. Details of process discipline may prompt a competitor to adjust their own planned expenditures of resources and development processes that may provide them an advantage over NS&S.

Specifically, the development and maintenance of the subject documents, the process and plans they describe, and the methods of describing the process are funded exclusively by Lockheed Martin. The results of the program are expected to provide significant commercial advantage to Lockheed Martin over those of our competitors who may not apply similar process rigors and discipline.

- 5. The information is being furnished to the NRC in confidence and solely for use by the NRC staff in the conduct of official NRC business.
- 6. As discussed further below, release of confidential and proprietary information is likely to cause Lockheed Martin substantial competitive harm. This could result in a loss of future business and jobs.

## **Lockheed Martin Business Environment**

- 7. Lockheed Martin NS&S products are for sale to United States nuclear electric generation customers and international customers in that industry. In offering these products, Lockheed Martin does compete with several other companies for providing similar products to domestic and international customers. The competition is narrow and keen
- 8. Based on my experience as LTR Licensing Manager for the NS&S line of business, I have direct knowledge of the competitions and the marketplace for providing modern, high-performance nuclear reactor safety and protective systems, as well as the appropriately cautious regulatory approval positions taken by the NRC with regard to the implementation of advanced systems.
- 9. Currently, Lockheed Martin is engaged in development activities related to the documentation of a disciplined design process for safety evaluation by regulatory authorities. Lockheed Martin has invested, and expects to continue to invest, its own precious financial resources in support of developing and maintaining this process.
- 10. Lockheed Martin may apply these processes in product development, design and documentation that may be needed to support NRC regulatory approval for the deployment of new products in new and existing U.S. nuclear-electric generating stations. Lockheed Martin believes this process represents a substantial licensing advantage for future products, contributing long-term financial returns as well as the benefit of employment for our highly envied base of employees.
- 11. Lockheed Martin has been performing development, design, qualification, manufacturing and logistics services for customers recognized for having a history of technical excellence in a niche nuclear Instrumentation and Controls market for 50+ years over numerous generations of products and product types. Lockheed Martin continues to perform these services for these customers.
- 12. Lockheed Martin developed specific processes of implementing disciplined, detailed processes and procedures that result in design artifacts for NRC-licensable products employed as reactor protection and other safety systems.

13. The details of the product development process contains methods and approaches that are intended to alleviate technical concerns related to the risk of implementing modern, advanced safety-related products. This information constitutes confidential commercial or technical information normally not disclosed in public. This is so because such disclosure would provide competitors with detailed technical information that would potentially permit earlier market penetration than Lockheed Martin may be able to achieve. Lockheed Martin is currently in a competitive race to market with other industry suppliers. The disclosure of these methodologies would significantly impact the company's competitive bid strategy for these procurements.

### **Summary**

In summary, release of Lockheed Martin's design and process details may result in a significant reduction to a potential substantial business opportunity and the potential loss of employment for Lockheed Martin personnel.

Further, the release of business, process and technical information could result in a disincentive for further internal Lockheed Martin investment intended to improve overall safety system performance, availability and longevity for U.S. and international customers in this uniquely sensitive business.

Sworn to and subscribed before me

this 19 day of January, 20 12

This 19th day of January, 2012

Patrick J. Troy

Commonwealth of Pennsylvania

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COMMONWEALTH OF PENNSYLVANIA

Notarial Seal Carol Green, Notary Public Archbald Boro, Lackawanna County My Commission Expires April 7, 2012

Member, Pennsylvania Association of Notaries