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RA-24-0096

April 24th, 2024

Document Control Desk
Attn: Licensing Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Instrumentation and Control Safety Systems
NRC Review of Framatome TXS-Compact Topical Report

As you are aware, many of the installed Instrumentation and Control Safety Systems in the United States and international Nuclear Power Plants have obsolescence challenges and are not always well supported by Original Equipment Manufacturers.

Duke Energy Carolinas, LLC (Oconee Nuclear Station) is aware that Framatome has developed a "state-of-the art" safety system addition to the TXS solution portfolio identified as the TXS Compact. TXS Compact is a Field- Programmable Gate Array (FPGA) technology-based solution built upon decades of Framatome operational experience acquired from a global fleet of installed I&C systems. The TXS Compact design is based on the extensive operational experience of the TXS platform installed in 88 Nuclear Power Plants in 17 countries. The TXS Compact technology offers the following benefits:

- Fully deterministic behavior based on static response time without any interruptions
- Unique and modern set of automated user-friendly tools allowing for application development and maintenance without any detailed FPGA training
- Resistance to cybersecurity issues
- Resilience to hardware obsolescence
- Self-testing and diagnostics capabilities allowing for reduction in surveillance intervals
- Reliability and availability improvements
- Small form factor (3U) - easy fit into existing system cabinets

Framatome is completing the TXS Compact Licensing Topical Report and expects to submit to NRC in 2024. We believe NRC review and approval of this newly developed "state-of-the-art" safety system platform would provide significant benefit to the commercial nuclear industry.

Sincerely,

David A. Wilson

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