

Ref. № 85/40

Dated 15. 01. 2015

Document Control Desk
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Washington, D.C. 20555-0001
USA

Attention: **Anthony Mendiola, Branch Chief**
Division of Policy and Rulemaking

SUBJECT: Intention to Submit RadICS Digital I&C Platform Topical Report

Public Company "Research and Production Corporation Radiy" (PC "RPC Radiy") is a Ukrainian company with a long history of working with operating nuclear power plants (NPPs) and installing new instrumentation and control (I&C) systems in turn-key projects. The company uses Field- Programmable Gate Array (FPGA) technology in our digital platform to implement customized solutions to NPPs I&C systems. PC "RPC Radiy" has over 90 systems installed to-date with a Safety Integrity Level (SIL)-3 certification¹ for the new RadICS platform.

PC "RPC Radiy" is taking the necessary actions to become established as an I&C supplier that is compliant with 10 CFR Part 50 Appendix B quality assurance program requirements. PC "RPC Radiy" also intends to submit a topical report for the RadICS digital I&C platform to the NRC for review and approval. The RadICS platform is a new generation product, designed in 2010-2011 on the basis of the more than 10 years of experience with the design, production, operation and maintenance of the RADIY digital I&C platform. The RadICS platform is composed of multiple types of modules, based on the use of FPGA technology as computational, processing, and system-internal control engines for each of the modules. PC "RPC Radiy" has been using the RADIY and RadICS platforms in I&C modernization projects at various NPPs for a wide range of safety and control applications (e.g., Reactor Trip Systems, Reactor Power Control and Limitation Systems, Engineered Safety Features Actuation System, Rod Control System, and non-safety Nuclear Island Control System, and Turbine Island Control System). More information can be found in the report: <http://radiy.com/en/news-media/brochures.html>

PC "RPC Radiy" would like to schedule a pre-submittal meeting towards the end of the first quarter 2015. Radiy has noted that pre-submittal meetings provide a good forum for an exchange of technical, general schedule, and topical report submittal scope information.

The PC "RPC Radiy" point of contact will be Vladimir Sklyar, Head of International Projects Department. He can be reached at international telephone number +38 0522 373220 and email address v.sklyar@radiy.com.

PC "RPC Radiy" requests that the NRC identify a point of contact to work with Vladimir Sklyar to arrange the pre-submittal meeting.

Sincerely,

Alexander Siora
General Manager



¹ Based on IEC 61508, *Functional Safety of Electrical/Electronic/Programmable Electronic Safety-related Systems*.