

March 21, 2018

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Subject: Studsvik Scandpower Quality Assurance for EPRI Burnup Credit Project

Dear Dr. Akkurt,

In response to your request I would like to provide the following description of the quality assurance associated with the EPRI burnup credit project done at Studsvik Scandpower, Inc. (SSP).

The EPRI report **1022909**, "*Benchmarks for Quantifying Fuel Reactivity Depletion Uncertainty*" was fully developed under the Studsvik QA program as stated in Appendix C of EPRI Report 1022909 as stated below.

*"The entire contents of this report are taken directly from a proprietary Studsvik report bearing the same title (report number, **SSP-11/409-C Rev. 0**) for which all work has been performed under the approved Studsvik QA Programs. If subsequent applications of data contained in this report require quality assurance, the proprietary QA version of this report can be obtained directly from Studsvik Scandpower, Inc."*

EPRI report **3002010613**, "*Benchmarks for Quantifying Fuel Reactivity Depletion Uncertainty - Revision 1*" includes sections from the original report and new sections that addressed the new statistical approach. The new analysis and revised version of the report were performed under the Studsvik QA program. All of the steps of the statistical analysis have been reviewed under the Studsvik QA program, incorporated into the above referenced report, and have been reviewed and confirmed to be accurate and correct.

Furthermore, the current quality assurance program is described in SSP-01/477-Q Rev. 13. This is the top-level document that describes the overall scope and application of the NQA-1 1994 compliant program. The scope of our QA program

is for the development and maintenance of software and the performance of engineering services.

For the role in the EPRI benchmarking project for burnup credit, both aspects of the program were used. The software was controlled and developed under SSP-01/478-Q. The application of the software in performing the benchmark was done under SSP-10-419-Q the engineering services QA procedure.

The QA program was also used to develop a Topical Report (TR), "**Generic Application of the Studsvik Scandpower Core Management System to Pressurized Water Reactors**". This TR was submitted to USNRC for review in December 2015 and approved in September 2017.

Our QA program undergoes regular audits by various customers and the NUPIC organization. Our most recent NUPIC audit closure letter is available for review upon request.

For any questions or comments, please contact me by telephone: 910-777-2564, or email: brandon.haugh@studsvik.com.

Best regards,



Brandon Haugh
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