



GE Hitachi BWRX-300 Small Modular Reactor Achieves Pre-Licensing Milestone in Canada

The first SMR technology to complete two phases of the Vendor Design Review process

WILMINGTON, North Carolina—March 15, 2023—GE Hitachi Nuclear Energy (GEH) today announced that its BWRX-300 small modular reactor (SMR) has achieved a significant pre-licensing milestone in Canada with the completion of phases one and two of the Canadian Nuclear Safety Commission’s (CNSC) Vendor Design Review (VDR) process.

“The BWRX-300 is the first SMR technology to have completed two phases of the CNSC’s VDR process,” Sean Sexstone, Executive Vice President, Advanced Nuclear, GEH. “The successful completion of these phases and the feedback that we have received on our SMR design are important steps in the deployment of this technology.”

In 2020, GEH made its first submittal to the CNSC for its review of the BWRX-300 design. Since then, GEH has made submittals addressing 19 VDR focus areas that included general plant description, control system and facilities, research and development, and design process.

After a detailed assessment of reactor designs, in 2021 Ontario Power Generation (OPG) selected the GEH BWRX-300 as the technology to be deployed at its Darlington Nuclear Site. Recently, GEH, OPG, SNC-Lavalin and Aecon signed an integrated project delivery agreement where the partners will provide a diverse range of expertise and services to develop, engineer and construct a BWRX-300 SMR, with construction to be complete by late 2028.

There is growing, global interest in the BWRX-300. Last month, Fermi Energia announced that it had selected the BWRX-300 for potential deployment in Estonia. Tennessee Valley Authority (TVA) has begun planning and preliminary licensing for potential deployment of a BWRX-300 at the Clinch River Site near Oak Ridge, Tennessee. SaskPower has selected the BWRX-300 for potential deployment in Saskatchewan in the mid-2030s. ORLEN Synthos Green Energy (OSGE) and its partners have started the pre-licensing process by submitting an application to Poland’s National Atomic Energy Agency for assessment of the BWRX-300. OSGE plans to deploy a fleet of BWRX-300s with the potential for deployment of the first of those units by the end of this decade.

The CNSC and U.S. Nuclear Regulatory Commission are collaborating on reviews of SMRs such as the BWRX-300 and last month the CNSC and Poland’s National Atomic Energy Agency agreed to cooperate in the review of SMR technologies including the BWRX-300.

Advanced nuclear technologies like the BWRX-300 are a key pillar of GEH’s energy transition leadership. In addition to helping customers achieve decarbonization goals, the BWRX-300 is designed to reduce construction and operating costs below other nuclear power generation technologies.



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About GE Hitachi Nuclear Energy

GE Hitachi Nuclear Energy (GEH) is a world-leading provider of advanced reactors and nuclear services. Established in 2007, GEH is a global nuclear alliance created by GE and Hitachi to serve the global nuclear industry. The nuclear alliance executes a single, strategic vision to create a broader portfolio of solutions, expanding its capabilities for new reactor and service opportunities. The alliance offers customers around the world the technological leadership required to effectively enhance reactor performance, power output and safety. Follow GEH on [LinkedIn](#) and [Twitter](#).

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