



# NRC NEWS

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## **NRC ISSUES FINAL SAFETY EVALUATION REPORT AND FINAL DESIGN APPROVAL FOR GE-HITACHI ESBWR ADVANCED REACTOR**

The U.S. Nuclear Regulatory Commission has issued a final safety evaluation report (FSER) and final design approval for GE-Hitachi's Economic Simplified Boiling Water Reactor (ESBWR). The approval, which indicates the NRC finds the design technically acceptable but does not fully certify the design, is good for 15 years.

NRC staff has spent approximately five years carefully considering whether to certify the reactor. The ESBWR is designed to produce approximately 1,500 megawatts of electricity and it features enhanced systems to safely shut down the reactor or mitigate the effects of an accident.

Separately, the NRC is considering GE-Hitachi's request to certify the design through rulemaking. The Commission is currently considering the NRC's staff's request to publish that proposed rule.

"Our technical experts have asked tough questions to ensure GE-Hitachi has appropriately addressed the NRC's requirements, and after their extensive technical evaluation they're satisfied with the ESBWR design," said Michael Johnson, director of NRC's Office of New Reactors. "If the Commission agrees with the staff, we'll move on to fully certifying the design, incorporating it into our regulations using a rule-making process that includes a public comment period."

Neither a final design approval nor design certification grant permission to build or operate a reactor. Full certification, if granted by the Commission following the staff's recommendation, is valid for 15 years and allows a utility to reference the design when applying for a Combined License to build and operate a nuclear power plant. NRC has long sought standardization of nuclear power plant designs to help enhance safety and bring efficiency to the reactor licensing process.

The NRC has certified four other designs: the Advanced Boiling Water Reactor (ABWR), System 80+, AP600 and AP1000. The agency has issued proposed rules to certify revised versions of the ABWR and AP1000. The staff is reviewing applications to certify two other designs: the U.S. Evolutionary Power Reactor and the U.S. Advanced Pressurized Water Reactor.

The FSER will be available through the NRC's electronic documents database, ADAMS, by going to: <http://wba.nrc.gov:8080/ves>, and entering accession number ML103470210.

More information about the ESBWR design review can be found on the NRC's website at: <http://www.nrc.gov/reactors/new-reactors/design-cert/esbwr.html>.

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