Westinghouse and Ukraine’s Energoatom to Develop Small Modular Reactor

Westinghouse AP300™ Small Modular Reactor

by Amy Baxter | Sep 14, 2023

Conventional Energy       Energy Management
Energy Procurement        Solar & Renewable Energy

Westinghouse Electric Company has teamed up with Energoatom, the state-owned nuclear utility of Ukraine, to develop and deploy the AP300 Small Modular Reactor (SMR).

The two companies signed a Memorandum of Understanding, and the agreement establishes that they will collaborate on contracting, licensing, and the local supply chain.

Westinghouse’s AP300 SMR is a 300-MWe single-loop pressurized water reactor. It is the only SMR based on an Nth-of-a-kind operating reactor, the proven and licensed AP1000 technology.

“Westinghouse is pleased to support the Ukrainian people and Energoatom with clean, reliable, and secure energy,” said Patrick Fragman, President and CEO of Westinghouse. “From nuclear fuel to plant services to electricity generation, Westinghouse is honored to be a trusted partner for Ukraine today and for decades to come. The AP300 SMR is the only SMR being developed which fully leverages the design, licensing pedigree, supply chain, and exceptional record of the AP1000 design already in operation in five plants around the world, and another seven units at different stages of construction and commission.”
The deal comes as Ukraine is working towards carbon neutrality in its energy sector by 2050. The nation is also pursuing plans to develop modern and safe nuclear generation with the latest technologies.

"Ukraine has every prospect of becoming one of the leaders in clean energy and increasing nuclear generation capacity both through the construction of new large power units and deployment of small modular reactors with first units expected within the next ten years," Minister of Energy of Ukraine German Galushchenko said in a statement.

According to Galushchenko, localization of manufacturing is key in the agreements to leverage Ukraine’s nuclear experts.

Ukraine is not the only country moving forward with SMRs. NB Power and ARC Clean Technology Canada announced in July they were making strides in constructing and operating an advanced SMR on the site of an existing nuclear power plant in New Brunswick.

For the SMR with Energoatom, Westinghouse said it targeted 2027 for the AP300 SMR design certification, with construction to begin by 2030. The first operating unit is expected to be available in the 2030s, the company said. The deal between Energoatom and Westinghouse is set to deploy nine units in Ukraine.