SMR deployment gets closer with recent collaboration and funding announcements

A flurry of announcements in October have signalled small modular reactor (SMR) deployment in North America is closer to becoming reality. Some announcements involve CANDU Owners Group (COG) members, Bruce Power and Ontario Power Generation. All of the announcements bring good news for several COG SMR vendor participants.

Photo: Westinghouse

Bruce Power and Westinghouse collaborate on new battery technology

Bruce Power and Westinghouse announced an agreement to pursue applications of Westinghouse's eVinci micro reactor technology in Canada.

Over the next year, the work between the two companies will focus on advancing the public policy and regulatory framework; assessing the economic, social and environmental contribution of the eVinci technology compared to alternates such as diesel or other fossil fuels; identifying potential industrial applications; and accelerating the roadmap for Canada to host a globally-recognized demonstration as part of the federal SMR action plan.

Westinghouse's eVinci micro reactor is a next-generation small battery for decentralized generation markets and micro grids such as remote communities, remote industrial mines and critical infrastructure. It is designed to provide power and reliability with minimal maintenance.

Click here to read the full Bruce Power announcement.

Click here to read the full Westinghouse announcement.

Photo: Terrestrial Energy

Canada invests $20 million in Terrestrial Energy

In a first for Canadian SMR-funding, Terrestrial Energy, announced it had received $20 million from the federal government to accelerate development of the company's Integral Molten Salt Reactor (IMSR) power plant. The technology is expected to provide high-efficiency on-grid electricity generation and high-temperature operation for uses such as zero-carbon hydrogen production.

The funds were directed to the Oakville, Ontario-based company through the government's Strategic Innovation Fund (SIF). This marks the first-time such funding has been given to an SMR-developer in Canada.

In accepting the government's investment, the company has committed to create and maintain 186 jobs nationally. In addition, Terrestrial Energy is spending at least another $91.5 million in research and development.

Click here to read the full announcement from Terrestrial Energy.

Click here to read the Canadian government's SIF SMR funding announcement.

Photo: UAMPS

U.S. Department of Energy awards funding for NuScale SMR plant

The U.S. Department of Energy has approved US$1.355 billion in funding to Utah Associated Municipal Power Systems (UAMPS) for NuScale Power's first prospective SMR project.

In August, NuScale's reactor became the first SMR to receive design approval from the U.S. Nuclear Regulatory Commission, following successful completion of a Phase 6 review.

Fluor, NuScale's parent company, has been working with UAMPS in the development of the Carbon Free Power Project, a 720-megawatt plant in Idaho using 12 NuScale SMRs, which once completed, will provide reliable base load electricity to UAMPS member participants.

Click here for the full Fluor SMR funding announcement.

Photos: GE Hitachi, Terrestrial Energy, X-energy

OPG working with SMR developers

Earlier this month, Ontario Power Generation (OPG) announced it will work with a trio of grid-scale SMR developers to advance engineering and design work.

OPG will work with GE Hitachi, Terrestrial Energy and X-energy in SMR development and deployment of this next generation nuclear technology. This announcement is consistent with OPG's pan-Canadian approach to SMR development and builds on its previously announced partnership with Global First Power and its SMR project to support remote energy needs.

As well, in a separate announcement, on Oct. 13, the U.S. Department of Energy announced it had selected X-energy and TerraPower LLC (not a COG SMR vendor participant) to receive US$80 million each in initial funding under the new Advanced Reactor Demonstration Program (ARDP). The ARDP is designed to help U.S.-based private industry demonstrate advanced nuclear reactor technologies. The funding will be used to build two advanced nuclear reactors that can be licensed and commercially operational within seven years.

Click here to read the U.S. ARDP funding announcement.

Click here to read COG's story covering the OPG announcement.