



years after its founding, and its plans to develop a sodium fast reactor are mentioned in several Department of Energy publications around 2015.

In 2017, ARC partnered with GE Hitachi Nuclear Energy to jointly develop, license, and deploy the ARC-100 in Canada. At the time, GEH planned to license intellectual property related to its Prism reactor design to ARC.

Progress on the Canadian side of ARC's work continues to this day; the ARC-100 has moved through several stages of regulatory review with the Canadian Nuclear Safety Commission, and ARC has partnered with several companies to advance plans for reactor deployment in Alberta.

Meanwhile, in the United States, ARC received a major boost in 2020 when the DOE rolled out the Advanced Reactor Demonstration Program, which aims to speed the demonstration of advanced reactors through public-private cost-sharing partnerships. The ARDP is split into three different groups, the most well-known of which involves TerraPower and X-energy. ARC was selected for a different group, the confusingly named ARC-20 pathway. With ARC's selection for ARC-20, the company received \$27.5 million in DOE funding and set a goal of deploying its reactor by the mid-2030s.

That year, ARC also began prelicensing engagement activities with the Nuclear Regulatory Commission. The company is now planning to pursue licensing under the recently unveiled 10 CFR Part 53.

Now, this newly formed partnership with Battelle, according to ARC, will see INL supporting "multiple technical functions including engineering and design, advanced materials and manufacturing, high-performance computing and

modeling, irradiation testing, reactor commissioning and operation, and site development; covering the full lifecycle from detailed design through [first-of-a-kind] deployment."

Unlike other recent, high-profile reactor deployments at INL, ARC has not been named as

a participant in either the Reactor Pilot Program or the Nuclear Energy Launch Pad. As such, its design must progress through NRC licensing rather than expedited DOE authorization.

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