

# Project Purpose & Need

- Evaluate and demonstrate the feasibility of deploying advanced nuclear reactors to support TVA's mission of providing safe, clean, reliable, and low-cost energy to the Tennessee Valley.
- Support TVA's 2019 Integrated Resource Plan by continuing to evaluate emerging nuclear technologies as part of technology innovation efforts aimed at developing future generation capacities.
- Consider a new nuclear technology park at the CRN Site to support TVA's innovation mission as another way to serve the people of the Tennessee Valley.

# Project Background

- The CRN Site was originally the site of the Clinch River Breeder Reactor Project. Site preparation from late 1982 to late 1983 disturbed approximately 240 acres on the project site before the project was terminated. The site was later reclaimed.
- In May 2016, TVA submitted an application to the Nuclear Regulatory Commission (NRC) for an Early Site Permit (ESP) for one or more small modular reactors (SMR) with a total combined generating capacity not to exceed 800 megawatts electric (MWe) at the CRN Site.
- The ESP offers early resolution of site safety and environmental issues providing increased predictability and stability in the subsequent NRC licensing process. Any construction and operation at the CRN Site will require additional NRC permitting.
- In April 2019, NRC issued a Final EIS assessing the environmental aspects of issuing an ESP to TVA.
- In December 2019, NRC issued an ESP to TVA for the CRN Site.