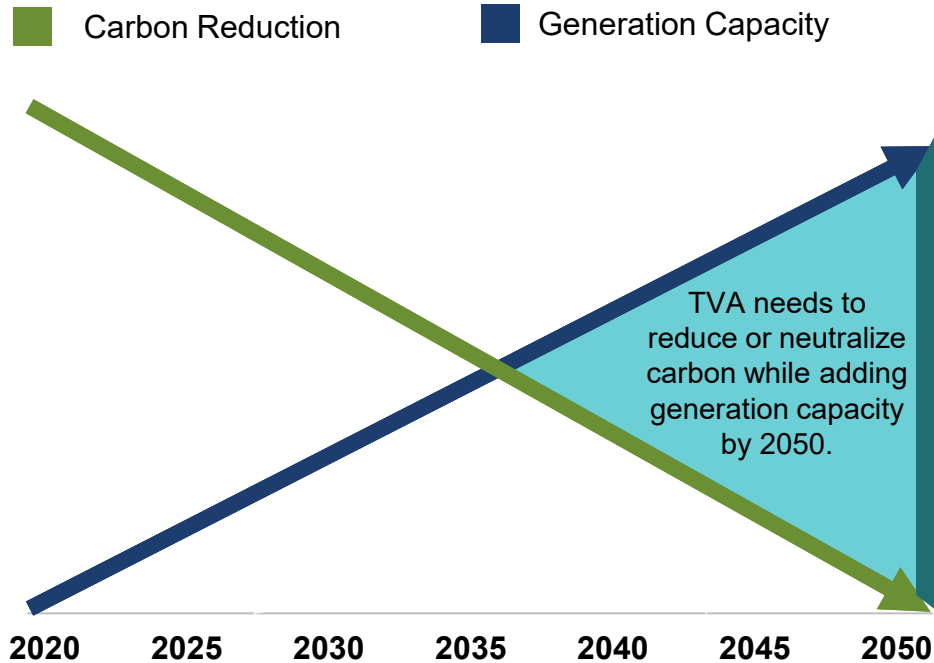

TVA's New Nuclear Program

*Bob Deacy, Senior Vice President
Clinch River Nuclear Project
Tennessee Valley Authority*

June 9, 2022

Electricity Demand vs. Carbon Reduction Goals

LEVERAGING ADVANCED NUCLEAR TO MEET BOTH OBJECTIVES



TVA's Energy System of the Future **CARBON-FREE OPTIONS**



Advanced Nuclear | Small modular reactors (SMRs) are a safe, reliable, and flexible source of carbon-free power.



Hydro | TVA is working to extend the life of the existing hydro fleet and evaluating new pump storage and pumped back capabilities.



Carbon Capture | Gas can be combined with carbon capture technology for a net-zero effect.



Solar | A renewable form of energy from the conversion of sunlight to electricity.



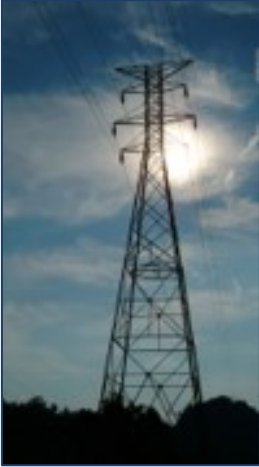
Battery Storage | Can be combined with solar to support peak demands.



Hydrogen | Technology is in development.

TVA's Nuclear Power and Construction Experience

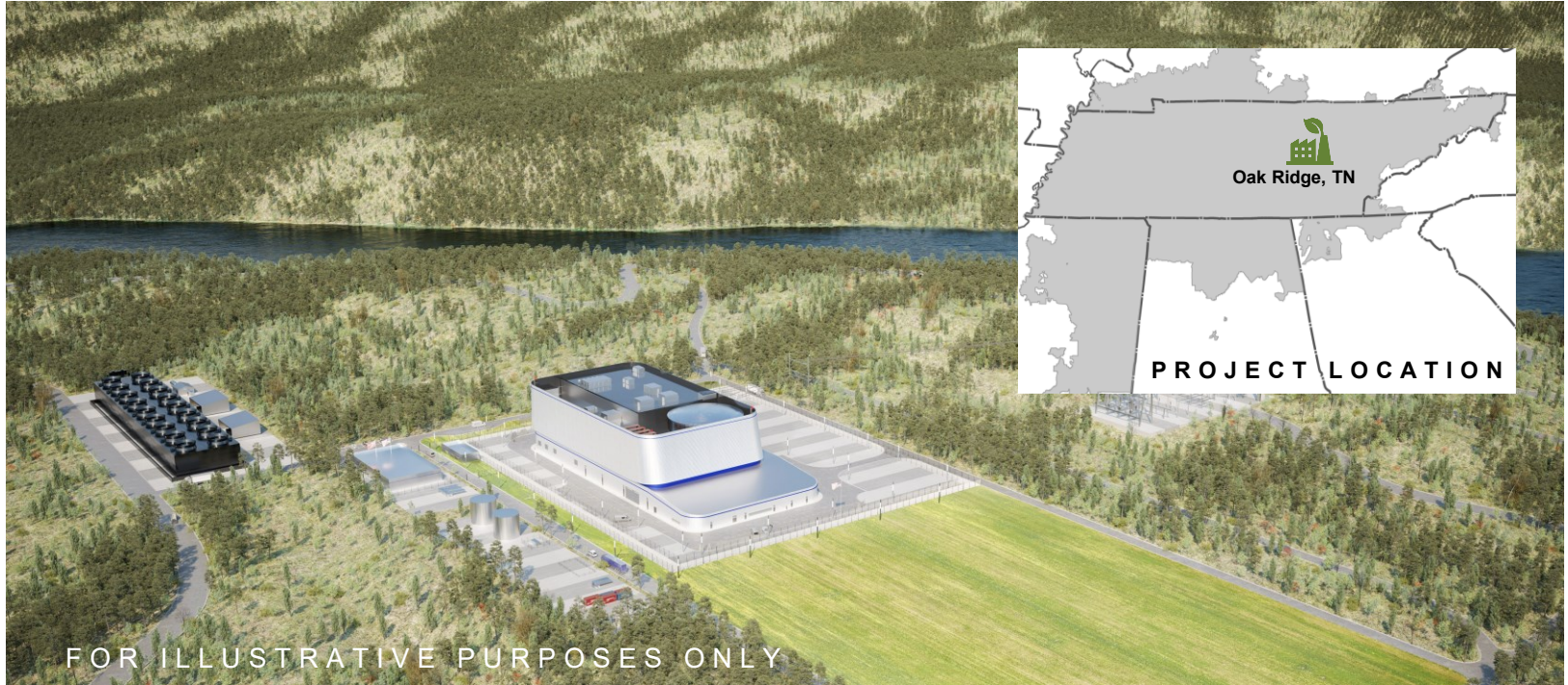
OUR EXPERIENCE & EVOLUTION POINT TO ADVANCED NUCLEAR



- TVA operates the third largest nuclear reactor fleet in the U.S.
- TVA's Watts Bar Unit 2, the nation's first new nuclear generation in 20 years, entered commercial operation in 2016
- At any given time, TVA has around 900 active projects totaling \$12 Billion in approved funding for construction and refurbishment projects for coal and gas plants, hydro-electric dams, and transmission infrastructure across the Tennessee Valley.

Clinch River Nuclear Project

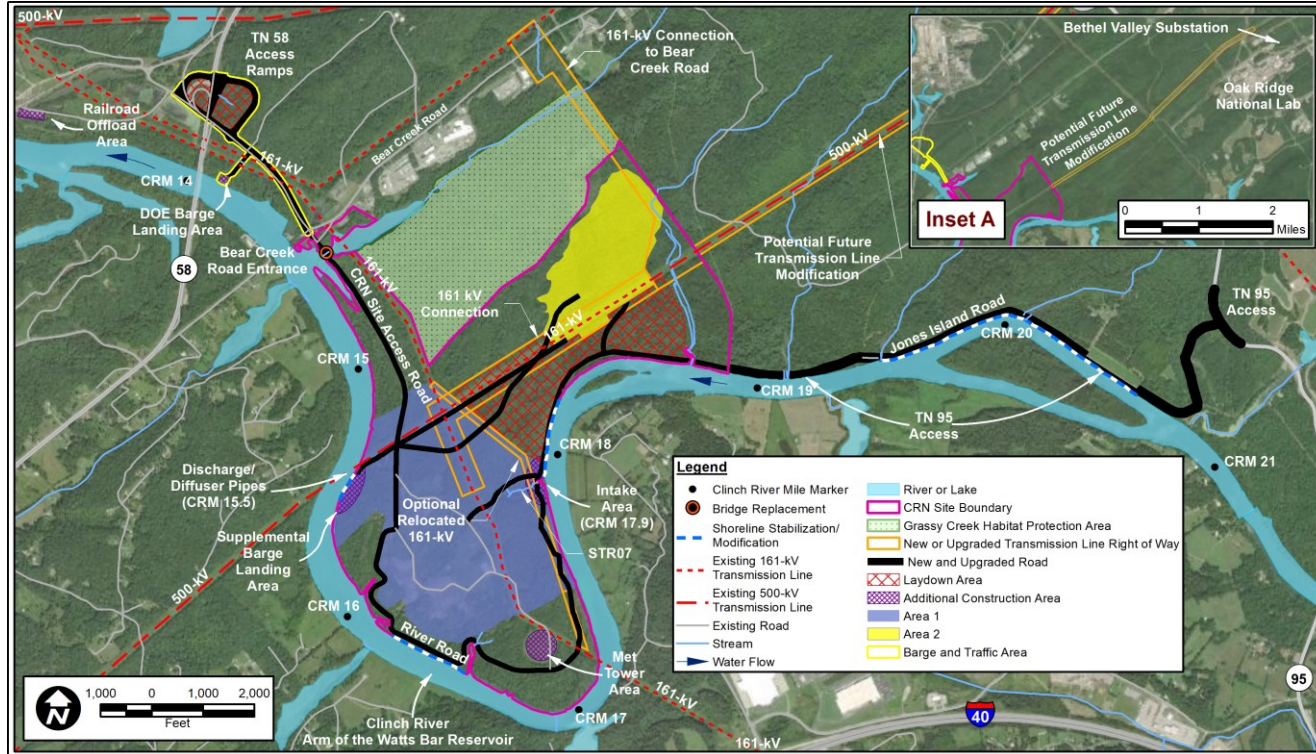
TVA'S FIRST ADVANCED NUCLEAR SMALL MODULAR REACTOR



FOR ILLUSTRATIVE PURPOSES ONLY

Clinch River Nuclear Project Site

TVA'S HISTORY OF PREPARATIONS & VISION



Extensive
Characterization for New
Nuclear

Nuclear Regulatory
Commission (NRC) Early
Site Permit for SMRs
2019

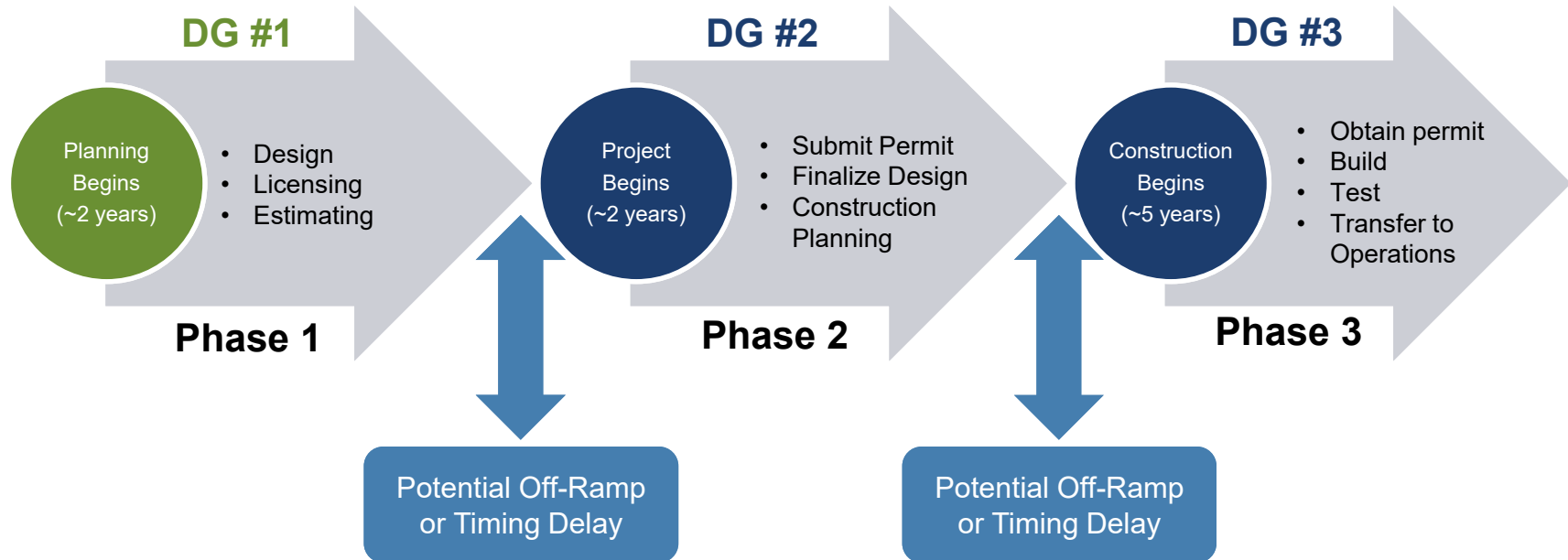
Programmatic
Environmental Impact
Statement for Advanced
Nuclear Technology Park

Clinch River Nuclear Decision Gate Process

PHASED DECISION APPROACH TO REDUCE RISK AND COSTS



Board Authorization required to proceed beyond Decision Gate (DG) for each phase.
Enterprise evaluation criteria to support recommendation to the CEO and Board.



TVA

**TENNESSEE
VALLEY
AUTHORITY**