

# EARLY SITE PERMIT



## WHAT IS AN EARLY SITE PERMIT?

An Early Site Permit (ESP) is the initial step in the U.S Nuclear Regulatory Commission (NRC) process for new nuclear power plants, including Small Modular Reactors (SMRs). The ESP allows the applicant (Appalachian Power Company), NRC, and the public to review the site and determine suitability for a nuclear plant in advance of applying for a Construction Permit.

- Determines site suitability for an SMR based on environmental and safety considerations
- Reviewed and approved by the U.S. Nuclear Regulatory Commission
- Robust 4 – 5 year review and approval process
- Utilizes a Plant Parameter Envelope (PPE) which includes all environmental and safety characteristics of SMR technologies under consideration
- Not a construction permit; nuclear construction and subsequent operation **cannot occur** with only an approved ESP

## WHY ARE WE PURSUING AN ESP?

- Certifies a viable project site that is environmentally suitable for an operating nuclear plant
- Ensures readiness as SMR technologies become commercially deployable
- Prevents costly delays at a future date
- Supports public participation and transparency

Our application involves expanded diligence, site characterization, and community engagement as we begin to prepare two major elements of the ESP application: the Environmental Report and the Site Safety Analysis Report.

