

NE-24-32454 – Future Climate Projections for Dry and Wet Condenser Cooling Options

Energy Northwest is a public power joint operating agency located in Richland, Washington. Their mission is to provide public power members and regional customers with safe, reliable, cost-effective, responsible power generation and innovative energy and business solutions.

Selecting the design for a heat rejection (cooling) system for a nuclear power project in a borderline arid climate that is rapidly changing is a challenge. This is made more challenging as reactor designs have expected lives of 60 or 80 years. This project will evaluate potential climate impacts in the northwestern United States from climate models and use those results to model plant performance using various cooling options. The results will be used to determine the range of plant performance and cost distributions to help understand the factors that need to influence the selection of a ultimate heat sink for a nuclear reactor in the region.

Energy Northwest will partner with Argonne National Laboratory (ANL) to support the modeling effort and evaluate the various options for deploying a reactor in the Energy Northwest service region.