

January Virtual Meeting Highlights Record for Peak Power Demand, Details on EnCompass Model

Editor's Note: TVA and stakeholders are working on TVA's next Integrated Resource Plan (IRP) to determine how TVA could meet customer demand for electricity between now and 2050 across a variety of possible futures that TVA could find itself operating in. A programmatic Environmental Impact Statement (EIS) will accompany the IRP to address its environmental effects.

TVA and the Integrated Resource Plan Working Group (IRP-WG) held a virtual meeting on January 19, 2024, to discuss a variety of topics, including information on a new peak power demand record for TVA, an update on IRP modeling, a presentation on the EnCompass model being used for the IRP, an update on External Relations activities, and a preview of upcoming topics for Working Group meetings.

Aaron Melda, Senior Vice President, Transmission and Power Supply at TVA, said that on Wednesday, January 17, at 7:30 a.m. Central time, TVA met a new all-time record for peak power demand – 34,526 megawatts, which exceeded the previous record by more than 1,000 megawatts. TVA experienced excellent fleet performance.

TVA also used social media and public relations to ask the public to reduce consumption, if possible. Even though there was record demand, the demand was lower than it might have been, thanks to the public's willingness to reduce consumption for a short time with efforts such as turning down thermostats or holding off on using large appliances. Customers' participation in demand response programs also helped reduce demand.

At the meeting, TVA presented information on the process it used to evaluate modeling software and select EnCompass, the model it is using for the IRP. EnCompass is a proven, broadly accepted power supply planning model that serves as the basis for regulatory filings in 17 states. It works to determine the optimal, least-cost resource portfolio and expected energy output for each resource in the portfolio. TVA also reviewed resource planning for future capacity needs and the ways EnCompass helps TVA determine the most cost-effective resources to fill the capacity gap.

Norm Richardson, President, Anchor Power Solutions, developer of the EnCompass software, provided details on the model. EnCompass is used for long-term integrated resource planning as well as detailed generation forecasting. The EnCompass approach is a single process that co-optimizes all resource types across requirements for capacity, environmental programs, energy and ancillary services.

The meeting also included presentations on TVA external relations activities related to the IRP and upcoming topics that will be covered at upcoming Working Group meetings.