IRP Working Group Meeting #2 NOTES

August 28-29, 2023

The IRP Working Group conducted its second meeting August 28-29, 2023, in Knoxville, Tennessee; its first meeting took place July 17-18, 2023, in Franklin, Tennessee. The group meets regularly during the Integrated Resource Plan process to provide in-depth discussion and feedback during every phase of the IRP development.

As TVA develops its next IRP to study how it could meet electricity demand between now and 2050 across a variety of future environments, stakeholder input is essential. The over-arching objective of the IRP Working Group is to provide stakeholder input to the framing and evaluation included in the development of the IRP.

Working Group members represent a diverse group of stakeholders, including local power companies, industrial customers, customer associations, state governments, environmental non-governmental organizations, academia and research associations, special interest groups, and community stakeholders.

At the August meeting, the group discussed the public scoping process and results, which was conducted earlier in the year to help shape how the IRP study would be done. It included input from the general public, TVA customers, organizations, and agencies. Results of the public scoping process help TVA evaluate the sources TVA could use to generate power, how TVA could manage the demand for power, how conditions in the TVA territory could change during the planning period, and the environmental topics to be considered. TVA is compiling a report summarizing the scoping input and documenting the comments received and the themes in the comments.

In forecasting power supply needs, the group discussed weather trends and variations and how they must be taken into account in projecting power demands and the optimal resource portfolio. The IRP process will include the modeling of potential impacts of climate change and extreme weather events. In conjunction with the IRP Working Group, TVA staff anticipates designing a sensitivity that captures more extreme potential impacts of climate change, such as faster warming trends and seasonal rainfall differences.

A third-party consultant shared results from a peer IRP benchmarking review with the Working Group. This review looked at both regional peers and some large utility peers outside of the southeast. The Working Group was also able to ask the third-party consultant follow-up questions related to peer IRPs to assist with their thinking on the TVA IRP.

TVA staff presented Reference Case forecasts related to economics, electric load, and commodities. Population and economic growth drive energy demands, and the group discussed TVA's economic forecasting process. The TVA region has seen stronger economic recovery than the national average, and continued growth in the region's population is expected as a result of post-pandemic in-migration. The decade 2010 to 2020 was a decade of flat load growth in energy needs but has been followed by strong post-pandemic growth in energy demand. Risks and uncertainties in the outlook include future load growth, availability of materials and

minerals, public policy, infrastructure development, global energy demand, and technological change.

Work on the development of 2024 IRP alternative scenarios is ongoing. The Working Group took considerable time discussing changes to potential alternative scenario narratives, as well as the creation of a new scenario. Further consideration of possible scenarios will take place at the Working Group's upcoming meetings.

TVA and Electric Power Research Institute (EPRI) subject matter experts led a discussion on several emerging technologies, including carbon capture and sequestration, battery energy storage, pumped storage, and hydrogen. These emerging technologies will be included in the 2024 IRP study as potential expansion options. Emerging technologies play an important role in allowing TVA to continue providing affordable, reliable, and cleaner electricity.

Working Group members were provided with the opportunity to visit TVA's Norris Dam in Norris, Tennessee, to learn more about TVA's integrated resource management. Also, TVA President and CEO Jeff Lyash expressed TVA's appreciation to the Working Group members for their engagement in the development of the IRP.

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