

Tennessee Valley Energy Consumers Group

July 18, 2023

TVECG represents the interests of energy consumers in the Tennessee Valley area with the objective of reliable service at the least possible cost to consumers. TVECG, together with its members, is preparing a series of collaborative studies that will support the TVECG reports to be filed in response to the TVA 2024 IRP. The TVECG study methodology will differ from power company IRP studies in significant ways:

1. The objective function of the TVECG studies is reliable service at least cost which differs from power company management objectives.
2. The TVECG studies are risk based and consider a wide range of uncertainties such as:
 - a. Natural gas price fluctuations and supply shortages.
 - b. Extreme weather events.
 - c. Nuclear plant performance.
 - d. Load growth
 - e. Impact of new technologies
 - f. Impact of increased environmental constraints
3. The TVECG studies are optimizing the cost of net consumer service, not just the grid costs. This means that in addition to generation and storage at the central grid level, we will consider options such as:
 - a. Distributor owned generation and storage
 - b. Consumer generation and storage both grid-connected and stand alone.
 - c. Consumer conservation options

TVECG is developing a series of reports in preparation for the IRP model runs. The first reports in the series are:

1. A discussion of the differences between consumer objectives and TVA management objectives that may influence the outcome of IRP studies. The discussion includes TVA salaries and management objectives and how those objectives may not align with consumer interests.
2. An analysis of the price and supply risks of natural gas fuel for TVA power plants. Also includes risks of additional emission control requirements. The results of this analysis will be input to the TVECG model runs.
3. A listing of options to be considered in the TVECG model runs. In addition to central grid options, decentralized options at the Distributor and consumer levels will be included. Consumer conservation, solar, storage, and off-grid solar will be considered.
4. A report on TVECG model runs for 2022 and 2023 as compared with actual TVA results. An analysis of the December 2022 extreme weather event is included. These runs serve as the basis for future projections.

5. A scoping study using model runs for 2022 and 2023 substituting the various options for TVA coal capacity. While the future is subject to uncertainty, the events of the past two years are known with certainty and model runs substituting in the various options will be very instructive.

The above reports, and future study reports, will be circulated to TVECG participants and sponsors in draft form for review and comment before the final report is released. Your review and comments are an important part of the process, please join us at www.tvecg.com