Grid Reliability and Integrated Data (GRIData) Act of 2024

Purpose
To require the U.S. Department of Energy (DOE) to identify, analyze, and share available data for the purpose of improving the reliability and resilience of the electric grid.

Background
Identifying, analyzing, and sharing the right types of data in secure, standardized and accessible ways are key to ensuring reliability and resilience of the electric grid and improving long-term reliability assessments. This is especially important in light of increasing occurrences of extreme weather, the changing mix of power generation and demands on the grid, and the need to ensure reliability and resilience in rural, low-income, disadvantaged, and energy communities.

Problem Statement

- **Reliability Data** – Although DOE collects and reports distribution-level reliability data from electric utilities through the Energy Information Administration (Form EIA-861), the data are averaged and reported at the utility level. Data are not consistently reported at a sufficiently granular level to identify where disparities in reliability or resilience may exist on a city or community level (CPUC, 2021).

- **Weather Data** – Increasing amounts of weather-dependent electricity generation sources and loads require more granular weather data over longer time periods to improve long-term reliability assessments and resource modeling (ESIG, 2023).

What the Bill Does

- Requires DOE to explore ways to share data at a sufficiently granular level to **support reliability and resilience of power distribution systems**, especially in **rural, low-income, disadvantaged, and energy communities**, with consideration of the types of data, frequency of data collection, spatial resolution of data, cost, security, and potential future data needs (e.g., to take advantage of machine learning or smart grid technologies).

- Requires DOE to identify, analyze, and share **weather data** that impact electricity generation, transmission, storage, and distribution system availability and loads in a manner necessary to help **improve long-term reliability assessments and resource adequacy modeling**.

- Requires DOE to serve as a centralized source and **clearinghouse** for **secure, standardized,** and **user-friendly dissemination** of **energy reliability and modeling data**.

- The bill does *not* require utilities to collect additional data

This bill incorporates reviews and comments from American Council on Renewable Energy, American Public Power Association, Americans for a Clean Energy Grid, California Public Utility Commission, DOE, Columbia University SIPA Center on Global Energy Policy, Edison Electric Institute, Electric Power Research Institute, Energy Systems Integration Group, Federal Energy Regulatory Commission, Lawrence Berkeley National Laboratory, National Association of Regulatory Utility Commissioners, North American Energy Reliability Corporation, National Rural Electric Cooperative Association, Sharply Focused, and Telos Energy.

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