## **Thought Leaders Speak Out 2025**

ENGAGING CUSTOMERS WITH TECHNOLOGY

# Key Takeaways: Unlocking the Grid-Interactive Vehicle for Load Flexibility

A Fireside Chat with Southern Company, WeaveGrid, and Toyota (March 2025)

The Institute for Electric Innovation's *Thought Leaders Speak Out 2025: Engaging Customers with Technology* series brings together electric companies to share lessons learned and the results of successful use cases of technology to advance customer and grid solutions.

In March, the Institute for Electric Innovation (IEI) invited Southern Company, WeaveGrid, and Toyota to discuss their partnerships to transform electric vehicles into flexible grid resources. The dialogue featured a discussion with Southern Company VP, Customer Solutions, John Smola; WeaveGrid CEO and Cofounder Apoorv Bhargava; and Toyota Motor North America Senior Manager of Grid Services, Max Parness. Adam Cooper of IEI provided welcome remarks and moderated the discussion. Key takeaways are summarized and highlighted below.

#### Delivering customer and grid value through managed charging.

"Southern Company's mission is to provide clean, safe, reliable, and affordable energy to our customers. If you make the right investments with the right infrastructure and fully utilize the existing infrastructure in the most efficient manner, then we are creating more value for all of our customers."

-John Smola, VP, Customer Solutions, Southern Company

- Electric vehicles (EVs) are growing rapidly. While EVs have the potential to become a valuable grid asset, without managed charging, it makes grid planning and load management more difficult.
- More than 1,400 customers are enrolled in Alabama Power and Georgia Power's managed charging pilots, and the teams are currently analyzing the transition from pilot to full-scale deployment. The programs feature passive managed charging based on behavioral demand response and active managed charging that optimizes both driver preferences and grid performance.



- EV managed charging programs enable value-stacking by offering direct benefits to EV owners, such as "set it and forget it" simplicity and cost savings from charging during off-peak hours. Electric companies can leverage bottom-up load flexibility to accelerate EV adoption without building new infrastructure, which helps put downward pressure on rates for all customers. Automakers benefit from enhanced customer experience, further supporting the growth of EV adoption.
  - WeaveGrid's patented Distribution Integrated Smart Charging Orchestration (DISCO) platform enables multi layered value stacking by shifting EV charging to protect distribution assets, defer infrastructure upgrades, and inform grid planning decisions.
- Southern Company emphasizes the importance of cost-effectiveness during both the prelaunch and post-launch phases to ensure that programs benefit customers and inform decisions for scaling. Key metrics for success include kWh savings, customer enrollment numbers, and customer satisfaction.
  - Southern Company shared that 80% of charging occurs during off-peak hours, with average charge sessions lasting 2.4 hours. This allows multiple vehicles to be managed on a single distribution asset.

#### Building a foundation of partnerships for EV managed charging success.

### *"Our mission is to turn EVs to becoming an incredibly valuable grid asset." -Apoorv Bhargava, CEO and Cofounder, WeaveGrid*

- Partnerships between electric companies, automakers, and technology providers are critical for building customer trust, enhancing customer experience, and delivering significant savings through managed charging programs.
- Toyota's venture arm, Woven Capital, led a \$28 million investment round in WeaveGrid to expand their partnership on managed charging solutions. WeaveGrid's first commercial integration with Toyota began in 2022, and today, they collaborate to offer managed charging programs with nine electric companies across the U.S.

#### "This all comes down to providing our customers a seamless charging experience at home." -Max Parness, Senior Manager - Grid Services, Toyota Motor North America

• WeaveGrid offers telematics-based managed charging solutions through direct partnerships with automakers to maximize customer experience and grid value. Vehicle telematics and direct, authorized integrations enable more accurate vehicle insights and allow scaling managed charging programs more cost effectively, securely, and reliably.



- Toyota places a strong emphasis on working with others, not only with technology providers, but also with electric companies, recognizing EVs are the largest behind-the-meter power source. Toyota believes that a collaborative effort is crucial to delivering customers a seamless and value-added charging experience at home.
- Toyota explained that customer trust and a customer-centric approach are fundamental to program success. Since 2021 when Toyota launched Clean Assist, a renewable charging program, around 20% of eligible BEV and PHEV customers have signed up without any incentive. Toyota attributes this high participation rate to the trust customers place in the company and its offerings. (Click here (page 46) for more information on Clean Assist.)
- Toyota recognizes the growing momentum in the industry toward enabling bidirectional charging. The insights gained from managed charging programs will help shape the future of bidirectional charging, as both initiatives share key enablers—customer trust, experience, and simplicity.

