Interstate Renewable Energy Council (IREC) Customer Grid-Edge Committee (CGE) 100th Meeting: November 21, 2025

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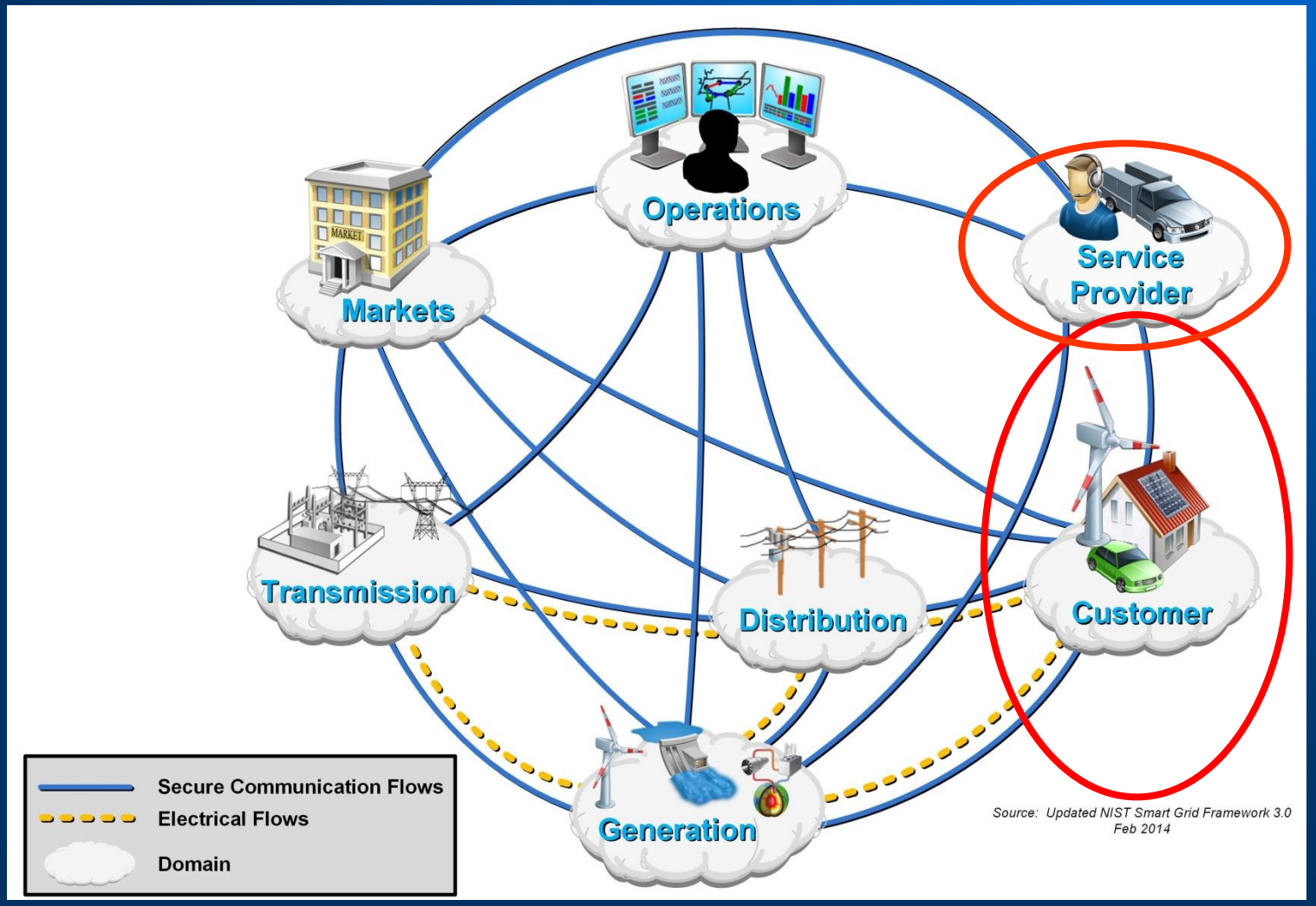
CGE: Focus on the Customer



The Motivation for CGE at IREC

- **Apprise IREC of smart grid impacts**
  - **Regulations**
  - **Technology**
  - **Markets & economics**
- **Develop strategies**
  - **For enhanced demand response (DR)**
  - **For Transactive Energy**
- **Guide IREC to integrate**
  - **Customer DER with utility grids**
  - **Customer microgrids into a smart grid mesh**

CGE featured presentations

- **Sampling of presentations 2021**
  - ***Price-based Grid Coordination***
  - ***Metrics for Smart Grid Consumer Devices & Systems***
  - ***Achieving Optimum Load Shaping***
  - ***Price-Based Grid Coordination***
  - ***ANSI/CTA-2045 Modular Communications Interface (MCI):***
    - ***Energy Management Standard for Water Heaters***
    - ***Supplying the MCI Market***
    - ***Deployment of MCI-equipped Appliances***
    - ***Flexible Load Management: The Time Has Come***

CGE featured presentations

- **Sampling of presentations 2022**
  - ***Tool for Achieving an Optimum Power Grid Load Shape***
  - ***Introduction to Solar Energy Storage, and Related Systems***
  - ***Introduction to the IREC Regulatory Program for Integrating DER***
  - ***The Equitable Approach to a 100% Clean Energy Future***
  - ***Regulatory Reform to Enable a New Advanced Energy Eco-System***
  - ***Navigating the World's Fastest Grid Transformation***
  - ***Electricity Innovation in Canada***
  - ***Transactive Energy Rate Recovery (TERR)***
  - ***Smart Inverters and Developing Grid Integration Tactics***
  - ***Microgrid Installation in Puerto Rico***

CGE featured presentations

- **Sampling of presentations 2023**
  - ***Resilience, Cost Savings, Sustainability—Can you really achieve all 3?***
  - ***Decarbonizing Existing Buildings***
  - ***An Update on Optimum Load Shaping of EV Charging and EcoPort Adapters***
  - ***Toward a New Energy Paradigm—a Regulatory and Finance Perspective***
  - ***Smart Panels: Enabling Flexible Electrification***
  - ***Scaling Microgrids with Fleet Management, Control, and Optimization***
  - ***The Importance of the Grid Edge to the Energy Transition***
  - ***Edge Intelligence—Next Gen Metering Applications***

CGE featured presentations

- **Sampling of presentations 2023, Part 2**
  - ***Data Visibility and Real-time Power Flow Control Enabling the Customer-side DER Transition***
  - ***Empowering Utilities and Grid Management with Advanced Energy Disaggregation***
  - ***Transactive Energy—Empowering Consumers***
  - ***Bits & Watts in Motion: Our Much Better Electricity Future***
  - ***A Consumer's Perspective on Going Solar***
  - ***Consumer Perils Posed By Cloud-Connected DER Equipment***
  - ***Simplifying and Empowering Consumers with Enterprise-Grade Networks***

CGE featured presentations

- **Sampling of presentations 2024, Part 1**
  - ***Net-Zero Communities Accelerator and Low Carbon Energy Innovation Initiatives***
  - ***Empowering Home Networks: A Roundtable on Configuration, Operation, and Cybersecurity***
  - ***Solar Energy Technologies: Past, Present, and Future***
  - ***Installing and Living with Solar PV and Storage***
  - ***Providing Clean and Resilient Residential Power***
  - ***Incentives for the Adoption of Load Management Solutions in the Electric Energy Industry***
  - ***Power to (and from) the People: Policy for Load Flexibility in California***

CGE featured presentations

- **Sampling of presentations 2024, Part 2**
  - ***Home Energy Management—Can You Make the Numbers Work?***
  - ***An Open Platform to Assist in Rapidly Dispatchable DERs with Low Soft Costs and High Resilience Value***
  - ***Energy Management Concepts for a Changing Grid"***
  - ***The Grid Edge is in Transition: Why the 'How' Matters***
  - ***Meter Socket Adapters and the Art of MPU Avoidance***
  - ***Integrating V2X into the Interconnection Review Process***
  - ***Ensuring Resiliency, Efficiency, and Flexibility with Next-Generation Condition Monitoring and Analytics***
  - ***Consumer Metrics Part II: EV Equivalent to $/gallon***

CGE featured presentations

- **Sampling of presentations 2025, Part 1**
  - ***Grid-Integrated Buildings***
  - ***The POWER Group—Power Efficient Approach***
  - ***Smart Home Energy Management***
  - ***CREC - The Colorado Renewable Energy Cooperative - a Prosumer owned Virtual Power Plant***
  - ***A Safer and Simpler approach to Energy Storage***
  - ***How to Make Buildings Resilient, Efficient and Healthy at the Same Time***
  - ***Empowering Renewable Energy Through AI-Driven Stakeholder Engagement***
  - ***How to Be a Good 'Noise Neighbor'***

CGE featured presentations

- **Sampling of presentations 2025, Part 2**
  - ***Home Energy Management Market Matures and Entices***
  - ***The Consumer View: Smart Home's Role in Energy Coordination and Energy Programs***
  - ***Adapting DER to Incorporate Additional Variable Loads***
  - ***Harvesting the Unheard: Turning Noise and Vibrations into Renewable Energy***
  - ***New Solar Panel and Storage Innovations that Offer New Hot Climate and Communication Applications***
  - ***Navigating Solar Financing in an Evolving Policy Landscape***
  - ***Edge AI: Grid Revolution***

CGE featured presentations

- **Sampling of presentations 2025, Part 3**
  - ***Demand Flexibility at the Grid Edge: Unlocking Commercial Building Potential***
  - ***DER-iving Local Value: A MA Roadmap for Distribution Grid Services Marketing***
  - ***Powering AI & IoT with Wireless Technology***
  - ***The One big Beautiful Bill, and a Path Forward for C&I Energy Storage***
  - ***Cybersecurity Protection for Microgrids and Behind-the-meter IoT devices***