

IEEE P825 is collecting input from its stakeholder community which will help identify critical focus areas for developing an IEEE P825 Transactive Energy **Guide**. This guide will permit common transactive grid services to be exercised by connected Distributed Energy Resource assets behind the meter. The guide brings together a broad set of grid interoperability standards, and is intended to shape future interoperability standards that will be needed to permit **Distributed Energy Resources** to efficiently and economically **transact** valuable electric power services to the distribution grid.

We'll begin with a **framing question** that will help set the right perspective from our team

Which of the following best defines your primary interest relative to transactions using **Distributed Energy Resource**.

- I am developing Academic research studies of this field
- I am Experimenting/Demonstrating with small scale lab/commercial pilot programs utilizing DER
- I am developing early commercial service offers and tariffs for deploying these technologies and services
- I am installing and currently operating large amounts of commercial DER assets (both generation and load)

These answers apply to the Country

that WG825 member represents: **Deregulated** **Regulated** **Region Where Energy Transactions Occur**

Renewable Energy MIX	Amt. of Dist Gen.	Peak Load Impact	Amt of Energy Storage
< 1.0 %	Minimal	Minimal	Minimal
1.0 % <=> 5.0%	Low, increasing	Occasional	Low, increasing
5% <=> 10%	Moderate	Regular/Steady	Moderate
10% <=> 20%	Moderate to High	Increasing	Moderate to High
> 20%	Widespread /Common	Severe	Widespread /Common

What is approximate current and expected future mix range of customer side generation? (as % of total load)

PRESENT (2017) **NEAR TERM (2020)** **MED TERM (2030)** **LONG TERM (2050)**

The P825 PAR Stakeholder Community is broad, and has been identified as follows. Which of the identified categories do you most strongly identify with? Please add any specific interest areas in text box:

- Energy Market Operator or Regulator
- Distribution System Provider
- Microgrid or Campus Building Facility Manager
- Energy Consumer or Prosumer

IEEE P825 - STRATEGIC ALIGNMENT TO KEY MARKET TRENDS

What areas create the **highest barriers** to widespread commercial adoption of Transactive Energy methods?

	Irrelevant	Unimportant	Neutral	Important	Critical	NO BASIS
Coherent Cybersecurity ?						
Complicated System Reliability ?						
Robust Comm. Protocols ?						
Creates Utility Stranded Assets ?						
Perceived Safety ?						
Coherent Risk/Reward Model ?						
Cost of Energy Storage ?						
Environmental Benefits ?						
Clear Pricing Signals ?						
Regulatory Restrictions ?						
Participant Reputation ?						
Secondary Markets ?						
High Power Switching ?						
Blockchain Ledger ?						



Which **three** technology areas have the **highest impact** on advancing Transactive Energy?

- | | | |
|----------------------------|--------------------------------|---------------------------|
| Solar PV / Smart Inverters | Phasor Measurement Units (PMU) | Internet of Things (IoT) |
| Energy Storage (incl EV) | Advanced Building EMS | High Power Switches (SiC) |
| Substation Automation | Cryptocurrency (Blockchain) | Cellular 5G |
| Microgrids | DC Transmission/Distribution | Other |

What are the participation options of most interest for P825 involvement?

Contributing
Research
Developing
Demonstrations
Building Models
for Simulation
Industry
Outreach
Other...

What are the primary benefits that you seek from joining this program?

Stay informed on evolving DER environment
Support a progressive industry service
Enhance our Utility Service Brand/Offers
Advance Clean Energy Programs
Develop Supplier Partnerships
Accelerate Industry Standard Adoption
Other

Interested in forming a Global Region Subgroup?

Thank you for your time and input into the IEEE P825 Program development