

GWAC Fall F2F – San Diego

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A New Associate Member Perspective

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Getting Oriented

- Understanding member perspectives
 - In regulatory world, perspectives are complicated
 - In technical world, solutions are steeped in a spectrum of experience
- Determining where my perspective can be useful
 - DOE BTO data standards and tool development
 - CPUC \$10B of regulatory investment evolution over the last decade
 - Local government as a critical stakeholder

Current State

- Demand Side Evolution

- Line between EE and demand flexibility is blurred
- Need to address environmental and social justice
- Electrification and decarbonization pushing or being pulled by grid modernization?

- Supply Side Evolution

- Emergence of new LSE actors – i.e. CCAs
- Regulatory reform of DSO
- Grid carbon intensity and statewide GHG targets
- Standards and Interoperability
- Digitalization, Diversification, Democratization

◉ Evolving State

- What needs to change
 - Load shapes radically changing – or are they?
 - Bridging gap between building energy modeling and grid analytics and design
 - Business ecosystem of current and new market actors
 - Price signals and ability to receive them
- Opportunity
 - Unprecedented investment (IIJA / IRA)
 - State level investment
 - Private sector investment
 - Local government appetite and expanding need/urgency
 - Emergence of market making and agents

Challenging Assumptions

- Customers
 - Underserved community needs to consume *more* energy
 - No such thing as too much on-site DER
 - Lead with DERs, then address EE
 - Energy shall not constrain business ops and economic development
- Moving Targets
 - Realize all EE in demand forecasts
 - Meet our RPS
 - Decentralize the energy system
 - Maximize customer self-consumption

Market Example

- Photography

- Film photography as a standard
- Introduction of digital devices, film, storage, software
- The number of photographs skyrocketed
- Film was no longer the constraining factor in the market

Role of GWAC

- Diffusion of Innovations?
 - Definition: An innovation communicated to a market over time
 - Can we articulate the innovation needed?
 - Who needs to adopt the GWAC innovation?
 - How does that message resonate with various adopters over time?
 - How do we measure it and when is our job done?