Why Direct Customer Participation in Wholesale Markets is Counter Productive

Bernie Neenan, EPRI Technical Executive
Wholesale/Retail Pricing: Can the Disconnected Realities be Bridged?

Harvard Electricity Policy Group

Dana Point, CA

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Disclaimers, Disclosures & Denials

• I was an early proponent of retail participation in wholesale markets

• I have seen the errors of my way

• Views are my own, not those of my employer

• If you quote me, I’ll swear I didn’t say it
How Much Price and Demand Response do we Have?  
(Source: FERC 2012 Demand Response Survey)
Demand Response MWs are predominantly from incentive-based, short duration call options.

I/C = interruptible/curtailable; DLC = direct load control; RTP = real-time pricing; TOU = time of use.
DR Program Designs vary widely across ISOs/RTOs

- CAISO
- ERCOT
- ISO-NE
- MISO
- NYISO
- PJM
- SWPP

**Spin Reserve**

**Emergency Capacity Resource**
A Proposition

Closing the door to retail customers physically trading in ISO/RTO markets…

- Properly makes a distinction between wholesale and retail market functions
- Shifts the focus price and demand services that fit customers’ capabilities
- Promotes efficient investments in home and business control technology
- Results in the optimal supply/demand balance
Why customer participation in centralized wholesale markets is counter-productive (1)

1. Direct customer participation in wholesale markets was expected to pave the way for diverse retail services
   - Has not materialized
   - It might be the case that ISO/RTO programs act as a deterrent to LSE* operated programs

2. Current wholesale demand response programs give customers benefits that retailers (LSEs) can’t compete with
   - Double-payment for performance (retail bill reduction + marginal-cost based savings)
   - Customers can sell that which they do not own
   - Unequal performance standards

*LSE = load serving entity
Why customer participation in centralized wholesale markets is counter-productive (2)

3. Use of customer baseline loads
   - The intractable problem of baselines: “How can you measure something that cannot be directly observed?”
   - Creates legitimate concerns about opportunistic bidding.

4. LSEs (retailers) can already provide opportunities to be linked to wholesale ISO/RTO markets
   - Priced cap load bidding in day-ahead energy markets
   - Use call options (overlays) to reduce load when the system is at peak to reduce the LSE’s capacity requirement.
   - Self-supply balancing services
   - Collaborate with distribution companies to implement localized PR/DR
If those are the problems, what is the solution? Two different directions

1. Break the plate
   - Phase out direct participation
   - Revise and refine ISO/RTO and LSE linkages
     • Price cap load bidding
     • Capacity contracts for differences

2. Allow direct retail customer participation but only under the same terms as generation
   - Customers will have to demonstrate they have paid for the resources (capacity and energy) that they are “selling into the market”
   - Would make DR perform fully equivalent to generation
Who says customers don’t like having options?

~40,000 Flat Bill Subscribers

Key Finding: 73% of customers will choose other than Standard

~40,000 Flat Bill Subscribers
Growing Evidence of Price Response – Substitution Elasticity

Price Elasticity

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