

CHP: The Entergy System's Perspective

Technical Conference

Overview

- The Entergy Operating Companies seek out the lowest cost, reliable sources of capacity and energy it can use to supply its customers.
- If CHP is to be used for economic dispatch, it must successfully compete against other supply-side and demand-side resources.
- The Entergy Operating Companies have developed the Market Value Interruptible Service rate to facilitate the integration of options such as CHP.
- The tariff is in place in several jurisdictions in the Entergy System but not Texas.

CHP in Economic Dispatch

- For CHP and DG to compete as generators in the wholesale market, they must be an economic alternative to other supply side options.
 - They will have to satisfy some size minimum to be allowed to compete.
 - They can make offers for periods as short as an hour or as long as the life of the equipment.
- To be considered as “capacity”, a resource must be under the control of the Entergy System dispatcher.
 - If it remains outside of the System’s control, it is no different than the 2,500 MW of Qualified Facilities on the Entergy System.
 - Those facilities require the Entergy System to maintain and operate a substantial quantity of flexible generation.

CHP as load displacement

- Retail customers can use CHP to reduce its demand and energy charges under their retail tariffs.
- CHP can supply power to retail customers if they are curtailed by their host utility.
- Those retail customers can interrupt service from their use their interruptibility to compete against supply side options by participating in the Market Value Interruptible Service program (“MVIS”)

Potential benefits of Successor Arrangements

- Provides autonomy to each Operating Company in long-term resource planning decisions
 - But doesn't preclude OpCos from planning together
- Preserves opportunities to realize economies of scale in generation additions
- Allows OpCos to continue to obtain benefits of joint commitment and dispatch
- Allows OpCos to retain benefits of lower capacity reserve requirements than would be possible through stand-alone operation

Potential benefits of Successor Arrangements (cont.)

- Eliminate Rough Production Cost Equalization (RPCE) requirement
 - RPCE has created contention, litigation, and distorted incentives for planning
 - FERC and Court decisions related to RPCE are premised on “mandatory” centralized decision-making used by Entergy -- VCP would change this

Successor Arrangement framework must complement VCP

- Benefit of coordinated commitment and dispatch hinges on OpCo participation
- As a result, the framework must provide proper compensation to OpCos that participate
- And pricing terms within the framework must send the correct signals to support VCP

Commitment, Operations and Dispatch Agreement (CODA) framework

- Provides for continued centralized commitment, dispatch, and operation of the OpCo's generating resources to serve the combined load of the System;
- Pricing and allocation framework designed to support VCP:
 - Each OpCo makes its own resource decisions and receives the benefit or burden of that decision.
 - The price of energy exchanged among Operating Companies provides the proper signals for resource decisions.
- Two year notice for terminating participation

CODA Exchanges

The CODA uses two exchanges to allocate costs among the OpCos:

- Flexible Energy Exchange
 - Energy and costs associated with the flexibility requirements of the System (e.g., load following, operating reserves, etc.) are allocated to properly compensate the OpCos for the services they provide to meet System needs
 - The combined flexibility requirements of all OpCos is calculated based upon actual operating parameters and allocated among the Operating Companies based on their requirements.
 - OpCos satisfy their requirements with their lowest cost resources and, if they have excess, sell the excess (to the “short” OpCos via the Flexible Energy Exchange) at cost of committing the unit that is providing the flexible energy.
- Economy Energy Exchange
 - These transactions (purchases and sales) occur at the System’s hourly avoided cost, rather than “at cost” (indicative of hourly energy price paid to QFs which represents a large portion of purchases).

Transmission Arrangements

- Operating Companies would continue to operate as a single transmission system and sell transmission service and associated ancillary services to third parties pursuant to a single open access transmission tariff (“OATT”)
- Transmission planning would continue to be done on a System basis;
- OpCos would continue to equalize imbalance of costs of bulk transmission system pursuant to an arrangement like Service Schedule MSS-2
 - Continued equalization of cost of bulk transmission facilities;
 - However, each OpCo would be responsible for costs of qualifying its own long-term network resources and any other economic upgrades it determines appropriate to fund (these would not be equalized regardless of voltage)

Summary: What Stays the Same?

- Centralized commitment and dispatch of Operating Companies' resources to meet System load;
- Energy exchanges among the Operating Companies
- Transmission planning

Summary: What Changes?

- No RPCE requirement;
- OpCos determine resource mix/acquisitions based on its needs;
- Allocation of costs associated with System's need for flexibility;
- Pricing of Economy Energy among Operating Companies (Exchange Energy);
- No reserve equalization payments; and
- Costs associated with qualifying new long-term network resources would be borne by applicable Operating Company