



CHP as a Utility Resource

Presented by

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Role of CHP as a Resource

PURPA introduced the idea of integrated resource planning (IRP):

- Evaluate all resources on an equal basis—supply and demand side
- Choose the least-cost resources to meet customer needs while insuring reliability

What are the desired outcomes?

- Meeting customer energy needs
- Choosing least-cost resources
- Achieving lowest electricity prices for all customers
- Insuring reliable power
- Promoting economic growth
- Minimizing emissions of pollutants

The CHP resource value proposition

- Can be a lower cost generation resource
- Can avoid or defer need to upgrade transmission and distribution resources
- Can improve resiliency by locating resource near demand
- Reduces T&D losses by locating near demand
- A lower-emission generation resource than utility gas generation
- Firms the grid to allow more variable resources

What is current reality?

- Growing electricity demand requires more resources—generation, transmission & distribution
- Utilities motivated to make investments because they earn a rate of return
- Investments are recovered through sales
- Customer-side resource reduce demand for utility services, which reduces need for investment, which reduces returns to utility shareholders

Need a New Business Model

- Utilities should evaluate supply and demand side resource on an equal basis
- They should choose the mix that best achieves society's desired outcomes—affordable, reliable power and a safe environment
- Utilities should be allowed to invest in customer-side resources and earn a rate of return equal to that for investing in supply-side resources

CHP as a Resource

- CHP and customer-side efficiency should be evaluated by utility planners and regulators whenever new resources are needed
- The mix of resources that optimally meets society's desired outcomes should be selected
- Utilities should be economically encouraged to make these investments

Utilities Considering Implementing this approach

- TVA
- Duke Energy
- AEP Ohio
- Southern Company

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