### Wired Group

Unleashing latent value in distribution utility businesses

## DEMAND RESPONSE RATE & PROGRAM DEVELOPMENT

Manage capacity cost and risk through rates and programs that enlist customers' support in shifting load away from coincident peaks

# Customers want cost control options. Utilities need to manage capacity risk. Demand Response rates and programs can help with both.

North American utilities are coming to grips with the fact that the supply of dispatchable capacity will be tighter in the future than it has been historically. This will give IPPs an edge at the bargaining table, exposing utilities to higher capacity prices, shorter contract terms, and undesirable features like demand ratchets. What can utilities do to satisfy customer demand at the lowest risk and cost?

Utilities traditionally buy or build the capacity required to meet customer demand. But increasingly, utilities are turning to demand response as part of a comprehensive approach to managing capacity cost and risk. The savings and rate reductions are generally larger than most utilities suspect, and the benefits are likely to be even larger in the future.

**New Generation? Owned Infrastructure**  Generation Fossil Transmission Hydro Distribution Renewables **DEMAND** SATISFACTION **PLAN** Purchased 3 M Demand-Side Power Resources Costs Commercial Structures Industrial •Terms Residential

Though demand response may not be right for all customers, none will criticize a utility for offering energy cost management opportunities. Even residential customers, through time-varying rates, can participate in community-wide efforts to avoid plant construction, reduce environmental impact, reduce electric bills, and improve the payback from large investments in advanced metering infrastructure.

The Wired Group helps utilities develop and launch Demand Response rates and programs that get results

#### **The Opportunity**

Through demand response, all types of utilities have the opportunity to improve customer satisfaction while reducing capacity cost and risk. Critical success factors include:

- Attractive, appropriately-priced rate designs
- Tools to help customers manage demand
- Internal education and support
- Rate and program promotion
- Customer engagement

#### **The Development Process**

The Wired Group's demand response rate and program development process is an effective and efficient approach that adapts the concept to the needs of specific utility clients, supply situations and customer bases. It includes:

- Understanding a utility's resource plan and demand response roadmap. (We'll use what you have or help you get what you need.)
- Conducting customer research (to forecast rate and program perception and adoption)
- Designing rates (interruptible for commercial and industrial; TOU, CPP, and PTR for residential and small commercial)
- Designing rate introduction methods (including default vs. voluntary) and promotion planning
- Developing program operations (customer enrollment/maintenance, event definitions, billing data collection/processing, etc.)
- Developing and testing customer tools (load control, real-time monitoring, and customer event notification technologies)
- Business case development (including executive review, input, and approval)
- Implementation planning (including IT project, internal education/training, and launch)

#### **Experience-Based Best Practices**

Wired Group principals and associates have decades of experience designing, implementing, operating, and evaluating the impact of demand response rates and programs. From interruptible rates for industrial customers to residential AC compressor cycling programs, we know what works and what doesn't. We also understand the strategies and tactics most likely to engage customers and maximize behavior change. As just one example, our quantitative and qualitative residential customer research indicates that saving money is only one of many messages utilities can use to motivate customers to shift loads from coincident peak periods.

#### **Thought Leadership**

Wired Group perspectives on distribution business value creation are sought and circulated by the most influential industry conferences and media outlets in the US, including:

- Public Utilities Fortnightly
- DistribuTECH
- Association for Demand Response and Smart Grid
- > Smart Grid News

#### **About the Wired Group**

Wired Group principals and associates have decades of experience in distribution utility businesses, including smart grid, demand response, and renewable energy. Our consulting services support visioning, planning, execution, and evaluation. Visit <a href="www.wiredgroup.net">www.wiredgroup.net</a> for more information. Or, for a no-obligation consultation on your utility's demand management options, contact Paul Alvarez at 303.997.0317, x-801, or palvarez@wiredgroup.net.