

SMART GRID PERFORMANCE EVALUATION

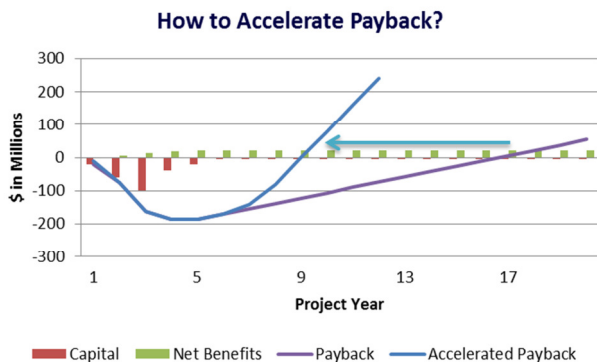
Wired Group experience conducting comprehensive, independent evaluations can help utilities maximize the benefits of smart grid investments by identifying, prioritizing, and closing gaps from emerging best practices ‘post deployment’.

Utilities and stakeholders want to know: what can be done to maximize the benefits of smart grid investments?

Utilities implementing large smart grid deployments are now being confronted by high stakeholder expectations and the integration and optimization challenges associated with new grid capabilities. Investor-owned utilities are particularly concerned with growing regulator interest in incorporating smart grid-related performance measures into ratemaking processes.

Regulators and customers are demanding that grid investments deliver on lofty expectations, including:

- Reduced O&M costs
- Reduced revenue leakage
- Improved distribution efficiency
- Deferred capital investment
- Improved reliability
- Improved customer services



The Wired Group offers best-in-class smart grid benefit quantification and performance evaluation

The Opportunity

Utilities of all types have the opportunity to increase the value created for customers and shareholders by identifying, prioritizing, and closing gaps in ‘post deployment’ best practices.

Wired Group performance evaluation services help utilities:

- *Identify process improvements* that capitalize on new smart grid capabilities to reduce cost and/or deliver greater benefit
- *Modify operating and regulatory policies and incentives* rendered obsolete by smart grid-related process changes and opportunities
- *Better integrate and utilize data and functions* made available by smart systems
- *Modify budgets (some up, some down)* to capitalize on opportunities from, or satisfy requirements of, smart grid technologies
- *Recognize changes in roles and skill sets* required to actualize smart grid capabilities
- *Capitalize on opportunities to automate and improve the customer experience* and services, from demand management to outage information.

(Smart Grid Performance Evaluation, continued)

Performance Evaluation Protocols

The Wired Group is at the forefront of smart grid performance evaluation. Our understanding of the organizational, operational, and systems changes required if benefits are to be maximized is captured in our evaluations protocols.

Validated evaluation protocols exist to help all utility functions maximize the benefits from grid investments, while a distinctly designed module evaluates customer experience and services:

	Organization and Operations	Data Utilization & Systems Integration	Capabilities & Resources	Policy and Governance
Meter Reading	X	X	X	X
Dist. Operations	X	X	X	X
Dist. Planning	X	X	X	X
Customer Care	X	X	X	X
Business Systems	X	X	X	X
Field Svc. Centers	X	X	X	X
Innovation	X	X	X	X
Cust. Engagement	Distinct Module			

Deliverables

Wired Group clients receive gap analyses and prioritization for each utility function listed and for the utility as a whole:

- Operating Processes and Governance
- Data Utilization and Systems Integration
- Organizational Capabilities and Resources
- Organizational Structures

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 www.wiredgroup.net for more information or, for a no-obligation consultation on your utility's performance, contact Paul Alvarez at x-801 or at palvarez@wiredgroup.net.

Standards Based, Field Tested

Wired Group performance evaluation protocols were developed from emerging standards (such as Carnegie Mellon's Smart Grid Maturity Model and the Environmental Defense Fund's customer services evaluation framework).¹ ² The Wired Group has further refined these standards through application in performance evaluations conducted on large, high-profile smart grid deployments, including:

- Xcel Energy's SmartGridCity™
- Duke Energy's Ohio deployment

Credibility

Wired Group provides advice and counsel on smart grid performance evaluation to some of the most respected, knowledgeable, and demanding clients in the US, including:

- Public Utilities Commission of Ohio
- Edison Electric Institute
- Electric Power Research Institute

The Wired Group's thought leadership on smart grid performance evaluation is sought out and distributed 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

¹"Smart Grid Maturity Model". U.S. DOE and Carnegie Mellon University. 2007 and subsequent updates.

²"Evaluation Framework for Smart Grid Deployment Plans". Environmental Defense Fund. Herter, K et al. 2011