

# Wired Group

Unleashing latent value in distribution utility businesses

## SMART GRID PERFORMANCE SEMINAR FOR GOVERNING BOARDS & COMMUNITIES

The Wired Group makes its unique and relevant primary and secondary research expertise conveniently available, helping governing boards and communities establish grid modernization and utility performance goals consistent with a future vision.

### Communities and governing boards want to know: Is our utility on the right track?

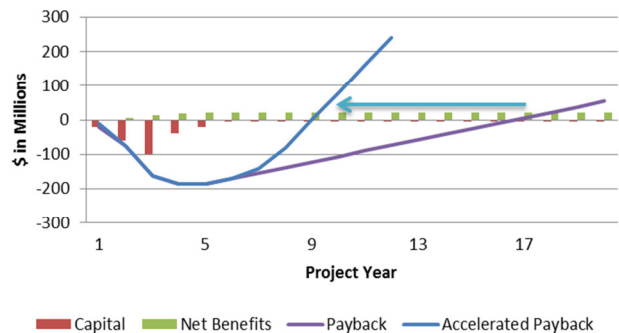
Historically, distribution investments have had predictable outcomes. Increased investment led to improved grid reliability and efficiency, and communities and governing boards trusted the advice of the experts running their utilities. Today, the stakes (funding requests) are much higher and the future is much more cloudy (with significant and fundamental change in customer and utility markets and technology likely).

Our experience indicates the value delivered by smart grid investments varies widely from utility to utility. Further, we believe that the success of any grid modernization investment is based in large part on knowing the intended goals:

- Improve grid and customer efficiency?
- Reduce capacity costs?
- Speed restoration or reduce storm impact?
- Reduce operations and maintenance costs?
- Accommodate high levels of customer generation?

Wired Group Smart Grid Seminars help communities and governing boards anticipate the type of grid and utility they will need a decade or two from now

### How to Accelerate Payback?



### The Opportunity

Regardless of grid or utility status, a Wired Group Smart Grid Seminar can help communities and governing boards answer many challenging questions:

- What roles do we want our distribution grid and utility to fulfill for our community?
- On what capabilities and outcomes should our utility be focused given modernization costs?
- How can we ensure technology choices are appropriate to goals, risks, and rewards?

### Seminar Deliverables

Seminar topics are determined by each audience, but a partial list is presented below.

(Continued on reverse)

(Customized Smart Grid Seminar, continued)

### **Future Grid Challenges**

- PV Solar/customer generation
- Flat or falling sales volumes
- Rapid-charging electric vehicles

### **New Utility Technologies & Capabilities**

- Smart meters (AMI, as distinguished from)
- Automated meter reading (AMR)
- Integrated voltage and power factor control
- Distribution automation
- Communications infrastructure

### **Modernization Costs and Risks**

- Capital cost and risk
- Obsolescence risk
- Cybersecurity risk
- Operating and optimization costs

### **Potential Customer Benefits**

- Lower rates (?)
- Enhanced reliability
- More choices
- Improved service levels

### **Policy and Ratemaking Reforms**

- Decoupling
- Net metering
- Performance targets and timeframes

In addition the Wired Group modifies content to address and accommodate state-specific characteristics, concerns, and interests:

### **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. Please visit [www.wiredgroup.net](http://www.wiredgroup.net) for more information.

- The current status of a grid and utility
- Unique customer base considerations
- Regional market dynamics (wholesale/retail market structures, distributed generation, etc.)
- Local interest topics (RPS, net metering, data privacy/security, prepay, etc.)

Wired Group smart grid seminars are generally 8 hours long and incorporate pre-read materials, lectures, and structured work sessions.

### **Experience**

Wired Group Customized Smart Grid Seminars are led by company president Paul Alvarez, author of *“Smart Grid Hype & Reality -- A Systems Approach to Maximizing Customer Return on Utility Investment”*. He has led the only two comprehensive, independent reviews of smart grid deployment performance, including:

- **SmartGridCity™ (Boulder, Colorado) for Xcel Energy**
- **Duke Energy’s Cincinnati deployment for the Ohio Public Utilities Commission**

In addition, the Wired Group has conducted multiple secondary research reviews to guide evaluation protocol development, validate results, and synthesize best practices in smart grid design and optimization. Examples prepared for the Smart Grid Consumer Collaborative include:

- **Smart Grid Economic and Environmental Benefits – A Review and Synthesis of Available Research**
- **Smart grid Technical and Economic Concepts – A Guide for Consumers**

All of these materials are in the public domain and can be downloaded at [www.wiredgroup.net](http://www.wiredgroup.net).