

Harvesting the Benefits You Expect from Advanced Metering Infrastructure (AMI) and Smart Grid

It's not as easy as you might think...

September 2017

Smart. Focused. Done Right.®

# AMI Is Enabling the Connected Future—But It's Challenging...



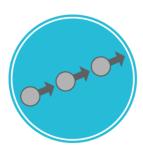
#### AMI and smart meters are being deployed with great promise

- Electric companies have installed 65 million smart meters, covering more than 50% of U.S. households, as of year-end 2015
- The rapid technological advancement of AMI-connected end-point devices, and supporting analytics, is fueling a new wave of AMI-enabled products and services
- Electric companies are using smart meter data today to improve grid operations, integrate distributed energy resources, provide customer services, and support innovative pricing<sup>1</sup>



### Harvesting the benefits associated with the promise has proven challenging

- AMI business cases are developed with inadequate identification and validation of potential benefits
- Smart meters and devices are deployed before operations, organizations, and systems are ready
- Tracking and measuring of AMI benefits is done in a haphazard way, if at all
- Intentionality and focus needed to fully harvest AMI benefits is largely missing



#### The quicker you realize the challenges, the better...

- If you are planning or preparing for deployment broaden your view of benefit opportunities and increase the involvement of operations in how the benefits will be realized
- If you are in the middle of deployment develop and maintain a laser focus on operational and organizational readiness throughout implementation
- If you have completed deployment ensure you are truly harvesting the benefits and are effectively tracking and measuring the results



# AMI Promises Multiple Benefits – Are You Harvesting Yours?

Leading practices for AMI start before the business case and RFPs and continue throughout full-scale deployment—technical readiness is a given, operational readiness is often overlooked, analytical readiness is emerging.

## AMI Benefits Are Growing

### Many electric companies fail to achieve AMI benefits beyond those associated with meter reading and remote connection with customers

- Opportunities beyond these are growing but require more commitment and more resources
- AMI-enabled asset and grid optimization products are growing but require more commitment and more resources

Are you building upon the opportunities afforded by the connected grid?

## AMI Implementation Is Hard

- Transitioning operations to an AMI-rich environment is much harder than most electric companies realize
- The process, organizational, and system changes underlying AMI deployments confound even the most prepared companies
- Deployment and execution playbooks help with change management, but often overlook critical details

Are you operationally and technically ready for the connected grid?

## Organizations Are Changing

- The connected digital landscape made possible by AMI has fundamentally changed how work is being done and by whom
- Connecting a growing population of AMI devices with a growing number of applications is stretching every organization
- A clear understanding of the new roles and responsibilities and the impact on organizations is essential to success

Is your organization adapting to the needs of the connected grid?

### Harvesting AMI Benefits Takes Effort

- Identifying and quantifying AMI benefits can be accomplished in a variety of ways and for a variety of purposes
- Emerging AMI products and services are increasingly dependent on analytics—as are the means to measure and track them
- What is needed first is a clear understanding of how AMI influences activities, behaviors, and costs

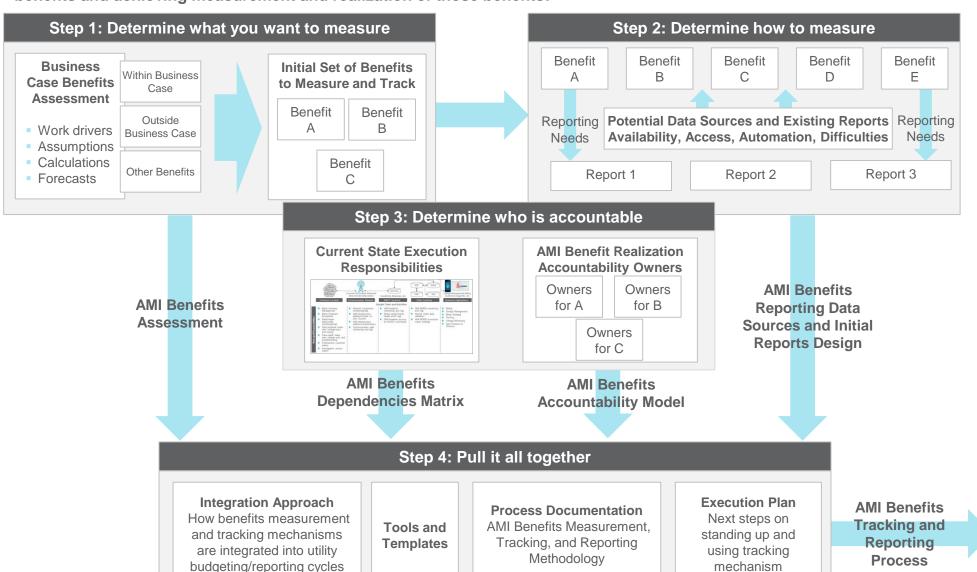
Are you effectively harvesting, measuring, and tracking benefits?

Harvesting AMI benefits from both current and emerging functionality is highly dependent upon the right mixture of implementation know-how, operational clarity, organizational alignment, and an ability to track and measure everything.



## Measuring and Tracking AMI Benefits – Are You There Yet?

ScottMadden has supported many utilities in their AMI journey. We have a proven process to guide utilities to understanding benefits and achieving measurement and realization of those benefits:



# ScottMadden Can Help – Our AMI Experience Speaks for Itself

### **Business Case Development and Assessment**

- AMI business case development, modeling, and assessment
- AMI business case benefits identification, assumptions/ calculation development, and alignment with "the field"
- Smart Grid evolution planning and integration of AMI network functionality and data into distribution edge asset management and optimization processes
- AMI business case benefits measurement, tracking, and reporting design and implementation

### **AMI/Smart Grid Operational Framework**

- Key success factors for planning, implementing, and operating an AMI/Smart Grid infrastructure and applications
- AMI roles, responsibilities, and accountabilities development and clarification within and across functional organizations
- Tracking, reporting, and analysis of AMI volumetric and financial measures, metrics, and identification of changes needed to ensure realization of benefits

### **AMI/Smart Grid Implementation**

- Identification and prioritization of AMI/Smart Grid business, IT, organizational, and customer requirements
- Identifying process, infrastructure, systems, and organizational impacts
- Meter and AMI infrastructure implementation planning and deployment sequencing
- Internal/external deployment and operational labor strategies
- Deployment "playbook" for deploying meters and communication infrastructure within a region, zone, district, or operating center
- Consolidated road maps reflecting deployment, network/ system integration, and business/operational readiness activities

#### **Operational Readiness and Change Management**

- Business process modification and/or re-development integrating the impact of AMI into existing work processes and practices
  - Field and customer service orders
  - AMI network and infrastructure monitoring and management
  - Customer service, billing, and revenue protection
  - Outage management, distribution operations, and distribution optimization
- Operational change management, including labor strategies



## **Contact Us**

### **Michael Montgomery**

Director



ScottMadden, Inc.
3495 Piedmont Road
Building 10, Suite 805
Atlanta, GA 30305
mmontgomery@scottmadden.com
O: 404-814-0020 M: 512-965-5500

Smart. Focused. Done Right.

#### lan A. Falk

Director



ScottMadden, Inc.
2626 Glenwood Avenue
Suite 480
Raleigh, NC 27608
ianfalk@scottmadden.com
O: 919-781-4191 M: 919-923-2153

Smart. Focused. Done Right.

