

#### SAVING MONEY ON INFRASTRUCTURE

ACEEE Finance Forum May 22, 2017





#### US Experience with Efficiency As a Transmission and Distribution System Resource

Authors

Chris Neme, Energy Futures Group Rich Sedano, Regulatory Assistance Project







#### **Energy Efficiency as a T&D Resource:**

Lessons from Recent U.S. Efforts to Use Geographically Targeted Efficiency Programs to Defer T&D Investments

January 9, 2015

Chris Neme & Jim Grevatt, Energy Futures Group



### Latest at the Federal Level

- □ 16 agencies in "Interagency Task Force"
  - Focus is broad, bill to be comprehensive
  - Includes energy, water, veteran's hospitals, etc.
- □ May 2017: "Principles" Due from Administration
- Q3 2017: Proposal to be Submitted to Congress
- □ \$200 billion in federal spending
- Leveraging \$1 trillion in total spending
- Focus on private capital, public-private partnerships



# Efficiency's Message on Infrastructure

Saves Money
 On Infrastructure Costs

2. Leverages Private Capital "By Definition"

# Three Options for Integrating Efficiency into Infrastructure Projects

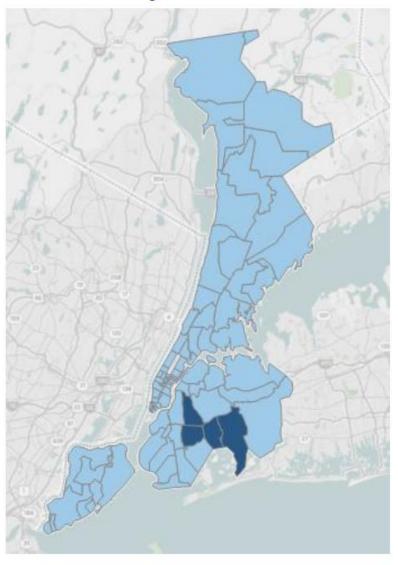


1. Efficiency in "Occupied Infrastructure" (Buildings)

2. Best Practices in Unoccupied Infrastructure Projects

3. Projects that Reduce Infrastructure Loads and Costs

#### The Story of BQDM



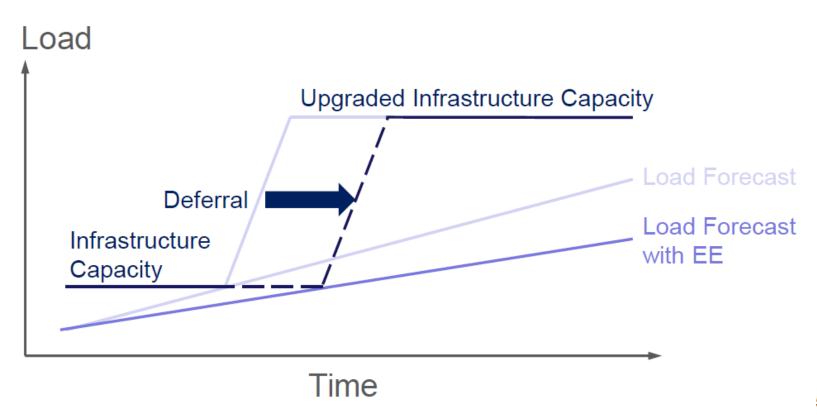
 Subtransmission feeders overloaded for 12 hour peak

 Require \$1B substation infrastructure upgrade

 Defer \$1B through \$200M efficiency, distributed generation and storage

#### Integrating EE & DM into Operations

 Non-wires alternative (NWA) approach: lower forecast through ED/DM to defer upgrade







# How Does this Relate to Financing?

## 1. Broadly:

Efficiency, as a whole, can help bring down the total cost of financing infrastructure investments.

### 2. Narrowly:

Financed EE projects can help bring down infrastructure investment costs.

# Infrastructure Financing Options that Could Incorporate Efficiency



1. Tax-Exempt Private Activity Bonds

2. "Direct-Pay" Bonds

3. Tax Credits for Equity Investors



# One key question...

- Not a financing question (don't have to be a financing expert to answer this...)
- □ **Eligibility**: How should we <u>define</u> "efficiency" in a way that could squeeze it into an infrastructure package?
  - Simple enough not to confuse non-energy people.
  - Broad enough to incorporate a wide range of projects.
  - Specific enough to be at least somewhat meaningful.
  - Discreet enough to facilitate tax-credit investing?
- "Any project that reduces infrastructure loads"?

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# Q&A

Chris Kramer
Energy Futures Group
ckramer@energyfuturesgroup.com
Phone: 802-482-5001

