



# **BOMA/CHICAGO SMART GRID INITIATIVE**

*Peak Load Management Alliance  
Fall Conference – Chicago, IL  
October 20, 2009*

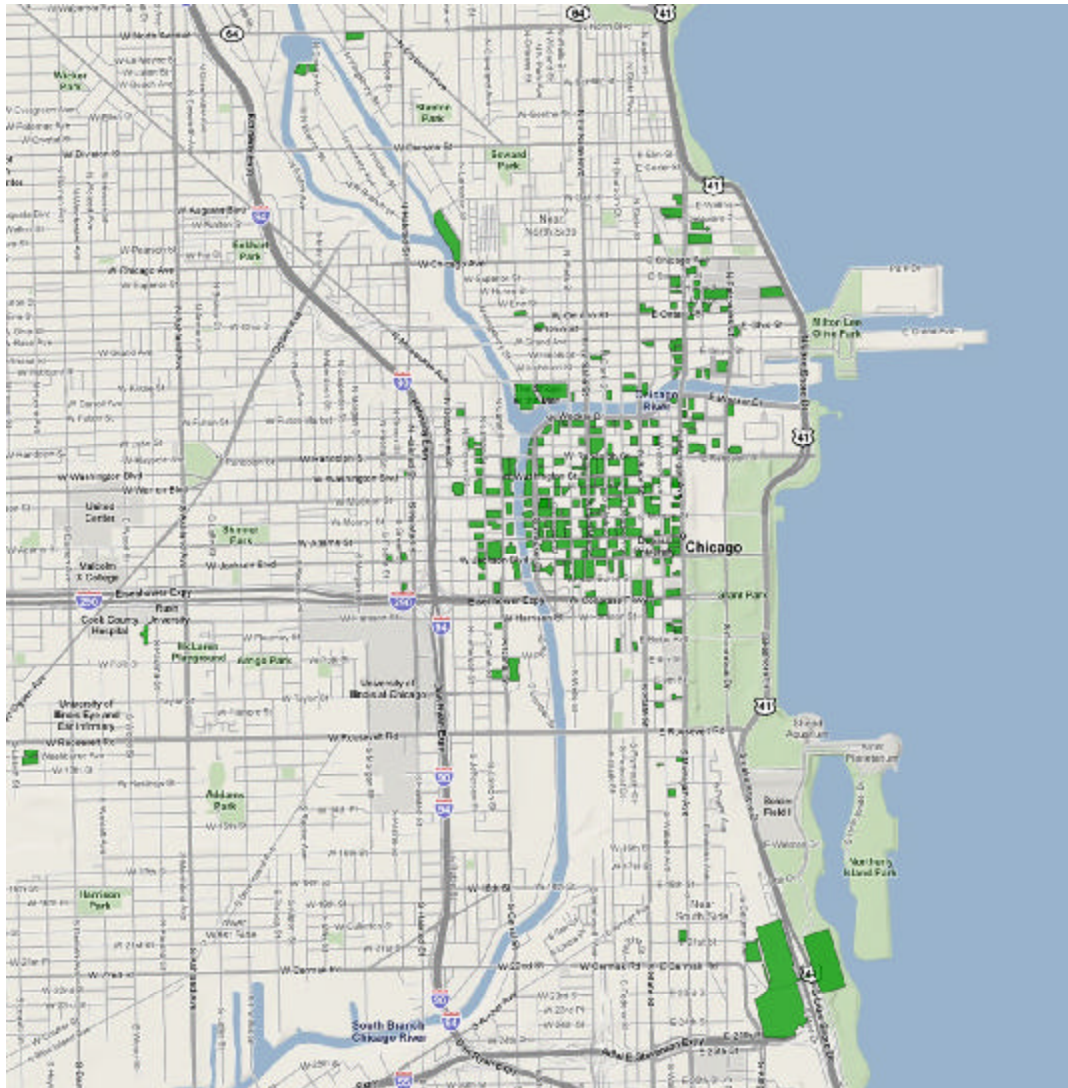


# BOMA/CHICAGO SGIG PROPOSAL

On August 4, 2009, BOMA/Chicago filed an application for \$92.2 million in matching SGIG funds to pay for half of the estimated total cost of our \$184.4 million Smart Grid Program.

- Delivery of a utility scale, green “virtual generator” by installing smart grid technology in up to 262 BOAM/Chicago member buildings
- Largest ever aggregation and integration of commercial buildings to provide demand response, operating reserves, and frequency regulation from demand side resources
- Reduce peak load by 20%, or 200 MW
- Cut participants’ implementation costs by 50%
- Provide innovative new financing for participants’ cost share

# Coverage Area



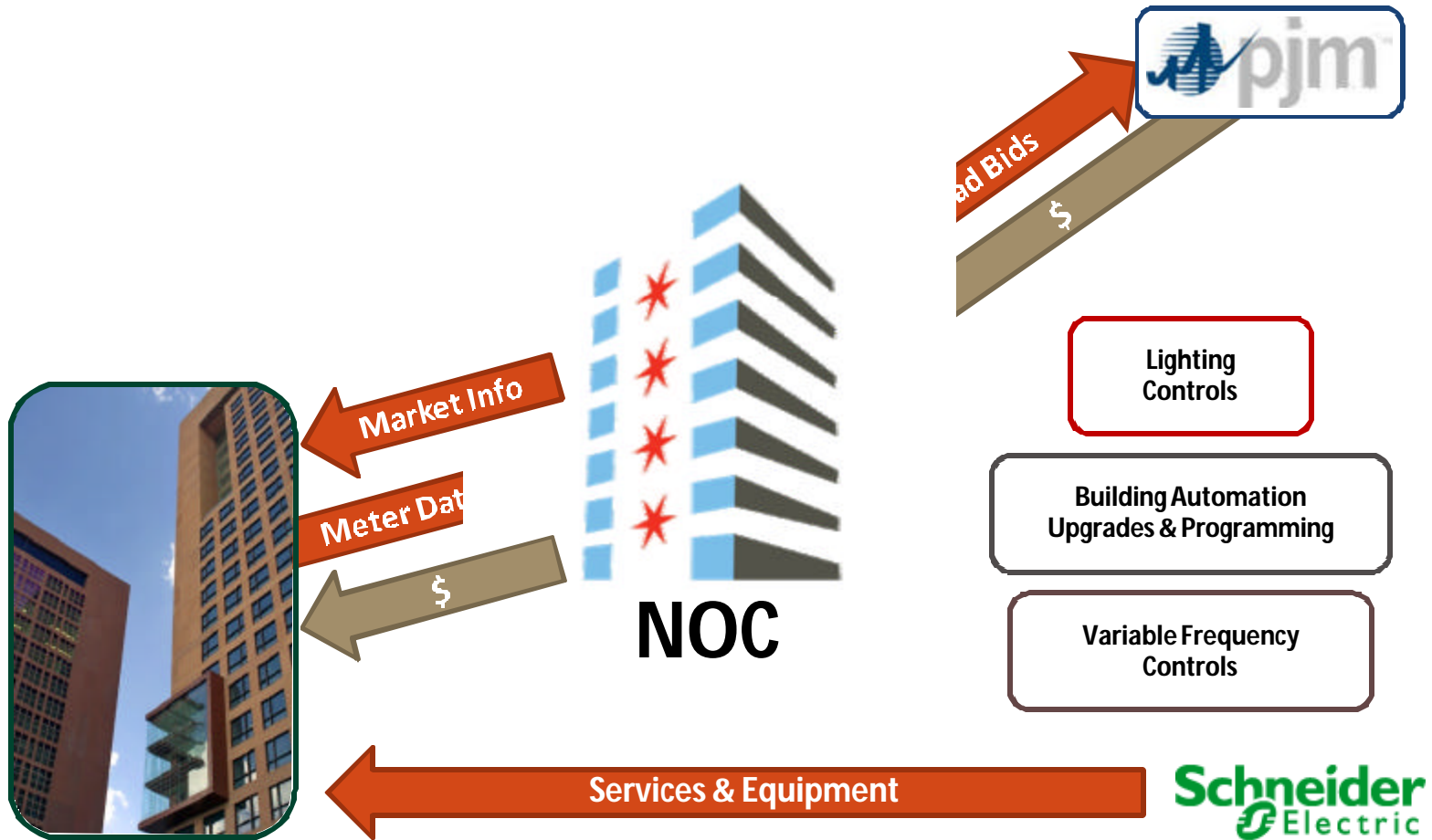
BOMA/Chicago represents 263 buildings housing private, institutional and government/public uses in the City of Chicago.

In aggregate, member buildings total over 150 million square feet of office space, and comprise an estimated 5% of ComEd system load.

# PROGRAM OBJECTIVES

- Maximize benefits of smart grid technology for commercial buildings and their tenants
- Create intelligent network to help buildings manage energy use by balancing building operational needs with grid operations and costs
- Provide innovative financing to enable implementation
- Offer a template for replication in other markets

# BOMA/Chicago Smart Grid Structure



# BENEFITS TO PARTICIPANTS

- 50% cost share from stimulus funds for qualified projects
- Optional financing with no additional out-of-pocket expense
- Creation of new building revenue streams from wholesale market revenues
- Reduced operating expense & upgraded building systems
- Enhanced asset value

# BENEFITS TO SOCIETY

- Annual energy cost reductions of \$82 million
- Reduced carbon emissions of 300 million pounds annually
- Demonstration of collaboration among private sector, government, utilities, regional transmission organization, and private lenders
- Ability to measure and verify regional economic and environmental benefits in unprecedented scope, scale, and granularity
- Creation or retention of over 2,000 jobs
- Opportunity for replication in other markets

# PROGRAM TEAM



BOMA/Chicago will provide overall management and control of the Program



Metropolitan Energy will provide the access point for information and market participation as a PJM Curtailment Service Provider and market innovator



Schneider Electric will provide network systems infrastructure, engineering, and efficiency equipment



Kenny Construction will provide program management services and reporting to the funding agency

University of Illinois at Chicago will provide program performance evaluation and metrics



# PROGRAM TASKS

- Identify individual building infrastructure requirements
- Upgrade existing building systems & devices to enable smart grid functionality
- Install smart meters & AMI system to communicate market price information
- Install Network Operating Center to aggregate and coordinate interaction of buildings with power grid
- Either Common Tasks or Building Specific Tasks

# We are shovel ready!



# FOR FURTHER INFO CONTACT:

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