Agenda

EVAC Update: Metrics and Engagement Planning

Planning Team Updates

Partner Updates
  • Minneapolis
  • Xcel Energy
  • CenterPoint Energy
EVAC Update:
Metrics and Engagement Planning
Metrics are critical to CEP success

- Per the ’15-’16 Work Plan, the Board directed the Planning Team to work with EVAC to identify a set of metrics to track progress
- Metrics will form the basis of the Annual Report
- Developing metrics include significant data collection from all three partners
Suggested Metrics from ’15-’16 Work Plan

- Greenhouse gas emissions
- GHG reductions by measure/visit (where available)
- Energy and cost savings
- Home Energy Squad visits
- Utility audits
- Energy usage access (are we making progress on data?)
- Community Solar Garden subscriptions
- Distributed renewables installations
- WindSource subscriptions
Preferred metrics:

• Can be updated regularly (annually)
• Are based on available data sources
• Are actionable & measure progress towards work plan goals
• Include geographic or demographic breakdown
Tracking equitable participation

Non-white residents
Percent by Census tract

Residents below 185% of poverty guidelines
Percent by Census tract

Percent of residents
- 0% - 20%
- 20.1% - 40%
- 40.1% - 60%
- 60.1% - 80%
- 80.1% - 100%

Author: Lauryn Sandkamp
Minneapolis Sustainability
Map created August 3, 2015
Data sources: City of Minneapolis and U.S. Census Bureau

Author: Lauryn Sandkamp
Minneapolis Sustainability
Map created August 3, 2015
Data sources: City of Minneapolis and U.S. Census Bureau
EVAC Metrics Review

- Q3 meeting: reviewed approved Work Plan, engaged in a discussion of Suggested Metrics, formed small groups
- Q4 meeting (November): complete Metrics discussion, make final recommendation to the Board
**Engagement Planning**

**Goals, Strategies, and Segments**

**Clean Energy Partnership Goals**
- Increase Energy Efficiency
- Increase Renewable Energy
- Develop Strong City-Utilities Collaboration

*Advancing equity and other environmental benefits*

**Strategies**
- Community and stakeholder engagement
- Data and information
- Policy levers

**Segments**
- 1-4 Unit Residential
- Multi-family
- Small Commercial
- Large Commercial
- City Enterprise
Engagement Planning

Goals, Strategies, and Segments

Clean Energy Partnership Goals
- Increase Energy Efficiency
- Increase Renewable Energy
- Develop Strong City-Utilities Collaboration

Advancing equity and other environmental benefits

Strategies
- Community and stakeholder engagement
- Data and information
- Policy levers

Segments
- 1-4 Unit Residential
- Multi-family
- Small Commercial
- Large Commercial
- City Enterprise
Strategies

Enhancing and Coordinating Community Engagement

- Identifying new and effective strategies to drive participation in efficiency and renewable energy programs
- Applies to Segments: Res. 1-4 unit, Multi-family, and Commercial, approach will vary by segment
- Engaging geographies or communities underrepresented in the usage of utility programs is a focus
Strategies

Enhancing and Coordinating Community Engagement

– Planning Team will engage EVAC to generate ideas, vet potential approaches

– Planning Team will return to the Board with detailed strategies, identify necessary resources and paths forward

– Long-term success means moving beyond historic levels of participation in energy efficiency and renewable energy programs
Engagement Planning – EVAC schedule

- **Q3 meeting**: formed small group to begin outreach and engagement brainstorming
- **Q4 2015 – Q2 2016**: Engagement and outreach discussions, complete recommendations to Planning Team and Board
Planning Team Updates:
Outreach & Engagement
Featured Partner Programs
Fast, easy solutions for homeowners and renters

Schedule a Home Energy Squad visit
Contact the Home Energy Squad, and a team of trusted energy experts will arrive at
your door equipped with all of the energy saving tools needed to make your home more
efficient. The Home Energy Squad will quickly assess your home’s efficiency and install
energy-saving measures of your choice—all in one convenient visit. When completed, your
home will be more efficient, more comfortable and you can save on your energy bills.

Easy programs for all—homeowners, renters, businesses and landlords

Renewable Energy is within your power
Windsource™ enables customers like you to pay a little extra each month to get some or
all of their energy from renewable wind resources. As one of the nation’s largest voluntary
renewable energy programs, Windsource is an easy, affordable way to make a difference.

With solar gardens, your future looks bright
SolarHedz® Community™ provides an opportunity to purchase clean solar power
without the need to install rooftop solar panels. To participate as a subscriber you’ll
need to work with a Garden Operator who is setting up a solar garden in your community.
The Garden Operator will manage your participation and gather the paperwork required for
you to participate.

To participate in these Featured Partner Programs, go to

mplsCLEANenergypartnership.org/resources

Coming soon... even more new programs for energy savings, including a
Multi Family Building Efficiency program.

More about Clean Energy Partnership
Get more details about the Clean Energy Partnership at

mplsCLEANenergypartnership.org

Initial Partnership collateral for use at multiple outreach
events – translating into multiple languages
Order up to three FREE showerheads and three faucet aerators

Low Flow Showerhead Rebate - August utility bills
Home Energy Squad Co-pay Buy-Down

• Energy efficiency assessment and install program for 1-4 unit properties
• Normally $70, reduced to $0 for households at or below 300% of poverty
• Can serve 200-300 households
• Planning Team is identifying areas of low participation, developing outreach with NCR, EVAC
Zero-Interest Loan for Energy Efficiency

- Home Energy Squad participants that need air sealing or insulation are eligible
- Existing CEE loan product – City is reducing interest rate to zero percent
- Can serve 100-200 households depending on loan sizes and terms
FREE Home Energy Squad visits for income-eligible residents

As an initiative of the Minneapolis Clean Energy Partnership, the City of Minneapolis is providing a limited number of free Home Energy Squad visits to income eligible residents. Total household income must be less than $35,310 for one person, $47,790 for two, $60,270 for three and up to $122,670 for eight. Call 612-335-5874 to confirm eligibility and schedule an appointment. Home Energy Squad is provided by CenterPoint Energy and Xcel Energy. If you are not income qualified see reverse side for program details.

0% Energy Financing Available!

As an initiative of the Minneapolis Clean Energy Partnership, the City of Minneapolis has partnered with the Lending Center at the Center for Energy and Environment to provide 0% energy financing for Home Energy Squad Enhanced participants. Improvements limited to energy upgrades identified during the Home Energy Squad visit. For more information call 612-335-5884.

Home Energy Squad buy-down and Zero Interest Financing - September utility bills
Events

October 10th – Minneapolis Energy Fair
Minneapolis Convention Center

September 13th – Southeast Asian Soccer Connection
Farview Park

Ward-specific events
– Home Energy Squad staff on-site to coordinate sign-ups
– For a limited time, Xcel Energy can provide LED bulbs as an incentive
Mayor’s 2016 Budget:
Clean Energy Partnership
2015 Upper Midwest Resource Plan

Laura McCarten
Regional Vice President, NSPM
September 9, 2015
Company Overview

- Provides safe, clean, reliable energy to more than **3.4 million** electric and **1.9 million** gas customers
- Regulated operations in 8 Midwestern and Western states
- **19,851** employees and contractors
- Headquartered in **Minneapolis**
- Approximately **2,700** employees and contractors work in Minneapolis
Accomplishments

A Leader in Transmission

A Leader in Conservation

Strong Reliability

Storm Response

Building Solar Capacity

No. 1 wind provider in America

All at a Competitive Price

30% Carbon Reduction By 2020

A Leader in Emission Reductions
Presentation Overview

- Resource Planning Process
- Preferred Plan Overview
- Regulatory Review Status
Resource Planning Process

- **Capacity & Energy Needs and Costs**
- **Resource Options**
- **Requirements and Objectives**

**RESOURCE PLAN**
- 15 Year View
- Future Energy Mix
- Costs
- Environmental Performance
- Compliance Requirements

**Process Flow**
- Stakeholder Review & Input
- Commission Approval
- Plan Implementation
Resource Plan process

Ongoing Stakeholder outreach: February - October

- Initial stakeholder workshop: February 10
- Stakeholder workshops: DSM, Strategist - April 7 & 8
- Environmental regulations workshop: June 2
- Dept. of Commerce workshop: August 3

Regulatory Process

- Initial plan filed: January 2
- Supplemental Plan filed: March 16
- Initial comments received: July 2
- Reply Comments: October 2
- PUC decision anticipated

- Initial plan filed: January 2
- Supplemental Plan filed: March 16
- Initial comments received: July 2
- Reply Comments: October 2
- PUC decision anticipated
Our Preferred Plan

Achieves cost-effective carbon emission reduction

- Doubles Renewables
- Reduces Reliance on Coal

Preserves diverse fuel mix

- Renews 35%
- Nuclear 28%
- Natural Gas 8%
- Coal 29%

Carbon Reduction:
- 43% Carbon Reduction By 2030
Diverse Energy Supply Portfolio

2015
- Nuclear: 30%
- Wind: 15%
- Hydro: 6%
- Biomass: 4%
- Coal: 37%
- Natural Gas: 8%

55% Carbon-free Electricity

2030
- Nuclear: 28%
- Wind: 25%
- Hydro: 2%
- Solar: 8%
- Coal: 29%
- Natural Gas: 8%

63% Carbon-free Electricity
Energy Resources by 2030

**New Wind:**
1,800 MW additions: 600 MW by 2020 & 1,200 MW by 2030

**New Solar:**
2,400 MW additions: 1,700 MW of large-scale and 700 MW of customer-driven small-scale

**Nuclear:**
Operate Monticello and Prairie Island plants through their current licenses

**Coal:**
Gradually decrease reliance on all units through 2030

**Natural Gas:**
1,750 MW of Natural Gas Combustion Turbines by 2030
Achieve MN Goal of 10% Solar by 2030

2,400 MW solar by 2030

**Large-Scale**

- 287 MW by 2016
- Additional 1,400 MW by 2030

**Small-Scale**

- 700 MW by 2030, largely community solar gardens
Carbon Emissions Reductions

State of Minnesota
- 15% by 2015
- 30% by 2025

City of Minneapolis
- 15% by 2015
- 30% by 2025

Xcel Energy’s 2016-2030 Resource Plan
- 23% by 2015
- 37% by 2025
- 43% by 2030
Carbon Emissions Reductions

-15% 2015

-23% 2025

-30% 2030

-37%

-43%

City of Minneapolis
Xcel Energy's 2016-2030 Resource Plan
2016-2030 Upper Midwest Resource Plan

Climate Action Plan* - From 2006 levels
Upper Midwest Resource Plan** - From 2005 levels
Initial Comments

INTERVENING PARTIES
- Department of Commerce
- Clean Energy Organizations
- Minnesota Pollution Control Agency
- City of Becker
- Community Power
- International District Energy Association
- Xcel Large Industrials
- St. Paul Cogeneration
- Liberty Paper
- Minnesota Utility Investors

KEY ISSUES
- Timing, impacts of Sherco retirement
- Demand Side Management goals and costs
- Compliance with environmental regulations, goals
- Preferred Plan costs, rate impacts
- Modeling Assumptions
Resource Plan Summary

• Exceeds the City’s carbon reduction goals in the Climate Action Plan
• Preserves system reliability at a reasonable cost
• Positions us well to manage post 2030 fleet transitions
Next Steps

- Reply Comments due on 10/2 will address:
  - Plan proposed by Community Energy Options, Department of Commerce and other parties’ issues
  - EPA Clean Power Plan Rules
  - ND energy policy
• Allows a group of customers to support a solar project and receive benefits
• Makes solar available to renters and property owners with shaded/unsuitable sites
• Utility facilitates the distribution of the benefits
Typical Power Purchase Agreement

- Competitively bid
- All customers pay PPA
Solar*Rewards Community

- Bill credit rate set by PUC
- Participants receive benefits
- All customers pay bill credit

Subscribers

Garden Operator

$ FCA

$ Subscription

$ PPA

Energy

Energy

All Customers

$ Bill Credit
Participant Roles

Utility

• Program and application management
• Tracks production
• Provides bill credits
• Signs S*RC contract with Garden Operator

Subscriber

• Enters agreement with Garden Operator for subscription
• Receives bill credit
Participant Roles Continued

Garden Operator

- Builds and manages garden
- Signs S*RC contract with Xcel Energy
- Recruits subscribers
Program Rules

• Xcel Energy will purchase energy at subscriber’s retail rate plus REC price
• Costs recovered from all customers through fuel charges
• Contributes to solar energy standard
• Unlimited overall capacity and budget
• Individual garden capacity limited to 1 MW
  – 5MW until September 25, 2015
Subscription Rules

• Maximum size is 120% of annual consumption
• No single subscriber subscribe to more than 40% of garden capacity
• Subscriber must reside within county or contiguous county
• Gardens must have minimum of 5 subscribers
## Subscriber Bill Credit

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>Bill Credit Type</th>
<th>Bill Credit Rate per kWh (AC) for Energy Delivered to Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Service</td>
<td>Standard</td>
<td>$0.12033</td>
</tr>
<tr>
<td></td>
<td>Enhanced – Solar Gardens &gt; 250 KW (AC)</td>
<td>$0.14033</td>
</tr>
<tr>
<td></td>
<td>Enhanced – Solar Gardens ≤ 250 KW (AC)</td>
<td>$0.15033</td>
</tr>
<tr>
<td>Small General Service</td>
<td>Standard</td>
<td>$0.11783</td>
</tr>
<tr>
<td></td>
<td>Enhanced – Solar Gardens &gt; 250 KW (AC)</td>
<td>$0.13783</td>
</tr>
<tr>
<td></td>
<td>Enhanced – Solar Gardens ≤ 250 KW (AC)</td>
<td>$0.14783</td>
</tr>
<tr>
<td>General Service</td>
<td>Standard</td>
<td>$0.09456</td>
</tr>
<tr>
<td></td>
<td>Enhanced – Solar Gardens &gt; 250 KW (AC)</td>
<td>$0.11456</td>
</tr>
<tr>
<td></td>
<td>Enhanced – Solar Gardens ≤ 250 KW (AC)</td>
<td>$0.12456</td>
</tr>
</tbody>
</table>
Current Status

• Program launched on Dec. 12, 2014
• Sense of urgency by developers with Incentive Tax Credit (ITC) stepdown 12/31/16 from 30% to 10%
• PUC Approval of Partial Settlement on August 6th
  – Working with developers to shrink co-located S*RC projects above 5MW
• Currently over 1100 MW of S*RC applications received
• First community solar garden expected to come online later this month
Multi-family Building Efficiency
Program Overview

- Multi-family Sector Overview & Opportunities
- Program Development Process
- Program Description
- Timing
Sector Overview

• CNP has roughly 7,000 MF customers
• Roughly 8 Million Dth/year in usage
  – Per-unit consumption estimated slightly higher than national average but about in line
• Figures may not reflect individually-metered buildings
• Does not differentiate between affordable and market-rate
• Multi-family customers have access to all our commercial offerings
  – Rebates
    • Prescriptive (boilers, tune-ups, water heaters, steam traps, etc.)
    • Custom (low-flow, windows, building envelope)
  – Audits
  – Energy Design Assistance
    • New Construction or Major Renovation
    • Currently several dozen multifamily projects underway

• Average 475 MF CIP participants / year (2010-2013)
  – “unique gas account” – all programs
• Average total savings of about 91,000 Dth
  – About 200 Dth saved per participant
  – So the sector is saving 1.1%

• Suggests opportunities for more comprehensive, deep-efficiency program

• Feedback from customers that they would value a dedicated program, preferably combined gas & electric
Program Development Process

• Joint program development began April 2014
• Program filed with regulators in Feb. 2015; received approval May 2015
• RFP for program implementer issued June 2015
• Concluding RFP process; expect to have implementer under contract in coming weeks
• On track for planned launch Oct 1, 2015
• Close joint development process between CenterPoint and Xcel teams

• Received technical support from ACEEE

• Data from MN Multifamily Characterization Study, US Census, and utility billing systems

• Consulted with national and regional experts
  – ACEEE
  – NYSERDA
  – Elevate Energy
  – CEE

• Solicited feedback on draft design from local stakeholders in October 2014
Program Description

• Goal: Customer-focused, performance-based whole-building efficiency offering that cost-effectively encourages owners to pursue high levels of savings

• Components:
  – “One-Stop Shop” Offering
  – Free building assessment and direct-install of low cost savings measures
  – Performance-based incentives to pursue deeper savings
    • Incentives increase with higher levels of whole-building savings
  – No distinction between savings on building vs. tenant meters or gas vs. electricity
Escalating Incentive Structure:

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>Whole-Building Energy Savings Achieved</th>
<th>Incentive Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>15%</td>
<td>25% of cost</td>
</tr>
<tr>
<td>Tier 2</td>
<td>20%</td>
<td>35% of cost</td>
</tr>
<tr>
<td>Tier 3</td>
<td>25%</td>
<td>40% of cost</td>
</tr>
</tbody>
</table>

Buildings meeting MN DOC criteria to qualify as low-income will be eligible for double the above incentives.
ACEEE Best Practices:

1. Provide a one-stop shop for program services
2. Integrate direct installation and rebate programs
3. Streamline rebates and incentivize in-unit measures to overcome split incentives
4. Coordinate or integrate programs across electric, gas, and water utilities
5. Encourage deeper retrofits with escalating incentives for greater savings levels
6. Serve both low-income and market-rate multifamily households
7. Combine utility-customer-funded programs with public funding available at time of affordable housing refinance
8. Partner with the local multifamily housing industry to market programs
9. Offer multiple pathways for participation to reach more buildings

Targeting

• Aimed at building owners, who have authority and capital to make decision to invest in deep efficiency projects

• Based on project structure, we expect a number of improvements to directly benefit building residents (both in direct-install and performance phases)

• Educational materials on energy and efficiency will be provided to residents
Outreach

• Direct promotion to building owners
• Promote through Minnesota Multi Housing Association (including at their Fall Convention on 10/6/15)
• Coordinate with MHFA to promote program to eligible projects
• Targeted outreach to Minneapolis owners and renters based on Clean Energy Partnership Outreach & Engagement Plan
Questions?
More information:

http://mplscleanenergypartnership.org