In Search of the Perfect Recipe - Code Support Opportunities Across Multiple States

10.22.2020
About Xcel Energy

• Electric and natural gas provider for approximately 4.3 million customers in 8 states
• Comprehensive demand-side management portfolio in largest states with offerings in others tailored to needs
The Evolving Energy Supply Mix

- Planned path to 80% GHG emission drop vs. 2005
- Path to 100% needs new technologies and channels
Why Pursue Utility Code Programs?
Big Effects, Low Price Tag

Percent of Achieving 2030 Target

<table>
<thead>
<tr>
<th>Policy</th>
<th>% of Achieving 2030 Target</th>
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<tbody>
<tr>
<td>50% RES</td>
<td>27%</td>
</tr>
<tr>
<td>SB32030</td>
<td>19%</td>
</tr>
<tr>
<td>40% RES</td>
<td>15%</td>
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<tr>
<td>Retire Coal</td>
<td>13%</td>
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<tr>
<td>CHP</td>
<td>10%</td>
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<tr>
<td>CP 2%</td>
<td>10%</td>
</tr>
<tr>
<td>CP 2.5%</td>
<td>7%</td>
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<tr>
<td>Waste Water Efficiency</td>
<td>0.14%</td>
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</tbody>
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Clean energy policies that immediately reduce emissions are shown. Bar height corresponds to the percent of emission reductions towards the 2030 target.

Cost Versus Savings

Clean energy policies that immediately reduce emissions are shown. Bar height correspond to the net costs and savings of policies where negative numbers are savings and positive numbers are costs. Net present value (NPV) takes all future dollars and discounts them back to the value of a dollar (in this case) in 2014.

Climate Solutions and Economic Opportunities Report, Minnesota Environmental Quality Board
Supporting Community Partners

Credits: City of Minneapolis, MN; City of St. Paul, MN; City of Edina, MN, League of Minnesota Cities
Different Places, Different Solutions
Colorado

- Most advanced – setting the tone for learnings
- Adapting to complexities of home rule
  - Matching capacity of each partner community with aspirations
  - Identifying opportunities to advance code vs. support compliance
- Training support already in place
- Expected full launch – early 2021 (pending approval)
Minnesota

- Statewide efforts leading, varying interest among energy providers
- Statewide code = many different support paths vs. Colorado
- Starting small in 2021 with commercial compliance pilot
- Expect more comprehensive program after MN Department of Commerce roadmap finalized in 2021
New Mexico and Texas

• Exploratory phase
• Understanding scalability of CO & MN work given:
  – Small, more rural population
  – Less construction activity
  – Different attitudes toward regulation
• These challenges don’t mean that customers should be left behind
• Expect some combination of CO, MN, and new channels may be effective
Minnesota Community Code Support
Focusing In On Compliance

Based on MN Conservation Applied Research and Development pilot led by CEE, completed in 2018

- Highlighted key areas of high-impact “missed savings” for code compliance programs
- Lack of documentation was a consistent issue
- Both prescriptive and performance path showed opportunity

Aligning with Community Partners

• With statewide action delayed, compliance is an immediate opportunity for local government action
• Connecting experienced energy-focused resources with communities is a natural fit
• Delivered through new construction product to:
  – Leverage existing new construction relationships, while also;
  – Expand the opportunity to work with customers not currently engaged in new construction programs, and;
  – Use voluntary programs to continue leading the market
Where Next?

• Understand existing resources, maximize effectiveness of support
• Observe pilot effects on review process and listen to communities
• Engage to support state roadmap, leveraging program
Colorado Codes and Standards Compliance Product
Key Program Elements

• Four main functions proposed:
Where Next?

- Gain approval
- Define the best ways to deliver each function with existing/new resources
- Establish evaluation processes
- Revise savings and program model as needed for future DSM plan filings
It Takes a Village
It’s Complicated.

• Even with 30+ years of DSM experience, codes programs are challenging because:
  – Processes and paths of influence are different
  – Two very technical but still different areas of expertise collide
  – The mix of cross-cutting and sector-specific stakeholders makes it hard to decide who leads

• Biggest lesson – if in doubt, talk it out.
Credit To The Team

- Julie Herman – Product Developer
- Ashly McFarlane (MN) & Jeremy Lovelady (NM, TX) – Program Policy
- Aaron Esselink, Rob Buchanan, Karl Shlanta, Lauren Sweeney – Colorado Product and Engineering Team
- Kris Kohls, Karl Shlanta, Matt Chmielewski (plus CenterPoint Energy) – Minnesota Product and Engineering Team
- Nick Minderman – Research & Evaluation, Program Policy
- Center for Energy and Environment (Carl Nelson, Russ Landry, Will Nissen) – MN Pilot Development
- EMI Consulting and New Buildings Institute – Research
- Many others for support
Thank you!

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