New Initiatives in Distributed Energy Resources

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APPA Joint Action Conference
January 2019
SMMPA Membership – 18 Municipal Utilities

- Generation and Power Supply
- Transmission
- Energy Services
- Legislative and Regulatory Support
- All-requirements and new project structure
Electric Vehicles (EV)

• Can MN utilities receive CIP credit for EV programs?
  • State legislative change possible?
• Developing the charging infrastructure
  • EV charging rebates?
  • Joint purchasing/deployment
• Removing barriers to greater adoption
  • Education & promotion
  • Fast-charging infrastructure to address range anxiety
Objective

• Provide members with a standard program
• Capture economies of scale with a larger project
• Offer a rooftop solar alternative for:
  • Those retail customers considering rooftop solar
  • Those retail customers without a rooftop solar option
• Use existing 5 MW of solar capacity to launch the program and commit to an additional 3 MW if there is sufficient interest
  • Subscribe 25% of the output of the 3 MW facility for 25 years
  • 24 months to reach the 25% threshold
  • Continue to serve enrolled customers from the 5 MW facility if the 25% threshold is not met
• Members standardized on up-front payment per panel
  • Similar to what local coops are offering
• Terms range from 5-25 years
  • Varies by member
• Can subscribe up to 75% of projected energy use
• Monthly bill credit based on average output of solar panel
• SMMPA, not the customer, keeps the renewable credits

<table>
<thead>
<tr>
<th>Term</th>
<th>5 Years</th>
<th>10 Years</th>
<th>20 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$325</td>
<td>$642</td>
<td>$1,252</td>
</tr>
<tr>
<td>Small Commercial</td>
<td>$342</td>
<td>$675</td>
<td>$1,316</td>
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<tr>
<td>Large Commercial/Industrial</td>
<td>$200</td>
<td>$395</td>
<td>$770</td>
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2,481 panels needed to reach 25% threshold

SMMPA SolarChoice Program
Prorated Panels Subscribed
Lessons Learned

• Members wanted to gauge support for additional solar
  • Question answered!
  • There are benefits to simply having the program as an option

• Pay-as-you-go might be more successful
  • Writing a big check is a barrier

• Marketing
  • Our members wanted to understand individual citizen interest so pursued the residential market first
  • Programs elsewhere that target the C&I market first have been successful in meeting the threshold
Fairmont Energy Station
Owatonna Energy Station
% of Days in Month the Plants Operated
2018

Commercial Ops Begin

Planned Maintenance Outage

Fairmont Energy Station
Owatonna Energy Station
Questions?