

Reforming the Energy Vision

Demonstration Project Q1 2016 Report

Community Energy Coordination



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1.0 Executive Summary

The Community Energy Coordination (CEC) demonstration project is actively exploring opportunities to reduce customer barriers to the adoption of distributed energy resources (DER). We have hypothesized that NYSEG can reduce the cost and support increased adoption of DER by taking on various roles within the DER value chain including:

- Facilitating community input to ensure our solutions are in support of community energy goals and that we also identify synergies with existing clean energy initiatives;
- Acting as a sales agent for DER service providers to leverage our connection with customers; and
- Acting as a market coordinator to ensure customers are connected with DER service providers and other relevant information in a manner that supports an efficient DER market.

The implementation plan for the CEC project was filed on February 6, 2016. The project team has been actively seeking community and stakeholder input on the project scope and has engaged in over forty separate meetings. Based on this engagement and input the team has refined the project scope to focus on three specific resources: residential solar photovoltaic (PV), community distributed generation (DG), and residential energy efficiency. Additionally, based on input received, the project team has refined its approach for connecting customers with service providers of these resources. This report provides an overview of the activity, progress, and results during the first quarter of 2016. The report also provides an updated project plan based on the results of the phase 1 activity.

2.0 Demonstration Highlights Since the Previous Quarter

Pre-planning work for the CEC project began in November, 2015. An assessment report was received from the Department of Public Service (DPS) Staff on January 6, 2016 and an implementation plan was filed on February 6, 2016. Activity and results from this time period include:

- Submitted an Implementation Plan
- Reviewed municipal Master Plans to identify community energy goals across Tompkins County
- Conducted meetings with community stakeholders
- Conducted initial meetings with DER service providers
- Conducted initial meetings with online platform providers
- Formed Community Advisory Board
- Selected three DERs
 - Residential Energy Efficiency
 - Residential Solar PV

- Community Distributed Generation
- Updated project scope and developed key guiding documents:
 - Initial business model draft for each DER
 - Online platform schematic design
 - Diagrams of customer and service provider experience
- Met with NYSERDA to review potential synergies
- Formulated market research customer survey

2.1 Activities Overview, Major Tasks Completed, and Milestones Progress

2.1.1 Activity: Community Stakeholder Engagement

- **Establish community advisory board & socialize project goals**
- **Hold information gathering meetings with key community stakeholders**
- **Hold information gathering meetings with potential service providers**

Establish community advisory board & socialize project goals

The CEC team established a community advisory board, designed to help the project align with community energy goals, and enhance synergies between this project and other energy projects underway in Tompkins County. Key representatives from different sectors have expressed enthusiasm about serving on the board.

Board representatives include:

- Katie Borgella – Deputy Commissioner of Planning, Tompkins County
- Nick Goldsmith – Sustainability Manager, City and Town of Ithaca
- Irene Weiser – Engaged Citizen & Board Member, Town of Caroline
- Matt Herndon – Engaged Citizen
- Martha Armstrong – Vice President, Tompkins County Area Development
- Paul Mazzarella – Director, Ithaca Neighborhood Housing Services
- Sharon Anderson – Energy Lead, Cornell Cooperative Extension of Tompkins County
- Dave Astorina – Owner, Green Home Heroes LLC

Hold information gathering meetings with key community stakeholders / Hold information Gathering Meetings with potential service providers

We identified important community groups and held many meetings and conversations about the project. The CEC team has conducted or attended over forty meetings and one-on-one conversation with key stakeholders to gain perspective and information on distributed energy resources. We have presented the CEC project overview and solicited feedback from elected

officials, service providers, technology companies, organizations and business leaders, as follows:

Municipal officials

- Tompkins County Council of Governments (TCCOG)
- Town of Ithaca & City of Ithaca Sustainability Coordinator and Tompkins County Planner
- Tompkins County Energy and Economic Development Task Force (co-chairs & staff)
- Tompkins County Environmental Management Council
- Town and County elected representatives

Service providers

- Four energy efficiency service providers with offices in Tompkins County
- Three solar PV service providers with offices in Tompkins County
- One wind energy developer interested in mid-size on-farm opportunities in Tompkins County

Community organizations

- Tompkins County Climate Protection Initiative (TCCPI)
- Cornell Cooperative Extension of Tompkins County, Energy Team (CCETC)
- Solar Tompkins / Heat Smart Tompkins
- Tompkins Chamber of Commerce Government Affairs Committee
- Alternative Energy Village project, Greater Ithaca Activities Center
- Pathstone Corporation
- Central New York Community Solar Forum

Energy industry organizations and companies

- NYSERDA
- Four organizations operating locally or elsewhere in New York State
- Seven companies offering technology platforms nationwide

Conversations with individuals

- Homeowners, business owners, solar PV owners, concerned citizens, industry professionals

Process of Engagement

To gather as much input as possible, we connected with a wide range of people through a variety of means. The group discussions and private conversations ranged from very general to very specific, depending on the context, energy literacy of the participants, and the possible role they might play in the project. For example, some municipal leaders were generally interested

and supportive, but they did not make specific suggestions about distributed energy resources. Whereas others, such as municipal staff, engaged citizens, and service providers, shared perspectives on particular DERs and possible barriers and opportunities. We also attended several public meetings as observers to learn about energy initiatives already underway, meet possible collaborators, and network on behalf of the project. Networking at these events gave us the opportunity to talk more casually with community members and we received candid reactions and thoughts on the CEC project.

2.1.2 Activity: Create Updated Project Scope

- **Create updated project scope based on stakeholder input**

Based on stakeholder input the project scope has been refined to include the promotion of three DERs: residential premise solar PV, community DG, and residential energy efficiency. The project will be limited to Tompkins County and will offer education, simplicity, convenience, and choice for customers.

NYSEG will build an online platform to offer a marketplace of energy services for these three DERs. Customers will be presented with offers from multiple service providers and will be provided information regarding their options in a way that is easy to understand and addresses previously stated concerns and needs. The platform will provide a simple and convenient experience that educates and offers choice for DERs, while inviting customers to take action.

Participating service providers will be carefully selected through a request for proposals process. NYSEG, in collaboration with Taitem and the community advisory board, will choose providers with whom to engage and receive quotes. Lead referral fees and finder's fees for closed sales will be paid to NYSEG at agreed upon rates. These fees will be determined based on input from providers.

NYSEG will build and execute a targeted marketing campaign in order to drive traffic to the online platform and allow service providers to realize the value of participation. NYSEG will also work with service providers and municipal leaders to develop co-marketing initiatives. NYSEG will serve as a trusted source of information and will provide customers with transparent options for DER services. Over time, customers may have the option to rate their experience working with participating service providers, which will provide feedback to the market. Participating service providers will reduce their cost of customer acquisition and will broaden their customer base.

2.3 Checkpoints

2.3.1 Check Point: Defined Product Offering

After discussing several potential DERs with the community stakeholders, three Distributed Energy Resources were selected:

- **Residential Solar PV**
- **Community Distributed Generation**
- **Residential Energy Efficiency**

These options had broad support from engaged stakeholders. We were able to envision value propositions for each that would benefit customers, service providers and the utility. For both energy efficiency and premise-based solar PV, we discerned that the residential sector is more homogeneous and simpler to work within than the commercial sector.

The project scope includes building and operating an online platform to connect customers with providers of energy efficiency and solar PV services. We anticipate that the service providers will deliver home energy assessments, weatherization and HVAC services, no-cost and low cost energy conservation improvements, solar PV quotations and installations, and community solar participation opportunities.

2.4 Issues

As the project moves forward, we will be addressing the following issues:

- Community education on the evolving role of the utility and awareness of NY REV
- Community DG is new in New York and project development may be slow and complex at this early stage
- There are a multitude of energy programs already shaping customer perceptions and engagement. We need to coordinate and differentiate as the project goes forward, for instance with NYSERDA's Home Performance energy efficiency program, and NYSEG residential energy efficiency rebates.

3.0 Work Plan

3.1 Budget Review

	2015	2016
	Q4	Q1
Project Budget		
Actual Spend		
Variance		

3.2 Updated Work Plan

Below is the updated project plan based on the outcome of the phase 1 activities:

3.3 Next Quarter Planned Activities

In the second quarter of 2016, we will benchmark and identify best practices in two similar programs, begin to develop the online platform, and engage more deeply with service providers to collaborate on program features and terms and conditions for participation.

EnergizeNY in Westchester County developed and manages a residential energy efficiency program with many features similar to our project scope. Enhabit.org, a statewide program created by Clean Energy Works Oregon and EnergySavvy, also offers a model. We will study these two programs to learn best practices for working with home performance contractors, engaging customers online, and designing a customer experience which balances education with convenience, and choice with simplicity.

A marketing research survey will be conducted to gauge interest and attitudes about relevant energy and utility topics among Tompkins County residential customers.

For the CEC online platform, NYSEG will look to leverage SimpleEnergy's software development work for the RG&E Energy Marketplace demonstration project to create technical specifications. We will scope a "minimum viable product" and plan to utilize an agile software development approach to enhance the platform in iterative collaboration with the energy service companies who participate in the program.

In the upcoming quarter we will meet with residential energy efficiency and solar PV service providers to present the updated project scope and get feedback on key program design questions. We will seek to identify community DG projects underway in NYISO Load Zone C, which the platform could promote to Tompkins County utility customers. Based on this collaboration and discovery, we will draft a Request For Proposals which we'll issue in early Q3.

4.0 Conclusion

4.1 Lessons Learned

The community engagement and outreach yielded five key lessons: community energy goals are broad; there is an opportunity for education; NYSEG should facilitate customer choice; there is an opportunity for collaboration; and there is a need for risk mitigation. These messages were heard from all stakeholder groups, and they provide valuable insight into the perceptions and misperceptions that the CEC must address.

Community Energy Goals Broadly Defined

Among the municipalities in Tompkins County, energy goals are varied and broadly defined. A review of 16 municipal comprehensive plans and master plans yielded a diverse set of energy statements. Most, but not all, discuss energy, although in a very general and broad way. The draft version of the Tompkins County Energy Roadmap, released in October, 2015 by the Tompkins County Planning Department, is detailed, ambitious, and indicates strong support for energy efficiency and solar PV.

There is no single organization or government entity that represents the implementation of community energy goals. Various stakeholders and interested individuals within the county are mostly aligned around the broad goals of increased renewable generation, decreased carbon emissions, and increased economic development, but, beyond those high level goals there is not a uniting entity of delivery of those goals.

Opportunity for Education

There is a strong need and opportunity for the CEC project to play a role in providing education and reducing confusion associated with customer DER options. Many stakeholders are confused by the language of the energy landscape and do not clearly understand all of the different components that are required to make informed decisions regarding investing in DERs, including incentive programs, tax implications, utility tariffs, utility regulation, and DER regulation.

Several stakeholders raised questions about the difference between supply and delivery, the role of the wholesale market, the role of the utility, delivery rate structure, net metering, and remote net metering. Some stakeholders expressed their opinion that the utility is in the business to sell energy and did not understand why NYSEG would be implementing a program to encourage saving energy or adopting distribution generation. Some stakeholders also raised questions about similar sounding initiatives: community solar vs community choice aggregation, energy smart community vs community energy coordination, NY REV vs Ithaca REV..etc.

NYSEG Should Facilitate Customer Choice

The original CEC project scope envisioned selecting a specific service provider for any DER offered. Feedback from stakeholders was that NYSEG should promote multiple qualified service providers, using an open and transparent selection process. Residential customers will be more likely to participate if they can review key information pertaining to each participating service provider and make their own choice about which company to work with. By involving more firms, the project will result in broader joint marketing efforts, and make a bigger impact in animating the local market of energy services companies.

Opportunity for Collaboration

There is a significant opportunity for the CEC project to act as a catalyst for broad collaboration around DER projects.

Service providers are very interested in working with NYSEG to create shared value. The CEC project is an opportunity to align interests with DER developers in order to create value for customers. They are optimistic about the opportunity for this type of program to reduce customer acquisition cost and to broaden the market.

The CEC project will provide opportunities to test new energy efficiency programs. This may include direct install measures by participating service providers, rebates on installed products, or even a simplified home energy assessment.

The CEC project will also provide a great opportunity to collaborate with other energy related efforts in the community. These efforts include broad energy and sustainability educational

initiatives, efforts to rate the efficiency of homes, efforts to increase adoption of solar PV, and efforts to increase the adoptions of energy efficient heating technology.

Risk Mitigation

Specifically for community DG, NYSEG assistance with customer off-take may lower the risk to project sponsors of not having fully subscribed projects. Several stakeholders expressed an opinion that if the utility promotes a community DG project, customers will be more likely to participate and therefore the cost of customer acquisition will be reduced and the risk of not having fully subscribed arrays is mitigated.

4.2 Conclusion

Through the CEC project NYSEG will offer education, choice, simplicity, and convenience to customers. We will invite them to learn and take action on residential energy efficiency, residential premise solar PV, and community DG. This initiative will be offered to customers through an online platform which delivers value as a source of information, a marketplace for qualified service providers and a means to lower energy costs and improved home comfort. Energy services companies, along with residential solar and community DG developers will be offered a marketing method to reach prospective customers and lower their cost of customer acquisition. The project will continue to be developed in collaboration with community stakeholder, energy services companies, and solar developers. By working collaboratively we will build an offering that addresses the needs of a broad stakeholder group and ultimately deliver value for customers.