Grow Solar A Midwest Partnership to Move Markets
Powered by SunShot U.S. Department of Energy

Utility Solar Adoption Roadmap Design Recommendations

Created through the Grow Solar Partnership, a DOE SunShot Initiative (Rooftop Solar Challenge II) grant recipient

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BUSINESS CONSULTANTS

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Introduction to the Solar Adoption Roadmaps

- Within the Grow Solar partnership, West Monroe Partners is leading the Utility Interconnection Process workstream:
  - **Complete:**
    - Current State Findings Report, which highlighted current utility- and stakeholder-identified pain points and best practices across four major target areas: application, information access, processing time, and inspections
    - Overview of Shared Solar Opportunities in the Midwest, a guide to shared solar program enrollment best practices, with an actions roadmap and leading examples
    - Multi-year Solar Adoption Roadmaps with technology / process improvements for six utilities
  - **Next Steps**
    - **Best practice improvement design recommendations reports – Consensus findings from Regional utility stakeholder groups on the components and trigger points of successful solar adoption road-mapping**

- This document contains suggested Solar Adoption Roadmap guidelines, or a collection of suggested technology and process improvements to help all utilities prepare for anticipated solar DG additions to the grid

- These guidelines were informed by the Solar Adoption Roadmaps completed for six pilot utilities. Roadmaps were developed in collaboration with utility stakeholders after identifying current state operations and future state goals

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Applications

Standardized and ***automated*** applications can save customers, contractors, and utilities time and energy

Introduce Online Application Submittal

Recommended Actions

1. Provide easy access to application forms online, along with clear, step-by-step instructions.
2. Create option for customers to submit applications online for ease.
3. Use marketing to encourage electronic submission of applications over e-mail, traditional mail, or drop-off.

Key Outcomes

Allowing customers to submit the application online helps streamline the application process, and reduces the inefficiency of a lot of paperwork for both customers and staff. An electronic application system would also eliminate errors, and automatic reminders can be built into the system so that applications are not forgotten or left behind.

Value Metric	
Utility Value	✓
Customer Value	✓
City/Municipality Value	
Contractor/Installer Value	

Create a Checklist for Completing DG Applications

Recommended Actions

1. Create a checklist to help customers and contractors complete DG applications. This checklist should be a step-by-step guide to help complete the application.
2. The checklist should be posted online for ease of access.

Key Outcomes

By having a checklist available with the application, all customers and contractors will find it easier to fill out applications correctly, even on the first attempt. This will help eliminate errors of incomplete or incorrect applications, especially from those filling it out for the first time, and with applications that require supporting documentation to be attached.

Value Metric	
Utility Value	✓
Customer Value	✓
City/Municipality Value	
Contractor/Installer Value	✓

Train Contractors to Reduce Application Errors

Recommended Actions

1. Allow contractors to fill out applications on behalf of customers.
2. Train contractors to fill out the applications and go through the interconnection process.
3. Publish training materials and host events to train new and old contractors.

Key Outcomes

Allowing contractors to access customer forms may expedite the application process, and taking the initiative to train them will eliminate commonly made errors. Contractors should also be re-trained on how to fill out and submit applications each time changes are made.

Value Metric	
Utility Value	✓
Customer Value	
City/Municipality Value	
Contractor/Installer Value	✓

Information Access

Customers would like to see ***transparency*** in application requirements and ***tracking*** throughout the process

Expand Educational Materials

Recommended Actions

1. Create more written materials for distribution that explain solar energy, interconnections, and net metering, including an online FAQ.
2. Develop educational pamphlets and provide customers with reputable resources (e.g., links to DOE, NREL website) where they can assess whether solar is right for them.

Key Outcomes

Customer questions are often handled on a case-by-case basis by phone and email, usually by a single resource. This is not a workable model for the future with accelerating interest in interconnections. Written resources can address common questions, help customers assess whether they are good candidates for rooftop solar, and help them fill out applications, thereby reducing employee workload.

Value Metric	
Utility Value	✓
Customer Value	✓
City/Municipality Value	
Contractor/Installer Value	✓

Use Automated Software to Track Applications

Recommended Actions

1. Utilize software to allow customers to view application status in real-time online, and to inform customers of any needed updates.
2. Use a system that will track of all interested customers and submitted applications with features such as automatic reminders.

Key Outcomes

Online tracking software can provide quick and automated feedback to customers to help the customer feel more valued and well-informed, reducing the burden of unnecessary phone calls and inquiries on utility employees. It will also allow utilities to reliably track and process applications on a larger scale, and ensure that no customers are neglected.

Value Metric	
Utility Value	✓
Customer Value	✓
City/Municipality Value	
Contractor/Installer Value	✓

Processing Time

Timely application processing depends on established ***utility review*** and ***customer response*** expectations

Minimize Application Turnaround Time, and Allow Expedited Process for Qualifying Projects

Recommended Actions

1. Consider an expedited application process for qualifying or simpler solar PV projects.
2. Automatic reminders can be built-in to ensure applications continue progressing and do not get "stuck" in one department.

Key Outcomes

Overall application processing times can be lessened by creating streamlined processes for simpler projects and mechanisms for applications to automatically be pushed to the next department. This creates an easier experience for customers and contractors, and lowers the workload for the utility's employees.

Value Metric	
Utility Value	✓
Customer Value	✓
City/Municipality Value	
Contractor/Installer Value	

Document the Interconnection Process

Recommended Actions

1. Have a documented procedure to review submitted applications, and for all other steps of the solar interconnection process.
2. Use the documentation to create comprehensive materials to train new employees to take up the responsibility of handling interconnections.

Key Outcomes

Documenting this process and creating training materials will make it easy if/when a new employee needs to be transitioned into the role. Using a checklist will ensure that interconnection applications are handled smoothly and without mistakes. It will also help employees quickly and efficiently process applications.

Value Metric	
Utility Value	✓
Customer Value	
City/Municipality Value	
Contractor/Installer Value	

Inspections

Having ***defined procedures*** (forms, cost, time) and ***City coordination*** allows customers to efficiently complete their system go-live

Create Inspection Checklists

Recommended Actions

1. Create and maintain a checklist for all on-site inspections.
2. Make the checklists available publicly to customers and contractors, allowing them to better meet all requirements.

Key Outcomes

By having a checklist for all on-site inspections, employees will be able to conduct inspections quickly and efficiently. It will also reduce mistakes and omissions, even by new and inexperienced staff. Making the checklist publicly visible will allow home-owners and contractors to prepare for the inspections and ensure that they have met all the necessary criteria.

Value Metric	
Utility Value	✓
Customer Value	✓
City/Municipality Value	
Contractor/Installer Value	✓

Create a Database to Track Existing DG

Recommended Actions

1. Creating one centralized location to store data from all systems.
2. This database could be integrated with the mapping tools and application process as well to automate as much as possible of the system.

Key Outcomes

Having a single centralized database where all information regarding DG installations can be accessed will allow several departments within the utility to work more efficiently and safely. It will also ensure that everyone is accessing the most up-to-date information. A well-designed system would also easily scale with potential increased future demand.

Value Metric	
Utility Value	✓
Customer Value	
City/Municipality Value	
Contractor/Installer Value	

Add Interconnections to Internal Mapping Tools

Recommended Actions

1. Start adding all approved interconnection projects to utility internal mapping tools.
2. Design the process to add DG sites to the maps automatically.

Key Outcomes

By having distributed generation sources on the internal maps, utility employees will be able to quickly and easily see the locations of those interconnections without going out into the field. By properly integrating it with an online database, it would provide up-to-date information automatically and very reliably.

Value Metric	
Utility Value	✓
Customer Value	
City/Municipality Value	
Contractor/Installer Value	

The Grow Solar Partnership works to reduce the barriers to solar generation across the Midwest

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- Funded through the U.S. Department of Energy SunShot Initiative's Rooftop Solar Challenge Phase II grant, the Grow Solar Partnership is a network of regional partners working to leverage private, local, and state support to build an open and advantageous solar market across the 3-state region of Illinois, Minnesota, and Wisconsin

- The Grow Solar Partnership is comprised of a team of core partners that work collaboratively with a wide range or regional organizations
  - **Core Partners:** Midwest Renewable Energy Association, West Monroe Partners, Environmental Law & Policy Center, Great Plains Institute, City of Milwaukee, Clean Energy Resource Teams, Illinois Green Economy Network
  - **State Energy Offices:** Illinois Department of Commerce and Economic Opportunity, Minnesota State Energy Office, Wisconsin State Energy Office

- To find out more, please visit the Grow Solar website at www.growsolar.org

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