



Solar Energy Development in Carver County

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Introduction

Recently, efforts have been made by both public agencies and private energy companies to pursue alternative energy projects in Carver County. Alternative energy proposals include solar power generation ranging in size from 1 to 7 MW, which would require sites that are approximately 5 to 10 acres per MW. Carver County has been contacted by at least 6 different solar development companies within the last 6 months, and is aware of approximately 12 potential solar garden locations within unincorporated areas of the county.

Carver County has made commitments to solar energy that involve developing community solar sites. Local planners want to ensure that the County and local municipalities have policies and regulations in place to promote orderly and efficient development of solar installations. In addition, the Carver County Community Development Agency seeks a tool that can be used to educate community officials about how solar installations work, the potential benefits, liabilities, and misconceptions that may exist.

Solar Jobs Act

- Minnesota state law passed in 2013
- Requires investor-owned utilities to produce 1.5% of their energy from solar by 2020
- Non-mandatory goal that state utilities produce 10% (5200 MW) of Minnesota's electricity from solar energy by 2030
- Extends solar rebate program through production-based incentives to help finance small solar systems (less than 20 KW)
- Development of community solar gardens to allow consumers to buy into shared systems
- 74% of state expressed support for the bill, 73% willing to pay \$1 more per month for more solar power

Project Objectives

- Investigate the current regulatory obstacles and concerns regarding large solar projects in Carver County
- Recommend best practices to regulate, plan, and develop solar gardens and other large-scale solar facilities in order to maximize generation and mitigate negative impacts

Methods

- Conduct in-person or phone interviews with city planners and utility directors in Carver County, local residents, solar developers and environmental policy analysts
- Read literature and policy documents regarding regulation on solar projects

Policy Issue

No policy currently exists in Carver County to regulate what needs to be considered before approving solar energy projects.

Regulatory Obstacles

- Lack of existing zoning regulations regarding solar gardens has led to residential concerns over proximity to homes
- Carver County's electricity needs are served by Xcel Energy, Municipal Utility Districts and rural co-ops which have different standards under the Solar Jobs Act
- Community solar is currently limited almost exclusively to Xcel customers
- There is a need for the timely permitting and approval of solar projects as the current federal tax credit ends on Dec. 31, 2016

Additional Concerns

- Many residents are not aware of the financial benefits of participating in solar projects and leasing land to solar companies
- Residents are concerned about the impacts of large scale solar farms on their property values and local environment

Policy Recommendations

Create specific zoning guidelines and ordinances that address solar installations.

- *Model solar ordinances have been developed by Minnesota Department Commerce or SunShot Initiative by U.S. Department of Energy that can be used as a framework*

Ensure clear communication with solar companies on the expectations and evaluating criteria for their proposals.

- *What is the objective of the program and who are the benefactors of this service*
- *Address storm water management*
- *Address stray voltage*

Create solar education programs on the following topics for local residents by collaborating with solar companies and other involved organizations.

- *Financial returns*
- *Impact on property values*
- *Noise and appearance*
- *Environmental Impacts*

Develop a complete solar ordinance based on the experience with Xcel and set models when small municipals and cooperative utility are ready to engage.

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What is Community Solar?

A community solar project is a solar power plant whose electricity is shared by more than one household or business. The primary purpose is to allow members of a community the opportunity to share the benefits of solar power without having to install solar panels on their property.

