

# Utility-Scale Distributed Solar Generation

Customized development to meet specific utility objectives





Solar As a Solution:  
create economic  
opportunity  
with Geronimo's  
customized model

## What is Utility-Scale Distributed Solar Generation?

The Geronimo model for Utility-Scale Distributed Solar Generation is the installation of multiple solar sites throughout a utility's service territory. These sites are strategically selected based on proximity to substations, substation load and permitting/ land use constraints. Geronimo's Utility-Scale Distributed Solar Generation model offers the best of both worlds: **a series of small-scale installations means transmission cost and availability are never a concern - and with its overall large size, the Geronimo Utility-Scale Distributed Solar Generation model offers proven cost savings, as well as an economic opportunity for utilities.**

## How Does Utility-Scale Distributed Solar Generation Work?

Geronimo has created a unique way to deliver utility-scale, clean, renewable generation resource that is cost-competitive with natural gas alternatives. We work with utilities throughout the entire development process and handle all the logistics surrounding this intricate process.



## Why Choose Utility-Scale Distributed Solar Generation?

Utility-Scale Distributed Solar Generation offers the distinct advantage of interconnecting smaller, separate generators, while providing economies of scale to drive down capital costs. *The Geronimo model optimizes output, offers easy-to-execute distribution level interconnections and is designed to provide measurable and reliable capacity in order to meet peak loads.*

### ✓ Customized

- Meet customer demands with distributed projects
- Enable community members' participation
- Capitalize on a mix of utility-scale and community-scale benefits

### ✓ Flexible

- Your Choice: utility-owned or PPA
- Phase projects to meet fluctuating resource needs

### ✓ Meet Statutory Demands

- Obtain Solar Renewable Energy Credits
- Promote clean, renewable energy
- Market utility as green

### ✓ Enhanced Project Value

#### Reduce:

- Line loss
- Capacity requirements and generation during peak load times
- Substation, transmission and interconnections upgrades
- The risk of system failures with geographic diversification of generation assets.

#### Increase:

- Reliability
- Ease of interconnection.



## Proven Success: The Aurora Utility-Scale Distributed Solar Project

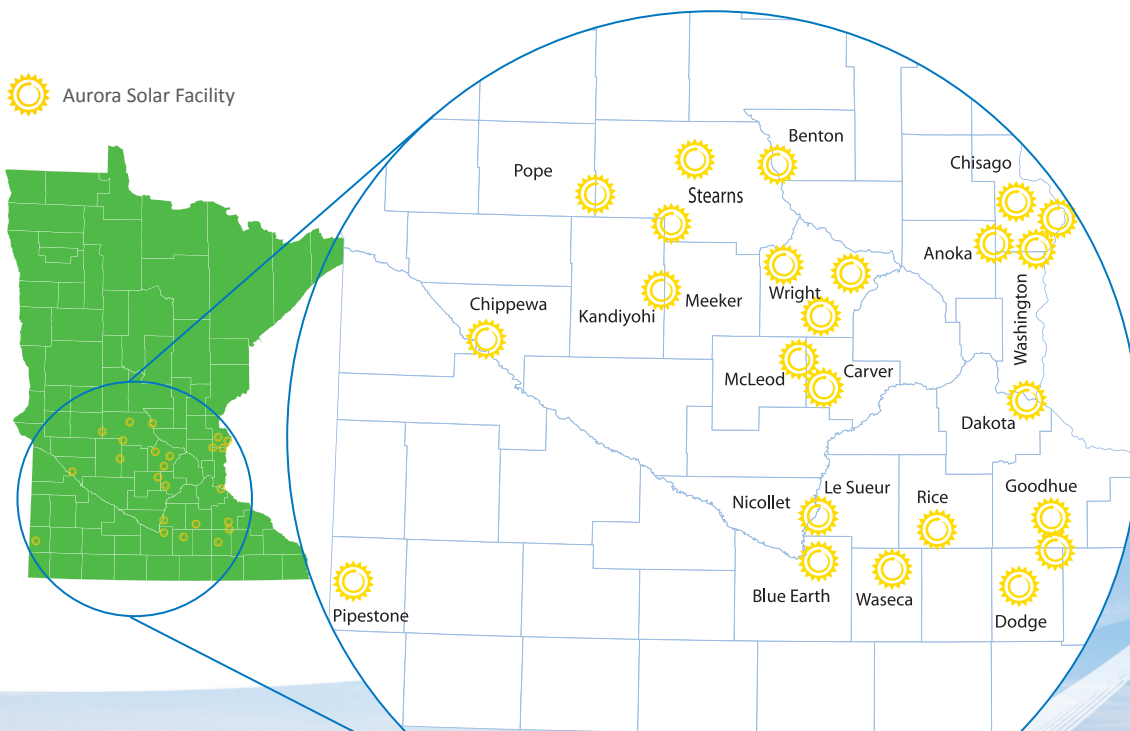
In March 2014, the Minnesota Public Utilities Commission made an unprecedented ruling that Geronimo Energy's Aurora Utility-Scale Distributed Solar Project proposal was the best choice to meet Xcel Energy's future capacity needs when compared in an open RFP to several natural gas proposals. As a 100 megawatt project, **the Aurora Utility-Scale Distributed Solar Project is historic for several reasons: it beat out natural gas on pure cost-analysis, it's the largest distributed solar project in the United States, and it will be permitted at the state level as a single project.**

### About Aurora\*

Aurora is a 100 megawatt (MW) distributed solar generation project that will utilize solar arrays ranging in size from 2 MW to 10 MW across Xcel's service territory and will utilize a linear axis tracker to increase the accredited capacity of the systems to 71% (based on MISO's accreditation methods for non-wind variable generation resources). The project will interconnect to multiple Xcel Energy substations across Minnesota and will provide energy and capacity to local loads over the distribution network. This unique design will deliver many benefits, including a reduction in line loss, elimination of transmission costs, and geographic diversification of generation assets. Arrays will be located on up to 24 sites throughout 16 counties in Minnesota in order to bring energy to consumers efficiently and cost-effectively, while protecting the environment. Each site location is adjacent to a distribution substation dispersed throughout Xcel Energy's Upper Midwest service territory.

\*For more detailed information about the Aurora Utility-Scale Distributed Solar Project, please see the white paper titled, "Utility-Scale Distributed Solar Projects: Why the Aurora Project is Historic and Transformative for the Solar Energy Industry."

Aurora proves the value of utility-scale distributed solar generation: reduced costs, increased reliability and optimal output and execution.





Geronimo has the experience to offer end-to-end development and manages all aspects of:

- ✓ Strategic planning
- ✓ Site analysis and acquisition
- ✓ Permitting
- ✓ Technology analysis and selection
- ✓ Management of engineering procurement and construction of the project
- ✓ Community and public relations
- ✓ Regulatory coordination



## Why work with Geronimo Energy?

Geronimo's ability to **create a custom utility-scale distributed solar generation project** provides you with a great opportunity to **diversify your generation portfolio** and **take advantage of low cost, long-term fixed** - without the high cost that comes with customization from within the walls of your utility. Geronimo has the team of experts and flexibility you need.

## About Geronimo Energy

Geronimo is a premiere renewable energy development firm in the Midwest. Geronimo is creative and flexible, offering solutions for all different types of electric utilities and other clients.

Headquartered in Minneapolis, Minnesota with satellite offices throughout the Midwest, Geronimo has successfully brought over 240 megawatts (MW) of wind and solar energy on line and has been awarded over 1,000 MW of wind and solar power purchase agreements for delivery in 2015 & 2016. The Geronimo team is fully staffed with competencies in marketing, wind and solar resource assessment, wind and solar development, land acquisition, real estate & title services, environmental permitting, energy policy, finance, accounting, and sales.

Geronimo Energy has extensive solar development experience in areas such as oversight, engineering and project management. Geronimo delivers large-scale solar projects and offers on-site/ near-site installations, as well as off-site installations located in more efficient, lower cost geographical locations. Recently, Geronimo was awarded a Power Purchase Agreement (PPA) from Xcel Energy for the largest solar project in the state of Minnesota, the 100 MW Aurora Utility-Scale Distributed Solar Project, which is slated for construction in 2016. Geronimo's ability to deliver solar energy with market-leading cost, creative solutions, and efficiency is due to our top-notch team of development professionals, who together, have a combined experience in over 100 commercial and utility-scale solar projects throughout 16 states in the United States.