



VOTE SOLAR

The Colorado Settlement: A Case Study for Different Approaches on Low Income Solar

CO Settlement Overview

- In 2016, settlement negotiations were reached in CO to resolve energy issues across three proceedings:
 - The Phase II General Rate Case,
 - Renewable Energy Plan and
 - The Solar*Connect application
- 20 out of 26 parties to the proceedings signed onto and supported the settlement
- Effective Jan 2017, implementation is ongoing

Phase II General Rate Case

- Xcel withdrew its controversial and problematic Grid Usage Charge, and instead will be offering an RE-TOU rate as the primary residential rate structure in the future.
 - Customers may opt into this rate (and have a 2 month window in which they can cancel), until 2 events occur: 1) AMI meters have rolled out, and 2) there is an Advice Letter filing in 2019 in which the Commission approves the concept that the rate will be mandatory for all customers.
 - Parties agree to support the concept of decoupling (which Xcel has made a separate filing).
- NEM customers will have equivalent treatment regarding base rate design, whether or not they participate in the Solar*Rewards program
- Conceptual agreement that solar systems with energy storage systems are eligible for NEM.
- Availability of 24 MW of SPV-TOU (with T&G Demand charge)

RE Plan – Solar*Rewards

Program	2017 Capacity	2018 Capacity	2019 Capacity	Total RES Capacity
Sm Opt A	24	24	24	123
Sm Opt B	9	18	24	
Medium	24	24	24	72
Large	6	10	14	30
Total Program Capacity	63	76	86	225

The capacity in Solar*Rewards has been increased significantly, with 225 MW being available over the next 3 years (vs the existing 108 MW).

RE Plan – Solar*Rewards

- Rebate levels are as follows:

	Small Program		Medium (25-500 kW)
Year	Option A	Option B	
2017	\$0.0050	\$0.0500	\$0.0475
2018	\$0.0050	\$0.0475	\$0.0425
2019	\$0.0050	\$0.0350	\$0.0375

- Large Program (> 500 kW, < 120% of energy usage) via RFP
- The capacity for Community Solar Gardens (CSG) have been expanded from the existing range of 6-30 MW/yr to the annual capacity listed below:

	2017	2018	2019	Total
Minimum	15	15	15	45
Maximum	30	35	40	105

RE Plan – Low Income

- For the first time, there will be specific program offerings for low income customers in CO.
- Rooftop Low Income Program:
- There will be an incremental 4 MW/yr CSG for 100% low income participants offered through an RFP.
- 500 kW of the maximum amount of the CSG program will be set aside annually for a low-income standard offer. The REC incentive to be paid for the standard offer participants will be the average annual awarded REC plus \$0.01/kWh. Max size < 100 kW.
- Xcel will take on the 5% CSG low income

RE Plan

- The following stakeholder groups have been established and will meet quarterly:
 - Distribution Grid and Interconnection Stakeholder Group
 - Future Voluntary Renewable Programs Stakeholder Group
 - Existing Voluntary Renewable Programs Stakeholder Group
 - Pilot Stakeholder Group

Solar*Connect

- Solar*Connect will now be known as Renewable*Connect.
- Xcel will enter into PPA for a 50 MW PV system, and sell subscriptions to its customers.
- Xcel must file an application if it wishes to expand the program.
- Administrative firewalls will be put into place to mitigate any favoritism towards marketing the program.
- A change from the original application was to revise the credit and unsubscribed energy methodology, which will be calculated per the QF Methodology updated for 2018 look; and then updated annually using a 50 MW decremental calculation



Colorado Low-income Community Solar

- Tom Figel, Policy & Regulatory Manager

Content

- GRID Alternatives
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 - Background
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- Our Mission

**WE MAKE RENEWABLE ENERGY
TECHNOLOGY AND JOB TRAINING
ACCESSIBLE TO UNDERSERVED
COMMUNITIES.**

- Direct solar project development & technical assistance
- Workforce development
- Low-income solar policy leadership



OUR WORK IS MAKING A DIFFERENCE.

- Solar for more than 1600 families in 2016, up 20% from 2015.
- Direct job placements and participation in national workforce partnerships
- Industry partnerships promoting STEM education in high schools and workforce diversity

Low-Income Solar Policy Guide:



VOTE SOLAR



lowincomesolar.org

LOW INCOME SOLAR POLICY GUIDE

[WHY ACT](#) [GUIDING PRINCIPLES](#) [POLICY TOOLS](#) [SUCCESSFUL MODELS](#)



WHY LOW INCOME SOLAR?

The growth of solar in the United States provides a tremendous opportunity to address some of the greatest challenges faced by lower-income communities: the high cost of housing; unemployment; and pollution. Solar can provide long-term financial relief to families struggling with high and unpredictable energy costs, living-wage employment opportunities in an industry adding jobs at a rate of 20% per year, and a source of clean, local energy... [\[Read more\]](#)



SINGLE-FAMILY SOLAR



MULTI-FAMILY HOUSING



COMMUNITY SOLAR



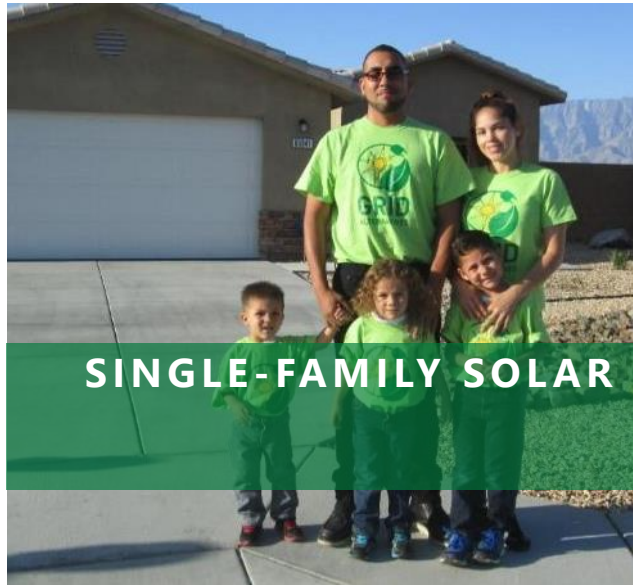
WORKFORCE DEVELOPMENT



Policy Wins

- Legislative victories in CA bringing millions of dollars to multifamily affordable housing
- Recent Illinois victory
- New key partnerships with utilities, state and local governments to scale our work

GRID Colorado



Background

- GRID intervened in RES Plan Proceeding (part of “global settlement”)
- Worked with other parties to address equity issues
 - RESA – LI paid in around \$60 million since 2006, no access to direct benefits
 - LMI should have access to programs, regardless of housing type or geographic location
- Xcel introduces new low-income solar programs for rooftop, multifamily, and community solar
- Link to settlement:
https://www.dora.state.co.us/pls/efi/EFI.Show_Filing?p_session_id=&p_fil=G_678020

Summary of Low-income Community Solar Programs

- ~ 18.75 MW of low-income community solar capacity 2017-19
- 4 MW Low-income RFP (annual)
- 500 kW standard offer (annual)
- Xcel assumes 5% (up to 5.25 MW total)
- Consideration for higher RECs in large program
- Affordable housing inclusion in community solar program

4 MW low-income RFP

- 12 MW total capacity 2017-19
- Up front or production based incentive
- Evaluations offer consideration for:
 1. percentage of expected electric utility bill reduction for the low-income customer
 2. provision of solar installation job training for low-income individuals at the bid CSG
 3. coordination with installation of energy efficiency measures

500 kW low-income standard offer

- 1.5 MW total capacity 2017-19
- 500 KW annually of projects up to 100 kW in size (so, five 100 kW projects, ten 50 kW, etc.)
- Up front and small production based incentive
- REC incentive for standard offer will be the average annual awarded REC for the low-income 4 MW CSG RFP (previous slide) paid as an up-front incentive, plus \$0.01/kWh.

5% requirement

- Xcel will assume 5% requirement
- Developers no longer required to comply
- Xcel will offer up to 5.25 MW through utility low-income community solar offering
- Will receive same REC as low-income standard offer
- Company will not seek recovery for investment in such CSGs through base rates
- Details TBD

Large CSG Program

- Consideration of higher RECs for low-income projects
- Public Service is open to evaluating and accepting bids in the general CSG solicitation that offer a higher REC price in order to incent projects that provide higher levels of low-income participation, provided that any low-income minimum proposed through this solicitation, as well as through the low-income solicitation, must be maintained through the life of the Solar*Rewards Community contract.

Multifamily Affordable Housing

- Eligibility for low-income community solar program participation
 - Nonprofit affordable housing buildings or public housing authority buildings will be considered “low-income subscribers” so long as: (1) the building’s residents meet the “low-income” definition set forth in § 40-3-106, C.R.S.; and (2) the housing authority provides verifiable information that these residents are the beneficiaries of the CSG subscription(s).
 - Defined at 185% of Federal Poverty Level
 - How to demonstrate benefit?

I don't want to live in a world

**where
someone else makes the world a better place better than we do!**



Get In Touch.

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CO Xcel Energy LI Rooftop Solar Consideration

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COLORADO
Energy Office

The Colorado Energy Office

MISSION STATEMENT

The CEO's mission is to improve the effective use of all of Colorado's energy resources and the efficient consumption of energy in all economic sectors, through providing technical guidance, financial support, policy advocacy and public communications.

DEPARTMENT VISION

The CEO's vision is to help Coloradans live more prosperous and healthy lives by promoting innovative energy production and efficient energy consumption practices that are beneficial to the economic and environmental health of the state.

CO Xcel Energy Global Settlement

- Xcel Energy and 26 solar and consumer interest groups struck a far reaching compromise on a rate case, a controversial large-scale utility solar program and the regular review of the state's renewable energy plan
- Replaced a proposed fixed “Grid Use Charge,” with a “Time-of-Use” rate trial and a “Time Differential Rate” demand charge pilot
- Adds a 50MW utility owned market subscription solar product + massive expansion of LI solar offerings
- Resolves Xcel's RE Plan through 2019
 - Includes capacity increases in renewable energy programs
 - Treats all net metered solar owners equitably

Xcel Energy Global Settlement- LI Elements

- IOU 5% PUC Rule Requirement Aggregation (5.25 MW) – Approx. 1,700 customers
- Low-Income Solar Rooftop Program (1.5MW) – Approx. 300 customers
 - Integrated with WAP offering an upfront incentive and a production based incentive
- 100% LI Community Solar Garden RFP (4 MW Annually, 12 MW Total) – Approx. 3,900 customers
 - Upfront incentive or a performance based incentive
- LI Standard Offer (.5 MW Annually/ 100 kW max) – Approx. 100 customers
 - Competitive upfront REC incentive plus \$0.01/ kWh

LI Weatherization Assistance Program (WAP) Rooftop Solar Integration

- The CEO's Weatherization Assistance Program is the first state in the nation to be granted DOE permission to use rooftop solar as an approved measure to reduce household energy burden
- CEO is integrating rooftop solar into its operations based on the following criteria:
 - Cost effective (SIR 1.0) and does not exceed a DOE contribution of \$3,545
 - Homes with high solar capacity factors
 - Customers with high electricity use
 - Customers with limited access to community solar offerings

CO Xcel Energy LI Rooftop Solar Consideration

- **Objective:**

- Reduce participating low-income customers' bills; thereby decreasing their electric energy cost burden
- Increase access to distributed generation for customers that currently have limited opportunity to utilize existing voluntary programs

- **Financing:**

- DOE/ CEO Wx funds will provide base funding
- Public Service will provide an upfront incentive of \$2.00/w installed and a production incentive of \$0.034/kWh. Public Service will retain all RECs

CO Xcel Energy LI Rooftop Consideration cont.

- **Project Description:**

- The program will be scaled over three years installing no more than 300 systems
- Each system will have a maximum size of 3.5 kW
- Each system will yield at least 1.0 SIR calculation using DOE approved methodology; and
- PV systems will yield a weighted average generation capacity factor of at least (14) percent

CO Xcel Energy LI Rooftop Consideration cont.

- **Customer Target:**

- Non-profit owned properties or housing providers with long-term agreements to serve low-income customers
- Homes with high solar capacity factors
- Customers with high average electricity use
- Customers without access to low-income CSG offerings

LI Rooftop Solar Lessons Learned

- Lessons Learned:
 - LI is a unique market segment with its own set of needs and barriers to entry
 - Market barriers are the reason for low customer participation
 - LI represents a large untapped market, but demands segment specific approaches
 - Upfront incentives are necessary for market catalyzation
 - Use existing service provider networks to lower soft costs and meet cost-effectiveness requirements
 - Maintain net metering benefits to pass along meaningful savings to reduce energy burden
-



COLORADO

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The Colorado Energy Office



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**Questions? Please enter
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