COLORADO LEADS THE WAY TO COMMUNITY SOLAR

NASUCA Mid-Year Meeting
Distributed Energy Resources Committee Panel
June 8, 2015
Philadelphia, PA

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COLORADO HISTORY OF SHARED SOLAR

• 2009 - first shared solar system came online
  o United Power
    • Rural electric co-op serving 67,000
    • First utility to create a solar garden with 48 panels
    • Added 48 more panels in 2010

• Gov. Bill Ritter signed law in 2010 creating community solar power systems throughout state C.R.S. 40-2-127
  o Implemented in 2012
  o Basically created community solar industry
  o Required community solar for IOUs which allowed innovative business models
  o Set-aside for low income customers is 5%
  o Many states have since used Colorado’s legislation as a model

• Recent legislative action
  o Eliminated a geographic restriction
    • Subscriber must be in county in which community solar garden is located OR ADJACENT COUNTY
COLORADO HISTORY OF SHARED SOLAR

• Xcel Energy (Colorado’s largest IOU) in 2012 and 2013
  o Over 40 projects built or in development; now generating about 28MW
    • Systems range from 500 kW to 2 MW
  o Incentives through Solar*Rewards Program
  o Capacity currently limited to 30 MW

• At least 12 Colorado utilities have sponsored projects

• Colorado co-ops and municipals have been leaders as well, completing projects even before law was passed
  o Multiple Colorado co-ops have gone on to build second or even third projects

• A 1 MW project can typically serve 200-300 customers, meaning thousands of Coloradans have community solar now
STATE-WIDE MARKET

• 30% renewables by 2020 - statutory standard
• Colorado PUC called for expansion of community solar capacity in 2015/2016 renewable energy plans
• Two main community solar providers
  o Clean Energy Collective (CEC)
    • Customers purchase panels; CEC maintains
  o Sunshare
    • Customers can pay up-front for panels or per kWh used over time
    • 20-year contract
• Colorado community solar companies have grown quickly with the market, creating jobs and expanding nationwide
• Customers get all the subsidies
  o 30% Federal tax credit (for now)
  o Utility incentive (approved by PUC)
PENDING ISSUES

• Capacity
  o Initial cap of 6 MW set by legislature for first 3 years
  o Xcel (largest IOU) now has 30 MW cap set by PUC
  o Unless capacity is limited, will not have competitive market

• Incentives
  o Competitive bids now down to close to zero

• Subsidies
  o Net metering

• Net metering credit
  o Now at full retail rate
  o Under PUC review
  o Other states:
    • 44 states have basic net metering
    • 17 states have aggregate net metering
    • 11 states have virtual net metering
  o Utility incentives

• Restrictions
  o Geographic
  o Size of community solar garden
WHERE DO WE GO FROM HERE?

- Expansion of programs
  - At least 49% of US households and 48% of businesses do not have solar-suitable rooftops
    - Many say number should be as high as 75%
  - By 2020, shared solar could represent 32% to 49% of distributed solar market
  - Cumulative growth: from 5.5 GW in 2015 to 11 GW in 2020
  - Represents $8.2 to $16.3 billion in investment