



Southern Colorado Sustainable Communities Workshop

Military Sustainability Track

November 21, 2008

Presented by: Jared Schoch, Southwest Regional Sales Manager, SunEdison

Purpose of our meeting

- Background
- Colorado solar projects
- Colorado solar market
- Funding vehicles
- Solar strategies for large campus environments
- Q&A

SunEdison

The first provider to offer solar energy as a turn-key service

- Fund-own-design-build-operate-maintain
- No capital outlays for clients
- No impact on existing services
- No ongoing client maintenance costs

The largest solar energy service provider in North America

- Over 500 projects installed
- Major Colorado presence
- Over 50MWs of 100% renewable electricity installed globally
- Over 18MW awarded or under contract in Colorado (50 - 75%+ large PV market share)
- Predictable electricity prices over a 20 year term
- Complementary services to existing utility offers



Financial Strength

- **SunEdison financial stability**

- Private equity investors
 - Goldman Sachs
 - MissionPoint Capital Partners
 - Allco Finance Group
- Project Financing Banks
 - HSH Nordbank
 - TD BankNorth
 - Wells Fargo



- **Project financing**

- \$400,000,000 committed

- **PEC Project Financing**

- Bank identified
- Financing capacity in place

- **Also noteworthy**

- SunEdison is currently developing Canada's largest solar farms in the Province of Ontario
- US's largest solar power system in operation today at Alamosa

SunEdison Sample Colorado Clients

- San Luis Valley Regional Medical Center (1,450 kW)
- Alamosa School District (825 kW)
- City of Alamosa (500 kW)
- City of Rifle (2,300 kW)
- City of Arvada (650 kW)
- City of Broomfield (300 kW)
- NREL (1,000 kW)
- Denver Federal Center (1,000 kW)
- Xcel Energy San Luis Valley Project (8,200 kW)
- More to be announced soon,,,

More than 18,000 kW of SunEdison Colorado PV projects awarded, in development or fully operational today

Colorado Energy Market Situation

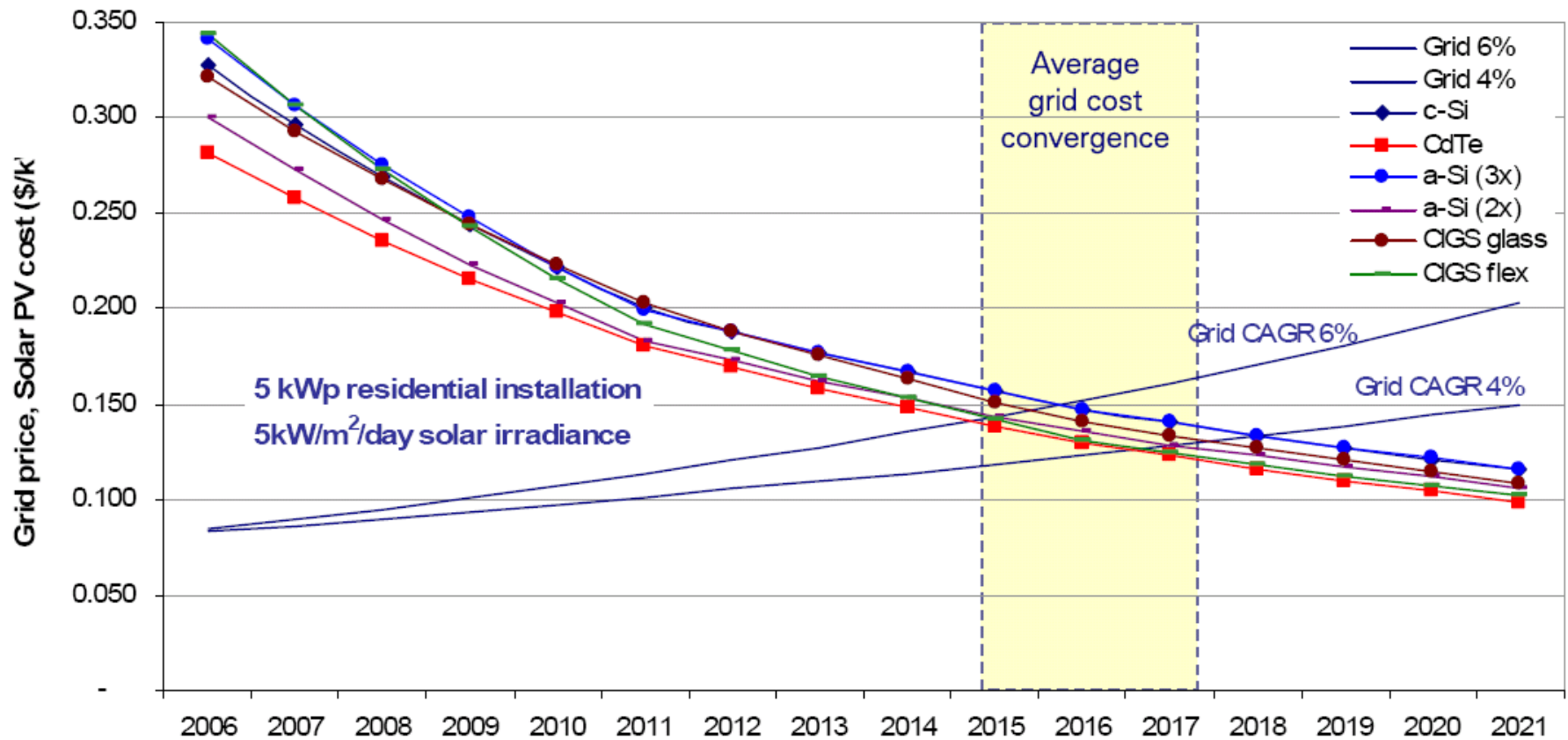
- 37% Xcel natural gas fuel cost increase translates into 15 – 20% increase in electricity costs to customers this fall.
 - *Denver Post, 2008*
- Xcel will request rate increase to pay for construction and operation of Comanche 3
- Black Hills requesting construction of 4 to 5 natural gas plants immediately
 - *Colorado Public Utility Commission 2008*
- 60% increase in electricity demand in next 10 years
 - *Colorado Public Utility Commission 2007*
- 7,000 megawatts of new load needed by 2025 to meet demand (1,000+ megawatts needs to be peak load)
 - *Colorado Energy Forum 2006 Study (Xcel, Aquila, Tri-State driven)*
- “If load not built, electricity prices will increase dramatically”
 - *Colorado Energy Forum 2006 Study (Xcel, Aquila, Tri-State driven)*
- Cost of electricity since 2000 has increased more than 42% (more than 4.7% annually)
 - *DOE Energy Information Administration 2008*
- Cost of electricity increasing at 3.9% nationally
 - *New York Times 2008*

Critical part of Solution – energy efficiency and alternative / renewable energy usage as a means to supporting peak load needs

– *Colorado Energy Forum 2006 Study (Xcel, Aquila, Tri-State driven), Governor’s Energy Office & Public Utility Commission*

Solar/Grid Price Cross-Over

Figure 53: Ave. grid price electricity versus solar PV output costs (excluding incentives) – 5kW residential system



Source: Deutsche Bank

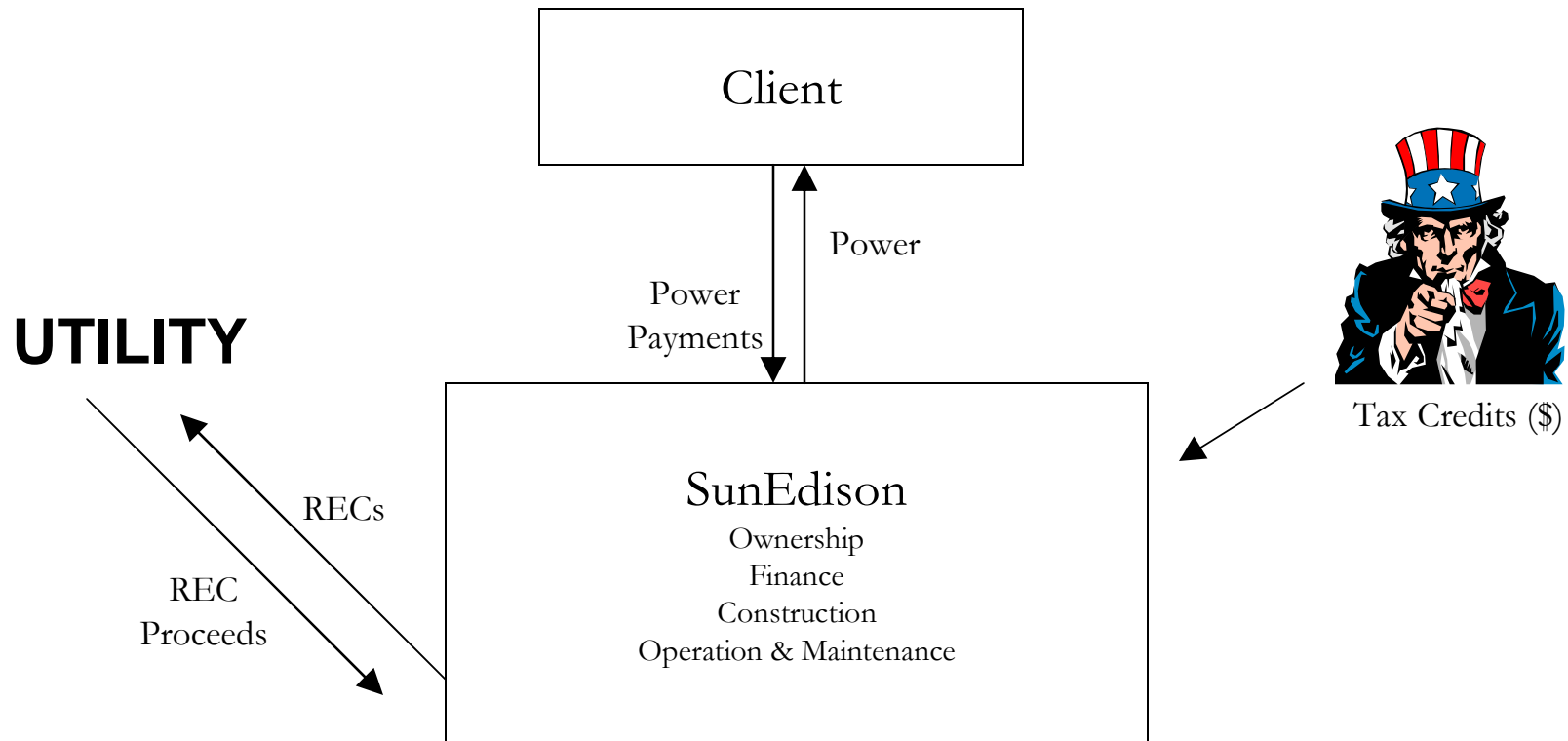


Colorado Utilities & Solar Programs

- Xcel Solar Rewards
 - Large & Mid-sized programs (4 to 6MW each year)
 - 3 years left under existing legislation
 - Changes may be on the way
- Black Hills
 - Solar RFPs every few years (1MW per)
- Tri-State Cooperatives
 - Negotiable in some instances
 - Driven by board and customer demand
- Municipal Utilities
 - No requirements for large solar programs today
 - Driven at Utility Board and City Council level

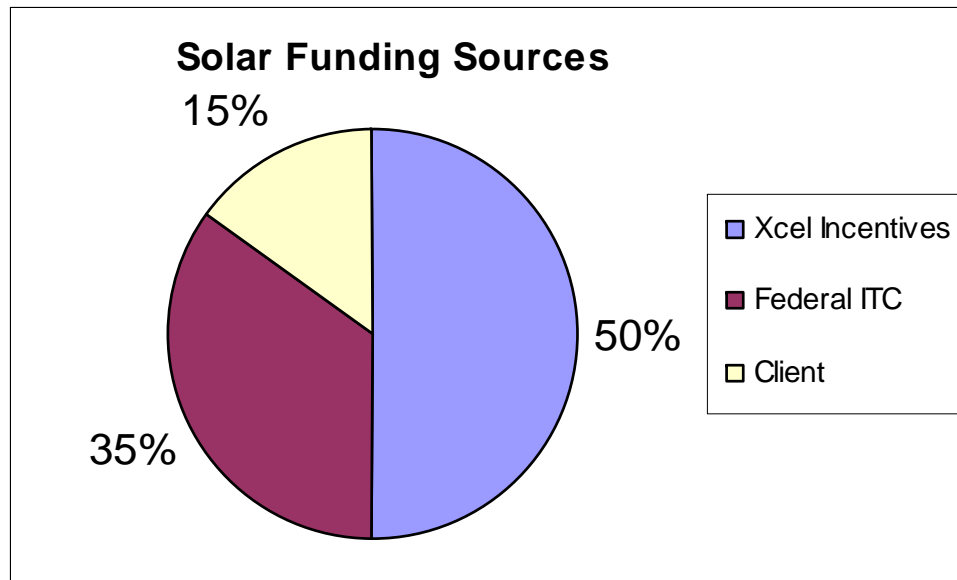
Gaining solar incentives not necessarily dependent on geographic location and existing utility relationship

SunEdison PPA Structure Diagram



PPA Funding

- SunEdison Financing Mechanism
 - High up-front capital cost for solar power systems
 - Combination of rate paid by client, federal tax credits and Xcel Energy Renewable Energy Credits



Federal Funding Vehicles

- Straight PPA agreements
 - SunEdison PPA in place with WAPA
- Design-build-operate capital projects
- ESPC
 - To allow PPAs in future
- GSA
 - Not ideal due to state to state differences
- Franchise agreement negotiations

Every deal so far has been 3 way agreement between user, solar developer and utility

Solar Strategies for Large Users

- Roof top and ground mount solar programs on all qualified customer-owned facilities
 - Master agreements put in place
 - Implement as incentives allow over time
- Large central plants
 - Distribution lines built to load/s
 - Must be careful not to challenge public utility definition

Thank You / Q&A



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