Proposed New Solar Incentive Program for Commercial and Multifamily Customers

Presentation to Electric Utility Commission

January 25, 2010

Karl R. Rábago Vice President, Distributed Energy Services Austin Energy



Overview

Austin Energy's support for solar since 2004:

1052	Customer-owned	so	lar	Sy	stems

Municipal and School installations

4 MW Solar generation capacity

35 Solar installation companies

300 Estimated green jobs created



Overview

In FY2009, solar rebate applications surged, due to:

- Increase federal tax credits
- Decline in cost for solar technology
- Increase number of solar installers
- Aggressive marketing by solar companies
- Increase customer awareness

Austin Energy Action in September 2009

- Rebates for homes lowered from \$3.75/watt to \$2.50/watt
- Capped at \$15,000 per project from \$50,000
- Homes required to install energy efficiency measures
- Rebates for businesses and multi-family suspended until January, 2010
- Engaged solar installer network on how best to allocate the remaining solar program budget



FY2010 Solar Rebate Program Budget

FY10 Solar rebate budget \$4.0 M

Fund already committed (10/09) \$2.7 M

FY10 remaining budget \$1.3 M

Balance allocated:

\$100k for solar commercial

\$700k for residential

\$ 50k for solar water heating

\$450k for residential released later



Process for Establishing Commercial Performance Based Incentive Solar Program

Held eight stakeholder meetings with solar installer network to determine how best to:

- Allocate remaining \$100,000 for commercial and multifamily
- Design program to respond quickly to dynamic market realities
- Continue support to local solar market
- Design next evolution tied to solar energy production
- Reflect business realities



Controls and Goals

Controls

- Budget
- Program requirements and processes

Goals

- 5 MW of new installed solar photovoltaic capacity
- Robust and growing solar industry
- Economic efficiency and responsiveness to market conditions
- Enhanced program transparency and predictability



The Next Evolution of Solar Program

- Switch commercial customers from up-front, sizedbased rebates to performance-based incentives (PBI)
- PBI based on actual metered solar energy production over a number of years; rewards system design optimization, long term system maintenance, and long term operations
- Allows Austin Energy to spread funding over a longer term, mitigating budget impacts
- Aligns public funding priorities with system performance



Proposed Performance Based Incentive Program

- Initial incentive set at \$0.14 per kWh of solar production (flat nominal rate, not deflated)
- Term is 10 years
- Maximum solar system size is 20 KW AC
- Solar system must comply with Austin Energy interconnection guidelines
- Austin Energy approved Solar Contractors will submit PBI applications on the customer's behalf
- Incentive level will be reviewed every four months and adjusted to reflect current cost of solar



Proposed Performance Based Incentive Program

- Customer will receive full benefit of solar energy produced
 - Solar production will offset building energy consumption
 - Excess solar energy is net metered
 - Facilities yielding a solar energy surplus over a billing cycle will be paid at current electric fuel cost rate
- Customers must accept regulatory and appropriations conditions
- Customers will be required to transfer all renewable energy credits and attributes to Austin Energy
- Not-for-profit facilities will not be excluded; however other options are being investigated as they may have limited borrowing power and are unable to use federal tax benefits



Budget Impact

- \$100,000 is available in current FY2010 O&M budget
- Program payments will be budgeted annually and spread over a 14 year period
- Austin Energy plans to enroll customers for five years
- Program will support development of 5 MW of solar
- Incentive levels will be evaluated every four months and adjusted to reflect market conditions
- Current incentive of \$0.14 per kWh is equivalent to \$1.40 per watt (NPV)
- PBI saves \$2,385,736 compared to an upfront size-based incentive

Yearly Budget and Cost / Benefit Projections

Year	Yearly Production Based Incentive Payment		
1	\$	99,225	
2	\$	198,395	
3	\$	296,628	
4	\$	394,370	
5	\$	491,623	
6	\$	489,165	
7	\$	486,719	
8	\$	484,285	
9	\$	481,864	
10	\$	479,454	
11	\$	382,683	
12	\$	285,977	
13	\$	190,173	
14	\$	94,848	
Total	\$	4,855,408	

• \$4,855,408 Nominal Total Program Payments

• \$3,415,748 NPV of Total Program Payments

• \$.79/Watt Nominal Average Cost/DC Watt

• \$.56/Watt NPV Average Cost/DC Watt

5.14 MW Total AC Capacity

190.7 gWh Total Generation

Questions

Contacts:

Karl R. Rábago

karl.rabago@austinenergy.com

Leslie Libby

leslie.libby@austinenergy.com

Tim Harvey

tim.harvey@austinenergy.com

