

**Commercial Solar Stakeholder Meeting  
Thursday, November 5, 2009  
Town Lake Center Assembly Room  
Minutes**

Leslie Libby, Manager of Austin Energy Solar Programs, opened the meeting at 3:00 p.m. and provided the following solar program updates:

Effective November 1, 2009, \$700,000 in residential rebate funding was released. \$400,000 in additional residential funds will be released at a later date. In addition, \$100,000 for commercial projects will be released with the new Commercial Solar Program launch January 2010.

Tim Harvey [Austin Energy Conservation Program Specialist Senior] updated the group with a tally of residential applications received since November 1, 2009, when the Residential Solar Program changes became effective. To date, 56 applications have been received. No new Letters of Intent (LOI) or rebate funds have been encumbered.

Leslie Libby discussed preliminary incentive ideas such as Feed-In Tariff (FIT) and Performance Based Incentive (PBI) models. Ms. Libby added that there would be regular program updates via contractor meetings, phone conferences, or the AE Solar website to improve communication and ensure stakeholders have the most current program status.

Ms. Libby requested ideas and general brainstorming from attendees as to what sort of incentive program they would like to see Austin Energy implement, and offer past experiences with other solar incentive programs, research results, and general market trends.

Mark Rangel [Texas Solar Power Company]: Mr. Rangel calculated some preliminary numbers and supplied the following:

	17 ¢	25 ¢	35 ¢
Annual Feed-In Tariff Cost per Array	\$2,344	\$3,446	\$4,825
# of Systems (using \$500,000 budget)	213	145	103
Megawatts of Production	2.13	1.45	1.03

Some estimated payback numbers for a FIT were:

	25¢/kWh	35¢/kWh	56¢/kWh
Payback Period	8 yr.	6 yr.	4 yr.

A number closer to FIT standards (e.g., Arizona) is 25¢/kWh [kilowatt.] Rebates are easier to sell. Estimated payback at \$2.55 per watt is four years and \$1.55 per watt is eight years.

Texas Solar Power Company polled five existing and three potential commercial customers. What kind of payback is sensible for the customer, and longest acceptable? Most agreed more than a seven-year payback would be a deal breaker.

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Stan Pipkin [Lighthouse Solar]: Would Power Purchase Agreements (PPAs) or leasing of equipment by a third party be allowed? SEIA [Solar Energy Industry Association] has stated that this would be the #1 item that could change the solar market the most.

Quentin Keith [Lighthouse Solar]: Predictability is important. For example, California has offered a "tiered" rebate system for years. As a funding threshold is reached, the rebate is lowered. No surprises.

Mike Weinnig [Standard Renewable Energy]: Business customers want security. A Feed-In Tariff at a locked in rate could offer that.

Jim Sylvana [Celestial Power]: What are Austin Energy's goals for commercial and non-profit solar customers? Do we want the largest amount of MW [megawatt] installed for the lowest amount of dollars? Is our goal energy efficiency or distributed energy production? Non-profit businesses cannot handle the upfront costs of an installation. Would an incentive program for non-profits be structured differently?

Most attendees agreed it would be a good idea to set up the incentive program for commercial businesses separately from non-profit businesses.

Jeff Wolfe and Brandon Mathis [Solar Community]: One of the biggest hurdles would be to get the large building owners on board. Currently, the lessee benefits if PV is installed, not the building owner. FIT programs don't encourage energy efficiency on the consumer side, which is one of the goals for the utility. On the other hand, FITs are easier to install on large buildings, strip malls, and big box stores because roof space is good. The Salt River Project has ten and twenty year contracts.

Rob McPherson [Standard Renewable Energy]: One goal is to reduce the number of power plants. Still, what is the primary Austin Energy mission?

Tim Harvey [Austin Energy]: Austin Energy has multiple goals: distributed energy, energy efficiency, and increasing the solar market in Austin.

Stan Pipkin [Lighthouse Solar]: The rate structure between residential and commercial customers should be more democratic. The current commercial rate structure doesn't seem to be as "structured" or even as beneficial as residential, e.g., a business makes radical changes to improve energy efficiency. PBI measures are almost counter to demand reduction.

Rob McPherson [Standard Renewable Energy]: Will Austin Energy allow net metering for systems larger than 20 kW? What about the current 20 kW limit? With a PBI, the customer receives dollars for excess generation and is somewhat protected from higher rates. FIT, not so much.

Mark Rangel [Texas Standard Power Company]: Where is the sweet spot for Austin Energy? For a PBI, what is realistic for Austin Energy, 25¢/kWh, 11¢/kWh?

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Tim Harvey [Austin Energy]: Example of 20¢/kWh for a 25 kW system would be a ten-year incentive plan.

Jim Sylvana [Celestial Power]: Most contractors agree that's too long for a business.

Leslie Libby [Austin Energy]: The Value of Solar Study performed last year estimated 17¢/kWh to our grid. Austin Energy doesn't want to implement a program that only several large businesses could take advantage of and use up available funding.

Dusty [Harshman]: Payback estimates are difficult to calculate. Net present value brings everything to the table. Need to shift thinking from Rate of Return (ROR) to a Net Present Value (NPV). We need definitions of both terms.

[Net Present Value (NPV) is a way of comparing the value of money now with the value of money in the future. A dollar today is worth more than a dollar in the future, because inflation erodes the buying power of the future money, while money available today can be invested and grow.]

[The Rate of Return on Investment (ROI) is expressed as a percentage of the total amount invested. Rate of return is usually, but not always, calculated annually.]

Leslie Libby [Austin Energy]: We are looking at many ideas. These are projected and very preliminary ideas. Performed Based Incentives, Feed-in Tariffs, and PACE. Financing is still a big issue. We will present schematics during the next meeting.

George Drazic [RM Mechanical]: Austin Energy needs to raise rates to offset costs and to mandate energy efficiency measures to a property before a business can receive incentives. Where are we assuming the customer will consume all the energy produced? FIT are long-term. Owners need cheap financing to cover costs up front.

Leslie Libby [Austin Energy]: Roger Duncan [Austin Energy General Manager] presented a rate case [discussion document] to increase rates to [Austin] City Council last week. Only excess on the grid for PBI results in lower dollar/kWh produced; with FIT all energy produced goes to the grid and results in a higher dollar/kWh.

Mark Rangel [Texas Standard Power Company]: Where are the incentives coming from?

Leslie Libby [Austin Energy]: The Solar Rebate Budget. Austin Energy has good credit, stable cash flow, and can assist in financing options.

Leslie Libby thanked the participants for their very helpful information. Meeting notes would be distributed prior to the next Solar Contractor meeting scheduled for November 19, 2009. She invited all interested parties to email her additional ideas and feedback. The meeting was adjourned at 4:00 p.m.