Briefing Paper
Impact of feed-in tariff on Energy Trust solar program

July 28, 2010

Summary

On July 1, 2010, PGE and Pacific Power launched a production-based solar incentive program (often referred to as a "feed-in tariff") that customers can choose as an alternative to Energy Trust's solar electric incentives and state tax credits. Federal solar tax credits are available in either case. Availability of the production-based incentive will have an impact on Oregon's solar market and Energy Trust's solar electric program.

Background

- The 2009 Oregon Legislature required PGE, Pacific Power and Idaho Power to offer production-based incentives for solar electric systems as a five-year pilot program. The program will be available to these utility customers and will be funded through electric utility rates.
- Program participants will receive 15 years of production-based payments for their solar generation. The incentive rate will be fixed for the 15 years, and will be the rate in effect when they enroll in the program.
- The pilot program aims to produce 25 MW of new solar electric capacity in Oregon, which is roughly equal to the capacity Energy Trust expects to fund during the same time period. The program will be evaluated and compared to the current incentive structure (Energy Trust + state tax credits.)
- Maximum individual system size is 500 kW. Residential and small commercial systems under 10 kW will make up 50% of the pilot program's capacity.
- Program capacity will be open to small and medium-sized systems every 6 months. The program launched with incentive rates of $0.55-$0.65/kWh, varying based on system size and location. Incentive rates offered to future participants will likely be lowered if the capacity is quickly subscribed. The incentive rate for large commercial systems will be set by competitive bids solicited annually.

Discussion

- Customers must choose either (i) the Energy Trust incentive + state tax credit or (ii) the utility's production-based incentive. Customers are eligible for federal tax credits with either choice.
- The current total value of the production-based incentive is significantly higher than the Energy Trust incentive + state tax credit.
- The first capacity allocation on July 1 was fully subscribed in 15 minutes, indicating strong demand.
- Despite the current gap in overall value, staff expects continued participation in the Energy Trust incentive program based on different motivating factors:

Energy Trust + state tax credit	Production-based incentive
Reduce up-front cost	Earn more money over time
Recover incentives in 4 years (good if planning to sell home)	Recover incentives in 15 years (good if planning to stay in home)
Reduce tax burden through credits	Earn income to offset loan? payments
No insurance requirement	Must purchase $1M liability coverage

- Residential:
  - In 2010, staff expects most forecasted residential installations to stay with Energy Trust because the production-based incentives (i) were not known in time for the Solarize neighborhood outreach and (ii) are not available to customers wanting to act now who would otherwise have to wait for the production-based incentive program to reopen October 1. Some small "Solarize" projects will choose the production-based incentive or be canceled due the reduction in the solar RETC announced July 14.
  - Beginning in 2011, residential projects may shift toward production-based incentives because the pilot program has greater capacity for small-scale systems than Energy Trust, and because the RETC reduction makes the Energy Trust incentive + state tax credit package less attractive for small systems.
- Commercial:
  - In 2010, we expect to lose some forecasted commercial projects to the production-based incentive because in this poor economy, a 15-year income stream is more attractive than a 5-year state tax credit to many businesses. The greater impact to Energy Trust's 2010 commercial solar activity is due to changes to the BETC, including competition for limited BETC funding and higher pass-through rates, which make it difficult for projects to find investors.
  - In future years, demand for Energy Trust commercial incentives may remain strong because (i) the pilot Feed-in Tariff program has very limited capacity for larger systems, and (ii) some businesses will prefer the quicker return on investment offered by the Energy Trust incentive + state tax credit, and will continue to be limited by available capacity within the BETC program.
- The new incentive option comes at a good time for Energy Trust and the solar market in Oregon. The market is growing steadily, but Energy Trust's solar program budget is not – it will be significantly less in 2011 than 2010. The new incentive program will absorb much of the growth.
- The new incentive is devalued by its presumed taxability, its requirement that the customer procure liability insurance, and its monthly utility meter service fee. Also, the rates are expected to decline over time, closing the current gap between the programs, and potentially driving demand for Energy Trust incentives up in future years.

Next Steps

- Staff will review our 2010 residential solar forecast and projected generation goals based on the new expectation that we will lose some small residential Solarize projects as a result of the recent ODOE RETC reduction.
- Our 2010 commercial solar forecast is down by roughly 25%, due primarily to limits ODOE imposed on BETC and not to projects jumping to the new Feed-in Tariff incentive option.
- We will utilize unspent 2010 PGE funds to expand our commercial solar incentive offering in PGE territory to capture larger projects not currently served by either incentive program. We expect to spend the entire 2010 Pacific Power budget, so cannot make a similar offering in Pacific Power territory at this time.
- Availability of the BETC has become the limiter in the market. Renewable Energy staff will work together to use available funding to support solar and non-solar renewable energy projects that are awarded BETCs in the competitive process.
- Staff will continue to monitor residential and commercial participation in both incentive programs throughout 2010 and will recommend a 2011 budget based on the trends in activity.