

Public Service Company's Current and Proposed Net Metering Tariffs

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Pilot Program, from 1998

- True Net Metering: single meter, spinning forward or backward;
- Purpose: to study "the cost and benefits of integrating PV into the electric distribution system."

PSCo Agreed to Perform A Study to Understand (among other items):

1. PV system production;
2. Correlation of PV system production with native residential and commercial loads;
3. Correlation of PV system production with distribution feeder loads;
4. Correlation of PV system production with substation loads;
5. Correlation of PV system production with system loads;
6. Quantify the benefits of PV to the regulated distribution utility;
7. Identify issues and options for pricing electricity produced by grid-tied PV systems and other distributed generation technologies;
8. How costs associated with net metering affect customer billing systems.

Results of PSCo's Study

- "During the course of this study period, no meters were installed to actually monitor the output of any of the systems."
- "Because no meters of this type were installed during the study period the Company does not have any quantification of net benefit to the Company's system."

Duration of Pilot Program

"Public Service agrees to permit the participants in this PV program to continue under the net metering tariff (if selected by the participant) until such time as retail competition is available to that customer."

Why Study PV Output?

Value of PV output is dependent upon when it is produced, with respect to:

1. PSCo total system peak;
2. PSCo distribution system (and component) peak;
3. Customer's distribution transformer's peak.

PSCo's Proposed Net Metering Program

- PV generation will not be distinguished from other small distributed generation;
- Customers will have 2 meters: one for production, and one for consumption;
- Customers would choose "net metering" with 2 Watt-hour meters, or net billing, with 2 time-of-use meters;
- PSCo would net only generation; PV customers would be billed for transmission and distribution on consumption, not consumption net of production.

Problems With PSCo's Proposal

1. High cost for 2 meters: \$8.00/mo vs. \$6.25/mo for net metering; \$45 vs. \$6.25 for net billing);
2. No transmission or distribution credit;
3. Could also argue about value of on-peak energy.

Conclusions

1. It's intuitively obvious that PV output has some correlation with PSCo system peak (and distribution system/component peak) and, therefore, value.
2. Without a study, it is not possible to determine what that correlation is, and, hence, what PV's value is.
3. Current ("true") net metering is a reasonable compromise.