

Rooftop Solar Integration Requires Fair Rates



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As more homeowners and businesses install solar panels on their roofs, while remaining connected to the electrical grid, new rate structures are required to efficiently and fairly integrate this small, variable, generation into the grid.

Rooftop solar has proliferated rapidly, thanks in part to significant federal and state subsidies and lower installation costs. Old rate models don't account for the complexities of customers generating a portion of the electricity they use, while depending on the grid for power when the sun doesn't shine.

If utilities pay customers the retail rate for their excess generation, and aren't compensated properly for a proportional share of overhead and upkeep of the grid, then other customers are subsidizing those who install solar panels. Such a rate structure is not sustainable as more and more customers install solar systems.

Bountiful City, whose power department is led by Allen Johnson, a UAMPS board member and past board chair, recognized the financial and integration challenges posed by rooftop solar. With the support of the mayor, city council and power commission, Bountiful implemented a feed-in tariff / time-of-day rate model for customers using solar power in July 2017.

Under this rate structure, all customers' solar-generated electricity is sold to them at the same retail price other customers pay for electricity. Excess solar power purchased by Bountiful is priced at the equivalent wholesale rate Bountiful has to pay for power at the time the power is generated.

This structure eliminates a significant subsidy to solar customers, which under the old net metering program could be as much as 200%, depending on the time of day. Such a subsidy was not fair to non-solar customers.

The transition has gone relatively smooth, Johnson said. Some 200 customers that had already installed solar were grandfathered in, so the feed-in tariff rate does not apply to them.

Johnson credits the successful implementation to good communications with customers, being completely transparent, and candidly explaining the flaws of the net metering rate structure. Information sent to customers outlining the new policy included blunt statements, such as, "Paying someone twice as much for something that could otherwise be purchased at half the cost is no way to run a successful enterprise."