Greenwire

SOLAR: Calif. utilities start moving toward feed-in tariffs (07/07/2011)

Anne C. Mulkern, E&E reporter

The biggest city-run utility in the country will start buying power from people who install solar panels.

Los Angeles Department of Water and Power (LADWP) yesterday said it plans to launch a feed-in tariff, or FIT, a market mechanism that usually pays a premium price for green energy. LADWP is the second utility in the state to begin a FIT, following a California law requiring all utilities to start such a program.

The move signifies the kind of incentives that could be seen across the country in the future, said Craig Lewis, executive director of the Clean Coalition, a nonprofit advocating development of green power. Feed-in tariffs in places like Germany began at the local level, and the same can happen in the United States, he said.

"This is where it starts," Lewis said. "Anybody working in energy policy right now is focused at the local level. We're not going to have any earth-shattering changes at the national level, especially with the impasse we have right now" in Congress.

Feed-in tariffs join a host of programs California is implementing in its bid to create a green economy. The Golden State has the country's toughest mandate for clean power generation, requiring that 33 percent of electricity come from renewable sources by 2020. In 2009 it passed S.B. 32, a law requiring most utilities to start FIT programs.

"They can be very successful strategies for increasing a utility's or a state's renewable energy," said J.R. DeShazo, economist and director of the University of California, Los Angeles' Luskin Center for Innovation.

With 1.4 million power customers, LADWP serves 10 percent of the power demand in California, Lewis said.

LADWP did not detail specifics of its FIT, including how much it will pay for solar energy. Instead it previewed the program to its Board of Commissioners, which still must approve the feed-in tariff. A vote could come as soon as a meeting next month.

LADWP proposes starting with a 5-megawatt demonstration program this fall. The utility eventually must have a 75 MW program to meet the state's requirement.

"We want Los Angeles to have a successful feed-in tariff program that enhances the future for local solar expansion," LADWP General Manager Ronald Nichols said in a statement. "A demonstration program is key to that success."

LADWP will have to make many important decisions, DeShazo said, including how high to set the tariff, which customers the program will target, and whether to look at a short-term or long-term strategy.

In many other places where feed-in tariffs exist, utilities pay above-market rates for green power. The California Public Utilities Commission likely will set the rate of the tariff for the three investor-owned

utilities, although the CPUC still has not implemented S.B. 32. Municipal utilities have more flexibility in designing their tariffs.

LADWP in 2009 proposed a feed-in tariff of 12.5 cents per kilowatt-hour, DeShazo said, but never took it to the public because the business community had told the utility no one would participate.

So far in California, FITs have been popular among businesses and residents wanting to install solar. The Sacramento Municipal Utility District last year launched a FIT and quickly received enough applications to fill its 100 MW program.

Not everyone applauded LADWP's initial announcement on a FIT, however. The Los Angeles Business Council, while supportive of a feed-in tariff, said it had concerns about the language used by the city utility.

LADWP in a statement said it would "buy the power generated by solar panel systems under a Standard Offer Power Purchase Agreement for a negotiated fixed price."

A "negotiated fixed price" is not the same as setting a "clear fixed rate," the Los Angeles Business Council said. Successful FIT models, it said, offer a reasonable rate of return to encourage participation and allow the program to grow. And without a fixed tariff, it said, small and medium-size businesses wouldn't be able to secure financing.

"LADWP is proposing an over-complicated process that creates barriers to widespread participation and does not appear to comply with S.B. 32's state mandate," said business council President Mary Leslie. "A simple, streamlined program that guarantees property owners a fair rate of return, such as our proposed CLEAN LA Solar Program, will speed the development of local solar power and jobs."

LADWP did not answer requests for comment about the solar programs.

LADWP yesterday also said it will restart its program that pays subsidies for solar installation. It had quickly become oversubscribed, with rebate applications outpacing the annual budget by a 3-to-1 margin. In April it was stopped for restructuring.

LADWP said it is expanding that program but has not said what the new incentives will be or whether they will be lower than previous levels, but described its earlier payment level as "exceptionally high."

"During public workshops, we heard overwhelming support for expanding local solar power, including fully funding the [Solar Incentive Program] and launching a feed-in tariff program, to benefit customers, the environment and the green economy in Los Angeles," Aram Benyamin, senior assistant general manager of LADWP's power system, said in a statement. "These two initiatives, if approved, will work together to expand renewable energy within our service area and contribute to our renewable energy goal of 33 percent by 2020."

The utility likely will be raising rates to cover a number of costs, including that of the FIT.

How to grow solar?

Popularized in Europe, feed-in tariffs are starting to gain some traction in the United States. In addition to California's law requiring they be developed, Vermont and Hawaii have approved FITs as a way to boost renewable power adoption and other states are debating the option.

California already offers net metering, under which those who install solar receive credit from their utility for power fed into the grid. The state's PUC in 2008 said that utilities must now pay small power generators

for any electricity they make that exceeds what they use in their home or business. CPUC, which called that a feed-in tariff, has not yet set the rate.

The state also has "reverse auctions" where the three investor-owned utilities take the lowest bidders to build renewable energy projects.

Some argue that a feed-in tariff is one of the best ways to spread solar quickly. Launched in Germany in 1991, the FIT is credited with powering an expansion of solar there and making the country one of the world's leaders in green power. But FITs have been controversial.

When France, the Czech Republic and Spain launched FITs, they quickly became overloaded with applications that exceeded their initial goals for a program, said Wilson Rickerson, a Boston-based renewable energy consultant.

"Some people point to France, Czech Republic and Spain and say those markets really toppled over," Rickerson said, adding that controls can be put in place to keep that from happening. "If you have an ambitious program for [photovolatics] at all," without those limitations, he said, "you're going to get the market to blow up."

FITs also usually come with a power price increase. And setting the level of the tariff has been tricky.

When a utility company in Gainesville, Fla., started a feed-in tariff in 2009, it picked a rate that would generate a 5 percent rate of return annually for home and business owners who installed solar.

In its first year, the Gainesville program paid roof-mounted system owners 32 cents per kilowatt-hour generated, guaranteed for 20 years. By comparison, those feeding power into the grid previously earned 12.5 cents per kilowatt-hour through a version of a net metering program.

That tariff rate made Gainesville's program the first in North America to generate a profit for those selling their power to the utility, an analyst with Gainesville Regional Utilities, known as GRU, said at the time. To pay for the program, GRU raised rates to a level equal to about $1 a month for all customers. But GRU also limited the feed-in tariff to 4 MW per year, about enough to power 1,500 homes.

Most FITs have not tried to be cost-effective, DeShazo said. They could be structured in a way to benefit customers over the long term, he said, adding, "We could actually make it a cost-effective program here in Los Angeles if we wanted to."

Prices for solar are dropping, DeShazo said, while there are projections that prices for natural gas will rise in coming years.

"At some point the cost of those two different energy technologies will cross," DeShazo said.

In studies he did for the Los Angeles Business Council, DeShazo found that a 600 MW program spanning 10 years with 20-year contracts would eventually become cost-effective. That program would last 30 years, he said, because those 20-year contracts would be issued in te last year of the decadelong tenure.

Solar costs would dip below natural gas prices between years 11 and 14 of the program, he said.

DeShazo said he has shown the model to LADWP. The utility, he said, wants to start small because it has concerns about reliability and the use of intermittent power sources. A 600 MW FIT would only represent about 3 percent of LADWP's power demand, DeShazo said.