

By Felicity Carus - 26 February 2013, 10:29 In Editors' Blog

Greed and fear bring Florida closer to Germany's feed in tariff model



"America is one of the greediest places on the planet and all you have to do is put a policy in place that recognises that and we'll have as much solar as you want", said Brad Mattson of Solexant.

Gainesville Regional Utilities had to go through several iterations of its feed in tariff programme to get it right.

More than 14MW has been added to Gainesville Regional Utilities' load, but that is still only 5% PV penetration.

Feed in tariffs have been popular all over the world and have transformed some solar markets. But the US has remained stubbornly resistant to the power of transformational policy, with utilities treating them with the same hostility as net energy metering.

America's culture of individuation extends even to its state-regulated energy industry and no utilities want to admit that they are alike. So even mandated FiTs would result in a rat's nest of 3,000 disparate programmes strewn across the country - one for each utility in the US.

Those individual and mostly very modest programmes that have got off the ground are often under threat - sometimes through lack of interest because of bad design.

LA Department of Water and Power (LADWP) nearly had its US\$0.17 per kWh FiT derailed at the last minute by concerns about costs to ratepayers. But LA City Council voted 12-1 in favour of the 100MW programme. Other programmes in Palo Alto, California, Long Island, New York, and Fort Collins in Colorado were cumulatively worth 200MW, according to advocacy group the Clean Coalition.

A presentation hosted by the Solar Electric Power Association last week featured FiT programmes in Gainesville, Florida, and Palo Alto, California, demonstrating the mixed fortunes of FiTs in the US.

Rachel Meek, a commercial analyst with Gainesville Regional

Blogger



Felicity Carus

Felicity Carus is the only UK journalist to be regularly reporting on clean energy policy and finance from California for a global audience. Before arriving in San Francisco in 2010. Felicity was on the Guardian's environment desk in London after stints at the Sydney Morning Herald in Australia and Interfax in Russia. She first "broke" into the renewables industry with a commission in the mid-90s to write a book on how to install a solar water heating system with a rusty old radiator. The industry has come a long way since then, thankfully ...

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Our focus here at Photovoltaics International has always been on efficiency improvement and driving down the cost per watt of modules. In this issue we take a look at some of the market dynamics driving prices in the supply chain so that you can make better decisions to help reduce your overall cost per watt and increase your efficiency at the same time

Utilities (GRU), began the tale of two cities with a description of how their FiT programme sold out way more quickly than expected.

The first phase of the GRU programme started in 2009/10 with a 4MW annual cap that offered a generous (by US standards) \$0.32 per kWh for rooftop systems and \$0.26 per kWh for ground-mounted systems. GRU received 8 years worth of applications in a land-grab by developers who were quicker to respond than GRU's customers.

The City of Palo Alto Utilities has increased its feed in tariff to US\$0.165 per kWh and reduced its capacity to 2MW, but will that be enough to tempt developers?

Meek commented: "We realised we needed an annual capacity reservation system. Having a queue was very difficult to manage and it eliminated opportunities for many of our customers to

participate. From a national standpoint, lots of people were hearing about our FIT programme but our local customers didn't seem to be on the same timeline. So once they really understood what it was, the capacity had already been filled up."

In 2011, GRU kept the capacity the same — at 4MW — but added a new tier (see figure 2) and introduced deterrent measures for speculative applicants such as processing fees and monthly customer charges to help eliminate "phantom projects".

"These things were done in an attempt to make sure that we were seeing true projects that were going to be built," she said.

The GRU programme was so successful that GRU decided not to offer any further FiTs in 2012, and has only just offered the same programme this year at much lower rates — as low as \$0.15 per kWh.

GRU now has 76 residential (510 kW) and 139 non-residential customers (13.6 MW) in its FiT programme, which still accounts for only 5% of the utility's load, said Meek.

"We were trying to add more renewables to our fuel mix and to spur economic development. Following the German model, FiT seemed to give us the best of those benefits. We have seen quite a bit of new solar contractors that have come into our community and we've seen a lot of other businesses that have benefited from the FiT programme including engineers, lawyers and local labour pools."

Sun-drenched Palo Alto nestled in the heart of Silicon Valley with plenty of financially savvy, high-net worth individuals might seem like the natural home for a FiT programme. But a pilot scheme set up by the City of Palo Alto Utilities (CPAU) has so far bombed at its original US\$0.14 per kWh tariff for its available 4MW capacity.

Jon Abendschein, Resource Planner at CPAU, said that the utility had started a rooftop solar rebate programme about a decade ago and although the residential side has done well, it still has more than 70% of its commercial capacity remaining under the California Solar Initiative.

Abendschein said: "To some extent, this might have formed some of the motivation for the request received from our council members a couple of years ago to consider a FiT programme ... introduced while we were developing our electric utility supply strategy.

"It looked like adding solar to our supply portfolio would end up costing more than buying renewables remotely even when you include the transmission cost. But we were hearing from a lot of outside groups that solar costs have come way down and that it might be a lot cheaper than we were expecting."

CPAU developed a programme to test the market based on avoided costs to shield customers from excess rates. The number CPAU came out with was US\$0.14 per kWh for a minimum system size of 100kW.

"We only had the capability of processing a certain number of interconnections with our existing staff

Solar Business Focus: Volume 5



Our latest edition of Solar Business Focus offers a flicker of hope. Articles from EuPD Research and NPD Solarbuzz highlight the reasons behind shakeout insolvencies, investor nervousness and short-term supply issues within the

industry, but offer solutions and reasons to remain optimistic. Things are certainly not quite as bleak as they may first appear.



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and so we designed the programme to maximise the amount of solar we could get if US\$0.14 per kWh happened to be a very attractive price.

"When we launched the programme, the response was really robust. I talked to a large number of developers who inquired about the programme and a lot of them went out and tried to acquire customers [and] made project proposals. Over the course of all of our discussions we learned that, yes the cost of solar had come way down, but in the end we didn't get any applications."

CPAU considered closing the programme to focus on remote renewable projects, keeping US\$0.14 per kWh and waiting for solar prices to come down enough where US\$0.14 per kWh would be attractive or changing the price.

CPAU is now offering to purchase the output of up to 2MW of new solar systems located in Palo Alto at a price of US\$0.165 per kWh.

"That new price went into effect at the beginning of January and while we haven't had any applications so far the consensus among developers is that the economics are reasonable and it's really just a case of customer acquisition at this point," said Abendschein.

But part of the problem is that Palo Alto has roof space only, given the extremely high land values thanks to the likes of Google, Facebook and all the other tech and biotech giants. Roof lease costs are correspondingly high, which could make US\$0.165 per kWh difficult for developers to work with.

At an event in Palo Alto last week, a city worker asked Brad Mattson of Solexant what it would take to get people to get to 2MW at US\$0.16 per kWh.

"It's really simple." he said. "Greed and fear. You haven't applied enough to the greed yet. What happens in all these countries is that they do crazy things — the FiT in Japan is US\$0.50 kWh. They start a lot higher and get the cycle of greed going. Once you get the cycle of greed going you almost can turn it off. That's what happened in Spain, they almost bankrupted the country. But you have to get the cycle of greed started.

"I have a ranch and if they had the right feed in tariff, I wouldn't be having cattle I turn it all over. I would take every dollar out of the bank put it in solar panels.

"Look at the returns, 10%, 15%, 20% — where can you take your money and park it and make 10%-20% a year for 20 years? So why did this happen in Germany? ... smart people... We have smart people, but we just have dumb politicians.

"America is one of the greediest places on the planet and all you have to do is put a policy in place that recognises that and we'll have as much solar as you want."

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Mike MacLean • a day ago

Feed-in tariffs, also known as CLEAN Programs, are responsible for deploying the majority of renewable energy worldwide.

While Germany boasts the most successful feed-in tariff, there are some very successful models in North America as well. Ontario, for example, is the first jurisdiction to completely phase out coal by bringing high penetrations of local renewable energy online. In 2003, Ontario's renewable portfolio consisted of 15 megawatts (MW) of wind power from just 10 wind turbines. After implementing a CLEAN Program in 2009, Ontario has now contracted a total of 4,600 MW of distributed renewable energy, including 2,000 MW of wind power capacity. Ontario's CLEAN Program benefits energy consumers and communities by reducing the need for expensive transmission upgrades, increasing local economic benefits (it has already created 20,000 new jobs and is on pace to create as many as 50,000), enhancing grid resilience, and fostering environmental sustainability.

In the US, Sacramento Municipal Utility District (SMUD) launched a CLEAN Program in 2010 to bring 100 MW of local solar power online. In August 2010, SMUD had a meager renewable energy capacity of 93 kW and has now contracted for 98.5 MW of local solar capacity. Furthermore, SMUD's program streamlined interconnection processes. In less than two months, two distribution engineers from the Sacramento municipal utility completed interconnection studies for the dozens of projects that comprise the 100 MW of SMUD's initial CLEAN Program capacity. It is also worth noting that 100 MW of local solar capacity in the SMUD service territory is equivalent to 2.5 GW of local solar capacity in California if a similar program were extended across the entire state.

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John Crider • a day ago

That is a misinformed statement @ Guest. GRU did not break its own rules; in fact, GRU stuck strictly to the rules which allowed all applicants in the first year to be allocated space with somewhat limited restrictions. In subsequent years, the rules were tightened up and special preference was given to small, local systems. In addition, the 5-year queue was abandoned and 6-8 Megawatts was reallocated from large out-of-town interests to be available to Gainesville customers. GRU did not cheat anyone.

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Annie Orlando -> John Crider • 2 hours ago

In the January 2011 FIT Solicitation, GRU allowed one company to submit applications for 37 unregistered LLC's on 11 parcels. They did not have a Federal ID #, a D&B #, or anything else that was required to submit a complete application. What do you call that?

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Guest • a day ago

Unfortunately,

GRU broke their own rules in order to allow speculators and investors to grab all the allocations, once again cheating local business owners and preventing them from getting allocations that they qualified for.

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