

Making The Case For Feed-In Tariffs

A ruling by the Federal Energy Regulatory Commission last year in California related to feed-in tariffs could have national implications for the wind industry.

BY CRAIG LEWIS & TAM HUNT

A little-known decision issued by the Federal Energy Regulatory Commission (FERC) in October 2010 could have profound effects on the U.S. wind industry. FERC's declaratory order on a California feed-in-tariff (FIT) program for cogeneration facilities will have ripple effects across the clean energy world, including the wind industry, because the commission chose to be proactive in clarifying the state authority to set multi-tiered FIT pricing.

FERC's ruling last October was a clarification on the California Waste Heat and Carbon Emissions Reduction Act (A.B.1613), which was passed into law in 2007 and implements a FIT for eligible cogeneration facilities up to 20 MW. As the California Public Utilities Commission (CPUC) moved to implement the law, the state's investor-owned utilities (IOUs) argued that the FIT was preempted by federal law because the CPUC would be setting wholesale electricity prices. The CPUC then requested a declaratory order from FERC for additional guidance on the preemption issue.

In the October 2010 clarification, the CPUC got what it wanted. FERC outlined how a multi-tiered FIT could be designed to comply with federal law. The ruling provided a clear pathway not only for implementing California's cogeneration FIT with the

CPUC's desired pricing system, but also for FITs applicable to any type of renewable energy at various pricing levels.

The ruling had two key features. It clarified that states can use different avoided costs for each technology required by state law to be procured by private utilities (this is what "multi-tiered pricing" means) and that states can provide additional value for renewable energy by allocating compensation via renewable energy credits (RECs), which represent the green attributes of renewable energy.

Prior to the October ruling, it was generally understood that avoided cost was only applicable to electricity that

FERC also clarified that states have complete control over how they design RECs in order to further compensate developers of different technologies and project sizes. Hence, RECs represent an additional tool that is both powerful and flexible for incentivizing clean energy at the state level.

What it means for wind

So, why is the FERC ruling crucial to the future of the wind industry? FIT programs have been highly successful around the world, and according to the National Renewable Energy Laboratory (NREL), FITs are responsible for approximately 45% of worldwide wind deployments through 2009, and

FITs can help with the wind industry's chief hurdles, such as transmission access.

is generated from a traditional energy source, such as natural gas. FERC's October ruling clarified, however, that avoided cost may be calculated using renewable energy technologies instead of traditional fossil-fuel technologies if the state has a renewable portfolio standard (RPS).

that percentage is increasing quickly as FITs are driving the rapidly expanding wind deployments in China and many other new markets around the world. While wind is considered the most mature of the clean energy technologies, the wind industry is facing major hurdles in the U.S. The general

feeling is that although wind installations broke records in 2009, the wind market slowed significantly in 2010, and market forecasts for this year and 2012 are highly uncertain for a number of reasons.

There are three main hurdles to the U.S. wind industry in the coming decade: the decrease in power purchase agreements (PPAs) offered; declining natural-gas prices, which are the most prevalent economic proxy for judging the cost-effectiveness of renewables, including wind; and lim-

one of the main reasons behind declining PPA opportunities for wind, because many states will only approve PPAs if they are considered cost-effective in comparison to the status quo of natural-gas power – calculations that generally exclude environmental, health and national security costs associated with fossil fuels. Natural-gas prices have dropped in the last couple of years from over \$14 per million BTUs in 2008 to around \$4 per million BTUs in 2010. This happened mainly because of the

of existing capacity, WDG wind projects can be built much more quickly than traditional larger wind farms and can be as cheap or cheaper than traditional wind projects. A recent study in California, conducted by consultants to the CPUC, found that the state's grid could support about 15,000 MW of WDG with only negligible upgrades to the existing grid.

Moreover, the Lawrence Berkeley National Laboratory (LBNL) stated in its 2010 annual report on the wind power market in the U.S. that the average cost for 5 MW to 20 MW wind projects is the lowest of any size segment, at about \$1,800/MW. This is even less costly than wind projects over 200 MW, which averaged about \$2,050/MW. Projects in the 20 MW to 50 MW range are the second cheapest, at about \$1,900/MW.

The LBNL's conclusions are important; they clearly show that bigger does not mean cheaper. As the report notes, economies of scale are optimized starting at 5 MW.

The fact that smaller wind projects represent a viable opportunity for the wind industry is critical, especially when considering that these projects can access the grid and be permitted more easily than large wind projects. In short, WDG can take the wind industry to where it needs to go more quickly than the alternatives, particularly if there is a backlash against larger projects – as is the case in some countries, such as the U.K., that have more dense wind power development than the U.S.

The clean energy industry is not entirely out of the woods, however, on the FIT preemption issue. The California utilities challenged the FERC ruling as going beyond the scope of the proceeding and contravening the intent of the Public Utility Regulatory Policies Act (PURPA) to keep ratepayers indifferent to qualifying facilities costs. While the FERC denied the utilities' appeal in January, a court challenge may ensue at some point in the future.

Federal action would provide an extra layer of protection from legal

Recent legislation benefitting FITs has gained momentum in Congress and will be revisited.

ited transmission availability. State-level FIT laws can solve all three of these problems, particularly in light of FERC's recent clarifications.

With respect to the drying up of PPAs around the country – a result of the continuing economic slowdown and lower natural-gas prices – FITs can be a major boost. This is because FITs are, by definition, “must take,” which means that utilities must buy the power offered if a project meets the FIT program criteria. RPS laws typically only set the required percentage of renewables that utilities are supposed to obtain, but they do not include features to ensure that renewables are actually procured in an efficient manner. FITs, however, have been widely proven as the most efficient mechanism for procuring renewables, and FITs are responsible for the vast majority of wind projects that are being deployed in the world today. Hence, RPS programs set the goal, and FITs are the perfect policy complement to ensure that the RPS mandates are actually fulfilled, both on schedule and in a cost-effective manner. This is true at the state and federal levels.

Declining natural-gas prices are

global recession, but also because of increases in natural-gas reserves in the U.S. stemming from the expansion of environmentally questionable hydraulic fracturing techniques used for drilling natural gas.

Multi-tiered FITs can remedy the situation by using the costs of applicable renewables for avoided costs, instead of using unrelated fossil-based proxies. This will allow states to approve PPAs at an appropriate avoided-cost level.

Lastly, well-designed FITs include assurances for transmission access. More specifically, well-designed FITs will primarily promote wholesale distributed generation (WDG), which is defined as clean energy close to load that is interconnected to the distribution grid rather than to the transmission grid. WDG saves ratepayers money because the power does not need to be converted to or from transmission level voltages and, more generally, has no need for transmission lines.

New transmission lines can cost billions of dollars and generally take at least a decade to build out. By filling in the existing distribution grids around the country, taking advantage

threats. For example, Congress can pass the Let States Innovate on Sustainable Energy Act, which would remove any doubt about the federal preemption issue once and for all. This two-page bill, sponsored by Sen. Bernie Sanders, I-Vt., would amend PURPA by clarifying that states have the authority to adopt clean energy incentives without fear of federal preemption.

This small but important legislative fix has been picking up momen-

tum and is expected to be revisited by Congress sometime this year. Thus, regardless of the FERC decision, enacting the Sanders bill into law could help with respect to federal preemption.

The wind industry has traditionally preferred RPS instead of FITs as policy supports. However, transmission access, PPA availability and natural-gas prices will probably remain major hurdles to wind development unless there are significant policy

changes. With the 2010 FERC ruling clarifying state authority to enact FITs with multi-tiered pricing, the wind industry should help to implement FIT programs across the nation. **NP**

Craig Lewis is executive director at the Clean Coalition, and Tam Hunt is a policy advisor and attorney for the Clean Coalition. They can be reached at info@clean-coalition.org.