Renewable Energy Barriers Fall With New FERC Order

Energy storage fans are rejoicing all across the country on the heels of a new ruling by the Federal Energy Regulatory Commission (FERC), which opens the floodgates to connecting more solar arrays and wind farms to the power grid. FERC adopted the new ruling, Order 792, in order to bring its existing rules for small generators up to speed with new developments in the energy storage field.

As FERC explained when issuing Order 792:

...the Commission finds it necessary under section 206 of the Federal Power Act to revise the pro forma SGIP [Small Generator Interconnection Procedures] and pro forma SGIA [Small Generator Interconnection Agreement] to ensure that the rates, terms and conditions under which public utilities provide interconnection service to Small Generating Facilities remain just and reasonable and not unduly discriminatory.

Energy Storage Gets A Boost From FERC Order 792
In a nutshell, Rule 792 adds energy storage as a power source that is eligible to connect to the grid. It effectively puts energy storage in the same category as the existing Small Generator Interconnection Procedures and makes it eligible for the existing Fast Track process.

Darrel Hayslip, who chairs the ESA, was fast out of the box with a big thank-you to FERC:

We commend the FERC Commissioners for acknowledging that energy storage should be able to participate in the small generator interconnection process on our electric grid and that our rules and policies should evolve as well. These reforms are good news for storage project developers and further facilitate the deployment of storage on the power grid.

What About Rule 784?
The implications for renewable energy, namely wind and solar, are clear when you take a look back at Order 784, which FERC adopted just last July.

Order 784 opened up the ancillary services market to renewable energy storage sources, by requiring utilities to consider speed and precision when deciding on which source to buy (ancillary services refers to power sources that utility companies can tap into on an as-needed basis).

Our friends at Midwestern Energy News explain that Order 784 filled an important gap in the rules for ancillary services, which previously specified generation, transmission, distribution, and load facilities — in other words, everything but energy storage.

Can Energy Storage Beat Gas And Coal?
Here’s where the rubber hits the road. Between Order 792 and Order 784, energy storage gets its own “box to check” when utilities are considering proposals for ancillary services. That puts it in a head-to-head matchup against gas and coal power plants, which utilities typically rely on for ancillary services.
The question is, since utilities are now required to consider speed and precision on a non-discriminatory basis, can next-generation storage facilities rev up more quickly than the typical gas or coal power plants?

That’s the key question, especially when you consider that a 2011 ruling, Order 755, established market incentives for speedier ancillary services and more precise supply-and-demand response (tx to our friends at breakingenergy.com).

Some storage technologies have already answered that question, with a Midwestern Energy News source claiming instantaneous production of 10 megawatts for a 40-megawatt lithium-ion battery in Ohio.

Barn Door Is Already Open
If you’re thinking that it will be a while before energy storage technology can get to the point where the industry can take advantage of the new FERC rules on a mass scale, guess again.

Energy storage for wind and solar is already well on its way to the mainstream.

To take just one example, let’s see what the energy storage company Xtreme Power has been up to. We first took note of their activities earlier this year when they hooked up with Duke Energy’s massive Notrees Wind Farm for an R&D project in partnership with the Department of Energy and other stakeholders.

Xtreme Power is also involved in a Texas smart grid R&D project with Samsung SDI and other partners.

That’s just the future-looking part of the company’s profile. Meanwhile on the commercial front, Xtreme Power has already been quite active, particularly in Hawaii where it has just announced its eighth energy storage project.

Hawaii is ripe for the renewable energy picking partly because of its reliance on expensive imported diesel fuel.

The new Xtreme Power project, in cooperation with the Kauai Island Utility Cooperative, will consist of a two megawatt lithium ion energy storage system for a 12 megawatt solar farm. Completion is expected in spring 2014.

The addition of utility scale storage facilities is expected to have a ripple effect on the renewable energy market in Hawaii, by contributing to grid flexibility. Not for nothing, but Xtreme Power has some heavy hitters in its investment portfolio, including some that indicate the fossil fuel industry is continuing its slow (very slow) and lurching pivot to a more diversified approach to energy generation.

That would be BP Alternative Energy (yes, that BP) and Dominion Resources (yes, that Dominion).
Read more at http://cleantechnica.com/2013/11/25/energy-storage-barriers-fall-with-ferc-order-792/#drl5IdIOUp6rEKcl.99