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HOW WILL THE SOLAR TARIFF AFFECT MICROGRIDS?

by Chris Evanich

In this edition of Industry Perspectives, Chris Evanich, manager of microgrids at S&C Electric Company, explores how the new solar tariff will impact the microgrid industry.

On Feb. 7, the U.S. government announced that imported crystalline-silicon solar cells and modules made outside the United States will face a 30 percent tariff. The first question that came to mind was: 'How will this affect the microgrid industry, which relies on multiple sources of generation, often including solar?'



Chris Evanich, manager of microgrids, S&C Electric Company

Before we can dig into the impact on the microgrid market, we should review the effects the tariff could have on standalone solar deployments. A solar farm consists of several pieces of hardware, such as panels, racking systems, inverter modules and a substation for a utility interconnection. This new tariff adds 30 percent to the cost of two of those hardware pieces: the panels and inverters. This potentially could cause delays in the completion of existing projects because developers will need to review their financing and power purchase agreements (PPAs), and it could go so far as to prevent other projects from breaking ground.

By contrast, a microgrid combines multiple generation sources beyond just solar, plus battery energy storage, control systems and integration services. While this tariff will result in a price increase, it will only affect a small portion of the many hardware and services components that make up a microgrid.

For this reason, I would contend the solar tariff will have minimal effect on microgrids and should not significantly restrain future deployments. For a project involving a large amount of solar generation — whether it be a standalone system or a microgrid — there are still ways to achieve the 30 percent tax credit AND purchase solar cells and inverter modules without the tariff having an impact, but developers must plan ahead to make this possible.

The new solar tariff, which took effect in early February 2018, will expire in 2021. But with the right plan, developers can avoid the tariff and still take advantage of the 30 percent Business Energy Investment Tax Credit the government now provides for solar.

Because the first 2.5 GW of imported solar panels are exempt from this tariff, one option would be to buy early to take full advantage of the tax credit. However, if you are not ready to commit before the 2.5-GW exemption level is reached, the tax credit is still an available option. The 30 percent tax credit begins to decline after 2019, but the full 30 percent is applicable to projects that are under construction by Dec. 31, 2019, as long as they are commissioned by Dec. 31, 2023.

Microgrid projects always require a large deal of planning, so it's unreasonable to think you can put one together overnight. While the new tariffs are not ideal, I know true microgrid innovators will be able to combat this new hurdle and continue to propel the energy space forward toward more reliable distribution worldwide.

We need to continue to push for the change that energy users deserve. We are living in an age of innovation, so let's use this as an opportunity for new approaches to be developed, ensuring that project developers continue to build large-scale solar installations.



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