Talen Energy To Convert PJM Coal Plants to Battery Storage; Save Jobs, Tax Base

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(By Bruce Rudoy)

It's no secret that coal plants have had trouble competing with cheaper renewables and natural gas in recent years. Unexpectedly low prices from PJM's latest capacity auction spurred a fresh wave of retirement announcements this month. But Talen Energy has decided that rather than retire coal plants and walk away, it would convert those sites to be used for other renewable energy-related projects. While Talen promised in November 2020 to shut down roughly 5 gigawatts of coal capacity in the 2020s, the company wanted more of a comprehensive strategy for this transition. "This is the first of hopefully many unit transitions from coal to lower-carbon sources and battery," said Cole Muller, who oversees Talen's fossil-powered fleet in the territory of regional transmission organization PJM. "It's really about decarbonizing, ...investing in the communities and continuing to provide opportunities for our people." After that project, Talen plans to build a 1-gigawatt battery fleet in the next three to five years on its existing properties, using individual batteries as large as 300 megawatts. "If you just retire it, you have a significant loss to both jobs and the tax base, and the communities at large," Muller said. Talen tapped battery developer Key Capture Energy to build a 20-megawatt system as a demonstration of the concept. That smaller size allows for a streamlined approval process, Muller noted. But the battery will act just like any other commercial power plant, bidding into PJM's markets for capacity, ancillary services and energy arbitrage. Assuming that goes well, Talen can add up to another 115 megawatts of battery storage to fully utilize the coal plant's grid connection capacity. That's a distinct advantage for developing batteries at an older power plant. The site has been cleared to export a certain amount of power to the grid, so there's less risk of having to pay for hefty network upgrades as developers must do at greenfield sites. The coal-to-battery switching remains too nascent to be labeled a trend. But we hopefully will see more of these transitions in the future making the switch from coal to renewable energy a win for everyone.

A power plant in Maryland ditches coal for batteries, a first for the US (canarymedia.com)

Tags: battery storage, coal, decarbonizing

