

# Utility backs solar farm atop capped Kentucky coal ash pit

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Coal is shown inside one of the train cars headed for the dumping area of the Shawnee Fossil Plant in western McCracken County, Ky. The nation's largest public utility has proposed building a \$216 million solar farm project in Kentucky atop a capped coal ash storage pit at one of its coal-fired power plants. The federal Tennessee Valley Authority voted Thursday, Nov. 10, 2022 to advance the initiative at Shawnee Fossil Plant in Paducah. Credit: John Wright/The Paducah Sun via AP

The nation's largest public utility has proposed building a \$216 million solar farm project in Kentucky atop a capped coal ash storage pit at one of its coal-fired power plants.

The federal Tennessee Valley Authority voted Thursday to advance the initiative at Shawnee Fossil Plant in Paducah. The utility called it a first-of-its-kind pilot project that would convert land used as a waste heap for the byproduct of burning coal for power into a solar farm that would help produce 100 megawatts. Officials say the model could ultimately be used at other closed Tennessee Valley Authority coal ash sites, with a capacity of 1,000 megawatts combined if they were to pursue that expansion.

The solar initiative is among the changes unveiled by the utility in recent years to adjust operations to combat global warming. Environmental advocates, however, have continued to note that TVA's efforts still fall short of the goal by President Joe Biden's administration for a carbon pollution-free energy sector by 2035.

"Moving quickly on this solar cap installation option at the Shawnee site allows us to move further and faster, as we build out towards our renewable generation goals while we balance the affordability, reliability and resiliency that our customers depend on," Don Moul, TVA's chief operating officer, said during a board meeting Thursday in Starkville, Mississippi.

TVA has said installing the solar panels at the 300-acre coal ash site, which is in the process of being closed, would not compromise the turf used to cap the waste. The project can tap into the transmission infrastructure already in place at the plant, which burns coal to generate approximately 8 billion kilowatt-hours of electricity a year, enough to supply 540,000 homes. Additionally, TVA officials are looking into whether the new federal Inflation Reduction Act could help the project

along.

Pending environmental and regulatory reviews, the project could be operational within two years, Moul said.

Amy Kelly, Tennessee's representative on the Sierra Club's Beyond Coal Campaign, said the group is "encouraged by TVA's initiative to place cheaper, reliable and clean solar power on the closing ash ponds at Shawnee." But she also said "it is also critical that TVA clean up the toxic mess left behind from more than six decades of burning coal." She said TVA should move toward further solar development, noting that the utility manages almost 300,000 acres of land.



Tennessee Valley Authority President Jeffrey Lyash speaks with the Times Free Press from the TVA Chattanooga Office Complex on Tuesday, April 23, 2019 in

Chattanooga, Tenn. The nation's largest public utility has proposed building a \$216 million solar farm project in Kentucky atop a capped coal ash storage pit at one of its coal-fired power plants. The federal Tennessee Valley Authority voted Thursday, Nov. 10, 2022 to advance the initiative at Shawnee Fossil Plant in Paducah. Credit: C.B. Schmelter/Chattanooga Times Free Press via AP, File

Kelly said the coal ash is in unlined pits at Shawnee, contaminating groundwater. TVA spokesperson Scott Brooks said that when its groundwater monitoring shows "corrective action is necessary," the utility takes those steps outlined in the federal coal ash rule and state rules.

Kelly also said renewables should be considered, instead of natural gas, as they wind down work at aging coal power plants. Switching to natural gas is under consideration for TVA's Cumberland and Kingston coal plants in Tennessee, though final decisions haven't been announced yet.

TVA already has plans to add 10,000 megawatts of solar power to its system by 2035. It has sought requests for proposals for [up to 5,000 megawatts of carbon-free energy before 2029](#). TVA has also teamed up on projects with several prominent industrial customers who want their operations tied to renewables. In addition, it is developing small module nuclear reactors and infrastructure to support electric vehicles.

But critics have said TVA is still falling short on its climate change obligation. During a September hearing, Democratic U.S. Sen. Ed Markey of Massachusetts expressed "frustration with TVA" and said it's "kind of disgusting" that TVA brags about figuring out nuclear power plants, but "energy efficiency, or wind or solar, eludes the scientists, eludes the management."

TVA has set a goal to reduce greenhouse gas emissions by 80% by 2035, compared to 2005 levels. TVA CEO Jeff Lyash has said TVA will not be able to meet the 100% reduction goal without technological advances in energy storage, carbon capture and small modular nuclear reactors, instead aiming for 80%. The utility has its own aspirational goal of net zero emissions by 2050.

There are enough TVA nominees selected by Biden currently awaiting the Senate's confirmation to make up a new majority on the board.

TVA power provides electricity to local power companies serving 10 million people in Tennessee and parts of six surrounding states.

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