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Duke Energy Finds Support for Smaller NC Grid Improvement Plan

The utility wanted to spend $7.8 billion. Environmental groups reached a settlement for $2.5 billion, with strings attached.

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Duke's settlement calls for more than just poles and wires.

Duke Energy Carolinas has reached an agreement (http://starw1.ncuc.net/NCUC/ViewFile.aspx?Id=d6757e5f-91f2-4c5d-81b1-e253d08f9f2a) with environmental groups on a multibillion-dollar grid improvement program for its North Carolina territory.

Duke initially wanted to spend (and charge customers) $7.8 billion over 10 years for its grid plan. The settlement, announced Friday, brings that down to $2.5 billion for a three-year pilot.

The spending will include hardening of the wires in hurricane-prone areas, voltage optimization, electric-vehicle charging infrastructure and energy storage deployments. It still needs approval from the North Carolina Utilities Commission.

Grid modernization is hard to argue against in principle, but, as in any case where a monopoly utility wants to pass new charges along to its customers, the debate in the Duke case centered on how much the utility should be allowed to spend and on what.

“Today’s settlement represents an improvement to Duke Energy’s grid planning in North Carolina, but there's more to be done to protect customers," said Caroline Golin, regulatory director at Vote Solar and an expert witness in the proceeding.

The original proposal, which Duke billed as a grid modernization effort, would have spent billions of dollars on hardening and undergrounding the traditional wires system. That didn't sound particularly revolutionary to grid observers looking at distributed energy resources, microgrids or bidirectional power flow.

"Definitely there's an expanded focus on non-wires technology in the settlement agreement," said Duke Energy spokesperson Jeff Brooks. "We tried to make the solution reflect the interests and needs of our customers."

Duke committed to installing 300 megawatts of energy storage by 2026, with 200 megawatts arriving by 2023. The utility had already included storage in its integrated resource plan, but this enlarges the capacity considerably, and ranks among the larger commitments in any state.

The document dedicates $25 million to electric-vehicle charging infrastructure, which could become a new revenue stream for Duke as it figures out what to do with its considerable solar production.

There's also a section about adding integrated volt/VAR support on approximately 20 percent of the utility's system distribution circuits. That equipment will make the delivery system more efficient, extending its capacity in periods of high demand, Brooks said.

Select undergrounding of wires for enhanced reliability formed the core pillar of the utility's original plan, but it got restricted to five demonstration projects totaling $50 million. Duke can still pay for the routine upgrades as it normally does, outside of the new payment vehicle.

Now Duke needs to gain approval from regulators for a new rider to charge customers for the program. Duke anticipates a decision within the next few weeks, Brooks said. The rider will apear as a consumption-based charge for most customer groups, with a demand charge for industrial customers, he noted.

It’s still possible that other stakeholders will object to the agreement, which was struck between Duke and the Environmental Defense Fund, Sierra Club and the North Carolina Sustainable Energy Association.

In fact, the Southern Environmental Law Center has already opposed the settlement in a letter (http://starw1.ncuc.net/NCUC/ViewFile.aspx?Id=d4817366-473b-49e5-a7ea-cb3a0c15e46b), calling it unlawful, "bad policy and harmful to ratepayers." The group wrote on behalf of the North Carolina Justice Center, North Carolina Housing Coalition, the Natural Resources Defense Council and the Southern Alliance for Clean Energy.*

Corporate and industrial groups that have invested in their own reliability and don’t want to be billed for additional reliability improvements might lodge an objection.

The new charges won't be as big as Duke had originally envisioned. The settlement also introduces a new degree of accountability: Projects paid for by the rider must undergo annual "reasonable cost-effectiveness analyses, both qualitative and quantitative."

In the future, Golin from Vote Solar said she hopes to see more open and transparent planning to decide on future grid investments.

"You cannot have grid modernization until you have integrated distribution resource planning," she said. "You have to know what the grid needs, and where it is going, and compare different solutions to meet that need to make sure you are investing in the most cost-effective solution."

Duke will engage in more integrated system planning going forward, Brooks said, with an increased focus on cost-benefit analysis.

"We try not to simply employ a solution for the sake of that solution," he added. "We want the data and needs of our customers to drive the right solution for the state."

Now it's up to the other stakeholders to decide if they're happy with this agreement, and to monitor the utility's cost-benefit evaluations if it goes into effect.

**Updated June 4 with information on the SELC objection.*

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