

## **PGE shift lifts hopes for \$800M pumped storage project**

By Pete Danko – Staff Reporter  
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It's still a long way from being built, but an \$800 million pumped storage project in Southern Oregon got good news from Portland General Electric late last week.

In a regulatory filing, the investor-owned electric utility proposed moving quicker than originally planned to explore plugging a capacity gap expected to open up later this decade. That could put the Swan Lake Energy Storage Project, which has a development timeline of several years, into play.

“What they’re saying now aligns with when we can deliver the project,” said Nate Sandvig, director of U.S. strategic growth at National Grid, a partner with Rye Development on the project.

The Swan Lake project, 11 miles north of Klamath Falls, would move water between two 60-plus-acre reservoirs separated by more than 1,600 vertical feet, pumping the water uphill when energy is available and sending it downhill through generating turbines when energy is needed. The technology is an old one, but it fell by the wayside in recent decades due to the lengthy development horizons, big upfront costs and permitting issues.

It's making a comeback, at least theoretically, as more intermittent resources come online, although no new projects have actually broken ground in the U.S. in recent years.

The Swan Lake project is fully permitted, and the developers say that if it has a power purchase or ownership agreement in place by the end of the third quarter this year, they could begin work in earnest and have the project online by 2025.

That's about when PGE forecasts a need for possibly several hundred megawatts of "non-emitting dispatchable power." Swan Lake would be able to generate nearly 400 megawatts of power — just a bit less than the Carty natural gas plant Portland General Electric brought online in 2016 — for up to nine hours.

## **TECHNOLOGY**

But in its integrated resource plan filed last July, PGE had proposed putting off a search for long-term capacity until it had better insight into its needs and market conditions. It has separate plans to pursue new renewable energy resources, and explore the market for existing capacity resources through.

Waiting would have put the pumped hydro project at a disadvantage to a combination of renewables plus battery energy storage, which can be deployed much more quickly.

The pumped hydro project argued that it could be a superior option on cost and performance, and that if PGE didn't bring it into the mix now, it could regret it later, especially with more and more analysts forecasting a region-wide capacity shortage in the mid-2020s and beyond.

"PGE may be undervaluing a very real, proven 100 percent clean technology that was modeled as a least cost and risk option in favor of hypothetical future cost reductions on new, emerging technologies — during a time when the company may not have access to a robust set of capacity resource alternatives," the project developers said in a Public Utility Commission filing. "In short, PGE may be setting itself up to be one of the last buyers in a seller's market."

PGE didn't explicitly agree with that analysis in its new filing that came in response to PUC staff and stakeholder critiques of its resource plan. But it did propose a concurrent approach to tackling its capacity needs, rather than sequential.

"This allows the company to initiate the non-emitting capacity (request for proposals) while bilateral negotiations may still be underway," it said. Stakeholders and PUC staff will have the chance to respond to that and other changes in PGE's plans in the coming weeks. The utility is aiming for commission action on the IRP this quarter.

[www.bizjournals.com/portland/news/2020/01/21/pge-shift-lifts-hopes-for-800m-pumped-storage.html](http://www.bizjournals.com/portland/news/2020/01/21/pge-shift-lifts-hopes-for-800m-pumped-storage.html)