

Council Meeting Staff Report

January 11, 2023

Agenda No.:

Indexes (Council Goals): * 2022 Council Goal - Investing in Infrastructure, DPU FY2022 - 1.0 Provide Safe and Reliable Utility Services, DPU FY2022 - 2.0 Achieve and Maintain Excellence in Financial Performance, DPU FY2022 - 3.0 Be a Customer Service Oriented Organization that is Communicative, Efficient, and Transparent, DPU FY2022 - 5.0 Achieve Environmental Sustainability, DPU FY2022 - 6.0 Develop and Strengthen Partnerships with Stakeholders

Presenters: Jordan Garcia

Legislative File: 16272-23

Title

Carbon Free Power Project Presentation by Mason Baker, UAMPS CEO & General Manager, Shawn Hughes, CFPP Project Director, and Bob Coward, Lead Owner's Engineer.

Body

At the end of 2022 NuScale delivered the class 3 project cost estimate to UAMPS and the CFPP project, and also delivered the Standard Design Application (SDA) for the 6-module plant configuration with a total capacity of 462MW. These are very significant milestones which have led to the completion of the following activities:

1. Evaluating the cost estimate by UAMPS and it's owner's engineers
2. Updating the CFPP financial model with the cost estimate data
3. Running the Economic Competitive Test (ECT)
4. Amending the Development Cost Reimbursement Agreement (DCRA)
5. Revising the Budget and Plan of Finance (BPF)

This revised BPF provides another contractual off-ramp for Los Alamos County to decide in February 2023 whether to continue participating in the CFPP. The next contractual off-ramp will be during the Combined Operating and Licensing Application (COLA) submittal decision, scheduled for December 2023.

Mr. Baker, Mr. Hughes and Mr. Coward will provide a short presentation covering the revised ECT, amended DCRA and BPF, and together with County Staff will answer Board questions.

The Department of Public Utilities plans to hold an Energy Town Hall on January 26 to engage with the community on future electric generation resources including CFPP.

BACKGROUND INFORMATION ABOUT THE CFPP

The CFPP design configuration that will be part of the Phase I Combined Operating and Licensing Application (COLA) submittal is the 6-module plant with a total capacity of 462MW. When the Board of Public Utilities and County Council voted in July 2021 to continue participating in the CFPP, the plant had a target levelized cost of electricity of \$58/MWh in 2020 dollars. It was hoped that the 462MW plant configuration would allow for the project to get fully subscribed sooner and reduce UAMPS' subscription risk. The next contractual off-ramp for the participants was planned at the Class 3 Project Cost Estimate, at the time planned to occur in September 2022, now planned for February 2023.

In July 2021 DPU recommended to Board and Council that we continue to participate in the CFPP at the same level of investment approved the previous year by Board and Council at \$1.26 Million for the Phase I COLA submittal. Given LAC's current level of investment, LAC's share of the CFPP is 1.8 MW, subject to change as total subscription changes.

LAC initially requested 8 MW's in the CFPP when this project began based on our current asset mix, forecasted load and the goal to be carbon neutral electrical energy provider by 2040. This level of subscription was studied in the 2017 Integrated Resource Plan at \$65/MWh that resulted in a 3% higher cost over the 20-year planning period. At \$58/MWh, the 2021 IRP update also determined that the CFPP is a feasible option when compared to alternatives.

In 2021, DPU staff expected that severe drought conditions affecting hydroelectric facilities across the west would continue, threats of wildfire and extreme weather patterns would increase, and constraints on the electric grid would increase as traditional dispatchable base load resources were replaced with renewable "intermittent" resources, causing extreme volatility in the electric markets and higher prices. We had already experienced an August 2020 heat wave which caused market prices to reach \$1,650 per megawatt hour costing the power pool approximately \$1.4 million dollars over a 10-day period. At the time historical average market prices were \$45/ MWh. In June of 2021 another heat wave had market prices at \$1,750 per MWh costing the power pool an additional \$800k over a 1-day period. Staff's expectation of continued high prices were correct. In the summer of 2022 market power purchases were in the range of \$450/MWh for several weeks. Given the continued retirement of coal-fired power plants, including the County's largest single generation resource, the San Juan Generating Station, and ongoing disruptions to the PV panel supply, DPU staff do not anticipate seeing any relief from high prices in the coming year.

DPU is committed to considering all viable resources that are able to supply Los Alamos County with a carbon neutral, reliable and diversified generation portfolio. While the projected CFPP cost increases with material and interest rate hikes, so have the cost of other new generation resources.

Alternatives

Other the next month, the County has three options to consider; choose to increase subscription, to reduce subscription or exit the project and pursue other carbon free dispatchable resources.

Fiscal and Staff Impact

Informational only at this time. Fiscal impact can be calculated based on desired level of participation at the \$89/MWHR in 2022 dollars. For Federal Fiscal Year 2023, there was \$165 million appropriated for the DOE match funding at 79% of project costs and this level of funding will fund the project to the COLA submittal milestone.

There is no staff impact since resource planning is part of our regular duties.

Attachments

A - CFPP_Los Alamos Presentation_2023