



County of Los Alamos

Council Meeting Staff Report

March 6, 2018

Agenda No.:	A.
Indexes (Council Goals):	BCC - N/A
Presenters:	Steve Cummins
Legislative File:	10377-18

Title

Joint Board of Public Utilities & Council Meeting - Discussion on the Carbon Free Power Project

Utilities Manager's Recommendation

Staff encourages Board and Council members to meet with staff one-on-one to address their individual concerns so they can make an informed decision when this phase of the project comes up for a vote.

Body

The purpose of this agenda item is to allow the Board of Public Utilities (BPU) and the County Council the opportunity to discuss and ask questions ahead of a decision point in early April regarding continued County participation in the next phase of the Carbon Free Power Project (a project to build a nuclear electric generating station using small modular technology).

BACKGROUND

At the recommendation of a citizen *ad hoc* committee and the direction of the BPU, the Department of Public Utilities (DPU) was tasked to explore participation in the Carbon Free Power Project (CFPP). The DPU is considering adding the CFPP to the County's electric generation portfolio as a potential replacement base load power resource after retirement of the County's coal generation assets in 2022 and to meet a Board-approved goal for the DPU to be a carbon-neutral electrical energy provider by 2040.

Through DPU's membership with the Utah Associated Municipal Power Systems (UAMPS), staff has been following the development of the CFPP, which is a projected 600MW nuclear generating station to be built in Idaho using small modular reactor (SMR) technology. As it is being designed, the facility would house up to twelve SMRs developed by NuScale Power, each capable of generating up to fifty megawatts of electric power for a total plant capacity of 600MW. The County's share would be 8MW.

What has been accomplished thus far:

- The County participated in the CFPP Project Study Phase and Siting Agreement (also referred to as the fatal flaw analysis). Findings - No fatal flaws were discovered in this phase, clearing the path for continued development.
- DPU surveyed its customers on how strongly they agreed or disagreed with Los Alamos County pursuing nuclear generation. Findings - 73% of residential and 60% of commercial customers agree or strongly agree that Los Alamos should pursue nuclear generation.
- DPU hired a third-party independent contractor to conduct an Integrated Resource Plan (IRP) to compare and weigh all of the options to serve the County's Electric Demand on a Levelized Cost of Energy (LCOE) basis, while meeting our carbon neutral goal. Findings - Solar with storage was determined to have the lowest LCOE among the options considered.

The CFPP came in second at approximately 3.5% higher cost based on the \$65/MWh cap the participants have determined to be the maximum they're willing to pay. DPU is looking at a combination of these resources for a diverse portfolio.

- Several public meetings specific to the technology, project, and IRP findings have been held.

WHAT WILL BPU AND COUNCIL BE DECIDING IN APRIL?

DPU will be asking the BPU and the Council to decide whether the county continues into the next phase of the project which would take the CFPP through Nuclear Regulatory Commission combined operating license application (COLA) preparation. Specifically, to continue in the CFPP the Council will need to sign a Power Sales Agreement, commit to a budget for the licensing phase, and agree to the plan of finance. If the BPU and the Council decide to move forward into the next phase, there will be future exit points from the project.

1. **Power Sales Contract** - The decision to proceed with signing the Power Sales Contracts not a decision to construct the CFPP; rather, the decision gives the County the ability to preserve the option to participate in this project if further development demonstrates the prudence of doing so. In the immediate development term, the first \$6 million of additional development costs will be subject to 100% reimbursement. This money will be spent only on additional development work on the project, and this work will help us evaluate whether further development of the project is in the best interest of UAMPS' participating members. UAMPS plans to continue to have development costs subject to 100% reimbursement up until the decision of whether or not to submit its COLA to the NRC in the summer of 2020. The decision to submit the COLA will be dependent in part, upon the level of contractual cost certainty NuScale and Fluor are able to provide. If we feel the level of contractual cost certainty is not sufficient then we will have the option to discontinue our participation in the project, with no obligation for further development costs, at the time that the NRC license application is submitted. The Power Sales Contracts provide contractual caps to a Participant's cost exposure during this development period.
2. **Budget & Plan of Finance** - The enumeration of costs for the various phases, plus the plans for how the project is to be financed is contained in the Budget and Plan of Finance. This document is important because the Power Sales Contract contains provisions that allow a Participant to withdraw from the Project if the cost escalates beyond a certain threshold. The Budget and Plan of Finance will be updated with completion of each Project phase to reflect expectations of cost based on periodic calculation of the economic competitiveness of the Project relative to other power generation options available. Should the project fail the economic competitiveness test, members will have the option to withdraw and the Project Management Committee will have the option of discontinuing the project without any penalties due to NuScale.

WHAT IS THE PLAN FOR THE MARCH 6th JOINT BOARD AND COUNCIL MEETING?

Staff will make a presentation which focuses on the primary concerns raised.

Attachments

- A - Recap of Q&A from January 25 Carbon Free Power Project Meeting
- B - Summary of major concerns raised at the January 25, 2018 meeting and the Open Forum
- C - Carbon Free Power Project (Small Modular Nuclear Reactors) - Open Forum Statements
- D - Executive Summary of Power Sales Contract
- E - Carbon Free Power Project Power Sales Contract
- F - UAMPS Carbon Free Power Project - Amended Budget and Plan of Finance

