



County of Los Alamos

Los Alamos, NM 87544
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Council Meeting Staff Report

February 21, 2018

Agenda No.:	7.A
Indexes (Council Goals):	BCC - N/A
Presenters:	Steve Cummins
Legislative File:	10402-18

Title

Board of Public Utilities Discussion on the Carbon Free Power Project

Recommended Action

None

Staff Recommendation

None

Body

Los Alamos County became a member of the Utah Associated Municipal Power Systems (UAMPS) and specifically a participant in the Resource Project on April 16, 2014. DPU staff has been following the development of the Carbon Free Power Project (CFPP), which is a projected 600MW small modular reactor (SMR) facility. As it is being designed, the facility would house up to twelve NuScale nuclear power modules, each capable of generating up to fifty megawatts of electric power for a total plant capacity of 600MW.

The CFPP is under consideration by LAC as a potential replacement base load power resource after retirement of the County's coal generation assets as early as 2022 and as a step towards meeting our goal of being a carbon neutral electric utility by 2040.

In August of 2015, BPU and CC approved an agreement allowing DPU to participate in the CFPP Study Phase and Siting Agreement with UAMPS also referred to as the fatal flaw analysis. The approved budget for this study phase was \$145,540.00 to be shared by DOE-LANL and LAC on an approximate 80/20 split, respectively. No fatal flaws were discovered in this phase, clearing the path for continued development. However, it was subsequently determined that DOE-LANL is unable to participate any further with LAC in the CFPP through the existing electric coordination agreement. Future costs would therefore be wholly the responsibility of LAC, unless some other form of participation agreement can be agreed upon with DOE.

In 2017 DPU completed an Integrated Resource Plan (IRP) comparing 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. The IRP identified solar with storage as having 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.

The next step in the CFPP development is the Licensing Period, which will be broken up into two phases. The first phase will be the preparation of the Combined Operating License Application (COLA). If the CFPP participants choose to move forward following the COLA preparation, the second phase will be submittal of the COLA to the Nuclear Regulatory Commission for review and approval. The estimated cost of the next phase to the County is \$497k, assuming support from the DOE in the form of a grant and 100% subscription of the plant capacity.

On January 25th DPU and UAMPS staff presented the latest information on the CFPP to gain a clear understanding of Public, BPU and CC concerns with continuing our participation. On January 26, DPU staff initiated an Open Forum on DPU Website giving our customers another opportunity to express their opinions on the CFPP.

At the February 21st Board meeting, the Board members will have a discussion about the concerns raised at the January 25th public meeting which was then followed by a joint BPU and CC meeting. Further discussion of the CFPP will help the Board gain a better understanding of the cost exposure and risk to the department by participating in the next phase prior to making a decision, currently scheduled for the March 21, 2018 regular meeting.

Alternatives

Discussion only

Fiscal and Staff Impact

Discussion only

Attachments

None