Agenda Report

October 28, 2024

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (September 10, 2024)

FROM: Water and Power Department

SUBJECT: **INFORMATIONAL UPDATE ON THE PASADENA WATER AND POWER'S OPTIMIZED STRATEGIC PLAN TO ESTABLISH A ROADMAP TO MEET THE GOALS SET FORTH BY CITY COUNCIL'S ADOPTED RESOLUTION 9977**

RECOMMENDATION:

This report is intended to provide information to the City Council regarding the Optimized Strategic Plan ("OSP"); no action is required.

BACKGROUND:

This report is to provide an informational update to the City Council about the status of the City of Pasadena's ("City's") OSP. The OSP is a broad effort to establish a cohesive, actionable roadmap that lays out the key steps and future decision points to best position the City to meet the goals set forth by Resolution 9977. This effort incorporates both new and updated original analyses to develop optimized future portfolios, as well as lessons from previous planning studies conducted by PWP.

On December 11, 2023, the Pasadena City Council unanimously approved Pasadena Water and Power's ("PWP") 2023 Power IRP, a 25-year planning blueprint to provide the local community with safe, reliable, and environmentally responsible electricity services at competitive rates. Preparing an IRP is a California regulatory requirement for utilities like PWP and must be updated and submitted to the California Energy Commission ("CEC") at least once every five years. In addition to meeting CEC's IRP requirements, the 2023 Power IRP also incorporates City Resolution 9977, which includes the goal to source 100% of Pasadena's electricity from carbon-free sources by the end of 2030 while optimizing for affordability, rate equity, stability, and reliability of electricity.

As part of the IRP approval, the City Council requested that the City Manager's Office oversee the development of an OSP to define and outline actions needed to achieve the goals set by Resolution 9977. It was further recommended that the OSP would be created in collaboration with a consultant experienced in green energy to ensure a feasible plan for

meeting Pasadena's ambitious targets. Accordingly, the City Manager's Office proposed the reengagement of Energy and Environmental Economics, Inc ("E3"), an industry leader in clean energy policy that provided technical review services for the 2023 IRP and has a good understanding of Pasadena's ambitious clean energy goals. With a client list that includes the CEC, California Public Utilities Commission, California Air Resources Board, and a variety of public and private utilities throughout North America and the world, E3 is uniquely positioned to help quickly implement Pasadena's accelerated transition towards a carbon-free energy supply. On March 25, 2024, the City Council approved a two-year contract with E3 to assist with the development of an OSP for the City.

Scope of Work

The OSP will lay out the key steps and future decision points that best position PWP to achieve its 2030 carbon-free goal while maintaining reliability and limiting cost impacts to customers. It will consider how new generation resources, investments in transmission and distribution infrastructure, and customer programs that could facilitate the transition to a clean energy future. E3 will assess PWP's infrastructure needs, including types and locations of new generation resources and associated timing of acquisition. They will also explore customer participation, including projected future customer energy demands, distributed energy resources, and virtual power plants such as solar, battery energy storage, demand response, flexible loads, and electric vehicle charging.

The OSP development process involves a series of independent analytical efforts or studies. The initial phase of the OSP is the "Preparatory Studies," which will identify the broadest possible set of options that could contribute to meeting Resolution 9977 objectives. E3 will draw upon a range of data sources and methods to characterize the cost and potential of different generation and transmission options that will serve as the building blocks of different scenarios. This includes emphasizing demand-side solutions, characterizing supply-side resources, and exploring transmission solutions that can support local reliability needs.

In the second phase of the OSP, the "Portfolio Development" studies, a range of traditional electric sector planning models (e.g., loss-of-load-probability modeling, long-term capacity expansion, production cost, and distribution planning) will be used to design various portfolios to meet goals. This will provide analysis of options to convert or replace the Glenarm Power Plant while maintaining an adequate supply of local resources and imports across all credible conditions including peak loads, extreme weather, and transmission contingencies. This phase also includes optimization modeling to develop multiple case studies of new resource investments and system operations aimed at minimizing costs while meeting clean energy targets and reliability requirements.

In the final phase of the OSP, E3 will analyze the cost impacts of each case study and develop a draft OSP. This phase will include a calculation of energy supply costs across a range of case studies to inform the selection of an OSP and will allow for the synthesis of findings and description of an OSP. Overall, the approved scope of work and timeline

represent a cohesive and comprehensive framework built on rigorous technical analysis to inform an optimized plan toward the carbon-free goals of Resolution 9977.

Stakeholder and Community Outreach

Engagement with the community, with comprehensive public participation, is a critical component of the OSP. In coordination and collaboration with PWP External Affairs, E3's comprehensive outreach process will include informational updates to the MSC and Environmental Advisory Commission ("EAC"); community outreach meetings that engage residential and commercial customers and community organizations; and advisory meetings with the newly formed Technical Advisory Panel ("TAP"), a diverse representation of the Pasadena community created to provide input and feedback on the developing plan.

Since kicking-off the OSP in March, staff has been actively engaged in robust outreach and engagement with various stakeholder groups, including six TAP meetings, two updates to the MSC, one update to the EAC, and one citywide Zoom meeting.

COUNCIL POLICY CONSIDERATION:

Developing the strategic plan supports an increase in renewable energy resources and reduction in GHG emissions, is consistent with the City's Urban Environmental Accords; specifically, Action 1, Renewable Energy; Action 2, Energy Efficiency; and Action 3, Climate Change as well as with Resolution 9977, passed by the City Council on January 30, 2023, declaring a climate emergency and setting a goal to source 100% of Pasadena's electricity from carbon-free sources by the end of 2030.

ENVIRONMENTAL ANALYSIS:

CEQA excludes, from environmental review, activities that are not "projects" as defined by CEQA Guidelines Section 21065 and within the meaning of Section 15378(b). Sections 21065 and 15378(b) define a project as an action which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. This is only an informational item, and no action is required. Since the activity is not a project subject to CEQA, no environmental document is required for this informational item.

FISCAL IMPACT:

The fiscal impacts of any future actions taken based on the Optimized Strategic Plan recommendations will be identified through a separate process and submitted to the City Council for review and approval. There is no fiscal impact related to this information item.

Respectfully submitted,

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