

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: FEBRUARY 8, 2021

SUBJECT: RIVERSIDE'S CLEAN ENERGY FUTURE WORKSHOP

ISSUES:

Receive a workshop on Riverside's Clean Energy Future for renewable and greenhouse-gas emissions free electricity generation, with a focus on how the clean generation technologies will ultimately serve all of the demand needs of Riverside Public Utilities Department's electric utility customers.

RECOMMENDATIONS:

That the Board of Public Utilities conduct a workshop for questions, comments and discussion on Riverside's Clean Energy Future.

LEGISLATIVE HISTORY:

California has an extensive legislative and regulatory environment that addresses climate change policy and requires the reduction of greenhouse gas emissions (GHG) in order to mitigate the effects of climate change. The list below focusses on key legislation and actions that have placed requirements or established goals applicable to the electric utility sector today as they relate to renewable and GHG emissions-free generation resources. This list does not represent a comprehensive history of the legislation affecting the City or Riverside Public Utilities in the realm of renewable energy or even sustainability from a Triple-Bottom-Line (TBL) perspective. Rather, it is primarily limited to State actions that directly impact RPU renewable energy procurement mandates.

- Global Warming Solutions Act of 2006, Assembly Bill (AB) 32 (2006): requires that the State of California reduce GHG emissions to 1990 levels by 2020. Importantly, this bill required the California Air Resources Board (CARB) to adopt regulations that achieve maximum technologically feasible and cost-effective GHG emission reductions. The adoption of AB-32 in turn affected regulations associated with energy efficiency, renewable and GHG emissions-free electric generation resources and initiated both the Cap and Trade program regulations and the Low Carbon Fuel Standard regulations.
- California Renewable Energy Resources Act, Senate Bill (SB) X 1-2 (2011): mandated all electric utilities, including Riverside Public Utilities (RPU), to procure increasing amounts of renewable energy primarily from in-state resources to serve its retail needs during specific compliance periods. SB X 1-2, which officially created the first set of tiered

Renewable Portfolio Standard (RPS) targets, requires RPU to supply 20%, 25% and 33% of retail energy needs using renewable resources by 2011, 2016 and 2020, respectively.

- Clean Energy and Pollution Reduction Act, SB 350 (2015): increased the RPS goal to 50% by 2030. Added the requirement for publicly-owned utilities like RPU to prepare and submit an Integrated Resource Plan that documents the steps it will take to reduce GHG emissions, incorporate and plan for renewable procurement, integrate electrification of the transportation system, and engage with disadvantaged communities.
- Global Warming Solutions Act, SB 32 (2016): requires the California Air Resources Board (ARB) to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030.
- The 100 Percent Clean Energy Act of 2018, SB 100 (2018): created the policy of meeting all the State's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045. To achieve this policy, the bill requires California utilities to maintain the target of 33% RPS by 2020 and increases the 2030 compliance target to 60% with interim compliance targets of 44% by 2024 and 52% by 2027.
- Executive Order (EO) B-55-18: established a statewide goal to achieve carbon neutrality as soon as possible but no later than 2045, while achieving and maintaining net negative emissions thereafter.

BACKGROUND:

The City of Riverside (City) and RPU has a long history of providing safe, reliable and cost-effective electricity and electricity service to its residents, businesses, and other government and institutional services located in RPU's service territory. In order to better serve its customers, RPU's Energy Delivery and Power Resources Divisions provide a combination of services that includes cost effective and reliable generation and procurement of electricity, distribution of electricity throughout its service territory, and high-quality customer care.

To reduce the climate impacts of the electricity being served to RPU customers, RPU is investing in generation resources that are GHG emissions free. RPU has successfully integrating these resources into its portfolio of generation resources, while simultaneously transitioning away from fossil fuel generation resources. As customer goals to have renewable and carbon emissions free electricity have increased, RPU has made available a 100% renewable electricity rate option for all customers. Additionally, the utility provides excellent customer support and partnership for those customers that opt to install their own renewable generation. RPU complements its renewable portfolio of generation resources by providing energy efficiency programs and supporting customers who are increasing their energy efficiency at their homes or businesses.

To facilitate these efforts, RPU prepares an Integrated Resource Plan (IRP) that outlines the strategy for meeting all customer load as well as how to comply with California's mandates for renewable electricity generation, carbon emissions-free electricity, transportation electrification, energy storage, transmission, and resource adequacy. With the passage of SB 350 in 2015, RPU's IRP was required to be submitted to the California Energy Commission (CEC) for review of its compliance with the requirements of the bill. RPU's 2018 IRP, the first submitted to the

State, received a positive review from the California Energy Commission (CEC) which included in its review the following statement:

“The Riverside Public Utilities’ (Riverside) IRP filing serves as a roadmap for a cost-effective transition away from carbon-intensive resources, such as coal, to low and zero-carbon resources that reduce the utility’s GHG emissions. The Riverside IRP filing examined both current and proposed supply-side and demand-side resources over a 20-year timeframe, along with strategies for meeting a diverse set of state and regional legislative and regulatory mandates. Riverside IRP also examined longer range planning activities such as energy storage, transportation electrification, distributed resources, and engagement with disadvantaged communities.”

RPU is required to prepare an IRP at least once every five years. The information from the IRP is used by the CEC and other state agencies for statewide electricity and energy planning. The City adopted its most recent IRP in 2018 prior to the adoption of SB 100 and EO B-55-18 and, as such, only demonstrates achieving a 50% renewable electricity goal by 2030. However, RPU is planning to submit a new and updated IRP in 2022 that will incorporate the 60% RPS by 2030 mandate, along with any other legislation as required. Finally, RPU is already working to achieve the goals of 100% GHG emissions-free generation for customers and supports the statewide carbon neutrality by 2045 goal.

The City Council recently adopted a 2025 Strategic Plan which establishes goals in six priority areas. This Plan includes environmental stewardship priorities to achieve carbon neutrality and increase renewable and GHG emissions-free electricity generation to 100% by 2040, 5-years ahead of State mandates. As such, RPU would like to initiate a dialogue on what Riverside’s Clean Energy Future will look like as it prepares to meet these and other goals.

DISCUSSION:

The Riverside City Council conducted a Riverside’s Clean Energy Future workshop on December 15, 2020. The following four presenters provided information for City Council member and public discussion:

1. Introductory and Background Presentation: Tracy Sato, Power Resources Manager, Riverside Public Utilities (RPU) Department
2. Topic Specialists:
 - Kate Meis, Executive Director and the Local Government Commission
 - Scott Haase, Director of Strategic Partnerships at the National Renewable Energy Laboratory (NREL)
 - Dr. Matthew Barth, Director of the Center for Environmental Research and Technology (CE-CERT) at University of California, Riverside

After discussion of options for renewable generation, energy storage and policies to support electrification of buildings and transportation, the City Council, without formal motion, received and ordered filed the presentations on Riverside Clean Energy Future of renewable and greenhouse-gas emissions free electricity generation.

RPU staff will provide a similar workshop for the RPU Board to discuss the future of renewable energy and what it means for utilities. Staff will provide an introductory presentation and an overview key points from two of the presentations (Ms. Kate Meis and Mr. Scott Haase) from the City Council December 15, 2020 workshop. Dr. Matthew Barth, Director of the Center for Environmental Research and Technology (CE-CERT) at University of California, Riverside will provide his presentation.

FISCAL IMPACT:

There is no fiscal impact associated with this workshop.

Prepared by: Daniel E. Garcia, Utilities Deputy General Manager/Power Resources

Approved by: Todd M. Corbin, Utilities General Manager

Approved by: Al Zelinka, FAICP, City Manager

Approved as to form: Kristi J. Smith, Interim City Attorney

Certifies availability of funds: Edward Enriquez, Chief Financial Officer/City Treasurer

Attachments:

1. California Executive Order B-55-18 to Achieve Carbon Neutrality
2. Staff Presentation
3. Presentation from Dr. Matthew Barth, CE-CERT
4. Presentation from Scott Haase, NREL
5. Presentation from Kate Meis, LGC