RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES **DATE: NOVEMBER 14, 2022**

SUBJECT: 2022 STATE ENERGY LEGISLATIVE UPDATE

ISSUE:

Receive an update on 2022 state energy legislation.

RECOMMENDATION:

That the Board of Public Utilities receive and file a 2022 state energy legislative update.

BACKGROUND:

The Legislative Affairs Manager actively engages with state legislators, and stakeholder and community organizations on policy issues to advance and protect the interests of Riverside Public Utilities (RPU) and its customers as policy and budget bills progress through the legislative process. While a number of policy and budget bills passed this year that will affect RPU, this report will review key energy legislation signed into law from the 2022 legislative cycle. For this year's session, most of the legislation that applies to RPU reflects California's aggressive climate policy.

All of the legislation discussed in this report is based on the State's evaluation of climate-related science – much of which is reflected in the actual bill language. To inform the state's climate policy and ensure that it is based on scientific evidence, Governor Schwarzenegger, by Executive Order S-13-08 in 2008, directed the California Natural Resources Agency to develop and prepare a climate adaptation strategy in collaboration with local, regional, state, and federal entities. In order to prepare the adaptation strategy, the State develops a science-based and peer reviewed climate assessment every four years that identifies vulnerabilities and impacts as well as recommended solutions that eventually make their way into legislation and regulation.

These assessments clearly indicate that climate change is an existential threat to our planet, and that California is susceptible to its impacts, including increasing extreme heat events, drought, wildfire, sea level rise, coastal flooding, and coastal erosion. According to the *Fourth California Climate Change Assessment* (2018), by 2100, the average annual maximum daily temperature is projected to increase by 5.6-8.8°F, water supply from snowpack is projected to decline by two-thirds, the average area burned in wildfires could increase by 77%, and 31-67% of Southern California beaches may completely erode without large-scale human intervention, all under business as usual and even moderate greenhouse gas (GHG) reduction pathways.

Achieving net-zero GHG emissions – where GHG emissions either reach zero or are entirely offset by equivalent atmospheric GHG removal – is essential in keeping Earth's average temperature within 1.5°C of its historical average. The sooner net-zero GHG emissions are reached globally, the less warming and adverse climate impacts will be experienced. Consequently, the State has been taking more aggressive climate policy action to drive change.

To achieve these recommended actions, a variety of bills and regulations have been developed that directly impact the electricity sector. The electric sector was one of the first sectors to be aggressively regulated to reduce GHG emissions because electricity can be generated without producing greenhouse gas emissions. As electricity generation becomes cleaner, it can replace other fossil fuel energy resources (e.g., gasoline, diesel, and natural gas). Thus, the electricity sector, and particularly electric utilities like RPU, have been and continue to be the focus of legislation aimed at aggressively reducing GHG emissions.

DISCUSSION:

In the waning days of its 2021-2022 session, the California Legislature passed multiple climate bills as part of an ambitious and aggressive climate policy agenda advocated by the Senate Climate Workgroup and Governor Gavin Newsom.

The measures passed by the legislature, and ultimately signed by Governor Newsom include a 2045 statewide carbon-neutrality target; interim targets to the statewide 100% clean energy policy and a 10-year acceleration of the 100% clean energy policy goals by state agencies; and a new requirement for retail electricity suppliers to collect and report data on when the grid runs on clean energy, when it uses fossil fuels, and how much.

This report focuses on three policy areas and three bills (identified in bold in each section) for which requirements affecting RPU are changed or expanded upon.

Statewide Carbon Neutrality Goals

The first statewide GHG emissions reduction target was to reach 1990 levels of GHG emissions by 2020 and was established by Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006. The bill also set up the initial planning and policy analysis that supports the state's ongoing progression towards eventual carbon neutrality. In 2016, the goal to reduce GHG emissions was expanded. SB 32 (2016) established the State's goal to reduce GHG emissions to at least 40% below the 1990 level by 2030. Two years later, in 2018, Governor Jerry Brown signed Executive Order B-55-18 establishing a non-binding statewide goal to achieve carbon neutrality by 2045. As statewide goals, these policies apply to all sectors of the statewide economy, not just electricity.

This year, the goal for statewide carbon neutrality by 2045 was codified into law under **AB 1279 (Muratsuchi), titled the Net Zero GHG Emission Goal** (Attached).

AB 1279 does the following:

- Requires the state to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative greenhouse gas emissions thereafter.
- Requires that statewide anthropogenic (human caused) GHG emissions be reduced to at least 85% below 1990 levels.

- Directs the California Air Resources Board (CARB) to ensure that its scoping plan identifies and recommends measures to achieve these policy goals.
- Directs CARB to identify policies and strategies to enable carbon capture, carbon utilization and storage, and carbon dioxide (CO_2) removal technologies to complement direct GHG emissions reductions to achieve the bill's neutrality goals.
- Requires the Legislative Analyst's Office to conduct an independent assessment of progress toward the bill's objectives every two years and make its findings available to the public.

It is important to note that the 2020 GHG emissions reduction target was met - statewide GHG emissions were below 1990 levels. The reduction of GHG emissions in the state's electricity sector was the primary reason that the state was successful in meeting that goal. However, the most recent projections show California is not on track to meet its 2030 GHG emissions reduction goal of 40% below 1990 levels of emissions due to slower progress in other sectors such as transportation, building, and processes that are continuing to rely on fossil fuel combustion.

Renewable Energy Procurement

RPU's renewable energy procurement requirements are primarily established by the California Renewable Portfolio Standard (RPS) program. The RPS program was established in 2002 by Senate Bill (SB) 1078 (Sher, 2002), though it did not directly apply to RPU at that time. Under the RPS program, electric utilities are required to procure for its retails sales a specified amount of electricity from renewable resources such as solar, wind, and geothermal generation facilities. Renewable electricity does not have GHG emissions.

The RPS program became applicable to publicly owned utilities (POU) like RPU in 2011 when SBX1-2 was signed into law. SBX1-2 established the requirement that 33% of the electricity procured for retail sales by an electric utility be from renewable resources (referred to as a 33% RPS). The program was accelerated in 2015 with SB 350 (de León, 2015) which mandated a 50% RPS by 2030.

In 2018, SB 100 (de León, 2018) was signed into law, which again increased the RPS requirements. Electric utilities are required to meet at least 50% of their electrical load from renewable energy resources by December 31, 2026, and at least 60% by December 31, 2030. The bill also requires all the state's electricity to come from carbon-free resources by 2045. And finally, the bill created the policy that it is the intent of the State that 100% clean energy meet all the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045.

This year, **SB 1020 (Laird), the Clean Energy, Jobs, and Affordability Act of 2022** (attached) further expands on existing renewable energy requirements. While the bill does not directly affect the RPS requirements, it establishes interim renewable targets for electric utilities to reach the SB 100 (2018) 100% clean energy goals and requires state agencies to purchase 100% zero-carbon electricity by 2035 to serve their load. The renewable targets are only planning targets, not mandates, meaning that RPU will be required to plan to meet these targets but will likely not be penalized if it fails to meet them. Importantly, SB 1020 also recognizes that grid reliability is a priority and requires an assessment of the grid to be prepared.

Specifically, SB 1020 does the following:

- Establishes interim clean energy planning targets of 90% renewable and zero-carbon electricity by 2035 and 95% by 2040, on the way to the existing target of 100% clean energy by 2045.
    - These are planning targets, not compliance requirements.
- Requires an interim annual electric grid reliability assessment, which will include a review of challenges and gaps.
- Requires state agencies to demonstrate clean energy leadership and procure 100% renewable and zero carbon energy by 2035, ten years before the statewide goal.
    - A state agency can meet this obligation through working on procurement with their incumbent utility, or through on-site generation.
    - A POU can require collateral or impose other requirements as a condition of procurement on behalf of the state agency.
    - A state agency can also satisfy their procurement obligation through participating in a green pricing program.
    - New procurement made on behalf of a state agency needs to be newly developed, if it is a zero-carbon resource it must be in the state, and there must be a multi-craft project labor agreement in place.
    - A POU must exclude the procurement from their retail sales obligations under the RPS.
- Requires the State Water Project to procure 100% clean energy by 2035, but there are offramps that allow that to be moved out to 2040.

Reporting Requirements to Achieve 100% Clean Energy

The 100% clean energy requirements of SB 100 will require the grid to move toward reliance on clean energy on a 24/7 basis – every hour of every day. To ensure that electric utilities are planning for 100% clean energy, SB 350 (2015) put in place a requirement for medium- and large-sized electric utilities to prepare an integrated resource plan (IRP). As part of the IRP process, utilities are assigned a GHG emissions target for 2030. This target is intended to ensure that every utility is doing its part to help achieve the State's GHG emissions reductions goals.

Within the IRP submissions, utilities must demonstrate a plan to purchase a portfolio of electricity generation, storage, and other resources that can meet their customers' needs, meet their renewables procurement requirements under the RPS program, and demonstrate annual GHG emissions below their assigned target. This plan compares the expected amount of energy supplied by their portfolio during each hour of the year against the predicted energy demand from the utility's customers in those hours. Any hours where there will be a gap between supply and demand indicates times during which the utility will need to rely on unspecified system power (which often continues to be produced by fossil fuel generation) to serve its customers' needs. The utility's total annual GHG emissions equal the sum of the GHG emissions caused by the utility's portfolio of resources plus the GHG emissions caused by the system power they rely on.

The approach used in the IRP assesses how much electricity a utility expects to rely on clean energy sources versus other sources; however, it is only a forward-looking model to guide purchasing. It does not measure what actually happens during the course of a year so that it's clear whether or not a utility is on track to meet its GHG target. To understand what is actually happening today, electric utilities are required to submit information to the California Energy Commission (CEC) under the Power Source Disclosure rules, which are provided to the public in the form of a "Power Content Label".

However, unlike the IRP process, the Power Source Disclosure rules do not consider hourly matching of supply with demand to understand how much a utility relied on carbon-emitting resources. The rules allow utilities to report their annual purchases of clean resources compared to their annual sales of electricity, without regard to timing. During daylight hours, utilities sometimes have more clean energy than they can use while continuing to rely heavily on fossil fuels to provide power at night. As such, the current annual accounting under the Power Source Disclosure could create a false impression that a utility relied almost entirely on clean energy for the year and caused few GHG emissions when, in fact, that may not be the case.

To remedy this issue, **SB 1158 (Becker), titled 24/7 Clean Energy Reporting** (attached) requires every retail supplier of electricity that is required to file an IRP to annually report the sources of electricity used to serve the supplier's load for each hour during the previous year. Because RPU is required to file an IRP, RPU is subject to the reporting required by this bill.

SB 1158 does the following:

- Requires the CEC to adopt rules by July 1, 2024, for a program for retail suppliers of electricity to report hourly information of the utility's sources of electricity to serve loss adjusted load and hourly greenhouse gas emissions.
    - Provides that program will begin on January 1, 2028.
    - Requires the CEC to publish an annual report with an aggregated summary of the data.
- Requires the governing board of each POU to annually review the total annual GHG emissions to assess whether the POU is demonstrating progress toward achieving the POU's GHG reduction target included in their IRP.
- Requires the California Public Utilities Commission to publish a report on investor-owned utilities and community choice aggregators use of renewable and zero carbon resources to meet resource adequacy obligations.

STRATEGIC PLAN ALIGNMENT:

This item contributes to **Strategic Priority 4 – Environmental Stewardship**, **Goal 4.1**: Rapidly decrease Riverside's carbon footprint by acting urgently to reach a zero-carbon electric grid with the goal of reaching 100% zero-carbon electricity production by 2040 while continuing to ensure safe, reliable and affordable energy for all residents, and **Goal 4.6**: Implement the requisite measures to achieve citywide carbon neutrality no later than 2040.

This item aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – By being transparent and communicating the potential future impact of legislation, RPU can plan the best course of action to move forward

2. **Equity** – Evolving law and policy impacts all customers supplied by RPU energy and water; it is important to consider how these policies may impact customers differently and address inequities that may be unfair.

3. **Fiscal Responsibility** – RPU strives to provide high quality energy and water at a low cost to our customers. Policies that have cost impacts should provide benefits comparable to their costs.

4. **Innovation** – RPU supports state legislative policy that provides the public with innovative solutions utilizing technology and science in a transparent, public process.

5. **Sustainability & Resiliency** – RPU supports state policies that enable the protection and growth of its groundwater supply and its local energy resources and assets.

FISCAL IMPACT:

There is no fiscal impact associated this action.

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Attachments:
1. California Energy Bills tracked 2021-2022
2. Assembly Bill 1279 (2021-2022)
3. Senate Bill 1020 (2021-2022)
4. Senate Bill 1158 (2021-2022)
5. Presentation