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**TO:** Energy Council

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**SUBJECT:** Electricity Rates and StopWaste Role in Energy Supply Issues

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### **SUMMARY**

Building electrification and decarbonization is one of the Agency's legislative priorities and has been a priority area for Energy Council programs and fund seeking since 2016. Most of our work in this area is funded through the Bay Area Regional Energy Network (BayREN), a partnership comprised of the Association of Bay Area Governments (ABAG) and public agencies representing the nine Bay Area counties. StopWaste leads BayREN's programs for multifamily retrofits, green labeling of single-family homes, and heat pump water heater market development. We conduct outreach to property owners about BayREN programs that incentivize the replacement of natural gas with electricity for end uses including water heating, space heating, cooking, and clothes drying. However, current electricity rates and recent energy supply policy decisions create disincentives for property owners to fuel switch or to consider onsite renewable energy generation such as solar panels.

At the December 20 Board meeting, staff will summarize the challenges associated with current rate structures, describe the regulatory landscape governing electricity supply and delivery, and discuss StopWaste's current activities and potential role in advancing a distributed energy resources (DER) grid of the future.

### **DISCUSSION**

Current electricity rate structures are based on cost recovery for utilities rather than alignment with state and local policy objectives for decarbonization and the establishment of a clean power grid powered by distributed renewable electricity. This conflict of interest in the energy supply model has negative effects on energy affordability and on private investment in distributed energy resources (DER). Examples of those effects are:

- Current electricity rates disincentivize property owners from implementing fuel substitution measures because their overall utility bills (gas and electric combined) could increase. While bill savings are a universally agreed upon goal, particularly for lower income households, there are many instances where fuel substitution projects could result in a net increase in utility bills. The

determination of bill impact is especially complicated in multifamily buildings, where the bills are split between owners and tenants.

- The California Public Utilities Commission's (CPUC) recent ruling on Net Energy Metering (NEM) drastically reduced the compensation that the investor-owned utilities pay to property owners for power provided to the energy grid from rooftop solar. This rate change has had a chilling effect on the state's solar industry, with installations dropping by 77-85 percent and up to 17,000 clean energy jobs projected to be lost by the end of 2023.
- Electricity rates continue to escalate because utilities need to re-coup infrastructure and energy procurement investment costs to shareholders through rate revenue. Consumers are bearing the enormous costs of maintaining an antiquated statewide utility grid. PG&E's rates in 2024 will substantially increase due to infrastructure modernization for safety, including undergrounding power lines in wildfire prone areas.

Electricity rates are determined by a complex set of energy supply stakeholders, including regulatory agencies; investor-owned, community-choice and municipal utilities; grid operators; demand response providers; solar and storage industry associations; Lawrence Berkeley National Lab; and the Public Advocates Office. Rate issue decisions cascade through a multitude of CPUC and California Energy Commission (CEC) regulatory proceedings and general rate cases. Relevant proceedings include High Distributed Energy Resources, Load Management Standards, Self-Generation Incentive Program (SGIP), Net Energy Metering, Virtual Net Metering, Energy Efficiency, Decarbonization, Electric Vehicle Pilots, Integrated Distributed Energy Resources, Clean Energy Financing/On-Bill Financing, Demand Flex Rates, Microgrids, and Resource Adequacy.

Strategies to address the problems created by existing rate structures are being considered by multiple stakeholders. CPUC staff have proposed a new electric water heating rate and have required the utilities to provide data on bill impacts from electrification of water heating end uses. The utilities have a new electric home rate plan that offers a preferential baseline for customers with specific electric end uses. The Utility Reform Network (TURN) and other advocacy groups are actively engaging in conversations around rates and the High DER Grid of the future. There are parties looking at alternative scales of grid management at the municipal, community or microgrid level which do not carry the burden of paying for past and future IOU grid infrastructure investments through rates. Options for how California structures electricity rates will evolve, because the technology for how utilities bill customers and enable distributed energy resources to interact with our grid is rapidly changing.

StopWaste has not been engaged in energy supply proceedings because of restrictions on the use of BayREN funding. Historically, funds could only be used on energy efficiency activities, but in 2019 the CPUC authorized the use of energy rate-payer funding for building electrification incentives. This is the first program cycle where fuel substitution measures have been incentivized and we are just beginning to understand issues such as bill impacts. Additionally, there is now an industry-wide move toward Integrated Demand Side Management (IDSM) where efficiency and fuel substitution strategies are coupled with load shifting, generation, and storage to achieve overall building decarbonization. The CPUC's recent authorization of the next 10-year program business plan allows BayREN to utilize up to 2.5 percent of its budget on IDSM strategies. This opens the door to integrating energy efficiency, fuel substitution, and other demand reduction strategies in BayREN programs, which will address some of the challenges associated with current electricity rates.

Staff have already initiated work under the BayREN Multifamily program to analyze utility bill impacts. This includes engaging property owners and renters to access their bill and energy consumption data, as well as collecting qualitative feedback around the retrofit process and the operation of newly electrified equipment and systems. Some additional activities that could be incorporated into our BayREN-related work include:

- **Conducting multifamily project and program level utility bill analysis:** Staff would coordinate with CPUC, CEC, and the IOUs to obtain additional data on the bill impacts for multifamily program participants who have implemented fuel substitution upgrades at their properties. An outcome could be a study on the impact of electrification on multifamily renters.
- **Engaging with BayREN partners to prioritize tracking of electricity rate and DER issues:** In BayREN's recently approved business plan, the single family, multifamily, and public sector programs have allocated funding towards IDSM program design. Under the umbrella of IDSM, BayREN could engage in energy supply issues including the high-DER grid of the future.

The Energy Council was established in 2013 to provide a means for developing and implementing sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient, and renewable resources available in the region. Supporting alternative rate structures would be aligned with these objectives. However, the regulatory landscape is dynamic and complex, and StopWaste does not have a dedicated source of funding to support extensive regulatory engagement on supply-side issues. Our local community choice aggregator (CCA), Ava Community Energy (Ava), is actively advocating on rate and DER issues aligned with Energy Council objectives. Ava staff have indicated that broader stakeholder support would be helpful on select issues.

Independent of our BayREN involvement, StopWaste could develop a regulatory intervention strategy on rate issues that are driving cost increases and limiting DER penetration. We are a relatively neutral party, because we do not actively set rates or bill customers for energy. Therefore, our recommendations would be considered less self-serving than other parties. Specific regulatory interventions would need to be implemented by partners such as the Local Government Sustainable Energy Coalition (LGSEC), because we do not have the internal capacity or funding to do so. Our potential role could include:

- Outlining potential partnerships and key stakeholders advocating in this space to develop recommendations on rate reform to enable cost containment and a high-DER grid of the future.
- Researching additional information on the mechanisms being considered to adjust the distribution component of rates which do not carry the burden of paying for past and future IOU grid infrastructure investments through rates.
- Identification of specific issues that would benefit from the mobilization of advocates, based on insight from Ava and others, and supporting partner organizations to be actively engaged in supply-side proceedings.

## **RECOMMENDATION**

That the Energy Council discuss the role of StopWaste in energy supply advocacy and provide direction to staff.