

# Agenda Report

September 8, 2025

**TO:** Honorable Mayor and City Council

**THROUGH:** Municipal Services Committee (August 26, 2025)

**FROM:** Water and Power Department

**SUBJECT: ADOPT A RESOLUTION TO ALLOW THE UPSIZING OF NEW SOLAR CUSTOMER-GENERATOR SYSTEMS WITHIN PASADENA WATER AND POWER'S SERVICE TERRITORY**

**RECOMMENDATION:**

It is recommended that the City Council:

1. Find that the proposed actions are exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15061(b)(3), the common sense exemption (formerly the "general rule"), as such, no environmental document pursuant to CEQA is required.
2. Adopt a resolution to authorize the Pasadena Water and Power Department ("PWP") to allow the upsizing of new solar customer-generator systems within its service territory as follows:
  - a. to allow solar customer-generator system sizing up to 150% of the customer's maximum annual historical usage within the past five years subject to localized distribution grid sufficiency, and
  - b. to allow solar customer-generator systems sizing greater than 150% of the customer's maximum annual historical usage within the past five years, provided that such installations do not exceed one megawatt, if paired with an energy storage system, subject to localized distribution grid sufficiency; and
3. Direct PWP staff to provide the Municipal Services Committee recommendations to incentivize battery storage, such as a battery rebate program, in advance of time-of-use rate implementation.

### **Staff Report Update – Municipal Services Committee Meeting on August 26, 2025**

Staff presented this item to the Municipal Services Committee ("MSC") on August 26, 2025, with a recommendation to direct the City Attorney to prepare and return with an ordinance within 60 days amending Pasadena Municipal Code ("PMC") Section 13.04.177, among other things. The original recommendation has been revised based on the Committee's direction, as outlined herein. Subsequently, as part of the Electric Rate Study and future required amendments to Title 13 of the PMC, relevant portions of the resolution would be codified as appropriate.

### **EXECUTIVE SUMMARY:**

In alignment with Pasadena's commitment to provide 100% of Pasadena's electricity with carbon-free resources by the end of 2030, PWP is advancing a comprehensive strategy that integrates customer generation, utility-scale procurement, rate modernization, and infrastructure planning. Recommendations discussed herein include updating solar sizing standards for customer generators to support reaching targeted goals for local solar and storage production within Pasadena and to further enable customers to plan for their electrified future. These updates aim to ensure transparency, equity, and regulatory clarity, while maintaining system reliability.

These actions would further align Pasadena's regulatory framework with its strategic clean energy goals and support a reliable, equitable, and sustainable energy future for all residents.

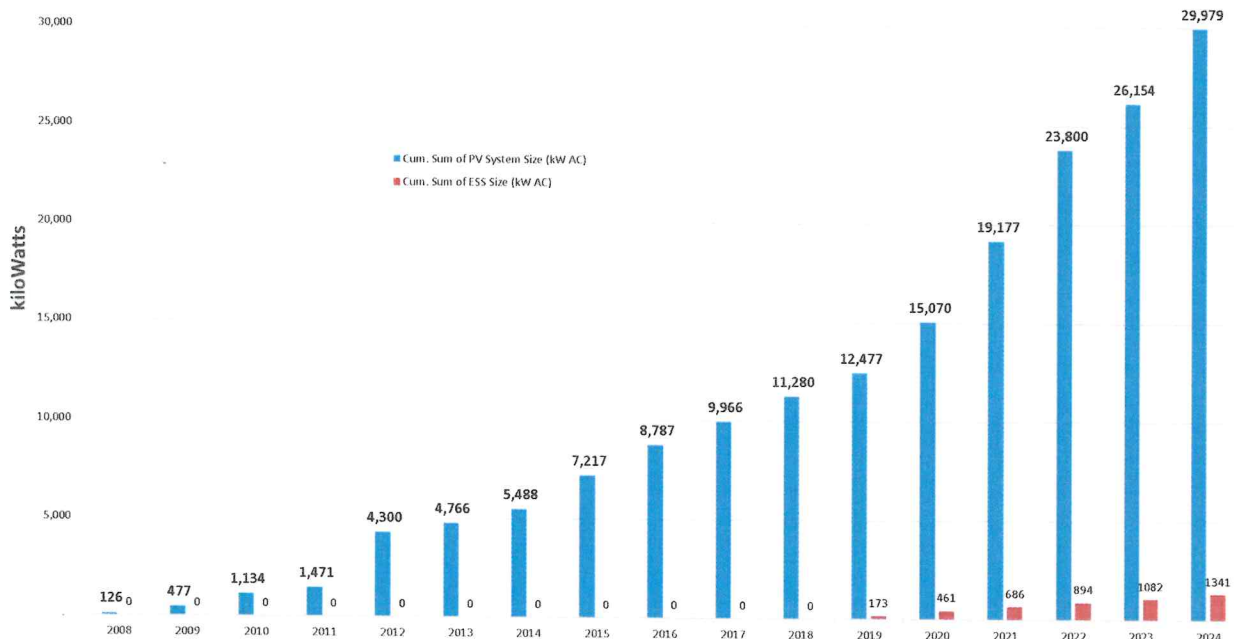
### **BACKGROUND:**

The City of Pasadena has adopted a resolution to source 100% carbon-free electricity by the end of 2030 to meet its energy needs. This goal is not an isolated initiative, but is integrated across the City's strategic planning efforts, including the Optimized Strategic Plan and the ongoing Electric Rate Study. Together, these efforts form the foundation of a coordinated transition toward a reliable, affordable, and clean energy future.

Since 2013, there has been steady adoption of customer-owned solar installations in Pasadena, averaging several hundred installations a year. The average solar installation by private entities has been approximately 2.4 MW per year. At the end of calendar year 2024, as illustrated in Figure 1, there is over 30 MW of installed capacity (solar and storage) supporting clean energy goals. The majority of installations by count are in the residential customer base while commercial customers account for a larger share of the total installed capacity.



**Figure 1: Cumulative Sum of Solar and Energy Storage System Sizes (kW AC)**



Regarding allowable solar system sizing, the PMC has been interpreted to mean that customer solar installations are intended to offset all or part of the customer's own electrical requirements. This interpretation has been incorporated into PWP's associated regulatory framework, specifically through Regulations 21 and 23. PWP currently determines solar system sizing as equivalent to 100% of a customer's 12-month historical usage. While this interpretation has provided a straightforward framework, it can be refined to better align with the City's broader electrification goals, which anticipate increased demand from transportation and building electrifications.

Through extensive collaboration, there is broad consensus that customer generation – particularly from residential and commercial solar installations – plays a key role in achieving the City's goal of a carbon-free energy future by the end of 2030. To modernize the existing framework, staff recommends codifying a clear standard that allows solar systems to be sized up to 150% of a customer's maximum billed annual usage within the past five years. Customers seeking to install systems exceeding 150% would be permitted to do so, provided that such installations do not exceed one megawatt – per PMC Section 13.04.177, to qualify for the Net Energy Metering rate schedule – and the solar generation is paired with an energy storage system of equal or greater capacity. These proposed adjustments are designed to further align with and support Pasadena's broader goals for solar and storage development within city limits.

The proposed changes must be implemented with the overarching imperative that the integrity of the distribution grid is protected to ensure the safety of all customers. A key condition to do so is that system approvals be contingent upon verification of localized

grid sufficiency to support the additional bi-directional energy flow from customer-sited generation. It is also essential that system-wide and localized impacts of customer generation be carefully assessed. The ongoing PWP distribution system study will provide critical insights into how residential and commercial solar installations affect local distribution feeders, transformers, and substations. These findings will be instrumental in guiding policy decisions that balance the growth of solar adoption with the continued reliability and equity for all ratepayers.

Energy storage is also a critical part of the City's carbon-free transition. Encouraging private investment in energy storage will help alleviate strain on the grid, mitigate peak demands, and provide customers with greater operational flexibility. To support this goal, staff, upon direction by City Council, may provide additional recommendations for incentive programs designed to accelerate energy storage adoption. These efforts will complement the proposed requirement for energy storage systems to accompany solar installations sized above 150% of historical usage.

The sizing of solar systems has been underpinned by language found in the net energy metering section of PMC section 13.04.177. The intention of the section is to provide terms and conditions that outline compensation for customer surplus energy generation as first established by the California Public Utilities Code, helping offset their upfront investment while advancing clean energy production in Pasadena.

Customer generators with PWP can generally expect to recoup their initial investment in solar installations and enjoy significant savings on their electricity bills with the payback period being seven to ten years, with the average lifespan and guaranteed performance from 25 to 30 years. PWP intends to establish guidelines that continue to incentivize the investment in solar systems and instill confidence in customers who want to support carbon-free investments. This is to be balanced with the principles of the program to serve the customer's own needs while not collecting more than the value of what is being provided to their community.

### **Other Solar Program Updates**

The City also recognizes that customer experience is a critically important part of encouraging friends and neighbors to adopt a new technology or make an investment. The interaction with the Planning and Community Development's Building and Safety Division and PWP's Electric Service Planning can determine the quality of the customer's experience. The Building and Safety Division interacts with PWP's Electric Service Planning and the Fire Department to ensure solar systems are properly and safely installed on customer premises.

Processes are established for compliance and safety to protect life and property. The City also recognizes that providing excellent customer service is essential and continue to make improvements to the solar permitting process. This includes maintenance fixes on the Express Solar Permitting system in compliance with SB379, which improves



system integration with PWP's PowerClerk software and provides immediate customer feedback on applicable validation. Simplified inspection requests are also now available via an online scheduling system. The City continues working to streamline the customer experience by improving the inspection coordination between Building and Fire services. Other administrative hurdles have also been removed for solar customers, such as removing the additionally insured requirement, accepting electronic signatures, and accepting the most recent bill instead of a 12-month historical statement.

In addition to distributed customer-owned generation, PWP is also pursuing complementary initiatives that support the clean energy goal. For example, staff is currently conducting site planning for solar and storage projects on municipal properties. Together, these strategies form an integrated framework to expand Pasadena's carbon-free supply portfolio.

### **CONCLUSION:**

The City's path to 100% carbon-free electricity by the end of 2030 requires a comprehensive approach that integrates customer generation, utility-scale procurement, rate design, and infrastructure planning. Updating solar sizing regulations, assessing system impacts, and incentivizing storage are key elements of this path. Together with municipal solar development and other programs, it is anticipated that these actions will further provide for Pasadena's clean energy transition.

Adopting a resolution authorizing PWP to allow the upsizing of new solar customer-generator systems within its service territory will help further align PWP's regulatory framework with the City's strategic goals and provide a larger path for customer generation to continue to grow while fostering reliability, equity, and sustainability for all Pasadena residents.

### **COUNCIL POLICY CONSIDERATION:**

This action is consistent with the City Council's goals, to maintain fiscal responsibility and stability, and Resolution 9977 while also promoting sustainability and quality of life for residents.

### **ENVIRONMENTAL ANALYSIS:**

The proposed action is exempt from the CEQA pursuant to State CEQA Guidelines Section 15061 (b) (3), the "common sense" provision of CEQA (formerly the general rule), which applies to projects which may have the potential for causing a significant effect on the environment. The proposed action will not result in any new development or physical changes.

**FISCAL IMPACT:**

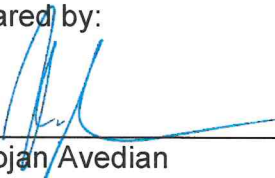
There is no fiscal impact as a result of this action at this time. PWP will research options for a battery rebate program, as well as potential costs of upgrades to the electrical grid that may be associated with the proposed changes to the Municipal Code.

Respectfully submitted,



DAVID M. REYES  
General Manager  
Water and Power Department

Prepared by:



Varoojan Avedian  
Assistant General Manager

Approved by:



MIGUEL MÁRQUEZ  
City Manager