

0220-06077-0000

T R A N S M I T T A L

TO Martin L. Adams, General Manager Los Angeles Department of Water and Power	DATE 02/28/2023	COUNCIL FILE NO. 21-0352
FROM The Mayor	COUNCIL DISTRICT All	

**COMMERCIAL ENERGY STORAGE TO GRID PILOT PROGRAM GUIDELINES,
CORRESPONDING STANDARD OFFER FOR COMMERCIAL ENERGY STORAGE TO GRID
PILOT INTERCONNECTION AGREEMENT, ENERGY (STORAGE SYSTEM >50
KILOWATTS), AND PILOT STANDARD OFFER AGREEMENT DISTRIBUTION VOLTAGE
ENERGY STORAGE SUPPLY SERVICE AGREEMENT**

Approved and transmitted for further processing including Council consideration.
See the City Administrative Officer report attached.



MAYOR
(Chris Thompson for)

MWS/PJH/JVW:CMM:10230084

REPORT FROM

OFFICE OF THE CITY ADMINISTRATIVE OFFICER

Date: February 24, 2023

CAO File No. 0220-06077-0000
Council File No. 21-0352
Council District: ALL

To: The Mayor

From: Matthew W. Szabo, City Administrative Officer 

Reference: Communication from the Department of Water and Power dated February 13, 2023: referred by the Mayor for report on February 18, 2023

Subject: **COMMERCIAL ENERGY STORAGE TO GRID PILOT PROGRAM GUIDELINES, CORRESPONDING STANDARD OFFER FOR COMMERCIAL ENERGY STORAGE TO GRID PILOT INTERCONNECTION AGREEMENT, ENERGY (STORAGE SYSTEM >50 KILOWATTS), AND PILOT STANDARD OFFER AGREEMENT DISTRIBUTION VOLTAGE ENERGY STORAGE SUPPLY SERVICE AGREEMENT**

RECOMMENDATION

That the Mayor:

1. Approve the proposed Resolution authorizing the approval of the Commercial Energy Storage to Grid Pilot Program Guidelines, its corresponding Standard Offer for Commercial Energy Storage to Grid Pilot Interconnection Agreement, (Energy Storage System >50 Kilowatts), and Pilot Standard Offer Agreement Distribution Voltage Energy Storage Supply Service Agreement; and,
2. Return the proposed Resolution to the Department for further processing, including Council consideration.

SUMMARY

Approval of the proposed Resolution will authorize the Los Angeles Department of Water and Power (LADWP) to approve the Commercial Energy Storage to Grid Pilot Program (CES2G Pilot Program) Guidelines, its corresponding Standard Offer for Commercial Energy Storage to Grid Pilot Interconnection Agreement (IA), Energy Storage System >50 Kilowatts, and Pilot Standard Offer Agreement Distribution Voltage Energy Storage Supply Service Agreement (DESS Rate Agreement) for an initial 20 megawatts (MW) of maximum capacity offering. LADWP reports the DESS Rate Agreement between the City and customer is a standard offer rate agreement and will be valid for up to ten years, depending on the useful life rating of the eligible commercial and industrial customer's energy storage system.

The CES2G Pilot Program provides multiple significant benefits, one of the primary being the ability for LADWP to establish and integrate dispatchable, customer-owned commercial stationary, and non-stationary battery energy storage systems (BESSs) within the City of Los Angeles basin. There are layers of benefits to the customer in the decision to invest in vehicle-to-grid chargers and vehicles capable of delivering energy back into the grid at incremental costs compared to traditional unidirectional chargers and vehicles. The budget for the pilot is an estimated \$32 million and is expected to generate approximately \$45 million in revenues for increased power revenue of \$13 million. Net new power revenue will be distributed throughout the power system to ensure reliable delivery of energy along with easing the future costs for ratepayers.

Pursuant to Charter Section 373, and the Los Angeles Administrative Code (LAAC) Section 10.5 (e)(2) for long term contracts and amendments over five years involving the same parties with no new competitive process, City Council approval is required. The City Attorney has approved the DESS Rate Agreement, CES2G Interconnection Agreement and the proposed Resolution as to form.

BACKGROUND

The State Senate Bill (SB) 350 requires California utilities and the LADWP submit an Integrated Resource Plan every five years outlining its current and future plans to meet SB 350 and SB 100 clean energy goals. SB 100 further establishes a goal to have all retail sales of electricity come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. Finally, the City Council instructed the LADWP to prepare a Strategic Long-Term Resources Plan (SLTRP) that achieves 100 percent carbon-free energy by 2035 (C.F. 21-0352).

The SLTRP ensures that LADWP will procure enough renewable and energy storage resources to ensure compliance with LADWP's Renewable Portfolio Standard Policy and Enforcement Program (RPS) and State legislative and regulatory mandates. The LADWP's SLTRP is aggressive in planning for resources to exceed the minimum RPS and energy storage requirements in these aforementioned policies and mandates. To illustrate, California SB 100 requires the City to achieve a 60 percent RPS by 2030. However, the 2022 SLTRP is planning and on target to achieve an 80 percent RPS by 2030 that exceeds the State mandated RPS target. The 2022 SLTRP also identifies a need for 1,000 MW of energy storage by 2030 which far exceeds the 404 MW State requirements.

The table below reflects LADWP's December 31, 2022 actual SB 100 compliance level and the compliance targets through December 31, 2030, with regard to retail sales from eligible renewable energy resources, in accordance with SB 100 approved in 2018.

Renewables: SB 100 Retail Sales from Eligible Renewable Energy Sources Compliance Targets*	
Percentage Goal	Target Date
39.9%	December 31, 2022 Actual

Renewables: SB 100 Retail Sales from Eligible Renewable Energy Sources Compliance Targets*	
Percentage Goal	Target Date
44%	December 31, 2024
52%	December 31, 2027
60%	December 31, 2030

*LADWP SLTRP targets 80% RPS by December 31, 2030

Commercial Energy Storage To Grid (CES2G) Pilot Program

The CES2G Pilot Program being proposed by LADWP will help meet the City's goals by increasing the City's reliable renewable energy resources and securing participation for stationary and non-stationary BESSs within the Los Angeles basin. LADWP reports the framework for the pilot is the result of extensive internal and external outreach and coordination among staff and stakeholders employing the best practices from other Distributed Energy Resources (DER) programs. Major benefits are discussed in detail later and include: **new** access to dispatchable, customer-sited distribution level energy storage that will offer an opportunity for peak shaving and reliability purposes, as well as help LADWP meet its local energy storage goals.

LADWP reports that its commercial and industrial customers have expressed the desire to work cooperatively with them to develop bi-directional charging opportunities and this program may meet those needs. Due to the benefits of investing in vehicle to grid chargers and vehicles capable of delivering energy back into the grid at incremental costs compared to traditional unidirectional chargers and vehicles, participants may exceed the capacity for this initial pilot.

LADWP considered other alternatives to increasing the BESS supply, such as purchasing and building energy storage projects in LADWP-owned facilities. There is limited LADWP-owned real estate which makes it difficult to achieve energy storage goals and purchasing wholesale energy is burdensome and strains transmission lines.

CES2G Guidelines, Interconnector Agreement (IA) and DESS Rate Agreement

LADWP developed and attached its CES2G Pilot Program Guidelines, the CES2G IA or Standard Offer for Commercial Energy Storage to Grid Pilot Interconnection Agreement and the DESS Rate Agreement that define terms and conditions of program participation (Attachment 1). A few notable details on the program framework and terms from the DESS are outlined in the section below. The IA will be a tri-party agreement between the entity that will design and install the BESS, LADWP and the commercial customer. The DESS Rate Agreement was designed with lessons learned from other DER, will govern the relationship between LADWP and the participant, have standard rates and will have a term of between five and ten years. A key requirement of the DESS is that it will require a bi-directional, separately metered system with the ability of charging and discharging stationary or non-stationary energy storage resources.

The CES2G Pilot Program has multiple benefits to LADWP operations and will allow LADWP to

integrate up to 20 MW of LADWP dispatchable, customer-owned, commercially stationary, and non-stationary BESSs within the Los Angeles basin. LADWP reports that within the Los Angeles basin, there are many potential participants that could include commercial entities already investing in electric vehicles, last-mile delivery companies as well as K-12 and higher education bus fleets. Key benefits include:

Peak Shaving - Peak shaving is an energy management strategy which effectively reduces the peak demand of electricity. The CES2G Pilot Program will add to the energy grid and enhance the peak shaving capacity in the LADWP in-basin territory. Participants will be credited at a rate higher than the charging rate for energy discharged as directed by LADWP during Critical Peak Periods (CPP) events.

LADWP Dispatchability - These BESSs will be integrated into LADWP's 4.8 and 34.5 kilovolt (kV) distribution systems in a manner that optimizes the deliverability of LADWP dispatchable electricity generated during hours that are most beneficial for the deferral of distribution system upgrades and for the reliability of the distribution grid. Participants will receive a minimum two hour notice and must have equipment on line and ready to be dispatched. Projects participating in the CES2G Pilot Program must be 50 kilowatts to three (3) MW. The terms of the DESS Rate Agreement will establish the price of energy used to charge BESSs and the value of the credit received by the customer for energy discharged to LADWP.

Offerings/Tranche System - LADWP plans to use a "tranche system" to "split" the total 20 MW program capacity into three smaller increments and offer the opportunity to potential applicants. The multiple offer periods will help to smoothen the administration of the program and allow staff to reassess and make improvements to the performance of the program between offerings. Applications will be reviewed and approved on a first come first served basis. There are a minimum of three tranches that have the following available capacities: four (4) MW, seven (7) MW, and nine (9) MW. During each tranche, the respective capacity will be made available for a period of 90 days for customers to submit their projects. If additional capacity is left over after the close of a tranche, additional tranches (beyond the three) may be created to fully subscribe the program.

Compensation Methods - This program includes multiple incentives for participation. LADWP guarantees the participants at least 50 CPP events, even if LADWP does not conduct 50 CPP events in a contract year. Participants will receive monthly energy credit for each CPP event conducted by LADWP during each quarter of each calendar year. Additionally, LADWP will reimburse participants for interconnection costs up to \$400,000 for 34.5-kV and \$150,000 for 4.8-kV interconnections, respectively. Each participant's DESS will be specific to that entity's individual set of circumstances and interconnection requirements for energy storage.

NOTABLE DETAILS OF THE CES2G PROGRAM FRAMEWORK AND TERMS

- A single entity may subscribe to no more than 40 percent of the capacity in a single tranche
- A single entity may subscribe to no more than eight (8) MW for the entirety of the CES2G Pilot

Program

- CES2G facilities will be separately metered from the participants existing load on the premises
- Facilities may be eligible for a reimbursement of certain interconnection costs
- Charging during CPP event will be at a higher/premium price per kW hour
- Rates and pricing are outlined in the DESS Rate agreement
- Three tranches totaling 20 MW: each to consist of a 90-day time window. Applicants may submit their applications up to 30 days prior to the start of a tranche
- CES2G Pilot Program participants will be credited for energy discharged from their facilities during CPP events and will be guaranteed at least 50 CPP events annually.

Additional Framework details are outlined in the Standard Offer Pricing section of Attachment 1 to the report and detailed further in the DESS.

Timeline and Reporting - LADWP projects that the estimated interconnection timeframe for each storage unit could be between six months and up to two and a half years. The target is to bring all 20MW in service by December 31, 2025. LADWP will provide periodic and semi-annual reports to its Board of Commissioners on the status of the subscriptions, capacity of the program, options for expansion, or other matters regarding the pilot, and as necessary.

California Environmental Quality Act (CEQA)

The item is exempt from CEQA pursuant to Section 15060(c)(3). In accordance with this section, an activity is not subject to CEQA if it does not meet the definition of a project and the BESS does not meet the definition of a project. Additionally, Section 15378(b)(4) states that government fiscal activities which do not involve any commitment to a specific project which may result in a potentially significant physical impact on the environment do not meet that definition. Therefore, approval of the CES2G Pilot Program guidelines, its corresponding IA, and DESS Rate Agreement are not subject to CEQA.

FISCAL IMPACT STATEMENT

There is no General Fund impact. The CES2G Pilot Program will be funded by the Power Revenue Fund. The estimated total cost for the CES2G Pilot Program is \$4.5 million for distribution interconnection reimbursements. However, adoption of the DESS Rate Agreement is expected to be revenue-generating as customers will electrify their mobile fleet.

The estimated budget for program CPP energy credits is \$26 million. The total CES2G Pilot Program budget is projected to cost up to \$32 million. Total revenue expected as a result of customers electrifying their fleets and charging energy storage systems under the DESS Rate Agreement is \$45 million, resulting in an estimated net revenue of \$13 million over the term of the agreements.

Attachment - February 13, 2023 LADWP Report (Resolution, CES2G Interconnection Agreement, CES2G Pilot Program Guidelines, and DESS Rate Agreement)