



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Lori Mitchell

**SUBJECT:** SEE BELOW

**DATE:** February 22, 2022

Approved

Date

2/24/2022

**SUBJECT: ACTIONS RELATED TO LONG DURATION STORAGE PROJECT AND  
PROCUREMENT AUTHORITY**

## RECOMMENDATION

Adopt a resolution:

- (a) Authorizing the Director of the Community Energy Department to execute the following two agreements for the procurement of up to 25 megawatts (MW) from LS Power's Tumbleweed long-duration storage battery project, with any non-material modifications developed, as appropriate, in consultation with the City Attorney, and subject to the annual appropriation of funds, in an amount not to exceed \$5,900,000 annually and \$89,000,000 in aggregate in Calendar Years 2022 through 2041 for both agreements:
  - (1) Project Participation Share Agreement between California Community Power, the City of San José, Peninsula Clean Energy, Sonoma Clean Power, CleanPower San Francisco, Redwood Coast Energy Authority, Silicon Valley Clean Energy, and Valley Clean Energy.
  - (2) Buyer Liability Pass Through Agreement between California Community Power, LS Power, and the City of San José.
  
- (b) Authorizing the Director of the Community Energy Department to negotiate and execute, in consultation with the City Attorney, a Coordinated Operating Agreement between California Community Power, the City of San José, Peninsula Clean Energy, Sonoma Clean Power, CleanPower San Francisco, Redwood Coast Energy Authority, Silicon Valley Clean Energy, and Valley Clean Energy addressing operation by the California Community Power of the LS Power's Tumbleweed long-duration storage battery project.
  
- (c) Increasing the authority granted to the Director of the Community Energy Department or her designee to negotiate and execute contracts five years and under, subject to the Energy Risk Management Policy and the appropriation of funds, for the procurement of power supply products by \$291,000,000 from \$928,600,000, to an amount not to exceed \$1,219,600,000 in aggregate in Calendar Years 2022 through 2025, subject to the following annual not to exceed amounts: 2022: \$360,200,000; 2023: \$320,100,000; 2024: \$291,500,000; and 2025: \$247,800,000.

## **OUTCOME**

By executing the Project Participation Share Agreement and the Buyer Liability Pass Through Agreement (BLPTA), the Community Energy Department would procure no less than 15.4 and up to 25 MW of LS Power's 69 MW lithium-ion long-duration-storage Tumbleweed project. Entering into these agreements would cost the Community Energy Department between \$3,600,000 and \$5,900,000 annually, and a maximum of \$89,000,000 over the fifteen-year term of the agreements. The Tumbleweed project would be the first power project procured through the new Joint Powers Authority California Community Power (CC Power). By negotiating and executing a Coordinated Operating Agreement, Community Energy Department would establish a framework for CC Power to manage its contract with LS Power for the Tumbleweed project in accordance with the directions of the participating Community Choice Aggregators (CCA), such as San Jose Clean Energy (SJCE).

Entering into these agreements would allow SJCE to make significant progress towards complying with the long-duration storage requirement issued by the California Public Utilities Commission (CPUC) in Decision 21-06-035. Decision 21-06-035 requires load serving entities like the Investor-Owned Utilities and CCA to procure resources in 2023 through 2026 to maintain mid-term reliability, due to various factors including the phased retirement of the Diablo Canyon Power Plant in 2024 and 2025. The Decision 21-06-035 requires SJCE to procure a minimum of 21.5 MW of long-duration storage in addition to 226.5 MW of other technologies.

Increasing the Director of Community Energy Department procurement authority will permit SJCE to continue to procure energy and low-carbon products, as power supply prices have increased since the June 2021 City Council procurement authorization for Calendar Years 2022 through 2025. The increased authority will also permit power procurement that moderates delivery risks related to long-term power contracts that have recently commenced operation and hence do not have well established delivery patterns due to weather variations.

## **BACKGROUND**

Section 26.50.020 of the San José Municipal Code states that the City may enter contracts to procure power products for a term up to twenty-five (25) years. Section 26.50.050 of the Municipal Code requires the Community Energy Director to submit a Risk Management Policy to City Council. On May 1, 2018, the City Council approved the Energy Risk Management Policy and associated Energy Risk Management Regulations.

Under the Energy Risk Management Policy, the City Manager's Risk Oversight Committee (ROC) is responsible for overseeing the Community Energy Department's risk management. The Energy Risk Management Policy and associated Energy Risk Management Regulations set forth a risk control structure and procurement requirements that apply to SJCE procurement activities. The ROC has been in operation since mid-2018. Current voting members include Kip Harkness (Deputy City Manager, City Manager's Office), Jim Shannon (Budget Director, City Manager's Budget Office), Lori Mitchell (Director, Community Energy), Zachary Struyk

HONORABLE MAYOR AND CITY COUNCIL

February 22, 2022

**Subject: Authority to Execute Agreements for the Procurement of Long Duration Storage and to Increase Procurement Authority**

Page 3

(Assistant Director, Community Energy), Jeanne Sole (Deputy Director, Community Energy), Julia Cooper (Director, Finance), and Luz Cofresi-Howe (Assistant Director, Finance).

City Council has authorized SJCE to procure power to meet load obligations. Most recently, on June 15 2021, City Council authorized the Community Energy Department Director or her designee to procure power supply products, other than Resource Adequacy, including but not limited to renewable projects and shaped or dispatchable power products, in an amount not to exceed \$2,671,700,000 in aggregate in Calendar Years 2021 through 2043, and Resource Adequacy including but not limited to storage projects combined with dispatchable power, in an amount not to exceed \$798,000,000 in aggregate in Calendar Years 2021 through 2043.

On August 25, 2020, City Council approved an Integrated Resource Plan (IRP) for SJCE. The preferred portfolio in the plan indicated that SJCE should, by 2030, add 100 MW of wind, 320 MW of solar, and 200 MW of battery storage. The CPUC required CCAs and other Load Serving Entities (LSEs) to evaluate and discuss long-duration storage in their IRPs. While SJCE's IRP modeling did not identify long-duration storage as a cost-effective addition prior to 2030, SJCE discussed in its IRP the importance of continuing to explore market opportunities to add competitive long-duration storage. (SJCE prepares and seeks City Council and CPUC approval of an IRP every two years. Each IRP presents progress towards achieving goals and as well as any appropriate modifications to those goals.)

On January 5, 2021, City Council authorized the City Manager or his/her designee to join CC Power, execute the California Community Power Agency Joint Powers Agreement, and pay the share of CC Power's annual costs in an amount not to exceed the contract authority of the City Manager for the corresponding fiscal year. City Council approval is still required for SJCE to participate in any CC Power project agreement and this action would not modify this requirement.

On June 6, 2021, the CPUC released its Decision 21-06-035 Requiring Procurement to Address Mid-term Reliability (2023-2026) which directed all LSEs subject to its jurisdiction to procure their proportional share of 11,500 MW of net-qualifying capacity over the period of Calendar Years 2023 through 2026. The CPUC assigned to SJCE 248 MW of this additional procurement, including a requirement for 21.5 MW of long-duration storage. Such project must be available during a peak month each year and online by June 2026.

On November 10, 2021, the City Manager's ROC approved making a recommendation to the City Council to authorize the Community Energy Department Director to negotiate and execute the Project Participation Share Agreement, BLPTA and Coordinated Operating Agreement to support procurement by SJCE of up to 25 MW from LS Power's Tumbleweed 69 MW Lithium-ion battery, which is the first of CC Power's long-duration storage projects.

On February 9, 2022, the City Manager's ROC approved making a recommendation to the City Council to increase the Community Energy Department Director authority for the procurement of power supply products pursuant to agreements five years or under, by \$291,000,000 from \$928,600,000, to an amount not to exceed \$1,219,600,000 in aggregate in Calendar Years 2022

through 2025, subject to annual not to exceed limits as follow: 2022: \$360,200,000; 2023: \$320,100,000; 2024: \$291,500,000; and 2025: \$247,800,000.

## **ANALYSIS**

### Long Duration Storage

#### *CPUC Procurement Mandate*

In Decision 21-06-035, the CPUC required all LSEs to procure a significant amount of additional Net Qualifying Capacity. Net Qualifying Capacity represents the amount of capacity from a project available in September, the highest energy use month in California. LSEs must meet this new requirement by executing long-term contracts during the period between 2023 and 2026<sup>1</sup>. This procurement is intended to replace the capacity and greenhouse-gas-free energy the California electric system will lose from the phased retirement of the Diablo Canyon Nuclear Power Plant in 2024 and 2025.

The CPUC assigned to SJCE 248 MW of this additional Net Qualifying Capacity as follows:

- 2023: 43 MW. SJCE expects to comply with this requirement with its Clines Corner Wind agreement.
- 2024: 129 MW. SJCE expects to comply with this requirement by issuing a new solicitation with other CCAs.
- 2025: 32 MW. SJCE expects to comply with this requirement by issuing a new solicitation with other CCAs.
- 2026: 21.5 MW of long-duration storage (projects that can store energy for a period of eight hours or longer) and 21.5 MW of firm clean resources (projects that deliver firm power and have no on-site emissions or that otherwise meet the state RPS requirements). SJCE expects to meet most of the long-duration storage requirement with the LS Power Tumbleweed project and additional projects under consideration by CC Power. SJCE expects to meet its firm clean resource requirement from projects that bid into CC Power's Firm Clean Energy Resources solicitation<sup>2</sup> currently underway.

#### *CC Power Long-Duration Storage Solicitation*

CC Power is a newly formed Joint Powers Authority comprised of ten CCAs in northern and central California<sup>3</sup>. CC Power was formed to allow CCAs to jointly solicit for projects to take advantage of potential economies of scale and to demonstrate to policy makers that CCAs can bring online projects needed to maintain reliability.

CC Power released a solicitation on October 15, 2020 seeking long-duration storage with an online date no later than June 2026. A total of 51 entities submitted 221 unique offers in response to the solicitation with a variety of technology types. CC Power completed a detailed

<sup>1</sup> <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M389/K155/389155856.PDF>

<sup>2</sup> [https://cacommunitypower.org/wp-content/uploads/2021/10/CCPower-FCR-RFO-Due-12-13-21\\_digital.pdf](https://cacommunitypower.org/wp-content/uploads/2021/10/CCPower-FCR-RFO-Due-12-13-21_digital.pdf)

<sup>3</sup> <https://cacommunitypower.org/members/>

assessment of the projects offered, including factors such as expected value, technology, location, project risk, environmental impact, labor, and offeror experience. The results were used to shortlist five of the most favorable bids. CC Power undertook negotiations with shortlisted bidders and concluded proposed agreements with LS Power for its Tumbleweed project (described below).

CC Power has since released several bids from its short list upon determining, through negotiations and/or further analysis, that the agreements for the relevant projects would be either unfavorable or infeasible. CC Power continues to negotiate with some bidders.

CC Power developed a draft Coordinated Operational Agreement between CC Power and the participating CCAs for the Tumbleweed project, but negotiation of this agreement has lagged and is expected to take place prior to the project Commercial Operation Date. While operational issues need to be resolved and the contract needs to be in place once the project starts operating, the Coordinated Operational Agreement will be finalized well in advance of the expected Commercial Operation Date.

*LS Power’s Tumbleweed Project*

The LS Power Tumbleweed project is located in Kern County. This project is 69 MW of lithium-ion battery energy storage with 8-hour discharge, qualifying it as long-duration storage. Its commercial online date is June 2026. Tumbleweed was among the highest ranked long-duration storage projects responding to the CC Power solicitation.

Table 1. CCAs Participating in the Tumbleweed Project

CCA	Financial Strength
Clean Power SF	Investment Grade Credit Rating – City of San Francisco Program, administered by the San Francisco Public Utilities Commission (A2/NR/NR)
Peninsula Clean Energy	Investment Grade Credit Rating (Baa2/NR/BBB+)
Redwood Clean Energy Authority	Unrated (small share of the project)
San José Clean Energy	City of San José Program, administered by the Community Energy Department
Silicon Valley Clean Energy	Investment Grade Credit Rating (Baa2/A/NR)
Sonoma Clean Power Authority	Investment Grade Credit Rating (NR/A/NR)
Valley Clean Energy	Unrated (small share of the project)

*Project Terms*

- Maximum annual cost to SJCE: \$5.9 million
- Maximum total contract cost to SJCE: \$89 million
- Term: 15 years
- Project size: 69 MW; SJCE Share: 15.4 to 25 MW (depending on the shares taken by other CCAs)

SJCE seeks approval for 25 MW to be able to accept additional capacity if some CCAs are unable to secure their respective Board or Council approvals for their shares. Additionally, SJCE seeks approval to absorb up to twenty-five percent (25%) of additional capacity if one or more CCAs default once the agreements are executed as further described in the Agreement Structure section below.

In addition to allowing SJCE to meet an important portion of its long-duration storage CPUC requirement, contracting for the output of Tumbleweed will meet SJCE needs for resource adequacy (a regulatory requirement), and give SJCE the ability to shift solar power to more valuable evening hours.

*Agreement Structure*

The participants of the long-duration storage procurement effort developed a comprehensive contracting structure that includes four separate agreements, each among different entities, that work in tandem. The structure establishes CC Power as the buyer of the storage services. The seller has direct recourse through CC Power to each participating CCA for its share of the contract payments, but this recourse is limited to only that CCA's share. Each participating CCA receives from CC Power its related share of the contract benefits (the storage services). CC Power has no assets but is required to maintain an appropriate suite of insurances. Finally, each CCA commits to assuming no more than twenty five percent (25%) more than its initial share of the contracted costs and benefits, if one or more of the other participating CCAs default.

***Energy Service Storage Agreement (ESSA)***

This agreement is between CC Power and the developer, LS Power. This agreement sets forth the terms for delivery of storage services between CC Power and LS Power. It gives CC Power the right to direct operation of the storage unit within its operational constraints. The benefits of those services are distributed to the participating CCAs pursuant to the Project Participation Share Agreement.

***Buyer Liability Pass Through Agreement (BLPTA) (Exhibit to ESSA)***

This agreement is between LS Power, CC Power, and each participating CCA. In this agreement, each CCA agrees to pay its share of CC Power's ongoing payment obligations under the ESSA, and its share of the ESSA termination payment if the ESSA is terminated prematurely. In exchange, the agreement limits each CCA's liability to LS Power to no more than its share of ongoing payment obligations and the CCA's share of the termination payment (in the event of a CC Power default under the ESSA). In the event of a CCA default under the ESSA, the BLPTA includes a step-up provision which allows the remaining CCAs to take on the defaulted capacity. This step-up provision will be capped at 25 percent (25%) of each CCA's initial share which will be determined once all CCAs have received their respective Board and Council approvals to execute the agreements. SJCE's initial share plus 25 percent will be no more than 25 MW.

***Project Participation Share Agreement***

This agreement is between CC Power and each participating CCA. The agreement:

- Defines each CCA's share of the project's benefits and costs.
- Requires each CCA to take up to an additional 25 percent of capacity beyond the CCA's initial share if another CCA defaults (i.e., step-up the CCA share).
- Requires each CCA to post as collateral cash in an amount equal to three months of its estimated monthly payment with CC Power for the duration of the contract.
- Defines how decisions related to the project will be made.
  - Key decisions are made by the CC Power board with voting limited to participating CCAs. Non-participating CCAs must abstain from voting.
  - Mid-level decisions are made by a Project Oversight Committee (POC), comprised of procurement staff of each participating CCA.
  - Other decisions are made by the CC Power general manager.

***Coordinated Operational Agreement***

This agreement is between CC Power and each participating CCA. It defines how the decisions will be made about operation of the resource. It does not address payment issues; these issues are addressed in the Project Participation Share Agreement and the BLPTA.

**Procurement Authorization**

SJCE last obtained procurement authorization from Council on June 15, 2021. SJCE recommends an increase in the Community Energy Department Director's procurement authority for the period 2022 through 2025 for non-RA power products of \$291,000,000 using contracts five years or less. This would increase the Community Energy Department Director's authority to procure all power products from \$928,600,000 to an amount not to exceed \$1,219,600,000 in aggregate in Calendar Years 2022 through 2025, subject to annual not to exceed limits as follow: 2022: \$360,200,000; 2023: \$320,100,000; 2024: \$291,500,000; and 2025: \$247,800,000.

Attachment A details the procurement request as well as the amounts previously authorized and contracted.

SJCE recommends this additional authority to:

- Continue to procure power in order to meet Risk Management Regulation coverage ratio requirements in 2022-2025. SJCE seeks to meet the upper range of coverage ratios in the Energy Risk Management Regulations for years 2022 through 2025. Aiming to meet the higher coverage ratios is prudent considering continuing price increases, supply limitation, and market disruption risks.
- Moderate delivery risks related to long-term renewable power contracts that have recently commenced operation and hence do not have well established delivery patterns due to weather variations.
- Complete procurement of RPS products.

Table 2. Recommended Five Year Power Purchase Authority Increase

**Calendar Year:**

Calendar Year	Total Existing Authority	Requested Additional Authority	Total Authority with Request*	Net Expected Cost (Pro-Forma)	Net Expected Cost Change from Existing Authority	Target Coverage Ratio
2022	\$283,200,000	\$77,000,000	\$360,200,000	\$289,000,000	\$5,800,000	120%
2023	\$248,100,000	\$72,000,000	\$320,100,000	\$277,000,000	\$28,900,000	110%
2024	\$237,500,000	\$54,000,000	\$291,500,000	\$295,000,000	\$57,500,000	90%
2025	\$159,800,000	\$88,000,000	\$247,800,000	\$286,000,000	\$126,200,000	90%
<b>Total</b>	<b>\$928,600,000</b>	<b>\$291,000,000</b>	<b>\$ 1,219,600,000</b>	<b>\$1,147,000,000</b>	<b>\$218,400,000</b>	

\*Does not consider revenues from sale of excess renewables in solar hours.

Table 3. Recommended Five Year Power Purchase Authority Increase

**Fiscal Year:**

Fiscal Year	Total Existing Authority	Requested Additional Authority	Total Authority with Request*	Net Expected Cost (Pro-Forma)	Net Expected Cost Change from Existing Authority
2021 2022	\$309,148,000	\$36,960,000	\$346,108,000	\$292,120,000	\$2,784,000
2022 2023	\$266,352,000	\$74,600,000	\$340,952,000	\$283,240,000	\$16,888,000
2023 2024	\$243,012,000	\$63,360,000	\$306,372,000	\$285,640,000	\$42,628,000
2024 2025	\$200,204,000	\$70,320,000	\$270,524,000	\$290,680,000	\$90,476,000
2025 2026**	\$159,560,000	\$45,760,000	\$205,320,000	\$286,000,000	\$65,624,000

\*Does not consider revenues from sale of excess renewables in solar hours.

\*\*This period is beyond SJCE detailed pro-forma.

*Energy Prices have Increased Since Council Last Authorized Procurement*

Energy prices in 2021 were significantly higher than they have been historically and rose by 28 percent from June 2021 to January 2022. This was caused by many factors, including low gas storage and low hydroelectric availability due to the drought.



*Higher Coverage Ratios are Recommended*

Market disruptions and lack of available power in high demand hours in 2020 & 2021 caused electricity prices to increase. Additionally, the Diablo Canyon Nuclear Power Plant has had several periods in the last few years of producing roughly half its regular output. The plant will be closed permanently in 2025 putting additional strain on California's clean power supply. SJCE plans to reduce its exposure to these market risks by buying energy in the forward markets to reach the upper limit of the coverage range in its RMR<sup>4</sup>. Coverage ratios are the amount of power that SJCE buys in the forward market to meet its load. When prices are high it is recommended to purchase more energy in the forward market to ensure customers are not exposed to short-term market disruptions.

*Moderate Delivery Risks Related to Long Term Renewable Contracts*

SJCE has four long-term renewable power purchase agreements (PPAs), two of which began deliveries late December 2021: a 225 MW wind project with variable energy delivery and a 62 MW solar project with firm delivery. Two additional solar agreements totaling 200 MW of variable energy delivery will begin deliveries in late December 2022.

SJCE is adjusting its procurement strategy to incorporate these agreements and their variability into its portfolio. There is always a risk that new projects will begin delivering late due to construction delays and deliver less than anticipated due to start-up operational issues. Wind is a particularly variable resource from day-to-day, although on a monthly and annual basis the predicted generation is more stable. Since new projects lack historical generation data, it is prudent initially to treat a portion of these deliveries as excess supply that can provide additional revenues and renewable power rather than relying on them as firm resources to meet our load.

**CONCLUSION**

Staff recommend City Council adopt a resolution authorizing the Community Energy Department Director or her designee to execute the Project Participation Share Agreement, and BLPTA and to negotiate and execute the Coordinated Operational Agreement, and thereby agree to procure between 15.4 and 25 MW of long-duration storage from LS Power's Tumbleweed project.

Staff also recommend that City Council adopt a resolution increasing the authority granted to the Director of Community Energy or her designee to negotiate and execute contracts of five or less years for the procurement of power supply products by \$291,000,000 from \$928,600,000 to an amount not to exceed \$1,219,600,000 in aggregate in Calendar Years 2022 through 2025, subject to the following annual limits: 2022: \$360,200,000; 2023: \$320,100,000; 2024: \$291,500,000; and 2025: \$247,800,000.

---

<sup>4</sup> The Risk Management Regulations were adopted by the ROC to implement the Risk Management Policy.

HONORABLE MAYOR AND CITY COUNCIL

February 22, 2022

**Subject: Authority to Execute Agreements for the Procurement of Long Duration Storage and to Increase Procurement Authority**

Page 10

### **EVALUATION AND FOLLOW-UP**

If authorized, the Director of Community Energy or her designee will execute the Project Participation Share Agreement, and BLPTA, and, in coordination with the City Attorney, negotiate and execute the Coordinated Operational Agreement.

### **CLIMATE SMART SAN JOSE**

The recommendation in this memorandum aligns with one or more Climate Smart San José energy, water, or mobility goals.

### **PUBLIC OUTREACH**

This memorandum will be posted on the City's website for the March 8, 2022 City Council meeting.

### **COORDINATION**

This memorandum has been coordinated with the City Attorney's Office, the City Manager's Budget Office, and the Finance Department.

### **COMMISSION RECOMMENDATION/INPUT**

These recommendations were not considered by the Clean Energy Community Advisory Commission.

### **FISCAL/POLICY ALIGNMENT**

The recommended actions support Climate Smart San José (action 1.1 Transition to a Renewable Energy Future) and the Envision San José 2040 General Plan (Goal MS-2 and Appendix 8: GHG Reduction Strategy).

### **COST SUMMARY/IMPLICATIONS**

Entering into the long-duration storage agreements would cost SJCE between \$3.6 and \$5.9 million annually, beginning no later than June 2026.

Increasing SJCE procurement authority for contracts five years or less to buy power supply products by \$291,000,000 brings SJCE's total procurement authority for those products to \$1,219,600,000 in aggregate in Calendar Years 2022 through 2025 subject to annual limits set

HONORABLE MAYOR AND CITY COUNCIL

February 22, 2022

**Subject: Authority to Execute Agreements for the Procurement of Long Duration Storage and to Increase Procurement Authority**

Page 11

forth in Tables 2 & 3. The recommended actions do not impact 2021-2022 revenue estimates or expenditure appropriations as currently budgeted in the San José Clean Energy Fund.

**CEQA**

Not a Project, File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

/s/

LORI MITCHELL

Director, Community Energy

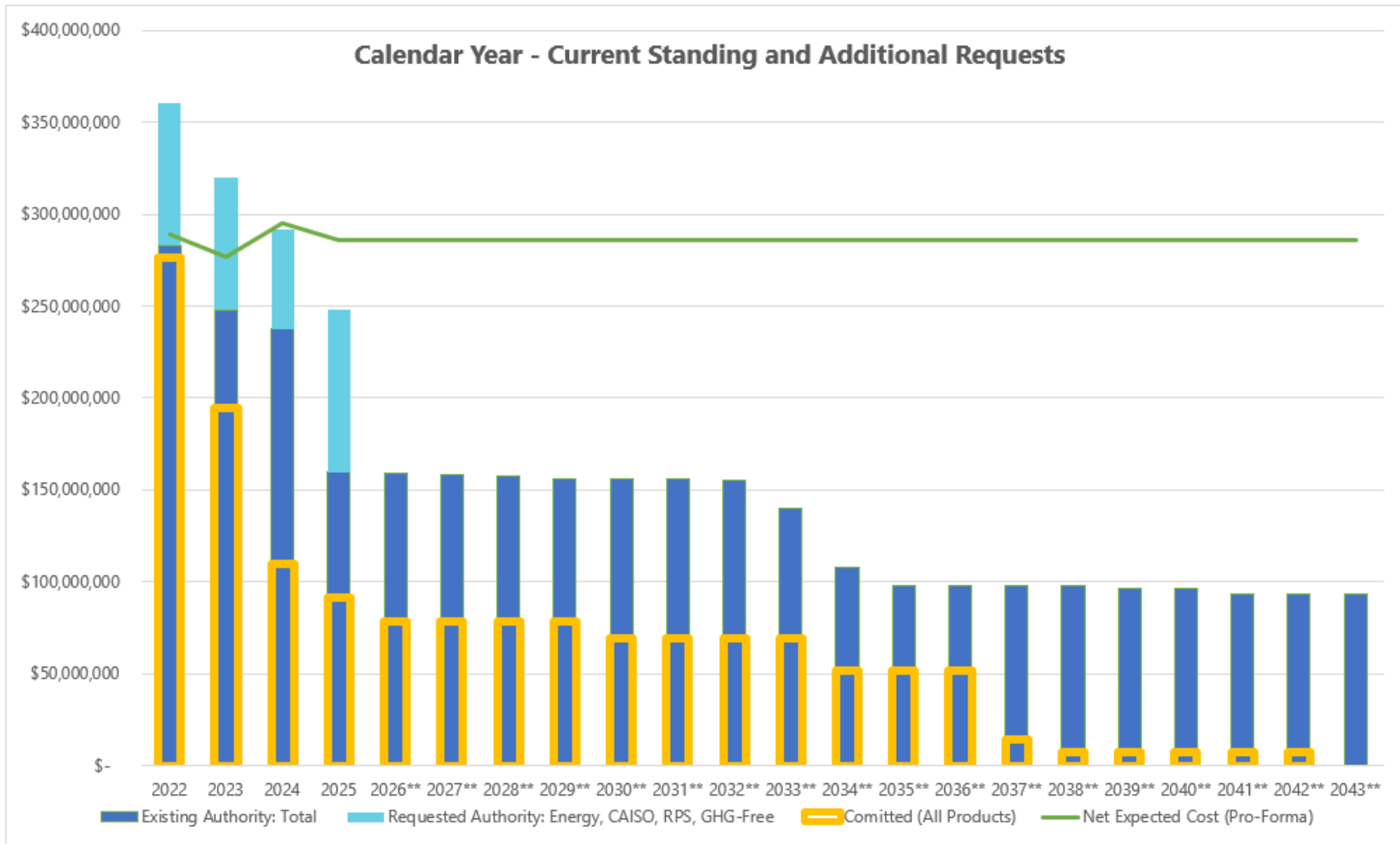
For questions, please contact Lori Mitchell, Director of Community Energy Department, at (408) 535-4880.

Attachment A - Requested Additional Procurement Authority

Attachment A - Requested Additional Procurement Authority

Calendar Year	Existing Authority: Total	Requested Authority: Energy, CAISO, RPS, GHG-Free	Total Authority With Request:	Coverage Ratio:	Net Expected Cost (Pro-Forma)	Change from Existing Authority
2022	\$ 283,200,000	\$ 77,000,000	\$ 360,200,000	120%	\$ 289,000,000	\$ 5,800,000
2023	\$ 248,100,000	\$ 72,000,000	\$ 320,100,000	110%	\$ 277,000,000	\$ 28,900,000
2024	\$ 237,500,000	\$ 54,000,000	\$ 291,500,000	90%	\$ 295,000,000	\$ 57,500,000
2025	\$ 159,800,000	\$ 88,000,000	\$ 247,800,000	90%	\$ 286,000,000	\$126,200,000
2026**	\$ 159,300,000		\$ 159,300,000		\$ 286,000,000	
2027**	\$ 158,000,000		\$ 158,000,000		\$ 286,000,000	
2028**	\$ 157,300,000		\$ 157,300,000		\$ 286,000,000	
2029**	\$ 156,300,000		\$ 156,300,000		\$ 286,000,000	
2030**	\$ 156,300,000		\$ 156,300,000		\$ 286,000,000	
2031**	\$ 155,800,000		\$ 155,800,000		\$ 286,000,000	
2032**	\$ 155,300,000		\$ 155,300,000		\$ 286,000,000	
2033**	\$ 139,600,000		\$ 139,600,000		\$ 286,000,000	
2034**	\$ 107,500,000		\$ 107,500,000		\$ 286,000,000	
2035**	\$ 97,500,000		\$ 97,500,000		\$ 286,000,000	
2036**	\$ 97,500,000		\$ 97,500,000		\$ 286,000,000	
2037**	\$ 97,500,000		\$ 97,500,000		\$ 286,000,000	
2038**	\$ 97,500,000		\$ 97,500,000		\$ 286,000,000	
2039**	\$ 96,500,000		\$ 96,500,000		\$ 286,000,000	
2040**	\$ 96,500,000		\$ 96,500,000		\$ 286,000,000	
2041**	\$ 93,200,000		\$ 93,200,000		\$ 286,000,000	
2042**	\$ 93,200,000		\$ 93,200,000		\$ 286,000,000	
2043**	\$ 93,200,000		\$ 93,200,000		\$ 286,000,000	

Attachment A - Requested Additional Procurement Authority



Attachment A - Requested Additional Procurement Authority

Fiscal Year	Existing Authority: Total	Requested Authority: Energy, CAISO, RPS, GHG-Free	Total Authority With Request:	Net Expected Cost (Pro-Forma)	Change from Existing Authority
2021 2022	\$ 309,148,000	\$ 36,960,000	\$ 346,108,000	\$ 292,120,000	\$ 2,784,000
2022 2023	\$ 266,352,000	\$ 74,600,000	\$ 340,952,000	\$ 283,240,000	\$ 16,888,000
2023 2024	\$ 243,012,000	\$ 63,360,000	\$ 306,372,000	\$ 285,640,000	\$ 42,628,000
2024 2025	\$ 200,204,000	\$ 70,320,000	\$ 270,524,000	\$ 290,680,000	\$ 90,476,000
2025* 2026*	\$ 159,560,000	\$ 45,760,000	\$ 205,320,000	\$ 286,000,000	\$ 65,624,000
2026* 2027*	\$ 158,676,000		\$ 158,676,000	\$ 286,000,000	
2027* 2028*	\$ 157,664,000		\$ 157,664,000	\$ 286,000,000	
2028* 2029*	\$ 156,820,000		\$ 156,820,000	\$ 286,000,000	
2029* 2030*	\$ 156,300,000		\$ 156,300,000	\$ 286,000,000	
2030* 2031*	\$ 156,060,000		\$ 156,060,000	\$ 286,000,000	
2031* 2032*	\$ 155,560,000		\$ 155,560,000	\$ 286,000,000	
2032* 2033*	\$ 147,764,000		\$ 147,764,000	\$ 286,000,000	
2033* 2034*	\$ 124,192,000		\$ 124,192,000	\$ 286,000,000	
2034* 2035*	\$ 102,700,000		\$ 102,700,000	\$ 286,000,000	
2035* 2036*	\$ 97,500,000		\$ 97,500,000	\$ 286,000,000	
2036* 2037*	\$ 97,500,000		\$ 97,500,000	\$ 286,000,000	
2037* 2038*	\$ 97,500,000		\$ 97,500,000	\$ 286,000,000	
2038* 2039*	\$ 97,020,000		\$ 97,020,000	\$ 286,000,000	
2039* 2040*	\$ 96,500,000		\$ 96,500,000	\$ 286,000,000	
2040* 2041*	\$ 94,916,000		\$ 94,916,000	\$ 286,000,000	
2041* 2042*	\$ 93,200,000		\$ 93,200,000	\$ 286,000,000	
2042* 2043*	\$ 93,200,000		\$ 93,200,000	\$ 286,000,000	
2043* 2044*	\$ 48,464,000		\$ 48,464,000	\$ 286,000,000	

\*\*This period is beyond SJCE detailed Pro-Forma

# Attachment A - Requested Additional Procurement Authority

