



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Lori Mitchell

SUBJECT: SEE BELOW

DATE: October 3, 2022

Approved

Date

10/14/22

**SUBJECT: CITY INITIATIVES ROADMAP – CLEAN ENERGY RESILIENCE:
AGREEMENTS FOR SOLAR POWER AND BATTERY STORAGE**

RECOMMENDATION

Adopt a resolution:

- (a) Authorizing the City Manager or designee to negotiate and execute:
- (1) An agreement with Cascade Energy Storage LLC, a subsidiary of Broad Reach Power, to buy Resource Adequacy associated with a battery storage facility, for a term of 10 years in an amount not to exceed \$360,000 annually and \$3,600,000 in aggregate during Calendar Years 2023 through 2033, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds;
 - (2) An agreement with Noosa Energy Storage LLC, a subsidiary of Broad Reach Power, to buy Resource Adequacy associated with a battery storage facility, for a term of 10 years in an amount not to exceed \$2,600,000 annually and \$26,000,000 in aggregate during Calendar Years 2024 through 2034, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds;
 - (3) An agreement with Nova Power, LLC, a subsidiary of Calpine Corporation to buy Resource Adequacy and Dispatchable Energy associated with a battery storage facility, for a term of 15 years in an amount not to exceed \$9,900,000 annually and \$148,500,000 in aggregate during Calendar Years 2025 through 2040, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds;
- (b) Authorizing the City Manager or designee to negotiate and execute the following agreements to replace the Renewable Power Purchase Agreement between the City of San José and Edwards Solar V, LLC, dated December 16, 2019:
- (1) An agreement with TGP Energy Management II, LLC, a subsidiary of Terra-Gen, LLC, to buy renewable energy associated with TGP Energy Management II's existing portfolio, for a term of 15 years in an amount not to exceed \$5,800,000 annually and \$94,000,000 in aggregate during Calendar Years 2023 through 2038, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds;

- (2) An agreement with Enterprise Solar Storage II, LLC, a subsidiary of Terra-Gen, LLC, to buy Resource Adequacy and renewable energy associated with a solar and battery storage facility, for a term of 15 years, in an amount not to exceed \$5,200,000 annually and \$78,000,000 in aggregate during Calendar Years 2025 through 2040, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds;
- (3) An agreement with Enterprise Solar Storage III, LLC, a subsidiary of Terra-Gen, LLC, to buy Resource Adequacy and renewable energy associated with a solar and battery storage facility, for a term of 15 years, in an amount not to exceed \$11,600,000 annually and \$174,000,000 in aggregate during Calendar Years 2026 through 2041, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds;
- (4) An agreement with Enterprise Solar Storage II, LLC, a subsidiary of Terra-Gen, LLC, to buy Resource Adequacy associated with a solar and battery storage facility, for a term of 15 years, in an amount not to exceed \$540,000 annually and \$6,300,000 in aggregate during Calendar Years 2025 through 2040, to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds.

OUTCOME

The Department of Community Energy (Department) is seeking authority to enter into agreements with a total notional value of \$530,400,000.

Long term agreements for purchase of Resource Adequacy and Dispatchable Energy associated with battery storage facilities

Entering into agreements with the Cascade Energy Storage LLC (Cascade), Noosa Energy Storage LLC (Noosa), and Nova Power, LLC (Nova) would allow the Department to meet customer needs and make progress towards complying with San José Clean Energy's (SJCE) requirements established by the California Public Utilities Commission (CPUC) in Decision 21-06-035 to address Mid-Term Reliability and SJCE's capacity obligations under the CPUC Resource Adequacy Program.

Decision 21-06-035 requires load serving entities like investor-owned utilities and community choice aggregators (CCAs) to procure resources in 2023 through 2026 to maintain reliability, due in part to the planned phased retirement of the Diablo Canyon Power Plant in 2024 and 2025 (which may be delayed pending permitting). Decision 21-06-035 requires SJCE to procure 248 megawatts (MW) of resources that can be available during SJCE's highest customer load in the month of September of each year, including 129 MW by June 1, 2024, and 32 MW by August 1, 2025. The agreements presented here count towards meeting these requirements. In addition, these agreements are consistent with modeling completed for SJCE's 2022 Integrated Resource Plan which has identified a need for substantial amounts of additional batteries and renewable resources.

Power Purchase Replacement Agreements

By executing agreements with TGP Energy Management II, LLC as replacements to the Renewable Power Purchase Agreement between San José and Terra-Gen, LLC (Terra-Gen) for Edwards Solar V dated December 16, 2019 (the Terra-Gen PPA), the Department would retain comparable value that would otherwise be lost. Terra-Gen has informed the Department that it will not build the Edwards Solar V solar project as required pursuant to the Terra-Gen PPA for a variety of reasons, which are under dispute between the Department and Terra-Gen. If instead of signing the replacement agreements, the Department opts to terminate the Terra-Gen PPA and collect damages, the Department will have to 1) engage in difficult negotiations and potentially litigation with Terra-Gen to establish the total amount of damages and the extent to which the Terra-Gen PPA provides for the City to collect these damages, and 2) replace the lost power in a challenging energy market. Staff recommends executing the replacement agreements as they retain comparable value to the original agreement.

BACKGROUND

Section 26.50.020 of the San José Municipal Code states that the City may enter into contracts to procure power products for a term up to 25 years. Section 26.50.050 of the San José Municipal Code requires the Department Director to submit a Risk Management Policy to City Council. On May 1, 2018, the City Council approved the Energy Risk Management Policy (Policy). The Policy may be amended by resolution of the City Council.

The City Manager appoints members to a Risk Oversight Committee to oversee SJCE risk management programs and provide advice on these matters. The Risk Oversight Committee approves and amends the Energy Risk Management Regulations (Regulations). The current version of the Regulations was approved on February 28, 2022.

On March 19, 2019, City Council authorized the Director of Community Energy (Director) or her designee to negotiate and execute power supply contracts for energy, renewable energy, renewable energy credits, resource adequacy, and low carbon power and attributes using the Edison Electric Institute agreement. On June 4, 2019, City Council authorized the Director or her designee to negotiate and execute medium- to long-term contracts using the Edison Electric Institute agreement for a term of up to 20 years to procure resource adequacy.

On December 16, 2019, the Department executed a power purchase agreement with Terra-Gen, for the Edwards Solar V, LLC solar photovoltaic project, with a commercial online date of December 31, 2022, as recommended by the City Manager's Risk Oversight Committee on September 17, 2019. In March of this year, Terra-Gen informed the Department that it will not build Edwards Solar V. The Department and Terra-Gen are negotiating with the support of the City Attorney's Office for replacement power from Terra-Gen's existing portfolio and a project Terra-Gen intends to build in 2025. There are four contracts in development to replace the Terra-

Gen PPA. These replacement agreements substitute the value of the Terra-Gen PPA and reduce power costs and risks by delivering power in the evening hours in addition to delivering in the middle of the day solar hours by adding batteries.

On June 15, 2021, City Council increased the authority of the Director or her designee to negotiate and execute contracts for power supply from \$2,373,700,000 to an amount not to exceed \$2,671,700,000 in aggregate in calendar years 2021 through 2043 and resource adequacy from \$488,000,000 to an amount not to exceed \$798,000,000 in aggregate in Calendar Years 2021 through 2043, including dispatchable power products.

On June 6, 2021, CPUC released its Decision 21-06-035 Requiring Procurement to Address Mid-term Reliability (2023-2026) due in part to the phased retirement of the Diablo Canyon Power Plant in 2024 and 2025. This decision required all load serving entities to procure their proportional share of 11,500 MW of capacity that can be available during the month of September, the highest energy use month in California, in long-term contracts over the period of calendar years 2023 through 2026. CPUC assigned to SJCE 248 MW of this additional procurement.

On May 24, 2022, the Department received unanimous approval from the City Manager's Risk Oversight Committee to make a recommendation to City Council to authorize the agreements to replace the Terra-Gen PPA.

On September 1, 2022, State lawmakers voted to keep the Diablo Canyon Power Plant open. Department staff do not expect the CPUC to adjust the requirements of Decision 21-06-035 but are actively monitoring the situation.

On October 12, 2022, the Department received unanimous approval from the City Manager's Risk Oversight Committee to make a recommendation to City Council to authorize the Director to negotiate and execute agreements for resource adequacy with Cascade and Noosa, and for resource adequacy and dispatchable energy with Nova.

ANALYSIS

CPUC Procurement Mandate

In Decision 21-06-035, CPUC required all load serving entities (investor-owned Utilities and CCAs) to procure a significant amount of additional net qualifying capacity. Net qualifying capacity represents the amount of power a power plant or battery can generate during the month of September, the highest energy use month in California. Load serving entities must meet this new requirement by building projects or executing long-term power purchase agreements with projects that come online during the period between 2023 and 2026¹. This procurement

¹CPUC Decision 21-06-035 <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M389/K155/389155856.PDF>

requirement was intended to replace the capacity and greenhouse-gas-free energy the California electric system will lose from the phased retirement of the nuclear Diablo Canyon Power Plant; but is unlikely to be reduced or eliminated if Diablo Canyon continues to operate.

CPUC assigned to SJCE 247 MW as follows:

- 2023: 43 MW. SJCE expects to comply with its Clines Corner Wind agreement signed in 2020 pursuant to authority granted to the Director by City Council in 2019 and increased in 2020.
- 2024: 129 MW. SJCE expects to comply with the Cascade and Noosa agreements and additional agreements either under negotiation or identified through future solicitations.
- 2025: 32 MW. SJCE expects to comply with the Nova agreement, and additional agreements either under negotiation or identified through future solicitations.
- 2026: 21.5 MW of long-duration storage (projects that can store energy for a period of eight hours or longer). SJCE expects to comply with the Tumbleweed and Goal Line projects negotiated through California Community Power, and already approved by City Council.
- 2026: 21.5 MW of firm, clean resources (projects that deliver firm power and have no on-site emissions). SJCE expects to comply with the Geothermal Ormat portfolio of projects, and the Fish Lake project negotiated through California Community Power. These contracts have been previously approved by City Council. Staff may identify additional resources through future solicitations.

Resource Adequacy

State and Federal laws require load serving entities such as CCAs, like SJCE, to contract with power plants to be available to meet load through the Resource Adequacy Program. CPUC requires SJCE to procure specified amounts of resource adequacy on an annual and monthly basis and imposes significant penalties for failing to meet the requirements.

Request For Offers Details and Qualifying Products

The Department, in partnership with East Bay Community Energy (EBCE), released a joint solicitation on February 17, 2022 seeking resources with an online date no later than June 2026 that meet the requirements of Decision 21-06-035. A total of 27 respondents submitted 44 projects with products including renewables, renewables plus battery storage, standalone storage, and demand response. SJCE/EBCE completed a detailed assessment of the projects offered, including expected value, technology, location and transmission issues, project risk, environmental impact, labor, and developer experience. Based on these results, the Department and EBCE shortlisted 10 projects. The Department agreed to key commercial terms with the companies mentioned below for the projects presented for approval in this memorandum. The Department is still negotiating with additional shortlisted respondents and may seek approval for additional projects in the coming months.

Cascade

Broad Reach Power's (Broad Reach) affiliate Cascade is developing a four-hour standalone battery storage project in San Joaquin County, California. The Department recommends negotiating and executing an agreement to procure resource adequacy from this project. Broad Reach is not willing to sell dispatchable energy from this project. The Department has not found alternative buyers willing to sell resource adequacy with dispatchable energy in 2024 in time to meet the CPUC Mid-term Reliability requirements.

Broad Reach is a utility scale independent power producer with 350 MW of battery storage projects in operation and over 10 gigawatts in its development pipeline. At the end of 2021, Broad Reach received \$400 million of equity commitment to accelerate its growth and expansion plans. Broad Reach is not a publicly traded company.

Project Terms: Maximum annual cost: \$360,000; Maximum total contract cost: \$3.6 million²; Term: 10 years; Online date: June 1, 2023. A summary of agreement terms for projects in this memorandum can be found in the Attachment.

Noosa

Broad Reach's affiliate Noosa is developing a four-hour standalone battery storage project in San Joaquin County, California. The Department recommends negotiating and executing an agreement to procure resource adequacy from this project. Broad Reach is not willing to sell dispatchable energy from this project. The Department has not found alternative buyers willing to sell resource adequacy with dispatchable energy in 2024 in time to meet the CPUC Mid-term Reliability requirements.

Project Terms: Maximum annual cost: \$2.6 million; Maximum total contract cost: \$26 million; Term: 10 years; Online date: June 1, 2024.

Nova

Calpine Corporation's (Calpine) affiliate Nova is developing a four-hour utility-scale electric battery storage project in Riverside County, California with an expected online date of June 1, 2025. The Department recommends negotiating and executing an agreement to procure resource adequacy from this project and the right to direct charging and discharging of the battery from and to the electric grid in alignment with SJCE load.

² The annual amount will be reduced over time as the battery degrades.

Nova is a wholly owned subsidiary of Calpine. Calpine is a full-service energy company that develops power generation, owns, and operates a fleet of natural gas, geothermal and energy storage projects. Calpine also sells wholesale and retail electricity throughout the United States. Calpine owns 76 power plants operating or under construction throughout the United States and Canada with a total generation capacity of approximately 26,000 MW. Calpine is a private company with public debt.

Project Terms: Maximum annual cost: \$9.9 million; Maximum total contract cost: \$148.5 million; Term: 15 years; Online date: June 1, 2025.

Terra-Gen PPA Replacement Package

The PPA replacement agreements are intended replace the value from the Terra-Gen PPA. The Terra-Gen PPA will be terminated at the time of execution of the replacement agreements. The agreements include renewable energy components and resource adequacy components. The renewable energy components of the agreements use a similar structure to the Edwards IV PPA (executed April 22, 2020 pursuant to authority given by City Council to the Director in 2019³ and increased in 2020⁴). Terra-Gen will use a new solar and battery storage project expected to come on-line in 2025, and its existing portfolio to sell firm amounts of solar power during predetermined hours every day, including in the more expensive evening hours. The resource adequacy components of the agreements will provide resource adequacy to SJCE from both the new solar project and the new battery storage.

Terra-Gen is a leading developer, owner, and operator of utility-scale renewable energy projects that has been operating since 2008 with over 1700 MW of operating projects. Terra-Gen is not a publicly traded company.

³ **City Council Memo:** <http://sanjose.legistar.com/gateway.aspx?M=F&ID=a650ab73-0cb6-4c55-bc28-92e9971a1787.pdf>

Resolution: <http://sanjose.legistar.com/gateway.aspx?M=F&ID=2974fff9-07cb-4624-8955-7ffd8d34ada1.pdf>

⁴ **City Council Memo:** <https://www.sanjoseca.gov/home/showpublisheddocument/58044/637242894437770000>

Resolution: <https://www.sanjoseca.gov/home/showpublisheddocument/58048/637242894446370000>

Project Terms:

| | Edwards V | Portfolio Agreement | Enterprise Solar Storage II | Enterprise Solar Storage III | Enterprise Solar Storage II - RA-Only |
|---------------------|----------------------------|--|---|---|--|
| Products | As available solar energy. | Renewable power from Terra-Gen’s existing portfolio to be delivered 7 days a week, 12 hours a day from 10 AM to 10 PM. | Solar power from an initial phase of a new project coupled with new batteries, to be delivered 7 days a week, 12 hours a day from 10 AM to 10 PM. | Solar power from a later phase of a new project coupled with new batteries, to be delivered 7 days a week, 16 hours a day from 6 AM to 10 PM. | Resource Adequacy from a new solar project coupled with batteries. |
| Online date | 12/31/22 | 7/1/23 | 6/1/25 | 6/1/26 | No later than 6/1/26 |
| Maximum annual cost | \$6,800,000 | \$5,800,000 | \$5,200,000 | \$11,600,000 | \$540,000 |
| Maximum total cost | \$99,000,000 | \$94,000,000 ⁵ | \$78,000,000 | \$174,000,000 | \$6,300,000 |

The replacement agreements have terms of 15 years from the online date. The agreements also include bridge renewable energy in years 2023 through 2026 to replace renewable energy that would have been delivered under the original Terra-Gen PPA. The annual cost of the agreements once all are delivering is \$23,140,000. The lifetime notional cost of the agreements is \$352,300,000.

The original Terra-Gen PPA had a total lifetime notional value of \$99,000,000. There is a difference in the amounts between the Terra-Gen PPA and the replacement agreements results because 1) the replacement agreements use solar plus batteries to provide power during a defined period including evening hours instead of providing exclusively solar power during the time it is generated, resulting in a larger volume of power; and 2) the replacement agreements have a higher price per megawatt hour because power is delivered during the more valuable evening hours by adding batteries.

Benefits of the Agreements

The Department is proposing agreements with a total lifetime notional cost of \$530,400,000.

The agreements with Nova, Cascade, and Noosa will contribute towards SJCE’s ability to meet the requirements of Decision 21-06-035 and provide SJCE with needed resource adequacy. The

⁵ The total amount includes the cost of bridge renewable energy but this is not a line item in the table.

agreement with Nova will also provide SJCE dispatchable energy that can help the Department meet future SJCE load as load and resources fluctuate.

Entering into the replacement agreements will provide SJCE with needed resource adequacy that is required to meet its regulatory compliance requirements. In addition, the replacement agreements will provide clean solar power during critical and often expensive evening hours.

All these projects would meet requirements identified in the context of SJCE's 2022 Integrated Resource Plan which include substantial amounts of additional batteries and renewable resources to meet California's and San José's carbon reduction goals.

CONCLUSION

Staff recommend City Council adopt a resolution authorizing the City Manager to negotiate and execute (a) an agreement with Cascade and an agreement with Noosa to buy resource adequacy associated with standalone batteries; (b) an agreement with Nova to buy resource adequacy and dispatchable energy associated with a standalone battery; and (c) replacement agreements with Terra-Gen, or its wholly-owned subsidiaries, to buy resource adequacy and renewable energy associated with a solar plus battery storage facility as well as Terra-Gen's renewable portfolio. The Department will terminate the Terra-Gen PPA upon execution of the replacement agreements with Terra-Gen or its wholly owned subsidiaries.

POLICY ALTERNATIVES

Alternative #1: Do not enter into these agreements. Issue a new solicitation.

Allow the Terra-Gen PPA to terminate, and attempt through negotiation or litigation to collect damages, and then seek replacement resources through future solicitations.

Pros: The Department may issue future solicitations and prices may moderate. With respect to the Terra-Gen PPA, the Department could seek damages and prices could moderate in the future and lower procurement costs.

Cons: The Department is unlikely to be able to find resources that meet a 2024 in-service date in subsequent solicitations since projects for 2024 are limited and are in demand given CPUC Mid-term Reliability requirements. Projects in 2025 are more available but also becoming scarce. Accordingly, a failure to enter into the agreements recommended in this memorandum will significantly reduce the Department's likelihood of meeting the CPUC Mid-term Reliability requirement.

The replacement agreements retain the value of the original Terra-Gen PPA. The Department is unlikely to be able to replace the Terra-Gen PPA in the market with other projects with a similar in-service date and cost.

Reason for not recommending: Deciding not to approve these agreements would jeopardize regulatory compliance with the Mid-term Reliability mandate, the resource adequacy program, and the Renewable Portfolio Standard. SJCE would be at risk for fines from the CPUC for failure to meet regulatory obligations.

EVALUATION AND FOLLOW-UP

No additional follow-up is expected at this time.

CLIMATE SMART SAN JOSÉ

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 October 25, 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 agreements would cost up to \$36,000,000 annually, beginning in January 2023, and \$530,400,000 over the lifetime of all agreements. The lifetime notional cost of the Terra-Gen PPA, \$99,000,000, will be deducted from the Department’s procured amounts once this agreement is terminated. If additional funding is needed for the remainder of 2022-2023, actions will be brought forward for City Council consideration before the end of the year. Funding needs identified for 2023 through 2024 and beyond will be allocated as part of future budget processes.

BUDGET REFERENCE

| Fund # | Appn. # | Appn. Name | Total Appn. | Amt. for Contract | 2022-2023 Proposed Operating Budget Page* | Last Budget Action (Date, Ord. No.) |
|---------------|----------------|-------------------|--------------------|--------------------------|--|--|
| 501 | 202V | Cost of Energy | \$310,200,000 | \$2,700,000 | 923 | 6/21/2022 Ord. 30790 |

* The 2022-2023 Adopted Operating Budget was approved on June 14, 2022 and adopted on June 21, 2022 by City Council.

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 - Summary of Agreement Terms

Attachment: Summary of Agreement Terms

GENERAL TERMS

The following terms apply to ALL agreements detailed below unless otherwise noted.

Overview

Under the energy storage services agreement (standalone battery storage for capacity and energy tolling¹) or a capacity-only agreement (resource adequacy only from standalone battery storage) to be used, the buyer or “offtaker” agrees to purchase energy, and capacity for a term of 10 to 15 years at a specified price. The seller will not transfer ownership of the facility to the buyer.

The seller is an independent energy producer that will develop, own, and operate an energy project. An agreement provides an assured source of revenue that is essential for the project to become viable. Product output from a standalone battery storage resource could be sold without a long-term agreement by placing bids into the spot market. However, these spot transactions are exposed to fluctuating market prices, which are too unpredictable for investors and developers to commit financing to build the project.

From the buyer’s perspective, the spot and short-mid markets for energy and capacity are also very risky. Prices can spike and rise well above long-term contract prices. Long-term agreements provide certainty regarding the price of the products for a given period of time.

Term

The term of the agreement allows the seller to amortize the debt and obtain a return on the investment. The agreement is effective and binding on the date that it is signed.

Upon the execution of the agreement, the seller will set out to build the facility. The agreement will include milestones to track construction progress and provide San José Clean Energy (SJCE) with liquidated damages if some of those are missed. The most important milestone is the Guaranteed Commercial Operation Date which is the date on which the project has completed all the phases required to safely operate the facility and deliver energy (or in the case of a standalone storage facility, charge/discharge from the grid and provide resource adequacy) to the transmission system. While the agreement begins at the effective date, the term of the contract is determined by COD (e.g., the seller will deliver energy for 10-15 years from COD). If the seller misses the Guaranteed COD, the agreement will allow for an extension (usually 120 to 180 days) and SJCE would receive liquidated delay damages. If COD is not completed by the end of the extension time, SJCE may terminate the contract and retain the development security. SJCE and the seller may also mutually agree to extend the Guaranteed COD.

¹ Energy tolling is the right to direct, and be assigned the benefits and costs of, charging and discharging energy associated with an energy storage facility.

Attachment: Summary of Agreement Terms (Cont'd.)

Guarantees

Long term agreements include provisions that require the seller to both develop the project and guarantee performance standards for the facility once it is constructed. Those guarantees are established to protect the buyer.

- Development Security: This security ensures payment of liquidated damages for delays related to the pre-COD period. The Development Security must be in the form of cash or a letter of credit that the seller must deliver to buyer, usually within 30 days of the effective date.
- Performance Guarantee. The seller must guarantee the performance of the facility by establishing a minimum amount of product that the facility is expected to produce over a period of time. The Performance Guarantee requires the seller to pay the buyer if the project's output fails to meet the guaranteed deliveries over that period.

Liquidated Damages

- Delay Damages: Damages are assessed for each day of delay, in the amount of the Development Security divided by the maximum number of permitted delay days.
- Shortfall Damages: If the facility does not meet the guaranteed output during a performance guarantee period, the seller must pay shortfall damages to the buyer.

Assignment

The agreements do not allow either party to assign (transfer) the agreement to third party without the other's prior written consent, with the following exceptions:

1. Assignment in connection with project financing
2. Assignment to a party's affiliate who is creditworthiness is equal to or higher than that of the assigning party

In the event that parties agree to an ownership transfer, the assignee shall agree in writing to be bound by the terms and conditions of the agreement. The non-transferring party may reasonably request assurances from the assignee.

Termination Payment: If there is an event of default from either party, the defaulting party may have to pay a Termination Payment to the other party.

- *Buyer default*: Buyer must reimburse the seller for the lost revenues to the seller for the remainder of the agreement, minus the revenues the seller can make from reselling the products.
- *Seller default*: Incremental costs that the buyer is expected to incur in buying replacement power and expenses associated with switching providers.

Attachment: Summary of Agreement Terms (Cont'd.)

Designated Fund and Appropriation of Funds: The agreement will include provisions that will limit the City's liability to the San José Clean Energy Operating Fund (Designated Fund). This fund is used solely for the City's costs and expenses associated with operating SJCE. The agreement will provide that payment obligations are special limited obligations of the City payable solely from the Designated Fund, and that those obligations shall not be a charge upon the revenues or general fund of the City of San José or upon any non-SJCE moneys or other property of the Department of Community Energy or the City of San José.

The agreement will also not financially bind future governing bodies and will not constitute an obligation of future legislative bodies of the City to appropriate funds.

BROAD REACH POWER: Cascade

This agreement is a capacity-only long-term agreement associated with a battery storage facility.

Key Terms

- **Annual contract cost:** \$360,000
- **Total contract cost:** \$3,600,000
- **Delivery Term:** 10 years
- **Delivery Period:** June 1, 2023 through May 31, 2033.

Parties:

- **Seller:** The seller is a limited liability company, Cascade Energy Storage LLC, that will construct, own, and operate a battery storage facility that will provide the capacity attributes sold to the buyer.
- **Buyer:** The buyer will be the City of San José, as administrator of SJCE, which is permitted under California law to buy energy and energy-related products and attributes at wholesale because it is certified as a community choice aggregation. The City will purchase capacity attributes from the facility to serve SJCE customers. The City will not own the facility.

Product: Capacity attributes

- **Capacity:** Also known as resource adequacy (RA) attributes, capacity is the ability and responsibility to provide supply to the system when directed to do so by the California Independent System Operator. The City will receive the RA credit for SJCE from the battery storage facility.

BROAD REACH POWER: Noosa

This agreement is a capacity-only long-term agreement associated with a battery storage facility.

Attachment: Summary of Agreement Terms (Cont'd.)

Key Terms

- **Annual contract cost:** \$2,600,000
- **Total contract cost:** \$26,000,000
- **Delivery Term:** 10 years
- **Delivery Period:** June 1, 2024 through May 31, 2034.

Parties:

- **Seller:** The seller is a limited liability company, Noosa Energy Storage LLC, that will construct, own, and operate a battery storage facility that will provide the capacity attributes sold to the buyer.
- **Buyer:** The buyer will be the City of San José, as administrator of SJCE, which is permitted under California law to buy energy and energy-related products and attributes at wholesale because it is certified as a community choice aggregation. The City will purchase capacity attributes from the facility to serve SJCE customers. The City will not own the facility.

Product: Capacity attributes

- **Capacity:** Also known as RA attributes, capacity is the ability and responsibility to provide supply to the system when directed to do so by the California Independent System Operator. The City will receive the RA credit for SJCE from the battery storage facility.

CALPINE CORPORATION: Nova

This agreement provides capacity associated with, and the right to direct, and be assigned the benefits and costs of, charging and discharging a battery storage facility.

Key Terms

- **Annual contract cost:** \$9,900,000
- **Total contract cost:** \$148,500,000
- **Delivery Term:** 15 years
- **Delivery Period:** June 1, 2025 through May 31, 2040.

Parties:

- **Seller:** The seller is a limited liability company, Nova Power, LLC, that will construct, own, and operate a battery storage facility that will generate the capacity attributes and provide the right to direct charging and discharging of the battery from and to the electric grid in alignment with SJCE load to the buyer.

Attachment: Summary of Agreement Terms (Cont'd.)

- **Buyer:** The buyer will be the City of San José, as administrator of SJCE, which is permitted under California law to buy energy and energy-related products and attributes at wholesale because it is certified as a community choice aggregation. The City will purchase capacity attributes and the right to direct charging and discharging of the battery from and to the electric grid to serve SJCE customers. The City will not own the facility.

Product: Capacity attributes and ability to direct and benefit from charging and discharging the battery

- **Capacity:** Also known as RA, capacity is the ability and responsibility to provide supply to the system when directed to do so by the California Independent System Operator. The City will receive the RA credit for SJCE from the battery storage facility.
- **Benefits from battery charging and discharging:** The right to direct charging and discharging of the battery from and to the electric grid, and to the economic benefits thereof. The City will optimize the charging and discharging of the battery to serve SJCE customers and maximize the economic value of the facility.

TERRA-GEN: Portfolio Power Purchase Agreement

This agreement is a renewable energy long-term agreement associated with the existing portfolio of Terra-Gen's wholly owned subsidiary TGP Energy Management II, LLC.

Key Terms

- **Annual contract cost:** \$5,800,000
- **Total contract cost:** \$94,000,000
- **Delivery Term:** 15 years
- **Delivery Period:** July 1, 2023 through June 30, 2038.

Parties:

- **Seller:** The seller is a limited liability company, TGP Energy Management II, LLC, that owns and operates an existing portfolio of renewable energy facilities that will generate the energy to be sold to the buyer.
- **Buyer:** The buyer will be the City of San José, as administrator of SJCE, which is permitted under California law to buy energy and energy-related products and attributes at wholesale because it is certified as a community choice aggregation. The City will purchase renewable energy to serve SJCE customers. The City will not own any of the facilities in this portfolio.

Product: 7x12 Firmed renewable energy. Renewable energy certificates.

Attachment: Summary of Agreement Terms (Cont'd.)

- **Renewable energy:** A specified and firm amount of renewable energy from seller's existing portfolio will be delivered seven days a week, 12 hours a day, from 10 AM to 10 PM.
- **Renewable energy certificates:** Since this energy comes from qualified renewable energy facilities, the City will receive renewable energy certificates from the power it receives that the Department can use to meet the State's Renewable Portfolio Standard requirements, and City renewable goals.

TERRA-GEN: Enterprise Solar + Storage, Firmed 7x12

This agreement is a renewable energy long-term agreement associated with a new solar and storage facility to be built by Terra-Gen's wholly owned subsidiary Enterprise Solar Storage II, LLC. This new project is an earlier phase in the larger complex of enterprise solar and storage projects from Terra-Gen.

Key Terms

- **Annual contract cost:** \$5,200,000
- **Total contract cost:** \$78,000,000
- **Delivery Term:** 15 years
- **Delivery Period:** June 1, 2025 through May 31, 2040.

Parties:

- **Seller:** The seller is a limited liability company, Enterprise Solar Storage II, LLC, that will build, own, and operate a new solar and battery storage facility that will generate the energy and attributes to be sold to the buyer.
- **Buyer:** The buyer will be the City of San José, as administrator of SJCE, which is permitted under California law to buy energy and energy-related products and attributes at wholesale because it is certified as a community choice aggregation. The City will purchase renewable energy and related attributes to serve SJCE customers. The City will not own this facility.

Product: 7x12 Firmed Renewable energy. Renewable energy certificates. Capacity attributes.

- **Renewable energy:** A specified and firm amount of renewable energy from seller's new solar and storage facility will be delivered seven days a week, 12 hours a day from 10 AM to 10 PM.
- **Renewable energy certificates:** Since this energy will come from a qualified renewable energy facility, City will receive renewable energy certificates it will use for the State's Renewable Portfolio Standard requirements.
- **Capacity:** Also known as RA, capacity is the ability and responsibility to provide supply to the system when directed to do so by the California Independent System Operator. The City will receive the RA credit for SJCE from the solar facility but

Attachment: Summary of Agreement Terms (Cont'd.)

NOT the battery storage. Some RA from the battery storage at this facility will be contracted for under a separate agreement. See 'Capacity-only from Enterprise Solar Storage II, LLC' below.

TERRA-GEN: Enterprise Solar + Storage, Firmed 7x16

This agreement is a renewable energy long-term agreement associated with a new solar and storage facility to be built by Terra-Gen's wholly owned subsidiary Enterprise Solar Storage III, LLC. This new project is a later phase in the larger complex of enterprise solar and storage projects from Terra-Gen.

Key Terms

- **Annual contract cost:** \$11,600,000
- **Total contract cost:** \$174,000,000
- **Delivery Term:** 15 years
- **Delivery Period:** June 1, 2026 through May 31, 2041.

Parties:

- **Seller:** The seller is a limited liability company, Enterprise Solar Storage III, LLC, that will build, own, and operate a new solar and battery storage facility that will generate the energy and attributes to be sold to the Buyer.
- **Buyer:** The buyer will be the City of San José, as administrator of SJCE, which is permitted under California law to buy energy and energy-related products and attributes at wholesale because it is certified as a community choice aggregation. The City will purchase renewable energy and related attributes to serve SJCE customers. The City will not own this facility.

Product: 7x16 Firmed renewable energy. Renewable energy certificates. Capacity attributes.

- **Renewable energy:** A specified and firm amount of renewable energy from seller's new solar and storage facility will be delivered seven days a week, 16 hours a day from 7 AM to 10 PM.
- **Renewable energy certificates:** Since this energy will come from a qualified renewable energy facility, City will receive renewable energy certificates it will use for the State's Renewable Portfolio Standard requirements.
- **Capacity:** Also known as RA, capacity is the ability and responsibility to provide supply to the system when directed to do so by the California Independent System Operator. The City will receive the RA credit for SJCE from the solar facility, but NOT the battery storage.

Attachment: Summary of Agreement Terms (Cont'd.)

TERRA-GEN: Capacity-only from Enterprise Solar Storage II, LLC

This agreement is a capacity-only long-term agreement associated with a new solar and storage facility to be built by Terra-Gen's wholly owned subsidiary Enterprise Solar Storage II, LLC.

Key Terms

- **Annual contract cost:** \$540,000
- **Total contract cost:** \$6,300,000
- **Delivery Term:** 15 years
- **Delivery Period:** June 1, 2025 through May 31, 2040.

Parties:

- **Seller:** The seller is a limited liability company, Enterprise Solar Storage II, LLC, that will build, own, and operate a new solar and battery storage facility that will generate the capacity attributes to be sold to the buyer.
- **Buyer:** The buyer will be the City of San José, as administrator of SJCE, which is permitted under California law to buy energy and energy-related products and attributes at wholesale because it is certified as a community choice aggregation. The City will purchase the capacity attributes to serve SJCE customers. The City will not own this facility.

Product: Capacity attributes

- **Capacity:** Also known as RA attributes, capacity is the ability and responsibility to provide supply to the system when directed to do so by the California Independent System Operator. The City will receive the RA credit for SJCE from the battery storage component of this solar and storage facility. For this specific contract, there is no requirement for the seller to maintain the capacity of the battery. As the battery degrades, buyer will pay less over time and will not be required to pay for capacity it is not receiving.