



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Lori Mitchell

SUBJECT: Long-Term Power Purchase Agreement with Shell Energy North America
DATE: June 1, 2026

Approved:  Date: 6/10/26

COUNCIL DISTRICT: Citywide

RECOMMENDATION

Adopt a resolution authorizing the Director of the Energy Department or her designee to negotiate and execute a long-term power purchase agreement with Shell Energy North America (US), L.P., to buy renewable energy, renewable energy credits, Resource Adequacy, and attributes associated with a geothermal facility for a term of 15 years beginning 2026 through 2041, in an estimated annual amount of \$8,300,000 and a not-to-exceed amount of \$124,500,000 in aggregate, to be paid solely from the San José Clean Energy Operating Fund, and subject to the annual appropriation of funds.

SUMMARY AND OUTCOME

By negotiating and executing this agreement, the City of San José (San José) will purchase the products described in the recommendation from Shell Energy North America (US), L.P. (SENA) from a portion of the Cape Generating Station 5 (Cape Station) for which SENA has a power purchase agreement with Fervo Energy (Fervo).

The agreement will contribute to San José Clean Energy (SJCE) compliance with California Public Utilities Commission (CPUC) procurement orders and resource adequacy requirements. CPUC orders require load serving entities to procure resource adequacy from new renewable resources or storage, including firm clean resources. Geothermal power qualifies as a firm clean resource. This agreement represents 2-3% of SJCE's annual power supply cost. The agreement will also add resources identified as needed to achieve state and local climate goals in SJCE Integrated Resource Plan.

BACKGROUND

CPUC Resource Adequacy Slice-of-Day Requirements

On June 23, 2022, the CPUC released Decision 22-06-050 adopting a Resource Adequacy Reform Track Framework. In this decision, the CPUC adopted a new regulatory framework for resource adequacy, a program to ensure that there are sufficient power resources to reliably meet demand. The regulatory framework requires load serving entities to show they have contracted with sufficient resources to meet their demand every hour of the day, on the peak day of each month.

Under this framework, geothermal generation is credited with the ability to meet load 24 hours a day. In contrast, solar plus storage facilities are limited to credit during solar hours and/or for the discharge capabilities of the storage, depending on the interconnection arrangement of the facility.

CPUC Procurement Mandate and SJCE Integrated Resource Planning

On June 6, 2021, the CPUC issued Decision 21-06-035 Requiring Procurement to Address Mid-term Reliability (2023-2026) in the Integrated Resource Planning proceeding, due in part to the expected phased retirement of the Diablo Canyon Power Plant in 2024 and 2025.¹ That decision requires all load serving entities to procure their proportional share of 11,500 megawatts of resource adequacy from new, renewable, or zero carbon emitting resources or energy storage. The resources procured must be from long-term agreements that come online over the period of calendar years 2023 through 2026. The CPUC assigned SJCE 247 megawatts of this procurement requirement. A subset of the 247 megawatts includes 21.5 megawatts that must be sourced from firm clean resources.

On February 2, 2023, the CPUC issued Decision 23-02-040 that extended the deadline for part of this requirement to 2028. That decision also added to the procurement requirements in Decision 21-06-035, that all load serving entities must procure their proportional share of 4,000 megawatts of resource adequacy. The CPUC assigned SJCE 80 megawatts of this additional procurement requirement.

On February 20, 2024, the CPUC issued Decision 24-02-047, allowing an extension for firm clean resources to come online no later than June 1, 2031. The geothermal capacity and energy received from SENA qualify as a firm clean resource and contribute toward satisfying this mandate.

¹ CPUC Decision 23-12-036 extended the continued operation of Diablo Canyon Power Plant beyond the originally planned closure. The incremental procurement requirement from Decision 21-06-035 was not modified.

On February 26, 2026, the CPUC issued Decision 26-02-057 Requiring 2029-2032 Electric Resource Procurement and Transmitting Portfolios for 2026-2027 Transmission Planning Process. This decision requires all load serving entities to procure their proportional share of 6,000 megawatts of new incremental resource adequacy. The resources procured must be pursuant to long-term agreements that come online over the period of calendar years 2030 through 2032. The CPUC assigned SJCE 129 megawatts of this procurement requirement and 32 of those megawatts must come from firm clean resources or long-duration storage.

Solicitation

On June 6, 2025, the Energy Department (Department) issued a solicitation seeking proposals for new clean resources, including renewables and batteries. Nearly 24 entities submitted 65 offers in response to the solicitation. The Department analyzed the offers considering factors such as value, technology, location, project risk, emissions mitigation, labor, community engagement, environmental impacts, and counterparty experience. SENA's geothermal offer was the only offer for geothermal energy and was selected pursuant to this solicitation.

Risk Oversight Committee Review

On May 21, 2026, the City Manager's Risk Oversight Committee recommended that the Department submit to City Council for approval a resolution as described in this memorandum.

ANALYSIS

Benefits of the Agreement

Key benefits of this agreement include:

- Contribute to the firm clean resource sub-set required under CPUC Decision 21-06-035.
- Contribute to the firm clean resource needs identified in SJCE Integrated Resource plan and is consistent with the anticipated buildout under the state's least-cost new resource buildout (CPUC Ruling 25-06-019).
- Contribute to SJCE annual and monthly regulatory requirements under the Slice-of-Day Resource Adequacy program.
- Contribute to SJCE long-term Renewable Portfolio Standard requirement established as part of Senate Bill 350, whereby community choice aggregators must ensure 65% of their procurement is from long-term agreements of 10 or more years.
- Provide around the clock clean energy to SJCE portfolio.
- Contribute clean energy towards achieving carbon neutrality by 2030.

- Demonstrate technology diversity within SJCE's portfolio.

Portfolio Fit

SJCE Integrated Resource Plan

In accordance with state law and SJCE Energy Risk Management Regulations, the Department developed the 2022 SJCE Integrated Resource Plan to identify a least-cost portfolio build out designed to reliably and affordably achieve specified emission-reduction targets. In 2024, the Department updated its analysis, incorporating the transition to the Slice-of-Day approach for Resource Adequacy in preparation for the 2024 Integrated Resource Planning cycle. However, the CPUC subsequently postponed the Integrated Resource Plan filing requirement until mid-2026.

Both the 2022 Integrated Resource Plan and the 2024 analysis concluded that a least cost portfolio should include energy storage systems. In addition, as of January 2026, the CPUC published a state-wide least cost portfolio to help inform individual planning exercises, which includes an increasing amount of long-duration energy storage. Staff expect energy storage, across a range of technologies and durations, to remain a key component of future portfolio buildout. This facility will contribute to that buildout.

Resource Adequacy

This project will provide SJCE with Resource Adequacy that can be counted toward its hourly requirements in all 24 hours under the CPUC's Slice-of-Day framework. Given California's current resource mix, the most challenging periods to meet Resource Adequacy requirements occur during the late summer evenings hours, when solar generation declines and system demand remains high. This facility will meet these hours and provide additional capacity in other hours; either for direct use or to charge storage for use during system peak.

Energy Supply

Geothermal resources provide reliable around the clock clean energy. The SJCE portfolio consists primarily of solar, wind, and storage. This project will deliver valuable clean energy during all hours and in particular through the evening peak and overnight.

Geothermal energy provides significant system benefits, is in high demand, and remains in relatively low supply – currently with little to no representation in the California interconnection queue. As a result, geothermal resources command a premium compared to other renewable energy sources. The Department has conducted extensive outreach, including collaboration with California Community Power, to further assess market availability. These efforts confirm that geothermal resource remain scarce, costly, and that many developers are unwilling or unable to commit to standard contract terms. The agreement with Shell addresses several of these challenges,

although it does require a price premium when compared to other renewables. Given the CPUC requirements for SJCE to procure firm clean resources scheduled to come online by 2031 and 2032, this project directly supports that need.

About SENA

SENA trades and markets natural gas, wholesale power, and environmental and risk management products in North America. It is an indirect, wholly owned subsidiary of Shell plc and has an investment grade credit rating. SENA is not a publicly traded company, but its parent company, Shell plc, is.

About the Project and Developer

SENA has contracted with Fervo for a portion of the Cape Station geothermal facility located in Beaver County, Utah. Fervo is one of the leading developers of enhanced geothermal systems, which uses advanced technology to access geothermal energy in locations not previously thought to be well suited for such. Fervo has announced numerous power purchase agreements with investor-owned utilities, community choice aggregators, and other private buyers, including for other phases of the larger Cape Station build-out. This phase of the Cape Station project is under construction and expected to come online in October of this year, making it relatively low risk from a project development perspective. Fervo recently announced a \$421 million financing package for the construction of phase 1 of the Cape Station project.²

Project Terms and Structure

- *Estimated annual cost:* \$8,300,000
- *Maximum total contract cost:* \$124,500,000
- *Term:* 15 years
- *Expected commercial online date:* 10/1/2026
- A failure to deliver products results in no payment and can result in penalties.
- Payment for the products after they are delivered.
- San José may terminate the agreement for certain performance failures.

Through this agreement, SENA is selling San José a percentage share of its power purchase agreement for Cape Generating Station 5. Although Fervo is the developer of Cape Generating Station 5, it was not involved in contract negotiations and is not a party to the agreement between SENA and San José. Fervo is no longer directly selling capacity from Cape Station Generating Station 5 to new counterparties; as a result, acquiring a share from an existing offtaker is the only practical means of accessing the project's geothermal capacity and output.

² [Fervo Energy Secures \\$421 Million in Non-Recourse Project Financing for Cape Station - Fervo Energy](#)

See the summary of terms in the Attachment - Summary of Material Terms for the SENA Long Term PPA.

Transmission Risk

The Cape Station geothermal facility supporting this agreement has secured firm transmission to a California Independent System Operator delivery point. To qualify for Resource Adequacy for CPUC compliance, San José must obtain import capability rights at that point. However, this delivery point is expected to be retired after the project's commercial online date and shift to a new delivery point.

This transition creates uncertainty for both SENA and San José. Department staff are working with subject matter experts to address these risks and have included protections in the agreement if the resource does not qualify for Resource Adequacy. Despite these risks, the Department recommends proceeding due to the extremely limited availability of resources that meet CPUC requirements.

Workforce, Environment, and Community Engagement

Evaluating this project offer under the *San José Clean Energy Power Workforce and Environmental Stewardship Project Selection Criteria*,³ the Department reports that the project:

- Will not be built using union labor via a project labor agreement that will include goals for use of local and apprentice workers; it will, however, pay applicable prevailing wage laws. Suppliers building in rural areas in states east of California have, in the past, presented that there is insufficient union labor available and willing to work on power plants in remote locations.
- The Federal Bureau of Land Management completed an environmental assessment and issued a formal Finding of No Significant Impact.
- No formal commitment to implement a community benefits plan for the local community.
- Is not in California nor within California Independent System Operator territory.

While this project does not score well under the San José Clean Energy Power Workforce and Environmental Stewardship Project Selection Criteria, the Department recommends proceeding due to the extremely limited nature of viable geothermal projects. This was the only geothermal offer received, and bilateral outreach has not identified viable geothermal resources within the timeframe required by the CPUC, and it is needed for regulatory compliance.

³ <https://sanjose.legistar.com/View.ashx?M=F&ID=14145212&GUID=5C39D187-D67C-465B-A844-F1FF6ED29BD5>

Climate Smart San José Analysis

Entering this agreement promotes San José's ability to provide renewable power to SJCE customers, thus increasing demand for renewable energy.

EVALUATION AND FOLLOW-UP

No additional follow-up action with the City Council is expected at this time.

FISCAL IMPACTS

Entering into this agreement is estimated to cost up to \$8,300,000 annually, beginning in calendar year 2026, and \$124,500,000 over the life of the agreement.

Funding for the agreement is included in the Cost of Energy appropriation under the San José Clean Energy Fund, and future funding adjustments will be recommended to continue supporting this agreement in future budget processes, subject to the appropriation of funds. To accommodate the anticipated agreement costs for the 2026-2027 fiscal year, the Department included adjustments to the Cost of Energy appropriation as part of the development of the 2026-2027 Proposed Operating Budget Source and Use.

The Department recommends SJCE customer rates to City Council on an annual basis sufficient to meet the Department's costs, including power purchase agreements.

COORDINATION

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

PUBLIC OUTREACH

This memorandum will be posted on the City Council Agenda website for the June 23, 2026 City Council meeting.

BOARD, COMMISSION, COMMITTEE RECOMMENDATION AND INPUT

No board, commission, or committee recommendation or input is associated with this action.

HONORABLE MAYOR AND CITY COUNCIL

June 1, 2026

Subject: Long Term Power Purchase Agreement with Shell Energy North America

Page 8

CEQA

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

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/

Lori Mitchell
Director of Energy

For questions, please contact Paul Innamorato, Deputy Director of Power Resources, Energy Department, at Paul.Innamorato@sanjoseca.gov or 408-535-4891.

ATTACHMENT:

Summary of Material Terms for the SENA Long Term PPA

Attachment - Summary of Material Terms for the SENA Long Term PPA

Buyer: The City of San José.

Seller: Shell Energy North America (US), L.P. (SENA)

Product: Renewable energy, capacity attributes, which include Resource Adequacy and firm clean resource attributes, green attributes (renewable energy certificates).

Facility: Cape Generating Station 5, a geothermal facility located in Beaver County, Utah.

CAISO Scheduling Coordinator: Seller will be the CAISO Scheduling Coordinator for the facility.

Delivery Term: The delivery term for the project is 15 years.

Pricing: \$8,300,000 Estimated Annual Cost, \$124,500,000 Maximum Total Cost.

Scheduled Commercial Operation Date: 10/01/2026

Outside Commercial Operation Date: 04/01/2027

Environmental Attributes: Portfolio Content Category 1 renewable energy.

Events of Default, Termination Rights, Collateral: Not disclosed due to commercially sensitive nature.

Insurance: Consistent with the requirements approved by Risk Management.

Designated Fund: Buyer is a municipal corporation and is precluded under the California State Constitution and applicable law from entering into obligations that financially bind future governing bodies without an appropriation for such obligation, and, therefore, nothing in this Agreement shall constitute an obligation of future legislative bodies of Buyer to appropriate funds for purposes of this Agreement; provided, however, that (i) Buyer has created and set aside a designated fund for San José Clean Energy as further described in Section 4.80.4050 of the City of San José Municipal Code (the "Designated Fund") for payment of its obligations under this Agreement, (ii) as set forth in Section 4.80.4060 of the City of San José Municipal Code, all monies derived from the operation of San José Clean Energy, including revenues for sale of electricity, payment from other entities, and any financing proceeds associated with San José Clean Energy's obligation will be deposited in the Designated Fund, and (iii) subject to the requirements and limitations of applicable law and taking into account other available money specifically authorized by the San José City Council and allocated and appropriated to the San José Clean Energy's obligations, Buyer agrees to establish San José Clean Energy rates and charges that are sufficient to maintain revenues in the Designated Fund necessary to pay its obligations under this Agreement and all of Buyer's payment obligations under its other contracts for the purchase of energy and related products for San José Clean Energy. Buyer shall provide Seller with

reasonable access to account balance information with respect to the Designated Fund during the Term.

Prevailing Wage: Seller shall use commercially reasonable efforts to ensure that in Generator's construction, operation, maintenance, and repair of the Facility Generator shall comply with all Requirements of Law applicable to it or the Facility concerning payment of fair wages, working conditions, and other labor requirements, if any ("Prevailing Wage Requirement"). Nothing herein shall require Seller, its contractors, and subcontractors to comply with, or assume liability created by, inapplicable provisions of any California labor laws.