CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: Transportation and Environment Committee

FROM: Kip Harkness
Deputy City Manager

SUBJECT: **San José Power Status Report**

DATE: November 8, 2024

Approved Date: 11/25/24

COUNCIL DISTRICT: # Citywide

RECOMMENDATION

Accept a status report on San José Power's exploratory phase of providing Municipal Electric Utility Service and cross-refernce this item for full Council consideration at the December 17, 2024, City Council meeting.

SUMMARY AND OUTCOME

On October 3, 2023 City Council unanimously directed the City Manager to explore the feasibility of establishing San José Power as a municipal electric utility in limited areas of the City. Since then, staff have focused on following Council direction, advancing the exploratory phase and assessing the feasibility of a municipal electric utility. The City has identified two potentially viable locations for launching San José Power, one in North San José and one in Downtown San José. The City filed interconnection requests for 250 megawatts (MW) of power at each location, for a total of 500 MW.

Financing San José Power's initial infrastructure build out falls primarily into three categories: electrical distribution, transmission interconnection, and staffing/consultant costs. City staff have been in discussions with potential partners about the possibility of a developer/customer-financed approach, with an initial partner taking on the upfront costs for building out the needed infrastructure and effectively reducing any financial risk to the City's General Fund.

In parallel, staff continues to collaborate with the International Brotherhood of Electrical Workers (IBEW) and PG&E as we advance the exploratory phase of this work. Staff will return to Council in 2025 and present the outcome of the financing strategy, the preliminary results from the business case development, any recommended action on establishing San José Power, and the outcome of engagement with IBEW and PG&E.

BACKGROUND

On October 3, 2023, the City Council unanimously voted to amend the municipal code (Titles 2, 4, 26, and 28) to create a municipal electric utility in order to establish the legal framework for the City's authority to generate, purchase, and distribute electricity. In the same action, the Council directed staff to explore the possibility of establishing San José Power to provide electric service in selected areas of the City. The Council directed staff to consider four key questions as a guide to the exploratory phase as follows:

If the City were to provide municipal utility for electric service in limited areas of the city, could that be done in a way that would:

1. Reduce electricity energy costs?
2. Allow the development of more innovative and energy efficient buildings such as that envisioned in the planned Downtown West development?
3. Increase the electrical resilience of the City of San José and our critical infrastructure for both climate change and emergency response?
4. Enable us to attract and retain the skilled and trained talent required to perform this work effectively and reliably?

To answer these questions, staff is evaluating the infrastructure needs and developing and evaluating a business case, staffing plan, and financing strategy for a potential municipal electric utility.

Two new high-voltage transmission lines approved by the California Independent System Operator (CAISO) present an opportunity to establish a utility with lower transmission costs. CAISO is the non-profit that oversees the 27,000 miles of transmission lines in California and manages the flow of electricity across these high-voltage, long-distance power lines. One of CAISO's roles is to conduct transmission planning to maximize electrical power efficiency and reliability. During the 2021-2022 Transmission Planning Process, CAISO identified a significant need for additional transmission capacity to the Santa Clara Valley region and awarded an initial 1,000 megawatts (MW) of new electrical transmission capacity to LS Power to construct and operate by 2028)[1]. Recently, CAISO staff identified the urgent need for even more electricity in the San José area and updated its transmission plan to propose doubling LS Power's project to 2,000 MW of transmission capacity[2]. The CAISO Board approved

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[1] On March 27, 2023 CAISO released the results of their selection process and announced LS Power as the winning bidder for two new high-voltage transmission lines coming into San José (https://stakeholdercenter.caiso.com/InitiativeDocuments/Metcalf-San-Jose-B-HVDC-Project-Project-Sponsor-Selection-Report.pdf; https://stakeholdercenter.caiso.com/InitiativeDocuments/Newark-NRS-HVDC-Project-Project-Sponsor-Selection-Report.pdf)

[2] On September 19, 2024, CAISO published an update to their 2024-2025 Transmission Plan and is proposing to double the amount of power LS Power is building from 1000MW to 2000MW in the San José area. (https://stakeholdercenter.caiso.com/InitiativeDocuments/Presentation-2024-2025-Transmission-Planning-Process-Sep-23-2024.pdf).

this mid-cycle change on November 12, 2024, increasing the capacity of the two LS Power constructed lines to a total of 2,000 MW.

These new transmission lines could allow the City to connect directly to the transmission grid, enhancing reliability and reducing San José Power's start-up infrastructure costs. The City of San José filed two interconnection requests with LS Power, one for North San José and one for Downtown San Jose. These requests will allow staff to understand the transmission infrastructure costs and begin reserving access to the transmission infrastructure and additional available capacity as appropriate.

ANALYSIS

Since October 2023, staff have focused on following Council direction, advancing the exploratory phase, and assessing the feasibility of a municipal electric utility. The City has identified two locations to interconnect with the CAISO grid in North San José and Downtown San José. These two locations are where the new high-voltage (HV) transmission line coming through San José ends and will provide an opportunity to connect and construct a new distribution grid in limited areas of North San José and Downtown San José. CAISO has contracted with LS Power to design, build, and operate these HV transmission lines. Coupling the launch of San José Power with the construction of LS Power's transmission line projects potentially offers an opportunity to reduce the duration of construction and cost of capital infrastructure.

The City filed two interconnection requests (one in North San José and one in Downtown) with LS Power for 250 MW each (500 MW total). With each interconnection offering 250 MW of transmission capacity, San José Power would reserve a portion for the initial developer/customer and could also reserve a portion of this capacity for critical infrastructure and economic development. This approach would allow the developer/customer to build projects using their 200 MW or reserved capacity and allow San José Power to also begin to service critical infrastructure and economic development uses.

North San José Service Area Opportunities

The first potential service area focuses on a limited portion of North San José on and adjacent to the San José-Santa Clara Regional Wastewater Facility (see Figure 1). The North San José transmission line, with 250 MW of power reserved for San José Power, presents an opportunity to potentially power private development and critical infrastructure on Regional Wastewater Facility land and catalyze economic development on land owned and leased out by the Regional Wastewater Facility. Critical infrastructure in this area that San José Power might serve includes the Regional Wastewater Facility itself as well as the current and expanding recycled water

system and build out of new direct potable reuse purified water facilities providing a diverse water supply to meet growing regional needs.

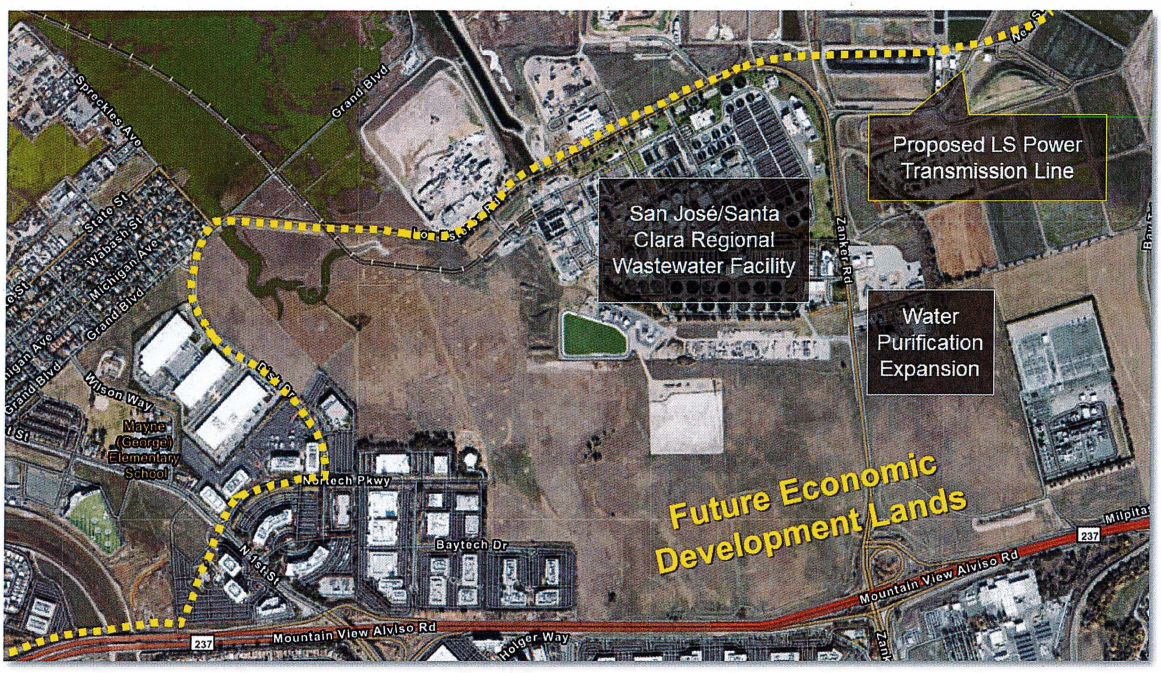

Figure 1: LS Power Proposed Transmission Line Route from Newark through North San José and continuing on to Santa Clara's NRS Substation (https://ia.cpuc.ca.gov/environment/info/esa/psb/index.html)

The reserved transmission capacity could also be available for commercial and industrial developments focused on economic development lands. The San José/Santa Clara Regional Wastewater Facility Plant Master Plan identifies 159 acres of economic development lands for new industrial, manufacturing, office, research and development, and retail uses. Many of these uses have high demands for electricity. Powering these developments through San José Power could offer a cost advantage, with potentially lower electricity prices, making the area more attractive to businesses and potentially incentivizing a more rapid development and build out of the area. The successful development of these economic development lands would provide ongoing lease revenue to the Regional Wastewater Facility reducing costs for ratepayers and would also provide an ongoing source of revenues (e.g., property taxes and utility taxes) to the City's General Fund.

Downtown San José Service Area Opportunities

The second potential service area in Downtown San José (see Figure 2), with an additional 250 MW of capacity allocated for San José Power, offers strategic opportunities to serve critical infrastructure, including San José Mineta International Airport and potentially Diridon Station. As key transportation hubs, both facilities would stand to gain from the potential increased reliability and cost savings associated with

San José Power. For instance, transitioning the Airport's electricity service to San José Power could enhance its operational resilience while lowering costs, an advantage particularly valuable as the City expands electric vehicle (EV) charging infrastructure and other energy-intensive services on the Airport campus.

A primary challenge in Downtown San José, however, lies in spatial constraints. The dense urban setting limits available land for new infrastructure, posing challenges for establishing necessary interconnection components.

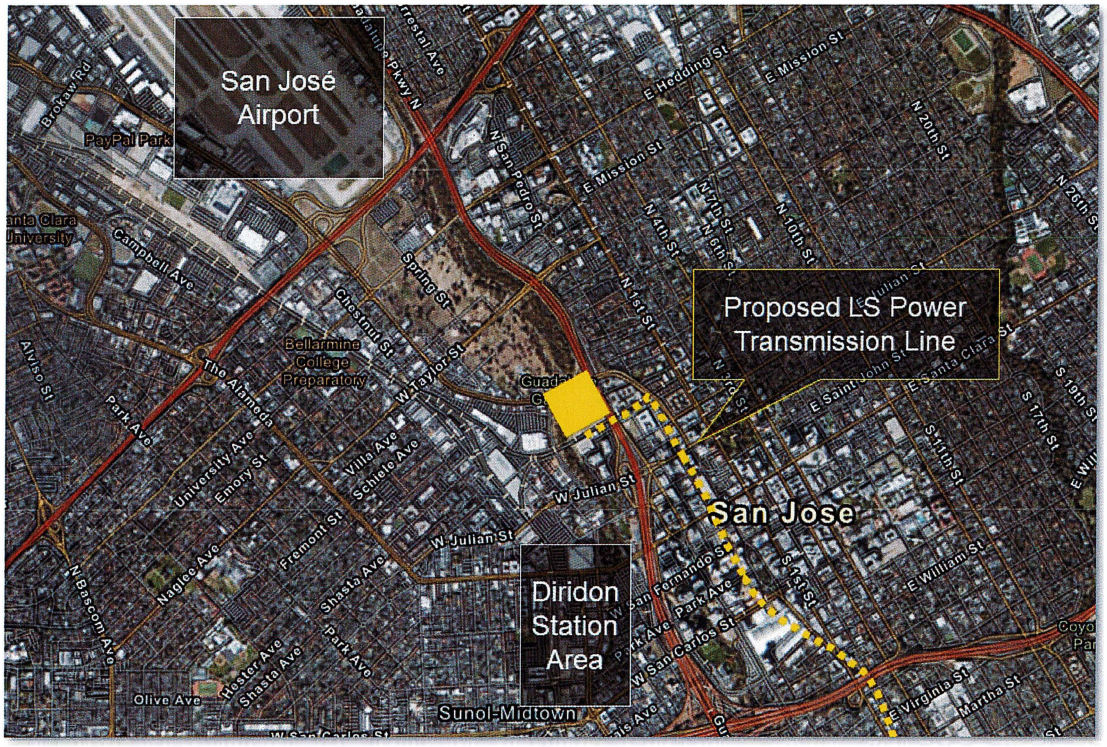

Figure 2: LS Power Proposed Transmission Line Route from Grove Substation in Coyote Valley to Skyline Terminal in Downtown San José.
(https://ia.cpuc.ca.gov/environment/info/esa/pscv/index.html)

Financing Approach and Business Case Development

Financing San José Power's initial infrastructure build out falls primarily into three categories: electrical distribution, transmission interconnection, and staffing/consultant costs. For the distribution infrastructure, San José Power will likely follow a typical model where a developer/customer funds and builds the distribution infrastructure and then turns it over to the utility. This approach gives the developer/customer greater input and control over infrastructure build out and timeline. For the transmission interconnection costs, staff is evaluating a financing model where the developer/customer would cover all of San José Power's upfront transmission interconnection costs. The developer/customer would cover the cost of building facilities that could scale in the future to also serve the nearby future load.
City staff have been in discussions with potential partners about the possibility of this developer financed approach with an initial developer/customer taking on the costs for building out the needed infrastructure and funding the ongoing operations and maintenance of the utility through electrical rates.

This customer focused approach reduces the risk of San José Power constructing infrastructure that becomes stranded if the development doesn't proceed. This model pushes this risk to the developer/customer who has better control over when to build distribution infrastructure to support the development. The developer/customer would also cover the City's staff costs, plus consultants, during the initial build out (and in future phases). The developer/customer would also be responsible for any power generation costs incurred in future phases.

In October, the City brought on NewGen Strategies and Solutions, LLC to develop a business case, financial model, and forecast of providing electric transmission and distribution delivery services to customers in the abovementioned potential service areas. The financial model will include all costs associated with owning and operating an electric delivery utility, amortize and project capital costs, benchmark delivery service to local IOU provider, and other analysis as needed to evaluate competitiveness and understand the viability, desirability, and risks of standing up San José Power.

Staff is in discussions with potential developers/customers in both North San Jose and Downtown. A potential next step could be a Mutual Cooperation Agreement with a preferred developer/customer to take staff's feasibility assessment through the next level of due diligence. Under a Mutual Cooperation Agreement, the potential developer would be granted an exclusive opportunity to develop an agreement to launch San José Power to serve their development(s). The developer/customer would reimburse the cost of the feasibility assessment work undertaken under the Mutual Cooperation Agreement. This work would likely include evaluating the specific infrastructure needs, and further developing and evaluating a business case, staffing plan, and financing strategy necessary to serve the developments and a path for the City to successfully launch a municipal electric utility.

Stakeholder Engagement – IBEW & PG&E

At the October 2023 meeting, Council requested that staff continue collaborating with IBEW and PG&E as we advance the exploratory phase of this work.

Since then, the City has met periodically with IBEW to discuss a range of topics. The Energy Department continues to engage with labor stakeholders including IBEW 332 on long term Power Purchase Agreement project selection criteria. Separately, the City plans to meet with IBEW on potential building electrification workforce development programs. The City Manager's Office has met with IBEW twice to understand their perspective on the City's exploration of a municipal utility, especially concerning staffing. The City plans to continue meeting with IBEW to gather their feedback as we refine the San José Power opportunity analysis.

PG&E, in coordination with the City Manager's Office, has proposed the development of a Memorandum of Understanding (MOU) for cooperation on the economic development of Downtown and North San José through the timely construction of the electrical infrastructure required to support development in those areas and meet the City's decarbonization goals. The MOU is currently being drafted and would commit to providing competitive terms, including certainty and speed for interconnections.

The City continues to engage with PG&E on a regular basis, including standing monthly meetings, and will solicit their feedback on the City's exploration of San José Power. The MOU could impact the desirability of moving forward with San José Power so the final draft MOU will be presented along with the results of the San José Power exploration when staff returns to Council, anticipated in March 2025.

EVALUATION AND FOLLOW-UP

Staff are actively exploring potential options and strategies to secure the financing needed for San José Power in North San José and Downtown San José. The success of this effort will depend on identifying a reliable customer/developer who can cover the upfront infrastructure costs in exchange for long-term access to lower cost electricity. Staff will return to Council in 2025 and present the outcome of the financing strategy, the preliminary results from the business case development, and any recommended action on establishing San José Power as appropriate.

COORDINATION

This memo has been coordinated with the Energy Department, the City Manager's Office of Economic Development and Cultural Affairs, the City Attorney's Office, and the City Manager's Budget Office.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the December 17, 2024 City Council meeting.

COMMISSION RECOMMENDATION AND INPUT

No commission recommendation or input is associated with this action.

CEQA

Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City action shall not result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in 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/
Kip Harkness
Deputy City Manager

For questions, please contact Erica Garaffo, Assistant to the City Manager, Lead Resilience Strategist, City Manager's Office at erica.garaffo@sanjoseca.gov.