



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Lori Mitchell

SUBJECT: SEE BELOW

DATE: July 24, 2023

Approved

Date

8/4/23

SUBJECT: ORDINANCE AMENDING TITLES 2, 4, AND 26 AND ADDING TITLE 28 TO THE SAN JOSE MUNICIPAL CODE TO ESTABLISH A MUNICIPAL UTILITY FOR ELECTRIC SERVICE

RECOMMENDATION

- (a) Approve an ordinance amending Titles 2, 4, and 26 of, and adding Title 28 to the San José Municipal Code to establish a municipal utility called “San José Power” with the ability to provide retail electric service in selected areas of the city.
- (b) Authorize the City Manager to submit an Interconnection Application(s) to LS Power as a Participating Transmission Owner of the California Independent System Operator for wholesale access to the California Independent System Operator Transmission grid at new LS Power-owned facilities to potentially allow retail service at Substation B at Guadalupe Parkway and Coleman Avenue to serve new load in a swath of territory along the rail right of way between Diridon Station and the San José Mineta International Airport; and in North San José Alviso region to serve load for planned development and future City or Valley Water facilities.

SUMMARY AND OUTCOME

Approving amendments to Titles 2, 4, and 26 of, and the addition of Title 28 to the San José Municipal Code would allow the City to file an interconnection application with LS Power for access to the California Independent System Operator (CAISO) wholesale electric transmission grid and allow the City to continue to study and provide electric service to certain areas of the city. The establishment of an electric utility does not obligate the City to actions or costs. Further analysis, consideration, public review, and City Council approval would be required prior to undertaking any obligations.

BACKGROUND

On August 29, 2019, the City Council held a study session discussing general options to improve the resilience, reliability, efficiency, and cost of electric service in the downtown San José area, including the possibility of forming a City of San José-owned public utility.

On February 10, 2020, the City Council authorized the City Manager to file a Wholesale Transmission Service Interconnection Application to Pacific Gas and Electric Company (PG&E) to begin exploration of the option to provide City electrical service to the Downtown West Project.

On September 16, 2022, the City Council held a special meeting to discuss the benefits and risks of providing San José electric service to new developments with a case study for the Downtown West Mixed-Use Development. The City Council unanimously accepted a memorandum from former Mayor Liccardo, which recommended accepting the case study and directed the Community Energy Department to return with additional information and proposed changes to the San José Municipal Code to enable the City to provide electric service to new developments.

Over the past several years, there have been growing concerns regarding the challenges that PG&E is facing with respect to upgrading its distribution infrastructure and interconnecting and energizing projects in a timely manner. Some are highlighted below:

- Preliminary research from the California Public Utilities Commission's (CPUC's) Public Advocates Office indicates the cost of upgrading the distribution grid across the territories of the state's three investor-owned utilities (IOUs) to prepare for electrification could be approximately \$15 billion to \$20 billion by 2035¹, while a recent report conducted for the CPUC estimated that figure would be over \$50 billion.² This is roughly an order of magnitude more than the projected costs needed for the system over this same timeframe. Such a large investment projection raises questions about the distribution system and whether the status-quo approach to meeting our decarbonization goals is sufficient.
- PG&E's capital budget for its transmission and distribution system is approximately \$9 billion per year³. The *San Francisco Chronicle* reported that PG&E requested a \$7 billion loan from the Department of Energy to cover the gap between funds it can raise from its balance sheet as authorized by the CPUC and what is required to finance currently approved projects. This includes burying powerlines for its Wildfire Mitigation Plan, a goal it was forced to decrease from 3,300 to 2,100 miles this year.⁴
- Many cities have confirmed project delays across PG&E service territory. Hundreds of projects have been delayed or canceled, spanning new housing (including affordable),

¹ [Public Advocates Office study on the costs of upgrading the distribution grid for electrification](#), Public Advocates Office, June 5, 2023

² [Electrification Impacts Study Part 1](#), Kevala, Inc. for CPUC, May 9, 2023

³ Discussed during PG&E Presentation, CAISO Transmission Forum, January 25, 2023

⁴ San Francisco Chronicle, [PG&E Seeks Major Federal Loan to Meet Soaring Demand for Electricity](#), June 29, 2023

hospital, emergency service, and other building interconnections; utility-scale renewable energy projects; and electric vehicle charging station interconnections. A coalition of cities, community choice aggregation providers, and business groups joined a coalition letter to advocate with the Governor’s Office, legislative leadership, and the CPUC to prioritize solutions to interconnection delay issues in the current legislative cycle (see **Attachments I** - Interconnection Coalition Letter and **II** - News Articles Regarding PG&E Delays).

- On May 24, 2023, the California State Assembly Committee on Utilities and Energy hosted an oversight hearing⁵ to address mounting complaints on interconnection and energization delays located disproportionately in PG&E service territory. Several legislative proposals seeking to address interconnection delay issues were introduced, and a few are still moving in the legislature.

Grid Interconnection Backlog Issues

There is currently a significant backlog for interconnection of new loads to the electric grid. For smaller projects, the backlog averages over one year. For larger projects, especially those that require upgrades to the bulk distribution system, the backlog is as much as seven years.⁶

In fall of 2022, PG&E reordered its project backlog to give priority to safety-related wildfire hardening projects, pushing interconnection of new residential, commercial, and industrial loads to the back of the line.⁷ The problem is likely to worsen as policy-driven transportation and building electrification initiatives begin to achieve success. In an April 2023 filing at the CPUC, PG&E indicated that it only has 50% of the capital required to address all the currently approved grid needs.⁸ Interconnection delays jeopardize a wide range of critical initiatives from housing to economic development to public transit to the achievement of important goals for sustainability and resilience.

ANALYSIS

New CAISO Transmission Lines

In March 2022, the CAISO approved the construction of two new high voltage direct current (HVDC) transmission lines into San José⁹. CAISO is a State chartered non-profit corporation that manages the wholesale electricity market for 80% of California and operates approximately 27,000 miles of transmission lines in the State. These new HVDC lines will be owned by LS Power, with usage paid for by all ratepayers through transmission rates. These lines are scheduled to be completed by June 1, 2028 for a first phase of a larger project scheduled to be completed in 2035. They will provide new transmission capacity into the “San José Sub Area” of

⁵ California State Assembly Committee on Utilities and Energy, [Informational Hearing Background](#) May 24, 2023

⁶ STAR Process June 1, 2023 Transmittal Letter, See also: [CAISO Transmission Forum](#), April 25, 2023

⁷ California ISO [Transmission Development Forum Update-Memo-Dec 2022](#), Dec 7, 2022, p.2

⁸ CPUC R.21-06-017, [PG&E Answers to ALJ Ruling Re Distribution Planning Process](#) April 10, 2023

⁹ California ISO <https://www.caiso.com/Board-Approved-2021-2022-Transmission-Plan>, March 17, 2022, p.8

the electric grid and will primarily serve the cities of San José and Santa Clara. The new transmission lines will significantly increase the electrical capacity of the region. This capacity increase is needed to support economic growth in the region and a forecasted doubling of electric load to serve electrification of the transportation sector, including not only light duty electric vehicles but also transit and school bus fleets, commercial delivery fleets, electrification of Caltrain, the BART extension, and High-Speed Rail. They are also needed to support building electrification including building space conditioning and domestic water heating.

These HVDC transmission lines serve as “freeways” to bring energy from sources like solar from the Central Valley to the load centers of San José and Santa Clara. The lines will be connected to the existing distribution grid at two locations: 1) The first line will start near Metcalf and connect underground near Monterey Road to the existing San José B Substation near Guadalupe Parkway and Coleman Avenue where several major transmission lines converge; and 2) near Alviso to serve new load in that area plus connect to the transmission and distribution grid owned and operated by Silicon Valley Power, the Santa Clara Municipal utility (see **Attachment III** - LS Power HVDC Projects Overview for a description and map). The direct current nature of these new lines provides not only the incremental energy, but also the flow and voltage control necessary to manage congestion on the grid to maximize capacity, reliability, and resilience of the existing infrastructure.

Significant investments are required to upgrade the existing electric distribution system to both distribute the energy delivered over the new HVDC transmission lines and allow for an increase in distributed energy resources such as solar energy from residential and commercial rooftops. There are concerns that PG&E is not prepared due to the interconnection backlog discussed above. Given the magnitude of the challenge and financial constraints of the recent bankruptcy¹⁰ and the focus on improving infrastructure to prevent wildfires, there is measurable risk that PG&E will fail to meet the challenge in a timely, cost-effective manner.

The construction of the two HVDC lines establishes new interconnection points that directly access the transmission grid operated by the CAISO at locations ideally suited to serving a meaningful portion of City loads without dependence on either existing PG&E transmission or distribution infrastructure. Planning for these interconnections now during the engineering/permitting phase of the HVDC lines project ensures the City has options to connect future infrastructure without prematurely committing significant capital. It is more cost effective to submit an interconnection application now during the design phase than to wait until they are constructed. It is also likely that other developers will be interested in connecting to these lines which may make it cost prohibitive to connect in the future due to the capacity constraints and infrastructure upgrades that may be required.

¹⁰ CPUC A.22-10-011, [Decision Authorizing Pacific Gas and Electric Company to Issue up to \\$10.5 Billion in Debt Services](#), April 27, 2023

Previous Analysis – Microgrids

As directed over the past three years, staff has analyzed the benefits of providing electric service to enable larger microgrids that increase clean energy and resiliency of new developments. A microgrid is a defined region of the larger grid that contains internal energy generation that can maintain service to critical loads within the microgrid during a bulk grid outage. In 2021, staff retained legal counsel to advise on the ability to provide this service and concluded the City possesses the statutory authority to form a municipal utility such as San José Power. Further, counsel affirmed that the ordinance as proposed is consistent with similar ordinances adopted by other municipalities in California.

In 2021, staff retained Flynn Resource Consultants Inc to analyze the benefits and risks of the City providing this service. This study analyzed the opportunity for the City to partner with developers to achieve the shared objectives of providing reliable, resilient, carbon-free power to customers within a new development at a competitive cost compared to traditional IOU service. The base case in the case study estimates rate savings for City electric service is in the range of 15-25%. This is in line with demonstrated experience from small and large public utilities throughout California. Lowering utility rates is an important factor in retaining and attracting businesses in many fields, including manufacturing. Decreasing power rates by 15-25% would be a powerful tool in the City’s retention and attractiveness of new development.

	Residential Rates Compared to IOU	Non-Residential Rates Compared to IOU
Silicon Valley Power (City of Santa Clara)	48% Lower	26%-38% Lower
Sacramento Municipal Utility District	33% (Avg.) Lower	31%-48% Lower
Alameda Municipal Power	15%-32% Lower	11%-19% Lower
Los Angeles Department of Water and Power	31% Lower	7%-27% Lower

Rate savings for City electric service customers versus IOU customers come from two principal sources. First, the cost of City electric service is lower because a City-owned electric utility will charge cost-based rates without payment of state and federal taxes or shareholder returns. Municipal utilities are non-profit entities. IOUs typically earn a five-to-eight percent after tax rate of return on investments and pay shareholder dividends.¹¹ A City electric utility would not earn a profit or pay shareholder returns; however, City electric utility costs do include a payment to the City – in-lieu of lost franchise fees, utility taxes, and property taxes that would have otherwise been paid by IOU customers to ensure General Fund revenues are not impacted. Second, municipalities, being tax exempt typically have a lower cost of borrowing than IOUs. These differences result in 15-25% rate savings. For a typical manufacturing facility that utilizes 9,500 megawatt hours annually, this would reduce their annual utility bill by \$330,000 to \$550,000.

¹¹ CPUC [Cost of Capital Proposed Decision](#), Nov. 9, 2022, pg. 1 Table

Stress testing in the study identified the following three most critical uncertainties around the comparison between City electric service and IOU service: 1) the accuracy of the load forecast. If the load is small, fixed costs from operating the utility could erode rate savings. It will be important to ensure the load served is large enough to reliably generate savings; 2) uncertainty around future IOU benchmark rates and how costs are recovered. Regulatory/legislative changes or new taxpayer subsidies to utilities can erode the cost differential between IOU and municipal service without fundamental changes in the underlying economics; and 3) staffing levels to operate and maintain a relatively small electric utility. These risks will need to continue to be studied and mitigation strategies will need to be implemented before proceeding.

In addition to the potential cost savings for customers, the City would have the ability to adopt design and construction standards for electrical infrastructure. This could allow for advanced microgrids in new developments and City facilities that could accommodate more onsite clean distributed energy resources, lower greenhouse gas emissions, and improved reliability and resiliency than would be possible under PG&E standards. This could help the City achieve its carbon reduction targets and increase the construction of housing and other developments in the City by reducing utility costs.

Further analysis is needed to quantify the benefits and the risks associated with the provision of San José Power service to City services and to individual new developments; however, approving the recommendations in this memorandum preserves the option to submit an interconnection application(s) to LS Power and allows staff to continue analyzing the benefits and risks of providing this service. Further recommendations would need to be brought forward to City Council for consideration prior to providing this service. It is expected that this process will take several years. At a minimum, future City Council considerations and direction would include the following items:

1. Transmission interconnection agreements with transmission owners and operating agreements with the CAISO prior to activation of distribution facilities;
2. Rules and regulations for operation of San José Power;
3. Power procurement and risk management processes;
4. Facility transfers agreements with developers prior to assuming ownership of developer constructed distribution facilities;
5. Staffing plan and the creation of new union classifications to support operations; and
6. Rates and tariffs based on a cost-of-service study to determine revenue requirements and ensure recovery of those revenue requirements from customers.

Summary of Proposed San José Municipal Code Revisions

State law requires that the Local Regulatory Authority of a Publicly Owned Utility providing electric service certify that the facilities operated by such utility conform to CPUC standards for safe and effective operations. The City Council will be the Local Regulatory Authority for the City's municipal electric utility, which will be named "San José Power." Under Title 2, Part 42, of the San José Municipal Code, the Director of Public Works is the Chief Engineer for City-

owned facilities. The proposed ordinance amending the San José Municipal Code would add the following general functions, powers, and duties to the Director of Public Works:

1. Develop, maintain, and update design and construction standards for San José Power's electric utility system;
2. Supervise and manage the design and construction of all work or improvements of the San José Power electric utility system as approved by the City Council;
3. Develop and negotiate agreements and obtain any permits and licenses as necessary to design and construct the San José Power electric utility system; and
4. Direct the engineering and construction of San José Power's electric utility system.

Title 2, Part 46, of the San José Municipal Code established the Community Energy Department and assigned functions, powers, and duties to the Director of the Community Energy Department. The proposed ordinance would change the name of the Community Energy Department to the "Energy Department" to reflect the establishment of two new divisions: an electric utility division to administer San José Power, and a community energy division to administer San José Clean Energy, which will continue to operate as a community choice aggregation program. In addition, the ordinance will add functions to the Director of the Energy Department for the operation of San José Power. Staff recommends that San José Power utilizes union labor similar to other City operations. For operational efficiency it is expected that the Energy Department will utilize some existing staff to procure power, provide customer service, maintain regulatory compliance, and other functions for both San José Clean Energy and San José Power; however, costs associated with the programs will be tracked separately and funds will not be commingled.

The proposed ordinance would amend Title 4 of the San José Municipal Code to establish the San José Power Operating Fund. All monies derived from the operation of San José Power, including but not limited to revenues from sale and delivery of electricity, payments from other entities, and any financing proceeds associated with the electric utility shall be deposited in the San José Power Fund. Monies in this fund shall only be expended for costs to operate and finance the utility and shall be appropriated on an annual basis through the budget process as directed by the City Council. This fund should also include appropriate reserves to stabilize rates and pay for future operations, repairs, and maintenance of the distribution system.

The proposed ordinance would amend Sections 26.10.106 and 26.20.010 of Title 26 to reflect the departments name change from the Community Energy Department to the Energy Department (see **Attachment IV** - Proposed Organization Chart).

The proposed ordinance would add Title 28 to the San José Municipal Code and establish a City electric utility named San José Power. Title 28 may need to be amended following future City Council consideration and direction to implement the new enterprise. The proposed electric utility would:

- Provide full electric service to service areas within the City's boundaries including power procurement, distribution, metering, and billing services for select new developments and certain City facilities;
- Be managed by the Energy Department for the operations and maintenance of the San José Power electric system including generation, transmission, and distribution infrastructure; infrastructure development would be managed by Public Works;
- Be subject to a Risk Management Policy, which may be combined with the policy applicable to San José Clean Energy;
- Set rates by resolution duly noticed to customers; and
- Comply with all regulatory and compliance obligations, metering, and billing operations.

EVALUATION AND FOLLOW-UP

Staff will bring forward additional recommendations as needed for consideration to allow for a cleaner and more reliable electric grid. If City Council approves, staff will submit the interconnection application. This process will inform the City of the cost required to interconnect to the LS Power transmission lines which will provide the basis for further analysis on the rates and potential service areas. If economically feasible, staff will bring forward additional recommendations for the initial service areas and expected cost reductions.

COST SUMMARY/IMPLICATIONS

No capital commitments are associated with this proposed City Council action. The cost to cover staff and consulting time associated with filing the interconnection application and continuing to analyze this option is estimated at \$120,000, which will be paid from the Climate and Seismic Resilience Planning City-Wide Expenses appropriation in the General Fund.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office, City Manager's Budget Office, Economic Development and Community Affairs, and the departments of the Airport, Environmental Services, Finance, Public Works, and Transportation.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the August 15, 2023 City Council meeting.

COMMISSION RECOMMENDATION AND INPUT

The contents of this memorandum were presented to the Clean Energy Community Advisory Commission (Commission) on July 13, 2023. The Commission issues its recommendation as follows: The Clean Energy Advisory Commission supports the staff recommendation. The delays from PG&E in connecting a range of new projects with electrical service and its failure to maintain a reliable, resilient distribution system present risk to the City. The Commission agrees that preserving the opportunity to connect to the new high-voltage transmission lines being constructed in San José makes sense to preserve the City's ability to ensure continued growth and meet City and State goals for electrification.

CEQA

Not a Project, File No. PP17-008. General Procedure and Policy Making resulting in no changes to the physical 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, Community Energy

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

Attachments:

Attachment I – Interconnection Coalition Letter

Attachment II – News Articles Regarding PG&E Delays

Attachment III – LS Power HVDC Projects Overview

Attachment IV – Proposed Organization Chart

ATTACHMENT I: INTERCONNECTION COALITION LETTER



Planning and Development Department
Office of Energy and Sustainable Development

April 26, 2023

Over 35 organizations urge the California Legislature to address the state’s interconnection crisis and ensure timely and equitable access to the electrical grid

We the undersigned parties — representing cities, towns, and counties; Community Choice Aggregators; and energy, rural, business, and environmental and climate groups — urge California policy makers to take urgent action to address unacceptable delays in connecting new construction, critical services, renewable energy, building decarbonization, and other projects to the state’s distribution and transmission grids.

California is facing an unprecedented climate crisis and is pursuing bold efforts to transition to zero-carbon energy. At the same time, California has a housing availability and affordability crisis which demands the rapid construction of new housing. These goals cannot be realized because many projects cannot connect to the power grid. Interconnection delays, ranging from months to years, harm residents, businesses, local job creation and economic development efforts, and state and local economies.

ATTACHMENT I: INTERCONNECTION COALITION LETTER

Severely delayed and abandoned electrical projects are a growing problem in communities throughout California. Hundreds of local projects spanning rural to urban have been delayed or cancelled, including service extensions to new affordable housing units and critical service sites ranging from hospitals to police/fire stations. Hookups for new electric vehicle charging stations and utility-scale and customer-sited renewable energy projects are also in peril. Examples of impacted projects are provided in the attached appendix.

Interconnection delays and resulting project cancellations threaten California's ability to respond to the climate and housing crises; prevent Californians from accessing important critical services; and harm communities by increasing project costs and reducing job opportunities.

We respectfully urge California policy makers to take immediate and decisive action to ensure interconnection and service extensions to new construction, renewable energy, building decarbonization, and other electrical projects are completed in a timely manner.

We stand ready to partner with you to identify the root problems and develop solutions to ensure that the state can achieve its ambitious climate, housing equity, and economic development goals.

Thank you for considering our request.

Sincerely,

Cities, Towns, and Counties:

The County of Humbolt

The City of Arcata

The City of Eureka

The City of Fortuna

The City of Rio Dell

The City of San Jose

The City of Berkeley, Office of Energy and Sustainable Development

The City of Piedmont

The City of Oakland

The City of Pleasanton

The City of San Jose

The Town of Danville

The Town of San Anselmo

Devin T. Murphy, Mayor, The City of Pinole

Kerry Hillis, Councilmember, The Town of Moraga

Laura Hoffmeister, Mayor, The City of Concord

Kevin Haroff, City Councilmember and Former Mayor, The City of Larkspur

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Chance Cutrano, Mayor, and Barbara Coler, Vice Mayor, The Town of Fairfax **The opinions expressed are those of these individual Councilmembers and are not representative of the entire Council or Town of Fairfax unless otherwise stated.*

Community Choice Aggregators:

Central Coast Community Energy
East Bay Community Energy
Valley Clean Energy
Redwood Coast Energy Authority
MCE
Pioneer Community Energy
Sonoma Clean Power
San Diego Community Power
Silicon Valley Clean Energy
Desert Community Energy
Clean Power Alliance
Peninsula Clean Energy

Energy Groups:

California Energy Storage Alliance
California Solar & Storage Association
Solar Energy Industries Association
Sunnova

Environment and Climate Groups:

Napa Climate NOW!
The Climate Center
California Environmental Justice Alliance

Rural Groups:

Rural County Representatives of California
California Farm Bureau

Business Groups:

Data Center Coalition
Joint Venture Silicon Valley
California New Car Dealers Association

ATTACHMENT I: INTERCONNECTION COALITION LETTER

Appendix

Community Choice Aggregator (CCA) Survey:

The interconnection and service extension delays below were compiled by CCAs surveying delayed projects in their territories. While this list is not comprehensive, it is representative of the scale of this problem.

Delayed service extensions to new/upgraded load:

Alameda County	Jail and Net Energy Metering Aggregation (NEMA) structure.
Yolo County	Significant delay for interconnection of a major facility designed to service the agriculture industry in Yolo County, located in a key transportation access parcel. The applicant is considering other business options due to ongoing obstacles.
The City of Albany	Upgrades to residential projects including solar panels.
The City of Berkeley	Solar system for mental health clinic, designed as a Zero Net Energy site.
The City of Davis	Delays in getting electric upgrade for a much-used community facility, and other city capital improvement projects and private development projects. The recent opening of a long-planned community homeless center project required a significant effort by the city, county, and private stakeholders to ensure the center received electrical interconnection so that the project would remain on schedule.
The City of Dublin	Car dealership and a three-building strip mall.
The City of Eureka	Transitional housing, commercial properties, and residential properties.
The City of Rio Dell	Various commercial projects.
The City of San Francisco	The City of San Francisco has reported (here) 136 interconnection delays since October 2018 including 519 units of affordable housing, a library, the Muni, an elementary school, academic buildings, a fire boat, recreational centers, educator housing, traffic signals and safety streetlighting, and water pump stations.
The City of San Jose	Diridon Station Area, which is a critical Bay Area transit hub for BART, light rail, ACE, other commuter trains, and eventually High-Speed Rail, faces delayed interconnection for up to four to five years. It will also include significant office space and 4,000 homes (1,000 of which will be affordable units).
The City of San Leandro	Joint-trench undergrounding project.
The City of Tracy	Commercial development projects.

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The City of Winters	New lighting in a city park, new homes, and a pump for a storm drain facility.
The City of Woodland	For the past several years, there has not been a single new construction project that has not suffered some level of financial impact due to interconnection service delays. One company, brought to California through a State Agency grant to help with recycling of carpets for repurposed use, walked away from its multi-million-dollar investment due to the delays in receiving electrical service, even though in 2018 electrical service was promised in a timely manner so the facility could be operated. This has resulted in the loss of over 30 jobs to the city.
The Town of Windsor	Commercial warehouses (500,000 square feet).

Delayed interconnection of CCA utility-scale renewable energy projects:

East Bay Community Energy	3 utility-scale projects totaling 173.13 MWs (nameplate capacity: 1 wind, 1 solar, 1 solar + storage)
California Choice Energy	1 utility-scale renewable energy project of 15 MWs (nameplate capacity: storage)
Central Coast Community Energy	2 utility-scale renewable energy projects totaling 97.5 MWs (nameplate capacity: solar, solar + storage)
Clean Power Alliance	3 utility-scale renewable energy projects totaling 360 MWs (nameplate capacity: 3 solar + storage projects)
Desert Community Energy	1 utility-scale renewable energy project of 50 MWs (nameplate capacity: solar + storage)
Silicon Valley Clean Energy	3 utility-scale renewable energy projects totaling 135 MWs (nameplate capacity)
Sonoma Clean Power	1 utility-scale renewable energy project for 19.6 MWs (nameplate capacity: solar + storage)

Media Coverage:

[Need power in California? Get in line](#)

Politico / April 21, 2023

[Interconnection Delays Disrupting Housing Markets, Causing 'Chaos'](#)

California Energy Markets / March 17, 2023

[New Northern California housing often sits empty, waiting for PG&E to turn on the lights](#)

San Francisco Chronicle / March 10, 2023

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[Bills aim to fix California's long delays in connecting construction projects to the grid](#)
North Bay Business Journal / March 10, 2023

[How PG&E Adds Months-Long Delays, Costs to New Housing](#)
KQED / March 10, 2023

[Delays in connecting new homes to power grid get scrutiny in California](#)
Politico / March 3, 2023

[Opening delayed for new Vallejo housing for homeless](#)
Vallejo Sun / January 31, 2023

[Muni Blames PG&E for Spiraling \\$15M Costs, Years of Delays in Train Upgrade Struggle](#)
The San Francisco Standard / December 13, 2022

[PG&E tells some Sonoma County projects that power connections could take up to 18 months](#)
North Bay Business Journal / December 1, 2022

[Power connection work delays local development projects](#)
Bakersfield Californian / November 26, 2022

[PG&E Execs Gets an Earful, Offer Update on SoHum Capacity Problems](#)
Lost Coast Outpost / November 2, 2022

[Jim Wood calls out PG&E over capacity issues in Southern Humboldt](#)
Times Standard / November 2, 2022

[In Power Struggle, Fresno Leaders Threaten to Ditch PG&E](#)
GV Wire / October 31, 2022

[California homes face PG&E delays for power connections. Frustrated leaders seek options](#)
Fresno Bee / October 28, 2022

[PG&E's Electricity Transmission Limits Threaten to Throttle Development Throughout Southern Humboldt, Blindsiding Local Officials](#)
Lost Coast Outpost / September 19, 2022

['Edge of the Cliff': PG&E's Lack of Electricity Capacity Puts Eel River Valley Projects at Risk](#)
North Coast Journal / September 15, 2022

[Opinion: PG&E delays are costing San Franciscans time and money](#)
San Francisco Examiner / February 4, 2022

NEWS > HOUSING • News

PG&E connection delays add to California's housing woes, advocates say

State lawmakers will consider a bill to force PG&E to more quickly add new housing projects to the grid



Jane Tyska/Bay Area News Group

A PG&E worker repairs a power line after a branch fell on Sunkist Drive in Oakland, Calif., on Tuesday, Nov. 1, 2022. (Jane Tyska/Bay Area News Group)

By **ETHAN VARIAN** | evarian@bayareanewsgroup.com | Bay Area News Group

PUBLISHED: March 20, 2023 at 5:45 a.m. | UPDATED: March 21, 2023 at 5:50 a.m.

Add waiting for the lights to turn on to the laundry list of delays holding up urgently needed housing in California



ATTACHMENT II: NEWS ARTICLES REGARDING PG&E DELAYS

Newly constructed apartment buildings across the northern half of the state are sitting empty for months as Pacific Gas & Electric Co. drags its feet connecting them to the power grid, according to developers and housing advocates. They say the utility's increasingly slow pace is also driving up building costs, creating yet another challenge to solving the state's worsening housing crisis.

This month, Scott Wiener, a Democratic state senator from San Francisco, crafted a bill to force PG&E and other utilities to install power hookups at residential and commercial construction sites no more than eight weeks after projects receive the necessary permits. Otherwise, utilities would be required to pay developers to compensate for the wait.

"We want to send a strong message that the lights need to go on fast," Wiener said at a news conference announcing the bill. "And no more delays by PG&E."

Power connections historically have taken about six to eight weeks. In recent years, however, it's been taking much longer, as many as 28 weeks, to get power, said the Construction Employers Association, one of the labor unions behind the new bill. PG&E says its average wait time for multifamily projects is just over eight weeks, but acknowledged there have been delays.

In a written statement, the utility acknowledged the "real-world impacts that delays have on our customers" and said it is working with the construction industry on improving and streamlining its process and "accelerating timelines" for energizing new buildings.

But passage of Wiener's bill would leave it no choice but to increase customer's utility rates, PG&E said. Customers' bills soared this winter as natural gas prices [skyrocketed](#).

In an interview, Wiener said PG&E officials have blamed the delays on staffing shortages and the increased resources diverted to [upgrading](#) the utility's aging equipment.

But Wiener was hardly convinced by that explanation. Like other politicians across the state, he has taken a hard line with PG&E since its electrical lines have sparked deadly wildfires and triggered power shutoffs over the past decade.

"You can't decide we're going to become a dominant corporate goliath with a huge monopoly and then make excuses for why you can't provide service," he said. "They need to figure it out. Period."

Last month, 134 construction-ready projects — comprising hundreds of new housing units and other types of development — had been waiting on PG&E power hookups for longer than eight weeks, according to state data compiled by Wiener's office. Of those, 95 had been delayed for over 12 weeks.

San Francisco-based Mission Housing was one of the developers left waiting on PG&E to provide power to recently completed accessory dwelling units for seniors in the city.

"There are high quality, 100% affordable housing units for families and seniors sitting vacant right now because PG&E won't turn on the lights," Sam Moss, Mission Housing's executive director, said at the news conference.

In some rural parts of the state, meanwhile, PG&E has effectively paused new power hookups because of limits on transmission capacity. The utility [blamed the cannabis industry](#) in Humboldt County for boosting electricity demand there and overloading the local grid.

Corey Smith, executive director for the Housing Action Coalition, a pro-housing group sponsoring the legislation, Senate Bill 86, said the growing wait times are only the latest among the challenges slowing housing construction in notoriously bureaucratic California.

Developers have long spent an inordinate amount of time planning how to secure the plethora of city approvals, construction permits and financing agreements before getting shovels in the ground, Smith said. Any setback in that process can trigger further delays, driving up costs and jeopardizing the financial viability of projects.

Housing advocates also cite high development fees, lengthy environmental studies and local zoning rules restricting where multifamily housing can go as barriers to building more homes. That's to say nothing of the [increasing costs of land, labor, materials and taking out construction loans](#), or the [severe lack of funding to subsidize low-income housing](#).

Since 2016, lawmakers have signed [nearly a hundred housing bills](#) to help streamline parts of the local planning and permitting process. But backers say even more reforms like SB 86 are needed for California to meet its goal of [adding roughly 2.5 million more homes](#) for people of all incomes by 2030. That would mean building an average of about 300,000 more units each year. The state currently [only produces about a third of that amount](#).

Smith said the sense of urgency is mounting to alleviate the "human cost" of not building enough housing in the state, where more than a quarter of renters [spend over 50% of their income on housing costs](#) and the homeless population has grown to over 170,000 people.

"All of the work and the effort we're doing is to try and find homes for people," he said.

ATTACHMENT II: NEWS ARTICLES REGARDING PG&E DELAYS

Tags: [Affordable Housing](#), [Editors' Picks](#), [Housing Crisis](#), [Housing Development](#), [PG&E](#), [PM Report](#), [Politics](#), [Real Estate](#), [Regional](#)

 Author **Ethan Varian** | Housing Reporter

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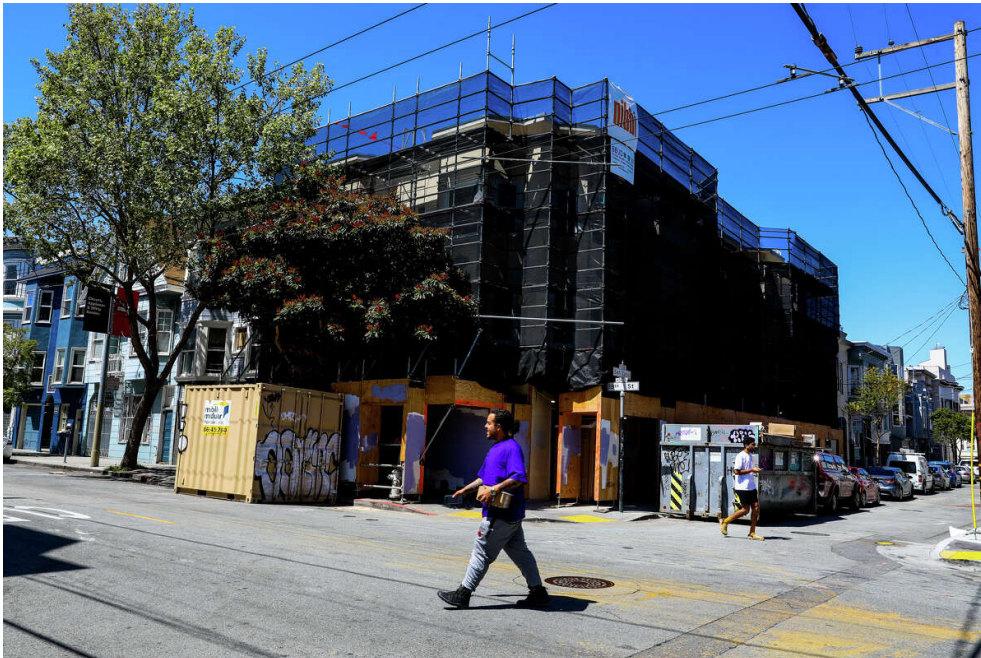
POLITICS

Big holdup for new Northern California housing? PG&E

Dustin Gardiner, Julie Johnson

Updated: March 10, 2023 11:57 a.m.

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Mission Housing recently completed construction an an accessory-dwelling unit project at San Carlos and 18th St. in San Francisco. But residents can't move in until PG&E connects the building to the grid.

Yalonda M. James/The Chronicle

UPDATE: [S.F. blames PG&E for \\$41 million in expenses and delays to affordable housing projects](#)

Hundreds of newly constructed apartment buildings and businesses in Northern California are sitting empty at any given time because the projects must wait on one entity, [Pacific Gas and Electric Co.](#), to turn on the lights.

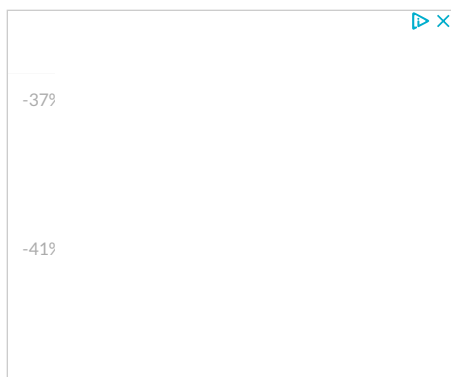
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PG&E, the state's largest utility, has long had a bad reputation among builders for the pace at which it connects buildings to the electrical grid, a process known as interconnection that occurs before a finished building can be occupied. But housing advocates and developers say those delays have grown increasingly worse in recent years, forcing many to leave buildings vacant for months amid the [state's worsening housing shortage](#).

There were 319 commercial and multi-family buildings waiting for PG&E to turn on power as of late February, according to PG&E data obtained by state Sen. Scott Wiener's office. Of those, 134 buildings had been waiting for more than two months and 95 had been waiting for more than three months.

Even worse, builders in some rural counties are being told they may have to wait many months or even years to connect new homes and businesses to the grid.

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"It's completely unacceptable for completed projects to just sit there gathering dust because PG&E can't get it together to turn on the power," Wiener, D-San Francisco, told The Chronicle. "We're in the middle of a housing crisis."

The issue is drawing deeper scrutiny at the state Capitol this legislative session as pro-housing advocates and builders examine how the state could force PG&E and other utilities to provide hookups in a quicker timeframe.

Wiener said he plans to unveil a bill Friday that would require investor-owned utilities to complete interconnection within eight weeks after a building is "green tagged," meaning local officials have inspected construction work and signed off on connecting it to the grid.

Under the measure, [Senate Bill 83](#), utilities that don't turn the power on for new and existing buildings within that timeframe would be required to financially compensate the project developer.

PG&E said it's working to speed up electric connections for new customers. But the company's resources have been taxed by urgent work [preventing wildfires](#) that have "required significant financial and workforce resources," PG&E spokeswoman Lynsey Paulo said. The company's [service territory](#) covers much of northern and central California.

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“We do understand there are real-world impacts that delays have on our customers,” Paulo said. “We’re committed to making it right.”

But Wiener and supporters of SB83 say the utility must do both — prevent its equipment from sparking wildfires and provide timely connections to help California address the housing shortage. “PG&E can’t just throw up their hands, which is what they’ve been doing,” Wiener said.



State Sen. Scott Wiener unveils a bill that would require investor-owned utilities to complete interconnection within eight weeks after local officials have signed off on connecting a new building to the grid.
Michaela Vatcheva/Special to The Chronicle

Since 2018, the San Francisco Public Utilities Commission has tallied nearly 140 projects it claims have been delayed by PG&E. Some are small, like new traffic signals, but others are significant affordable housing projects.

Barbara Hale, assistant general manager of power for the commission, said PG&E has routinely approved projects then balked once it’s time to energize them, causing delays.

“That’s a core function — planning and managing your assets,” Hale said. “And it seems like they are failing at that.”

ATTACHMENT II: NEWS ARTICLES REGARDING PG&E DELAYS

San Francisco's accounting of these projects is part of a case the city is building to take over PG&E's power lines and other electric infrastructure within its jurisdiction. Wiener said the delays bolster the city's case to form its own utility. A \$2.5 billion offer has been on the table since 2019, but PG&E has rejected it, saying its assets are worth far more.

Meanwhile, the delays have cost ratepayers, taxpayers and the city an estimated \$28 million in the form of lost revenue in the past four years, according to the commission.

PG&E company representatives meet with the city almost weekly to discuss projects and priorities, Paulo said. "We make every effort to respond promptly to all requests," she said.

Sam Moss, executive director of Mission Housing Development Corporation, one of the city's most prolific nonprofit builders, said egregious delays have become the norm, even when builders do everything right. For instance, he said Mission Housing recently completed construction of three accessory dwelling units for senior housing on 18th Street, which PG&E has known about for two years, but the utility could take months longer to turn on the power.

"The only thing you can count on with PG&E is obtuseness and not being direct and not being helpful," Moss said. "The most frustrating thing is the black box nature of it."

He said another Mission Housing project, [Kapuso at the Upper Yard](#), a 130-unit affordable project next to the Balboa Park BART station, was forced to use fuel-powered generators during the construction process because PG&E wouldn't provide a temporary hookup from its power junction on the street. Moss said such hurdles have cost the nonprofit "hundreds and hundreds of thousands of dollars."

State legislators have passed dozens of bills in the past five years aimed at [speeding up construction of new housing](#), most of which have focused on eliminating [barriers to construction](#) at the city level.



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Builders and housing advocates say those efforts to stop political opposition from blocking new housing at the local level have helped expose utilities' roles in delaying interconnections. While PG&E is the most notorious, data provided by Wiener's office also shows delays among another large utility.

Southern California Edison Corp., which services much of the Los Angeles metro area, had 17 commercial and multi-family projects waiting for more than one month for power hookups as of late February, according to data the company provided to

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Wiener's office. San Diego Gas & Electric Co. did not provide data, though it said most buildings are energized within 30 days after all requirements are met, with "few exceptions."

Delays getting power for new buildings are often the most glaring outside the state's major population centers.

Last fall, PG&E told Humboldt County that it wouldn't connect any new projects in the southern part of the county — no new houses, no new commercial properties — and even told local officials they would face significant delays for smaller projects like backup batteries.

State Sen. Mike McGuire, who represents the area, said the utility was essentially barring any growth for a region that is desperate for new economic activity and preparing to welcome a major offshore wind project. The county is also required, by the state, to build 3,390 new homes by 2027.

"We were blown away," said McGuire, D-Healdsburg. "It's become clear (PG&E) can't keep up with current and growing capacity for electricity."

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The utility, which, [according to local news reports](#), originally blamed cannabis farms for the energy pinch, has since met with outraged Humboldt County officials and promised to boost the region's energy capacity within 36 to 48 months, McGuire said.

Paulo, with PG&E, said the company is working to overcome challenges presented by the region's remote and rugged terrain and has committed to increasing service over the next several years.

In the Central Valley, where the state's population is growing the fastest, a group of builders last fall accused PG&E of imposing "a de facto moratorium on new home construction in Fresno and Madera counties." In a letter to state utility regulators, the Building Industry Association's Fresno and Madera counties chapter said PG&E had furloughed all contract crews that would have energized new residential subdivisions and said new connections would take five months.

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“We can’t build enough homes as it is,” Mike Prandini, president of the association chapter, told The Chronicle. “And it’s making it worse with the slowdown caused by PG&E.”

A home must be energized in order for a sale to go through. If the deadline for closing escrow has passed, a buyer must re-apply for a new loan. That can have devastating implications when mortgage interest rates are rising – putting homebuyers at risk of not qualifying for a loan with higher interest rates.

Meanwhile, many buyers had already given notice to landlords, sold current homes, made moving plans and would be devastated by further PG&E connection delays, the Building Industry Association wrote to state regulators.

After the association’s letters, PG&E fast-tracked the most critical cases where home sales in new developments were at risk of falling through, Prandini said. The group’s members are tentatively encouraged that PG&E executives seem to be aware and attentive to the problem, he said.

PG&E said it was working closely with developers, builders and others, including the California Building Industry Association, to streamline and speed up new electric interconnections.

Still, the frustration over slow utility hookups is growing in Sacramento. Some lawmakers said California’s push can’t rely on piecemeal negotiations between local officials and utility executives, especially as most of the state struggles to meet its housing targets.

The state has about 2 million fewer housing units than its population needs. It must construct 180,000 units each year to keep pace with existing demand, but California is only building about 80,000 units per year.

McGuire said he wants the state to conduct a systemwide capacity analysis of PG&E to learn about issues like insufficient transmission infrastructure and head off problems like those that occurred in Humboldt County. He’s drafting a bill to that effect.

Including SB83, six measures have been proposed at the state Capitol this year to require utilities to speed up interconnections. Most of the bills are still being drafted and only include intent language. Wiener’s bill is the most sweeping measure on the table so far.

His bill is sponsored by the Housing Action Coalition, an advocacy group, and several unions for construction workers, including the California Conference of Carpenters, California State Council of Laborers and International Union of Operating Engineers.

Corey Smith, executive director of the Housing Action Coalition, helped write SB83 and spoke with many builders and labor groups about what timeframe is reasonable for utilities to provide connections. He said the eight-week deadline in the bill is a generous timeline for utilities when most hookups could be completed within days.

“It’s worse today than it’s ever been,” Smith said. “Finding projects that are being delayed is easier than finding projects that are not being delayed.”

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Written By
Dustin Gardiner

Reach Dustin on

Dustin Gardiner is a state Capitol reporter for The San Francisco Chronicle, with a special emphasis on covering policies related to the housing crisis, climate change, social inequities and LGBTQ rights. He joined the staff in 2019, after nearly a decade with The Arizona Republic, where he covered state and city politics. Dustin's awards include first place honors for daily Capitol beat coverage from the Sacramento Press Club in 2023, and the "story of the year" award from the Arizona Newspapers Association in 2017. Outside of work, he enjoys running, camping, reading fiction and exploring Northern California. Dustin is a member of NLGJA, the association of LGBTQ journalists.



Written By
Julie Johnson

Reach Julie on

Julie Johnson is a reporter with The Chronicle's climate and environment team. Previously she worked as a staff writer at the Santa Rosa Press Democrat, where she had a leading role on the team awarded the 2018 Pulitzer in breaking news for coverage of 2017 wildfires.

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Top of the News

PG&E tells some Sonoma County projects that power connections could take up to 18 months



SLIDE 1 OF 3

A crew works on the planned 70,300-square-foot Building K warehouse at the Billa Landing Development on Copperhill Parkway in the Sonoma County airport industrial area north of Santa Rosa on Wednesday, Nov. 30, 2022. (Jeff Quackenbush / North Bay Business Journal)

JEFF QUACKENBUSH

THE NORTH BAY BUSINESS JOURNAL

December 1, 2022

Order Article Reprint

Construction has begun on the fourth of five planned warehouses in a 380,200-square-foot project near the entrance to the Sonoma County airport, but an electrical connection for it may take up to 18 months.

That's what the general contractor on the approved Billa Landing project said he heard from Pacific Gas & Electric Co. when seeking a substantial power upgrade for tenant improvements at a recently built 70,300-square-foot warehouse at 1740 Copperhill Parkway and when prepping to build a same-sized building next door.

The San Francisco-based utility that serves Northern and Central California told the builder last year to look for ways to reduce the power consumption on the existing Copperhill structure, called Hangar J in the project, according to Craig Nordby, CEO of Nordby Construction.

"They said they did not have enough power at the substation and distribution lines to approve such a project," Nordby said. "That caused us some pretty grave concerns, because we have more buildings to build up there."

When the contractor early this year put an initial inquiry in about basic warehouse-scale power service for the planned new building, Hangar K, he said the utility told him no more power would be available.

PG&E confirmed there are delays on electrical and gas connections in the region but declined to specify where the problem existed, how extensive it is or how long it will take to resolve.


"Yes, we are informing some business customers, including a select number in the North Bay, of some changes to construction timelines for new gas and electric service connections," a spokesperson told the Business Journal in an email. "Presently, requests for new gas and electric service connections are outpacing our forecasted demand for this year. Additionally, available resources to meet the growing demand are challenged by global supply chain issues and rising inflationary costs."

The utility's supply problems are wider than the North Bay, according to an independent monitor's report to California energy industry regulators. Denver-based Filsigner Energy Partners pointed to internal documents that warn of a shortage of power capacity in the region that is "widespread

ATTACHMENT II: NEWS ARTICLES REGARDING PG&E DELAYS

and unprecedented,” NBC Bay Area reported.

 Email

The energy company told the Business Journal it handles new-connection requests on a “first-r  Copy Link read basis rojects that are “construction ready” — completed all needed inspections and pre-construction work — are entered into the utility’s job queue.

Nordby said the utility told the project team that the substation and distribution line upgrades necessary to supply more power to the area, one of Sonoma County’s most concentrated warehouse/light industrial districts, are expected to be completed around mid-2024. The contractor has been exploring co-generation and alternative energy solutions to reduce building consumption.

The Billa Landing project is in the master-planned Westwind Business Park, in an unincorporated area south of Airport Boulevard and east of North Laughlin Road.

Sonoma County’s planning and building department has heard of this problem with utility provisions, typically a requirement for certificates of occupancy for residential and commercial structures, according to agency spokesman Bradley Dunn.

“Ensuring utility provision is essential to development,” Dunn said. “For projects and programs that create jobs, provide housing, and other community benefits, utility-provision delays are concerning. If a utility provider is inconsistent with communication, it can create uncertainty and undermine critical investments in our community.”

Jeffrey Wilmore, a commercial real estate agent with Keegan & Coppin Co. Inc., is marketing nearly 9 acres of land near the airport. Wilmore said he heard from a PG&E regional manager about a similar June 2024 timeframe for more power to become available.

Keegan & Coppin agents Danny Jones and Dave Peterson have been marketing Billa Landing.

The Business Journal reached out to other developers and contractors with projects in the airport area to see if they also have encountered utility-connection challenges, but those inquiries weren’t answered by press time.

Jeff Quackenbush covers wine, construction and real estate. Before coming to the Business Journal in 1999, he wrote for Bay City News Service in San Francisco. Reach him at [jqackenbush@busjrnl.com](mailto:jquackenbush@busjrnl.com) or 707-521-4256.

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[“Need Power in California? Get in line.”](#)

San Francisco Chronicle, April 12, 2023:

[“S.F. blames PG&E for \\$41 million in expenses and delays to affordable housing projects”](#)

San Jose Mercury News, March 20, 2023:

[“PG&E connection delays add to California’s housing woes, advocates say.”](#)

KQED, March 10, 2023:

[“How PG&E Adds Months-Long Delays, Costs to New Housing”](#)

San Francisco Chronicle, March 10, 2023:

[“Big holdup for new Northern California housing? PG&E”](#)

The San Francisco Standard, Dec. 13, 2022:

[“Muni Blames PG&E for Spiraling \\$15M Costs, Years of Delays in Train Upgrade Struggle”](#)

North Bay Business Journal, Dec 1, 2022:

[“PG&E tells some Sonoma County projects that power connections could take up to 18 months”](#)

Fresno Bee, Oct. 28, 2022:

[“California homes face PG&E delays for power connections. Frustrated leaders seek options.”](#)

HVDC Projects Background and Need

- CAISO is responsible for ensuring reliable operation of the electrical grid throughout California
- Two projects were identified in the San José area by CAISO to address reliability needs by strengthening the electrical grid
- These projects improve grid resiliency, support economic development, and provide better access to cost effective, renewable energy to support clean energy goals
- CAISO selected LS Power Grid California through a competitive process to construct, own, operate, and maintain the two projects
- LS Power Grid California has committed to strict cost caps and schedule guarantees, which puts cost overrun risks on LS Power Grid California instead of electric consumers

Schedules



Proposed Project Scopes

Metcalfe to San José B HVDC Project

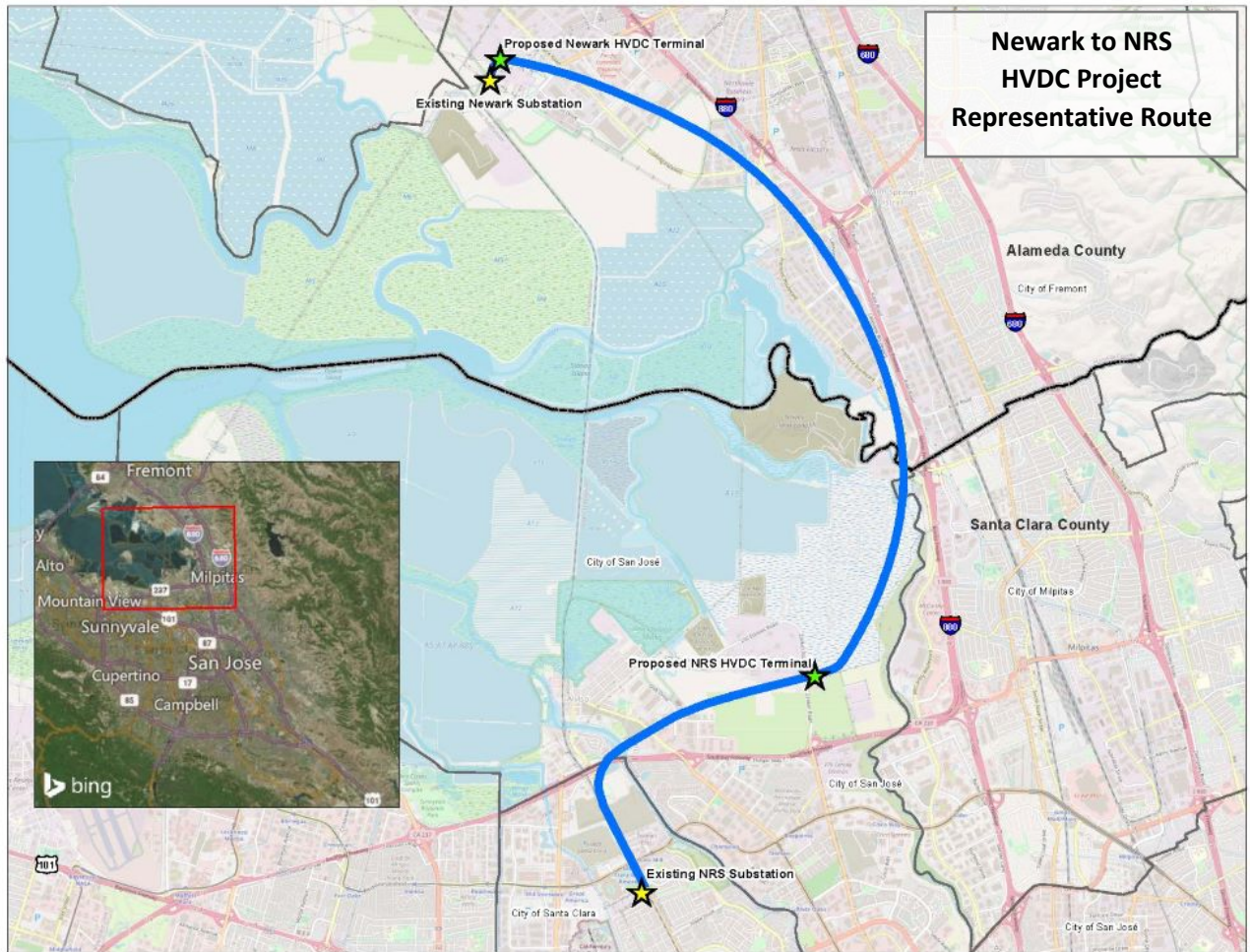
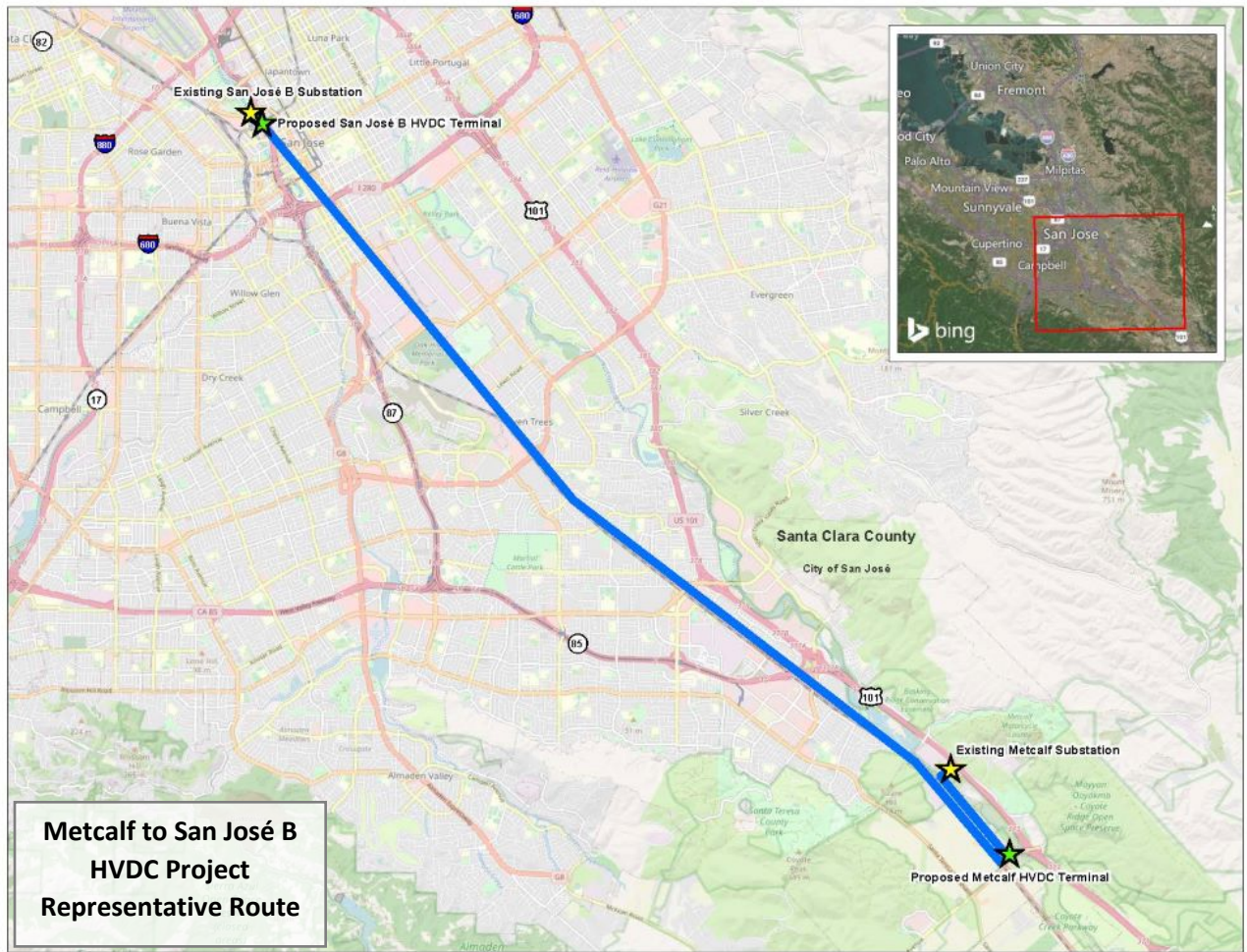


Newark to Northern Receiving (NRS) Station HVDC Project



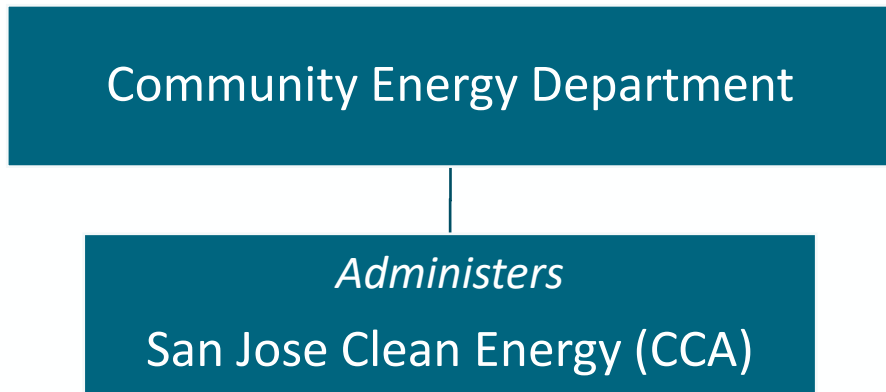
Representative HVDC Terminal Station Visualization

ATTACHMENT III: LS Power HVDC Projects Overview

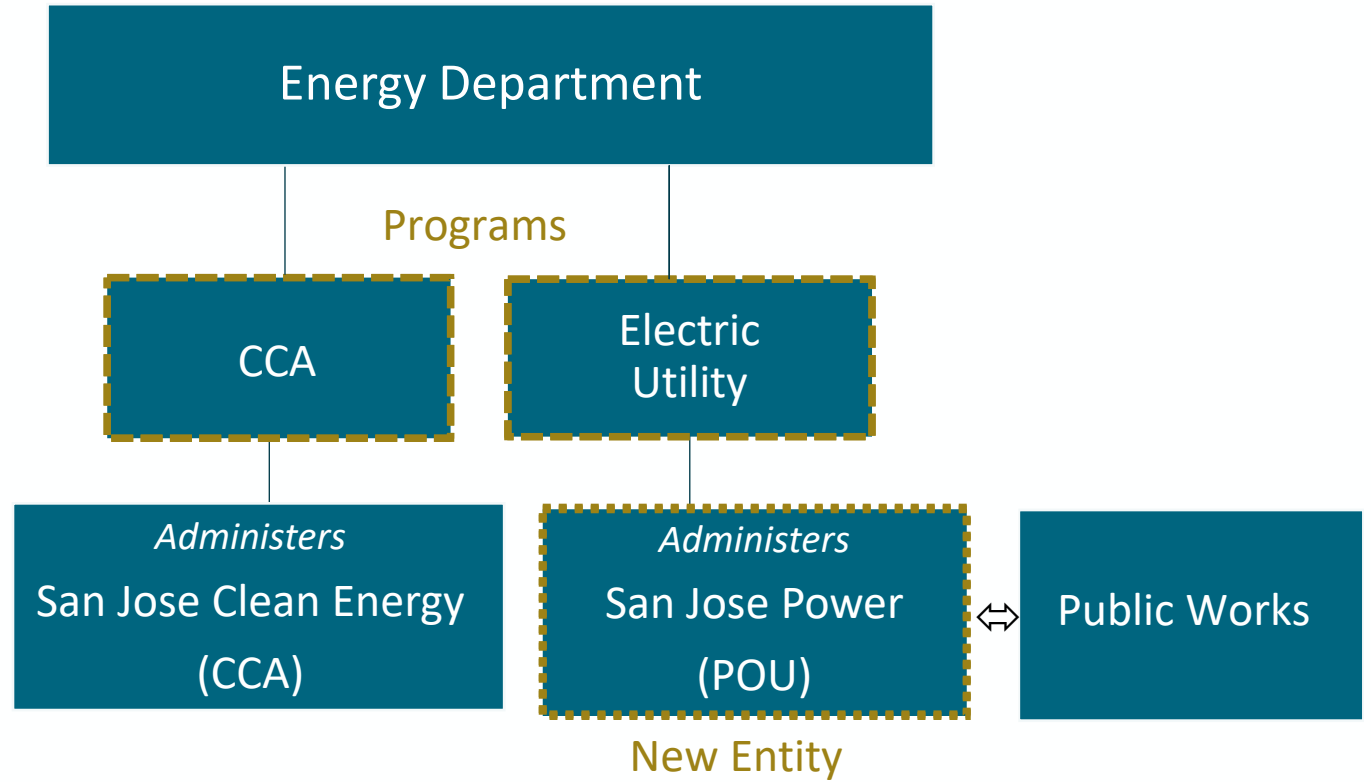


Proposed Organization Chart

Current structure



Proposed structure



Proposed structure from Title 28 changes allows the programs to share resources (i.e., power supply staff, regulatory staff, customer service staff, etc.), while establishing the necessary separated financials accounts.