



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Lori Mitchell

**SUBJECT:** ELECTRIC TRANSMISSION  
SERVICE INTERCONNECTION  
APPLICATION

**DATE:** February 10, 2020

Approved

*D. D. SyL*

Date

*2/14/2020*

**COUNCIL DISTRICT: 3**

## **RECOMMENDATION**

Direct City Manager to prepare and submit, in coordination with the City Attorney's Office, a Wholesale Transmission Service Interconnection Application to Pacific Gas and Electric, and if appropriate, to proceed with any required Pacific Gas and Electric System Impact and Facilities Studies, for the City of San José to provide electric distribution service to the Downtown West Mixed-Use Plan area and potentially, a broader area where new development is occurring.

## **OUTCOME**

Preparing and submitting an Interconnection Application to Pacific Gas and Electric (PG&E) and proceeding with any PG&E System Impact and Facilities Studies are the first steps in a multi-phased process that could result in the City of San José providing electric distribution service to the Downtown West Mixed-Use Plan area (Google Project) and, potentially, a broader area where new development is occurring. Approval of the recommendation would provide the City and Google, Inc. (Google) with sufficient time to fully analyze the requirements, benefits, and challenges of establishing a City-owned and operated electric service utility that are needed for subsequent decision-making, without precluding other electric service options open to Google and others.

## **BACKGROUND**

### **City Council Direction on Energy Resiliency**

On June 12, 2019, the Rules and Open Government Committee directed the Community Energy Department staff to hold a City Council study session to inform City Council and educate the public about the serious challenges that San José and other Northern California cities face regarding maintaining electric reliability and resilience.

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On June 25, 2019, City Council adopted a resolution establishing principles to guide advocacy regarding the restructuring of California's electric power system to ensure the electric generation, transmission and distribution infrastructure serving the City of San José is safe, reliable, clean, and affordable.

On August 29, 2019, City Council conducted a study session on energy resiliency which discussed both the current state of the City's resiliency, as well as near- and longer-term options to improve it. City Council directed City staff to return with recommendations that identified priority work program areas and the associated resource needs to accomplish the work.

On October 23, 2019, the Rules and Open Government and Committee of the Whole approved a memorandum by Mayor Sam Liccardo that provides many recommendations and directions to staff to improve energy resiliency<sup>1</sup>.

On November 19, 2019, City Council accepted staff's status report on priority work program areas and the associated resources needed to implement the collective direction for improved energy resiliency, which includes the evaluation and establishment of microgrids and the City offering electric service in new areas of development.

### **Diridon Station Area Plan and Downtown-West Mixed-Use Plan**

The City of San José adopted the Diridon Station Area Plan in 2014 in anticipation of major transportation investments and a major league ballpark in the Diridon Station Area. The Diridon Station Area Plan sets forth a blueprint for the development of the area, a 250-acre district surrounding San José Diridon Station on the western edge of downtown. The Diridon Station Area Plan envisions the transformation of the station area, an area which is currently dominated by parking lots and old industrial buildings, into a dynamic mixed-use urban neighborhood anchored by a world-class transportation hub and the SAP Center.

Although the City is not expecting to make major changes to the objectives of the Diridon Station Area Plan, several key planning assumptions have changed since 2014. Most relevant for this memorandum, changes include Google's plan for a mixed-use development, the adoption of Climate Smart San José, and an increased focus by the City on energy resiliency as described above, particularly in light of recent and future PG&E Public Safety Power Shutdowns.

On October 10, 2019, Google submitted to the City its mixed-use development application for the Google Project. The full application and the latest updates about the project are available at: [www.sanjose.gov/GoogleProject](http://www.sanjose.gov/GoogleProject).

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<sup>1</sup> See the Memorandum titled, Public Safety and Power Shutoffs: Making San José Grid-Resilient.

## ANALYSIS

### Overview of the Interconnection Application and Process

There is a regulated process to submit an application to PG&E requesting interconnection of new electrical loads for a development. Based on several factors, this application typically initiates a process with the following steps:

- 1. Interconnection Application** – The party, or applicant, requesting interconnection prepares and submits an Interconnection Application to PG&E that establishes a clear understanding of the facilities proposed to be interconnected to PG&E’s electric system. Typically, the most critical information provided in the application is the type of interconnection requested, point of interconnection, and maximum amount of electric load to be served by the new interconnection.

There are three types of interconnections:

- *Wholesale Transmission Service* in which the applicant takes electric service at transmission levels (above 60k volts). Transmission level facilities typically provide high-capacity power to switches, substations, transformers and other electrical equipment used to further distribute power throughout an area. The applicant would be responsible for the construction, operation, and maintenance as a utility provider for all distribution and on-premise electrical infrastructure “downstream” of the interconnection point, including voltage reduction to the desired levels for the end user.
- *Wholesale Distribution Service* in which the applicant takes electric service at distribution levels (below 60k volts). Distribution level facilities deliver power within a local area to electrical equipment, buildings and other facilities. The applicant would be responsible for the construction, operation, and maintenance as a utility provider for all distribution and on-premise electrical infrastructure “downstream” of the interconnection point, including voltage reduction to the desired levels for the end user.
- *Standard Retail Service* in which the applicant receives electrical service to its premise from PG&E. The applicant would own the infrastructure downstream of the connection point, which is typically near the meter used by PG&E to track power usage by the applicant within the premise.

Staff is recommending that the City prepare and submit a Wholesale Transmission Service Interconnection Application based on the latest electric load projections. An important consideration for City Council in approving the Recommendation is the fact that ***submitting an Interconnection Application to PG&E does not obligate the City to proceed with any other steps in the interconnection process described below, even after the Interconnection Application is approved by PG&E.***

- 2. System Impact Study** – This PG&E study models the power system in the vicinity of the proposed interconnection to determine whether there is sufficient capacity in the existing system to accommodate the requested load. If not, limiting facilities and conceptual system improvements will be identified by PG&E. An agreement between the applicant and PG&E is executed to initiate the study<sup>2</sup>. Typical cost to the applicant for this study is \$30,000 to \$50,000. Following the completion of this study, the applicant may directly proceed to the next step in the process, modify its request to potentially reduce any identified impacts, or withdraw its application.
- 3. Facilities Study** – If the applicant decides to continue with the interconnection process, PG&E will proceed with a facility study which uses the scope of the work identified in the System Impact Study to develop permitting requirements, protection requirements, estimated costs, and timelines for needed system improvements. An agreement between the applicant and PG&E is executed to initiate the study<sup>2</sup>. Depending on the extent of the needed improvements, typical cost to the applicant for this study can range from \$50,000 to \$150,000. Similar to the System Impact Study, following the completion of the facility study, the applicant may directly proceed to the next step in the process and negotiate with PG&E on requirements, costs, and timelines of the improvements, or withdraw its application.
- 4. Interconnection Agreement** – Upon receipt of the Facilities Study and if the applicant decides to move forward with the process, the applicant and PG&E negotiate and execute an Interconnection Agreement. This agreement defines various functional terms of the interconnection, such as ownership, maintenance and testing responsibilities of the interconnection equipment, rights of access, responsibility of each party to notify the other of any significant changes to their respective electric systems, process to be used for future interconnections, and other operational terms. This step in the process usually coincides with the next step – Design and Construction – in which other agreements are negotiated and executed that would likely have larger financial commitments requiring City Council approval.
- 5. Design and Construction** – Either simultaneous or subsequent to the execution of the Interconnection Agreement, design and construction of the required facilities begins. This step includes the negotiation and execution of agreements that define the scope, responsibilities, schedule, costs, and other terms for the project. The terms vary, depending on the type and extent of improvements being made.

The targeted timeframe for completing the interconnection process from submittal of the application through the execution of the Interconnection Agreement is 10 to 12 months. If the recommendation by staff is approved by City Council, staff would prepare and submit, in

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<sup>2</sup> Based on the projected cost, procedural nature, and time-sensitivity of this study, City Council action is neither required nor advised at this time for the City Manager to negotiate and execute the agreement. Staff would bring forward any necessary recommendations to City Council should this change.

coordination with the City Attorney's Office, an Interconnection Application for Wholesale Transmission Service to PG&E in or about April 2020.

As described above, there are many points in the process whereby the City could withdraw the application and, therefore, the City is under no obligation to pay for any improvements or commence the provision of electric service until an Interconnection Agreement is executed. ***Essentially, applying for Wholesale Transmission Service presents little risk to the City and allows sufficient time for the City and Google to fully evaluate this and other options*** for interconnecting the Google Project to the PG&E system and establishing electric service to the area.

### **Preliminary Feasibility Study and Expected Benefits of City Electric Service**

Under City Council direction to evaluate and establish microgrids and municipal electric service in areas of new development, the Department has been working with an expert electric utility consultant and Google to assess the feasibility, benefits, process, and other requirements related to the City's ability to develop and deliver electric service to the Google Project. Preliminary findings from this study indicate that the City is well-positioned to interconnect to PG&E's electric system and provide electric distribution service to the Google Project and, potentially, a broader area where new development is occurring.

### **Legal and Regulatory Feasibility**

The preliminary study provided by the Department's consultant indicates that the federal, state, and local laws, regulations and codes governing the delivery of electric utility service, along with the City's Franchise Agreement with PG&E, offer a clear path for the City to provide electric service to its inhabitants, as many other municipalities currently do. The City Attorney's Office is more thoroughly evaluating the legal and regulatory feasibility and requirements related to San José's ability to provide electric service to the Google Project. This analysis is scheduled for completion in February and would inform any further action by the City Council related to continuing down the interconnection process and deciding whether to proceed with owning and operating the electric system.

### **Expected Benefits**

While not yet specifically evaluated and quantified for this project, there are several expected benefits associated with the City applying for and providing electric service to the Google Project, which are similar to those experienced by other public power systems throughout the United States. The driving force behind many of the benefits of public power systems is that the local community owns the utility and, therefore, controls the utility's priorities through open meetings and transparent business decisions. As a result, public power utilities consistently provide safer and more reliable and efficient service to their customers than investor-owned utilities. One of the main benefits of the City owning and operating the electric distribution system is that ***the City and Google can better work together to advance our shared interest in***

*building an advanced microgrid with on-site renewable generation and energy storage*, thus making the energy service more resilient, clean, and affordable for the community.

## **CONCLUSION**

Preparing and submitting an Interconnection Application to PG&E is the first step in a multi-phased process that could result in the City of San José providing electric distribution service to the Downtown West Mixed-Use Plan area (Google Project) and, potentially, a broader area where new development is occurring. Initial studies have clearly indicated that the City is well-positioned from a legal and regulatory standpoint to be successful in this effort. It is also expected that proceeding down this path would benefit the City, Google and the community in terms of providing more resilient, reliable, clean, and affordable energy. More analysis and steps must be completed before any consequential or binding decisions are made. Staff will keep City Council appropriately informed and engaged.

## **EVALUATION AND FOLLOW-UP**

As previously described, submitting an Interconnection Application is the initial step in a longer process that may lead to the City owning and operating the electric system for the Google Project and, potentially, a broader area where new development is occurring. There are additional steps and work to do, and likely more decisions to be made by City Council. Below is a summary of the next steps and follow-up with City Council.

- 1. Final Legal and Regulatory Feasibility Study (January – March 2020)** – The City Attorney’s Office will continue to work with outside counsel to thoroughly evaluate the steps, requirements, restrictions, risks, timeframes, and other important considerations on the legal and regulatory feasibility and process for the City to submit an Interconnection Application and ultimately own and operate the electric system.
- 2. PG&E Interconnection Application (February – April 2020)** – Staff will continue to work with their consultant and Google to identify and study the electric system design options and prepare the technical information needed in the Interconnection Application. If approved, the Department, in coordination with the Attorney’s Office, will submit the Interconnection Application to PG&E by on or about April 2020.
- 3. Electric System Evaluation and PG&E Studies (April – November 2020)** – Staff will continue to work with their consultant and Google to evaluate and solidify the electric system design options, estimated costs and schedules, and other relevant elements of the project. Simultaneously, the System Impact Study and Facilities Study agreements with PG&E will be negotiated and executed as needed and in coordination with the City Attorney’s Office, and work will commence. Any necessary recommendations to City Council regarding these agreements would be brought forward to City Council at the appropriate time.

- 4. Analysis of the City-Owned and Operated Electric Utility Option (April – November 2020)** – Staff will continue to work with their consultants to prepare a comprehensive analysis on the steps, economics (e.g. financing, rates, revenues, expenditures, etc.), pros and cons, risks, operational needs and staffing, City Council decision points, and other important requirements and considerations related to the City’s ownership and operation of the electric system. Staff will present a report and make any necessary recommendations for City Council consideration in summer or fall of 2020.
- 5. PG&E Interconnection and Design and Construction Agreements (November 2020 – January 2021)** – Depending on the information available and decisions made up to this point in the process, the PG&E Interconnection Agreement and other agreements with PG&E related to the required system improvements would be negotiated and executed in late 2020 or early 2021. Any necessary recommendations to City Council regarding these agreements and funding for the electric system improvements would be brought forward to City Council at that time.
- 6. On-Going Coordination with Google and the Google Project (on-going)** – As described many times in this memorandum, the City is closely working with Google on the evaluation and steps associated with the Interconnection Application and the prospect of the City becoming the electric utility provider to the Google Project. To the greatest extent practical, staff will integrate any future terms requiring agreement and accountability between the City and Google into the Google Project development process as it progresses and comes forward to City Council.

### **CLIMATE SMART SAN JOSE**

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

### **POLICY ALTERNATIVES**

**Alternative #1:** City Council not approve the Recommendation, in which case Google would proceed with its original intention to receive Wholesale Transmission Service from PG&E.

**Pros:** The City would not be required to do any additional analysis or work related to the City establishing and providing electric utility service to the Google Project.

**Cons:** The City, Google and the community would not have the opportunity to receive the benefits of the City establishing and providing electric service to the Google Project, which in this case would likely include more resilient, reliable, clean and efficient energy.

**Reason for not recommending:** Submitting an Interconnection Application to PG&E is a low-risk, first-step in a longer process that could result in tremendous benefits to the City, Google,

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and the community. Further analysis is needed and planned, which will allow for more informed, timely, and consequential decision-making in the future.

### **PUBLIC OUTREACH**

The memorandum will be posted on the City Council's Agenda website for the February 25, 2020 City Council Meeting.

### **COORDINATION**

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

### **COMMISSION RECOMMENDATION/INPUT**

No commission recommendation or input is associated with this action.

### **FISCAL/POLICY ALIGNMENT**

This recommendation supports the City Council's goals and direction to improve energy resiliency.

### **COST SUMMARY/IMPLICATIONS**

The estimated cost to prepare and submit a Wholesale Transmission Service Interconnection application is approximately \$50,000, which is covered within the existing Funding and Service Reimbursement Agreement with Google. The typical cost for a System Impact Study ranges from \$30,000 to \$50,000. Funding for this study would likely be provided by Google in a future arrangement.

As described above, the City is not committing to any additional costs beyond submitting the application and conducting a System Impact Study. Likewise, Google is under no obligation to pay any additional fees on behalf of the City related to the Interconnection Application. The City and Google will meet and confer regarding respective obligations for future associated costs.



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**CEQA**

Not a project, File No. PP17-07, Preliminary direction to staff and eventual action requires approval from decision-making body.

/s/

LORI MITCHELL

Director, Community Energy Department

For questions, please contact Lori Mitchell, Director of Community Energy, at (408) 535-4800.