From: O"Connor, Kevin

To: brflynn@flynnrci.com; Doug Boccignone - Flynn Resource Consultants Inc. (dougbocc@flynnrci.com); Mike Keller

Subject: FW: FW: PG&E Application Responses

Date: Monday, June 1, 2020 5:12:00 PM

Attachments: PG&E Interconnection Application 10-year annual forecasted load.xlsx

Hello Gentlemen,

You were copied on Google's response to the follow-up questions we had regarding the Interconnection Application. I walked through each one with Andrew and Cindy today and I've added some additional clarification below in Magenta. Based on this latest information, can you update the application.

Some other things to note:

- 1. I'm waiting for Luisa's comments back on the Statement of Applicable Tariff and Eligibility. I've let her know that this is needed to submit and will follow-up again tomorrow.
- 2. I would like to include Lori as an Additional Contact Person. Her info is Lori Mitchell; Director, Community Energy Department; same address as mine; phone is (408) 535-4880; Email is Lori.mitchell@sanjoseca.gov
- 3. The attached file is the 10-year load forecast using the data they previously provided. We can include it as an attachment.
- 4. Let me know if you guys would like to do a video meeting to go over this again after you've updated. I'm open anytime on Tuesday after 1:00 pm or, the Energy Working Group meeting on Wednesday afternoon is being cancelled so we can use that time if it makes sense.

Kevin O'Connor

Energy Resilience Coordinator

City of San Jose Community Energy Department

Email: kevin.oconnor@sanjoseca.gov

Ph: (408) 535-8538

From: Andrew Breyer <breyer@google.com>

Sent: Monday, June 1, 2020 12:46 PM

To: O'Connor, Kevin < Kevin. Oconnor@sanjoseca.gov>

Cc: cindymuller@google.com; russell.carr@rewsprojects.com; brflynn@flynnrci.com; Doug Boccignone <dougbocc@flynnrci.com>; Mike Keller <mikekeller@flynnrci.com>; Ekern, Bill

<Bill.Ekern@sanjoseca.gov>

Subject: Re: FW: PG&E Application Responses

[External Email]

- 1. You indicated that this is a "preliminary response." Can I assume that you are working on the other items we included in the Draft Response email and documents which are not detailed below? They include the following:
 - a. Confirm Attachment 2 Point of Interconnection reflects Google's current plans for the locations of the undergrounded PG&E 115 kV lines, the City substation and the tap connections to the underground lines. Confirmed. Please note that this is in addition to the other options being studied in Google's application not in lieu of. This is still a little confusing. Andrew confirmed on the phone that it reflected what they've submitted, but his message seems to indicate that it doesn't. How about we provide the drawings we have and state that our points of interconnection will ultimately be based on final location of future undergrounded facilities specified by Google, or something to that effect? I can also ask for more clarification...
 - b. Please review and comment on the response to the question about on-site generation, especially the amount of solar and whether to include storage and non-solar generation. Please defer on this for now. We would state that the information is to be determined.
 - 2. While much of the information will be the same and can also reference Google's application, the City intends to submit a "stand-alone" application that is complete as possible based on available data, diagrams, load projections, etc. As new information is developed, we can update. Ideally we would submit our first response this week or next. Confirming using the load data from the April 22 shared deck with the City
 - Please review the description of type of load: summer or winter peaking, daily cycling, residential, commercial, (heavy, light) industrial, pump, dispatchable.

Mixed use development. Primarily commercial and residential. Please sync all load assumptions with Google's application. Does Google's application specifically state "Mixed-use development. Primarily commercial and residential"? Is Google suggesting that we include the comment, "Please sync all load assumptions with Google's application"? Confirming Mixed Use Development. Let's state, "Mixed-Use development. Primarily commercial and residential."

• If Google has identified the Power Factor associated with the forecast 2026 and 2035 demands, please provide it.

No power factor has been identified . However a transmission connection has to maintain power factor between 0.97 lag to 0.99 lead so the design of the site will be held to this. Should the City consider its response okay? This is sufficient

• Attachment 3 – Load Forecast. Please provide monthly demand and energy for 5 – 10 years. Please sync all load assumptions with Google's application. City will want to provide separately when available. If not available now or soon, we will state TBD and to be synced with Google's application in our first submittal. Aligns with Point 2 . I used this load data from Google's slide deck to create the attached spreadsheet. Please double check my numbers. We could state that monthly demand and energy is not available at

this time and will be determined and provided later...

• Please review and comment on Attachment 4 – General Arrangement

This is an approximate space plan for the Google substation that Arup mocked up some time ago. No comments on this. The GIS arrangement may not be necessary in a tapped arrangement. City to provide a diagram of general arrangement without specific detail. Yes, and thank you The newest diagram prepared by Mike works.

• Please provide input re: pumping plants and industrial facilities, starting KVA and power factor of the largest motor or group of motors

Early stage of the project, we do not have this information. However, as stated earlier this is a mixed use development. Primarily commercial and residential. Please sync all load assumptions with Google's application. City will state "TBD." That works

• Please review and comment on Attachment 5 – Single Line Diagram

Tapped arrangement. It is our understanding that PG&E will not accept this as these are CAISO controlled transmission lines. PG&E to confirm. City keep current response. That works

On Wed, May 27, 2020 at 4:17 PM O'Connor, Kevin < Kevin.Oconnor@sanjoseca.gov > wrote:

Hi Andrew,

Thank you for the quick turnaround. I've reviewed and provided some feedback to your specific responses below in Red. I also have some general feedback/questions as follows:

- 1. You indicated that this is a "preliminary response." Can I assume that you are working on the other items we included in the Draft Response email and documents which are not detailed below? They include the following:
 - a. Confirm Attachment 2 Point of Interconnection reflects Google's current plans for the locations of the undergrounded PG&E 115 kV lines, the City substation and the tap connections to the underground lines.
 - b. Please review and comment on the response to the question about on-site generation, especially the amount of solar and whether to include storage and non-solar generation.
- 2. While much of the information will be the same and can also reference Google's application, the City intends to submit a "stand-alone" application that is complete as possible based on available data, diagrams, load projections, etc. As new information is developed, we can update. Ideally we would submit our first response this week or next.

Kevin O'Connor

Energy Resilience Coordinator

City of San Jose Community Energy Department

Email: <u>kevin.oconnor@sanjoseca.gov</u>

Ph: (408) 535-8538

From: Andrew Breyer < breyer@google.com>
Sent: Wednesday, May 27, 2020 3:10 PM

To: O'Connor, Kevin < Kevin Kevin <a h

Russell Carr < russell.carr@rewsprojects.com >

Subject: PG&E Application Responses

[External Email]

Hey Kevin,

Sorry for the delay here, please see our preliminary response below. There are a few items about the load that we would like the CIty to sync with our existing application. Cindy and I can brief you over the phone at some point over the next week on that. Let us know if your team has any questions with these or if there is a concern with the level of detail needed at this point.

Please review the description of type of load: summer or winter peaking, daily cycling, residential, commercial, (heavy, light) industrial, pump, dispatchable.
 Mixed use development. Primarily commercial and residential. Please sync all load assumptions with Google's application. Does Google's application specifically state "Mixed-use development.
 Primarily commercial and residential"? Is Google suggesting that we include the comment, "Please sync all load assumptions with Google's application"?

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• Attachment 3 – Load Forecast. Please provide monthly demand and energy for 5 – 10 years.

Please sync all load assumptions with Google's application. City will want to provide separately when available. If not available now or soon, we will state TBD and to be synced with Google's application in our first submittal.

- Please review and comment on Attachment 4 General Arrangement
 This is an approximate space plan for the Google substation that Arup mocked up some time
 ago. No comments on this. The GIS arrangement may not be necessary in a tapped
 arrangement. City to provide a diagram of general arrangement without specific detail.
 - Please provide input re: pumping plants and industrial facilities, starting KVA and power factor of the largest motor or group of motors

Early stage of the project, we do not have this information. However, as stated earlier this is a mixed use development. Primarily commercial and residential. Please sync all load assumptions with Google's application. City will state "TBD."

• Please review and comment on Attachment 5 – Single Line Diagram

Tapped arrangement. It is our understanding that PG&E will not accept this as these are CAISO controlled transmission lines. PG&E to confirm. City keep current response.

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Andrew Breyer | Development Manager Working for Lendlease at Google Sunnyvale, CA | <u>+1 (415) 537-0346</u>

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Andrew Breyer | Development Manager Working for Lendlease at Google Sunnyvale, CA | +1 (415) 537-0346

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Year		Total Forecasted Load (MW)
	2026	25.2
	2027	27.4
	2028	27.4
	2029	32.3
	2030	39.7
	2031	41.2
	2032	44.3
	2033	44.3
	2034	47.9
	2035	47.9