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November 7, 2018

Ms. Angela Calvillo Clerk of the Board of Supervisors City Hall, Room 244 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4689

**RE:** San Francisco Public Utilities Commission's Quarterly Report to the Board of Supervisors on the Status of Applications to PG&E for Electric Service.

Dear Ms. Calvillo:

The attached quarterly report has been prepared for the Board of Supervisors in accordance with Resolution No. 227-18, approved by the Board on July 10, 2018 (File No. 180693) and enacted on July 20, 2018.

Pursuant to the terms of Resolution No. 227-18, the San Francisco Public Utilities Commission (SFPUC) shall "provide the Board a quarterly report for the next two years that identifies the following: status of all City projects with applications to SFPUC for electric service, including project schedules and financing and other deadlines; project sponsor and SFPUC concerns in securing temporary and permanent power, including obstacles that could increase costs or delay service to City customers; and the status of disputes with PG&E before the Federal Energy Regulatory Commission (FERC) or in other forums."

#### **BACKGROUND:**

As discussed at the Public Safety and Neighborhood Services Committee hearing held on June 13, 2018, Pacific Gas and Electric (PG&E) has delayed and obstructed service provision by making unnecessary and/or untimely requests for information, such as requiring system impact studies for very small loads. Furthermore, this quarterly report details denied requests for secondary (low-voltage) service for City projects. In many of these cases, PG&E contends that the City should provide primary (high-voltage) service for facilities with small electric loads that are typically served with secondary service.

As the SFPUC has previously conveyed, and as is detailed in this report, PG&E's requirement for City projects to use primary (high-voltage) power service has caused

**OUR MISSION:** To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.

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> Anson Moran Commissioner

Ike Kwon Commissioner

Harlan L. Kelly, Jr. General Manager



months of delay in meeting project timelines; and in some cases, PG&E has granted secondary power service after the SFPUC has already applied for primary service at additional cost.

### **REPORT HIGHLIGHTS:**

For the reporting period of July 2018 through October 2018, the SFPUC has identified 45 projects experiencing interconnection issues due to delays, arbitrary requests or increased project costs, as listed in **Attachment A**. **Attachment B** contains a map providing the location of each project.

Attachment C depicts a comprehensive timeline of the process for projects from application submittal to energization. Delays can potentially occur at any point in time during this process. This report lists 19 projects with applications for service that have been deemed complete by PG&E, allowing these applications to proceed onto the evaluation phase of the process required before a service agreement contract will be issued by PG&E. Of these projects, however, none have been deemed complete within the timeline requirements of PG&E's Wholesale Distribution Tariff (WDT).

Attachment D contains a detailed report of each category of additional incurred costs and impacts to the City per project, such as redesign costs, construction and equipment costs, and additional staff time (also included in the 'Impacts' column of Attachment A). Estimates show more than \$2 million in primary/secondary metering equipment costs, close to \$1 million in additional construction and project management costs, and \$3.6 million in lost gross revenue to the SFPUC.

#### **EFFORTS TO DATE:**

The SFPUC has remained committed to working with PG&E to improve the working relationship between the utilities. In spring of 2018, the SFPUC provided PG&E leadership with a list of current projects with interconnection issues dated as of April 20, 2018.

On July 24, 2018, SFPUC and PG&E staff convened a joint working group to discuss on-going project issues and monitor the progress of projects in the short-term. PG&E staff has since identified a subset of twelve (12) projects (indicated in Column N of Attachment A) that they have committed to energizing through 2018.

## STATUS OF DISPUTES WITH PG&E BEFORE FERC:

Confidential settlement discussions are underway in 10 FERC cases related to disputes in 2017 and 2018. FERC has not yet issued a decision on the City's 2014 complaint and related cases that were litigated in 2016.

Please find attached copies of the following documents related to this report:

- Attachment A: List of projects with active interconnection applications to PG&E for electric service as of October 2018
- Attachment B: Map of projects with PG&E power connection delays as of October 2018
- Attachment C: Process timeline for projects from application submittal to energization
- Attachment D: Cost impacts

Should you have any questions, please contact Barbara Hale, SFPUC Assistant General Manager for Power, at <u>BHale@sfwater.org</u> and 415-554-2483.

Sincerely,

Harlan L. Kelly, Jr. General Manager



А	В	С	D	E	F	G	Н	I	J	К	L	М	N	0
	PG&E NN#	Project Location	District #	Client Organization	Project Description	Project	Status	Initial Application Submittal Date		Service	require	Load Size/Can Be Served at Secondary	PG&E committed to work w/ SF to energize in 2018	Impacts
1	114248007	1950 Mission Street - Affordable Housing	9	I BRIDGE & Mission	New primary service (intially requested secondary)	Delays caused by dispute over primary vs. secondary. Project moving forward as primary.	PG&E reviewing application.	1/18/2018		9/2/19	Yes	1661 kW/Yes		Project delayed - project was in dispute from Jan. 2018 - Sept. 2018 (8-9 months) Primary switchgear will take 720 sq ft. that was planned as childcare space. Costs for primary redesign- \$45k Added costs for primary equipment - \$500k Temp. construction power service by PG&E at retail - \$294k in lost gross revenue to SFPUC (\$81k in additional costs to the project due to PG&E's higher rates) 623,000 lbs. of CO <sub>2</sub> emissions (construction period of 18 months)
2	114232705	490 South Van Ness Avenue - Affordable Housing	9	BRIDGE & Mission Housing	New secondary service	Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project is at a standstill. PG&E and SF working on a resolution.	1/16/2018		10/1/19	Yes	867 kW/Yes		Project delayed - project has been in dispute since Feb. 2018. (8-9 months) Costs for redesign (primary service with secondary metering) - \$15k Temp. construction power service by PG&E at retail - \$145k in lost gross revenue to SFPUC (\$43k in additional costs to project due to PG&E's higher rates) 294,000 lbs. of CO <sub>2</sub> emissions (construction period of 16 months) If required, primary switchgear will take the place of a community room.
3	114345033	1990 Folsom Street - Affordable Housing	9	MEDA	New secondary service	Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project is at a standstill. PG&E and SF working on a resolution.	2/26/2018		9/1/20	Yes	920 kW/Yes		Project delayed - project has been in dispute since Mar. 2018. (7-8 months) Temp. construction power service by PG&E at retail - \$563k in lost gross revenue to SFPUC (\$29k in additional costs to project due to PG&E's higher rates) 927,000 lbs. of CO <sub>2</sub> emissions (construction period of 22 months) If required, primary switchgear will take the place of childcare space.
4	114671141	2060 Folsom Street - Affordable Housing	9	MEDA	New secondary service	Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project is at a standstill. PG&E and SF working on a resolution.	5/18/2018		1/15/20	Yes	1387 kW/Yes		Project delayed - project has been in dispute since Jun. 2018 (4-5 months) Temp. construction power service by PG&E at retail - \$581k in lost gross revenue to SFPUC (\$8k in additional costs to project due to PG&E's higher rates) 922,000 lbs. of CO <sub>2</sub> emissions (construction period of 22 months) If required, primary switchgear will take the place of on-site supportive services.
5	112828717	2 Rankin Street - Central Bayside Pump Station	10	SFPUC- Wastewater	New primary service	Delays caused by PG&E failing to provide service agreement on time.	issued by PG&E. SFPUC	5/1/2017	8/17/2017	6/1/19	N/A	7000 kW/No		Project delayed - SFPUC granted a time extension to PG&E of one extra month to provide service agreement. PG&E took an extra 4 months but committed to have the project energized on time (Jun. 2019).
6	114546573	2401 Keith Street - Southeast Health Center	10	SFPW for SFDPH		Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project is at a standstill.	4/27/2018		7/26/20	Yes	200 kW/Yes		Project delayed - project has been in dispute since May 2018 (5-6 months) The opening of a new wing at the health center will be delayed, pushing back plans to integrate a more family-oriented primary care model. If required, primary switchgear will take the place of several parking spaces in an already constrained lot.
7	114713666	2110 Greenwich Street - Tule Elk Elementary	2	SFUSD	existing secondary	Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project is at a standstill.	6/15/2018		6/1/19	Yes	300 kW/Yes		Project delayed - project has been in dispute since Jun. 2018 (4-5 months) The timeline is very constrained as the school needs to remain open. Delays will push back much needed health and safety improvements to the facility. If required, primary switchgear will take the place of outdoor education space that is required by the state. Further design delays will impact the project construction budget and timeline.
8	113752930	51 Havelock Street - Balboa Pool	11		existing secondary	PG&E initially required primary. Project is moving forward at secondary metering.	PG&E started construction.	7/5/2016	3/14/2018	8/2/17	Yes	75 kW/Yes		Project delayed - project was in dispute from Jan. 2017 - Jun. 2018 (18-19 months) Electrical Redesign (to include interrupter): \$20k Additional Construction Cost: \$670k Additional Construction and Project Management Cost due to schedule delay: \$500k Lost gross revenue to SFPUC due to delays: \$14k Many swim programs were cancelled due to the project delay. The delay had a domino effect on RPD's plans to renovate a group of community pools.
9	114671200	1995 Evans - Traffic Controls and Forensics	10	SFPW for SFPD	New secondary service	Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project is at a standstill.	5/18/2018		3/1/20	Yes	2100 kW/Yes		Project delayed - project has been in dispute since Jun. 2018 (4-5 months). There are also pending issues regarding the franchise. Delays will affect the timeline of moving SFPD's Traffic Company and Forensic Services Division. If required, primary switchgear will take the space of parking spaces for SFPD vehicles.
10		Stockton btwn Ellis & O'Farrell - Central Subway Streetlight Reinstallation	3	SFMTA	Streetlight re-installation	Franchise dispute	Some issues remain, but SF and PG&E are working together to ensure proper streetlight installation.	N/A	N/A	N/A	N/A	N/A		PG&E and the City are in disagreement on who is responsible for re-installing the foundations for the historic streetlights. The City believes this scope of work falls under the franchise agreement.

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	PG&E NN#	Project Location	District #	Client Organization	Project Description	Project	Status	Initial Application Submittal Date	App Deemed Complete Date	Initial Service Need Date	require	Load Size/Can Be Served at Secondary	PG&E committed to work w/ SF to energize in 2018	Impacts
11	113167478	1909 16th Street - Streetlights	10	SFPUC - Power	Streetlight attachment on traffic signal	Delays caused by dispute over the "Okay to Serve" process. PG&E has recently indicated that this streetlight attachment can be connected without issues.	Dispute is still ongoing, but project is able to move forward.	8/17/2017		1/12/18	N/A	N/A		PG&E is requiring an "Okay to Serve" process which can cause delays to getting streetlights put up. The streetlight attachment load is really small (less than 1 kW) and remains significantly lower than what SF has paid for at that service point.
12		Transbay Transit Center - Transbay Joint Powers Authority	6	SFPUC - Power	Two new primary services (5 MW each)	Potential dispute over reserved capacity.	Energized - PG&E reviewing SF's request.	N/A	N/A	N/A	N/A	10 MW/No		PG&E is currently reviewing SF's request to use 10 MW of reserved capacity that SF applied and paid for. If PG&E denies request, SF may incur additional costs or have to limit the tenants.
13		Multiple Locations - Guy Wires (Franchise Issue)	9 & 10	SFMTA, SFPW, & SFPUC	PG&E's guy wires are impeding on SF projects.	Franchise dispute	Project is at a standstill.	N/A	N/A	N/A	N/A	N/A		PG&E's unresponsiveness in removing guy wires is an obstruction to SF projects. 1) SFMTA cannot install a pole replacement to promote safety. 2) SFPW cannot construct a new ADA curb ramp. 3) SFPUC cannot finish parts of construction at the Southeast Water Treatment Plant.
14	114088011	Lake Merced Blvd & Sunset Blvd - Restroom	4	SFRPD	New secondary service	Delays caused by dispute over primary vs. secondary.	PG&E sent options for service, SF is reviewing options.	12/8/2017		1/15/19	Yes	10 kW/Yes		Project delayed - project has been in dispute since late Aug. 2018. (2-3 months) Bathroom will not be available for public use at Lake Merced. Primary switchgear will cost the project an additional \$500k in equipment costs and take the space of parking spots.
	1145/10/9	50 Bowling Green Drive - GGP Tennis Center	5	SFRPD	New secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	PG&E reviewing application.	5/3/2018		2/1/19	Yes	160 kW/Yes	x	Project delayed - project was in dispute from May-July. 2018. (2-3 months) Additional project costs - \$75k (interrupter, #7 box, & installation) Lost gross revenue to SFPUC due to delays: \$1k
16	114713787	1001 22nd Street - Bus Electrification Pilot	10	SFMTA	New primary service	Project is moving forward.	PG&E reviewing application.	6/18/2018		5/1/19	N/A	2000 kW/Yes		Initially, PG&E was unresponsive in scheduling a pre-application meeting which has caused some delays.
17	113135002	49 South Van Ness Avenue - Building Inspection Office	5	SFPW for SFDBI	New primary service	Delays caused by PG&E		8/7/2017	11/10/2017	1/1/19	N/A	5848 kW/No		Project delayed - SFPUC granted a time extension to PG&E of one extra month to provide service agreement. PG&E took an extra 4 months but committed to have the project energized on time (Jan. 2019).
18	113161547	1296 Shotwell Street - Affordable Senior Housing	9	MEDA	New secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	Service agreement returned with payment by SFPUC.	7/26/2017	11/9/2017	2/1/18	Yes	340 kW/Yes		Project delayed - project was in dispute from August 2017-Oct 2017 (2-3 months). Additional project costs - \$75k (interrupter, #7 box, & installation)
19		88 Broadway - Affordable Housing	3	BRIDGE Housing	New secondary service	Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project at a standstill. PG&E and SF working on a resolution.	10/1/2018		12/2/19	N/A	1674 kW/Yes		Temp. construction power service by PG&E at retail - \$618k in lost gross revenue to SFPUC (\$79k in additional costs to PG&E's higher rates) 1,090,000 lbs. of CO <sub>2</sub> emissions (construction period of 18 months)
20		735 Davis - Affordable Housing	3	BRIDGE Housing	New secondary service	Delays caused by dispute over primary vs. secondary. Project is still in dispute.	Project at a standstill. PG&E and SF working on a resolution.	10/1/2018		12/2/19	N/A	683 kW/Yes		Temp. construction power service by PG&E at retail - \$335k in lost gross revenue to SFPUC (\$18k in additional costs to the project due to PG&E's higher rates) 554,000 lbs of CO <sub>2</sub> emissions (construction period of 19 months)
21	110833085	838 Pacific Avenue - Ping Yuen North Affordable Housing	3	CCDC	Replacing and relocating existing service	PG&E initially required primary. Project is moving forward at secondary service.	SF reviewing service agreement.	11/3/2015	6/20/2018	6/1/16	Yes	500 kW/Yes		Project delayed - project was in dispute from Sept. 2016 - May 2018 (20 months). Structural, safety, security, and aesthetic upgrades to the development have been delayed as a result. Lost gross revenue to SFPUC due to delays: \$186k Project/construction costs related to redesign and delay: \$240k
22	111904415	350 Ellis Street - Affordable Housing	6	TNDC	Relocating service & adding fire pump	Delays caused by dispute over "grandfathering" and design requirements for secondary service.	PG&E started construction.	7/21/2016	1/5/2017	7/1/17	Yes	200 kW/Yes		Project delayed - project was in dispute from Sept. 2016 - June 2017 (10 months). Renovations that included spaces for community space, supportive services, and building management offices have been delayed as a result. Lost gross revenue to SFPUC due to delays: \$110k
23	111912344	2451 Sacramento Street - JFK Towers Affordable Housing	2	Mercy Housing	Replacing existing service	PG&E initially required primary. Project is moving forward at secondary metering.	Energized - PG&E and SF discussing issues regarding the transformer.	8/1/2016		1/1/17	Yes	432 kW/Yes		Project delayed - project was in dispute from July 2017 - Feb. 2018. (7 months). Seismic retrofits and the addition of a community room have been delayed as a result. Lost gross revenue to SFPUC due to delays: \$15k

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	PG&E NN#	Project Location	District #	Client Organization	Project Description	Project	: Status	Initial Application Submittal Date			require	Be Served at	PG&E committed to work w/ SF to energize in 2018	Impacts
24	114088015	16th & Terry Francois Blvd Mission Bay Ferry Landing	6	SFPORT	New secondary service	PG&E would not provide the requested service.	SF revised electrical design and is working on a new application.	12/8/2017		6/14/19	Yes	70 kW/Yes		Project delayed - PG&E will not provide 3-phase secondary service. Additional project costs - \$75k (interrupter, #7 box, & installation) Additional staff time for Port - \$70k Costs of redesign - \$30k
25	111772188	Ferry Terminal	3	SFPORT for WETA	New secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	Engineering estimation by PG&E	7/5/2016	6/8/2018	6/18/17	Yes	150 kW/Yes	x	The Downtown Ferry Terminal is currently using power from the Agriculture Building. Delays of this service request could delay the redevelopment of the Agriculture Building. This would cause a delay to a build out of a new shorepower connection which would result in significant air pollution from up to 6 ferries idling in the berth. Additional project costs - \$75k (interrupter, #7 box, & installation) Additional staff time for Port - \$32k Additional staff time for WETA - \$64k Costs of redesign - \$32k
26	113934715	2241 Jerrold Avenue - Ambulance Deployment Facility	10	SFPW for SFFD	New secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	Pre-construction meeting scheduled.	3/9/2017	2/8/2018	1/1/18	Yes	300 kW/Yes		Project delayed- project was in dispute from May 2017 - Nov 2017 (6 months). Construction plans for the new ambulance deployment facility have been delayed as a result. Additional project costs - \$75k (interrupter, #7 box, & installation) Costs of redesign - \$100k Costs of construction delays - \$250k Additional Staff Time for SFPW - \$100k Lost gross revenue to SFPUC due to delays: \$110k
27	112173182	Pier 26 - Fire Boat Berthing	6	SFPW for SFFD	New secondary service	PG&E initially required primary. Project is moving forward at secondary service.	PG&E started construction.	10/28/2016	3/2/2017	2/20/17	Yes	216 kW/Yes		The dispute with PG&E lasted a month and had no material impact on project. The project is delayed due to other factors.
28	111975801	800 Amador Street - Pier 94 - Backlands	10	SFPORT		PG&E required primary. Project is moving forward with primary service.	Engineering estimation by PG&E	8/19/2016	1/26/2017	2/1/17	Yes	166 kW/Yes		Added costs for primary equipment (overhead) - \$500k The Port is investing over \$8M in upgrading the 16-acre parcel in the Backlands project site. The Port is expected to generate approximately \$250k in monthly rent revenue from this site. Significant delays to this project can cause the Port to lose \$3M in revenue annually. Additional staff time for Port - \$50k Costs of redesign - \$50k
29	112847828	801 Illinois Street - Crane Cove Park Building	10	SFPORT	New secondary service	PG&E initially required primary. The project team found a way to internally provide service for the near future.	Application on hold as SF is redesigning service request.	5/5/2017		1/1/18	Yes	50 kW/Yes	x	The project team found alternative solution for short term which resulted in significant staff time expense at the Port and Consultant project design team. Staff time for the Port - \$50k Costs of redesign - \$75k Depending on how the future service is finalized, there may be additional impacts.
30	113764870	2301 San Jose Avenue - Geneva Car Barn	11	SFRPD	New secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	Pre-construction meeting held.	8/24/2016	5/23/2018	9/20/17	Yes	1330 kW/Yes		Project delayed- project was in dispute from Oct 2016 - Oct 2017 (1 year). Construction plans for the new community arts center have been delayed as a result. Costs of redesign: \$5k Additional project costs - \$75k (interrupter, #7 box, & installation) Lost gross revenue to SFPUC due to delays: \$13k Additional Staff Time for SFRPD: \$15k
31	112129708	45th & Lincoln - Restroom for Golden Gate Boat Park	1	SFRPD	New secondary service	Delays caused by PG&E error in estimating.	Energized	10/20/2016	12/9/2016	3/1/17	No	24 kW/Yes		PG&E caused a 3-month delay due to an estimating error. No monetary impact.
32	111729695	6 Berry Street - Substation	6	SFMTA	Upgrade existing primary service	Delays caused by PG&E being unresponsive, changing requirements, and being non- transparent with costs and design changes.	Pre-construction	6/17/2016	12/12/2016	5/1/17	N/A	2000 kW/Yes		Parties disagree on costs and design requirements. SFMTA is incurring delay claims costs from contractor due to PG&E's failure to approve design and equipment submittals. (actual costs are to be determined but have been estimated to be \$5,000/day)
33	112434942	3455 Van Ness Avenue - AWSS Pump Station No. 2	2	SFPUC - Water	Remove two existing services and replace with one secondary service	Delays caused by PG&E requiring primary. PG&E has recently indicated that this project can move forward at secondary metering	Due to the delays, the project team is deciding on how to move forward.	12/9/2016		8/1/17	Yes	144 kW/Yes	x	Seismic improvements and architectural upgrades to increase reliability of the pumping station have been delayed - impacts TBD.

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	PG&E NN	# Project Location	District #	Client Organization	Project Description	Project		Initial Application Submittal Date	App Deemed Complete Date	Service	require	Load Size/Can Be Served at Secondary	PG&E committed to work w/ SF to energize in 2018	Impacts
34	11382699	0 T50 Brannan - Main Library Repository	6	SFPW for SFPL	Increase load request (237 kW to 500 kW)	Dispute over how to process increase in load request.	Service agreement returned with payment by SFPUC.	11/14/2017	1/18/2018	1/1/18	No	500 kW/Yes		Plans for a new HVAC system at the library repository have been delayed. No monetary impact - however, SF believes that PG&E's requirements for approving load increase for muni loads is extensive and will cause delays to projects.
35	11277476	Illinois St. & Terry 3 Francois - Mariposa Pump Station	10	SFPUC - Wastewater		Delays caused by PG&E requiring primary. PG&E has recently indicated that this project can move forward at secondary metering	Due to the delays, the project is going to take PG&E retail service.	4/13/2017		6/1/18	Yes	169 kW/Yes	x	Temp. construction power service by PG&E at retail - \$588k in lost gross revenue to SFPUC (\$22k in additional costs to the project due to PG&E's higher rates) 554,000 lbs of CO2 emissions (construction period of 36 months)
36	11313578	2 350 Amber Drive - Police Academy	8	SFPW for SFPD	Upgrading existing secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	SF is reviewing the service agreement.	8/8/2017	5/22/2018	6/15/18	Yes	160 kW/Yes	x	Project delayed - project was in dispute from Dec 2017-May 2018. (6 months). Health and safety upgrades to the Police Academy building have been delayed as a result. Additional project costs - \$75k (interrupter, #7 box, & installation) Lost gross revenue to SFPUC due to delays: \$18k
37	11382650	5 3630 Divisadero - Claire Lilenthal School	2	SFUSD		PG&E initially required primary. Project is moving forward at secondary metering.	Service agreement returned with payment by SFPUC.	11/14/2017	5/24/2018	5/1/18	Yes	461 kW/Yes	x	Project delayed - project was in dispute from Nov. 2017 - Apr. 2018. (5-6 months). The construction of a new building on campus has been delayed as a result. Additional project costs - \$75k (interrupter, #7 box, & installation) Lost gross revenue to SFPUC due to delays: \$3k Further design delays will impact the project construction budget and timeline.
38	11431510	4235 19th Street - 7 Harvey Milk Civil Rights Academy	8	SFUSD	Upgrading and relocating existing secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	SF working on redesign required by PG&E.	2/12/2018		9/1/19	Yes	300 kW/Yes	x	Project delayed - project was in dispute from Feb. 2018 - Jun. 2018. (3-4 months). Safety improvements and the construction of a new building have been delayed as a result. Additional project costs - \$75k (interrupter, #7 box, & installation) Lost gross revenue to SFPUC due to delays: \$6k Further design delays will impact the project construction budget and timeline.
39	11444999	600 32nd Avenue - 8 George Washington Hig School	ו 1	SFUSD	Upgrading and relocating existing secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	SF working on redesign required by PG&E.	3/27/2018		9/1/18	Yes	500 kW/Yes	x	Project delayed - project was in dispute from Feb. 2018 - Jun. 2018. (3-4 months). Safety improvements and the construction of a new building have been delayed as a result. Additional project costs - \$75k (interrupter, #7 box, & installation) Lost gross revenue to SFPUC due to delays: \$6k Further design delays will impact the project construction budget and timeline.
40	11414914	5 Garfield Pool	9	SFRPD	Relocating existing secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	Engineering estimation by PG&E	12/28/2017	8/17/2018	5/1/18	Yes	200 kW/Yes	x	Project delayed - project was in dispute from Jan. 2018 - May 2018. (3-4 months) Additional project costs - \$250k (interrupter, #7 box, transformer, main switchboard, installation, & trenching) This project is affected by 51 Havelock's delayed timeline as RPD does not want to have more than one pool closed at a time.
41	11442759	6 950 Golden Gate Avenu Margaret Hayward Park	1 3	SFRPD	Remove existing secondary services and replace with single secondary service	PG&E initially required primary. Project is moving forward at secondary metering.	SF is reviewing the service agreement.	3/15/2018	6/5/2018	8/1/18	Yes	100 kW/Yes	x	Project slightly delayed - project was in dispute from Mar. 2018 - May 2018. (2-3 months) Additional project costs - \$75k (interrupter, #7 box, & installation)
42		199 Museum Way/122 State Street - Corona Heights Restroom	5	SFRPD	Return service to a bathroom that was de- energized unknowingly	PG&E accidentally cut the cable to a restroom during construction of Randall Museum.	standstill.	N/A	N/A	N/A	N/A	N/A		The bathroom has been out of power for over a year. Re-energization of the bathroom is still TBD.
43	11016201	750 Phelps - Southeast Plant	10	SFPUC- Wastewater	New primary service	Potential delay as PG&E is late in providing SIS agreement.	Application deemed complete. PG&E is drafting the System Impact Study Agreement.	IN FLIGHT (Prior to July 2015)	7/14/2018	5/20/2020	N/A	12000 kW/no		Potential risk of delay - no impacts to report.
44	11472720	1595 Davidson - Bruce Flynn Pump Station	10	SFPUC- Wastewater	New primary service	Potential delay as PG&E was late in providing Work Performance Agreement.	Service agreement issued by PG&E. SFPUC reviewing agreement.	6/14/2018	7/16/2018	5/1/2019	N/A	2813 kW/Yes		Potential risk of delay - no impacts to report.
45	11243415	5 3133 Van Ness Ave SFMTA Restroom	2	SFMTA	New secondary service	PG&E initially required primary. Project moved forward with an "Okay to Serve".	Energized	12/2/2016	4/14/2017	6/1/17	Yes	24 kW/Yes		Project delayed - project was in dispute from Jan. 2017 - Mar. 2017. (2-3 months). The opening of a single-use bathroom for SFMTA drivers was delayed as a result.

А		В	С	D	E	F	G	Н	I	J	К	L	М	Ν	0
														PG&E	
					Client				Initial	App Deemed	Initial	Did PG&E	Load Size/Can	committed to	
	PC	G&E NN# F	Project Location	District #	Client Organization	Project Description	Project	Status	Application	Complete	Service	require	Be Served at	work w/ SF to	Impacts
					Organization				Submittal Date	Date	Need Date	Primary?	Secondary	energize in	
														2018	

Notes:

1. Secondary metering is not the same as secondary service. Secondary metering requires extra equipment costs (i.e. an interrupter, approx \$75k). The SFPUC believes that many of these loads should be served with secondary service, but has compromised with PG&E to move projects forward.

2. Cost impacts related to lost revenue are estimates calculated off of projected load values.

3. Not all cost impacts are reflected here as increased facility and construction costs are still to be determined.

3. CO<sub>2</sub> emissions are calculated using estimated loads with PG&E's 2016 emissions factor.

4. Delay impacts are only calculated off of the time in which PG&E and SF were in dispute. (Other delays are not included)

5. Primary switchgear is estimated to cost an additional \$500k.

### Key

Project is currently being disputed or has been delayed due to a dispute/issue and is past the Initial Service Need Date (Column K).

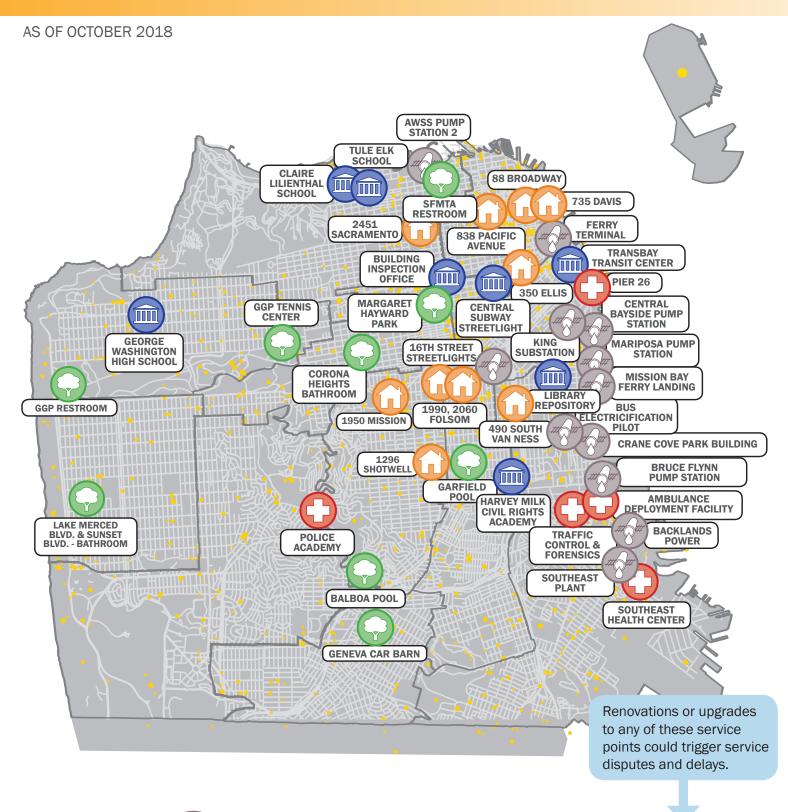
Energized, but still facing issues.

Project is moving forward, but not yet energized. Some are still facing major delays. Please review the impact column for further descriptions.

Project has been energized - no outstanding issues.

# **ATTACHMENT B** – MAP OF INTERCONNECTION ISSUES





## HOUSING

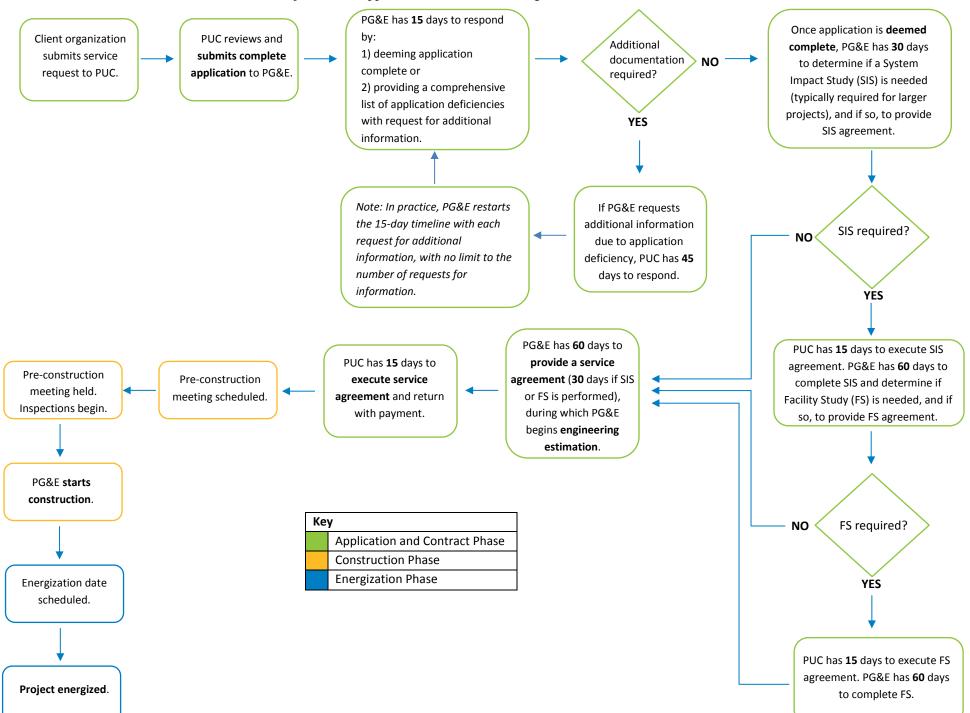
INFRASTRUCTURE







SFPUC METERED SERVICE POINT



### ATTACHMENT C: Process Timeline for Projects from Application Submittal to Energization

Α		В	С	D	E	F	G	Н		I	J
				Additi	onal Costs to	Project	•			Other In	npacts to SF
Project Location	Red	esign Costs	Primary or Secondary Metering Equipment Costs	Additonal Construction Costs	Additional Costs to Project for PG&E retail service	Additional Const./Project Mgmt Costs Due to Delay	Additional Staff Time Costs	Total Additional Project Costs (B+C+D+E+F+G)	re	ost gross venue to SFPUC	CO2 Emissions (lbs) from PG&E retail service
1950 Mission Street - Affordable Housing	\$	45,000	\$ 500,000		\$ 81,000			\$ 626,000	\$	294,000	623,000
490 South Van Ness Avenue - Affordable Housing	\$	15,000			\$ 43,000			\$ 58,000	\$	145,000	294,000
1990 Folsom Street - Affordable Housing					\$ 29,000			\$ 29,000	\$	563,000	926,652
2060 Folsom Street - Affordable Housing					\$ 8,000			\$ 8,000	\$	581,000	922,000
2 Rankin Street - Central Bayside Pump Station								\$ -			
2401 Keith Street - Southeast Health Center								\$-			
2110 Greenwich Street - Tule Elk Elementary								\$ -			
51 Havelock Street - Balboa Pool	\$	20,000		\$ 670,000		\$ 500,000		\$ 1,190,000	\$	14,000	
1995 Evans - Traffic Controls and Forensics								\$-			
Stockton btwn Ellis & O'Farrell - Central Subway Streetlight Reinstallation								\$-			
1909 16th Street - Streetlights								\$ -			
Transbay Transit Center - Transbay Joint Powers Authority								\$ -			
Multiple Locations - Guy Wires (Franchise Issue)								\$-			
Lake Merced Blvd & Sunset Blvd - Restroom								\$-			
50 Bowling Green Drive - GGP Tennis Center			\$ 75,000					\$ 75,000	\$	1,000	
1001 22nd Street - Bus Electrification Pilot								\$ -			
49 South Van Ness Avenue - Building Inspection Office								\$-			
1296 Shotwell Street - Affordable Senior Housing			\$ 75,000					\$ 75,000			
88 Broadway - Affordable Housing					\$ 79,000			\$ 79,000	\$	618,000	1,090,000
735 Davis - Affordable Housing					\$ 18,000			\$ 18,000	\$	335,000	584,000
838 Pacific Avenue - Ping Yuen North Affordable Housing						\$ 240,000		\$ 240,000	\$	186,000	
350 Ellis Street - Affordable Housing								\$-	\$	110,000	
2451 Sacramento Street - JFK Towers Affordable Housing								\$-	\$	15,000	
16th & Terry Francois Blvd Mission Bay Ferry Landing	\$	30,000					, ,	\$ 175,000			
Ferry Terminal	\$	32,000	\$ 75,000				. ,	\$ 203,000			
2241 Jerrold Avenue - Ambulance Deployment Facility	\$	100,000	\$ 75,000			\$ 250,000	\$ 100,000	\$ 525,000	\$	110,000	
Pier 26 - Fire Boat Berthing								\$ -			
800 Amador Street - Pier 94 - Backlands	\$	50,000	\$ 500,000				\$ 50,000				
801 Illinois Street - Crane Cove Park Building	\$	75,000					\$ 50,000				
2301 San Jose Avenue - Geneva Car Barn	\$	5,000	\$ 75,000				\$ 15,000	· · · ·	\$	13,000	
45th & Lincoln - Restroom for Golden Gate Boat Park								\$-			
6 Berry Street - Substation						\$ 5,000		\$ 5,000			
3455 Van Ness Avenue - AWSS Pump Station No. 2								\$ -			
750 Brannan - Main Library Repository								\$ -			
Illinois St. & Terry Francois - Mariposa Pump Station					\$ 22,000			\$ 22,000		588,000	554,000
350 Amber Drive - Police Academy			\$ 75,000	ļ	ļ			\$ 75,000		18,000	
3630 Divisadero - Claire Lilenthal School			\$ 75,000					\$ 75,000		3,000	
4235 19th Street - Harvey Milk Civil Rights Academy			\$ 75,000					\$ 75,000		6,000	
600 32nd Avenue - George Washington High School			\$ 75,000					\$ 75,000		6,000	
1271 Treat Avenue - Garfield Pool			\$ 250,000					\$ 250,000	-		
950 Golden Gate Avenue - Margaret Hayward Park			\$ 75,000		<u> </u>			\$ 75,000			

А	В	С	D	E	F	G	Н	I	J
			Additi	onal Costs to	Project			Other II	npacts to SF
Project Location	Redesign Costs	Primary or Secondary Metering Equipment Costs	Additonal Construction	Additional Costs to Project for PG&E retail service	Additional Const./Project Mgmt Costs Due to Delay	Additional Staff Time Costs	Total Additional Project Costs (B+C+D+E+F+G)	Lost gross revenue to SFPUC	CO2 Emissions (lbs) from PG&E retail service
199 Museum Way/122 State Street - Corona Heights Restroom							\$-		
750 Phelps - Southeast Plant							\$-		
1595 Davidson - Bruce Flynn Pump Station							\$-		
3133 Van Ness Ave SFMTA Restroom							\$ -		
TOTAL	\$ 372,000	\$ 2,075,000	\$ 670,000	\$ 280,000	\$ 995,000	\$ 381,000	\$ 4,773,000	\$ 3,606,000	\$ 4,993,652

Total Additional Project Costs	\$4,	773,000.00
Total Lost Gross Revenue to SFPUC	\$3,	606,000.00
Total Cost Impact to SF (Project Costs + Lost Revenue)	\$8,	379,000.00
Total CO2 Emissions (lbs.)		4,993,652

Note: These represent estimates of the costs that the City is aware of at at the moment. The projects may incur additional costs going forward.