

**UPDATED AGREEMENT BETWEEN
SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT
AND
PACIFIC GAS AND ELECTRIC COMPANY
FOR SPECIFIED CPUC JURISDICTIONAL ELECTRICAL SERVICES**

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2 1. PARTIES

3 This AGREEMENT is made by and between PACIFIC GAS AND ELECTRIC
4 COMPANY, a California corporation (“PG&E”), and SAN FRANCISCO BAY AREA
5 RAPID TRANSIT DISTRICT (“BART”), a rapid transit district established pursuant to
6 California Public Utilities Code, Section 28500 et seq. PG&E and BART may be
7 referred to collectively as the “Parties” or individually as “Party.”

8 2. DEFINITIONS

9 The following terms, when used in this Agreement with the initial letters capitalized,
10 whether in the singular, plural or possessive, shall have the meanings indicated below
11 or in Exhibit F of this Agreement. Unless specifically defined in this Section 2 or in
12 Exhibit F of this Agreement, all terms used in this Agreement with initial capitalization
13 shall have the same meanings as those contained in the Master Definitions
14 Supplement, included as Appendix A to the CAISO Tariff. If and to the extent this
15 Agreement contains a definition for a term where that same term is also found in the
16 Master Definitions Supplement to the CAISO Tariff, the applicable term definition
17 contained in this Agreement shall govern.

- 18 a. “**Ancillary Services**” has the meaning defined in the CAISO Tariff.
- 19 b. “**BART Power Supplies**” means State Authorized Power Supplies and CAISO
20 Power Supplies.
- 21 c. “**CAISO Power Supplies**” means power supplies to meet BART’s Ancillary
22 Services requirements and Real-Time imbalances between BART’s loads and
23 State Authorized Power Supplies.
- 24 d. “**CAISO Tariff**” means the California Independent System Operator Corporation
25 Fifth Replacement FERC Electric Tariff, as such tariff may be amended.
- 26 e. “**CEC**” means the California Energy Commission.
- 27 f. “**CPUC**” means the California Public Utilities Commission.

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- 1 g. **“Direct Generation”** means electricity from energy resources directly connected
2 to and generated at a BART Traction Power, Passenger Station, or
3 Miscellaneous Location that on average is less than or equal to the metered
4 physical load at that location during any given billing interval. Direct Generation
5 can consist of eligible renewable energy resources as defined in Section
6 399.12(e) of the California Public Utilities Code (“Direct Eligible Renewable
7 Energy Resource Electric Generation”), or any other energy resource at that
8 location that is not Direct Eligible Renewable Energy Resource Electric
9 Generation (“Direct Other Resource Electric Generation”).
- 10 h. **“Direct Transactions”** means electricity purchased by BART directly from
11 electric service providers in accordance with the terms and conditions set forth in
12 PG&E’s electric Rule 22.
- 13 i. **“Direct Eligible Renewable Energy Resource Electric Generation Project
14 Installed – Offsetting Excess Generation”** means a service location with an
15 Eligible Renewable Energy Resource Electric Generation Project installation that
16 has been designated as eligible to produce Offsetting Excess Generation as per
17 Section 8.
- 18 j. **“Direct Eligible Renewable Energy Resource Electric Generation Project
19 Installed – Other Excess Generation”** means a service location with an Eligible
20 Renewable Energy Resource Electric Generation Project installation that has not
21 been designated as eligible to produce Offsetting Excess Generation as per
22 Section 8.
- 23 k. **“Direct Eligible Renewable Energy Resource Electric Generation Project
24 Not Installed”** means a service location with no Eligible Renewable Energy
25 Resource Electric Generation Project installation.
- 26 l. **“Distribution Provider”** means the entity that provides and operates the “wires”
27 between the transmission system and the end-use customer. For those end-use
28 customers who are served at transmission voltages, the transmission owner also
29 serves as the Distribution Provider. PG&E is the Distribution Provider under this
30 Agreement.

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- 1 m. **“Electric Emergency Plan” or “EEP”** is an organized approach to implement
2 the California Independent System Operator load reduction orders in a safe and
3 responsive fashion to preserve the overall reliability of the PG&E system. The
4 EEP makes a good faith effort to be equitable in impact to all customers. This is
5 accomplished by applying the CPUC’s customer prioritization orders in a
6 reasonable and consistent fashion across the PG&E system. The EEP is
7 intended to meet the requirements of CPUC Decision Nos. 86081, 91548, 82-09-
8 028 and 01-04-006, to the extent that those decisions do not conflict with CAISO
9 requirements. As circumstances permit, the EEP will be followed in the event
10 that a local electric emergency occurs on the transmission system. PG&E will
11 allocate localized outages in accordance with PG&E’s electric Rule 14 and the
12 procedures established herein. Depending on the amount of load reduction
13 necessary, customers (including essential and non-exempt essential customers)
14 served from block 50 circuits may be subject to rotating outages. The EEP
15 includes the implementation of an under-frequency load shedding system
16 consistent with regulatory requirements.
- 17 n. **“Eligible Renewable Energy Resource”** has the same meaning as defined in
18 California Public Utilities Code Section 399.12.
- 19 o. **“Eligible Renewable Energy Resource Electric Generation”** means power
20 purchased or generated by BART from an Eligible Renewable Energy Resource
21 for delivery through PG&E’s Facilities.
- 22 p. **“Eligible Renewable Energy Resource Electric Generation Project”** means
23 an electric generation project at a location identified in Exhibits “A”, “B”, and “C”
24 and owned or controlled by BART that relies entirely on an Eligible Renewable
25 Energy Resource.
- 26 q. **“Excess Generation”** means electricity entirely from an Eligible Renewable
27 Energy Resource Electric Generation Project directly connected to and
28 generated at a BART Traction Power, Passenger Station, or Miscellaneous
29 Location that on average exceeds the metered physical load at that location
30 during any given billing interval. Excess Generation may be categorized as
31 either Offsetting Excess Generation or Other Excess Generation, based on
32 BART’s designation of the Eligible Renewable Energy Resource Generation
33 Project pursuant to Section 8.
- 34 a. **Offsetting Excess Generation:** As part of the conjunctive billing process,
35 Offsetting Excess Generation in any hour that on average exceeds the load at
36 the location will offset load at other BART locations at the same voltage level
37 during the same billing interval.

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- 1 b. **Other Excess Generation:** Excess Generation from all Eligible Renewable
2 Energy Resource Generation Projects that are not designated by BART for
3 treatment as Offsetting Excess Generation or do not qualify for such
4 treatment, will be treated like one of BART’s legislatively approved electricity
5 supply resources.
- 6 r. **“Facilities”** means all electric equipment owned, leased, or under contract by
7 PG&E for the purposes of delivering power to BART at the locations specified in
8 Exhibits “A”, “B”, and “C”.
- 9 s. **“Federal Preference Power”** means electric power that is purchased by BART
10 from a federal power marketing agency or its successor.
- 11 t. **“FERC”** means the Federal Energy Regulatory Commission.
- 12 u. **“Local Publicly Owned Electric Utility”** has the same meaning as defined in
13 California Public Utilities Code Section 224.3.
- 14 v. **“Local Publicly Owned Electric Utility Power”** means power purchased by
15 BART from a Local Publicly Owned Electric Utility for delivery through PG&E’s
16 Facilities.
- 17 w. **“Other Direct Electric Generating Facility Installed”** means a service location
18 that has installed generation that does not qualify as an Eligible Renewable
19 Energy Resource Electric Generation Project.
- 20 x. **“Other Direct Electric Generating Facility Not Installed”** means a service
21 location that either has no generation installed or the installed generation is for
22 backup or emergency generation purposes only.
- 23 y. **“REC”** means a renewable energy credit which is a tradable certificate of proof
24 that one MWh of electricity has been generated by a renewable-fueled source.
- 25 z. **“State Authorized Power Supplies”** means Federal Preference Power, Local
26 Publicly Owned Electric Utility Power, Eligible Renewable Energy Resource
27 Electric Generation (including Excess Generation), and any other future source
28 of power as authorized by law.
- 29 aa. **“Station and Miscellaneous Power”** means
30 a. single phase, three wire, grounded neutral, sixty cycle, alternating current,
31 delivered and metered at an electromotive force of 120/240 volts, subject to
32 reasonable variations in frequency and electromotive force allowed under
33 PG&E’s electric Rule No. 2, at such BART locations listed in Exhibits “B” and
34 “C” and at such other BART locations that BART may designate on the
35 System for delivery of alternating electric current at that electromotive force

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- 1 b. three phase, four wire wye, grounded neutral, sixty cycle, alternating electric
2 current, delivered and metered at an electromotive force of 277/480 or
3 120/208 volts, subject to reasonable variations in frequency and electromotive
4 force allowed under PG&E's electric Rule No. 2, at such BART locations listed
5 in Exhibits "B" and "C" and at such other BART locations that BART may
6 designate on the System for delivery of alternating electric current at that
7 electromotive force;
- 8 c. three phase, four wire wye, with resistance grounded neutral, sixty cycle,
9 alternating electric current, delivered and metered at an electromotive force of
10 2400/4160 volts, subject to reasonable variations in frequency and
11 electromotive force allowed under PG&E's electric Rule No. 2, at such BART
12 locations listed in Exhibits "B" and "C" and at such other BART locations that
13 BART may designate on the System for delivery of alternating electric current
14 at that electromotive force; and
- 15 d. alternating current other than Traction Power delivered and metered at other
16 voltages and locations, and in configurations as may be required by BART.
- 17 bb. **"Special Facilities"** are defined in PG&E's electric Rule No. 2.
- 18 cc. **"Supplemental Power"** means bundled service power supplied and delivered
19 by PG&E pursuant to PG&E's E-20 Rate Schedule.
- 20 dd. **"System"** means the mass transit system operated by BART within the State of
21 California.
- 22 ee. **"Third Party"** means a person or entity other than BART or PG&E.
- 23 ff. **"Traction Power"** means three phase, sixty cycle, alternating electric current
24 configured to BART's specification, supplied at an electromotive force of 34,500
25 volts or above, at points listed in Exhibit "A", subject to reasonable variations in
26 frequency and electromotive force allowed under PG&E's electric Rule No. 2.
- 27 gg. **"701.8(d) Facilities"** means those Facilities leased to BART and subject to
28 California Public Utilities Code, Section 701.8(d).

29 NOW, THEREFORE, the Parties agree as follows:

30 3. PG&E'S ELECTRIC TARIFFS

31 PG&E's applicable electric tariffs that are on file with the CPUC and in effect on the date
32 of this Agreement, and such amendments to those tariffs, amended tariffs, and
33 additional tariffs relating to PG&E's electric service as the CPUC may from time to time
34 authorize that are not in conflict with this Agreement shall control. Any reference to a
35 PG&E tariff (including both rate schedules and rules) includes any successor tariff.

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1 4. REGULATORY AUTHORITY

2 All services provided under this Agreement are subject to the jurisdiction of the CPUC
3 and this Agreement shall at all times be subject to such changes or modifications as the
4 CPUC may, from time to time, direct in the exercise of its jurisdiction. PG&E shall notify
5 BART as soon as practicable of any and all such changes or modifications. This
6 Agreement does not govern any service to BART under FERC jurisdiction.

7 5. OBLIGATIONS OF PG&E

8 PG&E agrees to do the following:

- 9 a. PG&E will provide Back-Up Transformer Service to BART as specified in Exhibit
10 "G".
- 11 b. For the services provided under this Agreement, PG&E will bill BART in
12 accordance with this Agreement.
- 13 c. Upon notice from BART to PG&E of an addition to the System that requires
14 Traction Power, PG&E and BART shall reach an agreement concerning the cost
15 and scope of work associated with the new facilities. BART will not be required
16 to make payments until completion of work for which BART is being invoiced.
17 Once BART has signed the necessary contracts or authorizations, PG&E shall
18 promptly begin and diligently prosecute to completion the planning and
19 installation of all Facilities required to supply Traction Power for that addition. All
20 such Facilities shall be added to Exhibits "A" and "D", and if applicable Exhibit
21 "E". Except for the obligations specified under 6.c. and 6.d. of this Agreement,
22 PG&E will provide BART a free footage allowance of one hundred (100) feet of
23 overhead conductor and related facilities for Traction Power line extensions.
24 BART will pay all applicable charges associated with construction, other than
25 those charges offset by the hundred (100) foot allowance, in accordance with
26 then existing PG&E electric Rule Nos. 2, 15, and 16, or their successors. BART
27 will not receive any allowances other than the hundred (100) foot allowance, and
28 will not be entitled to select the non-refundable discount option or receive any
29 revenue-based refunds.
- 30 d. Upon notice from BART to PG&E of any passenger station or location on the
31 System that requires Station and Miscellaneous Power, PG&E and BART shall
32 reach an agreement concerning the cost and scope of work associated with the
33 new facilities. BART will not be required to make payments until completion of
34 work for which BART is being invoiced. Once BART has signed the necessary
35 contracts or authorizations, PG&E shall promptly begin and diligently prosecute
36 to completion the planning and installation of all Facilities required to supply such
37 power to that station or location on the basis of dual supply with automatic
38 switching equipment, unless otherwise directed by BART. All such locations
39 shall be added to Exhibit "B" or Exhibit "C" as appropriate.

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1 The Facilities required for the first source will be according to PG&E's electric
2 Rules 15 and 16 for the standard facilities. If BART requests any non-standard
3 Facilities for the first source, then the non-standard facilities will be installed and
4 billed as Special Facilities. BART will pay all applicable charges associated with
5 construction of the first source, other than those charges offset by line extension
6 or other credits, in accordance with PG&E electric Rules 2, 15 and 16, or their
7 successors.

8 The Facilities required for the second source for any dual supply with automatic
9 switching for Station and Miscellaneous Power will be considered Special
10 Facilities. BART will pay all applicable charges in accordance with electric
11 Rule 2.

12 Table 1 summarizes the treatment of various existing and new distribution
13 facilities at BART locations that receive Station and Miscellaneous Power.

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Table 1

Activity Regarding PG&E and BART facilities	First Source	Second Supply and Automatic Switching Equipment
Applicable to post January 1, 2017 Installations		
New Installation on or after January 1, 2017 ¹	<ul style="list-style-type: none"> • Rules 15 and 16 with revenue allowance 	<ul style="list-style-type: none"> • Rule 2 Special Facilities
Applicable to both pre and post January 1, 2017 Installations		
Service Upgrade Due To Increased Load	<ul style="list-style-type: none"> • Rules 15 and 16 with revenue allowance 	<ul style="list-style-type: none"> • Rule 2 Special Facilities
Like for Like Replacement Due to End-of-Life of PG&E Facilities	<ul style="list-style-type: none"> • PG&E and BART facilities at PG&E expense for least cost configuration. • PG&E and BART facilities at BART expense for cost in excess of least cost configuration. 	<ul style="list-style-type: none"> • PG&E Facilities at PG&E expense for least cost configuration with no adjustment to Rule 2 Special Facilities cost basis. • BART facilities at BART expense.
Rearrangement / Alteration of PG&E or BART facilities at BART Request	<ul style="list-style-type: none"> • PG&E Facilities at BART expense. • BART facilities at BART expense. 	<ul style="list-style-type: none"> • PG&E Facilities pursuant to CPUC Form 79-255, Section 11. • BART facilities at BART expense.
Removal of PG&E or BART facilities	<ul style="list-style-type: none"> • PG&E Facilities at BART expense. • BART facilities at BART expense. 	<ul style="list-style-type: none"> • PG&E Facilities pursuant to CPUC Form 79-255, Section 13. • BART facilities at BART expense.

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¹ Four projects are currently “in-flight” and will likely be completed after January 1, 2017. The four in-flight projects are the Dublin/Pleasanton Passenger Station, South Hayward Passenger Station, Warm Springs Passenger Station, and the east end of the Transbay Tube. These four in-flight projects will be handled under the pre-January 1, 2017 cost responsibility rules in effect under the prior PG&E/BART agreement.

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- 1 e. PG&E shall lease Facilities to BART pursuant to Section 701.8(d) at any Traction
2 Power location specified by BART. All Facilities leased pursuant to Section
3 701.8(d) at any Traction Power location shall be listed in Exhibit "E".
- 4 f. PG&E shall render to BART monthly bills that show detailed breakdowns and
5 computations of all charges, including the charges for the power supplied to each
6 Traction Power and Station and Miscellaneous Power location.
- 7 g. PG&E shall use PG&E's distribution Facilities to deliver power from BART Power
8 Supplies to the locations listed in Exhibits "A", "B", and "C", and to those future
9 locations requested by BART to serve the System.
- 10 h. PG&E will, upon request, provide BART with historical meter data and load
11 profile data for each existing BART meter for 2014, 2015 and 2016. BART may
12 make this request one time only.
- 13 i. PG&E will work with BART to establish a common set of procedures to adjust
14 BART's metered usage for distribution loss factors in line with common PG&E
15 practice under CPUC rules.
- 16 j. PG&E is the Distribution Provider for all BART points of delivery receiving CPUC-
17 jurisdictional distribution service. BART's loads are to be included as part of the
18 Electric Emergency Plan and PG&E shall be responsible for any manual or
19 automatic load shedding requirements in accordance with the Electric
20 Emergency Plan and consistent with CPUC policies. PG&E will inform BART of
21 the treatment of BART loads in its load shedding plan. Consistent with current
22 practices, PG&E will not install under-frequency load shedding relays on BART's
23 Traction Power service. For locations where BART receives dual primary
24 service, PG&E will subject no more than one source to manual or automatic load
25 shedding at that location.

26 **6. OBLIGATIONS OF BART**

27 BART agrees to do the following:

- 28 a. BART shall take all reasonable measures to install, maintain, and operate such
29 protective devices and take such protective actions to protect and maintain the
30 integrity and continuity of the interconnected system. At each Traction Power
31 location, BART will provide and maintain space on or near BART's electrical
32 service entrance panels for protective relays and other related equipment
33 required by PG&E to provide service to BART.
- 34 b. For the services provided under this Agreement, BART will pay to PG&E all
35 charges specified in Section 7 of this Agreement. This Agreement does not cover
36 services or new charges not described herein or rates or charges applicable
37 thereto.

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- 1 c. BART shall fulfill its responsibilities required under electric Rule 2 for protection
2 equipment. If PG&E needs to install new or modify existing protection equipment
3 as a result of a request by BART for a change in load, change in service
4 configuration or to initiate a new service point, then PG&E's costs shall be
5 considered Special Facilities under electric Rule 2.
- 6 d. BART shall reimburse PG&E for payments required to obtain easements and
7 rights of way on private property acquired by PG&E and necessary regulatory
8 approval pursuant to General Order 131-D for such construction for Facilities
9 required to supply Traction Power, and Station and Miscellaneous Power for
10 additions to the System. Nothing in this Section 6.d. shall preclude BART from
11 acquiring easements and rights of way, and all related regulatory approvals,
12 necessary for construction by PG&E of Facilities under this Agreement, provided
13 that BART shall coordinate such land right acquisition activities with PG&E and
14 that such land rights acquired are satisfactory to PG&E.
- 15 e. With respect to Station and Miscellaneous Power delivered and metered at an
16 electromotive force of 2400/4160 volts, BART will provide a resistance ground for
17 the neutral of the four-wire wye.
- 18 f. BART will operate the System in such a manner that its electric load
19 characteristics are in accordance with the specifications set forth in Exhibit "D".
- 20 g. In the event that BART provides notice to PG&E of an addition to the System that
21 requires PG&E to supply and/or deliver Traction Power or Station and
22 Miscellaneous Power, BART's notice and subsequent documentation to PG&E
23 shall include information that PG&E deems necessary for PG&E to begin and
24 complete the planning, engineering, and installation of the Facilities.
- 25 h. In any notice that BART provides to PG&E of an addition to the System that
26 requires PG&E to supply and/or deliver Station and Miscellaneous Power, BART
27 shall specify whether or not power to that addition shall be on the basis of dual
28 primary supply with automatic switching equipment.
- 29 i. In the event that BART disputes any charges billed by PG&E pursuant to this
30 Agreement, BART agrees that all disputed portions of the amount claimed by
31 PG&E to be due shall, within sixty (60) days, be deposited with the CPUC, or a
32 designated escrow holder in accordance with PG&E's electric Rule 10.
- 33 j. For all BART Eligible Renewable Energy Resources installed at BART locations
34 subject to this Agreement, BART shall retain or retire the associated RECs from
35 such BART Eligible Renewable Energy Resources for the duration of this
36 Agreement.

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1 k. In accordance with the CPUC Rules, BART shall install and maintain the
2 necessary equipment to maintain proper power factor and voltage at the point of
3 interconnection. BART is responsible for power factor correction. When BART is
4 receiving power from the PG&E system, metered power factors outside
5 acceptable ranges may result in additional charges, as specified in PG&E's tariffs
6 and operating standards.

7 **7. CHARGES FOR SERVICES PROVIDED UNDER THIS AGREEMENT**

8 BART will pay the following charges under this Agreement:

9 a. For BART Power Supplies delivered pursuant to this Agreement to locations
10 specified in Exhibit "A", "B", and "C", BART shall pay the component charges for
11 the applicable voltage level pursuant to the E-20 rate schedule. These
12 component charges and billing calculations are specified in Exhibit "F".

13 b. BART shall be charged for 701.8(d) Facilities in accordance with Exhibit "E".
14 PG&E agrees that the monthly charges for 701.8(d) Facilities cover all necessary
15 maintenance, repair and replacement services including spare parts and
16 inventory related to such 701.8(d) Facilities.

17 c. BART shall be charged for Transformer Back-up Service in accordance with
18 Exhibit "G". BART will not be required to make payments for this service until
19 completion of work for which BART is being invoiced.

20 d. BART shall be charged for costs in accordance with Sections 5.c and/or 5.d.

21 **8. BART SELECTION OF ELIGIBLE RENEWABLE ENERGY RESOURCE GENERATION**
22 **PROJECTS QUALIFYING FOR OFFSETTING EXCESS GENERATION**

23 8.1 BART may designate one or more Eligible Renewable Energy Resource Electric
24 Generation Projects, with a cumulative capacity not to exceed 7.5 MWs (CEC AC)¹ and
25 meeting milestones described section 8.2 below, as eligible to produce Offsetting
26 Excess Generation.

27 8.2 As part of the conjunctive billing process, Offsetting Excess Generation in any
28 hour that exceeds the load at the location will offset load at other BART locations at the
29 same voltage level during the same billing interval. In order for a given project to qualify
30 for this treatment, all of the following conditions apply:

31 a. By no later than January 1, 2018, BART must have provided to PG&E the
32 locations and "indicative" capacities for projects that it wishes to be eligible to
33 provide Offsetting Excess Generation. The cumulative capacity of all such

¹ California Energy Commission Alternating Current is PTC Rating x Number of Modules x Inverter Efficiency. The PTC rating is based upon 1,000 Watt/m² solar irradiance, 20 degrees Celsius ambient temperature, and 1 meter/second wind speed.

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1 projects identified by BART by January 1, 2018 cannot exceed 7.5 MWs;
2

- 3 b. By no later than July 1, 2019, BART must have executed Power Purchase
4 Agreements or contracts for system purchase at specified capacities for the
5 locations identified in 8.2.a above in order for such projects to be eligible to
6 provide Offsetting Excess Generation. The cumulative capacity of all such
7 projects cannot exceed 7.5 MWs. Individual projects larger than 1 MW must
8 be sized to not exceed site load (based on annual kWhs).
9
- 10 c. The goal is to complete construction and request interconnection prior to
11 January 1, 2021 for any project to be eligible to provide Offsetting Excess
12 Generation, and then only if the 7.5 MWs have not already been reserved by
13 other projects. Aggregate project capacity representing no more than 50% of
14 the capacity identified in 8.2.b can complete construction and interconnection
15 later than January 1, 2021.
16
- 17 d. Through January 1, 2018, projects may be moved, or scheduled to be moved
18 out of the Offsetting Excess Generation category to accommodate planned
19 projects that otherwise would have exceeded the 7.5 MW limit. BART shall
20 provide PG&E at least 3 months' notice prior to adding or removing a project
21 from the Offsetting Excess Generation category.
22
- 23 e. Existing and in flight Eligible Renewable Energy Electric Generation Projects
24 (including Lafayette, Union City, Richmond, Hayward and Warm Springs) will
25 be placed in the Offsetting Excess Generation category. These inflight
26 Eligible Renewable Energy Electric Generation Projects can be removed from
27 the Offsetting Excess Generation category pursuant to Section 8.2.d.
28

29 All locations at a given voltage level need to receive service on the same billing option
30 (i.e., Standard E-20 vs E-20 Option R).¹
31

32 9. SUPPLEMENTAL POWER

¹ Eligibility for Option R will be determined based upon the aggregate load and generation at a given voltage level.

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1 BART currently does not intend to procure Supplemental Power from PG&E. BART will
2 notify PG&E at least 12 months in advance of commencement of taking Supplemental
3 Power from PG&E at which point PG&E and BART will define the specific meter and
4 schedule information exchange and settlement process needed to accommodate that
5 procurement. Upon initiation of Supplemental Power service, two weeks prior to each
6 monthly settlement period, BART will inform PG&E of its intent to take Supplemental
7 Power in lieu of CAISO imbalance energy. In general, Supplemental Power settlement
8 will have the following characteristics:

- 9 a. 60 minute settlement with no banking or deviation band considerations for over or
10 under deliveries.
- 11 b. Conjunctive billing for Offsetting Excess Generation.
- 12 c. Supplemental power will be billed under Rate Schedules E20T, E20S, or E20P, as
13 applicable.

14 10. DIRECT TRANSACTIONS

15 BART and PG&E agree that BART has the right by California legislation to procure
16 electricity through Direct Transactions. BART currently does not intend to procure
17 electricity through Direct Transactions. BART will notify PG&E at least 12 months in
18 advance of commencing to procure electricity through Direct Transactions, at which
19 point PG&E and BART will define the specific meter and schedule information exchange
20 and settlement process needed to accommodate that procurement. In general, Direct
21 Transactions settlement will have the following characteristics:

- 22 a. 60 minute settlement.
- 23 b. Conjunctive billing for Offsetting Excess Generation.
- 24 c. Direct Transactions will be billed under Rate Schedules E20T, E20S, or E20P, as
25 applicable, excluding the generation component.

26 11. ASSET REVIEW

- 27 a. Notwithstanding Section 5(g) of the prior Agreement Between BART and PG&E for
28 Specified CPUC Jurisdictional Services, PG&E and BART agree that PG&E is not
29 required to sell the East Portal Substation Facilities to BART upon termination of that
30 Agreement.
- 31 b. By September 30, 2017, PG&E and BART will meet to review and identify the owner
32 of the assets at the locations in Exhibit A. The equipment to be identified at each
33 location will include: 34.5 kV cable, transformers, tap changers, breakers, aerial
34 switches, oil circuit breakers, disconnect switches, protective relays and fencing.
- 35 c. By December 31, 2017, or such longer period as the Parties may mutually agree
36 upon, PG&E and BART will agree upon an asset list for the assets described in
37 subsection b above.

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1 d. In the event of any dispute regarding the ownership of any of the assets on the asset
2 list discussed in subsection b above, PG&E and BART will contact the CPUC's
3 Alternative Dispute Resolution Coordinator to request assistance in resolving their
4 disputes.

5 12. RESOURCE ADEQUACY

6 BART's loads are not part of PG&E's resource adequacy obligations and PG&E will not
7 be obligated to, and will not, procure resource adequacy capacity to cover BART loads.

8 13. PARALLEL OPERATION

9 Whenever BART uses generating units, storage facilities, or other sources of supply not
10 delivered through PG&E's system, including during emergency situations, such
11 generating units, storage facilities, or other sources of supply may not be operated in
12 parallel with PG&E's system unless authorized by PG&E and in compliance with
13 PG&E's electric Rule Nos. 2 and 21.

14 14. LIMITED TO ENERGY USING PG&E FACILITIES

15
16 Except for power from Direct Generation, the Parties have no understanding or
17 agreement with respect to the delivery of power to BART that does not pass through
18 PG&E's Facilities.

19 15. EXHIBITS

20 Exhibits "A", "B", "C", "D", "E", "F", "G", and "H" are attached to this Agreement and
21 incorporated herein.

22 For each Eligible Renewable Energy Resource Electric Generation Project subject to
23 this Agreement a "Special Interconnection Agreement for BART Eligible Renewable
24 Energy Resource Electric Generating Projects" in the form set forth in Exhibit H will be
25 entered into by PG&E and BART.

26 16. TERM

27 a. This Agreement becomes effective January 1, 2017 after final approval by the
28 CPUC and continues in effect from its effective date until 24:00 hours (midnight)
29 prevailing Pacific Time on December 31, 2026, unless either Party rejects this
30 Agreement in accordance with subparagraph (b) hereof.

31 b. If final approval by the CPUC is not an unqualified approval of this Agreement,
32 then the Parties shall attempt in good faith to renegotiate the terms and
33 conditions of this Agreement so as to restore the original balance of benefits and
34 burdens contemplated by the Parties. If a new agreement or agreements cannot
35 be negotiated within sixty (60) days after the commencement of negotiations, or
36 such longer period as the Parties shall mutually agree, either Party shall have the
37 right to reject this Agreement provided that such Party gives written notice of

**UPDATED AGREEMENT BETWEEN
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FOR SPECIFIED CPUC JURISDICTIONAL ELECTRICAL SERVICES**

1 such decision to the other Party within thirty (30) days of the end of the 60-day
2 period, or such longer period as has been mutually agreed to.

3 c. This Agreement supersedes and terminates all prior agreements between the
4 Parties with respect to electric power supply, including, but not limited to,
5 agreements executed May 31, 1968, January 21, 1972, August 19, 1987, July
6 31, 1997, June 21, 2000 and July 29, 2008. Notwithstanding anything to the
7 contrary in this Agreement or in the Interconnection Agreement between PG&E
8 and BART and the Offer of Settlement and Stipulation filed at FERC
9 contemporaneously with the execution of this Agreement, the Agreement for
10 Installation or Allocation of Special Facilities for Permissive Overreach Transfer
11 Trip and related communication equipment at BART's Shaw Road Substation,
12 dated August 4, 2000, shall continue in full force and effect.

13 d. In each instance where PG&E believes 1) BART is bypassing PG&E's facilities
14 by a direct connection to a Third Party where such direct connection displaces
15 the power that PG&E is then currently supplying or has been requested to serve
16 in writing; or 2) BART is providing power to Third Parties other than to existing, or
17 equivalent future, concessionaires located on BART owned station property,
18 PG&E may provide BART written notice of such bypassing. If BART does not
19 eliminate the noticed bypassing, or demonstrate to PG&E its belief is incorrect,
20 within 90 days of receipt of PG&E's written notice, PG&E may, at its sole option,
21 terminate this Agreement with one hundred and eighty (180) days prior written
22 notice.

23 17. GENERAL TERMS

24 a. Headings: Headings or titles of the provisions hereof are for convenience only
25 and shall have no effect on the provisions of this Agreement.

26 b. Construction of Agreement: Ambiguities or uncertainties in the wording of this
27 Agreement will not be construed for or against any Party, but will be construed in
28 the manner that most accurately reflects the Parties' intent as of the date they
29 executed this Agreement.

30 c. Severability: Any provision of this Agreement which is determined to be invalid
31 or unenforceable will be ineffective to the extent of such determination without
32 invalidating the remaining provisions of this Agreement or affecting the validity or
33 enforceability of such remaining provisions.

34 d. Statutory Requirements: The Parties agree that the services and charges in this
35 Agreement are permitted under Section 701.8 or Section 374(b) of the California
36 Public Utilities Code.

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FOR SPECIFIED CPUC JURISDICTIONAL ELECTRICAL SERVICES**

- 1 e. Entire Agreement: This Agreement and the Exhibits to it constitute the complete
2 agreement of the Parties relating to the matters specified in this Agreement and
3 supersede all prior representations or agreements, whether oral or written, with
4 respect to such matters. No oral modification or waiver of any of the provisions
5 of this Agreement shall be binding on either Party. This Agreement is for the
6 benefit of, and shall be binding upon, the Parties and their respective successors
7 and assigns.
- 8 f. Non-Waiver: The waiver by either Party of any breach of any term, covenant or
9 condition contained in this Agreement or in a utility service billing, or any default
10 in the payment of any obligation of any utility service billing rendered pursuant to
11 this Agreement shall not be deemed to be a waiver of any other breach or default
12 of the same or any other term, covenant, condition or obligation. Nor shall any
13 waiver of any incident of breach or default in payment constitute a continuing
14 waiver of the same.
- 15 g. Definitions: The singular shall include the plural, and the plural shall include the
16 singular.
- 17 h. Force Majeure: No Party shall be considered in default as to any obligation
18 under this Agreement if prevented from fulfilling the obligation due to an event of
19 force majeure, including without limitation, acts of God, labor disturbance, act of
20 the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage
21 or accident to machinery or equipment, any order, regulation or restriction
22 imposed by governmental, military or lawfully established civilian authorities, or
23 any other cause beyond a Party's control. However, a Party whose performance
24 under this Agreement is hindered by an event of force majeure shall make all
25 reasonable efforts to perform its obligations under this Agreement.
- 26 i. Exclusion of Damages: Neither Party shall be liable to the other for any special,
27 incidental, exemplary or consequential damages, whether such damages arise in
28 contract, tort (including negligence) or otherwise, including but not limited to lost
29 profits and loss of power.
- 30 j. Modification: This Agreement may be amended or modified only by a written
31 instrument signed by the authorized representatives of both Parties.
- 32 k. Notices: A notice, request, approval, consent or other communication required or
33 permitted by this Agreement shall be in writing and is sufficiently given, if
34 personally delivered or sent by mail, postage pre-paid, addressed

**UPDATED AGREEMENT BETWEEN
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FOR SPECIFIED CPUC JURISDICTIONAL ELECTRICAL SERVICES**

if to PG&E,

Pacific Gas & Electric Company
Attention of Manager, Electric Transmission Contract Management
PO BOX 770000, Mail Code B13L
San Francisco, California 94177

if to BART,

Assistant General Manager
BART Planning, Development & Construction
San Francisco Bay Area Rapid Transit District
300 Lakeside Drive, MC LKS-21
Oakland, CA 94612

With a copy to:

Manager, Energy Division
BART Planning, Development & Construction
San Francisco Bay Area Rapid Transit District
300 Lakeside Drive, MC LKS-21
Oakland, CA 94612

or to such other addresses or to the attention of other persons as the Parties may designate by notice given in the manner provided in this paragraph.

- 1 l. Counterparts: This Agreement may be executed in two counterparts, each of
2 which shall be deemed an original and all of which together shall constitute one
3 instrument.
- 4 m. Governing Law: This Agreement shall be interpreted, governed, and construed
5 under the laws of the State of California.
- 6 n. No FERC Jurisdictional Services: Notwithstanding any language or provision in
7 this Agreement to the contrary, this Agreement does not apply to any FERC
8 jurisdictional services provided to BART by PG&E.

9 18. SIGNATURE CLAUSE

**UPDATED AGREEMENT BETWEEN
BART AND PG&E
FOR SPECIFIED CPUC JURISDICTIONAL ELECTRICAL SERVICES**

- 1 The signatories hereto represent that they have been duly authorized to enter into this
- 2 Agreement on behalf of the Party for which they sign.
- 3 IN WITNESS WHEREOF, the Parties have executed this Agreement.

**SAN FRANCISCO
BAY AREA RAPID TRANSIT DISTRICT**

PACIFIC GAS AND ELECTRIC COMPANY


(Signature)


(Signature)

Grace Crunican

STEVEN E. MALNIGHT

(Type or print name)

(Type or print name)

General Manager

SVP, REGULATORY AFFAIRS

(Title)

(Title)

9.21.16

9/22/16

(Date)

(Date)

EXHIBIT A

TRACTION POWER LOCATIONS

TRACTION POWER SUBSTATION INFORMATION									BART'S CORRESPONDING 34,500 VOLT SWITCHING STATION		Subject to Asset Review
Ref No.	Name	Owner	Location	Point-of-Delivery to BART (Voltage at Point-of-Delivery)	Point of Metering (Meter Voltage)	Billing Adjustments	Number of Services	Capacity of Services (kVA)	Name	Location	
1	Lakewood Substation	PG&E	Walnut Creek	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV per PUC 701.8(d)	One	29,000	Walnut Creek	N. Calif Blvd N/O Ygnacio Valley Rd Walnut Creek	Yes
2	East Portal Substation	PG&E ¹	Orinda	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV per PUC 701.8(d)	One	29,000	Orinda	Freeway Route 24 & Camino Pablo Orinda	Yes
3	Station G	PG&E	El Cerrito	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV per PUC 701.8(d)	Two	30,000	Portola Drive	S/O Portola Dr., W/O Rancho Ct. El Cerrito	Yes
4	Jarvis Substation	PG&E	Decoto	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV per PUC 701.8(d)	One	45,000	Union City	E/O Decoto Rd & 12th St., Union City	Yes
5	Station U	PG&E	San Leandro	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV per PUC 701.8(d)	One	50,000	Watson Ave.	Washington St & Watson Ave., San Leandro	Yes
6	Oakland Power Plant	PG&E	Oakland	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV per PUC 701.8(d)	Two	50,000	Washington St.	5th & Washington Sts., Oakland	Yes
7	Bayshore Substation	PG&E	San Francisco	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV per PUC 701.8(d)	Two	61,000	Valencia St.	Mission St., W/O Powers Ave., San Francisco	Yes
8	East Dublin	BART	East Dublin	High voltage landing structure in substation (60 kV)	Load side of transformer (34.5 kV)	Billed at 60 kV	Two	30,000	East Dublin	Hacienda Drive, Dublin	Yes
9	Willow Pass	BART	West Pittsburg	High voltage landing structure in substation (115 kV)	Load side of transformer (34.5 kV)	Billed at 115 kV	One	25,000	Evora Rd	Evora Road, West Pittsburg	Yes
10	Castro Valley	PG&E	Castro Valley	Load side of transformer (34.5 kV)	Load side of transformer (34.5 kV)	Billed at 230 kV per PUC 701.8(d)	One	30,000	Crow Canyon	Grove Way, Castro Valley	Yes

¹ The substation site, control building, foundations or pads for Facilities, and fencing or equivalent structures at PG&E's East Portal substation at Orinda are the property of BART.

EXHIBIT A (Continued)

TRACTION POWER LOCATIONS

TRACTION POWER SUBSTATION INFORMATION									BART'S CORRESPONDING 34,500 VOLT SWITCHING STATION		Subject to Asset Review
Ref No.	Name	Owner	Location	Point-of-Delivery to BART (Voltage at Point-of-Delivery)	Point of Metering (Meter Voltage)	Billing Adjustments	Number of Services	Capacity of Services (kVA)	Name	Location	
11	WSP Santa Paula Bulk Substation	BART	Millbrae	High voltage landing structure in substation (115 kV)	Primary side of transformer (115 kV)	Billed at 115 kV	One	45,000	Santa Paula	19 Monterey St., Millbrae	Yes
12	WSR Shaw Road Bulk Substation	BART	San Bruno	High voltage landing structure in substation (115 kV)	Primary side of transformer (115 kV)	Billed at 115 kV	One	45,000	Shaw Road	983 7th Ave., San Bruno	Yes

EXHIBIT B

STATION POWER LOCATIONS

Ref No.	Name	Location	Voltage at Point-of-Delivery	Voltage at Point-of-Metering	Estimated Normal Maximum Demands (kVA)
13	Daly City	Hillcrest & San Joaquin Ave., Daly City	277/480	277/480	250
14	Balboa Park	Ocean Ave. & So. Freeway, SF	277/480	277/480	175
15	Glen Park	Bosworth & Diamond, SF	277/480	277/480	270
16	24th Street	Mission & 24 Sts., SF	277/480	277/480	310
17	16th Street	Mission & 16th Sts., SF	277/480	277/480	205
18	Civic Center	Market & Fulton Sts., SF	277/480 Network	277/480 Network	350
19	Powell Street	Market & Powell Sts., SF	277/480 Network	277/480 Network	375
20	Montgomery Street	Market & Montgomery Sts., SF	277/480 Network	277/480 Network	450
21	Embarcadero	Market & Davis Sts., SF	277/480 Network	277/480 Network	435
22	Oakland West	Chester & 5th Sts., Oakland	277/480	277/480	125
23	12th Street	Broadway & 12th Sts., Oakland	277/480 Network	277/480 Network	575
24	19th Street	Broadway & 18th Sts., Oakland	277/480 Network	277/480 Network	550
25	MacArthur	40th St., & Freeway Route 24, Oakland	277/480	277/480	375
26	Lake Merritt	Oak & 8th Sts., Oakland	277/480	277/480	935
27	Fruitvale	E 12th St., & 35th Ave., Oakland	277/480	277/480	155
28	Coliseum	San Leandro St., & 73rd Ave., Oakland	277/480	277/480	200
29	San Leandro	San Leandro Blvd., & W. Joaquin Ave., San Leandro	277/480	277/480	185
30	Bayfair	Colby & Wagner Sts., San Leandro	277/480	277/480	180

EXHIBIT B (Continued)

STATION POWER LOCATIONS

Ref No.	Name	Location	Voltage at Point-of-Delivery	Voltage at Point-of-Metering	Estimated Normal Maximum Demands (kVA)
31	Fremont	Mowry & Vancouver Sts. Fremont	120/240	120/240	15
32	Hayward	Sutro & C Sts., Hayward	277/480	277/480	200
33	South Hayward	Cole Pl. S/O Tennyson Rd., Hayward	277/480	277/480	150
34	Union City	East of Decoto Rd. & 12th St., Union City	277/480	277/480	185
35	Fremont	East of Mowry Ave. near Walnut Way, Fremont	277/480	277/480	180
36	Ashby	Adeline & Essex Sts., Berkeley	277/480	277/480	285
37	Berkeley	Shattuck Ave. & Center St., Berkeley	277/480	277/480	410
38	North Berkeley	Sacramento & Francisco Sts., Berkeley	277/480	277/480	260
39	El Cerrito Plaza	Fairmont Ave. & Richmond St., El Cerrito	277/480	277/480	150
40	El Cerrito del Norte	Cutting Blvd. & Kearney St., El Cerrito	277/480	277/480	175
41	Richmond	Nevine Ave. & 17th St., Richmond	277/480	277/480	200
42	Rockridge	College & Keith Ave., Berkeley	277/480	277/480	150
43	Orinda	Camino Pablo & Freeway Route 24, Orinda	277/480	277/480	150
44	Lafayette	Freeway Route 24, East of Happy Valley Rd., Lafayette	277/480	277/480	155
45	Walnut Creek	No. California Blvd. N/O Ygnacio Valley Rd., Walnut Creek	277/480	277/480	175
46	Pleasant Hill	Geary & Oak Rd., Pleasant Hill	277/480	277/480	175
47	Concord	Atlantic & Berkeley Ave.	277/480	277/480	195

EXHIBIT B (Continued)

STATION POWER LOCATIONS

Ref No.	Name	Location	Voltage at Point-of-Delivery	Voltage at Point-of-Metering	Estimated Normal Maximum Demands (kVA)
48	North Concord	Port Chicago Hwy. & Panoramic Dr., Concord	120/240	120/240	10
49	East Dublin / Pleasanton	5801 Owens Drive, Pleasanton	277/480	277/480	1000
50	Castro Valley	3301 Northridge, Castro Valley	277/480	277/480	650
51	Pleasant Hill Parking	1365 Treat Blvd., Pleasant Hill	277/480	277/480	200
52	Grand Street Garage	Grand Street, Hayward	277/480	277/480	200
53	Walnut Creek Parking	Ygnacio Valley, Walnut Creek	277/480	277/480	200
54	Pittsburg/Bay Point	1700 West Leland, Pittsburg	277/480	277/480	250
55	Bay Point	Willow Pass Rd., Baypoint	277/480	277/480	25
56	Colma	El Camino & F Street, Colma	12 kV	12 kV	200
57	South San Francisco	1333 Mission Road, South San Francisco	12 kV	12 kV	1000
58	San Bruno	1151 Huntington Ave., San Bruno	12 kV	12 kV	750
59	Millbrae	200 North Rollins Rd., Millbrae	12 kV	12 kV	1000
106	West Dublin Station	601 8th St., Oakland	277/480	277/480	30
108	Oakland Airport Connector – Coliseum Station	7400 San Leandro Street, Oakland	277/480	277/480	314
109	Warm Springs Station	45193 Warm Springs Blvd., Fremont	277/480	277/480	1178

EXHIBIT C

MISCELLANEOUS POWER LOCATIONS

Ref No.	Name	Location	Voltage at Point-of-Delivery	Voltage at Point-of-Metering	Estimated Normal Maximum Demands (kVA)
60	Daly City Turnback	School & Junipero Serra Blvd., Daly City	277/480	277/480	500
61	Daly City Maintenance Facility	"F" & "D" Sts., Daly City	277/480	277/480	500
62	Daly City Maintenance Facility	Hill & "B" Sts., Daly City	277/480	277/480	200
63	S.F. Vent Structure	300 ft. East of Ferry Bldg., SF	277/480 Network	277/480 Network	305
64	Oakland Vent Structure	5th St., & Oakland Mole, Oakland	277/480	277/480	420
65	Oakland Maintenance Facility	East 7th St., Oakland	277/480	277/480	350
67	Southern Alameda Yard	Fairway St. between SPRR & WPRR, Hayward	4160/2400	4160/2400	800
68	Richmond Yard	Kearny & 12th Sts., Richmond	4160/2400	4160/2400	500
69	East Portal, Berkeley Hills Tunnel	West of Orinda	277/480	277/480	200
70	Lafayette	Deer Hill Rd. & Orchard Rd., Lafayette	120/240	120/240	12
71	Concord Yard	San Miguel Rd., N/O Pine Creek, Concord	4160/2400	4160/2400	400
72	Traction Station LAA	Elgin Street S/O Ashland Ave., San Lorenzo	120/240	120/240	48
73	Traction Station LMB	I-580/Mission Blvd., San Lorenzo	120/208	120/208	72
74	Traction Station LCC	I-580/Crow Canyon (Grove), Castro Valley	120/240	120/240	48
75	Traction Station LOD	I-580/Dublin Road, Castro Valley	120/208	120/208	72
76	Traction Station L12	I-580/Villa Real Drive, Castro Valley	120/240	120/240	48
77	Traction Station LEC	I-580/Eden Canyon Road, Castro Valley	120/208	120/208	72

EXHIBIT C (Continued)

MISCELLANEOUS POWER LOCATIONS

Ref No.	Name	Location	Voltage at Point-of-Delivery	Voltage at Point-of-Metering	Estimated Normal Maximum Demands (kVA)
78	Traction Station LSR	Dublin Canyon Rd. near Schaefer Ranch Rd., MP 1.7, Castro Valley	120/208	120/208	144
79	Traction Station LRT	Dublin Canyon Rd., MP 3.15, Pleasanton	120/208	120/208	72
80	Traction Station LOC	Dublin Canyon Rd. W/O Foothill Blvd., Pleasanton	120/208	120/208	72
81	Traction Station LWD	Stoneridge Mall Rd., SW Corner I580/I-680, Pleasanton	120/208	120/208	144
82	CGD Substation	Port Chicago Highway, Concord	277/480	277/480	100
83	Canal and Madison MXL	Canal and Madison, Bay Point	120/240	120/240	25
84	Parking Lot Lights	S/East Corner Sunset & Hillcrest, Antioch	120/240	120/240	25
85	Car Cleaning Station	Port Chicago Highway, Concord	120/240	120/240	25
86	CNC Substation	Port Chicago Highway, Concord	120/240	120/240	25
87	Gap, Breaker Station	Evora Road 1000 ft. W/O Driftwood, Concord	120/240	120/240	25
88	Livermore Parking Lot	East Airway, Livermore	120/240	120/240	48
89	Parking Lot Lighting	4000 Walnut Blvd., Brentwood	120/240	120/240	25
90	El Cerrito Parking Lot	Hill and Liberty St., El Cerrito	277/480	277/480	200
91	Oakland Parts Warehouse	25 4th Street, Oakland	120/240	120/240	100
92	SES Serramonte Vent Structure	495 Serramonte, Colma	12 kV	12 kV	150
93	MIS Mission Rd. Vent Structure	1520 Mission Road, Colma	12 kV	12 kV	150
94	HSS Herman St. Vent Structure	1001 Herman St., San Bruno	12 kV	12 kV	150

EXHIBIT C (Continued)

MISCELLANEOUS POWER LOCATIONS

Ref No.	Name	Location	Voltage at Point-of-Delivery	Voltage at Point-of-Metering	Estimated Normal Maximum Demands (kVA)
95	ORS Orange Ave. Vent Structure	995 Antoinette Lane, South San Francisco	12 kV	12 kV	150
96	CHS Chestnut Ave. Vent Structure	199 West Orange Ave., South San Francisco	12 kV	12 kV	150
97	SAS Spruce Ave. Vent Structure	298 South Spruce Ave., South San Francisco	12 kV	12 kV	150
98	TAS Tanforan Ave. Vent Structure	1200 Huntington Ave., San Bruno	12 kV	12 kV	150
99	SYS Sylvan Ave. Vent Structure	450 1st Ave., San Bruno	12 kV	12 kV	150
100	SPS Santa Paula Vent Structure	19 Monterey St., Millbrae	12 kV	12 kV	150
101	Shaw Road 240/120V Supply	983 7th Ave., San Bruno	120/240	120/240	48
102	East Dublin Parking Garage	5067 Iron Horse Pkwy, Dublin	120/240	120/240	125
103	Oakland Shop Annex	601 8th St., Oakland	277/480	277/480	30
104	Richmond Parking Garage	1503 Macdonald Avenue, Richmond	277/480	277/480	150
105	MacArthur Parking Garage	550 West MacArthur Blvd., Oakland	277/480	277/480	250
107	Oakland Airport Connector – Drive Machinery	70 Hegenberger Road, Oakland	12 kV	12 kV	5247
110	Vent Structure CPS	1260 Stevenson Blvd., Fremont	12 kV	12 kV	876
111	Vent Structure LES	40690 Paseo Padre Pkwy, Fremont	12 kV	12 kV	876
112	Traction Power SPP	40726 Paseo Padre Pkwy, Fremont	277/480	277/480	224
113	Traction Power SBR	42545 Osgood Rd., Fremont	277/480	277/480	238
114	Gap Breaker Station SXA	3231 Skyway Ct., Fremont	277/480	277/480	101

EXHIBIT C (Continued)
MISCELLANEOUS POWER LOCATIONS

Ref No.	Name	Location	Voltage at Point-of-Delivery	Voltage at Point-of-Metering	Estimated Normal Maximum Demands (kVA)
115	Traction Power SWS	2300 Warm Springs Ct., Fremont	277/480	277/480	175

EXHIBIT D OPERATION SPECIFICATIONS

1. BART shall connect its rectifier equipment for Traction Power in such manner as to minimize, to the extent practicable in the operation of its System, phase unbalances and propagation of harmonic currents and voltages into PG&E's Facilities.
2. BART shall not vary its Traction Power during any period of 30 seconds or less, by more than the following amounts for the indicated load lagging power factors. Provided that BART complies with the specifications set forth in this Exhibit, BART shall not be responsible for any voltage fluctuations impacting PG&E's Facilities caused by BART's operation of its Traction Power.
3. Special technical studies are needed to complete the table below, and will also be needed to add operating specifications for new Traction Power points of delivery as appropriate. Parties are determining the necessity and timing of such studies. The Parties do not anticipate any adverse consequences while such a determination is being made. The Parties agree that this Exhibit D may be revised by mutual consent upon completion of the technical studies.

<u>Traction Point-of-Delivery</u>	<u>Maximum Permissible Load Variation in MVA</u>		
	<u>1.0 to 0.95 Power Factor</u>	<u>0.94 to 0.90 Power Factor</u>	<u>0.89 to 0.85 Power Factor</u>
Lakewood Substation, Walnut Creek	40	32	29
East Portal Substation, Orinda	40	32	29
Station G, El Cerrito	65	52	47
Jarvis Station, Union City	40	32	29
Station U, San Leandro	40	32	29
Station C, Oakland (a.k.a. Oakland Power Plant)	65	52	47
Bayshore Substation, San Francisco	80	64	58
Castro Valley Substation, Castro Valley	74	64	58
Willow Pass Substation, West Pittsburg	33	28	26
East Dublin Substation, Dublin	14	11	10
WSP Santa Paula Bulk Substation, Millbrae	TBD	TBD	TBD
WSR Shaw Road Bulk Substation, San Bruno	TBD	TBD	TBD

EXHIBIT E

701.8(d) FACILITIES

- 1 1. BART shall pay to PG&E a monthly charge (currently \$89,732.31) for the
 2 701.8(d) Facilities listed below representing the continuing monthly utility-financed
 3 cost-of-ownership charge of those 701.8(d) Facilities as determined in accordance with
 4 the applicable monthly transmission percentage rate (currently 1.14%) established in
 5 PG&E's electric Rule No. 2.
- 6 2. BART may at any time during the term of this Agreement convert its continuing monthly
 7 cost-of-ownership charge for these 701.8(d) Facilities from the utility-financed option to
 8 the customer-financed option as specified in electric Rule No. 2.
- 9 3. Monthly charges for 701.8(d) Facilities shall automatically increase or decrease without
 10 formal amendment to this Agreement if the CPUC subsequently authorizes a higher or
 11 lower transmission percentage rate for Special Facilities as stated in PG&E's electric
 12 Rule No. 2. Such increase or decrease shall be effective with the date of such
 13 authorization.
- 14 4. This Agreement will be amended when, and if, any additional 701.8(d) Facilities are
 15 installed to deliver power to existing or future Points-of-Delivery. The additional
 16 701.8(d) Facilities will be billed as specified above.

<u>701.8(d) FACILITY</u>	<u>LOCATION</u>	<u>COST BASIS</u>	<u>RATE</u>	<u>MONTHLY CHARGE</u>
Station U	San Leandro	\$90,300	1.14%	\$1,029.42
Station C (a.k.a. Oakland Power Plant)	Oakland	\$834,600	1.14%	\$9,514.44
East Portal Substation	Orinda	\$146,000	1.14%	\$1,664.40
Station G	El Cerrito	\$622,900	1.14%	\$7,101.06
Jarvis Substation	Decoto	\$237,900	1.14%	\$2,712.06
Lakewood Substation	Walnut Creek	\$598,600	1.14%	\$6,824.04
Bayshore Substation	San Francisco	\$1,956,700	1.14%	\$22,306.38
Castro Valley Substation	Castro Valley	\$3,384,255	1.14%	\$38,580.51
		TOTAL MONTHLY CHARGES FOR 701.8(d) FACILITIES		\$89,732.31

EXHIBIT F

BILLING METHODOLOGY

1 1. GENERAL DESCRIPTION

2 a. Introduction – Pursuant to paragraph 7.a of this Agreement, this Exhibit specifies
3 the calculation of PG&E’s monthly billings to BART for CPUC-authorized charges
4 for BART Power Supplies.

5 b. Monthly Bill Components – PG&E’s monthly billing to BART pursuant to this
6 Exhibit shall be determined as specified in Section 4 of this Exhibit.

7 c. Metering for On-Site Generation – For those locations that have on-site
8 generation that is not solely used for emergency back-up, BART shall provide the
9 following meter related services to measure the energy and power delivered from
10 and to the generation.

- 11 • Meter Ownership
- 12 • Meter Services (Installation, maintenance, and testing)
- 13 • Meter Data Management Agent (MDMA) Services

14 These services shall be in accordance with electric Rule 22. The metering shall
15 be installed as sub-meters to the premise meter. The metering shall measure
16 energy delivered from the generator on a channel that is separate from the
17 energy delivered to the generator. BART may be required to install more than
18 one set of metering per location. BART shall provide the metered quantities to
19 PG&E in a format and timeline that meets BART’s and PG&E’s requirements.

20 To the extent that BART installs an energy storage device coupled with an onsite
21 NEM-eligible generator, such installation and associated metering shall be
22 compliant with Special Condition 4(g)(2) of PG&E’s NEM tariff
23 (https://www.pge.com/tariffs/tm2/pdf/ELEC_SCHEDS_NEM.pdf).

24 d. Voltage Class – For the purposes of this Exhibit, Voltage Class means
25 Transmission, Primary, or Secondary as defined in the E-20 rate schedule.

26 e. Use of Meter Readings – For power accounting and bill calculation purposes the
27 amounts of BART’s total demand and energy loads will be determined by
28 summing meter interval quantities, taken from the locations specified in Exhibits
29 A, B, and C, according to the methodologies specified in this Exhibit. For
30 purposes of this Exhibit:

31 In instances where a meter produces data at a time interval that is greater than
32 one hour, that meter’s energy readings will be averaged across the hours of its
33 recording interval to determining the meter interval quantity.

34 In instances where a meter produces data at a time interval that is less than one
35 hour, that meter’s energy readings will be averaged across the hour for purposes
36 of determining the meter interval quantity.

EXHIBIT F (Continued)

BILLING METHODOLOGY

1 f. Use of E-20 Billing Time Periods – All billing calculations pursuant to this Exhibit
2 are to be based upon the CPUC-authorized demand and energy billing time
3 periods as specified in the E-20 rate schedule except that the starting and ending
4 times for such time periods shall be adjusted to earlier times as necessary to
5 begin and end on the hour instead of the half-hour. The E-20 demand billing
6 time periods are currently “Maximum Peak-Period” (summer season only),
7 “Maximum Part-Peak-Period”, and “Maximum”. The E-20 energy billing time
8 periods are currently “Peak-Period” (summer season only), “Part-Peak-Period”,
9 and “Off-Peak-Period”. For purposes of this Exhibit, the demand averaging
10 interval shall be one hour.

11 g. Definitions for Terms Used in this Exhibit. The following terms when used in this
12 Exhibit with initial letters capitalized shall have the following meanings:

13 1) Point-of-Accounting (POA) -- The point on the electric system at which all
14 of the load and energy associated with a particular Point-of-Billing are
15 balanced, in order to determine the components to be used in calculating
16 the billing capacity and energy. The Voltage Class at each POA must
17 equal the lowest Voltage Class of any load associated with the POB that it
18 is the POA for.

19 2) Point-of-Billing (POB) -- The point on the electric system at which the
20 billing capacity and energy are determined for the purpose of calculating
21 charges and credits to BART.

22 3) Point-of-Delivery (POD) -- The point on the electric system at which
23 PG&E's electric facilities connect to BART's electric facilities.

24 4) Point-of-Metering (POM) -- The point on the electric system at which the
25 capacity and energy is measured.

26 2. CALCULATIONS FOR POWER ACCOUNTING FOR A BART LOCATION

27 The following subsections describe the process to determine the quantity of capacity
28 and energy for a BART location.

29 a. Characteristics of a BART Location

30 This subsection describes the characteristics that are necessary to perform
31 power accounting for a BART location.

32 Each BART location shall be designated as one of the following:

33 1) Direct Eligible Renewable Energy Resource Electric Generation Project
34 Not Installed

EXHIBIT F (Continued)

BILLING METHODOLOGY

- 1 2) Direct Eligible Renewable Energy Resource Electric Generation Project
2 Installed – Offsetting Excess Generation (see Agreement, Section 8 for a
3 discussion of BART’s obligations in designating these locations);
- 4 3) Direct Eligible Renewable Energy Resource Electric Generation Project
5 Installed – Other Excess Generation

6 Each BART location shall also be designated as one of the following:

- 7 1) Other Direct Electric Generating Facility Not Installed
- 8 2) Other Direct Electric Generating Facility Installed

9 Each BART location shall have one or more Points-of-Delivery (POD). The
10 Voltage Class at each POD shall be specified as one of the following:

- 11 1) Secondary
- 12 2) Primary
- 13 3) Transmission

14 Each BART location shall have one or more Points-of-Metering (POM). The
15 Voltage Class at each POM shall be specified as one of the following:

- 16 1) Secondary
- 17 2) Primary
- 18 3) Transmission

19 Each BART location shall have one or more Points-of-Billing (POB). The Voltage
20 Class at each POB shall be specified as one of the following:

- 21 1) Secondary
- 22 2) Primary
- 23 3) Transmission

24 Each BART location shall have one or more Points-of-Accounting (POA). The
25 Voltage Class at each POA shall be specified as one of the following, and must
26 equal the Voltage Class of the load that it is the POA for (and not necessarily the
27 Voltage Class of either the POM or the POB):

- 28 1) Secondary
- 29 2) Primary
- 30 3) Transmission

31 b. Calculations for Power Accounting for a Location

32 All metered and measured quantities shall be loss factor adjusted to the POA
33 prior to performing any energy calculations, and shall then be loss factor adjusted
34 to the POB prior to determining any charges or credits, or the amount of any
35 offsets. The loss factor shall be determined pursuant to electric Rule 2, which
36 specifies a default of 1.02, for each stage of transformation between the location
37 POA and the Service Point POM, and for each stage of transformation between

EXHIBIT F (Continued)

BILLING METHODOLOGY

1 the Service Point POM and the location POB. The loss factors for each stage of
2 transformation between the POM for each on-site Generating Facility and the
3 location POA shall be determined on an individual basis.

4 Location Gross Load – The Location Gross Load, which cannot be a negative
5 number, is calculated as follows:

- 6 1) the energy delivered to BART as measured by the Service Point Meter for
7 the location, loss factor adjusted downward from the Service Point POM to
8 the location POA, as necessary, plus
- 9 2) the energy generated by BART as measured by the generator meter for
10 each Eligible Renewable Energy Resource Electric Generation Project
11 designated as Offsetting Excess Generation, loss factor adjusted
12 downward from the generator POM to the location POA, as necessary,
13 plus
- 14 3) the energy generated by BART as measured by the generator meter for
15 each Eligible Renewable Energy Resource Electric Generation Project
16 designated as Other Excess Generation, loss factor adjusted downward
17 from the generator POM to the location POA, as necessary, plus
- 18 4) the energy generated by BART as measured by the generator meter for
19 each Other Direct Electric Generating Facility, loss factor adjusted
20 downward from the generator POM to the location POA, as necessary,
21 minus
- 22 5) the energy exported by BART to PG&E as measured by the Service Point
23 Meter for the location, loss factor adjusted upward from the Service Point
24 POM to the location POA, as necessary.

25 Location Gross Generation – The Location Gross Generation, which cannot be a
26 negative number, is calculated as follows:

- 27 1) the energy generated by BART as measured by the generator meter for
28 each Eligible Renewable Energy Resource Electric Generation Project
29 designated as Offsetting Excess Generation, loss factor adjusted
30 downward from the generator POM to the location POA, as necessary,
31 plus
- 32 2) the energy generated by BART as measured by the generator meter for
33 each Eligible Renewable Energy Resource Electric Generation Project
34 designated as Other Excess Generation, loss factor adjusted downward
35 from the generator POM to the location POA, as necessary, plus
- 36 3) the energy generated by BART as measured by the generator meter for
37 each Other Direct Electric Generating Facility, loss factor adjusted
38 downward from the generator POM to the location POA, as necessary.

EXHIBIT F (Continued)

BILLING METHODOLOGY

1 Location Net Load – The Location Net Load, which cannot be a negative number,
2 is calculated as follows:

- 3 1) if the Location Gross Load is greater than the Location Gross Generation,
4 then the Location Net Load equals the difference between the Location
5 Gross Load and the Location Gross Generation, loss factor adjusted
6 upward from the location POA to the location POB, as necessary, else
7 2) then the Location Net Load equals zero (0).

8 Location Direct Other Power – The Location Direct Other Power, which cannot
9 be a negative number, is equal to the lower of

- 10 1) the Location Gross Load, loss factor adjusted upward from the POA to the
11 POB, as necessary, and
- 12 2) the energy generated by BART as measured by the generator meter for
13 each Other Direct Electric Generating Facility, loss factor adjusted
14 downward from the generator POM to the location POA, as necessary,
15 and subsequently loss factor adjusted upward from the location POA to
16 the location POB, as necessary.

17 Location Other Excess Generation – The Location Other Excess Generation,
18 which cannot be a negative number, is calculated as follows:

- 19 1) if the Location Gross Load is less than or equal to the energy generated
20 by BART as measured by the generator meter for each Other Direct
21 Electric Generating Facility, loss factor adjusted downward from the
22 generator POM to the location POA, as necessary, then the Location
23 Other Excess Generation equals the energy generated by BART as
24 measured by the generator meter for each Eligible Renewable Energy
25 Resource Electric Generation Project designated as Other Excess
26 Generation, loss factor adjusted downward from the generator POM to the
27 location POA, as necessary, and subsequently loss factor adjusted
28 downward from the location POA to the location POB, as necessary, else

EXHIBIT F (Continued)

BILLING METHODOLOGY

- 1 2) if the Location Gross Load is less than or equal to the energy generated
2 by BART as measured by the generator meter for each Other Direct
3 Electric Generating Facility, loss factor adjusted downward from the
4 generator POM to the location POA, as necessary, plus the energy
5 generated by BART as measured by the generator meter for each Eligible
6 Renewable Energy Resource Electric Generation Project designated as
7 Other Excess Generation, loss factor adjusted downward from the
8 generator POM to the location POA, as necessary, then the Location
9 Other Excess Generation equals the energy generated by BART as
10 measured by the generator meter for each Other Direct Electric
11 Generating Facility, loss factor adjusted downward from the generator
12 POM to the location POA, as necessary, plus the energy generated by
13 BART as measured by the generator meter for each Eligible Renewable
14 Energy Resource Electric Generation Project designated as Other Excess
15 Generation, loss factor adjusted downward from the generator POM to the
16 location POA, as necessary, minus the Location Gross Load, and
17 subsequently loss factor adjusted downward from the location POA to the
18 location POB, as necessary, else
19 3) the Location Other Excess Generation equals zero (0).

20 The Location Direct Other Resource Electric Generation shall always be applied
21 to the support of the Location Gross Load prior to any of the energy generated by
22 the Non-Offsetting Location Direct Eligible Renewable Resource, so that as
23 much of the energy generated by the Non-Offsetting Location Direct Eligible
24 Renewable Resource can be used as Location Other Excess Generation as
25 possible.

26 Location Offsetting Excess Generation – The Location Offsetting Excess
27 Generation, which cannot be a negative number, is calculated as follows:

- 28 1) if the Location Gross Load is less than or equal to the energy generated
29 by BART as measured by the generator meter for each Other Direct
30 Electric Generating Facility, loss factor adjusted downward from the
31 generator POM to the location POA, as necessary, plus the energy
32 generated by BART as measured by the generator meter for each Eligible
33 Renewable Energy Resource Electric Generation Project designated as
34 Other Excess Generation, loss factor adjusted downward from the
35 generator POM to the location POA, as necessary, then the Location
36 Offsetting Excess Generation equals the energy generated by BART as
37 measured by the generator meter for each Eligible Renewable Energy
38 Resource Electric Generation Project designated as Offsetting Excess
39 Generation, loss factor adjusted downward from the generator POM to the
40 location POA, as necessary, and subsequently loss factor adjusted
41 downward from the location POA to the location POB, as necessary, else

EXHIBIT F (Continued)

BILLING METHODOLOGY

- 1 2) if the Location Gross Load is less than or equal to the Location Gross
2 Generation, then the Location Offsetting Excess Generation equals the
3 Location Gross Generation minus the Location Gross Load, loss factor
4 adjusted downward from the location POA to the location POB, as
5 necessary, else
6 3) the Location Offsetting Excess Generation equals zero (0).

7 The Location Direct Other Resource Electric Generation and the Non-Offsetting
8 Location Direct Eligible Renewable Resource shall always be applied to the
9 support of the Location Gross Load prior to any of the energy generated by the
10 Offsetting Location Direct Eligible Renewable Resource, so that as much of the
11 energy generated by the Offsetting Location Direct Eligible Renewable Resource
12 can be used as Location Offsetting Excess Generation as possible.

13 Location Direct Eligible Renewable Energy Resource Electric Generation – The
14 Location Direct Eligible Renewable Energy Resource Electric Generation, which
15 cannot be a negative number, is calculated as follows:

- 16 1) the energy generated by BART as measured by the generator meter for
17 each Eligible Renewable Energy Resource Electric Generation Project
18 designated as Other Excess Generation, loss factor adjusted downward
19 from the generator POM to the location POA, as necessary, minus
20 2) the Location Other Excess Generation, loss factor adjusted upward from
21 the location POB to the location POA, as necessary plus
22 3) the energy generated by BART as measured by the generator meter for
23 each Eligible Renewable Energy Resource Electric Generation Project
24 designated as Offsetting Excess Generation, loss factor adjusted
25 downward from the generator POM to the location POA, as necessary,
26 minus
27 4) the Location Offsetting Excess Generation, loss factor adjusted upward
28 from the location POB to the location POA, as necessary
29 5) the total of 1 through 4 above subsequently loss factor adjusted downward
30 from the location POA to the location POB, as necessary.

31 3. DETERMINING QUANTITY OF CAPACITY AND ENERGY FOR THE BART SYSTEM

32 The following subsections describe the process to determine the quantity of capacity
33 and energy for the BART System.

34 BART System Net Hourly Load – The BART System Net Hourly Load shall be
35 determined on the hourly coincident demand (in kilowatts) of the BART System. These
36 hourly coincident demands shall be calculated by summing the Location Net Loads for
37 each hour for all Voltage Classes less the Location Offsetting Excess Generation for all
38 Voltage Classes.

EXHIBIT F (Continued)

BILLING METHODOLOGY

1 BART System Time-Of-Use Billing Demands – The BART System Time-Of-Use Billing
2 Demands shall be calculated for each time-of-use period (peak, partial-peak, and off-
3 peak) by determining the maximum coincident BART System Net Hourly Load during
4 each of the time-of-use periods. The date and time for the maximum demand during
5 each time-of-use period shall be noted for subsequent calculations.

6 Other BART Power Supplies – All of the Location Net Loads less the Location Offsetting
7 Excess Generation and less the Other Excess Generation for each hourly billing interval
8 will be grouped by Voltage Class, then the maximum demand (in kilowatts) at the date
9 and time identified above and the total energy (in kilowatt-hours) will be calculated for
10 each time-of-use period (peak, partial-peak, and off-peak) for each Voltage Class.
11 These values will be used to calculate the component charges for Other BART Power
12 Supplies (section 4.a.1, below).

13 System Direct Other Resource Electric Generation – All of the Location Direct Other
14 Power amounts for each hourly billing interval will be grouped by Voltage Class, then
15 the maximum demand (in kilowatts) at the date and time identified above and the total
16 energy (in kilowatt-hours) will be calculated for each time-of-use period (peak, partial-
17 peak, and off-peak) for each Voltage Class. These values will be used to calculate the
18 component charges for Direct Other Resource Electric Generation (section 4.a.1,
19 below).

20 System Offsetting Excess Generation – All of the Location Offsetting Excess Generation
21 amounts for each hourly billing interval will be grouped by Voltage Class, then the
22 maximum demand (in kilowatts) at the date and time identified above and the total
23 energy (in kilowatt-hours) will be calculated for each time-of-use period (peak, partial-
24 peak, and off-peak), for each Voltage Class. These values will be used to calculate the
25 component charges for Offsetting Excess Generation (section 4.a.1, below).

26 System Other Excess Generation – All of the Location Other Excess Generation
27 amounts for each hourly billing interval will be grouped by Voltage Class, then the
28 maximum demand (in kilowatts) at the date and time identified above and the total
29 energy (in kilowatt-hours) will be calculated for each time-of-use period (peak, partial-
30 peak, and off-peak) for each Voltage Class. These values will be used to calculate the
31 component charges for Other Excess Generation (section 4.a.1, below).

EXHIBIT F (Continued)

BILLING METHODOLOGY

1 System Direct Eligible Renewable Energy Resource Electric Generation – All of the
2 Location Direct Eligible Renewable Energy Resource Electric Generation amounts for
3 each hourly billing interval will be grouped by Voltage Class, then the maximum demand
4 (in kilowatts) at the date and time identified above and the total energy (in kilowatt-
5 hours) will be calculated for each time-of-use period (peak, partial-peak, and off-peak)
6 for each Voltage Class. These values will be used to calculate the component charges
7 for Direct Eligible Renewable Energy Resource Electric Generation (section 4.a.1,
8 below).

9 The following Table F-1 shows the billing components applicable to BART's power
10 sources. The above sections describe the methodology for applying principles of
11 conjunctive billing to BART Locations and Voltage Classes in order to appropriately
12 implement the applicability of the component charges below. Where ambiguity or
13 algorithmic errors are discovered, the Parties will mutually agree to resolve the issue in
14 order to ensure the intent shown in the Table F-1 is faithfully applied on implementation.
15

EXHIBIT F (Continued)

BILLING METHODOLOGY

Table F-1
Applicable Component Charges by Source of Power

Source of Power	Transmission	Distribution	Public Purpose	Nuclear Decommissioning	DWR Bond	Ongoing CTC
Direct Eligible Renewable Energy Resource Electric Generation	Per CAISO	No	No	No	No	No
Direct Other Resource Electric Generation ¹	Per CAISO	No	Yes	Yes	No	No
Offsetting Excess Generation	Per CAISO	No	No	No	No	No
Other Excess Generation	Per CAISO	Yes	Yes	Yes	No	No
BART Power Supplies other than those identified in the rows above	Per CAISO	Yes	Yes	Yes	No	No

4

5 **4. CALCULATING CHARGES APPLICABLE TO THE SOURCES OF POWER**

- 6 a. PG&E's monthly billing to BART pursuant to this Exhibit shall be the sum of the
- 7 following:
- 8 1) the sum of the demand and energy component charges as specified in
- 9 Table F-1 above for the sources of power identified therein for each of the
- 10 monthly demand and energy billing time periods plus
- 11 2) the monthly customer charges, calculated below, plus
- 12 3) the Power Factor Adjustment, calculated below

13 **5. MONTHLY CUSTOMER CHARGE**

- 14 a. BART shall pay a monthly customer charge equal to the sum of the E-20T
- 15 customer charge applicable to one E-20T account, plus the E-20P customer
- 16 charge applicable to one E-20P account, plus the E-20S customer charge
- 17 applicable to one E-20S account.

18 **6. POWER FACTOR ADJUSTMENT**

- 19 a. BART shall pay or be credited three separate monthly power factor adjustments.

¹ Energy from on-site backup or emergency generation will not be subject to Public Purpose or Nuclear Decommissioning charges.

EXHIBIT F (Continued)

BILLING METHODOLOGY

- 1 b. The monthly bill will be adjusted for power factor. The power factor is computed
2 as the cosine of the inverse tangent of the ratio of lagging reactive energy to the
3 real energy. The reactive energy used in this calculation is the sum of the
4 lagging reactive kilovolt-ampere-hours delivered during the billing month to BART
5 as measured by the Service Point Meters for each location. The real energy
6 used in this calculation is the sum of the kilowatt-hours delivered during the
7 billing month to BART as measured by the Service Point Meters for each
8 location. Power factors are rounded to the nearest whole percent.
- 9 c. The following adjustment will be made for each of the monthly energy bills. If the
10 average power factor is greater than 85 percent, then the total monthly bill
11 (excluding any taxes) will be reduced by 0.06 percent for each percentage point
12 above 85 percent. If the average power factor is below 85 percent, the total
13 monthly bill (excluding any taxes) will be increased by 0.06 percent for each
14 percentage point below 85 percent.
- 15 d. The formula for this adjustment is subject to future modification by the CPUC.

16 7. ENERGY STORAGE BILLING METHODOLOGY

- 17 a. In the event of a proposed BART installation of an energy storage device, parties
18 will confer to determine appropriate adjustments to the Billing Methodology. For
19 the specific case of an energy storage device installed at a location without direct
20 power supplies at that same location:
- 21 1) Energy discharged from the energy storage device, having been
22 previously treated as local load during charging and assessed billing
23 charges appropriate to the applicable BART Power Supply source, shall
24 be treated as a reduction in load for purposes of power accounting, rather
25 than as a BART Power Supply source.
- 26 2) To the extent that there is the potential for the energy storage device to
27 cause the energy readings over the billing interval at the location to result
28 in a net export of energy, parties will confer to determine appropriate
29 adjustments to the Billing Methodology to address such exports.
- 30 b. For other cases where an energy storage device is to be co-located with either a
31 Direct Eligible Renewable Energy Resource Electric Generation or a Direct Other
32 Resource Electric Generation or a combination of the two resources types,
33 parties will confer to determine appropriate adjustments to the Billing
34 Methodology.

EXHIBIT G

BACK-UP TRANSFORMER SERVICE

1 1. GENERAL DESCRIPTION

2 This Exhibit describes the Transformer Back-up Service. PG&E shall provide back-up
3 replacement and repair service for BART-owned transformers having a 34.5 kV
4 secondary voltage that are installed and operating at BART-owned Traction Power
5 substations under the following circumstances and conditions:

6 2. TRANSFORMER FAILURES AT BART-OWNED TRACTION SUBSTATIONS

7 a. When BART requires Transformer Back-up Service, PG&E, at BART's request,
8 will perform all activities necessary for the removal and replacement of
9 transformers. These shall include, but not be limited to, lifting, transportation,
10 setting, connecting, inspecting, and testing both BART-owned and PG&E-owned
11 transformers. BART may elect, at its expense, to make all necessary
12 arrangements for removal and replacement. In such event, PG&E shall allow
13 BART or its contractors access to the location where the back-up transformer is
14 warehoused.

15 b. BART shall promptly repair any BART-owned transformer that is replaced by a
16 PG&E back-up transformer. Upon completion of repairs PG&E shall remove the
17 PG&E-owned transformer and return the BART-owned transformer to service.

18 c. PG&E's service obligation under this Exhibit is limited to providing no more than
19 one back-up transformer at one time in BART-owned substations. In the event of
20 simultaneous failures of BART-owned transformers, BART will specify where
21 PG&E is to provide back-up service.

22 3. LIABILITIES

23 a. BART shall be responsible for any and all damage to any PG&E-owned back-up
24 transformer while the transformer is in use at a BART-owned substation. PG&E
25 shall as soon as practicable inspect and test its back-up transformer for such
26 damage before and after its use in a BART-owned substation.

27 b. BART shall indemnify and hold harmless PG&E, its officers, agents and
28 employees against all loss, damage, expense and liability, resulting from injury to
29 or death of any person, including but not limited to employees of PG&E, BART,
30 or any Third Party, or damage to property, including but not limited to, property of
31 PG&E, BART, or any Third Party, arising out of or in any way connected with the
32 performance of this Exhibit except to the extent caused by the active negligence
33 or willful misconduct of PG&E, its officers, agents and employees. BART will on
34 PG&E's request, defend any suit asserting a claim covered by this indemnity.
35 BART will pay any cost that may be incurred by PG&E in enforcing this
36 indemnity, including reasonable attorney's fees. The obligation of BART under
37 this paragraph, accrued or not, then known or unknown, shall not terminate on
38 any termination of this Agreement but shall be continuing as to any act,
39 occurrence, or omission prior to the termination of this Agreement.

EXHIBIT G (Continued)
BACK-UP TRANSFORMER SERVICE

1 4. CHARGES

2 In addition to the charges specified in paragraph 7 of this Agreement, BART shall pay
3 all of PG&E's actual costs on a time and materials basis including PG&E's markup for
4 such services, currently at 30%, to provide the services required of PG&E in paragraph
5 2 of this Exhibit. BART shall also pay PG&E's actual costs including markup, currently
6 at 30%, to repair any damages as described in paragraph 3.a. of this Exhibit.

EXHIBIT H
SPECIAL INTERCONNECTION AGREEMENT FOR BART ELIGIBLE
RENEWABLE ENERGY RESOURCE ELECTRIC GENERATING
PROJECTS

1. Purpose

This Special Interconnection Agreement provides for BART to connect and operate a BART Eligible Renewable Energy Resource Electric Generating Facility in parallel with PG&E's Transmission and Distribution System to serve the electric service account that PG&E uses to interconnect BART's Electric Generating Facility. Consistent with the provisions of Section 701.8 of the California Public Utilities Code and the "Updated Agreement Between San Francisco Bay Area Rapid Transit District and Pacific Gas and Electric Company for Specified CPUC Jurisdictional Electric Services", Offsetting Excess Generation from a BART Eligible Renewable Energy Resource Electric Generating Facility, as described in Section 4, may offset part or all of BART's electric requirements at a like voltage within the conjunctively billed and metered arrangement.

2. Summary and Description of BART's Electric Generating Facility

2.1 A description of the Eligible Renewable Energy Resource Electric Generating Facility, including a summary of its significant components and a single-line diagram showing the general arrangement of how the Electric Generating Facility and loads are interconnected with PG&E's Transmission and Distribution System is attached to and made a part of this Special Interconnection Agreement as Appendix A.

2.2 Name and address of the location of the Eligible Renewable Energy Resource Electric Generating Facility

Location Name: _____

Address: _____

City/Zip Code: _____

Size of Electric Generating Facility _____ kWac

3. Documents Included and Defined Terms

This Special Interconnection Agreement includes the following exhibits that are specifically incorporated herein and made a part of this Special Interconnection Agreement:

EXHIBIT H
**SPECIAL INTERCONNECTION AGREEMENT FOR BART ELIGIBLE
RENEWABLE ENERGY RESOURCE ELECTRIC GENERATING
PROJECTS**

1 **5. Term and Termination**

2
3 5.1 The Special Interconnection Agreement shall continue in full force and effect until the
4 earliest date that one of the following events occurs:

5
6 (a) The Parties agree in writing to terminate the Special Interconnection Agreement.

7
8 (b) Unless otherwise agreed in writing by the Parties, at 12:01 A.M. on the day following
9 the date the electric service account through which BART's Eligible Renewable
10 Energy Resource Electric Generating Facility is interconnected to PG&E is closed or
11 terminated.

12
13 (c) At 12:01 A.M. on the 61st day after BART or PG&E provides written Notice pursuant
14 to Section 9 below to the other Party of BART's or PG&E's intent to terminate this
15 Special Interconnection Agreement.

16
17 5.2 BART may elect to terminate this Special Interconnection Agreement pursuant to the
18 terms of Section 5.1(c) for any reason. PG&E may elect to terminate this Special
19 Interconnection Agreement pursuant to the terms of Section 5.1(c) for one or more of the
20 following reasons:

21
22 (a) A change in applicable rules, tariffs, or regulations, as approved or directed by the
23 CPUC, or a change in any local, state or federal law, statute or regulation, either of
24 which materially alters or otherwise affects PG&E's ability or obligation to perform
25 PG&E's duties under this Special Interconnection Agreement; or,

26
27 (b) BART fails to take all corrective actions specified in PG&E's Notice that BART's
28 Electric Generating Facility is out of compliance with the terms of this Special
29 Interconnection Agreement within the time frame set forth in such Notice; or,

30
31 (c) BART abandons the Generating Facility. The Generating Facility shall be deemed
32 abandoned if PG&E determines, in its sole opinion, the Generating Facility is non-
33 operational and BART does not affirm in writing BART's intent and ability to continue
34 to operate the Generating Facility within the time frame set forth in such PG&E

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1 Notice of PG&E's intent to terminate this Special Interconnection Agreement as a
2 result of BART's apparent abandonment of the Generating Facility; or,

3
4 (d) BART's Generating Facility ceases to meet and fails to remedy all applicable safety
5 and performance standards set out in Section 7.
6

7 5.3 Notwithstanding any other provisions of this Special Interconnection Agreement, PG&E
8 shall have the right to unilaterally file with the CPUC, pursuant to the CPUC's rules and
9 regulations, an application to terminate this Special Interconnection Agreement.
10
11

12 6. Generation Interconnection

13 6.1 Generation interconnection timeline and cost responsibility for projects that are 1 MW or
14 smaller qualifying for Offsetting Excess Generation shall be the same as for any
15 comparable NEM-eligible project¹ that is 1 MW or smaller.

16 6.2 Generation interconnection timeline and cost responsibility for projects that are larger
17 than 1 MW qualifying for Offsetting Excess Generation shall be the same as for any
18 comparable NEM-eligible project that is larger than 1 MW.

19 6.3 Generation interconnection for projects that are expected to produce Other Excess
20 Generation will interconnect under the Wholesale Distribution Tariff and shall further
21 meet any requirements as to operating, scheduling, metering, and settlements under the
22 CAISO Tariff.

23 6.4 Any re-designation by BART of a then-existing project out of the Offsetting Excess
24 Generation category may trigger the need to re-evaluate the interconnection rules that
25 governed the initial interconnection of the project. No later than September 30, 2017,
26 BART shall advise PG&E of any potential re-designation. Within 10 business days,
27 PG&E shall advise BART regarding whether such re-designation would require a new
28 interconnection review and potential change in the cost-responsibility of the
29 interconnection.
30

31 7. Generating Facility Requirements

32

¹ See http://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_21.pdf

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1 7.1 BART's Generating Facility must meet all applicable safety and performance standards
2 established by the National Electrical Code, the Institute of Electrical and Electronics
3 Engineers, and accredited testing laboratories such as Underwriters Laboratories and,
4 where applicable, rules of the CPUC regarding safety and reliability including PG&E's
5 electric Rule 21.

6
7 7.2 BART shall: (a) ensure that the Generating Facility and Interconnection Facilities are
8 maintained in a safe and prudent manner and in conformance with all applicable laws and
9 regulations including, but not limited to, Section 7.1, and (b) obtain any governmental
10 authorizations and permits required for the construction and operation of the Generating
11 Facility and Interconnection Facilities. BART shall reimburse PG&E for any and all losses,
12 damages, claims, penalties, or liability it incurs as a result of BART's failure to obtain or
13 maintain any governmental authorizations and permits required for construction and
14 operation of BART's Generating Facility.

15
16 7.3 BART shall not commence parallel operation of the Generating Facility until PG&E has
17 provided express written approval, which shall not be unduly withheld.

18 19 **8. Interconnection Facilities**

20
21 8.1 BART and/or PG&E, as appropriate, shall provide Interconnection Facilities that
22 adequately protect PG&E's Transmission and Distribution System, personnel, and other
23 persons from damage or injury, which may be caused by the operation of BART's
24 Generating Facility.

25
26 8.2 BART shall be solely responsible for the costs, design, purchase, construction, permitting,
27 operation, and maintenance of the Interconnection Facilities that BART owns.

28
29 8.3 If the provisions of PG&E's electric Rule 21, or any other tariff or rule approved by the
30 CPUC, require PG&E to own and operate a portion of the Interconnection Facilities, BART
31 and PG&E shall promptly execute a Special Facilities Agreement that establishes and
32 allocates responsibility for the design, installation, operation, maintenance, and ownership
33 of the Interconnection Facilities. This Special Facilities Agreement shall be attached to and
34 made a part of this Special Interconnection Agreement as Appendix B.

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9. Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Special Interconnection Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages of any kind whatsoever.

10. Review of Records and Data

10.1 PG&E shall have the right to review and obtain copies of BART's operations and maintenance records, logs, or other information such as Generating Facility availability, maintenance outages, and circuit breaker operation requiring manual reset, relay targets and unusual events pertaining to BART's Generating Facility or its interconnection to PG&E.

10.2 BART authorizes release to the CEC and CPUC of information regarding BART's facility, including customer name and Generating Facility location, size, and operational characteristics, as requested from time to time pursuant to the CEC's rules and regulations.

11. Assignment

BART shall not voluntarily assign its rights nor delegate its duties under this Special Interconnection Agreement without PG&E's written consent. Any assignment or delegation BART makes without PG&E's written consent shall not be valid. PG&E shall not unreasonably withhold its consent to BART's assignment of this Special Interconnection Agreement.

12. Non-Waiver

None of the provisions of this Special Interconnection Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Special Interconnection Agreement or to take advantage of any of its rights hereunder shall not be construed as a

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1 waiver of any such provisions or the relinquishment of any such rights for the future, but the
2 same shall continue and remain in full force and effect.

3
4 **13. Governing Law, Jurisdiction of CPUC, Inclusion of PG&E's Tariff Schedules and**
5 **Rules**

6
7 13.1 This Special Interconnection Agreement shall be interpreted, governed, and construed
8 under the laws of the State of California.

9
10 13.2 This Special Interconnection Agreement shall, at all times, be subject to such changes or
11 modifications by the CPUC as it may from time to time direct in the exercise of its
12 jurisdiction.

13
14 13.3 The interconnection and services provided under this Special Interconnection Agreement
15 shall at all times be subject to the terms and conditions set forth in the Tariff Schedules
16 and Rules applicable to the electric service provided by PG&E, including but not limited to
17 Electric Rules 2, 14, 15, 16 and 21 available at PG&E's website at www.pge.com or by
18 request, which Tariff Schedules and Rules are hereby incorporated into this Special
19 Interconnection Agreement by this reference.

20
21 13.4 Notwithstanding any other provisions of this Special Interconnection Agreement, PG&E
22 shall have the right to unilaterally file with the CPUC, pursuant to the CPUC's rules and
23 regulations, an application for change in rates, charges, classification, service, tariff or
24 rule or any agreement relating thereto.

25
26 **14. Amendment and Modification**

27
28 This Special Interconnection Agreement can only be amended or modified by a writing signed
29 by both Parties.

30
31 **15. Entire Special Interconnection Agreement**

32
33 This Special Interconnection Agreement, including any incorporated Tariff Schedules and

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1 Rules, and also including the Updated Agreement Between San Francisco Bay Area Rapid
2 Transit District and Pacific Gas and Electric Company for Specified CPUC Jurisdictional
3 Electric Services, contains the entire Special Interconnection Agreement and understanding
4 between the Parties, their agents, and employees as to the subject matter of this Special
5 Interconnection Agreement. Each Party also represents that in entering into this Special
6 Interconnection Agreement, it has not relied on any promise, inducement, representation,
7 warranty, agreement or other statement not set forth in this Special Interconnection Agreement
8 or in the incorporated Tariff Schedules and Rules and the Updated Agreement Between San
9 Francisco Bay Area Rapid Transit District and Pacific Gas and Electric Company for Specified
10 CPUC Jurisdictional Electric Services.

11

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1 **16. Signatures**

2

3 The signatories hereto represent that they have been duly authorized to enter into this Special
4 Interconnection Agreement on behalf of the Party for which they sign.

5 IN WITNESS WHEREOF, the Parties hereto have caused this Special Interconnection
6 Agreement to be executed by their duly authorized representatives. This Special
7 Interconnection Agreement is effective as of the last date set forth below.

SAN FRANCISCO
BAY AREA RAPID TRANSIT DISTRICT

PACIFIC GAS AND ELECTRIC COMPANY

(Signature)

(Signature)

(Type or print name)

(Type or print name)

(Title)

(Title)

(Date)

(Date)

8