

**AGREEMENT NO. XXDC-00-0086**

**STREETLIGHT LICENSE AGREEMENT**

**THIS AGREEMENT** is made and entered into on \_\_\_\_\_, by and between the **CITY OF MILPITAS**, a [charter city and] municipal corporation, ("CITY" herein) and **PACIFIC GAS AND ELECTRIC COMPANY**, a California corporation ("PG&E" herein) each being referred to individually as a "Party" and collectively as the "Parties."

**R E C I T A L S**

**WHEREAS**, CITY owns, operates and maintains certain streetlight facilities located in the geographic areas within the political jurisdiction of CITY; and

**WHEREAS**, PG&E desires to enter into an Agreement for the attachment of certain utility infrastructure support equipment used for the operation and maintenance of PG&E's SmartMeter network, to CITY's existing streetlight poles; and

**WHEREAS**, PG&E's SmartMeter equipment consists of certain utility infrastructure support equipment including, but not limited to, a data collector unit, two whip antennas, coaxial cable and photovoltaic adaptor ("SmartMeter Equipment"); and

**WHEREAS**, it is understood and agreed that this Agreement will permit the placement of the SmartMeter equipment on certain of CITY's existing streetlight poles; and

**WHEREAS**, CITY is willing to grant PG&E a non-exclusive, revocable license for the attachment of the SmartMeter Equipment to CITY streetlight poles, subject to the terms and conditions set forth in this License Agreement.

**NOW, THEREFORE**, incorporating the foregoing recitals herein, the Parties agree as follows:

**1. EFFECTIVE TERM OF AGREEMENT.** This Agreement shall be and remain in effect for an initial period of twenty (20) years from the date of execution ("Base Term").

**1.1** This agreement shall extend thereafter for successive terms of five (5) years each, unless otherwise terminated by either party pursuant to this Agreement.

**2. STREETLIGHT LICENSE.** CITY does hereby confer on PG&E a non-exclusive, revocable license to attach, replace, operate, maintain, and use

SmartMeter Equipment to certain photocells, support arms and streetlight pole(s) owned by CITY. Permission to attach to CITY-owned streetlight facilities shall be memorialized in the form of the Streetlight Permit, attached to this Agreement as **Exhibit "A,"** and incorporated herein by reference. The specific locations for which a Streetlight Permit is requested are included in Exhibit A, and are those specific locations that the Parties hereby agree are covered by this Agreement as of the date the Streetlight Permit is executed and subject to an encroachment permit to be submitted by PG&E along with plans for review and approval prior to start of any work. Subsequent poles shall be subject to this agreement and shall be subject to the review and approval by the Public Works Director/City Engineer.

**3. LICENSE FEE.** As partial consideration for the rights granted herein, PG&E shall pay to CITY a Seven Hundred and Eighty Dollars (\$780) up front payment for each SmartMeter Equipment attachment it makes to the City-owned street light pole set forth in Exhibit A for the Base Term, plus additional payments of Seven Hundred and Eighty Dollars (\$780) for each additional five-year extension period.

**3.1** PG&E shall also pay CITY up front Seven Hundred and Eighty Dollar (\$780) payments for each additional attachment installed on additional City-owned street poles for a twenty (20) year base term, plus additional payments of Seven Hundred and Eighty Dollars (\$780) for each additional five-year extension period.

**4. RECOVERY OF CITY COSTS.** In addition to the license fee requirements set forth herein, PG&E shall open and maintain a Private Job Account with the City of Milpitas and pay for the recovery of CITY staff time in processing this Agreement and any actions covered hereunder, including but not limited to design, engineering, inspections, legal review and City infrastructure maintenance and repair costs caused by the use, installation, modification, or removal of PG&E equipment. The initial amount of such private job account shall be Two Thousand Dollars (\$2,000.00) and shall be subject to periodic adjustment and monitoring by the CITY Finance Department. Failure to make timely payments and/or to maintain required account balances shall constitute cause to suspend and/or terminate this Agreement and any permits issued thereunder. City shall maintain in its records and disclose to PG&E in writing all charges transferred to such account. City shall identify with specificity the individual who charged time to such account, all such time charged to such account, and the hourly wage of each employee. Each entry shall include a description of the activities which were necessitated by the presence of the PG&E facilities.

**5. ADDITIONAL LOCATIONS.** Prior to installing any additional *SmartMeter* Equipment on any additional CITY-owned street light poles, other than the locations identified in Exhibit "A", PG&E will submit to CITY a revised Exhibit "A" seeking permission to install such additional *SmartMeter* Equipment on specified CITY-owned street light poles.

**5.1** CITY will use its best commercially reasonable efforts to respond, in writing, to each request submitted by PG&E within twenty (20) business days. The CITY shall determine in its sole discretion as to whether to allow such additional *SmartMeter* Equipment placements.

**5.2** If the CITY approves an application for the placement of additional *SmartMeter* Equipment, such approval shall be memorialized in a Street Light Permit in the form or substantially the same form as that set forth Exhibit "A" to this Agreement and a City Encroachment Permit. A City Street Light Permit and a City Encroachment Permit shall be automatically incorporated herein by reference at the time the permits are issued and shall constitute an amendment of the Exhibit A attachments as to the location of *SmartMeter* Equipment within the City of Milpitas and other terms listed therein.

**5.3** PG&E may, from time to time, replace, modify, update and/or reposition existing *SmartMeter* Equipment after receiving CITY approval. PG&E requests for replacement, modification, update and/or repositioning work shall be subject to reasonable design, safety and aesthetic review by the CITY and insurance of compatibility with exiting City infrastructure and/or third party equipment or attachments that may also be on City-owned streetlight facilities.

**6. SAFETY PRECAUTIONS.** PG&E shall perform all work on CITY-owned streetlight facilities in a workmanlike manner and in compliance with applicable federal, state, and local laws, rules and regulations. All work on such streetlight facilities shall be performed by PG&E's personnel or contractor operating from either a ladder or bucket truck.

**7. RADIO FREQUENCY EMISSION REQUIREMENTS AND SIGNAL INTERFERENCE.** PG&E will operate the PG&E *SmartMeter* Equipment in a manner that complies with the FCC's (or any more restrictive applicable standard subsequently adopted or promulgated by a governmental agency with jurisdiction) Maximum Permissible Exposure (MPE) limits for electric and magnetic field strength and power for density for transmitters in an inhabited area. Furthermore, each application for the placement of *SmartMeter* Equipment on a City-owned pole shall be subject to review and approval by the CITY to ensure that there shall be no interference with and/or potential degradation of existing or planned CITY or third-party services utilizing identical or otherwise affected radio spectrum, such as the City's own AMR, traffic calming, signal-controlling and WiFi systems

**8. CO-LOCATION AND REMOVAL OF SMARTMETER EQUIPMENT.**

CITY will use its best commercially reasonable efforts to provide PG&E ten (10) business days prior written notice of any non-emergency work that will, or may, affect the SmartMeter Equipment and/or the PG&E SmartMeter network.     

**8.1** In the event that CITY is required by law or unavoidable circumstance to remove any SmartMeter Equipment attached to CITY Property on an emergency basis, CITY will use commercially reasonable efforts to notify PG&E of such circumstance as soon as practicable and will take reasonable care in removing and storing the SmartMeter Equipment. Such removal and storage shall be at PG&E's expense and may be charged to PG&E's private job account.

**8.2** In the event that CITY chooses to remove or relocate SmartMeter Equipment due to normal CITY operations, upgrades, maintenance, or redesigns of CITY infrastructure (e.g., redesign and installation of new CITY light poles for purposes of new streetscapes, installation of new CITY equipment, etc.), such removal or relocation may be done by CITY at PG&E's sole expense and may be charged to PG&E's private job account.

**8.3** In the event that removal or relocation of SmartMeter Equipment is necessitated or requested by a third party, such work shall be done and charged according to a first in time, first in right process. That is, the entity that installed its equipment to a City-owned street pole after another user(s) of the pole shall pay for the relocation of previous equipment installers and/or users. Under no circumstances shall such first in time, first in right process apply against the CITY.

**8.4** In the event that PG&E itself removes SmartMeter Equipment, PG&E shall provide CITY written notice within ten (10) business days of its intent to remove such equipment and specify the SmartMeter Equipment removed and the CITY Property from which it was removed.

**8.5** PG&E shall, at its sole expense, remove all remaining SmartMeter Equipment from CITY Property within one hundred eighty (180) days of the termination or expiration of this Agreement.

**8.6** In the event that PG&E fails to remove any SmartMeter Equipment from the CITY Property in a timely manner, CITY may at PG&E's expense, remove and store such SmartMeter Equipment. Such removal and storage may be charged to PG&E's private job account.

**9. INDEMNITY.** PG&E shall indemnify, defend, and hold harmless CITY, its officers, agents and employees against any and all liability, claims, actions, causes of action or demands whatsoever against them, or any of them, before administrative or judicial tribunals of any kind whatsoever, arising out of, connected with, or caused by PG&E, PG&E's employees, agents, independent contractors,

companies, or subcontractors in the performance of, or in any way arising from, the terms and provisions of this Agreement whether or not caused in part by a party indemnified hereunder, except for any such claims, damage or liabilities caused by CITY's active negligence or willful misconduct. It is further understood and agreed by PG&E that its liability to the CITY shall not in any way be limited to or affected by the amount of insurance obtained and carried by the PG&E in connection with this Agreement.

**9. ASSIGNMENT.** Neither this Agreement, nor any interest in it, may be assigned or transferred by any party without the prior written consent of the parties, which shall not be unreasonably withheld.

**10. BINDING EFFECT.** The rights and obligations of this Agreement shall inure to the benefit of, and be binding upon, the parties to the Agreement and their administrators, representatives, successors and assigns.

**11. COMPLIANCE WITH ALL LAWS.** PG&E shall, at PG&E's sole cost, comply with all of the requirements of Municipal, State, and Federal authorities now in force, or which may hereafter be in force, pertaining to this Agreement, and shall faithfully observe in all activities relating to or growing out of this Agreement all Municipal ordinances and State and Federal statutes, rules or regulations, and permitting requirements now in force or which may hereafter be in force. However, PG&E shall not be required to apply for any encroachment permit for the SmartMeter Equipment authorized under this Agreement.

**12. CORPORATE AUTHORITY.** Each individual signing this Agreement on behalf of entities represent and warrant that they are, respectively, duly authorized to sign on behalf of the entities and to bind the entities fully to each and all of the obligations set forth in this Agreement.

**13. EXHIBIT.** In the event of a conflict between the terms, conditions or specifications set forth in this Agreement and the exhibit attached hereto, the terms, conditions, or specifications set forth in this Agreement shall prevail. The exhibit to which reference is made in this Agreement are deemed incorporated in this Agreement, whether or not actually attached.

**14. GOVERNING LAW.** The laws of the State of California will govern the validity of this Agreement, its interpretation and performance.

**15. FURTHER ASSURANCES.** Each party shall execute and deliver such papers, documents, and instruments, and perform such acts as are necessary or appropriate, to implement the terms of this Agreement and the intent of the parties to this Agreement.

**16. INSURANCE.** PG&E shall procure and maintain for the duration of this Agreement the following types and limits of insurance or self-insurance ("basic insurance requirements") herein:

**16.1 Automobile liability insurance,** providing coverage on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than One Million Dollars (\$1,000,000) per occurrence; and the policy shall:

**16.1.1** Provide coverage for owned, non-owned and hired autos.

**16.2 Broad form commercial general liability insurance,** unless otherwise approved by the CITY's Risk Manager, providing coverage on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than One Million Dollars (\$1,000,000) per occurrence; and the policy shall:

**16.2.1** Provide contractual liability coverage for the terms of this agreement.

**16.2.2** Provide products & completed operations coverage.

**16.3 Workers' compensation insurance** with statutory limits and employer's liability insurance with limits of not less than One Million Dollars (\$1,000,000) per accident...

**16.4** All policies shall contain provisions or have endorsements naming the CITY, its mayor, council, officers, agents, employees, or designated volunteers as additional insureds. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its mayor, council, officers, agents, employees, or designated volunteers

**16.5** All policies required of PG&E shall be primary insurance as to the CITY, its mayor, council, officers, agents, employees, or designated volunteers and any insurance or self-insurance maintained by the CITY, its mayor, council, officers, agents, employees, and designated volunteers shall be excess of the PG&E's insurance and shall not contribute with it.

**16.6** Except for workers' compensation, insurance is to be placed with insurers with a Bests' rating as approved by CITY's Risk Manager, but in no event less than A:V.

**16.7** Unless otherwise approved by CITY's Risk Manager, all policies shall contain an endorsement providing the CITY with thirty (30) days written notice of cancellation or material change in policy language or terms. All policies shall provide that there shall be continuing liability thereon, notwithstanding any recovery on any policy.

**16.8** The insurance required hereunder shall be maintained until all work required to be performed by this Agreement is satisfactorily completed as evidenced by written acceptance by the CITY.

**16.9** Full compensation for all premiums which PG&E is required to pay on all the insurance described herein shall be considered as included in the prices paid for the various items of work to be performed under the Agreement, and no additional allowance will be made for additional premiums which may be required by extensions of the policies of insurance.

**16.10** PG&E shall have the right to self insure with respect to any of the insurance requirements required under this Agreement. By request, PG&E shall submit a letter of self-insurance signed by a duly authorized representative, evidencing that the self-insurance program is in full force and effect and in compliance with and subject to all the terms, agreements, covenants, conditions and provisions of the Agreement.

**17. MERGER AND MODIFICATION.** All prior agreements between the parties are incorporated in this License Agreement which constitutes the entire agreement. Its terms are intended by the parties as a final expression of their agreement with respect to such terms as are included herein and may not be contradicted by evidence of any prior agreement or contemporaneous oral agreement. The parties further intend this License Agreement constitutes the complete and exclusive statement of its terms and no extrinsic evidence whatsoever may be introduced in any judicial or arbitration proceeding involving this License Agreement. This License Agreement may be modified only in a writing approved and signed by all the parties.

**18. NEGATION OF PARTNERSHIP.** CITY shall not become or be deemed a partner or joint venture with PG&E or associate in any such relationship with PG&E by reason of the provisions of this License Agreement. PG&E shall not for any purpose be considered an agent, officer or employee of CITY.

**19. NO WAIVER OF DEFAULT.** The failure of any party to enforce against another party any provision of this Agreement shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Agreement. The acceptance of work or services, or payment for work or services, by CITY shall not constitute a waiver of any provisions of this Agreement.

**20. NOTICES.** All notices relative to this Agreement shall be given in writing and shall be personally served or sent by certified or registered mail and be effective upon actual personal service or depositing in the United States mail. The parties shall be addressed as follows, or at any other address designated by notice:

**CITY: CITY OF MILPITAS  
Attn: Fernando Bravo  
Principal Engineer  
455 E. Calaveras Blvd  
Milpitas California 95035**

**PG&E: Pacific Gas and Electric Company  
Land Department  
c/o Dawn Plise  
5555 Florin Perkins Road  
Sacramento, CA 94015**

**21. TERMINATION.** The parties hereto agree that either party may terminate this Agreement, as it relates to any individual location of the *SmartMeter* Equipment, without cause upon one hundred eighty (180) days advance written notice to the other party. City agrees that it will not terminate this Agreement without cause within the first five (5) years and PG&E relies on this representation as a basis for the capital expenditure associated with the facility installations. With this exception, either party may terminate this Agreement without cause in its entirety, at any time during the term hereof by giving written notice to the other party, not less than six (6) months prior to the requested date of such termination. Furthermore, either party may terminate this Agreement and any permits issued hereunder for cause, such as for failure to maintain private job account balances and/or to make timely CITY invoice payments, at any time upon providing sixty (60) days notice to the other party. Any termination of this Agreement shall not relieve PG&E of any obligations, whether of indemnity or otherwise, which have accrued prior to such termination or completion of removal of PG&E's equipment, whichever is later, or which arises out of an occurrence happening prior thereto.

**21.1** Except as specifically set forth herein, CITY and PG&E agree that neither Party shall terminate this Agreement in the event of an alleged non-monetary breach nor default hereunder before the defaulting Party has been given notice of and a reasonable time and opportunity to respond to and cure any such non-monetary breach or default. For purposes of the foregoing, a reasonable time to cure any non-monetary breach or default shall be deemed to be thirty (30) days after notice, unless the nature of the default in question is such that while it is reasonably susceptible of being cured, it is not

reasonably susceptible of being cured within such thirty (30) day period .

**IN WITNESS WHEREOF**, the parties hereto have caused this Agreement to be executed, the day and year first-above written.

**CITY OF MILPITAS**

**PACIFIC GAS & ELECTRIC COMPANY**

By:\_\_\_\_\_

By:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_

Attachment: Exhibit "A" – Streetlight License



EXHIBIT A

STREETLIGHT PERMIT

PART 1 REQUEST FOR ACCESS

To: CITY OF MILPITAS: Date \_\_\_\_\_
Street: 455 Calaveras Boulevard Milpitas, CA 95035

In accordance with that certain Streetlight License Agreement between the City of MILPITAS ("City") and PG&E dated \_\_\_\_\_, 2009 (the "Agreement") we hereby request permission to place attachments on the City streetlights designated below.

- 1. Location of the streetlights

Table with 2 columns: PG&E NLC#, Location. Row 1: 15931, 1082 JACKLIN ROAD

- 2. Schematic drawing of the attachments to be contracted under this permit are attached. Location of each streetlight shown on Exhibit A attached.

Permittee: Pacific Gas and Electric Company
Authorizing Engineer Name: Bill Monlux Company or Department: SmartMeter Operations
Address: 1850 Gateway Blvd, Concord, CA 94520 Phone # (925) 270-2819

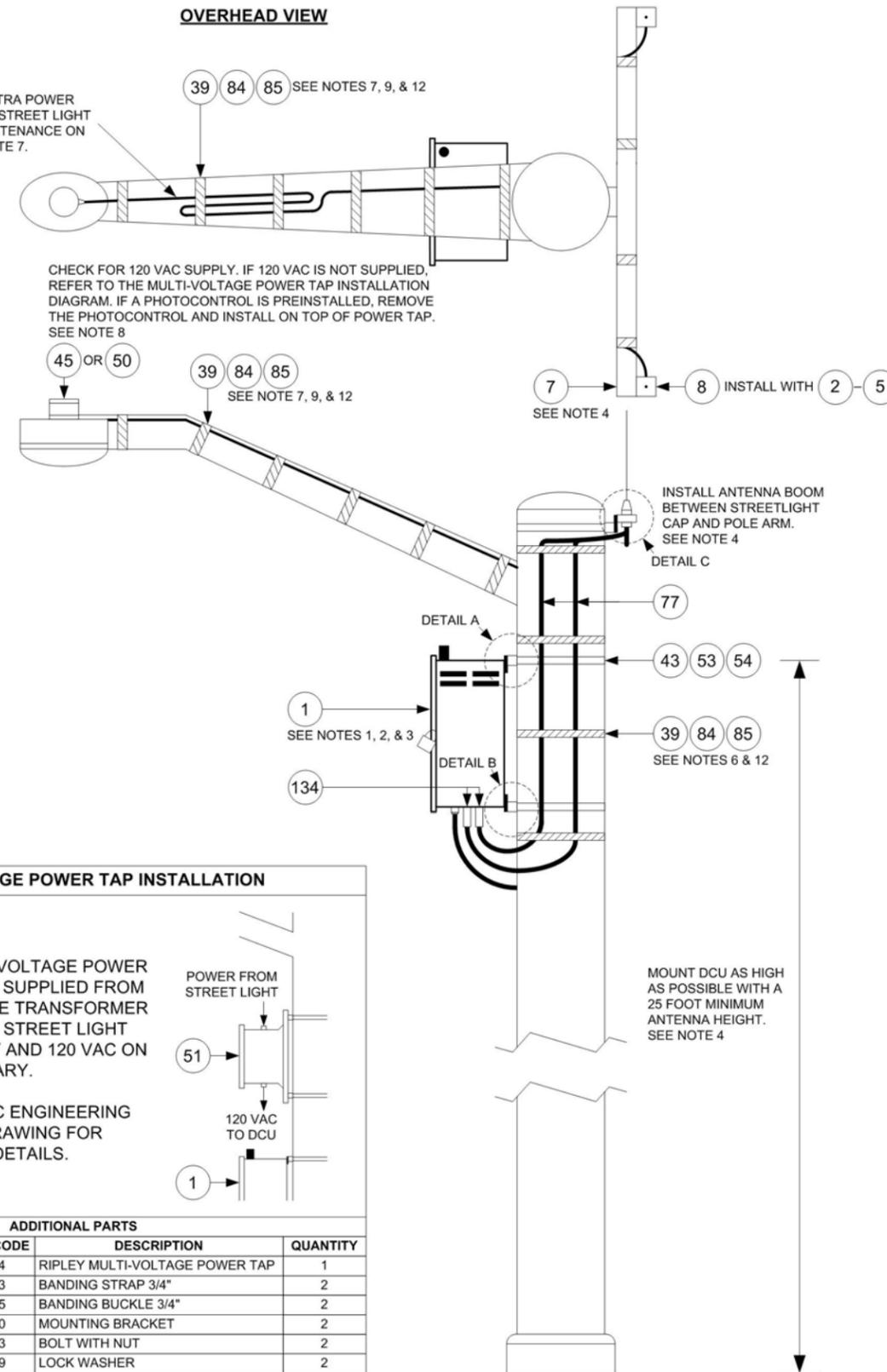
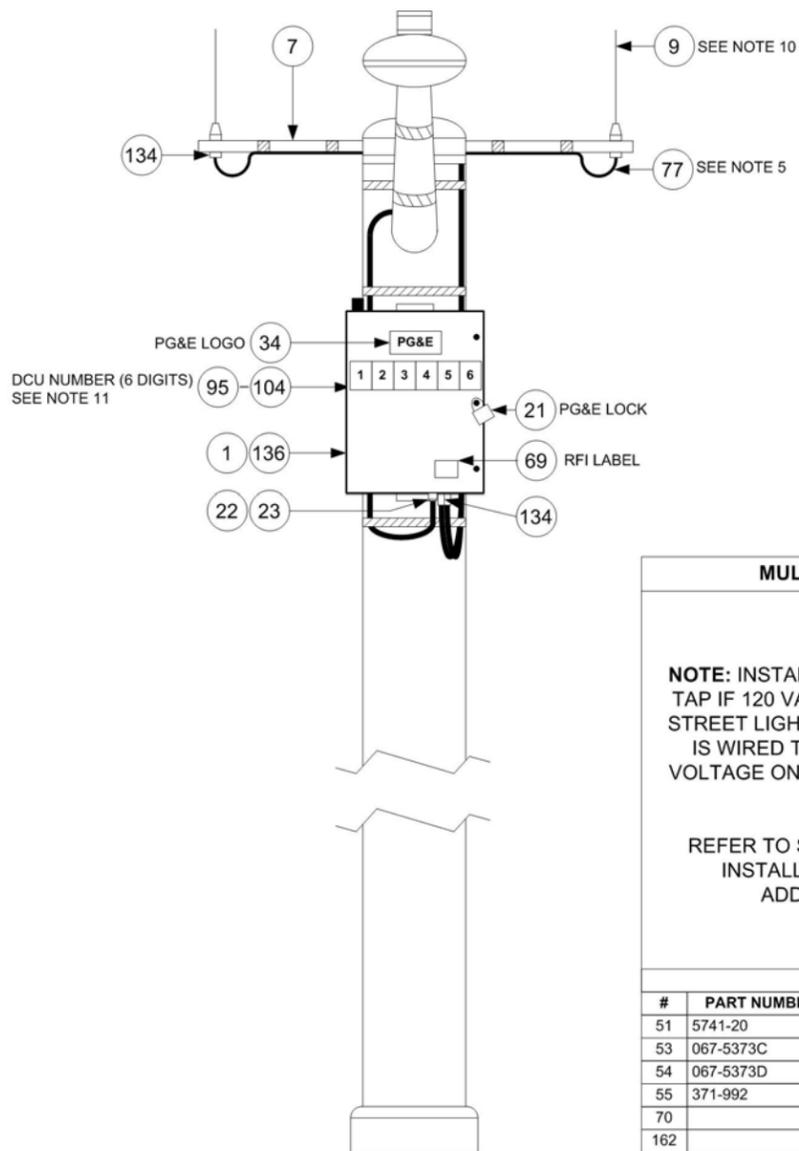
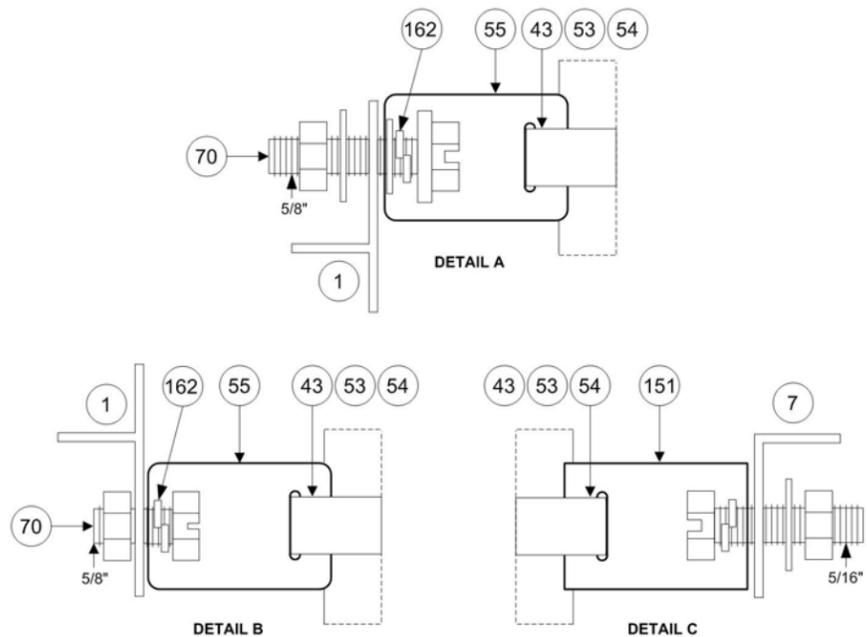
PART 2 AUTHORIZATION

Subject to the terms and conditions of the Agreement, you are hereby authorized to install the attachments described in this Exhibit A.

CITY OF MILPITAS:

BY: \_\_\_\_\_ Execution Date: \_\_\_\_\_

#	PART NUMBER	PG&E NUMBER	DESCRIPTION	QUANTITY
1	506-9975-1	A	DATA COLLECTOR UNIT AC, VERIZON	1
2	069-3305	M195517	5/16" FLAT WASHER METAL SS	4
3	069-561832LS	-	5/16" 18 x 1" HEX HEAD BOLT SS	4
4	069-3304	M195532	5/16" LOCK WASHER SS	4
5	069-3306	M195650	5/16" 18 HEX NUT SS	4
7	056-9975M	M231953	ANTENNA BOOM - 4 FEET	1
8	109-9975D	-	UHF ANTENNA BASE ASSEMBLY DCU II	2
9	073-0010	M231952	455-470 MHZ ANTENNA DCU II - 30" HEIGHT	2
21		M231947	PG&E LOCK	1
22	067-0320	-	STRAIN RELIEF 1/2" NPT	1
23	069-3610	-	1/2" LOCKNUT	1
34	PGE014-L-RE-TJ1	M621686	PG&E LOGO DECAL (LARGE)	1
39	GS4MT	M241089	HAND TENSION TOOL FOR SS BANDING MATERIAL	VARIES
43	UL4000	M204724	BAND-IT CLAMP INSTALLATION TOOL	VARIES
45		M232075	RIPLEY 120V ANCILLARY POWER TAP - 30 FOOT CORD	1
50	059-9975R	M231985	FISHER PIERCE POWER ADAPTER LIGHT HEAD	OPTIONAL
51		M231974	RIPLEY POWER TAP MULTI-VOLTAGE	OPTIONAL
53	067-5373C	M204723	BANDING STRAP 3/4" 201 STAINLESS, PRECUT	3
54	067-5373D	M204725	BANDING BUCKLE 3/4" SS 201 UB256	3
55	371-992	M232370	DCU/SOLAR/ANTENNA MOUNTING BRACKET	2
69	PGE814-L-A2-B32	M621583	LABEL DCU RFI EMISSION 3" X 5"	1
70		M192783	5/8" X 1 3/4" BOLT WITH NUT	2
77	070-2570-08	M232121	HYPERLINK COAXIAL CABLE, 8 FEET	2
84	MBH-TLR	M241090	CABLE TIE .31" SS, BANDING, ROLL 250 FEET	VARIES
85	MTHH-C	M241091	BANDING ROLLER BUCKLE .31" SS 304	VARIES
95-104		M621344 - 621353	LABEL NUMERAL 0 - 9 (LARGE)	VARIES
134	042-9975	M384110	SELF-FUSING TAPE	VARIES
136		M231946	DCU BATTERY	1
151	493867	M232373	ANTENNA BOOM MOUNTING BRACKET WITH HARDWARE	1
162		M195229	WASHER, LOCK, GALVANIZED, 5/8" BOLT SIZE	2



**MULTI-VOLTAGE POWER TAP INSTALLATION**

**NOTE:** INSTALL MULTI-VOLTAGE POWER TAP IF 120 VAC IS NOT SUPPLIED FROM STREET LIGHT. ENSURE TRANSFORMER IS WIRED TO MATCH STREET LIGHT VOLTAGE ON PRIMARY AND 120 VAC ON SECONDARY.

REFER TO SM009ACC ENGINEERING INSTALLATION DRAWING FOR ADDITIONAL DETAILS.

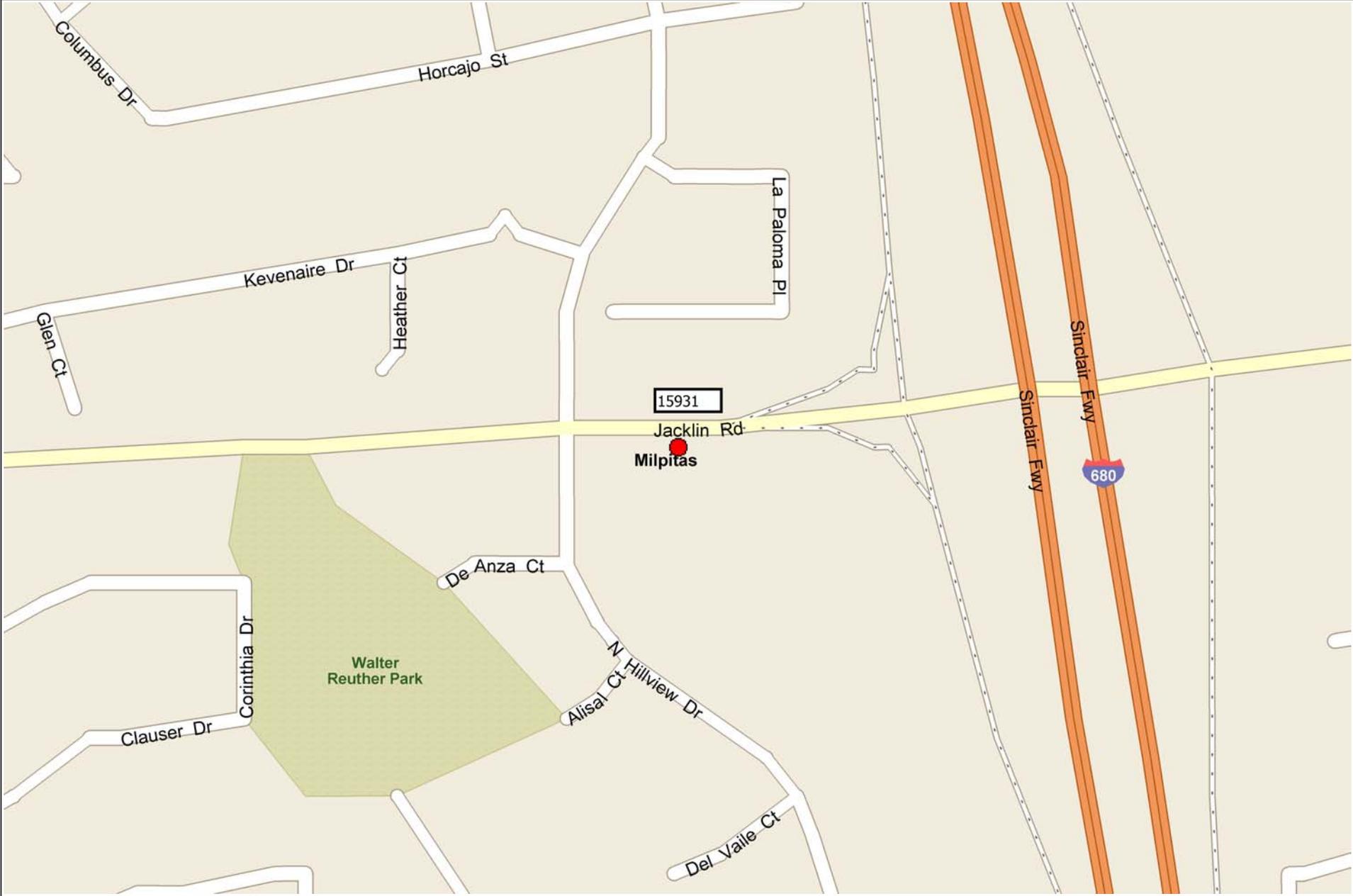
ADDITIONAL PARTS				
#	PART NUMBER	PG&E CODE	DESCRIPTION	QUANTITY
51	5741-20	M231974	RIPLEY MULTI-VOLTAGE POWER TAP	1
53	067-5373C	M204723	BANDING STRAP 3/4"	2
54	067-5373D	M204725	BANDING BUCKLE 3/4"	2
55	371-992	M232370	MOUNTING BRACKET	2
70		M192783	BOLT WITH NUT	2
162		M195229	LOCK WASHER	2

- NOTES**
- REFER TO PG&E ENGINEERING DOCUMENT 068190 FOR INFORMATION REGARDING SPECIFIC PG&E REQUIREMENTS.
  - DATA COLLECTOR UNIT (DCU) MAY BE MOUNTED UNDER STREETLIGHT ARM OR BACKSIDE OF POLE.
  - NO GROUNDING IS REQUIRED.
  - ANTENNAS SHOULD BE MOUNTED AS HIGH AS POSSIBLE ON POLE SHAFT OF STREETLIGHT WITH A 25 FEET MINIMUM HEIGHT. INSTALL ANTENNA BOOM MOUNTING BRACKET BETWEEN STREETLIGHT CAP AND POLE ARM. IF THE BRACKET DOES NOT FIT, INSTALL BELOW THE POLE ARM ON BACK SIDE OF POLE.
  - DRIP LOOPS SHOULD BE FORMED AS NEEDED WITH A RADIUS BETWEEN 8 AND 12 INCHES. AVOID COILING EXCESS CABLE.
  - COAXIAL CABLE RUN SHALL BE SUPPORTED BY STAINLESS STEEL MATERIAL AS LISTED EVERY 3 FEET. AVOID COILING EXCESS CABLE.
  - PROVIDE 2 - 3 FEET OF SLACK FOR REMOVAL OF POWER TAP OR FOR FUTURE MAINTENANCE.
  - CHECK VOLTAGE AND POLARITY PRIOR TO COMMENCING INSTALLATION. USE MULTI-VOLTAGE POWER TAP IF 120 VAC IS NOT SUPPLIED. DATA COLLECTOR UNIT (DCU) MUST BE POWERED WITH 120 VAC. ENSURE TRANSFORMER IS WIRED TO MATCH STREET LIGHT VOLTAGE ON PRIMARY AND 120 VAC ON SECONDARY. REFER TO MULTI-VOLTAGE POWER TAP INSTALLATION DIAGRAM AND SM009ACC ENGINEERING INSTALLATION DRAWING FOR DETAILS.
  - STRAP THE POWER LEADS WITH STAINLESS STEEL CABLE TIES AND BUCKLES TO THE POLE ARM AT 12 INCH INTERVALS.
  - THE MINIMUM VERTICAL CLEARANCE FROM DCU ANTENNAS TO LINES PASSING UNATTACHED ARE:
    - 4 FEET FROM SECONDARY.
    - 6 FEET FROM PRIMARY SUPPLYING 7.5KV TO 20KV.
    - 8 FEET FROM PRIMARY SUPPLYING 20KV TO 35KV.
    - FOR VOLTAGES ABOVE 35KV, CONSULT WITH ESE - ELECTRIC SYSTEM ENGINEERING.
  - THE DATA COLLECTOR UNIT (DCU) NUMBER IS UP TO 6 DIGITS LONG (OMIT LEADING ZEROS) AND LOCATED UNDER DCU.
  - ALWAYS USE STAINLESS STEEL CABLE TIES AND BUCKLES, ITEMS 84 AND 85, WHEN AVAILABLE. THE BLACK NYLON TIES HAVE BEEN PRECEDED. INSTALL WITH HAND TENSION TOOL, ITEM 39.
  - IF CELL COVERAGE IS NOT AVAILABLE IN THE AREA, INSTALL POTS DCU. SEE SM011PWP ENGINEERING INSTALLATION DRAWING FOR DETAILS.
  - MATERIALS NOT SPECIFIED BY MANUFACTURER SHALL BE PURCHASED TO MEET SPECIFICATIONS.
  - USE THIS DRAWING AS AN INSTALLATION GUIDE. CHANGES MUST BE APPROVED BY PG&E SMARTMETER DEPLOYMENT.

REVISIONS								PG&E			
REVISION	DESCRIPTION	DATE	APPROVED	REVISION	DESCRIPTION	DATE	APPROVED	TITLE:	SIZE	DRAWING #	REV
A	FINAL RELEASE TO PG&E	09/18/2007	ACLARA	I				STEEL LIGHT POLE	D	SM004SSL	F
B	REVISION PER SMARTMETER DEPLOYMENT	10/03/2007	WJM	J							
C	STAKEHOLDER REVISION	12/03/2007	WJM	K							
D	NEW TEMPLATE	05/22/2008	WJM	L							
E	SMARTMETER ENGINEERING REVISION	08/14/2008	KL	M							
F	SMARTMETER ENGINEERING REVISION	03/09/2009	WJM	N							
G				O							
H				P							

ENGINEER: KEVIN LIM  
ILLUSTRATOR: LARRY MANN  
SCALE: 1:16  
WEIGHT:  
SHEET 1 OF 1

Exhibit A - PG&E SmartMeter Equipment on the City of Milpitas, 07-09-09



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Portions © 1990–2005 InstallShield Software Corporation. All rights reserved. Certain mapping and direction data © 2005 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario. NAVTEQ and NAVTEQ ON BOARD are trademarks of NAVTEQ. © 2005 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.

**Exhibit A, PG&E SmartMeter Equipment on the City of Milpitas Streetlights, 07.09.09**

<b>NLC</b>	<b>City</b>	<b>Street</b>	<b>Equipment</b>	<b>TechIdentNo.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Mounting Type</b>	<b>Ownership</b>	<b>Pole Construction</b>
15931	MILPITAS	1082 JACKLIN RD.	42598536	M3552	37.446817	-121.893367	Street Light	Milpitas	Steel/Concrete



## SmartMeter Program Overview

### What is the *SmartMeter* program?

PG&E's **SmartMeter** program is the largest and among the most advanced deployments of automated metering infrastructure (AMI) technology in the United States to date. Through 2011, we are deploying 10.3 million **SmartMeter** gas and electric meters, a supporting communications network, and back-end systems to deliver **SmartMeter** capability to all of the millions of customers we serve.

The **SmartMeter** system will collect customer energy use data automatically and on a much more frequent basis. Traditionally, PG&E has used meter readers to manually collect data on customer energy use once a month for both gas and electric. With **SmartMeter**, we will automatically collect customer energy use data at much shorter intervals – once an hour or every minutes for electric, and daily for gas.

### Why is PG&E implementing the *SmartMeter* program?

California has a long history of innovation in energy. The state leads in energy conservation with among the lowest per capita energy consumption in the nation. It has managed to hold per capita energy consumption flat in spite of tremendous economic growth – this, at a time when per capita energy consumption across the country has increased substantially. The introduction of automated metering to customers is just another example of California's innovation in energy.

As a result of the energy crisis of the early 2000s, the CPUC recognized the need to provide energy customers information on the cost of the energy they consume. Today most customers pay a fixed price for electricity, even though the cost of electricity varies substantially over the course of the day and year. The cost is much greater during peak times – for example, between 2 and 7 on summer afternoons. Automated metering allows utilities to track energy use by time interval and provide customers information on the true cost impact of their electricity use. When coupled with rates and incentives, this information promises to motivate customers to conserve or shift their energy use to other times of the day. This closer linkage between energy supply and energy demand will create a number of benefits for our customers, the State, and our communities, as outlined below.

In addition, the **SmartMeter** program puts in place a core platform that will enable California to develop an advanced, high-tech electric grid of the future – what we call a Smart Grid. Although it will take years to evolve, this Smart Grid will support an expanded range of products and service offerings, enhanced customer service, streamlined operations, and environmental benefits.

**Go to [pge.com/smartmeter](http://pge.com/smartmeter) for more information**



## SmartMeter Program Overview

### How does the *SmartMeter* program benefit customers?

The **SmartMeter** system will enable PG&E to improve operations and provide our customers enhanced customer service. With the **SmartMeter** program, customers will benefit from:

**Fewer interruptions:** We'll collect meter data without setting foot on our customers' properties or interrupting their schedules.

**Faster power restoration:** We'll be able to pinpoint power outages and restore our customers' power faster.

**Faster problem resolution:** We'll be able to resolve service problems more easily and, in many cases, without sending service personnel to visit the customers' homes or businesses.

**Better billing:** Because we no longer have to depend on in-person meter readings, we'll no longer have to estimate customers' bills when we can't access their meters.

In addition, the **SmartMeter** system will enable PG&E to provide customers greater choice and control. With the interval data collected through the **SmartMeter** system, we will be able to offer our customers new time-of-day electric pricing plans. These plans create opportunities for customers to save by modifying how much electricity they use, and when they use it. To the extent they conserve or shift their energy use away from times of highest electric demand (and prices), customer can save on their energy bills.

Finally, we will provide our customers the ability to monitor their own energy use via the Internet and see when they are using the most energy. We will offer customers on-line tools to support their decisions on how and when to use energy. When coupled with time-of-day electric pricing plans, on-line energy use data will deliver our customers the understanding they need to more actively manage their energy use, and save.

### How does the *SmartMeter* system benefit California?

The **SmartMeter** system will enable a range of new tools – both pricing plans and enabling technologies – through which regulators and grid operators can influence energy demand. Using these new tools, regulators and grid operators will be better able to ensure that energy supplies and demands are in balance. The result is an increase in system reliability and a reduction in average energy procurement costs, both of which benefit the State's economy and its citizens. In addition, better alignment between electric supply and demand can yield positive environmental benefits for the State in the form of fewer power plants, less frequent use of older, inefficient (and dirtier) power plants, and an increased useful life for existing transmission and distribution equipment.

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## SmartMeter Program Overview

### How does the *SmartMeter* system benefit our communities?

The **SmartMeter** program will benefit community efforts to plan for and foster sustainable development. Community leaders can leverage energy use data aggregated to the neighborhood and community levels to identify and promote opportunities to make their communities more sustainable in a number of ways, including: improving land use; recognizing opportunities for local, renewable generation; supporting energy efficiency; and, promoting conservation.

### How does *SmartMeter* technology work?

In our **SmartMeter** program, we work hard to ensure we are leveraging the latest advances in automated metering technologies while at the same time ensuring that the technologies we deploy are cost-effective, reliable, and robust. To this end, PG&E is currently deploying a radio frequency (RF) technology for both gas and electric.

Each **SmartMeter** gas and electric meter is outfitted with a module that records customer energy use on a defined schedule – hourly for residential electric, 15 minute intervals for commercial electric, and daily for gas. Periodically, this **SmartMeter** module sends recorded energy use information over a radio frequency signal to a nearby data collection

unit, typically a small box mounted on a neighborhood streetlight. This data collector unit bundles the data from multiple meters and sends it to PG&E using a public network, typically a wireless network. At PG&E, this energy usage data is stored in a centralized data warehouse, where it is validated and made available for use in a wide range of back-end IT systems, including billing.

### How does the *SmartMeter* program support California's energy future?

The **SmartMeter** program puts in place a core infrastructure that will enable a new energy future for California. When upgraded with advanced capabilities, the **SmartMeter** electric system will enable such innovations as:

**Home energy management systems** that automatically adjust energy use to account for its cost, thereby enabling customers to achieve a desired balance between comfort and convenience on the one hand, and cost on the other.

**Widespread deployment of distributed generation and storage** that will provide customers the opportunity to draw electricity from the grid when it is cheapest (at night) and feed it back into the grid when it is more expensive (late afternoons). In this way, customers can minimize their average cost of electricity and maximize the benefit they receive from on-site distributed generation.

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## SmartMeter Program Overview

### **Electric and plug-in hybrid electric vehicles**

that charge when electric prices are at their lowest (at night) and have the potential to feed electricity back into the grid when electric prices are at their highest (late afternoons).

Over time, the **SmartMeter** program will enable PG&E to transform its relationship with customers. Through **SmartMeter**, we will be able to give our customers the tools and the know-how to be smarter energy consumers in a world where we all will be more aware of and engaged in our energy choices.

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## Photographic DCU Installation Example



## DCU on steel streetlight pole

