REPORT TO COUNCIL
City of Sacramento

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Staff Report
June 24, 2008

Honorable Mayor and
Members of the City Council

Title: PG&E SmartMeter Revocable Permit and Supplemental Agreement

Location/Council District: Citywide

Recommendation: Adopt a **Resolution** approving the following agreements between the City of Sacramento and Pacific Gas and Electric Company (PG&E) for the installation of automated meter reading equipment: 1) Agreement for Issuance of Revocable Permit; and 2) Supplemental Agreement for Administrative and Energy Costs.

Contact: Lucinda Willcox, Staff Aide, (916) 808-5052; Fran Halbakken, Operations Manager, (916) 808-7194

Presenters: None

Department: Transportation

Division: Office of Director

Organization No: 3416/15001041

Description/Analysis

Issue: PG&E has requested permission to use City streetlight poles at approximately 37 locations for the installation of SmartMeter equipment as part of its systemwide automated meter reading system for residential utility customers. If PG&E cannot use existing facilities, it will need to install utility poles to mount the equipment.

Policy Considerations: The PG&E SmartMeter equipment does not meet the current size and dimension requirements for the Zoning Code's antennae exemption. A companion item on the City Council agenda is an interim ordinance that would exempt antennae on City streetlights from Special Permit requirements.

In the same manner as the WiFi agreement, PG&E's meters will not be installed on pedestrian "acorn" style streetlights or any historic facility, and no more than one antenna will be installed on any City streetlight.

Environmental Considerations:

California Environmental Quality Act (CEQA): The proposed ordinance amendments and installation are exempt from the provisions of the California Environmental Quality Act (CEQA) under Section 15061 (b) (3).

Sustainability Considerations: Use of smart meter reading technology will reduce the number of vehicles needed to read meters with associated benefits in reductions of air pollutant and greenhouse gas emissions.

Committee/Commission Action: The Law & Legislation Committee considered this item and the Interim Ordinance on June 5, 2008. The Committee voted to forward the Interim Ordinance to City Council for adoption and directed staff to continue to review the financial considerations with PG&E.

Rationale for Recommendation: Installation of SmartMeter equipment on City streetlights will minimize visual intrusion that would be necessitated if PG&E is required to install separate utility poles. In addition, this agreement between the City and PG&E supports improved gas utility service to City residents and will reduce the number of vehicles needed for gas meter readers, consistent with the City's sustainability agenda.

Financial Considerations: The two agreements would provide $39.00 per year per installation for the revocable permit agreement and $120 per year per installation in supplemental costs. PG&E proposes to pay all costs up front for a total of $117,600 for the estimated 37 installations.

The revocable permit agreement provides for $39.00 per streetlight pole per year for 20 years, to be paid up front totaling $780 per location, for a total of $28,860 for 37 installations. This rate is generally consistent with the WiFi agreement that pays $36.00 per installation annually with annual inflation updates. This funding would be placed in Private Development Fund (Fund 790/2018) and used to pay for costs associated with permit issuance, street use permits, inspections, and related ordinance preparation.

In addition, PG&E has agreed to a supplemental agreement at an annual rate of $120 per installation to address administrative and energy costs, to be paid up front totaling $2,400 per location, for a total of $88,800 for 37 installations. This will be programmed into the City's traffic signal traffic LED replacement program (PN: SS01/ R15072700), and will result in ongoing benefits to the City in energy savings.

Emerging Small Business Development (ESBD): None.

Respectfully Submitted by: Francesca Lee Halbakken

Francesca L. Halbakken
Operations Manager

Approved by: Jerry Way

Jerry Way
Director of Transportation

Recommendation Approved:

Ray Kerridge
For City Manager

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Attachment 1

Background

PG&E SmartMeter Program

In 2006, PG&E conducted a successful pilot of its automated metering technology in Vacaville. Full deployment of the technology began in Bakersfield the following fall, and PG&E is continuing to install the equipment throughout its service territory to serve the 10.3 million residential customers in its service area.

To automate the reading of its gas meters, PG&E needs to install pole-mounted "SmartMeter" telecommunication equipment. Each equipment module consists of a data collector unit (DCU), two whip antennae, coaxial cable, and an optional photovoltaic adapter. Wind load calculations and radio frequency specification reports were provided and reviewed by City staff. PG&E has already installed necessary equipment on residential gas meters in Sacramento to be read with this equipment.

Proposed Use of City Streetlight Poles

Where feasible throughout the state, PG&E has been installing the equipment on its own facilities. The company has fewer poles in Sacramento because it does not provide electrical service to this area. PG&E's options are to install the equipment on City streetlight poles or install new poles in the public utilities easement (PUE) for this equipment.

PG&E proposes to install SmartMeter equipment on an estimated 37 street pole locations throughout the city to create an adequate grid to read the gas meters. A map with proposed installation streetlight locations is shown in Attachment 2 and an example of the equipment installation on City streetlights is shown in Attachment 3.

The PG&E SmartMeter installations will only include the larger or "cobra" style streetlights and none that include traffic signals or any other antenna or communications equipment.

Zoning Code Amendments

As a companion action, the City Council is scheduled to take action on an Interim Ordinance to exempt antennae on City streetlights from special permit requirements. City Code requires a Special Permit from the Zoning Administrator or Planning Commission to locate any antennae in the City. In connection with the City's agreement to deploy a citywide wireless broadband network, on July 31, 2007, the City Council adopted amendments to the Zoning Code so that antennae meeting specific criteria and installed on City property pursuant to a revocable encroachment permit are exempted from the requirement for a special permit. The SmartMeter equipment used by PG&E does not meet the size and dimensions specified in that Zoning Code exemption.

Installation of antennae or any equipment on City property requires permission from the City through a revocable encroachment permit, necessary agreements with the City, and requires appropriate environmental review.

PG&E has construction deadlines through its program directive from the Public Utilities Commission (PUC) for installation of its SmartMeter program throughout its service area. To meet the time constraints for PG&E's installation, staff recommends adoption of an Interim Ordinance that would exempt antennae on City streetlights from special permit requirements, returning this fall with a permanent Zoning Code amendment after further discussion and public outreach. The Interim Ordinance would exempt any proposals for such facilities from special permit requirements under the Zoning Ordinance, not only PG&E's proposal. Any proposals for streetlight use, like the PG&E agreement, would be brought forward to the City Council for approval. The Interim Ordinance is a separate action item on the City Council agenda.

SmartMeter Specifications

The SmartMeter equipment employed by PG&E includes Data Collection Units (DCUs) which are weatherproof assemblies mounted on utility poles, and contain a receiver/transmitter, a computer, modem, and a battery. Power is provided by the battery which is recharged by a connection to the A.C. line. PG&E will use the streetlight electrical facilities, and the Supplemental Administrative and Energy Use Agreement will contribute funding to cover the equipments' electrical use and other administrative costs.

The SmartMeter equipment that will be mounted in streetlight poles includes the DCU Box, two antennae, an antenna boom, and connecting cables. Specifications for these components are as follows:

	DCU Box	Antennae	Antenna Boom	Cable
Dimensions	24x13x9 inches	29.75 inches tall	4 ft length	0.405 in diameter; length as required
Weight	59 lbs (including battery)	2 lbs each	2 lbs	0.065 lbs/ft
Mounting	Below light arm	At ends of antenna boom	Min 25 ft At top of pole	Secured with UV stable wire ties

City staff has reviewed the wind load calculations and radio transmission frequency of these units to ensure they can be structurally accommodated safely and will not cause radio interference with other applications. In addition, under the revocable permit, if any location is determined to pose any kind of safety, operational, or other problem, the permit can be revoked and an alternate location or means put in place.

Similar Applications

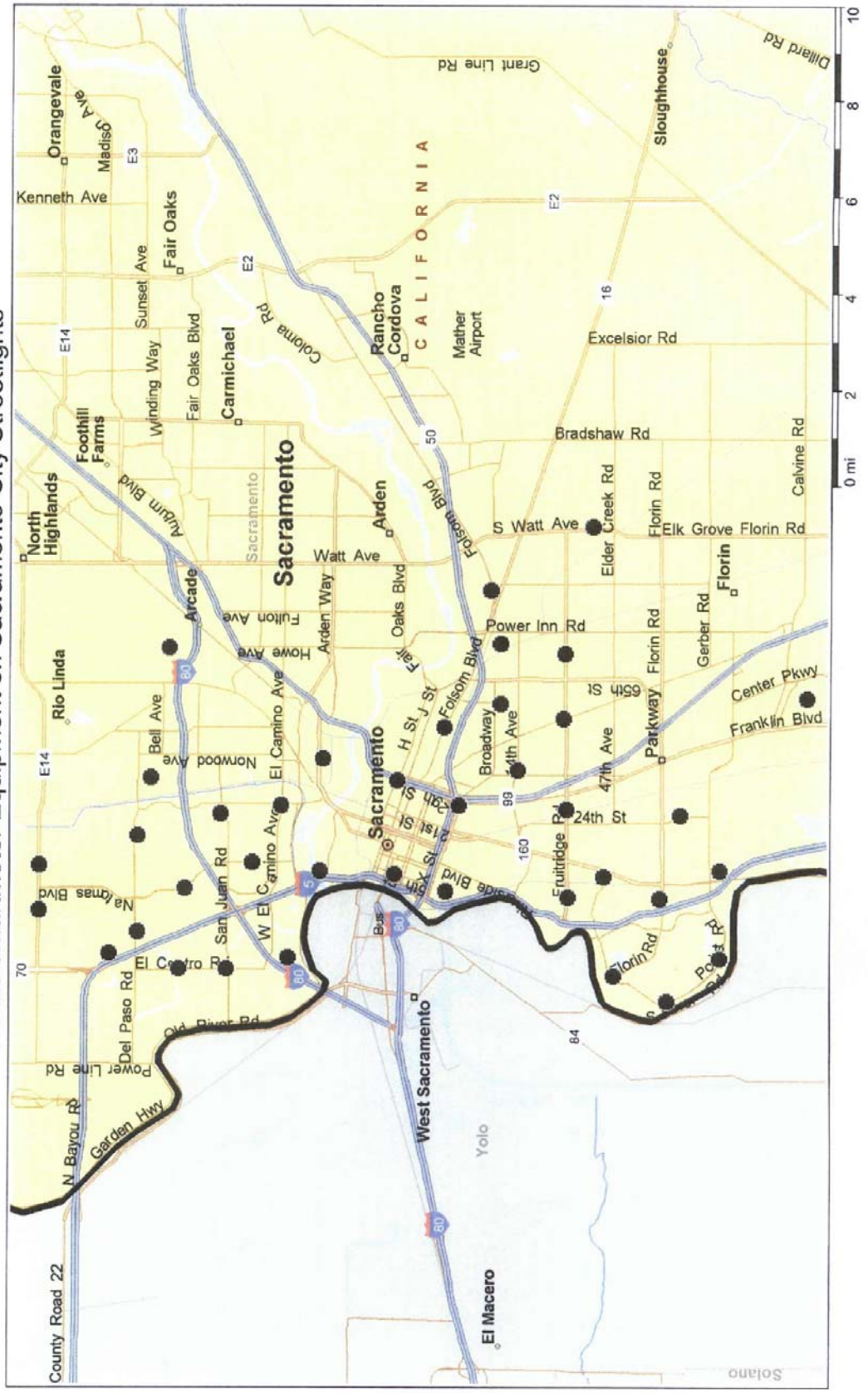
On June 21, 2007, the City Council approved an agreement for the design, deployment, and operation of a wireless broadband network in Sacramento with Sacramento Metro Connect, LLC (SMC). Under this agreement, SMC had non-exclusive rights to install its antennae on City facilities, including buildings and streetlights. SMC envisions a maximum use of 1,500 streetlight locations.

In February 2008, the City issued a Request for Proposals for automated meter reading technologies for City water meters. City staff is evaluating the proposals it received and will bring back recommendations for City Council approval.

WiFi and automated meter reading technologies continue to evolve and advance. While there may be opportunities and benefits to share technology and equipment for different applications, it may also not suit specific application needs or proprietary concerns. Staff will continue to review all proposals and applications to balance efficiency and business needs, and will recommend collocation or shared use where it will best meet operational needs. Any additional users of PG&E's SmartMeter equipment must be approved by the City under the revocable permit agreement.

Attachment 2

PG&E SmartMeter Equipment on Sacramento City Streetlights



Attachment 3

SmartMeter Installation on Streetlight

Attachment 4

RESOLUTION NO.

Adopted by the Sacramento City Council

REVOCABLE PERMIT AGREEMENT AND SUPPLEMENTAL AGREEMENT WITH PACIFIC GAS AND ELECTRIC COMPANY

BACKGROUND

A. The City owns, operates and maintains certain streetlight facilities located within the political jurisdiction of City.

B. The City supports the use of automated meter reading systems to reduce vehicular emissions, consistent with the City's Sustainability Plan.

C. PG&E desires to enter into Agreements for the attachment of communication equipment used for the operation and maintenance of PG&E's SmartMeter network to City's existing streetlight poles.

BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:

Section 1. The City Manager is authorized to execute the Agreement for Issuance of a Revocable Permit between the City and PG&E for installation of SmartMeter equipment. The $780 per installation, estimated at an initial 37 installations for $28,860, shall be appropriated into the Private Development Fund (Fund 790/2018).

Section 2. The City Manager is authorized to execute the Supplemental Agreement between the City and PG&E for administrative and energy costs and to amend the FY 2008/09 Capital Improvement Program revenue and expense budgets by appropriating the $2,400 per installation, estimated at an initial 37 installations for $79,500, into the Traffic Signal LED Retrofit Project (PN: SS01/R15072700).