

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



March 29, 2011

**Advice Letter 3172-G**

Jane K. Yura  
Vice President, Regulation and Rates  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10B  
P.O. Box 770000  
San Francisco, CA 94177

**Subject: Interconnection and Operational Balancing Agreement of  
PG&E Company and Ruby Pipeline, LLC (D.08-11-032)**

Dear Ms. Yura:

Advice Letter 3172-G is effective December 1, 2010.

Sincerely,

A handwritten signature in blue ink that reads "Julie A. Fitch".

Julie A. Fitch, Director  
Energy Division



December 1, 2010

**Advice 3172-G**

(Pacific Gas and Electric Company ID U 39 G)

Public Utilities Commission of the State of California

**Subject: Interconnection and Operational Balancing Agreement of Pacific Gas and Electric Company and Ruby Pipeline, LLC (D.08-11-032)**

Pacific Gas and Electric Company (“PG&E”) seeks California Public Utilities Commission (“CPUC” or “Commission”) approval of its Interconnection and Operational Balancing Agreement (“IOBA”) as negotiated with Ruby Pipeline, LLC (“Ruby Pipeline”).

**Purpose**

In accordance with Ordering Paragraph (“OP”) 3.ii of Decision (“D.”) 08-11-032 in Application (“A.”) 07-12-021, PG&E is filing this IOBA within six months of the anticipated in-service date of the interconnect point between PG&E and Ruby Pipeline, currently forecasted to be June 2011. This IOBA is an individually negotiated contract between the parties that accommodates both parties’ operational requirements for Ruby Pipeline delivering and PG&E receiving natural gas at the designated receipt point.

PG&E requests that the Commission approve this IOBA (Attachment 1) without modification.

**Background**

On December 21, 2007, PG&E submitted its application to the Commission for authority to contract for long-term capacity on the proposed Ruby Pipeline, which, if constructed, would transport natural gas from Opal, Wyoming, to Malin, Oregon, where it would interconnect with the PG&E system at the California-Oregon border near Malin, Oregon. On November 6, 2008, the Commission issued D.08-11-032 in A.07-12-021, which approved PG&E’s request subject to certain conditions.

One such condition, as identified in OP 3.ii of D.08-11-032, was that PG&E should file with the Commission “one or more advice letters to obtain approval for the

interconnection, operating, and balancing (IOB) agreements between PG&E and Ruby LLC, Pipeline.” This advice filing fulfills that condition.

### **Protests**

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than **December 21, 2010**, which is 20 days from the date of this filing. Protests should be mailed to:

CPUC Energy Division  
Tariff Files, Room 4005  
DMS Branch  
505 Van Ness Avenue  
San Francisco, California 94102

Facsimile: (415) 703-2200  
E-mail: [jnj@cpuc.ca.gov](mailto:jnj@cpuc.ca.gov) and [mas@cpuc.ca.gov](mailto:mas@cpuc.ca.gov)

Copies also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. Mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Jane K. Yura  
Vice President, Regulation and Rates  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10B  
P.O. Box 770000  
San Francisco, California 94177

Facsimile: (415) 973-6520  
E-mail: [PGETariffs@pge.com](mailto:PGETariffs@pge.com)

### **Effective Date**

As provided for by OP 3.ii of D. 08-11-032, PG&E files this advice letter as a **Tier 1** advice letter, with an effective date of **December 1, 2010**, the date of the filing.

**Notice**

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the service list for A.07-12-021. Address changes to the General Order 96-B service list and electronic approvals should be directed to e-mail [PGETariffs@pge.com](mailto:PGETariffs@pge.com). For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov). Advice letter filings can also be accessed electronically at <http://www.pge.com/tariffs>.

Handwritten signature of Jane Yura in cursive, with a vertical line and the initials 'lmt' to the right.

Vice President – Regulation and Rates

cc: Jonathan Bromson- Legal Division  
Richard A. Myers- Energy Division  
Robert Mark Pocta - Division of Ratepayer Advocates  
Marcel Hawiger- The Utility Reform Network  
Mike Florio- The Utility Reform Network  
Service List A.07-12-021

Attachment

# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY

### ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 M)**

Utility type:

ELC       GAS  
 PLC       HEAT       WATER

Contact Person: Linda Tom-Martinez

Phone #: (415) 973-4612

E-mail: lmt1@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas  
 PLC = Pipeline      HEAT = Heat      WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **3172-G**

**Tier: 1**

Subject of AL: Interconnection and Operational Balancing Agreement of PG&E and Ruby Pipeline, LLC (D.08-11-032)

Keywords (choose from CPUC listing): Agreements, Compliance

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.08-11-032

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL<sup>1</sup>: \_\_\_\_\_

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for:

Confidential information will be made available to those who have executed a nondisclosure agreement:  Yes  No

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: \_\_\_\_\_

Resolution Required? Yes   No

Requested effective date: **December 1, 2010**

No. of tariff sheets:

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed<sup>1</sup>: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

**CPUC, Energy Division**  
**Tariff Files, Room 4005**  
**DMS Branch**  
**505 Van Ness Ave.,**  
**San Francisco, CA 94102**  
**jnj@cpuc.ca.gov and mas@cpuc.ca.gov**

**Pacific Gas and Electric Company**  
**Attn: Jane Yura**  
**Vice President, Regulation and Rates**  
**77 Beale Street, Mail Code B10B**  
**P.O. Box 770000**  
**San Francisco, CA 94177**  
**E-mail: PGETariffs@pge.com**

# Advice 3172-G

## Attachment 1

Interconnection and Operational Balancing Agreement  
between  
Pacific Gas and Electric Company  
and  
Ruby Pipeline, L.L.C

This Interconnection and Operational Balancing Agreement ("IOBA") is made by and between Pacific Gas and Electric Company, a California corporation ("PG&E"), limited for all purposes hereunder to its Gas Transmission and Distribution function, and Ruby Pipeline, L.L.C., a Delaware limited liability company ("Ruby"). PG&E and Ruby may be referred to individually as a "Party" or collectively as the "Parties." For all purposes hereunder, PG&E is an interconnecting pipeline and is not a shipper on Ruby's interstate pipeline system.

**WHEREAS**, Ruby proposes to construct a new interstate natural gas transmission pipeline commencing at the Opal Hub in southwest Wyoming and terminating at the Malin, Oregon hub at the California-Oregon border;

**WHEREAS**, Ruby intends to file an application at the FERC (as defined herein) for a Certificate of Public Necessity and Convenience to construct and operate an "interstate pipeline" within the meaning of Section 2(15) of the Natural Gas Policy Act of 1978, and to construct and operate metering facilities, and as such would be regulated by and operate subject to the rules and regulations of the FERC to transport natural gas to points along its pipeline system;

**WHEREAS**, PG&E is a "gas utility" as defined in the Public Utilities Code of the State of California, is subject to the jurisdiction of the CPUC (as defined herein) and currently has CPUC tariffs and gas rules, and is a "Hinshaw" pipeline exempt from the jurisdiction of the FERC under Section 1(c) of the Natural Gas Act, and is a "local distribution company" served by an interstate pipeline within the meaning of Sections 2(17) and 311 of the Natural Gas Policy Act of 1978 and the Regulations of the FERC thereunder;

**WHEREAS**, Ruby desires that facilities owned and operated by Ruby interconnect with facilities owned and operated by PG&E at the Interconnect Point (as defined herein) specified in the Exhibit 1 attached hereto and incorporated herein;

**WHEREAS**, The Parties have entered into one or more Service Requester Agreements (as defined herein) with third party Service Requesters (as defined here) for the transportation of gas to and from the Interconnect Point on their respective systems;

**WHEREAS**, from time to time, the Scheduled Quantities (as defined herein) of gas may be greater or lesser than the quantities of gas which are actually delivered at the Interconnect Point, resulting in over-or under-deliveries relative to Scheduled Quantities; and

**WHEREAS**, the Parties desire to implement this IOBA in order to provide for terms and conditions under which Ruby's Facilities (as defined herein) will be interconnected with PG&E's Facilities (as defined herein); and to facilitate more efficient operations, accounting, and systems management at the Interconnect Point and on the Parties' respective systems.

**NOW, THEREFORE**, the Parties agree as follows:

ARTICLE 1  
DEFINITIONS

RUBY #22

- 1.1. Capitalized Terms – In addition to the terms “PG&E”, “Ruby”, and “IOBA” defined above, the following capitalized terms, when used in this IOBA, shall mean:
- a. AAA – As defined in Section 7.8b of this IOBA.
  - b. CPUC - The Public Utilities Commission of the State of California or any successor regulatory body.
  - c. Dispute - As defined in Section 7.8a of this IOBA.
  - d. DOT - As defined in Section 3.3.e of this IOBA.
  - e. Effective Date - As defined in Section 2.1 of this IOBA.
  - f. FERC - The Federal Energy Regulatory Commission or any successor regulatory body.
  - g. Interconnect Point – The point at which Ruby’s Facilities and PG&E’s Facilities interconnect as specified in Exhibit 1.
  - h. MOP - As defined in Section 3.3.d of this IOBA
  - i. NAESB – As defined in Section 6.1 of this IOBA.
  - j. Operational Imbalance – As defined in paragraph 2 of Exhibit 4 to this IOBA
  - k. PG&E’s Facilities - As defined in Section 3.1.a of this IOBA.
  - l. PG&E’s Scope of Work - As defined in Section 3.1 of this IOBA.
  - m. Ruby’s Facilities – As defined in Section 3.3.a of this IOBA.
  - n. Ruby’s Scope of Work - As defined in Section 3.3 of this IOBA.
  - o. Ruby’s Tariff – The FERC Gas Tariff of Ruby, as the same may be amended or superseded from time to time.
  - p. Scheduled Quantities – The net quantity of gas in decatherms for each shipper, confirmed and scheduled by the Parties to be delivered at the Interconnect Point for the gas day.
  - q. Service Requesters – Third parties who have entered into one or more transportation agreements with a pipeline.
  - r. Service Requester Agreements – An agreement for the transportation of gas on a pipeline to or from the Interconnect Point.

ARTICLE 2  
TERM

- 2.1. Effective Date - This IOBA shall be effective from the date it is fully executed by the Parties (the “Effective Date”) and, except as provided in Sections 2.2, and 2.3, shall remain in effect for the life of the interconnection of PG&E’s Facilities and Ruby’s Facilities.

- 2.2. Termination after Commercial Operation - After completion of PG&E's Scope of Work, this IOBA may only be terminated by: (i) mutual agreement of the Parties; or (ii) in accordance with the following renegotiation/termination process. A Party may initiate the process of terminating this IOBA by giving the other Party prior written notice of its intent. Within thirty calendar days of the receiving Party's receipt of such notice, the Parties shall initiate good faith negotiations for a replacement IOBA or an amendment to this IOBA; provided that any such superseding IOBA or amendment shall, to the extent possible and lawful, preserve the balance of benefits and burdens established hereunder. If the Parties are unable to agree on a superseding IOBA or amendment, the Parties shall seek FERC resolution of the matter and, unless otherwise agreed, this IOBA shall not be terminated, amended, or superseded except as may be ordered by FERC.
- 2.3. Termination Prior to Completion of Facilities - This IOBA may be terminated by Ruby prior to completion of PG&E's Scope of Work, provided that Ruby gives PG&E thirty (30) days prior written notice of its intent to terminate this IOBA. In the event Ruby terminates this IOBA, Ruby agrees that it shall be responsible to PG&E for any and all costs incurred for work performed or materials ordered by PG&E in preparation for or in completion of PG&E's Scope of Work. Upon receiving notice from Ruby of its intent to terminate, PG&E shall use reasonable efforts to minimize the costs actually incurred, including stopping the work in progress, and the ordering of materials.

### ARTICLE 3 INTERCONNECTION

- 3.1. PG&E's Scope of Work - Subject to the terms and conditions set forth in this IOBA, PG&E agrees to perform or cause the following actions to be performed (collectively "PG&E's Scope of Work"):
- a. Facilities - PG&E shall design, construct, own, operate, test, maintain and place in service a tap(s), pipeline, valves, overpressure protection, controls, communication, and related appurtenances, on its side of the Interconnect Point on PG&E's Line No. 400/401 as set forth in Exhibit 1, attached hereto. Collectively, these facilities shall be known as "PG&E's Facilities."
  - b. Overpressure Protection - PG&E shall install and operate overpressure protection equipment at or near the Interconnect Point to protect PG&E's Facilities from a failure of Ruby's pressure regulation equipment.
  - c. Computer Programming Changes - PG&E shall make applicable computer programming changes to its scheduling system required to add the new Interconnect Point for the purpose of nominations of gas by Service Requesters.
  - d. Cooperation - The Parties agree to cooperate and consult on the design and configuration of PG&E Facilities.
  - e. Warranty - PG&E represents and warrants that performance of the PG&E Scope of Work shall be in compliance and in accordance with all applicable federal, state, and local laws, ordinances, statutes, standards, rules, orders and regulations applicable to PG&E's Scope of Work. In addition, PG&E represents and warrants that, as of the commencement of commercial operations, PG&E's Facilities and the operation thereof will be in compliance with all federal, state, and local laws, ordinances, statutes, standards, rules, orders and regulations applicable to PG&E's Facilities and the operation thereof.

- 3.2. Conditions to PG&E's Scope of Work - PG&E's Scope of Work is subject to the prior receipt of necessary approvals, permits, and right of ways in a form acceptable to PG&E, in its sole discretion, from: (i) federal regulatory agencies; (ii) county, state or federal authorities; and/or (iii) landowners. PG&E agrees to diligently seek such necessary authorizations. Subject to receipt of necessary permits, approvals and rights of way, PG&E agrees to use reasonable efforts to complete PG&E's Scope of Work in a timely manner.
- 3.3. Ruby's Scope of Work - Subject to the terms and conditions set forth in this IOBA, Ruby agrees to perform or cause the following actions to be performed (collectively "Ruby's Scope of Work"):
- a. Facilities - In accordance with Ruby's FERC Certificate of Public Necessity and Convenience for construction and operation of its system and Ruby's Tariff, Ruby shall design construct, own, operate and maintain metering, measurement, and delivery facilities consisting of ultrasonic meters, gas chromatograph, moisture analyzer, flow computer, flow control, pressure regulation, coalescing filter separator, odorization, sulfur analyzer, data acquisition, communications, an adequate back-up power source, and related appurtenances, which are necessary to regulate, flow, and measure natural gas that is delivered to PG&E at the Interconnect Point. Collectively, these facilities shall be known as "Ruby's Facilities."
  - b. Cooperation - The Parties agree to cooperate and consult on the design and configuration of Ruby's Facilities.
  - c. Data Signals - Ruby shall provide to PG&E measurement, gas quality, and pressure equipment data available at the Interconnect Point pursuant to an access agreement to be entered into between the Parties.
  - d. Delivery Pressure - Ruby shall install the necessary equipment to effectuate the delivery of gas to PG&E at the Interconnect Point at or above PG&E's existing line pressures from time to time up to the current Maximum Operating Pressure ("MOP") of 911 psig.
  - e. Regulation Equipment - Ruby shall install flow control with pressure override capability at Ruby's Facilities. Ruby will set pressure override at a pressure not to exceed PG&E's MOP of 911 psig. Ruby will operate and maintain its facilities in compliance with U.S. Department of Transportation ("DOT") regulations. Overpressure protection equipment shall be installed and operated by PG&E as set forth in Section 3.1.b.
  - f. Compression - If Ruby has compression installed upstream of the metering facilities, it will insure that there will not be any pulsation that will cause measurement errors.
  - g. Odorization - Ruby's Facilities shall include equipment to odorize the gas for delivery to PG&E. The odorant used shall be an odorant blend as specified by PG&E with a concentration to be specified by PG&E. PG&E shall provide Ruby with 3 months advance notice of any change in odorant blend specifications.
  - h. Electric Isolation - Ruby's Facilities shall be electrically isolated from PG&E's Facilities at the Interconnect Point.
  - i. Damages - If any damage (or potential damage) to PG&E's Facilities does (or could) take place during the construction of Ruby's Facilities, then Ruby shall immediately inform PG&E of such occurrence and stop all further construction until PG&E provides notice to continue.
  - j. Warranty - Ruby represents and warrants that performance of Ruby's Scope of Work shall be in compliance and in accordance with all applicable federal, state, and local laws, ordinances, statutes, standards, rules, orders and regulations applicable to Ruby's Scope of Work. In addition, Ruby represents and warrants that, as of the commencement of commercial

operations, Ruby's Facilities and the operation thereof will be in compliance with all federal, state, and local laws, ordinances, statutes, standards, rules, orders and regulations applicable to Ruby's Facilities and the operation thereof.

#### ARTICLE 4 AGREEMENT TO PAY AND ACCOUNTING

- 4.1. Payment - Ruby agrees to pay to PG&E the actual costs of performing PG&E's Scope of Work, including normal overhead costs, and tax-gross up, if subject to income tax. Prior to the commencement of any work to be performed by PG&E, Ruby shall pay to PG&E a cash advance for the estimated cost of the work requested. The cost estimate for the requested work shall consist of PG&E's good faith cost estimate of the actual costs that PG&E will incur in performing the requested work. This estimate is solely a good faith estimate and in no way limits Ruby's obligation to reimburse PG&E for the actual costs incurred by PG&E.
- 4.2. Accounting - After PG&E's Facilities are constructed and placed in-service, PG&E shall provide Ruby with an accounting of the actual costs incurred, including normal overhead costs and tax gross-up, if subject to income tax, in performing PG&E's Scope of Work. Ruby shall have a right to audit this accounting at PG&E's offices during normal business hours, but any such audit must be completed by the end of the 180 day period beginning on the date of Ruby's receipt of the accounting. In the event Ruby owes PG&E additional payment to cover the actual costs incurred, PG&E will provide a final invoice to Ruby after the project is completed and all expenses are accounted for. This time period is typically within one hundred eighty (180) days of completion of the project. Ruby agrees to pay that amount within thirty (30) days after receiving an invoice from PG&E. If Ruby fails to make payment of such invoices within said thirty (30) day period, interest shall accrue on the unpaid portion of the billing(s) at the then-applicable FERC refund interest rate as specified in Section 154.501(d) of FERC's regulations. In the event that PG&E owes Ruby a refund of amounts paid, PG&E agrees to make that refund to Ruby within thirty (30) days after providing the accounting to Ruby.
- 4.3. Tax Indemnifications - Ruby agrees to protect, indemnify and hold harmless PG&E from all income taxes attributable to PG&E as the result of payments or property transfers made by Ruby to PG&E under this IOBA, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by PG&E. If any assessment, action, suit, proceeding or other claim for income taxes is brought against PG&E as the result of payments or property transfers made by Ruby to PG&E under this IOBA, PG&E will promptly notify Ruby in writing within ten (10) days of the commencement thereof, and Ruby shall be entitled to participate at its own expense or to assume the defense thereof and to employ counsel reasonably satisfactory to PG&E.

#### ARTICLE 5 OPERATIONS

- 5.1. Delivery Of Gas
- a. Pressure - Ruby shall deliver gas to PG&E at the Interconnect Point at prevailing pressures which, from time to time, may be up to the current MOP. On the date of this IOBA the MOP of Line 400/401 at the Interconnect Point is 911 psig, and PG&E represents that it does not have current plans to alter the MOP in the foreseeable future. However, certain operating conditions, or new regulation may require PG&E to temporarily, or permanently, alter the MOP at the Interconnect Point in the future. PG&E shall promptly notify Ruby in the event that it believes an alteration to the MOP may be required.
- b. Monitoring - Ruby operators will continuously monitor the gas quality and odorization levels of the gas delivered at the Interconnect Point.

- c. Cooperation - The Parties shall cooperate in the day-to-day operation of both systems to ensure efficient and coordinated operation.
- d. Maintenance Scheduling - Each Party shall attempt to schedule maintenance of its respective facilities, to the extent operationally feasible, to minimize any interruption of gas flow on the other Party's pipeline. Either Party shall give reasonable prior notice to the other Party of any scheduled maintenance.

## 5.2. Gas Quality

- a. Quality of Gas at Interconnect Point - Subject to the other provisions of this IOBA, PG&E agrees to accept gas delivered to it at the Interconnect Point that meets the quality specifications and requirements as set forth in Exhibit 2, attached hereto and incorporated herein by this reference. (Ruby has filed for FERC approval of tariff language regarding the quality of the gas delivered to the Interconnect Point that is set forth in Exhibit 2 to this IOBA.)
- b. Notice of Deficiency - If at any time, Ruby becomes aware that the gas being delivered at the Interconnect Point fails to conform to such gas quality standards, Ruby shall promptly notify PG&E of such deficiency. If at any time, PG&E becomes aware that the gas being delivered at the Interconnect Point fails to conform to such gas quality standards, PG&E shall promptly notify Ruby of such deficiency. In both instances, Ruby shall promptly attempt to resolve the issue or shut in the gas delivery.
- c. Suspension of Receipts - The Parties recognize that PG&E's agreement to accept gas from Ruby as set forth above is based on PG&E's engineering analysis of historical flow and gas quality on Line 400/401 near the Interconnect Point. If: (i) gas delivered to PG&E by Ruby at the Interconnect Point fails to conform to the gas quality specifications in PG&E's Gas Rule 21, or its successor; and (ii) PG&E determines, in its sole discretion, that it can no longer accept such gas from Ruby due to operational or gas quality issues, then PG&E reserves the right to suspend receipt of such gas at the Interconnect Point.
- d. Remedial Efforts - In the event that gas deliveries at the Interconnect Point are curtailed due to gas quality issues, the Parties shall diligently work together to remedy the deficiency as soon as practicable.

5.3. Odorization - Gas delivered from Ruby to PG&E shall be odorized as set forth in Section 3.3.g. of this IOBA.

5.4. Reserved Rights – Subject to the provisions of Section 7.1.c. of this IOBA, each Party retains the right unilaterally to take whatever action it deems necessary to comply with all applicable state and federal laws and regulations concerning gas quality, notwithstanding other provisions in this IOBA that contemplate cooperative efforts.

5.5. Measurement And Tests – Ruby shall measure the gas to be delivered to PG&E on a continuous basis and accumulate such measurement on a daily and hourly basis during the term hereof in accordance with the provisions set forth in Exhibit 3, attached hereto and incorporated herein by this reference (Ruby has filed for FERC approval of the tariff language relating to gas measurement that is set forth in Exhibit 3 to this IOBA.)

- a. Meters - The quantity of gas delivered to PG&E under this IOBA shall be measured by industry-accepted ultrasonic meters and other equipment, as set forth in Section 3.3 of Exhibit 3 to this IOBA, which shall be installed, owned, maintained and operated by Ruby, or its designee if mutually agreed by the Parties.

- b. Calibration - The Parties agree that Ruby will verify the accuracy of Ruby's measurement equipment at an interval consistent with Ruby's measurement policies and practices. For this interconnect, Ruby will conduct these tests at least once each calendar month, not to exceed 45 days, for flowing volumes in excess of 50 MMscf/day. The Parties agree the volume or frequency can change with mutual agreement.
- c. Liquids - For any liquids that accumulate at Ruby's filter separator at the Interconnect Point, Ruby shall characterize such liquids prior to disposal through required analytical tests in accordance with 40 CFR Part 761, and any additional applicable federal and state hazardous waste regulations. Such tests shall include a chemical analysis for polychlorinated biphenyls in accordance with approved EPA methods from 40 CFR Part 761 and Ruby shall provide a copy of the analytical test results to PG&E.

#### ARTICLE 6 GAS BALANCING

- 6.1 Operational Balancing Provisions – The balancing provisions of this IOBA are set forth in Exhibit 4, attached hereto and incorporated herein by this reference. Such provisions follow the Model Operational Balancing Agreement of the North American Energy Standards Board ("NAESB") adopted by the FERC,

#### ARTICLE 7 ADDITIONAL PROVISIONS

##### 7.1. Regulatory

- a. PG&E's Reserved Rights - PG&E shall not be required, hereunder, to take any action, including but not limited to entering into any contracts with parties transporting gas on the Ruby system to the Interconnect Point, which, in the good-faith and reasonable exercise of PG&E's judgment, may jeopardize PG&E's retention of its "Hinshaw Exemption" under Section 1(c) of the Natural Gas Act.
- b. Ruby's Reserved Rights - Ruby shall not be required to take any action hereunder, including, but not limited to, entering into contracts with parties transporting gas on PG&E's facilities, which, in the good-faith and reasonable exercise of Ruby's judgment, may cause Ruby to be subject to the jurisdiction of the CPUC.
- c. Governmental Action - Notwithstanding the other provisions of this IOBA, if at any time during the term hereof, any governmental authority having jurisdiction shall take any action whereby either Party's delivery, receipt, and/or use of gas hereunder shall be proscribed or subjected to terms, conditions, regulations, restraints, or limits that in the reasonable judgment of the Party prevents that Party from acting in a commercially reasonable manner to fulfill the terms of this IOBA, the Parties shall negotiate in good faith to modify this IOBA so that performance by both Parties is sustainable and the balance of benefits and burdens established hereunder is preserved to the extent possible under the changed circumstances. Further, in the event that there are changes ordered by the FERC or the CPUC to any of the provisions of this IOBA, the Parties shall use good faith efforts to amend this IOBA in writing to reflect such changes within sixty (60) days of such order(s).
- d. Non-dedication - Nothing herein shall be construed as a dedication by either Party of its respective facilities to the other Party, or to or for the benefit of any third party. Both PG&E

and Ruby may each construct facilities on their respective systems as they may deem necessary or appropriate in their sole discretion. Except as provided in Sections 3.1 and 3.3 of this IOBA, nothing herein obligates either Party to construct any additional facilities or to modify any existing facilities to provide for the receipt or delivery of gas contemplated hereunder.

- 7.2 Indemnification - Each Party shall indemnify and hold harmless the other Party, including its officers, board of Directors, managers, members, agents, contractors, and employees, against all losses, damages, costs and expenses (including attorneys' fees), claims, enforcement actions, judgments or other obligations or liabilities, resulting from physical injury to property or person, or from a violation of an applicable local, state or federal law, arising from the indemnifying Party's performance or nonperformance of its obligations under this IOBA. Provided, however, that neither Party shall be obligated to indemnify the other Party against any losses, however caused, which arise in whole or in part from the sole negligence, or willful or criminal misconduct of that other Party.
- 7.3 Limitation on Liability - IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY HEREUNDER FOR EXEMPLARY, PUNITIVE, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, REGARDLESS OF THE SOLE OR CONCURRENT NEGLIGENCE OF A PARTY, STRICT LIABILITY, OR DEFECT IN PREMISES, EQUIPMENT OR MATERIAL.
- 7.4 Risk of Loss - Risk of loss of all gas shall pass at the Interconnect Point. PG&E shall not be responsible to Ruby or Ruby's Service Requesters for any gas losses or delays (due to operating conditions or constraints, force majeure or otherwise) or damages occurring on Ruby's side of the Interconnect Point, and Ruby shall not be responsible to PG&E or PG&E's Service Requesters for gas losses or delays (due to operating conditions or constraints, force majeure or otherwise) or damages occurring on PG&E's side of the Interconnect Point.
- 7.5 Information - Each Party shall have the right to request, and upon such request, the other Party shall provide, information that is sufficient to meet its obligations and to enforce its rights under this IOBA including the verification of the accuracy of any computation contemplated under this IOBA. If the information is considered confidential then the disclosing Party shall identify it as such and the receiving Party shall treat it as such. Notwithstanding the above, neither Party shall be required to provide the other Party with information that, prior to the request was deemed to be confidential, proprietary, or where disclosure of the requesting Party would violate applicable rules and regulations of either the FERC or CPUC.
- 7.6 Force Majeure - In the event Ruby is rendered unable, wholly or in part, by force majeure (as defined in Ruby's Tariff) or PG&E is rendered unable, wholly or in part, by force majeure (as defined in the Gas Tariffs and Rules of PG&E) to carry out their respective obligations under this IOBA, it is agreed that, upon such Party giving notice and reasonably full particulars of such force majeure in writing or by telecopy or by telephone (and confirmed in writing within seventy-two [72] hours thereafter), to the other Party within a reasonable time after the occurrence of the cause relied on, then the obligations of the Party giving such notice, so far as they are affected by such force majeure, shall be suspended during the continuance of the effects of the cause, and the Party subject to such cause shall remedy it so far as practicable with all reasonable dispatch.
- 7.7 Notices - Any notice, request, or statement provided pursuant to this IOBA shall be in writing and shall be considered as having been given, if delivered personally, when delivered, or, if either electronically communicated, mailed, postage prepaid, sent by express mail, or overnight delivery, or if faxed to the other Party, then, when sent, to the following:

Agreement Notices and Other Correspondence

Ruby Pipeline, LLC  
2 North Nevada Avenue  
Colorado Springs, CO 80903  
Telephone: (719) 520-4465  
Fax: (719) 667-7864  
Attn: VP, Marketing & Business  
Development

Pacific Gas And Electric Company  
77 Beale Street  
P.O. Box 770000, Mail Code B16A  
San Francisco, CA 94177  
Telephone: (415) 973-2152  
Fax: (415) 973-0750  
Attn: Director, Gas System Operations

Operations

Ruby Pipeline, LLC  
2 North Nevada Avenue  
Colorado Springs, CO 80903  
Telephone: (719) 329-5637  
Fax: (719) 329-5646  
Attn: Director, Rocky Mountain Division

Pacific Gas And Electric Company  
77 Beale Street  
P.O. Box 770000, Mail Code B16A  
San Francisco, CA 94177  
Fax: (415) 973-3214  
Telecopier: (415) 973-1521  
Attn: Gas Control

NOMINATIONS AND SCHEDULING

Ruby Pipeline, LLC  
2 North Nevada  
Colorado Springs, CO 80903  
Telephone: (719) 520-3741  
Fax: (719) 520-4684  
Attn: Director, Nominations and  
Scheduling

Pacific Gas and Electric Company  
77 Beale Street  
P.O. Box 770000, Mail Code B16A  
San Francisco, CA 94177  
Telephone: (415) 973-2424  
Fax: (415) 973-0649  
Attn: Gas Scheduling & Accounting

ALLOCATION STATEMENTS

Ruby Pipeline, LLC  
2 North Nevada  
Colorado Springs, CO 80903  
Telephone: (877) 520-3797  
Fax: (719) 520-4504  
Attn: Customer Services

Pacific Gas and Electric Company  
77 Beale Street  
P.O. Box 770000, Mail Code B16A  
San Francisco, CA 94177  
Telephone: (415) 973-6376  
Fax: (415) 973-0750  
Attn: Gas Scheduling & Accounting

Changes to the above addresses shall be effectuated by a Party notifying the other Party in writing of the modification.

- 7.8 Remedies/Dispute Resolution - Each Party agrees that its sole remedies for nonperformance, breach or other default by the other Party in the performance of its obligations under this Agreement shall be as specified in this Agreement. Both Parties shall correct any such nonperformance, breach or default in a timely manner.
- a. Notice of Dispute - Within thirty (30) days of written notice from either Party to the other that there is a dispute, claim, or need for interpretation arising out of or relating to this Agreement ("Dispute"), the Parties shall meet and attempt to reach a settlement by negotiation. If the Dispute is not resolved within thirty (30) days of such meeting, the Dispute shall be resolved in the manner as further set forth, which shall be in lieu of litigation before any regulatory agency or any state or federal courts.
  - b. Mediation - At either Party's request, the Parties shall participate in and attempt to resolve their Dispute through non-binding mediation, with an officer of each Party present whose area of responsibility includes the subject matter of the Dispute, and in accordance with the Commercial Mediation Rules of the American Arbitration Association ("AAA"), except as

otherwise mutually agreed. The Parties shall agree upon specific rules for a mediation meeting at least seven (7) days in advance thereof. The mediation meeting(s) shall be held at a location to be mutually agreed upon, or failing agreement, in Las Vegas, Nevada and shall commence within thirty (30) days of a Party's request for mediation. Each Party shall bear its own mediation costs. The costs and expenses of the mediator shall be divided equally between the Parties. If the Dispute is not resolved within 30 days of such mediation meeting, then the Dispute shall be resolved in the manner set forth below.

- c. FERC Resolution - Any Dispute that is not resolved pursuant to the provisions of Sections 7.8a. or 7.8b. may be submitted by either Party to the FERC for resolution.
- d. Arbitration Process - If the FERC does not address the Dispute on the merits, then either Party may submit the Dispute to binding arbitration pursuant to the Commercial Arbitration Rules of the AAA. Within thirty (30) days after receipt of a Party's notice to submit the Dispute to arbitration, the Parties shall select a person to act as arbitrator. If the Parties are unable to or fail to agree upon an arbitrator, the arbitrator shall be selected under expedited rules of the AAA. Unless waived by both Parties, no arbitrator shall have been or be employed by a Party (or a Party's parent) in the last ten (10) years, or own or possess, either directly or indirectly, a material interest in any Party or the subject matter of the Dispute. Any arbitrator or potential arbitrator shall disclose all such interests. Such arbitration shall be held at a location to be mutually agreed upon, or failing agreement, in Las Vegas, Nevada. Each Party shall bear its own arbitration costs. The costs and expenses of the arbitrator shall be divided equally between the Parties.
- e. Damages - Notwithstanding any other provision hereof, no Party shall be assessed in arbitration, or otherwise, any special, punitive, consequential, incidental, or indirect damages, whether in contract or tort, for any actions or inaction arising out of this Agreement or related hereto.

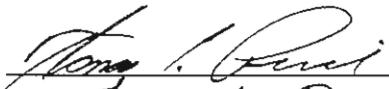
## 7.9 General Provisions

- a. Governing Law - This IOBA shall be governed by and interpreted in accordance with the laws of the state of Colorado, without giving effect to principles of conflicts of law.
- b. Non-waiver of Defaults - A waiver by any Party of any one or more breaches or defaults by the other Party hereunder shall not operate as a waiver of any future default or defaults, whether of like or different character. Furthermore, no consent or waiver, expressed or implied, by any Party of any breach or default by the other Party in the performance of its obligations hereunder shall be deemed or construed to be a consent to or waiver of any other breach or default in the performance of any other obligation of the other Party. Failure on the part of any Party to complain of any act or failure to act by the other Party or to declare the other Party in default, regardless of how long such failure continues, shall not constitute a waiver by such Party of any of its rights hereunder.
- c. Entire Agreement - This IOBA constitutes the entire agreement between the Parties pertaining to the subject matter hereof, and supersedes all prior discussions, agreements and understandings, whether oral or written, which the Parties may have in connection herewith. This IOBA may not be amended or modified except by written agreement of the Parties, and cannot be modified by course of performance, course of conduct or usage of trade.
- d. No Third Party Beneficiaries - This IOBA is intended solely for the benefit of the Parties and their permitted successors and assigns and, except as may be specifically set forth herein, is not intended to and shall not confer rights or benefits upon any other Party.

- e. Joint Efforts - This IOBA was jointly negotiated, and any ambiguities or uncertainties in the wording of this IOBA shall not be construed for or against either Party, but shall be construed in a manner which most accurately reflects the intent of the Parties when this IOBA was executed.
- f. Further Assurances - Each Party shall do all necessary acts and make, execute, and deliver such written instruments as shall from time to time be reasonably necessary to carry out the terms of this IOBA.
- g. Context of Words - Whenever the context may require, the singular form of nouns, pronouns and verbs shall include the plural and vice versa. Unless otherwise stated, a reference to a section shall include all sub- sections, e.g., a reference to Section 11.1 shall, unless otherwise indicated, include Section 11.1.a, 11.1.b, 11.1.c, and so on.
- h. Headings - The descriptive headings of all sections of this IOBA are formulated and used for convenience only and shall not be deemed to affect the meaning or construction of any such section.
- i. Partial Unenforceability - Any provision of this IOBA that is prohibited or unenforceable under applicable law shall be ineffective to the extent of that prohibition or unenforceability without invalidating the remaining provisions hereof.
- j. PG&E References - Unless expressly noted, references to "PG&E" in this IOBA are references to PG&E's gas pipeline function and do not include any reference to PG&E's Core Procurement Department or Electric Fuels Supply Department (or successor departments), which purchase gas and transport gas as shippers on interstate pipelines and in PG&E's service territory.
- k. Counterparts - This IOBA may be executed in counterparts and delivered by facsimile, and each such counterpart shall have the same legal effect as an original.
- l. Legal Authority - This IOBA and the terms and conditions herein are subject to all present and future valid laws, orders, rules, and regulations of duly constituted authorities having jurisdiction.
- m. Assignment - Any entity which shall succeed by purchase, merger or consolidation to the properties, substantially as an entity, of either Party, shall be subject to the obligations of its predecessor to this IOBA. No other assignment of this Agreement or of any of the rights or obligations hereunder shall be made.

N WITNESS WHEREOF, the Parties hereto have executed duplicate originals of this IOBA as of the Effective Date.

RUBY PIPELINE, L.L.C.

By   
Name Thomas L. Price  
Title Vice President  
Date 4-6-09

PACIFIC GAS AND ELECTRIC COMPANY

By   
Name Trista Berkovitz  
Title Director, Gas System Operations  
Date 3-26-09

EXHIBIT 1

To the Interconnection and Operational Balancing Agreement  
between  
Ruby Pipeline, LLC  
and  
Pacific Gas and Electric Company

Dated April 1, 2009

INTERCONNECT POINT

<u>D-U-N-S® NUMBER</u>	<u>RECEIPT / DELIVERY DESIGNATION</u>	<u>PROPRIETARY GAS TRANSACTION POINT CODE</u>	<u>DRN NO.</u>	Description
	Delivered by Ruby, and received by PG&E	_____for Ruby and _____for PG&E		Interconnection between the facilities of Ruby and PG&E located at a point on the borderline between the States of California and Oregon at or near Malin, Oregon, which is located in Section __; Township: <u>41S</u> ; Range: <u>12E</u> , Klamath County, Oregon.

## EXHIBIT 2

To the Interconnection and Operational Balancing Agreement  
between  
Ruby Pipeline, LLC  
and  
Pacific Gas and Electric Company

Dated April 1, 2009

PROPOSED GAS QUALITY PROVISIONS OF RUBY'S TARIFF

- 5.1 Gas Quality Specifications. The Gas which Shipper delivers to Transporter at a receipt point for transport and the Gas Transporter delivers to Shipper at a delivery point shall comply with the following requirements:
- (a) Heating Value –
- (i) Receipt - The Gas Shipper delivers to Transporter at a receipt point for transport shall contain a gross Heating Value<sup>1</sup> of not less than 995 Btu<sup>2</sup> per standard cubic foot or more than 1080 Btu per cubic foot; provided, however, Transporter may accept gas as low as 950 Btu per standard cubic foot and up to 1150 Btu per standard cubic foot provided the commingled Gas stream can be delivered within the specifications described in 5.1(a)(ii) below, and Transporter determines such acceptance will not interfere with Transporter's ability to (1) maintain prudent and safe operation of part or all of Transporter's pipelines system; (2) ensure that such Gas does not adversely affect Transporter's ability to provide service to others, and (3) ensure that such Gas does not adversely affect Transporter's ability to tender Gas for delivery to downstream pipelines or end-users.
- (ii) Delivery - The Gas Transporter delivers to Shipper (or to Operator on Shipper's behalf) shall contain a gross Heating Value of not less than 995 Btu per standard cubic foot or more than 1080 Btu per cubic foot.
- (iii) In the event Transporter cannot blend to delivery Gas specifications described in 5.1(a)(ii), Transporter shall reduce receipt sources that are less than 995 Btu or higher than 1080 Btu, depending on whether the Gas to be delivered is too low or too high in Btu content by first reducing the receipt source with the greatest variance from either the low or high end of the range (depending on which variable is outside the delivery specification), and then by reducing the receipt source with the next greatest variance, and

<sup>1</sup> "Heating Value" – shall mean the quantity of heat, measured in Btu, produced by combustion in air of one (1) cubic foot of anhydrous Gas at a temperature of sixty degrees Fahrenheit (60°F) and a constant pressure of fourteen and seventy-three hundredths pounds per square inch absolute (14.73 psia), the air being at the same temperature and pressure as the Gas, after the products of combustion are cooled to the initial temperature of the Gas and air, and after condensation of the water formed by combustion.

<sup>2</sup> "British Thermal Unit" ("Btu") – One (1) "Btu" shall mean one British thermal unit as defined by NAESB WGQ Flowing Gas Related Standards, Version 1.8, 1.3.14, 2.3.9, and 2.3.10, as amended by FERC.

continuing in similar fashion, to the extent necessary until a blended commingled Gas stream can be delivered within the specifications described in 5.1(a)(ii) above;

- (b) Dust, Gums and Solid Matter – The Gas shall be commercially free from dust, gums, gum-forming constituents, dirt, impurities, or other solid or liquid matter which might interfere with its merchantability or cause injury to or interference with proper operation of the pipelines, regulators, meters, or other equipment of Transporter;
- (c) Total Sulfur – The Gas shall not contain more than 1 grain of total sulfur (including the sulfur in hydrogen sulfide and mercaptans) per 100 standard cubic feet. The Gas shall also meet the following individual specifications:
  - (i) Hydrogen Sulfide - Shall not contain more than .25 grain of hydrogen sulfide per 100 standard cubic feet of gas;
  - (ii) Mercaptan Sulfur – The mercaptan sulfur content shall not exceed more than .3 grain per 100 standard cubic feet; and
  - (iii) Organic Sulfur – The organic sulfur content shall not exceed .75 grain per 100 standard cubic feet, which includes mercaptan, mono-, di- and poly-sulfides, but it does not include hydrogen sulfide, carbonyl sulfide or carbon disulfide.
- (d) Oxygen - The Gas shall not at any time have an oxygen content in excess of 1,000 parts per million by volume and the parties hereto shall make every reasonable effort to keep the Gas free of oxygen;
- (e) Temperature
  - (i) At Receipt Points - The Gas shall be received at a temperature not to exceed 120 degrees Fahrenheit or less than 25 degrees Fahrenheit;
  - (ii) At Delivery Points - The Gas shall be delivered at a temperature not to exceed 100 degrees Fahrenheit or less than 45 degrees Fahrenheit, except in the case of extreme weather conditions where Gas may be delivered at a temperature below 45 degrees Fahrenheit for short periods of time;
- (f) Carbon Dioxide - The Gas shall not contain more than 2 percent by volume of carbon dioxide but Transporter may accept up to 3 percent carbon dioxide provided the commingled Gas stream can be delivered at no more than 2 percent carbon dioxide and Transporter determines that such acceptance will not interfere with Transporter's ability to (1) maintain prudent and safe operation of part or all of Transporter's pipeline system, (2) ensure that such Gas does not adversely affect Transporter's ability to provide service to others, and (3) ensure that such Gas does not adversely affect Transporter's ability to tender Gas for delivery to downstream pipelines or end-users. In the event Transporter cannot blend to delivery Gas at 2 percent Carbon Dioxide, Transporter shall reduce receipt sources that are greater than 2 percent Carbon Dioxide content, first by reducing the receipt source with the highest gas quality variance above 2 percent Carbon Dioxide, and then by reducing the receipt source with the next highest gas quality variance above 2 percent Carbon Dioxide, and continuing in similar fashion, to the extent necessary until a blended 2 percent commingled Gas stream can be delivered;

- (g) Water Vapor – The Gas shall not contain water vapor in excess of 5 pounds per million standard cubic feet of gas;
  - (h) Deleterious Substances - The Gas shall not contain deleterious substances in concentrations that are hazardous to health, injurious to pipeline facilities, or adversely affect merchantability. Such substances include, but are not limited to bacteria, pathogens, toxic materials, and polychlorinated bithenyls; and
  - (i) Hydrocarbon Dew Point – The Gas shall not have a hydrocarbon dew point exceeding 25 degrees Fahrenheit as calculated from the Gas composition at pressures between 100 p.s.i.a. and the maximum allowable operating pressures of Transporter's transmission facility.
- 5.2 [N/A]
- 5.3 [N/A]
- 5.4 [N/A]
- 5.5 Commingling. Gas delivered by Shipper will be commingled with the Gas of other Shippers in the system. Accordingly, Shipper's Gas shall be subject to such changes in gross Heating Value and other specifications as may result from such commingling.
- 5.6 Biomethane. Biomethane refers to the portion of biogas that has been cleaned of other gases from sources that may include feedstock waste, landfill gas, wastewater treatment operations, co-digestion facilities. Biomethane must be free from bacteria, pathogens, and any other substances injurious to utility facilities or that would cause the gas to be unmarketable and it shall conform to all gas quality specifications in Section 5 of the GT&C.
- 5.7 Delivery Point Obligations. Upon mutual agreement between Transporter and the downstream Interconnecting Party, Transporter may temporarily deliver Gas that does not conform to the quality specifications set forth in Section 5.1 of the GT&C, if Transporter, in its reasonable operational judgment and in a not unduly discriminatory manner, determines that such delivery of Gas will not interfere with Transporter's ability to: (1) maintain prudent and safe operation of part or all of Transporter's pipeline system, (2) ensure that such agreement does not adversely affect Transporter's ability to provide service to others, and (3) ensure that such agreement does not adversely affect Transporter's ability to tender Gas for delivery to another downstream pipeline or end-user. Transporter may post waivers on its EBB at its discretion and will report waivers in accordance with Part 358 of the Commission's Regulations.

## EXHIBIT 3

To the Interconnection and Operational Balancing Agreement  
between  
Ruby Pipeline, LLC  
and  
Pacific Gas and Electric Company

Dated April 1, 2009

PROPOSED GAS MEASUREMENT PROVISIONS OF RUBY'S TARIFF

2. MEASUREMENT

- 2.1 Unit of Measurement and Metering Base - The volumetric measurement base shall be 1 cubic foot of Gas at a pressure base of 14.73 pounds per square inch absolute, at a temperature base of 60 degrees Fahrenheit, and without adjustment for water vapor.

The cutoff for closing measurement is five Business Days after the business Month (NAESB WGQ Standard 2.3.7). Measurement data that is missing or late at the cutoff is to be estimated pursuant to NAESB WGQ Standard 2.3.13. For treatment of measurement prior period adjustments, treat the adjustment by taking it back to the production Month. A meter adjustment becomes a prior period adjustment after the fifth Business Day following the business Month (NAESB WGQ Standard 2.3.11). For reporting measurement prior period adjustments, report it with the restated line item with the new total quantity for the Day and Month (NAESB WGQ Standard 2.3.12).

- 2.2 Measurement data corrections shall be performed pursuant to NAESB WGQ Standard 2.3.14. Measurement data corrections should be processed within 6 Months of the production Month with a 3-Month rebuttal period. This standard shall not apply in the case of deliberate omission or misrepresentation or mutual mistake of fact. Parties' other statutory or contractual rights shall not otherwise be diminished by this standard (NAESB WGQ Standard 2.3.14). This 3-Month rebuttal period shall begin with the interested party issuing a written notification that a measurement dispute exists. These disputes will apply to measurement errors that involve quantities for which Transporter has direct custody transfer responsibilities, as well as volumes measured by other companies that have been audited by Transporter.
- 2.3 Measurement data available upstream of aggregated points should be sent to the allocating party and used to allocate the aggregated volume back to the upstream points (NAESB WGQ Standard 2.3.8).
- 2.4 Transporter's measurement information provided via electronic delivery mechanism (EDM) shall conform to the requirements of the Data Dictionary standards as set forth in NAESB WGQ Standards 2.4.4 and 2.4.5.
- 2.5 Atmospheric Pressure. For the purpose of measurement, calculation and meter calibration, the average absolute atmospheric (barometric) pressure shall be based on the actual altitude of each point of measurement irrespective of variations in natural atmospheric pressure from time to time.
- 2.6 Temperature. The temperature of the Gas shall be determined at the points of measurement by means of a properly installed temperature transmitter of standard manufacture determined by Transporter in exercise of its reasonable judgment to be installed in accordance with the recommendations contained in API 14.3 and 21.1 First

Edition (Orifice Metering of Natural Gas). In the event electronic computer measurement is used, average daily temperature will be computed as a running average of data determined during each computer scan.

- 2.7 Determination of Heating Value and Specific Gravity. The gross Heating Value and specific gravity of the Gas may be determined by Gas chromatographic analysis. This shall be done by either a Gas sample or by an on-line Gas chromatograph. In the event a continuous Gas sampling device is used, intervals mutually agreed upon should not be less than every Month. The determination of gross Heating Value and specific gravity from chromatograph shall input continuously into the computer for quantity calculations. In the event a continuous Gas sampler is installed, then the gross Heating Value and specific gravity shall be determined in the laboratory by chromatograph. Such determinations shall be considered as the gross Heating Value and specific gravity of all Gas delivered during the applicable period of sampling. All gross Heating Value and specific gravity determinations made with a chromatograph shall use physical Gas constants for Gas compounds, as outlined in AGA 5 with any subsequent amendments or revisions to which the parties may mutually agree.
- 2.8 Supercompressibility. The measurement hereunder shall be corrected for deviation from Boyle's law in accordance with AGA Report No. 8, as amended from time to time.

### 3. MEASUREMENT EQUIPMENT

- 3.1 Unless otherwise agreed between Transporter and Operator/Interconnecting Party, Transporter will install, maintain, operate or cause to be installed, maintained and operated, measuring stations equipped with flow meters and other necessary metering and measuring equipment by which the volumes of Gas received and delivered hereunder shall be determined. Subject to the terms of the interconnect agreement at Transporter's sole election, Shipper may install check-measuring equipment at its own cost and expense, provided such equipment shall be so installed as not to interfere with the operations of Transporter. The reading, calibrating, and adjusting of electronic computer components and/or mechanical recording instruments thereof shall be done only by the equipment owner or such owner's representative, unless otherwise agreed upon. Both Transporter and Shipper shall have the right to be present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment; provided, however, failure of either Transporter or Shipper to witness such an operation shall not affect the validity of such operation in any way. The records from such measuring equipment shall remain the property of their owner, but upon request, each will submit within 10 Days to the other its records, together with calculations therefrom, for inspection, subject to return within 30 Days after receipt thereof. The measurement equipment of Shipper shall be for check purposes only and, except as expressly provided in the applicable agreement, shall not be used in the measurement of Gas for purposes of the Agreement.
- 3.2 Orifice Meters. Orifice meters shall be installed and Gas volumes computed in accordance with the standards prescribed in AGA Report No. 3 "Orifice Metering of Natural Gas."
- 3.3 Ultrasonic Meters. Ultrasonic meters shall be installed and Gas volumes computed in accordance with the standards prescribed in AGA Report NO. 9 "Measurement of Gas by Multipath Ultrasonic Meters."
- 3.4 Positive Displacement Meters. Positive displacement meters shall be installed and Gas volumes computed in accordance with generally accepted industry practices.
- 3.5 Electronic Flow Computers. Electronic flow computers shall be used for direct computation of Gas flows for custody transfer in accordance with the standards prescribed in API 21.1.

- 3.6 New Measurement Techniques. If, at any time, a new method or technique is developed with respect to Gas measurement or the determination of the factors used in such Gas measurement, such new method or technique may be substituted by Transporter in exercise of its reasonable judgment provided that the new method or technique reflects generally accepted industry practices. Transporter shall promptly inform all Shippers of any new technique adopted.
- 3.7 Calibration and Test of Meters. The accuracy of all measuring equipment shall be verified by Transporter at reasonable intervals, and if requested, in the presence of representatives of Shipper, but neither Shipper nor Transporter shall be required to verify the accuracy of such equipment more frequently than once in any 30-Day period. If either party at any time desires a special test of any measuring equipment, it will promptly notify the other, and the parties shall then cooperate to secure a prompt verification of the accuracy of such equipment.
- 3.8 Correction of Metering Errors. If, upon test, the measuring equipment is found to be in error by not more than one percent (1%), previous recordings of such equipment shall be considered accurate in computing deliveries, but such equipment shall be adjusted at once to record accurately. If, upon test, the measuring equipment shall be found to be inaccurate by an amount exceeding one percent (1%), at a recording corresponding to the average Hourly rate of flow for the period since the last preceding test, then any previous recordings of such equipment shall be corrected to zero error for any period that is known definitely or agreed upon between Transporter and Shipper/Operator. In case the period is not known or agreed upon by Transporter and Shipper/Operator, such correction shall be for a period equal to one-half of the time elapsed since the date of the last test.
- 3.9 Failure of Measuring Equipment. In the event any measuring equipment is out of service or is found registering inaccurately and the error is not determinable by test or by previous recordings, receipts or deliveries through such equipment shall be estimated and agreed to by the parties upon the first of the following methods which is feasible:
- (a) By correcting the error if the percentage of error is ascertainable by calibration, special test, or mathematical calculation.
  - (b) By using the registration of any check meter or meters, if installed and accurately registering.
  - (c) By estimating the quantity of receipt or delivery based on receipts or deliveries during preceding periods under similar conditions when the measuring equipment was registering accurately.
- 3.10 Preservation of Records. Shipper and Transporter shall preserve for a period of at least 3 years, or for such longer period as may be required by appropriate authority, all test data and other similar records.

## EXHIBIT 4

To the Interconnection and Operational Balancing Agreement  
Between  
Ruby Pipeline, LLC  
and  
Pacific Gas and Electric Company

Dated April 1, 2009

## OPERATIONAL BALANCING AGREEMENT PROVISIONS

1. Prior to the date and time of flow at the Interconnect Point, the Parties shall confirm and schedule nominations which will be delivered or received at the Interconnect Point. Such confirmation between the Parties shall be made electronically or in writing, unless otherwise mutually agreed to by the Parties. Ruby's confirmations will be in compliance with North American Energy Standards Board ("NAESB") nomination standards.
2. The Parties intend that the quantity of gas actually delivered and received each day at the Interconnect Point will equal the Scheduled Quantities for that location. Each Party will allocate quantities which have been delivered and received at the Interconnect Point among the Service Requester Agreements on its system pursuant to the Scheduled Quantities at such Interconnect Point. Any imbalance created, when the actual physical flow is different than the Scheduled Quantities, will be the "Operational Imbalance," which will be the responsibility of the Parties to eliminate pursuant to the provisions of this Exhibit 4. For gas accounting purposes, all daily Scheduled Quantities as scheduled for flow day shall be deemed to be delivered regardless of the actual volume of gas delivered.
3. Estimated operating quantities flowing at the Interconnect Point shall be used on a daily basis using data signals during any current period to determine the estimated Operational Imbalance at the Interconnect Point, with physical flow adjustments to be made in addition to Schedule Quantities during the current period as mutually agreed to by both Parties to attempt to maintain or achieve an Operational Imbalance of zero at the Interconnect Point. However, the Parties acknowledge that balancing Scheduled Quantities with actual gas flow is critical to the operation and integrity of their respective systems. In this regard, Ruby's and PG&E's gas control and scheduling personnel shall be in contact throughout the gas day, as necessary, in order to balance daily delivered quantities of gas with Scheduled Quantities of gas. The Parties reserve their rights to protect their respective systems and operations and to insure that Operational Imbalances are kept to a minimum. For the purpose of this Exhibit 4, delivery or receipt of any gas to resolve an Operational Imbalance is not subject to transportation charges by either Party.
4. a. The actual measured quantity of gas at the Interconnect Point each month shall be determined and communicated by Ruby by facsimile, electronic interface system, or in writing to PG&E in accordance with NAESB Standard 2.3.7. The actual measured quantity shall be determined pursuant to the applicable provisions of Ruby's Tariff and the applicable measurement procedures as set forth in Exhibit 3. Operational Imbalances shall be calculated initially by Ruby. In accordance with NAESB Standard 3.3.14, Ruby shall provide to PG&E, by the 9th business day, an Allocation Statement showing the total quantity of gas scheduled and delivered at the Interconnect Point during the previous month. This statement shall also provide the ending cumulative imbalance quantity, if any, and shall be deemed to be agreed to unless either Party notifies the other Party of its disagreement by the last business day of the month in which the Allocation Statement was rendered. The delivery of such statement shall not constitute a waiver of

either Party's rights under the General Terms and Conditions of Ruby's Tariff or NAESB Standard 2.3.14.

- b. Operational Imbalances shall be resolved as follows: The Parties shall use their best efforts to adjust any cumulative imbalance toward zero on the day or days following the receipt of the Allocation Statement, unless agreed to otherwise by the Parties, (i) on an "in-kind" basis, (ii) on a "cash-out" basis, or (iii) by some other mutually agreed to method; provided however, that in the event the Parties cannot agree in a timely manner as to the method to be used for the resolution of such Operational Imbalances, the "in-kind" basis method shall be utilized.
5. In the event that a capacity constraint occurs on either Party's system which results in curtailment of quantities through the Interconnect Point and if the capacity constraint is identified prior to or during a time that changes to Scheduled Quantities can be made, the Party on whose system the constraint has occurred shall determine the confirmation of quantities to the Service Requester(s) under the affected Service Requester Agreements. Such change in Scheduled Quantities shall be confirmed as required in Paragraph 1 above.
6. The provisions of this Exhibit 4 of this IOBA are entered into in order to facilitate operations and accounting between the Parties, and shall have no effect upon the Service Requester Agreements or upon the effectiveness of any Party's tariff.
7. [Terms to add or delete additional Interconnection Points are not applicable to this IOBA.]
8. Notwithstanding the termination of this IOBA, the Parties agree to reconcile and eliminate any remaining Operational Imbalance pursuant to the terms and conditions of this Exhibit 4 within 30 days of termination of this IOBA, or such other period of time following termination that may be mutually agreed to by the Parties. If the imbalance is not resolved within 30 days of termination, such imbalance shall be reduced to zero (0) by cash-out at 100% of the applicable cash-out price for that month as described in Ruby's Tariff.

**PG&E Gas and Electric  
Advice Filing List  
General Order 96-B, Section IV**

Alcantar & Kahl LLP	Division of Business Advisory Services	Occidental Energy Marketing, Inc.
Ameresco	Douglass & Liddell	OnGrid Solar
Anderson & Poole	Downey & Brand	Praxair
Arizona Public Service Company	Duke Energy	R. W. Beck & Associates
BART	Dutcher, John	RCS, Inc.
Barkovich & Yap, Inc.	Economic Sciences Corporation	Recurrent Energy
Bartle Wells Associates	Ellison Schneider & Harris LLP	SCD Energy Solutions
Bloomberg	Foster Farms	SCE
Bloomberg New Energy Finance	G. A. Krause & Assoc.	SMUD
Boston Properties	GLJ Publications	SPURR
	Goodin, MacBride, Squeri, Schlotz & Ritchie	San Francisco Public Utilities Commission
Braun Blaising McLaughlin, P.C.	Green Power Institute	Santa Fe Jets
Brookfield Renewable Power	Hanna & Morton	Seattle City Light
CA Bldg Industry Association	Hitachi	Sempra Utilities
CLECA Law Office	In House Energy	Sierra Pacific Power Company
CSC Energy Services	International Power Technology	Silicon Valley Power
California Cotton Ginners & Growers Assn	Intestate Gas Services, Inc.	Silo Energy LLC
California Energy Commission	Lawrence Berkeley National Lab	Southern California Edison Company
California League of Food Processors	Los Angeles Dept of Water & Power	Spark Energy, L.P.
California Public Utilities Commission	Luce, Forward, Hamilton & Scripps LLP	Sunshine Design
Calpine	MAC Lighting Consulting	Sutherland, Asbill & Brennan
Casner, Steve	MBMC, Inc.	Tabors Caramanis & Associates
Chris, King	MRW & Associates	Tecogen, Inc.
City of Palo Alto	Manatt Phelps Phillips	Tiger Natural Gas, Inc.
City of Palo Alto Utilities	McKenzie & Associates	TransCanada
Clean Energy Fuels	Merced Irrigation District	Turlock Irrigation District
Coast Economic Consulting	Modesto Irrigation District	United Cogen
Commercial Energy	Morgan Stanley	Utility Cost Management
Consumer Federation of California	Morrison & Foerster	Utility Specialists
Crossborder Energy	NLine Energy, Inc.	Verizon
Davis Wright Tremaine LLP	NRG West	Wellhead Electric Company
Day Carter Murphy	Navigant Consulting	Western Manufactured Housing Communities Association (WMA)
		eMeter Corporation
Defense Energy Support Center	Norris & Wong Associates	
Department of Water Resources	North America Power Partners	
Dept of General Services	North Coast SolarResources	