



# PENINSULA CLEAN ENERGY

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July 12, 2016

Krista Martinelli  
City Clerk  
P.O. Box 711  
South San Francisco, CA 94083

Dear Krista Martinelli,

Please find attached the report required by Section 6.1.3 of the Joint Powers Agreement. That Section provides:

**6.1.3 The Right to Withdraw Prior to Program Launch.** After receiving bids from power suppliers, the Authority must provide to the Parties the report from the electrical utility consultant retained by the Authority that compares the total estimated electrical rates that the Authority will be charging to customers as well as the estimated greenhouse gas emissions rate and the amount of estimated renewable energy used with that of the incumbent utility. If the report provides that the Authority is unable to provide total electrical rates, as part of its baseline offering, to the customers that are equal to or lower than the incumbent utility or to provide power in a manner that has a lower greenhouse gas emissions rate or uses more renewable energy than the incumbent utility, a Party may immediately withdraw its membership in the Authority without any financial obligation, as long as the Party provides written notice of its intent to withdraw to the Authority Board no more than fifteen days after receiving the report.

I am excited to report, as indicated in the attachment, Peninsula Clean Energy will launch with a baseline offering that is estimated to contain significantly more renewable energy with a significantly lower greenhouse gas emissions rate as compared to PG&E's baseline offering. Further, the report indicates that Peninsula Clean Energy will launch with a default product offering at rates lower than PG&E.

Sincerely,

Jan Pepper  
Chief Executive Officer, Peninsula Clean Energy Authority

# Comparison of Electric Rates, Renewable Energy Portfolio Content, and Greenhouse Gas Emissions Rates between Peninsula Clean Energy and Pacific Gas and Electric Company

*Pacific Energy Advisors, Inc.  
June 27, 2016*

## Introduction

Pursuant to section 6.1.3 of the Peninsula Clean Energy Authority Joint Powers Agency agreement, after receiving bids from prospective power suppliers, the Authority must provide a report to the Parties, which compares the following: 1) the total estimated electrical rates that the Authority will be initially charging to its customers relative to similar electrical rates to be charged by Pacific Gas and Electric Company (“PG&E”); 2) the estimated initial greenhouse gas emissions (“GHG”) rate associated with the Authority’s prospective energy supply portfolio relative to the anticipated GHG rate of PG&E; and 3) the estimated proportion of renewable energy to be reflected in the Authority’s initial energy supply portfolio relative to the anticipated proportion of renewable energy to be included within PG&E’s energy supply portfolio. Pacific Energy Advisors, Inc. (PEA) is the electric utility consultant retained by the Authority to complete this evaluation and offers the following analysis and conclusions related hereto.

## Rates

The Authority adopted its initial rates on June 23, 2016 (the “PCE Rates”). Such rates were designed to provide a 5% generation cost reduction relative to the PG&E rates in effect as of that date, including the cost of PG&E surcharges that will be charged directly by PG&E to the Authority’s customers. Based on final bids received from the prospective power suppliers, PEA concluded that the adopted PCE Rates will be sufficient to recover projected power supply and other program costs.

The adopted PCE rates are projected to yield \$146.6 million in revenue during the twelve month period from October 1, 2016 through September 30, 2017, assuming the customer enrollment schedule and participation rates set forth in the PCE Implementation Plan are realized. PEA estimates that the currently effective PG&E rates would yield \$193.3 million in generation revenues and \$37.0 million in surcharges if charged to the PCE customer base during this same time period.

For the initial twelve month period, total customer costs resulting from the adopted PCE Rates are projected to be \$9.7 million lower than if currently effective PG&E rates were charged to PCE customers.

## Renewable Energy

The specified power supply mix for the Authority's default service offering includes 50% renewable energy, 25% large hydro-electric energy, and 25% generic market or "unspecified sources of power," as defined by the California Energy Commission. The Authority's power supply does not include unbundled Renewable Energy Certificates.

As of 2015, PG&E's renewable portfolio content was reported to be 30%<sup>1</sup>, and PEA estimates that for 2016, the PG&E renewable portfolio content will likely be between 30% and 37%.

In consideration of this information, PEA concludes that at the commencement of service to customers in October 2016, PCE will supply a higher proportion of energy from renewable energy sources relative to PG&E.

## Greenhouse Gas Emissions

In regards to GHG rates, PEA estimates an average portfolio emissions rate of 236 pounds of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) per MWh for the Authority's default service offering. This is estimated by assuming a zero GHG rate for the renewable energy and large hydro-electric components of the Authority's default service portfolio (a total of 75% GHG-free energy supply) and applying the California Air Resources Board's default emissions factor of 943.58 pounds of CO<sub>2</sub>e per MWh to the aforementioned unspecified sources of power (25% of the default service offering's total resource mix).<sup>2</sup>

The most recently reported GHG rate for PG&E is 435 pounds of CO<sub>2</sub>e per MWh during the 2014 reporting year.<sup>3</sup> PEA estimates that PG&E's 2016 portfolio GHG rate will be between 340 and 407 pounds of CO<sub>2</sub>e per MWh. PG&E's estimated GHG rate (for the 2016 calendar year) is based on its reported rate for 2014, adjusted for the projected increase in renewable energy content between 2014 and 2016. The additional renewable energy included within PG&E's supply portfolio is assumed to displace unspecified sources of power, resulting in a corresponding reduction in the incumbent utility's carbon intensity.

Based on the aforementioned information and calculations, PEA concludes that at the commencement of service to customers in October 2016, PCE will supply electricity with a lower carbon intensity when compared to PG&E.

## Conclusion

Based on the final energy supply bids to support PCE's Phase 1 load requirements, PEA concludes that at the commencement of service in October 2016:

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<sup>1</sup> As reflected in PG&E's Power Source Disclosure Report for the 2015 calendar year, the incumbent utility's renewable energy content was 29.5% (and was appropriately rounded to 30% based on statistics reflected on PG&E's website: <http://www.pge.com/en/about/environment/pge/cleanenergy/index.page>).

<sup>2</sup> See section 95111(b)(1) of CARB's February 2015 update to the Mandatory Reporting of Greenhouse Gas Emissions: <http://www.arb.ca.gov/cc/reporting/ghg---rep/regulation/mrr---2014---unofficial---02042015.pdf>.

<sup>3</sup> For PG&E's most recent reported emissions rate: <http://www.pgecurrents.com/2016/02/05/pge%E2%80%99s-carbon-emissions-remain-among-nation%E2%80%99s-lowest/>

1. The estimated total electrical rates charged by PCE will be lower than similar rates charged by PG&E.
2. The estimated quantity of renewable energy supplied by PCE will be proportionately higher than quantity of renewable energy supplied by PG&E.
3. The estimated GHG rate associated with PCE's supply portfolio will be lower than the GHG rate associated with PG&E's supply portfolio.

PEA notes that future rate, renewable energy and GHG rate relationships between PCE and PG&E may change based on the Authority's policy and procurement decisions.

DRAFT