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**VIA ELECTRONIC SUBMISSION**

June 27, 2012

Hon. Mary D. Nichols, Chairman
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

**Subject: PE-Berkeley, Inc.'s Comments Regarding Amendments to California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance Instruments Issued by Linked Jurisdictions**

Dear Madame Chairman:

PE-Berkeley, Inc ("PEB"), a 22.47 megawatt (MW) cogeneration power plant located in Berkeley, California, and Olympus Power, LLC, an independent power company, which is both an equity investor in and the asset manager of this facility, offer these comments to the California Air Resources Board ("CARB"). PEB supplies thermal energy (or heat) to the University of California-Berkeley ("UC-Berkeley") and electric power to Pacific Gas & Electric ("PG&E") under separate long-term agreements. Compared to other combined heat and power ("CHP") or cogeneration facilities, a larger percentage of the power generated at PEB is in the form of district steam as compared to electricity.

## Introduction

CHP facilities are a reliable and highly efficient energy source that is critical to California meeting its goals under AB 32, and are an important part of the state's efforts to improve public health and develop a clean energy economy. As an energy efficient technology, CHP lowers demand on the electricity delivery system, frequently reduces reliance on traditional energy supplies, and reduces emissions of GHG and criteria pollutants. Consistent with Quebec's cap-and-trade program,[1] PEB strongly encourages CARB Staff to modify the California Cap-and-Trade Regulation[2] to provide allowances to legacy CHP facilities, such as PEB, that have no ability to recover the cost of allowances due to fixed-price long-term contracts for steam that were entered into decades ago before this type of regulatory program was remotely

[1] Regulation respecting a cap-and-trade system for greenhouse gas emission allowances, available at http://www.mddep.gouv.qc.ca/changements/carbone/reglementPEDE-en.pdf. (the "Quebec Regulation").

[2] Cal. Code Reg., tit. 17, §§ 95800 *et seq*.

foreseeable.[3] We believe a harmonized approach to this issue is necessary to appropriately integrate these cap-and-trade regulatory programs.

The intellectual integrity of the California Cap-and-Trade Regulation dictates a consistent approach to similarly situated projects, in particular, with respect to the equitable treatment of stranded assets. Absent the necessary relief, PEB will bear a disproportionately higher cost of compliance as compared to certain Quebec entities. Further, by adopting programs that cause substantial economic harm to legacy CHP facilities, CARB could effectively shut down the very legacy projects built in response to California's progressive energy policies developed during Governor Brown's first administration to implement the Public Utility Regulatory Policies Act of 1978 ("PURPA"),[4] the landmark legislation designed to reduce the barriers to and promote development of CHP nationwide.[5]

## I. Quebec's Cap-and-Trade Regulation Provides Appropriate Relief to CHP Facilities

As discussed throughout the rulemaking for the Cap-and-Trade Regulation, a limited number of legacy CHP facilities in California are parties to long-term contracts with no available pass-through mechanism for allowance costs related to steam supply.[6] In the case of PEB, it entered into a contract to supply steam in 1987 (well before carbon emissions regulations were even contemplated).[7] CARB Staff has recognized the need to address the issue of long-term fixed price contracts and committed early on to work with stakeholders to address this issue.[8] To date, however, CARB Staff has not proposed any solution and, thus, this important issue remains unresolved.[9]

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[3] As described in PEB's June 22, 2012 comment letter, if CARB does not provide direct allocation of allowances to PEB, it should provide allowance auction proceeds to PEB to avoid the punitive economic impact of the Cap-and-Trade Regulation to its CHP facility.

[4] 16 U.S.C. § 2601 *et seq*.

[5] Under Governor Brown's first administration, California established policies to implement PURPA that resulted in nearly 11,000 MW of new cogeneration and renewable generating capacity by the early 1990s. *See* California Energy Commission, Lead Commissioner Report, Renewable Power in California: Status and Issues (December 2011), 1-2, 22.

[6] CHP facilities will recover costs related to electric power supply as part of settlement agreement negotiated under the supervision of the California Public Utilities Commission; however, no such relief is provided to CHP facilities for the steam aspect of their operations under CARB's Cap-and-Trade Regulation.

[7] *See* PEB comment letters to CARB dated December 15, 2010, August 11, 2011, September 27, 2011, October 18, 2011, April 13, 2012, and June 22, 2012.

[8] CARB Resolution 10-42, Attachment B, 8.

[9] In adopting the Cap-and-Trade Regulation, the Board directed CARB Staff to "monitor progress on bilateral negotiations between counterparties with existing contracts that do not have a mechanism for recovery of carbon costs associated with cap-and-trade for industries receiving free allowances pursuant to section 95891, and identify and propose a possible solution, if necessary." Resolution 11-32, 12.

Quebec, on the other hand, has squarely addressed this issue by providing free allowances to all electricity generators and steam suppliers who entered such contacts prior to January 2008.[10] The Quebec program clearly recognizes that stranding allowance costs on such generators does not advance the goals of the program, but will cause inequitable financial harm to CHP, which is a reliable and highly efficient energy source that is critical to reducing GHG emissions as part of any cap-and-trade program. The Cap-and-Trade Regulation, however, creates unrecoverable costs and economic hardship to certain legacy CHP facilities, including PEB. Significantly, with no corresponding burden to Quebec entities, California CHP facilities will have greater cost of compliance compared to Quebec entities. As described in the attached letter from Gowlings, PEB would not bear these unrecoverable costs under the Quebec program.[11] Such a result appears contrary to the LAO's report, which determined that "in order to effectively link California's cap-and-trade program with another jurisdiction's program, California's cap-and-trade rules should be harmonized with the rules of the other jurisdiction, ensuring that covered entities in both jurisdictions are subject to equally stringent rules for compliance."[12]

As CARB Staff is aware, climate change programs are designed to change the behavior of end users by increasing the cost of energy, which, in turn, induces end users to choose different technologies, or encourage conservation or energy efficiency improvements. In the Initial Statement of Reasons (ISOR),[13] CARB Staff provided an overview of the possible economic impacts to California of linking the Cap-and-Trade Regulation with Quebec's cap-and-trade program. CARB Staff noted that expanding the number of sources that are able to trade will reduce the overall cost of reducing GHG emission reductions and will improve the efficiency of the emissions trading market. As part of its discussion, CARB Staff noted that the California Cap-and-Trade Regulation does not specify how or where emission reductions will be made, but emission reductions will be made when the cost of making efficiency improvements is less than the cost of acquiring allowances. Specifically, GHG emission reductions will be made "***as a result of changes in the prices of energy which will induce marginally greater investment in energy efficiency and/or energy conservation*** and by small changes in the purchase of all other goods and services, particularly energy-intensive goods and services."[14] As part of its analysis, CARB Staff recognized that a critical factor influencing the allowance price is "the extent to which consumers shift to low-GHG products ***in response to changes in prices***." Indeed,

[10] Quebec Regulation, Section 39; Table A of Part I of Appendix C.

[11] Gowlings Letter to Olympus Power, LLC, Québec cap-and-trade system for GHG emission allowances (April 12, 2012).

[12] Legislative Analyst's Office, *Evaluating the Policy Trade-Offs in ARB's Cap-and-Trade Program* (February 9, 2012), 14.

[13] Staff Report: Initial Statement of Reasons; Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance Instruments Issued by Linked Jurisdictions (May 9, 2012) (emphasis added).

[14] *Id*. at 83 (emphasis added).

"[w]henever the allowance price rises above the cost of making additional emissions reductions on-site, businesses will choose to make those reductions."[15]

Under its current steam supply contract with PEB, UC-Berkeley will incur ***no*** cost increase for its use of steam, and thus, it has no incentive to modify its energy usage or behavior. This consequence erodes the effectiveness of the Cap-and-Trade Regulation, because, unlike other consumers of steam subject to the program, these costs will not be realized by UC-Berkeley, the end user. Stranding PEB with these unrecoverable costs clearly frustrates the purpose of the Cap-and-Trade Regulation because there will be no corresponding reduction of GHG emissions without a pass-through or cost recovery mechanism.

## II. CHP is Critical to Meeting the GHG Emissions Reduction Goals Under AB 32

CARB should provide free allowances to CHP, which is among the most cost effective and technologically feasible sources of clean and efficient energy. As previously expressed, CHP is the concurrent production of electricity or mechanical power and useful thermal energy (heat) from a single source of energy. By capturing and utilizing heat that would otherwise be wasted, CHP is more efficient than traditional separate electricity generation and heat production, thereby using less fuel and emitting lower levels of GHG and criteria pollutants. Given these environmentally beneficial attributes, CHP lowers demand on the electricity delivery system and frequently reduces reliance on less efficient traditional energy supplies.

As described in PEB's prior comments,[16] CHP is widely recognized as one of the most promising options in California's and the country's energy efficiency portfolio. According to the U.S. Department of Energy, "energy efficiency and renewable energy are key components of a portfolio of promising supply- and demand-side resources that can provide the Nation with clean, affordable energy and support continued economic prosperity. ***CHP is first and foremost an energy efficiency resource***."[17] Indeed, "CHP reduces the carbon footprint of separately generated heat and power, [and] ***is one of the most cost-effective methods of reducing $CO_2$ emissions***."[18] Likewise, the U.S. Environmental Protection Agency ("EPA") recognizes that "because CHP uses less fuel than conventional generation, it reduces GHG emissions and air pollutants,"[19] and has established the Combined Heat and Power Partnership program, which seeks to reduce the environmental impact of power generation by promoting the use of CHP nationwide. U.S. EPA describes CHP as "an efficient, clean, and reliable approach to generating

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[15] *Id*. at 87.

[16] *See* PEB comment letter to CARB dated June 22, 2012.

[17] Combined Heat and Power, Effective Energy Solutions for a Sustainable Future, U.S. Department of Energy, (December 1, 2008), 4 (emphasis added).

[18] *Id*. at 9 (citing *International Energy Administration, Combined Heat and Power—Evaluating the Benefits of Greater Global Investment* (March 2008) (emphasis added).

[19] *Environmental Revenue Streams for Combined Heat and Power*, U.S. EPA Combined Heat and Power Partnership, (December 2008), iv.

power and thermal energy" that "can increase operational efficiency and decrease energy costs, ***while reducing the emissions of greenhouse gases that contribute to global climate change***."[20]

The California Public Utilities Commission ("CPUC"), the California Energy Commission, and CARB itself "***have all recognized that efficient and clean CHP can reduce GHG emissions***."[21] Governor Brown's "Jobs for California's Future" platform also recognizes the increased efficiency of CHP, as compared to traditional industrial and power plants, and seeks to increase deployment of CHP by 6,500 MW over the next 20 years.[22] Indeed, it is "***the policy of the state to encourage and support the development of cogeneration*** as an efficient, environmentally beneficial, competitive energy resource that will enhance the reliability of local generation supply, and promote local business growth."[23] To this end, the CPUC created the State CHP Program in 2010 to encourage the continued operation of the state's existing CHP facilities, as well as the development of new CHP Facilities, "in order to increase the diversity, reliability, and environmental benefits of the energy resources available to the State's electricity consumers."[24]

Throughout the Cap-and-Trade Rulemaking, CARB Staff has expressed its goal of promoting "widespread development" of CHP facilities in furtherance of the state's goals of reducing GHG emissions to 1990 levels by 2020.[25] Clearly, there is consensus among federal and California agencies, as well as the Governor's Office, that CHP offers significant environmental benefits compared to separately purchased electricity and thermal energy, and are important to reducing GHG emissions from power generation.[26] Given these attributes and to ensure proper

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[20] *Id.* at ii (emphasis added).

[21] CPUC Decision, 10-12-035, 38 (December 16, 2010) (emphasis added) (citing CPUC Decision D.08-10-037, at 237-38; Climate Change Scoping Plan: A Framework for Change, CARB, December 2008, 43-44; and 2009 Integrated Energy Policy Report, California Energy Commission, 97-98); *see* CPUC Decision R.06-04-009, 104 (October 22, 2008) (emphasis added) ("Overall, we support the identification of CHP as already included in ARB's Draft Scoping Plan. This is primarily due to the ability of CHP to reduce overall GHG emissions by producing two products (heat and electricity) with one fuel input. Classifying CHP as an emission reduction measure would complement the market demand for less GHG-intensive electricity.")

[22] Jerry Brown, "Jobs for California's Future", available at http://www.jerrybrown.org/jobs-california%E2%80%99s-future (CHP projects "are much more efficient than traditional power plants and many industrial plants. California currently produces 9,249 MW of combined heat and power. With the right incentives, we can increase this by 6,500 MW over the next 20 years.")

[23] Pub. Utilities Code, § 372(a) (emphasis added).

[24] CPUC Decision, 10-12-035, 37.

[25] *See* CARB Scoping Plan, 42-43. CARB Staff has recognized that deployment of CHP in the state "would help displace the need to develop new, or expand existing, power plants." *Id*.

[26] *See* California Energy Action Plan, 2008 Update (February 2008) (emphasis added) ("[C]ombined heat and power applications could ***play a large part in avoiding future greenhouse gas emissions*** due to the combined efficiency of the heat and power portions of the project.")

integration of these programs, CARB Staff should provide free allowances to those existing legacy CHP facilities, such as PEB, that are at risk of shutting down because they are unable to recover the cost of allowances under existing fixed price contracts for steam.[27]

Further, CARB is required under AB 32 to ***prevent any increase*** in the emissions of toxic air contaminants or criteria air pollutants as part of the Cap-and-Trade Regulation.[28] If CARB does not provide such relief to PEB, the facility may be forced to shut down, which would require the end user (i.e., UC-Berkeley) to operate, in the interim, older, less efficient boilers—that emit higher levels of GHG and criteria pollutants—in order to provide steam to its campus. Meanwhile, it would take several years, with no assurance of success, to site and build a new facility in the Berkeley area to replace PEB. Thus, potentially forcing the end user to switch to higher emitting boilers is contrary to this express statutory directive and clearly at odds with the GHG emission reduction goals under AB 32.

## III. CARB Staff Should Provide Allowances to Legacy CHP Facilities With Long-Term Contracts Without a Pass-Through Mechanism

As discussed throughout the rulemaking for the Cap-and-Trade Regulation, PEB believes that the appropriate solution is for CARB Staff to amend the Cap-and-Trade Regulation to provide direct allocation of allowances to PEB until its existing contract expires in 2017 or is substantively renegotiated. At a minimum, in circumstances where entities receive free allowances but have no corresponding increase in energy cost (due to a fixed price energy supply contract), CARB should not provide such entities with free allowances. Instead, CARB should provide free allowances to the counterparty who incurs such costs.

Absent allocation of allowances to legacy CHP facilities, CARB is effectively ***disincentivizing*** investment in new California CHP, contrary to these well established and uniform public policy objectives, by sending a clear signal that California energy investments represent a material risk of economic harm and regulatory uncertainty, which should be priced into any new investment in California, if one decides to invest at all. Further, to the extent that new CHP facilities are built in California, rate payers will likely realize higher project costs to account for this increased risk to investors and developers as a result of CARB's inequitable application of the Cap-and-Trade Regulation to CHP facilities that lack any pass-through or cost recovery mechanisms.

These burdensome costs to PEB are expected to consume all of the profits for its facility in advance of the first compliance period and will force the facility to operate at increasing losses over time. Further, given the physical constraints in the Berkeley area, it is unlikely that a new facility could be constructed in the area to replace the corresponding loss in steam or electricity generation capacity. Because Berkeley is located within a constrained "load pocket" area in this

[27] CHP facilities will recover costs related to electric power supply as part of settlement agreement negotiated under the supervision of the CPUC; however, no such relief is provided under CARB's Cap-and-Trade Regulation to CHP facilities for the steam aspect of their operations.

[28] Health & Saf. Code, § 38570(b)(2).

regard, any replacement generation would be located further away from existing load centers (i.e., Berkeley). Also, it should be noted that PEB today has "black start" capability and, therefore, can help restart the local electricity grid and can operate independently from the grid to supply power and steam to UC-Berkeley during a blackout. Thus, in addition to resulting in higher emissions of GHG and criteria pollutants, a shutdown of PEB—as a consequence of the Cap-and-Trade Regulation—would threaten local stability and reliability, and eliminate the facility's ability to provide critical services to the community in the event of a natural disaster or other emergency.

## Conclusion

PEB requests that CARB treat California CHP facilities the same as Quebec entities that entered into long-term contracts without a pass-through or cost recovery mechanism. CARB Staff should modify the Cap-and-Trade Regulation to provide direct allocation of allowances for the steam portion of generation to genuinely stranded CHP facilities that are forced to incur such enormous and unrecoverable costs. CHP provides reliable and highly efficient energy and is important to California's ability to meet its GHG emission reduction goals under AB 32. Given these attributes, CARB Staff should not jeopardize the continued operation of legacy CHP facilities.

We look forward to additional discussions with CARB Staff to resolve this important issue.

Respectfully submitted,

Sincerely,

Michael Mazowita
Vice President
P.E. Berkeley, Inc.

Sean P. Lane
General Counsel and Secretary
Olympus Power, LLC

Attachment: Gowling's Letter to Olympus Power, LLC, dated April 12, 2012.

cc: George Haley, Esq., Counsel to P.E. Berkeley, Inc.
Peter H. Weiner, Esq., Counsel to Olympus Power, LLC

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Montréal, April 12, 2012

**BY E-MAIL AND REGULAR MAIL**

Mr. Sean P. Lane
General Counsel & Secretary
Olympus Power, LLC
67, Park Place East
Morristown, NH 07960

**Re: Québec cap-and-trade system for GHG emissions allowances**

Dear Mr. Lane:

Following our telephone conversation earlier this week, we are pleased to provide you with our views with respect to the Québec cap-and-trade system for greenhouse gas (GHG) emissions allowances in light of the situation you described concerning the PE-Berkeley Inc. ("**PEB**") natural gas fired, combined cycle, cogeneration facility located on the campus of the University of California, Berkeley. It is our understanding that the PEB facility can supply both electricity and thermal energy, or heat. It is also our understanding that the steam sales agreement under the existing contractual structure bars PEB from recovering the material and unanticipated steam-derived financial cost of the California Air Resources Board (CARB) GHG regulation, as currently proposed.

**The Québec GHG Cap and Trade System**

On June 19, 2009, the National Assembly of Québec assented to Bill 42 *An Act to amend the Environment Quality Act and other legislative provisions in relation to climate change* ("**Bill 42**") which allowed the Government of Québec to put in place, by regulation, all the mechanisms required to implement a cap-and-trade system.

The explanatory notes to Bill 42 mention the following:

> "*In addition, it requires that certain emitters cover their greenhouse gas emissions with an equivalent number of emission allowances, whether emission units, offset credits or early reduction credits, which may be traded and banked under the cap-and-trade system. Caps on the number of emission units the Minister may grant are to be set by the Government.*"

Section 46.7 of Bill 42 (today, Section 46.8 of the *Environment Quality Act*) provides that the Government of Québec may :

> "*Grant the available emission units, either by allocating them without charge to emitters required to cover their greenhouse gas emissions, or by selling them at auction or by agreement to persons or municipalities determined by regulation of the Government*"

At the time Bill 42 was debated it was understood by representatives of the National Assembly that the allocation of emission units without charge was a mechanism of flexibility provided under the Western Climate Initiative ("**WCI**") to avoid harming the competiveness of a company as a result of the cap-and-trade system.

It was also understood that a "good number" of emission units would be allocated without charge taking into account several factors. An example was given of an enterprise that uses the best known technology at the time of implementation and will be unable to reduce its emissions. The allocation without charge was also intended to ensure a certain harmonization between jurisdictions in order not to penalize certain companies.

The representatives of the National Assembly were conscious of the fact that the Bill 42 gave the Government of Québec the general power to establish a cap-and-trade system including the granting of emission allowances without charge and that the details of how the system works would be later specified in regulation. At the time, the representatives noted that industry was present, participated in the debates and did not object in principle to Bill 42.

On December 14, 2011 the Government of Québec adopted the *Regulation respecting the cap-and-trade system for greenhouse gas emissions allowances*, O.C. 1297-2011, published in the *Gazette Officielle du Québec* on December 16, 2011, that came into force on January 1st, 2012 (the "**Regulation**").

Although the Regulation came in force on January 1st, 2012, its true effects will only begin a year from now on January 1st, 2013 when the WCI cap-and-trade system will also come into effect. The cap-and-trade system foreseen under the Regulation will begin with an initial phase consisting of three compliance periods. These will be proceeded by a transition year (the year 2012) to allow emitters and participants to register with the system, take part in pilot auctions and exchange GHG emission allowances on the market. No reduction or capping of GHG emissions will be required during this transition year. In fact, the capping and reduction of GHG emissions will begin officially on January 1st, 2013. Some 75 operators, primarily in the industrial and electricity sectors, whose annual GHG emissions equal or exceed the annual threshold of 25,000 tons of carbon dioxide equivalent will be subject to the capping and reduction of their GHG emissions.

**Regulation**

Title III of the Regulation pertains to emission allowances. By way of comparison with the PEB facility, we believe that Section 39 and following of the Regulation are of interest and particularly Section 39 that provides that an emitter operating a designated establishment and pursuing an activity referred to in Table A of Part I of Appendix C of the Regulation is eligible for allocation of emission units without charge. Among the Table A designated activities eligible for the allocation without charge of GHG emission units, the following activity is noteworthy:

> "*Electric power generation sold under a contract signed prior to January 1st, 2008, that has not been renewed or extended after that date in which the sale price is fixed for the duration of the contract with no possibility of adjusting the price to take into account the costs relating to the implementation of a cap-and-trade system for greenhouse gas emission allowances.*"

gowlings

The reference units for the purpose for the cap-and-trade system relative to industrial sectors set forth in Table B of Appendix C of the Regulation designate namely, the electricity sector for the production of electricity and the production of steam.

**Comparison with the PEB situation**

In light of the above, if your PEB facility were in Québec, under the Regulation, it would benefit from the allocations of emission units without charge in light of the fact that its contracts were executed prior to 2008 and current contractual structure bars PEB from recovering the material and unanticipated financial costs resulting from the coming into force of the cap-and-trade system described above.

We note that the WCI Partner jurisdictions' recommendations are designed to maintain and enhance competitiveness. To this end free distribution of emission allowances in certain industries has been identified as an approach to "promote competitiveness and minimize leakage".[1] The WCI also recognizes the need for harmonization between partners to "ensure consistent programmatic outcomes and a level playing field for covered sources".[2]

There appears however to be an advantage in favour of Québec-based facilities operating under the Province's cap-and-trade system as compared, in PEB's case, to what is presently proposed under the CARB GHG regulation. Such a result would be contrary to WCI's goal to harmonize linked programs and avoid penalizing certain entities.

Should you wish to know more about the Québec cap-and-trade system, please feel free to contact the undersigned.

Yours sincerely,

**GOWLING LAFLEUR HENDERSON LLP**

Paul Granda

[1] Western Climate Initiative, *Design for the WCI Regional Program*, July 2010, page 14.
[2] *Ibid.*, page 24.