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California Energy Commission
Docket Office, MS-4
Re: Docket No. 12-IEP-1D
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DOCKET	
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Subject: Comments of Praxair, Inc. on the February 16, 2012 IEPR Update Workshop on Combined Heat and Power in California, Docket No. 12-IEP-1D.

Dear Commissioners:

Praxair, Inc. ("Praxair") respectfully submits these comments in response to the February 16, 2012 IEPR Committee workshop discussion on technical and market opportunities for Combined Heat and Power ("CHP") in California. Praxair is a supplier of atmospheric gases and coating services business, and is globally recognized for its sustainability efforts (2011 Dow Jones Sustainability World Index, 2011 World Carbon Disclosure Leadership Index). In California, Praxair has 1000 employees at 80 locations and five production facilities: two facilities producing atmospheric gases, two facilities producing carbon dioxide, and one facility producing hydrogen. Praxair also owns a self generation plant located at its air separation facility in Wilmington, California ("Wilmington Plant"). The Wilmington Plant is not currently operational, but may be repowered to support nitrogen, oxygen, and argon production. Praxair's comments below discuss how the state's greenhouse gas policies currently discourage repowering facilities like the Wilmington self generation facility, even though repowering would further both the State's greenhouse gas and combined heat and power goals. Praxair requests

that the IEPR Committee specifically consider the challenges for new CHP development that are imposed by the State's greenhouse policies.

The Wilmington Plant has a permit to operate a 28.25 MW combined cycle generating facility that can provide electrical and thermal¹ needs for Praxair's air separation facility. Creating industrial gasses through air separation processes is an extremely electrically intensive activity, and Praxair consistently seeks to secure cost-effective electric supplies to maintain its competitiveness. When operating the Wilmington facility, the generation output only serves Praxair's on-site industrial operations.² Currently, Praxair does not operate the Wilmington facility's generator, but instead purchases its industrial power requirements from the Los Angeles Department of Water and Power ("LADWP"). Praxair is analyzing its power supply options, including the restart of the on-site generation, and the cost and regulatory impacts of the cap-and-trade program are a critical component to understanding the potential advantages of restarting the Wilmington Plant.

The cap-and-trade program will place significant, direct compliance costs on new and existing cogeneration facilities, regardless of the efficiency of a particular facility. These compliance costs will be especially detrimental when a cogeneration (or self-generation) facility is sized to meet on-site loads and does not make substantial quantities of electric power for wholesale sales.³ In determining whether to repower the Wilmington Plant, Praxair must account for these GHG compliance costs. Praxair is in a unique position to restart a previous off-

¹ Electric energy is used for the energy-intensive compression operations, which is the primary demand at the facility. Thermal energy applications involve industrial package chillers also used in gas production, although chiller operations could be done with electricity.

² It is possible that the generator could provide limited levels of power to the grid under unique circumstances, such as periods of supply scarcity with high wholesale prices, but only with alteration of gas production operations.

³ This assumes that for those facilities able to make sales into the wholesale market, the market price should reflect some level of GHG-related compliance costs.

line cogeneration facility, but under current cap-and-trade regulation, should Praxair decide to restart their cogeneration facility, Praxair would subject itself to ARB's GHG compliance costs.

In addition to the costs of the cap-and-trade program on cogeneration and self-generation facilities generally, Praxair also finds itself in a unique position due to its location in a publicly owned utility service territory. For three primary reasons, the cost considerations associated with restarting and operating Wilmington are different than the cost considerations for any of Praxair's competitors with generation options located within the IOU service territories. First, a generation facility in a POU service territory will not necessarily have GHG compliance cost recovery for power it sells to the grid. Generation facilities in POU service territories cannot take advantage of the GHG compliance cost recovery provisions in the recently approved CHP settlement that applies to qualifying facilities that contract with the IOUs. Second, the utilities' allowance allocations are set forth in Table 9-3 of the cap-and-trade regulation. CARB has stated that it will not update the allowance allocations because the utilities should know what their allowance allocations will be over the entire course of the cap-and-trade program.⁴ Consequently, if a self-generator starts operating in a utility's service territory, the utility will get to keep the allowances even though the utility's load is reduced. The utility has an economic disincentive to compensate the industrial host for cap-and-trade costs because the utility will keep the allowance value regardless of whether the host decides to serve its own load through self-generation.

Third, under the cap-and-trade program, POUs will be able to use the freely distributed allowances toward their own GHG compliance burden, and consign the remaining allowances to

⁴ See *Staff Proposal for Allocating Allowances to the Electric Sector*, p. 2, available at: <http://www.arb.ca.gov/regact/2010/capandtrade10/candtappa2.pdf>

the cap-and-trade auctions. On the other hand, the IOUs are required to make all of their freely allocated allowances available for the electric sector allowance auction, from which they too would purchase allowances to satisfy their GHG compliance obligations attributable to the generation that the IOUs own or import into California. That distinction between the IOUs and POUs with respect to the use of the freely allocated allowances creates an unlevel playing field for generators located within the respective territories. Consequently, we expect that it will be comparatively more expensive to operate an on-site generation facility serving an industrial operation within a POU service territory as opposed to a similar facility in an IOU service territory. While generation facility operators in IOU and POU service territories are treated similarly in terms of carrying similar compliance burdens, the policies that apply to IOUs and POUs' use of allocations are vastly different, and may create the unintended consequence of disadvantaging generation facilities located within POU territories. In addition, IOUs' use of allowance value will be governed by the CPUC's rulemaking, R.11-03-012, whereas POU allowance revenue determinations will be governed by the governing boards of the POUs. Generator interests are well represented in R.11-03-012, whereas there is far less transparency in how the POUs will use their allowance revenues,

To avoid discouraging the development of new, efficient CHP facilities, the state should re-evaluate the coordination of its CHP and greenhouse gas goals. Praxair requests that the IEPR expressly acknowledge the potential for discouraging CHP facilities and discuss areas where the state could better coordinate its CHP and greenhouse gas objectives. For example, in comments to CARB, Praxair proposed that to avoid the counterproductive result discussed above, emissions associated with CHP facilities should be characterized as industrial sector emissions. CHP facilities should be eligible for allowances allocated for "industry assistance" and should be

included in Table 9-1 (entities eligible for industrial assistance). CHP facilities should receive allowances based on the Thermal Energy Based Allocation Calculation Methodology, which would effectively allocate allowances to a source based on a thermal efficiency benchmark (0.05307 GHG allowances / MMBtu). Facilities that beat the efficiency benchmark should be able to sell the surplus emissions allowances in the quarterly auctions (or bank for use in subsequent periods) and, in doing so, CARB would create an investment incentive for repowering and efficiency improvements at existing industrial CHP facilities.

We appreciate your continued attention to these important issues. If you have any questions, please do not hesitate to contact me at (925) 866 – 6825, or by email at Gerald_miller@praxair.com.

Sincerely,

March 9, 2012

_____/s/____

Gerald Miller
Regional Vice President
Praxair, Inc.