

BEFORE THE CALIFORNIA ENERGY COMMISSION

DOCKET

12-IEP-1D

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In the Matter of:

Combined Heat and Power

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**COMMENTS FROM THE LOS ANGELES DEPARTMENT OF WATER AND POWER
TO THE CALIFORNIA ENERGY COMMISSION'S STAFF WORKSHOP ON
COMBINED HEAT AND POWER**

March 9, 2012

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Pursuant to the procedures established by the California Energy Commission (Energy Commission, or CEC) by written notice issued on August 16, 2011, which was subsequently revised on August 26, 2011, the Los Angeles Department of Water and Power (LADWP) respectfully submits these Comments on Combined Heat and Power (CHP).

I. INTRODUCTION AND OPENING COMMENTS

The City of Los Angeles is a municipal corporation and charter city organized under the provisions of the California Constitution. LADWP is a proprietary department of the City of Los Angeles that supplies both safe and reliable water and power to Los Angeles' residents, approximately 1.4 million customers, pursuant to the Los Angeles City Charter. LADWP is a vertically integrated utility that owns generation, transmission and distribution facilities.

As LADWP looks into the future, most of the issues influencing strategic and resource planning are based on the critical issues that LADWP is facing in the areas of greenhouse gas (GHG) reduction, elimination of once through cooling (OTC) of its coastal power plants, the Renewable Portfolio Standard (RPS) targets mandated in

California's Renewable Energy Resource Act (also known as and referred to as SB2 (1x)), and the reliable integration of increasing amounts of renewable resources.

The LADWP's foremost priorities are to protect its ratepayers from unnecessary rate impacts and ensure the continuous reliable operation of its electric grid.

II. COMMENTS

The LADWP has a history of supporting cost effective Combined Heat and Power within its electrical grid. The unique service territory for LADWP and economic factors for the Los Angeles Basin (LA Basin) should drive CHP development, not mandated CHP Portfolio Standards or subsidies within its service area. LADWP appreciates the opportunity to provide comments in this important proceeding.

LADWP CHP Status

The ICF International (ICF) study commissioned by the California Energy Commission (CEC) considered the LA Basin as a future market potential for CHP, and presented a graph that indicated LADWP's existing CHP as 294 MW. While this appears to be low, LADWP's service territory is mainly an urban setting without an abundance of agriculture, processing, manufacturing or an industrial base that might better support a higher need for CHP. For example, almost half, 600,000 out of 1.4 million of LADWP's electrical meters serve multifamily dwellings. Moreover recently, the LA Basin CHP has been reduced from 294 MW to 161 MW due to closure of a refinery.

Economical and operational factors that have influenced minimal CHP development in LADWP's service territory include:

1. Natural gas price volatility in recent years has caused uncertainty in the economic feasibility of CHP projects.

2. A record drop in the retail energy as a result of the economic downturn. LADWP estimates that retail sales won't return to 2008-09 levels until 2018-2019. A lack of new CHP development coincides with this general decrease in electrical loads.
3. Industrial customer growth in the City of Los Angeles has been on a steady decline for many years.
4. LADWP's service territory includes portions of the South Coast Air Basin (SCAB) where new source of emissions from combustion generation will require Emission Reduction Credits (ERCs). It's unknown whether there is an adequate amount of ERCs available to cover emissions associated with increased CHP in the service territories of those utilities in the SCAB territory.

LADWP Doesn't Support a Mandate for a CHP Portfolio Standard

The ICF study takes an optimistic view on the California CHP potential, and doesn't adequately address the challenges or implications from a utility perspective. There needs to be additional study and analysis of CHP potential in specific POU service territories, and it is not clear that a CHP Portfolio Standard as proposed would be successful. LADWP doesn't support a mandate for a CHP Portfolio Standard.

Based on customer feedback, LADWP is pursuing other more cost effective and amenable alternatives over CHP in its service territory, including solar distributed generation, advancing energy efficiency programs, and demand response. To encourage customer-developed CHP, LADWP currently offers the Standard Energy Credit (SEC), which is applicable to those customers who own or operate electrical

generating facilities that are interconnected with the LADWP and under an applicable customer generation service rate.

The SEC is based on the LADWP's marginal generation cost, and it is updated twelve times each year. LADWP is expected in the future to provide a renewable premium based on the renewable energy credit market plus the SEC. For non-renewable CHP energy, LADWP will continue to purchase excess energy at the SEC.

The ICF study's emphasis on the reuse of waste energy from local on-site power production in urban area as an untapped technical and economical opportunity for CHP doesn't consider utilities' barriers and challenges of CHP development. The challenges that LADWP faces for CHP development are as follows:

1. Feed-in-Tariff (FIT) costs;
2. Emission concerns;
3. Noise abatement;
4. Space limitations;
5. Maintenance costs; and
6. Lengthy interconnection agreements.

CHP Technology and Untapping Future CHP Opportunities

The CHP technology must be improved and should be driven by project economics, and generally should not require subsidies. By economic necessity, utilities must build and maintain the distribution infrastructure, and consider departing load charges and FIT costs. LADWP believes that CHP shouldn't be subsidized by utilities because:

1. CHP excess power would be provided during the off-peak loading period, when it is least needed.
2. CHP excess power is competing and not assisting with RPS integration into the power system grid.
3. Feed-in-Tariffs should provide a stable pricing for excess electricity and they are or have already been implemented by utilities.
4. CHP export power can provide the needed VAR support if it's dispatchable.
5. The current utility emission credit allocation was determined based on emission reduction forecasts that included Distributed Generation (CHP including) and there are no additional expected emission credits beyond those forecasted.

The LADWP is currently re-assessing the CHP technology and potential for its service territory and planning to include more robust CHP goals in the 2012 Integrated Resource Plan (IRP). LADWP's initial assessments indicate that targeting CHP for voltage support to transmission lines poses challenges because the supply typically is not dispatchable. Furthermore, CHP projects are sized primarily to serve the customer load.

The ICF study concluded that the export market in California is highly uncertain. The model had the following assumptions that are highly variable:

- Price and quantity of market penetration based on QF settlement and Long Term Procurement Planning (LLTP)

- 50 percent of California Air Resource Board (CARB) target would be applied by ISO control area with 50/50 split between on-site and export

To contrast with LADWP practices, LADWP targets a 25/75 split between on-site and export, and there is no planning on incremental CHP, as reflected on the LADWP 2011 IRP.

The LADWP will continue to evaluate the best practices and opportunities to develop customer and utility CHP within its service territory. However, additional studies on customer potential are needed for the LADWP service territory.


III. CONCLUSION

The LADWP supports cost effective and highly efficient CHP as driven by the economics in its unique service territory. LADWP doesn't support the concept of mandated CHP Portfolio Standards or subsidies to encourage development. Until the economic conditions improve for California, compulsory CHP implementation will create additional mandates, and take away resources from more cost effective programs to increase energy efficiency by its customers and to reduce emission.

Dated: March 9, 2012

Respectfully submitted,

By:



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