



CHP REDUCES GREENHOUSE GAS EMISSIONS

Excerpts from comments of the Cogeneration Association of California (CAC) and the Energy Producers and Users Coalition (EPUC) to the California Public Utilities Commission and the California Energy Commission – June 2, 2008

CHP Will Be An Indispensable Tool In The State's Efforts To Achieve AB 32 Mandates

AB 32 requires that the state achieve “*the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions . . . by 2020 . . .*”¹ CHP is one tool that the state cannot afford to ignore in its efforts to achieve this mandate. The benefits of CHP as a GHG reduction tool are undeniable. Historically, California has provided at least 7.0 MMtCO₂e and up to 26 million tons of CO₂e reductions annually as a result of CHP installations under the Public Utility Regulatory Policies Act of 1978.² The CEC also estimates that new CHP can bring an additional 9-11MMtCO₂.³ The Commissions’ modeling efforts have also demonstrated that CHP can bring not only substantial emission reductions but that CHP represents one of the lowest cost options on the supply curve of GHG reduction. These factors together demonstrate that an electricity policy that fails to adequately recognize the contribution of existing and new CHP resources to GHG reduction efforts will not fulfill the mandates of AB 32.

CHP Benefits Are Well-Recognized

The GHG reduction benefits of CHP resources are well-recognized by several agencies and committees that are devoted to examining environmental issues and policies:

- ETAAC Report: Cal EPA’s ETAAC Committee efforts are directed to identifying and making recommendations regarding activities that will facilitate emissions reductions. Its report recognizes CHP’s ability to “*avoid transmission bottlenecks,*

1 Ca Health & Safety Code § 38561.

2 18 C.F.R. § 292.301 et seq.

3 These emissions savings can be achieved under the high deployment scenario discussed in the CEC’s report entitled “Assessment of California CHP Market and Policy Options for Increased Penetration”, dated July 2005. See also Economic and Technology Advancements for California Climate Solutions, Discussion Draft (Nov. 15, 2007).

decrease transmission losses and provide other operational benefits.”⁴ As part of its effort to identify such investments, it recommends the promotion of CHP projects that will contribute to lower GHG emissions and criteria air pollutants.⁵

- CEC’s Integrated Energy Policy Report: The IEPR observes that CHP resources use fuel efficiently, minimize transmission and distribution line losses and will be important in the state’s effort to lower GHG: *The importance of keeping this distributed generation capacity in the system is elevated by the state’s need to reduce greenhouse gas emissions as part of AB 32. Combined heat and power in particular offers low greenhouse gas emissions rates for electricity generation taking advantage of fuel that is already being used for other purposes. The systems use waste heat for either process or electricity generation needs which results in very efficient use of fossil fuels. Large combined heat and power units appear to offer the greatest fuel efficiency of available distributed generation technologies. Because combined heat and power systems are located close to the load, transmission and distribution line losses are minimized, further reducing greenhouse gas impacts.*⁶
- CEC’s Report on CHP Market Potential: The CEC estimates that emissions savings from a high deployment of CHP resources can be as high as 9-11 MMtCO₂ in annual savings.⁷
- NARUC: NARUC’s recently adopted resolution reflects several CHP benefits: *“The deployment of CHP and waste-energy recovery technologies increases generation efficiency, reduces fossil-fuel consumption, enhances generation diversity, and has the potential to improve system reliability, decrease line losses, reduce grid congestion, and reduce emissions of air pollutants and greenhouse gases”*⁸
- Joint Energy Action Plan 2008 Update: The EAP 2008 Update recognizes the value of CHP resources to the state’s efforts to lower GHG emissions: *“In addition, new combined 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”.*⁹

Given such a wide range of support and recognition, state GHG policy cannot afford to exclude or compromise the value of these resources.

4 Recommendations of the Economic and Technology Advancement Advisory Committee Final Report on Technologies and Policies to Consider for Reducing Greenhouse Gas Emissions in California.

5 Id.

6 CEC 2007 IEPR.

7 Assessment of California CHP Market and Policy Options for Increased Penetration, dated July 2005.

8 NARUC Resolution to Encourage the Use of Combined Heat and Power, including the Recycling of Waste Energy, adopted February 20, 2008.

9 Joint Agency EAP 2008 Update.