

Solar Turbines®

A Caterpillar Company

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California Energy Commission
Dockets Office, MS-4
Re: Docket No. 12-IEP-1D
1516 Ninth Street
Sacramento, CA 95814-5512

DOCKET

12-IEP-1D

DATE MAR 09 2012

RECD. MAR 09 2012

Re: Solar Turbines Comments on Combined Heat and Power in California

Solar Turbines is a San Diego based manufacturing company with 3,500 employees in California and over 7,000 employees worldwide. Solar Turbines is also the largest manufacturer of industrial gas turbines in its size range, is one of California's largest industrial exporters, and is a key global player in the combined heat and power (CHP) market.

Solar Turbines is pleased to provide these written comments on select questions provided to us prior to the California Energy Commission Workshop on Combined Heat and Power held on February 16, 2012:

I. ICF Report on CHP Market Potential and Scenario Analysis

- The ICF analysis provided a reasonable description of the remaining market potential and the likely market capture for various policy & regulatory scenarios. CHP can appreciably help California achieve its energy efficiency and GHG reduction goals with policies and regulations that 1) eliminate institutional disincentives to CHP and 2) advocate for the adoption of efficient and clean CHP.
- The GHG reduction accounting method in the CARB Scoping Plan is appropriate as it establishes a fossil benchmark from which CHP is compared. It recognizes that efficient CHP will back out less efficient fossil resources.
- The GHG reduction accounting method used by the CPUC in its recent decision implementing SB 412 is very concerning.
 - The method rationalizes that customer CHP (and other end user efficiency and renewable measures) provide less GHG reduction benefits than identical wholesale generation measures because of shrinkage that occurs in the RPS wholesale market.
 - It inadvertently diminishes the environmental value of all end use measures relative to wholesale generation
 - To give a preference to wholesale measures over end use measures is flawed policy. If anything, customer measures should be preferred over wholesale measures as they reduce and don't exacerbate T&D constraints aggravated by central station renewable generation.

II. Small and Large CHP Project Development in California

- Cap and Trade regulation, if it continues on its present course, would seriously hamper CHP implementation and is at odds with the CARB Scoping Plan.

- Many energy users considering CHP will be forced into Cap and Trade which will work as a strong deterrent against implementing CHP
- Granting free allowances to electric utilities to shelter consumers from Cap and Trade related cost increases without providing like allowances to customer-side-of-the-meter CHP gas consumers effectively shrinks the spark spread, hurts CHP's economic value, and deters CHP adoption.
- AB 1613 will improve CHP economics for many of our prospective customers by justifying a larger size system and/or realizing a higher operating capacity factor. The still evolving new Rule 21 is currently a major roadblock to an interconnect agreement for export, which is necessary to take advantage of AB 1613.
- We welcome reinstatement of CHP back into the SGIP and see it as a State endorsement of CHP in addition to the financial incentive, both of which will appreciable help the CHP market.
- Departing load charges (DLCs) are currently in excess of \$0.02/kWh for our size class of gas turbine CHP. This is a major obstacle for CHP. CHP and other electric DG technologies are the only customer load reduction measures that face DLCs. Customer load reduction measures for which DLCs do not apply include energy efficiency, demand response, direct-drive prime movers, fuel switching, operational changes and plant downsizing.
- The incomplete Rule 21 remains the primary obstacle to renewable CHP.

III. Technology Innovation to Overcome CHP Barriers

- RD&D should not exclude or downplay natural gas CHP, which has greater market potential than bio-fuel CHP and provides significant GHG benefits. RD&D can provide for improved efficiency, smaller ecological footprint, smart grid compatibility, interconnect benchmarking, and value-added capability such as ancillary services, dispatchability, and power reliability.

IV. General Questions for All

- The state should pursue adoption of a CHP portfolio standard for highly efficient CHP. Utilities should be incentivized to encourage utility support toward the achievement of targets. An incentive structure similar to that being used for efficiency measures should be considered. Utility benchmarks should also be employed to ensure achievement of targets.

Thank you for the opportunity to provide comments on this important policy topic. If you would like to discuss any of these responses, please do not hesitate to call.

Sincerely,



Joseph W. Allen
Director of Government Affairs
Solar Turbines Incorporated