



October 19, 2012

Bryan Neff California Energy Commission 1516 Ninth Street, MS 20 Sacramento, CA 95814

Re: CHP Staff Paper

Dear Mr. Neff,

California Energy Commission
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The Energy Producers and Users Coalition, the Cogeneration Association of California and the California Cogeneration Council (together, CHP Parties) are pleased to have the opportunity to provide their views on the Final Staff Paper entitled "A New Generation of Combined Heat and Power: Policy Planning for 2030" (Staff Paper). The Staff Paper presents the most comprehensive, best articulated view of the issues facing existing and new CHP facilities in California's policy debate. The CHP Parties offer a few limited observations on the Staff Paper:

- ✓ The CHP industry is likely to atrophy absent the continued support and attention
  of regulators, aimed toward the implementation of very specific solutions by the
  end of the CHP Settlement's first program period in 2015. Long-term contract
  certainty, combined with reasonable policies regarding greenhouse gas (GHG)
  regulation, departing load charges, and interconnection procedures, would best
  ensure the viability of existing units and advance a market for new CHP facilities.
- ✓ The devil is in the details. Broad policy statements and generalized program
  design aimed to encourage CHP, while well intended, can be overtaken by
  simple details in the policy implementation. Although the CHP Settlement was a
  necessary and positive step to establish pricing and contracting policies, whether
  the programs established by that settlement are successful will depend on
  working through the details of many implementation and project development
  issues.
- ✓ The integration of energy-efficient CHP and Renewable Portfolio Standard (RPS) policy goals requires additional analysis and action to coordinate the benefits of these energy solutions.



✓ The tension between efficiency and dispatchability must be openly and expressly harmonized by policymakers to prevent competing goals for CHP operations and development.

The CHP Parties look forward to the integration of the views expressed in the Staff Paper into a higher level policy discussion.



1. The CHP industry is likely to atrophy absent the continued support and attention of regulators, aimed toward the implementation of very specific solutions by the end of the CHP Settlement's first program period in 2015.

There has been a wealth of "kind words" for CHP over the years in California. More recently, this support in concept has been given substance with the adoption of the CHP Settlement by the CPUC. Neither more kind words nor the CHP Settlement, however, will encourage CHP growth in California. Action is required.

The CHP Settlement was expected to do a reasonably effective job at keeping most, but not all, existing CHP alive until 2020. Unfortunately, preliminary results from the first round of CHP-only competitive solicitations indicates the utilities are executing contracts with resources the CHP Parties believe are ineligible for the program. The 3,000 MW target was carefully constructed with the assumption that it would be filled with baseload CHP and identified Utility Prescheduled Facility (UPF) resources, and not eroded with merchant RA facilities that cannot secure long-term contracts in other solicitations.

The more precarious element of the CHP Settlement, the GHG target, faces a much harder future. The 4.3 MMT GHG reduction target is built on an analysis performed by CARB several years ago for its AB 32 Scoping Plan. Nothing prevents the utilities, however, from undermining the target with CARB or in the CPUC's Long Term Procurement Planning process; in fact, CHP Parties anticipate this activity. Moreover, due to GHG counting protocols under the CHP Settlement, the targets could be met in part by removing existing CHP systems. Without clear policy efforts to counterbalance efforts to dilute the GHG reduction target, material CHP development is likely to become a relic of the last Brown administration.

Even if the GHG reduction target stays in place, further material CHP development is not likely. The CHP Settlement today provides only 12 year contracts; CHP developers, just like RPS developers who receive 20-25 year contracts, require longer term certainty. Without long-term contracts, CHP would be left to CAISO markets, thinly traded markets that cannot sustain new development. It will be appropriate to force CHP to rely on CAISO markets when utility shareholders are willing to accept cost recovery for any new utility units based on CAISO market revenues.

While there are many changes identified in the Staff Paper, most important are GHG cost recovery and departing load charges. With \$4/MMBtu gas prices and \$20/MT carbon, the combination of the GHG costs and departing load charges will approach 45% of the total variable cost of operation for a CHP facility. This impact is for a large



power customer, and impacts would be even greater for customers on lower voltages with less demand. These costs require focused attention.

## 2. The devil is in the details.

The complexity of today's electricity market prevents policymakers from designing a general structure and walking away to allow parties to fight out the implementation details. Seemingly benign issues, such as interconnection or GHG cost recovery, can prevent a project from going forward. Regulators must stay engaged unless and until it appears that the regulatory structure is yielding the desired results with minimal noise from the parties.

3. The integration of energy-efficient CHP and Renewable Portfolio Standard (RPS) policy goals requires additional analysis and action to coordinate the benefits of these energy solutions.

The Staff Paper addresses the integration of CHP and RPS policy goals, advancing proposals to mitigate the possibility that the installation of on-site CHP will change the equation for RPS calculations. The CHP Parties agree that these proposals merit review and implementation. Addressing CHP in the calculation of RPS should bring alignment of utility and CHP stakeholders.

More difficult, however, is the question of measuring the impact of CHP on-site use on the emissions reductions in the utility generation mix. The Staff Report explains: "If the RPS targets are met in 2020, the avoided utility emissions [for on-site use] are only 67% of the avoided emissions of the marginal fuel electric system." In other words, "but for" CHP on-site use, the utility would have had greater sales and thus acquired more renewable power; had the load stayed on the system, 33% of the load would be served by zero emitting resources. The Staff Paper observes that using this analysis could lead to favoring exported CHP generation over on-site generation for emissions savings – an illogical result.

The CHP Parties encourage the CEC and other regulators to address this RPS issue, and to consider including on-site loads served from CHP in the sales used to determine the RPS obligation. Further, it is impossible to obtain a fair and complete view of the merits of on-site CHP and RPS generation without better understanding the possible emissions associated with the RPS. RPS generation, after integrating gas-fired generation, may not be zero-emitting. It thus is not correct to assume that had the on-site CHP load been served by the utility, the consequence would have been zero emissions for 33% of the energy delivered; the emissions rate for the 67% of resources serving the load could be driven up. To get a fair evaluation of the impact of CHP on



RPS therefore requires an examination of RPS benefits that includes integrating generation. Any other approach will artificially devalue CHP emission-reduction potential.

4. The tension between efficiency and flexibility must be openly and expressly harmonized by policymakers to prevent competing goals in CHP operations and development.

A CHP generator at times could walk out of contract negotiations with whiplash, as the metrics shift back and forth between efficiency and product flexibility. Running a turbine in a flexible manner – ramping up and down to meet system needs – reduces the efficiency of the energy produced no matter what the form of generation. If a CHP facility has the ability to provide flexibility, its efficiency will be lower than it would if the plant were operating at baseload. For this reason, demanding that a CHP produce power at the highest theoretical level of efficiency while simultaneously demanding flexibility is not sustainable. This tension, along with exploration of potentially more flexible CHP products, requires direct attention.

The framework for a CHP future in California is far from complete. The CHP Parties look forward to a continuing discussion of the future of CHP in California.

Very truly yours,

Evelyn Kahl

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On behalf of the Energy Producers and Users Coalition Cogeneration Association of California and the California Cogeneration Council

c: Grant Mack Nick Chaset