



November 13, 2015

Chris Gallenstein
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Clean Power Plan Compliance Discussion Paper

Dear Mr. Gallenstein:

The Energy Producers and Users Coalition¹ (EPUC) appreciate this opportunity to comment on the California Air Resources Board (CARB) Clean Power Plan Discussion Paper September 2015 (the White Paper). CARB's early action to implement the EPA's Clean Power Plan reflects California's demonstrated record of leadership on climate change. This same leadership has left the State well situated for compliance with the Clean Power Plan without additional regulatory burdens on California facilities. California, and CARB specifically, however, must carefully design the State's implementation plan in order to maintain the State's position as a leader and avoid any unintended consequences on the California economy.

1. California's Continued Climate Change Leadership Requires the State to Take the Time Necessary to Develop a Well-Designed Plan

The White Paper suggests that implementation plans are due September 6, 2016.² The White Paper acknowledges, however, this is only an initial deadline for a plan or a request for an extension of two years.³ Given California's climate change success, the State could potentially develop a plan in advance of the 2016 deadline. However, the 2016 deadline should not prevent the State from taking the necessary time to think through the implications of a federal backstop for the electric sector in regards to AB 32 as the electric sector is only one sector of the more encompassing AB 32 State program.

¹ EPUC is an *ad hoc* group representing the electric end use and customer generation interests of the following companies: Aera Energy LLC, Chevron U.S.A. Inc., ExxonMobil Power and Gas Services Inc., Phillips 66 Company, Shell Oil Products US, Tesoro Refining & Marketing Company LLC and California Resources Corp.

² CARB Clean Power Plan Discussion Paper September 2015 at 4.

³ *Id.*



2. California's Electricity Sector, the Target of EPA's Clean Power Plan, is Well Situated for Compliance with Emissions Targets

California's energy policy initiatives have positioned the State's electricity sector well for compliance with the Clean Power Plan Rule for Existing Sources (Existing Source Rule). Varied estimates of recent electricity sector CO₂ emissions, which CARB will clarify through its inventory calculation, suggest achieving the EPA goals on a mass basis is within reach.

As a result of the Renewable Portfolio Standard (RPS), energy efficiency and other measures, California is well placed for compliance with the EPA mass-based final goal of 48.4 short tons, given total 2013 sector emissions of only 63.2 short tons⁴, its 50% RPS requirement, and energy efficiency targets. Little, if any, additional action will be required by the State to meet EPA's interim and final goals. Therefore, California should not over comply by submitting its entire AB 32 program, including additional sectors in a compliance plan for a regulation designed to reduce emissions from Electric Generating Units (EGUs).

3. The EPA Intends to Exempt Industrial, Efficient Topping-Cycle CHP from Affected EGU Status

The final Existing Source Rule published in the Federal Register includes changes to Section 60.5850 which, among other facilities, excludes efficient topping-cycle Combined Heat and Power (CHP) from Affected EGU status.⁵ The published version of the Existing Source Rule exempts CHP that has greater efficiency than the most efficient combined cycle gas turbine from Affected EGU status:

*EGUs that are combined heat and power units that have always historically limited, or are subject to a federally enforceable permit limiting, annual net-electric sales to a utility distribution system to no more than the greater of either 219,000 MWh or the product of the design efficiency and the potential electric output.*⁶

Notably, the Existing Source Rule does not define potential electric output, but directs parties to rely on definitions in the Clean Power Plan New Source Rule (New Source

⁴ EIA shows a value of 57.3 million metric tons. See California Electricity Profile, Tables 7, <http://www.eia.gov/electricity/state/california/>.

⁵ Carbon Pollution Emissions Guidelines for Existing Stationary Sources: Electric Generating Units, 80 Fed. Reg. 64953 (published October 23, 2015) (to be codified at 40 CFR pt 60) (hereinafter Existing Source Rule).

⁶ *Id.*



Rule) for any concepts not defined in the Existing Source Rule.⁷ Beyond providing the definitions necessary to determine the proper treatment of CHP units, the New Source Rule demonstrates EPA's intent to encourage the development of efficient industrial CHP. The preamble to the New Source Rule provides a clear explanation of EPA's intent and considerations when developing the exemption for efficient, industrial CHP. As the Existing Source Rule follows the same calculation for exempting CHP from affected EGU status, this same intent would encourage the continued operation of existing, efficient industrial CHP facilities.⁸

The New Source Rule clarifies that “*the EPA is not issuing standards of performance for certain types of sources—specifically, ... industrial CHP units.*”⁹ EPA exempts CHP units from the compliance since:

*CHP units are generally more efficient than conventional power plants because the heat that is normally wasted in a conventional power generation cooling system (e.g., cooling towers) is instead recovered as useful thermal output.*¹⁰

The exemption for CHP, however, is limited to industrial CHP units, since these units “*serve a different primary purpose (i.e., providing useful thermal output with electric sales as a by-product).*”¹¹ Not all CHP units are exempt, and the Clean Power Plan Rules are intended “*to cover only utility CHP units, because they serve essentially the same purpose as electric-only EGUs.*”

The published version of the Existing Source Rule confirms that existing CHP will receive the same treatment and exclusions as CHP subject to the New Source Rule:

Additionally, under CAA section 111(b) final applicability criteria, new dedicated non-fossil and industrial CHP units are not affected sources if they include permit restrictions on the amount of fossil fuel they burn and the amount of electricity they sell. Such units historically have had no regulatory mandate to include permit requirements limiting the use of fossil fuel or electric sales. We are exempting them from inclusion in CAA

⁷ *Id.*

⁸ Standards of Performance for Greenhouse Gas Emissions from New, Modified and Reconstructed Stationary Sources: Electric Generating Units, 80 Fed. Reg. 64949 (published October 23, 2015) (to be codified at 40 CFR pt 60, 70, 71 et. al.) (hereinafter New Source Rule).

⁹ *Id.* at 64532.

¹⁰ *Id.* at 64533.

¹¹ *Id.*



section 111(d) state plans in the interest of consistency with CAA section 111(b) and based on their historical fuel use and electric sales.¹²

Ultimately the intent of the EPA to exempt new and existing efficient, industrial CHP is clear, and these facilities are not subject to the Clean Power Plan.

4. The Clean Power Plan Does Not Include Unfired, Bottoming-Cycle CHP Within the Definition of Affected EGU

Unfired, bottoming-cycle CHP units do not fall within the definition of Affected EGU.¹³ The Existing Source Rule identifies three types of Affected EGUs -- steam generation, integrated gasification combined cycle and stationary combustion turbine.¹⁴ The definitions of these three types of facility clarify that they share one common element: each combusts fuel to generate electricity. To the extent a bottoming-cycle CHP unit does not utilize supplemental firing, it does not meet the definition of any of the three identified types of Affected EGU.

The Clean Power Plan Existing Rule treats unfired bottoming-cycle CHP as “Waste Heat Power.” The preamble to the Existing Source Rule states:

There are units, also referred to as bottoming cycle CHP units, where the fuel is first used to provide thermal energy for an industrial process and the waste heat from that process is then used to generate electricity....[U]nless the WHP unit supplements waste heat with fossil fuel use, there is no additional fossil fuel used to generate this additional power. As a result, there are no incremental CO₂ emissions associated with that additional power generation. As a result, the incremental electric generation output from the WHP facilities could be considered zero emitting for the purposes of meeting the emission guidelines, and the MWh of electrical output could be used to adjust the CO₂ emission rate of an affected EGU.¹⁵

To the extent that a bottoming-cycle CHP unit does not require additional fuel combustion, it is not an Affected EGU, and is instead a WHP for the purposes of the Clean Power Plan.

¹² Existing Source Rule at 64717.

¹³ A bottoming-cycle CHP unit includes a heat recovery steam generator which relies on waste heat from an industrial unit to heat water and produce steam, and a steam turbine to produce electricity.

¹⁴ Existing Source Rule, 80 Fed. Reg. 64953.

¹⁵ *Id.* at 64902-903.



5. Conclusion

EPUC looks forward to working with CARB to develop California's implementation plan.

Sincerely,

A handwritten signature in black ink that reads 'Katy Morsony'.

Evelyn Kahl
Katy Morsony

Counsel to the
Energy Producers and Users Coalition