

CCDC

CALIFORNIA CLEAN DG COALITION

December 16, 2016

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Discussion Draft 2030 Target Scoping Plan Update

California Air Resources Board:

The California Clean DG Coalition (CCDC) appreciates the opportunity to provide these comments on the Discussion Draft 2030 Target Scoping Plan Update (Draft 2030 Update). CCDC is an ad hoc group interested in promoting the ability of distributed generation (DG) system manufacturers, distributors, marketers and investors, and electric customers, to deploy DG. Its members represent a variety of DG technologies including combined heat and power (CHP), renewables, gas turbines, microturbines, reciprocating engines, and storage.¹ Through these comments, CCDC requests that the California Air Resources Board (CARB) modify the Draft 2030 Update to affirm the role of CHP in contributing to greenhouse gas (GHG) emission reduction goals, and supporting the integration of more renewable generation into the California grid.

CCDC supports California's climate goals and its ongoing work to reduce GHG emissions and mitigate the effects of climate change. CCDC understands that state policy supports a trajectory that includes increasing renewable generation and other zero-emission measures (energy efficiency, demand response, etc.), and decreasing reliance on fossil generation. CCDC is concerned that rigid adherence to a "no fossil fuel" approach will cause California to miss out on important emission reduction benefits over the near term.

Specifically, small, clean (natural gas) onsite CHP has the potential to reduce GHG emissions, while addressing customer needs and maximizing use of presently available fuel sources. CHP has long been recognized as an efficient technology: it uses a single fuel source to generate two products – electricity and thermal energy – required at industrial, commercial, institutional and

¹ CCDC is currently comprised of Capstone Turbine Corporation; Caterpillar, Inc.; Cummins, Inc.; DE Solutions, Inc.; EtaGen, Inc.; GE Energy; Hawthorne Power Systems; Holt of California; MMR Power; NRG Energy; Penn Power Systems; Peterson Power Systems; Regatta Solutions; Solar Turbines, Inc.; and Tecogen, Inc.

other facilities. This efficient use of fuel and generation of energy products means that GHG emissions from CHP facilities are less than GHG emissions from the separate generation of electricity and thermal energy (from a conventional natural gas power generation facility and a boiler, for example).²

The initial CARB Climate Change Scoping Plan recognized CHP's potential to reduce GHG emissions, and targeted an additional 4,000 megawatts (MW) of capacity and 6.7 MMT CO_{2e} reductions.³ Building on the initial Scoping Plan, Governor Brown set a goal of 6,500 MW of additional CHP capacity by 2030 as part of his Clean Energy Jobs Plan.⁴ The First Update to the Climate Change Scoping Plan reiterated these CHP goals, and observed that "significant installation barriers for CHP systems still remain," stymying development.⁵ In recognition of these barriers, CARB stated that it "is committed to working with the CPUC, CEC, and CAISO to assess existing barriers to expanding the installation of CHP systems and propose solutions that help achieve climate goals. A future CHP measure could establish requirements for new or upgraded efficient CHP systems."⁶ Most recently, the PATHWAYS report shows that CHP will have a role supporting renewables integration until at least 2050.⁷

Inexplicably, the Draft 2030 Update does not address these important CHP targets in the initial Scoping Plan and the First Update. This puts the state at risk of losing out on the GHG emission reduction benefits of CHP. For example, not all customers interested in on-site generation can use other renewable technologies that are eligible for SGIP. Solar and wind resources are intermittently available and are better suited for electric-only loads. Providing reliable power to residential and business customers that also have a thermal energy need requires a consistent and flexible source of power. Customer-sited CHP resources are well-suited to help many customers cost-effectively and efficiently serve both their electric and thermal energy needs. Additionally, as the state moves to greater volumes of available, cost-effective biogas production and pipeline distribution, these systems can easily transition from natural gas to renewable biogas and offer the same efficiency, reliability, and security.

² CCDC understands promising advances have been made in electric boiler technology, however, electric boilers presently are neither readily available nor affordable.

³ CARB Climate Change Scoping Plan (December 2008), p. 44, Table 7 (available at: <http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>).

⁴ Clean Energy Jobs Plan, ¶ 7 (available at: https://www.gov.ca.gov/docs/Clean_Energy_Plan.pdf).

⁵ First Update to the Climate Change Scoping Plan, p. 42 (available at: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf).

⁶ *Id.*

⁷ California PATHWAYS: GHG Scenario Results, California Climate Policy Modeling Dialogue, Energy + Environmental Economics (February 23, 2015), pp. 41-42 (available at: http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf).

Based on the foregoing, CCDC respectfully requests that CARB modify the Draft 2030 Update to affirm the role of CHP in contributing to GHG emission reduction goals and supporting the integration of more renewable generation into the California grid. Such revisions should include reiteration of previously set CHP targets and, as appropriate, establishment of a CHP measure for new or upgraded efficient CHP systems.

CCDC appreciates CARB's consideration of these comments.

Sincerely,

California Clean DG Coalition

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