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July 8, 2016

Rajinder Sahota, Branch Chief, Cap-and-Trade Program
California Air Resources Board
1001 I Street
Sacramento, CA 94812

Subject: Comments on 2030 Target Scoping Plan Concept Paper

Dear Ms. Sahota:

Calpine Corporation ("Calpine") is writing to provide comments on the 2030 Target Scoping Plan Concept Paper dated June 17, 2016 (hereinafter, "Concept Paper").[1]

Calpine is a long-time supporter of the Air Resources Board's ("ARB") Cap-and-Trade Program and supports the goal of reducing economy-wide greenhouse gas ("GHG") emissions to 40% below 1990 levels by 2030, as established by Governor Brown upon issuance of Executive Order ("EO") B-30-15. Calpine also supported and continues to support Senate Bill ("SB") 32 (Pavley), which would update key provisions of the California Global Warming Solutions Act of 2006, Assembly Bill ("AB") 32, to reflect the 2030 goal. Calpine also supported SB 350, which acknowledges both the 2030 goal and the companion goal previously established by Governor Schwarzenegger of reducing emissions to 80% below 1990 levels by 2050.[2]

Calpine supports ARB's efforts to proceed with updating the Scoping Plan to incorporate the 2030 target, as required by EO B-30-15. Of the four conceptual options outlined by the Concept Paper as the basis for the Draft Scoping Plan, Calpine strongly endorses Concept 1, which would build on the State's successful suite of programs to reduce emissions, including through continuation of the Cap-and-Trade Program. *See* Concept Paper, at 21-22. By working in

[1] *Available at*: http://www.arb.ca.gov/cc/scopingplan/document/2030_sp_concept_paper2016.pdf.

[2] *See* Pub. Util. Code § 454.52(a)(1)(A) (requiring load-serving entities to file integrated resource plans that ensure they will meet 2030 greenhouse gas emission reduction targets established by ARB, in coordination with the Public Utilities Commission ("PUC") and Energy Commission, reflecting the electricity sector's percentage in achieving economy-wide reductions of 40% below 1990 levels by 2020); *id*. at § 740.12(b) (requiring the PUC, in consultation with ARB and the Energy Commission, to direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification and thereby reduce emissions to 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050).

tandem with existing policies such as SB 350 and accounting for anticipated shifts in emissions among sectors (e.g., due to the electrification of transportation), continuation of the Cap-and-Trade Program will assure that the costs of carbon emissions are appropriately priced throughout the economy, driving the required reductions at least cost to consumers and businesses. As the Concept Paper acknowledges, continuation of the Cap-and-Trade Program could also provide the basis for the State's plan to be submitted to the U.S. Environmental Protection Agency pursuant to the Clean Power Plan and would facilitate potential links between California's program and mass-based trading programs implemented by other states pursuant to the Clean Power Plan. *Id*. at 22.

As the largest in-state generator of electricity from natural gas-fired and geothermal power plants, Calpine has serious concerns with Concept 2, which would impose entity-level declining caps on each industrial facility currently regulated by the Cap-and-Trade Program, without "any type of compliance instruments or trading" and without "a statewide limit on emissions." *Id*. at 23-24. According to the Concept Paper, the required rate of decline, "to be determined once there has been an evaluation of how many additional reductions are still needed after the other policies are implemented", would not exceed 4% each year. *Id*. at 24.

If the required rate of decline were the same for all industrial sources currently subject to the Cap-and-Trade Program, then this approach would assuredly result in higher costs to achieve the required reductions, as there would be no incentive for those sources that could achieve greater reductions at lower cost to do so. If ARB were to establish different rates of decline for individual sources based on their respective emissions performance, this approach would embroil ARB in a process more burdensome and contentious than allowance allocation, as ARB would have to decide, not merely how allowances should be distributed among covered sources, but what emission reduction opportunities exist for individual sources and how much individual sources should be allowed to continue operating, relative to historic operating levels.

Such a command-and-control approach is inconsistent with how cost-effective emission reductions have consistently been achieved and contrasts sharply with the market-based approaches reflected by the Clean Power Plan and other states' carbon reduction programs. For the electricity sector, such an approach would be particularly problematic due to the interstate nature of electricity sales and the fact that the State's existing fleet of gas-fired power plants is already highly efficient and opportunities for cost-effective emission reductions at individual plants are limited.

It also is unclear how Concept 2 could satisfy AB 32's legislative directives to minimize emissions leakage and account for emissions from all electricity consumed within the State. *See* Health and Saf. Code §§ 38562(b)(8), 38530(b)(2). The Cap-and-Trade Program has been carefully designed to minimize the risk of emissions leakage from the electricity sector, including through imposition of the import obligation on the first jurisdictional deliverer of electricity to the State. However, Concept 2 would presumably require facility-specific declining caps only for in-state electricity generators; ARB would have no apparent legal basis to impose such caps upon out-of-state generators. In the absence of any cost-effective emission reduction measures for individual units, in-state gas-fired generators would be forced to curtail their operation to meet their respective facility-specific caps, with the inevitable result that out-of-state generators would increase their deliveries of power to the State to replace the electricity otherwise generated by in-state generators. Any reduction in emissions from in-state generators would be illusory and potentially negated by increases in emissions from out-of-state generators. This risk of leakage would become even more acute in light of the expansion of the California Independent System Operator's Energy Imbalance Market ("ISO") and proposed regionalization of the ISO. Accordingly, Calpine does not view Concept 2 as a workable approach to reduce power sector emissions.

Concept 3 would focus on achieving greater reductions in emissions from the transportation sector, but without continuation of the Cap-and-Trade Program and without a statewide limit on GHG emissions. *See* Concept Paper at 26. Calpine believes that an increased focus on transportation sector emissions and ambitious targets for the electrification of transportation are critical to achieving the 2030 goal and should be a central feature of the Draft Scoping Plan. However, as acknowledged by the Concept Paper, in the absence of the hard cap imposed on statewide emissions, "continuous program adjustments may be necessary [under Concepts 2 and 3] to ultimately achieve the 2030 target." *Id*. at 24, 26. Likewise, Concept 4, which would essentially replace the Cap-and-Trade Program with a carbon tax, provides no guarantee that the 2030 goal will be achieved. According to the Concept Paper, "[b]ecause this scenario would not include a statewide limit on GHG emissions, it is unknown if any given level carbon tax would ultimately achieve the 2030 target." *Id*. at 27. While Calpine does not oppose a carbon tax as a potential means of reducing emissions, the hard cap on statewide emissions imposed under Concept 1 should better drive investment decisions and assure the State remains on-track to achieve its 2030 goal.

Because Concept 1 provides certainty that the State will achieve its ultimate goal and because continuation of the Cap-and-Trade Program would facilitate expanded links between California's GHG reduction efforts and those of other jurisdictions, Calpine urges ARB to utilize Option 1 in developing the Draft Scoping Plan.

Thank you for the opportunity to submit these comments. Please contact me if you have any questions at 925.557.2238 or barbara.mcbride@calpine.com.

Sincerely,

Barbara McBride
Director—Environmental Services
Calpine Corporation

cc: Hon. Mary Nichols, Chair
Richard Corey, Executive Officer
Edie Chang, Deputy Executive Officer