



May 4, 2026

Rajinder Sahota, Deputy Executive Officer
California Air Resources Board
1001 I Street
Sacramento, California 95814

Dear Deputy Executive Officer Sahota,

Constellation Energy Generation LLC, including its subsidiary Calpine LLC, (“Constellation”) submits these comments in response to the California Air Resources Board’s (“CARB”) supplemental 15-day package regarding Proposed Amendments to the Regulation for the California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms (“Cap-and-Invest Regulation”).¹

Constellation’s business unit, Calpine LLC (“Calpine”), operates the largest fleet of natural gas combined-cycle and combined heat and power (“CHP”) facilities in the United States. In California, the company is developing multiple pathbreaking carbon capture and storage (“CCS”) projects. The Sutter Decarbonization Project is expected to capture up to 1.75 million metric tons of carbon dioxide (“CO₂”) each year from the Sutter Energy Center near Yuba City, California.² The company also contributed to a Front-End Engineering Design (“FEED”) study sponsored by the Department of Energy (“DOE”) at Delta Energy Center in Pittsburg, California. Another FEED study has also commenced in cooperation with DOE to retrofit the Pastoria Energy Facility in Kern County with a carbon capture system. The company also hosts a pilot project at Los Medanos Energy Center, a CHP plant in Pittsburg, California. Full-scale CCS retrofits are at various stages of development at several other Constellation-owned plants across the country.

CARB’s 15-day package builds on its initial 45-day package,³ and addresses the California Legislature’s 2025 passage of two bills to extend and update the Cap-and-Invest Program. As Constellation has stated in the 45-day package comment, Constellation continues to support amendments to the Cap-and-Invest Regulation that will encourage the construction of CCS projects essential to achieving the state’s climate goals, while also maintaining the reliability of the grid. CCS technologies are key to achieving the state’s

¹ See Cal. Air. Res. Bd., Proposed 15-Day Amendments, Appendix A-1: Proposed Regulation Order (Apr. 14, 2026), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2026/cap_invest/nc_a-1_ci_15d.pdf (“15-Day Proposed Regulation”).

² Calpine, *Press Release: Calpine Announces Execution of Full-Scale CCS Demonstration Project Cost Sharing Agreement with the Department of Energy for Sutter Decarbonization Project* (Aug. 7, 2024), <https://www.calpine.com/calpine-announces-execution-of-full-scale-ccs-demonstration-project-cost-sharing-agreement-with-the-department-of-energy-for-sutter-decarbonization-project/>.

³ Cal. Air. Res. Bd., Proposed Cap-and-Invest Amendments, Appendix A-1: Proposed Regulation Order (Jan. 20, 2026), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2026/cap_invest/nc_app%20a-1.pdf (“45-Day Proposed Regulation”). Constellation submitted a comment on the proposed amendments, as well as those pertaining to the Mandatory Reporting Regulation. See Constellation, *Comment on Proposed Amendments* (March 9, 2025), https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid377/did200184/pid_213315/assets/merged/o907igrd5he_document.pdf?v=28683.

2045 emission-reduction targets.⁴ CARB’s 2022 Scoping Plan specifically emphasized the need for significant deployment of CCS on electricity generation facilities, which will be needed to maintain critical grid reliability as California moves toward AB 1279’s targets.⁵ Catalyzing the development and deployment of CCS in California can help advance its deployment in other jurisdictions.

To aid in achieving these goals, Constellation encourages CARB to extend eligibility for the Manufacturing Decarbonization Incentive (“MDI”) to natural gas-fired power generators that install CCS.

In the initial proposal, eligibility for the MDI program was limited to manufacturing facilities, such as those engaged in manufacture of cement, food processing, glass, and metals.⁶ Eligible facilities could apply for MDI allowances by demonstrating investment in qualifying decarbonization actions, such as replacement of fossil fuel-powered equipment with electrified alternatives, procurement of low-carbon hydrogen, generation or storage of renewable electricity, and use of biomass-derived fuels.⁷ If CARB approved the application, the facility would receive a cap adjustment factor (“CAF”) modifier, to be added to its applicable CAF, thereby increasing its free allowance allocation in a given compliance period.⁸ Allocations available for this program were expected to be around 40 million allowances.⁹

In response to concerns about affordability and economic uncertainty, CARB proposed three important expansions to the MDI program in its 15-day package. First, CARB expanded MDI eligibility to refineries and other sectors.¹⁰ Second, it expanded the pool of allowances to 118.3 million (with half designated for general industrial sectors and half for refiners and related sectors), valued at approximately \$4 billion.¹¹ Third, CARB confirmed that CCS is a qualifying decarbonization activity for purposes of the MDI program.¹²

The MDI program helps to address many of the practical challenges entities experience as they invest in deep decarbonization. As CARB explained, the MDI program is designed to accommodate the reality that “the costs of some decarbonization options continue to be greater than allowance prices,” particularly in light of “lost federal funding opportunities such as those previously available under the Inflation Reduction Act.”¹³ It justified the expansion of the MDI program in light of “short-term economic uncertainty caused by federal disruption, loss of federal incentives, global events and volatile market conditions.”¹⁴ CARB

⁴ AB 1279, the California Climate Crisis Act (Chapter 337, Statutes of 2022), was double-joined by the Legislature with SB 905 (Chapter 359, Statutes of 2022), the bill that authorized regulations to enable the deployment of CCS projects. This meant that AB 1279’s ambitious 2045 emission-reduction targets could not go into effect unless a CCS legal framework did as well. Also see *generally* Calpine, Comments on the Cap-and-Invest Program Workshop (Nov. 12, 2025), <https://ww2.arb.ca.gov/form/public-comments/submissions/54421>.

⁵ Cal. Air Res. Bd., 2022 Scoping Plan for Achieving Carbon Neutrality, at 86, <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>.

⁶ See Cal. Air Res. Bd., Staff Report: Initial Statement of Reasons at 71 (Jan. 20, 2026), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2026/cap_invest/nc_isor.pdf (“ISOR”).

⁷ ISOR at 71; 45-Day Proposed Regulation, 17 C.C.R. § 95891(g)(2)(A)-(F).

⁸ ISOR at 71–72.

⁹ *Id.* at 71.

¹⁰ 15-Day Proposed Regulation, 17 C.C.R. § 95891(g)(9).

¹¹ *Id.*

¹² See 15-Day Proposed Regulation, 17 C.C.R. § 95891(g)(2)(H) (providing for such facilities to “use the value of manufacturing decarbonization incentive allocation allowances to cover capital costs and electricity costs, and associated costs of design, engineering, and permitting necessary to support deployment of the capital, for equipment that captures or stores CO₂ emissions”).

¹³ ISOR at 70.

¹⁴ Cal. Air Res. Bd., 2026 Updates to California’s Cap-and-Invest Program Fact Sheet (Apr. 2026), https://ww2.arb.ca.gov/sites/default/files/2026-04/nc-CAI_FS_2026.pdf.

recently reiterated in its FAQ document that the MDI fund will “support investment and doing business in California and to help make up for the loss of federal incentives.”¹⁵

The rationales for the MDI program also justify eligibility for in-state natural gas-fired power plants installing CCS, which face many of the same challenges that manufacturing facilities and refineries face. CCS poses high upfront capital costs for installation, as well as significant ongoing operational costs. Global events and volatile market conditions—including tariffs and supply chain challenges—have further increased these costs. Although CCS-abated facilities will be able to claim the Section 45Q tax credit for carbon oxide sequestration, in the four years since the Inflation Reduction Act set the 45Q credit amount at \$85 per metric ton, the value of that credit has been significantly eroded by inflation.¹⁶ As a consequence, the 45Q credit is not itself sufficient to deploy CCS at facilities where it could provide significant reductions. It is for this reason that Constellation’s comments on the 45-day package emphasized the need for CARB to provide near-term clarity that a CCS-equipped facility’s compliance obligation will not include emissions permanently sequestered in accordance with a Board-approved methodology to be developed pursuant to SB 905.¹⁷ By allowing gas-fired generation installing CCS to be eligible for the MDI program, CARB could further counteract the loss of other federal grants and incentives intended to support near-term deployment of the technology for gas-fired generation.¹⁸

Constellation is making significant progress in developing its CCS projects, which will deliver significant emission reductions to California in the near term. Sutter Decarbonization Project, which is among the most advanced CCS retrofits at a natural gas-fired power plant anywhere in the world, is expected to begin capturing and sequestering emissions by 2031. This is precisely the sort of project the Legislature intends the Cap-and-Invest Program to support. In AB 1207, it specifically directed CARB to design its Cap-and-Invest regulations to “encourage[] early action to reduce greenhouse gases” and “in a manner that is equitable.”¹⁹ The inclusion of electricity generation in the MDI program will enable all sectors facing similar challenges to access incentives for deep decarbonization and help to ensure that the planned emission reductions occur on the anticipated timeline.

Given the critical role the Scoping Plan envisions for CCS-equipped electric generating facilities in achieving the state’s decarbonization objectives, CARB should extend eligibility for the MDI to in-state electric generating facilities proposing to add CCS to reduce emissions. While Constellation recognizes that natural gas-fired power plants do not currently receive free allocations pursuant to the product-based allocation methodology that the MDI is built upon, CARB could design an analogous approach for gas-fired generators—i.e., by setting a categorical baseline and rewarding emissions performance that exceeds the average. There are a number of potential options for designing a baseline emissions rate for such facilities,²⁰ and CARB could award allowances from the Build Up California Reserve Account based on the

¹⁵ Cal. Air Res. Bd., Manufacturing Decarbonization Incentive Fund Frequently Asked Questions (Apr. 2026) (“MDI FAQ”), https://ww2.arb.ca.gov/sites/default/files/2026-04/MDIF%20FAQ_April%202026.pdf.

¹⁶ 26 U.S.C. § 45Q(b)(1)(A), (h)(1). An inflation adjustment only begins in the 2027 tax year. See *id.* § (b)(1)(A)(ii).

¹⁷ See Constellation comment on 45-day package (Mar. 9, 2026), https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid377/did200184/pid_213315/assets/merged/o907igrd5he_document.pdf?v=24933.

¹⁸ On May 30, 2025, the Department of Energy terminated \$540 million in awards for two Calpine CCS projects—including \$270 million for the Sutter Decarbonization Project. See Brad Plumer, *Energy Dept. Cancels \$3.7 Billion for New Technologies to Lower Emissions*, N.Y. Times (May 30, 2025), <https://www.nytimes.com/2025/05/30/climate/energy-dept-climate-tech-awards-cut.html>.

¹⁹ Cal. Health & Saf. Code § 38562(b)(1)(A).

²⁰ One possible baseline could be to compare the existing facility’s reported emissions to the Emissions Performance Standard of 1,100 pounds of CO₂ per megawatt-hour for combined-cycle natural gas-fired turbines, as set by the Public Utilities

difference between the relevant baseline and the facility's historic or proposed net emissions rate. Constellation would be happy to discuss potential options with CARB.

Finally, if CARB does undertake an additional 15-day rulemaking package at this time, Constellation would encourage CARB to propose additional amendments to clarify the treatment of CCS in calculating the aggregate compliance obligation and net emissions rate of CCS-equipped facilities, as discussed in our comments on the 45-day package.²¹

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Constellation looks forward to continued engagement with CARB as it develops these regulations. Please contact me at Diana.Gallegos@calpine.com with any questions regarding these comments.

Sincerely,

_____/S/_____

Diana S. Gallegos
Director, Government and Regulatory Affairs

Commission pursuant to SB 1368. See Cal. Pub. Util. Code § 8341; Cal. Pub. Util. Comm'n, Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard, Decision No. D.07-01-039 (Jan. 25, 2007). Alternatively, the baseline could be aligned with the minimum design capture rate of 75% required for an electricity generating facility to qualify for the Section 45Q tax credit, see 26 U.S.C. § 45Q(d)(2)(B)(ii), so that a facility proposing to achieve a higher capture rate through installation of CCS, e.g., 95%, would receive proportionally greater MDI support.

²¹ See Constellation comments on 45-day package, *supra* at note 17.