



March 9, 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”) Proposed Amendments to the Regulation for the California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms¹ (“Cap-and-Invest Regulation”) and the Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (“Mandatory Reporting Regulation” or “MRR”).²

CARB’s proposed regulatory updates address the California Legislature’s 2025 passage of two bills to extend and update the Cap-and-Invest Program. Assembly Bill (“AB”) 1207 (Chapter 117, Statutes of 2025) extended the Program to 2045 and requires some technical changes.³ Senate Bill (“SB”) 840 (Chapter 121, Statutes of 2025) directed review of existing compliance offset protocols and made changes to the Greenhouse Gas Reduction Fund. These two bills also require CARB to align the Program’s emission reduction targets with AB 1279, the California Climate Crisis Act (Chapter 337, Statutes of 2022), which declared the policy of the state to reduce anthropogenic greenhouse gas (“GHG”) emissions to 85 percent below 1990 levels by 2045, to achieve net zero GHG emissions no later than 2045, and to maintain net negative GHG emissions thereafter.⁴

Constellation is the largest private-sector power producer in the world and the United States’s largest producer of clean and reliable energy, with approximately 55 gigawatts of capacity from nuclear, natural gas, geothermal, hydro, wind and solar facilities. 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.⁵

¹ See 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.

² Cal. Air. Res. Bd., Proposed Mandatory Reporting Amendments, Appendix A-1: Proposed Regulation Order (Jan. 20, 2026), https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2026/mrr/app_a-1.pdf.

³ See AB-1207 Climate change: market-based compliance mechanism: extension, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202520260AB1207.

⁴ Cal. Health & Saf. Code § 38562.2(c).

⁵ 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->

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 modern carbon capture system. The company also hosts a pilot project at Los Medanos Energy Center, a CHP plant in Pittsburg, California, where it has set up a learning center to disseminate information about CCS technology. Full-scale CCS retrofits are at various stages of development at several other Constellation-owned plants across the country.

Constellation supports 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 protecting public health and the reliability of the grid. CCS technologies are key to achieving the state’s 2045 emission-reduction targets.⁶ Indeed, 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.⁷

The existing regulations acknowledge that the compliance obligations of entities conducting CO₂ capture (“carbon dioxide suppliers”) will be reduced to reflect sequestered CO₂. However, both the existing regulations and proposed amendments defer key methodological decisions needed to catalyze development of this critical technology. Constellation encourages CARB to propose further targeted amendments in a 15-day package this spring, to provide the clarity that will ultimately be needed to scale-up CCS and meet California’s statutory climate goals.

Constellation offers the following comments:

1. To provide regulatory certainty for CCS developers, CARB should clarify in the Cap-and-Invest Regulation how “aggregated compliance obligations” are calculated, and CARB should do so now rather than deferring to a future Board-approved quantification methodology.
2. CARB should clarify that a geologic sequestration facility is a covered entity, with a compliance obligation that includes surface leakage of CO₂.
3. CARB should finalize its proposed amendments requiring geologic sequestration facilities to report under Subpart RR of the Greenhouse Gas Reporting Program (“GHGRP”).
4. To ensure the accuracy of power content label disclosures to consumers, CARB should amend the MRR to reduce a facility’s reported emissions to the extent that its CO₂ emissions are geologically sequestered.

execution-of-full-scale-ccs-demonstration-project-cost-sharing-agreement-with-the-department-of-energy-for-sutter-decarbonization-project/.

⁶ The Legislature double-joined AB 1279 with SB 905 (Chapter 359, Statutes of 2022), the bill that authorized regulations to enable the deployment of CCS projects. This meant that the state’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>.

⁷ 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>.

Constellation looks forward to continued engagement with CARB on its proposed amendments to support development of CCS projects.

- I. **To provide regulatory certainty for CCS developers, CARB should clarify in the Cap-and-Invest Regulation how “aggregated compliance obligations” of carbon dioxide suppliers are calculated, and CARB should do so now rather than deferring to a future Board-approved quantification methodology.**

The current Cap-and-Invest Regulation does not provide clarity for CCS developers on how aggregated compliance obligations are calculated. In a placeholder provision in Section 95852(g), it provides in a general way that a covered source (e.g., a gas-fired power plant that is a “first deliverer of electricity”) capturing and permanently sequestering CO₂ (as a “carbon dioxide supplier”) will have an “aggregate” compliance obligation, reduced to reflected captured and sequestered CO₂.⁸ But it provides few details and requires only that reporting and verification adhere to “a Board-approved carbon capture, utilization, and sequestration quantification methodology” that “must be incorporated into the Cap-and-Invest Regulation before it can be used.”⁹

CARB’s proposed amendments provide no further clarification. The proposed amendments would retain Section 95832(g), but relocate the language quoted above to a new Section 95852.3 entitled “Compliance Obligations for Sequestered or Utilized Captured Carbon Dioxide.”¹⁰ They also would add a statement that any “Board-approved carbon capture, utilization, and sequestration quantification methodology” to be adopted in the future will also have to meet the requirements of SB 905.¹¹

CCS projects are being developed for facilities subject to the Cap-and-Invest Program *today*, and developers need clear ground rules on how their aggregated compliance obligations will ultimately be calculated. If CARB waits until future rulemaking to adopt such rules, CCS project developers and their commercial partners – those transporting CO₂ in a pipeline meeting requirements adopted by the Office of State Fire Marshal pursuant to SB 614, those conducting sequestration within a permitted Class VI Underground Injection Control (“UIC”) well, and those purchasing the near-zero-emission electricity generated by CCS-equipped power plants to serve their customers – will not have the clarity needed to ensure permanent sequestration of the sequestered CO₂ and allocate responsibility among themselves. This could slow down and ultimately impede the development of projects essential to achieving the state’s climate goals.

Constellation encourages CARB to propose further amendments to the Cap-and-Invest Regulation as part of a 15-day package to explain how a carbon dioxide supplier’s “aggregated compliance obligation” is calculated. The starting point for the “aggregated compliance obligation” calculation should be the total CO₂ reported with respect to upstream manufacturing processes, other processes, and/or production wells from which the carbon dioxide supplier captures, extracts, or otherwise produces a CO₂ stream. The regulations should then clearly provide that the “aggregated compliance obligation” subtracts all CO₂

⁸ 17 C.C.R. § 95852(g).

⁹ *Id.*

¹⁰ See Cap-and-Invest Proposed Regulation Order at 121 (updated text of § 95852(g)); *id.* at 131–32 (new text for “§ 95852.3”).

¹¹ *Id.*

verified to be geologically sequestered as reported under section 95125 (i.e., CARB's newly proposed provision for reporting geologic sequestration under the MRR), in compliance with other applicable laws and regulations, including SB 905.¹² It is essential that CARB provide a clear accounting roadmap for CCS developers in calculating their aggregated compliance obligations under the Cap-and-Invest Program.

II. CARB should clarify that a geologic sequestration facility is a covered entity, with a compliance obligation that includes surface leakage of CO₂.

As noted above, the existing Cap-and-Invest Regulation and proposed amendments provide that carbon dioxide suppliers (i.e., entities that capture emissions) are covered entities. However, the Regulation does not currently provide that entities engaged in geologic sequestration are also covered entities. CARB should propose additional amendments in a 15-day package to close this gap as part of this rulemaking.

To accomplish this, CARB should add "geologic sequestration facilities" to the list of covered entities and specify an inclusion threshold for such facilities, which likely should be 0 MTCO₂e. CARB should also add a subsection providing that "geologic sequestration facilities" have a compliance obligation for the total quantity of "surface leakage" of CO₂.

These additional amendments will provide default rules around which the parties involved in the chain of custody for captured and sequestered CO₂ may contract, and in so doing, will facilitate the development of risk-allocation tools to ensure the permanence of sequestered CO₂.

III. CARB should finalize its proposed amendment to the MRR requiring geologic sequestration facilities to report under Subpart RR of the GHGRP.

The MRR already includes a definition for "geologic sequestration," which means "the process of injecting CO₂ captured from an emissions source into deep subsurface rock formations for permanent storage."¹³ It also provides that operators of facilities within the "source categor[y]" of "geologic sequestration of carbon dioxide" are subject to reporting under the MRR.¹⁴ However, the MRR did not previously explain *how* operators of facilities engaged in geologic sequestration were to report.

In its proposed regulation, CARB has included a new Section 95125, which clarifies that such operators must report under the version of Subpart RR of the GHGRP in effect on November 29, 2013.¹⁵ CARB should finalize this proposed amendment to the MRR. In addition to confirming that reporting by geologic sequestration facilities must conform to Subpart RR, this proposed amendment fills two important gaps in the existing MRR, which arguably does not incorporate Subpart RR by reference at all (because it only

¹² Constellation would encourage CARB to move forward in adopting the methodology for permanent sequestration in Class VI wells today and leave utilization for a future rulemaking, given the greater methodological challenges associated with quantifying reductions from CO₂ utilization and assumptions about end-of-life of utilization products.

¹³ 17 C.C.R. § 95102.

¹⁴ *Id.* § 95101(a)(1)(A)(6).

¹⁵ MRR Proposed Regulation Order at 208.

adopts GHGRP rules that were promulgated on other dates)¹⁶ and does not provide a definition for “surface leakage,”¹⁷ which is critical to ensure permanence of sequestered CO₂.

IV. To ensure the accuracy of power content label disclosures to consumers, CARB should amend the MRR to reduce a facility’s reported emissions to the extent that its CO₂ emissions are geologically sequestered.

CARB should propose amendments to the MRR to establish that, when an electricity generating unit or cogeneration unit’s CO₂ emissions are sequestered, that quantity of CO₂ is not considered an “emission” from the electricity generating unit or cogeneration unit.

The California Energy Commission (“CEC”) imposes power content disclosure requirements on retail suppliers to ensure that consumers have accurate information on the emissions associated with their power. Because CEC regulations base the Power Content Label on a facility’s reported emissions under the MRR,¹⁸ the MRR should facilitate reporting that supports accurate power content disclosures for facilities whose emissions are geologically sequestered at a Class VI UIC facility. Specifically, the MRR should report an electricity generating facility’s total emissions as its net emissions, after accounting for sequestered CO₂.

This amendment will ensure that commercial counterparties to CCS projects can rely upon the emission reductions achieved by CCS in conveying to their customers the carbon content of delivered electricity.

* * * *

Constellation urges CARB to use the current rulemakings for the Cap-and-Invest Regulation and the MRR to provide much-needed clarity on the substantive rules for reporting emissions and determining aggregated compliance obligations. This regulatory certainty is essential for CCS project developers to move forward with the investment and deployment that will help the state meet AB 1279’s emission-reduction and carbon-neutrality targets.

Constellation looks forward to continued engagement with CARB as it develops these regulations. Please contact either of us at Kassandra.Gough@calpine.com or Diana.Gallegos@calpine.com with any questions regarding these comments.

¹⁶ See 17 C.C.R. § 95100(c) (providing that the MRR incorporates “various provisions” of the GHGRP, and that, “[u]nless otherwise specified,” it adopts the GHGRP regulations promulgated in rules published in the Federal Register on “October 30, 2009, July 12, 2010, September 22, 2010, October 28, 2010, November 30, 2010, December 17, 2010, and April 25, 2011”). None of the rules promulgated on those dates included Subpart RR, and there was no specification elsewhere in MRR that did so.

¹⁷ 40 CFR § 98.449.

¹⁸ 20 C.C.R. § 1392(a)(2) (“A retail supplier’s purchases of the specified system power from an asset-controlling supplier shall use the GHG emissions intensity assigned to the asset-controlling supplier by the CARB for the corresponding data year used for data reporting to CARB pursuant to section 95111(b)(3) of the MRR.”).

Sincerely,

_____/S/_____

Kassandra Gough
Vice President, Government and Regulatory Affairs

_____/S/_____

Diana S. Gallegos
Director, Government and Regulatory Affairs