May 4, 2026

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

Re: Comments on the 15-Day Notice of Modified Text for Proposed Amendments to the Cap-and-Invest Regulation

Dear Ms. Sahota,

The mission of the California Hydrogen Coalition (CHC) is to enable California's transition to zero-emission vehicles by expanding the availability of dependable, convenient, and affordable hydrogen fueling to support the state's emission reduction goals. Our members include some of the world's largest hydrogen producers, along with fuel cell manufacturers, and infrastructure developers that will connect producers with end-users. We submit these comments on the 15-Day Notice of Modified Text for the Cap-and-Invest Regulation, with a particular focus on the hydrogen procurement criteria within the Manufacturing Decarbonization Incentive (MDI) program at §95891(g)(2)(C).

We support 15-day modifications that meaningfully strengthen the MDI program. Expanding eligibility to hydrogen production, creating the Build Up California Reserve account to fund decarbonization through 2035, adopting a 0.8 cap adjustment factor modifier, and recognizing carbon capture and sequestration as an eligible project type collectively reflect a serious commitment to keeping emissions-intensive, trade-exposed manufacturing in California while incentivizing on-site decarbonization. The MDI is, in concept, an innovative complementary policy structure California needs to achieve the AB 1279 carbon neutrality target without driving leakage. We appreciate the substantial work staff have invested in the program.

Our concerns are narrow and specific. They focus on the eligibility criteria for low-carbon hydrogen procurement under §95891(g)(2)(C), where the 45-day proposed text and the 15-day modifications together create a barrier to MDI participation by California manufacturers seeking to procure California-produced low-carbon hydrogen.

First, the 15-day additions to §95891(g)(2)(C)(3), specifically monthly time-matching and local balancing authority deliverability, impose technical requirements that no commodity product currently available in the Western Interconnection can satisfy. These additions also conflict with the position the four California state agencies, including CARB, took in their February 26, 2024, letter to Treasury on the

federal 45V rulemaking, and run counter to the regional energy market direction California codified in AB 825.

We discuss below, with a recommended alternative we believe accomplishes the program's environmental objectives while ensuring the MDI delivers the hydrogen procurement that the Scoping Plan, the SB 1075 evaluation, and the ARCHES strategic framework all contemplate. We close with a request for resolution language at the May 28 hearing directing staff to issue implementing guidance before the September 1, 2026 first MDI application deadline.

Support for the MDI Program

We support the Manufacturing Decarbonization Incentive as a structural addition to Cap-and-Invest. The MDI does two things at once that the allowance price alone cannot do at current and projected levels: it directs incentive value toward on-site decarbonization investments at trade-exposed industrial facilities, and it provides leakage protection during the period in which those investments are being financed and built. Decarbonizing in place is the right policy frame. It keeps emissions reductions and the associated economic activity in California rather than exporting both, and it preserves the in-state industrial capacity needed to support the broader clean energy transition.

The 15-day modifications meaningfully improve the program's ability to do that work. The Build Up California Reserve preserves the environmental integrity of the inventory adjustment while creating a durable pool of incentive value through 2035. The 0.8 cap adjustment factor modifier provides participants with a predictable allocation increment for compliance planning. The recognition of carbon capture and sequestration as an eligible project type aligns the MDI with the realistic technology set for industrial decarbonization in California.

Hydrogen procurement is one of the load-bearing eligible project types, particularly for sectors where electrification is technically constrained or prohibitively expensive, and for process applications where hydrogen functions as a feedstock or reductant rather than a fuel. The 2022 Scoping Plan projects that California will need to scale renewable hydrogen production roughly 1,700 times by 2045 to meet the AB 1279 carbon-neutrality target.[1] The MDI is the principal mechanism within Cap-and-Invest by which covered manufacturing facilities can participate in that scaling on the demand side. The eligibility criteria in §95891(g)(2)(C) determine whether the program delivers that participation in practice. As drafted, those criteria will significantly constrain the universe of eligible procurement, in ways we believe are inconsistent with both the Scoping Plan's projections and the position California's own state agencies took during the federal 45V rulemaking. The remainder of these comments focuses on those specific criteria.

[1]California Air Resources Board. (2022). *2022 Scoping Plan Update*, p. 8. https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf

The Four California Agencies' Letter to Treasury

On February 26, 2024, the chairs of CARB, the California Energy Commission, and the California Public Utilities Commission, along with the Director of the Governor's Office of Business and Economic Development, jointly wrote to Treasury Secretary Yellen and Senior Advisor Podesta on the proposed federal 45V Clean Hydrogen Production Tax Credit rule.[2] The letter is foundational context for these comments because it establishes California's official, signed position on the policy questions now embedded in §95891(g)(2)(C).

The agencies' core argument to Treasury was that California's existing planning, procurement, and market structures already accomplish the goals of the three-pillar framework, and that an alternative compliance pathway should therefore be available for states with mandated clean energy targets. The agencies asked Treasury to consider four facts about California specifically, each of which is now directly relevant to the Modified Text:

> *Any new load added on the electric grid in California will be served only with new renewable and zero carbon resources that will be added to the electric grid.*
>
> *Electric grid connected clean, renewable hydrogen production will serve multiple benefits including, reducing current levels of clean electricity curtailment, maximizing ratepayer benefits and leveraging state planning and procurement processes that incorporate existing electric infrastructure and land use constraints.*
>
> *Existing electric rate and wholesale power market structures in California will fundamentally maximize the sourcing of electricity for these facilities to align with times when renewable and zero-carbon electric generation is available.*
>
> *The clean, renewable hydrogen production facility's electricity demand will be fully accounted for in the state's electric system planning regime, including applicable system-level, state-mandated time-matching and deliverability requirements.*[3]

Treasury responded by adopting the qualifying GHG cap state exception in the final 45V rule, exempting electricity generated in California from the federal incrementality requirement on the basis that California's cap-and-invest program already addresses the leakage concern incrementality is designed to prevent.[4] California's argument prevailed in part because it was correct on the substance: a state with a binding GHG cap, mandatory clean energy procurement targets under the Renewables Portfolio Standard, integrated resource planning requirements that explicitly account for new load, and a

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[2]California Air Resources Board, California Energy Commission, California Public Utilities Commission, & Governor's Office of Business and Economic Development. (2024, February 26). *Comment on Proposed Rule – Credit for Production of Clean Hydrogen, Election to Treat Clean Hydrogen Production Facilities as Energy Property*. https://archesh2.org/wp-content/uploads/2024/02/CA-45V-Letter-2-26-24-Finalpost.pdf

[3]*Id. at 4–5.*

[4]Treasury Department & Internal Revenue Service. (2025). *Credit for Production of Clean Hydrogen and Energy Credit*, 90 Fed. Reg. 2224 (Jan. 10, 2025) (codified at 26 C.F.R. §1.45V-4(d)(3)(i)(C).

wholesale market that dispatches against marginal cost in a high-renewable resource mix does in fact accomplish what the three pillars are designed to accomplish, through different mechanisms.

The Modified Text proceeds in the opposite direction. Rather than relying on the California-specific structures that the four agencies described to Treasury as already addressing time-matching and deliverability concerns, §95891(g)(2)(C) layers state-level versions of those same restrictions on top of the cap-and-invest program. The result is that California-produced hydrogen procured by a California manufacturer using electricity sourced from California's qualifying GHG cap grid would be ineligible for MDI under §95891(g)(2)(C)(3) unless it also satisfies monthly time-matching and local balancing authority deliverability, requirements California's own agencies told Treasury were already addressed by existing state structures.

The contradiction is direct and difficult to reconcile. We respectfully ask the Board to reconcile it in guidance and subsequent rulemaking. The remainder of these comments lay out the specific changes we believe accomplish that reconciliation while preserving the environmental integrity the Board and staff are rightly seeking to protect.

The 15-Day Modifications to §95891(g)(2)(C)(3) Adding Monthly Time-Matching and Local Balancing Authority Deliverability Requirements Should Be Stricken

The 15-day Modified Text retains this pathway but adds two requirements that change its operational character. Renewable electricity must now be matched to hydrogen production on a monthly basis, and it must be sourced from a generation facility located within the same local balancing authority area as the hydrogen production facility. Both additions appear to be drawn from the federal 45V framework, where they exist as the temporal matching and deliverability pillars.

A. Monthly Time-Matching Cannot Be Verified Through Existing Tracking Infrastructure

The Western Renewable Energy Generation Information System (WREGIS) is the sole renewable energy attribute tracking system covering the Western Interconnection. WREGIS issues Renewable Energy Certificates with monthly vintage typically within 90 days following the end of the generation month. This means a producer cannot retire a January-vintage REC against January hydrogen production until approximately April, when the January RECs are created and deposited in their WREGIS account. This is not a structural infeasibility, but it is a meaningful timing reality.

The state-level monthly matching requirement in §95891(g)(2)(C)(3) sits in an awkward middle position. It is more granular than the WREGIS monthly REC vintage in the sense that it appears to require correspondence between the month of renewable electricity generation and the month of hydrogen production, rather than book-and-claim arrangements that WREGIS currently supports. There is no existing tracking system that issues attribute certificates calibrated to the state-level monthly matching standard the Modified Text would impose. Either WREGIS would need to develop new functionality to associate monthly REC retirements with monthly hydrogen production volumes from specific facilities, which is not a build that has been initiated, or CARB would need to develop a parallel verification system

using attestation, metering data, and load profiles. Neither path produces a workable mechanism by September 1, 2026.

We also note that the California Energy Commission's hourly Power Source Disclosure framework under SB 1158 (Becker, 2022) is sometimes cited as evidence that California is moving toward hourly granularity in its electricity accounting. SB 1158 is not a substitute for the tracking infrastructure §95891(g)(2)(C)(3) would require. It is a retrospective annual disclosure regime, effective in 2028, in which retail suppliers with greater than 60,000 customers and 1,000 GWh of load report their hourly procurement and loss-adjusted load aggregated across their entire retail portfolio for the prior calendar year, with calendar year 2027 data due to the CEC by June 1, 2028.[5] SB 1158 does not certify Renewable Energy Certificates, does not track facility-level transactions, does not establish any compliance obligation, and does not produce contemporaneous, transaction-specific tracking. It is an after-the-fact annual disclosure to inform the Power Content Label and to allow the CPUC and POU governing boards to assess GHG performance at the LSE level. The legislative direction it represents is for transparency, not for the kind of facility-level, transaction-level temporal matching that the Modified Text would require.

What California does have, however, is a tested temporal-matching standard for the same fact pattern §95891(g)(2)(C)(3) addresses: low-CI electricity used to produce hydrogen, claimed through book-and-claim accounting in a California regulatory program. The Low Carbon Fuel Standard at Cal. Code Regs. tit. 17, § 95488.8(i)(1)(A) establishes a three-quarter book-and-claim window for low-CI electricity supplied to the grid and used as feedstock to produce hydrogen.[6] The three-quarter rule operates as follows: a quantity of low-CI electricity supplied to the grid in any calendar quarter must be matched to grid electricity used for hydrogen production no later than the end of the third calendar quarter following that supply. Beyond that period, unmatched quantities expire for LCFS reporting purposes. The standard is implemented through quarterly reporting in the LRT-CBTS, REC retirement in WREGIS in a designated LCFS-compliance retirement account, and annual third-party verification under §§ 95500–95503. It is an existing temporal-matching framework, calibrated to existing tracking infrastructure, verified by accredited third parties, and applied to substantively the same activity §95891(g)(2)(C)(3) is regulating.

The LCFS three-quarter rule should also operate as a ceiling on temporal matching for §95891(g)(2)(C)(3), not as a floor. CARB conducted a multi-year rulemaking to develop the LCFS hydrogen pathway provisions, took comments from producers, verifiers, environmental advocates, and load-serving entities, and concluded that three-quarter book-and-claim matching is the environmentally sound temporal matching standard for low-CI electricity used to produce hydrogen in California. The 2026 Cap-and-Invest amendments do not develop a record for any tighter standard. They do not address why a temporal matching tighter than three-quarter is necessary for §95891(g)(2)(C)(3) but not for LCFS hydrogen credit generation, which presents the same environmental concern with respect to

[5] SB 1158, Becker, Chapter 367, Statutes of 2022 (codified at Cal. Pub. Util. Code § 398.6); see also California Energy Commission, Power Source Disclosure Program, Frequently Asked Questions (confirming that hourly reporting under SB 1158 is an annual retrospective disclosure aggregated at the retail supplier portfolio level, not a compliance instrument or facility-level tracking system).

the same activity. Imposing a tighter standard here would represent either a sub silentio determination that the LCFS rulemaking erred on the substance, which the Modified Text does not articulate, or an unexplained departure from the agency's prior position, which is disfavored under California Administrative Procedure Act standards.

We therefore recommend that the implementing guidance confirm two things. First, compliance with the §95488.8(i)(1)(A) three-quarter book-and-claim framework satisfies the temporal matching component of §95891(g)(2)(C)(3). Second, no temporal matching standard tighter than three-quarter book-and-claim is required for §95891(g)(2)(C)(3) eligibility. This preserves the environmental integrity of temporal matching, leverages existing CARB-administered verification systems, eliminates the operational infeasibility of a monthly standard, and aligns the MDI procurement criterion with the LCFS criterion that California's hydrogen producers are already meeting.

B. Local Balancing Authority Deliverability Is More Restrictive Than the Federal Standard

California is served by eight balancing authorities. The California Independent System Operator covers approximately 80 percent of the state's load. The remaining load is served by the Balancing Authority of Northern California, the Los Angeles Department of Water and Power, the Imperial Irrigation District, the Turlock Irrigation District, the Western Area Power Administration's Lower Colorado region, PacifiCorp West, and NV Energy.[7] A hydrogen production facility located in the IID footprint, for example, would be required under §95891(g)(2)(C)(3) to source its renewable electricity from generation facilities also located in IID. If the same facility were seeking eligibility for the federal 45V credit under the deliverability pillar, it would be permitted to source from any generation facility within the California deliverability region established by Treasury under the Department of Energy's National Transmission Needs Study, which encompasses all eight California balancing authorities. The federal rule additionally permits interregional sourcing from generation outside the California region where the producer holds firm transmission rights and the delivery is tracked and verified through a qualified EAC registry.[8] Furthermore, WREGIS does not segment certificates by deliverability region, balancing authority, or any geographic dimension finer than the WECC footprint and deliverability is enforced through the producer's retirement and reporting process rather than through the certificate itself.

This is not a marginal divergence. Each California balancing authority has a different mix of renewable resources, different transmission interconnection patterns, and different historical procurement relationships. Confining MDI hydrogen procurement to within-LBA sourcing eliminates from eligibility a range of California-produced renewable electricity that would unambiguously qualify under the federal deliverability standard the same Modified Text appears to be importing. We do not believe staff

[7]Federal Energy Regulatory Commission. (2024). *2023–2024 Western Interconnection Balancing Authority Reference Map*.

[8]Treasury Department & Internal Revenue Service. (2025). Credit for Production of Clean Hydrogen and Energy Credit, 90 Fed. Reg. 2224 (Jan. 10, 2025) (codified at 26 C.F.R. § 1.45V-4(d)(2)(ix)) (deliverability regions table); id. § 1.45V-4(d)(3)(iii)(B) (interregional transfer pathway).

intended a state-level rule that is more restrictive than the federal three-pillar version. The drafting outcome, however, is exactly that.

C. Deliverability Requirement is Inconsistent with Regionalization and the State's Energy Market Direction

In September 2025, Governor Newsom signed AB 825 (Petrie-Norris, Chapter 116, Statutes of 2025), codifying California's commitment to participate in a multistate regional energy market.[9] AB 825 added Public Utilities Code §399.16.5, directing the CPUC and CEC to ensure the regional market transition does not expand the types of transactions that meet the portfolio content category 1 (PCC1) requirements of §399.16(b)(1) beyond their December 31, 2025 baseline. That careful legislative attention to §399.16(b)(1)'s contours is directly relevant here because §95891(g)(2)(C)(3)(a) expressly invokes §399.16(b)(1) as its source authority. Section 399.16(b)(1), however, requires only that renewable electricity be scheduled "into a California balancing authority… without substituting electricity from another source, into any of the California balancing authorities.[10] It does not require that the underlying generation occur within the same local balancing authority as the load. The 15-day text accordingly imposes a same-LBA restriction that §399.16(b)(1) does not contain.

CARB's Mandatory Reporting Regulation amendments adopted in parallel with the 2026 Cap-and-Invest rulemaking acknowledge this direction. The MRR text adopts "CAISO Markets" terminology to capture both the CAISO and the Extended Day-Ahead Market, recognizing that California's electricity transactions increasingly occur across a broader regional footprint. Section 95891(g)(2)(C)(3) of the Modified Text moves in the opposite direction, requiring that MDI-eligible hydrogen procurement be matched to electricity generation within a single local balancing authority. The internal inconsistency is direct: the same regulatory package contemplates regional market participation in one provision and forecloses regional sourcing for MDI hydrogen procurement in another.

The CEC has been similarly direct. In a June 2025 letter to CARB, then-Vice Chair Siva Gunda urged that the Cap-and-Invest amendments accommodate the regional market structure that AB 825 was then in the process of codifying.[11] The Modified Text does not appear to reflect that input.

D. The Recommended Fix

We recommend that subsections (a) and (b) of §95891(g)(2)(C)(3) introduced in the 15-day Modified Text be stricken. The balance of the 15-day text, including the clarifying reference to "an Eligible Renewable Energy Resource" as defined in §95802 should be added. Specifically, we propose that the provision read:

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[9]Assembly Bill 825 (Petrie-Norris, Chapter 116, Statutes of 2025), adding Cal. Pub. Util. Code §§ 345.1, 345.2, 345.6, & 399.16.5).

[10] Cal. Pub. Util. Code § 399.16(b)(1)(A).

[11]Letter from Siva Gunda, Vice Chair, California Energy Commission, to Liane Randolph, Chair, California Air Resources Board (June 2025).

The hydrogen is produced through the electrolysis of water using 100 percent eligible renewable energy resources, as defined in section 95802.

This formulation accomplishes the program's environmental objective (procurement of hydrogen produced from genuinely renewable electricity) while relying on California's existing statutory and regulatory definitions of qualifying renewable resources. It avoids the geographic contradiction with AB 825's regional market direction. And it aligns with the position the four California state agencies took in their February 26, 2024 letter to Treasury, which the Board can rely upon as a matter of consistency with its own previously stated views.

If staff retain a policy concern about ensuring temporal correspondence between renewable electricity generation and hydrogen production, that concern should be addressed through implementing guidance that aligns §95891(g)(2)(C)(3) with the LCFS three-quarter book-and-claim framework discussed in subsection A above. The LCFS framework is California's settled temporal-matching standard for the same activity, is implemented through existing tracking infrastructure, and is verified annually by accredited third parties. The implementing guidance should confirm that compliance with §95488.8(i)(1)(A) satisfies the temporal matching component of §95891(g)(2)(C)(3) and that no temporal matching standard tighter than three-quarter book-and-claim is required for §95891(g)(2)(C)(3) eligibility.

Request for Board Resolution Directing Staff Implementation of the Recommendations Above Through Implementing Guidance

The concerns identified in these comments require operational specification beyond what the regulatory text alone resolves. We respectfully request that the Board, at the May 28-29, 2026 hearing, adopt a resolution directing staff to issue implementing guidance that incorporates the following:

1. **Renewable electricity sourcing under §95891(g)(2)(C)(3).** Staff guidance shall confirm that compliance with the three-quarter book-and-claim framework at Cal. Code Regs. tit. 17, § 95488.8(i)(1)(A), as implemented through quarterly reporting in the LRT-CBTS, REC retirement in WREGIS, and annual third-party verification under §§ 95500–95503, satisfies the temporal matching component of §95891(g)(2)(C)(3) eligibility, and that no temporal matching standard tighter than three-quarter book-and-claim is required for §95891(g)(2)(C)(3) eligibility. Staff guidance shall further confirm that within-local-balancing-authority deliverability is not a condition of §95891(g)(2)(C)(3) eligibility, consistent with California's existing electric system planning and procurement framework as described in the four California state agencies' February 26, 2024 letter to the U.S. Department of the Treasury and consistent with the regional energy market direction codified in AB 825 (Petrie-Norris, Ch. 116, Stats. 2025).

A resolution of this kind binds the agency to specific implementation outcomes on questions where the regulatory text leaves room for ambiguity. It does so without reopening the regulatory text itself, which we recognize is a practical consideration following a 15-day modified text package. The substantive work required to issue guidance on this timeline is well within staff capacity, and the legal effect of guidance issued under Board resolution is sufficient to give applicants the certainty they need to commit

decarbonization capital. The alternative, in which each of these questions is litigated through individual MDI application disputes after September 1, 2026, would impose substantial administrative burden on staff and substantial commercial risk on participants without any corresponding programmatic benefit.

We recognize that some of the substantive direction represents a different operational outcome than what the Modified Text contemplates on its face. The resolution mechanism allows the Board to confirm those operational outcomes through implementing guidance without altering the adopted regulatory text, which we believe is the cleanest procedural pathway for both the agency and the regulated community.

Conclusion

The Manufacturing Decarbonization Incentive program is an appropriate complementary structure for the policy problem. It directs incentive value toward on-site decarbonization at trade-exposed industrial facilities and provides leakage protection during the period in which those investments are financed and built. The hydrogen procurement pathway is, in turn, an appropriate and appreciated complementary structure within MDI for the substantial portion of California industrial decarbonization that will depend on low-carbon hydrogen as a fuel, feedstock, or reductant. The Scoping Plan's projection that California must scale renewable hydrogen production roughly 1,700 times by 2045 will not be met through the allowance market alone, and the MDI procurement pathway is the principal mechanism by which Cap-and-Invest can support the demand side of that scaling.

We appreciate the Board's and staff's consideration of these comments and stand ready to provide additional technical detail or operational input on any of the matters addressed.

Respectfully submitted,

/s/

Teresa Cooke
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California Hydrogen Coalition