

Quinn Rickert Comment on the Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR)

February 12, 2026

To: The Executive Officer and Members of the California Air Resources Board (CARB)

Thank you for the opportunity to provide comments regarding the proposed amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR). I am writing to express deep concern regarding several of the stricter provisions introduced in this regulatory package.

By expanding the scope of reporting to early-stage green technologies, heightening administrative burdens through stricter verification rules, eliminating minimum reporting thresholds, and imposing rigid default loss factors on energy storage systems, CARB risks inadvertently stifling the very clean-energy innovation it seeks to promote. Academic literature repeatedly demonstrates that excessive administrative complexity acts as a major bottleneck to the diffusion of renewable energy technologies. I respectfully urge the Board to reconsider the following stringent elements of the proposed MRR amendments.

1. Expanding Applicability to Emerging Green Technologies

The proposed amendments significantly broaden the MRR's applicability by encompassing biorefineries regardless of their emission levels, as well as importers and producers of electrolytic hydrogen at a low 500-metric-ton threshold. Subjecting these nascent clean energy sectors to the same rigorous compliance frameworks as established legacy fossil fuel operations risks creating insurmountable barriers to entry.

Imposing heavy administrative protocols on early-stage clean energy technologies can significantly deter their adoption. Research demonstrates that the administrative weight of environmental regulations increases initial project expenses and introduces delays, which is especially detrimental to new initiatives and organizations lacking extensive compliance experience (Newkirk, Watson, & Robinson, 2022). For the green hydrogen sector specifically, researchers caution that multi-layered certification schemes and broad carbon accounting boundaries carry substantial operational costs related to data collection, auditing, and trading fees, which can be particularly damaging to smaller hydrogen producers (Abad & Dodds,

2020; White et al., 2021).

Furthermore, applying strict carbon limitations and associated administrative risks to biorefineries can negatively affect their production planning and overall financial viability (Cheng & Anderson, 2016). Extended registration timelines and complex regulatory procedures are known to restrict the scalability and success of clean energy startups (Podosynnikov, Kolotilina, & Kochnieva, 2024). Instead of imposing fragmented and burdensome regulations that stall the transition to a low-carbon hydrogen economy and advanced biofuels (Drespel, 2025; Nurdiawati & Urban, 2022), CARB should pursue simplified compliance pathways that have been empirically shown to accelerate the growth of sustainable energy ventures (Halynskyi, Lytiuha, & Telizhenko, 2024).

2. Stricter Verification and Conflict of Interest (COI) Rules

The proposed amendments seek to tighten the rules surrounding third-party verification by capping a verification body's services to six consecutive *verifications* for a given entity (in addition to the existing six-year limit) and expanding the definition of a "high" conflict of interest to exclude verifiers who provided Low Carbon Fuel Standard (LCFS) consulting within the past five years.

These strict limitations will artificially shrink the pool of qualified, specialized environmental auditors, leading to increased compliance costs and logistical bottlenecks for reporting entities. Inflexible and excessive regulatory frameworks are widely recognized as primary obstacles to the widespread deployment of renewable energy technologies (Juszczak, Juszczak, Juszczak, & Takala, 2022; Obuseh, Eyenubo, Alele, Okpare, & Oghogho, 2025). Stakeholders in other mandatory greenhouse gas reporting programs have highlighted how heavy administrative demands and strict reporting rules can disproportionately harm smaller enterprises (Lodhia & Martin, 2011). Furthermore, introducing regulatory uncertainty and highly burdensome administrative procedures often works against government climate objectives by deterring necessary investments (Brown & Chandler, 2008). Streamlining environmental auditing and assessment procedures, rather than complicating them with exclusionary COI rules, is essential to facilitate clean energy development while minimizing bureaucratic friction (Schumacher, 2017).

3. Removal of Minimum Reporting Thresholds for Flaring

Under the proposed rules, CARB is eliminating previous flow-rate exemptions for startup, shutdown, and malfunction (SSM) flare events, requiring facilities to log

and report every single instance, no matter how negligible the volume of gas.

Eliminating *de minimis* reporting thresholds creates an outsized administrative burden that yields diminishing returns for actual environmental oversight. When establishing emissions accounting schemes, it is crucial for policymakers to balance the desire for absolute precision against the real-world financial costs of continuous data capture and compliance (Abad & Dodds, 2020). If reporting thresholds are entirely removed, the resulting hyper-granular reporting requirements can lead to unwelcome operational and economic consequences without proportionately benefiting the climate (Lodhia & Martin, 2011). Forcing facilities to track microscopic emission events diverts valuable operational resources away from actual decarbonization efforts and toward paperwork, ultimately delaying the practical implementation of new, innovative energy systems (Jørgensen, 2005).

4. Punitive Default Loss Factors Will Discourage Energy Storage Deployment

Finally, the amendments propose strict default efficiency loss factors (ELF) for Energy Storage Systems (ESS), applying a 1.18 multiplier to battery storage and a 3.00 multiplier to electrolytic hydrogen storage to account for efficiency losses.

While it is a physical reality that energy storage systems experience efficiency losses during charging and discharging—with lithium-ion grid batteries typically demonstrating round-trip efficiencies of 75 to 80 percent (Faunce, Prest, Su, Hearne, & Iacopi, 2018)—embedding rigid penalties for these mechanical losses into the regulatory framework threatens to discourage the deployment of critical grid infrastructure. Inefficiencies in storage can indeed be a source of emissions if the stored energy is fossil-generated (Revesz & Unel, 2018). However, stringent renewable energy policies do not automatically spur innovation in complementary technologies like energy storage; they must be actively supported by targeted mechanisms rather than mere penalties (Stevens, Tang, & Hittinger, 2023).

When regulations strictly penalize the inherent inefficiencies of storage without offering complementary value streams that reward storage for enabling broader grid decarbonization, they risk making multi-purpose battery systems entirely uneconomical (Müller et al., 2017; Bilich, Spiller, & Fine, 2019). Legal and regulatory obstacles that hinder the operation of energy storage must be reformed to encourage open market access and investment, rather than punishing their operation with blunt multipliers (Bhatnagar, Currier, Hernandez, Ma, & Kirby, 2013; Nouri et al., 2022).

Conclusion

California must ensure its regulatory frameworks remain flexible, pragmatic, and conducive to innovation. The proposed stricter amendments to the MRR lean too heavily toward administrative rigidity. By over-regulating emerging hydrogen and biofuel markets, shrinking the auditor pool, removing practical reporting thresholds, and financially penalizing energy storage, CARB risks stifling innovation.

I strongly urge the Board to revise these provisions to reduce the administrative burden on reporting entities and foster an environment that rewards, rather than restricts.

Thank you for your time and consideration of these comments.

Sincerely,

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