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**CRS Comments on Pre-Rulemaking Amendments to the Power Source Disclosure Program**

*Additional submitted attachment is included below.*



November 19, 2024

California Energy Commission (CEC)  
Docket Unit, MS-4  
Docket No. 21-OIR-01  
715 P Street, Sacramento, California 95814

**RE: COMMENTS OF CENTER FOR RESOURCE SOLUTIONS (CRS) ON RULEMAKING TO AMEND REGULATIONS GOVERNING THE POWER SOURCE DISCLOSURE (PSD) PROGRAM.**

Dear CEC Staff:

CRS appreciates this opportunity to submit comments on the 45 Day Updated Language Express Terms released October 4, 2024, in the Rulemaking to Amend Regulations Governing the Power Source Disclosure Program. Our comments pertain specifically to maintaining current Product Content Label (PCL) disclosures for “total power content” and “unspecified power,” use of the term “avoided emissions,” using residual mixes to assign emission factors to unspecified imports, and renewable energy certificate (REC) retirement for future hourly product specific reporting.

**BACKGROUND ON CRS AND GREEN-E®**

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy and has been providing renewable energy and carbon policy analysis and technical assistance to policymakers and other stakeholders in California for over 25 years. CRS also administers the Green-e® programs. For over 25 years, the Green-e® Energy program has been the leading independent certification for voluntary renewable electricity products in North America. In 2022, the Green-e® Energy program certified retail sales of over 114 million megawatt-hours (MWh), serving over 1.3 million retail purchasers of Green-e® certified renewable energy, including over 314,000 businesses.<sup>1</sup>

**CRS COMMENTS**

1. CRS recommends maintaining the “total power content” and “unspecified power” disclosures on the power content label (PCL) as below:

- *“Total power content’ includes retail sales to customers, other electricity uses that support retail electric service, and energy losses.”*

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<sup>1</sup> See the 2023 (2022 Data) *Green-e® Verification Report* here for more information: <https://resource-solutions.org/g2023/>.

- *“Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.”*

The inclusion of the “Total Power Content” column, while containing relevant information, may be confusing to customers without information stating that this column is not solely representative of a customer’s portfolio. Rather, it represents all power sources and associated emissions that a retail supplier used to cover its total annual loss-adjusted load. The inclusion of this information will prevent customers from misconstruing the “Total Power Content” column as representative of a specified product (resource mix and associated emissions) delivered to them. Additionally, maintaining the definition of “unspecified power” is important because it clarifies that some electricity is purchased through open market transactions without a direct link to a specific generation source. This transparency helps customers distinguish between electricity with known origins and power sourced from the broader market, supporting a clearer understanding of their energy mix.

2. CRS recommends using a different term for “avoided emission” factor, such as “Displaced Hourly Renewables” or “Hourly Null Power from Renewables.”

California’s PSD program represents state leadership by providing important electricity use information to end-use customers and market participants. As the PSD program also serves as a point of reference for state policy makers, the program should choose GHG terminology carefully. The current Express Terms section 1392(c)(7)(B) refers to “avoided emissions” as being attributed to a retail supplier to the extent that its oversupplied resources reduced the hourly GHG emissions factor of unspecified power, and those “avoided emissions” should not alter or adjust a retail supplier’s GHG emissions intensity.<sup>2</sup>

Avoided emissions is not the appropriate term to use for this value. Rather, avoided emissions<sup>3</sup> is a commonly used term representing the net change in emissions on the grid due to generation, meaning it measures the systemic emissions impact or consequences of producing electricity. Avoided emissions of generation are typically calculated as the difference between the direct emissions of the generation likely displaced by renewable energy generation (usually generation from marginal or non-baseload resources) and the direct emissions of the generation. In contrast, in the context of section 1392(c)(7), the term “avoided emissions” is being used to refer to the oversupply of hourly renewable emissions being reassigned. Referring to this as “avoided emissions” will be confusing to customers and should be avoided. A more appropriate term for emissions assigned to renewables in oversupplied hours would be “displaced hourly renewables” or “hourly null power from renewables.”

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<sup>2</sup> Rulemaking to Amend Regulations Governing the Power Source Disclosure Program, Section 1392(c)(7)

<sup>3</sup> See *Corporate and Voluntary Renewable Energy in State Greenhouse Gas Policy An Air Regulator’s Guide*. (pg.4). Available at: <https://resource-solutions.org/learn/policy-solutions/>.

3. In addition to being renamed, CRS recommends that “avoided emission” should not be used to alter or adjust a retail supplier’s GHG emissions intensity or be attributed directly to a supplier

The emissions benefit of clean oversupply is already incorporated into the emissions factor for unspecified power, which is used to cover undersupply hours for retail suppliers. When clean or low-emission oversupply is added to the grid, it reduces the overall emissions intensity of unspecified power, indirectly benefiting all users of unspecified power rather than just the supplier responsible for the oversupply. This approach ensures that the environmental benefit of clean oversupply is distributed across the grid in a way that aligns with actual grid operations and emissions impacts.

Attributing avoided emissions separately to the original retail supplier would be duplicative, as the emissions benefit has already been reflected in the unspecified power emissions factor. This could also lead to double-counting of emissions reductions, artificially lowering the supplier’s emissions intensity beyond what is accurate. By keeping avoided emissions solely within the unspecified power calculation, the PSD program can maintain accurate, transparent emissions accounting without overstating the impact of clean oversupply on individual suppliers.

4. CRS recommends using a residual mix emissions factor, or selecting a factor from the hierarchy outlined below, to accurately reflect the emissions associated with both hourly and annual unspecified electricity imports.

While the definition listed in section 1391 for “unspecified sources of power” or “unspecified power” or “unspecified electricity” is accurate in that it consists of dirtier energy (i.e., natural gas and other fossil fuels) that has not already been contractually allocated, the definition fails to accurately identify this unallocated power/electricity by a precise data category. Unspecified power should be assigned an emissions factor that considers all or most contractual transactions and removes those from the equation.

The emissions factor for hourly and annual unspecified purchases should represent the electricity delivered at the retail level. Unspecified power should be representative of its originating market, reflecting the electricity utilized for retail delivery rather than simply assuming the resource running on the margins. In cases where specific supplier information regarding the unspecified purchase is unavailable, utilizing a regional residual mix becomes necessary<sup>4</sup>. This mix should encompass all unclaimed generation/attributes within the organized wholesale market or eGRID subregion from which the electricity is imported or where the purchase is made.

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<sup>4</sup> Guidance for Calculating a Residual Mix, 2024. Center for Resource Solutions (CRS). Available at: <https://resource-solutions.org/document/030624/>

In instances where regional residual mixes are not accessible, the following hierarchy of data should be employed as an alternative:

<b>Data</b>	<b>Source</b>	<b>Description</b>
Type A Residual Mix <sup>5</sup>	Regional generation attribute tracking systems, federal databases (e.g., eGRID, EIA)	Most accurate, all specified transactions removed
Regional fossil-only resource mixes and emissions factors	Federal databases (e.g., eGRID, EIA)	Most conservative, all renewables and other clean energy assumed to be transacted and removed
Regional voluntary-only residual mixes (e.g., Green-e <sup>®</sup> Residual Mixes)	Green-e <sup>®</sup> program	Incomplete, only removes voluntary specified transactions, double counts non-voluntary specified transactions
Regional generation adjusted for imports and exports	Federal databases (e.g., eGRID, EIA)	Double counts specified transactions, reflects regional imports and exports to approximate areas of consumption
Regional grid average	Federal databases (e.g., eGRID, EIA)	Double counts specified transactions, does not represent consumption

To address the absence of an established Type A residual mix data source, we recommend that the CEC take direct action to engage with WREGIS, the California Independent System Operator (CAISO), and other relevant regional markets to develop methodologies for calculating residual mixes. These efforts should focus on leveraging existing data infrastructure to produce residual mix emissions factors that accurately represent unallocated generation and align with California’s emissions accounting principles.

As an interim step, CRS offers to partner with the CEC to develop a provisional residual mix emissions factor that can be utilized while more comprehensive tracking is developed. This interim emissions

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<sup>5</sup> Type A Residual Mix data, as defined in the CRS publication *Guidance for Calculating a Residual Mix*: "Type A is a mix of only all unclaimed or unsold electricity generation attributes in a given time period, or from which all transacted attributes and specified sales during that time period have been removed. The geographic boundary for Type A depends on the use case, either being the same market as the reporting entity or the market from which electricity is imported"

factor should draw on currently available datasets, such as CAISO and WREGIS data to represent the best-available approximation of unclaimed generation emissions.

5. CRS recommends that the CEC request that the Western Renewable Energy Generation Information System (WREGIS) expand to track all generation and all resources, to calculate a regional residual mix, and track on a more granular level.

Although the proposed updates to hourly PSD reporting will only provide aggregated data at the LSE level rather than product- or portfolio-specific hourly information, there is increasing demand for granular, hourly data specific to individual products or portfolios. Enhancing WREGIS's ability to track all resources in greater detail would support the disclosure of such information in the future. Expanding WREGIS tracking to include all-generation data with an hourly breakdown would enable the PSD Program to use that data to offer hourly portfolio-specific disclosures that accurately reflect REC purchases. This improvement would enable legitimate renewable energy end-use claims, ensuring that RECs are accurately matched with actual usage patterns. By using hourly WREGIS retirement data, the CEC could provide a more precise reflection of renewable energy contributions across all hours, aligning emissions with both oversupplied and undersupplied periods at the product level. This level of detail would enhance transparency and accountability in renewable energy reporting, supporting California's progress toward its ambitious emissions reduction goals and facilitating more robust claims of renewable energy use by end consumers.

Sincerely,

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Lucas Grimes  
Manager, Policy