

DOCKETED

Docket Number:	16-OIR-05
Project Title:	Power Source Disclosure - AB 1110 Implementation Rulemaking
TN #:	229688
Document Title:	Initial Statement of Reasons
Description:	N/A
Filer:	Gregory Chin
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	9/6/2019 2:28:41 PM
Docketed Date:	9/6/2019

INITIAL STATEMENT OF REASONS

Modification of Regulations Governing the Power Source Disclosure Program

California Energy Commission
Docket No. 16-OIR-05
September 2019

I. PROBLEM STATEMENT AND ANTICIPATED BENEFITS (Government Code section 11346.2(b)(1))

INTRODUCTION

The Power Source Disclosure (PSD) program was established by Senate Bill (SB) 1305 (Stats. 1997, ch. 796) in an effort to provide retail electricity consumers “accurate, reliable, and simple to understand information on the sources of energy that are used to provide electric services.”¹ In 2016, the California Energy Commission (Energy Commission) adopted modifications to the regulations to incorporate statutory changes to program rules and reporting requirements as required by Assembly Bill (AB) 162 (Stats. 2009, ch. 313) and AB 2227 (Stats. 2012, ch. 616).

Under the current PSD Program, retail suppliers are required to annually disclose to their retail consumers the mix of sources used to provide electricity service during the previous calendar year. In those instances where a retail supplier offers consumers more than one electricity portfolio, the retail supplier is to provide information specific to each electricity portfolio offered. In addition, retail suppliers are required to report to the Energy Commission their gross purchases of electricity by source, resales of electricity, and the net electricity by source used to serve retail load for the previous calendar year. The Energy Commission uses this information, in part, to generate California’s total system power mix. Retail suppliers then disclose to their consumers the power mix associated with their electricity portfolios, as well as California’s overall power mix on an annual Power Content Label. Providing both the portfolio information and California’s total system fuel mix allows consumers to compare their electricity portfolio to other portfolios offered by the retail supplier, as well as to California’s total system power mix.

AB 1110 (Stats. 2016, ch. 656) modified the PSD Program and Power Content Label by requiring retail suppliers to disclose the greenhouse gas (GHG) emissions intensity (the rate of emissions per unit of electricity) associated with each electricity portfolio beginning in 2020 for the 2019 reporting year. AB 1110 also requires the Energy Commission, among other things, to determine a format for disclosing unbundled renewable energy credits (RECs) as a percentage of annual retail sales.

To implement AB 1110, the Legislature tasked the Energy Commission with tasks including the following:

- Adopt a method, in consultation with the California Air Resources Board (CARB), for

¹ SB 1305 (Stats. 1997, ch. 796), section 398.1, subd. (b).

calculating the GHG emissions intensity corresponding to each purchase of electricity by a retail supplier to serve its consumers.

- Calculate the GHG emissions intensity associated with statewide retail electricity sales based on the GHG emissions for total California system electricity.
- Rely on the most recent verified GHG data while ensuring that GHG emissions intensity factors for electricity from specified and unspecified sources are available to retail suppliers with advance notice to permit timely reporting.
- Adopt guidelines for the reporting and disclosure of the GHG emissions intensity associated with retail sales on the Power Content Label.
- Adopt guidelines for the reporting and disclosure of unbundled RECs on the Power Content Label.
- Establish guidelines for adjusting the GHG emissions intensity for a reporting year for any local publicly owned electric utility (POU) that demonstrates it generated quantities of electricity in previous years in excess of its total retail sales and wholesale sales from specified sources that do not emit any GHGs.

On November 15, 2016, the Energy Commission adopted an Order Instituting Rulemaking to initiate a rulemaking proceeding to consider modifications to its regulations that implement the PSD Program. The Energy Commission held a workshop on February 21, 2017, to initiate pre-rulemaking and solicit input on several scoping questions. On July 14, 2017 and February 1, 2018, the Energy Commission held workshops to present draft implementation proposals. On March 6, 2019, the Energy Commission held a workshop to present draft regulatory language.

In evaluating modifications to the existing PSD regulations, the Energy Commission considered the legislative intent and requirements of the PSD statutes, as well as the more recent statutory changes provided under AB 1110. The Energy Commission also considered other renewable energy and GHG emissions accounting frameworks established by California.

Renewables Portfolio Standard Program

California statutes established the Renewables Portfolio Standard (RPS) Program² that requires retail suppliers in California to procure increasing amounts of renewable energy to reach 60 percent of retail sales of electricity by 2030. The Energy Commission and the California Public Utilities Commission (CPUC) implement the RPS Program through regulations, guidelines, and decisions.

The RPS Program uses RECs to track and substantiate renewable energy claims made by retail electricity suppliers toward multi-year compliance periods, creating precedent for California's accounting system for renewable energy.³ RECs are issued for every megawatt hour (MWh) of

² [Public Utilities Code section 399.11, et seq.](#)

³ SB 107 (Simitan, Chapter 404, Statutes of 2006) codified RECS as compliance instruments under California's RPS program.

electricity generated and delivered by an eligible renewable electric generating facility. RECs from facilities certified to participate in California's RPS Program are eligible to be used by retail electricity suppliers to meet their RPS Program procurement requirements, provided they meet all eligibility requirements.⁴ Subject to exceptions, the RPS Program provides that RECs include all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource.⁵

The RPS Program further recognizes that retail electricity suppliers should be able to procure a balanced portfolio of resources considering financial and operational factors and that electricity products may differ by their impacts on the operation of the grid.⁶ To implement the requirement for a balanced portfolio of resources, the RPS Program differentiates RECs based on contractual arrangements and delivery characteristics. The requirements for each classification are detailed in the *Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities*.⁷

Greenhouse Gas Emissions

California has also established goals for the reduction of GHG emissions and programs to accomplish these goals. Per AB 32 (Stats.2006, ch. 488)⁸, CARB maintains an economy-wide GHG inventory for California that is consistent with the practices of the Intergovernmental Panel on Climate Change (IPCC) to allow for comparison of statewide GHG emissions with those at the national level and with other international GHG inventories. Statewide GHG emissions calculations use many data sources, including data from other California and federal agencies. The MRR emissions data is the primary data used in the GHG inventory for the electricity sector, (in-state generators and imported power).

Through MRR, CARB implemented GHG emissions reporting standards for several entity types, including electricity generating facilities and electricity importers, as required by AB 32. A summary of GHG emissions data reported under MRR is made public each year, and the data serves as the foundation of CARB's Cap-and-Trade Program and supports the California GHG Emission Inventory. CARB further utilized MRR's GHG emissions accounting method in determining sectoral emissions reduction targets for retail suppliers as required by Senate Bill (SB) 350 (Stats. 2015, ch. 547).

MRR established California's standard reporting and verification processes for GHG emissions. It established verifiable and standardized measurement methods, uses reported and verified data

⁴ <https://efiling.energy.ca.gov/getdocument.aspx?tn=217317>

⁵ Public Utilities Code 399.12(h)(2).

⁶ Public Utilities Code, section 399.16, subd. (a).

⁷ <https://www.energy.ca.gov/2016publications/CEC-300-2016-002/CEC-300-2016-002-CMF.pdf>

⁸ Also known as the California Global Warming Solutions Act of 2006.

to calculate GHG emissions intensities of specific generators, and establishes criteria to determine the GHG emissions of electricity imports attributable to California entities.

MRR does not use RECs for GHG emissions accounting and does not allow RECs to adjust reported GHG emissions.⁹

PROBLEM STATEMENT

Through AB 1110, the legislature made clear there is a need in California for reliable, accurate, timely, and consistent information regarding fuel sources for electric generation offered for retail sale in California and the associated GHG emissions. It also made clear that under the Energy Commission's PSD Program, entities offering electric services in California must disclose accurate, reliable, and simple to understand information on the sources of energy, and the associated GHG emissions, that are used to provide electric services.

The lack of such reliable, accurate, timely, simple to understand, and consistent information prevents California consumers from understanding the impacts associated with their personal electricity usage or making informed choices when more than one electricity portfolio is available to them. This is the problem the Energy Commission is attempting to address with these regulations.

AB 1110 directs the Energy Commission to take several implementing actions including consulting with CARB, to address the lack of information specific to GHG emissions associated with electricity products and establishing a methodology, using the most recently verified GHG emissions data, for the calculation of GHG emissions associated with each purchase of electricity by a retail supplier to serve its consumers. AB 1110 also directs the Energy Commission to establish a format for the disclosure of the portion of annual sales derived from unbundled RECs (that do not include the delivery of any electricity), which would address the problem of consumers lacking information to distinguish such credits from other electricity products that are bundled with electricity. For instance, as allowed under California's RPS Program, retail electricity suppliers have associated unbundled RECs with a portion of their annual renewable sales, thereby increasing the renewable percentage of electricity portfolios as shown on Power Content Labels. While the procurement of a limited portion of unbundled RECs is allowed for compliance with the RPS Program, questions have been raised as to whether the purchase of unbundled RECs serves to reduce the actual energy intensity of a given portfolio, given that there is no concomitant electricity purchase and other electricity, most often non-renewable, must be purchased to serve the customer. .

Also, in implementing AB 1110, the Energy Commission had to navigate additional problems stemming from trying to distill complicated information with myriad complexities into a simple, easy-to-understand label, such as: what emissions factor to attribute to imported electricity; how to treat electricity purchased through the Energy Imbalance Market; how to apportion electricity purchased by the independently owned utilities through the cost allocation mechanism, which is

⁹ MRR FSOR, 2011, pg. 108, <https://www.arb.ca.gov/regact/2010/ghg2010/mrrfsor.pdf>

made for the benefit of the grid, but for which the other retail suppliers have no role in the decision of what resources are actually purchased; how to treat contracts entered into before these regulations came to fruition; whether or not it was more important for the fuel mix and GHG emissions calculation to rely on an identical construct, or whether these portions of the label should match the existing state programs with which they are most closely aligned; whether the power content labels of private one-off contracts entered into by retail suppliers and a minimal number of customers should be distributed to all customers, or just those involved in the contract; and whether to extend the ability of retail suppliers that are also public agencies to attest to all of their products instead of just the one that was previously allowed, among other issues.

Finally, with several years of program implementation experience, the Energy Commission and PSD Program participants have identified opportunities to improve and clarify other elements of the PSD Program. The proposed amendments update existing provisions to incorporate changes to the existing regulations to clarify definitions and references, provide consistency in reporting deadlines, and update audit requirements.

In meeting its obligations under AB 1110, the Energy Commission must harmonize the PSD Program requirements, to the extent reasonable, feasible, and consistent with good public policy, with the related but distinct assumptions, objectives and methodologies of the RPS Program and MRR, to ensure the Power Content Labels on which the required disclosures will be made are in fact reliable, accurate, timely, and consistent.

BENEFITS

The benefits expected from the proposed regulations include ensuring that consumers have reliable, accurate, timely, consistent, and simple to understand information about the electricity procured to serve their demand, including percentages of renewable energy and other fuel types, the greenhouse gas emissions intensity of the portfolio offered by their retail supplier, and the amount of unbundled RECs associated with the sales of the portfolio. The regulations will also allow consumers to compare the fuel types and GHG emissions intensity of their electricity portfolio to the values of California's Total System Power Mix. Disclosure of the GHG emissions intensities will better inform California consumers about the climate impacts of the electricity sources serving them and the methodology proposed will ensure that all retail suppliers are calculating and disclosing their emissions consistently. Additionally, the specific disclosure of unbundled RECs will improve the accuracy of the Power Content Label and help consumers distinguish unbundled RECs procured as a component of an electricity portfolio from the electricity serving the consumer's load. The additional information on Power Content Labels will provide consumers more information to support their choices in electric services. Finally, the proposed modifications will also clarify existing requirements, which will support consistent reporting and reduce the potential for misunderstanding by reporting entities.

II. STATEMENT OF SPECIFIC PURPOSE AND NECESSITY OF EACH SECTION OF THE PROPOSED REGULATIONS (Government Code section 11346.2(b)(1))

Title & Code Reference

Article 5 was retitled from “Electricity Generation Source Disclosure” to “Power Source Disclosure” for clarity. The program is referred to as Power Source Disclosure by the Energy Commission and by stakeholders.

Section 1391 Definitions

The Energy Commission deleted all subdivision headings in this section. Subdivision headings are unnecessary because all terms in this section are organized alphabetically.

Asset-controlling supplier

This subdivision defines an asset-controlling supplier, which is necessary to reflect common industry usage of a term and to be consistent with California terminology regarding GHG emissions accounting.

Balancing authority

The modification to this subdivision deletes the language “located in California” to distinguish this definition from the proposed definition of “California balancing authority.” This modification is necessary to clarify program terminology and avoid ambiguity.

Biogenic fuels

This subdivision defines a common industry term, which is necessary to ensure clear understanding of certain provisions of these regulations.

California balancing authority

This subdivision defines “California balancing authority,” which is necessary to establish consistent terminology with California programs and with industry usage.

Carbon dioxide equivalent

This subdivision defines a standardized GHG emissions accounting unit, which is necessary to establish a definition of a common GHG emissions accounting term.

Cogenerator

This subdivision defines a particular subclass of generator, which is necessary to establish a definition of a common GHG emissions accounting term.

Custom electricity portfolio

This subdivision defines a custom electricity portfolio, which is necessary to establish program terminology in a manner that reflects industry practices.

Delivered electricity

This subdivision defines delivered electricity, which is necessary to establish program terminology in a manner that reflects industry practices and is consistent with other California programs, including the RPS Program and MRR.

E-tag

This subdivision defines an electricity tracking mechanism, which is necessary to establish program terminology in a manner that reflects industry usage and that is consistent with other California programs including the RPS Program and MRR.

Electricity from unspecified sources of power

This subdivision was moved from Section 1391(w) of the preexisting regulations. Modifications to this subdivision are necessary to clarify that the term is synonymous with the common industry term “unspecified power” and to align the definition with the term defined under Public Utilities Code section 398.2(e).

Electricity portfolio

This subdivision clarifies the name of a pre-existing program term to reflect that multiple terms used to the same effect under Public Utilities Code 398.1-398.5 (electricity portfolio, electricity offering) are synonymous with electric service product. Going forward, these regulations will use the term *electricity portfolio*. Deletions in the first sentence of the pre-existing definition are necessary to reflect updated program terminology.

This subdivision also adds additional conditions for distinguishing between electricity portfolios, which are necessary to avoid ambiguity and ensure accurate and consistent reporting.

Eligible firmed-and-shaped product

This subdivision defines an RPS-eligible electricity product type, which is necessary to make specific certain provisions of these regulations.

Eligible renewable

This subdivision was amended to simplify the definition and ensure that it does not foreclose the addition of future technologies, which is necessary to ensure the regulations can accommodate anticipated changes in the generation of renewable electricity.

Energy Information Administration

This subdivision defines a federal agency, which is necessary to avoid ambiguity.

Fuel type attribute

Modifications to this subdivision clarify internal references, which are necessary to reflect other modifications to the regulation.

Fuel mix

This subdivision defines the fuel mix, which is necessary to establish a program term in a manner that is consistent with statutory usage under Public Utilities Code section 398.4.

Generating facility output

This subdivision was deleted because the term is no longer referenced under these regulations.

GHG emissions intensity of a generator

This subdivision defines the GHG emissions intensity of a generator, which is necessary to establish a program definition of a statutory concept under Public Utilities Code section 398.4(k)(2)(A) in a manner that is consistent with GHG emissions accounting practices by California.

GHG emissions intensity of an electricity portfolio

This subdivision defines the GHG emissions intensity of an electricity portfolio, which is necessary to establish a program definition of a statutory concept under Public Utilities Code section 398.4(k)(2)(1).

Independent System Operator

This subdivision was deleted because the term is no longer referenced under these regulations.

Large hydroelectric

The modifications to this subdivision clarify the definition of a program term, which is necessary to distinguish between eligible and large hydroelectric generators to avoid ambiguity.

Mandatory Reporting Regulation

This subdivision defines a set of California regulations, which is necessary to avoid ambiguity.

Local publicly owned electric utility that does not utilize the Independent System Operator

This subdivision was deleted because the term is no longer referenced under these regulations.

Net electricity generated

This subdivision was deleted because the term is no longer referenced under these regulations.

Out of state power

This subdivision was deleted because the term is no longer referenced under these regulations.

Pool

This subdivision was deleted because the term is no longer referenced under these regulations.

Product-specific written promotional materials that are distributed to consumers

This subdivision was modified to reflect updated terminology.

Renewable energy credit

This subdivision defines a renewable energy tracking instrument, which is necessary to establish program terminology in a manner that is consistent with the statutory definition under Public Utilities Code section 399.12(h)(1).

Retail sales

This subdivision defines retail sales, which is necessary to establish program terminology to interpret statutory references to retail sales or annual sales and to reflect the definition under RPS.

Retail supplier

Modifications to this subdivision update terminology and specify electricity provider subclasses included under the definition. These modifications are necessary to establish program terminology consistent with Public Utilities Code section 398.2(b) and to avoid ambiguity.

Specified purchase

Modifications to this subdivision reflect updated program terminology, which is necessary to avoid ambiguity.

An additional provision was added to clarify that specified purchases must be substantiated through purchase agreements made in advance of the generation of the purchased electricity, which is consistent with preexisting program guidance and common industry practice. This added provision is necessary to 1) avoid ambiguity and 2) differentiate contracted purchases of a specific resource from open market transactions of unspecified power, in which electricity might be traceable to a specific resource through e-tags without any contractual intention on the part of the buyer to procure electricity from that resource. Without a purchase agreement in place prior to the purchase of electricity from the market, one purchaser could by happenstance receive e-tags from a resource with low GHG emissions while another purchaser might randomly receive e-tags from a resource with high GHG emissions. Retail suppliers cannot claim specific resources, or attributes of those resources, unless they intentionally purchased those specific

resources; therefore, electricity purchased from the open market can only be claimed as unspecified power, regardless of whether an e-tag can be used to trace to a specific source.

Specified system power of an asset-controlling supplier

This subdivision defines a specific type of electricity procurement, which is necessary to establish program terminology in a manner that is consistent with common industry usage.

System Operator

This subdivision was deleted because the term is no longer referenced under these regulations.

Unbundled REC

This subdivision defines a specific type of electricity product, which is necessary to establish program terminology in a manner that is consistent with common industry usage.

Unspecified sources of power

This subdivision was moved to reflect the modified term of “Electricity from unspecified sources of power” under the alphabetical organization of this section.

Western Electricity Coordinating Council

This subdivision defines a governing body, which is necessary to avoid ambiguity.

Section 1392(b)(3)(C)(1)(f)

This provision identifies a method for categorizing other eligible renewable fuel types authorized by the RPS Program pursuant to Public Utilities Code 398.4(h)(6).

As explained under the definition of “Eligible Renewable,” these modifications are necessary to allow the program to classify other eligible renewable fuel types developed in the future that meet California’s RPS Program requirements.

New Section 1393 Accounting Methodology

All text from the pre-existing Section 1393 was moved to the new section labeled 1394.1. This change is necessary to improve the clarity and organization of the regulations.

Section 1393(a)(1)

This subdivision specifies that unbundled RECs, from an RPS eligible or non-eligible renewable energy resource, may not be used in the calculation of the fuel mix or GHG emissions of an electricity portfolio.

This provision is necessary to distinguish an unbundled REC from other electricity products and ensure the information disclosed to consumers is accurate, reliable, and simple to understand

pursuant to legislative intent. Public Utilities Code 398.4(h)(7) requires the Energy Commission to determine a format for retail suppliers to disclose unbundled RECs. Unbundled RECs are tracking instruments that represent a claim on renewable energy that is not delivered to serve California retail sales. Because unbundled RECs are procured without the underlying electricity, the price of an unbundled REC is considerably lower than the prices of other REC products.

Renewable energy advocates developed the concept of RECs in the late 1990s as a method for corporations and other entities to support the development of renewable energy without directly investing in renewable generators.¹⁰ In 2006, the Legislature formally codified RECs as compliance instruments under California's RPS Program.¹¹ California's RPS Program allows a small portion of an entity's compliance to be met with unbundled RECs. However, many unbundled RECs used for compliance or voluntary purposes in California are derived from renewable generation that delivers electricity to the Western Interconnection but not directly to a California balancing authority to serve retail sales. This occurs, for example, because the renewable generator is located out-of-state and its electricity is distributed locally or because the renewable generator is located in the state but serves on-site load rather than delivering the electricity to the grid for retail consumption.

This disconnect between RECs and the underlying power has led to some confusion and debate about the "green-ness" of grid electricity paired with unbundled RECs. One stakeholder contended that "[unbundled] RECs do not accurately reflect the energy-intensity or emission profile of serving load."¹² The Utility Reform Network pointed out that unbundled RECs may be sourced from generators serving load on-site (such as a rooftop installation on a home or business) in which the owners of the generator might describe the site as being served by renewable energy while the purchaser of the unbundled RECs would make the same claim on the same energy.¹³ This is made more complicated by the fact that the Legislature established the PSD Program in 1997, nearly a decade before the Legislature codified RECs under the RPS statutes.¹⁴ Previous PSD regulations did not address how unbundled RECs should be treated for disclosing the fuel mix serving retail consumers. Absent formal guidance from the Energy

¹⁰ <http://www.worldwatch.org/node/5135>.

¹¹ SB 107 (Simitan, Chapter 404, Statutes of 2006).

¹² [Energy Policy Initiatives Center, Comments to the AB 1110 Scoping Questions, March 15, 2017, pg. 3, https://efiling.energy.ca.gov/GetDocument.aspx?tn=216552&DocumentContentId=25372](https://efiling.energy.ca.gov/GetDocument.aspx?tn=216552&DocumentContentId=25372).

¹³ The Utility Reform Network, Comments on the AB 1110 Implementation Proposal, August 11, 2017, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=220713&DocumentContentId=25430>

¹⁴ SB 1305 (Sher, Chapter 796, Statutes of 1997).

Commission, many retail suppliers elected to use their unbundled RECs to calculate the fuel mix of their electricity portfolios for the Power Content Label while other retail suppliers did not.

As noted by Michael Gillenwater of the GHG Management Institute, unbundled RECs do not support the development of new renewable resources or represent actual reductions in GHG emissions.¹⁵ The Sierra Club voiced similar concerns, noting “unbundled RECs have questionable value in achieving the overall goal of reducing greenhouse gas emissions, and for this reason it is critical that their use is disclosed when consumers are paying extra for a “greener” portfolio.”¹⁶ The Utility Reform Network observed:

Retail suppliers in California typically match the purchase of unbundled RECs with system power produced by nonrenewable generation that must purchase GHG allowances pursuant to the Cap-and-Trade program. This fact means that there are demonstrated GHG emissions that can and should be assigned to such procurement.¹⁷

As discussed further in Section 1393(a)(3), while unbundled RECs may represent some benefit to GHG emissions reductions within the Western Interconnection, there is no reliable, verified data to quantify any such benefits. CARB concluded “that for the emissions profile of electricity generated and procured, RECs play no role in GHG accounting.”¹⁸ By establishing source-based accounting rules, CARB’s accounting principles provide a framework for measuring GHG emissions reductions over time and CARB’s accounting represents the total GHG emissions attributable to California. Based on arguments provided by some stakeholders and the established principles of other California programs, the Energy Commission has concluded that allowing unbundled RECs to adjust the GHG emissions intensity of electricity portfolios under this program would contradict an established GHG emissions accounting practice of CARB.

Public Utilities Code 398.1(b) requires the information disclosed about “the sources of energy, and the associated emissions of greenhouse gases, that are used to provide electric services” be “accurate, reliable, and simple to understand.” Furthermore, Public Utilities Code 398.4(k)(2)(C) requires the Energy Commission to “rely on the most recent verified greenhouse gas emissions

¹⁵ Greenhouse Gas Management Institute, Comments on the AB 1110 Draft Regulations, March 20, 2019, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227376&DocumentContentId=58488>; see also <https://scope2openletter.wordpress.com/>; <https://www.sciencedirect.com/science/article/pii/S0301421517306213>

¹⁶ Sierra Club, Comments on the AB 1110 Scoping Questions, March 15, 2017, pg. 4, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216571&DocumentContentId=25383>

¹⁷ The Utility Reform Network, Comments on the AB 1110 Scoping Questions, March 15, 2017, pg. 10, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216566&DocumentContentId=25379>

¹⁸ MRR FSOR, 2011, pg. 108, <https://www.arb.ca.gov/regact/2010/ghg2010/mrrfsor.pdf>

data” in developing the GHG emissions intensity methodology for this program. The Energy Commission has concluded that unbundled RECs cannot be used to calculate the GHG emissions intensity under this program. This decision is based on several factors: stakeholder concerns about the accuracy of using RECs for GHG emissions accounting, the lack of verified data quantifying the GHG emissions impacts of unbundled RECs, concerns that the inclusion of unbundled RECs in the GHG emissions intensity would contradict CARB’s established GHG emissions accounting practice, and retail suppliers’ differing practices of attributing unbundled RECs to fuel mixes. Consequently, the Energy Commission has determined that in order to best attain the goals expressed in AB 1110, unbundled RECs will not be allowed to calculate or adjust the fuel mix or GHG emissions intensity of electricity portfolios disclosed on a Power Content Label.

Instead, as required by AB 1110, retired unbundled RECs will be disclosed separately on the Power Content Label in accordance with Public Utilities Code 398.4(h)(7), as explained under Section 1394(b)(2).

These determinations apply only to the PSD Program and are restricted to the use of unbundled RECs to characterize a fuel mix or GHG emissions intensity of an electricity portfolio serving retail consumers under this program. They are not meant to assess the environmental benefits of unbundled RECs procured in good faith for RPS compliance or for voluntary purposes.

Stakeholders have suggested alternative approaches to the treatment of unbundled RECs for these regulations. Those alternatives are addressed under Part IV: Reasonable Alternatives.

Section 1393(a)(2)

This provision sets out guidance for claiming the resource attributes of electricity purchased from an asset-controlling supplier.

This provision is necessary to provide accurate and consistent information. The proposed treatment harmonizes reporting under the PSD Program with the approach followed under MRR, which collects and verifies GHG emissions data and annually assigns a specific GHG emissions intensity to specified purchases of system power sold by an asset-controlling supplier. Assigning a specific fuel mix that corresponds to the underlying electricity sources reported under MRR for GHG emissions accounting will recognize the unique characteristics of an asset-controlling supplier’s system mix and ensure greater accuracy of information disclosed to consumers.

Section 1393(a)(3)

This provision identifies the equation used to find net purchases of electricity to distinguish between procured electricity that was resold on the wholesale market and electricity sold to retail consumers.

This provision is necessary to ensure accurate calculations and data reporting.

Section 1393(a)(4)

This provision specifies the calculation method for determining the quantity of unspecified power attributable to an electricity portfolio.

This provision is necessary to provide simple guidance for calculating unspecified power on an annual basis according to any potential shortfall of specified electricity serving retail sales.

Section 1393(a)(5)

This provision identifies a method for investor-owned utilities to report accurately certain procurements mandated by the Public Utilities Commission that benefit all members on the shared grid.

The Public Utilities Commission requires investor-owned utilities to procure capacity and energy for resource adequacy, as well as must-take output from cogenerators. These procurements are undertaken by the investor-owned utilities, but the benefits and costs are distributed across all retail suppliers co-located in the respective utility's jurisdiction. The Energy Commission proposed this treatment to capture the share of procurement that meets the definition of a specified purchase of an investor-owned utility; the Energy Commission considers the remainder of such procurements to be unspecified power transactions on the open market.

This provision is necessary to attribute properly the portion of a shared specified purchase that the Public Utilities Commission allocates to investor-owned utilities.

Section 1393(a)(6)

This provision identifies the calculation method for adjusting a retail supplier's net electricity procurements so that it matches its retail sales.

Public Utilities Code sections 398.4(h) and 398.4(k)(1) specify that the fuel mix and GHG emissions intensity of an electricity portfolio should be calculated using the associated retail sales as the denominator. However, a retail supplier's total specified net electricity may not be limited only to procurement for retail sales, which means some procured electricity may serve another end-use, such as retail supplier self-consumption or covering transmission and distribution line losses. Total specified net electricity may also exceed retail sales due to over-procurement in which the retail supplier sells off excess electricity on the open market as unspecified power.

The calculation in this provision is necessary to provide reporting guidance for reconciling overprocurement of net specified electricity with retail sales, since the PSD statutes require retail sales to be used as the denominator for fuel mix and GHG emissions intensity calculations. It is

necessary to rank fuel type categories for the adjustment under this provision to accurately attribute low or zero GHG emission resources to retail sales and to account for wholesale sales of overprocured net specified electricity into the open market as unspecified power. This provision is also necessary to ensure the Power Content Label meets the statutory requirements of being simple to understand and to disclose information that is accurate and reliable.

Section 1393(b)(1)

This provision sets out requirements for a retail supplier to make a retail claim on the fuel type attributes of eligible renewable electricity in a manner that reflects RPS accounting, and identifies how to classify electricity from renewable generators that has been decoupled from the associated RECs.

Section 1393(b)(2)

This provision identifies the calculation of the fuel mix by aggregated fuel type.

This provision is necessary to provide clear guidance to reporting entities, and to ensure accurate and reliable reporting consistent with the requirements of Public Utilities Code section 398.4(h).

Sections 1393(b)(3)(A)-(G)

These provisions identify the fuel types that a retail supplier will use to calculate the fuel mix of an electricity portfolio pursuant to Public Utilities Code 398.4(h), and identifies a method for categorizing other eligible renewable fuel types authorized by the RPS Program pursuant to Public Utilities Code 398.4(h)(6).

This modification is necessary to allow the program to classify other eligible renewable fuel types developed in the future to meet California's RPS.

Section 1393(c)(1)

The purpose of this provision is to establish that the GHG emissions intensity will be calculated based on delivered electricity. This treatment applies to all electricity procurements, including eligible firm-and-shaped products.

This provision is necessary for the Energy Commission to establish a GHG emissions accounting methodology that is accurate, reliable and simple to understand, and is consistent with GHG emissions accounting policy established under MRR.

Under a firming-and-shaping agreement, a retail supplier purchases RECs and the underlying electricity from a renewable generator.¹⁹ However, due to costs or transmission constraints, the

¹⁹ Fuel mix accounting under PSD has traditionally recognized a firm-and-shaped import as an investment in

electricity from the renewable generator is not delivered to a California balancing authority; instead, the RECs are paired with electricity from a substitute source that is delivered to a California balancing authority to serve the retail supplier's consumers. Typically, the substituted electricity is from unspecified sources of power with attributable GHG emissions.

Some stakeholders contend that firmed-and-shaped products should be assigned the GHG emissions associated with the RECs, rather than the substitute electricity purchased by a California retail supplier and delivered to the state. As one stakeholder notes, "the complex systems created for transacting renewable energy were created because the electric grid is not a system whereby renewable power can generally be purchased and directly delivered to the purchaser or the procurer's consumers."²⁰ This rationale is grounded in the argument that a renewable generator produces low or zero-GHG emissions somewhere in the Western Interconnection, so the associated RECs represent GHG emissions reductions even if the electricity from the renewable generator is not directly delivered to California. However, because the electricity is not delivered to California, retail suppliers must procure electricity that is delivered to California, and often this electricity has GHG emissions associated with it.

Additionally, most other jurisdictions in the Western Interconnect presently lack the GHG emissions accounting and compliance programs initiated by California. Without reciprocal accounting regimes across the rest of the Western Interconnection, it is not possible to confirm that the GHG emissions attributable to substitute electricity imported to California are counted in another state's GHG emissions accounting programs or to quantify the net GHG emissions reductions that may be attributable to firmed-and-shaped RECs when the underlying electricity delivered and consumed in California emits GHGs. Consequently, the Energy Commission can only accurately assess the GHG emissions attributable to California; there is no reliable verified data to substantiate retail claims that firmed-and-shaped imports resulted in no increase of GHG emissions across the Western Interconnection. GHG emissions resulting from electricity serving California retail sales must therefore be attributed to California.

Public Utilities Code 398.4(k)(2)(C) requires the Energy Commission to "rely on the most recent verified greenhouse gas emissions data" in developing its GHG emissions accounting methodology." In California, the most reliable and verified GHG emissions data collection is performed under MRR. In 2011, CARB determined that RECs cannot adjust the GHG emissions of delivered substitute electricity associated with firmed-and-shaped imports; under MRR, all

renewable energy, characterized by and tracked through the RECs from the renewable generator. This treatment is consistent with the rules established by California in implementing the Renewables Portfolio Standard under which firmed-and-shaped transactions in which electricity delivered to the state paired with an equal amount of eligible renewable generation is characterized by the fuel type of the renewable generator.

²⁰ Sacramento Municipal Utility District, Comments on the AB 1110 Implementation Proposal, Third Version, November 6, 2016, pg. 1, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=225814&DocumentContentId=56489>

firmed-and-shaped electricity imported by a retail supplier or on its behalf is assigned the GHG intensity of the substitute power.²¹ CARB further applies this treatment of firmed-and-shaped imports under its GHG Emission Inventory and in its sectoral emissions reduction target for retail suppliers as required by SB 350.²²

Several stakeholders have expressed support for the Energy Commission aligning with CARB's treatment of firmed-and-shaped imports under this proceeding. For example, the Sierra Club and The Utility Reform Network filed joint comments stating that "consistency is critical to ensuring that the various GHG accounting approaches used by different agencies do not operate at cross-purposes or create significant discontinuities."²³ The Energy Policy Initiatives Center agreed, stating that accurate disclosure requires that "the emission profile of substitute electricity should be used to account for any causal increase in emission intensity resulting from firming and shaping electricity to serve load."²⁴

Moreover, as noted under Section 1393(a)(2), numerous experts have observed that a REC is not a viable instrument for quantifying or tracking GHG emissions reductions, which aligns with CARB's treatment.²⁵ Elaborating on the point that the GHG emissions benefits of firmed-and-shaped products are unclear, the Sierra Club asserted that "disclosing the greenhouse gas emissions that occurred in California due to the electricity a retail supplier scheduled to serve its consumers' load helps address this information asymmetry between consumers and their retail supplier."²⁶ Near Zero also commented that it appreciated the proposal "distinguishing between electricity, GHGs, and RECs to reflect the GHG emissions profile of electricity that serves California load."²⁷

²¹ MRR FSOR, 2011, pg. 108, <https://www.arb.ca.gov/regact/2010/ghg2010/mrrfsor.pdf>.

²² The Air Resources Board adopted CARB staff's proposed methodology at a public hearing on July 26, 2018. <https://www.arb.ca.gov/board/mt/2018/mt072618.pdf?ga=2.68498257.1774497100.1535477312-730192970.1512668373>

²³ The Utility Reform Network and Sierra Club, Comments on the Third Draft of the AB 1110 Implementation Proposal, October 25, 2018, pg. 5-6, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=225087&DocumentContentId=55740>

²⁴ Energy Policy Initiatives Center, Comments on the AB 1110 Implementation Proposal, March 15, 2017, pg. 3, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216552&DocumentContentId=25372>.

²⁵ In addition to the sources identified in Footnote 14, see also <https://www.sciencedirect.com/science/article/pii/S0301421517306213>

²⁶ Sierra Club, Comments on the AB 1110 Scoping Questions, March 15, 2017, pg. 2, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216571&DocumentContentId=25383>

²⁷ Near Zero, Comments on the AB 1110 Implementation Proposal, October 25, 2018, pg. 1 <https://efiling.energy.ca.gov/GetDocument.aspx?tn=225099&DocumentContentId=55753>

Employing a different calculation methodology for GHG emissions associated with firmed-and-shaped products for the Power Content Label would directly contradict the collective GHG emissions attributable to retail suppliers under CARB's SB 350 electricity sector GHG emissions reduction targets, as well as indirectly contradict the accounting methodology of CARB's GHG Emission Inventory and the MRR. Absent reliable, verified data about the GHG emissions impacts of firmed-and-shaped imports on the Western Interconnection, it is not currently possible to quantify what GHG benefits a firmed-and-shaped REC may have in a portfolio that obtains its substitute electricity from a GHG-emitting source.

Due to the statutory requirements to rely on verified data and to disclose accurate, reliable, and simple to understand information, as well as the contention by industry experts, including CARB, that RECs associated with firmed-and-shaped imports cannot convey a zero-GHG value to the delivered substitute electricity, the Energy Commission has concluded that it is necessary to assign GHG emissions to eligible firmed-and-shaped products based on the emissions profile of the delivered substitute electricity.

At the same time, the Energy Commission notes that the treatment of eligible firmed-and-shaped products with respect to fuel mix accounting recognizes the renewable fuel characterization of the substitute power. Fuel mix accounting under PSD has traditionally recognized a firmed-and-shaped import as an investment in renewable energy, characterized by and tracked through the RECs from the renewable generator. This treatment is consistent with the rules established by California in implementing the RPS Program where firmed-and-shaped transactions in which electricity delivered to the state paired with an equal amount of eligible renewable generation is characterized by the fuel type of the renewable generator. This treatment of eligible firmed-and-shaped products is necessary to recognize the differing rules, policy objectives and historical treatment of firmed-and-shaped transactions under existing California programs, specifically the RPS Program and statewide GHG emissions accounting.²⁸ Because California developed fuel type accounting and GHG emissions accounting for different purposes through different programs, the Energy Commission believes it best addresses consistency for consumers and accuracy of information required for this program by separately incorporating RPS rules for fuel mix and MRR rules for GHG emissions accounting.

Finally, the Energy Commission proposes to treat eligible firmed-and-shaped products as renewable for fuel mix accounting while not extending the same treatment to unbundled RECs because, under a firming-and-shaping contract, retail suppliers purchase the RECs and underlying electricity from a renewable generator. This represents a qualitatively different form of procurement than that of unbundled RECs. As discussed under Section 1393(a)(2), some stakeholders have questioned the grid impacts of unbundled RECs, leading the Energy

²⁸ In enacting the RPS in 2002, the Legislature enumerated several objectives, including economic, environmental, grid reliability, and public health benefits. See SB 1078 (Sher, Chapter 516, Statutes of 2002).

Commission to conclude that treating RECs associated with firmed-and-shaped imports differently than unbundled RECs best meets the program requirements to present information that is accurate, reliable, and simple to understand.

Section 1393(c)(1)(A)

This provision lays out requirements for a retail supplier to substantiate that a specified purchase was for delivered electricity. As discussed under the definition of “Specified purchase,” contracts are necessary to establish a retail claim on specified generation.

Section 1393(c)(1)(B)

This provision sets out requirements for a retail supplier to make a retail claim on the GHG emissions attributes of renewable electricity and identifies how to classify renewable electricity that has been decoupled from the associated RECs.

This provision is necessary to ensure consistent reporting and understanding and to reflect that RECs are needed to substantiate retail claims on renewable generation to avoid the potential for double-counting.

Section 1393(c)(2)(A)

The purpose of this provision is to identify that the Energy Commission will calculate GHG emissions intensities of generators for retail suppliers to use in annual reporting.

This provision is necessary to meet the statutory requirement that the Energy Commission develop a methodology for calculating GHG emissions intensities of purchases of electricity, and to ensure accurate and reliable data reporting.

Sections 1393(c)(2)(B)-(C)

The purpose of these provisions is to identify that the Energy Commission will calculate the GHG emissions intensity of generators based on MRR emissions data and using GHG emissions accounting practices codified under MRR.

These provisions are necessary to ensure consistency with established GHG emissions accounting practices by California, and to ensure accuracy and reliability by relying on GHG emissions data verified by CARB or through an estimation technique adopted by CARB.

Section 1393(c)(2)(D)

The purpose of this provision is to identify a method for calculating GHG emissions intensities when generator data is unavailable through the means described in Sections 1393(c)(2)(B)-(C).

This provision is necessary to maintain consistency to the extent practicable with established GHG emissions accounting practices of California by using fleet averages of emissions data verified by CARB or emissions data estimated by CARB.

Section 1393(c)(2)(E)

The purpose of these provisions is to distinguish GHG emissions attributable to electricity generation from GHG emissions attributable to other uses of thermal heat produced by a cogenerator.

These provisions are necessary because MRR emissions data does not distinguish between a cogenerator's GHG emissions attributable to electricity generation and emissions attributable to other uses of thermal heat. However, cogenerators report fuel consumed for electricity production and for other purposes separately. After consultation with CARB, the Energy Commission concluded that using fuel combustion data reported to EIA is a reasonable approximation of a cogenerator's GHG emissions attributable to electricity production.

Section 1393(c)(2)(F)

The purpose of this provision is to identify a method for disaggregating GHG emissions for facilities with mixed generation sources that provide electricity to separate retail suppliers.

This provision is necessary to ensure accurate GHG accounting in a manner that is consistent with the GHG emissions accounting methods established in this section.

Sections 1393(c)(2)(G)

The purpose of this provision is to identify a specific treatment of carbon dioxide emissions associated with biogenic fuels used at electricity generators.

This provision is necessary to maintain consistency with established GHG emissions accounting practices of California, the U.S. EPA, and the International Panel on Climate Change.

The best practices of subnational and national GHG emissions accounting do not attribute carbon dioxide emissions of generators using biogenic fuels to the electricity sector. CARB's GHG Emission Inventory does not include carbon dioxide emissions of generators using biogenic fuels in its electricity sector total emissions, nor does CARB include those emissions in its SB 350 emissions reduction targets for the electricity sector.²⁹ The U.S. EPA's GHG Inventory and

²⁹ See "California Greenhouse Gas Emissions for 2000-2016-Trends of Emissions and Other Indicators," *California GHG Emission Inventory, 2018 Edition*, CARB, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf; and https://www.arb.ca.gov/board/mt/2018/mt072618.pdf?_ga=2.68498257.1774497100.1535477312-730192970.1512668373

guidance from IPCC both categorize carbon dioxide emissions from generators using biogenic fuels to the land use and forestry sector.³⁰

Consequently, the Energy Commission has concluded it is reasonable to exclude carbon dioxide emissions associated with biogenic fuels used at electricity generators from the disclosure requirements of electricity portfolios.

Section 1393(c)(3)

The purpose of this provision is to identify the method for assigning a GHG emissions intensity to unspecified power.

This provision is necessary to ensure consistency with established GHG emissions accounting practices by California, and to ensure accuracy and reliability by relying on verified GHG emissions data calculated by CARB. CARB calculated the default emissions factor for unspecified power based on marginal fossil fuel emissions of generators located outside California. However, the Energy Commission understands that the average GHG emissions factor of current in-state marginal generation does not substantially deviate from CARB's GHG default emissions for imported sources of unspecified power. Furthermore, the Energy Commission is not aware of a simple and reliable method for distinguishing between in-state and imported sources of unspecified power purchased through open market transactions. Therefore, the Energy Commission concluded that it is appropriate to apply CARB's default emissions factor to all sources of unspecified power.

This provision is constructed to ensure that the factor utilized in the PSD Program will reflect any updates to the default emissions factor for unspecified power assigned by CARB if and when they occur.

Sections 1393(c)(4)(A)-(B)

The purpose of these provisions is to identify the calculation used to determine the GHG emissions intensity of an electricity portfolio.

These provisions are necessary to provide guidance to reporting entities required to disclose the GHG emissions intensity of electricity portfolios in a manner that is accurate, reliable, and consistent with the calculation of GHG emissions intensities of generators described in Sections 1393(c)(2)(B)-(C).

³⁰ See EPA's *Greenhouse Gas Reporting Program, Subpart C*, https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=be77ce6e756f0befaa0dd95743e3342e&tpl=/ecfrbrowse/Title40/40cfr98_main_02.tpl; 2006 IPCC *Guidelines for National Greenhouse Gas Inventories: Volume 2*, <http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol2.html>.

Sections 1393(d)(1) and 1393(d)(1)(A)-(B)

The purpose of these provisions is to recognize that prior to the implementation of AB 1110, some retail suppliers entered into contracts for eligible firm-and-shaped products to meet RPS targets or to support voluntary renewable procurement. Unlike the purchase of unbundled RECs, firm-and-shaped imports deliver substitute electricity to serve California retail sales, so the procurement of these resources often represents contracts to deliver power to meet multi-year load forecasts, and renegotiating or replacing such contracts may not be feasible for many retail suppliers.

These provisions are necessary to acknowledge retail suppliers' early investments in firm-and-shaped renewables that do not directly serve California consumers, and to recognize that this new methodology should not apply to historical investments in firm-and-shaped products that were made without the benefit of anticipating changes to the regulatory framework for GHG claims pertaining to electricity products.

The original MRR regulation, adopted in 2011, concluded that firm-and-shaped imports have GHG emissions attributable to California based on the substituted electricity, and any imports made on behalf of retail suppliers have been reported to CARB with corresponding GHG emissions since that time.³¹ However, the Energy Commission understands that prior to the adoption of AB 1110, retail suppliers have not been required to report GHG emissions at the retail level and as such have not received guidance on how GHG emissions should be publicly disclosed for investments in firm-and-shaped products. Retail suppliers previously prepared marketing materials or claims in which firm-and-shaped transactions were assigned the emissions profile of the renewable generator and associated RECs, and the methodology for calculating GHG intensity expressed in these regulations may be a departure from claims made in those materials for many retail suppliers.

To address this, the Energy Commission proposes to exclude GHG emissions of firm-and-shaped imports under existing contracts from the Power Content Label. Under the proposed provision, firm-and-shaped imports under contract before January 1, 2019, may be classified according to the emissions profile of the renewable generator and associated RECs. The Energy Commission selected January 1, 2019, as the cutoff date since that corresponds with the statutory implementation of GHG emissions reporting (GHG emissions reporting starts in June 2020 on 2019 electricity procurements).³²

Beginning with new contracts or modifications to existing contracts executed on or after January 1, 2019, GHG emissions attributable to the substitute (delivered) power of a firm and shaped

³¹ MRR FSOR, 2011, pg. 108, <https://www.arb.ca.gov/regact/2010/ghg2010/mrrfsor.pdf>.

³² Public Utilities Code 398.4(K)(2)(F)(i).

contract must be claimed. This includes circumstances in which the duration of a contract has been extended or renewed for an additional term or the terms have been amended or otherwise modified. This provision parallels regulatory provisions in the RPS Program dealing with when an extension or modification will remove a contract from the grandfathering provision.

Lastly, it is necessary for accurate and reliable accounting to require retail suppliers making use of the exclusion of GHG emissions attributable to firmed-and-shaped imports to furnish contracts to the Energy Commission to substantiate claims that the excluded emissions meet the requirements of these provisions.

Sections 1393(d)(2) and 1393(d)(2)(A)-(C)

The purpose of these provisions is to incorporate the GHG emissions adjustment specified by Public Utilities Code section 398.4(k)(2)(D) and to provide specific reporting and accounting rules for that adjustment.

These provisions are necessary to implement and interpret statutory requirements to ensure accuracy, consistency, and to avoid double-counting.³³ The Energy Commission is only aware of one current situation in which this GHG emissions adjustment applies: the unique contractual circumstances of excess Hetch Hetchy hydroelectric generation owned by the San Francisco Public Utilities Commission. Consequently, the Energy Commission proposes a 20-year life for each emissions adjustment to capture the annual fluctuation of hydroelectric output, which is consistent with a similar accounting provision for large hydroelectric generation under the *Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities*. Should other situations arise that meet the statutory requirements of this GHG emissions adjustment, this broad window for tracking GHG emissions adjustments will provide ample coverage for other resource types as well.

Since generation meeting the statutory requirements of this provision must have been sold as unspecified power, the Energy Commission proposes to adjust GHG emissions according to the default GHG emissions factor of unspecified power as assigned by MRR.

Since Public Utilities Code section 398.4(k)(2)(D) does not specify that this exclusion should apply retroactively to excess generation that does not emit GHGs, the Energy Commission concluded that it is reasonable to count generation meeting the requirements for the GHG adjustment in these provisions beginning January 1, 2017, the effective date of AB 1110.

Lastly, requiring retail suppliers making use of the exclusion of GHG emissions from excess generation that does not emit GHGs to furnish contracts to the Energy Commission for substantiation will ensure accurate and reliable accounting.

³³ Public Utilities Code sections 398.1(b) and 398.4(K)(2)(E).

Section 1394 Annual Submission to the Energy Commission

The Energy Commission proposes to replace most of the language of Section 1394 to account for the program changes required by AB 1110, improve accuracy and reliability of reported data, improve the clarity of the regulatory text, and eliminate duplicated requirements articulated elsewhere in the proposed regulations. The Energy Commission deleted all text from Section 1394(a)(1)(E) through Section 1394(a)(2)(D). The Energy Commission added two new sections to the proposed regulations: Sections 1394.1 and 1394.2. The Energy Commission moved the remaining text of the existing Section 1394 to the proposed Section 1394.2.

Section 1394(a) (Deleted)

The Energy Commission deleted this title subsection to reduce subdivision nesting for clarity and concision.

Sections 1394(a)

The modifications to this subdivision clarify reporting requirements, make terminology changes, and other nonsubstantive language changes.

The modification stating explicitly that retail suppliers must file a discrete annual report for each electricity portfolio is necessary to improve accuracy and reliability of reported data and to clarify potentially ambiguous regulatory guidance.

The other language changes in this provision are necessary for clarity and consistency with program definitions; they do not alter existing requirements or program operations.

Sections 1394(a)(1)

This subdivision was deleted and replaced with updated language specifying the submission format for retail suppliers to provide their annual reports to the Energy Commission.

This provision is necessary to update reporting requirements in a manner that reflects contemporary technologies and business practices.

Sections 1394(a)(2)

The modifications to this subdivision make terminology changes.

The language changes in this provision are necessary for clarity and consistency with program definitions; they do not alter existing requirements or program operations.

Section 1394(b)

This subdivision identifies electricity transactions that retail suppliers must report to the Energy Commission.

This provision is necessary for the Energy Commission to make specific the reporting requirements outlined in Public Utilities Code 398.5(a)(1)-(2).

Section 1394(b)(1)(A)

The modifications to this subdivision make syntactic corrections and clarify that there is an option to use a calculator provided by the Energy Commission to provide the necessary data.

Sections 1394(b)(1)(B)(1)-(4)

These subdivisions identify data reporting requirements pertaining to generation purchase and sales information.

These requirements are necessary for the Energy Commission to make specific the reporting requirements outlined in Public Utilities Code 398.5(a)(1)-(2) and to reflect the accounting provisions explained in Sections 1393(a)(6)-(7) of this document.

Sections 1394(b)(1)(C)(1)

This subdivision specifies additional metadata reporting requirements pertaining to electricity purchases.

This information is necessary for the Energy Commission to substantiate retail suppliers' renewable electricity purchases pursuant to the statutory requirement under Public Utilities Code section 398.4(h)(5), and to ensure accurate and reliable GHG emissions disclosure to consumers.

Sections 1394(b)(1)(C)(2)(A)-(B)

These subdivisions require retail suppliers to report EIA identification numbers for each purchase of electricity and provides guidance for when an EIA number is not available.

These provisions are necessary for the Energy Commission to assign GHG emissions intensity to each purchase of electricity from the index of GHG emissions intensities developed by the Energy Commission each year, and to ensure accurate and reliable GHG emissions disclosure to consumers.

Sections 1394(b)(1)(D)-(E)

These subdivisions require the annual reports of retail suppliers to include the GHG emissions and GHG emissions intensity of each purchase of electricity.

This provision is necessary to calculate the GHG emissions intensity of an electricity portfolio, which is required by statute under Public Utilities Code section 398.4(k)(1) and as outlined in the calculations of Section 1393(c).

Section 1394(b)(1)(F)

This provision sets forth guidance to retail suppliers reporting electricity procurements from pumped storage large hydroelectric facilities.

This provision is necessary to provide specific guidance regarding generator output and self-consumption to ensure accurate reporting of hydroelectric generation resulting from natural reservoir recharge rather than mechanical pumping at a pumped storage facility.

Sections 1394(b)(2)(A)-(C)

These subdivisions specify reporting and documentation requirements pertaining to unbundled RECs retired by retail suppliers. Unbundled RECs are tradeable instruments, meaning they can be purchased and resold. Only the retirement of unbundled RECs determines their association with a specific electricity portfolio and year. These provisions are necessary for the Energy Commission to implement the statutory requirement under Public Utilities Code section 398.4(h)(7), and to provide the Energy Commission with sufficient data to substantiate reporting claims and ensure accurate and reliable information disclosure to consumers.

The required reporting of unbundled RECs according to the quantity retired and associated with a specific electricity portfolio by retail suppliers is also necessary to ensure accurate information.

The provision requiring retail suppliers to authorize the Western Renewable Energy Generation Information System (WREGIS) to confirm REC retirements is necessary to substantiate the accuracy and reliability of data reporting by the retail supplier under this program.

Sections 1394(b)(3)(A)-(E)

These subdivisions specify reporting requirements pertaining to the retail sales and other electricity end-uses of an electricity portfolio, and data calculations based on information reported under Sections 1394(b)(1)-(2).

These provisions are necessary to verify retail supplier claims about retail consumption and to determine values used on the Power Content Label in accordance with statutory requirements under Public Utilities Code sections 398.4(h), 398.4(k)(1), and 398.5(a)(3).

Sections 1394(c) and 1394(c)(1)-(3)

These subdivisions specify reporting requirements for asset-controlling suppliers that would like to have their sales of system power classified as a specific fuel mix rather than as unspecified power.

These provisions are necessary to implement the fuel mix accounting of asset-controlling suppliers under Section 1393(a)(5), and to provide information that the Energy Commission can use to verify that the reported mix of electricity sources of an asset-controlling supplier corresponds to GHG emissions data reported under MRR.

New Section 1394.1

The Energy Commission moved all pre-existing text from Section 1393 to Section 1394.1 as detailed earlier in this document.

Section 1394.1(a)(1)-(4) (Deleted)

To improve the clarity and organizational logic of the regulations, the Energy Commission deleted these definitions and reincorporated relevant definitions under Section 1391.

Section 1394.1(a)

The modifications to this subdivision add the disclosure of GHG emissions intensities as a requirement for retail suppliers and make nonsubstantive terminology changes.

These modifications are necessary to incorporate the statutory requirement to disclose GHG emissions intensities under Public Utilities Code section 398.4(k)(1). The Energy Commission made other language changes in this provision for clarity and consistency with program definitions; they do not alter existing requirements or program operations.

Section 1394.1(a)(1)

This subdivision specifies that the information contained on the Power Content Label must be consistent with information the retail supplier submitted to the Energy Commission.

This provision is necessary to ensure accurate and reliable information is disclosed to consumers.

Section 1394.1(a)(2)

This subdivision is verbatim text copied from Public Utilities Code section 398.4(k)(3).

This is one of the only statutory provisions not requiring clarification in the regulations; because the regulations are so comprehensive, it is likely and foreseeable that the regulated community will only consult the regulations in determining what requirements apply. Therefore, it is

necessary to duplicate this statutory language to better ensure retail suppliers are aware of all the requirements and restrictions that apply to their disclosure of the GHG emissions associated with their electricity portfolios.

Section 1394.1(a)(3)

This subdivision specifies that the Energy Commission will supply information related to the fuel mix and GHG emissions intensity of California's total system power for inclusion on the Power Content Label.

This subdivision is necessary to implement statutory requirements under Public Utilities Code sections 398.4(g)(2) and 398.4(k)(1).

Section 1394.1(b)(1)

Modifications to this provision extend the requirements for materials distributed to consumers to include materials made available on a webpage, not just printed materials.

This change is necessary to reflect changing communications technology and industry practices.

Additional modifications to the subdivision clarify terminology to avoid ambiguity and remove an internal reference that is no longer applicable.

Section 1394.1(b)(2)

The modifications of this subdivision clarify the deadline for retail suppliers to provide Power Content Labels to consumers and to the Energy Commission, update terminology, and make a syntactical correction.

The deadline for retail suppliers to disclose Power Content Labels is established in statute under Public Utilities Code section 398.4(c). Since the Energy Commission implemented that deadline under the AB 162 rulemaking in 2016, retail suppliers have expressed confusion about how to interpret "the end of the first complete billing cycle for the third quarter of the year."³⁴ Billing cycles vary among retail suppliers, and potentially among individual consumers of a retail supplier, which has made it exceedingly difficult for retail suppliers to determine compliance with the disclosure deadline. Therefore, the Energy Commission finds it necessary to assign a specific date consistent with the statutory language by which retail suppliers must provide Power Content Labels to consumers. The Energy Commission selected August 30, as the last potential date that a complete billing cycle in the third quarter of the year would conclude.

³⁴ Public Utilities Code, section 398.4, subd. (c).

The Energy Commission made other language changes in this provision for clarity and consistency with program definitions and to avoid ambiguity; they do not alter existing requirements or program operations.

Section 1394.1(c)

The modifications to this subdivision clarify that retail suppliers must disclose all electricity portfolios on a single Power Content Label and deletes language that is duplicated in the following subdivision.

The modification regarding the use of a single Power Content Label is necessary to clarify potential ambiguity. The deletion is necessary to improve clarity and concision.

Section 1394.1(c)(1)

The modifications to this subdivision clarify existing disclosure requirements to address potential ambiguity of requirements as described above. An additional modification specifies that fuel mix percentages shall be expressed to the nearest tenth of a percent, rather than the nearest percent.

It is necessary to specify that fuel mix percentages be expressed with more precision to improve the accuracy of information disclosed to consumers.

Section 1394.1(c)(1)(C)

This sentence was deleted to eliminate duplicated requirements articulated elsewhere in the proposed regulations.

Section 1394.1(c)(2)(F)

Modifications to this subdivision identify a method for categorizing other eligible renewable fuel types authorized by the Renewables Portfolio Standard pursuant to Public Utilities Code 398.4(h)(6).

As explained under the definition of “Eligible Renewable,” these modifications are necessary to allow the program to classify other eligible renewable fuel types developed in the future to meet California’s RPS. The “other” category shall only appear on the label if it is actually used.

Section 1394.1(c)(3)

This subdivision specifies that retail suppliers must include the GHG emissions intensity of each electricity portfolio and of California’s total system power on the Power Content Label, as required by Public Utilities Code 398.4(k)(1). This subdivision further specifies that retail suppliers must display GHG emissions intensities graphically in a chart, which is necessary to better present emissions data for comparison in a manner that is simple to understand.

Section 1394.1(c)(4)

This subdivision specifies required identification and contact information to be included on the Power Content Label.

These requirements are necessary to enable consumers to make inquiries regarding the information disclosed on the Power Content Label.

Section 1394.1(c)(5)

This subdivision specifies the disclosure of unbundled RECs retired in association with electricity portfolios.

This requirement is necessary to implement the statutory requirement under Public Utilities Code section 398.4(h)(7) in a manner that is consistent with the accounting provision explained in Section 1393(a)(2) of this document.

Section 1393(d)(3) (Deleted)

This subdivision was deleted because similar requirements are provided elsewhere in the proposed regulations.

Section 1394.1(d)

The modifications to this subdivision require retail suppliers to disclose GHG emissions intensities, make nonsubstantive terminology changes, and clarify that all retail sales of an electricity portfolio subject to this requirement must be included.

The modification pertaining to GHG emissions intensities is necessary to implement the statutory requirement under Public Utilities Code section 398.4(k)(1). The terminology change of “electric service portfolio” to “electricity portfolio” is necessary for clarity and consistency with program definitions and does not alter existing requirements or program operations. The clarifying modification pertaining to retail sales is necessary to avoid potential ambiguity of the regulatory language.

Section 1393(e) (Deleted)

This subdivision was deleted because similar requirements are provided elsewhere in the proposed regulations.

Section 1394.1(e)

This subdivision specifies that custom electricity portfolios not publicly offered by retail suppliers are not subject to the general disclosure requirements of Section 1394.1(c)(1) and provides specific disclosure instructions for such portfolios.

This provision is necessary to reflect that retail suppliers negotiate custom electricity portfolios under unique contract terms designed for one or more non-residential consumer(s) that is not offered by retail suppliers in their general marketing materials.

The current regulation provides no guidance related to custom electricity portfolios, so retail suppliers have included resources serving custom electricity portfolios under their default electricity portfolio on the Power Content Label. The inclusion of these resources in the default electricity portfolio distorts the fuel mix (and would distort the GHG emissions intensity) of the electricity portfolio serving its retail consumers, which undermines the accuracy and consistency of information disclosed to consumers.

Some retail suppliers have numerous custom electricity portfolios that are not generally available to all consumers, but rather are marketed to discrete and separate types of consumers. Attempting to provide information on all portfolios on a single Power Content Label is impractical and would be confusing for consumers as such custom portfolios are not available for purchase by the general consumer base. The Sacramento Municipal Utility District contends “the intent is that [Public Utilities Code section 398.4(b)] applies only to “offerings” of electricity products that can be chosen by a broad variety of consumers, such as a retail provider’s default product or a voluntarily chosen product like a green pricing program.”³⁵

Consequently, the Energy Commission has concluded that it is reasonable and adheres to the statutory intent to restrict the informational disclosure to the actual consumers being served, or able to be served, by a custom electricity portfolio, rather than to require broader disclosure of all portfolios to consumers who cannot subscribe to such custom electricity portfolios.

Section 1394.1(f)

This subdivision specifies additional information for retail suppliers to disclose on the Power Content Label when the retail supplier’s consumers are subscribed to multiple electricity portfolios.

This provision is necessary to ensure the information disclosed to consumers is accurate, reliable, and simple to understand.

Section 1394.1(g)

This subdivision specifies a temporary exemption to the disclosure of GHG emissions intensities for new community choice aggregators.

This subdivision is necessary to interpret and make specific the statutory provision under Public Utilities Code section 398.4(k)(3). In particular, it is necessary for this subdivision to specify that

³⁵ Sacramento Municipal Utility District, Comments on the AB 1110 Scoping Questions, March 15, 2017, pg. 2, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216570&DocumentContentId=25382>.

GHG emissions accounting must be based on full calendar years in order to accurately portray an annual GHG emissions intensity.

Section 1393(e)(2) (Deleted)

This subdivision was deleted because similar requirements are provided elsewhere in the proposed regulations.

Section 1394.1(h)(2)

The modifications to this subdivision make terminology changes, which is necessary for clarity and consistency with program definitions; they do not alter existing requirements or program operations.

Section 1394.1(i)

The modifications to this subdivision delete duplicated requirements articulated elsewhere in the proposed regulations.

Section 1394.1(j)

This subdivision specifies the procedure for a retail supplier to include additional information about the sources of its unbundled RECs.

This subdivision is necessary to ensure the additional information is accurate and conforms to the statutory provision under Public Utilities Code section 398.4(h)(7).

Section 1394.1(k)

This subdivision establishes that a retail supplier may provide additional context about GHG emissions reduction activities that are unrelated to the electric supply portfolio pursuant to Public Utilities Code section 398.4(k)(3).

This provision is codified in statute and is necessary to provide in the regulations to ensure that retail suppliers are aware of the legal restrictions and provisions for GHG claims.

Section 1394.1(l)(1)-(2)

These provisions specify footnote information for inclusion in the Power Content Label. These footnotes are necessary to help the consumer understand the label and satisfy the statutory requirement that the label be simple to understand.

New Section 1394.2 Auditing and Verification

As discussed earlier in this document, the Energy Commission moved the remaining text of the existing Section 1394, beginning with Section 1394(b), to the proposed Section 1394.2. The

Energy Commission also deleted the section heading titled Appendix A, and moved up the existing text of Appendix A to Section 1394.2.

Section 1394(b) (Deleted)

The Energy Commission deleted this title subsection to reduce subdivision nesting for clarity and concision.

Section 1394.2(a)

The modifications to this subdivision amend an internal reference to reflect organizational changes to the proposed regulations.

Section 1394.2(a)(1)

This subdivision specifies the general purpose and requirements of the auditor.

This provision is necessary to clarify potential ambiguity of the regulatory language. The auditing activities are necessary to ensure the information reported to the Energy Commission and disclosed to consumers is accurate and reliable.

Section 1394.2(a)(1)(A)

This subdivision is based on pre-existing language and was moved to reflect organizational changes to the regulations. This subdivision specifies professional association standards required of an auditor engaged by a retail supplier to meet the requirements of this section. This is a status conferred situation. It is necessary to require membership in one of these professional bodies to ensure auditors perform their tasks in accordance with professional standards.

Minor changes were made to this subdivision for clarity. The initialism “AICPA” was spelled out as it is the first time it is referenced under the revised regulations and the term “accountant” was changed to “auditor” to be consistent with other references to auditors and auditing in this section.

Section 1394.2(a)(1)(B)

This subdivision specifies auditing standards required of an auditor engaged by a retail supplier to meet the requirements of this section.

This subdivision copies pre-existing AICPA auditing standards previously found in subdivision (b) of Appendix A, and adds an additional reference specifying contemporary auditing standards recognized by the Energy Commission’s internal auditors to be used by auditors engaged by retail suppliers to meet the requirements of this section. These modifications are necessary to simplify auditing requirements.

Section 1394.2(a)(2)

This subdivision modifies a compliance alternative for retail suppliers that are public agencies and extends the compliance alternative to all electricity portfolios offered by public agencies.

The modifications to this provision simplify auditing requirements by recognizing that reporting by public agencies is subject to review by their governing boards at public meetings, which is a level of accountability that non-public agencies do not have. Several stakeholders have pointed out this distinction, as well as the seeming incongruity of existing requirements that allow a single portfolio to be attested to by a public agency's governing board in lieu of the audit requirement while additional portfolios must be subject to the audit requirement. For example, one party noted that it "sees no distinction in the governing board's attestation regarding the veracity of the annual report as between one, or more than one, electricity portfolio."³⁶

The Energy Commission has concluded that requiring auditing of additional electricity portfolios is financially prohibitive for smaller public agencies and redundant to the governing board approval compliance alternative since public agencies must submit for governing board approval all electricity portfolio data reported to the Energy Commission. Other language changes to this provision are necessary to clarify requirements and avoid ambiguity.

Section 1394(c) (Moved)

The Energy Commission moved this pre-existing provision verbatim to Section 1394.2(c).

Appendix A

As explained in Section 1394.2 of this document, the Energy Commission deleted the section heading titled Appendix A, and moved up the existing text of Appendix A to Section 1394.2.

Appendix A(a), (b), and (b)(1)-(2) (Deleted)

The Energy Commission deleted these subdivisions to simplify auditing requirements as explained in Section 1394.2(a)(1)(B) of this document or to delete duplicated requirements for clarity and concision.

Section 1394.2(b)

The Energy Commission made a terminology change from "Agreed upon" to "Audit" for clarity.

³⁶ M-S-R Public Power Agency, Comments on the AB 1110 Draft Regulations, March 20, 2019, pg. 3, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227382&DocumentContentId=58493>. For additional support for this provision, see CalCCA, Comments on the AB 1110 Draft Regulations, March 20, 2019, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227388&DocumentContentId=58500>; and Northern California Power Agency, Comments on the AB 1110 Draft Regulations, March 20, 2019, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227374&DocumentContentId=58485>.

Section 1394.2(b)(1)

The Energy Commission deleted the term “Purchases” for clarity. The other modifications to this subdivision amend an internal reference to reflect organizational changes to the reporting forms.

Section 1394.2(b)(1)(A)

The modifications to this subdivision amend the term “specific” to “specified,” change the types of required generator identification numbers, delete references to “self-consumption,” update the number of reporting schedules subject to the audit, and add the requirement to verify retail sales.

The RPS identification number is necessary for the Energy Commission to verify that reported eligible renewables are certified under California’s RPS Program, which supports data accuracy and reliability. The requirement to report FERC identification numbers was deleted as unnecessary metadata. The deletion of references to “self-consumption” is necessary because entities will not report self-consumption directly under the proposed regulations; rather, self-consumption will be addressed through the adjusted net purchases calculation under Section 1393(a)(7). The added requirement to verify retail sales parallels an existing requirement under the deleted subdivisions (c)(2)(A)-(B) of Appendix A. The other modifications clarify terminology for consistency with program definitions and clarify an internal reference to reflect organizational changes to the reporting forms.

Section 1394.2(b)(1)(B)

The modifications to this subdivision clarify an internal reference to reflect organizational changes to the reporting forms and remove an internal reference to deleted requirements pursuant to the explanation in Section 1394.2(a)(1)(B) of this document.

Section 1394.2(b)(1)(B)(1)

The modifications to this subdivision delete auditing requirements of metadata that is no longer required to be reported, add an auditing requirement for RPS ID reporting, if applicable, and update internal references to reflect organizational changes to the reporting forms.

The deletions and additions are necessary to reflect amended reporting requirements of metadata as explained in Sections 1394(b)(1)(F)(1) and 1394.2(b)(1)(A). The deletion of auditing requirements pertaining to pools is necessary because that reporting requirement is obsolete, and the Energy Commission deleted references to requirements pertaining to pools along with the bulk of deleted text in the current Section 1394.

Section 1394.2(b)(1)(B)(4)

This subdivision specifies that an auditor must verify that retirement claims on unbundled RECs conform to regulatory requirements.

This provision is necessary to ensure the information reported to the Energy Commission is accurate and reliable.

Section 1394.2(b)(1)(B)(5)

This subdivision specifies that an auditor must verify that excluded GHG emissions conform to regulatory requirements.

This provision is necessary to ensure the information reported to the Energy Commission is accurate and reliable.

Subdivisions (c)(2)-(3) of Appendix A (Deleted)

The Energy Commission deleted these subdivisions to eliminate duplicated requirements articulated elsewhere in the proposed regulations and to eliminate an unnecessary subdivision.

Section 1394.2(b)(2)

The modifications to this subdivision simplify auditing requirements and make clarifying changes to improve syntax and reflect organizational changes to the reporting forms. The Energy Commission deleted the auditing requirement to calculate the fuel mix of the Power Content Label because it duplicates auditing requirements under Section 1394.2(b)(1)(A).

Subdivisions (c)(4) through (c)(4)(2)(B) of Appendix A (Deleted)

The Energy Commission deleted obsolete requirements pertaining to pools as explained in Section 1394.2(b)(1)(B)(1) of this document.

Section 1394.2(c)

This is verbatim text the Energy Commission moved from the current Section 1394(c).

III. DOCUMENTS RELIED UPON (Government Code section 11346.2(b)(3))

- Matthew Brander et al. “Open Letter Rejecting the Use of Contractual Emission Factors in Reporting GHG Protocol Scope 2 Emissions.” February 12, 2015.
<https://scope2openletter.wordpress.com/>
- Matthew Brander, Michael Gillenwater, and Francisco Ascui. “Creative Accounting: A Critical Perspective on the Market-Based Method for Reporting Purchased Electricity (Scope 2) Emissions.” *Energy Policy*, vol. 112. January 2018.
<https://www.sciencedirect.com/science/article/pii/S0301421517306213>
- California Air Resources Board. *Staff Report: Initial Statement of Reasons, Revisions to the Regulation for Mandatory Reporting of Greenhouse Gases*. October 28, 2010.

<https://www.arb.ca.gov/regact/2010/ghg2010/ghgisor.pdf>

- California Air Resources Board. *Staff Report: Final Statement of Reasons, Revisions to the Regulation for Mandatory Reporting of Greenhouse Gases*. October 28, 2011, <https://www.arb.ca.gov/regact/2010/ghg2010/mrrfsor.pdf>
- California Air Resources Board. *California Greenhouse Gas Emissions for 2000-2016- Trends of Emissions and Other Indicators*. California GHG Emission Inventory, 2018 Edition, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf; and https://www.arb.ca.gov/board/mt/2018/mt072618.pdf?_ga=2.68498257.1774497100.1535477312-730192970.1512668373
- California Air Resources Board. Meeting Transcript. July 26, 2018, https://www.arb.ca.gov/board/mt/2018/mt072618.pdf?_ga=2.68498257.1774497100.1535477312-730192970.1512668373
- California Energy Commission. *Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities*. April 22, 2016. <https://www.energy.ca.gov/2016publications/CEC-300-2016-002/CEC-300-2016-002-CMF.pdf>
- California Public Utilities Commission. *Energy Division's Portfolio Content Category Classification Review Process Handbook*. October 2017. <https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442454933>
- Energy Policy Initiatives Center. Comments on the AB 1110 Implementation Proposal. March 15, 2017, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216552&DocumentContentId=25372>
- Energy Policy Initiatives Center. Comments on the AB 1110 Implementation Proposal. July 26, 2017. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=220410&DocumentContentId=25406>
- Michael Gillenwater. "Is your 'Green Power' Really Just 'Green Washing'?" GHG Management Institute. March 12, 2014, <http://ghginstitute.org/2014/03/12/is-your-green-power-really-just-green-washing/>
- Greenhouse Gas Management Institute. Comments on the AB 1110 Draft Regulations. March 20, 2019. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227376&DocumentContentId=58488>
- Intergovernmental Panel on Climate Change. *IPCC Guidelines for National Greenhouse Gas Inventories, Volume 1 - General Guidance and Reporting*. 2006. <http://www.ipcc->

nggip.iges.or.jp/public/2006gl/

- Intergovernmental Panel on Climate Change. “Frequently Asked Questions,” IPCC Task Force on National Greenhouse Gas Inventories. <https://www.ipcc-nggip.iges.or.jp/faq/faq.html>
- Near Zero. Comments on the AB 1110 Implementation Proposal. October 25, 2018. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=225099&DocumentContentId=55753>
- Sierra Club. Comments on the AB 1110 Scoping Questions. March 15, 2017. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216571&DocumentContentId=25383>
- Sierra Club. Comments on the AB 1110 Implementation Proposal. August 11, 2017. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=220685&DocumentContentId=25416>
- Phil Ting. “Assemblymember Phil Ting’s Letter to the Daily Journal,” Assembly Daily Journal. August 31, 2016. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=215755&DocumentContentId=25366>
- U.S. Environmental Protection Agency, “Inventory of U.S. Greenhouse Gas Emissions and Sinks 2000-2015.” April 2017. https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf
- The Utility Reform Network. Comments on the AB 1110 Scoping Questions. March 15, 2017. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=216566&DocumentContentId=25379>
- The Utility Reform Network. Comments on the AB 1110 Implementation Proposal. August 11, 2017. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=220713&DocumentContentId=25430>
- The Utility Reform Network and Sierra Club. Comments on the Third Draft of the AB 1110 Implementation Proposal. October 25, 2018. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=225087&DocumentContentId=55740>
- United States Energy Information Agency. *Form EIA-923 Power Plant Operations Report, 2017 Final Revision* (OMB No. 1905-0129). <https://www.eia.gov/electricity/data/eia923/>
- Western Climate Initiative. “Electricity Subcommittee Discussion Paper on Renewable Portfolio Standards, Renewable Energy Certificates, and GHG Accounting.” December 8, 2008. [http://www.westernclimateinitiative.org/component/remository/Electricity-Team-Documents/Discussion-Paper-Renewable-Energy-Certificates-\(RECs\)-Accounting/](http://www.westernclimateinitiative.org/component/remository/Electricity-Team-Documents/Discussion-Paper-Renewable-Energy-Certificates-(RECs)-Accounting/)
- Western Climate Initiative. “Public Announcement: Treatment of Renewable Energy

Certificates in the WCI Cap-and-Trade Program.” May 15, 2010.

<http://www.westernclimateinitiative.org/component/remository/Electricity-Team-Documents/Treatment-of-Renewable-Energy-Credits-in-the-WCI-Cap-and-Trade-Program/>

IV. CONSIDERATION OF REASONABLE ALTERNATIVES, INCLUDING THOSE THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

(Government Code section 11346.2(b)(4))

No other reasonable alternatives to the proposed regulations have been proposed that would lessen any adverse impact on small business or that would be less burdensome and equally effective in achieving the purposes of the regulation in a manner that achieves the purposes of the statutes being implemented.

These regulations were required to do several things, as directed by the legislature, including:

- adopt a methodology for calculating the GHG emissions intensity corresponding to each purchase of electricity by a retail supplier to serve its customers;
- adopt guidelines for the reporting and disclosure of this intensity on the Power Content Label;
- calculate the GHG emissions intensity associated with statewide retail electricity sales based on the GHG emissions for total California system electricity;
- use the most recent verified greenhouse gas emissions data;
- ensure there is no double-counting of GHG emissions or emissions attributes;
- establish guidelines for adjustment of the intensity for any local publicly owned electric utility demonstrating generation of quantities of electricity in previous years in excess of its total retail sales from specified sources that do not emit GHGs; and
- adopt guidelines for the reporting and disclosure of the portion of annual sales derived from unbundled RECs on the Power Content Label.

The Energy Commission spent over two years considering stakeholder and public input to determine the best approach to meeting these statutory requirements, and has determined that the following approach best meets the statutory requirements.

The Energy Commission proposes a GHG emissions intensity methodology that relies on the California Air Resources Board’s Mandatory Reporting Regulation, which is the most recent verified greenhouse gas emissions data in the state. In adopting this methodology, the Energy Commission rejects the use of RECs in calculating the GHG emissions intensity (with one exception specified below) and also rejects the use of Clean Net Short; both alternatives are discussed further below. With this proposal, only electricity that is directly delivered into a California balancing authority would count for purposes of calculating the GHG emissions intensity; any RECs that are purchased for the portfolio but where the underlying electricity is not directly delivered would be excluded. The proposal would also use CARB’s default emissions factor for all unspecified power and would treat Energy Imbalance Market (EIM) imports as unspecified. Finally, in order to avoid penalizing entities for contract decisions made prior to these

regulations, the proposed GHG emissions accounting methodology would allow the use of RECs from eligible firm-and-shaped products that are the subject of contracts entered into prior to January 1, 2019. The regulations require retail suppliers to provide their customers with the Power Content Labels of all of their publicly available products.

For the reporting of unbundled RECs, the Energy Commission has concluded that in addition to being excluded from the GHG emissions intensity calculation, they should be pulled out from the fuel mix disclosure and separately noted on the label in the year they are retired.

With regard to who must receive the Power Content Labels, the regulations require retail suppliers to provide their customers with the Power Content Labels of all of their publicly available portfolios; retail suppliers are only required to provide the Power Content Labels of custom electricity portfolios to those specific customers receiving those portfolios.

Lastly, the regulations propose to expand the current ability of retail suppliers that are public agencies to have one portfolio submitted via attestation in lieu of meeting the auditing requirements to all of their portfolios.

Following is a more detailed discussion of the alternatives considered.

Allow RECs to be Included in the GHG Emissions Accounting Methodology

Several stakeholders urged the Energy Commission to incorporate RECs into the GHG emissions intensity accounting methodology. This would entail allowing RECs, where present, to modify the GHG emissions of electricity delivered to California to serve retail customers and assigning emissions according to the generating source of the REC. In this approach, all purchases for the portfolio would be considered; not just those where the underlying electricity is directly delivered to customers. This approach was rejected because it does not fit with an approach that is consistent with CARB's current GHG program and does not meet the statutory directive of using the most recent verified GHG emissions data. CARB already assigns a GHG emissions value to eligible firm-and-shaped products according to the delivered electricity; deviating from that practice would undercount emissions attributed to California by CARB. And although CARB's GHG emissions accounting used by MRR and the GHG Emission Inventory is source-based, accurate accounting requires that sources correspond with retail or end-use; aggregating all retail supplier emissions in California should generally correspond with CARB's GHG Emission Inventory for the electricity sector. Consequently, the Energy Commission has proposed a GHG emissions accounting methodology that reflects the pre-existing GHG accounting assumptions established by CARB.

Additionally, as discussed under Sections 1393(a)(1) and (c)(1), it is not possible to determine the GHG emissions value of RECs derived from renewable generators that deliver electricity to jurisdictions outside California. The Energy Commission did, however, accept stakeholders' proposal to allow RECs purchased with the underlying electricity to be considered in the fuel mix, even if such electricity was not directly delivered to customers. This approach is in line with the RPS Program, of which the fuel mix disclosure is a close approximation.

During the two years the Energy Commission has spent considering these issues, stakeholders offered various comments about why the alternative of REC based accounting should be adopted. In order to enable a more comprehensive understanding of the Energy Commissions reasons for rejecting this approach, we address the main comments below.

1. Some stakeholders have argued that firmed-and-shaped products are procured by retail suppliers, and that should take precedence over delivery. The procuring retail supplier, in such cases, paid to have that renewable generator operate, and should be able to claim the GHG emissions benefits of that generation.³⁷

The Energy Commission recognizes that procurement, rather than delivery, of electricity from eligible renewable generators under firming-and-shaping contracts may be used to meet RPS compliance targets. Consequently, the Energy Commission has proposed to extend that treatment to PSD, allowing eligible firmed-and-shaped products to be assigned the fuel type of the REC.

The Energy Commission also considered assigning GHG emissions of firmed-and-shaped products according to the GHG emissions profile of the eligible renewable generator, rather than that of the substitute electricity delivered to serve California load. However, the RPS Program and GHG emissions accounting serve different purposes, and using RPS accounting standards to determine GHG emissions accounting for this program would contradict established GHG emission accounting standards developed by CARB. CARB already assigns a GHG emissions value to eligible firmed-and-shaped products according to the delivered electricity; deviating from that practice would undercount emissions attributed to California by CARB.

And as discussed under Sections 1393(a)(1) and (c)(1), it is not possible to determine the GHG emissions value of RECs derived from renewable generators that deliver electricity to jurisdictions outside California. Therefore, the Energy Commission has determined that delivery of electricity, rather than procurement alone, best meets the statutory requirements to provide accurate, reliable, and simple to understand information about the sources of electricity serving California customers.

2. Some stakeholders argued that to be consistent with the RPS Adjustment mechanism under Cap-and-Trade, firmed-and-shaped imports should be categorized as zero-GHG.³⁸

CARB staff have been consistent in clarifying that the RPS Adjustment is strictly a financial mechanism. For example, CARB staff commented during the July 2017 PSD workshop that “the RPS Adjustment is a reduction of a compliance obligation. It is not a reduction in California's emissions.”³⁹ In other words, GHG emissions attributable to California are counted under MRR, and the RPS Adjustment does not affect that. The RPS adjustment only

³⁷ See, for example, [LADWP Comments](#), March 20, 2019.

³⁸ See, for example, SMUD Comments, ([TN#227404](#))

³⁹ [AB 1110 Workshop Transcript](#), July 14, 2017, pg. 61.

affects the financial costs of compliance under Cap-and-Trade. To be consistent with CARB's use of the RPS Adjustment, the Energy Commission has determined that PSD cannot allow the use of RECs to reduce the GHG emissions of firmed-and-shaped products.

3. Some stakeholders noted that RECs are used for retail-level claims, so RECs should be used for retail-level GHG emissions accounting. Therefore, alignment with MRR's source-based emissions accounting is inappropriate for PSD, which is a retail-level GHG emissions accounting program.⁴⁰

As discussed under Sections 1393(a)(1) and (c)(1), stakeholders have disputed the argument that RECs are appropriate for GHG emissions accounting. And although CARB's GHG emissions accounting used by MRR and the GHG Emission Inventory is source-based, accurate accounting requires that sources correspond with retail or end-use; aggregating all retail supplier emissions in California should generally correspond with CARB's GHG Emission Inventory for the electricity sector. Consequently, the Energy Commission has proposed a GHG emissions accounting methodology that reflects the pre-existing GHG accounting assumptions established by CARB.

4. Some stakeholders argued RECs should convey the emissions profile of the renewable generator because statute defines RECs to contain "all environmental attributes." Failure to use REC-based emissions accounting, stakeholders claimed, conflicts with U.S. Federal Trade Commission guidance⁴¹, infringes on property rights of REC owners, and undermines REC integrity.⁴²

The Energy Commission is tasked to implement AB 1110 and develop a GHG emissions accounting methodology that complies with the requirements specified therein. As discussed in the paragraphs above as well as under Sections 1393(a)(1) and (c)(1), the Energy Commission has concluded that assigning the GHG emissions profile of a REC to the substituted electricity in a firmed-and-shaped product would not best meet the statutory requirements for accurate, reliable, and simple-to-understand information. CARB has already developed a database of the most recent verified greenhouse gas emissions, and in that methodology does not allow RECs to factor into the calculation. In the final rulemaking documentation for the MRR in 2011, CARB found that although a REC is defined to contain all renewable and environmental attributes, the "definition does not state under what circumstances a REC has value in California, nor does it say where the electricity would be delivered."⁴³ The Energy Commission has determined that in order to best meet the

⁴⁰ See, for example, [3 Degrees Comments](#), October 29, 2018.

⁴¹ In public comments, TURN contends "there is no federally recognized property right associated with RECs and no national definition relating to the environmental value of a REC that applies to California. FERC has repeatedly held that RECs exist solely as a creation of state law and that state law determines all relevant rules relating to ownership and compliance value." See [TURN Comments, August 11, 2017](#), pg. 9.

⁴² See, for example, [CRS Comments](#), October 25, 2018.

⁴³ [Final Statement of Reasons](#), California Air Resources Board, Cap-and-Trade Program Regulatory Documents,

requirements of AB1110, the GHG emissions accounting methodology should align as closely as possible with the CARB MRR. No state or federal law prohibits the Energy Commission from reaching this conclusion.

5. Some stakeholders have noted that the fuel and GHG emissions profile of firmed-and-shaped imports must be conveyed together to ensure accurate and simple-to-understand information is provided to customers.⁴⁴

The Energy Commission recognizes that splitting the accounting treatment of firmed-and-shaped imports with respect to the fuel type and emissions profile may appear to be inconsistent. However, as described under Sections 1393(a)(1) and (c)(1), the Energy Commission has been tasked with bridging two fundamentally different accounting bases. The proposal put forward by the Energy Commission recognizes the historical role that the RPS Program has played in renewable resource accounting while establishing a GHG emissions accounting framework that better meets the statutory intent of providing accurate and simple-to-understand information to customers. As discussed in more detail elsewhere in this document, it makes sense to align the fuel mix with the RPS Program and the GHG emissions accounting with CARB's MRR.

6. Some stakeholders suggested that without REC-based accounting, implementation of AB 1110 may result in overcounting GHG emissions since it would be possible through firming-and-shaping contracts for no retail supplier in the Western Interconnection to be able to claim the GHG attribute of the renewable generator.⁴⁵

This is a possibility when considering the broader Western Interconnection. However, this would not result in overcounting within California. And on the other hand, REC-based accounting may result in undercounting GHG emissions since it would be possible that no retail supplier (anywhere in the Western Interconnection) would claim the emissions from the substitute power that was purchased and delivered to serve California retail load. The Energy Commission believes it more closely meets the statutory requirement for accuracy to risk overcounting, rather than undercounting, GHG emissions.

7. Some stakeholders contended that unbundled RECs derived from generators that deliver electricity to a California balancing authority should be counted as zero-GHG, since this generation is delivered to California; failure to do so would penalize overprocured retail suppliers and limit market flexibility.⁴⁶

Many unbundled RECs sourced from within California are derived from generators that are behind-the-meter, which means those generators serve on-site load directly or through a net

October 2011, p. 616.

⁴⁴ See, for example, [CRS Comments](#), October 25, 2018.

⁴⁵ See, for example, [CMUA Comments](#), October 25, 2018.

⁴⁶ See, for example, [CRS Comments](#), October 25, 2018.

metering agreement. It is inaccurate to characterize those RECs as being derived from electricity delivered to the grid to serve retail sales. While those generators are interconnected to the grid and electrons flows to and from the grid, that generation reduces a retail supplier's retail sales. Treating those RECs as if they were derived from electricity that was sold to retail customers would result in double-counting. At the same time, the proposed approach does not prevent overprocured retail suppliers from unbundling and reselling RECs. Unbundled RECs may still be used for RPS compliance and for voluntary purposes.

Allow Unbundled RECs To Be Counted In The Fuel Mix

As discussed above, the Energy Commission proposes excluding unbundled RECs from the fuel mix disclosure and requiring it to be separately itemized on the Power Content Label. Some stakeholders have argued that unbundled RECs are eligible renewables under RPS, so unbundled RECs should count as renewable electricity under PSD for purposes of the fuel mix disclosure. A failure to align with the RPS Program in fuel mix accounting, stakeholders note, may lead to customer confusion or suggest a retail supplier is falling short of its RPS target.⁴⁷

The Energy Commission rejected this alternative approach. AB 1110 directs the Energy Commission to develop a format to ensure that “[t]he portion of annual sales derived from unbundled renewable energy credits shall be included in the disclosures” on the Power Content Label. As discussed under Section 1393(a)(1), the Energy Commission believes disclosing unbundled RECs outside the fuel mix best meets the requirements for accurate, reliable, and simple-to-understand information. PSD and RPS are different programs serving different purposes. In addition, the Energy Commission has added additional contextual information in the power content label footnotes explaining that the label does not reflect RPS compliance to avoid the potential for confusion.

CAM-based Resources Should be Apportioned to All Benefitting Retail Suppliers

Pursuant to CPUC requirements, investor owned utilities (IOUs) are obligated to purchase what are called “Cost Allocation Mechanism” or “CAM” resources to benefit the electrical system in their territory, and apportion costs to the other retail suppliers. These retail suppliers do not have a choice in which resources are purchased by the IOU. During the pre-rulemaking proceedings, some investor-owned utilities argued each retail supplier should claim its allocated share of Cost Allocation Mechanism resources since all customers in the service territory are billed for those benefits.⁴⁸ However, other stakeholders objected, noting that it would be unfair to assign generation to retail suppliers that they did not procure, nor hold under contract.⁴⁹ In weighing stakeholder perspectives, the Energy Commission developed a proposal under Section 1393(a)(5) that ensures investor-owned utilities accurately account for their share of specified CAM procurements without imposing a reporting burden on other retail suppliers to

⁴⁷ See, for example, [CalCCA Comments](https://efiling.energy.ca.gov/GetDocument.aspx?tn=227388&DocumentContentId=58500), March 21, 2019, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227388&DocumentContentId=58500>

⁴⁸ <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227368&DocumentContentId=58479>

⁴⁹ <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227388&DocumentContentId=58500>

claim generation these entities did not directly procure.

Prohibit the Use of Eligible Firmed-and-Shaped Products Purchased Through Contracts Entered Into Prior to January 1, 2019 in the GHG Emissions Accounting Methodology

Initially, the Energy Commission considered not allowing any eligible firmed-and-shaped products from being considered in the GHG emissions accounting methodology, even those entered into prior to AB 1110 or the finalization of these regulations. As discussed under section 1393(d)(1) of this document, however, the Energy Commission concluded that such an approach would impose a considerable burden on retail suppliers, and might unfairly penalize retail suppliers that have made pre-existing investments in firmed-and-shaped imports to meet RPS and voluntary renewable goals. Consequently, the Energy Commission opted to include the provision under Section 1393(d)(1) to provide transition assistance to affected parties.

Extend the Allowance of Eligible Firmed-and-Shaped Products to be Included in the GHG Emissions Accounting Methodology to Contracts Entered into by December 2019

As discussed above, the regulations would allow eligible firmed-and-shaped products to be considered in the GHG accounting methodology if they were contracted for prior to January 1, 2019. Some stakeholders have argued that the cut-off date for firmed-and-shaped contracts eligible for this exclusion should be extended to December 2019 to “ensure that the grandfathering date has real relief impact on retail sellers, and more importantly energy consumers in California.”⁵⁰ These stakeholders note that retail suppliers cannot enter into new firming-and-shaping contracts amid the uncertainty that the proposed regulatory treatment of firmed-and-shaped imports will be adopted by the Energy Commission.

As discussed under Section 1393(d)(1), the Energy Commission proposed this exclusion to apply to procurements made by retail suppliers prior to implementation of the new GHG emissions intensity disclosure requirements of AB 1110. It would be unfair to tell entities that contracts they made in good faith to try to “green up” their portfolio, and which they cannot get out of now, may not be claimed for the purposes for which they bought them. On the other hand, now that it is clear that the Energy Commission has concluded that the GHG emissions accounting methodology that best meets the requirements of AB 1110 must exclude the use of RECs in the calculation, it would be counterproductive to allow the continued purchase of these resources to count; especially beyond the timeframe the legislature established for the accounting methodology to apply. Some stakeholders expressed support for limiting the scope of this GHG exclusion to pre-existing contracts to prevent “gaming” the provisions of this GHG exclusion.⁵¹

⁵⁰ [CalCCA Comments](https://efiling.energy.ca.gov/GetDocument.aspx?tn=227388&DocumentContentId=58500), March 20, 2019
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=227388&DocumentContentId=58500>

⁵¹ The Utility Reform Network and Sierra Club, Comments on the Third Draft of the AB 1110 Implementation Proposal, October 25, 2018, pg. 7-8,
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=225087&DocumentContentId=55740>

Insert a Sunset Date for the Use of Eligible Firmed-and-Shaped Products Purchased Through Contracts Entered Into Prior to January 1, 2019 in the GHG Emissions Accounting Methodology

The regulations propose that once an eligible firmed-and-shaped product qualifies to be used in the GHG emissions accounting calculation, it may be used for as long as the contract provides. Some stakeholders commented that this grandfathering provision must include a sunset date to prevent indefinite contract extension and expansion.⁵²

Although the proposed regulation does not include a sunset date for this exclusion provision, the provision does include language that precludes amended or extended contracts from eligibility for the grandfathering provision. Only the original duration and terms of a contract executed prior to January 1, 2019 will be recognized under the grandfathering provision for eligible firmed-and-shaped contracts.

An Alternative to CARB’s Default Emissions Factor for Unspecified Power Should be Identified and Used

The proposal requires retail suppliers to use CARB’s default emissions factor, currently set at 0.428 MT CO₂e/MWh, as the GHG emissions intensity for all unspecified power. Some stakeholders contended that CARB’s default emissions factor for unspecified power is outdated and inaccurate, and that an updated factor would yield a lower emissions factor.⁵³ In December 2018, CARB reassessed its default emissions factor for unspecified power and concluded the factor is still appropriate.⁵⁴

As discussed under Section 1393(c)(3), the Energy Commission has concluded that for purposes of consistency, and in deference to CARB’s expertise in this arena, the regulations should rely on the same accounting assumptions that CARB uses to assign GHG emissions to unspecified power. CARB’s factor is an industry standard in California; that factor establishes the carbon price of unspecified power that retail suppliers throughout California use in their procurement decisions. The Energy Commission concludes that deference to CARB’s expertise in this matter is warranted, and best meets the requirements of AB 1110. The regulations are structured as such that if and when CARB chooses to update its default emissions factor for unspecified power, the PSD Program regulations will automatically require the updated factor.

Unbundled RECs Should be Reported When Procured, Not Retired

⁵² See, for example, [SCE and PG&E Comments](#), March 5, 2019.

⁵³ See, for example, [Near Zero Comments](#), October 25, 2018.

⁵⁴ Mandatory Reporting Regulation, [Final Statement of Reasons](#), December 2018, pg. 38-39.

The regulations require retail suppliers to report unbundled RECs in the year they are retired. Some stakeholders suggest that retirement of unbundled RECs within the reporting year should not be required in order to report those unbundled RECs on the power content label. The power content label, stakeholders argue, is supposed to reflect procurement, not retirement.⁵⁵

As explained under Sections 1394(b)(2)(A)-(C), unbundled RECs are tradeable instruments, meaning they can be resold without any restriction or loss of value. The ultimate disposition of an unbundled REC cannot be determined until that unbundled REC has been retired. Consequently, the Energy Commission believes that retirement more appropriately signifies that the product has been served to retail customers and, thus, must be disclosed.

Retail Suppliers Should be Required to Disclose Power Content Labels of Custom Electricity Portfolios to All Customers

The regulations require retail suppliers to provide their customers with the Power Content Labels of all of their publicly available portfolios. They are not required to provide all of their customers the Power Content Labels of any products that were privately negotiated. Some stakeholders argued private contracts should not be excluded from general power content label disclosures, as this impedes transparency and fair competition in energy markets.⁵⁶

The portfolios under private contracts will be disclosed to the specific customers who negotiated for, and are served by, these resources. As noted under Section 1394.1(e), such portfolios cannot be subscribed to by general consumers. Furthermore, disclosing several additional portfolios (especially ones that general customers cannot purchase) may lead to consumer confusion. Consequently, the Energy Commission developed the proposal to limit disclosure of custom electricity portfolios to the parties that directly contracted with the retail supplier for that portfolio.

The Energy Commission Should Revoke, and Not Extend, the Ability of Retail Suppliers that are Public Agencies to Have the Auditing Requirements Supplanted by an Attestation

The regulations propose to extend the current ability of retail suppliers that are public agencies to have one portfolio submitted via attestation in lieu of meeting the auditing requirements to all of their portfolios. Some stakeholders contend that the governing board of a public agency should not be allowed to attest to the veracity of an annual report in lieu of the auditing requirements under Section 1394.2.⁵⁷ Stakeholders argue that such an approach compromises the accuracy and reliability of the power content label, and have recommended that the Energy Commission remove this provision.

⁵⁵ See, for example, [LADWP Comments](#), March 20, 2019.

⁵⁶ <https://efiling.energy.ca.gov/GetDocument.aspx?tn=227388&DocumentContentId=58500>

⁵⁷ See, for example, [SCE and PG&E Comments](#), March 5, 2019.

The regulations have for some time allowed retail suppliers that are public agencies to have one portfolio submitted via attestation and, to date, the Energy Commission has not experienced any problems with this allowance. During the course of this proceeding, as noted in the rationale for Section 1394.2(a)(2), public agency stakeholders have stated that, while somewhat convenient to do so, there is limited value to them in allowing one electricity portfolio to be attested to by their respective governing board, if they will still have to pay for audits for all of their other electricity portfolios. In order to reduce the reporting burden in a sensible manner and in recognition of the higher threshold of public accountability that public agencies are subject to, the Energy Commission has found that governing board attestation for public agencies is an acceptable substitute for the auditing requirements.

Clean Net Short Accounting Method

As discussed above, the regulations adhere to, and are consistent with, CARB's Mandatory Reporting Regulation for purposes of the GHG emissions accounting methodology. Some stakeholders recommend a more granular level of resource accounting referred to as Clean Net Short. This approach is based on an hourly matching of electricity sources and retail sales, rather than reporting electricity resources and retail sales on an annual basis. This means that on an hourly basis, a retail supplier's load is met through its contracted renewable and non-dispatchable resources, so long as those sources deliver electricity to the grid during the same hour as the retail supplier's load. If the retail supplier's load exceeds its contracted renewable and non-dispatchable sources, the remainder would be met by system resources dispatched by the retail supplier's balancing authority. If the retail supplier's contracted renewables and non-dispatchable resources exceed the retail supplier's load for a given hour, that excess generation is added to the system resources dispatched and distributed by the balancing authority, meaning those excess resources could be claimed by a different retail supplier whose load exceeds its contracted resources for that given hour.

Stakeholders have argued this approach more accurately captures GHG emissions associated with serving retail load, and that it more fairly assigns GHG emissions associated with fossil fuel generators that may be contracted to a retail supplier but are dispatched by the balancing authority.⁵⁸

Public Utilities Code section 398.2(d) specifies that "retail suppliers may rely on annual data to determine whether a transaction meets [the definition of purchases of specified electricity], rather than hour-by-hour matching of loads and resources." Consequently, the Energy Commission has concluded that implementing Clean Net Short is not reasonable because the Energy Commission cannot compel retail suppliers to identify their specified purchases by matching load and resources on an hourly basis. Other reasons for rejecting this alternative, as argued by, other stakeholders, include that Clean Net Short ignores the financial and contractual relationship between retail suppliers and generators, could be overly burdensome to implement, and could lead to consumer confusion. Some stakeholders also argue that the effect of Clean Net Short

⁵⁸ See, for example, [SCE and PG&E Comments](#), March 5, 2019.

would be to penalize retail suppliers that pay to add renewable or GHG-free electricity to the grid during times when the grid can absorb that electricity.⁵⁹ For the reasons cited above, the Energy Commission rejected this alternative.

Designate EIM Imports as Specified Power Based on the “Deemed Delivered” Resource

In consultation with CARB, the Energy Commission determined that EIM imports should continue to be classified as unspecified imports under PSD, and the regulations reflect this approach. Some stakeholders commented that imports through the Energy Imbalance Market (EIM) should not be treated as unspecified imports, but rather be assigned the emissions profile of the “deemed delivered” resource.⁶⁰

However, CARB attributes additional emissions to California due to emissions leakage that results from EIM, and those emissions cannot be accurately reflected if this program only relied on “deemed delivered” emissions. Furthermore, EIM imports are transacted on the open market through mechanisms that parallel other purchases of unspecified power. Until CARB and the California Independent System Operator develop clearer insight into the emissions profile of specific EIM transactions, the Energy Commission believes that continuing to treat EIM imports as unspecified power best meets the statutory requirements to disclose accurate, reliable, and simple-to-understand information about the emissions associated with retail load.

Attribute Carbon Dioxide Emissions from Generators Using Biogenic Fuels to the Electricity Sector

In consultation with CARB, the Energy Commission determined that carbon dioxide emissions resulting from electricity generators using biogenic fuels should not be attributed to the electricity sector under this program. However, some stakeholders have advocated for these GHG emissions to be included in the GHG emissions intensities disclosed under this program.⁶¹

The best practices of subnational and national GHG emissions accounting do not attribute carbon dioxide emissions of generators using biogenic fuels to the electricity sector. CARB’s GHG Emission Inventory does not include carbon dioxide emissions of generators using biogenic fuels in its electricity sector total emissions, nor does CARB include those emissions in its SB 350 emissions reduction targets for the electricity sector.⁶² The U.S. EPA’s GHG Inventory and

⁵⁹ See, for example, [TID Comments](#), March 20, 2019, and [CalCCA Comments](#), March 20, 2019.

⁶⁰ See, for example, [CMUA Comments](#), October 25, 2018.

⁶¹ See, for example, [Center for Biological Diversity Comments](#), October 25, 2018.

⁶² See “California Greenhouse Gas Emissions for 2000-2016-Trends of Emissions and Other Indicators,” *California GHG Emission Inventory, 2018 Edition*, CARB, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf; and <https://www.arb.ca.gov/board/mt/2018/mt072618.pdf?ga=2.68498257.1774497100.1535477312->

guidance from IPCC both categorize carbon dioxide emissions from generators using biogenic fuels to the land use and forestry sector.⁶³

To be consistent with established governmental GHG accounting practices, including those developed by California, the Energy Commission has concluded it is reasonable to exclude carbon dioxide emissions associated with biogenic fuels used by electricity generators from the disclosure requirements of electricity portfolios. Deviating from CARB's established treatment of carbon dioxide emissions associated with biogenic fuels would be inaccurate and potentially mislead consumers. Consequently, the Energy Commission rejected the proposal by stakeholders to assign carbon dioxide emissions associated with biogenic fuels to the electricity sector.

V. SPECIFIC TECHNOLOGIES OR EQUIPMENT (Government Code section 11346.2(b)(1))

The proposed regulations do not mandate the use of specific technologies or equipment.

VI. ECONOMIC IMPACT ASSESSMENT (Government Code sections 11346.2(b)(2) and 11346.3(a)(3))

The economic impact assessment was performed pursuant to Government Code § 11346.2(b)(2) and is included as Appendix A.

VII. DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS (Government Code section 11346.2(b)(6))

The Energy Commission will perform GHG emissions intensity calculations based on existing reporting requirements of retail suppliers under the PSD Program. The Code of Federal Regulations does not contain requirements for retail suppliers of electricity to disclose the GHG emissions intensity of their electricity portfolios to consumers. The Energy Commission has concluded that proposed modifications will not cause unnecessary duplication or any conflicts with federal regulations contained in the Code of Federal Regulations and addressing the same issues.

VIII. EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT AFFECTING BUSINESS (Government Code section 11346.2(b)(5)(A))

This section is not applicable since the Energy Commission has found no potential economic

[730192970.1512668373](https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=be77ce6e756f0befaa0dd95743e3342e&tpl=/ecfrbrowse/Title40/40cfr98_main_02.tpl)

⁶³ See EPA's *Greenhouse Gas Reporting Program, Subpart C*, https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=be77ce6e756f0befaa0dd95743e3342e&tpl=/ecfrbrowse/Title40/40cfr98_main_02.tpl; 2006 IPCC *Guidelines for National Greenhouse Gas Inventories: Volume 2*, <http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol2.html>.

impacts affecting businesses, as detailed in the Economic Impact Assessment.

Obligated parties under the proposed regulations are responsible for reporting the generation sources and emission content of the electricity they provide to California consumers. These entities include all retail suppliers of electricity. California's IOUs and Electric Service Providers (ESPs) are the only obligated business entities. Currently, IOUs have procured renewable and zero carbon resources adequate to ensure their power source disclosure electricity reports will continue to include a high percentage of renewable and zero carbon resources resulting in low GHG emissions intensities. For example, the Power Content Label for IOU green pricing programs, marketed as 100 percent renewable, are anticipated to display current procurements from previously entered into contracts from portfolio content category 1 resources which will be classified as renewable and low GHG emission resources.

ESPs are competitive providers that contract directly with consumers to provide electricity service as an alternative to the IOUs. The total amount of electricity that ESPs can offer through Direct Access (DA) services is limited by the CPUC, and DA services almost exclusively serve commercial and industrial consumers. Staff analysis has concluded that DA services in most cases are distinguishable from IOU services based on retail price, rather than marketable environmental attributes. Staff analysis has concluded that ESPs will not incur any costs associated with altered procurement strategies in response to the proposed regulations.

Both the local publicly owned electric utilities (POUs) and community choice aggregators (CCAs) are local public entities and not businesses. To the extent that POU and CCAs have green electricity offerings and the IOU they may be competing with has a low emission electricity offering, POU and CCAs may be motivated to alter their procurement to maintain their market share and ensure consumers are getting what they signed up for at a competitive price. The proposed regulatory changes would involve changing the accounting of renewables and adding emissions for all generation. This would lower the amount of reported renewable for some entities who have relied upon lower priced RECs for their high renewable offerings, such as a 100 percent renewable sourced green pricing program. In these situations, POU and CCAs may change their procurements as estimated in the Economic Impact Assessment.

Private businesses and non-profit entities in the voluntary REC industry provide procurement, marketing, and verification services for entities interested in ensuring the RECs they procure meet the Green-e standards.

The Center for Resource Solutions has a history of providing renewable certification and verification services for the voluntary REC market, including supporting voluntary renewable portfolio offerings by retail suppliers. The proposed regulations will not change the amount of certified offerings or require the modification of any certification standards. The proposed regulations do not require any changes to the amount of RECs procured by businesses or the environmental goals of private companies. The proposed regulation is not estimated to reduce the total quantity of RECs procured and retired by electricity retail suppliers, which means there will not be any reduction in business services by the voluntary REC industry. It is plausible that with the passage of SB 100 (de León, Chapter 312, Statutes of 2018) establishing a 100 percent zero carbon electricity resource goal by 2045, corporations and other entities may move towards zero

carbon products.