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Appendix A:

Economic Impact Assessment for Implementing Assembly Bill 1110 Power Source Disclosure Regulations

# **Proposed Regulations**

The Assembly Bill (AB) 1110 (Ting, Chapter 656, Statutes of 2016) regulations implement the disclosure and reporting requirements established in Article 14 (commencing with section 398.1) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code. The current proposed regulatory language amends California Code of Regulations Title 20. Div. 2, Chapter 3. Art. 5, Sections 1391, 1393, and 1394, and adds section 1394.1 and 1394.2. These regulations provide information to electricity consumers about the source of the electricity they are purchasing, particularly important for marketed electricity products that highlight environmental claims. Current power source disclosure regulations require the reporting of the electricity generation sources to be submitted to the Energy Commission and to provide a clear electricity content label to consumers. The proposed regulatory language amends the regulations to include total GHG emissions associated with electricity procured to serve customer load. on the customer power content label.

Regulatory changes include a new Section 1393, which defines the accounting methodology for calculating Greenhouse Gas (GHG) emissions. The methodology includes fuel mix accounting, emissions accounting, and GHG emission exclusions.

# Summary of Cost Impacts and Benefits

The following table summarizes the costs and benefits across the proposed power source disclosure regulations for the first three fiscal years of the reporting implementation.

**Table 1. Summary of Costs and Benefits for Proposed Regulations** 

•		
Fiscal Year		
2020/21	2021/22	2022/23
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$35,170	\$36,906	\$38,729
\$0	\$0	\$0
\$0	\$0	\$0
\$35,170	\$36,906	\$38,729
\$8,767,738	\$8,692,835	\$8,661,361
\$0	\$0	\$0
\$8,767,738	\$8,692,835	\$8,661,361
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$35,170 \$8,767,738 \$0 \$8,767,738 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2020/21 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$35,170 \$36,906   \$8,767,738 \$8,692,835   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0   \$0 \$0

Obligated Party Benefits	\$90,300	\$90,300	\$90,300
Total Costs	\$8,802,908	\$8,729,741	\$8,700,090
Total Benefits	\$90,300	\$90,300	\$90,300

# Summary of Analytical Approach and Assumptions

The current analytical approach discusses four areas of potential impacts or benefits: administrative, customer response, procurement changes, and those potentially influencing third-parties. Each of these is discussed separately and will be appropriately combined to arrive at the final economic and fiscal costs and benefits.

#### **Direct Costs**

The power source regulations were developed to provide California consumers electricity product details, not directly require any changes to procurement. Renewable and zero carbon procurement requirements are directly influenced by other legislation such as recently approved Senate Bill (SB) 100 (de León, Chapter 312, Statutes of 2018) which increased renewable procurement requirements to 60% of retail sales by 2030 and set a state planning goal of 100% zero carbon resources by 2045. Consumer power source information provides customers with details of the content of their purchased electricity but does not require electricity purchases from any specific generation technology. Additionally, AB 1110 requires the Energy Commission to consult with CARB while developing the regulations. Although reconciling the differences between programs and agencies can be difficult given the nuanced objectives of various programs, staff has made an effort to harmonize methodologies when appropriate.

There is no indication that there will be a shift in customer purchasing behavior solely based on the information provided to consumers due to the implementation of AB 1110 reporting requirements. Utilities are already moving away from unbundled renewable energy credits (RECs) as the value of these products for Renewables Portfolio Standard (RPS) compliance decreases, other regulations decrease their importance, and public perception focuses on climate change.

Additionally, the reporting of GHG emissions may not influence procurement since AB 1110 implementation will not directly change the quantity of procured renewables required to meet the State's RPS and emissions will be reported as a single value. Since emissions will be an aggregated number for the entire electricity portfolio, customers may find it difficult to clearly link reported emissions to generation types. The inability to directly attribute emissions to any single generation component may make it less likely that utilities will change electricity procurement.

Current procured renewables may have emissions due to the source of delivered electricity. In the past it was enough to ensure that the RPS was met, but consistent with the state's focus and goals to reduce GHGs, individual load serving entities have been assigned GHG reduction goals and there is a need to quantify and track GHG emissions associated with retail sales of electricity across the state.

There are currently many factors encouraging LSEs to procure renewable and zero carbon resources and most LSEs have included distinct plans to decrease the procurement of any resources including renewable resources that have associated GHG emissions. Many IRP filings provide details of these plans and highlight the fact that AB 1110 implementation by itself will have minimal impact on electricity procurement.

As such, the implementation of AB 1110 is purely informational and the associated cost for reporting the new information is negligible since LSEs already are required to report the procurement information to customers. There will be one-time and continuing costs for updating emission factors, forms, providing thorough communications and identifying, tracking, and reporting procurements having GHG emissions. Tracking procurement consistent with RPS portfolio content categories is already completed by LSEs as part of ensuring RPS compliance. Since existing Energy Commission staff perform power source fuel mix reporting and manage the certification and verification activities of the RPS program and CARB already provides emissions intensities for specific generators, the additional emission data needed to implement AB 1110 will not result in significant increases to state workload.

#### Administrative Impacts

The basic purpose of the amended regulations is to address legislative requirements for utilities to provide additional information to electricity customers about their electricity purchases, in this case the GHG emissions associated with the electricity purchases and the clear communication of the amount of unbundled RECs procured. The Energy Commission is updating the existing Power Source Disclosure forms to include the GHG emissions associated with the reported electricity. The updated forms will contain the emission information and have calculations embedded directly into the form to automatically calculate emissions based on a consistent methodology. As such, obligated parties will only need to provide the data they have been providing and the form will automatically calculate the associated emissions. Therefore, there is no additional effort on the part of the reporting parties to comply with the new regulations. However, the Energy Commission must perform the work necessary to update, maintain, validate, and process the additional GHG emissions information. These are the primary administrative costs being estimated.

### **Indirect Costs**

Although the regulations only directly impact an estimated 92 entities required to report power source information to the Energy Commission, there are a number of possible indirect impacts. These indirect impacts include consumer response to the new emission information, modified procurement strategies to modify the emission characteristics of electricity portfolios, and unlikely market influences impacting third parties.

### **Consumer Impacts**

The GHG emission information provided may lead to consumers electing to change the electric product they subscribe to or the provider of their electricity services. This would most likely occur with customers already electing to participate in voluntary green-energy programs, who become aware of GHG emissions associated with the products that pay a premium for and are most likely to make purchase decisions based on the labeling information. Not all customers will have an opportunity to change electricity providers, but those who can, might elect to change providers as a result of the new information. It is worth noting, that many things impact consumer behavior – including a growing concern about climate change and GHG emissions. The emissions information update to the Power Content Label is only one part of a larger story impacting consumer behavior.

Numerous electric utilities, including community choice aggregators (CCA), provide green electricity programs with varying levels of environmental claims. The current power source disclosure ensures claims regarding the amount of renewable energy procured are consistently and reliably communicated to customers. The proposed amendments additionally require information on the GHG emissions associated with each product be provided to consumers. The addition of this information will have the

greatest impact on those electricity products that claim to be significantly green, for example 100% renewable electricity products, but incorporate significant amounts of unbundled RECs or products procured under recent short term firmed and shaped agreements. In these cases, reported emissions could prompt customers to consider changing products or even service providers. It may be worth noting that SB 100, known as the 100 percent Clean Energy Act of 2018¹ distinguishes between renewable energy resources and zero-carbon resources. AB 1110 recognizes that there may be GHG emissions associated with the electricity tied to renewable claims and also that certain zero carbon resources are not eligible for the RPS and are therefore not categorized as renewable.

Currently competition only exists at a consumer retail level between CCAs and IOUs where customers can choose between the two utilities. If there were a customer response to change products offered by the same retail supplier, there would arguably be little impact to the utility's revenues since they have incorporated the expenditures and profits for each specific product into their rate schedules typically by customer sector. For example, if a customer changes from one rate to another rate within the same utility, the utility would likely not see significant revenue changes as they adjust their rates to meet their overall revenue requirements. However, if the customer chooses to change service providers, there is the potential for one utility to lose revenue to another utility. This is seen most readily in California CCAs who have been able to provide alternative, and often "greener" services to IOU customers at competitive rates. The impact to the IOU is offset by charges paid by the CCA to the host IOU.

Energy Commission staff has decided to quantify the cost of utilities to change their procurement of resources to retain customers instead of estimating the migration of customers from one utility to another due to newly reported emissions. Given that existing green pricing programs have relatively small subscription rates, this migration is not estimated to be significant in most instances.

#### **Electricity Procurement Impacts**

Utilities consider many different requirements when procuring resources to meet their projected electricity loads, including: internal environmental objectives, regulatory requirements, procurement costs, market share, availability of resources, delivery constraints, market conditions, projections of load growth, resource adequacy requirements, balancing area markets, customer preferences, system reliability issues, the generation resource characteristics, and financial (financing) conditions. First and foremost, utilities procure generation resources which reliably meet their electricity loads in a cost effective manner and allow them to meet all regulatory requirements. They must procure adequate amounts of resources to meet their demand and have a reserve to address any unexpected reliability issues. They must also ensure they meet regulatory requirements such as California's RPS requirements. For the RPS, this involves procuring various electricity products that meet the procurement, category and contract term requirements of the RPS. There are also market wide caps on emissions under California's Cap and Trade program, in which electricity generators and importers must participate. In addition, the utility must remain financially stable and must consider electricity procurements that maintain their revenues and market shares.

For this analysis, the Energy Commission will specifically look at potential procurement changes that could occur to mitigate the potential market and fiscal impacts of reporting GHG emissions on the power content label. These impacts would likely be most significant where the entity providing service has not procured adequate resources of the proper types to meet its green program obligations in a manner that would not require a significant change in the way the product is marketed or in meeting

<sup>&</sup>lt;sup>1</sup> https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\_id=201720180SB100

subscribers' expectations. This is more significant where the current service provider may have competition from other entities. If the utility has already procured sufficient low-emission generation or has little incentive to change its procurements because there would be little revenue impacts, they are not likely to make significant changes. This analysis is complicated by the fact that there are many other regulations being implemented which influence these decisions as is often identified in the utility Integrated Resource Plans (IRPs) and other procurement plans.

#### Third-Party Impacts

The power source disclosure regulation directly impacts obligated parties who report to the Energy Commission and who have a responsibility to provide Power Content Labels to customers. There have been pre-rulemaking comments from entities which are not directly impacted but who argue the new GHG-emission reporting would influence their business. These comments center primarily on voluntary green markets, or products that are not required by any regulations but meet a consumer demand for green products. These are mostly green pricing programs which offer customers an assurance of green products for a premium price, for example 100 percent renewable electricity for an additional \$0.01 per kWh of electricity. There have been a number of businesses which facilitate this market by certifying and verifying the environmental claims of the electricity or by brokering the purchase of these products. These products have typically relied on purchases of unbundled RECs for making high percentage green energy claims. The businesses offering and certifying these products argue that the proposed regulations may decrease the value of their products or the size of the market may decrease and therefore influence their revenue. There is no indication that the size of market for unbundled RECs will decrease as a result of the proposed regulations. Additionally, there are broader changes occurring which have led to the introduction of new voluntary green market products.

# **Economic and Fiscal Analysis Assumptions**

The Energy Commission is proposing the following fiscal analysis assumptions.

#### Implementation Date of the Regulations

Economic and fiscal analyses need to be performed over a 12-month period following full implementation of the evaluated regulations. The supporting rulemaking activities will be completed in 2019 with an estimated implementation date of January 1, 2020. The first full reporting requirement under the new regulations would be for fiscal year 2020-2021. The Energy Commission is proposing to use fiscal year 2020-21, as the basis of the economic and fiscal impact estimation since this will be the first required reporting year.

#### **Obligated Parties**

In 2017, there were 76 reporting entities who submitted PSD data. Due to the proliferation of CCAs, staff anticipates 86 entities to report 2018 data under PSD, and 92 entities to report on 2019 data. The Energy Commission is proposing to use 92 as the number of entities directly impacted by the proposed regulations in this assessment.. Of the 92 estimated obligated parties, 20 are private businesses and 72 are public utilities. Although additional entities will come into existence in the coming years, it is not anticipated that this will significantly impact the costs. Staff has not identified any of the obligated parties as small businesses.

#### **Emission Factors**

Although specific resource emission factors have not been finalized there are a number of sources which will be used to estimate emissions across different power mixes. The absolute GHG-emission values will likely play less of a role than the GHG-emission difference between competing programs. The following are the current values and sources used in the calculations.

Table 2. Proposed Emission Factors by Technology

Technology	Emission Factor (MT CO₂e/MWh)	Source
Coal	0.987896	Energy Information Agency (EIA)
Natural Gas	0.4148172	EIA
Geothermal (average with binary plants)	0.081646627	Geo-Energy.org
Biomass (non-pellet)	0.030844281	Global Bio Energy
Unspecified Energy	0.428	Existing Regulations

Other renewable resources, such as solar and wind, are assumed to have little or no emissions. Staff will use the emission factor for unspecified energy for firmed and shaped contracts that do not explicitly identify procured substitute eligible renewable resources.

#### Administrative Costs

All obligated parties are required by existing regulations to submit PSD data. The new regulations will add GHG emission data to the labeling but will not result in any additional administrative costs from the utilities since all GHG emission data will be inserted into the reporting forms by Energy Commission staff and the resulting emissions will be automatically calculated in the PSD forms. Consequently, the Energy Commission is proposing to focus the State's administrative costs associated with modifying the form, compiling emission data, maintaining the emission data, verifying that emission data is accurate, and responding to program participant and general public inquiries. These activities will be performed by existing Energy Commission staff and will not require new resources.

### Staff Salaries

In performing the evaluation of administrative costs the Energy Commission is proposing to use fully loaded rates based on average salaries for staff position classifications, staff benefits, and staff operating costs. The pay scales will be increased by estimated annual percentages based on the average negotiated annual increase by the Bargaining Unit to reflect potential salary increases. Table 3 provides a list of the classifications used, associated salaries, and estimated annual salary increases. The classifications used will be based on current Energy Commission staff organization charts and resource expectations.

**Table 3. Summary of Staff Fully Loaded Annual Salaries in Analyses** 

Classification	2019 Fully Loaded Annual Rates	Estimated Post 2019 Annual Salary Increase
Energy Commission Specialist I	\$140,005	5%
Energy Generation System Specialist I	\$172,400	4.5%
Energy Resource Specialist III (Supervisory)	\$184,261	5%
Energy Resources Specialist III (Management)	\$199,426	5%

Career Executive Assignment B	\$221,590	4%
Attorney IV	\$233,370	4.7%

#### **Staff Hours**

The estimated hours used in the administrative cost evaluation will be marginal to the current process and will include costs for one-time and ongoing costs for modification, maintenance, verification, and communication regarding the new regulations and reporting processes.

#### Prices

There are a number of prices which play a role in the economic and fiscal analyses including the price of procuring electricity generation, the price of electricity a customer pays, and the price of RECs.

## Renewable Energy Credit Prices

Energy Commission staff evaluated representative incremental REC prices. For this analysis the Energy Commission is using the Mid Price REC for all California RPS eligible RECs as reported from S&P Global Platts Megawatts Daily publication estimates for the week of February 8, 2019. The REC prices used in the analysis are shown in Table 4.

**REC Category Low Price Mid Price High Price** PCC 1 \$17.50 \$18.50 \$19.50 PCC 2 \$5.75 \$6.75 \$7.75 PCC 3 \$1.00 \$1.25 \$1.50

Table 4. S&P Global Platts REC Prices (February 8, 2019)

The Energy Commission also evaluated contracted renewable resources from POU reported data to estimate prices. The contracted prices were close to the Platts values, approximately \$14 per MWh for PCC1, \$6 per MWh for PCC2, and \$1.50 per MWh for PCC3.

#### Zero-carbon Generation Prices

There may be a situation where GHG-free generation will be needed to substitute for fossil fuel or other resources with associated GHG emissions. Energy Commission staff evaluated reasonable marginal price changes for these products. Current marginal prices are estimated from \$1 to \$4 per MWh and will be held constant over the assessment. The Energy Commission is currently using \$2.50 per MWh in the economic analysis.

### Certified Auditor Billing Rate

The Energy Commission has received comments regarding the expected hourly rate of an auditor to perform the required audits. The Energy Commission will be using the supplied hourly rate of \$400 to estimate the benefits to POUs who will no longer have this requirement.

### Section 1391. Definitions

The proposed regulatory changes within Section 1391 focus on clarifying and adding definitions to improve the understanding of the other proposed regulations. Since the changes are purely administrative in nature and do not independently require reporting to the Energy Commission there will be no cost impacts due to any of the proposed regulations in this section.

## Costs to Obligated Parties

There are no cost impacts to any obligated parties due to clarifying and adding definitions to this section. The proposed language will not result in any changes to reporting processes.

#### Costs to the State

There are no cost impacts to the state due to clarifying and adding definitions to this section. The proposed language will not result in any changes to reporting processes.

## Potential Impacts of Proposed Regulations

The proposed regulations within Section 1391 will not result in the creation or elimination of any jobs within California. Existing businesses and staff will perform all the work necessary to meet the new obligation. No new businesses will be created and neither will any existing business be eliminated by the new regulations. The proposed regulatory changes will not expand any existing businesses doing business in California and there will be no direct benefits of the definitions to the health and welfare of California residents, to worker safety, or to the state's environment.

# Section 1393. Accounting Methodology

The new language in section 1393 describes the proposed new accounting methodology for emission calculations and analytical requirements. The detailed methodology draws upon vetted emission calculation methods used at the California Air Resources Board.

By providing explicit equations and requirements for emissions calculations, obligated parties can approximate their potential emission reporting for their electricity products and understand the source of emission factors.

#### Costs to Obligated Parties

There are no cost impacts to any obligated parties due to defining the methodologies for calculating electricity product emissions. The proposed language will not result in any changes to reporting processes but details the emission calculations to obligated parties which will be embedded into the reporting form.

### Costs to the State

There are no cost impacts to the state due to defining the methodologies for calculating electricity product emissions. The proposed language will not result in any changes to reporting processes.

### Potential Impacts of Proposed Regulations

The proposed regulations within Section 1393 will not result in the creation or elimination of any jobs within California. Existing businesses and staff will perform all the work necessary to meet the new obligation. No new businesses will be created and neither will any existing business be eliminated by the new regulations. The proposed regulatory changes will not expand any existing businesses doing business in California and there will be no direct benefits of the accounting methods to the health and welfare of California residents, to worker safety, or to the state's environment.

# Section 1394. Data Reporting to the Energy Commission

The Energy Commission is working to augment the current power source disclosure filling process to include the proposed emission reporting requirements. During the pre-rulemaking process staff has worked on developing updated forms, illustrative emission factors and calculations, and proposed forms for single and multiple electricity product filings. This work will expedite the development of final forms and emission factors. The new forms will automatically calculate the product emissions given existing required power source filing data. This removes any incremental work to obligated parties and streamlines the reporting process.

## Costs to Obligated Parties

There are no cost impacts to any obligated parties since calculations for electricity product emissions are clearly defined in the regulations and implemented, by the State, in the reporting forms. The proposed language will not result in any changes to reporting processes but detail to obligated parties the emission calculations and emission factors incorporated into the power source disclosure reporting forms.

#### Costs to the State

The incremental cost to the state due to emission reporting data to the Energy Commission are small since obligated parties already submit the power mix information as part of existing regulations. There will be one-time costs associated with updating the submission forms to account for the emissions calculations and minor additional time associated with maintaining, updating, and verifying the emission reported values.

In order to facilitate the reporting of the new data Energy Commission staff will be modifying, disseminating, and answering questions regarding updated power source disclosure forms already being used to collect related data. The modification of the forms themselves is straightforward and are being drafted as part of pre-rulemaking. In total, over the course of modifications, staff estimates this will result in 80 hours of staff time dedicated to the one-time modifications necessary to finalize the form.

The additional State Staff administrative work will involve updating the emission factors each reporting year, communicating and addressing emissions-related questions from obligated parties, finalizing the updated forms, verifying emission values, and include management review and revisions throughout the process. This work results in nearly 400 hours of new work across staff and management and will result in an estimated State cost of \$35,170 in Fiscal Year 2020/21. Although these costs will likely decrease over time as staff become more familiar with the emission data sources, general data issues, and reporting issues, for this analysis the hours to perform the work have assumed to be constant over the fiscal analysis.

## Potential Impacts of Proposed Regulations

The proposed regulations within Section 1394 will not result in the creation or elimination of any jobs within California. Existing staff will perform all the work necessary to meet the new obligation. No new businesses will be created and neither will any existing business be eliminated by the new regulations. The proposed regulatory changes will not expand any existing businesses doing business in California and there will be no direct benefits of the data reporting to the health and welfare of California residents, to worker safety, or to the state's environment.

## Section 1394.1. Retail Disclosure to Consumers

Although the regulations only require the reporting of procured generation resources for program electricity fuel mix and emissions, this economic impact analysis assumes that some obligated parties will change their electricity procurements to mitigate the reported emissions for some electricity products, specifically 100 percent renewable marketed green programs. This is particularly true for obligated parties who exist in competitive markets, like CCAs. The following costs estimates include private, public, and state costs.

## Costs to Obligated Parties

There are two types of businesses required to provide power source disclosure information, investor owned utilities (IOUs) and electric service providers (ESPs). While publicly owned utilities and CCAs are obligated to report under power source regulations, they are public entities associated with local and regional joint governments and cities. Consequently, the estimated costs to California businesses, private obligated parties, is zero.

As mentioned above, the proposed regulations do not require a change in electricity resources. For the fiscal analysis, however, staff has assumed there will be reporting and procurement changes to maintain market shares and ensure consistency with marketing claims. In particular, green pricing programs, which often claim 100 percent renewable electricity sources, might be adjusted to reflect changes to the regulations and to remain competitive with other available programs by ensuring there are no emissions associated with their renewable procurements. Staff expects any procurement changes to be limited to increased imports of hydroelectricity from the Pacific Northwest and reductions of in-state or imported electricity derived from natural gas or unspecified power. Consequently, any procurement changes in response to AB 1110 will not result in the development of new electricity generators or increased operations of existing electricity generators within the state.

IOUs have historically procured significant amounts of renewables and currently have renewable contracts which will cover their RPS obligation and any other associated programs with bundled category 1 RECs. These resources have low to negligible emissions and fully count as renewable resources under the proposed regulations. Therefore, the few existing 100 percent renewable products for the IOUs would be comprised of category 1 RECs and therefore there would likely be no change in reporting due to the proposed regulatory changes.

ESPs are competitive providers that contract directly with customers 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 customers. <sup>2</sup> Staff analysis has concluded that DA services in most cases are distinguishable from IOU services on the basis of retail price, rather than marketable environmental attributes. There is little indication ESPs will alter their procurements in response to the proposed regulations. Of course, ESP renewable procurement will continue to be driven by compliance with California's RPS which has a potentially significant cost for non-compliance far exceeding procurement costs. However, those renewable procurement costs are associated with the RPS program and not the PSDP.

Green pricing programs offering 100 percent renewables in competitive markets are typically seen in CCA service areas. Additionally, CCAs have marketed themselves as being cheaper and greener

<sup>&</sup>lt;sup>2</sup> http://www.cpuc.ca.gov/General.aspx?id=7881

alternatives to IOUs. Staff has also considered the cost of procurement to lower the total emission of their offered electricity products to ensure they are at least as clean, in terms of GHG emissions, as the IOU's offerings.

Across the CCAs, most used category 1 RECs which would remain renewable and have limited emissions for their green pricing programs. There were two CCAs who in 2017 have reported category 3 RECs in their green pricing programs and in those two instances staff assumed they would continue to report the same percentage of their program as category 3 RECs which would need to be substituted to maintain their 100 renewable status given the proposed regulatory changes to reporting. Additionally, one CCA also used category 2 RECs for their 100 percent renewable product. It appears for that obligated party, they only have short-term category renewables procured so there would be emissions associated with this product which staff assumes would be mitigated. Lastly, CCAs are in competitive markets with IOUs and in order to maintain market share and stay competitive, staff assumes they will need to at least match the emission factors reported for corresponding IOU products. Staff has therefore estimated a cost for CCAs to procure excess resources to ensure they at least match the IOU product emission factors. The estimated costs for CCAs is \$5,202,847 for fiscal year 2020/21.

After reviewing publicly owned utility green pricing programs, there were few that would need to modify their offerings to meet the marketed 100 percent renewable claim and ensure there was no reported emissions. The estimated cost for publicly owned utility obligated parties was \$3,564,891 for fiscal year 2020/21.

The total cost for all public obligated parties in fiscal year 2020/21 is \$8,767,738.

### Costs to the State

There are no cost impacts to the state due to the proposed modifications to power source reporting requirements.

## Potential Impacts of Proposed Regulations

The proposed regulations within Section 1394.1 will not result in the creation or elimination of any jobs within California. Existing staff will perform all the work necessary to meet the new obligation. No new businesses will be created and neither will any existing business be eliminated by the new regulations. The proposed regulatory changes will not expand any existing businesses doing business in California and there will be no direct benefits of power source reporting to the health and welfare of California residents, to worker safety, or to the state's environment.

# Section 1394.2. Auditing and Verification

The proposed regulations provide clarification and simplification of existing auditing requirements including moving requirements from an auditing appendix into subdivisions of this section. The proposed regulations also allow POU and CCA governing boards the authority to attest to the validity of their submitted information through a board approval process.

### Costs to Obligated Parties

There are no cost impacts to any obligated parties due to the clarification of auditing requirements. The clarifications simplify the auditing approval process and provide alternate auditing standards for auditors to meet requirements.

#### Costs to the State

There are no cost impacts to states due to the clarification of auditing and verification requirements. The proposed language will not result in any changes to reporting processes.

## Benefits to Obligated Parties

The benefits realized by POUs and CCAs would be for any POU and CCA who had more than a single offered product. In the 2017 PSD reports POUs and CCAs provided data on 21 electricity products in addition to their primary electricity product reports. Energy Commission staff assumes these products will be offered in Fiscal Year 2020/21. The amount of time for each audit is estimated at 10.75 hours and will result in a total benefit of \$90,300.

## Potential Impacts of Proposed Regulations

The proposed regulations within Section 1394.2 will not result in the creation or elimination of any jobs within California. Existing staff will perform all the work necessary to meet the new obligation. No new businesses will be created and neither will any existing business be eliminated by the new regulations. The proposed regulatory changes will not expand any existing businesses doing business in California and there will be no direct benefits of the auditing or verification to the health and welfare of California residents, to worker safety, or to the state's environment.