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<th><strong>Docket Number:</strong></th>
<th>16-OIR-05</th>
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<td><strong>Project Title:</strong></td>
<td>AB 1110 Implementation Rulemaking</td>
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<td><strong>Document Title:</strong></td>
<td>Energy Policy Initiatives Center Comment re Pre - Ruling Making Workshop on Updates to the Power Source Disclosure Regulation</td>
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Energy Policy Initiatives Center Comment re Pre - Ruling Making Workshop on Updates to the Power Source Disclosure Regulations

Additional submitted attachment is included below.
March 14, 2017

California Energy Commission
Docket Unit, MS-4
Re: Docket No. 16-OIR-05
1516 Ninth Street
Sacramento, CA 95814-5504
Submitted Electronically

Re: Energy Policy Initiatives Center Comments on Pre-Rulemaking Scoping Questions to Power Source Disclosure Regulation Docket No.16-OIR-05

Pursuant to the California Energy Commission’s (Commission) February 21, 2017 Staff Pre-Rulemaking Workshop on Updates to the Power Source Disclosure Regulations, the Energy Policy Initiatives Center respectfully offers these comments in response to the Commission’s questions regarding the Assembly Bill (AB) 1110 Implementation Rulemaking proceeding.

Annual Sales

1. **What should be the programmatic definition of “annual sales”?**

   The Energy Policy Initiatives Center does not propose a definition of “annual sales” at this time.

2. **What should be the programmatic definition of “electricity portfolio”?**

   The Energy Policy Initiatives Center does not propose a definition of “electricity portfolio” at this time.

3. **What should be the programmatic definition of “electricity offering”?**

   The Energy Policy Initiatives Center does not propose a definition of “electricity offering” at this time.
Renewable Energy Credits

1. Should retail suppliers be required to report the purchase of eligible renewable energy resources based on the year that the renewable electricity was generated or based on the year that the REC is retired, if the two years differ?

Retail suppliers should report the purchase of eligible renewable energy resources in the year that the renewable electricity was generated. This accurately reflects the energy intensity that existed when the eligible renewable energy resources generated electricity by standardizing how energy intensity is reported and preventing an electric supplier from using the year of retirement of a REC as the basis of its overall energy intensity in a particular year. Retirements of RECs for RPS compliance will not always accurately disclose the energy intensity to customers for the particular year that the renewable energy resource generated electricity to serve load.

2. How should firmed and shaped electricity products be categorized for the power-mix percentage calculations? Specifically, should these products be categorized based on the fuel-type of their REC or the fuel-type of their substitute electricity?

To accurately capture the energy-intensity of a retail supplier, the substitute electricity that firm and shape electricity should be used to the extent that this incremental substitute power increases the amount of generation required to serve load. The fuel-type used should either reflect the actual generation used to firm and shape the applicable electricity or an average of the energy-intensity by fuel-type of the balancing authority, system operator, or third party that firmed and shaped the electricity, if possible. To calculate an average energy-intensity by fuel-type, the Commission should use as similar a method as possible to the Asset Controlling Supplier (ACS) method used by the Air Resource Board. We believe that the Commission’s authority under Public Utilities Code Section 398.3, in addition to information from retail suppliers, the Air Resources Board, and the Public Utilities Commission, should allow the Commission to accurately create an average based on current energy and emission intensity for specific balancing authorities, system operator, or other third party. The calculation should account for the total energy used to shape and firm electric power to serve load.
3. How should greenhouse gas emissions intensities be calculated for firmed and shaped electricity products? Specifically, should the greenhouse gas emissions intensity for these products be calculated based on the emissions profile associated with the generation source of their REC or based on the emissions profile of their substitute electricity?

Emissions caused by firming and shaping should be accurately disclosed. 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. The emission intensity used should either reflect the actual emission profile of the generation used to firm and shape the applicable electricity or an average of the emission intensity of the balancing authority or system operator that firmed and shaped the electricity. To calculate an average energy-intensity by fuel-type, the Commission should use as similar a method as possible to the Asset Controlling Supplier (ACS) method used by the Air Resource Board. We believe that the Commission’s authority under Public Resources Code Section 398.3, in addition to information from retail suppliers, the Air Resources Board, and the Public Utilities Commission, should allow the Commission to accurately create an average based on current energy and emission intensity for specific balancing authorities and system operator. The calculation should account for the total emissions caused by the shaping and firming electric power to serve load.

4. Should unbundled RECs (PCC 3) be reflected in the power mix or disclosed separately on the Power Content Label? What factors should be considered in making this determination?

PCC 3 RECs used for RPS compliance should be disclosed separately on the Power Content Label because PCC 3 RECs do not accurately reflect the energy-intensity or emission profile of serving load. The actual fuel-type used to serve load should be used instead. If the full-type is unknown, or unknowable, then the energy-intensity and emission intensity for null power should be used.
5. How should null power be categorized for the power-mix percentage calculations? How should the greenhouse gas intensity of null power be calculated?

Null power should be accounted for as a specific power-content item under the specific fuel-type (natural gas, large hydro, RPS, etc.) that the null power qualifies under. Null power and unbundled RECs, such as PCC 3 RECs, should be equal. Null power and unbundled RECs should be described to the electric customer in a way that conveys that unbundled RECs are used for RPS compliance but the actual energy-intensity and emission profile of the null electricity used to serve load has a specific profile that is reflected by its actual fuel-source.

The greenhouse gas intensity of null power should be calculated based on the fuel-type used for the power that has a causal connection to serve load. Where the null power is unbundled renewable energy, the calculation should reflect this reality. Where the null power is natural gas or another fossil fuel, the calculation should reflect this to accurately account for the emission profile and energy-intensity of the null power used to serve a specific load.

**GHG Intensity Factor Data and Calculations**

1. **AB 1110 defines “greenhouse gas emissions intensity” as the “sum of all annual emissions of greenhouse gases associated with a generation source divided by the annual production of electricity from the generation source.”** Are there any reasons to consider calculating GHG emissions intensities using greenhouse gases other than those accounted for in both MRR and the EPA’s Greenhouse Gas Reporting Program?

The Commission should ensure that all emissions from co-generation plants are calculated. This should include both heat output and the emission associated with fuel-type to accurately calculate emission intensities. For example, the MRR and eGRid allocate total emission from electric generation
and heat output to a specific co-generation facility. This will ensure that total emission from co-generation facilities are accurate and consistent with existing methods.

2. What are the concerns, limitations, and benefits of relying on GHG emissions reported to the MRR program for the development of GHG emissions intensities for in-state and out-of-state facilities?

The concern and limitation of using GHG emissions reported to the MRR program for the development of GHG emission intensities for in-state and out-of-state facilities rests on the definition of specified power, the definition of unspecified power, the use of a decade old WECC wide average as the emission factor of 0.428 MT CO2e/MWh for unspecified power, and how these are used under 17 CCR 95852 (b)(3). The current statutory definition of unspecified power is used to capture most, if not all, imported power, power purchased in the real-time, and power-purchased in the day-ahead market of the California ISO that is transacted as unspecified power purchased without an auditable contract trail. This reflects the actual physics of the electric transmission system and consequent limitation of verifying the generation source of electricity for a specific load through a means other than an auditable contract. However, the use of 0.428 MT CO2e/MWh does not accurately reflect the emission factor for unspecified power as it exists today, or will exist in the future, because this average is from the WECC as it existed in 2005-2006 and because the PSD serves a different function than the MRR and Cap and Trade. It is possible to provide greater accuracy of energy-intensity and the emission profile of a retail suppliers by further specifying the fuel-type through an hour-by-hour matching of load and resources as authorized under Public Utilities Code Section 398.2 (d). Additionally, Public Utilities Code Section 398.2 (d) is not limited to auditable contracts because the definition also allows for “equivalent” verification that proves that the electricity source claimed has been sold once and only once to a retail customer. The use of an equivalent verification method that use hour-by-hour matching of load and resources would provide the most accurate, timely, reliable, and consistent information on energy-intensity and emission profiles. It would also decrease the amount of unspecified power under the PSD and help to update the accuracy of the existing emission factor for unspecified power by tracing power flows and assigning specific emission factors to balancing authorities or system operators similar to current ACS treatment by the Air Resources Board.
3. **Should GHG emissions classified as non-covered or exempt under the Cap and Trade Program be included in PSD greenhouse gas intensity calculations?**

Yes, greenhouse gas emissions from non-covered and exempt facilities under Cap and Trade should be included to accurately account for the total energy-intensity and GHG emissions profile for all generation serving load.

4. **Should the Power Disclosure Program adopt ARB’s default factor as the greenhouse gas intensity for unspecified power?**

The PSD should adopt an updated emission factor that reflects the current emission factor from either the WECC as it exists presently or for each balancing authority and system operator similar to current ACS treatment by the Air Resources Board. Use of a decade old emission factor does not accurately reflect the emission in the WECC today nor will it accurately reflect the emission of the WECC in the future.

5. **Energy procured through the Energy Imbalance Market (EIM) is reported under the MRR program as specified electricity. What greenhouse gas intensity factor should be assigned to electricity procured through the Energy Imbalance Market (EIM)?**

Specified electricity from the EIM should reflect the greenhouse gas intensity factor of the transacted and delivered power by fuel-type. Because this is considered specified power, it does not suffer from the same ambiguity as unspecified power. Capturing the potential secondary dispatches created by the EIM remains an open concern that the Commission should work closely with the Air Resources Board and ISO to resolve and accurately account for emissions created to serve California load.
POU GHG Intensity Adjustment

1. **What quantities of electricity have been generated in previous years that stakeholders believe would qualify for this adjustment?**

The Energy Policy Initiatives Center does not have comments on this question at this time.

**Conclusion**

Thank you for the opportunity to comment on this important issue. We look forward to future opportunities to participate in this proceeding.

Please contact me with any questions or concerns.

Respectfully Submitted,

/s/
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