

## DOCKETED

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| <b>Docket Number:</b>   | 16-OIR-05   |
| <b>Project Title:</b>   | Power Source Disclosure - AB 1110 Implementation Rulemaking                   |
| <b>TN #:</b>            | 222410  |
| <b>Document Title:</b>  | Presentation - Updates to the Power Source Disclosure Program Public Workshop |
| <b>Description:</b>     | February 1, 2018 Workshop Slide Deck by Jordan Scavo                          |
| <b>Filer:</b>           | Jordan Scavo  |
| <b>Organization:</b>    | California Energy Commission  |
| <b>Submitter Role:</b>  | Commission Staff  |
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# Updates to the Power Source Disclosure Program Public Workshop

Jordan Scavo

Renewable Energy Division

Rosenfeld Hearing Room

February 1, 2018



## Housekeeping

- Handouts available on desk at room entrance and on AB 1110 online docket
- Written comments due Monday, February 23, 2018 by 5:00 PM. Comments may be submitted directly to the docket through our e-filing system at:  
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=16-OIR-05>



## Agenda

- Review of Major Areas Covered in the Staff Proposal
  - Including revisions made from the prior version of the implementation proposal for AB 1110
- Presentation on proposed annual reporting forms
- Public comment period



## Process

- Pre-rulemaking
  - Scoping Workshop, Feb 2017
  - Implementation Proposal Workshop, July 2017
  - Implementation Proposal Workshop, Feb 2018
- Formal Office of Administrative Law (OAL) rulemaking
  - Adopt regulation in 2019



## Overview of Power Source Disclosure

- Annual reporting of generation sources and retail sales
- Disclosure of an electricity portfolio's power mix to consumers on a Power Content Label



## AB 1110 Requirements for LSEs

- Requires the disclosure of the GHG emissions intensities associated with each electric service product
- Requires all marketing claims about GHG emissions to be consistent with the PSD methodology
- Requires the disclosure of an LSE's unbundled RECs



## Guiding Principles

- Provide reliable, accurate, timely, and consistent information
- Minimize the reporting burden
- Ensure there is not double-counting of GHGs or environmental attributes
- Rely on the most recent verified GHG emissions data





## Guiding Principles

- Align with the Air Resources Board's GHG emissions accounting under Mandatory Reporting Regulation (MRR)



## Major Areas of the Proposal

- RECs and the PSD Program
- GHG Emissions Intensity Calculations
- Power Mix Accounting
- GHG Emissions Accounting
  - Procurement Types
  - Emissions Adjustments



## RECs and Emissions Accounting

- REC-based accounting could lead to undercounting of emissions
- RECs do not confer emission reductions
- Firmed-and-shaped imports differ qualitatively from directly-delivered sources
- Alignment with CARB method reflects progress toward emissions reduction goal of SB 350



## GHG Emissions Intensity Calculation

- Calculated using MRR emissions data (supplemented with EIA data), and PSD procurement and retail sales data
- Expressed in kg CO<sub>2</sub>e/MWh



## PSD Accounting Overview

| Procurement Type               | Power Mix Accounting       | GHG Emissions Intensity Accounting               |
|--------------------------------|----------------------------|--|
| Specified - Directly Delivered | Resource type of generator | Emissions intensity of generator                 |
| Specified - Firmed & Shaped    | Resource type of REC       | Emissions intensity of substitute power          |
| Specified - Null Power         | Unspecified power          | Emissions intensity of generator                 |
| Unspecified                    | Unspecified power          | Default emissions intensity of unspecified power |



# Power Mix Accounting

| <b>POWER CONTENT LABEL</b>    |                           |                                |
|-------------------------------|---------------------------|--------------------------------|
| <b>ENERGY RESOURCES</b>       | <b>2014<br/>POWER MIX</b> | <b>2014 CA<br/>POWER MIX**</b> |
| <b>Eligible Renewable</b>     | <b>32%</b>                | <b>20%</b>                     |
| Biomass & waste               | 7%                        | 3%                             |
| Geothermal                    | 2%                        | 4%                             |
| Small hydroelectric           | 4%                        | 1%                             |
| Solar                         | 12%                       | 4%                             |
| Wind                          | 7%                        | 8%                             |
| Coal                          | 10%                       | 6%                             |
| Large Hydroelectric           | 8%                        | 6%                             |
| Natural Gas                   | 38%                       | 45%                            |
| Nuclear                       | 0%                        | 9%                             |
| Other                         | 0%                        | 0%                             |
| Unspecified sources of power* | 12%                       | 14%                            |
| <b>TOTAL</b>                  | <b>100%</b>               | <b>100%</b>                    |

\* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

\*\* Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the previous year.



## GHG Emissions Accounting

- Based on delivered electricity
- Aligns with emissions accounting under the Air Resources Board's MRR



## Procurement Types - Directly Delivered Procurements

- Must be directly delivered to a California balancing authority
- Directly delivered renewables must be transacted with the associated RECs
- Null Power





## Procurement Types - Firmed-and-Shaped Imports

- Electricity from a renewable generator is not delivered to California customers
- Firmed-and-shaped imports will be assigned the emissions factor of the substitute power



## Procurement Types - Asset Controlling Suppliers

- LSEs may claim the resource mix of an asset-controlling supplier for specified purchases of system power from asset-controlling suppliers



## Procurement Types - Unspecified

- Null power
- Spot Market Purchases Through the Energy Imbalance Market



## Emissions Adjustments - Self-Consumption & Grid Losses

- AB 1110 requires power mix and GHG accounting to be based on retail sales
- To reconcile net procurement with retail sales, self-consumption and grid losses will be proportionally attributed to non-renewable sources



## Emissions Adjustments - Line Loss Adjustment Factor for Imports

- Eliminated proposal to adopt CARB's line loss adjustment factor for imported electricity



## Emissions Adjustments - POU Emissions Adjustment Credits

- Amends the proposal to allow banking of historical emissions credits going back to effective date of AB 1110 (Jan 1, 2017)



## Other Topics

- Biogenic CO<sub>2</sub> will be disclosed as a footnote on the power content label
- Removal of Schedules 3 & 4 previously used for power pools
- Schedule Updates
  - Establish a due date for public agencies to submit final board approval of PSD filings



## Agenda

- Review of Major Areas Covered in the Staff Proposal
  - Including revisions made from the prior version of the implementation proposal for AB 1110
- **Presentation on proposed annual reporting forms**
- Public comment period





# Proposed Reporting Templates & Worksheets

- Schedules 1-4 & attestation
- Attestation
- Supplemental calculators
- Proposed Power Content Label



## Rulemaking Document Availability

- Copies of rulemaking documents available on CEC website at:  
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=16-OIR-05>
- Copies of rulemaking documents can also be obtained by contacting Energy Commission staff



## Public Comments

- Comments via WebEx: Use “raise hand” feature; we will un-mute you during your turn.
- Comments via phone: We will un-mute all lines at end of comment period; please un-mute your phone only to ask a question
- Written comments due Friday, February 23<sup>rd</sup> by 5pm. Comments may be submitted directly to the docket through our e-filing system at:  
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=16-OIR-05>



## Next Steps

- Draft proposed regulation language in Q2 2018
- Initiate formal rulemaking in late 2018
- Present for adoption in 2019
- GHG emissions disclosures begin in 2020 (for 2019 reporting year)



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