| **DOCKETED** |
|-----------------|------------------|
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| **Submitter Role:** | Commission Staff |
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Updates to the Power Source Disclosure Program
Public Workshop

Jordan Scavo
Renewable Energy Division

Rosenfeld Hearing Room
July 14, 2017
Housekeeping

• Handouts available on desk at room entrance and on AB 1110 online docket
• Written comments due Friday, July 28th 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
Agenda

• Background information
• Presentation on AB 1110 implementation proposal & other potential program modifications
• Discussion section:
  – Clarifying questions on implementation proposal a
  – Discussion of other potential modifications
• Public comment period
Process

- Pre-rulemaking
  - Scoping Workshop, February 2017
- Formal Office of Administrative Law (OAL) rulemaking
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

- Requires the disclosure of the GHG emissions intensities associated with each electric service product
- Requires the disclosure of a retail supplier’s unbundled RECs
- Requires guidelines for the adjustment of a publicly owned utilities’ emissions in certain cases of excess generation
AB 1110 Implementation Proposal for Power Source Disclosure

- Developed with input from Scoping Questions
- Reconciling AB 1110 with the existing PSD program
- One reporting mechanism, two outputs
Guiding Principles

• Provide reliable, accurate, timely, and consistent information
• Minimize the reporting burden
• Ensure there is not double-counting of GHGs or environmental attributes
• Align with the Air Resource Board’s GHG emissions accounting under MRR
Statutory Definitions

• Electricity portfolio = electricity offering = electric service product
• Annual sales = retail sales
  – Excludes wholesale sales, line losses, and municipal load
Greenhouse Gases

• Targeted Gases: CO$_2$, CH$_4$, and N$_2$O
• Excluded Emissions: CO$_2$ from biogenic fuels
Renewable Energy Credits

- RECs must be reported for power mix
- RECs do not factor into GHG emissions intensities
- RECs reported by generation year
- Unbundled RECs reported separately, outside power mix and GHG emissions intensity
## Power Mix Accounting

<table>
<thead>
<tr>
<th>ENERGY RESOURCES</th>
<th>2014 Power Mix</th>
<th>2014 CA Power Mix**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Renewable</td>
<td>32%</td>
<td>20%</td>
</tr>
<tr>
<td>Biomass &amp; waste</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Geothermal</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Small hydroelectric</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Solar</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>Wind</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Coal</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Large Hydroelectric</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>38%</td>
<td>45%</td>
</tr>
<tr>
<td>Nuclear</td>
<td>0%</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Unspecified sources of power*</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

* "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.
Data Sources & GHG Emissions Intensity Calculations

- In-state generators
  - MRR emissions data
  - EIA generation data
- Out-of-state generators
  - Emissions factors directly from MRR
- Cogenerators
  - Assign an electricity generation factor using EIA fuel consumption and generation data
Specified Imports in GHG Emissions Accounting

- Firmed-and-shaped electricity will have emissions profile of its substituted power
- Null power from zero-GHG resources will be counted
- Energy Imbalance Market treated as it is under MRR
- GHG emissions from imports to be adjusted up 2% to account for line losses
Unspecified Sources of Power in GHG Emissions Accounting

• Unspecified power will use CARB’s default GHG emissions factor of 0.428 MT CO2e/MWh

• Purchases from Asset Controlling Suppliers may use their CARB assigned emissions factors

• Imported generation and its GHG emissions to be adjusted up 2% to account for line losses
Emissions Adjustment for Publicly Owned Utilities

• Available to public utilities that have excess GHG-free generation in certain circumstances

• Creates emissions credits of 0.428 MT CO2e/MWh for excess zero-GHG generation
New Reporting Requirements

• Unbundled RECs reported in aggregate and separate from electricity sources, according to retirement year

• Report quantity of municipal load (e.g., street lighting)

• Identify which renewable sources are from firmed-and-shaped transactions

• Input the GHG emissions factor for each line item of electricity
Other Potential Modifications

• Statutory due date for Power Content Label:
  – When does the first full billing cycle of the third quarter end?
  – Are there practical limitations of this due date for stakeholders?
Other Potential Modifications (cont’d)

- Energy storage losses:
  - Should storage losses be treated as line losses?

- Power pools:
  - Should Schedules 3 & 4 and the regulatory language pertaining to power pools be eliminated?
Other Potential Modifications (cont’d)

• Asset-Controlling Suppliers’ system mix:
  – Should a retail supplier be allowed to claim the system mix of an ACS for purchases of unspecified power from those entities?
Next Steps

• Draft proposed regulation language in Q3 2017
• Initiate formal rulemaking in Q1 2018
• Present for adoption in Q3 2018
• GHG emissions disclosures begin in 2020 (for 2019 reporting year)
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

• Written comments due by 5pm on Friday, July 28th.
Contacts

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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, July 28th 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
Discussion – Clarifying Questions on Implementation Proposal
Discussion – Other Potential Program Changes

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Discussion – Other Potential Program Changes (con’t)

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Public Comments Section