Technical Committee Meeting
Thursday, April 6, 2017
9:00 A.M.

The Barbara George Conference Room
1125 Tamalpais Avenue, San Rafael, CA 94901

1114 Orchard Road
Lafayette, CA 04549

Agenda Page 1 of 1

1. Board Announcements (Discussion)

2. Public Open Time (Discussion)

3. Report from Chief Executive Officer (Discussion)

4. 2.2.17 Meeting Minutes (Discussion/Action)

5. Update on MCE Local Projects (Discussion)

6. Update on IOU CCA Joint Mailer and Draft Guidelines (Discussion)

7. Update on AB1110 Implementation for Power Content Label (Discussion)

8. Committee Member & Staff Matters (Discussion)

9. Adjourn

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DRAFT

MCE TECHNICAL COMMITTEE MEETING
February 2, 2017
9:30 A.M.

The Barbara George Conference Room
1125 Tamalpais Avenue, San Rafael, CA 94901

Roll Call

Present: Ford Greene, Town of San Anselmo, Acting Chair
Kevin Haroff, City of Larkspur
Emmett O’Donnell, Town of Tiburon
Ray Withy, City of Sausalito

Absent: Greg Lyman, City of El Cerrito
Kate Sears, County of Marin, Chair

Staff: Brian Goldstein, Resource Planning and Implementation
Elizabeth Kelly, General Counsel
David McNeil, Finance and Project Manager
David Potovsky, Power Supply Contracts Manager
Byron Vosburg, Power Supply Contracts Manager II
Dawn Weisz, Chief Executive Officer

Action Taken:

Agenda Item #4 – Approval of Minutes from 12.1.16 Meeting (Discussion/Action)

ACTION: It was M/S/C (O’Donnell/Withy) to approve minutes from 12.1.16 meeting. Motion carried by unanimous 4-0 vote: (Absent: Lyman and Sears).

Agenda Item #5 – MCE Integrated Resource Plan Update (Discussion/Action)

ACTION: It was M/S/C (Withy/Haroff) to approve the MCE Integrated Resource Plan Update. Motion carried by unanimous 4-0 vote: (Absent: Lyman and Sears).
ACTION: It was M/S/C (O’Donnell/Withy) to accept proposed Resolution 2017-02 and forward to the MCE Board as written for approval. Motion carried by unanimous 4-0 vote: (Absent: Lyman and Sears).

Agenda Item #7 – MCE Headquarters Solar and Electric Vehicle Installation (Discussion/Action)

ACTION: It was M/S/C (O’Donnell/Kevin) to 1. authorize CEO and Board Chair to finalize and approve Power Purchase Agreement with Energy Finance Associates, LLC and American Solar Corporation and, 2. authorize CEO and Board Chair to finalize and approve Electric Vehicle Charger Installation and Purchase Agreement with Energy Finance Associates, LLC and American Solar Corporation. Motion carried by unanimous 4-0 vote: (Absent: Lyman and Sears).

Agenda Item #8 – Resource Adequacy Overview and Update (Discussion)

ACTION: No action required.

The meeting was adjourned to the next scheduled meeting on March 2, 2017.

Ford Greene for Kate Sears, Chair

ATTEST:

Dawn Weisz, Chief Executive Officer
April 6, 2017

TO: MCE Technical Committee

FROM: Jamie Tuckey, Director of Public Affairs

RE: Update on IOU CCA Joint Mailer and Draft Guidelines (Agenda Item #06)

ATTACHMENTS:
A. 2016 Joint Mailers
B. 2016 Joint Mailer Rate Analysis
C. CPUC Letter to Dawn Weisz
D. Draft Joint Mailer Guidelines

Dear Technical Committee Members:

SUMMARY:

CCAs and Investor-Owned Utilities (IOUs) are required by SB 790 and CPUC decision 12-12-036 to send a mailer by July each calendar year comparing the energy costs and power sources for each supplier. The mailer is sent to all customers in the CCA service area, regardless of whether they have opted out of the CCA program. All costs for the mailer are split evenly between the IOU and the CCA.

Historically, MCE and PG&E have sent the mailer in July. However in 2016, due to ongoing discussions about content, the joint mailers (Attachment A) were not delivered to customers until December.

MCE proposed to include a footnote on the 2016 mailer about its Board-approved September 1 rate change, which was scheduled to take effect less than 60 days after planned delivery of the mailer. Because PG&E opposed this request the CPUC Public Advisor’s Office was asked to provide direction. A final decision was not provided by the CPUC until after MCE’s September 1 rate change was implemented. At that time PG&E requested to include its forecast January 1, 2017 rates in the cost comparison chart on the mailer. MCE opposed this request, primarily because the rates were preliminary and would provide inaccurate information to customers (Attachment B). The CPUC gave final direction on November 16, 2016 allowing PG&E to include its forecast January 1, 2017 rates. The CPUC also sent a follow-up letter confirming that the use of forecast rates in the annual joint mailer would not set a precedent for any future joint mailers (Attachment C).
PG&E, MCE, and the other established California CCAs have drafted Joint Mailer Guidelines (Attachment D) to streamline future development and CPUC approval of the mailer, clarify the areas of agreement and prior discussions, and ensure old issues are not re-opened by new CCAs or new staff members at existing CCAs. However, PG&E has proposed several changes to the established mailer rules and procedures which contradict SB 790 and CPUC decision 12-12-036. Proposals in dispute between PG&E and the CCAs are indicated with red text in Attachment D.

PG&E has agreed to postpone pursuit of their proposed changes until after the July 2017 mailer has been finalized according to current and existing SB 790 and CPUC direction.

**Budget Impact:** None

**Recommendation:** Discussion only
As part of our mutual commitment to support your energy choice, MCE and Pacific Gas and Electric Company (PG&E) have partnered to provide you with a comparison of commercial electric rates, average monthly charges and generation portfolio contents.

If this comparison does not address your specific rate, please visit us online at mcecleanenergy.org/rates or pge.com/cca.
Understanding your energy choice

Residential rates as of October 1, 2016

<table>
<thead>
<tr>
<th>PG&amp;E</th>
<th>PG&amp;E Solar Choice 100% Renewable Energy</th>
<th>MCE Light Green 52% Renewable Energy</th>
<th>MCE Deep Green 100% Renewable Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.09684</td>
<td>$0.10942</td>
<td>$0.07200</td>
<td>$0.08200</td>
</tr>
<tr>
<td>$0.13943</td>
<td>$0.13943</td>
<td>$0.13943</td>
<td>$0.13943</td>
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<tr>
<td>N/A</td>
<td>$0.02385</td>
<td>$0.02385</td>
<td>$0.02385</td>
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<tr>
<td>$0.23627</td>
<td>$0.27208</td>
<td>$0.23528</td>
<td>$0.24528</td>
</tr>
<tr>
<td>$110.44</td>
<td>$127.18</td>
<td>$109.98</td>
<td>$114.65</td>
</tr>
</tbody>
</table>

Generation Rate ($/kWh) $0.09288 $0.09371
PG&E Delivery Rate ($/kWh) $0.13961 $0.13961
PG&E PCIA/FF ($/kWh) N/A $0.02868
Total Electricity Cost ($/kWh) $0.23249 $0.26199
Average Monthly Bill ($) $108.68 $122.47

Monthly usage: 447 kWh

This compares electricity costs for an average residential customer in the MCE/PG&E service area with an average monthly usage of 447 kilowatt-hours (kWh). This is based on a representative 12-month billing history for all customers on E-1 rate plan.

Generation Rate is the cost of creating electricity to power your home. The generation rate varies based on your energy provider and the resources included in your energy provider's generation supply. The forecast PG&E Generation Rate, as compared to the CPUC approved rate, has recently varied by +4% to –7%.

PG&E Delivery Rate is a charge assessed by PG&E to deliver electricity to your home. The PG&E delivery rate depends on your electricity usage, but is charged equally to both MCE and PG&E customers.

PG&E PCIA/FF represents the Power Charge Indifference Adjustment (PCIA) and the Franchise Fee surcharge (FF). The PCIA is a charge to recover the costs of power purchase commitments made by PG&E before MCE initiated service to prevent customers that remain with PG&E to bear any additional costs related to that initiation of MCE service. The PCIA also applies to PG&E customers that elect to take service under PG&E’s optional Solar Choice program. The Franchise Fee surcharge is levied by cities and counties in PG&E’s service territory for all customers.

If this comparison does not address your specific rate, please visit us online at mcecleanenergy.org/rates or pge.com/cca.

2015 Electric Power Generation Mix*  

<table>
<thead>
<tr>
<th>Specific Purchases</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable</td>
<td>30%</td>
<td>52%</td>
<td>100%</td>
</tr>
<tr>
<td>• Biomass &amp; Biowaste</td>
<td>4%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>• Geothermal</td>
<td>5%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>• Eligible Hydroelectric</td>
<td>1%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>• Solar Electric</td>
<td>11%</td>
<td>5%</td>
<td>25%</td>
</tr>
<tr>
<td>• Wind</td>
<td>8%</td>
<td>36%</td>
<td>75%</td>
</tr>
<tr>
<td>Large Hydroelectric</td>
<td>6%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>25%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>Nuclear</td>
<td>23%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Unspecified Sources of Power</td>
<td>17%</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*As reported to the California Energy Commission’s Power Source Disclosure Program. PG&E data is subject to an independent audit and verification that will not be completed until October 1, 2016. The figures above may not sum up to 100 percent due to rounding.
Understanding your energy choice

Commercial Electric Rate Comparison, A1 TOU

Current rates as of October 1, 2016

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>PG&amp;E Solar Choice 100% Renewable Energy</th>
<th>MCE Light Green 52% Renewable Energy</th>
<th>MCE Deep Green 100% Renewable Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price ($) per kWh</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG&amp;E Generation Rate ($/kWh)</td>
<td>$0.09650</td>
<td>$0.10668</td>
<td>$0.07850</td>
<td>$0.08850</td>
</tr>
<tr>
<td>PG&amp;E Delivery Rate ($/kWh)</td>
<td>$0.13360</td>
<td>$0.13360</td>
<td>$0.13360</td>
<td>$0.13360</td>
</tr>
<tr>
<td>PG&amp;E PCIA/FF ($/kWh)</td>
<td>$0.01787</td>
<td>$0.01854</td>
<td>$0.01854</td>
<td>$0.01854</td>
</tr>
<tr>
<td>Total Electricity Cost ($/kWh)</td>
<td>$0.25882</td>
<td>$0.23064</td>
<td>$0.24064</td>
<td>$0.24064</td>
</tr>
<tr>
<td>Average Monthly Bill ($)</td>
<td>$268.12</td>
<td>$301.59</td>
<td>$268.76</td>
<td>$280.41</td>
</tr>
</tbody>
</table>

Forecast rates for January 1, 2017

PG&E forecast rates are subject to CPUC approval. The changes in the PG&E PCIA/FF and PG&E Delivery rate will also result in changes to MCE customer bills.

<table>
<thead>
<tr>
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<tr>
<td>PG&amp;E Generation Rate ($/kWh)</td>
<td>$0.12699</td>
<td>$0.13388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG&amp;E Delivery Rate ($/kWh)</td>
<td>$0.13388</td>
<td>$0.13388</td>
<td></td>
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<tr>
<td>PG&amp;E PCIA/FF ($/kWh)</td>
<td>N/A</td>
<td>$0.02206</td>
<td></td>
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<tr>
<td>Total Electricity Cost ($/kWh)</td>
<td>$0.26088</td>
<td>$0.27978</td>
<td></td>
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<tr>
<td>Average Monthly Bill ($)</td>
<td>$303.99</td>
<td>$326.01</td>
<td></td>
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</tr>
</tbody>
</table>

Monthly usage: 1,165 kWh

This compares electricity costs for an average small commercial customer in the MCE/PG&E service area with an average monthly usage of 1,165 kilowatt-hours (kWh). This is based on a representative 12-month billing history for all customers on A1-TOU rate plan.

Generation Rate is the cost of creating electricity to power your business. The generation rate varies based on your energy provider and the resources included in your energy provider’s generation supply. The forecast PG&E Generation Rate, as compared to the CPUC approved rate, has recently varied by +4% to –7%.

PG&E Delivery Rate is a charge assessed by PG&E to deliver electricity to your business. The PG&E delivery rate depends on your electricity usage, but is charged equally to both MCE and PG&E customers.

PG&E PCIA/FF represents the Power Charge Indifference Adjustment (PCIA) and the Franchise Fee surcharge (FF). The PCIA is a charge to recover the costs of power purchase commitments made by PG&E before MCE initiated service to prevent customers that remain with PG&E to bear any additional costs related to that initiation of MCE service. The PCIA also applies to PG&E customers that elect to take service under PG&E’s optional Solar Choice program. The Franchise Fee surcharge is levied by cities and counties in PG&E’s service territory for all customers.

If this comparison does not address your specific rate, please visit us online at mcecleanenergy.org/rates or pge.com/cca.

### 2015 Electric Power Generation Mix* 

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"PG&E" refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2016 Pacific Gas and Electric Company. All rights reserved. Printed on recycled paper. Printed with soy-based ink.
This compares electricity costs for an average medium commercial customer in the MCE/PG&E service area with an average monthly demand of 45 kilowatts (kW) and an average monthly usage of 17,298 kilowatt-hours (kWh). This is based on a representative 12-month billing history for all customers on A-10S rate plan.

Generation Rate is the cost of creating electricity to power your business. The generation rate varies based on your energy provider and the resources included in your energy provider’s generation supply. The forecast PG&E Generation Rate, as compared to the CPUC approved rate, has recently varied by +4% to –7%.

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<td>0%</td>
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<tr>
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<td>4%</td>
<td>0%</td>
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<td>0%</td>
</tr>
<tr>
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<td>100%</td>
<td>100%</td>
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</tr>
</tbody>
</table>

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**PG&E** refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2016 Pacific Gas and Electric Company. All rights reserved. Printed on recycled paper. Printed with soy-based ink.

Monthly usage: 17,298 kWh, monthly demand: 45 kW

### Electric Generation Rates

<table>
<thead>
<tr>
<th>Season</th>
<th>Price ($) per kWh</th>
<th>PG&amp;E</th>
<th>PG&amp;E current</th>
<th>MCE current</th>
<th>MCE current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>$0.098</td>
<td>$0.104</td>
<td>$0.087</td>
<td>$0.104</td>
<td>$0.087</td>
</tr>
<tr>
<td>Winter</td>
<td>$0.075</td>
<td>$0.088</td>
<td>$0.062</td>
<td>$0.088</td>
<td>$0.062</td>
</tr>
</tbody>
</table>

Demand Charges (Summer Only)

- Price ($) per kW
- Summer: $2.80
- $4.83

PCIA/FF fees are included in PG&E’s base generation rates, but are charged separately for MCE and Solar Choice customers. Charts for illustrative purposes only and is not to scale.

### Agenda Item #06_Att. A: 2016 Joint Mailers

Forecast rates for January 1, 2017

PG&E forecast rates are subject to CPUC approval. The changes in the PG&E PCIA/FF and PG&E Delivery rate will also result in changes to MCE customer bills.
Generation Rate is the cost of creating electricity to power your business. The generation rate varies based on your energy provider and the resources included in your energy provider's generation supply. The forecast PG&E Generation Rate, as compared to the CPUC approved rate, has recently varied by +4% to -7%.

PG&E Delivery Rate is a charge assessed by PG&E to deliver electricity to your business. The PG&E delivery rate depends on your electricity usage, but is charged equally to both MCE and PG&E customers.

PG&E PCIA/FF represents the Power Charge Indifference Adjustment (PCIA) and the Franchise Fee surcharge (FF). The PCIA is a charge to recover the costs of power purchase commitments made by PG&E before MCE initiated service to prevent customers that remain with PG&E to bear any additional costs related to that initiation of MCE service. The PCIA also applies to PG&E customers that elect to take service under PG&E’s optional Solar Choice program. The Franchise Fee surcharge is levied by cities and counties in PG&E’s service territory for all customers.

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Understanding your energy choice

Commercial Electric Rate Comparison, E-19S

Current rates as of October 1, 2016

<table>
<thead>
<tr>
<th>PG&amp;E</th>
<th>PG&amp;E Solar Choice</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.09459</td>
<td>$0.10981</td>
<td>$0.07754</td>
<td>$0.08754</td>
</tr>
<tr>
<td>$0.08241</td>
<td>$0.08241</td>
<td>$0.08241</td>
<td>$0.08241</td>
</tr>
<tr>
<td>N/A</td>
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<td>$0.01653</td>
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<tr>
<td>$0.17700</td>
<td>$0.20875</td>
<td>$0.17648</td>
<td>$0.18648</td>
</tr>
<tr>
<td>$41,337.69</td>
<td>$48,752.85</td>
<td>$41,216.42</td>
<td>$43,551.90</td>
</tr>
</tbody>
</table>

Generation Rate ($/kWh)  PG&E Delivery Rate ($/kWh)  PG&E PCIA/FF ($/kWh)  Total Electricity Cost ($/kWh)  Average Monthly Bill ($)

PG&E  $0.09010  $0.08469  N/A  $0.17479  $40,821.13  $46,012.29
PG&E Solar Choice  $0.09215  $0.08469  N/A  $0.19701  $48,752.85  $57,539.25
MCE Light Green  $0.07754  $0.05807  $0.01588  $0.14840  $38,328.10  $46,432.00
MCE Deep Green  $0.08754  $0.05524  $0.01653  $0.15973  $40,420.00  $46,828.00

Forecast rates for January 1, 2017

PG&E forecast rates are subject to CPUC approval. The changes in the PG&E PCIA/FF and PG&E Delivery rate will also result in changes to MCE customer bills.

This compares electricity costs for an average large commercial customer in the MCE/PG&E service area with an average monthly demand of 593 kilowatts (kW) and an average monthly usage of 233,553 kilowatt-hours (kWh). This is based on a representative 12-month billing history for all customers on E-19S rate.

2015 Electric Power Generation Mix*  Percent of Total Retail Sales (kWh)

<table>
<thead>
<tr>
<th>Specific Purchases</th>
<th>PG&amp;E</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
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</thead>
<tbody>
<tr>
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<td>4%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Geothermal</td>
<td>5%</td>
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</tr>
<tr>
<td>Eligible Hydroelectric</td>
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<td>0%</td>
</tr>
<tr>
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<td>5%</td>
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</tr>
<tr>
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<td>Natural Gas</td>
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<tr>
<td>UnsSpecified Sources of Power</td>
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<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*As reported to the California Energy Commission’s Power Source Disclosure Program. PG&E data is subject to an independent audit and verification that will not be completed until October 1, 2016. The figures above may not sum up to 100 percent due to rounding.

Understanding your energy choice
2016 Joint Mailer Rate Analysis
Summary of Differences Between Forecast and Actual Rates

The joint mailer, delivered in December 2016, included PG&E and MCE current rates as well as PG&E forecast rates for January 1, 2017.

1) PG&E’s actual 2017 generation rate was 6% higher than forecasted, by .55 cents/kWh.
2) This brings PG&E’s average bill $2.30 more expensive than forecasted. As a result, MCE compares at +$1.59 rather than PG&E’s forecast +$3.82, a 140% difference.
3) PG&E’s Solar Choice rates were not reduced by 1.57 cents/kWh as included in the forecast.
4) This brings PG&E’s average Solar Choice bill $7.32 per month more expensive than forecasted.
5) PG&E’s PCIA forecast was 1.8% higher than forecasted, by .05 cents/kWh.

Forecast rates for January 1, 2017
PG&E forecast rates are subject to CPUC approval.

The changes in the PG&E PCIA/FF and PG&E Delivery rate will also result in changes to MCE customer bills.

Residential Electric Rate Comparison, E-1 (AS PRINTED)

<table>
<thead>
<tr>
<th>PG&amp;E</th>
<th>PG&amp;E Solar Choice</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
<th>Generation Rate ($/kWh)</th>
<th>PG&amp;E Delivery Rate ($/kWh)</th>
<th>PG&amp;E PCIA/FF ($/kWh)</th>
<th>Total Electricity Cost ($/kWh)</th>
<th>Average Monthly Bill ($)</th>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Residential Electric Rate Comparison, E-1 (ACTUAL RATES - DISCREPANCIES IN RED)

<table>
<thead>
<tr>
<th>PG&amp;E</th>
<th>PG&amp;E Solar Choice</th>
<th>MCE Light Green</th>
<th>MCE Deep Green</th>
<th>Generation Rate ($/kWh)</th>
<th>PG&amp;E Delivery Rate ($/kWh)</th>
<th>PG&amp;E PCIA/FF ($/kWh)</th>
<th>Total Electricity Cost ($/kWh)</th>
<th>Average Monthly Bill ($)</th>
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<td>$0.09838</td>
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<td></td>
</tr>
</tbody>
</table>

Delta | Variance
PG&E Gen Rate | $0.00550 | 0.0%
Delivery Rate | -$0.00055 | -0.4%
PCIA/FF Rate | $0.00051 | 0.0%
PG&E Avg Bill | $2.30 | 2.1%
Solar Choice Gen | $0.01571 | 16.76%
Solar C. Avg Bill | $7.32 | 6.0%

Notes: Delivery Rate estimated due to tiering complexity, de minimis differences.
Solar Choice rates do not appear to be changed as of Jan 1 excluding the updated PCIA.
November 22, 2016

Dawn Weisz
Secretary
California Community Choice Association
1125 Tamalpais Avenue
San Rafael, CA 94901

Dear Ms. Weisz:

I am writing to follow up on our meeting held November 16, 2016 in which we discussed a number of issues including the Joint IOU and CCA Mailer. As discussed and at your request, I wanted to confirm that the use of PG&E forecasts in this year’s Joint Mailer (of PG&E and MCE) will not set a precedent for any future Joint Mailers.

Please distribute a copy of this letter to the community choice program administrators and elected officials who participated in the November 16, 2016 meeting at the Commission. In addition, feel free to distribute this letter to any member of your association.

Sincerely,

Timothy J. Sullivan
Executive Director
California Public Utilities Commission

cc Mitchell Shapson, California Public Utilities Commission
Allison Brown, Public Advisor, California Public Utilities Commission
CPUC Decision 12-12-036 and SB 790 require each community choice aggregator (CCA) and investor-owned utility (IOU) to prepare and deliver a joint mailer to assist customers in making educated choices about their electric provider. The mailer must be postmarked no later than July 1st each year and shall be sent to all customers who have been offered CCA service, regardless of which provider they are taking service from. Customers in a CCA service area that have not been offered CCA service, due to phased enrollments or some other reason, will not receive the mailer until after service is offered.

The mailer shall include a comparison of average rates for customer classes served by the CCA and IOU, along with a comparison of at least one sample residential bill for an average level of usage agreed on by the CCA and IOU. Additional tariff and rate comparisons for all customer classes will be posted on both the websites within 60 days after any IOU or CCA tariff changes, and on additional websites, as appropriate. Comparisons must meet the 15/15 rule. CalCCA proposes that PG&E provide updated cost comparisons for the website to the CCAs within 30 days of any tariff changes, allowing 30 days for the CCAs to review before both the CCA and IOU post on the website within the required 60 days. PG&E proposes that:

- web comparisons be prepared once per year in March to capture PG&E’s January 1 rate change;
- web comparisons not be calculated at all for non-residential rate schedules where there are less than 15 customers;
- web comparisons not be revised for residential rate schedules where there are less than 100 customers;
- web comparisons for pilot or experimental rates not be prepared; and that
- web comparisons will include PCIA/EFFS based on the most recent approved vintage available.

The CCA and IOU will share the costs of the mailed notice equally, but each entity will pay the costs of posting the comparison to its own website. The CPUC’s Public Advisor’s office, will have final approval of the wording of these materials, and by this final approval may resolve any disputes that the CCA and IOU cannot resolve informally.

Review, Design & Print Process

- Each CCA and IOU team will have a kick-off meeting in Q1, by the first week in March, to propose content to fill in the standard template for the “Joint Mailer” (see attached) used in the prior year.
  The purpose of the kick-off meeting is to:
  - Determine the number of rate comparisons (broken down by customer class); and
  - Conduct a high-level review of timeline and deadlines to determine any conflicts.
- Each CCA will be responsible for managing design finalization and printing of Joint Mailer unless other arrangements are made in advance of XX days from XX (awaiting PG&E’s proposed timeline).
Templates from previous year’s Joint Mailers will be provided by the IOU or CCA responsible for the previously used final design file.

- The party responsible for designing the Joint Mailer must ensure design adheres to the CCA and IOU’s brand guidelines.
- The party responsible for printing the Joint Mailer will ensure the vendor has executed a non-disclosure agreement to protect confidential customer information prior to print.
- The standard template used in prior years shall not be modified unless a CCA or IOU brings forth a proposed change before April 15. The standard template includes:
  1. A representative rate comparison and average monthly bill comparison for the identified customer rate schedule.
  2. Standard definitions for Generation Rate, PG&E Delivery Rate, Demand Charge, and PG&E PCIA/FF.
  3. Electric power generation mix comparison, as submitted to the California Energy Commission as the ‘Power Content Label’, and standard footnote definition.
  4. Electric Generation Rate chart (applicable to time-of-use rate schedules).
  5. Demand Charge chart (if applicable to rate schedule).

The standard definitions are:

**Generation rate** is the cost for creating electricity to power your [home or business]. The generation rate varies based on your energy provider and the resources included in your energy provider’s generation supply.

**Delivery Rate** is a charge assessed by PG&E to deliver electricity to your [home or business]. The PG&E delivery rate depends on your electricity usage, but is charged equally to both [CCA] and PG&E customers.

**PCIA/FF** represents the Power Charge Indifference Adjustment (PCIA) and the Franchise Fee surcharge (FF). The PCIA is a charge to recover PG&E’s costs for generation resources that are currently above the market rate. These resources were committed to prior to a customer’s switch to a third-party electric generation provider. The PCIA also applies to PG&E customers that elect to take service under PG&E’s optional Solar Choice program. PG&E acts as a collection agent for the Franchise Fee surcharge. This fee is imposed by cities and counties in PG&E’s service territory for all customers. The costs for resources included in the PCIA and FF surcharges are included in the generation rate for PG&E bundled service customers.

**Demand Charge** is the maximum amount of electricity you used during any 15-minute interval over the course of a billing period, and can vary depending how and when you use your equipment from month to month.

- If a change to the template is requested from either party by April 15, either 1.) Both parties must agree to the change by May 10 and submit to the PAO office for approval, or 2.) If both parties do not agree to the change, a request may be made to the PAO office by May 10 for assistance in resolving the issue.
• Final content (includes approved language by PAO and figures) for the Joint Mailer must be submitted to the CCA by last week of May.
• The draft Joint Mailer, inclusive of all data, must be in final form by June 1 for submittal to the CCA printer.
• The Joint Mailer must be delivered to all bundled and unbundled customers in the CCA jurisdiction and postmarked by July 1.
  o PG&E proposes that this be mailed on or before July 1 using the last 12 month historical rate (their first preference) or in March using January 1 rates (their second preference).

Costs
• The design, postage and printing costs of the Joint Mailer will be split 50/50 between the CCA and IOU.
• After the CCA provides an invoice to the IOU for printing costs, payment must be received within 15 days.

Branding
• Each CCA and IOU shall include their logo on the front of the Joint Mailer as indicated in the template.
• The color used for each column of data shall be reasonably similar to logo colors used by the respective IOU or CCA.

Customer Classes
A Joint Mailer shall be prepared for each of the following customer classes*:
• E1 (basic residential)
• A1X (small commercial)
• A10S (medium commercial)
• E19S (medium and large commercial)

*Specific customer classes might change year after year depending on the geography of the service territory. However, specific classes should be determined and agreed to in the Q1 kick-off meeting.

Rates
• The Joint Mailer must include the average Generation Rate (inclusive of demand charges), average Delivery Rate (sum of bundled charges minus generation), sum of the Power Charge Indifference Adjustment and Franchise Fee rates, Total Electricity Cost, and the Average Monthly Bill as shown in the template.
• Average rates are determined by calculating the applicable average kWh usage, kW load, and HP load (known as billing determinants) for each active rate schedule in the applicable service area, and multiplying by the current corresponding rates. PG&E proposes multiplying by current PG&E delivery rates and the last 12 month historical generation rates (first preference) or multiplying by January 1 rates (second preference).
• Billing determinants shall be calculated based on data not older than 18 months.
CCA-specific billing determinants will be used and updated every 12 months. When CCA billing determinants are updated, PG&E will run analysis on the new rate schedules that are found in the updated billing determinants.

Billing determinants shall be determined by calculating the simple average of monthly usage for the specific customer class over the previous calendar year for all bundled and unbundled customers in the CCA service area.

- NEM customers and customers with less than 12 months of data on their current rate shall be excluded from these determinants as they artificially reduce average customer usage.

The sample usage cited in the comparison shall be derived from the billing determinants but does not need to match it exactly. This sample usage can be reused year-over-year with consent of the CCA and IOU.

IOU and CCA parties shall use rates that have been approved by the organization’s governing body or regulator and will be in effect during the circulation of the Joint Mailer. Circulation of the Joint Mailer is defined as the four week period starting with the mail date. In the event that rates are expected to change during the circulation period, the new rates shall be used with a note of their effective date. PG&E proposes to use 12 month historical rates (their first preference) or to use rates effective on January 1 (their second preference).

The Joint Mailers for commercial customers shall include a bar chart that shows difference between peak, partial, and off-peak rates. The bar chart should be designed to be as close to “scale” as possible.

The Joint Mailer must include a reference to the IOU and CCA websites for most current rate information.

Each calculation will assume a PCIA and Franchise Fee based on the most currently available vintage.

- This simplification is due to overall minor impacts of various PCIA vintages. Because this may change in future years, an update to this methodology may be proposed by either party provided it is issued by April 1st.

Customers shall receive the Joint Rate Mailer by electronic (email) or direct mail (print) depending on customer preference of communication on file with PG&E. It is PG&E’s responsibility to provide these indicators and the appropriate mailing address to the CCA.

**Power Generation Mix**

- IOU and CCA parties shall use the most current power content label from the “Annual Report to the California Energy Commission: Power Source Disclosure Program” with data presented in an unaltered form. Typically this report is from the year prior.

**Greenhouse Gas Emissions**

- GHG emissions may be included in the Joint Mailer only if: 1). Both the CCA and the IOU wish to include it, 2). The CCA and IOU utilize the methodology required by the Climate Registry or the California Energy Commission and 3). Both the CCA and the IOU agree to use the same methodology.
<table>
<thead>
<tr>
<th><strong>Docket Number:</strong></th>
<th>16-OIR-05</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>AB 1110 Implementation Rulemaking</td>
</tr>
<tr>
<td><strong>TN #:</strong></td>
<td>216147</td>
</tr>
<tr>
<td><strong>Document Title:</strong></td>
<td>AB 1110 Scoping Workshop Presentation</td>
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<tr>
<td><strong>Description:</strong></td>
<td>Power Point Slides for Workshop on February 21, 2017</td>
</tr>
<tr>
<td><strong>Filer:</strong></td>
<td>Jordan Scavo</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>California Energy Commission</td>
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<tr>
<td><strong>Submitter Role:</strong></td>
<td>Commission Staff</td>
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<tr>
<td><strong>Submission Date:</strong></td>
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<td><strong>Docketed Date:</strong></td>
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</table>
AB 1110 Implementation
Pre-Rulemaking Workshop

Jordan Scavo
Renewable Energy Division

Rosenfeld Hearing Room
February 21, 2017
Agenda

• Rulemaking Process
• PSD Background
• AB 1110 Requirements
• AB 1110 Scoping Questions
• Next Steps
AB 1110 Implementation Process

• Pre-rulemaking activities
• Formal Office of Administrative Law (OAL) rulemaking process
  – Commences when OAL publishes NOPA
  – Initial Rulemaking documents
    • Notice of Proposed Action (NOPA)
    • Proposed amendments to regulations (Express Terms)
    • Initial Statement of Reasons (ISOR)
AB 1110 Implementation Process

• Adoption Hearing at Energy Commission Business Meeting for Proposed Regulations estimated for December 2017

• Once complete, final rulemaking package will be submitted to OAL for approval
Rulemaking Document Availability

• Copies of rulemaking documents available on CEC website at:

• Copies of rulemaking documents can also be obtained by contacting Energy Commission staff
Background: Power Source Disclosure Program

- Annual reporting of gross generation sources and retail sales
- Disclosure of an electric service product’s power mix to consumers on a Power Content Label
## POWER CONTENT LABEL

<table>
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<th>ENERGY RESOURCES</th>
<th>2014 POWER MIX</th>
<th>2014 CA POWER MIX**</th>
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<tbody>
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<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>
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</tr>
<tr>
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<tr>
<td>Solar</td>
<td>12%</td>
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<tr>
<td>Wind</td>
<td>7%</td>
<td>8%</td>
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</tr>
<tr>
<td>TOTAL</td>
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</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.

---

For specific information about this electricity product, contact:

Sample

555-555-555

California Energy Commission

For general information about the Power Content Label, consult:

http://www.energy.ca.gov/pcl/
Background: AB 1110 (Ting)

• Passed in 2016
• Inform consumers of the greenhouse gas (GHG) emissions intensity of their electricity
• Improve transparency of the Power Content Label
The Energy Commission’s Responsibilities

• Adopt a methodology, in consultation with ARB, for calculating GHG emissions intensities for electricity sources

• Calculate California’s overall GHG emissions intensity

• Determine format for disclosure of unbundled RECs as percentage of annual retail sales
The Energy Commission’s Responsibilities Continued

• Adopt guidelines, on or before January 1, 2018, for reporting and disclosure of GHG emissions intensities

• Establish guidelines for adjustments to a GHG emissions intensity factor for any qualifying local publicly owned utility (POU)
Guiding Principles

• Provide reliable, accurate, timely, and consistent information
• Ensure there is not double-counting of GHGs or environmental attributes
• Rely on the most recent verified GHG emissions data while allowing timely reporting
• Align to the extent practicable with the Mandatory Reporting Requirement and the Cap and Trade Program
• Minimize the reporting burden
Related Programs

- Renewable Portfolio Standard (RPS)
- Cap-and-Trade Program
- Mandatory Reporting Regulation (MRR)
- Integrated Resource Plans (IRPs)
Scoping Questions

- Programmatic definitions
- Renewable Energy Credits (RECs)
- GHG emissions data and factor calculations
- Publicly-owned utility GHG emissions adjustment
Scoping Questions: Programmatic Definitions

- Annual sales
- Electricity portfolio
- Electricity offering
Scoping Questions: RECs

- Retirement of RECs
- Treatment of firmed-and-shaped (Bucket 2) products
- Treatment of unbundled (Bucket 3) RECs
- Treatment of null power
Scoping Questions: GHG Emissions Data and Intensity Factor Calculations

- Included gases
- MRR data availability
- Exempted resources
- Unspecified power
- Electricity Imbalance Market (EIM) resources
Scoping Questions: Publicly-Owned Utility GHG Intensity Factor Adjustment

- Potential eligibility
Next Steps

- Written comments due by 5p.m. March 8^{th}
- Energy Commission staff aiming to release draft regulatory language by early Q2 2017
- Aiming for December 2017 Adoption
- Hearing at Energy Commission Business Meeting
Written Comments

Comments due by:

5pm March 8, 2017

Written comments should be submitted through the CEC’s e-filing system:

• http://www.energy.ca.gov/e-filing/
• Instructions for submitting written comments are on page 3 of the Workshop Notice
• Docket 16-OIR-05
Comment Instructions

• 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: Submit according to directions in workshop notice
Contacts

Jordan Scavo
Technical Lead
AB 1110 Implementation
Jordan.Scavo@energy.ca.gov
(916) 654-5189

Kevin Chou
Program Administrator
Power Source Disclosure
Kevin.Chou@energy.ca.gov
(916) 654-1628
March 15, 2017

California Energy Commission
Docket Unit
Re: Docket No. 16-OIR-05
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Preliminary Scoping Questions for February 21 Workshop

California Community Choice Association (“CalCCA”) hereby submits its responses to the Preliminary Scoping Questions for February 21 Workshop (“Scoping Questions”). CalCCA looks forward to working with the staff of the California Energy Commission (“CEC”) to implement Assembly Bill (“AB”) 1110 in a manner that increases consumers’ understanding of Greenhouse Gas (“GHG”) emissions associated with their electricity products.

I. Introduction

CalCCA represents the interests of California’s Community Choice Aggregators (“CCAs”) in the legislature and at jurisdictional regulatory agencies, including the CEC. Community choice programs are administered by local governments with a mission to provide competitive alternatives to Investor-Owned Utilities (“IOUs”). CalCCA’s current members include Apple Valley Choice Energy, CleanPowerSF, Lancaster Choice Energy, MCE, Peninsula Clean Energy, Redwood Coast Energy Authority, Silicon Valley Clean Energy, and Sonoma Clean Power.

Many CCAs offer at least two electricity products: a default product that competes with the IOU’s default electricity product on a rate-related basis while offering renewable energy content in excess of current procurement mandates, and a voluntary 100% renewable product with rates that reflect associated procurement costs for such power sources. As retail sellers, CCAs comply with applicable requirements of the CEC’s Power Source Disclosure Program, distributing Power Content Labels (“PCLs”) to help their customers understand the energy sources that are procured on their behalf. CalCCA’s interest in this proceeding is to ensure that the implementation of AB 1110 results in increased customer awareness of the GHG emissions associated with electric energy use.

II. Responses to Annual Sales Questions

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

CalCCA recommends remaining consistent with the existing RPS and Power Source Disclosure Program (“PSDP”) process by defining “annual sales” as the sum of retail sales at customer meters, expressed in kilowatt-hours within a given reporting year.

2) What should be the programmatic definition of “electricity portfolio”? 
Electricity portfolio should refer to the composite of specified and unspecified electric energy purchases that were procured for purposes of serving retail electricity loads of the reporting entity. In other words, the definition of “electricity portfolio” should remain consistent with existing PSDP regulations.

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

Electricity offering should refer to a retail service option that is available to customers of the reporting entity during the reporting year. Each electricity offering would have a unique electricity portfolio, as specified by the reporting entity in its PCL. Each electricity offering should have an independent greenhouse gas emissions factor that would be calculated and reported in the reporting entity’s PCL.

III. Responses to Renewable Energy Credits Questions

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?

The purchase of eligible renewable energy resources should be reported based on the year the REC is retired. In implementing this process, the CEC should acknowledge that the retirement of a REC may occur after the conclusion of a reporting year. For instance, if an entity may retire a large volume of 2016 vintage RECs in early to mid-2017, such RECs may be retired to an account that was created for the 2016 reporting year. In this example, the year associated with the noted retirement account would be referenced when completing pertinent PSDP reporting activities. Such an approach would eliminate potential complications related to “portfolio” contract delivery structures that may allow supply flexibility when delivering renewable energy volumes over multi-year periods.

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?

Firmed and shaped products should be categorized based on the fuel type associated with the RECs that were purchased by the buyer of such products. Reporting based on the fuel type of substitute energy would lead to market failure, where the buyer of the REC receives no benefit, while a random recipient of the clean energy would receive a benefit she did not pay for.

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?

The GHG emissions intensities associated with firmed and shaped products should be calculated based on the emissions profile related to the purchased and retired RECs associated with such transactions. For example, CalCCA recommends that the emissions intensity of a Portfolio Content Category 2, or “PCC2,” transaction, which results in the delivery of a certain quantity of unspecified electricity volumes as well as an equivalent quantity of RPS-eligible RECs, would be calculated in
consideration of the generating characteristics associated with the noted REC volumes rather than unspecified electricity volumes.

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?

Unbundled RECs should be reflected in the PCL. PCC 3 volumes represent valuable renewable energy products which are also eligible for use under California’s RPS program. Public Utilities Code Section 399.12(h) states that a REC “includes all renewable and environmental attributes associated with the procurement of electricity from an eligible renewable energy source.” This definition would include the RECs’ GHG-free attributes. Currently, unbundled RECs are reported within the fuel source that relates to the underlying renewable generating technology, and CalCCA endorses the continued use of this practice. Reporting RECs within the typically-used fuel source categories supports key purposes of the PCL, which is to disclose “accurate, reliable, and simple-to-understand information on the sources of energy” that are delivered to retail customers.

To promote disclosure of unbundled renewable energy transactions, CalCCA recommends the inclusion of a footnote within the PCL or other descriptive language provided in concert with the PCL, which would assist in customers’ understanding of RECs and the portion of a portfolio covered by unbundled RECs. The recommended footnote reads as follows, “Renewable energy credits (RECs) are used to track ownership of clean energy generation from renewable resources such as wind, solar, small hydropower and biomass. Unbundled RECs are delivered separate from the electricity that was purchased on your behalf.” The CEC could develop a standard for reporting the volume or percentage of unbundled RECs in CalCCA’s recommended footnote.

5) How should null power be categorized for the power-mix percentage calculations? How should the greenhouse gas intensity of null power be calculated?

The emissions intensity associated with null power should be reported based on the system power emissions factor that has been established by CARB. This would promote simplicity and consistency during the reporting process.

IV. Responses to 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?

GHG emissions factors for qualifying renewable sources such as geothermal and biomass should be based on measured data for the facility as reported to CARB, unless such data are unavailable. Unspecified source energy should be reported as having the default emissions factor from CARB MRR.

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 CEC must consider, for example, aligning customer disclosure information with the Power Content Label. Where the CARB MRR can contribute, however, is in defining a standard default emissions factor for unspecified source energy and defining common default emissions factors for RPS-eligible sources, such as biomass and geothermal, when no direct measured emissions data are available.

3) Should GHG emissions classified as non-covered or exempt under the Cap and Trade Program be included in the PSD greenhouse gas intensity calculations?

No. If GHG emissions are classified as non-covered or exempt under Cap and Trade, it would be reasonable to exclude such emissions from PSD calculations to promote consistency amongst California’s GHG reporting programs.

4) Should the PSD adopt ARB’s default factor as the greenhouse gas intensity for unspecified power?

Yes. The Energy Commission should apply the ARB’s default emissions factor for system/unspecified power in the PSD.

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)?

The CARB MRR default unspecified emissions factor should be used.