Marin Clean Energy
Technical Committee Meeting
Monday, January 12, 2015
5:00 P.M.

San Rafael Corporate Center, Boro Room
750 Lindaro Street, San Rafael, CA 94901

Agenda

1. Board Announcements (Discussion)
2. Public Open Time (Discussion)
3. Report from Executive Officer (Discussion)
4. MCE Open Season (Discussion)
5. Energy Efficiency (Discussion)
6. Approval of 12.8.14 Meeting Minutes (Discussion/Action)
7. Members & Staff Matters (Discussion)
8. Adjourn
Open Season 2015

Greg Brehm
Director of Power Resources | Marin Clean Energy

January 12, 2015
• Open Season Overview & Identification of Changes for 2015 Process

• Description of Requested Products & Key Requirements

• Proposal Evaluation

• Response Preparation & Additional Information

• Questions
MCE Open Season – Purpose

Additional renewable energy purchases will be necessary to meet future demand of MCE customers:

- CA RPS increase from 20% to 33% (2020)
- Minimum in-state delivery requirements increase from 50% to 75% (of total renewable energy deliveries)
- Aspiration to maximize in-state renewable procurement, with an emphasis on Local projects, sited within MCE service territory
- Transition to internally managed renewable energy supply portfolio
MCE Open Season Highlights

MCE is requesting three specific products through the 2015 Open Season:

- Portfolio Content Category 1 ("Bucket 1") eligible renewable energy
- Portfolio Content Category 2 ("Bucket 2") eligible renewable energy
- Carbon-free energy supply (hydroelectric)

MCE will require selected respondent(s) to submit a Shortlist Deposit of $3.00 per kilowatt upon their acceptance of shortlisting status (only applicable for new projects).

MCE will not accept/discuss substantive contract changes related to credit requirements.
MCE Open Season – Requested Products

Improved coordination with general resource planning efforts:

- Updated load forecast
- Updated renewable energy forecast

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<tbody>
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<td>Product Content Category 1</td>
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<td>37</td>
<td>50</td>
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<tr>
<td>Product Content Category 2</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>110</td>
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<td>79</td>
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<td>77</td>
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<tr>
<td>Subtotal, Open Position, Renewables</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>147</td>
<td>130</td>
<td>117</td>
<td>109</td>
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*RPS open positions are based on MCE’s internal renewable procurement targets, which exceed state-wide mandates

Participation limited to RPS-eligible products within the following Portfolio Content Categories:

- PCC1/Bucket 1
- PCC2/Bucket 2

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<td>109</td>
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<td>106</td>
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Carbon free supply is typically sourced from hydroelectric generators located within California or the Pacific Northwest.
Projects will be ranked based upon the following criteria:

a. Project location & Local Benefits (i.e., local hiring and prevailing wages)
b. Interconnection status, queue position and RA Deliverability status
c. Siting, zoning permitting status
d. Price
e. Resource type & Proposed product i.e., PCC1, PCC2, etc.
f. Qualifications of project team
g. Ownership structure
h. Environmental impacts and related mitigation requirements
i. Financing plan & financial stability of project owner/developer
j. Acceptance of MCE’s standard contract terms
k. Development milestone schedule
MCE Open Season – PCC 1

Key Requirements:

• **Product:** PCC1-eligible; in-state with preference given to resources located in proximity to MCE service territory

• **Minimum capacity:** 1 MW AC

• **Initial date of delivery:** No sooner than January 1, 2019

• **Term of agreement:** Not more than 25 years

• **Pricing:**
  1) Single, flat price/MWh throughout contract term (required)
  2) Alternative pricing options (voluntary)
Key Requirements:

- **Product:** PCC2-eligible; WECC-located with preference given to resources located in proximity to MCE service territory
- **Minimum capacity:** 1 MW AC
- **Initial date of delivery:** No sooner than January 1, 2019
- **Term of agreement:** Shorter term agreements preferred
- **Pricing:**
  1. Single, flat price/MWh throughout contract term (required)
  2. Index plus
  3. Alternative pricing options (voluntary)
- **Point of delivery:** NP15 trading hub (per CAISO)
MCE Open Season – Carbon Free

Key Requirements:

• **Product**: Bundled hydroelectric power

• **Minimum annual delivery requirement**: 10,000 MWh

• **Initial date of delivery**: No sooner than Q2 2015

• **Term of agreement**: Not more than 25 years

• **Pricing**:
  1) Single, flat price/MWh throughout contract term
  2) Index plus

• **Point of delivery**: NP15 trading hub (per CAISO)
Open Season – Response Preparation

- Responses due no later than 5:00 P.M. PPT on Monday, March 2\textsuperscript{nd}
- Only electronic submittals will be accepted
- Respondents must use designated response templates (available online):
  - Information provided in template must be complete
  - Only one product per response template (copy/paste worksheet for additional product proposals)
- Any proposed contract changes must be submitted (as attachment to response) by March 2\textsuperscript{nd}
- Questions: Greg Brehm, Director of Power Resources, gbrehm@mceCleanEnergy.org
MCE Open Season – Additional Information

Anticipated schedule:
- Responses due: Monday, March 2\textsuperscript{nd}, at 5:00 P.M. PPT
- Response evaluation and supplier interviews: March 9\textsuperscript{th} – May 15\textsuperscript{th}
- Short-list notification: June 1\textsuperscript{st} (first business day following May 31\textsuperscript{st})
- Contract negotiation and approval: June 1\textsuperscript{st} – October 31\textsuperscript{st}

Administration:
- Questions: Greg Brehm, Director of Power Resources, gbrehm@mceCleanEnergy.org
- MCE website: http://www.mceCleanEnergy.org/
- MCE website: https://mceCleanEnergy.info/
- MCE procurement website: http://www.mceCleanEnergy.org/energy-procurement
  - Download overview, response templates and form PPA
  - Stay informed regarding process and document/form updates, schedule changes, etc.
Questions? Comments?
Energy Efficiency Update

Beckie Menten
Energy Efficiency Director | Marin Clean Energy

Technical Committee, January 12, 2014
2016: Technical Program Development

- Savings Potential Within Service Territory
- Preliminary Measure List
- Finalizing Program Budgets
- Final Step: Creation of E3 Calculator
Estimating Participation Levels and Potential Savings Helps Set an Overall Savings Target
## Sample Proposed Measures List (MF)

<table>
<thead>
<tr>
<th>Custom (c)</th>
<th>Preliminary Measure Description</th>
<th>Target Fuel: Electric, Gas, or Both</th>
<th>Initial Estimated Cost Effectiveness: High, Medium, Low</th>
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<tr>
<td><strong>Multifamily</strong></td>
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<td></td>
<td>Showerheads</td>
<td>gas</td>
<td>HIGH</td>
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<td></td>
<td>Aerators</td>
<td>gas</td>
<td>HIGH</td>
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<tr>
<td>c</td>
<td>Central Pipe Insulation</td>
<td>gas</td>
<td>HIGH</td>
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<td></td>
<td>Central Heating Controls</td>
<td>gas</td>
<td>HIGH</td>
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<td></td>
<td>Free Residential (Apt) LED Lamp Only</td>
<td>electric</td>
<td>Medium</td>
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<td></td>
<td>Exterior LEDs</td>
<td>electric</td>
<td>Medium</td>
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<tr>
<td>c</td>
<td>Central Laundry Washer</td>
<td>gas</td>
<td>Medium</td>
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<td></td>
<td>Demand DHW Recirculation Controls</td>
<td>both</td>
<td>Medium</td>
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<tr>
<td>c</td>
<td>Temperature DHW Recirculation Controls</td>
<td>both</td>
<td>Medium</td>
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<tr>
<td></td>
<td>Common Area LEDs</td>
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<td>Medium</td>
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<td></td>
<td>Refrigerator (pre-1993)</td>
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<td></td>
<td>Roof Insulation from None Existing</td>
<td>both</td>
<td>Medium</td>
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<td></td>
<td>Variable Speed Pump (Central Boiler Heating)</td>
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<td>Medium</td>
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<td>Wall Insulation from None Existing</td>
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<tr>
<td>c</td>
<td>Pool Pump VFD</td>
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</tr>
<tr>
<td>c</td>
<td>Residential (Apt) Pipe Insulation</td>
<td>gas</td>
<td>Medium</td>
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Agenda Item #5: Energy Efficiency Update
• Working with WSP Global
• Picking Up on Work SMUD Started
• Phase 1: Defining Tool Needs and Methodology
• Phase 2: Development of Excel Based Tool
  • Evaluate Energy Improvements on Equal Footing (i.e. solar panels and energy efficiency)
Questions?
Roll Call
Present:
Kate Sears, County of Marin, Chair
Ray Withy, City of Sausalito
Carla Small, Town of Ross
Emmett O’Donnell, Town of Tiburon
Ford Greene, Town of San Anselmo

Absent: Kevin Haroff, Town of Larkspur

Staff: Dawn Weisz, Executive Officer
Emily Goodwin, Director of Internal Operations
Rafael Silberblatt, Program Specialist

Action taken:

Agenda Item #4 – Approval of Minutes from 10.21.14 Meeting (Discussion/Action)
M/s Ford/O’Donnell (passed 5-0) approval of minutes from 10.21.14 meeting. Director Haroff was absent.

____________________________________________
Kate Sears, Chair

ATTEST:

____________________________________________
Dawn Weisz, Executive Officer