## 17-12-8\_D r a f t Work Product

Comments should be submitted to <u>LDBPcomments@ebce.org</u>. Comments shall be no longer than 5 pages.

1. Grid-side DER Assessment: Large-scale Local Clean Energy Potential

We can put solar panels above all business / retail parking, and many streets, and charge BEVs below. With the Bosch Captive Column structural geometry the cost of the support structures can be a fraction of today's cost with steel.

2. Customer-side DER Assessment: Behind-the-meter Energy Resources

We will sell batteries for \$100/kWh within 3 years; probably \$150/kWh within 2 years.

3. Development Models and Strategies: Local DER Programs and Incentives

We will sell batteries for \$100/kWh within 3 years; probably \$150/kWh within 2 years.

4. EBCE Development Issues: Labor and Workforce, Finance and Ownership Models

We need cooperatives, drawing on disadvantaged communities for the labor force and ownership, to convert vehicles from fossil fuel to BEV, taking advantage of the battery breakthroughs. The range will be longer, with fewer batteries, due to higher specific energy.

We also need to have CCAs partner with the solar and BEV industries, to incentivize people to do energy efficiency, renewable energy, BEV charging, demand management, and energy management in every building.

- 5. Implementation and Policy Issues: Permitting, Equity, Transparent Reporting
- 6. Integrated Resource Planning: Integrating LDBP w/Long-term Planning (IRP)
- 7. Preliminary Plan Scenarios: Develop Local Development Business Plan

## • Task 1- LCOE Narrative

## This finding:

Solar LCOEs range from \$0.10/kWh for large ground mount systems in the sunnier eastern side of the County to \$0.156/kWh for smaller rooftop systems along the Bay.

Is out of date, or will soon be. Solar is headed for \$0.01/kWh in the tropics, and probably \$0.03/kWh in our 5.5 full sun equivalent insolation regime.

Wind grid integration cost will be much less than \$0.20/Watt! We will sell batteries for \$100/kWh within 3 years; probably \$150/kWh within 2 years. At ten cents a watt purchase price, and increasing the value of the electricity sold to the grid by upwards of 3 cents per kWh because it can be dispatched, with financing there is essentially zero cost for integrating wind into the grid. The same applies to solar; see the NREL paper on 6 hours of storage for a thermal solar power plant, which is directly analogous.

- <u>Task 4-EBCE Workforce Policy</u>
- Task 1- EBCE Wind Assessment Narrative
- <u>Task 1- EBCE Solar Siting Survey Summary Report</u>
- Task 3- EBCE FIT Design Recommendations
- Task 3- EBCE Agency as Developer Strategy

Mark Roest Marketing & International Development SeaWave Battery, Inc. & Sustainable Energy Inc. Board Member, Green Fleets Group <u>MarkLRoest@gmail.com</u> 650-888-3665