

August 17, 2012

California Energy Commission
Dockets Office, MS-4
RE: Docket No. 12-EPIC-01
1516 Ninth Street
Sacramento, CA 95814-5512

California Energy Commission

DOCKETED
12-EPIC-1

TN # 66814

AUG 17 2012

RE: Comments on EPIC, Docket No. 12-EPIC-01

Dear Commissioners and Staff,

Thank you for the opportunity to comment on the State of California's First Triennial Investment Plan for the Electric Program Investment Charge (EPIC).

Better Place was founded on the mission of ending the world's dependence on oil by offering consumers an electric car that is cheaper and more convenient than the equivalent gasoline car. The key feature of the Better Place model is the separation of ownership of the car and battery. This allows a dramatic reduction of the upfront cost and risk for the consumer, as Better Place owns the batteries. This also enables unlimited driving range through "instant charging" at Better Place's battery switch stations, which allow the driver to switch out an empty battery for a full one in less than 5 minutes. This innovation, together with centrally managed charging at home, at work and at public locations, smart network management and superior customer service offers the world's only complete and scalable alternative to gasoline.

After opening our first networks in Israel and Denmark earlier this year, consisting of 55 battery switch stations and thousands of public, work, and residential Level 2 smart charging stations, Better Place members have already driven over 2 million electric miles. Leveraging these networks of centrally controlled batteries, smart charging and switching stations, Better Place can uniquely integrate and co-optimize its demand and energy delivery with utilities and grid operators to produce the following benefits for ratepayers:

- Cheaper electricity due to increased off-peak energy consumption, which will lower fixed costs
- Dynamic load management enabling generators and system operators to more efficiently schedule and dispatch generation around the clock, lowering operating costs
- Higher utilization of intermittent renewable energy and ancillary services, enabled by EV-grid integration
- A steady stream of used batteries that can serve as stationary grid storage after they outlive their useful life for electric cars

Better Place has already achieved many of the technical milestones necessary to realize these benefits for the State of California. To create incentives that promote these benefits locally, Better Place recommends:

- A guiding principal be added promoting the concept of "dual-use," grid-ready EV charging infrastructure (i.e., network managed) and dual-use EVs / batteries (e.g., vehicle-to-load, vehicle-to-home, vehicle-to-grid) to ensure maximize system benefits and avoid stranded investment by utilities and consumers alike.
- Battery grants or rebate incentives of \$100 per kWh (enhancing the existing federal incentive) for EVs that participate in load aggregation, load response and grid-integrated EV charge

network management programs. This will drive greater realization of energy benefits to directly benefit all ratepayers.

- E-mile incentives in the form of a grant or rebate for smart vehicle systems and telematics that directly enable or enhance smart charging (via data, analytics) and grid integration (via charge rate control). Data generated telematics (e.g., battery state of charge, EV location, driving profiles, etc.) is critical in knowing real-time status of EV and driver, and more importantly being able to determine level of flexibility in their charging requirements (as well as forecasting loads). Such e-mile incentive programs can be efficiently administered via aggregators, OEMs and other service provider models that have been consistently and successfully used in the past by California such as in programs supporting energy efficiency and demand response.

Sincerely,



Jason Wolf
Vice President
North America