DOCKETED	
Docket Number:	19-TRAN-02
Project Title:	Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure
TN #:	236577
Document Title:	JSiemens and Veloce Energy Comments
Description:	N/A
Filer:	Patty Paul
Organization:	Siemens and Veloce Energy
Submitter Role:	Public
Submission Date:	2/2/2021 4:36:20 PM
Docketed Date:	2/2/2021

VIA ELECTRONIC FILING

February 2, 2021

California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Comments on Draft Concept for Interoperability Testing Events Request for Proposals, Docket Number: 19-TRAN-02

Siemens and Veloce Energy, together the "Joint Parties", appreciate the opportunity to file these comments in the above-captioned proceeding.

Siemens is a leading provider of EV charging infrastructure technology, including chargers, make-ready equipment, software, and services. We are committed to supporting California's transition to electrified transportation, including electrifying our own fleet. We have adopted a corporate goal of net zero carbon emissions by 2030. A primary reason for our support of electrification is the economic benefits accruing to all citizens, including those in disadvantaged communities.

Veloce Energy is a California-based provider of EV charging solution, committed to accelerating the electrification of transportation through technology and business model innovation. Veloce's solution supports modular and flexible charging infrastructure, with the intent to streamline deployment and provide resiliency. Veloce's interoperable charging solutions utilize open standards and ensure that site hosts, utilities, and facility operators can dynamically manage charging loads to create a grid resource.

General Comments

The Joint Parties generally support the overall project proposal by CEC Staff. The lack of interoperability[1] is a major barrier to EV adoption. Without interoperability, customers have fewer choices, technology buyers face vendor lock-in, costs are higher due to reduced market competition, and stranded asset risks are higher.

The Joint Parties Support CEC Staff's Proposed Program

Interoperability issues exist between vehicles and chargers and between chargers and back-end software systems. To accelerate the adoption of interoperability by industry, staff is developing an

[1] "Interoperability" refers to the ability of hardware, software, or systems provided by one vendor or party to work with the hardware, software, or systems provided by another vendor or party. Interoperability is achieved through the implementation of open industry standards for the interfaces between the different hardware, software, or systems.

RFP solicitation that will provide up to $1 million from the Clean Transportation Program funds for Interoperability Testing Events. These annual events will support interoperability of chargers and vehicles for all on-road vehicle sectors and ensure charging hardware and software work as intended, and the various combinations of chargers and vehicles entering the marketplace work together. These events will convene key EV stakeholders to conduct interoperability tests, develop and finalize products and standards, and discuss means to overcome common technology barriers.

The Joint Parties see a strong need in the industry for programs to promote interoperability, and we see Staff's proposal as a good one. One example of the challenge is when vehicle OEMs introduce new vehicles, each charger manufacturer has to find a way to test their charger with the vehicle. Today's approach is *ad hoc*, with each charger provider and each OEM having to work out individual one-on-one arrangements, because implementation of standards for interoperability inevitably result in small differences from one manufacturer to another. Staff's proposal will both provide a convenient venue for testing as well as promote uniform implementation of interoperability standards – therefore reducing the cost and need for interoperability testing.

The Joint Parties Urge that Additional Funding Be Provided

While supporting the overall program, the Joint Parties find the proposed $1 million budget to be insufficient. Arranging these events requires significant expertise and navigation of complex logistics – for example, how can several megawatts of electrical capacity be made available at the event site for the many chargers and types of vehicles? Considering the challenges, the Joint Parties suggest that a budget of as much as $2 million may be needed.

We are also of the opinion that the need for these events will decline rapidly as implementation of standards becomes more common. We expect increased harmonization to be one of the direct results of the proposed program.

The Joint Parties View the Proposed Events Program as Synergistic with the ViGIL GFO

The proposed Events Program involves testing for products at any stage of development using standards that may also be in different stages of development and in an informal collaborative setting. Participants would experiment with solutions, vetting various technologies and refining further development, including interoperability software and firmware.

The Vehicle-Grid Innovation Lab GFO is designed for final-stage products ready for market rollout. Testing would be in a formal lab setting and be designed for product certification to meet customer or regulatory requirements.

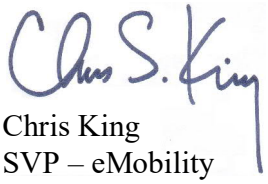
Each program promotes interoperability at a different stage of product (and market) development, and each provides benefits for that stage, including speeding up time-to-market, enhancing collaboration between technology providers, and ensuring product performance and functionality for end customers (with respect to interoperability).

To achieve the defined benefits, we support both programs.

Conclusion

For the reasons given above, the Joint Parties respectfully suggest the CEC adopt the Events Program and increase the budget allocation.

Siemens and Veloce Energy appreciate the opportunity to comment.



Chris King
SVP – eMobility
Siemens
chris_king@siemens.com

Bonnie Datta
Advisor, Policy & Regulatory Affairs
Veloce Energy
bonnie.datta@veloceenergy.com