#### American Honda Motor Co., Inc.: Reply Comments R.13-11-007

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies. Rulemaking 13-11-007 (Filed February 23, 2018)

#### <u>APRIL 4, 2018 REPLY COMMENTS OF AMERICAN HONDA MOTOR CO., INC. ON</u> <u>ASSIGNED COMMISSIONER'S RULING SEEKING COMMENT ON VEHICLE-</u> <u>INTEGRATION COMMUNICATION PROTOCOL WORKING GROUP ENERGY</u> <u>DIVISION STAFF REPORT</u>

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In accordance with the February 23, 2018 Assigned Commissioner's Ruling ("ACR")

Seeking Comment on Vehicle-Grid Integration ("VGI") Communication Protocol Working

Group, Energy Division Staff Report in the above-captioned proceeding, American Honda Motor

Co., Inc. hereby submits this reply to other parties' comments.

American Honda Motor Co., Inc. ("Honda") appreciates the opportunity to participate in the Working Group. We fully support the Joint Parties' opening comments, of which Honda was a signatory.

# Introduction

Honda would like to reply specifically to Hank McGlynn's opening comments. While McGlynn provides excellent comments on vehicle to grid (V2G) related subject material, and his knowledge and expertise contributed tremendously to the outcome of the VGI Working Group, we do not agree with his views on including workplaces or fleets within the mandate.

# **Workplaces Present a Price Challenge**

Honda provides workplace charging on its Torrance, CA campus. We installed 60 EVSEs that are being used by more than 100 unique users each day. The EVSE cost was paid for usinga California Energy Commission grant under the Alternative and Renewable Fuel and Vehicle Technology Program, and Honda covered the electrical and construction cost. Despite this grant, and despite Honda charging users to access the stations, the stations will never recoup the cost of installation, and in some months, not even the cost of the electricity<sup>1</sup> being used. Honda understands that not all businesses can afford to subsidize electric vehicle charging infrastructure for their employees. In addition, we have observed that drivers are price sensitive, and billing them above residential electrical costs causes them to charge at home instead of work.

At the same time, such infrastructure is critical for several reasons:

- It provides a way for employees who do not have home charging to drive a plug in vehicle
- It allows for more vehicles to charge during the day, which in most cases is the time of lowest carbon intensity for the California Grid<sup>2</sup>
- It presents a flexible daytime load for utilities, aggregators, automakers, and/or charging ٠ station manufactures to control and use as a grid resource
- It helps increase awareness, and to promote and sell electric vehicles

We have observed that smart charging in a workplace setting does not require any additional communication between the vehicle and charging station other than the standard SAE J1772 PWM implementation. Simply put, the need to get data directly from the vehicle is not necessary in this application. We have observed that many of our commuters have very predictable usage patterns. Implementing VGI could be done by a local controller or cloud based software which uses past charging session data to determine which vehicles can have their charging interrupted or slowed. In this case, an algorithm could easily identify which vehicles typically leave later or do not need much energy, allowing for VGI without negative impact to drivers.

We conclude that no mandate for private workplaces should be enacted. The mandate has additional costs that do not provide a clear benefit to all private workplaces, and could present a

http://www.caiso.com/TodaysOutlook/Pages/emissions.aspx

<sup>&</sup>lt;sup>1</sup> The stations are on an electric vehicle specific rate from Southern California Edison. This rate does not have demand charges, a significant cost savings for the site. Prior to moving to the TOU-EV-4 rate, the site electrical cost per kWh was 2-3 times higher than what drivers were willing to pay, caused by demand and customer charges. <sup>2</sup> Real time emissions information for the California ISO is available here:

barrier to some smaller businesses, which are more likely to adapt non-networked stations due to their low costs.

# **Utility Workplace Charging Considerations**

McGlynn also mentions, "EVSE used to serve utility fleets or at utility sites for by utility employees or visitors should conform to the requirements, even if not procured using ratepayer investment." Honda disagrees; utility companies and government entities should not be held to a different standard than any other business wishing to install private workplace or fleet charging. If a utility or government entity were to provide public Level 2 charging as part of a workplace installation, only that section should require the mandates listed in the Staff Report.

### Fleets Cover a Wide Range of Use Cases

Honda does not believe fleets should be mandated to conform to the Staff Report recommendation. The use case of "fleet" covers an entire spectrum of use cases. Regardless of the use case, the fleet operator, infrastructure manager, and/or procurement personnel have a duty to operate their fleet at a low cost.

Whether smart charging is applicable to a fleet or not comes down to two factors:

- **Cost Effectiveness** The proposed grid service must have an acceptable rate of return for the additional costs.
- **Sufficient Dwell or Idle Time** For a grid service such as demand response, there must be little or no impact to the vehicle caused by stopping, slowing, or delaying charging. In the case of rideshare vehicles, such a fleet may simply be unable to perform grid services due to the need to get back on the road in a short amount of time.

We conclude that no mandate for fleets should be enacted. Fleet operators are already looking towards innovative solutions that can help save money, and do not need a mandate requiring this. If smart charging works and proves to reduce operating expenses or provide other benefits, fleet operators will naturally adopt it.

### Conclusion

Honda appreciates the opportunity to participate in the Working Group and to submit these reply comments.

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Respectfully submitted,

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