Attachment D
RFP EM-011-2023
Electric Vehicle DC Fast Charging – Maine Phase 5
Data Capture and Reporting Requirements



Section 1: Data Capture Requirements

Each EV charger must have network communications that, at a minimum, provide the following information:

- 1) Date and time of each charging session (start and stop time);
- 2) Total kWh dispensed and maximum kW demand for each session;
- 3) Total dollar amount charged to the user for each session;
- 4) Charger status and health in real time;
- 5) Malfunction or operating error;
- 6) Full site level demand; and
- 7) For projects that employ battery energy storage systems (BESS), BESS state of charge before and after each vehicle charging session and time to charge and discharge.

Section 2: Reporting Requirements

Recipient must collect and report the following data to the Trust at the frequencies listed below. These data capture and reporting requirements are based on those in the <u>NEVI Standards and Requirements</u> (23 CFR 680) at § 680.112 and § 680.116(c). Recipient may also be required to report this information directly to the FHWA in a manner to be prescribed at a later date when the FHWA establishes guidelines for data submittal.

- **2.1 Quarterly Data submittal.** Recipients must submit the following data on a quarterly basis for each individual port:
 - 1) Charging station identifier that the following data can be associated with. This must be the same charging station name or identifier used to identify the charging station in data made available to third-parties in § 680.116(c)(1) of the NEVI Standards (see Section 3: Third Party Data Sharing below);
 - 2) Charging port identifier. This must be the same charging port identifier used to identify the charging port in data made available to third-parties in § 680.116(c)(8)(ii) of the NEVI Standards;
 - 3) Charging session start time, end time, and any error codes associated with an unsuccessful charging session by port;
 - 4) Energy (kWh) dispensed to the EV per charging session by port;
 - 5) Peak session power (kW) by port;
 - 6) Payment method associated with each charging session;
 - 7) Charging station port uptime, T_outage, and T_excluded calculated in accordance with the equation in § 680.116(b) of the NEVI Standards for each of the previous 3 months;
 - 8) Duration (minutes) of each outage

In addition to the above listed data, Recipient should report to the Trust quarterly:

1) The amount billed to each customer for each transaction; and

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- 2) For projects that employ battery energy storage systems (BESS), BESS state of charge before and after each vehicle charging session and time to charge and discharge.
- **2.2 Annual Data Submittal.** Beginning in 2024, Recipients must submit the following data on an annual basis, on or before March 1:
 - 1) Maintenance and repair cost per charging station for the previous year.
 - 2) For private entities involved in the operation and maintenance of chargers, identification of and participation in any State or local business opportunity certification programs including but not limited to minority-owned businesses, Veteran-owned businesses, woman-owned businesses, and businesses owned by economically disadvantaged individuals.
- **2.3 One-time Data Submittal**. Beginning in 2024, Recipients must submit the following data once for each charging station, on or before March 1 of each year:
 - The name and address of the private entity(ies) involved in the operation and maintenance of chargers;
 - 2) Distributed energy resource installed capacity, in kW or kWh as appropriate, of asset by type (e.g., stationary battery, solar, etc.) per charging station;
 - 3) Charging station real property acquisition cost, charging equipment acquisition and installation cost, and distributed energy resource acquisition and installation cost; and
 - 4) Aggregate grid connection and upgrade costs paid to the electric utility as part of the project, separated into:
 - i. Total distribution and system costs, such as extensions to overhead/underground lines, and upgrades from single-phase to three-phase lines; and
 - ii. Total service costs, such as the cost of including poles, transformers, meters, and onservice connection equipment.

Section 3: Third-Party Data Sharing

As required by the NEVI Standards § 680.116, recipients must ensure that the following data fields are made available, free of charge, to third-party software developers, via application programming interface:

- 1) Unique charging station name or identifier;
- 2) Address (street address, city, State, and zip code) of the property where the charging station is located:
- 3) Geographic coordinates in decimal degrees of exact charging station location;
- 4) Charging station operator name;
- 5) Charging network provider name;
- 6) Charging station status (operational, under construction, planned, or decommissioned);
- 7) Charging station access information:
 - i. Charging station access type (public or limited to commercial vehicles);
 - ii. Charging station access days/times (hours of operation for the charging station);
- 8) Charging port information:
 - i. Number of charging ports;

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- ii. Unique port identifier;
- iii. Connector types available by port;
- iv. Charging level by port (DCFC, AC Level 2, etc.);
- v. Power delivery rating in kilowatts by port;
- vi. Accessibility by vehicle with trailer (pull-through stall) by port (yes/no);
- vii. Real-time status by port in terms defined by Open Charge Point Interface 2.2.1;
- 9) Pricing and payment information:
- 10) Pricing structure;
 - i. Real-time price to charge at each charging port, in terms defined by Open Charge Point Interface 2.2.1; and
 - ii. Payment methods accepted at charging station.