Exhibit G

Network Service Agreement Charging Network Provider Data Sharing Agreement Terms and Conditions

The following must be attached as an Exhibit to the Network Service Agreement.

The Level 2 EVSE supported under this Network Service Agreement is part of an Incentive Recipient project with Agreement Number _____ awarded under the Communities in Charge program funded by the California Energy Commission.

Application Number	
Award Number	
Incentive Recipient	
Project Site	
Magnitude of Award	
Agreement Number	

The purpose of this Exhibit is to ensure that the data delivery requirements required for Level 2 EVSE at Incentive Recipient Projects are met by an Incentive Recipient whether directly by a charging network provider and/or by the Incentive Recipient or other third party through appending this Exhibit in its entirety to the agreement entered into for an Incentive Recipient Project with the charging network provider (the "Network Service Agreement"). A charging network provider is the entity that provides the digital communication network that remotely manages the chargers ("Charging Network Provider"). Charging Network Providers may also serve as charging station operators and/or manufacture chargers. **Incentive Recipient agrees and acknowledges that the ultimate responsibility for delivery of the data required by this Exhibit rests with the Incentive Recipient. Incentive Recipient also agrees and acknowledges that the data to be delivered in this Exhibit shall continue for six (6) years following the date of commissioning of the chargers in the Incentive Project.** Capitalized terms used in this Exhibit are to be given the meanings set forth in the Incentive Recipient Agreement unless otherwise defined herein. The terms of this Exhibit G shall survive the termination of the Agreement.

Terms and Conditions

1. **CEC Enforcement:** The California Energy Commission ("CEC") shall be deemed a third party beneficiary/real party in interest in a Network Service Agreement and all data collected and reported thereunder with full rights to enforce all terms and conditions of those

agreements. Failure to meet the Operational Requirements set forth in this Exhibit shall allow CEC to seek repayment of incentive funds from the Incentive Recipient of funds from the CEC.

2. **Operational Requirements:** All installed charging ports have to maintain an uptime of at least 97 percent for each year for six (6) years after the beginning of commissioning. Uptime and downtime calculation methods are described below.

3. **Charging Network Provider Requirements:** The Charging Network Provider agrees to meet all of the following requirements:

    a. **Use of CEC API:** The Charging Network Provider must have an API of the CEC's choosing to permit the Charging Network Provider to transfer the data required in this section directly to the CEC or the CEC's designee within 60 minutes of the record's generation.

    b. **OCPP Subset Certification:** The Charging Network Provider must have Subset Certification of the Charging Station Management System in the Open Charge Alliance OCPP Certification Program for OCPP version 2.0.1, published May 24, 2023, or a subsequent version of OCPP for Core, Advanced Security, and ISO 15118 Support functionalities.

    c. **Version of OCPP:** The Charging Network Provider's central system must have connection to the chargers using OCPP version 2.0.1 or a subsequent version of OCPP. This does not preclude the additional use of other communication protocols.

    d. **Transmission Protocols:** The Charging Network Provider and chargers must transmit the following protocol data units between the Central Management System and the charger(s) as specified in OCPP version 2.0.1 or a subsequent version of OCPP:

        i. AuthorizeRequest shall be transmitted to the Central Management System by the charger.
        ii. AuthorizeResponse shall be transmitted by the Central Management System to the charger.
        iii. BootNotificationResponse shall be transmitted by the Central Management System to the charger in response to any received BootNotificationRequest.
        iv. HeartbeatRequest shall be transmitted to the Central Management System by the charger on a set interval.
        v. HeartbeatResponse shall be transmitted to the charger by the Central Management System in response to any received HeartbeatResponse.
        vi. RequestStartTransactionRequest shall be transmitted by the Central Management System to the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.
        vii. StatusNotificationRequest shall be transmitted by the charger to the Central Management System any time the charger or an associated charging port's operative status changes.
        viii. TransactionEventRequest shall be transmitted to the Central Management System by the charger as specified in OCPP 2.0.1 or a subsequent version of OCPP.
        ix. The optional field meterValue must be populated when the eventType field is set to either "Started" or "Ended."
        x. When populated, the sub-subfield Value of the subfield SampledValue of the field meterValue shall be transmitted in Watt-hours (Wh).

xi. When populated, the sub-sub-subfield unit of the sub-subfield unitOfMeasure of the subfield SampledValue of the field meterValue shall be set to the default string, "Wh."
xii. When populated, the sub-sub-subfield multiplier of the sub-subfield unitOfMeasure of the subfield SampledValue of the field meterValue shall be set to the default integer, 0 (zero).
xiii. When the meterValue field is populated, the measurand sub-subfield of the SampledValueType subfield, of the field meterValue shall be populated as specified in OCPP 2.0.1 or a later version.

4. **Recordkeeping and Transmittals**: For networked chargers, the Charging Network Provider must:

   a. Collect and retain the Remote Monitoring data below from each charging port installed and operated as part of the Network Service Agreement.

   b. Automatically transmit the Remote Monitoring data below to the CEC, via API, within 60 minutes of the Remote Monitoring data's generation. Transmittals must begin within one month of the charger becoming operational.

   c. Retain the Remote Monitoring data below for 2 years from the date of each record's generation and for the duration of the length of the Network Service Agreement, Provide Remote Monitoring records to the CEC within 10 business days of request.

   d. Provide digital records in a comma separated values file unless another file format is approved by the CEC for the request.

   e. Provide a clear and understandable Data Dictionary from each Charging Network Provider that describes each data element and any associated units with all digital records.

5. **Remote Monitoring Data:** Remote monitoring data for networked chargers, which will serve as the foundation for the Remote Monitoring records that must be submitted shall include:

   a. All instances of the following Protocol Data Units, specified in OCPP 2.0.1, that are transmitted between the charger and the central system.
      i. AuthorizeRequest
      ii. AuthorizeReponse
      iii. BootNotificationRequest
      iv. HeartbeatResponse
      v. RequestStartTransactionRequest
      vi. StatusNotificationRequest
      vii. TransactionEventRequest

6. **Reporting:** With respect to Level 2 charging ports, the Charging Network Provider shall:

   a. After the charger becomes operational, prepare and submit to the CEC *Quarterly Reports on Charger and Charging Port Reliability and Maintenance*. This report must conform to a format approved by the CEC and is provided for six (6) years after the charging port is operational. Each report must include:
      i. A summary of charging port downtime, including total downtime and the number and frequency of downtime events, the minimum, median, mean, and maximum duration,

and the causes of downtime events. Downtime shall be determined on a per charging port basis by summing the durations of all downtime events during the reporting period. The duration of a downtime event shall be the longest of the following periods:

A. **For networked charging ports**, the time after the charger has transmitted a StatusNotificationRequest indicating that the charging port associated with that charger is in a "faulted" or "unavailable" state until a subsequent StatusNotificationRequest is transmitted by that charger indicating that the charging port has transitioned to an "available," "occupied," or "reserved" state. The timestamps in each StatusNotificationRequest shall be used to quantify downtime.
B. **For networked chargers**, the time between a BootNotificationResponse transmitted by the Central Management System and the last HeartbeatResponse transmitted by the Central Management System prior to the BootNotificationResponse. The timestamps in the relevant BootNotificationResponse and HeartbeatResponse shall be used to quantify downtime.
C. **For all charging ports**, the time between the earliest record that a charging port is not capable of successfully dispensing electricity or otherwise not functioning as designed and the time it is available to deliver a charge. First record that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed includes, but is not limited to, consumer notification, internal diagnostics, or inspection, whichever is earliest.

ii. Provide a summary of excluded downtime, including total excluded downtime and the number and frequency of excluded downtime events, the minimum, median, mean, and maximum duration, and the causes of excluded downtime events. 'Excluded Downtime' includes:

A. **Before Initial Installation**: Downtime before the charging port was initially installed.
B. **Grid Power Loss**: Downtime during which power supplied by a third-party provider is not supplied at levels required for minimum function of the charging port. This may include, but is not limited to, service outages due to utility equipment malfunction or public safety power shutoffs. This does not include power generation or storage equipment installed to serve the charger(s) exclusively. Documentation from power provider detailing outage is required to claim this as excluded downtime.
C. **Outage for Preventative Maintenance or Upgrade**: Downtime caused by any preventative maintenance or upgrade work that takes the charging port offline. This must be scheduled at least two weeks in advance of the charger being placed in an inoperative state. The maximum downtime that can be excluded for preventative maintenance or upgrade work is 24 hours for any 12-month period.
D. **Vandalism or Theft**: Downtime caused by any physical damage to the charger or station committed by a third party. This may include, but is not limited to, theft of charging cables, damage to connectors from mishandling, or damage to screens. A maximum of 5 days may be claimed as excluded downtime for each vandalism or theft event. A police report or similar third-party documentation is required to claim this as excluded time.
E. **Natural Disasters**: Downtime caused by any disruption of the charging port due to a natural event such as a flood, earthquake, or wildfire that causes great damage. Third party documentation such as news reporting must be provided

along with a narrative of the direct impacts to the charger(s) to claim this as excluded downtime.

F. **Communication Network Outages**: Downtime caused by loss of communication due to cellular or internet service provider system outages. A Communication Network Outage can be claimed as excluded downtime provided the chargers default to a free charge state during communication losses. A free charge state is when the charger is operational and dispenses energy free of charge to any consumer.

G. **Operating Hours**: provide the hours in which the charging port is in an operative state but that are outside of the identified hours of operation of the charging station.

b. **Uptime**: Provide a summary and calculation of uptime. Each report shall include the uptime percentage of each charging port (Uptime) installed and operated as part of this Agreement for the reporting period. Charging port uptime shall be calculated as:
[Equation]
   i. U = Charging Port Uptime
   ii. T =
   Q1 reporting period = 129,600 minutes, except for a leap year, which is 131,040 minutes.
   Q2 reporting period = 131,040 minutes.
   Q3 and Q4 reporting periods = 132,480 minutes.
   iii. D = Total charging port downtime for the reporting period, in minutes.
   iv. E = Total charging port excluded downtime in the reporting period, in minutes.

c. **For networked charging ports**, provide a charge attempt summary for each charging port. The charge attempt summary shall include, as defined below, the total number of charge attempts, the total number of successful charge attempts, the total number of failed charge attempts, and the successful charge attempt rate for the reporting period.
   i. **Charge Attempt**. A charge attempt occurs upon transmission of one or more of the protocol data units identified in following subsections A. through G. below between the Central Management System and the charger as specified in OCPP Version 2.0.1 or a subsequent version of OCPP. Any number of the Protocol Data Units described in A. through G. of this subsection below timestamped within a three-minute interval shall be counted as one charge attempt. Any number of TransactionEventRequest described in D. through G. of this subsection below transmitted with identical identifier strings in the transactionId subfield of the transactionInfo field shall be counted as one charge attempt.
      A. An AuthorizeRequest message transmitted by the charger to the Central Management System.
      The AuthorizeRequest message shall not count as a charge attempt if the Central Management System responds with an AuthorizeResponse message with the status subfield of the idTokenInfo field set to any of the following responses:
         a. "Blocked"
         b. "ConcurrentTx"
         c. "Expired"
         d. "Invalid"
         e. "NoCredit"
         f. "NotAllowedTypeEVSE"
         g. "NotAtThisLocation"

h. “NotAtThisTime”
i. “Unknown”

B. A RequestStartTransactionRequest message transmitted by the Central Management System to the charger.
C. A StatusNotificationRequest message transmitted by the charger to the Central Management System with the connectorStatus field set to “Occupied”.
D. A TransactionEventRequest message transmitted by the charger to the Central Management System with the eventType field set to ”Started”.
E. A TransactionEventRequest message transmitted by the charger to the Central Management System with the triggerReason field set to ”CablePluggedIn”.
F. A TransactionEventRequest message transmitted by the charger to the Central Management System with the chargingState subfield of the transactionInfo field set to “EVConnected”.
G. A TransactionEventRequest message transmitted by the charger to the Central Management System with the chargingState subfield of the transactionInfo field set to “Charging”.

ii. **Charging Session**. A charging session begins and ends as follows:
A. A charging session begins when the charger transmits TransactionEventRequest to the Central Management System with the chargingState subfield of the transactionInfo field set to “Charging.”
a. In the event that multiple TransactionEventRequest protocol data units are transmitted with the chargingState subfield of the transactionInfo field set to 'Charging' AND identical identifier strings in the transactionId subfield of the transactionInfo field, the charging session shall begin when the first of those protocol data units are sent. Which protocol data unit was sent first shall be determined based on the lowest value in the seqNo field.
b. A charging session ends when the charger transmits a subsequent TransactionEventRequest to the Central Management System with the chargingState subfield of the transactionInfo field set to any of the following values:
i. “EVConnected”
ii. “SuspendedEV”
iii. “SuspendedEVSE”
iv. “Idle”
c. The identifier string contained in the transactionId subfield of the transactionInfo field must be identical in the messages described in a. and b. of this subsection above.
d. The date and time found in the timestamp field of the messages described in A. and B. of this subsection above shall be used to determine the start and stop time of a charging session.

iii. **Successful Charge Attempt**. A successful charge attempt is a charge attempt that is followed by either A. or B. of this subsection below prior to another charge attempt.
A. A charging session that lasts for 5 minutes or longer as determined by the timestamps described above
B. The stoppedReason subfield of the transactionInfo field of the TransactionEventRequest protocol data unit ending the charging session is set to one of the following:
a. “EnergyLimitReached”
b. “Local”

c. "Remote"
d. "SOCLimitReached"

iv. **Failed Charge Attempt**. A failed charge attempt is any charge attempt that is not followed by a successful charge attempt prior to a subsequent charge attempt.

v. **Successful Charge Attempt Rate**. The successful charge attempt rate for a charging port shall be calculated using the following formula:
[Equation]
Where:
SCAR = Successful Charge Attempt Rate
CA = Total Charge Attempts for the reporting period
FCA = Total failed charge attempts for the reporting period

d. **For all chargers**, a summary of the total number of maintenance dispatch events that occurred since the last report, the number of days to complete each maintenance event reported, and a narrative description of significant maintenance issues. Include details of all excluded downtime and a narrative description of events that caused the excluded downtime. Include the summary in each Quarterly Report on Charger and Charging Port Reliability and Maintenance.

7. **Charger Utilization**: The charger network provider shall collect and provide to the CALSTART and the CAM at CEC, at minimum, quarterly utilization data from the project for all installed Level 2 chargers in an EV Utilization Data Report in the format of the CEC's choosing, for three (3) years after the charging ports are operational, including, but not limited to:

a. **EV Charging Port**:
   i. Charging Network Provider name
   ii. Charger site address, city, zip code
   iii. Charger make, model, and manufacturer serial number
   iv. EV service equipment charger and charging port ID
   v. Peak Power (kW)
   vi. Charging session start/end date and times
   vii. Charging session energy consumed (kW)
   viii. Plug in/un-plugged timestamp Coordinated Universal Time (UTC)
   ix. Charging interval peak demand
   x. Charging interval start/end times
   xi. Charging interval energy consumed
   xii. If a bidirectional charger, energy (kWh) discharged back to grid or facility
   xiii. Total transacted amount
   xiv. Payment method

8. **Product**: The charger network provider shall provide an *EV Utilization Data Report,* provided, at a minimum, quarterly for three years after charging ports are operational.

9. **Data Reporting**: All information set forth above shall be required to comply with CEC approved formatting, report templating and delivery methods.

The signatories below agree to comply with all of the foregoing terms and conditions of this Exhibit.

Charger Network Provider	Incentive Recipient, or their Project Partner:
By:	By:
Name of Certifying Officer:	Name of Certifying Officer:
Title:	Title:
Organization Name:	Organization Name:
Date:	Date: