

# ELECTRIC VEHICLE CHARGING DATA REQUIREMENTS & AGREEMENT



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND NEW JERSEY BOARD OF PUBLIC UTILITIES

## INTRODUCTION

This data specification defines the minimum requirements for a Company's inclusion in the list of Pre-Qualified Network Service Providers (the "Program") for electric vehicle charging grants funded through the New Jersey Department of Environmental Protection ("NJDEP") or the New Jersey Board of Public Utilities ("NJBPU"). In the future, grantees receiving NJBPU or NJDEP grant funds for electric vehicle supply equipment ("EVSE") subject to data reporting requirements will be required to procure appropriate network services from one of the Companies on the list of Pre-Qualified Network Service Providers.

These specifications are intended to closely align with the specifications required by utility EVSE incentive programs.

Companies that meet the requirements described herein ("Requirements") will be eligible for inclusion in the Program. <u>NJDEP will publish and update from time to time a list of participating Companies on its</u> website<sup>1</sup>.

## ELIGIBILITY

To be added provisionally to the Program a Company must certify that it will meet the Requirements and agree to provide the data for the Participating Data Sources to the Program Manager at no cost. The Company must also complete and submit the attached Signature Page to <u>drivegreen@dep.nj.gov</u>.

To remain eligible for inclusion in the Program, a Company must work in good faith with the Program Manager to establish and maintain data transfer on terms that are mutually acceptable.

#### COMPLIANCE

In collaboration with the NJBPU and the Program Manager, NJDEP reserves the right to determine that a Company is noncompliant with the Requirements and to remove noncompliant Companies from the Program.

<sup>&</sup>lt;sup>1</sup> <u>www.drivegreen.nj.gov/networkproviders.htm</u>l



## DATA SHARING

For purposes of the Programs, the Program Manager will share the data collected from participating Companies only with State agencies and their contractors as appropriate and will publicize only anonymized summaries of the data provided.

#### FORMAT AND CONTENT

The data *content* set forth in the Requirements is mandatory, but the data *format* in the Requirements is a suggestion only. However, if reporting is accomplished through a flat-file exchange, then at least two separate files shall be delivered, as explained in the Data Exchange section.

If the New Jersey Department of Environmental Protection deems that the Company's data content satisfies the Requirements, and the data is clearly labeled or a clear data key is provided, the Company should not expect to make changes to its existing data format if an automated data transfer is established for the sharing of data with the Program Manager (See Data Exchange Mechanism.)

If desired, the Program Manager can review a Company's sample dataset to help answer any questions about compliance.



#### DEFINITIONS

Charging Session – A charging occurrence for a single EV, during which a certain amount of energy is transmitted to the EV, measured in duration according to the time of the EV's physical plug-in to the EVSE to the time of the EV's physical plug-out from the EVSE. All events between the physical plug-in and physical plug-out are considered part of the same Charging Session, regardless of any interruptions or restarts that may take place within that period.

Company: A Network Service Provider.

Data Source: An EVSE or other technology that records EV Charging Session data.

Data Source Owner: The entity that owns the physical Data Source.

Date/Time: A string field with the preferred format: YYYYMMDD hh:mm:ss [+/-hh:mm] using a 24-hour clock. The time in brackets represents the difference from coordinated universal time.

Decimal Number: A numeric field that may contain up to seven significant digits.

Integer: A specific numeric field which may only contain whole numbers.

Interval Data: Data that uses timestamps that align with natural time increments (i.e., at the beginning of the hour, or 15, 30, or 45 minutes thereafter) in the same time zone reported in the Session Data. Each 15-minute interval will be associated with a real number representing electricity delivered to vehicles (in kilowatt-hours, to at least two decimal places) in that interval. Interval data must be clearly linked to a single Data Source and ideally should be linked to a particular Port and Charging Session.

Network Service Provider or "Company": A business that provides electric vehicle charging network services which include collection of EV charging data.

Operating Status (ACTIVE/INACTIVE): A Participating Data Source is ACTIVE when it is operable by the intended user, it is associated with a network service that is capable of data collection and reporting to meet this specification, and the Data Source Owner is in good standing with that network service. A given Participating Data Source may shift between ACTIVE and INACTIVE status multiple times, as dictated by that Data Source's performance history. The status of the Data Source on the last day of the reporting period shall be used as the basis for determining whether the Data Source is ACTIVE or INACTIVE. Note that Operating Status is distinct from Outage status, i.e., a device may experience any quantity or duration of Outages while remaining ACTIVE. If a Data Source ceases to qualify as a Participating Data Source, its Operating Status shall be INACTIVE.

Outage: Any period in which one or more ports of an EVSE is incapable of delivering its normal rated energy capacity to an appropriately authorized EV, other than periods in which the Data Source Owner may choose to make the EVSE unavailable for use.



Participating Data Source: A Data Source whose owner has granted written consent to the Reporting Entity to have the relevant data accessed for purposes of providing it to the Program.

Port: A connection capable of transmitting energy to a vehicle. For the purposes of this standard, the total number of ports associated with a Data Source shall be equal to the number of simultaneously operable ports that the Data Source can provide.

Program: The Pre-Qualified Network Service Provider list and associated data requirements maintained by the New Jersey Department of Environmental Protection and the New Jersey Board of Public Utilities. Certain grant and incentive programs managed by the New Jersey Department of Environmental Protection and New Jersey Board of Public Utilities, or their contractors will require grantees to select an appropriate, hardware-compatible network plan from a Pre-Qualified Network Service Provider on this list.

Program Manager: NJDEP staff, NJBPU staff, or a consultant hired by NJDEP or NJBPU, responsible for the Program's operations, including receiving and processing the data received from the Reporting Entity.

Reporting Entity: The entity that provides the data derived from Data Source(s) to the Program Manager. In most cases, this entity will be a Network Service Provider. However, the Reporting Entity may also be another party that is able to meet the Requirements.

Site: The physical location where vehicle charging occurs.

String: A text field of letters, numbers, punctuation, and symbols. Empty string fields are <NULL>.

Zip Code: A valid five-digit US ZIP code.



#### REQUIREMENTS

#### DATA EXCHANGE MECHANISM

#### DATA GROUPS

Two general groups of data, Charging Session Data, and Data Source Inventory Data, are required:

- (1) Charging Session Data This data contains information gathered from individual Charging Sessions over a given reporting period.
- (2) Data Source Inventory Data This data contains information about the status and performance of each Data Source as of the end of a particular reporting period.

## DATA EXCHANGE METHOD

Two methods of data exchange are acceptable: (1) an automated interface; or (2) a monthly "flat-file" via email transfer.

Regardless of the method selected, the data must include the required content described in Table 1 and Table 3.

If the Company uses field nomenclature that differs from the field names in Table 1 and Table 3, the Company <u>must</u> provide definitions that clearly link its field names to the required content.

#### DATA EXCHANGE OPTION 1: AUTOMATED INTERFACE (PREFERRED)

The preferred data exchange method is a secure automated interface such as an Application Programming Interface (API) or Secure File Transfer Protocol (SFTP). The Program Manager will work with the Company to establish automated data transfer from Data Sources.

#### DATA EXCHANGE OPTION 2: FLAT-FILE VIA EMAIL

If the Reporting Entity does not wish to exchange data via an automated interface, the Reporting Entity may instead elect to provide the monthly Charging Session Data and Data Source Inventory datasets in two "flat files" in .csv (comma separated value) format. In this case, the files shall be delivered to the Program Manager or its designated representatives(s) via email between the first and tenth day of each calendar month and shall contain data including the charging activity associated with a Data Source for the previous calendar month. The files shall be named in a mutually agreeable way that captures the identification of Reporting Entity, the Data Source, and the month and year of the charging activity covered by the dataset.



#### WEB PORTAL ACCESS

In addition to the two Data Exchange Methods, data shall be accessible to the Program Manager via a secure Web-based portal ("Web Portal") provided by the Company which permits ad-hoc export of data with customizable period ranges. *Access to a Web Portal does not replace the need for a separate Data Exchange Method*, via automated interface or emailed flat files.

If the Company does not have an existing Web Portal system, this requirement may be waived at the discretion of the Program Manager.

At a minimum, the Web Portal shall provide period-level summary data including total Charging Sessions and total kilowatt-hours delivered. Additional data may also be included. The Web Portal <u>does not</u> need to provide access to all data content.



#### CHARGING SESSION DATA CONTENT

The Charging Session Data shall contain information that characterizes each individual Charging Session for the Reporting Entity's portfolio of Data Sources. This dataset should include data from Participating Data Sources only.

An automated data transfer interface is preferred. If the Reporting Entity reports data for a Data Source via a monthly flat file exchange, all Charging Session Data content shall be presented in a single file. The file shall include all new Charging Session Data following the last record contained in the previous file exchange. The format of this data is at the discretion of the Reporting Entity. The preferred file format includes a single row for each Charging Session, with the column names and format described in *Table 1*. Other formats are acceptable.

#### **REQUIRED CHARGING SESSION DATA FIELDS**

The Company shall provide Charging Session Data that includes the data content described in *Table 1: Charging Session Data Field List.* 

If the Company uses field nomenclature that differs from the field names in Table 1, the Company <u>must</u> provide definitions that clearly link its field names to the required content.

Field Name	Charging Session Data Content Description	Suggested Data Format	Content Required
Reporting_Entity	Unique identifier for the Reporting Entity, which shall be constant over time. The Reporting Entity may choose its identifier or request that the Program Manager assign one.	String	REQUIRED
Data_Source_ID	A unique identifier of the Data Source which is not repeated for any other Data Source in the Network Service Provider's Data Source portfolio, and which is constant over time.	String	REQUIRED
Station_ID	This uniquely identifies a charging station (either ID or name). A charging station is the area in the immediate vicinity of a group of chargers and includes the chargers, supporting equipment, parking areas adjacent to the chargers, and lanes for vehicle ingress and egress. Note that a charging station could comprise only part of the property on which it is located. The specified Charging Station ID must be the same unique identifier used to identify the charging station in data made available to third-parties in §680.116(c)(1). The station_id attribute corresponds to location_id in OCPI 2.2.1.	Alphanumeric character string with no maximum character count. Reported as type: String Example: LOC1	REQUIRED

## Table 1: Charging Session Data Field List



Field Name	Charging Session Data Content Description	Suggested Data Format	Content Required
Session_ID	This uniquely identifies each charging session. A charging session is a period of time that is initiated when an EV is connected to a charging port (plugged-in) and concludes when the EV is disconnected from the charging port (unplugged). The session_id attribute corresponds to session_id in OCPI 2.2.1.	Alphanumeric character string with <b>no maximum character count</b> . Reported as type: <b>String</b> <u>Example</u> : 101 01KOL	REQUIRED
Port_ID	This uniquely identifies a charging port. A charging port is the system within a charger that charges one electric vehicle (EV). A charging port may have multiple connectors but it can provide power to only one EV through one connector at a time. In cases where there exist more than one (1) charging port on a charger, each charging port must be uniquely identified by a Charging Port ID. This specified Charging Port ID must be the same value used to identify the charging port in data made available to third-parties in 680.116(c)(8)(ii). The port_id attribute corresponds to evse_uid in OCPI 2.2.1.	Alphanumeric character string with no maximum character count. Reported as type: String Example: 3256 EG98	REQUIRED
Time_Zone	The time zone applicable to all timestamps reported.	String	REQUIRED
Session_Start	Timestamp (following RFC 3339 in UTC, as shown in OCPI 2.2.1 DateTime Section 16.2) identifying when the charging session (charging session ID) became active in the platform of the charging network provider. The session_start data attribute corresponds to start_date_time in Session Object in OCPI 2.2.1. A charging session is considered active when all pre- conditions for a session being accepted and active are met: There has been communication between the EV and charger (e.g., cable was correctly plugged in) and the EV or driver is authorized by the network provider to charge. At this time the EV is being charged (or can be charged) and energy is (or is not) being transferred to the EV.	YYYY-MM-DD HH:mm:ss in UTC Reported as type: DateTime Example: 2023-07- 03T12:51:48Z Unit: UTC	REQUIRED



Field Name	Charging Session Data Content Description	Suggested Data Format	Content Required
Session_End	Timestamp (following RFC 3339 in UTC, as shown in OCPI 2.2.2 DateTime Section 16.2) identifying when the charging session (charging session ID) was completed. The session_end data attribute corresponds to end_date_time in Session Object in OCPI 2.2.1. Note that charging might have finished before the session ends (e.g., EV is full but customer must continue to pay for parking spot until session is completed).	YYYY-MM-DD HH:mm:ss in UTC Reported as type: DateTime Example: 2023-07- 03T12:51:48Z Unit: UTC	REQUIRED
Charging_Start	When power transfer to the vehicle began for the first time, after the related session_start timestamp.	Date/Time	REQUIRED
Charging_End	When power transfer to the vehicle ended for the last time before the related session_end timestamp.	Date/Time	REQUIRED
Charging_ Duration	The cumulative length of time over which power transfer to a particular EV takes place between session_start and session_end, measured in minutes. Note that Charging_Duration with respect to a particular EV may not always be equal to the difference between Charging_Start timestamp and Charging_End timestamp, due to charging interruptions.	Non-Negative Integer	REQUIRED
Session_Error	<ul> <li>"Any error codes associated with an unsuccessful charging session. If more than one (1) error code is associated with an unsuccessful charging session, a comma-separated list of all relevant error codes must be given. Specify "None"" if there are no errors associated with the charging session.</li> <li>Recommended list of error codes:</li> <li>none (None): No errors associated with the charging session.</li> <li>CX001 (ConnectorLockFailure): Failure to lock or unlock connector on the vehicle side.</li> <li>CX002 (GroundFailure): Ground fault circuit interrupter has been activated.</li> <li>CX003 (HighTemperature): High temperature inside the EVSE is derating power delivery.</li> <li>CX004 (OverCurrentFailure): Over current protection device has tripped.</li> <li>CX005 (OverVoltage): Input voltage to the vehicle has risen above an acceptable level.</li> </ul>	Alphanumeric character string with no maximum character count. Reported as type: String Example: {CX020} {CX009, CX013} {CX025, other} {other} {none}	REQUIRED



Field Name	Charging Session Data Content Description	Suggested Data Format	Content Required
	CX006 (UnderVoltage): Input voltage to the vehicle has dropped below an acceptable level.		
	CX007 (WeakSignal): Wireless communication device reported a weak signal.		
	CX008 (EmergencyStop): Emergency stop is pressed by the user (required if equipped).		
	CX009 (AuthorizationTimeout): The user plugs in but fails to authorize a charging session prior to the connection timeout between the vehicle and		
	EVSE.		
	CX010 (InvalidVehicleMode): The vehicle is in an invalid mode for charging.		
	CX011 (CableCheckFailure): Failure during the cable check phase. Includes isolation failure.		
	CX012 (PreChargeFailure): The EVSE did not reach the correct pre-charge voltage.		
	CX013 (NoInternet): The EVSE has no internet connectivity.		
	CX014 (PilotFault): The control pilot voltage is out of range.		
	CX015 (PowerLoss): The EVSE is unable to supply any power due to mains failure.		
	CX016 (EVContactorFault): Contactors fail to open or close on the vehicle side. May also include welding related errors.		
	CX017 (EVSEContactorFault): Contactors fail to open or close on EVSE's side. May also include welding related errors.		
	CX018 (CableOverTempDerate): Temperature of charging cable or connector assembly is too high, resulting in reduced power operation.		
	CX019 (CableOverTempStop): Temperature of charging cable or connector assembly is too high, resulting in a stopped charging session.		
	CX020 (PartialInsertion): Cable latch is raised due to incomplete insertion into the		
	vehicle charging port.		
	CX021 (CapacitanceFault): An Isolation Monitoring Device tripped due to high capacitance during active charging.		
	CX022 (ResistanceFault): An Isolation Monitoring		



Field Name	Charging Session Data Content Description	Suggested Data Format	Content Required
error other	Device tripped due to low resistance to the chassis during active charging. CX023 (ProximityFault): The proximity voltage is out of range. CX024 (ConnectorVoltageHigh): The output voltage of EVSE is high before charging starts or after charging ends. CX025 (BrokenLatch): The latch on the connector is broken. CX026 (CutCable): The output cable has been severed from the EVSE. other (Other): Any other errors not specified above. Additional description must be provided in session error description. More information on recommended error codes can be found in ""Recommendations for Minimum Required Error Codes for Electric Vehicle Charging Infrastructure" and ""Implementation Guide for Minimum Required Error Codes in Electric Vehicle Charging Infrastructure"" by ChargeX Consortium (https://inl.gov/chargex/)."	Alphanumeric character	REQUIRED
error_other	The description for any other error codes associated with an unsuccessful charging session that are not categorized in the recommended error codes in session_error (i.e., "other" was selected for session_error). If multiple errors need to be defined, they should be given by a comma- separated list.	string with <b>no maximum</b> character count. Reported as type: String <u>Example:</u> {error description 1} {error description 1, error description 2}	REQUIRED
energy_kwh	Amount of energy (in kilowatt-hours) dispensed by the port (port ID) during the charging session (session ID). Energy charged corresponds to the attribute ENERGY_IMPORT defined in the CdrDimensionType object in OCPI 2.2.1. Specify value as <b>none for a session that was not</b> <b>successfu</b> l-i.e., no energy was dispensed and a non- empty value of session error is associated with this charging session.	Numeric value greater than zero for any successful charging specified to at least two (2) decimal places Reported as type: Decimal(7,2) Example: 52.31 none Unit: kWh	REQUIRED



Field Name	Charging Session Data Content Description	Suggested Data Format	Content Required
power_kw	Maximum power (in kilowatts) dispensed by the port (port ID) during charging session (session ID). Peak power corresponds to the MAX_POWER attribute defined in the CdrDimensionType object in OCPI 2.2.1. Specify value as " <b>none" for a session that was not successful-</b> i.e., no energy was dispensed and a non- empty value of session error is associated with this charging session.	Numeric value <b>greater</b> than zero for any successful charging specified to at least two (2) decimal places Reported as type: <b>Decimal(7,2)</b> <u>Example</u> : 120.43 none <b>Unit:</b> kW	REQUIRED
Fee	The amount due from the EV driver, in USD. If fees may apply at the Data Source, but the EV driver did not owe a fee (due to network membership or another factor), the Fee should be represented as zero. Suggested Format Detail: If no fees apply under any circumstances at the Data Source (for a	Decimal Number (A positive value shows payment due from the EV driver.)	OPTIONAL
	personal-use or otherwise "free charger"), the Fee should be <null>.</null>		
Payment_Method	Method(s) of payment used to complete the charging session (session ID). If more than one (1) payment method is associated with a charging session, a comma-separated list of all relevant payment methods must be given. Recommended list of payment methods: <b>none</b> : Successful or unsuccessful charging session with no payment received <b>membership</b> : Payment by membership account and/or membership card <b>credit_card_terminal</b> : Payment via credit card or debit card terminal <b>phone_online</b> : Payment through mobile app, website, automated phone number or messaging system <b>plug_charge</b> : Payment via ISO 15118 Plug and Charge <b>roaming</b> : Payment via roaming partners <b>other</b> : Any other payment method not specified above. Additional description should be provided in Payment Method Description. The description for any method(s) of payment used	Alphanumeric character string with <b>no maximum</b> <b>character count.</b> Reported as type: <b>String</b> <u>Example:</u> {membership} {credit_card_terminal, phone_online} {other} {none}	REQUIRED
payment_other	The description for any method(s) of payment used to complete the charging session that are not	Alphanumeric character string with <b>no maximum</b>	REQUIRED
	categorized in the recommended payment methods in payment_method (i.e., "other" was selected for payment_method). If multiple payments need to be defined, they should be given by a comma-	<b>cnaracter count.</b> Reported as type: <b>String</b> <u>Example:</u> {cash}	

Electric Vehicle Charging Network Service Provider Minimum Data Requirements



Field Name	Charging Session Data Content Description	Suggested Data Format	Content Required
	separated list.	{cash, transit card}	
[Additional fields]	Data fields other than the ones described herein, such as peak Charging Session power, are welcome and may be provided at the Reporting Entity's discretion.		OPTIONAL



## INTERVAL DATA

Interval Data access may be a condition of eligibility for certain electric vehicle charging grants funded through the New Jersey Department of Environmental Protection or the New Jersey Board of Public Utilities. To ensure maximum eligibility, Network Service Providers should plan to provide access to Interval Data. However, Interval Data is not required for participation in the Program.

If the Reporting Entity elects to satisfy the Data Exchange requirement with monthly flat files, interval data may be supplied in a third file if necessary.

The suggested format in *Table 2: Interval Data Field List* is not required:

## Table 2: Interval Data Field List

Field Name	Interval Data Content Description	Suggested Data Format	Content Required
Interval_Start	The beginning of the 15-minute interval. All Interval_Start timestamps should align with natural time increments with mm:ss corresponding to exactly 00:00, 15:00, 30:00, or 45:00.	Date/Time	OPTIONAL (Required for maximum eligibility)
Interval_ kWh	Decimal number representing the electricity delivered (in kWh, to two decimal places) in the 15-minute interval.	Decimal Number	OPTIONAL (Required for maximum eligibility)



## DATA SOURCE INVENTORY CONTENT

The Data Source Inventory contains information about the portfolio of Data Sources that a particular Reporting Entity manages.

To be eligible for inclusion in the Program, a Network Service Provider must provide the data content detailed in Table 3: Data Source Inventory Field List.

Many of the fields in Table 3 may be collected at the time a new Data Source is commissioned and will remain constant over time. From time to time, New Jersey Department of Environmental Protection may provide updates or add additional fields. Such additions will be made after consultation with, and notice to, all pre-approved vendors.

#### SCOPE, UPDATES, AND PERSISTENCE

Fields in the Data Source Inventory should be updated for Participating Data Sources only. Data Sources that are no longer Participating Data Sources will be marked as "Inactive" and their Data Source Inventory data will not otherwise be updated, though it must continue to be reported.

Once a Participating Data Source is correctly included on the Data Source Inventory, it shall not be removed from the Data Source Inventory although its Operating\_Status indicator may change. Thus, even if a Data Source no longer exists in the real world, or is no longer a Participating Data Source, a record of its existence will be preserved in the Data Source Inventory with an "Inactive" status indicator.

#### FORMAT

If the Reporting Entity reports data via a monthly flat file exchange, the Data Source Inventory shall be provided in a single file, separate from the Charging Session Data. The preferred format of the file is .CSV with comma-separated fields for each row in the file, in the order noted in Table 3. Each row in the preferred file format represents a single Data Source, with each comma-separated field representing parameters about the Data Source.



*If the Network Service Provider uses field nomenclature that differs from the field names in Table 3, the Network Service Provider <u>must</u> provide definitions that clearly link its field names to the required content.* 

## Table 3: Data Source Inventory Field List

Field Name	Data Source Inventory Content Description	Suggested Data Format	Content Required
Station_ID	This uniquely identifies a charging station (either ID or name). A charging station is the area in the immediate vicinity of a group of chargers and includes the chargers, supporting equipment, parking areas adjacent to the chargers, and lanes for vehicle ingress and egress. Note that a charging station could comprise only part of the property on which it is located. The specified Charging Station ID must be the same unique identifier used to identify the charging station in data made available to third-parties in §680.116(c)(1). The station_id attribute corresponds to location_id in OCPI 2.2.1.	Alphanumeric character string with no maximum character count. Reported as type: String Example: LOC1	REQUIRED
Port_ID	This uniquely identifies a charging port. A charging port is the system within a charger that charges one electric vehicle (EV). A charging port may have multiple connectors but it can provide power to only one EV through one connector at a time. In cases where there exist more than one (1) charging port on a charger, each charging port must be uniquely identified by a Charging Port ID. This specified Charging Port ID must be the same value used to identify the charging port in data made available to third-parties in 680.116(c)(8)(ii). The port_id attribute corresponds to evse_uid in OCPI 2.2.1.	Alphanumeric character string with no maximum character count. Reported as type: String Example: 3256 EG98	REQUIRED
Reporting_ Entity	Unique identifier for the Reporting Entity, which shall be constant over time. The Reporting Entity may choose its identifier or request that the Program Manager assign one.	String	REQUIRED
Data_ Source_ID	Unique identifier of the Data Source which is not repeated for any other Data Source in the Network Service Provider's Data Source portfolio, and which is constant over time.	String	REQUIRED
Last_Verified	The most recent time at which the Data Source data was verified and current. Typically, this should correspond to the end of the reporting period.	Date/Time	REQUIRED



Field Name	Data Source Inventory Content Description	Suggested Data Format	Content Required
Model_ Number	The model number of the Data Source equipment, where applicable.	String	REQUIRED
Source_ Type	The type of Data Source supporting the charging transaction.	String: "Chrgr-L2", "Chrgr-DCFC", "Vehicle", or "Telematic".	OPTIONAL
Port_Count	The number of simultaneously operable ports provided by the Data Source, where applicable.	Positive Integer	REQUIRED
Port_Power	The power provided by each port associated with the Data Source, in kW (to at least one decimal place), when all ports are simultaneously in use, where applicable.	Positive Decimal Number	OPTIONAL
Site_Name	A name for the location where charging is taking place, typically the host name for charging locations.	String	REQUIRED
Address	Site street address	String	REQUIRED
City	Site city	String	REQUIRED
State	Site state	String	OPTIONAL
ZIP	Site ZIP code	ZIP Code	REQUIRED
County	Site County	String	OPTIONAL
Owner	The name of the entity that owns the Data Source.	String	OPTIONAL
Service_ Type	Differentiates between charging served by a dedicated utility service and charging that shares a utility service with other loads ("behind-the-meter")	String "DEDICATED" or "BTM"	OPTIONAL
Utility	The electric utility supplying service	String: "PS", "AC", "JC", "OR", and "OT" (for "other")	REQUIRED
Utility _Account	The utility account number for the service providing power to the Data Source, where applicable.	String	OPTIONAL
Site_Type	The setting of the Site (e.g. single family, residential, hotel, public, etc.)	String: "S" = single family residential, "M" = multi- family residential, "W" = workplace, "F" = fleet, "P" = Public, "H" = Hotel, and "O" = Other	OPTIONAL



Field Name	Data Source Inventory Content Description	Suggested Data Format	Content Required
Commission _ Date	The first day after installation in which the Data Source is fully operable and accessible for its intended purpose and is transmitting any data to the Network Service Provider.	Date/Time	REQUIRED
Operating_ Status	The Operating Status of the Data Source at the Last_Verified timestamp.	String: "ACTIVE" or "INACTIVE."	REQUIRED
Uptime_Reporti ng_Start	Timestamp (following RFC 3339 in UTC, as shown in OCPI 2.2.2 DateTime Section 16.2) identifying the start date of the reporting period for port uptime, total outage, and total excluded outage.	Reported as type: DateTime Example: 2023-07- 03T12:51:48Z Unit: UTC	REQUIRED
Uptime_Reporti ng_End	Timestamp (following RFC 3339 in UTC, as shown in OCPI 2.2.2 DateTime Section 16.2) identifying the end date of the reporting period for port uptime, total	YYYY-MM-DD HH:mm:ss in UTC Reported as type: DateTime	REQUIRED
	outage, and total excluded outage.	Example: 2023-07- 03T12:51:48Z	
		Unit: UTC	
Uptime	The uptime of a port (port ID) is the time over the previous 12 months when a charger's hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity in accordance with requirements for	Numeric value equal to or greater than zero and equal to or less than 100 and specified to at least two (2) decimal places	REQUIRED
	23 CFR 680.112 and 23 CFR 680.116(b) requires that port uptime be calculated on a monthly basis for the	Reported as type: Decimal (5, 2)	
	previous twelve months, in accordance with the	Example:	
	equation in 23 CFR 680.116(b)(3) for each month of the reporting period:	98.23	
		0.00	
	μ = ((525,600 – (T_outage – T_excluded)) / 525,600) × 100 Where:	100.00 <b>Unit:</b> Percentage	
	<ul> <li>μ = port uptime percentage for a given port ID</li> <li>T_outage = total minutes of outage for the port ID in</li> <li>previous year</li> <li>T_excluded = total minutes of outage for the port ID</li> <li>in previous year for reasons outside the charging</li> </ul>		
	station operator's control.		
	Reasons for outage outside the charging station operator's control provided that the charging station operator can demonstrate that the charging port would otherwise be operational may include but are not limited to: electric utility service interruptions, failure to charge or meet the EV charging customer's		



Field Name	Data Source Inventory Content Description	Suggested Data Format	Content Required
	expectation for power delivery due to the fault of the vehicle, scheduled maintenance, vandalism, or natural disasters. Also excluded are hours outside of the identified hours of operation of the charging station. Port uptime must be calculated as a rolling, annual percentage according to the above formula that is updated each month.		
Total_power	The total maximum power output rating of the Data Source in kW (to at least one decimal place), when the maximum number of ports are in use, where applicable.	Positive Decimal Number	REQUIRED
Total_Outage	The total time (in minutes) over the previous 12 months during which the charging port (port ID) did not successfully dispense electricity as expected. This corresponds to the T_outage value in port uptime formula in 23 CFR 680.116(b).	Numeric value equal to or greater than zero and specified to at least two (2) decimal places Reported as type: Decimal(6,2) Example: 50.25 0.00 8760.00 Unit: Minutes	REQUIRED
total_outage_ex cl	The total time (in minutes) over the previous 12 months during which the charging port (port ID) did not successfully dispense electricity as expected for reasons outside the charging station operator's control, provided that the charging station operator can demonstrate that the charging port would otherwise be operational: electric utility service interruptions, failure to charge or meet the EV charging customer's expectation for power delivery due to the fault of the vehicle, scheduled maintenance, vandalism, or natural disasters. Also excluded are hours outside of the identified hours of operation of the charging station. This corresponds to the T_excluded value in port uptime formula in 23 CFR 680.116(b). Charging station operators should be able to demonstrate that the charging port would otherwise be operational.	Numeric value equal to or greater than zero and specified to at least two (2) decimal places Reported as type: Decimal(6,2) Example: 50.25 0.00 8760.00 Unit: Minutes	REQUIRED



Field Name	Data Source Inventory Content Description	Suggested Data Format	Content Required
Outage_Id	Timestamp uniquely identifying a single instance of an outage for a given charging port (port ID). An outage is any period of time during which a charging port cannot successfully dispense electricity as expected. Outages must be identified regardless of whether their occurrence is for reasons outside of the control of the charging station operator (see outage and excluded outage data attributes for details). The outage_id should follow RFC 3339 in UTC, as shown in OCPI 2.2.1 DateTime type.	YYYY-MM-DD HH:mm:ss in UTC datetime Reported as type: DateTime Example: 2023-07- 03T12:51:48Z <b>Unit</b> : UTC	REQUIRED
Outage_ Duration	Length of time (in minutes) during which the charging port (port ID) could not successfully dispense electricity as expected. Outage duration must be reported for each outage instance (outage ID) and measure the duration of the entire outage, starting from initial disruption in electricity being dispensed as expected to when charging port is able to dispense electricity again successfully.	Numeric value greater than zero and specified to at least one (1) decimal place Reported as type: Decimal(8,2) Example: 120.55 <b>Unit</b> : Minute	REQUIRED
Outage_ Count	The number of Outages recorded by the Data Source during the reporting period.	Non-Negative Integer or <null> if not known</null>	OPTIONAL
[Additional fields]	Additional fields are welcome and may be provided at the discretion of the Reporting Entity.	Multiple	OPTIONAL



#### TERMS AND CONDITIONS

## NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND NEW JERSEY BOARD OF PUBLIC UTILITIES <u>TERMS AND CONDITIONS GOVERNING</u> ELECTRIC VEHICLE CHARGING NETWORK SERVICE PROVIDERS

- 1. The Company agrees to the Electric Vehicle Charging Network Service Provider Minimum Data Requirements, including the Eligibility, Compliance, and Data Sharing requirements set forth therein.
- 2. The Company agrees to provide data to the Program Manager in the manner stipulated in the Electric Vehicle Charging Network Service Provider Minimum Data Requirements, which data meets the requirements set forth therein.
- 3. The Company agrees to provide interested New Jersey customers with a list of its appropriate products paired with compatible hardware upon request.
- 4. The Company agrees to provide instructions and assistance to its customers wishing to authorize sharing of their EV charging usage data with the Program Manager.
- 5. The Company shall protect, indemnify and hold harmless the State of New Jersey from and against all liabilities, losses, claims, damages, judgments, penalties, causes of action, costs and expenses (including, without limitation, attorneys' fees and expenses) imposed upon or incurred by or asserted against the State of New Jersey resulting from, arising out of or relating to Company's participation in the Program including, without limitation, Company's sale of charging equipment and/or network services in association therewith;
- 6. The undersigned signatory certifies that they have the legal authority to commit the Company to the obligations herein.



SIGNATURE PAGE					
Company Program Contact Information					
For Program-related communications from the Program Manager					
Program Contact Name					
Program Contact Email					
Program Contact Phone					
Company Public Contact Information					
To be published on the New Jersey Department of Environmental Protection's website					
Company Name to Display NJDEP Web:	site				
Company Website U	JRL				
Public Contact Na	me				
Public Contact En	nail				
Public Contact Pho	one				

#### THE COMPANY HEREBY ACKNOWLEDGES AND AGREES TO MEET AND FOLLOW THE REQUIREMENTS AND RESPONSIBILITIES FOR PARTICIPATION IN THE PRE-QUALIFIED NETWORK SERVICE PROVIDER LIST, AS SET FORTH IN THE TERMS AND CONDITIONS AND REQUIREMENTS.

Company Name					
Authorized Company Representative					
Representative Printed Name	Repre	sentative Title			
Representative Signature		Date			

#### EMAIL COMPLETED FORMS TO DRIVEGREEN@DEP.NJ.GOV.

Submit Form