



**Electric Vehicle Direct Current Fast Charging Network Program**  
**Request for Applications to**  
**Select Fast Charging Sites**  
**RFA 21107**

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# Electric Vehicle Direct Current Fast Charging Network Program Request for Applications to Select Fast Charging Sites

## 1. Introduction

The Alaska Energy Authority (AEA) is soliciting a Request for Applications (RFA) 21107 to select electric vehicle (EV) fast charging site(s) as part of AEA's Direct Current Fast Charging Network Program to develop a fast charging corridor from the Kenai Peninsula to Fairbanks.

## 2. Background

Volkswagen (VW) was sued by the Environmental Protection Agency (EPA) for its installation of software in diesel vehicles that masked the actual in-use emissions of nitrogen oxides (NO<sub>x</sub>). The parties reached a settlement which required VW to establish an Environmental Mitigation Trust (Trust) to fund diesel replacement projects to fully mitigate the excess NO<sub>x</sub> emissions that would be produced over the lifetime of the affected vehicles. Under the settlement, the State of Alaska, as a beneficiary, was allocated \$8.125 million of the Trust. AEA has been designated the lead agency to administer the State's allocation. Based on public input, the State has allocated 15 percent of the Trust (\$1.25 million) to electric vehicle (EV) charging infrastructure. Approximately \$1 million is available to fund the development of a direct current fast charging (DCFC) corridor from the Kenai Peninsula to Fairbanks and the remainder will be used to fund community-based Level 2 (L2) chargers through a separate solicitation.

### 2.1 DCFC Network Program Overview

AEA intends to create the core of an EV fast-charging network along the Alaska highway system through public-private partnerships, in phases as funding allows. The overall goal of the first phase of the program is to create an EV fast charging corridor from Homer and Seward north to Fairbanks beginning in 2021 (Figure 1).

To achieve this goal, AEA has released a series of solicitations to qualify electric vehicle supply equipment (EVSE) Suppliers; identify potential Site Hosts; and subsequently, competitively select fast charging site projects. A Request for Qualifications (RFQ) was released February 22, 2021 to develop a list of qualified suppliers of EVSE Packages that meet AEA's requirements for equipment, software and network services to operate and manage the EVSE. The list of qualified EVSE Suppliers was made public March 12, 2021. A Request for Information (RFI) Questionnaire was released February 24, 2021 to identify parties interested in hosting DCFC charging sites. Responses to the RFI were provided to the list of qualified EVSE Suppliers so both parties can work together to determine site feasibility and develop project proposals including ownership model, fee structure, and cost estimates for the installation, equipment and services. These initial solicitations were intended to get the program started. AEA will continue to accept responses to the RFQ and will continually update the list of qualified EVSE Suppliers. Similarly, there is no closing date of the RFI Questionnaire. AEA will continue to provide information regarding interested Site Hosts to the qualified EVSE Suppliers.

This RFA is intended to competitively select fast charging site projects as part of the DCFC Network Program. AEA will accept applications from the Site Host or other entities on behalf of the Site Host, including an EVSE Supplier, utility, site designer, or other designated Project Lead. Interested Site Hosts can contact AEA-approved EVSE Supplier directly to determine the suitability of their site for a fast charging station. Qualified EVSE Suppliers may also approach prospective Site Hosts and utilities to

assess fit with the technology and program. Potential fast charging projects will not be limited to the list of respondents to the RFI Questionnaire.

Applications will be reviewed on a rolling basis until the funds have been committed. The first round of the RFA 21107 will be open from March 16, 2021 through May 5, 2021. Subsequent rounds will be open on a rolling basis for a period of approximately 30 days thereafter. Once a fast charge project site is selected for a specific 50-100 mile highway segment, subsequent applications for that segment may or may not be eligible.

## 2.2 Available Funding

Using VW Trust funds, AEA will disburse approximately \$1 million for the installation, hardware, software, network, and operations and maintenance services at approximately 10-15 sites spaced approximately 50 to 100 miles apart. The equipment is to be operated and maintained for a period of five years. This program will use Trust funds to pay for 80 percent of the project cost, not to exceed \$100,000 of VW Trust funds per site; program participants will be required to fund the remaining 20 percent as well as any costs in excess of the \$100,000 per site limit.

## 2.3 Early Incentive Funds

As an incentive to promote the program, AEA will award up to \$10,000 for each of the first ten sites selected during the first open solicitation period that begin site development prior to June 30, 2021. To receive the incentive funds, a selected fast charge site **must** complete and submit the final site configuration plan, the Host Site Agreement(s), and procure charging infrastructure and invoice AEA no later than June 30, 2021.

## 2.4 Eligible Expenses

This program will fund the cost for the charging equipment and related material; signage; final site design; electrical contractors; installation labor and parts; and network services, customer service, warranties and maintenance of the EVSE infrastructure for a period of five years. This program will not fund the electricity, any costs to purchase or lease real-estate, other capital costs (e.g., construction of buildings, parking facilities, etc.) or general maintenance (i.e., maintenance other than of the chargers themselves) as these are not eligible expenses under the VW settlement agreement.

## 2.5 Phase One Project Area Description

There are approximately 615 highway miles from Homer and Seward to Fairbanks. The goal is to locate one DCFC charging station every 50-100 miles, where communities and electric distribution infrastructure exist, and within five miles of the highway system. Within the Phase 1 project area, there is currently only one fast charger (a 25-kW charger located at the Chevrolet dealership in Wasilla) and there are 16 publically available J1772 L2 stations and seven Tesla L2 stations located from Homer to Cantwell. Five electric utilities serve this area: Homer Electric Association, City of Seward, Chugach Electric Association, Matanuska Electric Association, and Golden Valley Electric Association (Figure 2). Due to the various electricity rate structures and demand fees, AEA has funded the development of an easy-to-use calculator loaded with the rates of each of the electric utilities along the road system for applicants to estimate their electricity costs based upon site and installation specific information. The calculator can be found here

[https://share.streamlit.io/mmwilber/ak\\_ev\\_calculators/main/EV\\_Emissions.py](https://share.streamlit.io/mmwilber/ak_ev_calculators/main/EV_Emissions.py) .

## 2.6 Highway Segments

The goal of the program is to locate one fast charging station approximately every 50 to 100 miles along the highway system from Homer and Seward to Fairbanks, as funding and existing power supply infrastructure allows. While many EVs are capable of driving further on a full charge, the Federal Highway Administration (FHWA) requires designated EV highway corridors to locate fast chargers every 50 miles and within five miles of the highway. Under the FHWA’s requirements, the Department of Transportation and Public Facilities (DOT&PF) has designated the Parks Highway from Anchorage to Fairbanks as EV Corridor-Ready and the Seward, Sterling, Glenn and Richardson highways as EV Corridor-Pending. However, Alaska, with its remoteness and vast geography, lacks adequate power supply infrastructure (i.e., three phase power) in some areas to meet the goal of one fast charging station per 50 miles. In addition, the amount of funding available through this solicitation is insufficient to locate stations every 50 miles between Homer and Seward and Fairbanks.

AEA’s DCFC Network Program will contribute to the DOT&PF’s designations to the extent funding and infrastructure allows. For planning purposes, AEA has divided the highway corridor into the segments noted in Table 1. For the most part, applicants will only be competing with other applicants within the same highway segment or potentially adjacent segments depending on the applications received and meeting the desired goal of creating a contiguous corridor. Through this solicitation, AEA is not committing to selecting one fast charge site for each of the segments described below. In addition, the Anchorage bowl was designated as its own segment as there are multiple objectives for locating fast charging stations in the state’s most populous city. In critical geographic areas where fast charger Site Hosts cannot be found or the power supply infrastructure is not suitable for fast charging, AEA may pursue the installation of Level 2 chargers to ensure a safety net for long range EV drivers.

Table 1. AEA DCFC Corridor Highway Segments from Kenai Peninsula to Fairbanks

<b>Highway 9 (Seward Highway)</b>
From Seward to intersection with Highway 1
<b>Highway 1 (Sterling Highway)</b>
From Homer north to and including Kasilof
North of Kasilof to intersection with Highway 9
<b>Highway 1 (Seward Highway)</b>
From intersection with Highway 9 north to Potter Valley Road intersection
Anchorage from Potter Valley Road intersection to Muldoon Road exit
<b>Highway 1 (Glenn Highway)</b>
East of Muldoon Road exit to Highway 3 intersection at Wasilla
<b>Highway 3 (Parks Highway)</b>
West of Wasilla up to and including Trapper Creek
North of Trapper Creek up to and including Cantwell
North of Cantwell up to and including Healy
North of Healy up to and including Nenana
North of Nenana up to and including Fairbanks

### 3. Scope of Work

Through this solicitation, AEA is seeking applicants to host and develop DC fast charging stations and associated operations, maintenance, and management services for a five-year period. The program participants shall be responsible for providing EV charging hardware, installation services, maintenance, network operations and ongoing provision of EV charging services to consumers at selected Host Sites along the highway corridor defined above. The scope of work includes hardware, software and related equipment and infrastructure to install and operate DC fast charging stations; final site design, engineering, construction and installation of the specified charging stations; network operations; and maintenance and customer support through the period of performance.

#### 3.1 Fast Charge Program Requirements

The following section describes the requirements of the program. Each successful applicant will be awarded a grant to carry out the scope of work and shall be required to meet the conditions described below for the five-year duration of the project. The grant agreement will include a claw back provision if the charging site is not fully functional for the entire five-year project duration.

##### 3.1.1 Host Site Agreements

All relevant parties are expected to enter into a Host Site Agreement that will include, at a minimum: five years of operation and maintenance of the charging station; a disposition plan for the station in the event the agreement is terminated; a provision regarding who has the legal right to access, own, and operate the station; and a provision for nondisclosure of confidential and proprietary information.

##### 3.1.2 Site Accessibility and Availability

All fast charging sites must be located within five miles of the highway segments noted in Table 1 and be publicly accessible 24 hours per day, seven days per week, 365 days per year. Eligible sites must have dusk-to-dawn area lighting. Dedicated EV charging areas must be paved or hardscaped and clearly marked as dedicated spaces for EV charging. All eligible sites must have Wi-Fi or cellular service to allow for charging equipment that is connected to a network. Sites must have signage visible from points of ingress identifying the location as an EV charging site. Eligible sites should have amenities at the site or nearby for EV drivers to use while charging their vehicles.

##### 3.1.3 Site Configuration

Selected sites must have at least two parking spaces dedicated for EV charging associated with one DCFC charger that is accessible from each of the two dedicated parking spaces. The site must also have at least one auxiliary Level 2 charger within reach of either of the two dedicated spaces or alternatively configured to reach an adjacent space where available.

##### 3.1.4 Charging Equipment

The equipment must come from AEA's approved list of EVSE Suppliers. The list can be found at AEA's website: <http://www.akenergyauthority.org/What-We-Do/Energy-Planning-Project-Development/Qualifying-EVSE-Suppliers>. The equipment must be new and unused, and cannot be refurbished or remanufactured. The most current technology available at the time of proposal submittal shall be used.

All charging equipment must connect to a network via Wi-Fi, cellular or other connection. All charging equipment must be networked, capable of collecting and storing the data noted in Attachment B, and capable of remote monitoring, management, and preventative maintenance.

All DC fast chargers must use both CHAdeMo and CCS charging connector standards, with at least one of each connector per site to maximize usefulness to drivers and be capable of charging at power levels of 50 kilowatts (kW) or greater. Each DCFC station will consist of at least one 50kW or greater DCFC and one L2 charger for redundancy and safety with a minimum of two charging spaces dedicated for EV use only.

Consider the average daily temperature during the winter for sites from Trapper Creek north. Charging equipment north of Cantwell must meet the minimum temperature standard of -40 F (-40 C). For sites between Trapper Creek and Cantwell, the equipment must either meet the minimum temperature standard of -40 F (-40 C) or equipment with lower minimum temperature thresholds (e.g., -22 F to -31 F or -30 C to -35 C) may be considered if the applicant provides temperature data representative of the site and proposes a proven method to ensure product functionality at those temperatures.

### 3.1.5 Installation

The Grantee shall be responsible for achieving completed installations at each EV charging site. The Grantee shall obtain all applicable local, state and federal permits required for installation and operation of the EV charging station. The Grantee shall ensure that all installation work as it pertains to site preparation, curbing, striping, signage, charging equipment, billing and networking systems, and electrical interconnections is installed by qualified contractors; consistent with the manufacturers' specifications and the project design submitted in the proposal; and in accordance with all applicable local, state and federal zoning and code requirements. The Grantee shall ensure that all equipment is commissioned and working properly. The Grantee shall coordinate all installation activities with the Site Host, the electric utility, the EVSE Supplier, and any sub-contractors needed to complete the work.

### 3.1.6 Customer Payment Options

Each site shall be capable of supporting multiple point-of-sale methods, such as pay-per-use and subscription methods, including the ability to accept credit or debit cards without incurring excessive fees, inconvenience or delays versus other payment or access control methods; payment via mobile application; RFID; Smart Cards, etc.; and, as applicable, adhere to and demonstrate compliance with all relevant Payment Card Industry Compliance (PCI) standards.

The point-of-sale shall have open standards that allow subscribers of other EV charging system networks to access the EV charging station. The EV chargers' supporting network shall use open communication protocols that allows for communications from the station to the network.

### 3.1.7 Customer Support Services

Customer support shall be provided throughout the five-year duration of operability of this project, at a minimum. Customer service must be available 24 hours a day, seven days per week via a toll-free telephone number posted on or near the charging equipment, and be clearly visible to the customer. Customer issues shall be resolved over the telephone, or service personnel shall be dispatched to the Host Site as needed. The fast charger site must be added to PlugShare.com, at a minimum, so that drivers can be made aware of the charging infrastructure installed at the site and that the station is operational.

### 3.1.8 EVSE Maintenance

The Grantee shall operate and maintain each charging station for at least five (5) years from the date the station becomes fully operational. The EVSE Package shall include a 5-year warranty and service agreement that covers service, parts and labor. The Grantee shall be responsible for ensuring payment of all operating and maintenance costs including, but not limited to, royalties, licenses, fees, taxes, revenue sharing, utilities, and electric power supply for the charging equipment and supporting elements, such as area lighting.



The Grantee shall be responsible for ensuring the maintenance of the chargers including cables, ancillary equipment, and any awnings, canopies, shelters and information display kiosks for signage associated with the charging station. Maintenance includes preventive maintenance requirements to satisfy warranties, regular maintenance needed to ensure optimal performance and minimize downtime, and any needed repairs. The Grantee is responsible to ensure that the equipment is safe, operable, and accessible.

The applicant must propose a plan to ensure that the equipment at each charging station is operational at least 97% of the time based on a week of 24 hours a day and 7 days, with no more than 5 hours cumulative downtime in a 7-day period. The plan shall include the process for dealing with issues leading to extended downtime (such as vandalism).

### 3.1.9 Data Capture

Attachment B includes a list of data parameters to be captured. Technical charging station data and anonymous user data must be accessible to the Site Host or owner of the equipment as well as AEA while guaranteeing customer privacy.

### 3.1.10 Reporting

The Grantee shall provide progress reports with monthly invoices from project inception through procurement, final site design, construction and installation, and the date at which the fast charging site is fully operable. After such time, the Grantee shall provide at least quarterly progress reports. Construction for the DCFC Network Program shall begin in 2021. A commitment to report site, uptime, equipment, and utilization data for 5 years from the time the EV chargers are operational is required of all Grantees.

## 3.2 Awarded Fast Charge Sites

After being selected as a DC fast charging site, the program recipient will be expected to agree to all terms and conditions of the program and provide an executed Host Site Agreement.

## 4. Schedule

The following timetable provides an overview of the first phase of the DCFC Network Program and associated deadlines. Applications will be reviewed on a rolling basis until the funds have been committed. The first round of the RFA will be open from March 15, 2021 through May 5, 2021. Subsequent rounds will be open on a rolling basis for a period of 30 days thereafter. Once a fast charge project site is selected for a specific 50-100 mile highway segment, subsequent applications for that segment may or may not be eligible.

AEA will host an informational webinar on March 30, 2021 at 2 p.m. – 3:30 p.m. Alaska Time to review the process for submitting applications and answer any questions.

<b>Description</b>	<b>Deadline Date</b>
Release of RFA 21107 Round 1 for DCFC Sites	March 16, 2021
<b>Information Webinar</b>	<b>March 30, 2021 2 p.m. – 3:30- p.m. AK Time</b>
<b>RFA Round 1 Submission Deadline</b>	<b>May 5, 2021 2 p.m. Alaska Time</b>
Round 1 DCFC Sites Selected	May 12, 2021
Host Site Agreement Executed	May 15, 2021
<b>Incentive Funds Invoice Submittal Deadline (with backup) for the completion of Final Design and Budget; Executed Host Site Agreement; and Charging Equipment Procurement.</b>	<b>June 30, 2021</b>

Installation	Within 12 months of grant execution; unless approved extension for 18 months from grant execution
Operation, Maintenance and Reporting	Five years from date of station beginning operation (2021-2027)

## 5. Procedures for Responding

An applicant can submit proposals for multiple sites, however, one proposal must be submitted per site.

Consultation with the servicing utility regarding the electric infrastructure at the site, costs and timeframes for any electrical upgrades at the site, and cost-effective location(s) for chargers within a site is required to complete an application. It is highly recommended that applicants consult with the servicing utility as early as possible in this process and do not wait until the end of the solicitation open period.

### 5.1 RFA Electronic Submission

RFA 21107 proposals should be sent electronically to Lois Lemus at [procurement@aidea.org](mailto:procurement@aidea.org). To be considered for the first round, AEA must receive complete proposals no later than 2 pm on May 5, 2021. Proposals received after the deadline may be rejected, or considered in a subsequent round.

### 5.2 Application Review

The Authority will appoint a committee of three - five individuals to review the proposals for completeness and score the proposals based on the criteria outlined in Section 7. Failure to provide a proposal that meets the program goals and requirements outlined in Section 3.1 may result in rejection of the proposal.

### 5.3 Questions regarding the RFA

Any questions regarding this RFA should be emailed to Lois Lemus at [llemus@aidea.org](mailto:llemus@aidea.org). AEA will review and respond within five business days.

## 6. RFA Application Submittal Requirements and Proposal Format

### 6.1 Application and Supporting Documentation

Applicants must complete, sign, and submit the Application Form with the attachments listed below. Be sure to indicate on your application if you are interested in pursuing the installation of a Level 2 charging station if your site is not selected as a DC fast charging site.

- Legal description of site.
- Letter from the servicing utility regarding the capability of the existing electrical infrastructure at the site to meet the anticipated load.
- Proof of access to the proposed Host Site by evidence of property ownership, a lease, or a letter from the property owner indicating permission or commitment to good faith negotiations. Applicants should clearly describe any existing relationships or agreements that will facilitate access to the property.
- Letters of support from the local planning department, other community groups, businesses potentially impacted by the installation, EV owners, etc.

## 6.2 Project Organization, Staffing, and Qualifications (1 page maximum)

### 6.2.1 Organizational chart

Provide an organizational chart of the proposed project team. The chart should identify key team members and affiliation, their project roles, and illustrate relationships between the team members, AEA, the servicing utility, and any other organizations involved in the project. Identify the Project Lead who will be responsible for overall project coordination and management. The Project Lead can be the Site Host, the EVSE Supplier, or another entity working on behalf of the Site Host. Identify the Grantee that will enter into the grant agreement with AEA if the project is selected. Clearly indicate the primary point of contact for AEA for both the Project Lead and the Grantee. In addition to the parties noted above, include the following in the org chart: Site Host Tenant (if applicable), EVSE Supplier, EVSE Management Provider (data, customer service, maintenance), Site Designer, Electrical Contractor, and Installation Contractor. The same entity can assume multiple roles, but the org chart should clearly identify those roles and illustrate relationships among the relevant parties.

### 6.2.2 Individual qualifications

Briefly describe the proposed project team and qualifications for their role related to this project.

For key team members of the EVSE Supplier and Project Lead, clearly describe the individual's role on this project and a summary of his or her relevant skills, qualifications, experience and expertise, including previous similar projects completed. Provide 1-page resumes for each key team member of the EVSE Supplier and Project Lead showing relevant project experience in a separate attachment. Key project team members identified in the proposal must be dedicated to the proposed project as described in the proposal.

### 6.2.3 Corporate qualifications

Describe the qualifications of the EVSE Supplier and Project Lead, including brief descriptions of past experience on contracts of similar scope and size; provide a client name and contract value for each prior project listed and describe how the work is relevant to this project. Prior EV charging station development experience (i.e. number of years, number of stations / sites developed, duties, locations, etc.) should be clearly indicated. Results from past projects should be highlighted, including uptime.

In a separate attachment, provide a list of references for EVSE Supplier and Project Lead included in the proposal. At least three (3) references must be provided for each organization. For each reference, please provide current contact information (name, company, telephone number, and email address) and a brief description of the work conducted for the reference and its relevance to this project.

## 6.3 Financial and Ownership Structure (1 page maximum)

All relevant parties are expected to enter into a Host Site Agreement that will include, at a minimum: five years of operation and maintenance of the charging station; a disposition plan for the station in the event the agreement is terminated; a provision regarding who has the legal right to own and operate the station; and a provision for nondisclosure of confidential and proprietary information.

Identify the parties that would be subject to the Host Site Agreement and describe the process of developing the Host Site Agreement with anticipated time frame.

Describe the ownership and business model for the charging station. Describe who will fund and assume ownership of the charging station. Describe point of sale equipment to be installed at or near the EV charging station. Describe the proposed fee/rate structure and business model of the EV charging station. Explain who will be responsible for and how that entity will ensure payment of all operating and maintenance costs including, but not limited to, royalties, licenses, fees, taxes, revenue sharing, and

electric power supply for the charging equipment and supporting elements, such as area lighting, for a period of five years. Discuss any terms and conditions unique to the site.

Please attach documentation of this agreement or an example agreement to your application that could be executed by May 15, 2021.

#### 6.4 Site Suitability (1 page maximum)

Describe the Host Site. Provide a rationale for selecting the site and demonstrate how it meets the minimum requirements described above in Section 3.1 for site accessibility, availability, and configuration. Describe the Wi-Fi and cellular services at the site and confirm that the site meets the requirements necessary for the selected EVSE Package.

Host Sites must have access to existing, nearby utility power required to meet the minimum station specifications. Describe the engagement that has occurred with the servicing utility to determine if the site has the existing electrical infrastructure capable of meeting the anticipated load. Indicate if the site is currently capable to meet the anticipated load or if the electrical infrastructure needs to be upgraded. If applicable, describe the necessary upgrades, estimated cost of the upgrades and provide a timeline for completion based on consultation with the servicing utility.

Describe nearby amenities (number, type, and hours of operation) and other features available at the site for an EV driver while charging for a period of up to an hour. Indicate if the site has restrooms or overhead shelter.

#### 6.5. Conceptual Site Configuration Plan (1 page maximum plus figure)

Describe the layout of the Host Site and demonstrate that it meets the site configuration requirements described in Section 3.1. Describe the rationale for the location of the chargers and dedicated EV parking spots within the site. What is the estimated distance (feet) from the proposed DCFC installation site and the point of interconnection with the existing electrical services? Is there a more cost-effective location for the chargers within the site? If so, please provide a rationale for the selected charging site and the cost difference.

Describe the location and plan for signage. Indicate if it complies with applicable local, state, and/or federal laws, ordinances, regulations, and standards. Indicate if signs will be visible for drivers approaching from any ingress and if there will be signs identifying that the charging spaces are dedicated for EV use only.

Attach an aerial photo of the proposed site and a labelled conceptual site configuration plan that identifies the following:

- ingress and egress
- buildings or other facilities associated with the site and nearby amenities
- proposed point of interconnection with the existing electrical service
- existing electrical meter or proposed separate meter, if applicable
- existing lighting or proposed lighting, if applicable
- proposed DCFC EV charger
- proposed dedicated parking spaces for EV DCFC charging
- proposed Level 2 charger
- proposed parking for the Level 2 charger (if different than the two dedicated sites)
- area for future expansion

- proposed signage visible from any ingress

## 6.6. Project Implementation Plan (5 pages maximum)

Applicants must submit a Project Implementation Plan that addresses each of the areas below. Where applicable, outline the approach to tasks and specify relevant methods and deliverables. For each task, identify coordination that needs to occur between AEA, the servicing utility, Project Lead, Site Host, EVSE Supplier, and other contractors, subcontractors, and project partners, as applicable. Responses should demonstrate that AEA's minimum requirements in each area are met.

### 6.6.1 EVSE Package

Briefly describe the selected EVSE Package for the site and relevant features.

#### *Charging Equipment*

Charging equipment must be selected from AEA's qualified list of EVSE Packages, which can be found here: <http://www.akenergyauthority.org/What-We-Do/Energy-Planning-Project-Development/Qualifying-EVSE-Suppliers>. Describe the charging equipment proposed to be installed and how it will meet the goals of the program. Consider the average daily temperature during the winter for sites from Trapper Creek north. Charging equipment north of Cantwell must meet the minimum temperature standard of -40 F (-40 C). For sites between Trapper Creek and Cantwell, equipment with lower minimum temperature standards (e.g., -22 F to -31 F or -30 C to -35 C) may be considered if the applicant proposes a proven method to ensure product functionality.

#### *Network Services*

Describe the network services capabilities and proposed settings at this site. Describe how network security concerns will be prevented, addressed and managed.

### 6.6.2 Installation

Describe the installation work necessary at the site and demonstrate how it meets the requirements described in Section 3.1. Describe how these activities will be coordinated with the Site Host, the electric utility, EVSE Supplier and any other contractors needed to complete the work.

#### *Permitting*

Identify local, state, and federal permits required at the site. Explain who will be responsible for permitting and provide the schedule for obtaining permits.

### 6.6.3 Operations and Maintenance

#### *Customer Payment*

Describe the point-of-sale and the supporting network that uses an open protocol to allow subscribers of other EV charging system networks to access the EV Charging Station. Demonstrate how this meets the requirements in Section 3.1.

Describe the fee structure. The servicing utilities and the Regulatory Commission of Alaska (RCA) are currently reviewing rate structures for EV charging. This RCA docket number is R-20-005. You are encouraged to inform yourself about this docket. Current demand fees and rate structures may change over the five-year project duration. If the electricity rate class changes at the site, or if demand charges specifically related to EV charging changes, describe the process for reviewing and changing the fee structure accordingly. AEA disclaims any and all responsibility for informing you of rates and tariff provisions under which you may incur charges to a utility from which you take power.

### *Customer Support Service*

Describe the customer support services that will be provided at the site and for the duration of the five-year program. Include a description of remote diagnostics and remote customer service support. Describe the ability to provide customer support following the five-year period.

### *EVSE Maintenance*

Describe the 5-year warranty and service agreement as it pertains to service, parts and labor. Provide supporting documentation.

Attach a station EVSE management and maintenance plan for ongoing operation and maintenance of the charging site. This plan shall include a description of available technical resources, qualifications of personnel who will assist during maintenance events, expected response times, and any specific, foreseen challenges/barriers to maintenance. The plan shall also provide a summary of planned maintenance activities by frequency of schedule and a communications strategy to keep AEA informed about operations and maintenance activities. Note any special maintenance requirements unique to the site.

Describe how malfunctions and repairs will be addressed to ensure sites are operational at least 97 percent of the time based on 24 hours a day and 7 days a week service, with the exception of service outages for situations beyond the Site Host or EVSE Supplier's control such as power failures behind the meter.

#### 6.6.4 Data Capture

From the Data Requirement list (Attachment B), clearly identify all of the data parameters that will be collected. Describe who will have access to the data and how customer privacy will be guaranteed. Describe how AEA will have access to the technical charging station data, including uptime, and anonymous user data and on what frequency.

#### 6.6.5 Reporting

Describe the typical reports to be generated throughout the duration of the project including, but not limited to: project invoicing, construction and installation, operations and maintenance, customer support service, uptime, and data capture. Include a frequency schedule for each report.

#### 6.6.6 Project Implementation Schedule

Provide a chart, table, or outline detailing the proposed schedule for the project, including proposed timelines for each milestone and associated deliverables or reports for equipment procurement and shipping, permitting, Host Site Agreement, construction and installation, anticipated in-service date for the charging infrastructure, five years of operations and maintenance, and reporting.

Applicants should note issues or conditions that will need to be resolved before the project can begin and highlight barriers that could delay the proposed timeline. All stations are expected to complete installations and be operational within 12 months of grant execution. Proposals with timelines beyond 12 months must provide a rationale for an extended timeline (e.g., necessary upgrades to the electrical infrastructure; availability of resources or infrastructure; equipment requiring a long lead time; COVID-related delays).

### 6.7 Project Budget (1 page maximum plus Budget Form)

Applicants must complete and submit the Budget Form detailing the breakout of costs, including those associated with: project management; equipment and materials; project design and installation; permitting; operations (where applicable); five years of network, warranty and maintenance services; and any other contracted services or direct costs. All related expenses must be included and itemized on this



form; any costs not included on this form may be disallowed for reimbursement. Provide backup documentation or quotes that support the budget.

In addition, provide a detailed explanation of the project budget including a clear description of the following: project management; the quantity and specifications of charging units, associated equipment and shipping; five-year warranties for equipment; utility upgrades (if applicable); hard costs such as concrete and conduit; and final site design, engineering, and permitting.

The narrative should clearly explain the applicant’s cost share funds for the proposed project and where they come from. Applicants should indicate any other funding sources that will be used for this project and describe any plans to attract additional funding, if applicable. List all project-specific grant funds received or committed to date, whether from public or private sources, including all applications for funding pending with other entities.

If the project budget includes AEA’s early incentive funds of \$10,000 per site, be sure to demonstrate how the applicant will meet the requirements of developing, submitting, and invoicing the following no later than June 30, 2021: a final site configuration plan; Host Site Agreement(s); final budget; and procurement of EVSE equipment.

If the Project Lead, EVSE Supplier, or Site Host is submitting applications for multiple sites, indicate if there will be any volume discounts by providing a budget for this site as a stand-alone site as well as if it were one of a multiple-site proposal.

### 6.8 Community Support for the Project

Please demonstrate community support for developing a fast charging station at this location. Describe relevant local or regional initiatives or codes supporting EV adoption in this area. Provide applicable letters of support for locating a fast charging station at this location from entities such as nearby business owners, local jurisdiction, planning departments, EV owners, etc.

## 7. Scoring Criteria

Proposals will be scored based on the areas identified in Table 2 and the criteria described below. Applicants will be competing against other applicants within the same highway segment or adjacent highway segments.

Table 2. Fast Charge Site Selection Proposal Scoring

<b>Category</b>	<b>Maximum Points</b>
Application and Supporting Documentation	5
Project Organization, Staffing, and Qualifications	10
Financial and Ownership Structure	5
Site Suitability	20
Conceptual Site Configuration Plan	10
Project Implementation Plan and Schedule	15
Project Budget	10
Community Support	5
Site Location	20
<b>Total</b>	<b>100</b>

### 7.1 Application and Supporting Documentation (5/100)

- Is the application complete and signed?
- Is there a letter from the servicing utility regarding the capability of the existing electrical infrastructure at the site to meet the anticipated load?
- Is there proof of access to the proposed Host Site by evidence of property ownership, a lease, or a letter from the property owner indicating permission and commitment to good faith negotiations?
- Is a legal description of the property attached?

### 7.2 Project Organization, Staffing, and Qualifications (20/100)

- Is the proposed project organization clearly defined and appropriate for the scope of the project?
- How qualified are the Project Lead and EVSE Supplier personnel in terms of skills, expertise and experience relevant to this project?
- How qualified are the Project Lead and EVSE Supplier in terms of demonstrated successful experience and capacity to execute this type of project? What are the proven uptimes for previous projects?
- Does the remainder of the project team demonstrate relevant experience appropriate for their roles?

### 7.3 Financial and Ownership Structure (5/100)

- Is the financial and ownership structure clearly defined?
- Is there an agreement in place?
- If there is not yet an agreement, has an example agreement been provided that can be executed by May 15, 2021?

### 7.4 Site Suitability (20/100)

- Does the site meet the goals of the first phase of AEA's EV DCFC Network Program?
- Is the site within 5 miles of the highway?
- Is the site accessible year-round, 24 hours per day, 7 days per week?
- Does the site have Wi-Fi and/or cellular service?
- Does the site have two dedicated parking spaces for fast charging EVs?
- Is the electrical infrastructure at the site capable of meeting the anticipated load?
- Can the electrical infrastructure be reasonably upgraded to meet the anticipated load?
- Are there amenities at the site available to EV drivers while charging for up to an hour?

### 7.5 Conceptual Site Configuration Plan (10/100)

- Is there a figure showing the conceptual site configuration plan? Are relevant site features labelled?
- Is there a rationale for the site configuration?

### 7.6 Project Implementation Plan and Schedule (15/100)

- Does the Project Implementation Plan present a comprehensive, sound approach for completing the project?
- Is the Project Implementation Plan thorough, specific and responsive to the requirements and details specified in the RFA?
- Does the proposal demonstrate a clear understanding of the project and AEA's expectations?
- Does the Project Implementation Plan reflect best practices in project management and delivery?
- Does the project include a schedule?
- How soon does the applicant propose to install and make operational the charging station?
- Is the proposed timeline sensible, reasonable and likely to be met?



- Does the timeline meet the requirements to receive AEA’s early incentive funds?

### 7.7 Project Budget (10/100)

- Are appropriate resources being devoted to the individual tasks and sub-tasks?
- How does the total project budget compare to other comparable proposals?
- Is the proposed budget consistent with the proposed Project Implementation Plan?
- Is the Budget Form filled out completely and accurately?
- Is the source, type, and amount of cost share funds appropriate?
- Does the budget include AEA’s early incentive funds?
- Does the proposal include voluntary matching funds?
- Is there adequate supporting data and documentation to validate budget veracity?

### 7.8 Community Support (5/100)

- Are there established goals or initiatives in the area for EV adoption?
- Does the site have support from the community, local planners, potentially impacted business owners, EV owners, etc.?

### 7.9 Site Location (20/100)

For the most part, site locations will be scored and ranked against other proposed sites within a given highway segment as defined in Section 2.6 Table 1. However, AEA reserves the right to consider proposed sites in adjacent highway segments to best fit the overall goal of establishing a continuous corridor from Homer and Kenai to Fairbanks with one fast charging site located every 50-100 miles. The characteristics below will be considered in scoring site location.

- Distance (road miles) from highway within highway segment
- Distance (road miles) from proposed or selected sites in adjacent highway segments
- Number, variety, and availability of amenities
- Availability of restrooms
- Availability of overhead shelter or heated shelter
- Annual Average Daily Traffic  
Annual Average Daily Traffic (AADT) identifies the average volume of traffic for the average one day (24 hour period) during a year at a specific location. It is a calculated value derived from both continuous and short term counts that are factored for seasonality, vehicle type and day of week. The value measures how busy a road is and is a critical input parameter in many transportation planning applications. AADT maps can be found at the DOT&PF website: <https://akdot.maps.arcgis.com/home/webmap/viewer.html?webmap=7c1e1029fdb64d7a86449d55ef05e21c>.
- Air Quality Priority Areas  
The ambient air quality of a proposed site relative to other sites will be considered in site selection. The relative ambient air quality of the site will be scored against other sites within the same 50-100 mile highway segment, or proposed charging sites in adjacent highway segments. Figures A-2 through A-10 of the Beneficiary Mitigation Plan identify relative air quality conditions by census area. Sites located in designated Non-attainment or Maintenance areas per the Clean Air Act, or within areas receiving a disproportionate amount of diesel particulate matter (DPM) emissions will be prioritized.
- Environmental Justice Index  
Areas of disproportionate impacts from diesel particulate matter on at risk populations will be considered in site selection. Each site will be scored against other sites within the same 50-100 mile highway segment, or proposed charging sites in adjacent highway segments, based on the

DPM concentrations and exposure of at-risk populations to DPM at the charging site. Figures B-1 through B-1d of the BMP which were developed using the EPA's Environmental Justice Screening and Mapping Tool (<http://www.epa.gov/ejscreen>) will be used in scoring.

#### 7.10 Overall Quality of Proposal and Response

- What is the overall quality of the proposal submission, including but not limited to: completeness, clarity, attention to detail, adherence to instructions and requirements and lack of errors?
- Does the proposal reflect and respond to the specific attributes of the project and the AEA's requirements for the project?
- Does the proposal include adequate supporting documentation and data to validate the veracity of the project as proposed?

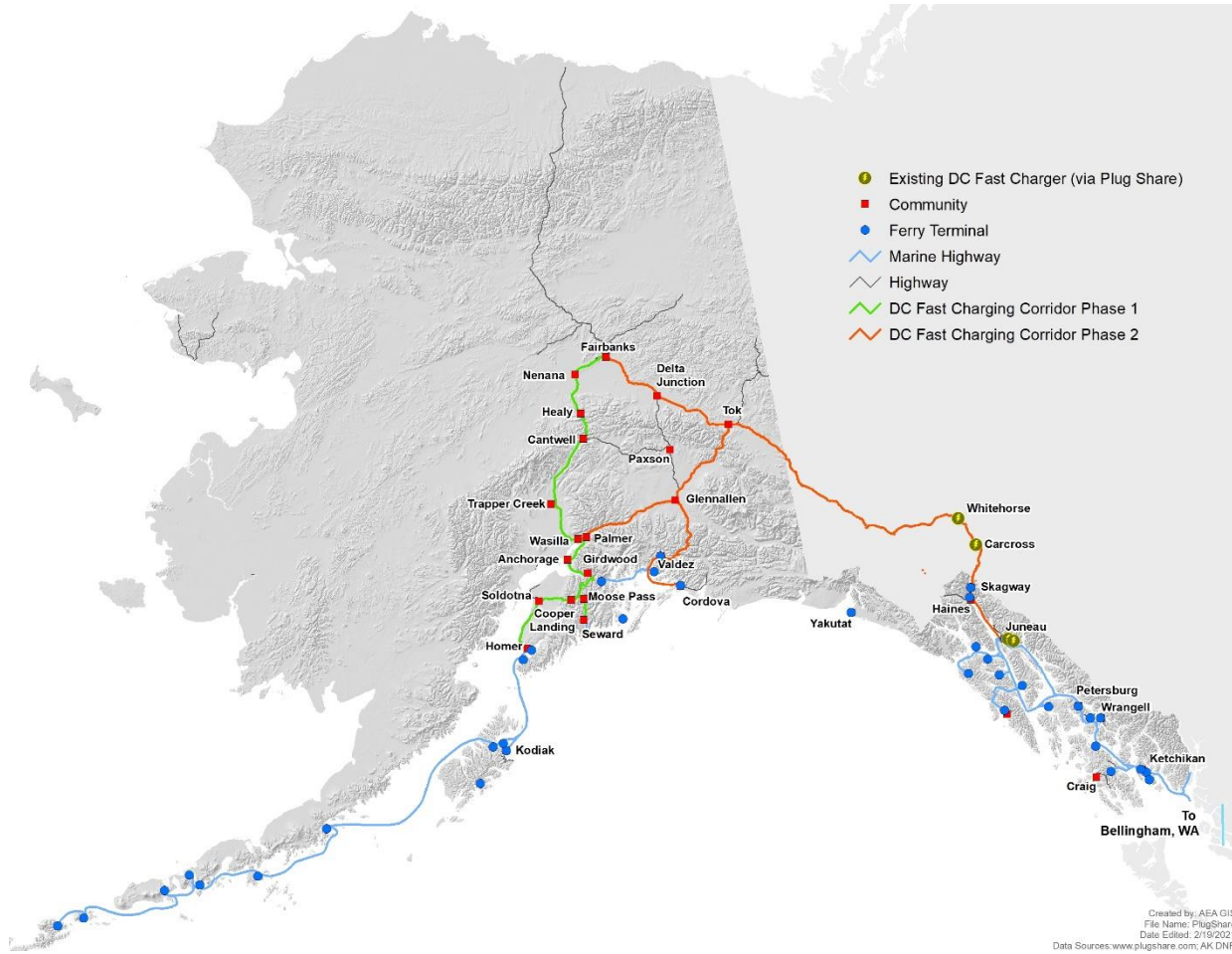


Figure 1. Location of electric vehicle direct current fast charging infrastructure in Alaska. This RFQ is for the Phase 1 highway system between the Kenai Peninsula and Fairbanks shown in green above.

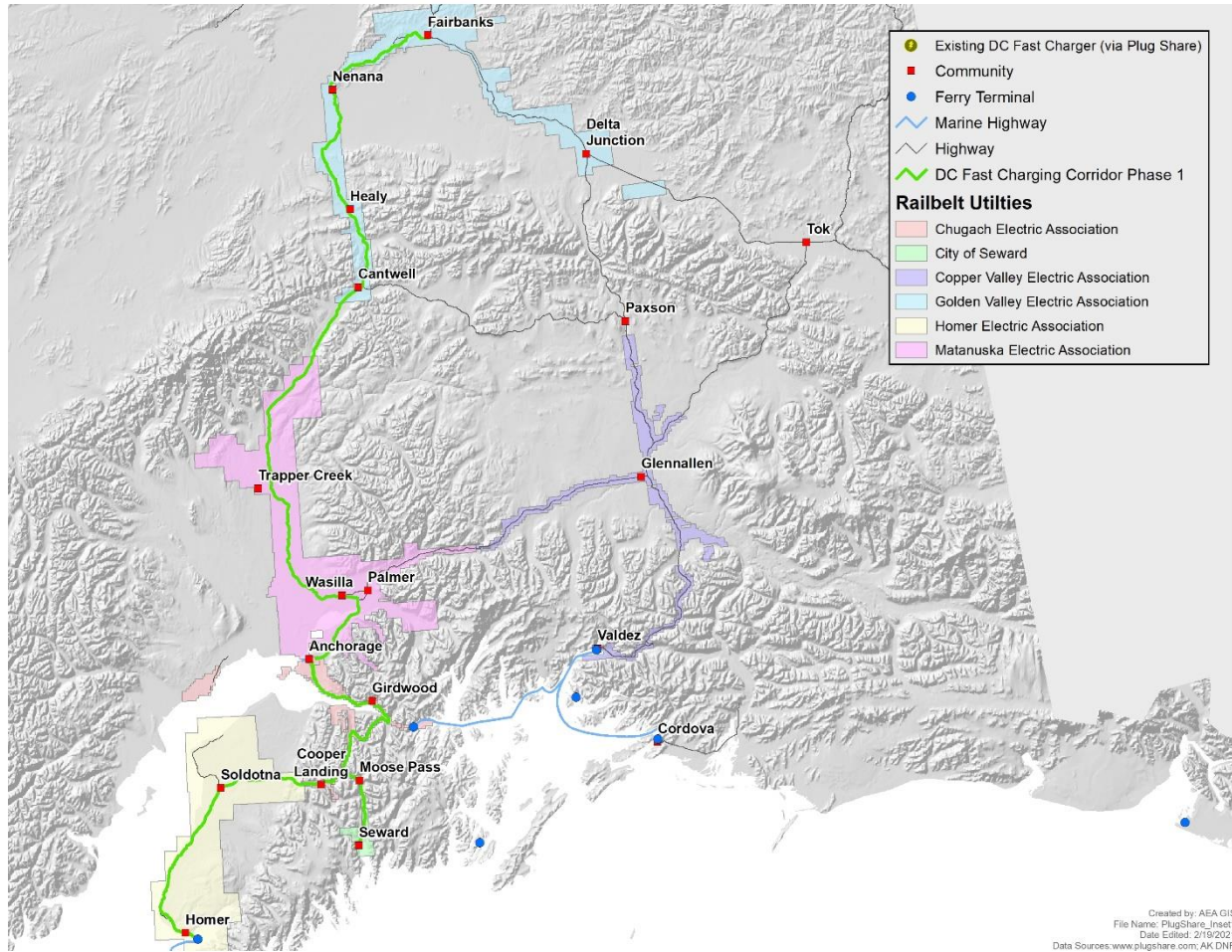


Figure 2. Map of electric utility service areas.

## Attachment A

### Definitions and Abbreviations

AEA – Alaska Energy Authority

CCS – (Combined Charging System) – One of a few types of standard charging connectors for Direct Current Fast Charging.

CHAdEMO – One of a few types of standard charging connectors for Direct Current Fast Charging.

COR – (Customer of Record) – The person, group of persons, firm, corporation, institution, municipality, or other civic body, in whose name service is rendered, as evidenced by the signature on the application, contract, or agreement for that service or, in the absence of a signed instrument, by the receipt and payment of bills regularly issued in that name, regardless of the identity of the actual user of the service.

DCFC – (Direct Current Fast Charging) – Charging via DC electrical connection using off-board AC/DC equipment at a fast rate. For AEA’s DCFC Network Program, eligible DCFC equipment must be 50kW or higher.

DCFC Network Program – AEA’s pilot program to develop a direct current fast charging network along Alaska’s highway system.

EV – Electric Vehicle

EV Driver – Person using EV facilities to charge an EV.

EV Facility – The location where charging stations have been installed (Site).

EV Service Connection – Traditional utility infrastructure from the utility distribution system to the meter, this may include but is not limited to cable, conductors, conduit, transformers and associated substructures from the utility distribution system.

EV Site Host – Owner of the site at which the EVSE will be deployed.

EV Supply Infrastructure – Infrastructure from the meter (“but not including the meter”) to the parking space, this may include panel, cable and conduit necessary to deliver power to the parking space.

EVSE – Electric vehicle supply equipment used for charging EVs. The conductors, including the ungrounded, grounded, and equipment grounding conductors, the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatuses installed specifically for the purpose of delivering energy from the premises wiring to the electric vehicle. Devices include software and communications devices necessary to network enable the EVSE.

EVSE Package – Inclusive of EVSE hardware (physical components), software, and network services. The package will not include installation services. Physical components include internal electronics, controllers, cord, EV-compatible plug and telecommunications devices to share data and enable network connections. Software components include applications to manage the charging, billing, driver access, and administration of the EV DCFC Network Program.

Incentive – AEA will provide up to 10 percent of the project cost for each of the first ten sites selected during the first round of solicitation for fast charge sites, not to exceed \$7,500 per site. Incentive funds must be expended prior to June 30, 2021.

J1772 Standard – An SEA standard for electrical and physical interface to facilitate a safe connections from the EVSE for conductive charging.

Level 2 Charging – Charging via AC electrical connection at 208 volts or 240 volts at up to 80 amps.

Program – AEA’s EV DCFC Network Program.

Session - Charge session is defined by the time connected with power available to the vehicle. If the connected time exceeds the charging period by 15 minutes or more, or the connected time is assessed separately from charging energy or time, connected time will also be reported.

Site Host – AEA-selected site to participate in EV DCFC Network Program. Eligible Site Hosts include government and non-government entities, private businesses, electric cooperatives, and non-profit organizations. In AEA’s Program, approved vendors submit applications on behalf of Site Hosts.

Supplier – Bidder; third party EVSE Package Provider.

Vendor – Bidder; third party EVSE Package Provider.



## Attachment B

### EV DCFC Network Program Data Reporting Requirements

<b>Site Characteristics</b>	
<ul style="list-style-type: none"> <li>• Site Name (AEA format)</li> <li>• EVSP Name (AEA format)</li> <li>• Vendor ID (AEA format)</li> <li>• Site ID (AEA format)</li> </ul>	<ul style="list-style-type: none"> <li>• Street Address</li> <li>• City, Zip Code</li> <li>• Latitude, Longitude</li> <li>• Pricing Structure</li> </ul>
<b>Equipment Details</b>	
<ul style="list-style-type: none"> <li>• EVSE ID (for each unit, AEA format)</li> <li>• EVSE Manufacturer</li> <li>• EVSE Model</li> <li>• EVSE Model number</li> <li>• EVSE Serial Number</li> </ul>	<ul style="list-style-type: none"> <li>• Demand Max (Maximum rated kW for each EVSE)</li> <li>• Number of ports on associated EVSE</li> <li>• Ground mount or wall mount</li> <li>• Gateway or non-gateway</li> </ul>
<b>Port Details</b>	
<ul style="list-style-type: none"> <li>• Port ID</li> </ul>	<ul style="list-style-type: none"> <li>• Max rated kW per port</li> </ul>
<b>Session Data - 15-minute interval data for each charging session that occurs at the site</b>	
<p>(Charge session is defined by the time connected with power available to the vehicle. If the connected time exceeds the charging period by 15 minutes or more, the connected time will be assessed separately from charging energy or time, and will be reported.)</p>	
<ul style="list-style-type: none"> <li>• Session Type (charging, outage)</li> <li>• Maximum rated kW of each port</li> <li>• Start date and time of session</li> <li>• End date and time of session</li> <li>• Start date and time of connection</li> <li>• End date and time of connection</li> <li>• Equipment outages</li> <li>• Reason for outage</li> <li>• Date and time of when outage started</li> <li>• Date and time of when outage ended</li> <li>• kWh consumed during the session</li> <li>• Average demand (kW) per session</li> <li>• Maximum demand (kW) per session</li> </ul>	<ul style="list-style-type: none"> <li>• Anonymous unique driver ID for each driver/user</li> <li>• Vehicle Make</li> <li>• Vehicle Model</li> <li>• Vehicle Year</li> <li>• Vehicle Type</li> <li>• Start date and time of interval</li> <li>• End date and time of interval</li> <li>• Number of kWh consumed during the session interval</li> <li>• Average demand (kW) per session interval</li> <li>• Maximum demand (kW) per session interval</li> </ul>
<b>Port Data - 15-minute interval data for each port each day (96 intervals/port/day)</b>	
<ul style="list-style-type: none"> <li>• Start date and time of interval</li> <li>• End date and time of interval</li> <li>• Number of kWh consumed during the interval</li> </ul>	<ul style="list-style-type: none"> <li>• Average demand (kW) per interval</li> <li>• Maximum demand (kW) per interval</li> </ul>

Attachment C  
AEA EV Direct Current Fast Charger Network Program  
Fast Charging Station Application



