

## ATTACHMENT 1: TECHNICAL SPECIFICATIONS AND REQUIREMENTS FOR OPERATION

Funding for any agreement resulting from this Notice of Funding Opportunity (NOFO) will be paid from Electric Vehicle Charger Reliability and Accessibility Accelerator (EVC-RAA) discretionary grant funds. All applicable requirements of Title 23 United States Code (USC) and 2 Code of Federal Regulations (CFR) Part 200 apply to the administration of these funds, which include, but are not limited to: 23 CFR 680, the Davis-Bacon Act, the Americans with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964, the National Environmental Policy Act of 1969 (NEPA), and the Build America, Buy America (BABA) Act. The Grantee must also comply with all other standards and requirements required by federal, state, and local laws.

Electric Vehicle Supply Equipment (EVSE) funded under any agreement resulting from this NOFO will be covered by the *Build America, Buy America Implementation Plan to Enhance Buy America for Electric Vehicle (EV) Chargers*.

In addition to the above, Grantees must comply with the following technical requirements.

1. PROJECT SITE REQUIREMENTS		
1.1	Distance from AFC	<p>For a Charging Station to be considered “located along” an AFC, it shall be within a maximum driving distance of 1 mile from the Alternative Fuel Corridor (AFC). The measurement of the distance shall be the driving distance from the intersection or interchange to the station location. The 1-mile distance may be measured from the end of the exit ramp or loop—in other words, where the ramp or loop intersects or merges with the adjoining road. Whichever exit or ramp is nearest the station may be used.</p> <p><b>Note:</b> Charging Stations are not required to be located along an AFC for EVC-RAA, but whether or not a site is located along and designed to serve users of an AFC determines eligible project activities.</p>
1.2	Site Accessibility	<p>If located on and designed to serve an Alternative Fuel Corridor, the Charging Station shall be accessible to the public and reachable from a public road 24 hours per day, 7 days per week, throughout the year, without a fee.</p> <p>If not located on and designed to serve an Alternative Fuel Corridor, the Charging Station must be available for use and</p>

1.2	Site Accessibility cont.	<p>accessible to the public at least as frequently as the business operating hours of the site host.</p> <p>Access to the Charging Station must have adequate traffic control measures, such as signage, signals, striping, etc.</p>
1.3	ADA Compliance	<p>Site includes at least one parking space that factors in the U.S. Access Board's <a href="#">Design Recommendations for Accessible Electric Vehicle Charging Stations</a> (Not exclusive ADA use)</p>
1.4	Signage	<p>Include "Designed for Accessibility – Use Last" signage for the parking space factoring the U.S. Access Board's recommendations</p>
1.5	Traffic Control Devices or On- Premises Signs Acquired, Installed, or Operated	<p>The Grantee shall adhere to the requirements of 23 CFR 680.110.</p>
1.6	Safety Lighting	<p>The Project site shall provide lighting to illuminate all EVSE and corresponding parking spaces. Lighting levels and requirements shall be consistent with existing jurisdictional and zoning requirements.</p>
1.7	Cell Phone Service	<p>The Grantee shall make certain that there is adequate cell phone service available at the Project site. This may include an open access Wi-Fi hotspot.</p>
1.8	Physical Security	<p>All EVSE, electrical infrastructure, and other equipment at the Project site shall be protected (e.g., bollards) from being hit by vehicles from inside and outside of the site. They must also be secured physically to prevent unauthorized access.</p>

2. EVSE REQUIREMENTS		
2.1	Range of Operating Temperature	EVSE shall be capable of operating over an ambient temperature range of minus 22 degrees to 122 degrees Fahrenheit.
2.2	DCFC Port Power Level	If installed, DCFC charging ports must support output voltages between 250 volts DC and 920 volts DC. DCFCs located along and designed to serve users of designated AFCs must have a continuous power delivery rating of at least 150 kilowatt (kW) and supply power according to an EV's power delivery request up to 150 kW, simultaneously from each charging port at a charging station. These corridor-serving DCFC charging stations may conduct power sharing so long as each charging port continues to meet an EV's request for power up to 150 kW.
2.3	Level 2 Port Power Level	If installed, each AC Level 2 charging port must have a continuous power delivery rating of at least 6 kW and the charging station must be capable of providing at least 6 kW per port simultaneously across all AC ports. AC Level 2 chargers may conduct power sharing and/or participate in smart charge management programs so long as each charging port continues to meet an EV's demand for power up to 6 kW, unless the EV charging customer consents to accepting a lower power level.
2.4	Minimum Power Supply	The utility feed to the Charging Station shall have a minimum power capacity capable of providing sufficient power such that each charging port may be operated simultaneously at the minimum power delivery rating without interruption.
2.5	Port Power Sharing	The Charging Station shall have a minimum of 4 CFR-680-compliant charging ports. Applicants may have additional ports at the station that do not meet 23 CFR 680 so long as they are not seeking funding for these ports. For DCFC, power sharing between EVC-RAA-funded ports and the non-EVC-RAA-funded ports is allowed as long as the 150 kW continuous and simultaneous power requirements for the EVC-RAA-funded ports are met.
2.6	DCFC Chargers	DCFC chargers must be certified by an Occupational Safety and Health Administration Nationally Recognized Testing Laboratory. DCFC chargers must be certified to the appropriate Underwriters Laboratories (UL) standards for EV charging system equipment.

2.7	CCS Connectors	Each DCFC charging port must contain a charging port capable of charging any CCS-compliant vehicle. Additionally, each DCFC port must contain a CCS Type 1 connector. CCS equipment must be certified by an Occupational Safety and Health Administration Nationally Recognized Testing Laboratory.
2.8	NACS Connectors	If installed, NACS (J3400) connectors must be certified by an Occupational Safety and Health Administration Nationally Recognized Testing Laboratory.
2.9	CHAdemo Connectors	If installed, CHAdemo connectors must be certified by an Occupational Safety and Health Administration Nationally Recognized Testing Laboratory.  <b>Note:</b> CHAdemo connectors are ineligible expenses under EVC-RAA.
2.10	Level 2 Chargers	Level 2 chargers must be ENERGY STAR certified. Level 2 chargers must be certified by an Occupational Safety and Health Administration Nationally Recognized Testing Laboratory. Level 2 chargers must be certified to the appropriate Underwriters Laboratories (UL) standards for EV charging system equipment.
2.11	J1772 connector	If installed, each Level 2 charging port must contain a permanently attached J1772 connector able to charge J1772-compliant vehicles.
2.12	Interoperability of Electric Vehicle Charging Infrastructure	The Grantee shall adhere to the requirements of 23 CFR 680.108.
2.13	Charging Network Connectivity of Electric Vehicle Charging Infrastructure	The Grantee shall adhere to the requirements of 23 CFR 680.114.
2.14	Information on Publicly Available Electric Vehicle Charging Infrastructure Locations, Pricing, Real-Time Availability and Accessibility Through Mapping Applications	The Grantee shall adhere to the requirements of 23 CFR 680.116, including a minimum annual uptime average of greater than 97% for each charging port.
2.15	Battery Energy Storage System	Battery Energy Storage System shall capable and configured to dispense energy until the battery energy is depleted in the case of utility power failure.

3. CYBERSECURITY AND DATA MANAGEMENT REQUIREMENTS		
3.1	Cybersecurity and Data Management Plan	The Grantee shall have a Cybersecurity Plan that protects consumer data and protects against the risk of harm to, or disruption of, charging infrastructure and the grid. The Grantee shall adhere to the requirements of 23 CFR 680.106(h)
3.2	Data Segmentation	Data networks used by the charging network shall be segmented to minimize the risk of unintended damage, unauthorized access, data loss, lack of service, privacy breaches, or other issues resulting from unprotected connections.
3.3	Cybersecurity Operations	Cybersecurity operations shall adhere to and maintain certification for System and Organization Controls (SOC 2).
3.4	Risk Assessment Schedule	The Grantee shall provide a schedule for regular risk assessments and process reviews. Risk assessment read-out reports shall be provided to ODOT upon request. Risk assessments shall include vulnerability scans using the MITRE or Cybersecurity and Infrastructure Security Agency (CISA) Common Vulnerability and Exposures (CVE) database and a report summarizing results and actions for mitigating new or existing vulnerabilities. Qualified personnel shall provide regularly scheduled security patching.
3.5	Cybersecurity Event Notification	The Grantee shall inform ODOT of any cybersecurity event that requires notification to any person under federal or state law, including data breaches or incidents affecting an electric utility, within 24 hours of the Grantee's discovery of the event.
3.6	Data Reporting	The Grantee shall report data required by 23 CFR 680.112 directly to EV- ChART at the time specified in Attachment 2, Scope of Work and Deliverables.

4. OPERATIONS AND MAINTENANCE REQUIREMENTS		
4.1	Customer Service	The Grantee shall provide a customer service phone line. The Grantee shall also provide a website or text message number to report problems or issues with the EVSE or Project site. The customer service phone line, and the website or text message number, shall be available 24 hours a day, 7 days a week, and posted clearly and visible at the charging stations. All contact methods must connect the customer to the Grantee and must provide access for users that have limited English proficiency and for people with disabilities.
4.2	Service Level Agreements and Warranties	If included in the Cost Proposal at the time of application, the Grantee shall provide ODOT with proof of a warranty and parts replacement program, which may include a Service Level Agreement with the manufacturer or a maintenance contract.
4.3	Operations and Maintenance Plan	The Grantee shall submit an Operations and Maintenance Plan to ODOT for review and approval. The Operations and Maintenance Plan shall discuss any warranties and/or service level agreements and/or maintenance contracts.

5. Training Requirements		
5.1	Qualified Workforce Training and Technician Documentation	The Grantee shall verify that the workforce installing, maintaining, and operating chargers has appropriate licenses, certifications, and training to verify that charger installation and maintenance is performed safely by a qualified and increasingly diverse workforce of licensed technicians and other laborers per 23 CFR 680.106. Workforce training is encouraged to target recruiting, training, and hiring individuals from disadvantaged communities.