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Volkswagen Settlement Environmental Mitigation Trust

IMPLEMENTATION GUIDELINES FOR ZERO EMISSION
VEHICLE (ZEV) SUPPLY EQUIPMENT – FUNDING CYCLE 1



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Overview

In 2016, the Environmental Protection Agency (EPA) filed a complaint alleging Volkswagen (VW) violated the federal Clean Air Act with the sale of motor vehicles between 2009 and 2016 equipped with "defeat devices" designed to perform differently during normal vehicle operation than during emissions tests; exceeding the EPA compliant levels of nitrogen oxides (NOx) during normal use. VW agreed to settle some of the allegations with the creation of an Environmental Mitigation Trust (Trust) to fund a specific set of mitigation actions ([Appendix D-2 of the Trust Agreement](#)) that will reduce NOx emissions. Iowa will receive approximately \$21 million in Trust funds for NOx mitigation projects. Iowa DOT has been designated the lead state agency to administer the funds. [Iowa's Beneficiary Mitigation Plan](#) details the state's funding priorities and groups the Trust allowed mitigation actions into the five categories in Table 1.

Table 1: Beneficiary Mitigation Plan – Mitigation Categories and Targeted Funding

| Mitigation Category | Funding Target |
|---|---------------------|
| Category 1 - Class 4-8 School Bus, Shuttle Bus, or Transit Bus | \$9,450,000 |
| Category 2 - Freight Trucks and Port Drayage Trucks | \$3,150,000 |
| Category 3 - Non-Road Transport and Equipment | \$2,100,000 |
| Category 4 – Zero Emission Vehicle (ZEV) Supply Equipment | \$3,150,000 |
| Category 5 – Diesel Emission Reduction Act (DERA) Grant Program | \$3,150,000 |
| TOTAL | \$21,000,000 |

Trust funds allocated to the [DERA program](#) will be administered through that pre-existing grant program now administered by Iowa DOT. The remaining categories will be distributed through competitive application programs and applications will be solicited through at least three funding cycles for each category.

This document provides program and application guidance for the first \$1.1 million ZEV Supply Equipment funding cycle. Table 2 lists the available funding amounts for two types of projects: Direct Current (DC) Fast Charger Corridor sites and Level 2 Community Charging sites. For more information on this funding cycle as well as the other Iowa VW Trust funding programs, visit <https://www.iowadot.gov/vwsettlement> and sign up to receive updates.

Table 2: Zero Emission Vehicle (ZEV) Supply Equipment Project Types

| Project Type | Funding Target |
|--|--------------------|
| Type 1 – Direct Current (DC) Fast Charger Corridor sites | \$900,000 |
| Type 2 – Level 2 Community Charging sites | \$200,000 |
| TOTAL | \$1,100,000 |

Eligibility

Eligible Applicants

Eligible applicants for this program include, but are not limited to:

- For-profit businesses
- Incorporated non-profit organizations
- Federal, state, local, or tribal government agencies
- Metropolitan or regional transportation planning organizations.

Ineligible Applicants

Entities or individuals that are currently suspended or debarred by the state of Iowa or the federal government are not eligible applicants for this program.

Application Limitations and Requirements

Only one charging site may be included in a single application. Applicants may submit more than one application. If submitting more than one application, the applicant must prioritize the applications at the time of submission. Applications for DC fast charge projects may also include one Level 2 charger, if desired. Awards will be made on a cost reimbursement basis. This means applicants must incur the cost of the project prior to being repaid. Costs must be incurred only after a project is selected for award and a project funding agreement has been executed with the Iowa DOT.

Eligible Zero Emission Vehicle (ZEV) Supply Equipment Project Types

This first round of ZEV supply equipment funding will support publicly accessible sites demonstrating a high potential for use, enabling longer-distance travel for a wide variety of electric vehicles, and which strategically build out the charging equipment infrastructure network in the state.

Two ZEV supply equipment project types are eligible for funding during this first funding cycle: Direct Current (DC) Fast Charger Corridor sites and Level 2 Community Charging sites. These two project types are intended to serve different aspects of the overall charging equipment infrastructure network and lay the groundwork for a sustainable market of EV station providers in the state.

All projects shall meet the requirements listed in Appendix C Type 1 and Type 2 Project Requirements included in this guidance, as applicable.

Projects selected for funding will be reimbursed up to the maximum dollar amount per application or percentage of total eligible project costs per application, whichever is less, shown in Table 3. Total reimbursements will not exceed the total amount awarded to the project.

Table 3: Funding Limits Per Application (one charging site per application)

| Project Type | Any Government Agency | All Other Eligible Applicants |
|---|-----------------------|-------------------------------|
| Type 1 – Direct Current (DC) Fast Charger Corridor ¹ | \$180,000 | \$160,000 |
| | 90% | 80% |
| Type 2 – Level 2 Community Charging | \$15,000 | \$14,000 |
| | 90% | 80% |

¹ Reimbursement for utility upgrades such as transformers and extensions, is limited to \$15,000.

Type 1 - Direct Current (DC) Fast Charger Corridor Sites

At the request of Iowa DOT and the Iowa Economic Development Authority, the Federal Highway Administration has designated I-80 and I-35 as alternative fuel corridors. This designation is a result of demonstrated local interest, demand for charging stations along these corridors, and regional electric vehicle (EV) travel and traffic counts. For these corridors to be considered ready for long distance EV travel, EV charging sites must be located at intervals of 50 miles or less along the corridor.

To support the readiness of these corridors for long distance EV travel, this round of funding is limited to locating additional DC fast charging sites for light-duty EVs along I-35 and I-80 and no more than one road mile off these corridors to help fill in gaps in the developing charging equipment infrastructure network. For the purposes of addressing widespread public use, DC fast charging locations along these corridors with a proprietary plug for Tesla vehicles are not considered a part of the publicly available fast charging equipment infrastructure network.

All projects shall meet the requirements listed in Appendix C Type 1 and Type 2 Project Requirements included in this guidance, as applicable. Existing and planned DC fast charging sites along I-35 and I-80 can be seen in Appendix B of this guidance. A comprehensive database of existing DC fast charging and Level 2 charging locations can be found at the [Alternative Fueling Station Locator](#) maintained by the Alternative Fuels Data Center of the U.S. Department of Energy.

Type 2 – Level 2 Community Charging Sites

The predominant EV charging infrastructure currently in the state are Level 2 charging stations that can be implemented at a much lower cost than fast charging stations. Investing in Level 2 stations can quickly increase the number of sites EV drivers can charge although these sites charge at a slower rate than fast charging stations.

Project Type 2 applications for Level 2 Community Charging will provide conveniently located and publicly accessible Level 2 charging sites that can demonstrate a high potential for use. These sites are not restricted to any particular corridor and may be geographically located anywhere across the state.

All projects shall meet the requirements listed in Appendix C Type 1 and Type 2 Project Requirements included in this guidance, as applicable.

Ineligible Projects

Projects not eligible for award in this funding cycle include, but may not be limited to:

- Installation of Level 1 charging equipment
- Workplace charging locations that are not publicly accessible
- Charging locations in exclusively multi-family residential developments
- Location of hydrogen fueling stations
- DC fast charging stations to be located more than one road mile off the I-80 or I-35 corridors
- Projects not meeting the requirements listed in Appendix C

Costs Eligible for Reimbursement

Costs directly incurred by the applicant through the purchase and/or installation of eligible equipment after the execution of a project funding agreement are eligible for reimbursement subject to the limitations in Table 3. These costs may include the procurement of goods and services from vendors and contractors, labor costs incurred by the applicant's employees for installation, and other costs necessary to successfully complete the project. All costs must be supported by appropriate documentation. The Iowa DOT retains the sole authority to determine eligible project costs.

Eligible project costs include, but are not limited to:

- DC fast charging station, power conversion, hardware, and associated equipment (with required warranties)
- Level 2 charging station, hardware and associated equipment (with required warranties)
- Supporting costs such as final design, engineering and permitting
- Utility upgrades such as transformers and extensions
- Initial networking/subscription activation fees for a charging network
- Payment module, as required by this program
- Cord or cable management strategy including retractable cords
- Battery storage
- Construction and/or installation costs directly related to the charging station such as dedicated parking spaces, electrical service and connection, on-site sign installation, installation of lighting, shelter/awning construction etc.

Costs Ineligible for Reimbursement

Funds awarded by this program cannot be used for administrative costs, lobbying, or for the intervention in federal regulatory or adjudicatory proceedings. Costs incurred prior to the execution of the project funding agreement are also ineligible project costs and will not be reimbursed.

Ineligible costs include, but are not limited to:

- Research projects and studies
- Feasibility studies such as surveys to determine interest in the installation of EV charging stations in particular locations
- Proposals for any type of vehicle demonstration or demonstrations of existing technologies for public outreach or education
- Land or parking space purchase/lease
- Level 1 infrastructure
- Internet and/or cellular connection (wireless or otherwise)
- Ongoing or annual networking/subscription fees for a charging network
- Electricity consumption and demand charges
- General maintenance or repair of equipment or facilities
- Administrative costs
- Signs and installation of signs located off-site or along adjacent highway corridors directing drivers to the charger locations
- Other capital costs, such as construction of buildings, parking facilities, etc. or general maintenance other than the supply equipment.
- Construction or installation of site amenities not directly related to the charging station such as restrooms

Funding and Cost-Share Requirements

Applicants will receive reimbursement for eligible costs incurred up to the maximum dollar amount or percentage of total costs listed in the project funding agreement. No costs to be reimbursed may be incurred prior to the execution of the project funding agreement. A cost is considered incurred if it has been ordered, contracted, purchased, or installed. Requests for reimbursement shall be in a manner as required by the Iowa DOT and must include documentation to show that the equipment has been received, installed, and accepted by the project sponsor; the equipment is operational; all requirements of the project funding agreement have been met; and that the costs have been incurred and paid by the project sponsor.

Cost-Share Requirements

Mandatory cost-shares are required for all projects. Reimbursement of eligible costs will only be provided up to the maximum dollar amount or percentage of total costs included in the project funding agreement in accord with the applicable sections of this guidance. The remaining project costs are the responsibility of the applicant and serve as the applicant's cost share. In-kind donations are not eligible project costs and may not be credited as part of an applicant's cost share.

Disqualification from Funding

The applicant shall not receive reimbursement if complete and truthful information has not been submitted to the Iowa DOT. The applicant will be disqualified and shall not receive reimbursement if the applicant has:

- Not submitted a claim for reimbursement and all required documentation by the deadline included in the project funding agreement, or
- Incurred costs prior to the execution of the agreement.

Evaluation of Applications

Eligible projects will be evaluated on a competitive basis according to the scoring criteria listed in Table 4. While the scoring criteria provided in this section are the primary means of determining a selected project, Iowa DOT may also consider other factors not included in these scoring criteria in making the final selection of projects.

Table 4: Evaluation Criteria and Points Available

| Scoring Criteria | Maximum Points |
|---|----------------|
| NOx Emission Reduction: Projects will be evaluated on whether they can achieve significant, quantifiable reductions in NOx emissions. To calculate estimated emissions reductions, the Iowa DOT will assess each site's expected utilization. Factors will include the applicant's demonstration of driver demand at that location and plans to market the site to drivers including plans for signage identifying the site. | 15 |
| Cost Effectiveness: The cost effectiveness of an application will be assessed considering the expected NOx emissions reductions and funding requested. The objective of this criterion is to have a low program dollars per ton of NOx emissions reduced. | 5 |
| Disproportionate Share of Air Pollution: To ensure health and environmental benefits for areas that bear a disproportionate share of air pollution and people most adversely affected by Volkswagen's actions, the Iowa DOT will | 5 |

| | |
|---|-----------|
| <p>rank projects based on their geographic location. The following will factor into an application’s score for this criterion:</p> <ul style="list-style-type: none"> • Higher share of county mobile NOx measurements • Higher share of registered non-compliant Volkswagen subject vehicles • Areas of concern for vulnerable populations based on environmental justice screening tools • Higher rates of asthma and heart disease hospitalizations • Higher share of point source NOx measurements | |
| <p>Demonstration of Previous Successes: Projects will be evaluated on how they build on the successes of previous emission reduction projects completed by the applicant and whether evidence is provided of a proven track record of success with emission reduction projects (transportation related or otherwise).</p> | 5 |
| <p>Complements Other Programs: Projects will be evaluated on whether they complement other public and/or private programs, initiatives, or partnerships to reduce emissions.</p> | 5 |
| <p>Verified Additional Funding Sources: Funding sources and project budgets will be reviewed to determine if the project will expand the impact of mitigation funding by leveraging other verified additional funding sources and result in a larger applicant cost share than required.</p> | 10 |
| <p>Long-term Sustainability: Projects will be reviewed to gauge the applicant’s ability to continue efforts or expand the project after the mitigation project funding is utilized and whether the project is a continuation of a previous effort. In addition to maintenance plans for the site, incorporating technological readiness (future proofing) and innovation into the project will be key to a site’s long-term success. Examples include battery ready stations or battery storage; advanced data collection or energy management components; expansion plans for more stations beyond the initial funded project; and enabling future higher power station upgrades.</p> | 20 |
| <p>Project Readiness: Projects will be reviewed on how well the application demonstrates a project’s readiness to be implemented quickly upon award. Keeping in mind procurement may NOT proceed at this time, examples of demonstrating readiness include a specific site being identified in the application, an ability to implement a project without regard to any other work or projects not included in the application, studies of a site’s utility availability already having been completed and needs identified, and the expected timeline for project completion.</p> | 10 |

| | |
|---|------------|
| <p>Quality of the Site: The chosen site will be the largest factor contributing to whether or not a site will see high utilization and ultimately be successful. Projects will be reviewed to gauge a site’s likelihood for use due to general location or distance from other sites, concentrations of traffic or driver stops, and amenities on or nearby the chosen site. Amenities in addition to those required in Appendix C may include: free wireless internet, food, retail, walkability to other nearby attractions, parks, etc.</p> | 20 |
| <p>Alignment with the Iowa Energy Plan: The Iowa Energy Plan (http://iowaenergyplan.org) encourages the growth of alternative fuel and electric vehicles and the expansion of electric vehicle charging stations. Projects will be evaluated on their contribution toward furthering these objectives.</p> | 5 |
| Total Points | 100 |

Award Timeline and Requirements

All applicants will be notified regarding their award status at the conclusion of the funding cycle. Applicants selected to receive funding will be required to execute a project funding agreement with the Iowa DOT. Although not required at the time of application, a simple site plan showing the charging station location, planned site improvements to be reimbursed, and other pertinent details of the project parcel will be required prior to a draft agreement being provided by Iowa DOT to the recipient. Execution of the agreement is expected to be completed by approximately July 2020, with an estimated project start date for the applicant of no earlier than July 1, 2020. If the apparent successful applicant fails to deliver an executed agreement within 45 days of receipt, the Iowa DOT, at its sole discretion, may cancel the award and award the funds to another applicant.

Upon execution of the agreement by the Iowa DOT, a copy of the fully executed agreement will be returned to the applicant, at which time the funding will be considered awarded. The project, including the purchase of equipment, may not occur prior to the execution of the agreement.

Agreement Terms

Applicants interested in applying for funding should consider the following items that will be part of the requirements addressed in the agreement:

- All projects selected for funding shall be completed within two years from the date the agreement is executed. If an application indicates a project cannot be completed within two years, it will not be considered for funding.

- Charging locations funded by this program must be in operation for a period of not less than five years. Sites may be upgraded by the applicant over this period, but the number of charging ports and minimum charging capability shall not be reduced.
- Applicants will be required to submit biannual and final reports to the Iowa DOT.
- The claim for reimbursement of costs and all required documentation is due to the Iowa DOT within one month after the completion of the project. The Iowa DOT will not reimburse the applicant until all requirements are met. No reimbursement will be made for any costs incurred in development of a project that is not successfully completed and placed in service. Failure to maintain the project and comply with all terms of the agreement will result in repayment of funds reimbursed. Under no circumstances will reimbursement be made for costs incurred prior to the execution of the agreement. Applicants should expect to allow a minimum of 90 days for reimbursement processing.
- Applicants will procure all goods and services in accordance with state law and must make a good faith effort to encourage competition. All documents relating to procurement will be made available to Iowa DOT upon request. State agencies and political subdivisions of the state may use an existing state contract in accordance with Iowa Code Chapter 8A. The state has recently posted contracts for this type of equipment and for this purpose on the [Iowa Department of Administrative Services website](#). These contracts include purchase as well as installation and mounting of the equipment by the vendor but do not include any site design or site preparation including any necessary electrical work, concrete paving, etc. Those additional cost items would still be required to be procured competitively if intended to be reimbursed by this program.
- All information submitted to Iowa DOT over the course of the project, including all records supporting all expenditures of funds, is subject to inspection by interested parties and disclosure to the public, subject to any applicable confidentiality exceptions provided in Iowa Code Chapter 22 or other applicable state or federal laws.

Project Reporting and Monitoring Requirements

Applicants will be required to submit biannual reports to the Iowa DOT from the contract start date until the project is completed as well as a final report. Additionally, all applicants will submit annual station utilization data to Iowa DOT for 3 years after project completion. At a minimum, the following information will be submitted for each charging station installed:

- Number of charging events
- Connect and disconnect times
- Start and end charge times
- Number of unique vehicles connected
- Total kWh dispensed per charging event

- Average kWh per charging event
- Peak power (kW) per event
- Peak power (kW) by time and date
- Peak power demand (kW) by month
- Average duration of charging events
- Percentage of station downtime

How to Apply

Applicants may submit more than one application; however, each application must request funds from either Type 1 or Type 2; not both. To apply, please submit the following application materials, which can be found at <https://www.iowadot.gov/vwsettlement>. Application components shall be submitted in the same file format as the forms provided on the website for applicants' use and may not be converted to a different file format than indicated below:

- Application Form (Word format)
- Signed Certification (PDF format)
- Project Costs Form (Excel format)
- Minority Impact Statement (PDF format)

Complete applications are due by email before 5:00 pm CST on February 17, 2020.

Applications received after the deadline will be deemed ineligible and will not be reviewed. Incomplete applications may be disqualified from consideration. The Iowa DOT is not responsible for any errors or delays caused by technical difficulties resulting from the emailing of applications.

Submit the signed, completed application packet (application form, signed certification, project costs form, and minority impact statement) as four separate attachments and in the file format noted above to vwsettlement@iowadot.us.

Application Questions

Questions or requests for clarification about this program may be submitted in writing via email to vwsettlement@iowadot.us. Verbal questions will not be addressed. If the question or request for clarification pertains to a specific section of this guidance document, please reference the section and page number. A list of written questions and answers will be available for review at <https://www.iowadot.gov/vwsettlement>.

The Iowa DOT reserves the right to amend this guidance at any time by addendum. If the addendum is issued after the closing date for receipt of applications, the Iowa DOT may, in its

sole discretion, allow applicants to amend their project applications in response to the addendum, if necessary.

Amendment or Withdrawal of an Application

Applicants may withdraw or amend and resubmit project applications at any time before the deadline. The amended proposal or application withdrawal must be in writing, signed by the applicant, and received **before 5:00 pm CST on February 17, 2020**.

Iowa DOT Discretion

The Iowa DOT may select part of an application for funding and/or may offer to fund less than the dollar amount requested in an application. The Iowa DOT reserves the right to reject any or all applications, in whole or in part, any time prior to the execution of a project funding agreement.

The Iowa DOT is not obligated to fund an application from an applicant that has demonstrated marginal or unsatisfactory performance on previous grants or contracts with the Iowa DOT or other state agencies.

The Iowa DOT reserves the right to verify information contained in the application. This may include utilizing publicly available information and other outside sources to evaluate the applicant's performance under other contracts.

Disqualification of Applications

The Iowa DOT may reject outright and may not evaluate applications for any one of the following reasons:

- The applicant fails to deliver the application by the due date and time.
- The applicant acknowledges that a requirement of the application cannot be met.
- The applicant's proposal materially changes a requirement of this guidance or the proposal is not compliant with the requirements of this guidance.
- The applicant's proposal limits the rights of the Iowa DOT.
- The applicant fails to timely respond to the Iowa DOT's request for information, documents, or references.
- The applicant fails to include an original signature.
- The applicant presents the information requested by this guidance in a format inconsistent with the instructions of the guidance or otherwise fails to comply with the requirements of the guidance.
- The applicant provides misleading or inaccurate responses.
- There is insufficient evidence (including evidence submitted by the applicant and evidence obtained by the Iowa DOT from other sources) to satisfy the Iowa DOT that the applicant is properly qualified to satisfy the requirements of the guidance or application.

- The proposed project(s) are not in compliance with applicable state and federal statutes and rules.

Process for Clarification of Application Information

The Iowa DOT reserves the right to contact an applicant after the submission of an application for the purpose of clarifying the application to ensure mutual understanding. The Iowa DOT will not consider information received if the information materially alters the content of the application or alters the type of project the applicant is proposing. Failure to comply with requests for additional information may result in rejection of the application as non-compliant.

Disposition of Applications and Copyrights

All applications become the property of the Iowa DOT and will not be returned to the applicant at the conclusion of the selection process. Contents of all applications will be in the public domain and open for inspection by interested parties, subject to exceptions provided in Iowa Code Chapter 22 or other applicable laws.

The applicant agrees that the Iowa DOT may copy the application for purposes of facilitating the evaluation of the application or to respond to requests for public records. By submitting an application, the applicant consents to such copying and warrants that such copying will not violate the rights of any third party.

Appendix A: Definitions

“Alternative fuel corridor” shall mean a highway segment designated by the Federal Highway Administration (FHWA) as part of an interstate network of stations that will fuel vehicles powered by clean and domestically produced alternative fuels.

“Combined charging system (CCS) Type 1” shall mean a type of special electrical connector used in DC fast charging to charge certain battery electric vehicles and using the Type 1 connector adopted for use in North American charging systems.

“CHAdeMO” shall mean a type of special electrical connector and standard used in DC charging certain battery electric vehicles. CHAdeMO is a portmanteau meaning “charge de move.”

“Charging network” shall mean a data management system utilized by electric vehicle supply equipment and connected via cellular, wi-fi, or other form of connection. The charging network enables remote management and diagnostics of the electric vehicle supply equipment, as well as interaction by customers to identify station locations and assess charger status/availability. The charging network also enables collection and download of detailed charger and vehicle utilization data.

“Charging site” shall mean a single geographic location, property, or parcel of land offering publicly accessible electric vehicle charging equipment for use by drivers of electric vehicles.

“Direct current (DC) fast charger (DCFC)” shall mean a high power (50KW - 350KW), fast charging method used to resupply an EV battery using direct current electricity, typically 208/480V 3 phase.

“Electric vehicle or equipment” shall mean a vehicle or engine that uses electric motors and motor controllers for propulsion or operation of mechanical equipment in place of more common power sources such as the internal combustion engine (ICE).

“Future proofing” shall mean building in a conduit and an electrical service box of adequate size and disconnect capacity that will allow additional electrical cable to be run to the site for future installation of additional 50 kW chargers or a higher power charger up to 350 kW.

“Infrastructure” shall mean the equipment used to enable the use of electric powered vehicles (e.g., EV charging station charger).

“Level 1” shall mean infrastructure associated with 110V charging, typically available through conventional electrical outlets and providing slow/ overnight charging.

“Level 2” shall mean EV supply equipment that provides alternating current (AC) at 208/240V up to 19.2 kW for charging an EV battery.

“Light-duty vehicles” shall mean class 1 and 2 vehicles that have a Gross Vehicle Weight Rating of less than 10,000 lbs.

“Open Charge Point Protocol (OCPP)” shall mean an application protocol for communication between Electric vehicle (EV) charging stations and a central management system, also known as a charging station network, similar to cell phones and cell phone networks.

“Open standards” shall mean a collection of rules and guidelines for data communication between and among the charging station, charging station operator, charge point management system, energy management system, operators, service providers, etc. that promotes interoperability among all aspects of the electric charging infrastructure stream

“Procurement” shall mean the acquisition of goods and services through lease, lease/purchase, acceptance of, contracting for, obtaining title to, use of, or any other manner or method for acquiring an interest in a good or service.

“Publicly accessible” shall mean station that is available for public use, without restrictions, 24 hours per day, 7 days per week.

“SAE J1772” shall mean a type of special electrical connector and North American standard for alternating current (AC) Level 2 charging of an electric vehicle.

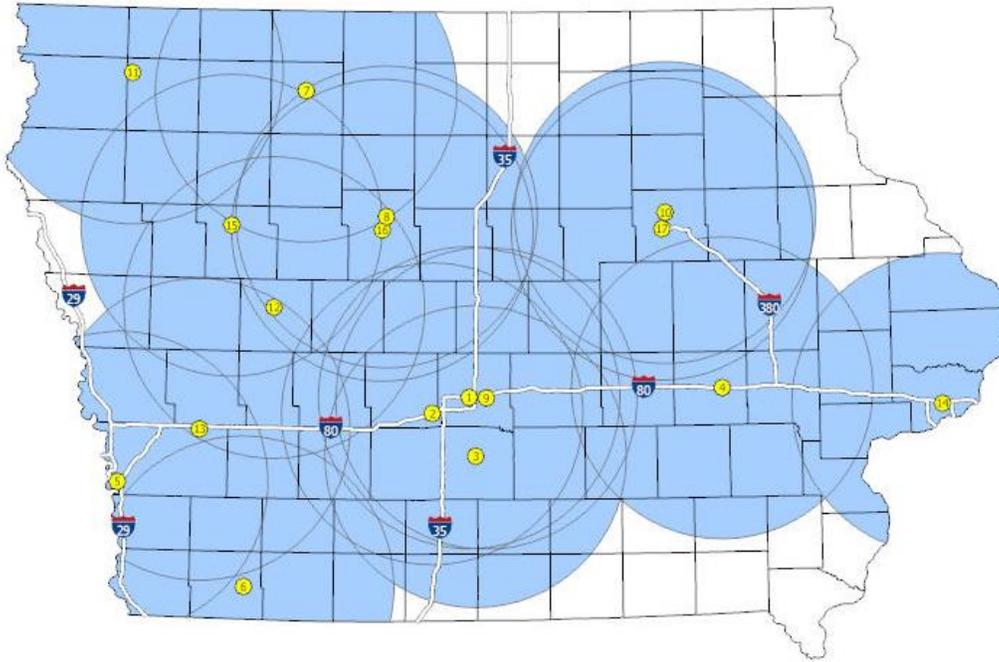
“Station locator” shall mean the database of alternative fuel stations available to the public and administered by the Alternative Fuels Data Center (AFDC) that would allow drivers to identify charging locations.

“State Agency” includes a state department, board, commission, or other unit of state government regardless of whether moneys are appropriated to the agency.

“Universal payment method” shall mean allowing drivers to transmit payment for charging that is not proprietary to the charging network or limited to one method of payment.

“Zero emission vehicle supply equipment” shall mean equipment permanently installed at a site for recharging or refueling an electric vehicle.

Appendix B: Existing and Planned DC Fast Charging Stations (50-mile radius shown)



| | Existing Stations | Address | Outlets | Connectors | | Network |
|---|---------------------------|--|---------|------------|---------|-------------------|
| | | | | SAE CCS | CHAdeMO | |
| 1 | Big Barn Harley-Davidson | 81 NW 49th Pl., Des Moines | 1 | X | | Chargepoint |
| 2 | Kum & Go #0540 | 3105 Grand Prairie Pkwy., Waukee | 4 | X | X | Electrify America |
| 3 | Route 65 Harley-Davidson | 1300 S. Jefferson Way, Indianola | 1 | X | | Chargepoint |
| 4 | Casey's Williamsburg #2 | 130 W. Evans St., Williamsburg | 4 | X | X | Electrify America |
| 5 | Walmart Supercenter #1965 | 3201 Manawa Centre Dr., Council Bluffs | 4 | X | X | Electrify America |

| | Planned Stations (Developed by Mid American Energy) | Address |
|----|--|---|
| 6 | Clarinda | Casey's General Store, 1107 S. 16th St. |
| 7 | Emmetsburg | Casey's General Store, 2406 Main St. |
| 8 | Fort Dodge | Hy-Vee, 115 S. 29th St. |
| 9 | Altoona | Hy-Vee Fast and Fresh, 3590 Prairie Fire Drive NW |
| 10 | Waterloo | Waterloo Center for the Arts, 225 Commercial St. |
| 11 | Sheldon | Fareway, 2603 Park St. |
| 12 | Carroll | <i>Site under negotiation</i> |
| 13 | Avoca | Casey's General Store, 1019 N. Chestnut St. |
| 14 | Davenport | <i>Site under negotiation</i> |
| 15 | Early | Casey's General Store, 2245 Karr Ave. |
| 16 | Fort Dodge | <i>Site under negotiation</i> |
| 17 | Waterloo | Hy-Vee, 1422 Flammang Dr. |

Appendix C: Type 1 and Type 2 Project Requirements

| | Type 1 Projects: DC Fast Charger Corridor Sites | Type 2 Projects: Level 2 Community Charging Sites |
|--|---|---|
| SITE REQUIREMENTS | | |
| Located no more than 1 road mile from either the I-80 or I-35 corridors | ● | |
| Publicly visible, accessible, and available to drivers for charging (24 hours a day, 7 days a week) | ● | ● |
| Sites must provide site amenities for users including at a minimum: indoor shelter, restrooms, lighting/safety | ● | ● |
| Paved parking spaces for to allow the maximum capacity of EVs for installed charging equipment to be charged simultaneously | ● | ● |
| Adequate signage on-site for drivers to quickly identify how to navigate to the charging station from the site entrance | ● | ● |
| Signage limiting the use of provided parking to charging drivers only including “Electric Vehicle Charging Only” pole or wall mounted signs as well as stenciled pavement markings for each marked charging parking space | ● | ● |
| EQUIPMENT REQUIREMENTS | | |
| DC fast charging equipment rated at 50KW or higher | ● | |
| Each DC fast charger offers both CHAdeMo and SAE J1772 CCS (Society of Automotive Engineers Combined Charging System) charging protocol connectors | ● | |
| Each Level 2 charger offers a J1772 compatible connector | | ● |
| Charging equipment must be certified through the Nationally Recognized Testing Laboratory (NRTL) program to demonstrate compliance with appropriate product safety test standards. A complete list of accredited NRTLs can be found online at: https://www.osha.gov/dts/otpca/nrtl/nrtllist.html . | ● | ● |
| Charging equipment must be capable of operating without any decrease in performance over an ambient temperature range of minus 22 | ● | ● |

| | | |
|---|---|---|
| to 122 degrees Fahrenheit with a relative humidity of up to 95% | | |
| Charging enclosure must be constructed for use outdoors in accordance with UL50, Standard for Enclosures for Electrical Equipment, NEMA, Type 3R exterior enclosure or equivalent | ● | ● |
| A cord management system or method to eliminate potential for cable entanglement, user injury and connector damage from lying on the ground. Retractable cords are encouraged. | ● | ● |
| PAYMENTS, PRICING, & DATA REQUIREMENTS | | |
| Universal payment system allowing multiple payment methods to be used by charging drivers | ● | ● |
| Real-time pricing information displayed on the device or payment screen | ● | |
| Utilization of open standards including OCPP | ● | ● |
| Equipment is networked by Wi-Fi or cellular connection and network hardware and software is maintained with the capability for: remote diagnostics, remote start of the equipment, collecting and reporting usage data, processing payments, and tracking usage by the kilowatt hour. | ● | ● |
| Annual utilization data collection | ● | ● |
| SPONSOR/VENDOR REQUIREMENTS | | |
| Make every effort to educate the general public of the existence of the new charging site including registering the site on a station locator | ● | ● |
| Customer service support is available by telephone 24 hours a day and 7 days a week and is clearly posted to assist customers with difficulties accessing or operating the equipment | ● | |
| Customer service support is available by telephone from 6am to 6pm, Monday through Saturday and is clearly posted to assist customers with difficulties accessing or operating the equipment | | ● |
| Site development, project installation, and maintenance shall be in compliance with all applicable laws, ordinances, regulations and | ● | ● |

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|---|---|---|
| standards, including, but not limited to, the Americans with Disabilities Act (ADA). | | |
| Equipment has a 5-year manufacturer's warranty and is maintained to continually be in full-working order to the extent possible | • | • |
| Should repair be necessary, chargers shall be fully operating within 72 hours of equipment issue/breakdown to ensure a 95% annual uptime guarantee. | • | |

Thank you to the following for assistance in the development of this guidance.

