

Overview of the National Electric Vehicle Infrastructure June 9, 2022, Proposed Rule

The Federal Highway Administration's (FHWA) initial guidance for the NEVI Formula Program was issued on February 10, 2022. This guidance lays out the framework for the federal funding program administration, project eligibilities, and the requirement for all states to have an approved Electric Vehicle Infrastructure Deployment Plan (EVIDP) before funding can be obligated. Montana's EVIDP was developed in compliance with the NEVI Guidance and submitted for approval July 28th.

Currently there are no national standards for EV charging stations. For any given charging station, the charger manufacturer, charging network, charging network provider, charging station owner, charging station operator, and even the utility providing electricity, may all be different entities, all with different expectations for contracts, maintenance, operations, and customer response.

To address this, the FHWA issued a Notice of Proposed Rule Making (NPRM) on June 9, 2022. This proposed rule establishes regulations setting minimum standards and requirements for each charging stations and applies to any publicly accessible charger funded with title 23 funding, not just the NEVI program funding. Montana has submitted comments addressing concerns with the guidance as proposed, the docket closed August 22, 2022. There is no indication at this time when the final rule will be issued.

Summarized below are the general requirements in 6 categories proposed in the June 9th guidance as well as concerns captured in MDT comments to the docket.

Installation, operation, and maintenance by qualified technicians

The proposed regulation includes the minimum number of chargers, connector type, and power level for each EV charging station. These minimum requirements are proposed to provide the public with a predictable user experience of the public charging infrastructure including:

- Minimum of four Direct Current Fast Charging (DCFCs) ports capable of simultaneously charging four EVs
- Non-proprietary Combined Charging System (CCS) charging ports
- Power levels at or above 150 kW per charging port
- Stations must be available 24 hours a day, seven days a week on a year-round basis
- Payment methods must include contactless payment methods accepted from all major credit and debit cards and that access to service not be restricted by membership or payment method type
- All chargers must be certified by an Occupational Safety and Health Administration Nationally Recognized Testing Laboratory
- Physical and cybersecurity strategies to mitigate vulnerability to the charging infrastructure, electrical grid, and consumer protection
- Maintenance of charging equipment for a minimum of 5 years
- Installation, maintenance, and operation must be performed by an electrician certified through the Electric Vehicle Infrastructure Training Program (EVITP)
- Customers must be able to report outages
- Only information strictly necessary to provide service to the customer can be collected, processed, and retained
- Income from the sale, operation, or lease can only be used for debt service of the chargers, improvements and maintenance of the chargers or a reasonable return on investment.

Interoperability of EV charging infrastructure

Minimum interoperability standards for charger communication with EVs. Outlines industry standards for charging infrastructure consistent with standards outlined in ISO 15118, an international standard for EV-to-charger communication.

Traffic control devices and on-premise signs

Must be consistent with the Manual on Uniform Traffic Control Devices (MUTCD)

Data, including the format and schedule for the submission of such data

Minimum data submittal requirements, applicable only to NEVI Formula Program projects.

- Extensive quarterly and annual data submittals
- Annual community engagement outcomes report
- Prescribed format for data collection, maintenance and submittals

Network connectivity

Minimum standards for the charging network connectivity of EV charging infrastructure to include charger-to-charger network communication, charging network-to-charging network communication, and charging network-to-grid communication.

EV charging infrastructure locations, pricing, real-time availability and accessibility

Minimum standards and requirements for chargers to communicate their status with consumers and third-party mapping applications. And requirements for the communication, display, and structure of the pricing for electrical charging.

- Price must be displayed as the price of electrical charge in \$/kWh
- Minimum uptime requirement of greater than 97%

Areas of Concern

Concerns with the proposed regulations, particularly how they impact rural states:

- Flexibility is needed for the spacing and number of charger requirements for NEVI and other title 23 funded stations. Rural States should not be required to seek exception for vast regions of their state due to grid capacity issues, distances between communities and/or interstate access points, local geography, sparse population density, or low average daily traffic/demand. States must have the flexibility to suit local conditions in order to facilitate prompt and efficient implementation where scarce dollars are most needed. Consideration should be given to revising the requirements to be based on population density and average daily traffic as these factors inform demand.
- To ensure a reliable and accessible network, publicly funded EV charging stations must allow for payment methods available to all members of the public, particularly the unbanked communities where cash, credit, and debit cards with both chip and contactless features are needed.
- In rural areas EV charging investment is risky and potentially not profitable for many years. Income requirements in the rule will disincentivize private third-party vendors from participating due to new financial restrictions. This could have a disproportionate impact on the historically underserved communities where private investment is most needed.
- Long-term operation and maintenance of charging infrastructure increases the regulatory burden on states and should not be a state DOT responsibility, just as state DOTs do not operate or maintain gasoline or diesel fueling infrastructure today.
- Current Montana law restricts the ability to charge based on \$/kWh, guidance requires \$/kWh be displayed at the charger.
- Implementation of the NEVI program will require thousands of qualified electricians nationwide, requiring EVITP-certification could delay installation and increase costs particularly in rural areas with limited training facilities. Greater flexibility to meet the requirement for a “qualified technician” should be allowed. This provision could have unintended consequences for underserved communities.