March 16, 2020

RE: Direct Current Fast Charging Infrastructure Request for Information: Response from Clean Energy NH

Dear Tim White,

Clean Energy NH (CENH) appreciates the opportunity to respond to the NH Dept. of Environmental Services’ Request for Information regarding Direct Current Fast Charging Infrastructure for the state of NH. As the coordinator of the stakeholder group Drive Electric NH and as a proponent of clean energy technologies, CENH has a vested interest in the growth and expansion of electric vehicles and charging infrastructure in the Granite State.

A statewide DC-fast charging network is critically important to the future of NH’s electric vehicle fleet. DC fast chargers are essential to provide a convenient, quick charge for drivers during road trips and other transportation needs. A robust network will help eliminate range anxiety and help promote EVs as a viable sustainable transportation option for NH drivers. A fast-charge network is also vital to support tourists with EVs that contribute significantly to NH’s economy.

CENH submits the following comments on the questions as outlined by NHDES and hopes the following input is helpful towards the development of the next iteration of the Direct Current Fast Charging Request for Proposals. Please do not hesitate to contact me with any questions.

Sincerely,

Brianna Brand
Senior Program Director, CENH
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1. **What costs should be eligible? Why?**

CENH recommends all eligible costs listed under the original RFP continue to be eligible. In addition, CENH recommends NHDES consider making electrical infrastructure on the property and/or grid interconnections costs eligible under the RFP. Due to uncertainty in ongoing and future regulatory proceedings for some utilities to receive approval for EV make-ready investments, this aspect represents a potentially significant cost for applicants. Without these costs being made eligible, it is possible these costs would cause sites to be uneconomical, threatening the timely buildout of the corridor.

CENH also recommends NHDES consider allowing certain operation & maintenance costs be considered eligible. As it is vitally important for each station to be available 24/7, there is significant expectation on the site owner/operator to maintain reliability. This can come at a cost, particularly in areas of the state where items such as internet connectivity is, at times, unreliable or unpredictable. Therefore, CENH recommends certain operation & maintenance costs that directly contribute to the reliability and accessibility of the station be considered eligible. CENH also recommends including extended warranty costs as an eligible item.

Lastly, CENH recommends NHDES consider encouraging the incorporation of demand response technologies at sites. Incorporating energy storage and on-site generation can help defray costly demand charges and increase the overall sustainability of the charging location. However, these technologies can be costly on top of the cost of the charging station equipment. CENH recommends 25% of the cost of purchasing and installing an on-site energy storage system be considered eligible, and that systems including on-site generation and/or demand response systems be reviewed favorably.

2. **What costs should be ineligible? Why?**

CENH recommends the list of ineligible items as described under the original RFP continue to be ineligible, with the exception of electrical infrastructure and/or grid interconnection costs, internet connectivity or cell signal, and on-site energy storage systems as described under Question 1, above.

3. **What level of cost share/match is recommended? Why?**

CENH strongly supports maximizing the available funding to install as many DC fast chargers as possible along the identified travel corridors. NH is considerably behind our neighboring states when it comes to availability of this infrastructure, and in order to serve both in-state drivers and tourists, many more chargers are required to meet both current and future needs. Therefore, CENH advocates for aggressive funding levels that encourage private investment while also ensuring that available funds are maximized. CENH recommends allocating higher levels of funding in areas with designated prime characteristics, such as in a rural location with high seasonal traffic from tourists, or sites located at ideal sites directly off the designated travel corridors (i.e. less than 0.5 miles). This could be a generalized formula that allows for specific sites to garner a higher level of funding according to pre-determined scoring criteria. If the department determines a flat match is most appropriate, CENH supports a 20% applicant match as consistent with other state’s requirements.

4. **Please provide input on program structure:**

   a. **Allow for multiple awards or have a winner-take-all approach?**
Clean Energy NH recommends allowing for multiple awards. This will allow for more entities to submit applications, resulting in a more competitive RFP. This will also allow more flexibility for independent site hosts to partner with charging station providers at a range of locations along the travel corridors. Currently, publicly accessible DC fast charging stations are not uniform by make/model/installer, with the exception of Tesla. While there are benefits to a single charging station provider because drivers know what to expect at each station, in CENH’s knowledge and experience, the design and operation of DC fast chargers do not differ so significantly as to warrant a winner-take-all approach solely based on this reasoning. We find empowering independent site hosts with the ability to apply a more competitive and open approach to utilizing the available funding preferable. Furthermore, many charging station providers are merging software that allows members of one network to easily be able to charge at an out-of-network station. If NHDES allows for multiple awards, CENH recommends specifying universal requirements for each charging station, such as allowing credit card readers. This will ensure all drivers, regardless of subscription, the ability to pay for their electricity and use the charging station.

b. Assuming both DCFC and level 2 charging will be required at each location, how many chargers of each type should be required at a minimum? Should the minimum differ by location in the state?

CENH recommends varying requirements by location when it comes to the number of level 2 charging stations that should be installed with accompanying DC fast chargers. At sites where quick, convenient charging sessions are anticipated to be more prevalent, such as sites immediately off the travel corridor with limited entertainment or dining options, a lower number of level 2 plugs should be required. This will ensure the costs of including level 2 charging stations will not economically discourage the installation of DC fast charging stations. However, in areas with projected high near-term utilization rates or sites with availability of long-term entertainment and dining options, the inclusion of more level 2 plugs should be encouraged.

5. How many charging sites should be anticipated with a total budget of approximately $2 million?

CENH supports maximizing the $2 million allotment to serve as many sites along key travel corridors as possible. CENH places a higher emphasis on the number of DC fast chargers available to drivers rather than the speed of each charger. Therefore, if more 50kw charging stations could be installed for the same price as fewer 150kw chargers, then CENH would encourage the installation of the 50kw stations. As much as possible, level 2 charging stations should be included as a back-up for drivers if the DC fast charging stations are in use, or for drivers who will be spending longer durations at the host site and do not need the faster charge. For comparison, Vermont’s ongoing RFP to build out the state’s DC fast charging network requires a minimum of 11 sites, five of which will include two 150kw DC fast chargers and six locations will include two 50kw DC fast chargers. CENH finds the significantly higher costs for 150kw stations should limit these stations to sites with a clearly expressed and justifiable need, as detailed by the applicant. Furthermore, some models of EVs are not equipped to accept charging at a rate of 150kw, but may be able to accept the lower 50kw charge.

6. Is the goal of having at least one charger on each of the corridors identified on the attached map realistic?

CENH feels the goal of having at least one charger on each of the corridors identified on the designated map is realistic and should be achieved via the RFP. These corridors demonstrate a
variety of traffic volumes, geographic locations, and current availability of charging stations. Including one or more charging stations along each corridor is essential to the buildout of NH’s DC fast charging network. This will also ensure multiple options for NH drivers and tourists to select when traveling, ensuring NH’s travel corridors are accessible for EV drivers.

7. How can the state design a solicitation that will ensure DCFC locations in the more rural parts of the state are included in project proposals?
CENH believes opening the RFP for individual site hosts to apply will enable site hosts located in rural parts of NH to be included in the DC fast charging network. Because they are more rural and may have a less dense population of EV drivers, these sites may not be as immediately attractive to include by a single company that serves as the applicant. By allowing individual site hosts to apply, there is more opportunity for these sites to compete on an even playing field. In addition, individual site hosts often know their communities and customers very well, such as the seasons when tourist travel is more plentiful, and can therefore more accurately predict if hosting a DC fast charging station will be a beneficial addition to the community or business where it is located.

CENH also recommends the department consider an adder or slightly lower match fund requirement for rural sites to further encourage the development of DC fast charging in these locations. This could also take the form of a scoring rubric that includes higher points for sites that are located in designated rural locations. Lastly, CENH recommends the department consider allowing communities in rural areas but not located on the identified travel corridors, especially in Northern NH, to apply without being penalized for being located off the corridors. This could encourage more site hosts from rural areas to apply without the risk of being penalized. For instance, CENH knows of at least one rural community in the North Country that both desires and would be a solid location for a DC fast charger. However, the site is not located on one of the travel corridors identified in the RFP, so would not be as competitive as another applicant located in a non-rural site but that is on a travel corridor.

8. What communication protocols should be allowed/required?
CENH does not have any comments or suggestions on this item.

9. What payment methods should be allowed/required?
CENH recommends a variety of payment methods be available at each charging station to accommodate a variety of EV drivers and their preferred payment methods. At the minimum, all charging stations should be equipped with a “chip” credit card reader that can process payments. Although many payments can now be conducted via cell phone applications and subscription services, CENH finds it in the best interest of all drivers to have a credit card processing capability. This ensures that if a driver’s phone is out of battery, if internet connectivity is down, or the site host is not open to process payments inside 24/7, the driver has the opportunity to pay to charge with a credit card. Phone payments should also be available for customers.

10. What operations & maintenance standards should be required of hosts?
CENH supports the list of operation & maintenance standards included under the original RFP. CENH identifies the following as top priorities for operations & maintenance: ensuring internet accessibility for payments and customer service inquiries; ensuring any repairs are conducted in a timely manner so the charging station can operate consistently and serve drivers that need to
charge; ensuring the parking spaces adjacent to the charging stations are kept clear and accessible at all times, especially during winter months; and maintaining any signage that provides directions to or instructions on how to use the charging station. CENH supports the opportunity for the applicant to partner with or establish operations & maintenance agreements with local entities to maximize economic benefits to the host community.

11. The entity named in the Contract must be the owner of the installed EVSE equipment for the duration of the Contract and will have the responsibility for ensuring continued operation of the equipment during the Contract period. Can you suggest potential ownership models for the EVSE funded through the RFP that would meet these criteria? CENH does not have any comments or suggestions on this item.

12. What do you consider to be an adequate length of time to complete a satisfactory proposal in response to an RFP? CENH does not have a recommendation for the length of time the RFP response period should be open. However, CENH recommends structuring this time period with the entire timeframe of the RFP release, application period, and evaluation and award period in mind to ensure applicants have the ability to begin construction before the federal EVSE tax credit expires at the end of 2020. This has proven to be an important aspect that affects the economics of projects. Furthermore, it is in the state’s best interest to move forward quickly, to ensure NH can keep pace with the rest of the region when it comes to EV infrastructure buildout.

13. What networking requirements (if any) should be included for EVSE funded using VW Environmental Mitigation Trust funds? CENH recommends all DC fast charging equipment be networked or “smart” chargers that are able to track data such as charging period duration and can be displayed as available or out-of-service on charging station applications available to EV drivers. For accompanying level 2 charging stations, CENH recommends the opportunity for applicants to propose non-networked chargers, as these can be a lower-cost option for applicants to install. These lower costs enable applicants to focus available funds on DC fast chargers that also including additional, slower charging stations as an option for drivers to use if needed or preferred.

14. What future-proofing requirements for EVSE at the selected sites should be considered? Please provide information on new charging technologies that should be considered, if appropriate. CENH strongly recommends sites be future-proofed to allow for the installation of additional charging stations, as appropriate. We support this because, as the EV market continues to grow and adoption in NH increases, there will be more EV drivers and tourists on the road that will need to access public charging. Therefore, it is very likely that more charging stations will be needed to meet demand. CENH recognizes future-proofing may require additional investments in both electrical infrastructure and site host preparation, and that these costs may not be insignificant. Therefore, CENH recommends reasonable requirements for future proofing that do not constitute a financially burdensome situation that could jeopardize the current installation of DC fast charging stations. Applicants should be encouraged to include plans for future proofing at each site in their proposals, with descriptions of why each future proofing decision was made.