Notes from March 10, 2020 Listening Session

1 & 2. What costs should be eligible/ineligible? Why?

- one big uncertainty of the initial RFP was what level of make-ready investment the utilities would be making. The cost of necessary electrical upgrades that are not covered by utility make-ready investments should be eligible. Grid interconnection costs and electrical infrastructure on the property should be included.

- maintenance and warranty contracts should also be eligible costs, especially with 97% uptime requirements that the state is requiring. The state of technology makes absorption of some of those costs appropriate.

- allow all costs permitted under the VW settlement

- the demand charges anticipated at many sites makes battery backup an innovative solution. If there’s not going to be any type of demand charge waiver, then battery storage should be considered as an eligible cost.

- counter statement - providing costs for solar and/or battery storage takes away from intended focus of the RFP

- all of the following costs should be eligible: warranty; internet connection or cell signal; software subscription; electricity consumption including demand charges; costs associated with the operation, maintenance and customer support services associated with the EV charging station, including the EVSE.

- Allow use of funds for a 5 year extended warranty.

- cellular data can get expensive. More remote sites may need to subsidize cellular boost technology.

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

- could be site specific – looking at ME where they provided 100% subsidy at turnpike locations (higher utilization in the short term) – this maximized the potential revenue to the host to offset costs in more rural locations where there is much less revenue

- follow the VW Settlement and only require the amount of match required.

4. Please provide input on program structure:

a. Allow for multiple awards or have a winner-take-all approach?

- suggest multiple awards – a lot of site hosts looking to add charging and in most cases would like to be owner/operator rather than do a revenue share – allows for competitive marketplace and different opportunities for growth.
• multiple awards, and should not require fast chargers at all sites, some should be allowed to just have Level 2.

• concern with having a fragmented approach – should be consistent technology at each site so people don’t have to relearn. This would be best done by a single operator. But multiple vendors may attract more host sites.

• Level 2 should be required at all sites as an “insurance policy”.

• Vehicle miles traveled data on a given corridor should be used to determine the required number of DCFC and Level 2 chargers at each proposed site.

• If only installing 1 DCFC/L2, the project should be required to do “make-ready” for future expansion.

• The US Dept. of Energy EV Pro Lite tool could be used to help decide the correct number of chargers at a given location

• multiple awards are something to consider

• individual site hosts should be able to apply for funding directly and then select their own vendor

• rural subsidy may not make sense if you are going to allow for more than one vendor to apply for separate sites

• should be flexible on the number of chargers per site

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?

• co-locating some L2s at DCFC sites makes sense but this should be an option (maybe it strengthens an application if included)

• if there is a fast charger at a site L2 should be there – focus on vehicle density at corridor and build out the ones anticipated to have the most use up front. At more rural locations wouldn’t consider having more than one DCFC

• putting money into the future expansion as part of the project costs should be considered – e.g. if your putting in one DCFC and L2, plan for larger switch gear, transformer and conduit up front will make it less burdensome to expand down the road

• regarding the 150kW requirement for the DCFC – very few cars can currently use this level of power at this time. It is important to be flexible and this may need to be a site by site determination. NH should be open to power sharing, so if two cars are charging at the same time the amount of power provided by the charger may be split between the two (e.g. if 2 cars are charging on a 150 kW charger then each would get a max of 75 kW)
5. How many charging sites should be anticipating with a total budget of $2 million?

- the number of sites will be determined by the power (kW) requirement. With the proposed 150 kW and a minimum of 2 chargers we will have far fewer sites due to the cost difference between 50 kW and 150 kW. Don’t require a specific kW rating, but make sure the site is future-proofed to allow upgrades as needed.

- if you hold some money back now, what is likelihood of rate cases coming through to leverage make-ready money down the road? If they do come through then we can get more sites out of the limited amount of VW funding.

- could greatly expand reach of program if the utilities are offering make-ready as part of it

6. Is the goal of having at least one charger on each of the corridors identified on the attached map realistic? A second question was also posed based on the recommendations above – if we allow for individual site applications, how do we get DCFC in the more rural areas?

- Realistic if you allow individual site hosts to submit applications along those corridors and allow the site host to own the equipment. There was interest, but not if they couldn’t own equipment.

- a lot of towns in the North Country are interested, but are not on the corridors identified – there is interest on Route 3 – it may be good to consider alternative corridors, particularly in the North Country.

- some communities would rather own the infrastructure than allow a third party – the way RFP was written didn’t allow for that.

- All corridors need at least 2 chargers and all sites should include Level 2. Allow for 50 kW with future-proofing to get more out there now.

- Some funding should be held back. Develop the spine for the network – see where utilization is and in next round you can see where there is opportunity based on usage of existing equipment, and then allow for release of more funding. A lot of value to DCFC is visibility – reassures non EV drivers that the infrastructure exists. Marketing is also important.

- to maximize emissions reductions, we should be targeting the urban core, focusing on commuters, not visitors.

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?

- Increase the level of funding available to the rural locations and to municipally owned sites.

- there are entities interested in driving business to their communities – you may find more response to this if they can apply
• think about the dynamic between individual site host ownership and system wide ownership - you
won’t attract private investment in more rural locations – there isn’t a business model

8. What communications protocols should be allowed/required?
• Open Charge Point Protocol (OCP) and OpenADR should be required.

9. What payment methods should be allowed/required?
• whatever is the easiest - App, RFID
• A credit card reader is not a positive requirement, not sure it makes sense, but it’s doable.

10. What operations and maintenance standards should be required of hosts?
• uptime is a critical area for the success of this network – 97% is aggressive but appropriate. This
requirement should be combined with subsidy to help ensure it. – reliability variation exist
between the different types of hardware – easiest way to sabotage driver’s use of EVs is to have
nonfunctioning units – standard as stated is good – but subsidy is important part of it
• most hardware providers included 2 to 3-year warranty. Allow use of funds for a 5 year extended
warranty and require such warranty.
• applicants should have to describe their maintenance plan including the frequency of site and
equipment maintenance.
• requirements should apply to Level 2 as well. In rural locations if L2 is down it could be life
threatening. Consider system redundancy in more rural locations, whether heightened operations
and maintenance or multiple L2s, etc. in areas where there’s not as much justification for the DCFC
• the location of these chargers should be a municipal location or 24-hour rest area in rural locations.
The sites must be safe so people feel comfortable going to them.

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?
Clarification of the question: A single entity ownership of all sites was required in the RFP. If we allow
the applicant to not also be the owner of the equipment how can the state structure the RFP and
contract with the applicant in a way that provides recourse should the equipment owner, presumably
the site host, decide to shut down the station?
• that’s a lawyer question – there are ways to structure that
• if the site host is legal entity and you include a 5-year network and operations fee as part of the
eligible expenses then that part is covered by that particular aspect of it
• require applicant have a performance bond in place which renews each year - they secure the bond
and the beneficiary is the state
• suggest a succession based analysis – claw back – work with utility in that territory – maybe utility is empowered to take control

• real issue is if site host isn’t the entity running and installing the equipment. You need people to come to you with partnerships that can work. You can always contract out services to make this happen.

12. What do you consider to be an adequate length of time to complete a satisfactory proposal in response to an RFP?

• Federal tax credits are expiring at the end of this year and sites have to be operational to qualify. Consider first come/first served model to get some early projects up and running.

• Get RFP back out in next 30 days.

• Utilities need adequate time to evaluate costs – both what the customer would provide and what the utility would provide. Need to require this in the RFP.

• you’ve created enough buzz among the network that anticipated funds are forth-coming, but 4-6 weeks could be tightened up – put in a deadline depending on if one applicant or multiple site hosts – consider town meeting approvals, etc.

• time window is dependent on quality of cost estimate – if you want a good estimate, you need to build in some time – that didn’t exist in the first round – in several cases utilities weren’t contacted until 2-3 days prior to when the bid was due

• the state might consider requiring that applicants provide utilities at least 6 weeks prior to the RFP deadline to prepare their site cost estimates.

• utilities should be estimating just their normal service work (from the pole to the site) and other site prep (excavation, pad, conduit to the service panel) should be responsibility of the applicant. Assuming the applicant either is, or is working with, an experienced installer they are able to provide such estimates.

• The RFP should provide contact information for lead person at each utility

• The RFP should set a date by which all requests for site assessments have to be submitted to the utility. The information needed includes contact info for EVSE applicant and host site facility manager, amperage and kW needed, what equipment is proposed, location of chargers. Utilities can do a high level feasibility study within a couple of weeks and tell applicant if it’s a good location or not. If the site passes this initial evaluation, then utilities can do a more in-depth site evaluation and provide a standard utility work estimate within 6 weeks. May have to tack on another week or 2 for additional estimates to come through and respond by week 8.
we are only looking at 10 or 12 sites around the state – we can do a rough estimate pretty quick – most utilities charge for a detailed estimate – we will respond as quickly as possible – initial inquiry then it takes 2 weeks to do a full estimate, this usually costs a couple hundred dollars, but takes 4 weeks to get the check

let electricians, developer and excavators do what they do best to estimate their costs and let the utility do what they do best

13. What networking requirements (if any) should be included for EVSE funded using VW Environmental Mitigation Trust funds?

- are you looking for the actual data that the site host/network would provide the state on a monthly/yearly/quarterly basis or looking at OCCP/Wi-Fi side of it
- the requirements in the RFP, Section 4.1.4 are all good:
  - EVSE must connect to a network via Wi-Fi, cellular, or other connection using multiple carriers.
  - The network must be configured to display real-time operational status on a smartphone application, either through a network-specific application or a third-party aggregator.
  - Applicants must describe how network security concerns will be addressed and managed.
  - relative to making station data available to the State, recommend doing what other states are doing

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.

- having a site prepared for new technology and power requirements, kw levels, what newer cars have for batteries, is good.
- Should require that whatever is installed at the time of construction is capable of a relatively easy upgrade (e.g. conduit, electrical panels).
- requiring OCCP is part of future-proofing as it allows other OCCP providers to come into the marketplace and/or take over existing sites where appropriate
- should consider exclusivity agreements and whether they should be allowed with this funding source. On one hand such agreements can protect the state’s investment by preventing a competitor from coming onto the same site and reducing usage and therefore value of the settlement funded station. On the other hand, the number of total EVSE parking spaces may be more easily expanded through competition, thus increasing available charging spaces at no additional state cost (example noted was that a waiver of exclusivity had to be negotiated by Tesla at Hannaford to put in their chargers, even though not directly competing with the contracted provider).
• could put something in place that the exclusivity clause goes away if the EVSE is not operational for a period of time

• a vendor is leaving money on the table if it’s overbuilt and ready for expansion

• could include things like a site hose commitment to allow for site expansion.

• Consider transformer size requirements; conduits to electrical infrastructure.

15. Please provide any additional feedback or considerations related to developing voluntary minimum standards for DC fast charging stations.

• on the maintenance side, a lot of components have a wait time for shipping – how do you facilitate rapid response to these sites? If there are multiple sites with different ownership models, but with same maintenance requirements, the state needs to consider how a contract is structured to ensure up-time requirements can be met.

• realistically some of the host sites in awarded contract(s) are going to fall through. The state needs to consider its recourse if this happens after the RFP has been awarded. Should applicants have an MOU with the site host before they submit an application? Would a Letter of Intent be adequate?

• consider as the state, implementing some type of marketing campaign. Oregon did it through their state tourism office.

• Proposed marketing by the site host/applicant could be a scoring criteria in the RFP.

• The RFP should discuss who is responsible for marketing the charging station.

• Can Level 2 chargers be made available through the State bid process to municipalities?