Alaska EV Working Group

Technical Session

March 26, 2020

Notes

Intros

Michelle Wilber – ACEP
Shaina Kilcoyne – Municipality of Anchorage
Chris Rose - REAP
Mark Wiggins
Pam Kauveiyakul – Launch Alaska
Tim DeMarre - GVEA
Besty McGreggor - AEA
Taylor Asher - AEA
Kirk Martakis – Driving on Sunshine Taxi
Brandy Dixon - AEA
Chris Pike - ACEP
Andrea Tousignant – Ions for EVs
Alec Mesdag – AEL&P
Eric Taylor – Alaska DOT, LRTP manager
Phil White – Fairbanks Climate Action Coalition
Pierce Swhalb – Municipality of Anchorage
Erin Whitney - ACEP
Josh Craft - MEA
Todd VanHove – Alaska DOT, Central Region

Recap of last meeting

Utilities invited to the last Technical Session to discuss the technical requirements that would guide where installation of DCFC are practical.

Utilities have developed a map of the Railbelt grid to illustrate the general locations on the grid that are suitable for DCFC.

Chris R. – is there any specific technical consideration or what we need to watch out for when locating DCFC?

Josh – A couple hundred kWs will not likely cause an issue. When we start talking about larger installations of multiple Level III (or DCFC) chargers then we will need to look at the specific transformers that are near the site host. In that case it is likely that the transformers

Shaina – can you give the numbers in a document?

Josh – he provided transformer costs in a spreadsheet to AEA yesterday. The spreadsheet titled "Transformer Cost Estimates-Craft-2020.03" is saved in SharePoint in the EV Working Group > Technical Sessions – Agendas, Notes & Materials folder

DOE Grant

AEA & Tim L. has developed a spreadsheet to track what stakeholders and subrecipient components of the grant need to be. AEA will send this out along with instructions and templates to entities that will participate in the grant proposal.

Andrea T. – We did send a letter of support for the concept. We would be happy to follow-up with AEA and AK DOT&PF

Shaina – Has AEA been in touch with Pierce on this grant?

Betsy – For the concept paper, yes. For the full proposal, not yet. We would like a letter of support from Anchorage Muni.

Tim D. – If GVEA hasn't identified specific costs that can be used as cost-share, will a letter of support help the grant effort?

Betsy – Yes. A main objective of the grant is to show and develop community partnerships

Pam K. – Launch Alaska can do a letter of support.

Betsy – AEA has posted a template and example letter of support in SharePoint. AEA will also post letters of support from the Concept Paper in SharePoint that can be used as examples by others.

Siting Criteria Discussion

Michelle – we can look at other locations, like British Columbia for examples of how they have done it.

Josh – we can use the four main objectives of the VW Settlement Beneficiary Mitigation Plan 1) reduce NOx, 2) reduce particulates, 3) ensure environmental justice, and 4) leverage other resources to benefit Alaskans.

Traffic study conducted by Josh shows high concentration of traffic in the state are 1) along the Glenn Highway between the Valley and Anchorage, and 2) East side Fairbanks.

There is plenty of traffic in Anchorage, however most residents will charge at home.

Michelle – Should we use the Beneficiary Mitigation Plan goals to orient our siting criteria?

Betsy – The goals in the Beneficiary Mitigation Plan are oriented to reducing pollution from diesel. EVs will likely displace passenger vehicles, mostly gasoline. We can keep the Beneficiary Mitigation Plan goals in mind, but let's develop a set of criteria that allows us to advance EV market uptake.

Josh – If we use 8-18 Level 3 (250-800 level IIs)

Andrea – Look at hub and spoke model of DCFC corridor. Review Washington state costs - interconnected Level III often $250k. Review Washington DOT data on cost. VW funds alone may fund 6-8 Level IIIs. Interconnected chargers done through cellular network.

Chris R. – Can AEA describe timeline of processes

Betsy – AEA has an RFI for site hosts drafted. There is a demand charge

Josh – recommends including a criterion: Site host is willing take on costs of electricity used by Level III charger even if there is no relief on demand charges from the RCA.

Andrea T. – Network costs and O&M costs can be taken care of if it can be passed along to those using the charging service.

Josh – Economics as a criterion will be challenging b/c we don't know what those will be in the medium term. Most site hosts will need to be willing to not make or lose money on the Level IIIs in the near term.

Michelle – Wouldn't it still be good to have some sort of economic criterion?

Sean – CEA did have something similar for Level II siting. Set-up a 100 point scoring system for evaluation of proposals.

20 points – geographic location, including distribution of chargers, access to chargers; 20 points – activities available to those charging; 15 points – public availability; 15 points – Hours available; 10 points – Publicity of charging station; 10 points – Technical merits; 10 points – other information

Sean will send criteria to Tim/AEA so we can share it with Group via SharePoint.

For corridor placement, it would be helpful to identify the distance between the locations.

Kirk M. – Some of these can be built as a modular unit. We want to keep installation costs down. If charging at Level III chargers is provided for free we may get a lot of traffic as compared to if there is a fee

Michelle – shared screen with BC siting criteria and flow chart.

Josh – what is the ultimate goal? Is it building out the corridor or is it servicing the most of drivers? Do we want redundancy? If so, we may need to phase the corridor development.

Andrea T. – geographic spread, we should keep spacing to ~40 miles. Corridor development isn't designed to service commuters. Most commuters will charge at home/work, unless the commuters are travelling ~200 miles.

Michelle – To AEA, is corridor development the priority? We need to identify the main goal.

Betsy – VW funds are oriented to corridor development. Let's turn this discussion into criteria that can be used for selection. AEA does want redundancy and will ask that at least two level II chargers are collocated with a Level III charger.

Michelle – It sounds like the goal is clear: Develop an EV Charging Corridor. Let's work out the ideal, with a certain number of miles between the chargers, then overlay that with the reality of distribution towns, and grid requirements.

Andrea – with EVs, you do have to plan for the lower mileage cars because it is a safety issue. You don't want to leave people stranded. She can send the criteria.

Josh – I don't think we can use a lower 48 standard due to limited access of distribution grid in some areas of the state.

Tim L. – identify the ideal distance between charging stations, then apply the realities of Alaska including 3 phase power availability and proximity to amenities to determine what is realistic for Alaska.

Betsy – let's identify questions as to what will be used to prioritize locations. Ex. – What is the geographic location, is it accessible year-round…?

Josh – If you have geography as a main criterion, how do you prioritize the respondents? Example, if we get 5 respondents and only funds for three, how do we select from Anchorage area vs. Healy area?

Michelle – perhaps traffic volume?

Andrea T. – one of the things to consider, medical facilities as quick hits.

Michelle – we've discussed a variety of criteria, including: available space, utility service, amenities. Are there other criteria categories that we should discuss? (no

Tim D. – meta-analysis comment – could notes that are being taken be shared live so participants can make comments again if they weren't captured?

Michelle – The meeting notes will be available on SharePoint, meeting participants should go there, review and make comments as needed.

Betsy – AEA will send the RFI out early next week for comments from the group.

Michelle – We have some homework to do. In addition to reviewing the RFI, we should look at the siting criteria from other locations.

Meeting ended at 11:51 am.

Meeting Details

Who: Technical Representatives from Electric Utilities, Municipalities, and more.

What: AEVWG Technical Sub-Committee Meeting

When: March 26, 2020 from 10 a.m. to noon

Where: In accordance with the State of Alaska's COVID-19 Health Alerts, we will conduct this meeting via Zoom. To join online click here (https://alaska.zoom.us/j/816183129). Or dial +1 669 900 6833 US (San Jose). Use Meeting ID: 816 183 129.