

Alaska Electric Vehicle Working Group

Quarterly Meeting

October 13, 2020

Location

Join Zoom Meeting

<https://alaska.zoom.us/j/97015370271?pwd=M0k2UVpnVGFRS0V0MWY2L3VvRUhYQT09>

Meeting ID: 970 1537 0271 Passcode: 110171

Dial by your location +1 253 215 8782 US (Tacoma)

Find your local number: <https://alaska.zoom.us/j/97015370271?pwd=M0k2UVpnVGFRS0V0MWY2L3VvRUhYQT09>

Agenda (Times listed are Alaska Time)

- | | |
|-----------------|---|
| 10 am | Introductions around the Zoom room |
| 10:10 am | Presentation & Q&A – EV Policies for States, Municipalities and Utilities

Cassie Powers, Managing Director, Programs, National Association of State Energy Officials (NASEO) |
| 10:35 am | Presentation & Q&A – Regulatory Solutions to Demand Charge/DCFC Issue

Bill Ehrlich, Senior Policy Advisor, Charging Policy and Rates, Tesla

Francesca Wahl, Senior Charging Policy Manager, Tesla |
| 10:55 am | Break |
| 11:00 am | Updates & Announcements

Cordova Electric (3 mins)

CEA (3 mins)

MOA (3 mins)

AKEVA (3 mins)

Chevrolet of Wasilla (3 mins) |

ACEP (3 mins)

AEA (3 mins)

General (4 mins)

11:25 am Draft Charter - Discussion and Vote

Please review the Draft Charter prior to meeting, come prepared for discussion

11:35 am EV Charging Station Siting Criteria – Presentation, Discussion, and Vote

Please review the Draft Siting Criteria prior to meeting, come prepared for discussion

11:55 am Meeting Wrap-up & Schedule Next Meeting

General information about the Alaska Electric Vehicle Working Group can be reviewed on the Alaska Energy Authority website here: <http://www.akenergyauthority.org/What-We-Do/Energy-Planning-Project-Development/Electric-Vehicles>

Those not yet signed up for the Alaska Electric Vehicle Working Group listserv may do so at: <http://list.state.ak.us/mailman/listinfo/alaskaev>

Attendees

Phone only

Chris Rose - Renewable Energy Alaska Project (REAP)

Taylor Asher – Alaska Energy Authority (AEA)

Bruce Shelly – Homer Electric Association (HEA)

Gary Agron – New Horizons Telecom

Zoom

Louie Flora - The Alaska Center to Everyone

Tanya Krackovic - eCAMION Inc. out of Toronto Canada

Pierce Schwalb - Municipality of Anchorage

Sean Skaling - Chugach Electric Association

Bradley Berberich - New Horizons Telecom, out of Palmer Alaska

Travis Million - Copper Valley Electric Association - Valdez, Alaska

Cassie Powers – NASEO, Washington DC

Michelle Wilber - Alaska Center for Energy and Power (ACEP) in Anchorage

Brian Winnestaffer - Chickaloon Native Village

Kyle Wilson - Siemens, Alaska

Shaina Kilcoyne - Municipality of Anchorage, Solid Waste Services

Kirk Martakis – Driving on Sunshine, Cantwell

Francesca Wahl - Tesla

Phylicia Cicilio – ACEP, Fairbanks

April Woolery - DOT&PF Northern Region, Fairbanks

Clay Good - Renewable Energy Alaska Project, Haines

Tyler Bethune - General Sales Manager from Chevrolet of Wasilla

Betsy McGregor – AEA

Dimitri Shein – Alaska Electric Vehicle Association

Brandy Dixon – AEA

Connie Fredenberg - Helping Northern Arizona University, ITEP, with Tribal VW Fund which can fund EVs and charging stations, located in Palmer, AK.

Dale Banks - owner of personal electric vehicle business in Homer, AK

Alex Leumer – ChargePoint

Steve Colt - Alaska Center for Energy and Power

Andrea Tousignant – Ions for EVs, Seattle

Marten Martensen - Continental Auto Group (Anchorage Car Dealer)

Notes

Presentation -EV Policies for States, Municipalities and Utilities by Cassie Powers, Managing Director, Programs, National Association of State Energy Officials (NASEO)

Member org for state energy offices, transportation electrification has become a focus b/c of:

- economic development
- climate goals
- etc

Resource: PEV Policy Evaluation Rubric

Insights:

Most important EV policy options:

1. Vehicle Purchase Incentives

-reduce purchase price (rebates more effective than tax credit)

-some states and utilities tailor incentives for low- and moderate income drivers

- e.g. fed. tax credit \$7500
- OR rebate - \$2500 for new, plus \$2500 for new or used for LMI
- S.C. Edison - \$1000 rebate for new or used

2. PEV adoption requirements

- CA ZEV standard - adopted by 10 other states, % of sales be EV by 2025

3. Streamlined permitting, building codes, zoning ordinances

- CA, HI

EVSA Installation support

- incentives
- utility make-ready support
- grid modernization support

eg MA EVSE incentive program, NY 'make ready' program

Other policy categories:

- Carbon or carbon intensity pricing - CA (effective but challenging)
- Non-financial Incentives - preferred parking, ferry priority, anti-icing policies etc.
- EV rates - TOU rates for EVs - Georgia power, NV Energy - demand charge phase-in over 10 yrs
- Marketing and Communication - Recharge Boston, Recharge Colorado
- Fleets - govt initiatives - Duke Energy
- Dealership policies - CT CHEAPR
- EV and EVSE planning - AKEVWG
- Reduce other operating costs - DC sales tax exemption
- Regional Collaboration - REV West
- Equitable EV Programs: LMI, communities of color, disadvantages communities. Here too, lowering upfront cost of vehicle is the most effective. Work with trusted community partner

Q&A:

Q: Michelle: who offers the local rebates

A: many are from states - 8 to 10 do. Some muni's. Growing amount in utility space - often around infrastructure - some vehicle

Q: Chris Rose: demand charge holiday - is there a place to go to see all the different efforts

A: the EV Hub

Q: Tim Leach - Excel Energy rebates - any info?

A: No specific info - only available to Excel customers. If approved, will be a great model to replicate across IOUs, possibly coops

Q: Andrea - rate payer organizations - Natl policy for rate payer coops, she can forward on, small rebate direct to the dealer, will follow up

Presentation - Regulatory Solutions to Demand Charge/DCFC Issue by

Bill Ehrlich, Senior Policy Advisor, Charging Policy and Rates, Tesla;

Francesca Wahl, Senior Charging Policy Manager, Tesla

Tesla hopes to bring supercharging to AK

Look at utility rates, line extension policies, development timelines

Rate design considerations:

- Public fast charging

- Home Charging

- Fleet Charging

Demand charges

- majority of Op cost for DCFC (Tesla is owner operator)

- absent an EV rate, DCFC takes service under commercial rates with demand component

- at current rates of EV adoptions, utilization low, demand charges are huge component of op. costs

- barrier to DCFC stations

- commercial customers are usually >50% load factor, not true for DCFC today

- congestion at charging stations at 30% LF, negative customer experience so don't want to go above that!

- CEA case, for 8-charger tesla DCFC: at 5% LF - pays 63 cents/kWh! (at 30% - 20 cents per kWh, down to ~17.5 cents at 50% and above). really busy station is around 20%, often down to 5%

- Pacific Power Oregon - EV Rate - price is capped at 20 cents per kWh - changed demand into tiered blocks - low LF has low coincidence with system (GENERATION) peak

- more data coming in gives evidence that EV not big cost causer on system

- incremental load - collect marginal cost (maybe phase back in some distribution cost)

Principles:

- be tech agnostic and accessible to all non-res. EV customers

- available to new and existing stations

- remain optional

- consider all needs - including fleet

- incentivize intelligent and manageable scheduling where appropriate

- provide certainty and stability for long term investment

Examples:

SC edison, Xcel, Eversource, NV energy, Con Edison, Pacific Power, PECO, PA, Dominion Virginia, Madison G&E

Rates designed to be cost based, revenue neutral. Tesla pays a lot of

attention to - mix of EV specific and general rates

Q&A:

Q: Tim: distribution peaks? (not just generation)

A: good solution is to recover marginal distribution costs. Look at as incremental load is important, provides context for appropriate cost causation. PG&E and SDG&E - only recovering marginal distribution costs initially because incremental load. Eversource, CT - translating all demand charges into avg per kWh rate other commercial customers are paying and apply to EV load.

Q: Sean Skaling - looking at these things. What is a fair LF to charge?

Maybe average of the commercial customers on that class, what is their LF and set a cap. Have they seen this done?

A: case he showed capped at 10% (mechanism right (rate?) block?), still at 37 cents in CEA - high but not \$2. 30% is a pretty smooth hand off - low end of standard commercial customer LF, high end of DCFC

Out of time, but get Tesla folks and Alex Leumer of Chargepoint to join for more discussion in a technical session

Updates& Announcements:

Cordova Electric - (Tim standing in for Clay) - Electrify Alaska! Coming up, virtual.

Updates

Chugach Electric Association (CEA)

Sean: started 6 different EV charging programs. Residential incentive - get \$200 credit if charge at level 2 at home (to know where people are charging) - ~13 people signed up. Commercial \$500 credit if install level 2 charging. Specific one for Hotels - similar to commercial. Fleet charging - energy only rate if charge in demand shadow (night), 2 for rental companies - extended test drive, uber type drivers. Info on website <https://www.chugachelectric.com/energy-solutions/electric-vehicles>. worked with Dimond Center to install a new L2 Charger on the south side of the mall. Recently held a ribbon cutting. This is the third in our research program (Alyeska Resort, South Anchorage Mall already installed). The final installation under this program is underway at a Muni parking lot near Rustic Goat! Coming soon.

Municipality of Anchorage (MOA)

Pierce - DOE grant - 2 E garbage trucks, one box truck, e-camion

battery backup 120kWh charger - \$100,000 cost savings over life of unit over life of charger. Mobile - in half-container can be moved to new facility. 25K from AEA to evaluate charging eq., ~600K from DOE. ACEP - data collection and analysis. Received final notice to fund grant, working through muni process.

Working on EV rough in - EV readiness on new home construction. Future proof AK home stock, reduce unsafe ad-hoc solutions. Adopted by intern. code council at some point - pitching to assembly for revised building codes for ANC. Oct 27 Assembly meeting.

[Alaska Electric Vehicle Association \(AKEVA\)](#)

Dimitri - had board elections. Continuing EV outreach and educ. - UAA green fund to install level 2 (and possibly 3) charger. Presented to Ak IEEE - what fast charging installation looks like, EV growth. Pending petition at Regulatory Commission of AK. started Electrify Last Frontier Supporters - feature a business each month, do an article. Received google ads grant to spend up to 10K each month to promote EV efforts in AK. Eval tool - database that takes VINs from DMV and decodes to count EVs - similar numbers to CEA. Looks pretty good for counting vehicles going forward. Looking for partners to disseminate the data - perhaps quarterly. State of AK libraries and Museum - evaluating for charger placement. Looking to package that to shovel ready projects if funding becomes available. continue with site searches and evals - close to \$200 - transformers, business owners etc for level 2, level 3 charging. Look for efficient installations around rail belt, looking forward to funding to install more. Ride and Drive on hold due to COVID. Excited about muni building codes, want to support, will take work talking to builders, get them on board - see as a marketing feature.

[Chevrolet of Wasilla](#)

Tyler Bethune - Installed a DC fast charger. 25kW. CCS plug. Also a 9.6kW level 2 - J1772. Expensive to install. Ideal locations in lot 3-4x more expensive. Installed close to electrical service. Premier Electric did it for them, quick. \$4100 installation cost (not incl. material costs). 15' of conduit. additional \$5k if wanted to go 150' more. New 160A breaker. Free to public for now...capitalize on drawing in potential customers. Steve wants to know what current demand charge is based on, he will look.

(ACEP - EV temp map coming soon, temp data! Cold WX report coming soon. EV electric cost calculator up on AEA site

<http://www.akenergyauthority.org/What-We-Do/Energy-Planning-Project->

Development/Electric-Vehicles - Skipped!)

AEA

Betsy - hoping to get VW site host RFA out by end of month, plan to have it open for 30 days and close to see what is there, but keep accepting applications - close every 30 days. Might modify as they go if need to fill in charging gaps.

Taylor - 3 locations for State property located charging stations - \$40k reimbursement for level 2s

Discussion of Draft Charter

Amendments to document:

Assumptions are made that there is \$ beyond the VW settlement (was hoping for DOE funds).

Strike specific community names (they were providing cost shares from that cost proposals

Discussion of some no's:

Chris Rose - soft no - suggests: 2.2 say 'accelerate' rather than promote

Josh Craft - soft no - long time since look at this for discussion - maybe needs discussion
Andrea Tousignant - soft no - wants to see mention of equitable

draft Adopted with highlighted changes, bring forward amendments in the future for vote.

Zoom Chat Transcript

10:02:55 From Louie Flora - The Alaska Center : Louie Flora

10:03:01 From Louie Flora - The Alaska Center : The Alaska Center

10:03:05 From BBerberich : Good Morning -

10:03:08 From Tanya Krackovic : Hi Tanya from eCAMION Inc. out of Toronto Canada - happy to be here

10:03:11 From Pierce : Hi this is Pierce Schwalb, with the Municipality of Anchorage

10:03:18 From Sean Skaling, Chugach Electric : Good Moring everyone! Sean Skaling, Chugach Electric. In my office in Anchorage.

10:03:22 From TMillion : Travis Million - Copper Valley Electric Association - Valdez, Alaska

10:03:22 From BBerberich : Bradley Berberich, New Horizons Telecom, out of Palmer Alaska

10:03:24 From Cassie Powers, NASEO : This is Cassie Powers with the National Association of State Energy Officials (NASEO), based in the Washington, DC metro area

10:03:24 From Michelle Wilber : Michelle Wilber, ACEP - in Anchorage

10:03:33 From Brian Winnestaffer : Brian Winnestaffer - Chickaloon Native Village

10:03:35 From Kyle Wilson : Hi everyone. Kyle Wilson with Siemens, Alaska

10:03:36 From Shaina, Solid Waste Services : Hi - Shaina Kilcoyne, Solid Waste Services, Municipality of Anchorage

10:03:37 From kirkmartakis : Hi Kirk in Cantwell

10:03:47 From Francesca Wahl : Francesca Wahl with Tesla

10:03:50 From Phylicia Cicilio : Good morning, Phylicia Cicilio ACEP - Fairbanks

10:03:52 From amwoolery : April Woolery, DOT&PF Northern Region, Fairbanks

10:03:58 From Clay Good - REAP : Good Morning All. Clay Good with the Renewable Energy Alaska Project. I'm working from Deishu - Trails End (Haines) on Chilkat and Chilkoot traditional lands.

10:04:00 From Tyler Bethune : Hi, I'm Tyler Bethune General Sales Manager from Chevrolet of Wasilla.

10:04:01 From BMcGregor : Hi. Betsy McGregor from AEA

10:04:04 From shein : hi, Dimitri from AKEVA

10:04:05 From Shaina, Solid Waste Services : 744-1815 is Shaina

10:04:18 From bdixon : Hi, Brandy Dixon from AEA

10:04:19 From Connie Fredenberg : Connie Fredenberg sitting in Palmer, AK. Helping Northern Arizona University, ITEP, with Tribal VW Fund which can fund EVs and charging stations.

10:04:20 From Dale Banks : Dale Banks, Homer, owner of personal electric vehicle business

10:04:28 From Alex Leumer, ChargePoint : Hi all! Alex Leumer with ChargePoint

10:04:37 From Steve Colt : Steve Colt, Alaska Center for Energy and Power and also concerned citizen, typing in Anchorage

10:07:13 From Andrea Tousignant : Hi Andrea Tousignant, originally from Anchorage and I work in EV Infrastructure here in Seattle and have had the fortune to work with Chugach to sell several of the L2 charging stations at the new sites. Also currently working with WSU on a Fleet installation and site assessment project. Happy to chat about fleets and charging infrastructure success and barriers.

10:07:37 From mmartensen : Marten Martensen Continental Auto Group (Anchorage Car Dealer)

10:33:14 From kirkmartakis : Basically very good presentation, But we need to stop talking and start funding EV charging infrastructure build outs NOW!

10:46:59 From kirkmartakis : I hope these presentations will be available on on demand video for utility boards and other important people not here today

10:48:26 From Tim Leach SparkBox & ACEP : Thanks, Kirk. Yes.

10:49:47 From kirkmartakis : Same with the last presentation

10:51:32 From Tim Leach SparkBox & ACEP to kirkmartakis(Privately) : When I get Cassie's presentation we will circulate it.

10:58:18 From Steve Colt to Tim Leach SparkBox & ACEP(Privately) : He is talking about generatin peak, maybe not distn system peak

10:58:36 From Tim Leach SparkBox & ACEP to Steve Colt(Privately) : Good point.

10:59:23 From Tim Leach SparkBox & ACEP to Steve Colt(Privately) : Each feeder could be unique, but wouldn't gen peak be broadly representative of distribution system peak?

11:08:28 From kirkmartakis : Another great presentation

11:16:00 From kirkmartakis : Thank you Chugach for being a large utility leader

11:17:47 From Andrea Tousignant : I am not seeing slides? are there some.

11:18:00 From Michelle Wilber : no slides!

11:18:28 From Andrea Tousignant : thx!

11:18:41 From Andrea Tousignant : thank you Sean!

11:19:14 From kirkmartakis : and CORDOVA,

11:19:24 From Sean Skaling, Chugach Electric : Here's the link to Chugach EV programs:

11:19:29 From Sean Skaling, Chugach Electric : <https://www.chugachelectric.com/energy-solutions/electric-vehicles>

11:22:07 From Sean Skaling, Chugach Electric : I forgot to mention that we worked with Dimond Center to install a new L2 Charger on the south side of the mall. Recently held a ribbon cutting. This is the third in our research program (Alyeska Resort, South Anchorage Mall already installed). The final installation under this program is underway at a Muni parking lot near Rustic Goat! Coming soon.

11:24:08 From kirkmartakis : So glad to hear of this progress

11:32:39 From kirkmartakis : Good job AKEVA

11:34:43 From kirkmartakis : RIGHT ON WASILLA CHEVY!

11:35:11 From Michelle Wilber : What was the cost?

11:35:21 From Michelle Wilber : I was typing...

11:37:10 From Michelle Wilber : Thanks!!

11:37:51 From Shaina, Solid Waste Services : That would be good info as we discuss laying conduit for new construction to prep for EV charging

11:38:25 From Andrea Tousignant : 25kWh is a lot less expensive to install as well.

11:39:00 From kirkmartakis : and very useful

11:39:05 From Andrea Tousignant : than 50kW or the future-proof for 150kWh

11:39:55 From kirkmartakis : Bolt is a great car

11:41:11 From Andrea Tousignant : I have another call at 1pm

11:41:19 From Andrea Tousignant : I can not

11:41:26 From Connie Fredenberg : I have another call at 12

11:41:40 From Andrea Tousignant : whoops I mean 12noon

11:42:49 From Andrea Tousignant : CLAPPING!!!!!!! for the RFA

11:43:10 From Josh Craft : how long will the RFA be open?

11:47:38 From Andrea Tousignant : The charter is great! I hope to see equitable EV Charging infrastructure access wording as part of the Mission statement.

11:48:30 From kirkmartakis : yes

11:48:31 From Kyle Wilson : Yes

11:48:31 From Steve Colt : YES

11:48:32 From chrisrose : NO

11:48:35 From Brian Winnestaffer : yes

11:48:35 From Michelle Wilber : yes

11:48:35 From Carolyn K. : Yes

11:48:44 From Josh Craft : no

11:48:51 From Dale Banks : yes

11:48:56 From Connie Fredenberg : I must abstain - I did not get a chance to study it before this call.

11:49:02 From Shaina, Solid Waste Services : Can we have discussion per the no's?

11:49:13 From Andrea Tousignant : no

11:49:15 From Tanya Krackovic : abstain

11:50:31 From kirkmartakis : YES

11:50:45 From kirkmartakis : to Chris

11:51:31 From kirkmartakis : We need to start using these moneys for current EV drivers

11:54:16 From Andrea Tousignant : Yes

11:59:47 From Connie Fredenberg : This was interesting and informative. Thank you!

12:00:02 From Andrea Tousignant : I really like the work on the criteria, but would not vote to pass today based on incorporating destination charging to the safety net (same thing), distance and adding more specs on Provider charging network requirements to be discussed...dropping off for another meeting... sorry.

12:02:33 From Brian Winnestaffer : I have to go. Thanks for an informative meeting. Cheers!

12:03:35 From kirkmartakis : Great job Michelle

12:04:58 From kirkmartakis : VERY GOOD POINT D

12:07:09 From kirkmartakis : The best dollars being spent today is the funds coming out of private pockets now and not AEA

12:07:40 From kirkmartakis : for EV infrastructure in Alaska

12:07:59 From kirkmartakis : yes

12:08:09 From shein : yes

12:08:48 From Shaina, Solid Waste Services : Yes

12:08:56 From Tanya Krackovic : yes

12:09:08 From Kyle Wilson : yes

12:09:29 From chrisrose : I would like to ask a question of Dimitri

12:09:30 From Steve Colt : yes

12:10:06 From kirkmartakis : use of these moneys will never be perfect

12:11:06 From kirkmartakis : this will not be the end of ev charging sites funding once the 3 phase demand charging fees

12:12:40 From kirkmartakis : I DO, but D is right

12:12:42 From Steve Colt : Why does McDonalds build entire indoor play areas for kids?

12:13:00 From Sean Skaling, Chugach Electric : Yes

12:13:12 From Dale Banks : yes

12:13:17 From kirkmartakis : THANK YOU M

12:13:30 From Steve Colt : Why do lot owners host coffee shacks?

12:13:47 From chrisrose : Thanks, Michelle!

12:15:54 From BBerberich : Thank you for the time

12:16:16 From shein : because they can sell more than one cup of coffee per day

12:16:18 From Kyle Wilson : Thank you, this was an excellent meeting!

12:16:23 From shein : thank you