

Climate Impact Advisory Committee
APPROVED Meeting Minutes



Date: July 2nd, 2020
Location: Zoom

QUORUM	Y
Members Present	
Kaylee Galloway	X
Casey Harman	
Erika Lautenbach	
Treva Coe	X
Phil Thompson	X
Ellyn Murphy	X
John Yakawich	X
Katherine Kissinger	X
David Kershner	X
Cynthia Mitchell	X
Alex Ramel	
STAFF Chris Elder	X

1) Meeting Began at 5:30 PM

Meeting began with roll call of CIAC members

Public in attendance:

- Atul Deshmane, Whatcom PUD Commissioner
- David Hostetler
- Eddy Ury, ReSources
- Jim Lazar

2) Review and Approval of Minutes

David moved to approve the minutes, but wanted to make a change on page 7 to the minutes to reflect that he was inquiring about the average percentage reduction per year needed to get to NetZero emissions by 2035. Phil seconded and the motion passed

Ellyn asked if there was anyone who wanted to make a public comment before the meeting began. No comments were offered.

3) Presentation of Energy Supply 2020 Update

By: Cynthia Mitchell and Jim Lazar

Three Key Takeaways:

- The National trend for carbon-free electricity is key to reducing GHG emissions.
- Lacking more information, PSE appears to be on a path that will not get us to zero emissions and CETA compliance
- Public utility power in WA is over 90% carbon free and an alternative to private utility power.

Carbon free electric grid is the main goal for the county

Slides 4, 5, & 6, Emissions breakdown:

Electricity is 70% of built environment, gas is 30%

Jim pointed out that the breakdown of emissions of Whatcom county is quite distinct compared to other counties

Kaylee asked about the difference between industrial point source and industrial energy Cynthia said the industrial point sources are the refineries, Alcoa, and the Whitehorn generation facility in Whatcom county. Phil said that the industrial energy is the amount of electricity and natural gas they use. Kaylee asked how the curtailment will impact Alcoa's emissions. Eddy said it would be significantly reduced.

PSE is phasing out their use of coal, so the question remains as to how PSE will replace this generation. Regarding a comment made by Cynthia, Ellyn asked why private utilities are limited to 30% hydro. Jim said it was simply limited infrastructure since most hydro is owned by public utilities such as Bonneville Power Administration (BPA) which preferentially sells to public utilities.

Slide 7 on fuel mix comparing PSE with BPA: Dave asked about the operating life of the nuclear station that provides the 9% nuclear energy to the BPA fuel mix. Jim said it is one facility that has a 25-year contract. But it may or may not last another 25 years because most nuclear facilities are decommissioned when something substantial breaks. Ellyn mentioned there are plans to pilot small nuclear reactors in the Tri-Cities.

Slide 8: Cynthia said that reforming the electrical system is how we get to net 0 emissions. We need widespread renewables, energy storage, and widespread distribution of resources. This allows for easier transition of transportation and creates more space in the electric grid.

Slide 9: Climate change is impacting electricity loads, which is an unknown factor currently, but is actively being modeled by the Northwest Power Association and BPA. We need to have utilities with flexibility. Jim explained how changes in climate regarding rain and snowfall could impact hydro requiring storage solutions for water that can be used in times of drought or reduced rainfall. Some solutions include things like pumped hydro facilities. These are still in the early stages of development.

Slide 10: Washington is a net exporter of electricity and imports all fossil fuels. The Pacific Direct Current Intertie near Bonneville Dam exports electricity to California to balance the CA grid. During the day WA imports some electricity from solar farms in the SW. At night WA exports electricity when the sun sets.

Slide 11: Solar storage projects are comparable in cost to other generating operations, like coal and gas plants. Wind energy is much cheaper than fossil fuel options. Cynthia said that going in the direction of renewables will save money for consumers in the long run.

Slide 12: Ellyn asked if the project on this slide included wind or if it was just solar Jim said they were just solar projects.

Slide 13 on Ten Strategies for managing the load on the electric grid: Demand response could change with advances in smart technology to control demand to optimize it for times where there are surpluses of energy. Applications could be used in household appliances, water heaters, and electric vehicles. Regional demand response group for Portland General is one of the leading utilities in the region. PSE is lacking in demand response. Portland General Electric has about half a million electric water heaters under their control – a good example of demand response. Cynthia said that energy companies do not need AMI to control the water heaters. Water heaters just need FM radio capability (or internet) to be controlled by the utilities. Load control of Air conditioners can help flatten the summer peak of electricity consumption.

Phil asked about electric heat contributing to the electricity load. Cynthia said that space heating is not their biggest drain. Hot water heaters are the biggest drain. Jim said that electric heat isn't as common across the country so it was not included in the slide. Jim said efficiency should be prioritized first when it comes to space heat since it is harder to store.

Slide 16 on Characteristics of PSE electric system: Phil asked if PSE has plans for a roll out of smart meters. Cynthia said yes, PSE has a program set for around 2022 to help with the roll out of smart meters.

Slide 17 on Key elements of CETA: Hard stop off coal by 2025. Soft stops for gas: GHG Neutral by 2030, GHG zero emissions by 2045. Right now, renewable energy credits can be purchased by consumers. CETA doesn't mean we will be off gas by 2045, utilities could get a waiver from UTC for compliance if they demonstrate that gas is necessary for grid integrity, this is the route PSE is currently taking. CETA cost cap: utility total revenue can't go up more than 2% per year for CETA compliance costs.

Slide 18 on the CETA Process: Phil Asked about Request For Proposal approval. Cynthia said it is the UTC that will accept the RFP. And they approve it for private utilities. Public utilities are approved by Commerce.

Slides 19, 20, and 21 on what we currently know about PSE compliance with CETA:

Atul asked about if PSE having trouble complying with CETA. Cynthia said that is her statement- that PSE will argue they are in compliance with the exceptions to CETA. But they are not on track currently to meet the GHG goals.

Slide 22: Public utilities that get their power from BPA are nearly carbon neutral
Public utility power is 90% Carbon free

Slide 23: PSE produced 15x more carbon pollution on a per customer basis than BPA utilities in 2016.

“BPA Full- Requirements utilities” Whatcom county could become a customer of BPA.

Additional Q&A on Presentation: Atul asked a question about slide 12 on energy storage. Atul thinks there are a big gap in energy storage and asked Jim where he gets those numbers. Jim said those numbers are bid costs for solar + storage from the southwest. Would be likely for costs in places in eastern WA such as the Moses Lake area. Real costs. Weekly storage is the challenge, or extended times where you can't recharge the battery. Battery storage is cheap to build and only expensive in operation. The cost of battery production has gone down, approaching \$100/kwh for storage. Batteries are cheaper than gas generating turbines. Can be called on when there are transmission outages. Batteries could be stationed at specific sites around the city for emergency coverage. Bloomberg Predicts \$75/kwh by mid 2020's. Battery costs have been going down in cost for the past few years to the point that they are now a more realistic option.

Atul asked how the folks at Energy Northwest feel about this. Jim said they are generally 10 years behind the science.

Eddy asked if our public utilities could expand storage so that we have less need to use gas from PSE? Jim said that small public power utilities don't innovate as much as the large ones like Seattle and Tacoma. The NW ones have been held back by reliance on Bonneville since it has such a low wholesale rate for electricity. BPA wholesale rate is 30% lower than PSE cost of power. BPA has federal resources, and tax-exempt funding and no federal income taxes. Real savings comes from power supply and capital investment.

4) Discuss and Review Committee Membership & Vacancies

What capabilities should we request in applicants, any names you can think of? Sustainable farming, transportation etc. send info to Chris & Ellyn

Phil said he might know some people at WWU. Dave is contacting people in sustainable farming. We need to add 3 new members. Advertising in early September with the Council potentially voting on it in October.

5) Work Group Updates

Transportation: Phil: they are still refining their list of 300 measures and are thinking about all the goals, strategies, and measures with a goal of roughly 30-40 some measures might be transferrable to other groups. Kaylee mentioned they were refining the actions by thinking about what the county council directly is able to do and what should we advocate for actions to be taken up at the state and federal level.

Natural Resources: Ellyn is developing a chapter outline for Natural Resources. Like transportation, they also had a lot of different measures/actions. We may be able use this outline as a template for other groups

Communications and outreach: Ellyn and Dave have been meeting with city officials about making short videos on YouTube about climate change topics. Dave has been reaching out to sustainable connections about possibly partnering with them.

6) Old & New Business

Ellyn asked if any groups were willing to present at the August meeting

- Phil said maybe for transportation
- Cynthia wanted to do another presentation with Jim about energy
- Kaylee mentioned bringing someone in to talk about climate policies at different legislative levels.

Ellyn mentioned The Growing Climate Solutions Act of 2020 introduced in the senate focused on Agriculture. She said she could send it out in an email to everyone.

7) Public Comment

Eddy mentioned there were meetings coming up on July 23 of the energy strategy advisory committee to develop a CETA strategy

Ecology is assessing GHG's EIS county is the SEPA authority

8) Next Meeting Discussion Topics

Eddy could do a presentation on what the county can do. Tentatively scheduled for next month.

9) Meeting Adjourned at 7:30 PM.

Recorded By: Katherine Kissinger
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