Cully Energy Plan PAC Meeting #7 Meeting Agenda September 18th 2017

Meeting Agenda:

- A. Welcome and check-in
- B. Cully Energy Snapshot Dat Presentation
- C. Energy Plan Outline and Pilot Feedback
- D. October/November PAC meeting
- E. Closing and Evaluations

Welcome/Bienvenidos Sept. 18" 2017 LIVING CULLY LIVING CULLY LIVING CULLY

Name (First & Last)	Email or Phone Number	Are you a volunteer or want to be involved with Verde/Living Cully?
Nombre y Apellido	Email o numero de telefono	Eres un voluntario o quiere involucrarse en Verde/Living Cully?
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	Nombre y Apellido	Nombre y Apellido Email o numero de telefono Driana Marcha Dacolo Andria Jacolo Holly Braun Main el Timan Tach Sipple Pesince Rajeer - William Holly Braun Manges Alan Hopoleto

Cully Energy Plan PAC Meeting #7 Meeting Notes 09-18-2017

SLIDE 1: Cully and the City of Portland Current Condition

Holly: First stat is congruent with previous presentation; but people are barely paying more – how do those two go together (especially because space heating is expensive)

- New ETO data last week (baseline changed: 2% population consuming 2% energy)
- Process question: how will we know when we need to disregard previous slides? –
 challenging when bringing slides to internal organizations
 - Agreement: will update PAC when data analysis changes

SLIDE 2: Average Monthly Electricity Consumption Graph

Oriana: Question about peaks in August and October and valleys in November and July; consistent with Portland data except for October which is an aberration

Holly: Process question: what is the QA?

• Total consumption from ETO and divide by total households; Verde analysis

SLIDE 3: Cully and City of Portland Current Condition

Holly: 63% gas penetration in Cully and 80% in Portland (question about how NW Natural data aligns with ETO data)

Andria: Question on income numbers: household income? And what is non-low-income * Yes

Alan: Important to make distinction between median annual income and area median income

- Median annual income = median income of the category in the table
- Group finds that the Median annual income column is confusing especially in terms of how it works with AMI

Desiree: May need footnotes depending on the audience to explain columns

Oriana: Is it possible to have a row for "low income" households in Cully?

No

SLIDE 4: Per Person Consumption of Electricity, Natural Gas, Carbon Emissions...

Andria: (brought Climate Action Plan) Carbon reduction = 2 metric tons/person but in table it's set at 0.6 metric tons (85% reduction)

Holly: Even if we're starting lower than the City average and we go toward 0.6 is that too aggressive? Should the rest of the City pull more of the weight

Alan: It's a good thing if it's easier for a low-income community to reach a carbon goal, but may not want to burden community by setting a more aggressive goal

Carolina: Which measure of determining carbon emissions goals should we use?

Lizzie: Like per person goal; reasoning is sound. Faith in ability to do analysis!

• This is only household use; 2 metric ton includes transportation

Oriana: Want to think about goals in terms of number of solar panels or houses weatherized?

Holly: This path feels linear and that path feels more complicated

Holly: Set goal based on percentage of current carbon footprint

Andria: Good news: ahead of PDX per person therm and kwh goals

Holly: Do these numbers factor in the grid getting cleaner over time?

No; but that makes the goal easier

Lizzie: Formula assumption in conversion to carbon emissions would evolve for new, cleaner grid

Holly: That lowers the emissions goals that have to happen at the community level; 50% renewable by 2050

RECOMMENDATION: Bring in calculation of centralized cleaning of the grid to carbon emission goals for Cully

• ETO has statewide power purchasing formula/utility data

SLIDE 5 (graphs of Slide 4)

<u>SLIDE 6: Cully Neighborhood Targeted Energy Consumption Goals</u>

Lizzie: time intervals on graph are confusing and make the last quarter of the work look backloaded

Alan: You want the X axis to be equal intervals

Lizzie: Looks like a straight line percentage reduction across all years; lots of unknowns about future technologies (considerations for calculating energy futures); would it be helpful to have insight into forecasted opportunities?

SLIDE 7: 65 kwh reduction per person per year

Holly: This scale makes it look like more reduction than it actually is; words and visual don't go together

SLIDE 8: Cully Energy Snapshot Discussion

No community energy generation target

Andria: How would you define community-based energy development? Is it about siting or ownership? Different conversation if you change based to shared

Alan: Center for Social Inclusion informed definition

Carolina: Idea for energy generation target: PAC work off Google Doc to create definition

Lizzie: Go to community (Cully) for definition

Would take a lot of time

Zach: PAC create definition and run by community

Maiyee: May not be fair to put definition on to the community given education gap w/ PAC

Desiree: Not sure what community energy generation; don't know what universe of possibility is; how does generation look from a resiliency perspective that would need to be invested in the community that falls outside the utility

• Would love a conversation around a microgrid? Is it a nonstarter?

Andria: Need to recognize the limited role the City/County play in 100% Renewables Resolution given the current regulatory structure

Alan: Best we can we want to mirror the resolution; there are some definitions out there like the Center for Social Inclusion ("community based decentralized energy")

Action Item: Put out CSI definition to PAC and community members to see if definition resonates

Cameron: Need to resolve definition of ownership of generation

Andria: Sacramento project with community owning solar/working with utility (Sacramento Municipal Utility District)

SLIDE 9: Living Cully Community Energy Plan Audience

SLIDE 10: Living Cully Community Energy Plan Pilot Selection

Chose pilots based on likelihood to initiate in 2018/2019

SLIDE 11: Living Cully Community Energy Plan Outline

a. Ductless Heat Pump Coop

b. St. Charles Church

Andria: No reason you couldn't add a battery onto the solar and utilities may be supportive; think about battery upfront/battery ready

Lizzie: Or smart inverter at the very least Zach: That project has a storage lite inverter

Lizzie: Tell Neil Kelly not to axe storage; there may be funding elsewhere Alan: Deciding whether to apply for Blue Sky with St Charles or alone

Lizzie: ETO will be cofounding with Blue Sky and RDF

c. Oak Leaf Mobile Home Park

Using Habitat NRI funding for replacement?

d. Living Cully Plaza Rebuild

Holly: Is this really a pilot?

Alan: Innovations to site that wouldn't normally be available for a CDC project (water, energy, disposal); innovation could be feature itself or existing technology or practice but needed to get some new regulatory treatment to place innovation (innovative delivery)

e. Community Solar
Planning 2018/build out 2019

f. Community Educational Campaign

SLIDE 12: Plan Outline and Pilot Discussion

Technical Assistance: Solar on mobile homes, neighborhood scan for community solar locations and capacity (how many households, size of site, where...)

Lizzie: QA support and technical training for ductless heatpump coop

Desiree: Is it a vialbe solution to have a solar array on industrial building adjacent to mobile home parks (close to but not on park)

"Better housing by design Project"; take temperature of area around Living Cully Plaza and take temperature after and set design of project to set a heat reduction goal

Cameron: Technical assistance for portable solar that would be owned by a nonprofit

Holly: Gas seems to be missing in this; want to brainstorm how to bring it in; ductless heat pumps only work in ducted homes; create new gas infrastructure with eye toward reducing bills (NW Natural has pilot dollars to try these different things); converting oil and wood heated homes

Desiree: Need section or for each pilot description how each initiative will work toward antidisplacement

Cameron: Each description could include what doing the pilot well will set up for a future pilot; technical assistance/evaluation component: how dollars are flowing through project to neighborhood

PAC Recommendations and Next Steps (added by Carolina after the meeting)

- Explore the possibility of using a calculation of centralized cleaning of the grid to carbon emissions goals for Cully from slide 4 (ETO has statewide power purchasing formal/utility data).
 - Dat and I are meeting with ETO Thursday to go over some of the comments from the PAC meeting.
- Please notify PAC members if there are big changes in data analysis presented.
 - We are finalizing the data analysis for the energy plan over the next two weeks and will be sending updates and asking for feedback from PAC members via email.
- Create working definition for community based/shared energy development.
 - I will be sending out an email soon with the Center for Social Inclusion definition on community energy development and will ask PAC members for comments.
 We will then be taking the definition back to community members for final vetting.
- Incorporate storage into pilots with solar PV.
 - Alan will be reaching out ETO and BPS for partnership opportunities to incorporating solar.
- Absence of natural gas focused pilot.
 - o I will be reaching out to Holly about a specific pilot in relation to new gas infrastructure and or converting oil and wood heated homes.
- Sending meeting materials the Friday before the meeting does not provide enough time for PAC members to prepare for meetings.
 - I will make sure to send meeting materials at least a week before the next meeting.