

ENVIRONMENTAL INITIATIVES COMMITTEE

Meeting Minutes

Date: May 6, 2021

- Call to Order (roll call)
 - Vrinda, Stan, Steve, Pat, Jolie, Sasha, Aileen, Peter, Anand, Srini
 - Missing April
 - Kjell joined as public
 - Hayley Ditzer wanted to join but could not
- Approval of Minutes of the meeting on April 1, 2021
 - Anand made the motion, Srini seconded, unanimously approved.
- Agenda Review
 - All ok.
- Topics of Interest /Open Discussion
 - Anand: Town picnic? Should we have an EIC booth?
 - Vrinda: Write up a summary of the GHG inventory? In the Parks & Recreation Departments Activity Guide, the deadline for submissions is July1.
 - Jolie: If we do have a booth at the picnic or whatever, have a board with post-it notes, so residents can add ideas.
 - Peter: Confirmed that there is no Town picnic this year.
 - Vrinda: Email from Vrinda to Town Council; group effort, summarizing our work on CAP.
- Water issues in LAH--Jolie
 - Western US in drought conditions, ¾ the of California under exceptional drought.
 - Should the EIC be involved in this?
 - Steve: Yes, the EIC did the WELO (water efficient landscape ordinance (**WELO**)) in 2012--new normal, not drought.
 - Peter:
 - Yes. This would be the committee.
 - There used to be a Water Conservation Committee. After it was disbanded the portfolio was given to EIC.
 - There is an update to WELO. The ordinance imposes a water budget on new property development projects which is a quarter of what the state imposes. We should be doing an audit of those properties to see the effectiveness of the ordinance. Since 2014, the water use in Purissima Water District (2/3rd of the town) has gone down by half. Has crept up in recent years--11% above last year -not sure why.
 - The water allocation was based on the number of connections in 1982. We have been adding connections since then and we have overrun the water we have rights to. We are water which is not guaranteed. We were at 140% of our quota and now we are at 100%. In the prior years we were a little lower.

- Anand: Not enough water to collect. In India they insist that rainwater goes into the ground; no runoff.
- Sasha: Collect rainwater? Peter: Not enough rain to justify it. Steve: In one case in Palo Alto, water only lasted mid-June.
- Stan: Graywater use? Can you use it to water plants? Vrinda: need to process it. Peter : only limited use for Graywater
- Pat: County offers rebates (\$2/sf) to replace lawn with low-water alternatives.
- Peter; We do not limit lawns but limit the water.
- Aileen: "Beef is the new Coal". Beef is at the center of both water and carbon issues.
- Kjell: CA has laws that require water to go to the ocean... before 1492 CA was wasting 100% of it's water. (?)
- Stan: Should we shift the bball fields to artificial turf? Need to be researched.
- Peter: The fields are being irrigated very efficiently. Steve: 3 professional bball teams have shifted to artificial turf in the past year.
- Srini: Water is very different from GHGs because we have house-by-house water use. Could shame people.
- Peter: All water ordinances are by Purissima Hills (and CalWater). Stan: Could adjust MFA/MDA.
- Subcommittee on water?
- Lessons learnt from Forming a Microgrid --Sasha, Peter
 - Town of Gonzales wanted to increase their agricultural processing footprint--
 - Concentric Power worked with town of Gonzales, 4 yr project.. Won bid in 2018. Proposed 14.5 MW of PV (~20 GWh), plus 10 MW natgas, 27.5 MWh battery
 - Approached PG&E may be add substation. Came up with big numbers and lead time of 5-7 years.
 - First stage--the town worked with a couple consulting companies, One company highly talked about was Our Energy Co., they walked the town through municipalization of their power grid--tariffs & fees to be paid to CAISO. CPUC and PG&E
 - The second phase start construction on the Microgrid. At present it is an island --does not interconnected to CAISO or PG&E. Rest of the town is buying from PG&E. The municipal power company is the intermediary, PG&E is the long distance distributor and the town is the local distributor and then there is the island of the microgrid which contracts with the local power company.. The microgrid with total built out capacity of 35 MW is ready..
 - The next stage will be to cut out PG&E and directly contract out with CAISO, by bringing the generating capacity online with the local grid.
 - Two sources needed for being your own utility. They will be CAISO and municipality -- no PG&E.
 - Total cost \$70 million (\$50 million in for generating capacity), natural gas plant is mostly idle put in there to deal with weather)-< infrastructure than what LAH needs
 - Delivering 30 GWh to the industrial park (55-60 GWh in LAH)
 - Concentric is doing a fully undergrounding projection a ranch close to Bakersfield

- 16 sq. miles of ranch outside Bakersfield
 - Removing diesel powered water pumps and replacing them with electric water pumps, putting solar and battery with natural gas backup
 - Total power is <LAH but the total service area is roughly = LAH
 - In Gonzales the delivered power cost is 20c per kWh for generation which includes exit tariffs. When those are paid off the cost goes further down. With grid smoothing they can turn a profit.
 - Town raised a bond for putting the distribution network, Concentric owns the generating infrastructure, they sell the power over years. That's why the high cost of)\$0.20 cost which includes the cost of financing but still < than PG&E offer.
 - Don't want to underground everywhere... due to corrosion especially if there is agricultural runoff?
 - Check out the PG&Es CMEP(Community Microgrid Enabling program?) LAH might qualify.... but didn't seem like a good deal. PG&E gives some money for instructure but the cost they extract-they continue to be the distributor at the current rate schedule.
 - Suggestions: Even if we have half baked plans of undergrounding Talk to two consultants on municipalization .Sasha--it is doable
 - Steve: No PCIA? (Power cost indifference adjustment stipulated by CPUC to equalize the burden of paying for the loans of the past) over and above the cost of generation to be paid to PG&E. Sasha to investigate this next.
 - Peter: Is there a connection between municipalization & microgrid?
 - There has been no new municipalization in the last 40 years. Palo Alto 19c and Santa Clara 12c less than what we pay PG&E
- Undergrounding progress-Peter
 - Does undergrounding provide an opportunity to investigate microgrid and/or municipalization? Need to explore Who will own the undergrounded infrastructure?
 - Need to ask questions about the design of the LAH infrastructure--should it be different, what should change
- Progress report on Climate action Plan-Subcommittee update
 - The subcommittee decided to add air travel. Unlike most towns the air travel is <5% is considered as non-material. Worldwide it is about 2% of the emissions.. According to the consultants it is 50% for LAH in 2019. Without air travel we hit our target for 2025 of reducing our emissions by 30% below 2005. If you include air travel it is no longer the case.
 - The CSG Consultants included the combusted emissions of NG, but NG leakage rates impact the calculations significantly. If we consider NG leakage rates, it changes the inventory substantially.
 - Commercial use is dominated by Foothills college. CSG used the emission factors of SVCE and PG&E. Foothill college does not use SVCE or PG&E. It uses direct access -at 17c or so-- from Constellation Energy--cheap dirty energy, their emission factors are more than double that of PG&Es.

- CSG did not consider the high rate EV adoption in LAH. Anand has collected data to reflect that. BAU projections
 - EV adoption will drive down transportation emissions
 - Air travel was down 75% in 2020
 - Electric and gas use went up in COVID
 - 2030 CA's goal- reduction of 50%. If we take out the air travel we are pretty close to that goal
- Peter: Add data on per-capita emissions, especially for air travel
- Steve: LAH per capita carbon footprint is the highest in the US. We need to reduce it and show that we can reduce it
- Srini: The example of Steve reducing carbon footprint from 35 metric tons/year to under one metric tonne is a powerful story that needs to be told.
- Aileen: Why exclude air travel? Same as vehicle travel. If the goal is to educate... may not want to show average LAH air travel--research suggests that if everyone is doing it, then there is no pressure to change. .
- Peter: What interventions would be effective?
- Aileen: Invite Diane Baily to an EIC meeting to guide us through nudges for behavioral changes. Steve suggested Josie or TomK as well.
- Stan: Emotional intelligence is key...
- Next EIC meeting: June 3, 2021
- Adjournment