

Energy Plan Commission

Meeting Minutes 17 May 2023

Regular Meeting (City Hall Room 430)

Attendance: Commissioners: Tari Rayala, Gary Olson, Robert Reichert, Cassandra Theisen, Scott Wishart. **Absent:** Alison Hoxie, Brian Hinderliter

City Staff: Mike LeBeau, Construction Project Supervisor; Jim Filby Williams, Director – Property, Parks, & Libraries; Parker Angelos, AmeriCorps VISTA Energy & Sustainability Assistant. **Absent:** Mindy Granley, Sustainability Officer; Jennifer Ondrik, Administrative Specialist

Call to Order:

The meeting started at 4:00pm

Approval of March 15th 2023 Meeting Minutes:

Approved by Commissioner Wishart, seconded by Commissioner Rayala

Approval of Agenda:

Commissioner Olson proposed agenda change to move Executive Committee updates to the end of meeting to allow for Commissioner Theisen to arrive

Old Business:

Executive Committee

- See Commissioner Olson's notes (5-3-23)
- Commissioner Olson: Decided that Executive Committee would meet on the off months to set agendas and prepare
- Focus groups: Jackson notes that these groups would be three or fewer commissioners
- Notes from Commissioner Theisen
 - Jen is looking into the process for updating our mission statement to reflect the updated GHG emission goal of 100% by 2050 – keep it vague?
 - Per charter: power and duty to “promote community best practices and strategies for reducing greenhouse gasses”; clears confusion between whether we need to focus solely on City emissions vs. community-wide emissions
 - Official subgroups/sub-committees would require more City time and staff – can do “working groups” or “focus groups”
- Notes from Commissioner Olson
 - Climate Action Work Plan 2022-2027 as a guiding document
 - Discussion of cross-pollination at the City Commission level

- Discussion of how to encourage more funding for sustainability efforts for City projects
- Ann Arbor, MI: "[City Climate Action Millage](#)", \$1 million increase in their budget, 20-year commitment; 7th community in the country to do that
 - Methane gas utility, put out for bid to come up with clean energy utility
- Question from Jackson: Individuals, pairs, or trios research these opportunities, when they bring it back to the whole, how is it presented, what's the goal?
 - Commissioner Theisen: Yet to be determined. Intention is to focus on ourselves being more educated and impactful and bringing ideas to city staff to support the staff, and opportunity to come up with original ideas. Hoping that we can come back with creative ideas that can be implemented.
 - Jackson: Seems like that might be an effective way to push things to the Council and the administration.
- LeBeau: I do think potential implementation methods would be a good thing for focus groups to think about
 - Commissioner Theisen: We can recommend action or implementation steps to go along with these brainstormed ideas.
- LeBeau: Yes, and we can help guide you with this, a good thing to add into this process.
- Commissioner Theisen: If there are identified holes or gaps on what your teams are able to cover, perhaps we can help with this. If there are things you can think of, bring them back to the next meeting.
- Commissioner Olson: Wants to bring all of the commission's professions and knowledge to the table, to make it more efficient and more empowered. It would be nice if a City Councilor was assigned to this committee
 - Jackson: The commissions with a City Councilor in them are written into the respective commissions by-laws. This isn't likely to happen. But you could always ask or invite a Councilor.
 - Commissioner Theisen: Invite a councilor to a particular meeting when there is something relevant as opposed to a councilor assigned to every meeting.
 - Commissioner Reichert: Could we ask the council who is interested in this commission? They could get the minutes and update the council?
 - LeBeau: You could request to be on their agenda to speak and give an update. There might be someone who is interested; must go through a public process.
 - Jackson: EPC would have to agree on how to move forward with the counselor participating

New Business:

Update on Minnesota Power's EV Charging Efforts – Jon Sullivan (Customer Programs & Services Representative Lead; MN Power)

- Mr. Sullivan leads EV programs and electrification from a residential, commercial, and transportation perspective
- Electric vehicle overview:
 - All-Electric Vehicles (EVs)
 - BEV (Battery Electric Vehicle)
 - Plug-In Hybrid Electric Vehicles (PHEV)
 - Hybrid Electric Vehicles (HEV)
- EV Charging Overview
 - AC Level 1: 5 miles/hour

- AC Level 2: 20 miles/hour
- DC Fast Chargers: 180+ miles/hour
 - Angelos: Question about battery longevity
 - Response: Battery management system in vehicle prevents battery wear down at last 10% of charging
 - Commissioner Rayala: Question about cost
 - Response: At home charging cheaper
- By 2030-2040 timeline range, anticipated high influx of EV adoption (Bloomberg study)
- Customer Engagement
 - Getting people who are on the fence or anti-EVs to learn more and understand better; outreach
 - Invited EV owners to talk to the general public at event
 - Real experiences expressed to public
 - Having conversations to help get the work out
- Level 2 Charger Donation Project
 - 38 Chargers donated
 - 20 sites
 - 15 communities
 - Paid for a portion of installation
 - In Duluth; Frost River, medical ramp, Milk House
- DCFC (DC Fast Charger) Project
 - Add 16 new DC Chargers
 - Investing in small areas with a lack of private investment
 - Floodwood, Big Fork, Silver Bay, etc.
 - Hinkley
 - Fall along main travel corridors
 - Making sure customers have access to EV charging
 - Equitable Access; reducing barriers to EV ownership
 - Leverage federal funding and partnerships
 - Goal of reducing range anxiety; placing fast charging stations along routes to Brainerd (210), International Falls, Hinkley
 - Commissioner Rayala: Tesla chargers can only be used by Tesla owners?
 - Response: Yes, for now. But because of federal funding these are being opened up to other EVs.
 - Commissioner Rayala: Can Tesla's charge at other stations?
 - Response: Yes, with an adapter
 - Commissioner Olson: What's the business model? How will they be maintained?
 - Response: Mandated that they have to charge customers to use them. All revenue collected from this project will go back to offset project costs. Looking to partner with federal grants to help drop the cost. 10-year project.
 - LeBeau: What's on the ground at the sites shown?
 - Response: One DC fast charger with two plugs, with backup level 2 charger in case of service or emergency
 - In Duluth: 350 Kw charger, or two stand-alone
 - LeBeau: Which plug standard?
 - Response: Standard CCS. Everyone is migrating to one standard plug that everyone would use.
 - Commissioner Olson: Are there apps that will tell you when the chargers are open?

- Response: Yes, PlugShare and other apps. Definitely will be mapped, not 100% sure if they will display “in-use”.
- Actively recruiting site hosts
 - Working through equipment, installation and software partners
 - Good sites: proximity to 3-Phase Power, close to highways or interstates, 24-hour access, public restrooms, area lighting, close to local attractions, food and beverages, close to shopping
 - Online form available to recommend sites
- Hopeful for installations end of 2023 and into 2024
- Commissioner Wishart: DC fast charger tied to business’s meter?
 - Response: No. Partnership with site hosts. Metered separately so no cost to site hosts.
- Additional EV Outreach
 - Car dealership engagement
 - Develop relationships with distributors
 - Developing electrician training
- Commissioner Wishart: concerned with transformer supply and distribution?
 - Response: We’ve already allocated transformers. But other supply chain concerns for other projects.
- Residential EV Rates and Rebates
 - Rebates
 - Second Service: \$500; Service Rate requires separate meter, so rebate helps with cost; IRA opportunities may also help
 - Level 2 Smart Charger: \$500
 - Discounted charging rates
 - Whole Home Time-of-Day Rate
 - Overnight rate: \$0.02391
 - Residential EV Service Rate (separate service), requires separate meter
 - Overnight Rate: \$ 0.05707
 - Quarter of the cost of a gallon of gas
- Time of Use Rates
 - Time of Day Rate
 - On-Peak, Off-Peak, Super Off-Peak (see slides)
 - LeBeau: Not available to solar customers, is that going to change?
 - Response: From a billing system perspective, adds tremendous complexity, working with utilities in California to see what works best for them. Being actively worked on.
 - Commissioner Olson: California getting rid of net-metering?
 - Response: Not sure, would have to consult with a co-worker.
- Commercial EV Programs and Rebates
 - Time based rate that limits demand from 3:00 - 8:00pm (see slides)
 - EV Demand Credit
 - Caps rate to have their demand at 30%
- Multifamily Consultation
 - “A whole different animal”
 - Assist with developing EV charging plan
 - Biggest success has been in partnership with electricians
 - Minnesota Power will submit a Multifamily program
- Another issue in Duluth is on street parking – many residents do not have garages

- Questions
 - Commissioner Olson: Money for installation in multifamily?
 - Response: Haven't seen something from a grant perspective, because the issue is complex. Some funding in IRA for panel upgrades that might be useful. Who pays? A complex issue
 - Commissioner Olson: Level 2 charger, what are the advantages of a hard-wired vs plug-in?
 - Response: Not a big difference for home use (change dryer outlet to the right plug)
 - Commissioner Olson: As technology evolves taking advantage of newer models?
 - Response: Going with standard dryer outlet would make changing easier

GHG Inventory Updated 2022 Data – Parker Angelos

- More accurate calculations because two City facilities, City Hall and the Aerial Lift Bridge, are actually on renewable service accounts
 - Revised calculation: 2,739 - 2,391 = 349 MT CO₂e
 - 1% change in Buildings and Facilities contribution to GHG emissions
 - From a 63% reduction since 2008 to a 64% reduction since 2008
- Municipal Emissions by source (2022 MT CO₂e)
 - Water and Wastewater
 - Natural gas: 415
 - Grid electricity: 4,532
 - Buildings and Facilities
 - Natural gas: 1,537
 - Coal: <1
 - Grid electricity: 2,391
 - Vehicle Fleet
 - Gasoline: 1,581
 - Diesel: 1,996
 - Street Lights and Traffic Signals
 - Grid electricity: 1,713
- Duluth Solar Resources: kW
 - Large jump in public solar during 2022 due to Jean Duluth solar array
- Questions
 - Commissioner Wishart: Was there a drop in community solar garden kW from 2020 to 2021?
 - Response: No, always 40 kW, but may need to revise data entry on graph.

RACER Grant Update and Sustainability Officer updates – Mindy Granley (presented by Lydia Peterson, AmeriCorps Lead for America Fellow)

- New Team Member - Brett Crecelius (Community Resilience Project Coordinator)
- DOE Geothermal Grant - Awarded!
 - DOE Geothermal Technologies Office
 - \$700,000 over 1 year
 - 1 of 11 communities chosen
 - Partners: Eco3, WLSSD, Ever-Green Energy
- Earth Week 2023!
- Upcoming Events
 - Love Your Block Learning Series

- Midwest Climate Resiliency Conference

City Energy Updates (Alex Jackson)

- All EV orders have been canceled, but with City Hall grounds project, will be putting in fleet charger on 2nd street lot & facility maintenance office
 - Chargers have been purchased even though EVs were canceled
 - Set up for 4 more in 2nd street lot
- City Hall project - remove air handlers and transition from steam radiators to VRF, providing heat at much lower temperature to save money and use much less energy from district heating systems.
 - Allows us to take heat from the warm part of the building to a cooler side of the building.
 - Energy used for that transfer a small pump, like the coolant in your car.
 - Investing 13 million in upgrading substantially outdated air handling units, new DOAS units, allowing us to bring fresh air into the building from outside, so we are not circulating the same air throughout the building - COVID money - documented that this system will improve air quality; much more comfortable and healthier place for those who work and visit
 - Completed first stage, Admin back in their space, IT and engineering is not under renovation
 - Commissioner Olson: Switching from steam to hot water from DES?
 - Response: steam is still coming in, because no hot water loop at city hall, immediately going into a transfer
 - Commissioner Reichert: Once finished, will you be off the district heating system?
 - Response: Not in the foreseeable future. We'll see how much we have to be on the district system in the future.
- On schedule and making good progress
- Commissioner Reichert: When can you order EVs again?
 - Response: When automakers can allow us to put in more orders.
- Moving forward on air-source heat pump water heaters (going to be ordered next week); asset management systems, working with contractor to see where we can make most bag for our buck on upgrading facilities
 - More to come in 2 months
- Question Wishart: Air source heat pump water heaters, IRA funding?
 - Response: Yes, we are able to capitalize on IRA funding, but guidance has not quite been laid out yet. In the short term, take MN Power rebate for installation of technology. First three will go in the city hall building in the next six weeks.

Public Comment:

- None

Future Meeting Topics:

- Sheri Hansen: representing the American Institute of Architects, actively lobbying for issues related to energy
 - Report on status of lobbying efforts as related to the IRA
 - Up-to-date, and once lobbying is over on May 22nd, results may be very interesting for the group
- Commissioner Reichert: If we could continue in Room 430 that would be helpful for hearing
 - Can still record via Teams
- Sub-group presentations/sharing
 - A good way to bring things to Council and/or Administration?
- Focus group topics, what should we dive into?

Adjournment:

Motion to adjourn at 5:40pm by Commissioner Olson