



City of Ann Arbor

301 E. Huron St.
Ann Arbor, MI 48104
<http://a2gov.legistar.com/Calendar.aspx>

Meeting Minutes Energy Commission

Tuesday, January 13, 2015

6:00 PM

Larcom City Hall, 301 E Huron St, Second floor,
City Council Chambers

CALL TO ORDER

Appleyard called the meeting to order at 6:05 p.m.

ROLL CALL

Present: 9 - Charles Hookham, Brigit Macomber, Mike Shriberg, Mark Clevey, Erik Eibert, Stephen Raiman, Christopher Taylor, Wayne Appleyard, and Kenneth J. Wadland

Absent: 2 - David A. Wright, and Shoshannah Lenski

APPROVAL OF AGENDA

Approved unanimously on a voice vote.

APPROVAL OF MINUTES

Approved unanimously on a voice vote.

15-0017

Attachments: Energy Commission Minutes 11-10-14.pdf

PUBLIC INPUT

None.

ENERGY REPORT - NEWS FROM THE ENERGY OFFICE AND COMMISSIONERS

Geisler: Last week was first Sustainable Ann Arbor forum for 2015, on Sustainable Buildings. Over 50 attendees, including some Commissioners. February 12 is next forum on Economic Vitality. March forum on Sustainable Systems. April forum focus will be Responsible Resource use (all categories come from City's Sustainability Framework). Local Food Summit on Feb. 15th at Rackham and Michigan League (more at: www.localfoodsummit.org). Work is underway with Clean Energy Coalition on community energy projects. Bonnie Bona will be at the next Energy Commission meeting to update on PACE. Will attempt to also have a representative from Lean and Green PACE alongside.

Nuclear Energy (Raiman)

Raiman: In order to meet goals in the Climate Action Plan (90% reduction by

2050), cannot be accomplished by renewables alone. Need to support ways to support carbon free base load. Since we can't build a power plant in Ann Arbor what can we do at a local level? We do need to think locally but we should be a small part of a big solution and not a big part of a small solution. There are 3 ways we can look into this: 1) Change our language (in our documents and outreach). Need to stop talking about renewable energy and instead talk about carbon-free energy. If Ann Arbor residents are hostile toward nuclear energy, there is a large part of Michigan hostile toward renewable energy. 2) There are ways for residents to support nuclear energy - a model from the Netherlands and another from Germany. The Netherlands system has been in place since 2008. 3) Need to lobby support for nuclear outside Ann Arbor. DTE is licensing at the Fermi site and this reactor can be supported. Otherwise they are planning to shift their base load production to natural gas, which will not help meet carbon reduction goals. An alternative is to form a subcommittee to look at these three things, which I would offer to head up along with other interested Commissioners.

Clevey: Carbon-free as a moniker leaves out methane from natural gas. A partnership with the University on some kind of community nuclear would change the economics on the viability. (Raiman: there is world-class expertise at the University that could be called upon to help.)

Shriberg: Applying the carbon free label to nuclear would be problematic due to the embedded carbon used in producing the physical materials - there might be a a carbon debt of ten years or more for the carbon needed. Massive solutions at community scale is not where communities are having success, rather household energy efficiency is much more scalable for a focus. A focus on supporting nuclear would not be a good use of Commission time. Worth bringing the issue up, because any time I speak at public forums about clean energy, the first question is often about nuclear energy's role. My issue with nuclear is less about the safety risks and more about investment. Every dollar toward nuclear is more costly than dollars put toward efficiency, solar, or wind.

Raiman: Renewables are intermittent technology that rely on the weather. The vast majority of evidence-based literature states that you will hit a wall after a certain percent of variable renewable sources are reached. We don't have the physics to do the storage needed for high rate renewables. It is a matter of faith to wait until 2050 for alternatives that might not exist, when we know nuclear works.

Appleyard: The scale of nuclear (or fast reactors), has not been demonstrated. The EPA's clean power ruling is more than a year away and so there is likely no clear way to engage on the issue until the rules are settled with respect to how nuclear fits.

Generation, Transmission, Storage Primer (Hookham)

Hookham: We have to strike a balance among options, and a balance from our finite resources. Most people don't get what an electron does. Generation to transmission to distribution is essential for understanding. The grid was a great invention in the 20th century, and we are stuck with it for now. But there is more interest in distributed sources at the community level. Sending electrons long distances from their typical generation source is not efficient, that is why we need high voltages for transmission. Solar generation by contrast has to be stepped up to a higher voltage for any transmission, which

results in losses. ITC owns the grid in most of Michigan. Last year coal was 55% percent of state's supply, nuclear was 30%, natural gas was 11%, hydro 1%, with other renewables picking up remainder. Demand in MI has gone down, but will still need to replace generation plants. Reliability is an important topic that decision-makers don't always get. On the heating side, 90% comes from natural gas - very difficult to come up with something to displace it. The City does generate at two hydro plants, and a landfill gas capture system on a decline curve. Where are we headed? Things we can look at are a function of what we can afford. Solar helps as one option, and helps peak shave. Biodigestion can take advantage of our WWTP material. The lowest hanging fruit is energy efficiency - by lowering demand/need. Energy storage is critical. Ludington's facility is fifth largest in the world (owned jointly by Consumers and DTE). Batteries are increasingly being used for voltage regulation and other back-up. I think we need to redo our mission statement. There are lots of topics at play like climate change. We need to have new thinking on these topics and how to address sustainability.

Clevey asked a clarifying question on the landfill gas capture system and revenue it generates which staff responded to.

Eibert asked for a copy of the presentation.

Macomber agreed that revisiting the Commission's mission statement is worthwhile to figure out the best use of time.

Eibert: Understanding the data (Hookham may have available) and what options make the most economic sense would be helpful to find a focus.

Wadland asked about ways to make grid more efficient. Hookham discussed smart grid ideas. Locally we cannot do a whole lot. DTE looking for ways to enhance grid. Is there a way to segregate parts of the local grid? Something we can look at.

Clevey brought up the issue of being a municipal utility to gain control over sources of our energy.

Hookham discussed that some communities are off the grid now and self-sustainable. Unclear today whether we can do this but at some point it could be a possibility.

2015 Commission Priorities

Appleyard: Energy conservation should be promoted first, followed by renewable sources. I've spent time looking at Boulder CO's way of funding programs to help community meet their Climate Plan goals. I would like to look for ways to come up with a sustainable funding source for our CAP. Boulder's carbon tax is levied based on how much energy you use. They are a little smaller than Ann Arbor. Currently they are collecting \$1.3M per year for such programs. There are other ways to do this too. Since 2010 their residential program has had 38,000 quick installs. Their programs often include rebates that give some of the money back when people make improvements.

Hookham: Should we do a retreat again?

Clevey: Was principal investigator of Better Buildings program for MI. We

found out how to get deep penetration in buildings. Clean Energy Coalition was lead on this and are a local resource. We did payroll benefits as part of a project at Grand Valley that was very successful.

Geisler mentioned that CEC is engaged on the community energy funding City Council did approve for this year.

Macomber mentioned issues with the Commercial Benchmarking ordinance effort. Without data transfer system in place this could be a time and resource strain. So we are stepping back and doing a pilot program for city buildings to see how it would work on a smaller scale to be able to better handle technical side if an ordinance goes forward. Nonetheless this will be an issue Commissioners will still work on in 2015. (Appleyard explained some of the technical issues with the systems used for these ordinances.). Staff will be generating a draft of the pilot - anyone interested in looking at this can. Macomber further explained DTE's response to request for direct data transfer as has happened with other utilities aiding cities.

Wadland mentioned a focus on solar photovoltaic. May be time again to look at low-impact hydro.

Macomber seconded Hookham's idea for a retreat. Climate Action Plan could be a base for ideas to focus on in terms of what's most relevant for the Commission.

Shriberg said that the Climate Partnership's goals overlap with the Commission's interest, so could have the CCP present in some form too for the retreat.

Hookham: What is the community interested in? The community is our customer. (Appleyard said the CCP could be good conduit for this.) Macomber also mentioned Parks survey work as part of Parks Advisory Commission and the department's strategic planning as another model to look to.

Shriberg: Is there a way to focus on interest of City Council? (Taylor agreed to inquire of fellow Council-members for feedback. Council's last retreat was organized around the Sustainability Framework. As the representative to Council this can be something he can try and gather periodically.)

Raiman expressed interest in "lecture" updates from Hookham on over-arching topics of interest to the Commission.

Late March discussed as a possible retreat timeframe.

Community Biodigester

Appleyard: We need a deeper dive to understand where we might go and understand the scale necessary. Hookham offered to use his slot for next month to discuss biodigester feasibility.

Shriberg: This a good time to link with the University of Michigan as they are revisiting their sustainability targets and plan.

COMMITTEE UPDATES

Climate Action Plan (Shriberg)

Shriberg: Working with a firm on marketing and branding to find the messages that will resonate with the community. As well we are developing a community dashboard to direct people to for personal climate goals.

Energy Benchmarking Ordinance (Appleyard)

Discussed earlier.

Community Solar (Wright)

Will be meeting in the next month.

PUBLIC INPUT

ITEMS FOR NEXT AGENDA

Clevey: Renovo's install is near complete and they can share data if not at the next meeting then soon after.

Staff confirmed that PACE updates from Ann Arbor and the Lean and Green program will take place at the February 10 Commission meeting.

Shriberg suggested a look at community funding models for climate plan and energy efficiency programs as discussed by Appleyard earlier in the meeting.

Macomber: voting on Chair and Vice Chair.

ADJOURNMENT

Appleyard adjourned the meeting at 7:40 p.m.

Visit www.a2energy.org for community energy information in Ann Arbor,
or
www.a2gov.org/energy to learn more about the City's Energy Programs

Regular meetings shown Live and replayed on CTN Channel 16 and at www.a2gov.org/ctn