Minneapolis Clean Energy Partnership ENERGY VISION ADVISORY COMMITTEE

Minneapolis City Hall, Room 319 Monday, March 27, 2017 4:00 – 6:00 p.m.

Q1 2017 Meeting Notes

Committee members present: Chair: Abby Finis. Members: Timothy DenHerder-Thomas, Trevor Drake, John Farrell, Timothy Gaetz, Matt Kazinka, Kevin Lewis, Patty O'Keefe, Rebecca Olson, Jamez Staples, Billy Weber

Committee members excused: Louis Alemayehu, Cameran Bailey, Julia Silvis, Shane Stennes

Guests: Chris Duffrin, Alice Madden, Lee Samelson

Planning Team/staff present: Bridget Dockter, Peter Ebnet, Robin Garwood, Luke Hollenkamp, Louis Mondale, Kelly Muellman, Audrey Partridge, Gayle Prest, Katie Jones Schmitt, Brady Steigauf, Al Swintek, Marsha Wagner

1. Welcome and Introductions

Chair Abby Finis called the meeting of the Energy Vision Advisory Committee (EVAC) to order.

2. Review and Approval of Agenda and Minutes

Under Item 4, third bullet on renewable energy policy, the motion was amended to insert the word "city-wide" so it now reads: "EVAC recommends adding city-wide goals of 100% renewable electricity by 2030, and net zero energy by 2050." It was MOVED and SECONDED that the minutes, as amended, from December 7 (Q4 2016) be approved. Motion CARRIED. It was requested that the CEP Board members be made aware of the amended language.

3. Introductions of 2017-2018 EVAC Members

Abby invited Luke Hollenkamp to make an announcement about staffing changes at the City. Mayor Hodges has hired a new Policy Aide for Sustainability and Environmental Justice, Halston Sleets. Gayle Prest, Sustainability Director, is leaving her position with the City at the end of April. After several people expressed their thanks and appreciation to Gayle, Abby asked EVAC members, staff, and guests to introduce themselves.

4. EVAC Election of a Co-Chair

Abby called for nominations for EVAC Co-Chair. John Farrell nominated Matt Kazinka, who accepted the nomination. There were no other nominations or volunteers for Co-Chair. It was MOVED and SECONDED that Matt Kazinka serve as Co-Chair of EVAC. Motion CARRIED.

5. Presentation on Tariff-based Financing in Minnesota

Chris Duffrin, President of Center for Energy and Environment (CEE), said that they have done a preliminary analysis of tariff-based on-bill financing and will explore it more thoroughly if

requested by EVAC. He explained that tariff-based on-bill financing, which utilities are not required to provide (unlike on-bill repayment enacted through statute), stays with the meter and transfers to the next occupant of the property. Because it transfers to the next owners, the efficiency upgrades must result in "bill neutrality" or better, which means the monthly savings must be greater than the loan payment.

Chris provided some basic information on loan payments, saying that lenders need to fit monthly payments into the customer's budget, meeting their ability to pay. Someone with low to moderate income levels would have less ability to pay, which would require a lower payment and longer term, resulting in higher interest expenditures. There are two independent variables in achieving bill neutrality: the loan term based on ability to pay and energy savings based on physics (i.e., heat loss). Having a shorter loan term will minimize interest expense, but the monthly payment has to be within the customer's budget. A loan where the savings are greater than the loan term will be based on what the savings are, and the question becomes how far out the lender is willing to stretch the loan term. The lender has capital they are trying to revolve, and the borrower does not want to pay excessive interest.

The process for tariff-based on-bill financing differs from determining cost-effectiveness of energy efficiency (EE) programs. Looking at lending, the total cost of tariff-based on-bill financing to a borrower is reflected as total savings on the bill. In energy efficiency (EE) programs they are looking at incremental savings, the difference between baseline for usage less efficient usage. Comparing that to incremental cost (the difference in the cost between the standard and efficient model), lenders look to ensure that the incremental savings are greater than the costs over the life of that measure. The baseline in each category of technology is determined by what decision the program is trying to influence. For instance, if CEE is trying to influence someone to buy a furnace through a program, they will encourage them to buy a 95% AFUE furnace instead of the 85% AFUE furnace. However, if they are insulating their home they are adding insulation, not replacing something that has failed, so the full cost or amount of savings will be counted.

In describing payback periods in EE programs versus lending, Chris gave an example of replacing a 70% AFUE furnace with a 94% AFUE furnace. In EE programs they consider the incremental cost – not the total cost of the replacement furnace but the difference between a standard 80% AFUE furnace and one that is 94% AFUE – and incremental savings per year to calculate simple payback of 15 years. In lending, the full cost of the replacement furnace must be financed but the full savings are greater, and the simple payback is 20 years.

In summation, bill neutrality requires long term loans. CEE analyzed eight measures that are common in EE programs. The changes in the typical loan terms (in years) to bill neutral terms for wall insulation, furnace replacement, and retrofits (under-insulated homes) were considerable, with a corresponding increase in additional interest. [PPT page 7] Measures that did not cash flow positive were air conditioning, high-efficiency boilers, and window replacements. The examples that Chris provided used an interest rate of 4.99%, which is much lower than the utility cost of capital for CenterPoint Energy and Xcel Energy (the utility cost of capital is the rate used by the PAYS model). Chris said several factors would improve the numbers: higher natural gas costs, lower cost items, greater savings, and cheaper capital. He also

offered other ideas for making financing more accessible to people: credit enhancements for higher risk customers, successful and wide-reaching multifamily programs (CIP), neighborhood programs that "normalize" landlord action, city policies that encourage improvements (enforcement of codes), disclosure policies, and tenant copayments as an alternative to financing.

The following topics and issues were discussed following this presentation:

- If tariff-based financing was used to finance the energy savings or rebate eligible portion, CIP money could be used if the program was designed that way by the utility. Currently the utility subsidizes fairly heavily in multifamily program EE improvements and landlords pay the other portion, so who pays what could be changed and allowed under the CIP process. CIP funds are currently paid out, not loaned/returned, so a different measurement would be used. Various rebates available through CIP were not included in the calculation of payback time in the examples shown.
- Chris has some back-end analysis that can be shared with EVAC to help them understand what assumptions and numbers were used in the savings calculations. CEE uses a modeling tool to estimate savings and various scenarios and assumptions can be run. Looking at the demographics and property types of customers who are currently being served by loan programs and various services, they tend to be the types of homeownership and building types that have historically had more EE work done to them in the past, with the exception of some of the low-income programs. Looking at the demographic difference between the programs that are currently being served and used in Minneapolis building stock as a whole, and figuring out how those savings potentials may be different, is an important area for EVAC to look at to determine who is being served and who is not. The way the rebates are structured, the property owner has to have a lot of the money up front to do a measure, which may be skewing who is participating strongly toward homeowners who have capital. Loan Amortization Program data would provide more information on the lack of access to capital piece, and the upcoming CEP second annual report will address geographic distribution of EE program use.
- It would be helpful to receive from Chris a definition or description of what this program considers a high-risk customer. It would give EVAC the ability to determine if a program like this impacts the targeted user group that is underserved to access capital and energy improvement.
- The biggest factor is low cost natural gas is hurting the ability to do cost-effective measures right now.
- Funding sources: McKnight Foundation's impact investing program offers 2% loan teams on seven to ten year loans, so sources exist that would provide capital at a lower cost. Chris cautioned that the lender will build in their costs in an administrative addition to the loan rate. Residential PACE financing can be used that is attached to property tax, not utility bill; this could be an easier way to involve landlords.
- Even with the additional costs involved in stretching payments over many years, there is an extra comfort benefit to consider. It would be helpful to study current loan programs in Minneapolis to determine how far they are penetrating into the segment, what other segments could additionally be served by unlocking some of these funds, and what the potential benefits are. Cooperative Energy Futures has requested Meister Consulting Group, which has

done a number of feasibility analyses, to do an analysis of measures using CEE savings data, low-income savings data, and other sources.

6. EVAC Work Group Discussion

a. Overview

Work Groups were established during the 2015-2016 Work Plan period to study topics in more detail than could be accomplished during EVAC meetings. Funding and Community Engagement Work Groups were formally established by motion, and others – small business and multifamily – were not formally established. After discussion the following criteria was developed to guide formation of additional formally-recognized work groups:

- Establish goals what they want to accomplish within the course of a year on the defined scope of the Work Group
- Have an incremental timeline one or two activities, aligned with activity items in the current Work Plan
- Definition of success have accomplished their goals and are done
- Minimum number of members two EVAC members recommended, plus others outside of EVAC with pertinent expertise, subject to approval by EVAC
- Staff support as needed, requested by the proposed Work Group, and subject to availability and capacity of city and utility staff; establishment of communication process would be helpful, i.e. updates at Planning Team meetings, biweekly status updates on shared document on Google, quarterly updates
- b. Updates on Existing and Proposed Work Groups
 Following the discussion several Work Groups were proposed.
 - Small Business Work Group. Explore best practices for the City to reach small business customers with EE programs, and identify an action plan for how the City can play a role. The timeline fits within the two-year 2017-2018 Work Plan. Great Plains Institute is currently doing work in this area, with funding to do a scoping assessment, identifying key players and resources in the Twin Cities metro, so that effort would be leveraged and brought to EVAC. The level of staff involvement needs further consideration, but there would be a role for utility staff to play perhaps on a quarterly basis, and Kelly Muellman expressed an interest in being involved.

It was MOVED and SECONDED that a Small Business Work Group initially comprised of EVAC members Trevor Drake, Matt Kazinka, and Cameran Bailey be created. Motion CARRIED.

• Multifamily Housing Work Group. Address greater understanding and specific program issues as outlined in the current Work Plan; explore strategies of engagement, rental licensure and regulatory authority of the City, and feasibility of developing or extending a multifamily building EE program to affordable housing, possibly in partnership with Community Planning and Economic Development (CPED) to preserve and leverage funds to create greater EE. The first goal would be to determine who would need to be involved, with minimal input from utility staff and more input from City staff (Kelly Muellman). At the next quarterly EVAC

meeting the Work Group will provide more information on specifics, including proposed timeline and strategic plan.

It was MOVED and SECONDED that a Multifamily Housing Work Group initially comprised of EVAC members Billy Weber, Rebecca Olson, and Timothy DenHerder-Thomas, with possible addition of members of neighborhood organizations, be created. Motion CARRIED.

 Workforce Development Work Group. Utilize this body of work, considering specific projects in the Work Plan and Climate Action Plan, to provide a more inclusive opportunity to ensure that work is done in an equitable fashion.

It was MOVED and SECONDED that a Workforce Development Work Group initially comprised of EVAC members Jamez Staples, Patty O'Keefe, and outside experts/volunteers be created. Motion CARRIED.

- Financing Work Group. Identify gaps to fill, identify which tools are already available through various sources, and a scope study for any increase in funding. Part of its work would be to evaluate current strategies to attain Climate Action Plan goals, as specified in the Work Plan. The Financing Work Group would connect work done by other Work Groups to make sure nothing was overlooked coordinating and sharing information among them. Formation of this Work Group was tabled to the next quarterly EVAC meeting.
- The Community Engagement Work Group has completed its goal of creating a pilot program to test community engagement strategies, and is currently inactive. The pilot program was approved and funded by the CEP Board, and a request for proposals was issued. Two pilot programs were selected and are currently being implemented by the Minneapolis Renters Coalition and Neighborhood Hub. This is a year-long process so more information will be available in the fourth quarter of 2017, and a final report for both pilot programs will be provided at their conclusion.

It was MOVED and SECONDED that the Community Engagement Work Group be suspended until further notice. Motion CARRIED.

c. Update from Funding Work Group

John Farrell said this group was formed following the CEP Board Q4 meeting in response to the Board's and EVAC's interest in determining how to pay for the items in the Work Plan. They have held five meetings and two planning sessions, one of the results of which was developing a ~60-item spreadsheet of activity items mentioned in the Climate Action Plan (CAP) and CEP 2017-2018 Work Plan. (The spreadsheet will be distributed to EVAC members following the meeting, along with meeting notes referencing line items in the spreadsheet.) The items in the spreadsheet were grouped by category, residential engagement being a significant piece of the Work Plan, and there were several items around City ordinances and financing.

It was noted that the dollar amounts used in the presentation – i.e., salary for full-time employees, expanding community engagement pilot citywide, focus on single and multifamily properties, strategic buy-down of Home Energy Squad visits/audits, collaborate with utilities and utility program providers on community-based marketing initiatives – were VERY rough estimates and need significant refinement. The group

developed an annual estimated cost of ~\$2.6 million to execute everything possible to meet 2017-2018 Work Plan and CAP goals.

For financing, The Funding Work Group looked at things like CenterPoint's on-bill payment program, studying the inclusive financing and other options like interest rate buy-downs, loan products that could be offered, and funding a loss reserve (which would need one-time, not annual, funding). Passing ordinances and tracking things like multifamily benchmarking and residential EE incentives would require additional city staff to do things like scope out information or meet with city council members.

Funding sources on the low end include utilities (specifically for CEP items; not including territory-wide programs like CIP that also include Minneapolis) and leasing revenue from hosting renewable energy projects on city property. In the middle are foundation grants, general city funding (existing annual budget), marginal savings from EE or renewable energy, and state and federal grants. At the top end is the franchise fee, the incremental fee the utilities collect on the sale of electricity and gas from Minneapolis residential, commercial, and industrial customers and pass along to the city. For each funding source the timeline and rough order of magnitude (amount of additional funds to support CEP activities) were considered.

John provided an illustration to show the order of magnitude of the franchise fee, which varies by customer class; currently three to five percent. The chart showed how much revenue could be realized by increasing the franchise fee by 0.25, 0.50 and 0.75 percent.

Customer Class	0.25% Increase	0.5% Increase	0.75% Increase
Residential	\$472,222	\$944,444	\$1,416,667
Commercial	\$650,000	\$1,300,000	\$1,950,000
Industrial	\$192,233	\$383,333	\$575,000
Total	\$1,314,456	\$2,627,778	\$3,941,667

Next steps for the EVAC Funding Work Group include listening to feedback from EVAC members and the Board, refine the rough estimates of costs, and possibly adding someone with technical expertise to the Funding Work Group. This is an iterative process of learning what is useful from the work they have done, and what additional detail needs to go into it. It would also be important to estimate the energy savings and emission reductions that would be gained with this additional funding over what is currently available, but this may require additional outside resources. Bridget Dockter said that if they are looking at specific energy efficiency technical calculations Xcel Energy may be able to assist with the energy savings estimates.

A rough timeline includes meeting with the Planning Team, getting feedback from CEP Board members, and one-on-one meetings with CEP Board members if necessary. After incorporating any suggested additions or changes, EVAC would need to vote to approve the funding recommendation at its Q2 meeting in June, and the CEP Board may have to approve it by the end of June to get something in the City budget this year to begin

providing funding in 2018. The Mayor typically introduces the budget in August and the City Council adopts it in December.

Luke commented that this is a very complicated subject, and the spreadsheet that shows Climate Action Plan and Work Plan items on funding is very helpful in systematically working through them. There are different policy paths to increase funding beyond the city's annual budget process that should be recognized. Taking a deeper dive on this might be beyond the scope of the individuals on the Funding Work Group, but the CEP Board, policy makers and EVAC will all be considering and discussing it. Audrey suggested that it would helpful to overlay the pie chart with one showing where the most potential exists in residential or large commercial areas so the CEP Board can see how funding would align with the impact. Billy thought this was a great idea, and added that it should be across factors that are in the Climate Action Plan and engagement pieces embedded in the Work Plan. He commended the Funding Work Group for doing an amazing job putting this information together. The question for City and utility staff is to determine what the CEP Board would like to see, so pertinent information can be filled in by Work Group members. Bridget said that the Planning Team will take this under consideration and report back to the Work Group, copying EVAC Co-Chairs. Luke added that at the next CEP Board meeting the Funding Work Group will give a report to the CEP Board on their work, and will offer some specific options for them to consider as deliverables.

Referencing the timeline, Trevor wondered if it made sense to engage with some of the stakeholders to get their input and gauge their level of acceptance or opposition. Timothy stressed the importance of getting good data to show the outcome or savings potential from this investment. Luke suggested it might be helpful to have discussions with peer cities who have recently enacted franchise fees or have dedicated funding specifically for work in EE.

Robin Garwood, Policy Aide to Council Member Cam Gordon, said that the policymakers would want a clear recommendation from EVAC about the percentage increase on the franchise fee, not all of the options presented by the Funding Work Group, and what the resulting revenue would be. While it is good to see how much it would cost to do everything on the list, it would be better to select three or four programs that would be identified, present the costs, and if possible provide some service to all of the classes of rate payers in Minneapolis. He added that in addition to the formal budget process that begins in August, the Mayor also has a State of the City address in May. Having something that is a clear idea, agreed upon by EVAC and the CEP Board, could be introduced at that time so a public discussion could begin.

7. EVAC Priorities to Meet 2017-2018 Goals Discussion

A discussion will be set up and these will be determined through email.

The meeting was adjourned at 6:02 p.m.

This constitutes my understanding of items discussed and decisions reached. If there are any omissions or discrepancies, please notify the author in writing. Submitted by:

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