Minneapolis Clean Energy Partnership BOARD MEETING

Doty Board Room, Minneapolis Central Library Monday, June 17, 2019 3:00 – 5:00 p.m.

2019 Q2 Meeting Notes

Board members present: Mayor Jacob Frey (Chair), Council Member Cam Gordon, Council Member Jeremy Schroeder, Council Member Steve Fletcher (alternate), and Mark Ruff from the City of Minneapolis; Amber Lee, Brad Tutunjian and Todd Berreman (alternate) from CenterPoint Energy; Bria Shea and John Marshall from Xcel Energy.

Board members excused: None.

Planning Team present: Sara Barrow, Bridget Dockter, Kim Havey, Luke Hollenkamp, Kennedy Kruchoski, Heidi Ritchie, Emma Schoppe, Al Swintek, Karlee Weinmann

Guests/Staff present: Ellen Anderson, Bisrat Bayou, Jessica Burdette, Zoe Bourgerie, Ryan Cook (phone), Carter Dedolph, Timothy Denherder-Thomas, Chris Duffrin, Aaron Hanson, Matt Kazinka, Marcus Mills, Stacy Miller, Patty O'Keefe, Rebecca Olson, Jeremy Peterson, Lee Samelson, Jamez Staples.

1. Welcome and Introductions

Mayor Jacob Frey called the meeting to order at 3:04 p.m. Mayor Frey invited Clean Energy Partnership (CEP) Board Members and staff to introduce themselves. Mayor Frey, noting the lack of progress on climate change and sustainability issues at both the state and federal levels, said it is incumbent on the Partnership to continue to work together to do this important work.

2. Review and Approve Agenda and Minutes

Mayor Frey asked for a motion to approve the agenda, as well as the minutes from the 2019 Q1 CEP Board Meeting. It was MOVED and SECONDED that the agenda for June 17, 2019 be approved. Motion CARRIED. It was MOVED and SECONDED that the minutes from March 25, 2019 be approved. Motion CARRIED.

3. EVAC Co-Chair Update

Patty O'Keefe has been a member of the Energy Vision Advisory Committee (EVAC) since 2017. She is an organizer with the Sierra Club and has been involved with climate and clean energy advocacy in Minneapolis for the past eight years. She is particularly interested in the intersections of climate change and racial justice, thinking about how racial disparities are being addressed by the City through the transition to clean energy.

During Q2, EVAC engaged in Xcel Energy's Time of Use Pilot, and submitted program design recommendations to Xcel Energy and the CEP Board. [Link] EVAC is supportive of time-of-use pricing as a strategy to reduce reliance on fossil fuels and wants the pilot to be successful,

although there were concerns around equity implications for low-income and customers of color. EVAC appreciates Xcel Energy's willingness to change the location of the pilot.

At the request of the Partnership, EVAC is also working to develop workforce and equity metrics to track progress and inform work in those areas.

At its Q2 meeting, EVAC reviewed the energy vision and 2019-2021 work plan. They also received an overview of utility CIP programs, discussed a new plan for EVAC's engagement around the franchise fee increase programming, and heard an update on Xcel Energy's Time of Use Pilot.

John Marshall, Community Relations Director at Xcel Energy, recognizing EVAC co-chairs and members in attendance, said this is a good success story and example of the Partnership with an opportunity to collaborate and develop some of the metrics and design of this TOU program moving forward. He believes a lot of good changes will come from the tireless volunteer work that EVAC members put in and he thanked them for their efforts.

4. Inclusive Financing

a. Energy Transition Lab Introduction and Cadmus presentation of *Minnesota Tariffed On-Bill Financing Feasibility Study* [Link to PPT] and The State Energy Office-sponsored Cadmus Legal/Regulatory Analysis Update
Ellen Anderson is the Executive Director of Energy Transition Lab (ETL) at the University of Minnesota, which is leading the inclusive financing feasibility study. Ellen began by acknowledging the funders of the project, including the City of Minneapolis which is a key funder along with the Institute for Local Self-Reliance, the McKnight Foundation, Xcel Energy, the City of Warren and the Marcy Holmes Neighborhood Association.

The project is a financial analysis of a tariffed on-bill financing program, similar to what is known as a Pay As You Save® (PAYS®) program. The Energy Transition Lab goal was to do an objective and accurate review of the financial viability of this sort of program in the State of Minnesota, and to get a better look at what measures might not be practical for this type of financing. Referencing a document listing the members of the Advisory Committee (which includes Xcel Energy and CenterPoint Energy and other utilities, the City of Minneapolis and other state and local government representatives, community groups and industry experts), Ellen said that the process they used was one of robust stakeholder involvement. The advisors worked with Ryan Cook, the consultant from Cadmus who did the modeling, and were very engaged in the process by examining all results as they were presented and providing feedback and recommendations on what should be modeled.

Several of the participating utilities provided data which was essential to get good information. In conducting its financial analysis ETL looked at energy-efficiency measures and potentially solar or renewables deployment to understand where this type of financing could be used to help a customer be able to access those kinds of improvements on their property in a way that would be financially viable for them. The

hope is that financing can be provided that will help enable customers, especially those who lack a credit history or score, access to improvements who would not otherwise be able to do so.

There are a couple of things that are not in scope for the project. ETL is not doing a program design or analysis, or looking at how a program would be set up for consumer protection, but those will be important next steps. In looking at the finances, the assumption is that they are looking at a model somewhat based on the idea of a PAYS® model, which is a relatively commonly used finance mechanism for co-ops in primarily southern states. The idea is that it will be an on-bill payment that is not a loan, but rather a tariff that would be paid by the customer with their bill. They would have to get at least twenty percent of the cost savings benefit of the improvement, and their bill would have to be reduced from what it was before the improvement was made. Some of the extra cost savings of the improvement would be used to pay off the improvement itself.

When asked if the twenty percent figure was legislatively mandated, Ellen said it is just the starting point. The PAYS® program is based on a minimum of twenty percent value that goes to the customer, and ETL's financial models are based on that number. Additional savings beyond twenty percent would accrue to the utility investment.

The intent of the program is to reach customer segments that would not otherwise have an opportunity to do improvements. That is a matter of program design to figure out how to reach those customers since there might be low-income customers who might be able to access programs already in place to make improvements. The study looks at market segmentation and building stock differentials between different income brackets. They looked at measure screening, the types of improvements that could be made either individually or in a bundle, benchmarking study looking at other examples of this program in other locations, and cost-effectiveness. ETL contracted with Cadmus Consulting, who has a lot of expertise in this area and has done similar type studies across the country.

Ellen reported that Cadmus also conducted a separate policy regulatory analysis which was funded by the Department of Commerce (DOC). They drafted a memorandum (which will be distributed to CEP members following the meeting) that looks at the existing statutory framework in Minnesota. Prior legal analyses were also done by CenterPoint Energy and Apparatus for Community Power. There are different opinions, and Cadmus' memorandum also raises questions about current statutory authority to do a program like this. ETL is not endorsing any particular opinion. If a filing is made at the Minnesota Public Utilities Commission (PUC) to do an inclusive finance pilot or program, it would be the PUC's job to determine which of these laws would or would not apply, and what their broader legal authority is to allow this.

Genuine opportunity exists in Minnesota to provide a way for some customers to finance efficiency or renewable energy investments even if they lack good credit. One of the values of ETL's process has been to have the participation of all of the different types of utilities on the Advisory Committee, including East Central Energy, a co-op that is

implementing a similar program. It would be ideal to see some pilots done in places like Minneapolis to get an understanding of what is possible and how this would work, and how to design the program to achieve the aggressive goals for decarbonization and equity set forth by the Partnership.

Ellen concluded by reiterating that the PUC will be the entity that will decide what can proceed, at least for Xcel Energy and CenterPoint Energy if they choose to present a proposal. ETL is contemplating asking the PUC if they can present their final report at a planning meeting, which would be a useful way to begin a conversation before any kind of docket is filed.

Ryan Cook is a Senior Associate with the Cadmus Group, a strategic and technical consultancy that works with cities and other entities—including cooperative utilities primarily in the Southeast United States—on energy efficiency and clean energy programs. Cadmus has worked with the Energy Transition Lab and Advisory Committee on this project.

On-Bill programs have historically been loan-based programs using on-bill financing and on-bill recovery where the utility, generally speaking, acts as a middleman. It is not fundamentally different from a customer getting a loan for improvements through another source. The on-bill nature just makes the process more convenient and cleaner. Tariffed On-Bill Financing (TOBF), as is being considered here, is a departure. Rather than a loan it is a utility tariff, where the utility invests in home energy improvements and then recovers those costs through a tariff charge.

To give an example of how the eighty percent rule works, if a customer installs a home energy improvement that was going to last for ten years and was going to pay on average \$50 per month, the program would require eighty percent of that monthly savings over eighty percent of the expected useful life of the measure. In this case the utility would be able to recover costs from the customer up to \$40 per month over eight years, so twenty percent of that \$50 savings would stay with the customer. In cases where the installation cost of the home energy upgrade exceeds what the maximum tariff amount would yield, the customer would still be able to participate if they could provide a copayment to make up the difference.

Typically, TOBF includes a financing approach because it is intended to be a loan for homeowners and renters. Generally speaking no credit checks are required for participation in the program because repayment obligations stay with the meter as opposed to the customer. If a renter moves out, the next renter to move in picks up the cost recovery charge, and if the program is done correctly, they are still enjoying that twenty percent savings and are economically better off. The most standard way these programs are implemented is through PAYS® which is a branded TOBF program. This study is assessing the feasibility of TOBF in Minnesota.

The analysis tasks assigned to Cadmus, with support from the stakeholder advisory committee that advises on approach and vets inputs and assumptions, include:

- Market Segmentation: comparison of low-income/rental building stock to overall building stock.
 - Initial results [Cadmus PPT Slide 6]: Natural gas is the main heating source. In Minneapolis low- and moderate-income households (LMI) and rental households disproportionately live in large multi-family housing and electric-heated homes.
- *Measure Screening:* identifying measures and packages that can be financed through a TOBF program

Initial results [Cadmus PPT Slides 7-9; 11]: Existing TOBF/PAYS® programs tailor installed measures to cost-effective opportunity in a specific home. A typical participant is likely to reside in a poor-efficiency, high-bill home; install a suite of insulation and air sealing measures; and have strong opportunities for cost-effective energy improvements. Equipment (i.e. HVAC and DWH) measures are evaluated both on a standalone basis and in combination with envelope upgrades (attic insulation, air sealing and wall insulation) and small measures.

They are looking at three key scenarios for program cost of capital: market-rate (base case) using the current Center for Energy and Environment (CEE) Home Energy Loan rate of about 5 percent, subsidized rate of zero percent, and utility commercial (pre-tax lending) rate of 9.05 percent. The stakeholders are providing a lot of feedback on these scenarios. They are also looking at normal (based on utility averages) and high (assumed large system sizes and reduced existing insulation) household energy consumption scenarios.

While specific numbers are not yet being shared from the analysis because they are still being refined by the stakeholders, some generalized results were presented. The greatest opportunities are on the building envelope side: attic insulation, wall insulation and air sealing, and possible opportunities with ductless mini-split and solar PV especially when paired with existing subsidies. There are limited opportunities with Ground Source Heat Pumps, Boilers, Heat Pump Water Heater and gas water heater; and central Air Conditioning is not viable for OBF. [An acronym list was distributed at the meeting.]

 Benchmarking Study: understanding program costs and participation rates of prior and similar programs
 Initial results [Cadmus PPT Slide 10]: There are two types of data sources that can be drawn from to determine participation rate and program costs: prior PAYS® programs that are used in rural areas and have minimal upfront and administrative

programs that are used in rural areas and have minimal upfront and administrative costs, and CenterPoint Energy's On-Bill Recovery program. In both cases the implementation cost is approximately \$1,000 per participant. Neither of these programs exactly applies to our situation which has a much larger service territory than the PAYS® program and on a percentage basis has a much lower number of participants per year than CenterPoint Energy's program.

- Cost-Effectiveness: assessing costs and benefits from societal, utility and ratepayer, and participant perspectives Initial results [Cadmus PPT Slide 12]: It is expected that there will be numerous economic opportunities for TOBF. The strongest opportunities are for insulation and air sealing in homes with electric heat and poor efficiency. Targeted opportunities are based on specific circumstances for homes with gas heat (which currently costs less than electric heat), average-consumption homes, equipment measures (combined with insulation and air sealing) and solar PV (paired with existing solar rebates). A question was asked about if the cost of gas increased, would there be a stronger opportunity for homes with gas heat. Kim Havey said the Planning Team has asked the advisory committee to look at a sensitivity analysis on the various costs of heat over a longer period of time. Ryan added that they will also look at the percentage change in cost that would make it cost-effective. They include an annual escalator on the price of fuel; however, they do not include an escalator in the amount of the cost recovery payment which is fixed based on the first-year savings. As energy prices increase over time, there is additional benefit to the participants and they may get more than twenty percent savings.
- Report on findings
 Preliminary results were presented to the advisor group on June 6, and feedback from them is currently being collected. A final report will be completed in mid-July.

Preliminary Conclusions

- Impact of Cost of Capital [Cadmus PPT Slide 13]: For a majority of the scenarios
 assessed, changing the cost of capital does not necessarily change the interpretation of
 the results. However, the program cost of capital has a significant impact on measures
 with marginal TOBF feasibility. Adopting a lower cost of capital for the program
 would enable a broader set of feasible measures but would also increase program
 costs.
- Program Design [Cadmus PPT Slide 14]: The specifics of the benefit cost analysis
 vary on a range of factors that must be defined, including eligible measures, program
 cost of capital and participation rates. Program cost-effectiveness will be more
 specifically defined in the final report. Regarding program planning considerations,
 several factors regarding program cost and participation remain uncertain due to lack
 of direct precedent. Prior program estimates are from loan-based programs
 implemented in large jurisdictions, and tariff-based programs implemented in small
 jurisdictions.

One of the advisory committee members present at the meeting asked about an issue he had previously raised about the differential cost of capital with potential implementation partners in terms of program effectiveness. Ryan responded that at this meeting he is presenting primarily on a fundamental framework and preliminary findings. On the question of the participation of the cost capital, they are looking at four cost range scenarios.

b. Partnership Activity Pilot Programs Status Update and Next Steps

Amber Lee, CenterPoint Energy's Director of Regulatory Affairs, said a lot of progress has been made on what the pilot will look like in the petition they will file with the PUC. To recap, three efforts have been underway in Q2: feasibility study which is still underway, the legal/regulatory study, and collaborating with the Partners on key features. Quite a bit of progress has been made to memorialize what the pilot will look like. At this point they are working to identify areas that need continued work in Q3.

It was MOVED and SECONDED that the Clean Energy Partnership Inclusive Financing Board Motion be approved. [Link]

Many Board members and staff expressed their appreciation for the hard work and collaboration to get to the point of the motion the Board approved today.

Council Member Gordon commented on Item I. a-j, saying that he would like to see participation stretched to include affordable commercial and a tentative launch date in 2020 instead of 2021. He would also like to see it include more than air sealing and insulation measures, including a bundling package to include a furnace, solar, or other elements. Aside these concerns, he acknowledged that the proposed motion is still a big step for the Partnership and is willing to support it.

Luke pointed out that the Motion includes (Item III) that in preparation for the Q4 Board meeting Xcel Energy will examine and report back on the potential to finance air source heat pumps, ductless mini splits, and/or solar PV bundled with wall and attic insulation and air sealing. This will hopefully point to ways the Partnership can move forward with inclusive financing and ways to make the program more expansive and inclusive.

Council Member Fletcher agreed with CM Gordon that he would like to see the launch date moved up to 2020. Pending DOC or legislative approval, he wondered if the Partnership has decided to move forward and has made enough progress to do so. Brad answered that CenterPoint Energy was waiting for the results of the feasibility study and regulatory analysis before going to the PUC. There are also infrastructure requirements to be considered that will have a huge impact.

Emma pointed out that the Inclusive Financing Draft Timeline distributed at the meeting is offered for illustrative purposes. It is pending many factors, i.e. the Cadmus study and the legal regulatory analysis.

John Marshall, Community Relations Director at Xcel Energy, addressed CM Fletcher's comments about having a sense of immediacy, which has been mentioned at previous Board meetings as well. From Xcel Energy's standpoint, information continues to come in and they are in a far more advanced position than they were at the last Board meetings. The information from Cadmus will help inform next steps. Xcel Energy is committed to coming back at the Q4 meeting with more insight and will move forward as expediently

as possible. Brad added that the work done in Q2 alone demonstrates CenterPoint Energy's commitment to work on moving this program forward.

There was discussion about approaching the PUC informally or attending a planning meeting to have a conversation with them before a formal filing is made. Holding intermediate workshops with Board members and staff prior to the Q3 Board meeting was also suggested for the purpose of reviewing the study findings and defining next steps. The City committed to prioritizing time for PUC Planning meeting preparation. Amber said that the work ahead of the Partnership is defined in Item II.b-f, and as those determinations are made they will lead to Item II.j, drafting an outreach plan. All of that work is pending the results of the feasibility study and legal regulatory analysis.

There being no further discussion, a vote was taken. Motion CARRIED.

5. Other Partner Updates

a. Home Energy Squad – Current Wait Times and Reduction Efforts

Todd Berreman, Director, Energy Efficiency at CenterPoint Energy, spoke on behalf of
CenterPoint Energy and Xcel Energy. He reported that there was a huge demand for
Home Energy Squad (HES) visits following the City's offer of full buy-downs for its
residents who signed up by the end of 2018. That resulted in the program signing up as
many participants in three months as they normally would have in a year. Along with that
we experienced a very cold winter with a lot of ice dam problems. The program has
continued to gain momentum, increasing about 25 to 30 percent each year, and they
expect an even larger increase this year.

These factors combined to create a backlog, and CEE did not have enough staff to deliver on the increased number of visits. CEE has hired two new auditors, has promoted six staff members to audit positions, and created two new training positions to expedite onboarding of the new auditors. The wait times have decreased substantially, and now an audit can be scheduled in two weeks and a regular or enhanced HES visit in four weeks. While a backlog remains, they are actively working to move up customers who have a real need or request for the visit to take place earlier. Between CenterPoint Energy, Xcel Energy and CEE things are getting under control. Moving forward, CenterPoint Energy and Xcel Energy are in the planning process for a triennial plan that will be looking at programs historically that have been increased and how to best meet those needs so they can avoid a situation like this in the future.

6. Adjourn

The meeting was adjourned at 4:15 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: Marsha Wagner, CastleVisions, marsha@castlevisions.com