

www.ever-greenenergy.com



TCAAP EIRF 2-11-15 ERAB Meeting Minutes

Attendees

ER-GREEN

Affirmative Action, Equal Opportunity Employer

- a. Lyle Salmela ERAB Chair
- b. Jim Ostlund ERAB
- c. Andrew Holewa ERAB
- d. Kate Knuth ERAB
- e. Ryan Streff City of Arden Hills
- f. Greg Mack RC
- g. Zack Hansen RC
- h. Mary Karcz RC
- i. Blake Huffman RC Comissioner
- j. Sean McFarling EGE
- k. Ander Rydaker EGE
- I. Jenny Edwards CEE
- m. Marty Skoglund National Guard/AHATS
- n. Meghan Tisdell Xcel Energy
- o. Dana Cottrell Xcel Energy
- p. John Marshall Xcel Energy
- q. Richard Strong CSBR
- r. John Suzukida
- II. The Agenda was approved
- III. Meeting Minutes from the January 14th meeting were reviewed and approved
- IV. Ryan Streff updated the ERAB on the TCAAP Redevelopment Code
 - a. The final workshop for the redevelopment code is scheduled for February 2nd. After which, the redevelopment code will be presented to the City Council.
 - b. Work session for the final draft is scheduled for February 24 & 25th with the City Council.
 - c. A "fit test" was requested by Commissioner Huffman to test the redevelopment plan against the County goals and objectives. This will include a market analysis for the site as well.

- d. After the fit test is completed, a Comprehensive Plan Amendment will be prepared.
- e. Lyle asked how the EIRF will be incorporated into the redevelopment code, as the redevelopment code will be completed before the EIRF. Ryan replied that they will be independent documents, and that the EIRF principles will need to be incorporated into the RFPs to the developers.
- V. Greg gave a recap of the TCAAP Information Exchange that was held on January 30 to give all of the entities working on TCAAP an opportunity to coordinate efforts.
 - a. In the information exchange, Heather Worthington relayed that the remediation of the site will be completed by June 2015, and development would be starting late 2016 or early 2017.
- VI. Jenny gave a presentation on the DSM strategies that will be recommended for implementation at TCAAP
 - a. Andy asked if the potential for solar PV on the roofs of commercial buildings was being considered due to the typical construction of large, flat roofs, and that TCAAP doesn't have any extra land for solar installation.
 - b. Jenny said that hasn't been considered, because of the primer tracer possibility, but that doesn't preclude a commercial entity from installing a solar PV system on their roof. However, rooftop systems are not as cost effective or efficient as large scale systems.
 - c. Lyle brought up questions that have been provided to Commissioner Huffman, specifically the issue of building and street orientation for solar efficiency, and asked if SB2030 requires orientation to maximize efficiencies.
 - d. Jenny said that CEE is working to provide context on solar efficiency gains based on orientation, but that SB2030 is about performance, including building orientation.
 - e. Kate asked about DSM efficiencies in the utilities, and felt that is important to consider.
- VII. John Suzukida presented on the improvements that he made in his home in Shoreview to push towards carbon neutral status, including geothermal heat pumps and solar PV.
 - a. Lyle asked if there would be economic savings, incentives available to have heat pumps available in all TCAAP homes. It was mentioned that the Hill and Creek neighborhoods are being proposed to have heat pumps in every home.
 - b. Greg said that Heather Worthington is exploring the possibility of a future users group to assist in the process of moving forward.
 - c. Andy asked about the possibility of using the consulting team to help build systems in as the development is constructed.
 - d. Anders said that heat pumps are reliable technology that has been proven for a long time.
 - e. Jim said that when looking at the numbers, the real payback is more like 25 years, not the 13 that John presented. John said that the 13 year payback was due to his connections in the industry that provided him significant cost savings, and that it wouldn't make sense economically otherwise. He would not recommend a retrofit of an existing home, but is excited about the potential of TCAAP. He emphasized

- that the development should use the free energy available because of the groundwater treatment.
- f. Andy asked how long it takes the water to circulate through the geothermal well field. John said that it works a lot like a normal furnace, turning on for a few minutes and then off for awhile.
- g. Andy asked if 10 wells of the size that John has could serve two homes. John said

VIII. John Marshall and Dana Cottrell presented on Xcel Custom Rebate program

- a. John mentioned that Xcel is working at integrating itself deeper into the TCAAP by mobilizing a "custom" team for TCAAP and Ford for the "out of the box" energy vision.
- b. This team is evaluating the different technologies that are being proposed.
- c. Andy asked if the RFP will mandate that developers meet with Xcel to investigate potential rebate opportunities. Jenny said that the strategy is to balance incentives with mandates.
- d. Both Dana and John emphasized that they would be glad to meet with developers to see how Xcel could assist. They said that they do that regularly in other areas.
- e. Kate mentioned that she thought it was good that Xcel was working to adapt.
- f. Greg asked about the role of Xcel in pre-bid conferences, and suggested that might be a good place for developers to be introduced to the custom rebates.
- g. Jenny asked about energy feedback and sub-metering.
- h. Dand said that behavioral modifications is difficult to measure and keep persistence, but that they are looking at constant commissioning.

IX. Richard Strong from CSBR presented on SB2030

- a. Emphasized that SB2030 is based on performance of the building, not just design. But that design is more effective for energy conservation, and that it is not correlated to the amount spent.
- b. For each building, the SB2030 process is monitored at Schematic Design, Pre-Bid, 2 yrs after occupancy, and after 10 yrs of operation.
- c. All projects must have 15 year simple payback without rebates or incentives.
- d. Jim asked if this was for any state funded building. Richard said yes, and for 24 buildings owned by the City of St. Paul.
- e. Jim said that it seemed like SB2030 would have to be mandated.
- f. Jenny asked if SB2030 is recognized in the market. Richard said yes, but it is not as marketable as LEED. However, LEED is moving in the direction of SB2030 as it relates to performance.
- g. Greg asked if voluntary implementation was possible. Richard said not presently, but if the building owner is willing to share the cost for the benchmarking (\$3k-\$5k per building) then it would be possible.
- h. Andy asked about the cost for residential benchmarking. Richard said that it is unknown, because it is based on building design.
- i. Jim asked if CSBR has met with builders. Richard said yes, and that three large commercial contractors are asking for benchmarking because it's advantageous.
- j. Lyle asked how it would be possible to implement SB2030 at TCAAP. Richard said that requesting of the state to allow TCAAP implement SB2030 in the community.

- k. Richard said that economic factors are more intriguing to builders than requiring, and that there is a market for the builders who know how to do it.
- X. Sean presented the draft outline of the EIRF
 - a. Lyle mentioned that he saw a lot of energy supply topics in the outline, but very little on the demand side, and said that he would like to see that increased because the potential for savings seems much larger.
 - b. Jenny, Sean, and Greg reiterated that there is a lot of uncertainty in the development, so providing broad range strategies and solutions is going to be most effective at this point, rather than specifying specific technologies.
- XI. Greg presented the schedule moving forward.
- XII. Meeting adjourned