

**MINUTES OF SPECIAL MEETING  
BURLINGTON ELECTRIC COMMISSION**

**Wednesday, March 1, 2017 – 5:30 p.m.**

The special meeting of the Burlington Electric Commission was convened at 5:35 p.m. on Wednesday, March 1, 2017 at the Burlington Electric Department at 585 Pine Street, Burlington, Vermont.

Commissioners Bob Herendeen, Scott Moody, Tim Perrin were present. Gabrielle Stebbins was present via conference call.

Staff members present included Neale Lunderville, James Gibbons, Casey Lamont, Tom Lyle, and Darren Springer

Other staff members present included Laurie Lemieux, Board Clerk.

**1. Agenda**

There were no changes to the agenda.

**2. Public Forum**

Mr. Rob Backus, public member of the IRP committee, was present for the meeting.

**3. Integrated Resource Plan (IRP)**

Mr. Lunderville explained that the IRP is something that BED is required to do every three (3) years. The IRP is an extremely large project that includes members of the public, the Commission, and members of BED staff along. This plan will prove out to the Public Service Board BED's decision making around how the Department is thinking about power supply and how decisions are made. The Department is not asking for Commission approval tonight but hopefully can answer all questions so that the Commission can approve the IRP at the next meeting. Once this is approved by the Commission it will go before the City Council for approval and then the IRP will be submitted to the Public Service Board. At this time Mr. Lunderville turned the meeting over to Mr. Gibbons and Mr. Lyle to walk through a summary of the presentation and an open discussion.

Mr. Lyle recognized the IRP Committee: Rob Backus, Doug Goldsmith, Gabrielle Stebbins, and Tim Perrin. Mr. Lyle thanked the Committee for providing great insight and assistance in the process of developing the IRP.

Mr. Lyle began the PowerPoint presentation by giving an overview of the discussion topics which include the Purpose of the IRP, Content, Main Themes, Process, Outcomes, Preferred Pathway and Action Plan(s), and next steps.

Mr. Lyle explained that the purpose of the IRP per the Vermont Statute 218C states:

*“...meet the public's need for energy services, after safety concerns are addressed, at the lowest present value life cycle cost, including environmental and economic costs, through a strategy combining investments and expenditures on energy supply, transmission, and distribution capacity, transmission and distribution efficiency, and comprehensive energy efficiency programs”*

Mr. Lyle stated that essentially this statute means the Department needs to look out 20 years and figure

out a suite of portfolios that will produce the lowest present value cost of service and to develop decision tools and construct a comprehensive decision making framework. BED needs to look out over 20 years and think about what the main variables are, what the inputs are and what the risks in operating a distribution utility are.

Mr. Lyle continued with the presentation by explaining that BED's IRP is not a request to act for approval on any capital items, such as a purchase power agreement or seeking approval to build a power plant or enter into a wind contract. What the IRP is about is demonstrating how BED thinks about resources, how resources are put in place and how BED selects these resources.

Mr. Lyle reviewed the IRP Chapters highlighting the chapters on Technology Options, Decision Tree Analysis, Preferred Path, and the Implementation Plan. Mr. Lyle stated that in reading through the IRP the main themes relate to deliberate actions that put the organization in a position to realize BED's 10 year vision which is:

*Transition Burlington to a "net zero energy" city across electric, thermal, and transportation sectors by reducing demand, realizing efficiency gains, and expanding renewable generation, while increasing system resilience."*

Commissioner Perrin asked if the Department envisions the possibility that the DRP and the IRP process will merge at some time to have a truly integrated resource plan. Mr. Gibbons stated that because of the lag in timing, the avoided costs being used in the DRP planning are completely aligned with the avoided costs being used in the IRP.

Mr. Lunderville stated that because BED is both a DU and EEU, the Department should be planning the DRP and the IRP together. There is an opportunity because BED has an efficiency first policy and looking at BED's 10 year vision, it does make sense to start planning them together.

Mr. Lyle stated that the process took approximately 12 months which included identifying 21 key variables and inputs that included REC Value, Energy Value and Capacity Value, which presents the most risk. Also 9 portfolio scenarios were developed that are relevant to the overall strategic initiative, along with 27 plausible pathways and 729 plausible outcomes. Other analysis conducted was on demand, energy efficiency programs, technologies, generation and supply options, along with time and demand.

Mr. Lyle reviewed the evaluation of the 729 iterations of plausible outcomes and hypothetical pathways depicted on a color coded graph. Mr. Lyle explained that red represents energy related capacity, blue represents capacity and green represents RECs with each pathway having a different set of major variables and major risks.

Mr. Backus wanted to take time before leaving to let the Commission know what it was like to be part of the IRP Committee. Mr. Backus began by thanking BED for all the great work done and to state that it was overwhelming in the beginning due to Mr. Backus' lack of expertise in this area and the realization that there was so much to learn. BED's staff is clearly very competent and knowledgeable and answered all questions in a way that could be easily understood. Mr. Backus stated that one good thing about having the public involved in this process is that questions were asked that the staff had not thought about which is very rewarding. Mr. Backus learned a lot from the process; it was a great experience and would be willing to serve on this Committee again in the future.

Mr. Lyle reviewed the new technology and energy transformation programs that the Department looked at which included electric busses, battery electric vehicles and Passive House to name a few. Mr. Lyle stated that the technologies that were looked at passed the utility cost test and societal test and were marginally cost effective from the customer cash flow point of view with the exception of battery storage.

Mr. Lyle said that after all the analysis and work over the past year; it is the recommendation of the Department to choose the second lowest cost of service pathway which is keeping BED's options open and

an active demand response program which will continue to arbitrage RECs. BED is recommending this pathway for the Commission's consideration on the basis that the Department feels it is consistent with BED's Mission and allows the greater degree of flexibility and preferred risk ratio and would have the least impact on customer bills.

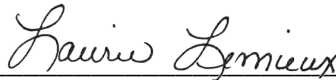
Mr. Lunderville stated that the IRP will be on the agenda for next week and, if the Commission feels comfortable, the Department would ask for approval and a recommendation to move forward to the City Council and to file with the Public Service Board.

Mr. Gibbons will answer the following questions for the Commissioners before the next meeting:

- Integrating the IRP and DRP
- Will look at the change and effect on discount rates and the language to make sure it's covered in an obvious place along with actively monitoring for change in the underlying assumptions
- Look for the impact on the strategic load growth and why it doesn't show more in the graph

Commissioner Perrin moved to adjourn the meeting at 6:57 p.m.; the motion was seconded by Commissioner Herendeen and approved by all Commissioners present.

Attest:



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Laurie Lemieux, Board Clerk