#### Minutes:

Stowe Electric Commissioners' Meeting
December 18, 2019 at 8:00 a.m. at Town of Stowe Electric Conference Room

#### Present:

BOARD MEMBERS: Richard ("Dick") Marron, Chairman; Larry Lackey, Vice-Chairman (via telephone); Heidi Scheuermann, Commissioner

STAFF: Ellen Burt, General Manager; David Kresock, Director of Operations; Kristin Winer, Controller; Matt Rutherford, Manager of Regulatory Compliance; Lily Burgess, Clerk of the Board

Guest: Bill French Sr, Karen French, Charles (Chuck) Coyne

Larry called the meeting to order at 8:05 a.m.

# Approval of the November 20th, 2019 Meeting Minutes

On motion made and seconded, the minutes of November 20, 2019 were approved.

# **Hydro Facility and Dam Restoration Presentation**

Ellen introduced Bill French and Chuck Coyne. Chuck used to be in charge of all the power plants in Braintree, MA. After they both retired, Bill founded French Development Enterprises, a renewable technology company commercializing hydro power technologies and hired Chuck as a consultant. Bill toured the SED mill building and dam about a month ago, and relayed the seriousness of the state of both. During the last flood in the night of October 31st, the SED mill and dam were damaged even more. Bill knows developers interested in funding the project, however, SED wants to maintain the generated power for themselves. Ellen expressed interest in creating a micro-grid, or energy-island (together with the Nebraska Valley Solar facility) while keeping and restoring the existing, historical mill building. Bill also mentioned that he went to look at the dam further north by the Tubbs building, which also has a good drop to generate hydro power.

Bill stated that according to an article published by the Department of Energy, hydro is considered the Guardian of the Grid. Out of all the renewables, hydro is the most reliable on any grid, as wind and sun are intermittent, and unreliable. Bill stated that hydro is 98% efficient, whereas solar is 28% and wind is 32% efficient. Hydro is also special in that it is flexible to the grid and with a dam is controllable, and can be "scheduled". Hydro also has black-start capabilities, which neither solar nor wind power have (it can restore an electrical grid without relying on the external power transmission network to recover from a complete or partial shutdown). Bill elaborated on how the US Army (and Department of Defense) is the biggest electric user in the US, and is very invested in micro-grids. After Hurricane Sandy hit

New Jersey and New York, Wall Street was lit up because they have a micro-grid, while the rest of Manhattan was in the dark. Bill suggested that the first step would be to involve a civil engineer to study the existing site conditions. The next step would be to hire a hydrologist, who can determine the water flow by miles, evaluate the dam and its water drop to determine the kinetic energy that could be created. Bill stated it could be between 500kW and 1.5MW.

Dick raised the concern that the Supreme Court just told Morrisville Water & Light that they are not allowed to operate the dam as they have in the past and will have to reduce and keep the water level at a certain level, making it not economical to keep their dam.

The Stowe dam was built in the late 1800s and Ellen believes it is grandfathered. The State is supportive of these kind of small dams with little impact. Chuck recommended that SED start to explore funding possibilities. He also recommended to hire an engineering firm to determine the existing conditions of the dam such as the length, the height, the thickness of the concrete. The next step would then be to hire a hydrologist as Bill already stated. Chuck elaborated on the best location for a new turbine and this was discussed in detail. Advantages and disadvantages of funding through investors and spreading the risk, vs financing through municipal means and keeping the power were discussed in detail. There are also considerable federal financial incentives to have black-start capabilities. Hydro RECs were discussed.

Bill, Karen and Chuck exited the meeting at 8:54am.

# **Regulatory Update**

2020 Renewable Energy Standard Tier 3 Plan: Matt elaborated on the Tier 3 Forecast table. For next year, if SED was going meet the target entirely through Alternative Compliance Payment ("ACP"), it would be at a cost of roughly \$133,000. SED's designed program with the 2020 Tier 3 Offerings, with customer incentives and including administrative costs in comparison is estimated to cost around \$63,500. SED's designed program would also have the benefit of additional electrification, which would mean increased revenue. The highlight of the 2019 program has been the cold climate Heat Pump ("ccHP") program, which was much more successful than anticipated. SED is poised to meet almost its entire target through the ccHP incentives. SED's EV program has not performed as well as hoped and there have been two incentive payments issued so far this year. As a result, the program has undergone several changes for 2020. It will be available for the lease of new vehicles, and the purchase of used vehicles. The incentive payment levels will also increase. The Vermont Agency of Transportation plans to launch an EV incentive program in partnership with the electric utilities and a group of participating auto dealers on December 16th. SED anticipates it will benefit from the discussions centered on the statewide incentive. The remainder of SED's programs are new for 2020 and include level 2 EV charging equipment for public and workplace use, and electric lawnmowers for residential and commercial purposes. SED is furthermore partnering with Efficiency Vermont to offer new incentives for heat-pump water heaters to replace fossil-fuel fired units, for wood pellet stoves, and for whole-building heat pumps.

### **Operations Report**

Dave reported that it was a fairly quiet month with few outages. The crews are still plugging away on miscellaneous jobs between the snowflakes, freezing rain and rain drops. Heidi inquired about the Pole Attachment regulation changes. The pole attachment and replacement process is very complicated, as there are so many people involved. Stowe has 5 attachers. Not every utility uses NJUNS, and sometimes the communication chain breaks down. Heidi asked whether Dave had an update on the pole owned by Morrisville Water & Light (MW&L) pole on West Hill Road near Shaw's. Dave believes that MW&L has not worked on the pole yet.

The highlight this month is coming out of the IT department. Chris is very knowledgeable and he has been doing a fantastic job. The Outage Management System ("OMS") purchase has been finalized, the new virtual servers are set up. Chris continues to work on the design and purchase of new server hardware for the OMS. He is also coordinating with Efficiency Vermont ("VEIC") and our billing software provider SEDC to try and finalize the interval data export project as SEDC is producing test files for VEIC to review and making the final adjustments at this time.

## Approval of 2020 Budget

In order to build a forecast for 2020, Kristin compared the 2018 and 2019 budgets to actuals. The budget prepared for 2019, as approved in October 2018, was based on a forecast from ENE that still had several months left in the year. When ENE came out with their final numbers for 2018 and the subsequent forecast for 2019, the forecast was significantly (\$500,000) less than expected. This in part explains the big budget variance of 2019 vs. 2020. The other one-time charges that affected the 2019 budget was the Highgate Transmission Asset transaction. Ellen and Kristin will take another look at the 2019 budget, and compile the details of the various disbursements for the Highgate Transmission Asset to present at next month's meeting.

Working closely with Ellen, the revenue forecast is very solid and based on SED's billings, including adding in the incentive program for Tier 3. This will result in a modest increase in the metered accounts, but a reduction overall. Purchase power costs (energy and transmission costs) are expected to decrease significantly. Kristin will continue to monitor power and transmission cost forecasts and will report to the Commissioners quarterly.

The significant change in snowmaking budget vs. forecast is due to the fact that Stowe had a lot of snow last year, and the Mountain had little need for snowmaking. The most significant changes shown in the Direct System Costs are an increase in labor and benefit cost changes. Rent and utilities have decreased considerably, since SED now fully owns the office and garage.

Kristin will review the budget and present it to the Commissioners again in January.

## Old Garage Building Lease

SED has not been able to reach an agreement with the Lamoille Regional Solid Waste Management District ("LRSWD") yet. The details of the proposed lease were discussed at length. The Commissioners gave the General Manager clear instructions, since SED's ratepayers cannot subsidize the lease with LRSWD.

#### **Other Business**

The Board scheduled the next Commissioners' meeting for Wednesday, January 22<sup>nd</sup> at 8:00 a.m.

There being no further business, the meeting was adjourned at 9:35 a.m.

Respectfully Submitted,

City Burgess

Lily Burgess

Clerk of the Board