

Agenda Summary

March 13, 2024

Agenda Item No. B-7

Equipment Fund Amendment - Electric Mowers

Summary: Staff requests to amend the Equipment Fund regarding the FY25 purchases of the 72” electric zero turn and the 54” gas zero turn mowers. The Energy Committee previously asked the Selectboard to amend the Equipment Fund to replace one 72” gas zero turn mower with an electric model and three in FY26. Staff has engaged with the Energy Committee and expressed concerns with the availability and performance of 72” electric zero turn mowers (Energy Committee minutes attached). Parks staff demoed each brand of electric zero turn mowers this past season, with the exception of EXMark which was not yet available, and found various pros/cons. Some of the largest limiting factors and challenges we face are:

- The mowers up for replacement in the Equipment Fund in FY25 and FY26 are 72” commercial zero turn ride-on mowers with bagger attachments. Mean Green is the only company currently marketing more than 60”, the EVO model has a 74” mowing deck. Hartford tested and was not happy with this machine. Our staff also concurred and felt that of the models they demoed, it tested the poorest.
- None of the current models have bagger attachment capability. The baggers are used for bagging grass clippings and leaves and for spring and fall clean-up. Not having them would reduce quality and significantly increase labor.
- The electric models performed poorly in wet conditions. Mowing only when dry is not a feasible reality due to the acreage mowed and available man hours. Our Parks Department mows approximately 135 acres weekly. Although 4” is doable in certain areas and situations, it is not adequate for athletic fields which are primarily where the 72” mowers are utilized.
- Battery run times vary between different models/brands

Being that there is not currently an electric mower available which meets our required performance specs for the 72” mowers, staff recommends amending the Equipment Fund for FY25 to trade-in the Kubota 54” zero-turn mower for a 60” electric mower and trading in the 72” gas zero turn mower for another 72” gas model. The Kubota 54” is utilized primarily for mowing the Rec Path and Quiet Path, as well as some of the cemeteries. If the amendment to the Equipment Fund is approved by the Selectboard, staff will put the mowers out to bid.

Town Plan Impact: N/A

Fiscal Impact: Currently in the FY25 Equipment Fund there is \$46,000 budgeted for the 72” electric mower and \$10,000 budgeted for the 54” gas mower. Based on quotes and estimated trade values, requested amended amounts are \$36,500 for the 60” Electric Mower and \$19,500 for the 72” Gas Mower. The combined budget amount remains the same at \$56,000.

Recommendation: Move to amend the Equipment Fund to trade-in the 72” mower for another gas model for the amount up to \$36,500 and trade-in 54” gas mower for a 60” electric mower for the amount up to \$19,500.



**Stowe Energy Committee Meeting
Thursday, February 22, 2024**

Present via Zoom:

Energy Committee Members: Catherine Crawley, Elizabeth Soper, Marina Meerburg, Cap Chenoweth, Robi Artman-Hodge, Andrew Rianhard

Absent: Julia Biedermann

Attendees via Zoom:

Assistant Town Manager Will Fricke, Parks and Recreation Director Matt Frazee, Steven Wisbaum

Call to Order

Energy Committee Chair Catherine Crawley called the meeting to order at 5:48pm.

Approval of the Agenda

On a motion by Robi Artman-Hodge, seconded by Cap Chenoweth, the Energy Committee approved the agenda. All were in favor.

Review & Approve Minutes

Robi Artman-Hodge requested a correction to the January 25 minutes; the motion to approve the letter to the Stowe School Board was put forward by Julia Biedermann.

Marina Meerburg moved to approve the November 30, 2023 and the January 25, 2024 minutes with the proposed change. Cap Chenoweth seconded. All were in favor.

Electric Town Mowers and Other Tools

Catherine Crawley summarized where the Town and the Energy Committee are on electric mowers. The FY25 equipment fund to be approved at Town Meeting this year includes one electric mower. Three are projected in FY26. When the Electric Committee proposed the electric mowers, their cost-benefit analysis showed a pay-back in less than 7 years, based on a Mean Green EVO 74-inch zero turn. It was

agreed last year that the Town would try one out before committing to multiple electric mowers. The Energy Committee has shared information on models and specifications, as well as experiences from other Towns, with the Parks and Recreation department. Matt Frazee, Stowe Parks and Recreation direct, has joined the meeting today to discuss the different options, challenges, pros and cons of electric mowers.

Matt Frazee said the Town has tried out pretty much every electric mower available, including the EVO 74-inch. One of the biggest challenges is that the models that are scheduled to be replaced soon are 72-inch zero turns, and the 72-inch electric zero turns currently available tested the lowest in terms of performance, in particular the EVO 74-inch model, when the Town had a demo. The other concern is that, as far as he is aware, none of the zero turn mowers have bagger capabilities. All zero turns currently in use by the Town utilize bagging throughout the year.

There is also a 54-inch zero turn scheduled for replacement, and the Town is considering replacing that in FY25 with a 60-inch electric zero turn. Many of the vendors are still working on the technology for bagging and to open their lines up to 72-inch models. They are also looking into electric walk-behind mowers.

Catherine Crawley asked how the Town weighs aesthetic considerations against best practices of keeping the clippings on the field, and whether the Town fertilizes fields. Matt Frazee said that they primarily overseed and aerate, with some fertilization. They do not bag the clippings consistently, but there are times during the year when the grass is too wet to mow. When that happens, the grass grows too high to leave the clippings on the field for both aesthetic and functional reasons. When they can keep up with mowing on a regular basis, they leave the clippings. Bagging is also used for spring and fall debris and leaf cleanup. Crawley asked about mulching kits. Frazee said they do have some, but they are often not adequate for the amount of leaves to be cleaned up.

Andrew Rianhard said that Greenworks has a 72-inch electric model that is not yet on their website. In a few months he is going to an event that Greenworks will be at, and he might be able to see it in person or schedule a demo. He said they often have new equipment that is not yet available but can be seen in their marketing. He also asked if the Town ever utilizes double mowing as an alternative to bagging. Frazee said that they do double mow the larger fields twice a week; bagging is necessary for spring and fall cleanup, and for situations with excessive rain or wet conditions. They are aware of the new technology, but for this year they are more comfortable with replacing the 54 with a 60, rather than going with one of the limited options for 72-inch mowers. They are hopeful that maybe a year from now there will be more data and more options available for 72 inch mowers and new bagging options.

Cap Chenoweth said that Parks Supervisor David Danford said they had tested the EVO 74-inch model five years ago. He asked if the Town had tested an EVO mower recently, and why they thought the performance was not adequate. Frazee said that feedback from both the companies themselves and other organizations is that it performs fine in dry conditions but can struggle in wet conditions. Many Town-owned fields in Stowe have a high water table due to being wetlands or resulting from flooding from beaver dams. So the Town is often mowing in wet conditions. Another concern was that the suspension system in that model was one of the least responsive they had tested. He also said that they have also tested the most recent mode of the EVO 74-inch, as well as a model five years ago.

Elizabeth Soper said that we should do what we can where we have the technology, and where the Parks Department feels comfortable doing it, though the goal from this committee and the Town should be to move towards all e-mowing technology.

Robi Artman-Hodge asked if the Town is looking at other equipment such as trimmers and blowers for electric versions. Matt Frazee said that they are looking at every aspect of what they do, and their goal is to move away from fossil fuels in every functional capacity. He clarified for the committee that they originally had planning to replace the 54-inch mower with a gas model and the 72-inch mower with an electric model, but based on the information they had the available models it made more sense to swap that. The important thing is to get one in their fleet and get used to using it and maintaining it. They now use electric trimmers and are acquiring electric walk-behinds, and are testing electric chain saws.

Proposed HVAC Plan for Akeley

Chair Crawley said that the voters are going to be asked to approve almost \$500,000 to convert Akeley to propane, and that she feels that as the Energy Committee it is their responsibility to stand up and say whether or not it is a good thing. Cap attended the meeting between Stowe Public Works and the engineer planning the project. He said they are planning to use the existing duct work and install a 12.5 ton rooftop unit and two 3-ton units. This system will also act as the makeup system. He said an alternative option they could explore is installing six 3-ton mini splits with a rooftop heat pump, and the heat pump would be the reheat system for the makeup air. He also said the lighting in the theater, which is not owned by the Town, is a significant heat issue.

Robi Artman-Hodge asked Cap Chenoweth how he thinks the cost of installing the six 3-ton mini splits would compare to the current plan. Cap said the current plan is expensive; almost half of the budget goes to the steel structure over the elevator shaft, and Historic Preservation rules require anything to be hidden, which would also apply to the condensers for mini splits. You won't be able to install the condensers without screening. Considering the requirements they had – and the current boilers are going to go away at some time quickly – this was their solution. It's not a bad way to do it, the new A/C will be much more efficient, but mini splits would be more efficient, and propane will be used the makeup air. He explained further that a hot water boiler is required to utilize the current heating system in Akeley, which is baseboard radiators. This project has been made necessary by the 40-year-old boilers failing. Re-doing the building envelope would save more energy, but the cost is prohibitive.

Elizabeth Soper and Andrew Rianhard expressed concern about the scale of the project and whether there was a way to repair the current heating system or install a stopgap until a renewable solution could be implemented. Catherine Crawley said it's the best of a bad situation and that she feels they can give qualified support for the project.

Vermont Arts Council Cultural Facilities Grant to Replace Theater Lighting in Akeley

Chair Crawley said that the Vermont Arts Council Cultural Facilities grant can fund up to \$30,000 matched on a one-to-one basis and can cover replacing the Akeley theater lighting. She shared information on the grant with Assistant Public Works Director Chris Jolly, who then shared it with the Stowe Theatre Guild.

Vermont Diesel Emissions Reduction Financial Assistance

Chair Crawley said that the Vermont Diesel Emissions Reduction Financial Assistance is a program run by the Vermont Department of Environmental Conservation that offers technical assistance and incentive funding for projects that reduce emissions for Diesel powered vehicles and non road equipment. It can cover the replacement of that equipment. The deadline was in December but it will have another round

of funding in Fall 2024. Lee Martin, an environmental analyst with the program, will attend the Energy Committee Meeting on March 28 to talk about the program.

Collaborating with School Board on Grant Funding for Energy Efficient Upgrades

The Energy Committee sent a letter to the School Board expressing interest in helping with installing energy efficient upgrades to the high school. One School Board member responded positively and it was on the agenda for their last meeting. The superintendent was supportive. Catherine Crawley reported that School Board member Alan Oulette said that he would like to get a group together to include the Energy Committee, and then some students at still high school to work on this, and the superintendent wanted to also to loop in the director facilities as well. The primary program they recommended the School Board look at was the Renew America's Schools Grant Program under the Bipartisan Infrastructure Law.

Other Business

Chair Crawley said the Stowe Electric Department is looking to get a grant to purchase an e-bike.

Robbie Artman-Hodge attended the most recent Planning Commission meeting and said that the Town Plan renewal process will begin soon. Catherine Crawley said that the Energy Committee will have an opportunity to revise and present to the Planning Commission the Town Plan section on energy.

Chair Crawley said that the law that allows remote-only meetings is phasing out on July 1, but that the committee could have a hybrid meeting setup, where the Zoom is run from Town Hall Memorial Room.

Will Fricke said the Town Report is available, physical copies can be picked up at Town Hall, public safety building, Library, etc. It is also on the website. The equipment fund can be found on page 22 and it could help inform the Energy Committee discussions on energy efficient equipment upgrades. He also said that he will be emailing everyone on a town committee whose term is expiring this year on April 30 to see if they want to be reappointed. That includes everyone on the Energy Committee as the terms are for one year.

Chair Crawley said the next meeting is March 28 at 5:30.

Adjournment

There being no other business, Chair Crawley adjourned the meeting at 6:54pm