

BURLINGTON
BOARD OF ELECTRIC COMMISSIONERS
585 Pine Street
Burlington, Vermont 05401

SCOTT MOODY, VICE CHAIR
LARA BONN
JIM CHAGNON
ROBERT HERENDEEN
BETHANY WHITAKER

*To be held at Burlington Electric Department (and)
Via Microsoft Teams*

[+1 802-489-6254](tel:+18024896254)

Conference ID: 295 615 914#

AGENDA
Regular Meeting of the Board of Electric Commissioners
Wednesday, January 11, 2023– 5:30 p.m.

- | | |
|---|----------------|
| 1. Election of Officers | 5:30 (5 min.) |
| 2. Agenda | 5:35 (5 min.) |
| 3. Minutes of the December 14, 2022 Meeting | 5:40 (5 min) |
| 4. Public Forum | 5:45 (5 min.) |
| 5. Commissioners' Corner (Discussion) | 5:55 (10 min.) |
| 6. GM Update (Oral Update) | 6:05 (10min.) |
| 7. Financials: FY23 November | 6:15 (10 min.) |
| 8. Commissioners' Check-In | 6:25 (5 min.) |

Attest:



Laurie Lemieux, Board Clerk

If anyone from the public wishes to speak during the public forum portion of the Commission Meeting and/or wishes to be present for the Meeting of the Board of Electric Commission via Microsoft Teams, please email llemieux@burlingtonelectric.com to receive a link to the meeting, or call (802) 489-6254, Conference ID: 295 615 914#

Note: Members of the public may speak during the Public Forum, or when recognized by the Chair during consideration of a specific agenda item.

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(for 01/11/23 meeting)

***** FYI *****

- Minutes of the December 14, 2022 Meeting
- December Monthly Report
- Dashboard
- FY23 November Financials

Note: Members of the public may speak during the Public Forum, or when recognized by the Chair during consideration of a specific agenda item.

*****DRAFT*****
MINUTES OF REGULAR MEETING
BURLINGTON ELECTRIC COMMISSION

Wednesday, December 14, 2022 pm

The regular meeting of the Burlington Electric Commission was convened at 5:30 pm on Wednesday, December 14, 2022 at Burlington Electric Department at 585 Pine Street, Burlington, Vermont and virtually through Microsoft Teams.

Channel 17 was present to record this meeting.

Commissioners Chagnon, Herendeen, Moody, Stebbins, and Whitaker were present.

Staff members present at 585 Pine Street included Paul Alexander, Rodney Dollar, Mike Kanarick, Munir Kasti, Laurie Lemieux (Board Clerk), Paul Pikna, Darren Springer, and Emily Stebbins-Wheelock.

Staff members present via Microsoft Teams included Erica Ferland and James Gibbons.

1. Agenda

There were no changes to the agenda.

2. November 9, 2022 Meeting Minutes

Commissioner Moody made a motion to approve the minutes of the November 9, 2022 Commission Meeting; the motion was seconded by Commissioner Chagnon and approved by all Commissioners present.

3. Public Forum

No one from the public was present for the meeting.

4. Commissioners' Corner

Commissioner Stebbins stated that there was a street lighting meeting scheduled for last Thursday that was postponed as it makes more sense to have this meeting once the new Director of Engineering is hired and has begun working. Mr. Springer stated that a candidate has accepted this position and will begin in early January 2023. Once the director has had a chance to acclimate himself, Commissioner Stebbins will reach out to the Board Clerk to reschedule this meeting, possibly in the next few weeks.

Commissioner Stebbins stated that this will be her last Commission Meeting. Commissioner Stebbins stated that, once the Legislative Session begins, it would be difficult for her to arrive at Commission Meetings on time. Also, her term ends in June and Commissioner Stebbins felt it would be a good time to step down. The City Council has approved a new Commissioner, Lara Bonn, and Commissioner Stebbins stated that Ms. Bonn is truly knowledgeable in energy efficiency and various heat pump technologies, is smart, organized, and will be a great addition to the Commission.

5. GM Update

Mr. Springer stated that the Department appreciates everything Commissioner Stebbins has done for the Burlington community and knows that she will continue this work in different capacities and thanked her for her nine years of service on the Commission.

Mr. Springer stated that BED, VGS, and Ever-Green Energy provided a verbal update to the City Council on December 5 on district energy, and also announced with the Mayor that the project is ready to move to Act 250 state permitting for the first-time in its long history of consideration. Ever-Green manages the Burlington District Energy non-profit that we set up to operate and finance district energy and is the entity that will submit the permit application in mid-December. We expect to have construction bids in by the end of this week and will know a little more concretely what the potential pricing for this aspect of the project will look like. The first quarter of 2023 will be significant for the financial arrangements and agreements. We are continuing to work on McNeil steam pricing and on customer allocations. We will be looking at interest rates and have had many conversations with VEDA and the State Treasurer's Office to determine if we can get more favorable rates through state government than commercially. Mr. Springer stated that all of this progress is significant and exciting, as we have never gotten to this point with district energy over the past 40 years.

BED and our colleagues at the Department of Permitting and Inspections presented a final report on our work examining thermal energy policies stemming from Burlington's Charter Change. The report recommended requiring 100 percent renewable systems, or conventional systems with renewable fuels, for new construction starting in 2024, with an alternative compliance carbon pollution impact fee if the building uses fossil fuels. We recommended a delay for domestic water heating in larger multi-family buildings until 2026. We also recommended the same requirements, as it relates to heating and water heating systems for large existing buildings, 50,000 square feet or larger, and City buildings. The proposal would require subsequent voter approval at Town Meeting Day 2023 to advance to ordinance development.

To summarize, we worked with the Building Electrification Institute which is a national organization that knows a lot about what other cities are doing and provides technical assistance and support. For new construction, we would propose starting in 2024, 100 percent renewable for all thermal uses, not just the renewable heating systems that are in place now. This would be applicable for everything except for domestic water heating for larger multi-family buildings. This

decision was based on feedback we received from the affordable housing community that stated in multi-family larger buildings the current domestic water heating technologies are not as far along, so we proposed delaying that until 2026. Also, if a building didn't comply with one of the renewable options and wanted an alternative compliance option, then there would be an up-front carbon fee representative of the lifetime expected output of the fossil fuel system. This fee would be charged up-front at the time of permitting. We proposed that, if a permit were pulled for a heating or water heating system, then they would use a renewable replacement, or they would have the option to pay the carbon fee. In that case, we would cap the carbon fee at no more than 75 percent of the installed cost of the conventional system.

We also recommended that renewable be defined broadly, similar to what we've used already in ordinance. So it can be any renewable system, geothermal, wood heating, heat pumps, all the different technologies, could be a renewable fuel and a conventional system biodiesel, renewable gas, district energy credits that goes forward or even the option for other fuels that may come online that are not here now like renewable hydrogen.

We also proposed that the City would meet the large existing building requirement for all of its buildings, and proposed that the revenues from the carbon fee could be used for helping the City convert its fleet to electric vehicles, consistent with advisory question 7 from town Meeting Day 2021, which was focused on making sure benefits from this proposal would flow to lower income Burlingtonians and making available a clean heating technology fund from the City to support low income households and low income renters.

Mr. Springer stated that there is definitely more work to do, but the first aspect of this is to put it on the Town Meeting Day ballot and get approval, which is required under the charter change. We would then go back to the Council and work on an ordinance language in the spring to begin effective in 2024.

Mr. Springer stated that BED was pleased to host again, for the first time since the pandemic, an in-person celebration for our 4th grade public school students whose artwork is included in the 2023 Net Zero Energy Calendar. We were joined by the Mayor, CHAMP, and our sponsor for the event Vermont Energy Contracting and Supply, with pizza provided by American Flatbread.

6. October FY23 Financials

Ms. Stebbins-Wheelock presented the October 2022 financial results.

The Department's net loss for the month of October was \$366K compared to a budgeted net loss of \$629K, which is \$264K better than budget.

Sales to customers were \$154K below budget for October, but only \$94K or 0.5% below budget for the fiscal year to-date. Commercial sales overall for the year so far are slightly under budget and residential sales are slightly above budget.

Other revenues, primarily EEU, were higher than budget by \$328K for the month. There were no REC revenues in October. Year-to-date REC revenues were \$258K below budget, and we expect this variance to worsen over the fiscal year as we are expecting REC revenues in the next delivery quarters to be below budget due to lower production earlier this calendar year.

Power supply expenses were favorable to budget by \$173K in October. This is due to a combination of increased purchase power expense offset by decreased fuel and transmission expense. McNeil was offline for the entire month; therefore we had savings on fuel, but we paid more for power through the ISO exchange than budgeted.

Non-power supply operating expenses for October were only \$48K under budget and are on budget for the fiscal year to date.

Other income was \$84K below budget due largely to the timing of customer contributions to capital projects and the unrealized loss on investments in the construction fund.

Year to date the Department has a net loss of \$171K compared to a budgeted net income of \$265K.

As of October 31, the Department's capital spending was \$3.1M versus the \$4.4M budgeted, or 34% of the total FY23 capital budget.

Cash as of October 31 was \$6.4M compared to a budget of \$7.2M, or 83 days cash on hand. Department management will be monitoring the cash position closely over the next several months.

The Department's debt service coverage ratio is 3.53 and the adjusted debt service coverage ratio is 1.01.

6. McNeil Station 2023 CY Budget

Munir Kasti presented the McNeil Station 2023 Calendar Budget.

The draft CY23 expense budget is \$33,887,121 as compared to \$28,531,577 for the CY22 budget. The CY23 budget is approximately \$5,355,544 more than the approved CY22 budget. The increase can be explained by an increase in the fuel expense budget of \$4,745,128. In CY22 the wood tons were budgeted for 420,232 tons and the price per ton was \$28.00/ton for an annual average, in CY23 we have budgeted 397,691 tons with a price per ton annual average of \$40.00/ton to accommodate the current wood chip market. The remaining expense budgeted increase of \$610,416 is due to the rising cost of materials and labor.

The capital budget for CY23 is \$2,845,556 as compared to CY22 was \$2,061,391 a difference of \$784,165. The main reason for the increase in our capital budget is a front-end loader replacement is needed and turbine controls upgraded. Additionally, rising costs of materials and

labor has contributed to this increase.

Commissioner Chagnon made a motion to accept the budget as presented; the motion was seconded by Commissioner Herendeen and approved by all Commissioners present.

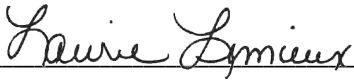
7. Commissioners' Check-In

Commissioner Stebbins stated that BED has an amazing team which is responsive, intelligent, dedicated, and hardworking and she really appreciates all of BED's work and has enjoyed her years on the Commission.

Commissioner Moody made a motion to adjourn; the motion was seconded by Commissioner Herendeen and approved by all Commissioners present.

The meeting of the Burlington Electric Commission adjourned at 6:33 p.m.

Attest:



Laurie Lemieux, Board Clerk



To: Burlington Board of Electric Commissioners
From: Darren Springer, General Manager
Date: January 6, 2023
Subject: **December 2022 Highlights of Department Activities**

General Manager

- **Concept Papers** – BED has submitted or will be submitting, on its own or as part of a group, 7 concept papers in response to DOE funding solicitations under the infrastructure bill that passed during the last Congress. These are primarily focused on grid upgrades and investments that would complement our Net Zero Energy Revenue Bond investments and also on items such as energy storage.
- **2023 Incentive Announcement** – On January 11 BED and Mayor Weinberger will announce BED's updated 2023 incentives for strategic electrification, and also highlight available federal rebates and incentives as part of the Inflation Reduction Act, as well as touch on the new WRAP tariff.
- **Thermal Policy** – On 1/9 BED and DPI will be at the City Council with the Resolution providing ballot language for Town Meeting Day up for consideration for approval.
- **December Storm Events** – BED crews helped GMP during the earlier winter storm outage event, and helped WEC during the storm on the 23rd of December, working through the holidays to help restore power for WEC customers. BED's crews were mentioned in several news stories including <https://vtdigger.org/2023/01/05/powerless-in-a-record-storm-a-small-electric-cooperative-struggled-to-turn-on-the-lights/> and <https://www.wcax.com/2022/12/26/line-crews-still-working-restore-power-hundreds-vermonters/>
- **Legislative Session** – The 2023 legislative session is now underway. BED will be present on January 12 at the legislature to discuss McNeil and sustainable forestry. We anticipate actively participating in Act 151 and RES discussions during the session.
- **Level 3 Chargers** – As part of the Net Zero Energy Revenue Bond, BED has invested in two 62.5 kW level 3 fast chargers. BED issued an RFP for electrical contractors to install the chargers and anticipates project work happening in January. One will be located at 585 Pine Street (replacing the outdated 25 kW Fuji charger), and one at the Marketplace garage downtown.

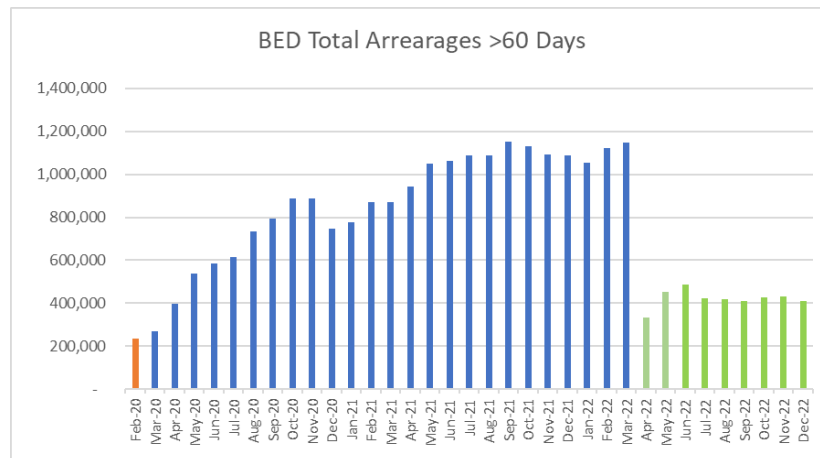
Center for Innovation - Emily Stebbins-Wheelock

- Acting supervisor of Finance & Accounting and Billing staff.
- Coordinating efforts to track and respond to federal IIJA and IRA funding opportunities.
- Working with Safety to assess workspace equipment of CFI staff.
- Overseeing WRAP program implementation and contracting with VHFA.
- Sponsoring formation of new internal work groups re EV chargers and net metering.

- Overseeing 2022 rate case development/implementation.
- Continued sponsorship of IT Forward implementations.

Finance & Accounting

- Delivered training on BED Chart of Accounts and PR process to Pine Street employees.
- Prepared FY24 budget development guidelines and schedule.
- Filed request for accounting order to create a regulatory asset for Moran Frame liability and discussed with DPS.
- Created new accounts and billing codes for WRAP payments and fees.
- Calendar year-end closing and reporting.
- Responded to annual Moody's data request.
- Monitoring receivables in response to COVID19: as of December 31, 2022, BED's total non-current receivables had decreased \$27,040 or 4% compared to the end of November 2022. Arrearages >60 days were \$408,903.



Information Services

- Applied several emergency hardware updates to protect against zero-day threats and vulnerabilities.
- Upgraded SmartGrid/AMI Collection Engine to latest vendor release. This was a significant challenge for both internal and external teams and a critical milestone for the MDMS upgrade project.
- Regular phishing testing to our users.
- Implemented significant process improvement for Finance: multifunction scans to file server (previously scan to email, this removes a manual step).
- Successful wireless network upgrade/replacement at McNeil; work now moves to Pine and Winooski One for area improvements and hardware updates.
- With assistance from the Engineering and McNeil teams, installed network hardware to bring additional connectivity (redundancy) to McNeil.
- Ongoing work to replace and retire older BED corporate servers.

- Ongoing staff training: System & Network Engineer Jeff Clinton spent a week in AlienVault/USM training. System & Network Engineer Neil Charland recently attended HP/Aruba training. Both Neil and Jeff are enrolled at Champlain for the spring semester.
- Continued support of SCADA/ICCP projects for Engineering and Distribution.
- Continued work and progress on IT Forward projects.
- Continued management of cross-departmental working group regarding the implementation of net metering rules as applied to BED customers.
- CyberSecurity work group (meets monthly) has started working through mini table-top exercises with potential risk scenarios. Continued progress on resulting documentation.
- Working with Billing and Finance to optimize revenue reports.

Policy & Planning

- Engagement with Moody's on Net Zero.
- Finalized net metering rate schedule.
- Worked on pole attachment issues with Comcast and Consolidated.
- Developed proposals for DOE Grid Resilience & Innovation Partnerships (storage and innovation rate deployment).
- IRP load forecast development (BAU and Scenario #1).
- Met with representative from Lund, Sweden on Sustainability.
- Filed final EEU Demand Response Plan with proposals related to use of Act 151 and TEPF funds.
- Recorded podcast on DeltaClimaVT program.
- Ongoing monitoring and preparation for legislative session.
- Filed final comments on draft net metering rule revisions.
- Developed and deployed dashboard for monitoring energy market interactions.
- Biomass task force meetings of Climate Council concluded.
- Removal of Packetized Energy WH Control Devices started.
- Received 6 responses to RFP for new renewable resources.
- Reviewed contractual terms for McNeil control upgrade.
- Reviewed existing contracts governing GT work.
- Participated in VT Winter readiness preparation.
- Evaluating impacts of December energy pricing/shortage event.
- Filed response to PUC questions on EV rate.
- Implemented plan for McNeil increased output during high price times.
- Completed Q2 of the Rate Design Initiative Grant funding pilots.
 - Submetering and load control for level 1 EV charging.
 - Submetering and load control for air-source heat pumps.
 - Load control options in commercial/industrial facilities.
- Finalized Enel X Data Sharing Agreement, adding this charger as an approved device under the EV rate.

Sustainability & Workforce Development

- Attended virtual annual Urban Sustainability Directors Network meeting including sessions on federal funding opportunities for cities. The meeting included 120 sustainability colleagues from cities around North America.

- In conjunction with Adam Rabin, Communications & Technology Specialist, recorded NZE Podcast episodes with Jon Copans, Director of Old Spokes Home, Chip Patullo, Champlain Housing Trust Facilities Director, and a BED customer with a NZE home.
- Joined City team to review Transportation Demand Management proposals submitted by private sector transportation specialist and intended to reduce vehicle miles traveled and the negative impacts of single occupancy vehicle use in Burlington.
- Joined BED Energy Services Specialist Bob Bolin for tour of Champlain Club; held a subsequent meeting with Champlain Club Program Director on building electrification, weatherization, and private-sector funding opportunities.
- Participated in Emergent Learning Fund webinar and met with Director of Old Spokes Home on a proposal to support community biking and vehicle miles reduction in support of NZE.
- Facilitated monthly project meeting of the Vermont Low Income Trust for Electricity funded effort to expand EV access for low-income residents through car sharing and enhanced charging infrastructure.
- Participated in Executive Steering Committee meeting with Burlington 2030 District; reviewed final work on the Transportation Property Plan Survey efforts conducted by RSG with funding from Department of Transportation's United Planning Work Program Funds.
- Prepared for January start date of Ita Meno, newly hired Project and Equity Analyst, including meetings with BED staff and external stakeholders.
- Joined a meeting of the Greater Burlington Campus Sustainability Collaborative, including a farewell to Christina Erikson as Christina transitions from Champlain College to Local Motion. Discussed collaboration between BED and Local Motion.
- Visited Ward 6 NPA as part of the building electrification policy stakeholder engagement process; participated in bi-monthly meeting with the Building Electrification Institute to hone policy development; and participated in December 5 City Council meeting.
- Orchestrated monthly Lunch and Learn on safety at BED, presented by Mike Flora, Director of Safety and Environmental,
- Organized a conversation with Sustainability staff in Lund, Sweden to discuss shared NZE goals and the interplay of weatherization and electrification.

Center for Safety and Risk Management – Paul Alexander

Safety

- Closed out OSHA log reporting for 2022.
- Conducted Lunch & Learn presentation of Safety Program to BED employees.
- Attended Safety meeting of all VT Utilities Safety Directors.
- Conducted Operational & Generation Field Audits.
- Performed 3310 Breaker qualification of McNeil employee.
- Completed Safety section for Annual Report.

Environmental

- Completed the McNeil Title V air permit renewal application and submitted it to the VTDEC.
- Conducted quarterly wastewater testing.
- Completed the annual RATA, bi-annual PM testing, and 5 year 3-load flow RATA.

- Completed the CEMS RFP and put out the bid.
- Completed Environmental section for Annual Report.

Risk Management

- New Claims Investigations (4 total: 2 Property, 1 Liability, 1 “Other”).
- Conducted barrel check for safety.
- Reviewed/clarified insurance lines invoices for Finance.
- Meet with legal and Engineering on pole testing RFP.
- Produce and submit C4S’ Annual Report (AR) for Communications area
- Met with IHMS (Ashley) and BED employees on standing chairs ergonomics/safety.
- Finalized updated annual NERC-Alert member list.

Purchasing/General Services

- Conducted PR training for various groups at BED in conjunction with Finance.
- Participated in our monthly call with the state on our electric bucket truck.
- Updated the PR approvals flow in the system per each manager’s request for their area.

Center for Operations & Reliability – Munir Kasti

- Acting Supervisor of Grid Services staff.
- Acting Supervisor of Generation staff.
- Acting Supervisor of Director of Engineering. Completed interviews and recruitment of Director of Engineering position. Paul Nadeau starts on 1/4/23.

Operations

- Completed the first leg of reconductoring 2L5 in the downtown area of South Winooski Avenue and College Street. The 350 mcm copper cable has been replaced with 1000 mcm copper cables.
- Continuing work on University Place while still waiting for streetlight materials to be delivered. Crews have pulled in the secondary lighting circuits in anticipation of the lights coming in.
- Continuing replacement of the services to Lyman Avenue. Crews are pulling cable and preparing for service cutovers estimated to occur in February 2023. Street lighting work will not be completed until Spring 2023.
- Continuing to set poles and assist Consolidated Communications with their pole sets on the Flynn Avenue, Morse Place and Lyman Avenue sections of Champlain Parkway while SD Ireland completes civil work.
- Started replacing old streetlight heads on Oak Street with new LED style heads. Poles will be set in the coming weeks.
- Temporary service to 79 Pine Street has been removed and we have energized part of their permanent service. The fire pump portion of the service should be completed in the coming weeks.
- Due to a storm on December 23, 2022 our system experienced two major outages on Colchester Avenue and Mansfield Avenue caused by trees from high winds. The storm also resulted in a half dozen smaller single customer outages caused by trees.
- Responded to two mutual aid calls for our crews this month:

- From December 17, 2022 to December 20, 2022 two crews in two trucks went to Green Mountain Power's White River Junction territory.
- From December 24, 2022 to December 29, 2022 two crews in two trucks went to Washington Electric Cooperative territory.
- BED operations welcomed a new apprentice on December 12, 2022. David Seymour comes to us from a contracting company and will be attending the Northeast Public Power Association (NEPPA) apprentice school starting in March 2023.
- Provided estimates for City Place services and street lighting.
- Coordinated equipment site selection for the McNeil Electric Boiler. Project designs and estimates will be built once the location is determined.
- Reviewed legal language issues in our pole inspection contract with Osmose Utility Services. BED Legal met with Osmoses' attorney and given an updated draft to the contract legal language to engineering with his approval.
- Received notification from the Sunset Cliff Homeowners Association that the rebuild project has unanimous approval. We have received two of the signed easement documents from residents. Engineering is waiting for the remaining easement documents to be sent.
- Worked on submitting progress billing for the University Place decorative street lighting project based on our current MOU with DPW. Currently waiting for a signature from DPW for the updated MOU in order to finish the remaining work.
- Sent an updated estimate to 500 Pine Street for a customer requested secondary rebuild.
- Issued a pole attachment license to First Light Fiber for a 7-pole attachment application on Pine Street.
- Filed easement document for 400 Appletree Point Road at the Land Records Office at City Hall for a customer driven relocation and upgrade project at 410 Appletree Point Road. This work has now been released to crews.
- Updated inventory minimum and maximum levels for our overhead conductors and wooden poles due to long lead times.
- Updated estimates for upcoming capital projects that were included in BED's application for the Department of Energy Grid Resilience Grant.
- Finalized our responses to the distribution transformer and customer electrification questions asked by the Vermont Department of Public Service.
- Issued work and design orders:
 - New service at 278 Main Street.
 - New service at Cambrian Rise Building M.
- Review of conflicts between BED infrastructure and proposed design plan for Main Street Great Streets.
- Provided support to Energy Services for installation and RFP of new DC fast chargers.
- Worked on Deforest Road Illuminating Engineering Society (IES) design.

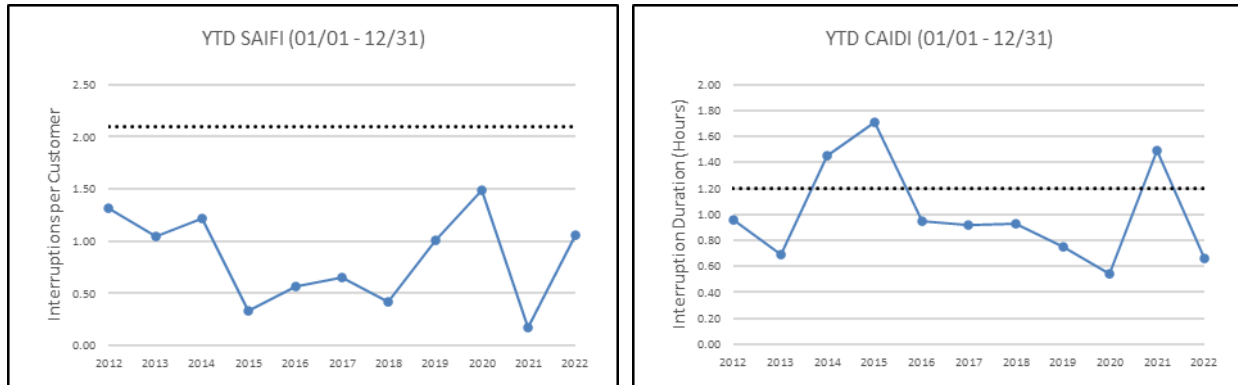
Grid Services

- Tested new inter-control center communications protocol (ICCP) connection with VELCO.
- Resolved issue of the SCADA "assembly needs update" nuisance alarm.
- Completed the remaining work for the replacement of SCADA firewalls.

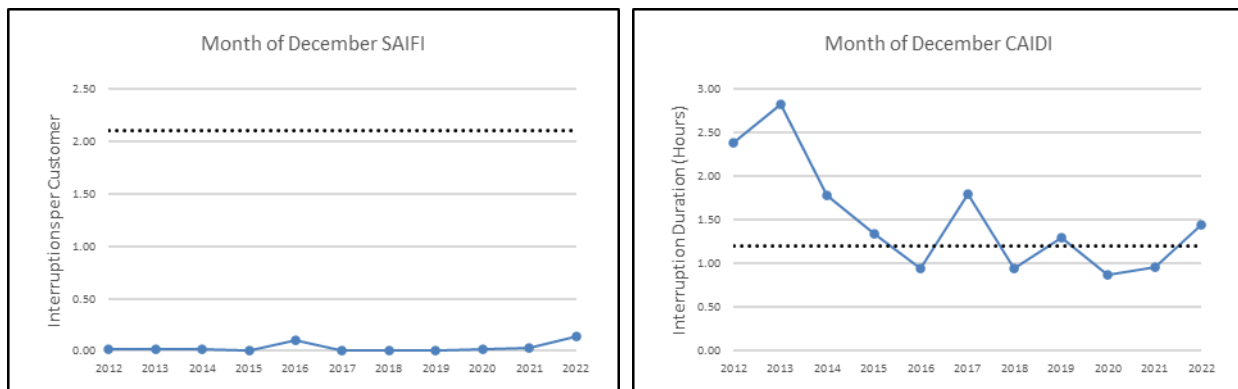
SAIFI & CAIDI Outage Metrics:

BED's distribution system experienced 21 outages in December 2022 (12 unscheduled and 9 scheduled). BED's SAIFI for the Month of December was 0.14 interruptions per customer and CAIDI was 1.45 hours per interruption. BED's YTD SAIFI is 1.06 interruptions per customer and YTD CAIDI is 0.67 hours per interruption. The high CAIDI value for this month is attributed to two separate storms that came through the area causing tree contact in multiple locations.

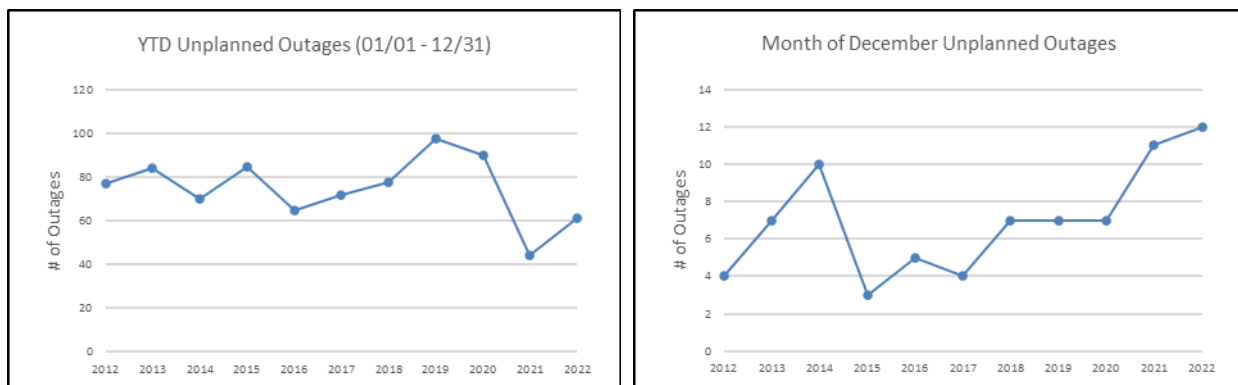
The following figure shows BED's historical YTD SAIFI and CAIDI:



The following figure shows BED's historical December SAIFI and CAIDI:



The following figure shows BED's historical Unplanned Outages:



GENERATION*McNeil Generating Station*

Month Generation:	35,736 MWh
YTD Generation:	228,981 MWh
Month Capacity Factor:	96.06 %
Month Availability:	95.17 %
Hours of Operation:	707.13 hours

This month at McNeil we concluded our tube leak repairs, conducted Relative Accuracy Test Audit (RATA) testing, and miscellaneous maintenance repairs. We have made progress on water curtain and tool crib projects. The reductions for McNeil during this month were due to the tube leak repairs, RATA testing, and some equipment freezing issues.

Winooski One Hydroelectric Station

Monthly Generation:	3,198.782 MWH (% of average)
YTD Generation:	25,360.353 MWH (% of average)
Month Capacity Factor:	58.10 %
Annual Capacity Factor:	39.12 %
Month Availability:	98%

This month at Winooski One we replaced the fish screen, replaced hydronic pump, and completed other miscellaneous repairs. There was a small loss of generation due to the storm causing trees to fall on the power lines on 12/17/22.

Burlington Gas Turbine

Month Generation:	00.000 MWh
YTD Generation:	355.686 MWh
Month Capacity Factor:	0.000%
Month Availability:	0.0%
Hours of Operation Unit A:	0.0
Hours of Operation Unit B:	0.0

The asset has been out of service since 7/20/22 undergoing troubleshooting and repairs due to the forced outage resulting from the failed power turbine (PT) A coupling shim pack. In total, four PT and generator bearings, associated with both PT A and PT B, along with the East and West generator bearing seals were found to be out of tolerance after the failure event and in need of repair and machining. Initial troubleshooting is complete, and repairs are underway. Unfortunately, some re-machined components received were found to be oversized during installation activities and needed to be sent back to the shop for additional machining. Based on present known remaining activities required to place the asset back in service, the asset is expected to be available for operation in late January 2023 after reassembly activities occur and vibration analysis is completed upon commissioning. The asset is unavailable for operation at the end of the month.

Solar (Airport 499 kW)

Month Generation: 12.0 MWh (5% from previous year)
 YTD Generation: 623 MWh
 Month Capacity Factor: 3%
 Month Availability: 100%

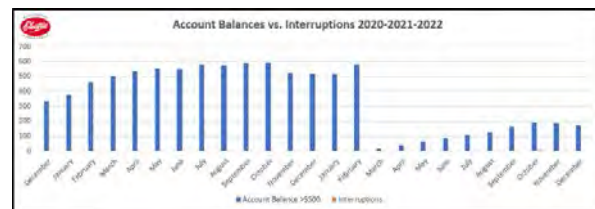
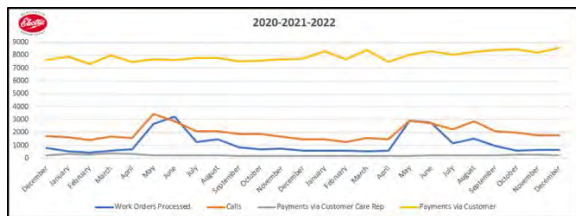
Solar (Pine Street 107 kW)

Month Generation: 2.0 MWh (12% from previous year)
 YTD Generation: 113 MWh
 Month Capacity Factor: 3%
 Month Availability: 100%

Center for Customer Care & Energy Services – Mike Kanarick

Customer Care

- **Call Answer Time (75% in 20 seconds):** December 2022 87.5%, November 83.5%, October 85.7%, September 81.4%, August 69.5%, July 79.5%. December 2021 84.6%, November 85.2%, October 77.7%, September 82.4%, August 81.5%, July 81.6%. While Customer Care continued to lend a hand with cash receipts (taking one Rep off phones), this month we again benefitted from the hiring of temporary agency worker to administer VERAP allowing us to get another Rep back on the phones.
- **December 2022 Stats:** please see dashboard for additional metrics categories.



**Please note that our account balances greater than \$500 was substantially reduced with the application of more than \$1M in ARPA funds in early April 2022.*



Communications and Marketing

- **Net Zero Energy Festival – A Supercharged Day of Family Fun:** please mark your calendars for Saturday, September 23, 2023 (rain date September 24). Planning has begun for our 2nd annual NZE Festival to help our community continue to learn how to take steps to meet our Net Zero Energy city goal by 2030. Last year, we had activities and information for folks of all ages, including: food trucks, DJ & live music, raffles, E-Bike test rides and EV test-drives, mobile bike

repair unit, bike parking, heat pump, solar, and lawn care vendor partners, walking, biking, and carsharing advocates, BED energy experts, CHAMP, and more.

- Energy Assistance Program: new monthly bill credit program to offset by 12.5% the rate increases (3.95% proposed this year and 7.5% last year) began July 1, 2022 – boost to former Temporary Energy Assistance Program of 7.5%. Last year’s participants in Temporary Energy Assistance Program of 7.5% automatically enrolled in new program. So far, 151 (same # as November & up from 142, 135, 134, 120, 114, 101, 99, 90, 79, 75, 69, and 58) customers have applied with 115 approved, 35 pending verification, and 1 found ineligible. Customers can learn about eligibility requirements and apply by visiting burlingtonelectric.com/rates.
- Vermont Emergency Rental Assistance Program (VERAP - erap.vsha.org): launched by State in April 2021 “to help alleviate income pressure on tenants and landlords and restore stability to the rental community.” VERAP helps tenant households with paying rent, as well as paying utility and home energy costs. Big news: the state has announced that the last day to apply will be December 31, 2022, and that any eligible amounts will be covered only for bills through the end of the year. In addition, as of October 1, 2022, assistance was reduced from 100% to 70% for all VERAP participants, including existing renters and new applicants. **BED has approved 1,271 of 1,599** (up from 1,257 of 1,586 November, 1,204 of 1,550 October, 1,136 of 1,511 September, 1,052 of 1,442 August, 962 of 1,288 July, 870 of 1,202 June, 810 of 1,099 May, 765 of 1,037 April, 709 of 972 March, 591 of 866 February, 560 of 818 January, 478 of 696 December, 411 of 639 November, 312 of 561 October, and 280 of 461 September) **program applicants for a total of \$1.133M** (up from \$1.107M November, \$1.053M October, \$991k September, \$899k August, \$796k July, \$706k June, \$660k May, \$620k April, \$568k March, \$474k February, \$434k January, \$353k December, \$323k November), **of which BED has received \$1.123M** (up from \$1.099M November, \$1.044M October, \$966k September, \$852k August, \$731k July, \$687k June, \$643k May, \$599k April, \$533k March, \$436k February, \$388k January, \$263k December, \$212k November).
- Vermont Homeowner’s Assistance Program (VHAP): launched by the State of Vermont through the Vermont Housing Finance Agency (VHFA) in January 2022 to help prevent home foreclosure and displacement with assistance for overdue mortgage payments, homeowners association fees, property taxes, and utilities. So far, BED has certified 82 (up from 79, 70, 61, 52, 46, 34, 27, 13, 12) applicants and received \$38k (same as November & October and up from \$22k, \$10k) in payments.
- Annual Net Zero Energy Calendar Contest: 2023 calendars are available at the reception desk at BED.
- Highlight: for a fifth year, BED and VGS partnered with Burlington’s New Year’s Eve event, Highlight. This year, rather than encouraging our customers to make the change from paper billing to e-billing to help our environment, we asked our customers to make social media posts showing steps they are taking toward Net Zero Energy. Customers who made such posts and/or signed up for our NZE e-newsletter received one free ticket (\$12 value) to Highlight. We included a bill insert featuring this promotion in all our customers’ December bills. It’s always good to try new calls to action, but we learned in this instance that, despite our constant promotion, our customers did not engage in the opportunity to share their steps through social media. We will consider another call-to-action next time around.
- North Avenue News: our January column and ad both promote new and enhanced rebates for 2023.
- December 2022 Website and Facebook Highlights

- Overall site-wide pageviews for December 2022 = 20,272
 - November = 21,290
 - October = 21,797
 - September = 22,639
 - August = 27,972
 - July = 23,885
 - June = 24,859
 - May = 29,609
 - April = 28,428
 - March = 23,967
 - February = 17,126
 - January = 19,000
 - December = 18,374
- Unique homepage pageviews for December 2022 = 8,207
 - November = 7,371
 - October = 6,762
 - September = 6,921
 - August = 8,895
 - July = 8,565
 - June = 7,860
 - May = 8,211
 - April = 7,499
 - March = 7,282
 - February = 5,831
 - January = 6,380
 - December = 6,346

- Full site traffic for December 2022



- Visitors by website page – some columns indicate n/a as the page-specific URLs changed when we launched our new website.

page title	Dec 2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	July 2022	June 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022	Dec 2021
E-billing	234	241	319	330	362	443	524	287	234	266	266	340	345
Contact Us	473	507	510	553	862	530	654	784	489	555	360	445	439
McNeil Generating Station	393	614	699	624	410	425	482	648	726	557	255	374	379
Heat Pumps	408	883	508	435	579	589	490	638	512	559	331	382	264
Rebates	554	584	588	627	689	1129	754	920	636	917	488	450	377
Rebate Center	524	617	609	597	876	852	934	1026	688	732	508	549	419
Green Stimulus	22	36	19	66	32	37	29	50	53	121	49	57	27
Stop or Start Service	273	294	348	407	841	738	951	2184	464	323	202	248	279
Leadership Team	178	202	216	224	206	159	174	185	284	269	237	265	196
Rates & Fees	201	226	226	289	228	225	208	254	220	246	180	221	203
Usage Tracker Registration	112	124	120	124	177	118	128	113	77	145	120	156	142
RFP	413	374	516	419	268	225	335	268	211	534	597	362	152
Residential Ways to Save	134	125	133	142	187	194	199	249	171	155	146	147	157
Electric Vehicles	331	356	295	355	497	483	324	273	274	356	296	222	244
E-Bikes	76	107	151	173	292	375	202	260	167	206	89	78	76
Net Zero Energy News	40	48	40	37	25	25	32	24	57	27	30	33	26
Electric Vehicles	331	356	295	355	497	483	324	273	274	356	296	222	244
Our Energy Portfolio	49	65	74	57	102	90	55	80	79	124	54	58	48
Lawn Care	67	71	123	110	135	249	259	472	121	149	31	n/a	n/a
RFP Detail	195	241	533	214	143	35	93	151	110	422	413	214	n/a
Defeat The Peak	8	9	12	15	333	242	15	25	9	16	11	8	12
Commercial Ways to Save	46	49	38	31	40	46	48	43	42	63	45	30	43

- Top-performing December Facebook posts

- Happy Hanukkah
- Outage Notifications/Updates
- District Energy System announcement

	 Happy #Hannukah from BED. Here's a sh...	Boost post	...	Dec 19, 2022	803 People reached	111 Post engagements	33 Reactions	1 Comments	1 Shares
	 We are aware of an outage affecting abo...	Boost post	...	Dec 17, 2022	422 People reached	20 Post engagements	4 Reactions	0 Comments	1 Shares
	 We are aware of a large outage affecting ...	Boost post	...	Dec 16, 2022	964 People reached	255 Post engagements	13 Reactions	5 Comments	1 Shares
	 BED was excited to join Mayor Miro Wein...	Boost post	...	Dec 6, 2022	914 People reached	59 Post engagements	11 Reactions	2 Comments	1 Shares

Energy Services

UVM

- Trinity Campus District Energy Feasibility Study – A feasibility study has been completed by an engineering firm contracted by UVM. Its scope is focused on the future housing expansion and system consolidation that is being planned at UVM's Trinity Campus. BED is in communication with UVM concerning available incentives for efficient design features, which includes a possible geothermal district energy system. We are also focusing strongly on optimized building envelope systems which will reduce the necessary size and capital cost of mechanical equipment supporting the campus and provide a smaller energy footprint throughout the full lifetime of the buildings. BED paid our committed rebate for the cost of the initial energy study this month. VGS also cost shared on this study.

UVMCC

- Miller Building – Although this building has been in operation for several years, the energy modeling calibration is just now in the process of being completed. Complications were experienced in getting reliable usage data from the central plant services of steam and chilled water. This month BED received the initial energy model calibration report. We are in the

beginning process of analyzing the data, but at this point there still seems to be calibration work to be done to meet the final requirements for calibration accuracy.

- Secondary Chilled Water Balancing – The Miller Building addition, finished several years ago, created a significant new load on the central chiller plant. To optimize chiller efficiency, the chiller secondary loop needed to be re-balanced so optimal differential pressures can be maintained. This project was initiated in late 2019, but the Covid lock-down created a lengthy delay in implementation. The balancing process has been completed for several months. BED went on site this month to assist the controls contractor in identifying additional trend data that we will need in order to estimate energy savings for this system upgrade.

Other Services

- Weatherization coordination with VGS - VGS requested electrical account usage histories this month (with customer permission) for 3 SF and 3 MF buildings (representing 12 living units) for the purpose of weatherization audit preparation and building energy use analysis. This brings the total YTD (2021-2022) requests to 156 SF and 114 MF buildings (representing 3920 living units). The overall increase in multifamily building interest in the VGS weatherization program is being driven by the Burlington Minimum Energy Efficiency Rental Housing Ordinance.
- Continue to collaborate with VGS staff to target Burlington multifamily buildings (owners) that have received a VGS audit, analysis and incentive offer but have not moved forward with their projects. These buildings will fall under the new Burlington Minimum Housing Standard Ordinance at some point in the next several years. The focus for approaching this group and encouraging them to act is to add a supplemental BED incentive where appropriate.
- Rhino Foods / Manufacturing Facility Expansion – BED attended a City of Burlington Technical Review Committee (TRC) meeting concerning an expansion of the Rhino Foods facility at 179 Queen City Park Rd. It will largely be freezer warehousing with additional production area included. This is a significant manufacturing expansion for the city and its completion at this site will help create a stable employment environment for several hundred employees. BED has been working with Rhino for several months concerning maximizing the energy efficiency of the refrigeration systems for this new building.
- COTS Main St. Addition NC / 278 Main St. – This project involves the expansion of the existing COTS building to house sixteen additional apartments for high-risk, low-income occupants. BED had supplied an incentive letter-of-commitment to the building's owner to assist in their financing effort. The official ground-breaking for the addition occurred late this month and BED attended the ceremony.
- Old Spokes Home (Bicycle Sales & Repair) / Air Stratification – The customer has inquired about the possible use of ceiling fans in the winter to reduce stratification in their high-bay areas. This is a heat pump heated facility where added air movement may help distribute air more evenly and allow lower set-points for the space temperature thermostats. This month BED provided a half-dozen temperature and RH loggers to be installed at both floor and ceiling levels to help understand the extent of stratification and determine what further action might be helpful. It is expected to leave those in place for up to two months to gather sufficient data during the coldest winter weather.
- Redstone 85 North Avenue Apartments / Re-Commissioning – BED was a participant in a meeting with the owner of this 43-unit multifamily completed in 2019. This is an efficiently designed

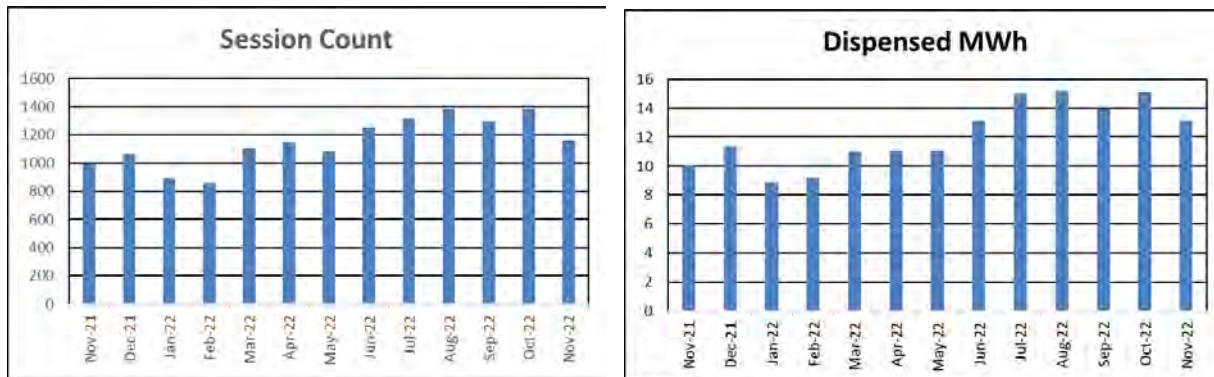
building with excellent envelope and blower door test results. This building is conditioned mostly via air source heat pump, for both heating and cooling. A re-commissioning process has identified one area of possible improvement in natural gas heating efficiency, focusing on the interstitial space above the parking garage. A plan has been put in place to investigate the operation of this heating system and determine if optimization of the boiler controls can reduce what seems to be an excessive amount of natural gas usage.

- Hotel VT & Courtyard Marriott / HVAC Upgrades – At the customer’s request, BED made a field visit to the site several months ago to discuss planned improvements in the operation of these two hotel’s HVAC systems, to improve comfort and energy efficiency. Measures under consideration include room thermostat integration to the hotel’s reservation system, enhanced shading for southern facing windows, laundry room drain heat recovery and DHW efficient recirculation pumping. This month we delivered some preliminary information about energy savings and a rebate for the guest room thermostat project to assist in the possible awarding of a state grant for the project.
- First Congregational Church / Efficiency Audit – BED received a request from the church last month to investigate opportunities to reduce their energy footprint. AMI data analysis shows a significant amount of night-time electrical load. A BED walkthrough was completed earlier this month and a preliminary report was distributed. Some definite areas of potential energy savings have been identified. A second site visit was completed near the end of this month to look more deeply into the savings possibilities. An updated report has now been distributed with some action items already being planned.
- Green State Gardener / Indoor Cannabis Grow Facility – This company on Pine St. has nearly finished the process of fitting-up an existing portion of their building into an indoor cannabis growing facility. The area is quite small – 600 SF. BED is working with EVT and their customized energy modeling software to compare a baseline grow facility to the facility as it is designed and installed. The details of the grow lighting strategy have been finalized and savings calculations are essentially complete. BED is waiting now for documentation on the cost of the equipment so a rebate offer can be formulated.

Electric Vehicles

- The EVSE dispensed a total of 14.9MWh and supported 1,245 sessions.
- The top 3 sales were 75, 94 & 96 kWh and occurred at Church & Main, the Cherry St. garage & College St. garage stations.
- The top 10 sessions (0.8% of total) accounted for 5.0% (750 kWh) of the total monthly sale. The ten sessions ranged from 65 kWh-96 kWh.
- The EVSE served 632 unique drivers.
- DCFC installation RFP has been posted. Pending contractor interest and walkthrough is scheduled Thursday, January 5.
- In an effort to address EV drivers who park in EV spaces but don’t charge, UVM has been using the ChargePoint portal to study charging activity. They have requested expanded access to the four BED owned stations on campus for three members of their parking enforcement team.
- We requested a quote from ChargePoint on December 14 for a replacement head for BE01 (Church and Main). Followed-up on December 27 and January 3. They have yet to respond.

- Session Count and Dispensed Energy plots from the from the public charging network are shown below.



- Number of EV and PHEV rebates to date – 460 (of this 84 LMI rebates to date as shown below)
 - New All Electric Vehicle – 188
 - New All Electric Vehicle (LMI) – 35
 - New PHEV – 119
 - New PHEV (LMI) – 41
 - Used All Electric Vehicle – 37
 - Used All Electric Vehicle (LMI) – 5
 - Used PHEV- 19
 - Used PHEV (LMI) – 3
 - New All Electric Vehicle (\$50K plus) – 12
 - New PHEV (\$50K plus) – 1
- Number of customer loans with lending partners to date – 5
- Number of customers currently participating in the new EV Rate – 157
- Number of E-Motorcycle rebates to date – 1

Electric Vehicle Charging Stations

- Number of home EV charging stations rebates to date – 114
- Number of Multi-family EV charging stations rebates to date – 1
- Number of Multi-family Non-EVmatch charging stations rebates to date (LMI) – 3
- Number of Multi-family Non-EVmatch charging stations rebates to date – 2
- Number of Multi-family EVmatch Public charging stations rebates to date – 2
- Number of Level 2 Workplace charging stations rebates to date – 4

Electric Lawn Equipment to Date

- Number of e-mower rebates to date – 552 (11 commercial & 541 residential)
- Number of e-leaf blowers to date – 60
- Number of Residential e-Trimmers – 45
- Number of Residential e-chainsaws – 8

Heat Pump Installations to Date (since the September 2019 NZEC announcement)

- Total Number of Heat Pump Technology rebates to date- 893 (of this 139 LMI rebates to date as shown below)
 - Number of ductless heat pumps to date – 538
 - Number of LMI eligible ductless heat pumps to date – 111
 - Number of centrally ducted heat pumps to date – 182
 - Number of LMI eligible centrally ducted heat pumps to date – 18
 - Number of air-to-water heat pumps to date – 1
 - Number of commercial VRF heat pump systems to date – 2
 - Number of geo-thermal heat pump systems to date – 1
 - Number of heat pump hot water heaters to date – 35
 - Number of LMI eligible heat pump hot water heaters participants to date – 5

Electric E-Bikes to Date

- Number of e-bike rebates to date – 420

Electric Induction Stovetops to Date (new offering in Jan 2021)

- Number of induction Stovetops rebates to date – 33

Electric Snow Blowers to Date (new offering in Jan 2022)

- Number of snow blower rebates to date – 12

BED 2022-2023 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Dec 2022 Actuals	Nov 2022 Actuals	Oct 2022 Actuals	Sept 2022 Actuals	Aug 2022 Actuals	July 2022 Actuals	June 2022 Actuals	May 2022 Actuals	Apr 2022 Actuals	Mar 2022 Actuals	Feb 2022 Actuals	Jan 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
Engage Customers and Community																
Call answer time 75% within 20 seconds	75%	88%	84%	86%	81%	70%	79%	75%	71%	85%	86%	85%	90%	avg 82%	avg 81%	
Delinquent accounts >\$500	0	173	189	192	166	127	111	89	63	40	16	571	513	avg 529	avg 201	
Disconnects for non-payment	0	0	2	10	0	0	0	0	0	0	0	0	0	0	45	
# of residential weatherization completions	10	0	1	1	1	1	1			0	0	0	0	5	3	11
Weatherization completions in rental properties		1	2	1	1	1	0		0	-	0	0	0	0	0	TBD
# or % of homes or SF weatherized		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0
Champ Challenge weatherization participants		0	0	0	0	0	0	0	0	2	2	3	3	0	1	TBD
# of commercial building with improved thermal envelopes		0	1	1	0	0	0	1	0	0	0	1	0	5	5	0
% of EEU charge from LMI customers spent on EE services for LMI customers	\$ 180,250	\$ 335,234	\$ 333,734	\$ 315,262	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Strengthen Reliability																
SAIFI (AVG interruptions/customer) (annual target)	< 2.1	0.14	0.01	0.04	0.09	0.36	0.02	0.04	0.06	0.002	0.23	0.01	0.06	0.22	1.50	1.03
CAIDI (AVG time in hrs to restore service) (annual target)	< 1.2	1.45	1.6	0.76	0.67	0.50	0.89	1.23	0.31	12.05	0.38	1.4	0.12		0.55	0.75
Distribution System Unplanned Outages (annual target)	82	12	1	6	5	8	5	5	2	3	3	7	4	44	90	98
McNeil Forced Outages	0	1	2	1	1	2	1	0	3	0	1	0	2	5	21	TBD
W1H Forced Outages	0	1	0	0	1	0	0	0	2	2	0	0	0	9	2	TBD
GT Forced Outages	0	1	1	1	1	1	1	0	0	0	0	0	0	2	3	TBD
Invest in Our People, Processes, and Technology																
Avg. # of days to fill positions under recruitment	120	145	116	97	94	90	80	87	99	96	76	102	115	68	179	
# of budgeted positions vacant	0	9	10	10	10	13	10	7	7	9	9	9	10	avg 9	6	NA

BED 2022-2023 Strategic Direction Dashboard

	Target	Dec 2022 Actuals	Nov 2022 Actuals	Oct 2022 Actuals	Sept 2022 Actuals	Aug 2022 Actuals	July 2022 Actuals	June 2022 Actuals	May 2022 Actuals	Apr 2022 Actuals	Mar 2022 Actuals	Feb 2022 Actuals	Jan 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
Metrics by Strategic Initiative																
Innovate to Reach Net Zero Energy																
<i>Tier 3 Program</i>																
# of residential heat pump installs		11	11	40	30	20	41	22	12	9	26	13	20	315	203	10
# of commercial heat pump installs		0	1	0	0	1	0	0	0	0	0	1	1	4	13	0
# of residential hot water heat pump installs		0	10	8	1	1	2	1	1	1	0	1	0	14	6	4
# of commercial hot water heat pump installs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heat pump rebates		13	11	41	31	30	41	22	12	9	26	14	21	328	212	0
Heat pump hot water heater rebates		0	1	8	1	1	2	1	1	1	1	1	0	15	3	0
LMI heat pump rebates		4	0	3	0	8	6	6	2	4	4	6	0	28	6	4
Heat pump technology installs in rental properties		1	1	1	1	1	0	2	0	0	1	1	1	14	9	TBD
LMI heat pump hot water heater rebates		0	0	0	0	0	0	0	0	0	1	0	0	2	0	1
EV rebates - new		5	6	7	7	4	3	3	2	3	5	2	6	67	14	36
EV rebates - pre-owned		0	1	2	0	2	1	2	3	3	3	0	1	7	8	2
LMI EV rebates		2	1	1	0	0	1	3	0	1	0	0	0	11	7	7
PHEV rebates - new		1	4	5	0	1	2	6	1	1	6	0	0	41	10	17
PHEV rebates - preowned		1	1	1	1	2	2	1	1	0	1	0	1	6	5	3
LMI PHEV rebates		0	1	1	0	1	0	2	2	1	5	1	1	13	6	2
Public EV chargers in BTV (total)		30 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	27 ports	14
Public EV charger energy dispensed (kWh)		14,900	13,100	15,100	13,900	15,200	15,000	13,100	11,000	11,000	11,000	9,200	8,860	86,570	35,690	78,000
Home EV charging station rebates		2	5	16	16	15	15	0	0	0	0	0	1	32	20	12
EV rate charging customers (total)		157	153	153	149	143	135	129	123	116	109	106	102	40	40	28
Level 2 charger rebates		3	4	4	0	0	0	0	0	0	0	0	0	10	0	1
Level 1 charger rebates		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
E-bike rebates		8	9	21	31	21	31	4	12	8	0	3	4	88	36	65
E-mower rebates		0	2	6	13	20	31	56	23	4	1	1	2	154	95	142
E-forklift rebates		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
MWE of Tier 3 measures installed		1,526	1,943	1,874	1,850	2,905	2,967	1,883	1,890	957	2,013	829	1,730	23,763	35,112	3,342
% Tier 3 obligation met with program measures	100%	131%	122%	111%	100%	89%	72%	55%	43%	32%	27%	15%	10%	159%	283%	31%
<i>Net Zero Energy Roadmap Goals</i>																
# of solar net metering projects installed		1	0	6	2	3	2	2	7	2	3	1	4	29	24	33
No. of homes receiving NZE Home Roadmaps		0	0	0	0	0	0	1	1	0	2	1	2	10	7	
Residential heat pumps for space heating (no. of homes)	2022: 8615	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1235, 20% of goal	891	572
Commercial heat pumps for space heating (1000 SF floor space served)	2022: 5397	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	405, 11% of goal	374	374
Residential heat pumps for water heating (no. of homes)	2022: 4365	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	108, 4% of goal	108	87
Commercial heat pumps for water heating (1000 SF floor space served)	2022: 1019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	-
EV registrations in BTV (light-duty)	2022: 2294	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	549, 45% of goal	361	296
Greenhouse gas emissions (1000 metric tons CO2)	2022: 150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	188, 114% of goal	185	214
Fossil fuel consumption (billion BTU)	2022: 2418	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3220, 120% of goal	3,182	3,660

BED 2022-2023 Strategic Direction Dashboard

	Target	Dec 2022 Actuals	Nov 2022 Actuals	Oct 2022 Actuals	Sept 2022 Actuals	Aug 2022 Actuals	July 2022 Actuals	June 2022 Actuals	May 2022 Actuals	Apr 2022 Actuals	Mar 2022 Actuals	Feb 2022 Actuals	Jan 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
Metrics by Strategic Initiative																
<i>Demand Response</i>																
Manage Budget and Risks Responsibly																
<i>Safety & Environmental</i>																
No. of workers' compensation/accidents per month	0	0	1	1	0	1	1	2	3	3	0	1	0	4	8	
Total Paid losses for workers' compensation accidents (for the month)	annual	\$10,714	\$13,172	\$1,899	\$9,005	\$12,122	\$8,264	\$79,665	\$5,153	\$3,573	\$382	\$396	\$757	\$ 93,612	\$ 165,402	\$38,288
Lost Time Incident Rate (days/year) (Dec numbers reflect annual results)	<= 3.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.93	0.89
Lost Time Severity Rate (days/year) (Dec numbers reflect annual results)	<= 71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	41.71	78.2
Lost work days per month	0	0	30	29	24	0	17	13	0	0	0	0	0	0.0	45	
NOx reporting levels to EPA (Quarterly) (lbs/mmbtu)	<0.075	0.1	0.064	0.0	0.068	0.068	0.1	0.065	0.062	0.0	0.07	0.07	0.071	0.07	0.07	
# of reported spills, waste water incidents (monthly)	0	0	0	0	1	2	1	2	0	0	0	0	0	4	4	
Phosphorus levels to DEC in lbs (monthly/yearly total)	<0.8/37	0.041/0.688	0/0.666	0/0.666	0.005/0.69	0.006/0.78	0.007/0.89	0.109/0.92	0.024/0.86	0.119/1.00	0.104/1.52	0.067/1.71	0.145/1.83	2.028		1.169
# of new power outage claims reported (monthly)	1	1	1	0	1	0	0	2	0	0	0	0	0	7	4	
# of new auto/property/other liability claims reported (monthly)	2	3	3	2	2	3	5	3	0	4	2	0	0	18	27	
<i>Purchasing & Facilities</i>																
# of Purchase Orders for Inventory (Target: avg for winter months)	42	66	51	75	56	30	57	27	50	59	56	39	70	644	593	
\$ value of Purchase Orders for Inv. (Target: avg dollars spent during winter)	\$78,000	\$1,084,311	\$219,733	\$253,885	\$275,925	\$146,006	\$129,412	\$179,709	\$394,020	\$753,161	\$626,698	\$231,292	\$566,870	\$ 3,278,620	975,531	
# of stock issued for Inventory (Target: avg during winter months)	320	453	652	529	565	503	477	562	526	446	531	556	387	4,402	4,545	
\$ value of stock issued for Inventory (Target: avg. during winter)	\$ 65,000	\$ 155,594	\$ 543,697	\$ 194,302	\$ 168,160	\$ 115,040	\$ 92,581	\$ 333,014	\$ 114,763	\$ 231,454	\$ 141,090	\$ 71,107	\$ 39,432	855,456	1,086,478	
# of posters pulled from poles monthly (Target: goal to remove each month)	58	21	22	46	61	171	48	36	117	42	164	76	96	2,728	627	
# of Spark Space and Auditorium setup/breakdowns monthly (Target: Covid impact)	3	16	16	18	15	11	8	13	11	12	7	3	2	88	87	
<i>Finance</i>																
Debt service coverage ratio	1.25		3.14	3.53	3.56	3.88	3.82	4.61	4.93	4.59	5.47	5.26	5.15	NA-FY basis	NA-FY basis	NA-FY basis
Adjusted debt service coverage ratio	1.5		0.89	1.0	1.01	1.09	1.03	1.22	1.33	1.2	1.5	1.43	1.39	NA-FY basis	NA-FY basis	NA-FY basis
Days unrestricted cash on hand	>90		81	83	106	101	99	120	140	139	138	145	142	NA-FY basis	NA-FY basis	NA-FY basis
<i>Power Supply</i>																
McNeil generation (MWH) (100%)	per budget	35736.0	20,758	0	1,238	25,511	33,526	13,093	3,787	0	25,342	33,825	36,165	273,355	192,696	
McNeil availability factor	100%	95%	62%	17%	76%	74%	91%	39%	11%	60%	87%	100%	96%	80%		
McNeil capacity factor	per budget	96.1	58%	0%	3%	69%	90%	36%	10.2%	0%	68%	100.7%	97.2%	62.4%		
Winooski One generation (MWH)	per budget	3198.8	1,921	1,541	1,578	376	649	1,309	3,046	4,495	3,850	1,751	1,635	24,752	21,194	
Winooski One availability factor	100%	98%	99%	99%	99%	99%	99%	98%	97%	97%	99%	98%	98%	97%		
Winooski One capacity factor	per budget	58.1	37%	28%	29%	7%	12%	55%	55%	84%	69%	35%	30%	37%		
Gas Turbine generation (MWH)	NA	0.0	0.0	0.0	0.0	0	55.2	77.3	40	16	137.4	13.7	16.1	373	441	
Gas Turbine availability factor	100%	0%	0%	0%	0%	0%	64%	100%	100%	100%	97%	100%	93%	96%		
Gas Turbine capacity factor	NA	0.0	0.0	0%	0%	0%	0.39%	0.56%	0.23%	0.1%	0.8%	0.09%	0.09%	0.21%		
BTV solar PV production (mWh)		141	273	467	454	620	706	637	687	488	396	235	156	5,015	5,182	
Cost of power supply - gross (\$000)			\$2,894	\$2,404	\$3,038	\$2,571	\$4,078	\$5,481	\$3,649	\$2,565	\$2,718	\$2,409	\$2,116	\$30,285	\$31,081	
Cost of power supply - net (\$000)			\$1,721	\$2,404	\$3,038	-\$87	\$4,078	\$4,019	\$1,331	\$2,565	\$2,718	\$746	\$2,116	\$22,134	\$23,388	
Average cost of power supply - gross \$/KWH			\$0.11	\$0.09	\$0.11	\$0.08	\$0.13	\$0.19	\$0.14	\$0.11	\$0.10	\$0.09	\$0.07	\$0.09	\$0.10	
Average cost of power supply - net \$/KWH			\$0.07	\$0.09	\$0.11	\$0.00	\$0.13	\$0.14	\$0.05	\$0.11	\$0.10	\$0.03	\$0.07	\$0.07	\$0.08	



*FY 2023
Financial Review
November*

January 3, 2023

Burlington Electric Department Financial Review

FY 2023

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FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of November FY23

(\$000)	Full Yr Budget	CURRENT MONTH			YEAR TO DATE		
		Budget	Actual	Variance	Budget	Actual	Variance
Sales to Customers	51,553	3,846	3,697	(150)	21,821	21,578	(244)
Other Revenues	3,631	309	606	297	1,488	2,251	763
Power Supply Revenues	8,385	1,589	1,172	(417)	4,506	3,831	(675)
Total Operating Revenues	63,569	5,745	5,475	(270)	27,816	27,660	(156)
Power Supply Expenses	31,423	3,311	2,894	417	15,189	14,985	204
Operating Expense	22,952	1,737	1,913	(177)	8,940	9,115	(175)
Depreciation & Amortization	6,391	533	512	21	2,663	2,560	102
Taxes	3,466	289	270	19	1,453	1,365	88
Sub-Total Expenses	64,232	5,869	5,589	280	28,244	28,025	220
Operating Income	(664)	(124)	(114)	10	(429)	(365)	64
Other Income & Deductions	5,009	408	450	42	2,095	1,761	(334)
Interest Expense	3,114	271	308	(37)	1,389	1,540	(151)
Net Income (Loss)	1,231	13	28	15	278	(143)	(421)

Year-to-Date Results:

- **Sales to Customers** down \$244,000 (1%). Non-Residential Sales down \$279,200 and Residential Sales up \$35,900.
- **Other Revenues** up \$763,000 (51%)
 - a. DSM billable (customer driven).
- **Power Supply Revenues** down \$675,000 (15%)
 - a. McNeil REC revenue of \$1,728,000 compared to a budget of \$2,240,000.
 - b. Wind REC revenue of \$1,663,000 compared to a budget of \$1,708,000.
 - c. Hydro REC revenue of \$440,000 compared to a budget of \$464,000.
 - d. Other REC revenue of \$0 compared to a budget of \$93,000.
- **Power Supply Expenses** down \$205,000 (1%)
 - a. Purchased Power up \$788,000.
 - b. Fuel down \$838,000.
 - c. Transmission down, \$154,000.
- **Taxes** down \$88,100 (6%)
 - a. Actual Payment in Lieu of Tax (PILOT) is less than budget assumption.
- **Operating Expenses** up \$175,500 (2%)
 - a. DSM (rebates & outside services) higher \$858,000. Offset by various items that are less than budget. This includes labor and overhead (\$340,700).
- **Other Income & Deductions** down \$334,000 (16%)
 - a. Budget assumed customer contributions for Champlain Pkwy, \$258,200 and other billable, \$98,600.
 - b. Actual includes unrealized loss on investment, (\$215,000) offset by interest income higher, \$144,000.
 - c. Timing: retirements budgeted in August, (\$134,000) have not happened.

FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of November FY23

Capital Spending – November YTD (\$000's)				
Plant Type	Full Yr. Budget	Budget	Actual	% Spent
Production	\$1,637	\$669	\$404	25%
Other	267	133	110	41%
Distribution	4,460	2,633	2,487	56%
General	2,127	1,061	549	26%
Sub-Total	8,491	4,496	3,550	42%
Transmission	632	577	577	91%
Total	\$9,123	\$5,073	\$4,126	45%

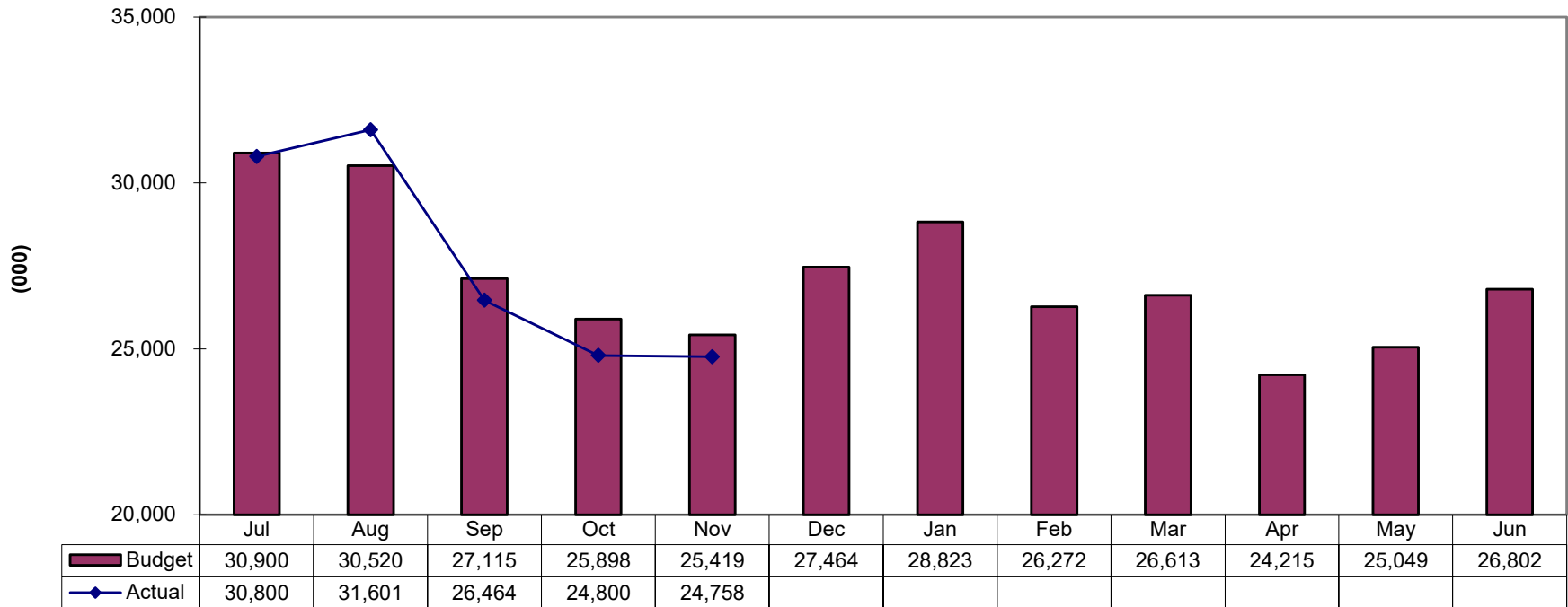
- (1) **Production** – Timing of Winooski One project, \$204,300 and roof replacement at the Gas Turbine is deferred to FY24, \$85,000.
- (2) **Other** – Timing; budget includes direct current fast chargers, Distributed Energy Resources, and research & development.
- (3) **Distribution** – Timing of various projects.
- (4) **General** – IT Forward project budgeted throughout the year; YTD expenses of \$353,800 compared to a budget of \$527,100. Pole mount routers YTD expenses of \$1,100 vs budget of \$106,700 and Open Way upgrade, YTD expenses of \$0 vs budget of \$24,700.

As of November 30, 2022 Cash and Investments	
Operating Funds	\$4,599,300
Operating Fund – CDs	\$992,900
Total Operating Fund	\$5,592,200

Credit Rating Factors – November 2022				
	"A"	"Baa"	Current	3 Year Average
Debt Service Coverage Ratio	1.25	1.25	3.14	3.95
Adjusted Debt Service Coverage Ratio	1.50	1.10	0.89	1.02
Cash Coverage - Days Cash on Hand	90	30	81	123

**Burlington Electric Department
Fiscal Year Ending June 30, 2023**

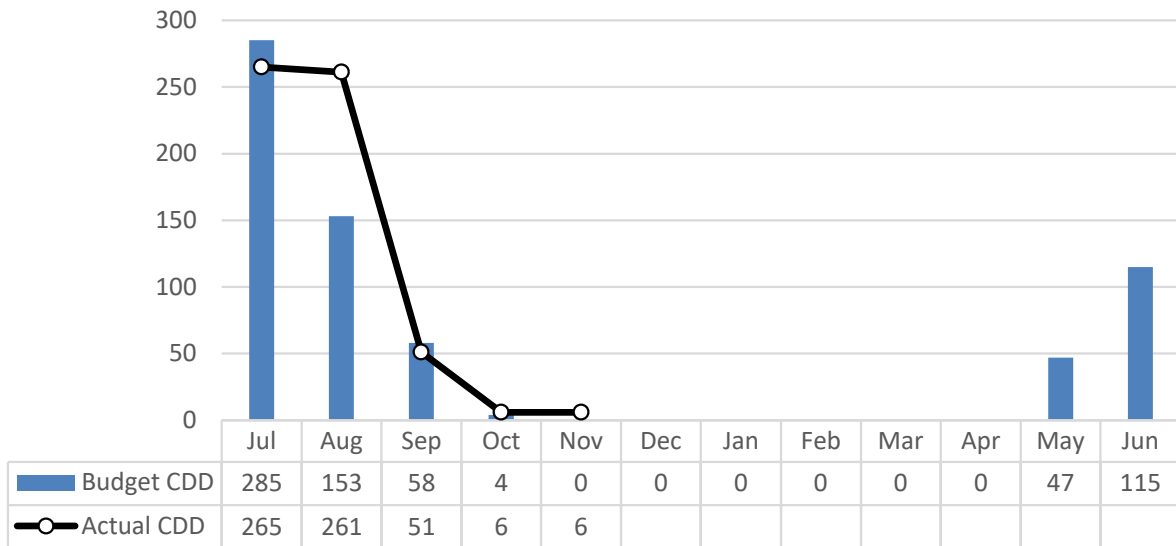
**Total Sales to Customers - KWH
Monthly**



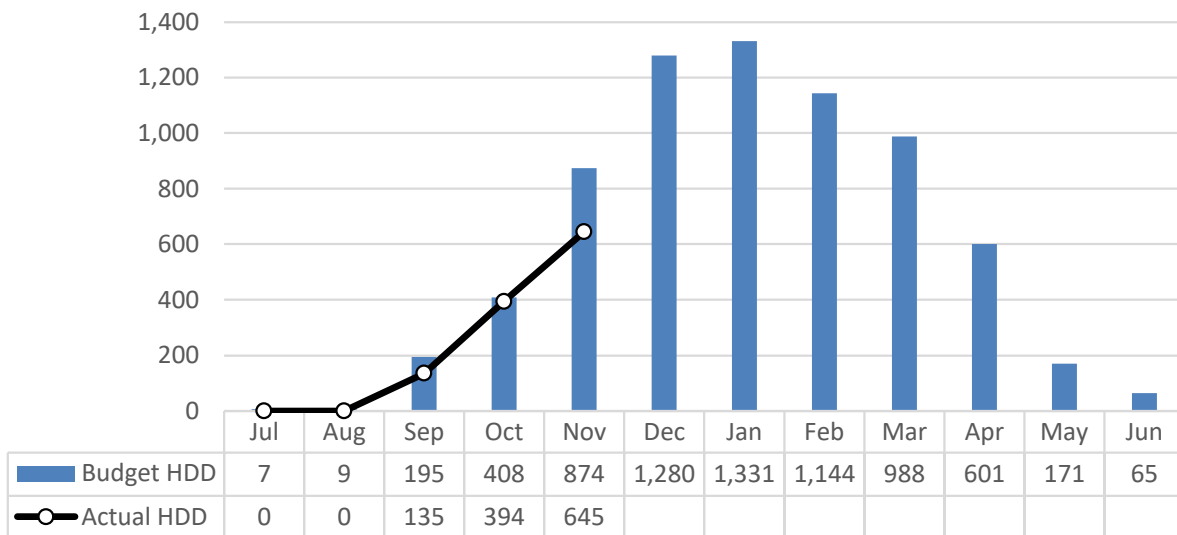
KWH Sales to Customers (YTD)												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget	30,900	61,420	88,534	114,432	139,851	167,316	196,138	222,410	249,023	273,239	298,288	325,090
Actual	30,800	62,400	88,864	113,664	138,422							

FY 2023

Cooling Degree Days (CDD)



Heating Degree Days (HDD)

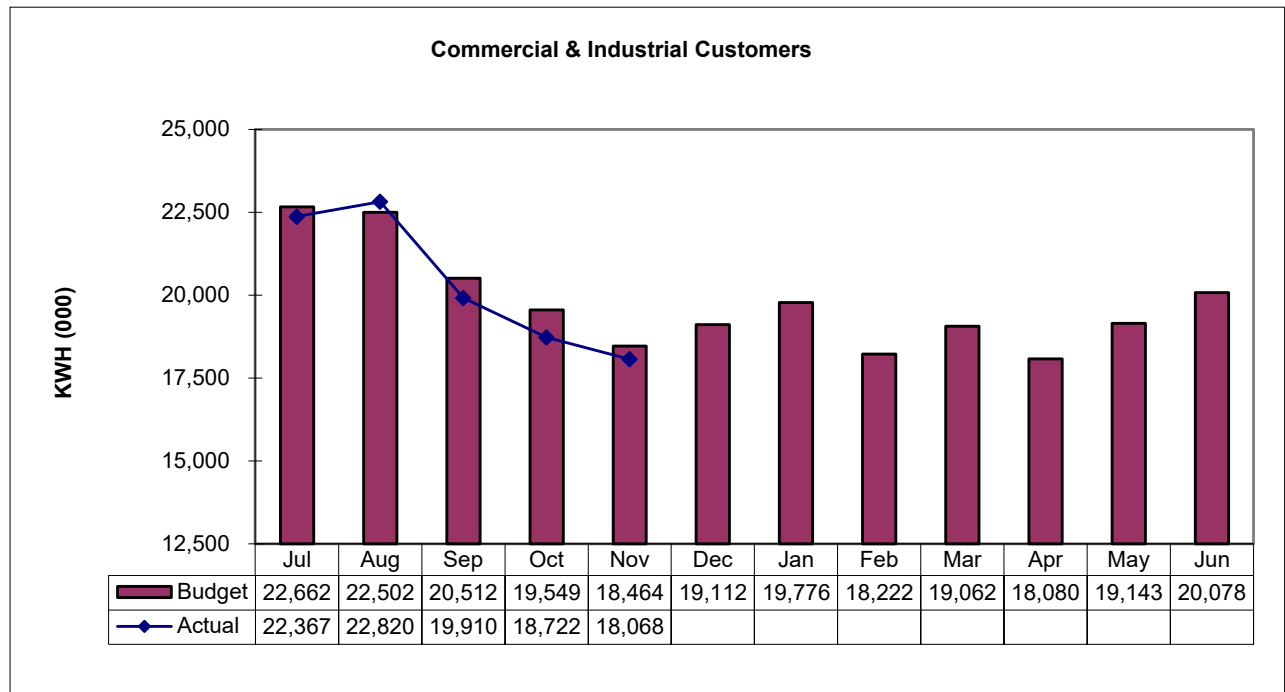
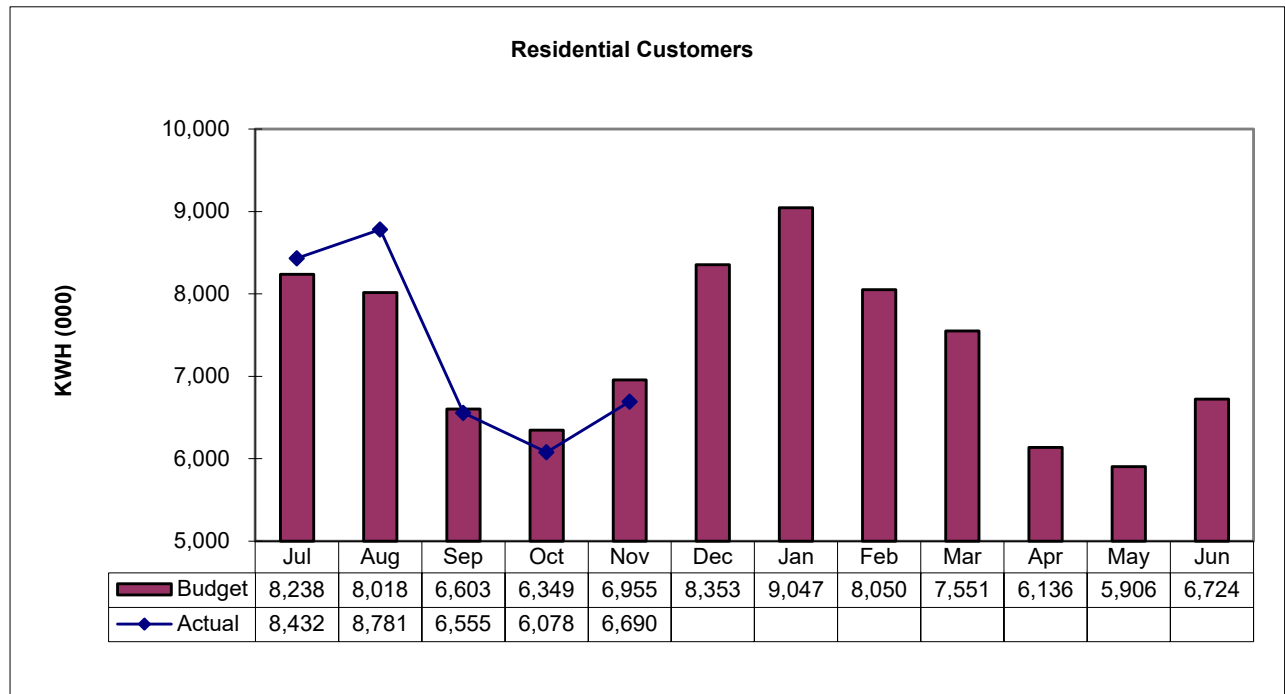


Average Monthly Temperature

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget	72	71	63	50	39	28	20	22	32	45	58	67
Actual	73	73	62	52	44							

CDD/HDD definition per National Weather Service: Degree days are based on the assumption that when the outside temperature is 65°F, we don't need heating or cooling to be comfortable. Degree days are the difference between the daily temperature mean (high temperature plus low temperature divided by two) and 65°F. If the temperature mean is above 65°F, we subtract 65 from the mean and the result is Cooling Degree Days. If the temperature mean is below 65°F, we subtract the mean from 65 and the result is Heating Degree Days.

**Burlington Electric Department
Fiscal Year Ending June 30, 2022
KWH Sales**



Street Lighting is included with Commercial & Industrial Customers.

**Net Power Supply Costs
November - FY 2023**

(\$000)							
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
Expenses:							
Fuel (p. 7)	\$389	\$826	(\$437)	(1)	\$3,856	\$3,018	\$838 (1)
Purchased Power (p. 11)	2,070	1,253	817	(2)	7,418	8,206	(788) (2)
Transmission Fees - ISO	515	555	(40)	(3)	3,217	3,229	(12) (3)
Transmission Fees - Velco	274	214	60	(4)	435	270	165 (4)
Transmission Fees - Other	63	46	17	(5)	263	261	2
Total Expenses	3,311	2,894	418		15,189	14,985	205
Revenues:							
Renewable Energy Certificates - McNeil	529	225	(304)	(6)	2,240	1,728	(512) (5)
Renewable Energy Certificates - Wind	729	700	(28)		1,708	1,663	(46)
Renewable Energy Certificates - Hydro	271	248	(24)		464	440	(24)
Renewable Energy Certificates - Other	60	0	(60)	(7)	93	0	(93) (6)
Total Revenues	1,589	1,172	(417)		4,506	3,831	(675) (7)
Net Power Supply Costs	\$1,722	\$1,721	\$1		\$10,683	\$11,154	(\$471)
Load (MWh)	26,134	25,391	(743)		143,717	142,186	(1,531)
\$/MWh	\$65.90	\$67.79	\$1.89		\$74.33	\$78.44	\$4.11

Current Month:

- (1) See detail on page 7.
(2) See detail on page 11.
(3) October Peak Load (billed in November) over Budget.
(4) BED's share of Common Charges under Budget.
(5) NYPA NYISO Transmission charges currently booked are under Budget (but will be trued-up to over Budget).
(6) McNeil REC sales under Budget due to Q2CY22 production under Budget.
(7) Other (Solar) REC sales generally completed towards the end of the fiscal year.

YTD:

- (1) See detail on page 7.
(2) See detail on page 11.
(3) Peak Load under Budget.
(4) VELCO Common Charges and BED's share of Common Charges under Budget.
(5) McNeil REC sales under Budget due to H1CY22 production under Budget.
(6) Other (Solar) REC sales generally completed towards the end of the fiscal year.
(7) REC Sales projected to be 11% under Budget due to lower McNeil and Winooski One production in calendar year 2022.

**Net Power Supply Costs
November - FY 2023**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<u>FUEL:</u>							
McNeil:							
Fuel Consumed	172	634	(462)	(1)	2,653	2,291	362 (1)
Swanton Yard	41	46	(5)	(1)	238	155	82 (1)
Train Deliveries	79	78	1	(1)	470	318	152 (1)
Labor & Other Expenses	81	68	13	(2)	413	234	180 (2)
Total McNeil Fuel	373	826	(453)		3,775	2,999	776
Gas Turbine	16	0	16	(3)	81	19	62 (3)
Total Fuel	389	826	(437)		3,856	3,018	838

Current Month:

(1) McNeil production 239% over Budget. Budget based on November 2021 actual where McNeil was mostly building wood supply for the Winter. Wood Price per Ton 19% over Budget. (p. 9)

(2) Actual labor is based on tonnage consumed by McNeil; budgeted labor is based on personnel/days in the month, thus timing issues for comparative purposes.

(3) GT offline for maintenance.

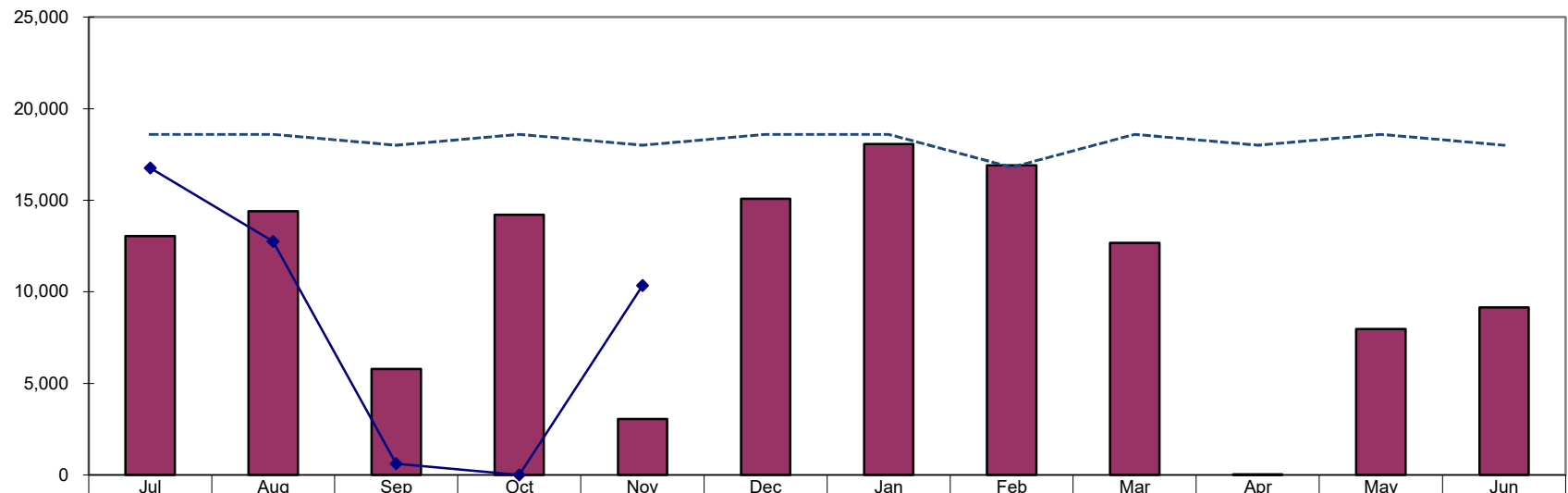
YTD:

(1) McNeil production 20% under Budget. Wood Price per Ton 17% over Budget. (p. 9)

(2) Actual labor is based on tonnage consumed by McNeil; budgeted labor is based on personnel/days in the month, thus timing issues for comparative purposes.

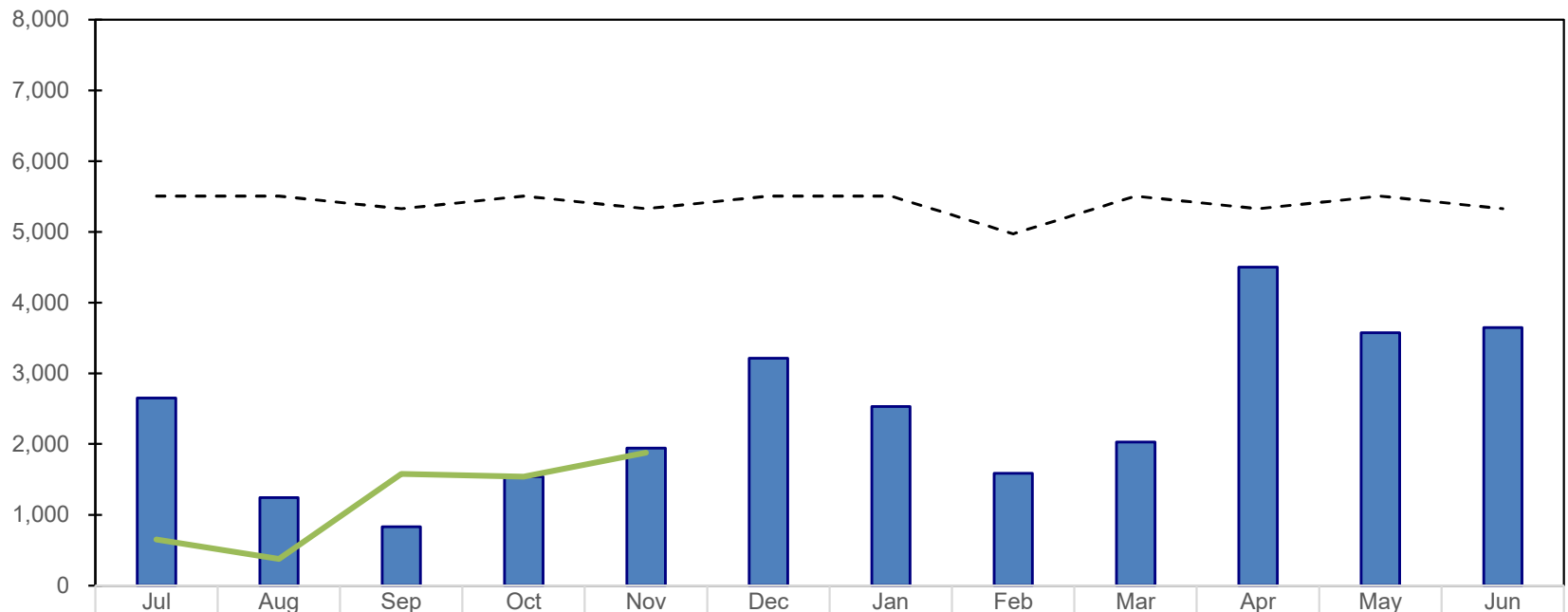
(3) GT outage occurring on 7/20/22 and continuing into December. Estimated to be online in January

**Burlington Electric Department
McNeil Plant - MWH Production (50%)
FY 2023**



 Budget	13,047	14,395	5,792	14,209	3,057	15,088	18,082	16,912	12,671	23	7,963	9,152
 ♦ Actual	16,763	12,756	619	0	10,354							
 Maximum	18,600	18,600	18,000	18,600	18,000	18,600	18,600	16,800	18,600	18,000	18,600	18,000

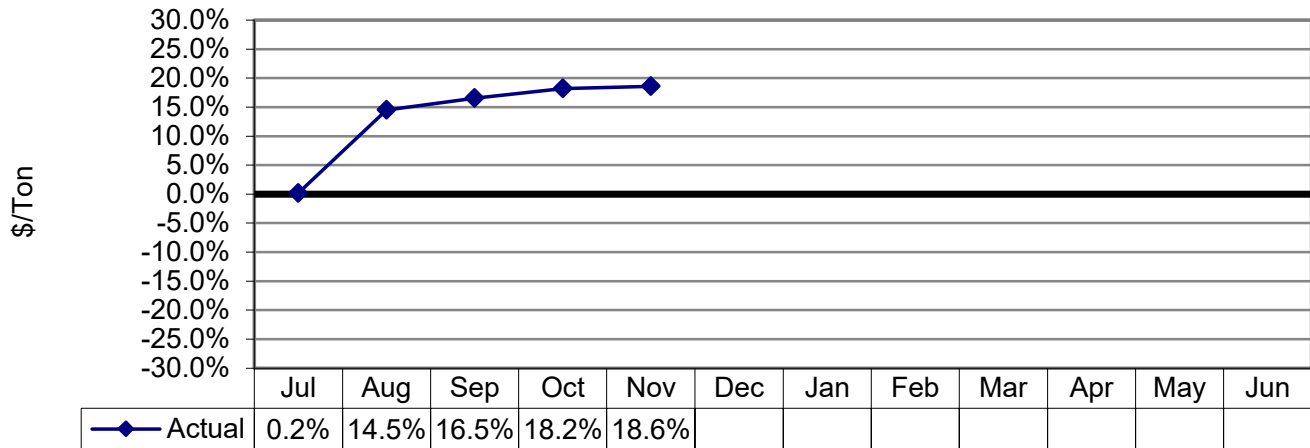
**Burlington Electric Department
Winooski One - MWH Production
FY 2023**



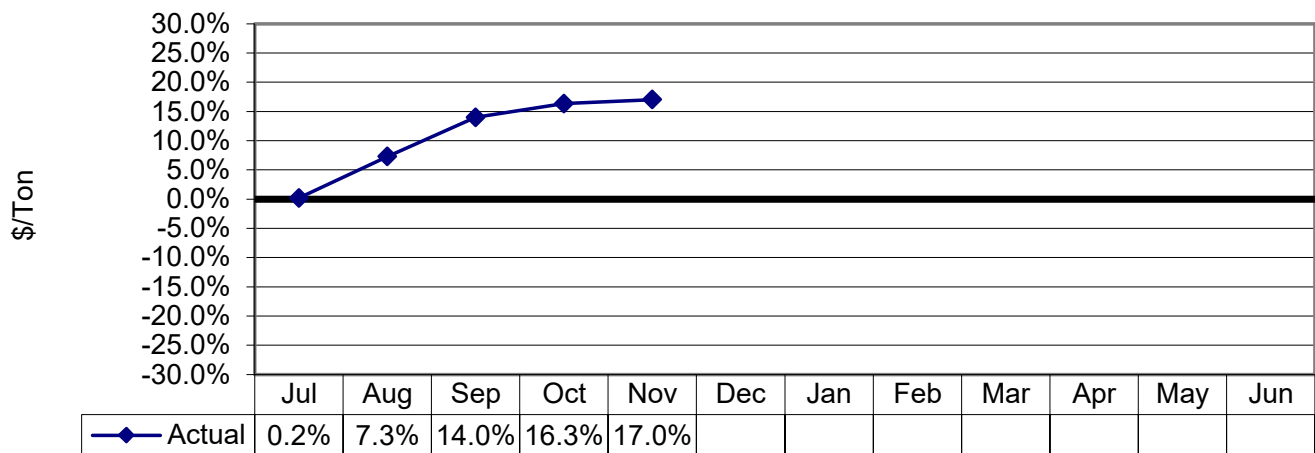
█ Budget	2,650	1,246	832	1,541	1,942	3,216	2,531	1,587	2,032	4,503	3,575	3,643
— Actual	651	376	1,578	1,541	1,878							
- - - Maximum	5,506	5,506	5,328	5,506	5,328	5,506	5,506	4,973	5,506	5,328	5,506	5,328

Burlington Electric Department Fiscal Year 2023

Woodchips Price Per Ton Monthly Variance



Woodchips Price Per Ton Year-to-Date Variance



* Wood only. Does not include other costs.

**Net Power Supply Costs
November - FY 2023**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<u>PURCHASED POWER:</u>							
Non-Energy (capacity)	85	238	(152)	(1)	490	785	(295) (1)
Energy:							
Georgia Mountain Wind	319	388	(68)	(2)	1,290	1,326	(36) (2)
Hancock Wind	351	365	(14)	(3)	1,102	1,017	85 (3)
VT Wind	257	183	74	(4)	912	698	214 (4)
Hydro Quebec	283	283	(0)		1,293	1,293	(0)
Great River Hydro	167	167	0		852	873	(21)
In City Solar Generators	46	48	(3)		397	428	(31) (5)
NYPA	6	7	(1)		31	34	(3)
ISO Exchange	299	(481)	779	(5)	371	1,221	(849) (6)
Velco Exchange	0	(0)	0		0	(3)	3
Total Energy	1,729	959	769		6,247	6,886	(639)
Ancillary Charges	5	23	(18)	(6)	27	150	(123) (7)
Miscellaneous	251	33	218		655	385	269
Total Purchased Power Expense	2,070	1,253	817		7,418	8,206	(788)

Current Month:

(1) Includes \$35k Mystic Cost of Service not in Budget and 139k true up of Efficiency pass through from July to November that usually occurs monthly.

(2) Production 21% over Budget.

(3) Production 4% over Budget.

(4) Production 29% under Budget.

(5) McNeil Production 239% over Budget.

(6) Reflects loss of Forward Reserve Revenues due to GT outage.

YTD:

(1) Includes \$227k for Mystic Cost of Service not in Budget.

(2) Production 3% over Budget.

(3) Production 8% under Budget.

(4) Production 23% under Budget.

(5) Production over budget.

(6) Production (McNeil (-20%), Wind (-9%), and Winooski One (-27%)) under budget.

(7) Reflects loss of Forward Reserve Revenues due to GT outage.

Burlington Electric Department
Operating and Maintenance Expense by Spending Category
FY 2023 - November

	Budget	Actual	Variance	% Variance	*
Labor-Regular	3,622,906	3,419,107	203,799	6%	
Labor-Overtime	246,618	267,867	(21,249)	9%	a
Labor-Temporary	5,500	25,797	(20,297)	369%	b
Labor-Overhead	1,470,404	1,291,990	178,414	12%	c
Outside Services	1,001,849	985,565	16,284	2%	
DSM	825,579	1,683,385	(857,806)	104%	d
Materials & Supplies	381,025	399,405	(18,380)	5%	
Insurance	306,843	266,614	40,229	13%	
A & G Clearing	(462,436)	(313,038)	(149,398)	32%	e
Other - RPS Compliance	264,280	239,791	24,489	9%	
Other	1,276,963	848,502	428,461	34%	f
Operating and Maintenance Expense	8,939,530	9,114,985	(175,455)	2%	

(a) Areas higher than budget include McNeil Plant, \$17,600, Finance & Accounting, \$11,300.

(b) Budget assumed intern positions in Policy & Planning, \$5,500. Actual includes temporary help in System Operations, \$24,400 and Finance & Accounting, \$1,400.

(c) See page 13.

(d) Projects are driven almost entirely by customer decisions. The budget is based on information on specific projects or seasonal variations; otherwise the amount is spread evenly across the year.

(e) The credit for A&G ("Admin and General Expenses") charged to Capital projects was less than planned.

(f) Timing; higher Uncollectible Accounts, \$37,800 offset by various areas that are less than budget including, Maintenance Contracts (\$82,100), Education & Training (\$49,000), Transportation Clearing (\$20,400) and Building Clearing (\$26,200).

**Burlington Electric Department
Budget vs Actual Spending Analysis
FY 2023 - November YTD**

Labor - Overhead	Budget	(000's)		%	
		Actual	Variance		
Pension	\$638	\$708	(\$70)	-11%	(a)
Medical Insurance	591	556	35	6%	(b)
Social Security Taxes	414	385	28	7%	(a)
Workers Compensation Ins.	157	137	20	13%	(b)
Dental Insurance	34	30	4	13%	(b)
Life Insurance	8	8	0	1%	(b)
	\$1,842	\$1,824	\$18	1%	

Rates Table:		Budget
Pension		12.49%
Social Security		7.65%

(a) Function of labor cost. Actual includes monthly pension arbitration amortization, \$5,440.

Pension amount for the year provided by the City during budget development.

(b) Budget provided by the City during budget development.

Net Income
FY 2023 - November (\$000)

		Current Month				Year - To - Date		
	Ref	Budget	Actual	Variance		Budget	Actual	Variance
Operating Revenues								
Sales to Customers	p.3	3,846	3,697	(150)		21,821	21,578	(244)
Other Revenues		309	606	297	(a)	1,488	2,251	763 (a)
Power Supply Revenues	p.6	1,589	1,172	(417)		4,506	3,831	(675)
Total Operating Revenues		<u>5,745</u>	<u>5,475</u>	<u>(270)</u>		<u>27,816</u>	<u>27,660</u>	<u>(156)</u>
Operating Expenses								
Fuel	p.6	389	826	(437)		3,856	3,018	838
Purchased Power	p.6	2,070	1,253	817		7,418	8,206	(788)
Transmission	p.6	852	815	37		3,915	3,761	154
Operating and Maintenance	p.12	1,737	1,913	(177)		8,940	9,115	(175)
Depreciation & Amortization		533	512	21		2,663	2,560	102
Revenue Taxes		49	47	2		255	252	3
Property Taxes Winooski One		43	40	3		216	202	14
Payment In Lieu of Taxes		196	182	14	(b)	981	910	71 (b)
Total Operating Expenses		<u>5,869</u>	<u>5,589</u>	<u>280</u>		<u>28,244</u>	<u>28,025</u>	<u>220</u>
Other Income and Deductions								
Interest/Investment Income		5	37	31		25	168	144
Dividends		366	366	(0)		1,825	1,826	2
Customer Contributions/Grant Proceeds		40	2	(38)	(c)	358	40	(317) (c)
Gain/(Loss) on Disp of Plant		0	6	6	(d)	(134)	6	139 (d)
Other		(3)	39	42	(e)	22	(280)	(301) (e)
Total Other Income & Deductions		<u>408</u>	<u>450</u>	<u>42</u>		<u>2,095</u>	<u>1,761</u>	<u>(334)</u>
Interest Expense								
		271	308	(37)	(f)	1,389	1,540	(151) (g)
Net Income								
		<u>13</u>	<u>28</u>	<u>15</u>		<u>278</u>	<u>(143)</u>	<u>(421)</u>

Current Month:

- (a) Energy Efficiency Program cost reimbursement was higher than planned, \$299,400.
(b) Actual Payment in Lieu of Tax (PILOT) is less than budget assumption.
(c) Budget assumed customer contributions for Champlain Pkwy, \$28,700 and other overhead/underground billable, \$11,000.
(d) Actual includes salvage value on vehicle.
(e) Actual includes unrealized gain of \$61,000 on investments.
(f) Revenue Bond 2022 actual interest higher than projected.

Year - To - Date:

- (a) Energy Efficiency Program cost reimbursement was higher than planned, \$765,000.
(b) See current month.
(c) Budget assumed customer contributions for Champlain Pkwy, \$258,200 and other overhead/underground billable, \$98,000.
(d) Timing; retirements budgeted in August. Actual includes salvage value on vehicle.
(e) Actual includes unrealized loss of \$215,000 on investments.
(g) Revenue Bond 2022 actual interest higher than projected.

**Burlington Electric Department
Capital Projects - FY23**

	\$000			
	Full Year Budget	Budget	November YTD Actual	Variance
McNeil (BED 50% Share)				
ESP Mechanical Field Rebuild (312)	245		3	(3)
Boiler Grate Overhaul West	200		320	(320) (a)
Routine Station Improvements	167	67	46	21
Continuous Emissions Monitoring Repl/Upgrade	146	117		117
Replacement Rail Cars	75	75		75
Switchyard 3321 Breaker Replacement	70			0
Turbine Control System Upgrade/Insurance (314)	49	49	2	47
A-Belt Belt Replacement (312)	30			0
Augers Replaced (312)	30	30		30
Demi/Service Water Pump	15	15		15
Safety Valve Replacements (312)	13			0
Shelving Footings	13		11	(11)
Station Tools & Tool Boxes	8	4	4	(0)
Rigging Equipment (316)	5	3		3
Other	11	5	7	(2) (b)
Total McNeil Plant	1,076	364	393	(29)

(a) Timing; budget assumed April.

(b) Budget includes energy efficiency improvements, equipment cameras, perimeter fence upgrade, portable radios upgrade and furniture replacement. Actual includes west grate emergency repairs, \$3,100, furniture replacement, \$1,100 & perimeter fence upgrade, \$1,900.

Hydro Production	<u>224</u>	<u>204</u>	<u></u>	<u>204</u>
Gas Turbine	<u>338</u>	<u>101</u>	<u>11</u>	<u>90</u> (a)

(a) Roof at GT has been postponed to next fiscal year, \$85,000. Also, painting outside of GT delayed until spring, \$9,000.

Other				
Direct Current Fast Charger (new locations)	162	81	110	(29)
EV Charger Installation (Level 2)	39	20		20
Distributed Energy Resources	37	19		19
Policy & Planning Research & Dev	29	15	0	14
Total Other	<u>267</u>	<u>133</u>	<u>110</u>	<u>23</u>

Transmission Plant				
VT Transco Investment	632	577	577	0
Total Transmission Plant	<u>632</u>	<u>577</u>	<u>577</u>	<u>0</u>

**Burlington Electric Department
Capital Projects - FY23**

	\$000			
	Full Year Budget	Budget	November YTD Actual	Variance
Distribution Plant-General				
Aerial				
Heineberg Rd Reconductor	186	74	31	43
Pole Inspection & Replacement	118		23	(23)
Ethan Allen Pkwy - Conv to 2ph P2942-2959	73	15	57	(42)
Replace Recloser 252R			39	(39)
Total Aerial	376	89	150	(61)
Underground				
Lyman Avenue Rebuild	669	535	553	(18)
2L5 Cable Replacement Pt3	573	573	650	(76)
Sunset Cliff Rebuild	455	318	11	308
1L2/2L5 Cable Replacement Pt1	294	59	4	54
2L5/2L2 Cable Replacement Pt2	223	223	184	39
Replace 322/323/324S (Main St and Univ Hts)	138		0	(0)
Appletree Point Rebuild (Electrical Work)	107	107	55	52
Edgemoor Drive Rebuild - Phase 3	92	92	87	4
Replace 724S/725S (Milot - College St)	71		0	(0)
Replace 910S/911S (Votey)	59	56	20	36
Replace Switch (303,307,308)			104	(104)
Replace Switch (756,757,758,730-Battery/Pearl)			5	(5)
Total Underground	2,680	1,964	1,673	291
Customer Driven/City Projects				
Champlain Parkway	736	331	54	277
Champlain Parkway (CAFC)	(574)	(258)		(258)
UVM Athletic Facility	18	18	110	(92)
Shelburne St Roundabout Relocation			9	(9)
University Place Decorative Lighting			110	(110)
UVM LCOM Building			16	(16)
Main Street Great Streets			4	(4)
Total Underground	180	91	303	(212)
Other				
Distribution Transformers	230	137	90	47
SCADA Field Device Upgrades	182	91	(5)	96
SCADA Network Switches Replacement	42	10	5	5
Communication Equipment Emergency Repair	29	3	4	(1)
SCADA Backup Server UPS Replacement	20			0
Metering CF-33 Toughbook	10	7		7
Other	0		9	(9)
Total Other	512	249	104	145
Total Distribution Plant-General	3,748	2,392	2,229	163

**Burlington Electric Department
Capital Projects - FY23**

	\$000			
	Full Year Budget	Budget	November YTD Actual	Variance
Distribution Plant - Blanket				
Lighting	251	56	65	(9)
Lighting (Rebate)	(6)	(1)		(1)
Underground	347	163	121	42
Underground (CAFC)	(152)	(68)	(36)	(32)
Aerial	170	69	81	(12)
Aerial (CAFC)	(67)	(30)	(3)	(27)
Meters	92	32	10	22
Tools & Equipment - Distribution/Technicians	35	14	9	5
Replace Corroded Vista CT's/PT's	22	4	11	(6)
Substation Maintenance	16	2		2
Gas Detectors	4			0
Total Distribution Plant - Blanket	711	241	257	(16)
Total Distribution Plant	4,460	2,633	2,486	147
General Plant				
Computer Equipment/Software	1,902	836	400	436 (a)
Vehicle Replacement	94	94	109	(15)
Buildings & Grounds	120	120	33	87 (b)
Other	11	11	8	4 (c)
Total General Plant	2,127	1,061	549	511
 <i>(a) Budget includes IT Forward, \$527,100 and various other projects (desktop/laptop replacements, OpenWay upgrade, Pole Mount Routers and Virtualized Hardware Refresh). Actual includes IT Forward, \$353,800 and Desktop/Laptop replacements, \$33,500.</i>				
<i>(b) Budget includes various projects (paving at 585 Pine St, Storm Drain rebuild, Camera System upgrade, extend pole pile and HVAC Software upgrade). Actual includes Resource Planning office, \$10,100 and Camera System Software upgrade and parking lot paving.</i>				
<i>(c) Budget includes training yard material and AED Purchase. Actual is new Pitney Bowes postage machine.</i>				
Sub-Total Plant	\$9,123	\$5,073	\$4,126	\$947
Add: CAFC* reclass to "Other Income"	798	358	40	318
Total Plant	\$9,921	\$5,431	\$4,166	\$1,265

* Customer Advances (Contributions) for Construction.

Operating Cash - FY 2023 Monthly Ending Balance

