

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

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

*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, February 08, 2023- 5:30 p.m.**

- |   |                |
|---|----------------|
| 1. Agenda                                       | 5:30 (5 min.)  |
| 2. Minutes of the January 11, 2022 Meeting      | 5:35 (5 min.)  |
| 3. Public Forum                                 | 5:40 (5 min.)  |
| 4. Commissioners' Corner (Discussion)           | 5:45 (5 min.)  |
| 5. GM Update (Oral Update)                      | 5:50 (10min.)  |
| 6. Financials: FY23 December                    | 6:00 (10 min.) |
| 7. IRP Forecast Update (Discussion): J. Gibbons | 6:10 (10 min.) |
| 8. Commissioners' Check-In                      | 6:20 (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](mailto: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 02/08/23 meeting)

**\*\*\* FYI \*\*\***

- Minutes of the January 11, 2023 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.



To: Burlington Board of Electric Commissioners  
From: Darren Springer, General Manager  
Date: February 3, 2023  
Subject: **January 2023 Highlights of Department Activities**

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### **General Manager**

- **Legislative Update –**
  - **Renewable Energy Standard proposal from Renewable Energy Vermont (REV)** – On 2/1 REV announced a proposal to change Vermont's Renewable Energy Standard that would potentially cost BED customers tens of millions of dollars in additional power supply costs with no additional benefit since we are already 100% renewable. It also would phase out McNeil's eligibility to count toward Vermont's renewable goals.

BED (myself, Jen Green Director of Sustainability, Betsy Lesnikoski Chief Forester, Munir Kasti COO and Acting Director of Generation) and IBEW Local 300 (Jeffrey Wimette and Chief Steward Duke Dutra) put out a media statement after REV's announcement raising serious concerns about the new legislative proposal. I've also shared the statement with many legislators, as well as members of the TEUC (which is separately considering holding a forum on wood energy).

Coverage in:

Seven Days (with a correction added at our request) -  
<https://www.sevendaysvt.com/vermont/solar-advocates-push-for-more-aggressive-renewable-energy-goals/Content?oid=37500567>

Fox44/ABC 22 - <https://www.mychamplainvalley.com/news/local-news/burlington-electric-opposes-plan-to-tighten-vt-renewable-energy-standard/> and

Vermont Business Magazine which has full statement from BED and IBEW -  
<https://vermontbiz.com/news/2023/february/01/bed-and-union-balk-rev-proposal-remove-mcneil-plant-renewable-energy-source>.

- **Affordable Heating Standard** – I'll be testifying in Senate committee Tuesday 2/7 on this bill, which BED generally supports, and we'll be working with utilities to get some limited additional language clarifying how these new programs will work with our existing incentives.

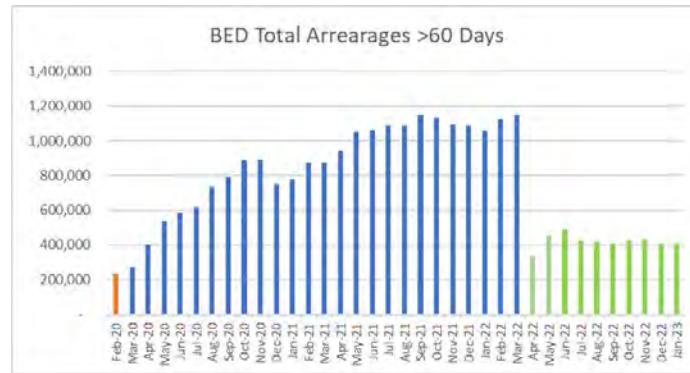
- **Act 151** –BED and Efficiency Vermont will be working together to seek an extension of Act 151, which gives us flexibility to use a portion of our efficiency dollars in tandem with our Tier 3/Net Zero incentives.
- **Budget** – FY23 budget is challenged mainly by warmer than expected temperatures leading to lower than expected energy prices year-to-date through December. We are working on strategies, including relative to how we deploy McNeil, to attempt to mitigate. Work on FY24 budget and rates began in January.
- **District Energy Update** – Act 250 Jurisdictional Opinion request is in to the district coordinator, from Burlington District Energy non-profit. We are engaging with State agencies to discuss financing options for the project. Federal funding from Leahy still pending review with Department of Energy. UVMHC presenting on this project to their neighbors at a community meeting in February, which BED will join. Work continuing on steam pricing. BED and DPW and Ever-Green coordinating more closely on project details.
- **Thermal Policy Update** – Mayor, DPI, BED and many organizations supporting the carbon pollution fee ballot item held a press conference at Hula in January. Ballot item will be on Town Meeting Day ballot in March.
- **January press conference on new incentives** – BED updated incentives for 2023, and also discussed the new WRAP tariff on-bill finance program for heat pumps and weatherization. BED also working now on a heat pump rate pilot program, in effort to develop a heat pump peak use mitigation strategy that could entail a customer bill credit monthly for enrolling and participating in the future.

#### **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 new internal work groups re EV chargers and net metering.
- Overseeing 2022 rate case development/implementation.
- Continued sponsorship of IT Forward implementations.

#### **Finance & Accounting**

- Calendar year-end closing and reporting.
- Began FY24 budget development.
- New staff completed APPA Public Utility Accounting training.
- Responding to PUC questions re: request for accounting order to create a regulatory asset for Moran Frame liability.
- Provided Winter Storm Elliott outage recovery costs to FEMA for possible disaster claim.
- Monitoring receivables in response to COVID19: as of January 31, 2023, BED's total non-current receivables had increased \$67,582 or 10% compared to the end of December 2022. Arrearages >60 days were \$410,707.



### Information Services

- Ongoing phishing testing for users.
- Applied software and firmware upgrades to production cluster.
- Migrated and upgraded HVAC system to new server.
- Ongoing work to replace and retire older BED corporate servers.
- Continued support of SCADA/ICCP projects for Engineering and Distribution.
- Continued work and progress on IT Forward projects.
- Continued progress on documentation and playbook for disaster recovery and cybersecurity initiatives.
- Applied security patches and updates on CIS/FIS system.
- Completed redundant internet connectivity through datacenter.

### Policy & Planning

- Received discovery from PUC and PSD on Net Metering tariff filing; replies are in process.
- Received questions from PUC on rate filing and Moran accounting order; replies are in process.
- Continued engagement with Moody's on Net Zero.
- Worked on funding opportunities from IIJA and IRA.
- IRP forecasting (low and high EV and CCHP deployment rates).
- Ongoing monitoring and engagement for legislative session and proposed bills.
- Finalized contractual terms for McNeil control upgrade.
- Modified McNeil bid structures.
- WRAP tariff approved; contract finalization proceeding.
- Provided Policy and Planning overview for new BED team members.
- Discussion with potential Burlington-based storage options.
- DES/DPW meetings proceeding.
- Revised DES term sheet shared with Evergreen; responses being reviewed.

### Sustainability & Workforce Development

- Welcomed Ita Meno, Project and Equity Analyst, to the team. Various onboarding meetings with BED Energy Services, Policy and Planning, and Customer Care; as well as CarShare Vermont, the Hunt Family Room, Energy Action Network, Burlington 2030 District, and others.
- In conjunction with Adam Rabin, Communications & Technology Specialist, edited and posted 3 new podcasts: with Geoff Robertson and Policy and Planning Director James Gibbons re:

DeltaClimeVT, Old Spokes Home Director Jon Copans, and AJ Rossman about upgrades to his commercial space.

- Joined City team to review Transportation Demand Management (TDM) proposals. Participated in three interviews and selected firm to create city-wide TDM plan.
- Participated in Electrification Incentives Press Event, hosted at 585 Pine, and a press conference at Hula regarding the new electrification policies and March ballot item concerning the application of a carbon pollution fee.
- Orchestrated meeting between Energy Services and ReSource to discuss a “Weatherization and Construction 101” training and curriculum that reflects Burlington’s needs and advances NZE.
- Drafted Emergent Learning Fund proposal to support non-profit bike shop partner Old Spokes Home and its development of an inclusive bike workshop for BIPOC and low-income customers.
- Facilitated monthly project meeting of the Vermont Low Income Trust for Electricity (VLITE) funded effort to expand EV access for low-income residents through car sharing and enhanced charging infrastructure. Helped move legal agreement between CarShareVT and the City of Burlington through the signatory process.
- Met with Fletcher Free Library staff to discuss collaborative events, including a May Bike-to-Work event with Local Motion and bikes from the e-bike lending library.
- Participated in the Burlington 2030 District Executive Steering Committee meeting. Reviewed annual budget and facilitated meeting between Energy Services and Vermont Green Building Network regarding 2023 financial support. Initiated meeting between new COTS Executive Director, Energy Services, and Burlington 2030 District to solicit COTS membership in the program.
- Launched efforts to track IRA and IIJA bills including various funding opportunities for BED and external stakeholders including the Burlington School District, Burlington 2030 District, and others. Met with USDN Federal Engagement Specialist Cynthia McCoy about resources to support cities applying for various funds.
- On behalf of the Burlington 2030 District, submitted a Unified Planning Work Program (UPWP) proposal to advance the transportation survey (created by Resource Systems Group) and to devise additional Transportation Energy Plans for 2030 District members.
- Attended first Renewable Energy Vermont 2023 Annual Meeting planning event, including brainstorming on conference theme and prospective keynote speakers.
- Joined first of monthly meeting with DPI, VGS, and Energy Services team on the Rental Weatherization Ordinance including progress and next steps.
- Participated in Department of Planning meeting to discuss the development of a Burlington Neighborhood Code, and the identification of barriers to build neighborhood scale “middle” housing across the city.

### **Center for Safety and Risk Management – Paul Alexander**

#### **Safety**

- Posted OSHA Log for 2022 results.
- Submitted the following reports:
  - SQRP results for 2022.

- Submitted Bureau of Labor Statistics annual survey.
- Submitted 2022 OSHA Injury & Illness Report.
- Conducted fire extinguisher inspections for Pine Street, along with substation inspections for first aid and fire extinguishers.
- Conducted Operational & Generation Field Audits.
- Completed draft expense section of RC48 Safety FY24 Budget.

### **Environmental**

- Passed the State of Vermont Air Operating Permit inspections at the McNeil Station and Penny Lane Gas Turbine Peaking Units.
- Conducted bi-annual wastewater monitoring for the McNeil Station.
- Submitted the 2022 Q4 emissions data to the EPA.
- Completed capital/expense budget work for the McNeil 2024 fiscal year.
- Completed the 2022 McNeil Emissions Inventory Report for submission.
- Submitted Gas Turbine 2022 annual emissions inventory to VT ANR.

### **Risk Management**

- New Claims Investigations (2 total: 1 Property, 0 Liability, 1 “Other”).
- Forward UFLs 6-month testing result to NERC consultant.
- Attended 2 Vt State Attorney pole claim hearings.
- Finalized with legal and Engineering the pole testing RFP.
- Prepare non-insurance FY’24 expense budget and submit C4S labor rosters.
- Reviewed the following:
  - BED leased lights/pole program and releases.
  - City Emergency Operations plan (EOP) for BFD re: BED contacts.
  - Employee vs. contractor vs. temporary agency DOL/legal history.
  - City’s draft Narcan policy.
  - Heat pump pilot release language for Policy and Planning.
- Reviewed the PUC’s questions regarding the Frame Project and Moran history.

### **Purchasing/General Services**

- Worked with State of Vermont Grants and Lyon and Terex on our all-electric bucket trucks.
- Working on budget proposal for FY24.
- Met with Distribution and Kiley Company on Electric Bucket Truck.
- Sent out RFP’s for McNeil shut down for this spring.

### **Center for Operations & Reliability – Munir Kasti**

#### **Center for Safety & Reliability – Munir Kasti**

- Acting Supervisor of Grid Services staff.
- Acting Supervisor of Generation staff.
- Completed proposed FY24 Engineering expense budget.
- Completed proposed FY24 Grid Services expense budget.

## Operations

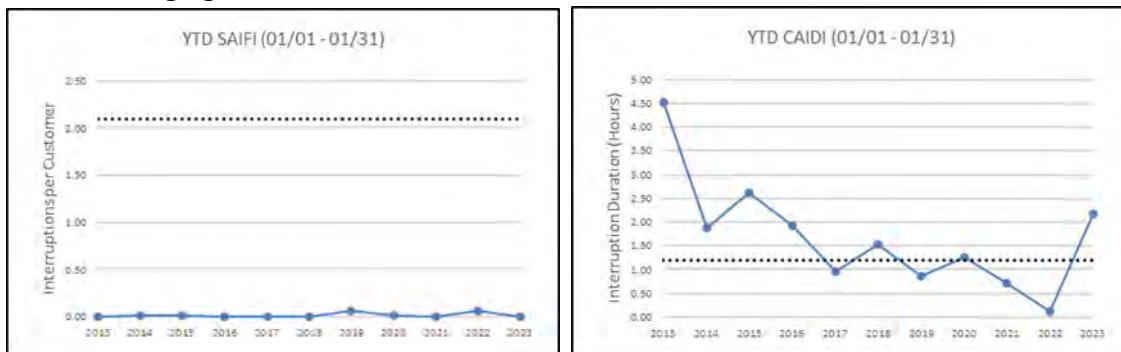
- Completed Apple Tree Point circuit conversion from 4 KV to 13.8 KV by replacing the poles and overhead and underground primary and secondary conductors.
- Pulled in new underground conductors at Cambrian Rise Building C and set a new pad mount transformer to feed temporary power to the ongoing Cambrian Rise project.
- Assisted electrician at 79 Pine Street to pull in a final fire pump service. BED metering technicians have completed wiring a new Current Transformer (CT) cabinet and are now waiting for the electrician to schedule an outage for connection.
- All material has been delivered for ongoing University Place work. Crews are pulling in service wire and installing the lights. Six poles and lighting fixtures have been installed to date.
- Continuing undergrounding the services to Lyman Avenue. Crews have pulled all cable and are currently transferring services to the new underground system. The streetlighting on this job will be completed in spring 2023.
- Continuing work on 1L2 feeder cable upgrade to College Street substation. This included a small outage to allow crews to pull in new conductors. Crews completed the North section and are moving to the South section when 1000 MCM cable arrives.
- A contract was signed with Osmose Utilities Services for pole inspections to be completed by end of May 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. Tentatively scheduled to transfer Morse Place crossing to underground on 2/6/2023.
- Upgraded streetlighting to LED fixtures on Oak Street in front of the Boys and Girls Club.
- Completed replacement of old streetlight fixtures on South Willard Street with new LED style fixtures.
- Continuing review of proposed design plan for Main Street Great Streets.
- Continuing work on a new service at 157 South Champlain Street. A new underground vault has been set.
- Completed 100 Bank Street temporary service for City Place. Started design of new lid for utility hole 33 for City Place new service.
- Started work on design and estimates for the McNeil Electric Boiler.
- Received notification from the Sunset Cliff Homeowners Association that the rebuild project has unanimous approval. We have received five of the signed easement documents from residents. BED Engineering is waiting for the remaining easement documents to be sent.
- Issued a pole attachment license to First Light Fiber for a 7-pole attachment application on Pine Street.
- Working with Burlington Department of Public Works on pole relocation for replacement of the Rock Point pedestrian bridge.
- Issued engineering design package to crews for new underground switch at Battery and Pearl Streets.
- Issued work orders for the following new services:
  - 410 Appletree Point.
  - 275 South Willard Street.

- 79 Pine Street.
- 251 South Union Street.
- Cambrian Rise Building C Temporary Service.
- Issued work orders for the line extension/new service for 1 Railway Lane.

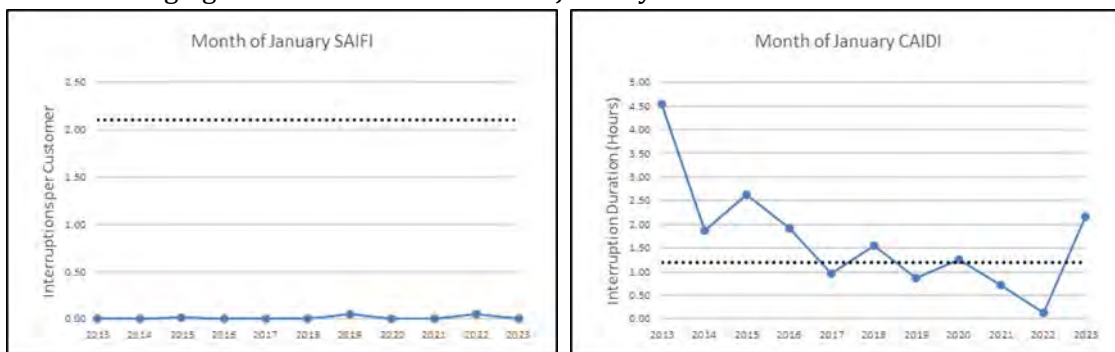
**SAIFI & CAIDI Outage Metrics:**

BED's distribution system experienced 14 outages in January 2023 (3 unscheduled and 11 scheduled). BED's SAIFI for the Month of January was 0.01 interruptions per customer and CAIDI was 2.17 hours per interruption. BED's YTD SAIFI is 0.01 interruptions per customer and YTD CAIDI is 2.17 hours per interruption. BED experienced a high CAIDI number for the month of January due to two scheduled outages with a high number of customers. The first was to intercept conduit into a new hand hole for the COTS project. The other was to replace cable as a part of the 1L2 College St. underground reconductor project. The remainder of outages in the month of January were shorter with less customers, which further increased the CAIDI value.

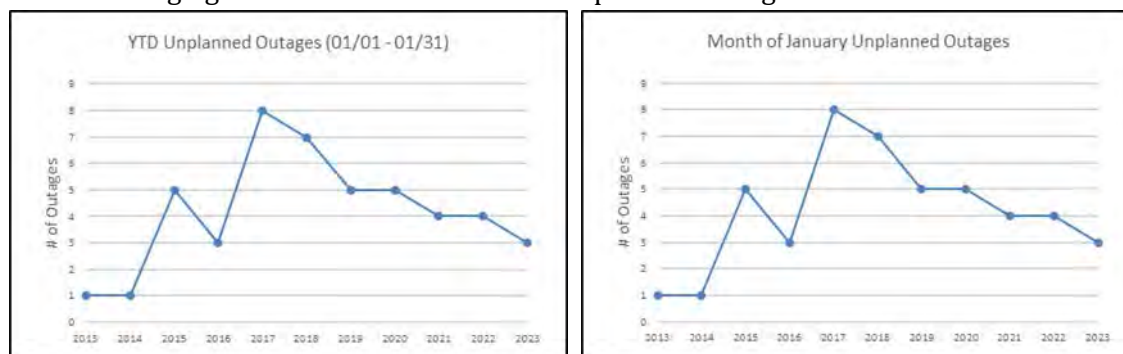
The following figure shows BED's historical YTD SAIFI and CAIDI:



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



The following figure shows BED's historical Unplanned Outages:



## GENERATION

### *McNeil Generating Station*

Month Generation:	30,034 MWh
YTD Generation:	30,034 MWh
Month Capacity Factor:	80.74%
Month Availability:	84.14%
Hours of Operation:	627.57 hours

Repairs were made to McNeil cyclone hoppers and miscellaneous maintenance activities occurred. The truck dumper bumper extension project was completed to assist longer trailers unloading at the facility. Tube leak repairs were conducted during the shutdown.

### *Winooski One Hydroelectric Station*

Monthly Generation:	3,608.926 MWH (% of average)
YTD Generation:	3,608.926 MWH (% of average)
Month Capacity Factor:	67.735 %
Annual Capacity Factor:	67.735 %
Month Availability:	99 %

PC construction installed a service hatch over the existing one. Miscellaneous repairs were conducted, and the semi-annual wicket gate maintenance and inspection was completed.

### *Burlington Gas Turbine*

Month Generation:	00.000 MWh
YTD Generation:	00.000 MWh
Month Capacity Factor:	0.000%
Month Availability:	00.000%
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. Upon re-installation, the east generator bearing housing pedestal was found to be distorted and out of tolerance further delaying commissioning. Based on present known remaining activities required to place the asset back in service, lube oil system flushing was initiated, the asset is expected to be available for operation in February 2023 after reassembly activities occur and vibration analysis has been completed. The asset is unavailable for operation at the end of the month.

#### *Solar (Airport 499 kW)*

Month Generation: 8.6 MWh (-53% from previous year)  
 YTD Generation: 8.6 MWh  
 Month Capacity Factor: 2.3%  
 Month Availability: 100%

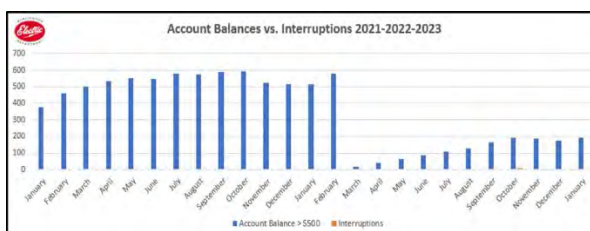
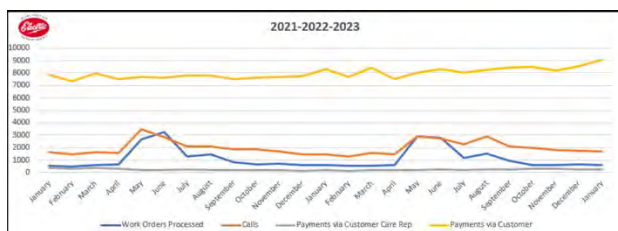
#### *Solar (Pine Street 107 kW)*

Month Generation: 1.3 MWh (83% from previous year)  
 YTD Generation: 1.3 MWh  
 Month Capacity Factor: 1.6%  
 Month Availability: 100%

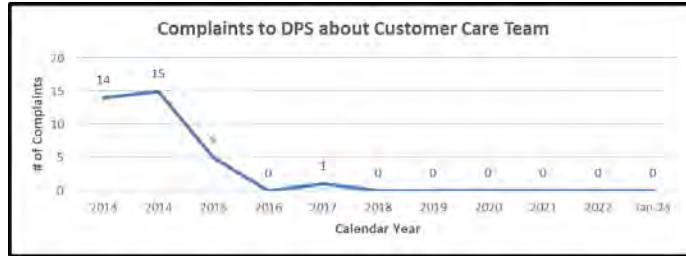
### **Center for Customer Care & Energy Services – Mike Kanarick**

#### **Customer Care**

- **Call Answer Time (75% in 20 seconds):** January 2023 85.4%, December 2022 87.5%, November 83.5%, October 85.7%, September 81.4%, August 69.5%. January 2023 83.9%, December 2021 84.6%, November 85.2%, October 77.7%, September 82.4%, August 81.5%.
- **January 2023 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

- 2023 Net Zero Energy Rebates press conference: on January 11, Mayor Miro Weinberger and Burlington Electric Department (BED), joined by partners from Rewiring America, the nation's leading electrification nonprofit, and the Vermont Housing Finance Agency (VHFA), today announced new and expanded Net Zero Energy incentives and an innovative, on-bill financing program for home weatherization and cold climate heat pumps. Read the press release [here](#).
- Thermal Heating/Carbon Pollution Impact Fee press conference: on January 24, Mayor Miro Weinberger, leaders from Burlington Electric Department (BED) and Department of Permitting and Inspections (DPI), Hula developer Russ Scully, Burlington High School students, and environmental partners promoted ambitious, new climate policies that will help the City of Burlington pursue its bold Net Zero Energy goal. They discussed policies outlined by BED and DPI in December 2022 that proposed requiring new construction to be fully renewable, and for large existing buildings and City buildings to use renewable heating and water heating systems when replacing older systems, starting in 2024. For buildings unable to meet the requirements, a carbon pollution impact fee would be applied. This proposed fee is subject to approval by Burlington voters on Town Meeting Day, March 7, 2023. Read the press release [here](#).
- Energy Assistance Program: 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, 152 customers have applied. Customers can learn about eligibility requirements and apply by visiting [burlingtonelectric.com/rates](http://burlingtonelectric.com/rates).
- Vermont Emergency Rental Assistance Program (VERAP - [erap.vsha.org](http://erap.vsha.org)): VERAP helps tenant households with paying rent, as well as paying utility and home energy costs. While December 31, 2022 was the last date to apply for assistance, the state will continue to provide certain levels of assistance for the most vulnerable Vermonters through June 2023. BED so far has received \$1.150M of the \$1.154M awarded to its customers.
- 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 85 applicants and received \$38k in payments.
- North Avenue News: our February column seeks to educate Burlingtonians about new renewable energy policies for new construction and renovations, as well as a carbon pollution

impact fee that will be a question on next month's Town Meeting Day ballot. We did not place an ad in the February NAN.

- January 2023 Website and Facebook Highlights will be included in next month's report.

## **Energy Services**

### *UVM*

- Terrill Hall / Lab Hood Upgrades – This project was completed in summer 2022, upgraded 11 lab hoods with improved face air-velocity control and a reduction in total lab Air Changes per Hour (ACH), to conform with UVM's current standards. The engineer who directed this project no longer works for UVM. At the University's request, BED has written up a short project description in conjunction with an offer for a rebate. We are requesting additional post-project information so that energy saving estimates can be developed for the work.
- Trinity Campus District Energy Feasibility Study – A feasibility study has been completed by an engineering firm contracted by UVM. The scope is focused on future housing expansion and system consolidation. BED is in communication with UVM concerning available incentives for efficient design features, which include a possible geothermal district energy system. This month BED attended an on-campus meeting with the engineering consulting company that completed the study. Their background experience and pragmatism in developing the report has increased our confidence in the credibility of the work. In order to narrow down the possible technical solutions, the University will need to make some key organizational decisions regarding their long-term future direction.

### *UVMHC*

- 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 now been completed for several months. BED is waiting for additional DDC trend data before continuing with the energy savings analysis.
- High Bay Fixture Replacement – The upcoming elimination of the use of 4-ft fluorescent fixtures in Vermont has caused the hospital to purchase 1,000 new high-bay LED fixtures. The intent is to replace a portion of this older technology lighting, especially in many of the ACC interior spaces. BED has paid a significant rebate to allow this work to be initiated.

### *Other Services*

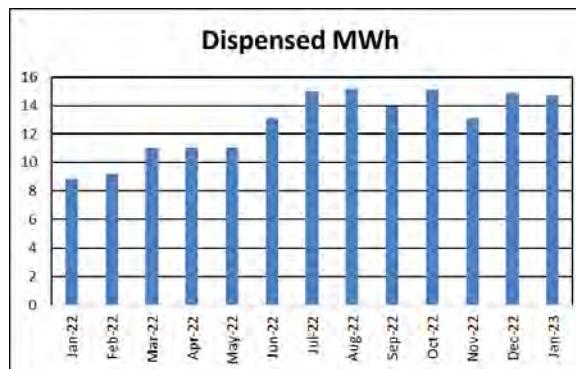
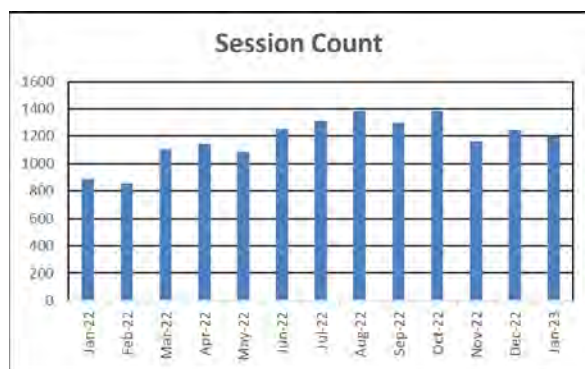
- Weatherization coordination with VGS - VGS requested electrical account usage histories (with customer permission) for 4 SF and 4 MF buildings (representing 16 living units) this month for the purpose of weatherization audit preparation and building energy use analysis. This brings the total YTD (2021-2023) requests to 160 SF and 118 MF buildings. 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 Energy Efficiency Rental Housing 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.
- 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. BED is working with EVT and their customized energy modeling software to compare a baseline grow facility to a more energy efficient facility as it is designed and installed. The modeling has been completed and a savings estimate is available. Based on the invoices we received from the customer we are now working on calculating the incremental cost of the project. This will allow a rebate offer to be generated.
- 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 hotels HVAC systems which will improve comfort and energy efficiency. One measure under consideration is guest room thermostat integration to the hotel's reservation system. This would provide automatic temperature setbacks when rooms are vacant for various different reasons. This month BED provided a preliminary savings and rebate estimate for this measure which will assist the customer in obtaining grant money for the work.
- First Congregational Church / Efficiency Audit – BED received a request from the church several months ago to investigate opportunities to reduce their energy footprint. AMI data analysis shows a significant amount of night-time electrical load. Two BED walk-throughs were completed last month, and a final audit report was distributed. Some definite areas of energy savings have been identified. BED is continuing to work with the church representatives on how to proceed with the audit recommendations.
- Claire Point Apartments / Garage Ventilation Upgrade – Last summer BED received a request for a rebate estimate to upgrade controls at two parking garages in this multi-family complex. The effort is to convert constant 24/7 fan ventilation in the spaces to variable speed fan operation. CO-sensors would be used to increase ventilation fan speed from minimum, as needed, to safely ventilate the space while vehicles are in operation. The decision was made to go ahead with the project for *Building D* parking garage only. This month the project was completed and BED made a site visit to confirm the installation details. The offered rebate has now been paid.
- City Market / Refrigeration Leak Detection – BED attended a meeting with the HVAC contractor that is pricing a permanently installed refrigerant leak detection system for City Market's downtown store. Additional discussion also occurred concerning case freezer control and defrost modifications which will assist in stabilizing freezer temperatures and reducing defrost times.
- 77 Pine St. / NC Apartments – The south half of this building has been modified from bank offices to about 50 new apartments. BED is in the process of calibrating the energy modeling for this project with analysis being done of the aggregated AMI data to compare it against the energy model predictions. Progress on this is continuing.

- YMCA- 298 College St. / Re-Commissioning – This new construction project, just several years old, has had high energy usage since the building was completed in early 2020. BED has worked with facilities staff to understand the HVAC and DHW systems in more detail especially as they relate to the pools. There is more complete knowledge now of some of the deficiencies of these systems. BED has asked a local engineering company to put together a proposal to identify cost-effective corrective actions that will improve system operation. BED is planning to approach VGS for assistance in funding this re-commissioning effort.

### Electric Vehicles

- The EVSE dispensed a total of 14.7 MWh and supported 1,195 sessions.
- The top 3 sales were 79, 80 & 94 kWh and occurred at the Cherry St. garage & College St. garage stations.
- The top 10 sessions (0.8% of total) accounted for 5.1% (757 kWh) of the total monthly sale. The ten sessions ranged from 66 kWh-94 kWh.
- The EVSE served 537 unique drivers.
- DCFC installation RFP has been awarded to Peck Electric.
- 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 have begun discussing how we can support a ChargePoint installation for Parks and Recreation at Oakledge Park.
- We are awaiting a replacement head from ChargePoint for BE01 (Church and Main).
- *Session Count* and *Dispensed Energy* plots from the from the public charging network are shown below.



- Number of EV and PHEV rebates to date – 470 (of this 85 LMI rebates to date as shown below)
  - New All Electric Vehicle – 193
  - New All Electric Vehicle (LMI) – 36
  - New PHEV – 122
  - 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 Charging Rate- 162
  - Number of E-Motorcycle rebates to date – 1

#### **Electric Vehicle Charging Stations**

- Number of home EV charging stations rebates to date – 116
- 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 – 3
- Number of Multi-family EVmatch Public charging stations rebates to date – 2
- Number of Level 2 Workplace charging stations rebates to date – 5

#### **Electric Lawn Equipment to Date**

- Number of e-mower rebates to date – 553 (11 commercial & 542 residential)
- Number of e-leaf blowers to date – 61
- Number of Residential e-Trimmers – 46
- 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- 926 (of this 135 LMI rebates to date as shown below):
  - Number of ductless heat pumps to date – 558
  - Number of LMI eligible ductless heat pumps to date – 111
  - Number of centrally ducted heat pumps to date – 188
  - 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 – 6

#### **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 – 34

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

- Number of snow blower rebates to date – 13

## BED 2022-2023 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Jan 2023 Actuals	2022 Yearly Actual	Dec 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
<b>Engage Customers and Community</b>							
Call answer time 75% within 20 seconds	75%	85%	avg 82%	88%	avg 82%	avg 81%	
Delinquent accounts >\$500	0	194	avg 188	173	avg 529	avg 201	
Disconnects for non-payment	0	0	12	0	0	45	
# of residential weatherization completions	10	0	5	0	5	3	11
Weatherization completions in rental properties		0	6	1	0	0	TBD
# or % of homes or SF weatherized		TBD	TBD	TBD	TBD	TBD	0
Champ Challenge weatherization participants		0	10	0	0	1	TBD
# of commercial building with improved thermal envelopes		0	4	0	5	5	0
% of EEU charge from LMI customers spent on EE services for LMI customers (cumulative for year)	\$ 180,250	\$ 348,213	\$ 335,234	\$ 335,234	TBD	TBD	TBD
<b>Strengthen Reliability</b>							
SAIFI (AVG interruptions/customer) (annual target)	< 2.1	0.01	1.06	0.14	0.22	1.50	1.03
CAIDI (AVG time in hrs to restore service) (annual target)	< 1.2	2.17	21.39	1.45		0.55	0.75
Distribution System Unplanned Outages (annual target)	82	3	61	12	44	90	98
McNeil Forced Outages	0		14	1	5	21	TBD
W1H Forced Outages	0		6	1	9	2	TBD
GT Forced Outages	0		6	1	2	3	TBD
<b>Invest in Our People, Processes, and Technology</b>							
Avg. # of days to fill positions under recruitment	120	179	100	145	68	179	
# of budgeted positions vacant	0	7	avg 9	9	avg 9	6	NA

## BED 2022-2023 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Jan 2023 Actuals	2022 Yearly Actual	Dec 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
<b>Innovate to Reach Net Zero Energy</b>							
<i>Tier 3 Program</i>							
# of residential heat pump installs	See NZE Roadmap Goals below	25	255	11	315	203	10
# of commercial heat pump installs		0	4	0	4	13	0
# of residential hot water heat pump installs		6	26	0	14	6	4
# of commercial hot water heat pump installs		0	0	0	0	0	0
Heat pump rebates		26	271	13	328	212	0
Heat pump hot water heater rebates		6	18	0	15	3	0
LMI heat pump rebates		0	43	4	28	6	4
Heat pump technology installs in rental properties		1	10	1	14	9	TBD
LMI heat pump hot water heater rebates		0	1	0	2	0	1
EV rebates - new		4	53	5	67	14	36
EV rebates - pre-owned		0	18	0	7	8	2
LMI EV rebates		1	9	2	11	7	7
PHEV rebates - new		3	27	1	41	10	17
PHEV rebates - preowned		0	12	1	6	5	3
LMI PHEV rebates		0	15	0	13	6	2
Public EV chargers in BTV (total)		30 ports	30 ports	30 ports	27 ports	27 ports	14
Public EV charger energy dispensed (kWh)		14,700	151,360	14,900	86,570	35,690	78,000
Home EV charging station rebates		3	70	2	32	20	12
EV rate charging customers (total)		162	157	157	40	40	28
Level 2 charger rebates		1	11	3	10	0	1
Level 1 charger rebates		0	-	0	0	1	0
E-bike rebates		0	152	8	88	36	65
E-mower rebates		1	159	0	154	95	142
E-forklift rebates		0	1	0	0	0	0
MWE of Tier 3 measures installed		1,427	22,837	1,796	23,763	35,112	3,342
% Tier 3 obligation met with program measures	100%	7%	131%	134%	159%	283%	31%
<i>Net Zero Energy Roadmap Goals</i>							
# of solar net metering projects installed		5	33	1	29	24	33
No. of homes receiving NZE Home Roadmaps		0	7	0	10	7	
Residential heat pumps for space heating (no. of homes)	2022: 8615	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	405, 11% of goal	374	374
Residential heat pumps for water heating (no. of homes)	2022: 4365	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	0	0	-
EV registrations in BTV (light-duty)	2022: 2294	NA	NA	NA	549, 45% of goal	361	296
Greenhouse gas emissions (1000 metric tons CO2)	2022: 150	NA	NA	NA	188, 114% of goal	185	214
Fossil fuel consumption (billion BTU)	2022: 2418	NA	NA	NA	3220, 120% of goal	3,182	3,660

## BED 2022-2023 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Jan 2023 Actuals	2022 Yearly Actual	Dec 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
<i>Demand Response</i>							
<b>Manage Budget and Risks Responsibly</b>							
<i>Safety &amp; Environmental</i>							
No. of workers' compensation/accidents per month	0	0	16	0	4	8	
Total Paid losses for workers' compensation accidents (for the month)	\$225,000 annual	\$4,031	\$ 145,102	\$10,714	\$ 93,612	\$ 165,402	\$38,288
Lost Time Incident Rate (days/year) (Dec numbers reflect annual results)	<= 3.5 annual	N/A	1.99	N/A	0.0	0.93	0.89
Lost Time Severity Rate (days/year) (Dec numbers reflect annual results)	<= 71 annual	N/A	112.63	N/A	0.0	41.71	78.2
Lost work days per month	0	0	avg 9	0	0.0	45	
NOx reporting levels to EPA (Quarterly) (lbs/mmmbtu)	<0.075	0.067	0.06	0.1	0.07	0.07	
# of reported spills, waste water incidents (monthly)	0	0	6	0	4	4	
Phosphorus levels to DEC in lbs (monthly/yearly total)	<0.8/37	0.017/0.560	0.688	0.041/0.688	2.028		1.169
# of new power outage claims reported (monthly)	1	0	5	1	7	4	
# of new auto/property/other liability claims reported (monthly)	2	2	27	3	18	27	
<i>Purchasing &amp; Facilities</i>							
# of Purchase Orders for Inventory (Target: avg for winter months)	42	40	636	66	644	593	
\$ value of Purchase Orders for Inv. (Target: avg dollars spent during winter)	\$78,000	\$229,809	\$ 4,861,023	\$1,084,311	\$ 3,278,620	975,531	
# of stock issued for Inventory (Target: avg during winter months)	320	569	6,187	453	4,402	4,545	
\$ value of stock issued for Inventory (Target: avg. during winter)	\$ 65,000	\$ 275,666	\$ 2,200,233	\$ 155,594	855,456	1,086,478	
# of posters pulled from poles monthly (Target: goal to remove each month)	58	73	900	21	2,728	627	
# of Spark Space and Auditorium setup/breakdowns monthly (Target: Covid impact)	3	16	132	16	88	87	
<i>Finance</i>							
Debt service coverage ratio	1.25		NA-FY basis	3.04	NA-FY basis	NA-FY basis	NA-FY basis
Adjusted debt service coverage ratio	1.5		NA-FY basis	0.88	NA-FY basis	NA-FY basis	NA-FY basis
Days unrestricted cash on hand	>90		NA-FY basis	76	NA-FY basis	NA-FY basis	NA-FY basis
<i>Power Supply</i>							
McNeil generation (MWH) (100%)	per budget	30,034	228,981	35,736	273,355	192,696	
McNeil availability factor	100%	84%	67%	95%	80%		
McNeil capacity factor	per budget	81%	52.4%	96%	62.4%		
Winooski One generation (MWH)	per budget	3,609	25,350	3,199	24,752	21,194	
Winooski One availability factor	100%	99%	98.3%	98%	97%		
Winooski One capacity factor	per budget	67.7%	41.7%	58%	37%		
Gas Turbine generation (MWH)	NA	0.0	356	0.0	373	441	
Gas Turbine availability factor	100%	0%	54.5%	0%	96%		
Gas Turbine capacity factor	NA	0%	0.2%	0%	0.21%		
BTV solar PV production (mWh)		82	5,260	141	5,015	5,182	
Cost of power supply - gross (\$000)				\$2,831	\$30,285	\$31,081	
Cost of power supply - net (\$000)				\$2,837	\$22,134	\$23,388	
Average cost of power supply - gross \$/KWH				\$0.10	\$0.09	\$0.10	
Average cost of power supply - net \$/KWH				\$0.10	\$0.07	\$0.08	

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

**Wednesday, January 11, 2023**

The regular meeting of the Burlington Electric Commission was convened at 5:35 pm on Wednesday, January 11, 2023 at Burlington Electric Department at 585 Pine Street, Burlington, Vermont and virtually through Microsoft Teams.

Channel 17 was present to record this meeting.

Commissioners Lara Bonn, Jim Chagnon, Robert Herendeen, Scott Moody, and Bethany Whitaker were present.

Staff members present at 585 Pine Street included Paul Alexander, Rodney Dollar, James Gibbons, 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, Betsy Lesnikoski, and Amber Widmayer.

**1. Election of Officers**

Board Clerk Laurie Lemieux called the meeting to order at 5:35 p.m. and stated that, due to the resignation of Commission Chair Gabrielle Stebbins effective December 2022, the first order of business will be to elect a new Commission Chair. The Board Clerk opened the floor for nominations for Chair of the Commission.

Commissioner Chagnon made a motion to nominate Commissioner Moody to serve as Chair of the Burlington Electric Commission; the nomination was seconded by Commissioner Herendeen. The Board Clerk asked if there were any other nominations. Hearing none, the Board Clerk asked the Commission to indicate support for Commissioner Moody by way of roll call.

The Board Clerk, Laurie Lemieux, conducted a roll call vote by calling on the following Commissioners:

Commissioner Bonn. Aye  
Commissioner Chagnon. Aye  
Commissioner Herendeen. Aye  
Commissioner Whitaker. Aye

Results: 4 Ayes with 0 Nays and 1 abstention, the motion carries.

Of the 5 members, 4 votes were cast in support of Commissioner Moody, with Commissioner Moody abstaining. Commissioner Moody was elected Chair of the Commission. At this time Ms. Lemieux turned the meeting over to Chair Moody.

Commissioner Moody opened the floor for nominations for Vice Chair of the Burlington Electric Commission. Commissioner Chagnon made a motion to nominate Commissioner Whitaker to serve as Vice Chair of the Burlington Electric Commission; the nomination was seconded by Commissioner Herendeen. Commissioner Moody asked if there were any other nominations. Hearing none, the Board Clerk asked the Commission to indicate support for Commissioner Whitaker by way of roll call.

The Board Clerk, Laurie Lemieux, conducted a roll call vote by calling on the following Commissioners:

Commissioner Bonn. Aye  
Commissioner Chagnon. Aye  
Commissioner Herendeen. Aye  
Commissioner Moody. Aye

Results: 4 Ayes with 0 Nays and 1 abstention, the motion carries.

Of the 5 members, 4 votes were cast in support of Commissioner Whitaker, with Commissioner Whitaker abstaining. Commissioner Whitaker was elected Vice Chair of the Commission.

## **2. Agenda**

There were no changes to the agenda.

Commissioner Moody welcomed Commissioner Lara Bonn to the Commission and stated that we are excited to work with her.

## **3. December 14, 2022 Meeting Minutes**

Commissioner Herendeen asked that the minutes be amended to change the word "*pulled*" to "*requested*" in the following sentence:

We proposed that, if a permit were *requested* 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.

Commissioner Chagnon made a motion to approve the minutes of the December 14, 2022 Commission Meeting as amended; the motion was seconded by Commissioner Herendeen and approved by all Commissioners present.

#### **4. Public Forum**

No one from the public was present for the meeting.

#### **5. Commissioners' Corner**

Commissioner Herendeen thanked Mr. Gibbons for sending a memo to him clarifying the connection between diesel prices and fuel prices.

Commissioner Moody stated that BED replaced the lights on his street and that he has a light directly in front of his home that is making an incredible difference on his street and around his home. Commissioner Moody continued by stating that the light color and level are much more tolerable than the orange lights and reflect well on the street and on the sidewalk, and that he is happy with the change.

Mr. Springer stated that he was happy to hear. There was a post on Front Porch Forum regarding the lighting on Deforest Heights that complained that the lights in that location were orange and provided extremely poor visibility. The poster also stated that he had difficulty riding his bike in that area due to the light level. Mr. Kasti and his team worked quickly to replace these lights with new LED fixtures that have more of a soft color temperature and do a better job of lighting.

Mr. Springer stated that we had followed up with our former Chair, Gabrielle Stebbins, who remains interested in introducing a local lighting expert that may have tips that could be beneficial in interpreting the Illuminating Engineering Society (IES) recommendations. Mr. Kasti has been in touch with Ms. Stebbins and has offered dates that may work for a meeting.

We have hired a new Director of Engineering, Mr. Paul Nadeau, who comes to us from Green Mountain Power. He does not have a background in street lighting; therefore, for now, Mr. Kasti and Mr. Sehovic will take the lead in this meeting.

Mr. Springer stated that, if this street light meeting has taken place before the next Commission Meeting, we will report back on what we have learned.

Commissioner Herendeen stated that he was interested in attending this meeting, and Mr. Kasti stated that, once a date was set, he would reach out to Commissioner Herendeen.

#### **5. GM Update**

Mr. Springer stated that, along with hiring the new Director of Engineering, the department also has hired a new Energy Equity Analyst, Ita Meno. Ita comes to us from the City of Burlington's Department of Permitting and Inspections and will be working with Jen Green and our Sustainability team.

BED has submitted and will be submitting, either individually at BED or as part of a group, seven concept papers in response to Department of Energy (DOE) funding solicitations under the infrastructure bill that passed during the last Congress. These are concept papers primarily focusing on grid upgrades and investments that would compliment our Net Zero Energy Revenue Bond investments and also on items such as energy storage. Mr. Springer stated that our hope is to have one or more of our papers accepted to advance to a full application. Most of the papers compliment the work from the Revenue Bond and adding additional capacity to the grid. Our Net Zero Energy Roadmap had identified a series of pathways, and our 2020 Integrated Resource Plan (IRP) had analysis suggesting that in 2019 the dollars we needed were \$19-\$24M of grid upgrades to get to 102.8 megawatts. We have done additional analysis that would result in a total upgrade to 120-140 megawatts and some of this is being submitted as part of the paper with the idea that this could compliment our current Revenue Bond funding.

Mr. Springer stated that, in the BED truck bay earlier that day, we held a press conference with the Mayor and other partners announcing BED's updated 2023 incentives for strategic electrification. This announcement also highlighted available federal rebates and incentives as part of the Inflation Reduction Act (IRA) and touched on the new Weatherization Repayment Assistance Program (WRAP) tariff. Every year, we review our programs and try to boost some of the incentives along with adding new programs. This year, we highlighted the federal IRA programs that will compliment our local incentives. Along with Mayor Weinberger, we had a representative from the Vermont Housing Finance Agency (VHFA) who described a program that, if approved, would allow us to do on-bill financing for heat pumps and weatherization. It is an income-qualified program, aimed at low- and moderate-income customers. Not only are the interest rates reasonable, but also the partnership with VHFA can break through the split incentive issue that we have where the tenant is paying the energy bill and the property owner has to pay for the improvements. With this program, the property owner does not have to make the investment and the improvement, and the savings stay with the meter. Not only is this program available to renters, it also is available to homeowners. Other announcements included heat pump and EV incentives that include significant tax credits that, when coupled with BEDs incentives, will make things more affordable.

Mr. Springer stated that, through 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 to replace the outdated 25 kW Fuji charger, and one at the Marketplace garage downtown.

Mr. Springer stated that, at the City Council meeting on January 9, BED received unanimous approval from the City Council on the resolution regarding thermal heating policy and carbon fees. This means that, on Town Meeting Day on March 7, this item will be included on the ballot. If it passes, the City will have the authority to charge a carbon pollution impact fee of up to \$150 per ton of carbon for new construction and large existing building above 50,000 sq. ft.

Mr. Springer, Betsy Lesnikoski, and Paul Pikna will be in Montpelier tomorrow to meet with Legislators to talk about the McNeil Plant and the sustainability of our forestry operations.

Hopefully, towards the end of January, we will have discussions about extending Act 151 which allows us, as an efficiency utility, to use a portion of our funding on emissions reduction projects and not just on electric efficiency.

Mr. Springer stated that BED crews helped GMP during the recent winter storm outage event, and helped Washington Electric during the storm on December 23, working through the holidays to help restore power for WEC customers.

Commissioner Moody asked where in the IRP process the department is..

Mr. Springer stated that the IRP is due in September and that our team presently is working on it and performing the normal analysis with some focus areas. Mr. Springer stated that we will brief the Commission as we get closer to having a work product to share, which may be in the spring. The Commission agreed that its members would like the opportunity to review. The Board Clerk took note that this would be on the agenda in the spring.

## **6. November FY23 Financials**

Ms. Stebbins-Wheelock presented the November FY2023 financial results.

The Department's net income for the month of November was \$28K compared to a budgeted net income of \$13K, which is \$15K better than budget.

Sales to customers were \$150K below budget for November and \$244K or 1.1% below budget for the fiscal year to-date. Commercial sales overall for the year so far are under budget and residential sales are slightly above budget.

Other revenues, primarily EEU, were higher than budget by \$297K for the month. REC revenues in November were \$417K below budget. Year-to-date REC revenues are \$675K below budget.

Power supply expenses were favorable to budget by \$417K in November. This is due to a combination of increased fuel expense offset by decreased purchased power and transmission expense. The Department continues to experience unbudgeted capacity charges related to the Mystic, MA power plant, which were \$35K in November.

Non-power supply operating expenses for November were \$177K higher than budget and \$175K higher for the fiscal year to date, largely due to timing variances.

Other income was \$42K higher than budget due to increased interest income and unrealized gain on investments in the construction fund offset by customer contributions to customer lower than budgeted.

For FY23 to date, the Department has an actual net loss of \$143K compared to a budgeted net

income of \$278K. Exclusive of any volatility in the energy markets, which could be considerable, the Department is currently forecasting to end the fiscal year with a net income of approximately \$0, or \$1.1M less than budget.

As of November 30, the Department's capital spending was \$4.1M versus the \$5.1M budgeted, or 45% of the total FY23 capital budget.

Cash as of November 30 was \$5.6M compared to a budget of \$9.1M, or 81 days cash on hand. Department management will continue to monitor the cash position closely over the remainder of the fiscal year.

For the 12 months ended November 2022, the Department's debt service coverage ratio is 3.14 and the adjusted debt service coverage ratio is 0.89.

## **7. Commissioners' Check-In**

Commissioner Herendeen asked Mr. Springer for an update on District Energy.

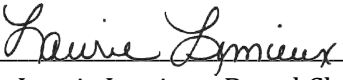
Mr. Springer stated that the Burlington District Energy non-profit received bids for construction pricing and is in the process of reviewing these bids. We were hoping we would be prepared to make our Act 250 filing in December, but due to the holidays this was delayed. We anticipate filing within the next week or two. Mr. Springer stated that we are trying to get updated pricing for the steam from McNeil and updated term sheets to review and will continue discussion with the joint owners. We are also working on what options might be available at the state level for financing at a lower rate than market rate and possible opportunities at the state level for programs to help with either a portion or all of the funding.

Commissioner Moody again welcomed Commissioner Bonn and suggested that she take advantage of a tour of McNeil, Winooski One, substations, etc. as doing so had helped him immensely when he was first on the Commission.

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

The meeting of the Burlington Electric Commission adjourned at 6:36 p.m.

Attest:

  
\_\_\_\_\_  
Laurie Lemieux, Board Clerk



*FY 2023  
Financial Review  
December*

*February 2, 2023*

# **Burlington Electric Department Financial Review**

**FY 2023**

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## FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of December FY23

(\$000)	Full Yr Budget	CURRENT MONTH			YEAR TO DATE		
		Budget	Actual	Variance	Budget	Actual	Variance
Sales to Customers	51,553	4,475	4,527	53	26,296	26,105	(191)
Other Revenues	3,631	324	470	146	1,813	2,722	909
Power Supply Revenues	8,385	0	(6)	(6)	4,506	3,825	(681)
Total Operating Revenues	63,569	4,799	4,992	193	32,615	32,652	37
Power Supply Expenses	31,423	1,918	2,831	(913)	17,108	17,816	(708)
Operating Expense	22,952	1,756	1,892	(136)	10,696	11,006	(311)
Depreciation & Amortization	6,391	533	512	21	3,196	3,072	124
Taxes	3,466	287	252	35	1,740	1,616	123
Sub-Total Expenses	64,232	4,494	5,486	(992)	32,739	33,511	(772)
Operating Income	(664)	305	(494)	(800)	(124)	(859)	(735)
Other Income & Deductions	5,009	401	748	346	2,497	2,509	12
Interest Expense	3,114	273	320	(46)	1,662	1,859	(197)
Net Income (Loss)	1,231	434	(66)	(500)	712	(209)	(921)

### Year-to-Date Results:

- **Sales to Customers** down \$191,000 (within 1%). Non-Residential Sales down \$216,300 and Residential Sales up \$25,000.
- **Other Revenues** up \$909,000 (50%)
  - a. DSM billable (customer driven).
- **Power Supply Revenues** down \$681,000 (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 down \$99,000.
- **Power Supply Expenses** up \$708,000 (4%)
  - a. Purchased Power up \$1,369,000.
  - b. Fuel down \$493,000.
  - c. Transmission down, \$169,000.
- **Taxes** down \$123,100 (7%)
  - a. Actual Payment in Lieu of Tax (PILOT) is less than budget assumption.
- **Operating Expenses** up \$311,000 (3%)
  - a. DSM (rebates & outside services) higher \$967,000. Offset by various items that are less than budget. This includes labor and overhead (\$441,000).
- **Other Income & Deductions** up \$12,000 (within 1%)
  - a. Budget assumed customer contributions for Champlain Pkwy, \$286,900 and other overhead/underground billable, \$111,000. Actual includes prior year billable for UVM LCOM \$214,000.
  - b. Actual includes unrealized loss on investment, (\$165,200) offset by interest income higher, \$181,500.
  - c. Timing: retirements budgeted in August, (\$134,000) have not happened.

## FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of December FY23

Capital Spending – December YTD (\$000's)				
Plant Type	Full Yr. Budget	Budget	Actual	% Spent
Production	\$1,637	\$675	\$453	28%
Other	267	160	113	42%
Distribution	4,460	2,947	2,385	53%
General	2,127	1,190	649	31%
<b>Sub-Total</b>	<b>8,491</b>	<b>4,973</b>	<b>3,600</b>	<b>42%</b>
Transmission	632	632	634	100%
<b>Total</b>	<b>\$9,123</b>	<b>\$5,605</b>	<b>\$4,234</b>	<b>46%</b>

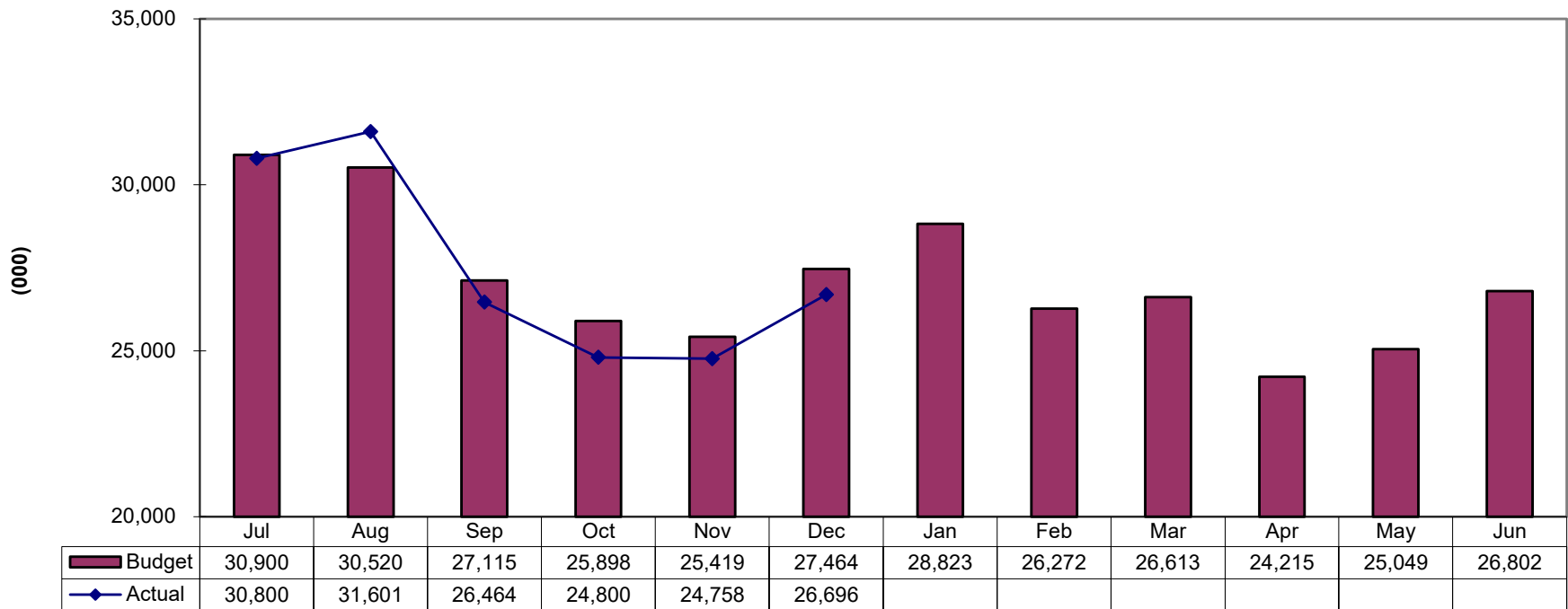
- (1) **Production** – Timing of Winooski One projects, \$175,000 and roof replacement at the Gas Turbine is deferred to FY24, \$85,000.
- (2) **Other** – Timing; budget includes direct current fast chargers, Distributed Energy Resources, and research & development.
- (3) **Distribution** – Timing of various projects.
- (4) **General** – IT Forward project budgeted throughout the year; YTD expenses of \$422,700 compared to a budget of \$657,000. 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 December 31, 2022 Cash and Investments	
Operating Funds	\$3,687,500
Operating Fund – CDs	\$996,900
Total Operating Fund	\$4,684,300

Credit Rating Factors – December 2022				
	"A"	"Baa"	Current	3 Year Average
Debt Service Coverage Ratio	1.25	1.25	3.04	3.93
Adjusted Debt Service Coverage Ratio	1.50	1.10	0.88	1.02
Cash Coverage - Days Cash on Hand	90	30	76	121

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

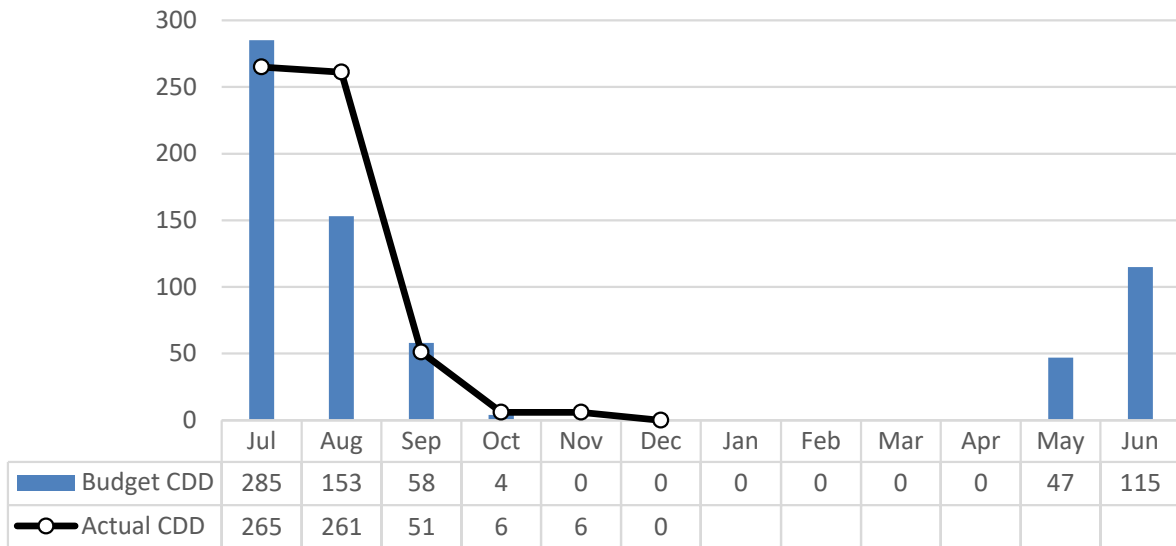
**Total Sales to Customers - KWH  
Monthly**



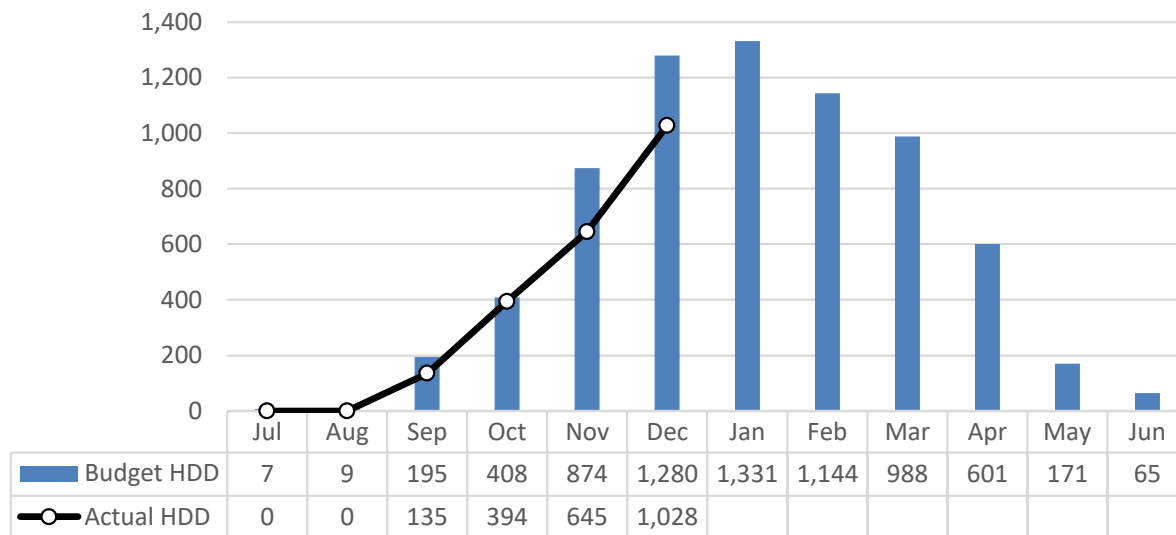
KWH Sales to Customers (YTD)												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>Budget</b>	30,900	61,420	88,534	114,432	139,851	167,316	196,138	222,410	249,023	273,239	298,288	325,090
<b>Actual</b>	30,800	62,400	88,864	113,664	138,422	165,118						

## FY 2023

### Cooling Degree Days (CDD)



### Heating Degree Days (HDD)

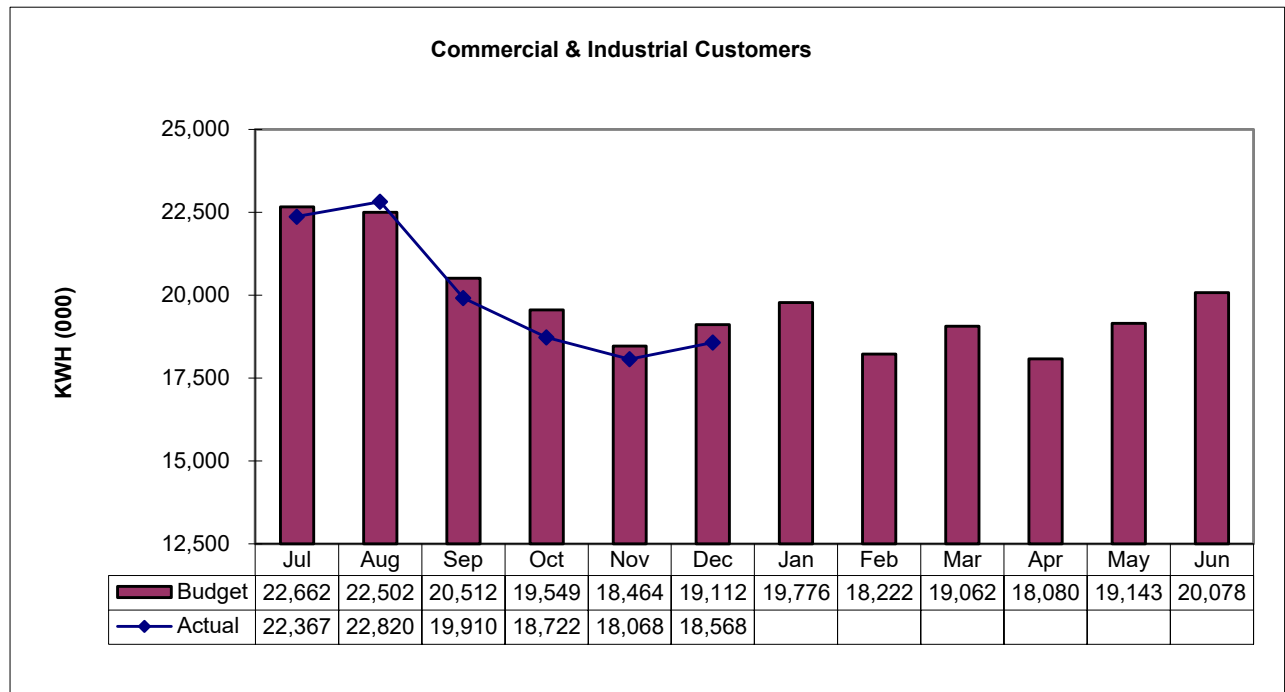
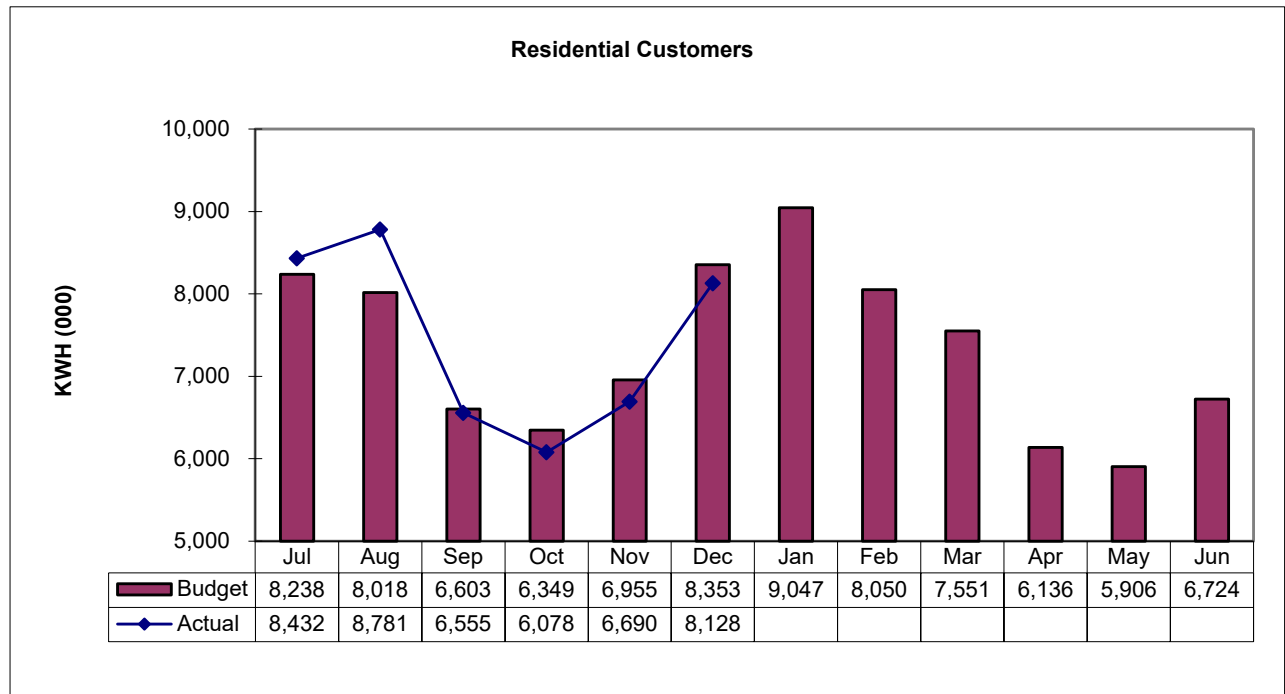


### Average Monthly Temperature

	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	30						

**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  
December - FY 2023**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<b>Expenses:</b>							
Fuel (p. 7)	\$1,032	\$1,377	(\$346)	(1)	\$4,888	\$4,395	\$493 (1)
Purchased Power (p.11)	32	613	(581)	(2)	7,450	8,820	(1,369) (2)
Transmission Fees - ISO	555	531	25	(3)	3,772	3,760	12 (3)
Transmission Fees - Velco	233	182	51	(4)	668	452	216 (4)
Transmission Fees - Other	66	128	(61)	(5)	329	389	(59) (5)
Total Expenses	1,919	2,831	(912)		17,108	17,816	(708)
<b>Revenues:</b>							
Renewable Energy Certificates - McNeil	0	0	0		2,240	1,728	(512) (6)
Renewable Energy Certificates - Wind	0	0	0		1,708	1,663	(46)
Renewable Energy Certificates - Hydro	0	0	0		464	440	(24)
Renewable Energy Certificates - Other	0	(6)	(6)	(6)	93	(6)	(99) (7)
Total Revenues	0	(6)	(6)		4,506	3,825	(681) (8)
Net Power Supply Costs	\$1,919	\$2,837	(\$918)		\$12,602	\$13,990	(\$1,389)
Load (MWh)	28,164	27,349	(816)		171,881	169,535	(2,347)
\$/MWh	\$68.12	\$103.72	\$35.60		\$73.32	\$82.52	\$9.21

**Current Month:**

- (1) See detail on page 7.  
(2) See detail on page 11.  
(3) November Peak Load (billed in December) under Budget.  
(4) BED's share of Common Charges under Budget.  
(5) NYPA NYISO Transmission charges over Budget.  
(6) Negative due to Airport REC Revenue adjustment.

**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) NYPA NYISO Transmission charges over Budget.  
(6) McNeil REC sales under Budget due to CY22 production under Budget.  
(7) Other (Solar) REC sales generally completed towards the end of the fiscal year. Negative due to timing.  
(8) REC Sales projected to be 11% under Budget due to lower McNeil and Winooski One production in calendar year 2022.

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

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<b><u>FUEL:</u></b>							
<b>McNeil:</b>							
Fuel Consumed	784	1,084	(300)	(1)	3,438	3,376	62 (1)
Swanton Yard	52	73	(21)	(1)	290	228	62 (1)
Train Deliveries	107	143	(35)	(1)	578	461	117 (1)
Labor & Other Expenses	72	78	(6)	(2)	486	312	174 (2)
Total McNeil Fuel	1,016	1,378	(362)		4,791	4,377	414
Gas Turbine	16	(1)	16	(3)	97	18	78 (3)
<b>Total Fuel</b>	<u>1,032</u>	<u>1,377</u>	<u>(346)</u>		<u>4,888</u>	<u>4,395</u>	<u>493</u>

**Current Month:**

(1) McNeil production 18% over Budget. Wood Price per Ton 18% 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.

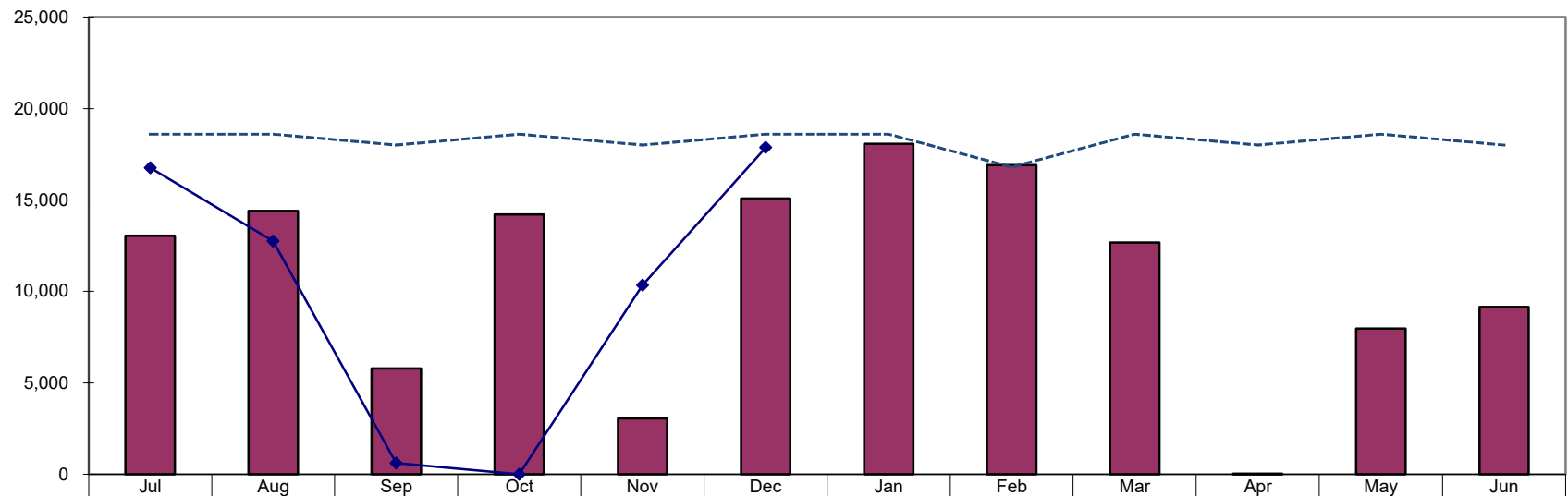
**YTD:**

(1) McNeil production 11% 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.

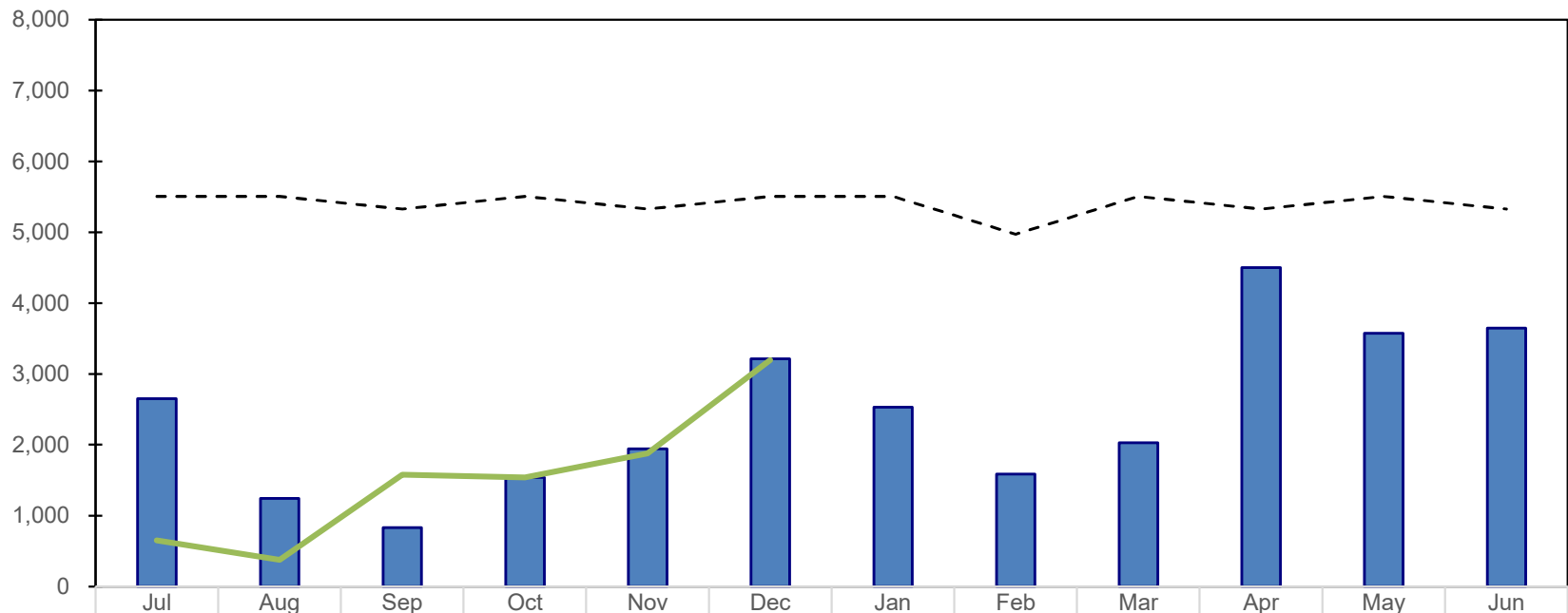
(3) GT outage occurring on 7/20/22 and continuing into December. Estimated to be online in February.

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



<span style="display:inline-block; width:15px; height:10px; background-color:maroon; border:1px solid black;"></span> Budget	13,047	14,395	5,792	14,209	3,057	15,088	18,082	16,912	12,671	23	7,963	9,152
<span style="display:inline-block; width:15px; height:1px; background-color:blue; border:1px solid black;"></span> Actual	16,763	12,756	619	0	10,354	17,868						
<span style="display:inline-block; width:15px; border-top:1px dashed blue; border:1px solid black;"></span> 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

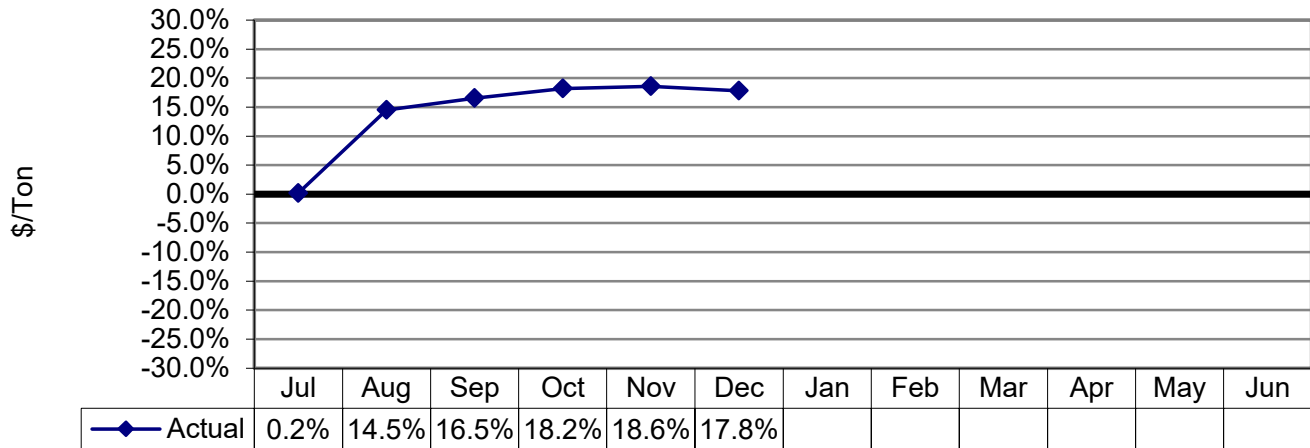
**Burlington Electric Department  
Winooski One - MWH Production  
FY 2023**



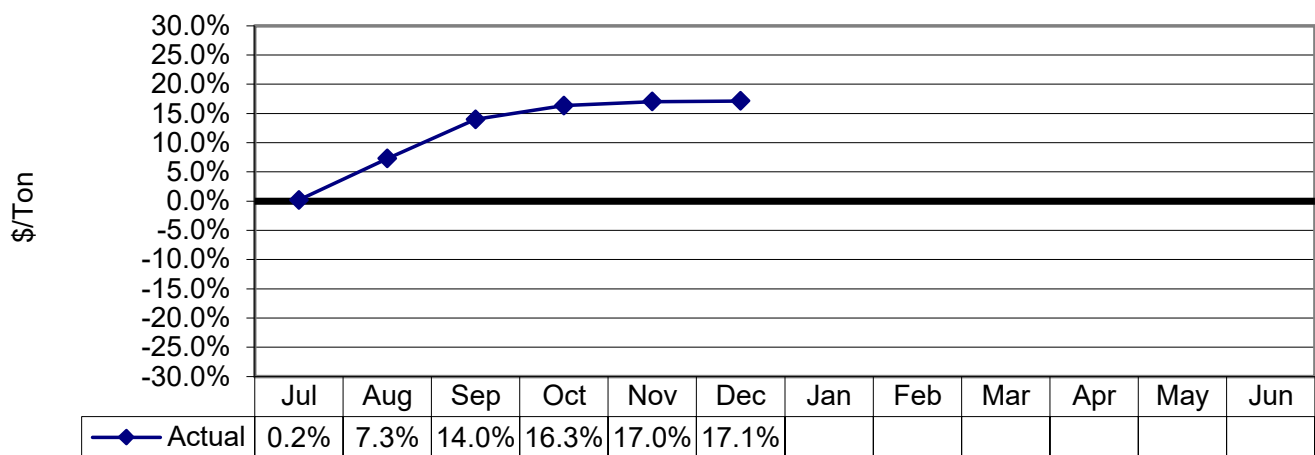
<span style="color: blue;">█</span> Budget	2,650	1,246	832	1,541	1,942	3,216	2,531	1,587	2,032	4,503	3,575	3,643
<span style="color: green;">—</span> Actual	651	376	1,578	1,541	1,878	3,197						
<span style="color: black;">- - -</span> Maximum	5,506	5,506	5,328	5,506	5,328	5,506	5,506	4,973	5,506	5,328	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  
December - FY 2023**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<b><u>PURCHASED POWER:</u></b>							
Non-Energy (capacity)	83	233	(150)	(1)	573	1,018	(445) (1)
<b>Energy:</b>							
Georgia Mountain Wind	299	374	(75)	(2)	1,589	1,701	(112) (2)
Hancock Wind	349	373	(24)	(3)	1,450	1,390	61 (3)
VT Wind	259	227	32	(4)	1,171	925	245 (4)
Hydro Quebec	293	293	(0)		1,586	1,586	(0)
Great River Hydro	173	172	0		1,024	1,045	(21) (5)
In City Solar Generators	26	25	1		422	453	(31) (6)
NYPA	7	7	(0)		38	41	(3)
ISO Exchange	(1,503)	(1,329)	(174)	(5)	(1,132)	(109)	(1,023) (7)
Velco Exchange	0	1	(1)		0	(2)	2
Total Energy	(99)	143	(242)		6,148	7,030	(881)
Ancillary Charges	1	40	(40)	(6)	27	190	(163) (8)
Miscellaneous	47	196	(150)	(7)	701	582	120 (9)
Total Purchased Power Expense	32	613	(581)		7,450	8,820	(1,369)

**Current Month:**

- (1) Includes \$147k Mystic Cost of Service not in Budget.
- (2) Production 25% over Budget.
- (3) Production 7% over Budget.
- (4) Production 12% under Budget.
- (5) Energy Prices under Budget partially by Volume over Budget.
- (6) Reflects loss of Forward Reserve Revenues due to GT outage.
- (7) Includes REC Adjustment Expense.

**YTD:**

- (1) Includes \$373k for Mystic Cost of Service not in Budget.
- (2) Production 7% over Budget.
- (3) Production 4% under Budget.
- (4) Production 21% under Budget.
- (5) Includes REC purchases.
- (6) Production over budget.
- (7) Energy Prices under Budget. Production (McNeil (-11%), Wind (-6%), and Winooski One (-19%)) under budget.
- (8) Reflects loss of Forward Reserve Revenues due to GT outage.
- (9) Includes REC Adjustment Expense.

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

	<b>Budget</b>	<b>Actual</b>	<b>Variance</b>	<b>% Variance</b>	<b>*</b>
Labor-Regular	4,357,852	4,075,848	282,004	6%	
Labor-Overtime	296,846	305,187	(8,341)	3%	
Labor-Temporary	7,000	33,294	(26,294)	376%	a
Labor-Overhead	1,768,768	1,574,992	193,776	11%	b
Outside Services	1,193,007	1,235,274	(42,267)	4%	
DSM	974,176	1,940,793	(966,617)	99%	c
Materials & Supplies	444,035	456,222	(12,187)	3%	
Insurance	369,679	361,212	8,467	2%	
A & G Clearing	(521,990)	(339,807)	(182,183)	35%	d
Other - RPS Compliance	316,180	273,956	42,224	13%	
Other	1,489,419	1,089,136	400,283	27%	e
<b>Operating and Maintenance Expense</b>	<b>10,694,970</b>	<b>11,006,107</b>	<b>(311,137)</b>	<b>3%</b>	

*(a) Budget assumed intern positions in Policy & Planning, \$7,000. Actual includes temporary help in System Operations, \$31,400 and Finance & Accounting, \$1,900.*

*(b) See page 13.*

*(c) 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.*

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

*(e) Timing; higher Uncollectible Accounts, \$120,000 offset by various areas that are less than budget including, Maintenance Contracts (\$93,000), Education & Training (\$52,700), Transportation Clearing (\$32,000) and Building Clearing (\$30,900).*

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

Labor - Overhead	(000's)				
	Budget	Actual	Variance	%	
Pension	\$765	\$853	(\$88)	-11%	(a)
Medical Insurance	709	697	12	2%	(b)
Social Security Taxes	496	452	44	9%	(a)
Workers Compensation Ins.	189	165	24	13%	(b)
Dental Insurance	41	37	4	9%	(b)
Life Insurance	9	10	(0)	-4%	(b)
	<b>\$2,210</b>	<b>\$2,214</b>	<b>(\$4)</b>	<b>0%</b>	

<b>Rates Table:</b>		<b>Budget</b>
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 - December (\$000)**

		Current Month				Year - To - Date		
	Ref	Budget	Actual	Variance		Budget	Actual	Variance
<b>Operating Revenues</b>								
Sales to Customers	p.3	4,475	4,527	53		26,296	26,105	(191)
Other Revenues		324	470	146	(a)	1,813	2,722	909 (a)
Power Supply Revenues	p.6	0	(6)	(6)		4,506	3,825	(681)
Total Operating Revenues		<u>4,799</u>	<u>4,992</u>	<u>193</u>		<u>32,615</u>	<u>32,652</u>	<u>37</u>
<b>Operating Expenses</b>								
Fuel	p.6	1,032	1,377	(345)		4,888	4,395	493
Purchased Power	p.6	32	613	(581)		7,450	8,820	(1,370)
Transmission	p.6	854	841	13		4,769	4,601	168
Operating and Maintenance	p.12	1,756	1,892	(136)		10,696	11,006	(311)
Depreciation & Amortization		533	512	21		3,196	3,072	124
Revenue Taxes		48	47	1		303	299	4
Property Taxes Winooski One		43	40	3		260	243	17
Payment In Lieu of Taxes		196	165	32	(b)	1,178	1,075	103 (b)
Total Operating Expenses		<u>4,494</u>	<u>5,486</u>	<u>(992)</u>		<u>32,738</u>	<u>33,511</u>	<u>(773)</u>
<b>Other Income and Deductions</b>								
Interest/Investment Income		5	43	38		30	212	182
Dividends		366	368	2		2,191	2,194	4
Customer Contributions/Grant Proceeds		40	235	195	(c)	398	276	(122) (c)
Gain/(Loss) on Disp of Plant		(15)	(19)	(4)		(149)	(13)	135 (d)
Other		5	120	116	(d)	27	(159)	(186) (e)
Total Other Income & Deductions		<u>401</u>	<u>748</u>	<u>346</u>		<u>2,497</u>	<u>2,509</u>	<u>12</u>
<b>Interest Expense</b>		273	320	(46)	(e)	1,662	1,859	(197) (g)
<b>Net Income</b>		<u>434</u>	<u>(66)</u>	<u>(500)</u>		<u>712</u>	<u>(209)</u>	<u>(921)</u>

**Current Month:**

- (a) Energy Efficiency Program cost reimbursement was higher than planned, \$114,300.
- (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. Actual includes prior year billable for UVM LCOM, \$214,000.
- (d) Actual includes unrealized gain of \$47,800 on investments.
- (e) Revenue Bond 2022 actual interest higher than projected.

**Year - To - Date:**

- (a) Energy Efficiency Program cost reimbursement was higher than planned, \$879,000.
- (b) See current month.
- (c) Budget assumed customer contributions for Champlain Pkwy, \$286,900 and other overhead/underground billable, \$111,000. Actual includes prior year billable for UVM LCOM \$214,000 and other projects.
- (d) Timing; retirements budgeted in August.
- (e) Actual includes unrealized loss of \$165,200 on investments.
- (g) Revenue Bond 2022 actual interest higher than projected.

**Burlington Electric Department  
Capital Projects - FY23**

	<b>\$000</b>			
	<b>Full Year Budget</b>	<b>Budget</b>	<b>December YTD Actual</b>	<b>Variance</b>
<b>McNeil (BED 50% Share)</b>				
ESP Mechanical Field Rebuild (312)	245		3	(3)
Boiler Grate Overhaul West	200		338	(338) (a)
Routine Station Improvements	167	67	46	20
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)
<b>Total McNeil Plant</b>	<b>1,076</b>	<b>364</b>	<b>411</b>	<b>(47)</b>

(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.

<b>Hydro Production</b>	<u>224</u>	<u>208</u>	<u>0</u>	<u>208</u> (a)
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(a) Rail replacement is complete and within budget, \$32,700. This was posted to expense and will be corrected.

<b>Gas Turbine</b>	<u>338</u>	<u>103</u>	<u>41</u>	<u>62</u> (a)
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(a) Roof at GT has been postponed to next fiscal year, \$85,000. Also, painting outside of GT delayed until spring, \$9,000.

<b>Other</b>				
Direct Current Fast Charger (new locations)	162	97	113	(16)
EV Charger Installation (Level 2)	39	24		24
Distributed Energy Resources	37	22		22
Policy & Planning Research & Dev	29	17	0	17
<b>Total Other</b>	<u>267</u>	<u>160</u>	<u>113</u>	<u>47</u>

<b>Transmission Plant</b>				
VT Transco Investment	632	632	634	(2)
<b>Total Transmission Plant</b>	<u>632</u>	<u>632</u>	<u>634</u>	<u>(2)</u>

**Burlington Electric Department  
Capital Projects - FY23**

	<b>\$000</b>			
	<b>Full Year Budget</b>	<b>Budget</b>	<b>December YTD Actual</b>	<b>Variance</b>
<b>Distribution Plant-General</b>				
<b>Aerial</b>				
Heineberg Rd Reconductor	186	130	31	99
Pole Inspection & Replacement	118		23	(23)
Ethan Allen Pkwy - Conv to 2ph P2942-2959	73	44	57	(13)
Replace Recloser 252R			39	(39)
Total Aerial	376	174	149	24
<b>Underground</b>				
Lyman Avenue Rebuild	669	535	612	(76)
2L5 Cable Replacement Pt3	573	573	675	(102)
Sunset Cliff Rebuild	455	318	12	306
1L2/2L5 Cable Replacement Pt1	294	176	6	170
2L5/2L2 Cable Replacement Pt2	223	223	157	66
Replace 322/323/324S (Main St and Univ Hts)	138		1	(1)
Appletree Point Rebuild (Electrical Work)	107	107	55	52
Edgemoor Drive Rebuild - Phase 3	92	92	88	4
Replace 724S/725S (Milot - College St)	71		0	(0)
Replace 910S/911S (Votey)	59	59	17	42
Replace Switch (303,307,308)			104	(104)
Replace Switch (756,757,758,730-Battery/Pearl)			5	(5)
Total Underground	2,680	2,084	1,731	353
<b>Customer Driven/City Projects</b>				
Champlain Parkway	736	368	66	302
Champlain Parkway (CAFC)	(574)	(287)		(287)
UVM Athletic Facility	18	18	110	(92)
Shelburne St Roundabout Relocation			9	(9)
University Place Decorative Lighting			107	(107)
UVM LCOM Building			16	(16)
UVM LCOM Building (CAFC)			(214)	214 (a)
Main Street Great Streets			4	(4)
Total Underground	180	99	98	1

(a) Timing; prior year billable.

**Burlington Electric Department  
Capital Projects - FY23**

	<b>\$000</b>			
	<b>Full Year Budget</b>	<b>Budget</b>	<b>December YTD Actual</b>	<b>Variance</b>
<b>Other</b>				
Distribution Transformers	230	137	93	45
SCADA Field Device Upgrades	182	100	(5)	105
SCADA Network Switches Replacement	42	31	10	21
Communication Equipment Emergency Repair	29	9	4	5
SCADA Backup Server UPS Replacement	20			0
Metering CF-33 Toughbook	10	10		10
Other	0		12	(12)
Total Other	512	287	113	174
 Total Distribution Plant-General	3,748	2,644	2,092	552
 <b>Distribution Plant - Blanket</b>				
Lighting	251	81	74	7
Lighting (Rebate)	(6)	(2)		(2)
Underground	347	180	159	21
Underground (CAFC)	(152)	(76)	(52)	(24)
Aerial	170	80	84	(4)
Aerial (CAFC)	(67)	(34)	(3)	(30)
Meters	92	47	12	35
Tools & Equipment - Distribution/Technicians	35	14	9	5
Replace Corroded Vista CT's/PT's	22	8	11	(3)
Substation Maintenance	16	5		5
Gas Detectors	4			0
Total Distribution Plant - Blanket	711	303	293	11
 Total Distribution Plant	4,460	2,948	2,385	563

**Burlington Electric Department  
Capital Projects - FY23**

	<b>\$000</b>				
	<b>Full Year Budget</b>	<b>Budget</b>	<b>December YTD Actual</b>	<b>Variance</b>	
<b>General Plant</b>					
Computer Equipment/Software	1,902	965	485	481	(a)
Vehicle Replacement	94	94	109	(15)	
Buildings & Grounds	120	120	48	72	(b)
Other	11	11	8	4	(c)
<b>Total General Plant</b>	<b>2,127</b>	<b>1,190</b>	<b>649</b>	<b>541</b>	

(a) Budget includes IT Forward, \$657,000 and various other projects (desktop/laptop replacements, OpenWay upgrade, Pole Mount Routers and Virtualized Hardware Refresh). Actual includes IT Forward, \$422,700 and Desktop/Laptop replacements, \$44,100.

(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.

(c) Budget includes training yard material and AED Purchase. Actual is new Pitney Bowes postage machine.

<b>Sub-Total Plant</b>	<b>\$9,123</b>	<b>\$5,605</b>	<b>\$4,234</b>	<b>\$1,371</b>	
Add: CAFC* reclass to "Other Income"	798	398	270	128	
<b>Total Plant</b>	<b>\$9,921</b>	<b>\$6,003</b>	<b>\$4,504</b>	<b>\$1,499</b>	

\* Customer Advances (Contributions) for Construction.

## Operating Cash - FY 2023 Monthly Ending Balance

