

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

GABRIELLE STEBBINS, CHAIR
SCOTT MOODY, VICE CHAIR
JIM CHAGNON
ROBERT HERENDEEN
BETHANY WHITAKER

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

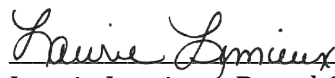
[+1 802-489-6254](tel:+18024896254)

Conference ID: 154 453 814#

AGENDA
Regular Meeting of the Board of Electric Commissioners
Wednesday, December 8, 2021– 5:30 p.m.

- | | |
|---|----------------|
| 1. Agenda | 5:30 (5 min.) |
| 2. Minutes of the October 27, 2021 Special Meeting | 5:35 (5 min) |
| Minutes of the November 10, 2021 | |
| 3. Public Forum | 5:40 (5 min.) |
| 4. Commission Corner | 5:45 (5 min.) |
| 5. GM Update (Oral Update) | 5:50 (10 min.) |
| 6. Financials: FY22 October (Discussion): | 6:00 (10 min.) |
| Emily Stebbins-Wheelock | |
| 7. Revenue Bond Reimbursement Resolution (Discussion and Vote): | 6:10 (10 min.) |
| Emily Stebbins-Wheelock | |
| 8. McNeil Station 2022 Calendar Budget (Discussion and Vote): | 6:20 (20 min.) |
| Dave MacDonnell | |
| 9. Commissioners' Check-In | 6:40 (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: 154 453 814#

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 12/08/21 meeting)

***** FYI *****

- Minutes of the October 27, 2021 Special Meeting
- Minutes of the November 10, 2021 Meeting
- November Monthly Report
- Dashboard
- FY22 October Financials
- Revenue Bond Reimbursement Resolution
- McNeil FY22 Calendar Budget
- McNeil Letter to Climate Council

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



MEMORANDUM

To: Burlington Board of Electric Commissioners
From: Darren Springer, General Manager
Date: December 3, 2021
Subject: **November 2021 Highlights of Department Activities**

General Manager

- **VLITE Grant** – BED is partnering with CarShare Vermont and Champlain Housing Trust on a proposal to VLITE that will be considered in December to add two new electric vehicles to the CarShare fleet in Burlington and locate one near the Family Room in the Old North End. The proposal includes dedicated charging for the CarShare EVs, and an additional public charger in the Old North End that would expand access to charging for residents.
- **District Energy** – BED, VGS, and Ever-Green will meet with UVM and UVMMC as we work to wrap up Phase 3 of the feasibility work. During Phase 3, to-date, we have worked with the McNeil Joint Owners to reach an agreement in principle on a McNeil term sheet, done extended testing at McNeil to ensure we can accommodate district energy operationally, had a third-party engineering design review for UVMMC, and further refined the financials of the project.
- **McNeil and Climate Council** – An agriculture subcommittee of the Vermont Climate Council had proposed, without consensus, some recommendations that would jeopardize our ability to pursue district energy and could even lead to a forced shutdown of existing wood-chip plants in Vermont. BED, GMP, VPPSA, and IBEW sent a letter (attached to this packet) outlining our serious concerns with this from both a process standpoint (the subcommittee had not engaged with McNeil) and substantive. Ultimately the full Council had a straw poll vote on the language and there was not support for it, so the Council tabled this recommendation, and the Council's cross-sector mitigation subcommittee (which includes energy sector representation) will engage now further on this issue. We will continue to monitor and engage on this.
- **Revenue Bond** – BED presented briefly at the City's public information meeting on the Revenue Bond on Dec. 1, and the Burlington Free Press ran an article on the bonds recently as well. We move now to the vote on Dec. 7th and are including a resolution for your consideration as part of this packet to authorize expenditure under the Revenue Bond proposal, if voters approve it on the 7th. The resolution would then move to the Board of Finance and City Council on Dec. 13th.

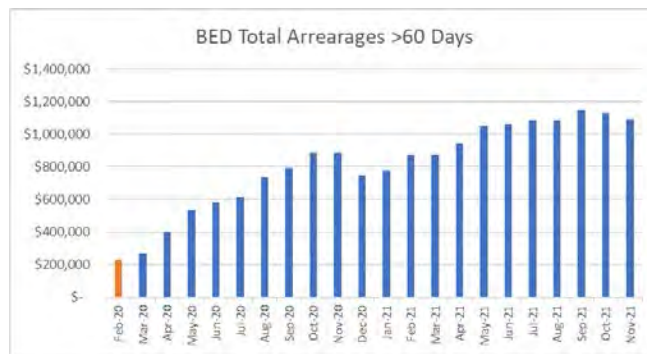
Center for Innovation - Emily Stebbins-Wheelock

- Recruiting for Director of Information Technology, Director of Finance, and IS positions; acting supervisor of Information Services and Finance & Accounting staff.
- Continued sponsorship of IT Forward implementations.
- Sponsoring internal team reviewing rebate process for efficiencies and effectiveness.

- Facilitating a white accountability group for City employees sponsored by the Racial Equity, Inclusion and Belonging (REIB) Office.

Finance & Accounting

- Completed work with external auditors on the statewide EEU audit.
- Reviewed DPS rate case testimony.
- Determining accounting/chart of accounts setup for Act 151 programs.
- Assessing new GASB Standard 87-Leases for implementation in FY22.
- Monitoring receivables in response to COVID19: as of November 30, 2021, BED's total non-current receivables had decreased \$88,655 or 5.7% compared to the end of October 2021. Arrearages >60 days were \$1,093,388.



Billing & Analytics

- Functional lead for MDMS replacement and team member on Customer Portal replacement projects, with work on data integrations, data migration, documentation, and data cleanup.

Information Services

- Participation in candidate interviews for IT Director and other IS positions.
- Continued work on IT Forward projects: secure file transfer, AMI integration, data extracts for CIS daily syncs, and MDMS data conversion.
- Refreshed MDMS-CIS test environment.
- Preparations for next FIS/CIS upgrade.
- Implementing phone system changes.
- Planning/preparation for staff transitions.

Policy and Planning

- Submitted draft standards and procedures to be used by the Commission when reviewing utilities' proposals for innovative rates and services under 30 V.S.A. § 218d(o).
- Participated in weekly VT DU legislative session prep meetings.
- Monitored Climate Council discussions and recommendations.
- PUC approved EEC rates for CY22.
- Began participating in Joint Energy Coverage calls with VPPSA.
- Explored potential Rate Design Initiative Grant.
- Act 151 meetings and program development.

- Discussed Vehicle-to-Grid technology with vendors.
- Participated in VT AOT Study Group on EV road usage fees.
- Drafted McNeil term sheet for Thermal Energy.
- Reviewing proposed website terms & conditions and changes to Operating Guidelines.
- Monitoring winter 2021-2022 energy price increases and impact.
- Finalizing revised accounting treatment for RECs and Tier 3.
- Participated in Finance Director candidate interviews.

Sustainability and Workforce Development

- Continued management of the Ventilation Improvement Program that supports Burlington's smaller commercial customers and non-profit entities with efficient air quality interventions; shared October [webinar touting health and safety benefits of fresh air and ventilation](#).
- Planning early December EV "Ride and Drive" event for UVMCC/UVM staff and faculty, hosted by BED and GMP in conjunction with UVM Transportation Services, UVM Office of Sustainability, and Clean Cities Coalition.
- Hosted third and fourth episodes of NZE Podcast, featuring a Burlington homeowner on his property's transition to NZE and Commissioner Bethany Whitaker on transit and e-bikes, respectively.
- Disseminated third employee survey, designed to capture employee feedback, and assess vehicle miles traveled during the Remote Work Pilot. Analyzed data and reported findings to BED leadership and staff.
- Held bi-monthly meeting with Department of Permitting & Inspections leadership on Weatherization in Rental Properties ordinance and composed memo outlining suggesting compliance timeline and schedule.
- Drafted and submitted – with assistance from Policy and Planning and Energy Services teams – a proposal to Vermont Low Income Trust for Electricity (VLITE) to expand EV access for low-income residents through car sharing and enhanced charging infrastructure. Proposed project will partner with CarShare Vermont and Champlain Housing Trust.
- Virtually attended biannual New England Municipal Sustainability Network meeting with 35 other New England cities.
- Hosted Urban Sustainability Directors Network "Building Electrification and Gas Transition" Learning Group call, with guests from Boulder, CO and Ithaca, NY. Boulder discussed the Comfort365 program and their transition to air source heat. Ithaca discussed a program that will use \$100 million in outside investments and creative financing solutions to maximize energy efficiency and eliminate carbon emissions from energy use for 1,600 residential and commercial properties. 116 cities participated in the call.
- In conjunction with the Center for Safety, planned a demonstration of the XL PHEV pickup truck for BED staff, hosted through Clean Cities Coalition.
- Worked with Burlington 2030 District to coordinate webinar on the newly released City of [Burlington Historic Buildings' Path to NZE guide for building and homeowners](#). Sixty-one people joined the webinar, and the LinkedIn post about the guide received 3,200 views.

Center for Safety and Risk Management – Paul Alexander

Safety

- McNeil: Worked with Jon Clark at Winooski One Hydro to assess current life safety vest protection.
- McNeil: Completed Draft section for the Generation Assets Accident Prevention manual. “Special Instruction” for working at Winooski One Hydro.
- Pine Street: Worked with Northern Toyota Lift on assessing forklift attachments for Pine Street forklift.
- Pine Street: Completed Pole Top/ Bucket rescue training of Lineworkers.

Environmental

- Tested and abated asbestos located within the men's locker room at Pine Street.
- Conducted clean-up operations pertaining to a spill at the Winooski One Hydro.
- Conducted waste removal operations for the McNeil, Gas Turbine, and Pine Street locations.

Risk Management

- Claims Investigations 2 Power Outages.
- Create release for bucket truck platform.
- Participate in Director of IT and Finance interviews.
- Create agenda and chair BED's Safety Committee kickoff meeting.
- Review Foresters' railcars testing agreement.
- Prepare and present WC data at Mayor's BTV Stat meeting.
- Revisit Hydraulic vapor issue at W1H.

Purchasing/General Services

- Meeting on Insurance improvements at McNeil and their status.
- Monthly meeting with the State of Vermont on our new electric bucket truck.
- Worked with vendor and McNeil on trying to fix issues with the MCC controller.

Center for Operations & Reliability – Munir Kasti

Engineering and Operations

- Completed the Lavalley Lane/ Railway Lane transformer bank relocation. All poles and lines have been removed and the new transformers are energized.
- Installed and energized the step-down transformer for the McNeil Station backup boiler feed pump.
- Replaced bad transformers on Cliff Street and Bank Street.
- The Airport/ FAA stepdown transformer upgrade was completed.
- Completed the service upgrade to the ArtsRiot on Pine Street.
- Completed 15 service requests and addressed numerous lighting issues.
- On November 12, 27 and 28 we sent a crew to help in power restoration in the Middlebury area.
- De-energized the street lights on the Shelburne Round-about as needed per SD Ireland.
- Completed testing of mechanical relays at McNeil Station.
- Updated RTU firmware at Winooski One Hydro.
- Worked with Radio North to replace radio repeater under warranty at McNeil Station.

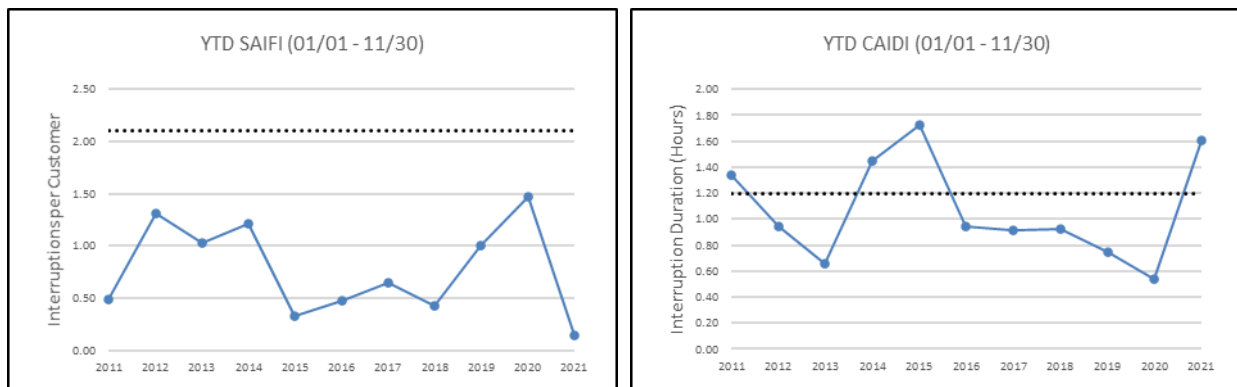
- Assisted McNeil personnel with troubleshooting of new 4kV MCC for backup boiler feed pump.
- Began work on the SCADA Field Device project:
 - Set up test bench
 - Began evaluation of several vendor devices.
 - Met with various vendors to discuss setup and programming of devices.
- Issued the design and work order for:
 - Relocation of BED aerial line along Lavalley Lane in preparation for the Amtrak siding being added to the railyard.
 - Relocation of a pole at Perkins Pier.
- Continued analysis of projected system loading due to Net Zero Energy. A study was completed which focused on a system peak load of 120 MW. Projects were identified in addition to those previously identified for a system peak load of 102.8 MW. The scope of these projects was further defined, and cost estimates are being prepared.

SAIFI & CAIDI Outage Metrics:

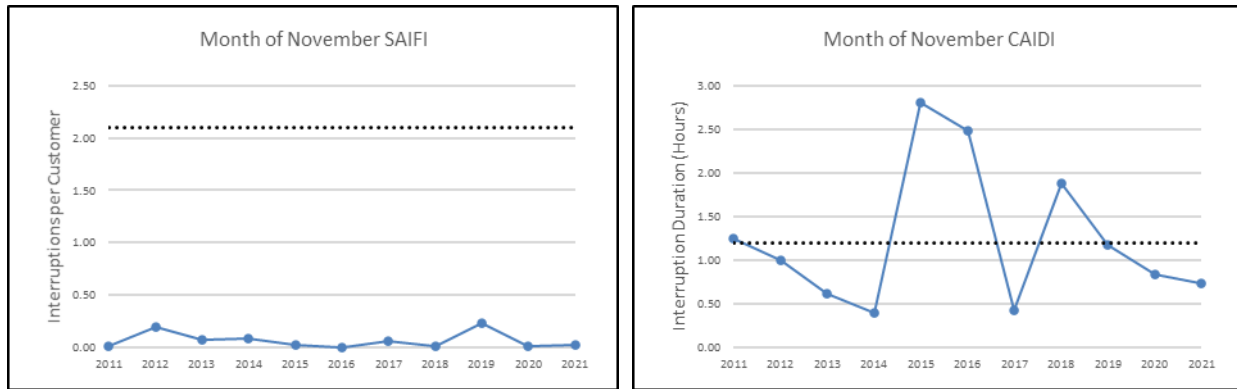
BED's distribution system experienced 9 outages in November 2021 (3 unscheduled and 6 scheduled). BED's SAIFI for the Month of November was 0.02 interruptions per customer and CAIDI was 0.73 hours per interruption. BED's YTD SAIFI is 0.14 interruptions per customer and YTD CAIDI is 1.61 hours per interruption.

The year-to-date CAIDI metric remains above the target of 1.2 hours due to fewer unplanned outages while the planned outages that have occurred required longer duration outages to safely maintain and replace equipment.

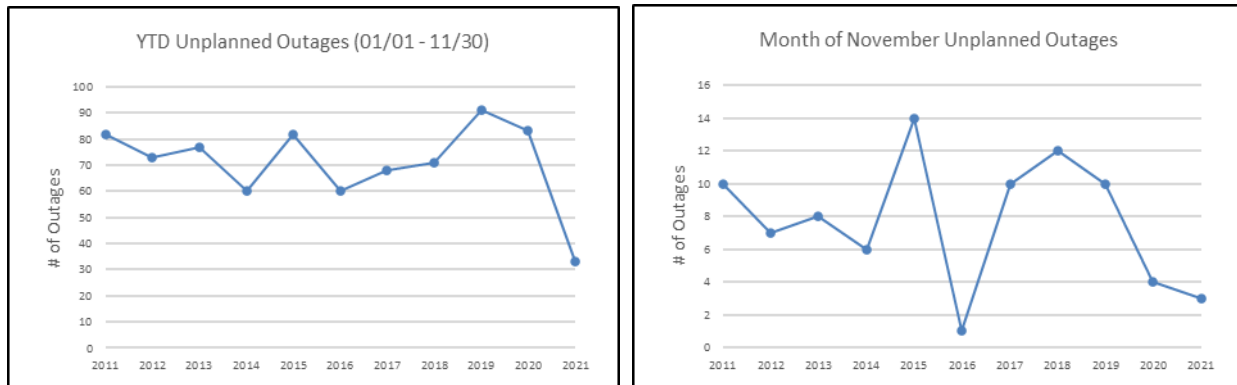
The following figure shows BED's historical YTD SAIFI and CAIDI:



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



The following figure shows BED's historical Unplanned Outages:



GENERATION

McNeil Generating Station, November 2021

Month Generation:	6,113.0 MWh
YTD Generation:	243,180 MWh
Month Capacity Factor:	17.0%
Month Availability:	29.6%
Hours of Operation:	121.6 Hours

John Bent has accepted the position of Yard Worker. His start date at McNeil was on Monday November 8.

Winooski One, November 2021

Monthly Generation:	3039.74 MWH (107.6% of average)
YTD Generation:	21,886.0 MWH (80.91% of average)
Month Capacity Factor:	57.05%
Annual Capacity Factor:	36.89%
Month Availability:	97%

On November 1 there were a few hours of no generation due to flood conditions.

On November 17 the units were offline for a few hours for firmware update at tie breaker.

Burlington Gas Turbine November 2021

Month Generation:	0.000 MWh
YTD Generation:	358.771 MWh
Month Capacity Factor:	0.000%
Month Availability:	100.000%
Hours of Operation Unit A:	0.0
Hours of Operation Unit B:	0.0

There were no operations of the asset during the month of November. The asset is fully functional and in service at the end of the month.

Solar (Pine Street 107 kW)

Month Generation:	5 MWh (17% from previous year)
YTD Generation:	105 MWh
Month Capacity Factor:	6%
Month Availability:	100%

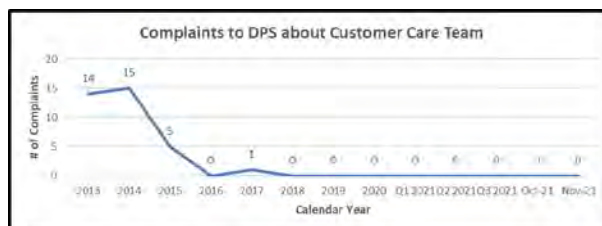
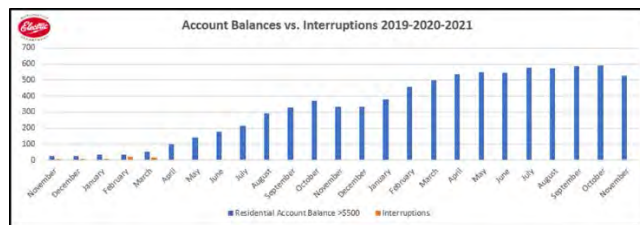
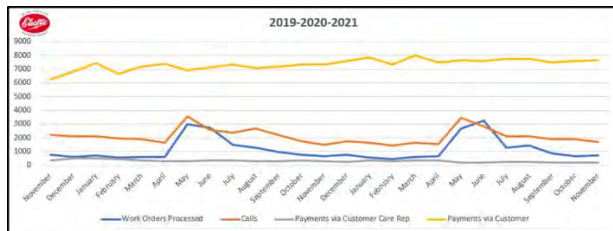
Solar (Airport 499 kW)

Month Generation:	22 MWh (12% from previous year)
YTD Generation:	544 MWh
Month Capacity Factor:	6%
Month Availability:	100%

Center for Customer Care & Energy Services – Mike Kanarick

Customer Care

- **Call Answer Time (75% in 20 seconds):** November 2021 85.2%, October 77.7%, September 82.4%, August 81.5%, July 81.6%, June 69.3%. November 2020 85%, October 84.4%, September 84.3%, August 72.1%, July 78.6%, June 74.8%. Call answer time up 7.5% from last month and slightly from same time last year.
- **November 2021 Stats:** please see dashboard for additional metrics categories.



Communications and Marketing

- Temporary Energy Assistance Program to offset 7.5% rate increase: to help offset BED's first-rate increase in 12 years that began appearing as a surcharge on customer bills in August, we are offering income-qualified customers temporary assistance in the form of a monthly bill credit through June 2022. So far 58 customers have applied with 40 approved and 18 awaiting verification. Customers can learn about eligibility requirements and apply by visiting burlingtonelectric.com/rates.
- Vermont COVID-19 Arrearage Assistance Program (VCAAP II): The Vermont COVID-19 Arrearage Assistance Program (VCAAP) that was active last fall was back this fall and concluded on October 24. VCAAP II provided financial support to residential (homeowners and renters) and commercial customers who may face disconnection of service because of past-due balances for their electric, landline telephone, natural gas, water, or sewer/wastewater charges. BED approved 271 applicants for a total of \$242,000, of which BED has received \$225,000. VCAAP 1.0 ended in mid-December 2020; BED was successful in securing for our customers \$345,437 (\$259,098 residential and \$86,339 commercial) in grants.
- Vermont Emergency Rental Assistance Program (VERAP - erap.vsha.org): launched by State in April "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. BED has approved 411 of 639 (up from 312 of 561 last month and up from 280 of 461 in September) program applicants and has received \$212,214.
- Net Zero Energy Podcast: with the amazing production work of BED's digital guru Adam Rabin and the hosting skill of Sustainability Director Jennifer Green, BED has launched its new Net Zero Energy Podcast with published episodes about BED's Net Zero Energy Revenue Bond and electric bikes. We invite you to visit burlingtonelectric.com/nze to subscribe.
- Annual Net Zero Energy Calendar Contest: once again this year, Brian Reilly, Residential Energy Senior Engineer, and Mike Kanarick visited virtually with the 4th graders in all 6 of Burlington's public schools, engaged in a presentation and conversation about energy efficiency and renewable energy, and invited the students to submit artwork that represents their visions of energy. As we did last year, we have created certificates for our 14 contest winners, assembled goodie bags, including gift cards for pizza and ice cream for each winner and sent them to their schools for pick-up. 2022 NZE calendars are available at the reception desk at BED.
- Highlight Hybrid: for a fourth year, BED and VGS have partnered with Burlington's New Year's Eve event, Highlight (a hybrid event this year with both in-person and livestreamed events), to encourage our customers to make the change from paper billing to e-billing to help our environment. Customers who make the change will receive one free ticket (\$15 value) to Highlight. We have included a bill insert featuring this promotion in all our customers' December bills.
- Triennial Customer Satisfaction Survey: we applied for and received Public Utility Commission approval to delay our survey from FY 2021 to FY 2022 due to the pandemic. We recently began the process of updating our survey from the fall of 2017 and plan to put the survey in the field in late February or early March 2022. We likely will present to the Commission at the May 2022 meeting.
- North Avenue News: our December column highlights the NZE Calendar Contest winners, and our December ad promotes BED's new Net Zero Energy Podcast.
- November 2021 Website and Facebook Highlights
 - Overall site-wide pageviews for November = 19,898

- October = 20,598
- September = 21,327
- August = 22,962
- July = 23,727
- June = 25,159
- May = 28,428
- April = 22,745
- March = 21,463
- February = 18,773
- January = 20,402
- December 2020 = 18,797
- November = 19,638
- Unique homepage pageviews for November = 6,379
 - October = 6,857
 - September = 6,905
 - August = 8,464
 - July = 7,931
 - June = 7,484
 - May = 7,499
 - April = 5,404
 - March = 5,775
 - February = 5,165
 - January = 7,571
 - December 2020 = 5,561
 - November = 7,071

Full site traffic for November 2021











The spike in web visits on October 24 is due to the large outage we experienced.



- Visitors by website page – please note that some of the columns indicate n/a as the page-specific URLs changed when we launched our new website. We will continue to track this information, which will become more meaningful each month.

page title	Nov 2021	Oct 2021	Sep 2021	Aug 2021	July 2021	June 2021	May 2021	Apr 2021	Mar 2021	Feb 2021	Jan 2021	Dec 2020	Nov 2020	Oct 2020	Sept 2020
Burlington Electric Department	7246	8186	7845	8464	9164	9085	9667	6884	7234	6550	7571	7130	7071	7497	9277
My Bill	2737	2825	2943	2846	3033	3295	3235	3087	3228	3046	3532	3308	2965	3258	3651
Waste Wood Yard	1649	1069	1045	1080	1212	1160	1569	2034	1110	367	979	761	1756	1545	1303
Report A Problem	93	235	119	79	153	135	93	60	88	80	80	121	76	140	721
Stop or Start Service	306	298	454	867	803	1079	2599	622	337	279	336	277	330	366	502
E-billing	274	276	376	345	522	451	337	380	352	368	495	528	397	394	669
Contact Us	448	460	577	642	638	731	949	468	560	413	417	467	414	436	547
McNeil Generating Station	544	443	347	339	447	409	627	791	517	395	525	507	734	634	548
Heat Pumps	394	477	406	496	567	369	82	40	39	46	30	18	36	36	36
Rebates	501	537	566	571	621	795	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rebate Center	499	546	530	667	679	319	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Green Stimulus	49	91	106	113	138	233	355	257	280	504	283	208	156	152	171
Stop or Start Service	306	298	454	867	803	1079	2599	622	337	279	336	277	330	366	502
Leadership Team	222	206	243	276	228	240	212	198	308	218	286	207	193	190	269
Rates & Fees	166	214	178	132	143	247	310	184	212	218	161	140	139	190	190
Usage Tracker Registration	107	114	94	154	177	223	107	118	150	196	185	209	147	154	201
RFP	270	243	452	497	455	158	143	439	393	471	404	258	387	400	383
Residential Ways to Save	164	156	172	191	172	220	217	173	178	163	137	159	137	212	172
Electric Vehicles	296	289	272	265	245	332	247	258	246	218	210	190	208	296	219
E-Bikes	78	161	168	265	207	192	223	242	196	117	106	109	117	131	174
Net Zero Energy News	32	67	204	129	115	178	210	132	187	195	228	179	225	222	241
Electric Vehicles	296	289	272	265	245	332	247	258	246	218	210	190	208	296	219
COVID-19 Updates	22	79	153	166	397	540	335	275	332	301	349	337	323	281	83
Our Energy Portfolio	88	104	96	59	42	n/a	51	110	102	101	49	51	53	84	125
Electric Lawn Mowers & Leaf Blowers	94	117	150	133	184	229	408	312	176	79	131	70	157	101	88
RFP Detail	94	49	258	334	185	n/a	23	401	199	414	303	148	293	321	403
Defeat The Peak	12	n/a	11	137	22	155	11	17	20	35	n/a	n/a	10	20	n/a
Commercial Ways to Save	37	41	98	55	39	62	26	46	59	33	37	41	34	53	33

- Top Facebook posts
 - Job Opportunities and our new podcast got a lot of traction on Facebook in November.

11/22/2021 8:49 AM		Job Opportunities at Burlington Electric			3.1K		678 1	
11/09/2021 8:42 AM		We've launched our new Net Zero Energy podcast. We			2.2K		69 9	

Blue: clicks / Red: comments, shares

Energy Services

UVM

- UVM / Hills Ag-Science Renovation – BED received the preliminary design drawings for this upcoming UVM building renovation project. The complexity of the work suggests that a building energy model is the most effective way to develop a rebate offer. BED still must verify that the design of the building is sufficiently efficient to warrant the cost of this type of detailed analysis. This building is served by the central heating and cooling plant.

UVMCMC

- UVMCMC / Main Parking Garage Lighting Upgrade – The existing 600-plus fixtures in this highly-utilized underground parking garage are of T8 fluorescent technology. The hospital is now considering an upgrade to LED lighting. BED has been involved with the manufacturer and distributor for the proposed new lighting fixtures in order to direct the design in a way that will maximize LED rebates and provide the most efficient final design.

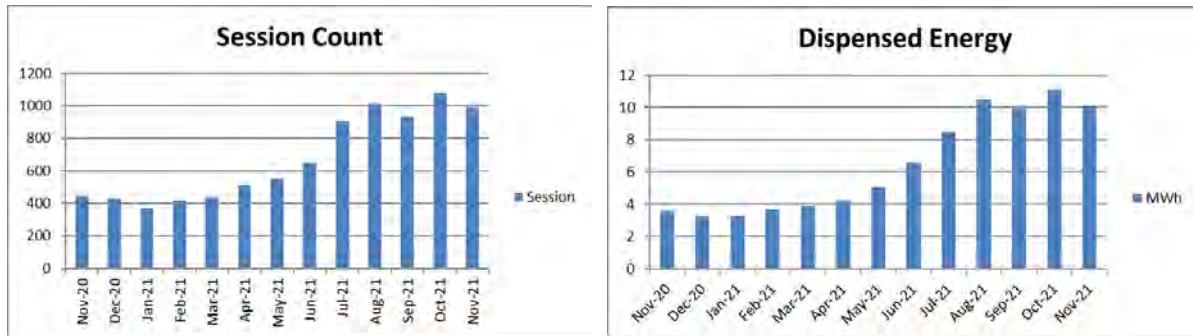
Other Services

- 100 Bank St. Office Building / HVAC Controls Optimization – This project was completed some months ago and involved enhanced control of both the air-handling unit and the chiller system for this seven-story downtown office building. Estimates were made earlier for the energy savings. Now that the systems have been running for a more than a year, final energy savings calculations can be completed. Complicating the data analysis are the effects of Covid lockdowns on building occupancy and HVAC usage. This makes it necessary to look deeper, using DDC trend data for pre- and post-project analysis. Difficulties here include ensuring sufficient trend data is available from the customer's system and ensuring that it is good data without significant missing data-points.
- Burlington City Arts – 405 Pine St. / Major Renovation – This on-going building improvement is happening over several phases, and as financing and fund-raising permit. The goal is to create a space which is Net Zero, or at least Net Zero ready. The Phase Two energy modeling reports have been made available to BED and we have had the opportunity to respond with some high-level comments. At this stage of planning, heat pump technology is likely to be phased in over time when the existing natural gas equipment reaches end of life.
- Soulshine Power Yoga / Attic Insulation Project – BED is working with the tenant in this space to improve the insulation and air-sealing around the second-floor area. This is an electrically heated space, using far-infrared technology. Because it is electrically heated and this is a building envelope improvement in a business highly affected by Covid restrictions, it has been approved for the BED temporary "90% Rebate" program. This month, an insulation proposal from a local contractor was supplied by the business owner to BED. We have confirmed that this project is eligible to be reimbursed at 90% of the cost. A rebate contract has been signed and the next step is for the contractor to complete the work. This is expected to occur within the next few months.
- BP Wastewater High Bill Complaint – BED completed a walk-through this month at this 15,000 SF facility on Riverside Avenue. The visit was the result of a high-bill inquiry by the tenant of the space. Analysis of AMI data from the account shows that relatively high electrical usage is occurring even during unoccupied hours and on weekends. The walkthrough revealed that the space was previously used for high detail manufacturing work and has a large number of high-wattage high-bay fluorescent fixtures installed, some of which are of very old technology. Included are a few metal halide HID fixtures. Presently, most of the space is being used only for storage, primarily for process trucks that support the wastewater business. BED completed a walk-through report for the tenant, suggesting a number of items to look at more closely with the lighting system to likely be the first item to address to affect a reduction in the electric bill.
- Cambrian Rise / Lauretide New Construction – This affordable multifamily has now been occupied for over a year. Energy model calibration, to verify that the building is running as efficiently as originally planned, is now finished. The incentive has already been paid. Calibration of the energy model was completed this month and final energy savings have been claimed in the DSM database. This building has been shown to be performing in the efficient manner that was expected when it was completed and occupied.
- Cambrian Rise / Juniper House NC – This 70-unit affordable multifamily for adults 55+ has been occupied for over 6 months. Sub-metering has recently been installed by the owner to allow a more granular analysis of energy use in the building. BED now has access to this data which will assist in our own energy usage analysis when the time arrives for final savings claims to be calculated.

- 77 Pine St. Renovation / Bank Offices and Multifamily – The north side of this renovated building is bank offices, and it has been fully occupied since April 2021. Just being completed is the renovation of the south side of the building, which consists of 70+ apartment units. The entire building will undergo blower door testing early next month which will inform the energy modeling for the building. BED has received baseline and proposed executable files of the energy models to assist us in adjusting the modeling to match actual building operation and allow an accurate energy savings estimate to be made. The first rebate payment for the bank side of the building has already been paid to the owner. The second payment for that half of the building will be available as soon as the operational energy savings are confirmed. Heat pump technology for space heating and cooling is planned for in the apartments.
- YMCA New Construction / Final Calibration and Savings Claim – This new YMCA Facility on College St. has been completed and in operation for nearly two years. However, Covid restrictions have interfered with final savings calculations. BED is presently confirming that the energy model and actual building operation are in step with one-another. Once done, the formal energy savings claim can be determined. One concern that has been noted is the unexpectedly high natural gas consumption of the finished building. In connecting with the owner during this process, BED learned that the YMCA has had on-going concerns over the high utility costs. We are in the process of assisting the customer to review the operation of the building controls and determine if more optimized set-points and sequences of operation can reduce the building's energy use further.
- Weatherization coordination with VGS - VGS requested electrical account usage histories (with customer permission) for 10 SF and 7 MF buildings (representing 27 living units) in the month of November for the purpose of weatherization audit preparation and building energy use analysis. This brings the total TTD requests to 99 SF and 62 MF buildings (representing 203 living units).

Electric Vehicles

- The EVSE dispensed a total of 10.1 MWh and supported 990 sessions.
- The top 3 sales were 66, 67 & 76 kWh and occurred at Church & Main and the Cherry St. garage.
- The top 10 sessions (1% of total) accounted for 6.0% (611 kWh) of the total monthly sale. The ten sessions ranged from 51kWh-76kWh.
- The Pine St. DC fast charger accounted for 36 of the 990 sessions and dispensed 3.6% of the total energy.
- The EVSE served 481 unique drivers.
- ChargePoint now recommends the following: *A good preventative maintenance plan for all ChargePoint stations is to Power cycle the station OFF for 5-10 mins every 2 -3 weeks to apply all software updates to keep stations current.*
- Session Count and Dispensed Energy plots from the from the public charging network are shown below.



- **Number of EV and PHEV Rebates to Date** – 328 (of this 53 LMI rebates to date as shown below)
 - New All Electric Vehicle – 142
 - New All Electric Vehicle (LMI) – 26
 - New PHEV – 91
 - New PHEV (LMI) – 25
 - Used All Electric Vehicle – 21
 - Used All Electric Vehicle (LMI) – 1
 - Used PHEV- 12
 - Used PHEV (LMI) – 1
 - All Electric Vehicle (\$50K plus) – 9

- Number of customer loans with lending partners to date – 5
- Number of customers currently participating in the new EV Rate- 93
- Number of EV home charging stations rebates to date – 55

Electric Lawn Equipment to Date

- Number of e-mower rebates to date – 389 (11 commercial & 378 residential)
- Number of e-leaf blowers to date – 31

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

- Total Number of Heat Pump Technology rebates to date- 561 (of this 77 LMI rebates to date as shown below)
 - Number of space conditioning heat pumps to date (ductless and centrally ducted) – 469
 - Number of income-eligible space conditioning heat pump participants to date – 73
 - Number of heat pump hot water heaters to date – 15
 - Number of income-eligible heat pump hot water heaters participants to date - 4

Electric E-Bikes to Date

- Number of e-bike rebates to date – 266

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

- Number of induction Stovetops rebates to date – 10

BED 2021-2022 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Nov 2021 Actuals	Oct 2021 Actuals	Sept 2021 Actuals	Aug 2021 Actuals	July 2021 Actuals	June 2021 Actuals	May 2021 Actuals	Apr 2021 Actuals	Mar 2021 Actuals	Feb 2021 Actuals	Jan 2021 Actuals	2020 Yearly Actual	2019 Yearly Actual
Engage Customers and Community														
Call answer time 75% within 20 seconds	75%	85%	78%	82%	82%	82%	69%	65%	91%	89%	93%	87%	avg 81%	
Delinquent accounts >\$500	0	526	592	588	573	578	545	552	535	500	458	378	avg 201	
Disconnects for non-payment	0	0	0	0	0	0	0	0	0	0	0	0	45	
# of residential weatherization completions	10		0	0	0	1	0	1	1	0	1	0	3	11
Weatherization completions in rental properties			0	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	0
Champ Challenge weatherization participants		0	0	0	0	0	0	0	0	0	0	0	1	TBD
# of commercial building with improved thermal envelopes		0	1	1	1	0	0	1	0	1	0	0	5	0
% of EEU charge from LMI customers spent on EE services for LMI customers		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Strengthen Reliability														
SAIFI (AVG interruptions/customer) (annual target)	< 2.1	0.02	0.04	0.02	0.002	0.06	0.02	0.01	0.004	0.01	0.004	0.002	1.50	1.03
CAIDI (AVG time in hrs to restore service) (annual target)	< 1.2	0.73	1.88	0.90	1.87	1.95	3.85	0.75	0.77	0.49	1.05	0.72	0.55	0.75
Distribution System Unplanned Outages (annual target)	82	3	2	4	4	7	3	0	1	3	2	4	90	98
McNeil Forced Outages	0		0	1	1	1	0	0	0	0	0	1	21	TBD
W1H Forced Outages	0		1	1	0	2	0	0	0	2	1	0	2	TBD
GT Forced Outages	0		0	0	0	0	0	0	0	1	0	1	3	TBD
Invest in Our People, Processes, and Technology														
Avg. # of days to fill positions under recruitment	120	74	87	81	76	64	60	47	65	35	77	62	179	
# of budgeted positions vacant	0	10	7	13	14	11	10	7	6	6	6	7	6	NA

BED 2021-2022 Strategic Direction Dashboard

[illegible]

BED 2021-2022 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Nov 2021 Actuals	Oct 2021 Actuals	Sept 2021 Actuals	Aug 2021 Actuals	July 2021 Actuals	June 2021 Actuals	May 2021 Actuals	Apr 2021 Actuals	Mar 2021 Actuals	Feb 2021 Actuals	Jan 2021 Actuals	2020 Yearly Actual	2019 Yearly Actual
Manage Budget and Risks Responsibly														
<i>Safety & Environmental</i>														
No. of workers' compensation/accidents per month	0	0	0	0	1	0	0	1	0	2	0	0	8	
Total Paid losses for workers' compensation accidents (for the month)	\$225,000 annual	\$7,873	\$3,830	\$4,406	\$2,279	\$8,109	\$43,320	\$7,042	\$2,809	\$8,289	\$2,768	\$1,868	\$ 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	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	41.71	78.2
Lost work days per month	0	0	0	0	0	0	0	0	0	0	0	0	45	
NOx reporting levels to EPA (Quarterly) (lbs/mmbtu)	<0.075	0.070	0.069	0.068	0.071	0.068	0.068	0.069	0.071	0.068	0.069	0.067	0.07	
# of reported spills, waste water incidents (monthly)	0	2	0	1	0	0	1	0	0	0	0	0	4	
Phosphorus levels to DEC in lbs (monthly/yearly total)	<0.8/37	0.069/2.376	0.069/2.376	.092/1.581	0.116/1.489	0.116/1.489	0.034/1.373	0.048/1.339	0.17/1.291	0.631/1.121	0.192/0.192	0.334/1.81		1.169
# of new power outage claims reported (monthly)	1	2	1	0	0	1	1	0	1	0	1	0	4	
# of new auto/property/other liability claims reported (monthly)	2	0	2	2	2	2	1	1	1	2	2	0	27	
<i>Purchasing & Facilities</i>														
# of Purchase Orders for Inventory (Target: avg for winter months)	42	34	41	51	112	56	37	30	32	53	28	90	593	
\$ value of Purchase Orders for Inv. (Target: avg dollars spent during winter)	\$78,000	\$137,698	\$240,198	\$91,052	\$1,871,500	\$98,535	\$105,330	\$65,173	\$31,021	\$139,566	\$193,052	\$91,356	975,531	
# of stock issued for Inventory (Target: avg during winter months)	320	302	369	495	336	420	406	265	501	272	334	315	4,545	
\$ value of stock issued for Inventory (Target: avg. during winter)	\$ 65,000	\$ 73,872	\$ 81,183	\$ 86,977	\$ 36,471	\$ 71,605	\$ 100,339	\$ 45,103	\$ 75,434	\$ 61,775	\$ 37,230	\$ 102,901	1,086,478	
# of posters pulled from poles monthly (Target: goal to remove each month)	58	52	458	364	503	237	205	185	221	176	72	165	627	
# of Spark Space and Auditorium setup/breakdowns monthly (Target: Covid impact)	3	5	10	26	6	6	9	4	4	8	1	1	87	
<i>Finance</i>														
Debt service coverage ratio	1.25		4.29	4.04	3.77	3.91	NA	4.05	4.47	3.89	4.01	3.56	NA-FY basis	NA
Adjusted debt service coverage ratio	1.5		1.10	1.03	1.01	0.96	NA	1.01	1.15	0.96	1.02	0.86	NA-FY basis	NA
Days unrestricted cash on hand	>90		108	121	125	116	NA	117	127	122	126	109	NA-FY basis	NA
<i>Power Supply</i>														
McNeil generation (MWH) (100%)	per budget	6,113	28,417	11,587	28,792	26,094	18,302	15,925	17,407	35,682	32,549	22,312	192,696	
McNeil availability factor	100%	30%	90%	80%	81%	71%	93%	95%	76%	100%	100%	61%		
McNeil capacity factor	per budget	17%	76%	32%	77.4%	70%	51%	42.8%	48.3%	95.9%	96.9%	59.9%		
Winooski One generation (MWH)	per budget	3,040	1,541	921	1,687	2,051	642	2,636	3,713	2,872	1,162	1,584	21,194	
Winooski One availability factor	100%	97%	97%	97%	99.8%	99.8%	100%	100%	96%	100%	90%	90%		
Winooski One capacity factor	per budget	37%	35%	18%	30.6%	37%	12%	48%	70%	52%	23%	29%		
Gas Turbine generation (MWH)	NA	0.0	7.6	15.3	118.1	87.0	32.6	15.4	18.5	29.4	17.8	16.9	441	
Gas Turbine availability factor	100%	100%	55%	100%	99.5%	100%	95%	100%	100%	99.9%	100%	99%		
Gas Turbine capacity factor	NA	0.0	0.045%	0.11%	0.83%	0.61%	0.24%	0.09%	0.11%	0.17%	0.115%	0%		
BTV solar PV production (mWh)		263	336	471	588	542	644	642	525	548	190	107	5,182	
Cost of power supply - gross (\$000)			\$2,476	\$2,576	\$2,732	\$2,483	\$2,564	\$2,431	\$2,092	\$2,955	\$2,477	\$2,457	\$31,081	
Cost of power supply - net (\$000)			\$2,476	\$2,576	\$169	\$2,483	\$2,564	\$2,090	\$514	\$2,955	\$592	\$2,457	\$23,388	
Average cost of power supply - gross \$/KWH			\$0.09	\$0.10	\$0.08	\$0.085	\$0.090	\$0.097	\$0.086	\$0.111	\$0.095	\$0.089	\$0.100	
Average cost of power supply - net \$/KWH			\$0.09	\$0.10	\$0.01	\$0.085	\$0.090	\$0.084	\$0.021	\$0.111	\$0.023	\$0.089	\$0.076	

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

Wednesday, October 27, 2021, 5:30 pm

The special meeting of the Burlington Electric Commission was convened at 5:31 pm on Wednesday, October 27, 2021 via Microsoft Teams Video Meeting.

Commissioners Chagnon, Stebbins, and Whitaker participated via Microsoft Teams.

Staff members present included Darren Springer, Paul Alexander, James Gibbons, Mike Kanarick, Munir Kasti, Laurie Lemieux (Board Clerk), and Emily Stebbins-Wheelock.

1. Agenda

There were no changes to the Agenda.

2. Public Forum

Heather Kuney and Brock Romano from KPMG were present for the meeting. There were no public comments.

3. KPMG FY2021 Audit Presentation

Ms. Stebbins-Wheelock provided a brief update of the FY21 financial results, indicating that she doesn't expect these results to change between now and when the financial statements are issued. Mr. Stebbins-Wheelock will include the FY21 audited financial statements in the Commission's packet for its November meeting so the Commission may review and prepare any questions. At the September Commission meeting the Department reported a preliminary FY21 net loss of \$275K; we are now expecting to report a net loss of \$43K due to some post-closing entries, including the recording of additional grants/ miscellaneous other income and a new FY2021 regulatory asset per an accounting order from the Public Utility Commission for labor expenses that the Department was not able to capitalize (similar to the regulatory asset recorded for FY2020).

Ms. Stebbins-Wheelock also highlighted a change in the Department's accounting and reporting for the energy efficiency for the FY2021 financial Statements. The Department became the fiscal agent for the Energy Efficiency Utility (EEU) effective January 1, 2020, and for FY2020 the assets and liabilities of the EEU were incorporated into the Department's financial statements. For FY2021, due to the adoption of GASB Standard No. 84, those EEU activities will be reported as a custodial or fiduciary fund, separate from the Department's statements. Ms. Stebbins-Wheelock then invited KPMG to begin its audit presentation.

KPMG reported that the FY2021 audit opinion would be an unmodified opinion.

KPMG reported the following:

- The Department implemented Governmental Accounting Standards Board (GASB) Statement No 84, *Fiduciary Activities*, during the year ended June 30, 2021. The implementation resulted in the restatement of net position and other financial statement line items within the presentation of June 30, 2020 comparative statements in order to properly present the fiduciary activities associated with the EEU custodial activity that was blended with the Department's enterprise fund during the prior year. No other new accounting policies were adopted during the current year and the application of existing accounting policies were consistent.
- Outstanding matters include documentation to support the cash flow statement tie out, completion of journal entry testing, management representation letters, and updated legal letter;
- There were no significant or unusual transactions identified during the audit;
- There were no uncorrected audit differences identified;
- There were no corrected misstatements differences identified;
- There were no non-GAAP policies for which the effect would have a material impact on the FY20 financial statements;
- There were no matters to communicate regarding material weakness or significant deficiencies;
- There were no disagreements with management;
- There were no significant changes to the risk assessment and audit strategy;
- We have discussed with management our judgments about the quality, not just the acceptability of the Department's accounting principles as applied to its financial reporting. The discussions generally included such matters as the consistency of the Department's accounting policies and their application, and the understandability and completeness of the Department's financial statements, which include related disclosures.
- KPMG reviewed the areas of emphasis in the audit results, which included Accounts Receivable and Revenue, Cash and Investments, Utility Plant in Service and Debt, Expenses and Inventory, Pension and Postretirement Plans, conformity with GAAP, and consistency with industry practices. KPMG stated that there are no matters to report.

KPMG stated that a required management representation letter will be obtained once all KPMG procedures are performed and prior to the issuance of the audit.

The best practice following an audit report is for the Commission to call an Executive Session to review any issues that auditors may not feel comfortable discussing with management present.

Commissioner Chagnon moved to find that premature general public knowledge of KPMG's evaluation of BED's management with the Commission would clearly place the Burlington Electric Department at a substantial disadvantage per Title 1, Section 313, Subsections (a) (1) and (a) (3) of the Vermont Statutes because such information may risk contractual relationships with BED

counterparties in the regular sale and purchase of energy and is considered an evaluation of BED personnel. The motion was seconded by Commissioner Whitaker.

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

Commissioner Chagnon. Aye
Commissioner Stebbins. Aye
Commissioner Whitaker. Aye

Results: 3 Ayes with 0 Nays, the motion carries.

Commissioner Chagnon moved that the Commission enter into Executive Session to discuss the KPMG information with the Commission under the provisions of Title 1, Section 313, subsection (a)(1)(A) of the Vermont Statutes. This motion was seconded by Commissioner Whitaker.

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

Commissioner Chagnon. Aye
Commissioner Stebbins. Aye
Commissioner Whitaker . Aye

Results: 3 Ayes with 0 Nays, the motion carries.

The Commission moved into Executive Session at 6:09 p.m.

Commissioner Chagnon made a motion to exit Executive Session at 6:35 p.m. This motion was seconded by Commissioner Whitaker.

Commission Chair Stebbins conducted a roll call vote by calling on the following Commissioners:

Commissioner Chagnon. Aye
Commissioner Whitaker. Aye
Commissioner Stebbins. Aye

Results: 3 Ayes with 0 Nays, the motion carries.

Commissioner Chagnon made a motion to accept the KPMG audit report. This motion was seconded by Commissioner Whitaker.

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

Commissioner Chagnon. Aye
Commissioner Stebbins. Aye
Commissioner Whitaker. Aye

Results: 3 Ayes with 0 Nays, the motion carries.

Commissioner Chagnon made a motion to adjourn; the motion was seconded by Commissioner Whitaker.

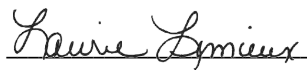
The Board Clerk, Laurie Lemieux, conducted a roll call vote by calling on the following Commissioners:

Commissioner Chagnon. Aye
Commissioner Stebbins. Aye
Commissioner Whitaker. Aye

Results: 3 Ayes with 0 Nays, the motion carries.

The meeting of the Burlington Electric Commission adjourned at 6:39 p.m.

Attest:



Laurie Lemieux, Board Clerk

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

Wednesday, November 10, 2021, 5:30 pm

The regular meeting of the Burlington Electric Commission was convened at 5:36 pm on Wednesday, November 10, 2021 via Microsoft Teams Video Meeting.

Channel 17 was present via Microsoft Teams Video to record this meeting.

Commissioners Herendeen, Moody, Stebbins, and Whitaker participated via Microsoft Teams. Commissioner Herendeen joined the meeting at 5:45 pm.

Staff members present included Darren Springer, Paul Alexander, James Gibbons, Mike Kanarick, Munir Kasti, Laurie Lemieux (Board Clerk), Paul Pikna, and Emily Stebbins-Wheelock.

1. Agenda

There were no changes to the Agenda.

2. October 13, 2021 Meeting Minutes and October 27, 2021 Special Meeting Minutes

Commissioner Moody made a motion to approve the minutes of the October 13, 2021 Commission Meeting; the motion was seconded by Commissioner Whitaker.

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

Commissioner Moody. Aye
Commissioner Stebbins. Aye
Commissioner Whitaker. Aye

Results: 3 Ayes with 0 Nays, the motion carries.

The October 27, 2021 Commissioner Meeting Minutes will be presented at the December meeting due to Commissioners Moody and Herendeen abstaining from the vote as they were not present at the October 27, 2021 meeting. Commissioner Chagnon was not present at tonight's meeting, preventing a quorum for the vote.

3. Public Forum

No one from the public was present for the meeting.

5. Commissioners' Corner

Commissioner Herendeen is having difficulties finding the meeting link each month and asked that the link be sent out a second time at least 24 hours before the meeting.

Commissioner Herendeen stated that at the last meeting he requested information from various BED staff members and received all the information in short order. He thanked Chris Burns, Freddie Hall, and Munir Kasti for their quick responses.

Commissioner Whitaker, who is an e-Bike enthusiast stated that she was invited by Jen Green to participate in a BED podcast about e-Bikes and Net Zero Energy. Commissioner Whitaker stated that this was a great experience and, as part of the podcast, discussed the bike lane project and asked if BED had weighed in on this project given the Net Zero Energy Roadmap.

Mr. Springer thanked Commissioner Whitaker for her participation in the podcast and stated that BED's first podcast episode focused on the Net Zero Energy Revenue Bond with another podcast coming out soon featuring Commissioner Stebbins that will focus in part on the revenue bond, heat pumps, and other technologies.

Mr. Springer stated that, as part of the Net Zero Roadmap, the Department has focused on supporting all means of alternative transportation. As part of the update earlier this year with Synapse, the Department made an effort to communicate with the public about these issues, and is making sure we continue to support walking, biking, and transit as ways to decrease emissions. We defer, from an expertise standpoint to the Departments of Public Works and Planning, the Departments that are leading the City's efforts on the bike lane planning and infrastructure projects. Jen Green is engaged as well on these projects and does a great job maintaining the interdepartmental partnerships.

Commissioner Whitaker asked if Mr. Springer could speak about staffing issues and any impacts to BED.

Mr. Springer stated that it is a very challenging environment in which to hire, and we are experiencing this challenge in some of BED's search processes. The Department has experienced some turnover, and we are addressing and are presently posting four (4) positions. BED moved a packet through the City Council this past week that made some organizational changes to key positions. Each time the Department has a vacancy, we review the position to ensure that the salary is competitive for the marketplace and to see if we need to update the job qualifications and requirements. We will have another packet going before the City Council next week to convert an IT position that will be vacant in December to a position of great need. We are trying to adapt

organizationally to the greatest needs and are working with HR to make sure we are being competitive with our offers. BED is not unaffected by these challenges and in some cases we are not losing employees to local organizations, but rather are losing them to remote work opportunities with out-of-state companies, which is something we have not had to deal with in the past.

Mr. Springer stated that BED is working to plan employee participation in City-wide racial equity training coordinated by the Office of Racial Equity, Inclusion & Belonging (REIB). We are in the process of scheduling these trainings, which will run 16–20 hours over approximately 16 weeks.

Commissioner Moody asked about the White Accountability Group mentioned in the monthly report. Ms. Stebbins-Wheelock responded that as part of the Mayor's commitment to address structural racism as a key priority, the Mayor and REIB created opportunities for all City employees to participate in affinity groups to discuss racism and equity. There are groups both for people who identify as white and for people of color. The White Accountability Groups started in March 2021 and will meet for one year to read and discuss *White Fragility* by Robin DiAngelo. Ms. Stebbins-Wheelock is a volunteer peer facilitator of one group.

6. GM Update

BED finalized and issued financials for the 2021 audit, and Mr. Springer gave thanks to Ms. Stebbins-Wheelock and the finance team for their hard work on this.

The Department has closed the posting for the Director of Finance position and have interviews scheduled with potential candidates next week.

Mr. Springer stated that one of the major items on which BED is focusing is the December 7 vote on the Net Zero Energy Revenue Bond. We are engaged in communicating information about the Revenue Bond through the following communications channels: media outlets; presentations at the NPAs; FAQs, podcasts, Mr. Springer's commentary, and a link to the Live at 5:25 Town Meeting TV program on the BED website.

Mr. Springer stated that, through a collaborative process with IBEW, frontline employees, management, and HR, BED has developed a new performance review form that is clearer and more transparent, and focuses on our four key values: safety, reliability, community, and innovation. The form will go into effect starting in December and will be a significant improvement over the prior evaluation form.

6. FY21 Audited Financial Results

Ms. Stebbins-Wheelock presented BED's FY21 Audited Financial Statements.

Ms. Stebbins-Wheelock began with the balance sheet or Statement of Net Position. BED's capital assets decreased by \$742K for FY2021 compared to FY2020, mostly due to fewer capital additions offset by depreciation expense. Cash and cash equivalents was also down compared to FY20 by approximately \$1.8M, with the increase in customer arrearages being a major contributor, as well as a decrease in customer contributions for capital projects. Accounts receivable was adjusted in both FY20 and FY21 for the allowance of uncollectible accounts to reflect that BED's arrearages are at unprecedented levels. Total current assets in FY21 were down \$867K compared to FY20. Under non-current assets, Ms. Stebbins-Wheelock noted that BED received approval from the PUC to record a regulatory asset related to non-capitalized labor again in FY21. This enabled BED to amortize labor expense that BED had budgeted to spend on capital projects but was unable to spend due to the COVID-19 pandemic. Total deferred outflows of resources were up \$1.1M compared to FY20; most of this is due to changes in the actuarially determined liability for deferred pension contribution. Overall, BED's current liabilities increased approximately \$200K for FY21 compared to FY20, largely driven by bond maturity schedules. The largest increase in non-current liabilities was in the net pension liability, which increased by \$2.4M per the City's actuarial report. The Department's total net position for FY21 was \$60,750,141, a decrease of \$43K versus FY20.

Ms. Stebbins-Wheelock next presented the income statement, or Statement of Revenues, Expenses, and Changes in Net Position. Under operating revenues, sales to customers were up by \$122K compared to FY20 and other operating revenues were up by \$260K due to increases in both price and volume of RECs sold in FY21. Under operating expenses, production expense increased by just under \$1M compared to FY20 due largely to increased operations and maintenance expense at McNeil and the Gas Turbine. Transmission costs increased \$146K and Distribution expenses were in line with FY20. Customer accounting, service, and sales was up \$417K compared to FY20. Ms. Stebbins-Wheelock stated that this line includes several elements, but one driver of the increase was higher Tier 3 expenses compared to budget. Administrative and general expenses, also a broad category with multiple components, was up about \$350K, largely due to items that tend to increase every year, such as salaries, pension benefit costs, and property insurance. Depreciation and amortization was up slightly. The Department's net operating loss improved by about \$500K in FY21 compared to FY20. Under, non-operating revenue, Ms. Stebbins-Wheelock explained that Dividends from associated companies are the dividends associated with our VELCO investment. Low interest rates caused a significant decrease in interest income compared to FY20. Grant income increased in FY21 significantly because of COVID-19-related grants including FEMA reimbursement and Local Government Expense Reimbursement. The Department's saw a \$43K decrease in net position (net loss) for FY21, which Ms. Stebbins-Wheelock was an improvement over FY20's net loss despite the continuing pandemic.

Ms. Stebbins-Wheelock then presented the cash flow statement, which showed cash and cash equivalents decreased by \$1.8M in FY21, with the Department showing a year-end cash balance of \$9.9M.

Ms. Stebbins-Wheelock then covered the financial statements for the Energy Efficiency Utility

Custodial Fund. In January 2020 BED became its own fiscal agent for EEU funds, which were previously administered by a third-party entity. As our own fiscal agent, BED collects EEU fees from customers and puts them aside for designated EEU activities. As EEU projects are completed, we invoice ourselves and transfer the money spent on the project from the EEU account to BED's operating account. The Department continues to submit the same monthly reports to the State to document our EEU expenditures. In FY20 EEU activity was incorporated into BED's financial statements, but for FY21 the Department was required to adopt a new accounting standard, GASB 84, that requires separating the presentation of those EEU funds as a separate fiduciary or custodial fund. As of FY21 year-end the EEU's net position was \$3.3M, up approximately \$400K from FY20.

FY22 September Financials

Ms. Stebbins-Wheelock reviewed the budget-versus-actual results for the month of September FY22. On the revenue side, sales to customers were favorable to budget by \$835K. Residential sales were up \$400K and commercial sales were also up \$400K. Other revenues were down \$49K.

Power Supply expenses were \$49K over budget and operating expenses were up \$211K. Other income was \$217K under budget for September, mostly due to customer contributions not arriving as planned. For FY22 year-to-date, the Department is largely on track versus with a negative variance of \$79K.

As of September, the Department has spent 11% of the FY22 capital budget and has an operating cash balance of just under \$7M or 127 days cash on hand. The debt service coverage ratio is 4.27 and the adjusted debt service coverage ratio is 1.09.

7. BED 2021 Property/B&M Renewal

Mr. Alexander stated that BED's current Property/B&M Insurance coverage with AIR/Starr Tech/Zurich/AEGIS was scheduled to expire on 11/20/21 for which BED pays a premium of \$644,506.

Our insurance agent (Hickok & Boardman: H&B) has worked with our existing four carriers and is still in negotiations with AIG to increase their "capacity" to 30% versus the current 25%.

The renewal premium is anticipated to increase from last year's amount of \$644,506 to \$676,755, which matches our estimated 5% renewal premium for 11/20/21 in the FY22 budget.

Similar to last year, our Total Insurable Value (TIV) will be capped at \$175,000,000 of property versus our current fully scheduled TIV of \$264,312,000. The McNeil Station's TIV is listed at \$187,382,000.

H&B has appealed to AIG to increase its capacity by 5% by offering to raise our deductible for "Property/Equipment breakdown" from \$500K to \$1M.

The impact on the FY22 budget amount of \$663,318 was calculated using 5 months at the “current/known” premium amount of \$644,507 and 7 months at the projected amount of \$676,755. This would amount to 0.0% change in our FY22 budget and a 5% increase over our expiring premium.

Commissioner Whitaker made a motion to recommend to the City Council that Darren Springer, BED General Manager, or his designee, is authorized to renew BED’s Property/B&M Insurance for the period of 11/20/21 through 11/20/22, with a not to exceed premium of \$676,755, as outlined, subject to review and approval of the City Attorney’s office; the motion was seconded by Commissioner Herendeen.

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

Commissioner Herendeen. Aye
Commissioner Moody. Aye
Commissioner Stebbins. Aye
Commissioner Whitaker. Aye

Results: 4 Ayes with 0 Nay, the motion carries.

7. Market Update

Mr. Gibbons stated that there has been a lot in the news about prices for energy this winter and will present a PowerPoint to indicate what this will mean to BED.

Mr. Gibbons stated that within the presentation the term “Henry Hub” is used and represents a pricing point for natural gas in the Texas Gulf area. The term “Algonquin” refers to the natural gas pipeline that delivers into Massachusetts and is the pipeline that most of the generators in New England use to access natural gas. The differences between these two locations can be significant, particularly in the winter when there is a limitation on the pipeline to transmit the gas up to New England.

Mr. Gibbons stated that, for the first time in 12 years, we are entering winter with gas prices over \$5/MMBtu. We have had a long time of relatively inexpensive gas prices, and we are now seeing them increase for the first time.

Mr. Gibbons reviewed a graph showing prices going into winter and stated that the cost for peak energy for the month of January 2022 has not been this high since late 2020. We are not up to the point where trading for wholesale energy is at \$0.16, which is very close to our retail rates for residential and commercial customers. Mr. Gibbons stated that Burlington is not going to be exposed to that directly because we have contracts that protect us.

Higher gas prices in New England drive the higher electric prices. Mass Hub on peak is the cost of electric energy and Algonquin is the cost of natural gas delivered to New England. You can see on the graph how closely correlated they are (90%). The reason is that New England relies very heavily on natural gas generation.

The prices also have risen in the outer years, so right now the most price effect we've seen is for the next year to two years. These prices have pulled up in the outer years but are nowhere near as much.

The next graph indicates a line showing when BED would need to consider its next major energy purchase. The curve is not too problematic for BED, since the back end of the curve, where we would be needing to start to purchase power again, has not moved nearly as much. If the Department is looking to do a replacement for power, we're not likely to be looking at the prices that we're seeing today unless they continue to increase for that period of time.

Mr. Gibbons ended his presentation and answered questions from the Commission.

8. Commissioners' Check-In

Commissioner Herendeen stated that, when reading the monthly reports on efficiency measures, the question he asks is "are we making this more efficient with the burning of gas or in the use of electricity." Commissioner Herendeen proposed that more detailed information in the monthly reports on this issue could be added. Mr. Kanarick suggested that he would be glad to facilitate a phone call between Chris Burns and Commissioner Herendeen regarding the information he is looking for each month. Commissioner Herendeen said he would be happy to participate in the call.

Commissioner Moody made a motion to adjourn; the motion was seconded by Commissioner Herendeen.

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

Commissioner Herendeen. Aye

Commissioner Moody. Aye

Commissioner Stebbins. Aye

Commissioner Whitaker. Aye

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

The meeting of the Burlington Electric Commission adjourned at 7:02 p.m.

Attest:

Laurie Lemieux

Laurie Lemieux, Board Clerk



*FY 2022
Financial Review
October*

November 29, 2021

Burlington Electric Department Financial Review

FY 2022

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FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of October FY22

(\$000)	Full Yr Budget	CURRENT MONTH			YEAR TO DATE		
		Budget	Actual	Variance	Budget	Actual	Variance
Sales to Customers	48,172	3,725	3,684	(41)	16,700	16,809	108
Other Revenues	3,978	297	271	(26)	1,241	1,026	(214)
Power Supply Revenues	8,404	0	0	0	2,458	2,563	105
Total Operating Revenues	60,554	4,022	3,955	(68)	20,399	20,398	(1)
Power Supply Expenses	32,155	2,632	2,476	156	10,417	10,267	150
Operating Expense	21,543	1,590	1,599	(9)	6,811	6,389	422
Depreciation & Amortization	6,007	501	512	(11)	2,002	2,048	(45)
Gain/Loss on Disp of Plant	291	0	0	0	143	130	13
Taxes	3,935	321	272	50	1,316	1,112	204
Sub-Total Expenses	63,932	5,043	4,858	185	20,689	19,945	744
Operating Income	(3,378)	(1,021)	(903)	118	(290)	453	743
Other Income	6,588	610	382	(227)	2,841	1,478	(1,363)
Interest Expense	2,402	197	196	1	788	784	3
Net Income (Loss)	808	(608)	(717)	(109)	1,763	1,146	(617)

Year-to-Date Results:

- **Sales to Customers** up \$108,000 (within 1% of budget). Residential Sales up \$432,900 and Non-Residential Sales down, \$307,100.
- **Other Revenues** down \$214,000 (17.3%)
 - a. DSM billable (customer driven) down \$175,300.
- **Power Supply Revenues** up \$105,000 (4%)
 - a. McNeil REC revenue of \$1,605,000 compared to a budget of \$1,453,000.
 - b. Wind REC revenue of \$823,000 compared to a budget of \$821,000.
 - c. Hydro REC revenue of \$135,000 compared to a budget of \$149,000.
 - d. Other REC revenue of \$0 compared to a budget of \$35,000.
- **Power Supply Expenses** down \$150,000 (1%)
 - a. Purchased Power down \$319,000.
 - b. Transmission Fees down \$58,000.
 - c. Fuel up \$227,000.
- **Taxes** down \$204,000 (15.5%)
 - a. Actual Payment in Lieu of Tax (PILOT) is less than budget assumption. This is projected to be a \$580,000 positive variance for the year.
- **Operating Expenses** down \$422,000 (6.2%)
 - a. Various items are less than budget. This includes outside services (\$295,000), materials & supplies (\$90,000), DSM (rebates & outside services) (\$21,000), transportation clearing & building Clearing, (\$54,200) and uncollectible accounts (\$35,000). Offset by higher expense due to the credit for A&G (“Admin and General Expenses”) charged to Capital projects was less than planned, \$196,100.
- **Other Income** down \$1,363,000
 - a. Budget assumed \$750,000 of ARPA. Also, assumed customer contributions for Shelburne Road roundabout relocation, \$431,700, UVM LCOM, \$87,200 & Champlain Pkwy, \$91,100.

FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of October FY22

Capital Spending – October YTD (\$000's)				
Plant Type	Full Yr. Budget	Budget	Actual	% Spent
Production	\$1,017	\$541	\$88	9%
Other	192	77	0	0%
Transmission	1,150	0	0	0%
Distribution	3,577	1,464	1,116	31%
General	2,034	638	205	10%
Total	\$7,970	\$2,720	\$1,409	18%

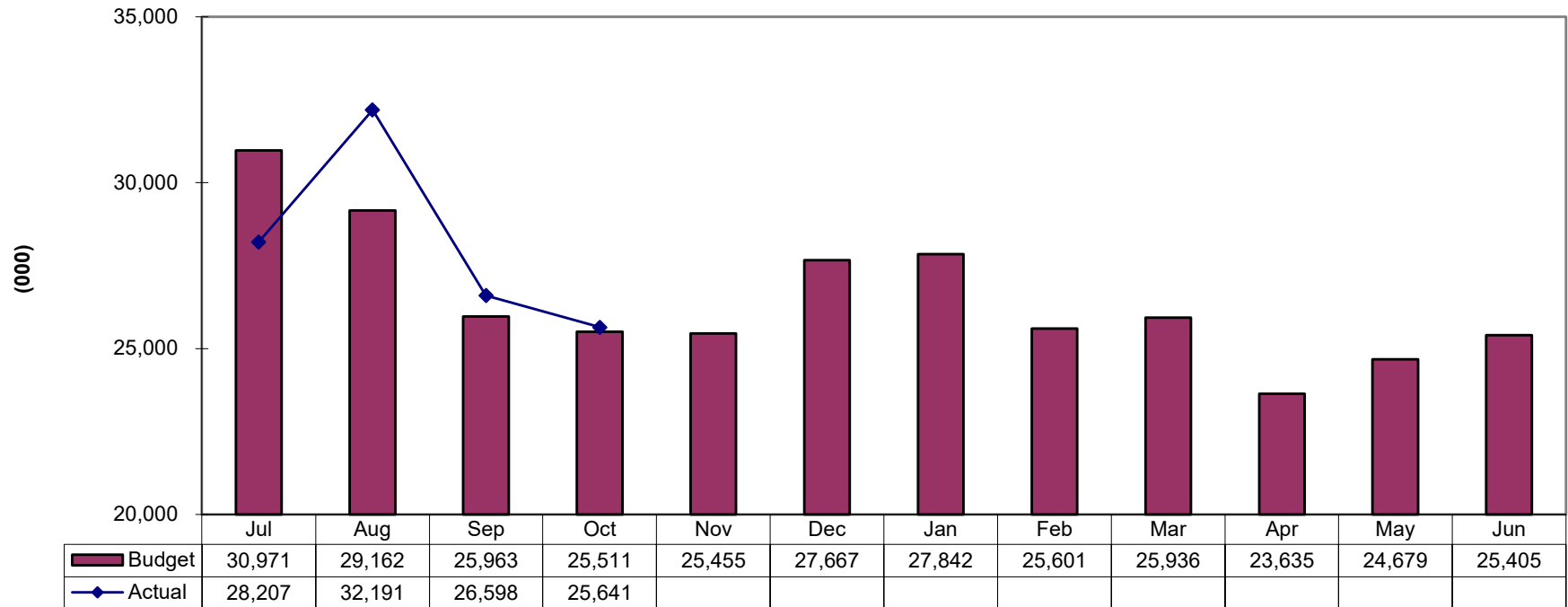
- (1) **Production** – Timing of projects at McNeil, \$159,000 and Gas Turbine, \$95,000. The unit #3 bearing replacement budgeted for Winooski One will not happen this fiscal year, \$125,000.
- (2) **Other** – Timing; budget includes Level 2 & 3 chargers, Packetized Energy, and research & development.
- (3) **Distribution** – Timing of various projects.
- (4) **General** – IT Forward project was budgeted throughout the year; YTD expenses of \$165,700 compared to a budget of \$409,800. Pole mount routers YTD expenses of \$5,300 vs budget of \$67,500. Electric Bucket Truck replacement was budgeted throughout the year, delivery has been delayed until July 2022.

As of October 31, 2021 Cash and Investments	
Operating Funds	\$8,811,500
Operating Fund – CDs	\$411,400
Total Operating Fund	\$9,222,900

Credit Rating Factors				
	"A"	"Baa"	Current	3 Year Average
Debt Service Coverage Ratio	1.25	1.25	4.29	3.76
Adjusted Debt Service Coverage Ratio	1.50	1.10	1.10	0.93
Cash Coverage - Days Cash on Hand	90	30	108	127

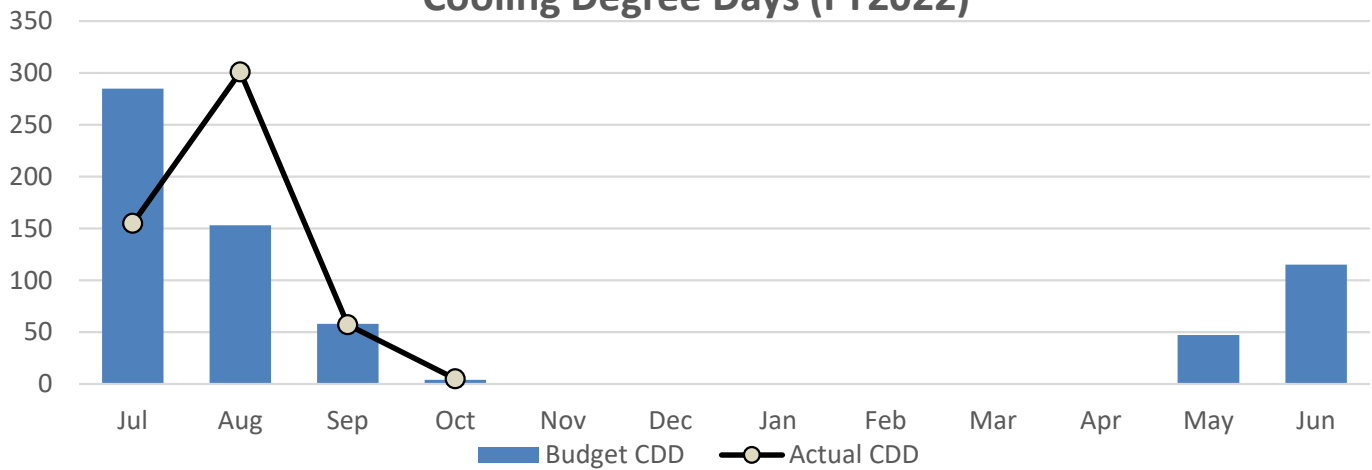
**Burlington Electric Department
Fiscal Year Ending June 30, 2022**

**Total Sales to Customers - KWH
Monthly**

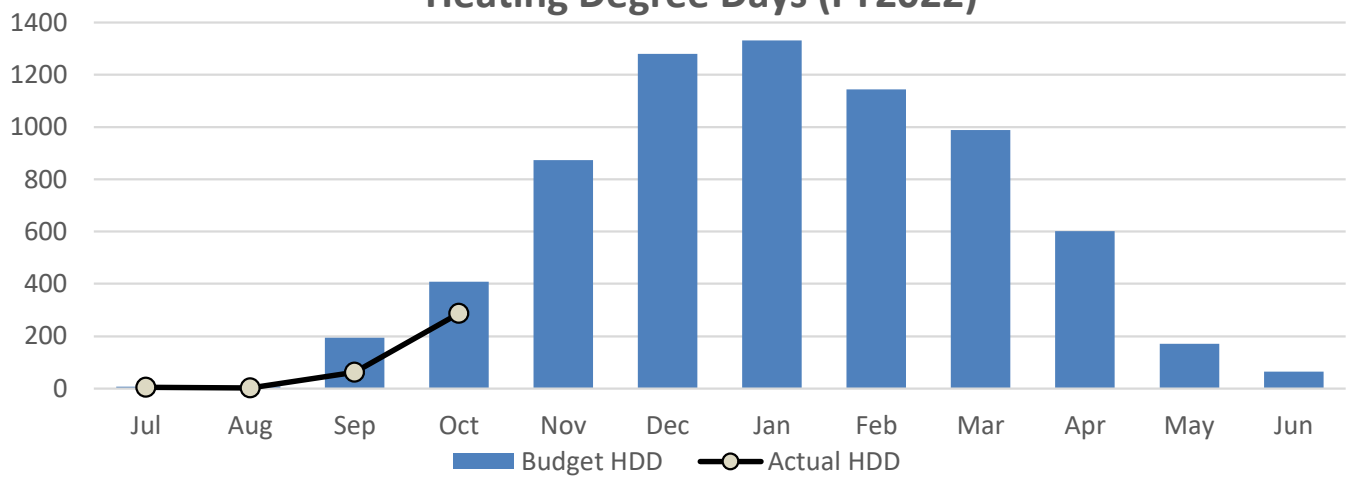


KWH Sales to Customers (YTD)												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget	30,971	60,134	86,097	111,608	137,063	164,730	192,571	218,172	244,108	267,743	292,422	317,827
Actual	28,207	60,398	86,996	112,636								

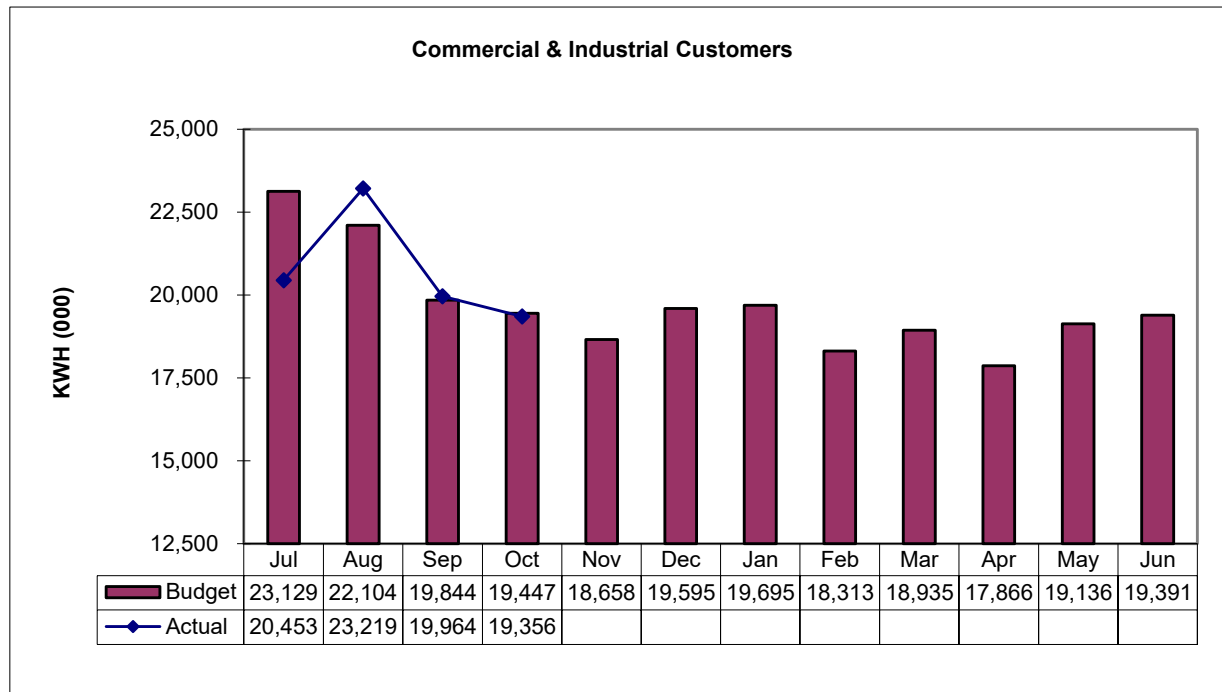
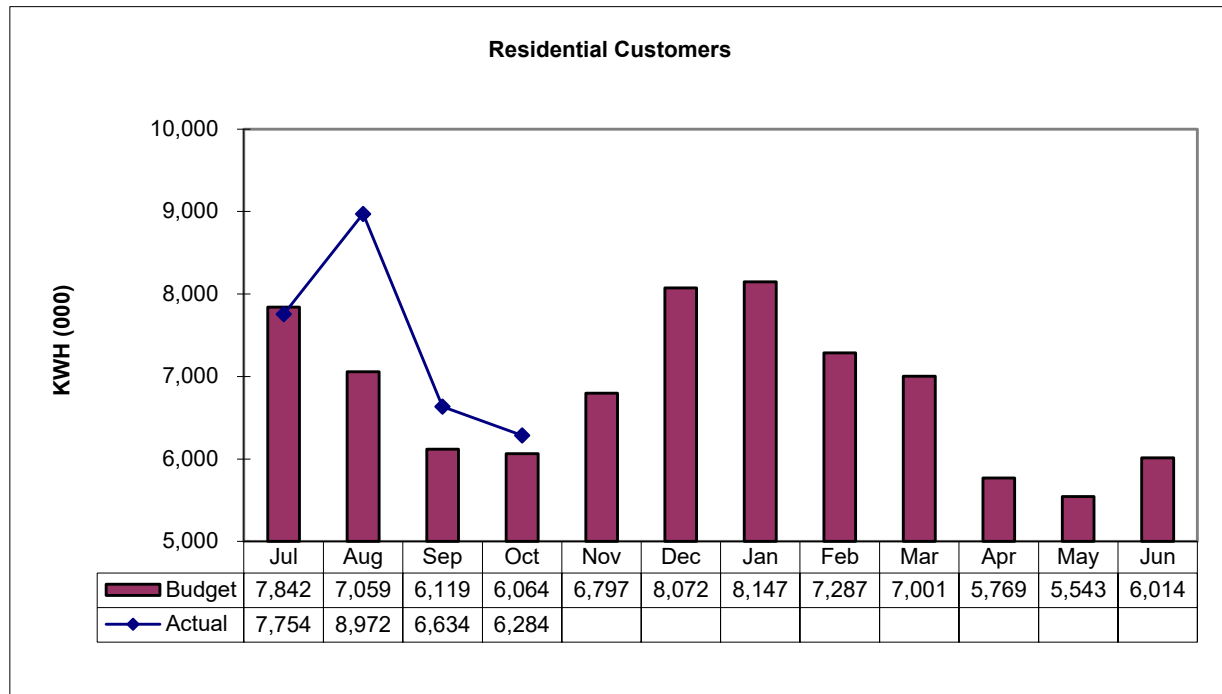
Cooling Degree Days (FY2022)



Heating Degree Days (FY2022)



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



Street Lighting is included with Commercial & Industrial Customers.

Net Power Supply Costs **October - FY 2022**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
Expenses:							
Fuel (p. 7)	\$503	\$863	(\$360)	(1)	\$2,689	\$2,916	(\$227) (1)
Purchased Power (p.11)	1,474	910	564	(2)	5,048	4,730	319 (2)
Transmission Fees - ISO	600	607	(7)		2,354	2,663	(310) (3)
Transmission Fees - Velco	14	47	(33)	(3)	133	(221)	355 (4)
Transmission Fees - Other	41	50	(8)		192	179	13 (5)
Total Expenses	2,632	2,476	155		10,417	10,267	150
Revenues:							
Renewable Energy Certificates - McNeil	0	0	0		1,453	1,605	152
Renewable Energy Certificates - Wind	0	0	0		821	823	2
Renewable Energy Certificates - Hydro	0	0	0		149	135	(14)
Renewable Energy Certificates - Other	0	0	0		35	0	(35)
Total Revenues	0	0	0		2,458	2,563	105 (6)
Net Power Supply Costs	2,632	2,476	155		7,959	7,704	255
Load (MWh)	25,964	26,220	257		113,397	115,722	2,326
\$/MWh	\$101.36	\$94.44	(\$6.92)		\$70.19	\$66.57	(\$3.61)

Current Month:

- (1) See detail on page 7.
(2) See detail on page 11.
(3) VELCO Transmission over Budget due to VELCO Common Charges above Budget.

YTD:

- (1) See detail on page 7.
(2) See detail on page 11.
(3) ISO-NE Transmission over Budget due to higher ISO-NE Transmission rates.
(4) VELCO Transmission under Budget due to VELCO receiving higher than projected ISO-NE transmission revenues.
(5) NYPA VELCO Transmission under Budget (same reason as 4).
(6) RECs expected to come in 3% below for Fiscal Year Budget due to under Budget Wind and Hydro Production

**Net Power Supply Costs
October - FY 2022**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<u>FUEL:</u>							
McNeil:							
Fuel Consumed	345	602	(256)	(1)	1,844	2,023	(180) (1)
Swanton Yard	30	74	(44)	(1)	162	244	(82) (1)
Train Deliveries	62	112	(50)	(1)	328	348	(21) (1)
Labor & Other Expenses	60	73	(13)	(2)	314	233	81 (2)
Total McNeil Fuel	497	860	(363)		2,647	2,849	(201)
Gas Turbine	6	2	3	(3)	42	68	(25) (3)
Total Fuel	503	863	(360)		2,689	2,916	(227)

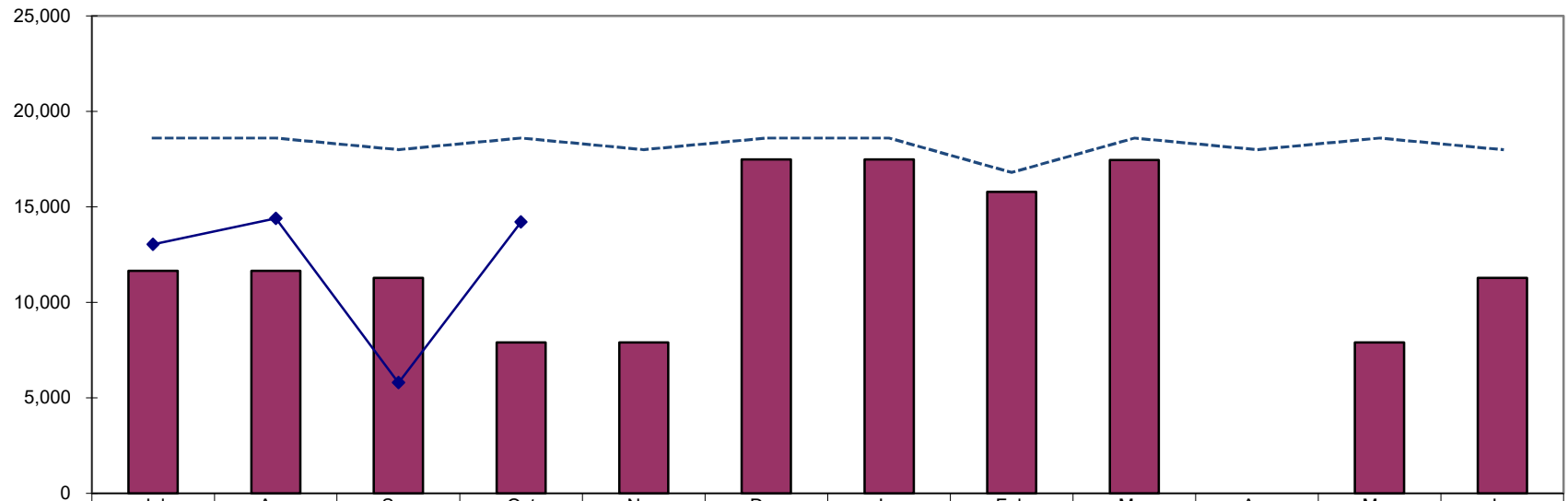
Current Month:

- (1) McNeil produced 14,209 MWh (80% over Budget); Woodchip costs (per ton) were 2% under 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 produced 8 MWh (60% under Budget).

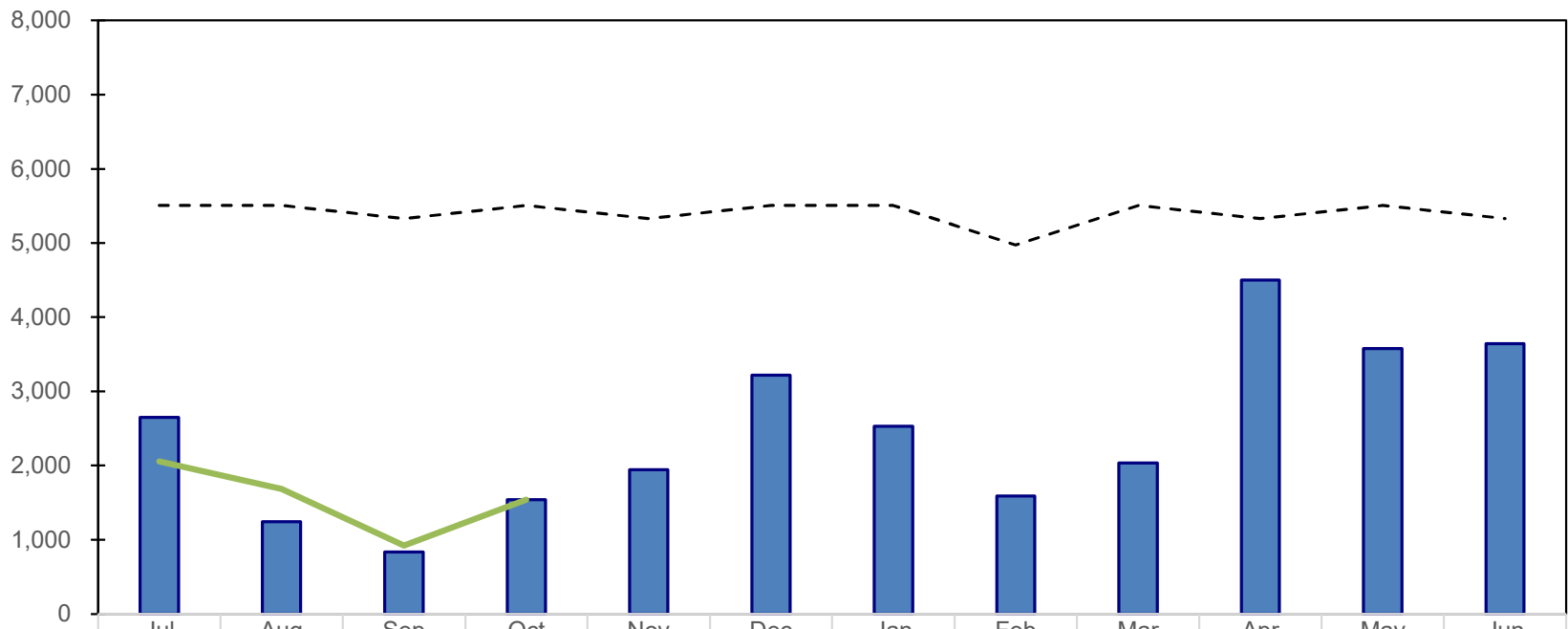
YTD:

- (1) McNeil production was 12% over Budget; Woodchip costs (per ton) were 2% under Budget. (p. 9)
 (2) See Current Month.
 (3) GT produced 229 MWh (63% over Budget).

**Burlington Electric Department
McNeil Plant - MWH Production (50%)
FY 2022**

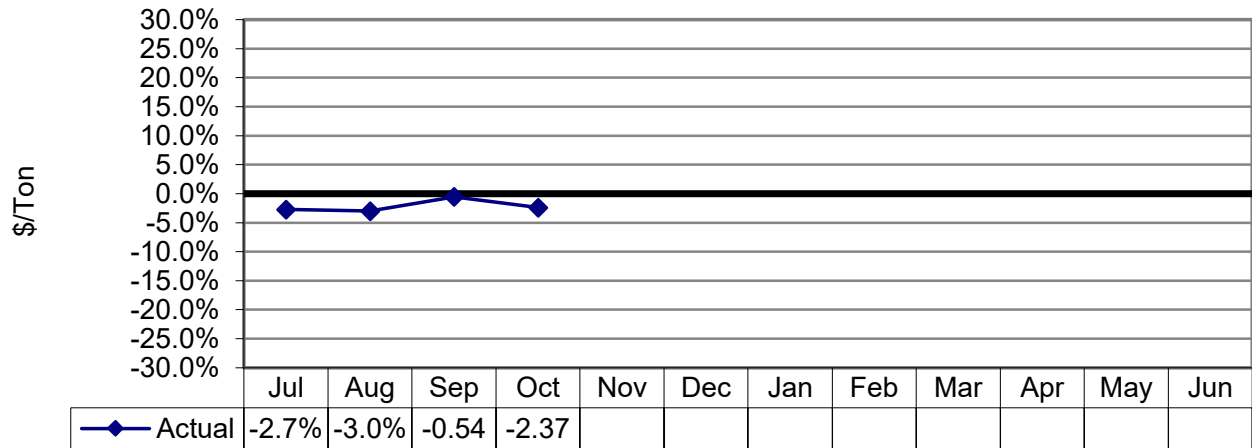


**Burlington Electric Department
Winooski One - MWH Production
FY 2022**

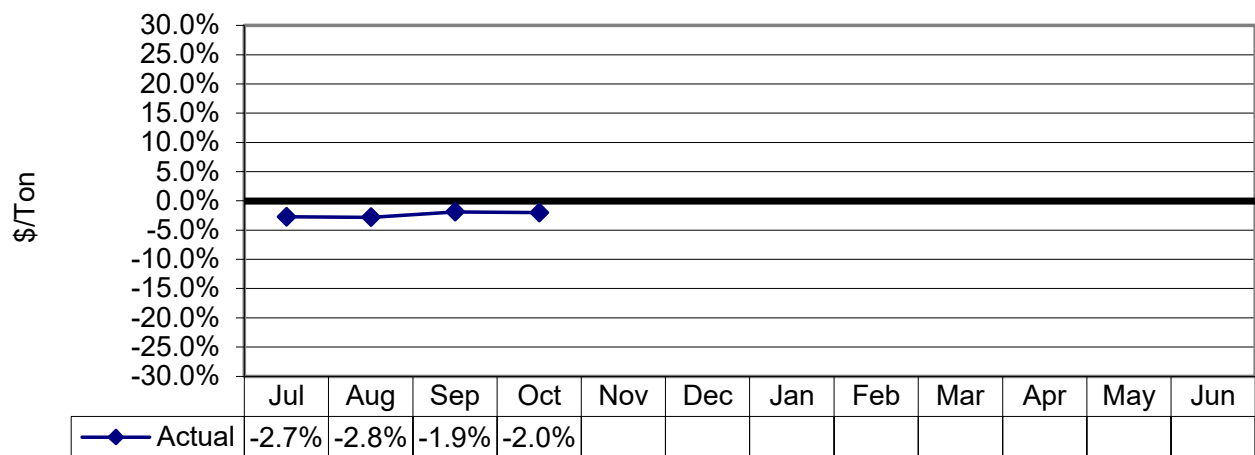


Burlington Electric Department Fiscal Year 2022

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 **October - FY 2022**

	(\$000)							
	Current Month				Year-to-Date			
	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>		<u>Budget</u>	<u>Actual</u>	<u>Variance</u>	
<u>PURCHASED POWER:</u>								
Non-Energy (capacity)	<u>102</u>	<u>136</u>	<u>(34)</u>		<u>485</u>	<u>580</u>	<u>(95)</u>	
Energy:								
Georgia Mountain Wind	361	175	187	(1)	1,031	670	361	(1)
Hancock Wind	322	146	176	(2)	866	528	338	(2)
VT Wind	272	181	91	(3)	673	552	121	(3)
Hydro Quebec	226	226	0		897	897	0	
Great River Hydro	169	169	0		671	670	1	
In City Solar Generators	56	58	(1)		351	330	22	
NYPA	6	7	(1)		25	34	(9)	
ISO Exchange	(84)	(266)	182	(4)	(166)	251	(417)	(4)
Velco Exchange	0	(1)	1		0	(2)	2	
Total Energy	<u>1,328</u>	<u>694</u>	<u>634</u>		<u>4,348</u>	<u>3,929</u>	<u>419</u>	
Ancillary Charges	3	15	(11)		15	(20)	35	
Miscellaneous	41	65	(25)		200	240	(40)	
Total Purchased Power Expense	<u>1,474</u>	<u>910</u>	<u>564</u>		<u>5,048</u>	<u>4,730</u>	<u>319</u>	

Current Month:

(1) Production 52% under Budget (partly due to one turbine out). Lower CY21 production will result in lower REC revenues later in FY22.

(2) Production 40% under Budget. Rate 24% under Budget due to Financial Adjustment. Lower CY21 production will result in lower REC revenues later in FY22

(3) Production 34% under Budget. Lower CY21 production will result in lower REC revenues in FY22.

(4) McNeil (80%) Production over Budget.

YTD:

(1) Production 26% under Budget (one turbine out until Fall). Lower CY21 production will result in lower REC revenues in FY22.

(2) Production 24% under Budget. Rate 13% under Budget due to Financial Adjustment. Lower CY21 production will result in lower REC revenues later in FY22.

(3) Production 7% under Budget. Lower CY21 production will result in lower REC revenues in FY22.

(4) Wind (28%) Production under Budget.

Burlington Electric Department
Operating and Maintenance Expense by Spending Category
FY 2022-October

Description	Budget	Actual	Variance	% Variance	*
Labor-Regular	2,676,113	2,655,775	20,338	1%	
Labor-Overtime	160,292	175,379	(15,087)	9%	
Labor-Temporary	4,500	0	4,500	100%	a
Labor-Overhead	1,019,963	1,046,275	(26,312)	3%	b
Outside Services	899,290	603,859	295,431	33%	c
DSM (rebates & outside services)	677,083	656,413	20,670	3%	d
Materials & Supplies	308,719	218,734	89,985	29%	e
Insurance	237,405	201,398	36,007	15%	
A & G Clearing	(323,470)	(127,344)	(196,126)	61%	f
Other - RPS Compliance	220,248	407,598	(187,350)	85%	
Other	930,891	550,814	380,077	41%	g
Subtotal	6,811,034	6,388,901	422,133	6%	

(a) Policy & Planning assumed intern positions in July.

(b) See page 13.

(c) Timing of various items; Triennial Consulting Engineer's Report (\$52,500), other items at GT & W1 (\$96,300), assumed DPS billback expense due to rate case (\$133,300) and REC Broker commission fees (\$26,000); offset by McNeil items higher, \$36,200.

(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) Timing; Distribution (\$34,900), GT & W1 (\$10,200) & Safety (\$14,600).

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

(g) Timing: various areas are less than budget including; Transportation Clearing (\$25,000), Building Clearing, (\$29,200), Dues & Fees (\$19,000), Utilities (\$19,900) and Uncollectible Accounts (\$35,000).

**Burlington Electric Department
Budget vs Actual Spending Analysis
FY 2022 - October YTD**

Labor - Overhead	(000's)				
	Budget	Actual	Variance	%	
Pension	\$506	\$489	\$18	3%	(a)
Medical Insurance	501	502	(1)	0%	(b)
Social Security Taxes	314	288	26	8%	(a)
Workers Compensation Ins.	114	117	(3)	-2%	(b)
Dental Insurance	31	29	2	5%	(b)
Life Insurance	7	5	2	32%	(b)
	\$1,474	\$1,430	\$44	3%	

Rates Table:	Budget
<i>Pension</i>	13.11%
<i>Social Security</i>	7.65%

(a) Function of labor cost.

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

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

Net Income
FY 2022 - October (\$000)

		Current Month			Year - To - Date		
	Ref	Budget	Actual	Variance	Budget	Actual	Variance
Operating Revenues							
Sales to Customers	p.3	3,725	3,684	(41)	16,700	16,809	108
Other Revenues		297	271	(26) (a)	1,241	1,026	(214) (a)
Total Operating Revenues		4,022	3,955	(68)	17,941	17,835	(106)
Net Power Supply	p.6	2,632	2,476	156	7,959	7,704	255
Operating Expenses							
Operating and Maintenance	p.12	1,590	1,599	(9)	6,811	6,389	422
Depreciation & Amortization		501	512	(11)	2,002	2,048	(45)
Gain/Loss on Disp of Plant		0	0	0	143	130	13
Revenue Taxes		40	36	4	191	191	(1)
Property Taxes Winooski One		42	41	1	168	165	4
Payment In Lieu of Taxes		239	194	45 (b)	957	756	201 (b)
Total Operating Expenses		2,411	2,382	29	10,272	9,678	594
Other Income and Deductions							
Interest/Investment Income		4	5	1	18	20	2
Dividends		360	360	(0)	1,441	1,447	6
Customer Contributions/Grants		245	12	(233) (c)	1,361	15	(1,346) (c)
Other		1	6	5	22	(3)	(25)
Total Other Income & Deductions		610	382	(227)	2,841	1,478	(1,363)
Interest Expense		197	196	1	788	784	3
Net Income		(608)	(717)	(109)	1,763	1,146	(617)

Current Month:

- (a) Energy Efficiency Program cost reimbursement was less than planned, \$17,000.
(b) Actual includes city reappraisal.
(c) Budget assumed customer contributions for Shelburne Road roundabout relocation, \$154,000, UVM LCOM project, \$29,000 and Champlain Pkwy, \$60,800. Actual includes other billable.

Year - To - Date:

- (a) Energy Efficiency Program cost reimbursement was less than planned, \$175,300.
(b) See current month.
(c) Budget assumed \$750,000 of ARPA funds in July and customer contributions for Shelburne Road roundabout relocation, \$431,700, UVM LCOM project, \$87,200, and Champlain Pkwy, \$91,100. Actual includes other billable.

**Burlington Electric Department
Capital Projects - FY22**

	\$000			
	Full Year Budget	Budget	October Actual	Variance
McNeil (BED 50% Share)				
ESP Mechanical Field Rebuild	225			0
Routine Station Improvements	107	43	1	42
Backup Boiler Feed Pump/Insurance	103	103	84	19
Turbine Control System Upgrade/Insurance	37			0
Augers Replaced	30	30		30
Elevator Geared Equipment & Controls	25			0
Turbine Extraction Valve Actuators	20	20		20
Belt Fire Suppression/Insurance	17			0
Cooling Tower Fill Drift Eliminators	15			0
Disc Screen	15			0
Chemical Feed Pump Replacement/Upgrade	15			0
ESP Wire Replacement	13			0
Safety Valve Replacements	12			0
GSU Transformer	11	11		11
Analyzer Upgrades for Chemical Treatment	9	9		9
Char Ash Conveyor	10	10		10
Station Tools & Tool Boxes	7	4		4
DC Lube Oil Pump Contractor Upgrade/Insurance			2	(2)
Other	24	16		16 (a)
Total McNeil Plant	697	246	87	159
 (a) Budget includes energy efficiency improvements, farmhouse repair, probe ladder, perimeter fence upgrade, radio upgrades, rigging equipment and office equipment.				
Hydro Production	221	200	1	200 (a)
 (a) Budget assumed Unit #3 bearing replacement, \$125,000. Project will not happen in this FY.				
Gas Turbine	98	95	0	95
Total Production Plant	1,017	541	88	453
Other				
Direct Current Fast Charger (Level 3)	85	34		34
Packetized Energy	52	21		21
Public Level 2 EV Charge	33	13		13
Policy & Planning Research & Dev	21	8		8
Total Other	192	77	0	77
Transmission Plant				
VT Transco Investment	1,150			0
Total Transmission Plant	1,150	0	0	0

**Burlington Electric Department
Capital Projects - FY22**

	\$000			
	Full Year Budget	Budget	October Actual	Variance
Distribution Plant-General				
Aerial				
Scarff Avenue Rebuild	701	385	488	(103)
Appletree Point Rebuild	258	155	4	151
1L4 P3149 to P3169 Reconductor	162		2	(2)
1L4 P3132 to P3149 Reconductor	140	21	22	(1)
Replace Condemned Poles	118		0	(0)
Replace Recloser 252R	48	48		48
227S Automation	47	47		47
Ferguson Ave, Wells St			39	(39) (a)
Rebuild 3L4 Long Spans			4	(4) (a)
Rebuild 1L4 Long Spans PH2			7	(7) (a)
3L1 Circ P396 to P404			6	(6) (b)
Total Aerial	1,474	656	571	85

(a) FY21 project that was delayed.

(b) New project added.

Underground

Replace Switch (756,757,758,730-Battery/Pearl St)	204		3	(3)
Replace Switch (303,307,308,309-Main/S Prospect)	137		1	(1)
Replace UG Switch (821,401,727,349,233)			53	(53) (a)
Replace UG Switch (731,736,760,761)			16	(16) (a)
Shelburne St-Rep Sec p323-328			19	(19) (b)
Starr Farm Beach-Conv 2 ph			13	(13) (b)
Total Underground	341	0	105	(105)

(a) Additional work from FY21.

(b) New project added.

Customer Driven/City Projects

Champlain Parkway C6	644	97		97 (a)
Champlain Parkway C6 (CAFC)	(608)	(91)		(91) (a)
UVM LCOM Project (Larner College of Medicine)	391	293	6	287
UVM LCOM Project (CAFC)	(116)	(87)		(87)
UVM Athletic Facility	101	101	17	84
Shelburne St Roundabout Relocation	630	441	2	439
Shelburne St Roundabout Relocation (CAFC)	(617)	(432)		(432)
Total Underground	425	322	25	296

(a) Project is delayed and not anticipated to impact FY22.

**Burlington Electric Department
Capital Projects - FY22**

	\$000			
	Full Year Budget	Budget	October Actual	Variance
Other				
SCADA Networking Upgrade/Firewall Replacement	296	133		133
Distribution Transformers	194	76	201	(125)
SCADA Network Switches Replacement	98			0
Field Device Network Upgrades	67	37	1	36
Communication Equipment Emergency Repair	27		2	(2)
SCADA Servers Virtualization	0		6	(6)
Other			12	(12)
Total Other	682	246	222	25
Total Distribution Plant-General	2,922	1,224	923	301
Distribution Plant - Blanket				
Lighting	159	27	65	(38)
Lighting (Rebate)	(6)	(1)		(1)
Underground	194	86	93	(7)
Underground (CAFC)			(7)	7
Aerial	106	35	32	3
Meters	125	73	4	69
Gas Detectors	4			0
Tools & Equipment - Distribution/Technicians	30	10	1	9
Substation Maintenance	16	1		1
Replace Corroded Vista CT's/PT's	20	1	5	(4)
Substation-Temperature Alarms	8	8		8
Total Distribution Plant - Blanket	655	240	193	47
Total Distribution Plant	3,577	1,464	1,116	348

**Burlington Electric Department
Capital Projects - FY22**

	\$000			
	Full Year Budget	Budget	October Actual	Variance
General Plant				
Computer Equipment/Software	1,806	559	181	378 (a)
Vehicle Replacement	165	17		17 (b)
Buildings & Grounds	55	55	23	32 (c)
Other	8	8	0	8 (d)
Total General Plant	2,034	638	205	434

(a) Budget includes IT Forward, \$409,800, Lake Street Network switch replacement, \$37,000, OpenWay upgrade, \$24,600 and Pole Mount Routers, \$67,500. Actual includes IT Forward, \$165,700, Shared Data Center, \$9,400 and Pole Mount Routers, \$5,300.

(b) Budget assumed new electric bucket truck with a large portion covered by a grant. Periodic payments were assumed in July, January, March and May. Delivery has been delayed until July 2022.

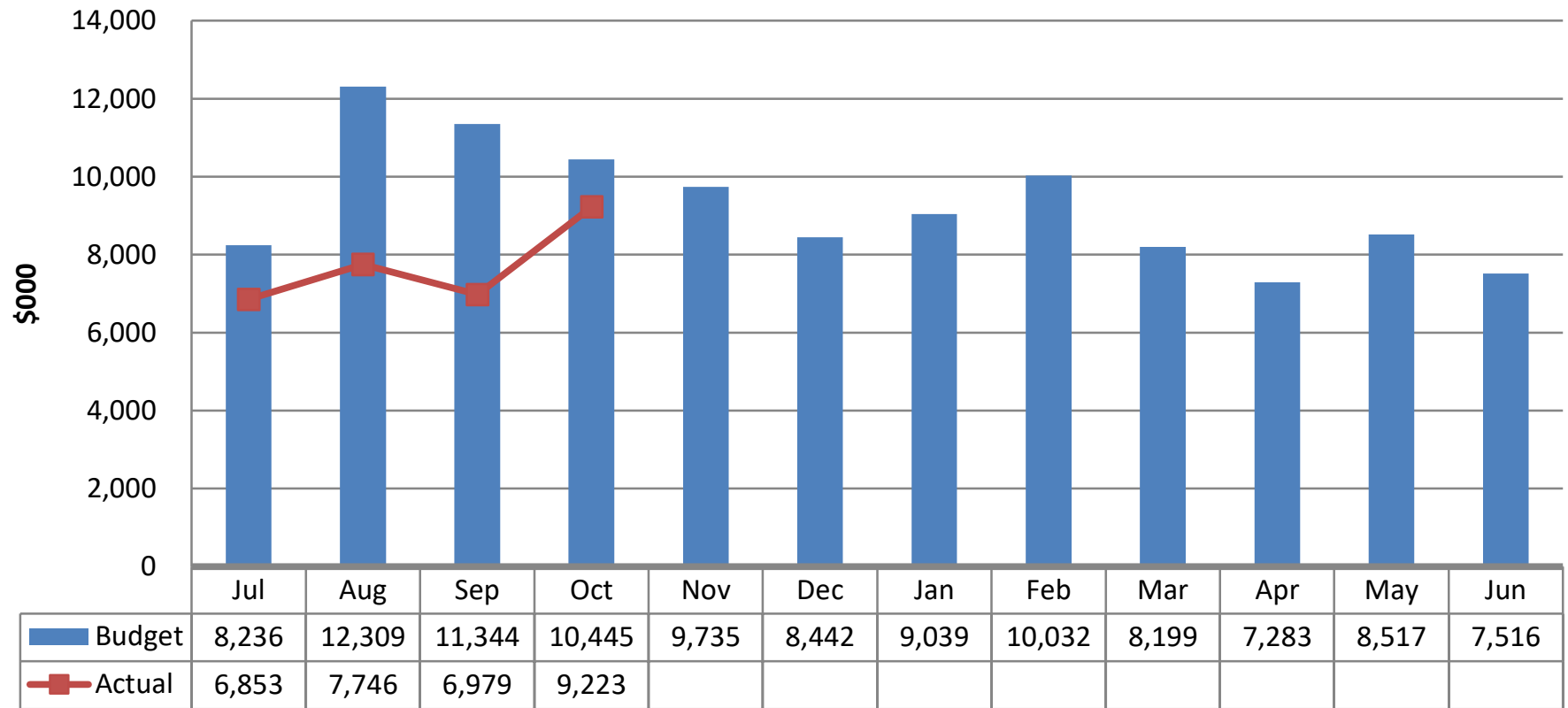
(c) Budget includes fence for solar array, \$19,000, security camera replacements, \$8,000, sign replacements, \$5,000 and ID printer, \$4,000. Actual includes dispatch AC relocation, ID printer replacement and chair for system operations.

(d) Budget includes training yard materials & AED purchase for Pine Street.

Sub-Total Plant	<u>\$7,970</u>	<u>\$2,720</u>	<u>\$1,409</u>	<u>\$1,312</u>
Add: CAFC* reclass to "Other Income"	1,346	611	7	604
Total Plant	<u><u>\$9,316</u></u>	<u><u>\$3,331</u></u>	<u><u>\$1,415</u></u>	<u><u>\$1,916</u></u>

* Customer Advances (Contributions) for Construction.

Operating Cash - FY 2022 Monthly Ending Balance



Resolution Relating to

AUTHORIZATION FOR REIMBURSEMENT FROM
REVENUE BONDS FOR ELECTRIC DEPARTMENT
CAPITAL IMPROVEMENTS

**BURLINGTON ELECTRIC DEPARTMENT
BOARD OF COMMISSIONERS**

In the year Two Thousand Twenty One
Resolved by the Board of Commissioners of the Electric Department of the City of Burlington (the
“Department”), as follows:

- 1 That WHEREAS, on December 7, 2021, voters of the City of Burlington (the “City”) approved a ballot
2 question and authorized the City to issue revenue bonds or notes in an aggregate principal amount not to
3 exceed Twenty Million Dollars and 00/100 (\$20,000,000.00) for the purpose of making capital additions and
4 improvements to the City’s electric and energy conservation systems in furtherance of the City’s Net Zero
5 Energy goals;
6 WHEREAS, the City intends to utilize the proceeds of tax-exempt bonds or other debt to pay the costs of such
7 capital improvement projects for Department purposes, and may incur some capital costs prior to the issuance
8 of bonds to finance the capital improvements;
9 WHEREAS, the Board of Electric Commissioners (the “Board”) is authorized under the City Charter and the
10 General Bond Resolution, adopted October 7, 1981 by the Board, to issue bonds for Department purposes,
11 with the approval of the City Council.
12
13 NOW THEREFORE, BE IT RESOLVED that it is the official intent of the Board to reimburse some capital
14 expenditures made for capital improvements to the electric and energy conservations systems as authorized by
15 the voters in an amount not to exceed \$2,600,000 in the aggregate, with the proceeds of tax exempt bonds, in
16 accordance with the requirements of Section 1.150-2 of the Treasury Regulations adopted under the Internal
17 Revenue Code of 1986, as amended. The Board reasonably expects on the date hereof that such expenditures
18 will be reimbursed with the proceeds of tax exempt bonds.
19 BE IT FURTHER RESOLVED, that the Board recommends that the City Council also declare an official
20 intent to reimburse capital expenditures made in furtherance of the capital improvements to the City’s electric
21 and energy conservations systems with the proceeds of tax exempt bonds.



MEMORANDUM

To: Board of Electric Commissioners

From: David MacDonnell

Date: December 8, 2021

Subject: Calendar Year 2022 Draft Budget

Please find a draft of the 2022 calendar year (CY) budget for McNeil Station. Also included for your information are the following:

1. Capital budget versus actual figures for the past (2) years, and January – September 2021.
2. Station capacity figures for the above years.
3. Comparison of budget versus actual figures for operation, maintenance, and administration and general expenses for calendar years 2019-2020, and January – September 2021.
4. Budget Narrative (below)

The draft CY22 expense budget is \$28,531,577 as compared to \$27,165,763 for the CY21 budget. The CY22 budget is approximately \$1,365,814 more than the approved CY21 budget. The increase can be explained by an increase in the fuel expense budget of \$584,812. In CY21 the wood tons were budgeted for 419,085 tons and the price per ton was \$27.85/ton for an annual average, in CY 22 we have budgeted 420,232 tons with a price per ton annual average of \$28.00/ton to accommodate the current wood chip market. \$27.85/ton for an annual fuel cost average to accommodate the current wood chip market. The remaining expense budgeted increase of \$781,002 is due to the rising cost of materials and labor, planned CY22 annual overhaul and raising property tax.

The capital budget for CY22 is \$2,061,391 as compared to CY21 was \$1,552,328 for a difference of \$509,063. The main reason for the increase of our capital budget is we did not have an annual overhaul in CY21 due to COVID. We last had an overhaul in September of 2020, our next overhaul is approved by ISO NE starting April 23, 2022.

Please do not hesitate to contact me for any questions. I can be reached at 1-802-865-7476 or by email at dmacdonnell@burlingtonelectric.com

Burlington Electric Department
585 Pine Street Burlington, VT 05401
burlingtonelectric.com

Phone 802.658.0300

MCNEIL STATION CALENDAR YEAR 2022 BUDGET

ACCT	TITLE	Approved CY 2022 Budget	Proposed CY 2022 Budget	Budgeted CY 2021
OPERATIONS				
500	SUPERVISION & ENGINEERING		\$631,822	\$563,457
501	FUEL EXPENSE		\$17,386,424	\$16,801,612
502	STEAM EXPENSE		\$2,120,327	\$2,034,169
505	ELECTRIC EXPENSE		\$841,053	\$863,512
506	MISCELLANEOUS STEAM EXPENSE		\$876,357	\$864,975
MAINTENANCE				
510	SUPERVISION & ENGINEERING		\$147,718	\$108,445
511	STRUCTURE		\$111,320	\$108,982
512	BOILER PLANT		\$1,190,871	\$1,129,374
513	ELECTRIC PLANT		\$750,007	\$678,758
514	ROUTINE IMPROVEMENTS		\$49,863	\$54,024
TOTAL GENERATION EXPENSE		\$0	\$24,105,762	\$23,207,308
TRANSMISSION EXPENSE				
556	SYSTEM CONTROL & LOAD DISPATCHING		\$59,496	\$57,876
562	OPERATIONS - STATION EQUIPMENT		\$30,800	\$30,800
567	OPERATIONS - RENT		\$40,200	\$11,636
570	MAINTENANCE - STATION EQUIPMENT		\$6,000	\$6,000
TOTAL TRANSMISSION EXPENSE		\$0	\$136,496	\$106,312
ADMINISTRATIVE & GENERAL EXPENSES				
909	INFORMATIONAL ADVERTISING		\$74,300	\$70,431
920	SALARIES		\$759,699	\$653,573
921	OFFICE SUPPLIES AND EXPENSES			
	ADMINISTRATIVE FEE		\$105,475	\$107,086
	ADMINISTRATIVE FEE A&G		\$48,468	\$39,000
	TOTAL ACCOUNT 921	\$0	\$153,943	\$146,086
923	OUTSIDE SERVICES			
	LEGAL		\$14,118	\$14,760
	DIRECT RETIREMENT		\$0	\$3,402
	INDIRECT COST ALLOCATION		\$70,980	\$75,474
	HUMAN RESOURCE ALLOCATION (2)		\$44,256	\$47,700
	CONSULTANTS		\$9,400	\$30,004
	FINANCE AUDIT		\$24,050	\$0
	TOTAL ACCOUNT 923	\$0	\$162,804	\$171,340
924	PROPERTY INSURANCE		\$530,503	\$490,746
925	LIABILITY INSURANCE (ANNUAL)		\$87,766	\$93,660
925	INJURIES & DAMAGES		\$102,000	\$96,000
925	SAFETY/ENVIRONMENTAL COMPLIANCE		\$116,064	\$95,457
	TOTAL ACCOUNT 925	\$0	\$305,830	\$285,117
926	EMP. BENEFITS - UNALLOCATED		\$5,100	\$624
930	MISCELLANEOUS GENERAL EXPENSE		\$65,140	\$100,326
935	MAINTENANCE OF GENERAL PLANT		\$22,000	\$18,900
408	TAXES		\$1,710,000	\$1,515,000
421	GAIN/LOSS ON DISPOSITION		\$300,000	\$300,000
	LOSS ON DISPOSAL OF INVENTORY		\$200,000	\$100,000
TOTAL A & G EXPENSES		\$0	\$4,289,319	\$3,852,143
TOTAL EXPENSES		\$0	\$28,531,577	\$27,165,763
Total expenses minus fuel		\$0	\$11,145,153	\$10,364,151

PROPOSED

MCNEIL STATION CALENDAR YEAR 2022 BUDGET- FUEL

BREAKDOWN OF ACCOUNT 501 (FUEL EXPENSE)	CY 2022 Fuel Budget	Budgeted CY 2021
OIL		
OIL USAGE FOR START-UP - 1,080 GALLONS @ \$2.50/GALLON	\$ 2,700	\$ 1,890
OIL USAGE FOR NOX REDUCTION - 504 GALLONS @ \$2.50/GALLON	\$ 1,260	\$ 1,750
Gas		
GAS FOR INTERRUPTIBLE (STARTUP) - 15,000 MCF @ \$9.00/MCF	\$ 135,000	\$ 87,450
GAS MCF FIRM - 4200 MCF @ \$9.00/MCF	\$ 37,800	\$ 24,486
GAS USAGE FOR NOX REDUCTION - 1992 MCF @ \$9.00/MCF	\$ 17,928	\$ 11,660
VGS METER CHARGE	\$ 4,200	\$ 4,200
WOOD		
WOOD USAGE IS 420,232 TONS @ \$28.00/TON	\$ 11,745,173	\$ 11,671,517
WOOD - LABOR - YARDWORKER	\$ 670,037	\$ 635,346
WOOD - LABOR & EXPENSES - FORESTERS	\$ 598,754	\$ 560,502
WOOD - WASTE WOOD YARD LABOR	\$ 106,264	\$ 96,020
WOOD - RAILROAD		
RAIL COSTS FOR 175 (rounded) TRAINS @ \$9300/TRAIN (January - Sept)	\$ 1,617,007	\$ 1,602,645
RAIL COSTS FOR 55 (rounded) TRAINS @ \$9400/TRAIN (Oct - December)	\$ 524,189	\$ 517,202
TOTAL WOOD - RAILROAD TRAIN COST FOR CY 2021	\$2,141,196	\$2,119,847
RAILROAD FUEL EQUALIZATION ADJUSTMENT	\$ 53,457	\$ 42,397
THREE WEATHER RELATED UNLOADING DELAYS @ \$2,750/TRAIN	\$ 8,250	\$ 8,250
ADDITIONAL SNOW TRAINS 2 TRAINS @ 9200 & 1 TRAIN @ 9,300	\$ 27,700	\$ 27,096
WOOD - SWANTON YARD		
SWANTON COSTS ARE 315,174 TONS @ \$3.39/TON	\$ 1,068,438	\$ 1,037,235
SWANTON YARD EQUALIZATION ADJUSTMENT	\$ 10,684	\$ 10,372
RAILCAR UNLOADING CONTRACT (LABOR)	\$ -	\$ -
ASH HANDLING		
LOADER FUEL MCNEIL YARD 38,702 GALLONS @ \$2.50/GALLON	\$ 96,755	\$ 75,936
LOADER FUEL WASTE WOOD YARD 1,339 GALLONS @ \$2.50/GALLON	\$ 3,348	\$ 2,629
EMERGENCY LOADER RENTAL	\$ 2,000	\$ 12,000
RAILCAR MAINTENANCE	\$ 210,000	\$ 37,000
LOADER MAINTENANCE - MCNEIL YARD	\$ 117,100	\$ 83,100
LOADER MAINTENANCE - WASTE WOOD YARD (CONSUMABLES)	\$ 34,200	\$ 31,050
GRINDING COST FOR WASTE WOOD	\$ 152,500	\$ 91,500
RAILROAD - LEASE/AGREEMENT	\$ 9,500	\$ 9,500
RAILROAD TRACK ENGINEER INSPECTION	\$ 3,500	\$ 3,500
RAILROAD TRACK MAINTENANCE	\$ 30,000	\$ 30,000
RAILROAD SWITCHING @110/SWITCH/14 SWITCHES PER MONTH	\$ 18,480	\$ 18,480
ROUTINE CHARGES - RAILCARS/SCALES/VEHICLES ETC	\$ 48,000	\$ 48,000
CSWD ANNUAL PAYMENT FOR OPERATION OF THE WASTE WOOD YARD	\$ (60,000)	\$ (60,000)
Fuel Account Sheet		
TOTAL 501 CHARGES	\$17,386,424	\$16,801,612

PROPOSED
MCNEIL STATION CALENDAR YEAR 2022 BUDGET - CAPITAL

FY2022
FY2023

ACCT.	TITLE	CY 2022 Capital Budget	Budgeted CY2021
311	STRUCTURES & IMPROVEMENTS		
	ROUTINE STATION IMPROVEMENTS / STRUCTURES & IMPROVEMENTS	\$ 25,000	
	ENERGY EFFICIENCY IMPROVEMENTS	\$ 2,482	
	ELEVATOR GEARED EQUIPMENT AND CONTROLS	\$ 49,988	
	ROUTINE STATION IMPROVEMENTS / STRUCTURES & IMPROVEMENTS	\$ 40,000	
	ENERGY EFFICIENCY IMPROVEMENTS	\$ 2,500	
	FARMHOUSE HEAT PUMP	\$ 47,000	
	FARMHOUSE NETZERO BUILDING	\$ 25,000	
	FARMHOUSE SECURITY SYSTEM	\$ 5,000	
	FARMHOUSE REPAIR	\$ 25,000	
	TOTAL ACCOUNT 311	\$ 221,970	\$ 439,500
312	BOILER PLANT EQUIPMENT		
	ROUTINE STATION IMPROVEMENTS / BOILER	\$ 30,000	
	STATION TOOLS AND TOOL BOXES	\$ 7,497	
	ESP MECHANICAL FIELD REBUILD	\$ 450,456	
	BELT FIRE SUPPRESSION INSURANCE	\$ 34,962	
	ESP WIRE REPLACEMENT	\$ 26,562	
	SAFETY VALVE REPLACEMENTS	\$ 24,906	
	DISC SCREEN	\$ 29,938	
	CHEMICAL PUMP REPLACEMENT / UPGRADE	\$ 29,844	
	ROUTINE STATION IMPROVEMENTS / BOILER	\$ 45,000	
	STATION TOOLS AND TOOL BOXES	\$ 7,500	
	AUGERS REPLACED	\$ 60,000	
	TRUCK DUMPER MODIFICATION	\$ 40,000	
	DEMI / SERVICE WATER PUMP	\$ 30,000	
	CHEMICAL PUMP REPLACEMENT / UPGRADE	\$ 5,000	
	CEMS REPLACEMENT/ UPGRADE	\$ 200,000	
	TOTAL ACCOUNT 312	\$ 1,021,665	\$ 695,000
314	TURBINE GENERATOR		
	ROUTINE STATION IMPROVEMENTS / TURBINE	\$ 45,000	
	TURBINE CONTROL UPGRADE / INSURANCE	\$ 74,242	
	COOLING TOWER DRIFT ELIMINATORS	\$ 29,958	
	ROUTINE STATION IMPROVEMENTS / TURBINE	\$ 30,000	
	TURBINE CONTROL UPGRADE / INSURANCE	\$ 250,000	
	COOLING TOWER GEAR BOX AND FRAMEWORK (1 OF 2)	\$ 25,000	
	TOTAL ACCOUNT 314	\$ 454,200	\$ 165,000
315	ACCESSORY ELECTRIC EQUIPMENT		
	ROUTINE STATION IMPROVEMENTS / ACCESSORY EQUIPMENT	\$ 30,000	
	CONTROLS LAPTOP	\$ 3,994	
	ROUTINE STATION IMPROVEMENTS / ACCESSORY EQUIPMENT	\$ 15,000	
	IT FORWARD UPGRADES	\$ 59,606	
	MCNEIL RELAY ENGINEERING STUDY	\$ 20,000	
	TOTAL ACCOUNT 315	\$ 128,600	\$149,828
316	PLANT EQUIPMENT		
	ROUTINE STATION IMPROVEMENTS / PLANT EQUIPMENT	\$ 6,250	
	GSU TRANSFORMER	\$ 12,966	
	PORTABLE RADIO UPGRADES	\$ 1,990	
	ROUTINE STATION IMPROVEMENTS / PLANT EQUIPMENT	\$ 6,250	
	PORTABLE RADIO UPGRADES	\$ 2,000	
	RIGGING EQUIPMENT	\$ 5,000	
	TOTAL ACCOUNT 316	\$ 34,456	\$89,500
362	STATION EQUIPMENT		
		\$ -	
	TOTAL ACCOUNT 362	\$ -	\$0
391	OFFICE FURNITURE & EQUIPMENT		
	ROUTINE STATION IMPROVEMENTS	\$ 1,000	
	ROUTINE STATION IMPROVEMENTS	\$ 1,000	
	FURNITURE MCNEIL	\$ 2,500	
	TOTAL ACCOUNT 391	\$ 4,500	\$12,500
392	TRANSPORTATION EQUIPMENT		
	RAILCARS	\$ 150,000	
	FORESTRY VEHICLE	\$ 38,000	\$ -
	TOTAL ACCOUNT 392	\$ 188,000	\$0
398	MISCELLANEOUS EQUIPMENT		
	APPLIANCES	\$ -	
	EQUIPMENT CAMERAS	\$ 3,000	
	SUP OPERATIONS LAPTOP	\$ 5,000	
	TOTAL ACCOUNT 398	\$ 8,000	\$1,000
	CAPITAL BUDGET TOTAL	\$ 2,061,391	\$1,552,328

MCNEIL STATION BUDGET AND ACTUAL AMOUNTS
FOR CALENDAR YEARS 2019 - 2020 AND JANUARY- SEPTEMBER 2021

ACCT.

		CY2019 Budget	CY 2019 ACTUAL	CY2020 Budget	CY 2020 ACTUAL	CY2021 Budget	CY 2021 ACTUAL AS OF September	PROPOSED CY2022 Budget
OPERATIONS								
500	SUPERVISION & ENGINEERING	443,716	448,021	451,973	421,854	563,457	367,776	631,822
501	FUEL EXPENSE	15,337,706	13,415,233	16,278,420	13,753,651	16,801,612	11,584,165	17,386,424
502	STEAM EXPENSE	1,992,602	1,543,785	1,964,768	1,540,730	2,034,169	1,284,726	2,120,327
505	ELECTRIC EXPENSE	778,615	670,813	832,558	653,429	863,512	505,953	841,053
506	MISCELLANEOUS STEAM EXPENSE	702,854	518,549	790,020	627,726	864,975	412,833	876,357
MAINTENANCE								
510	SUPERVISION & ENGINEERING	99,217	108,538	99,099	121,692	108,445	94,320	147,718
511	STRUCTURE	139,098	91,608	109,355	78,878	108,982	46,035	111,320
512	BOILER PLANT	1,959,103	1,284,273	1,552,872	860,734	1,129,374	383,021	1,190,871
513	ELECTRIC PLANT	3,432,608	3,045,788	664,528	586,884	678,758	581,212	750,007
514	ROUTINE IMPROVEMENTS	79,593	48,202	59,697	23,629	54,024	24,178	49,863
TOTAL GENERATION EXPENSES		24,965,112	21,174,810	22,803,290	18,669,207	23,207,308	15,284,219	24,105,762
556	SYSTEM CONTROL & LOAD DISPATCHING	45,082	37,091	50,140	42,069	57,876	35,598	59,496
562	OPERATIONS STATION EQUIPMENT	79,500	32,611	20,800	9,252	30,800	25,260	30,800
567	OPERATIONS - RENT	14,760	20,295	5,818	28,463	11,636	19,780	40,200
570	MAINTENANCE - STATION EQUIP.	6,000	0	6,000	0	6,000	0	6,000
TOTAL TRANSMISSION EXPENSE		145,342	89,997	82,758	79,784	106,312	80,638	136,496
ADMINISTRATIVE & GENERAL EXPENSE								
909	INFORMATIONAL ADVERTISING	83,577	71,441	68,843	44,646	70,431	46,415	74,300
920	SALARIES	596,011	553,799	620,788	535,195	653,573	410,727	759,699
921	ADMINISTRATIVE FEE	43,800	45,719	44,100	36,820	107,086	57,664	105,475
921	ADMINISTRATIVE FEE (A&G & ALLOC)	77,185	32,622	132,749	35,088	39,000	26,919	48,468
923	OUTSIDE SERVICES	171,416	146,416	161,304	143,491	171,340	139,806	162,804
924	PROPERTY INSURANCE (ANNUAL)	213,414	212,264	463,968	452,296	490,746	387,447	530,503
TOTAL ACCOUNT 909 - 924		1,185,403	1,062,261	1,491,752	1,247,536	1,532,176	1,068,978	1,681,249
925	LIABILITY INSURANCE (ANNUAL)	97,446	61,130	91,596	44,636	93,660	36,288	87,766
925	SAFETY	110,437	\$98,529	115,384	75,813	95,457	70,242	116,064
925	INJURIES & DAMAGES	0	109,507	10,000	96,225	96,000	65,440	102,000
TOTAL ACCOUNT 925		207,883	269,166	216,980	216,674	285,117	171,970	305,830
926	EMP. BENEFITS - UNALLOCATED	0	(21,527)	2,004	(5,220)	624	23,335	5,100
930	MISCELLANEOUS GENERAL EXPENSE	51,177	13,500	50,076	16,166	100,326	18,116	65,140
935	MAINT. OF GENERAL PLANT	16,100	3,963	19,820	2,725	18,900	5,227	22,000
TOTAL A&G EXPENSES		1,460,563	1,327,363	1,780,632	1,477,881	1,937,143	1,287,626	2,079,319
408	TAXES	1,326,600	1,379,353	1,393,530	1,438,585	1,515,000	1,153,134	1,710,000
411	GAIN/LOSS ON DISPOSITION / INVENTORY	300,000	183,927	300,000	850,893	400,000	1,121,751	500,000
TOTAL EXPENSES		28,197,617	24,155,450	26,360,210	22,516,350	27,165,763	18,927,368	28,531,577
MAJOR TURBINE OUTAGE		2,750,810						
Total Expense Minus Outage		25,446,807						

**MCNEIL STATION CAPITAL BUDGET AMOUNTS AND ACTUAL SPENT
FOR CALENDAR YEARS 2019 - 2020 AND JANUARY- SEPTEMBER 2021**

PROPOSED

Acct	DESCRIPTION	2019	2019	2020	2020	2021	2021	2022
		BUDGET		BUDGET		BUDGET	ACTUAL AS OF	BUDGET
		AMOUNT	ACTUAL	AMOUNT	ACTUAL	AMOUNT	September	AMOUNT
303	Software and Licenses	\$0	\$0	\$0	\$4,945	\$0	\$0	\$0
311	Structures & Improvements	\$452,000	\$70,436	\$109,828	\$11,494	\$439,500	\$30,261	\$221,970
312	Boiler Plant Equipment	\$509,000	\$173,444	\$1,585,544	\$2,570,914	\$695,000	\$306,512	\$1,021,665
314	Turbine Generator	\$494,000	\$355,227	\$119,954	\$112,509	\$165,000	\$116,013	\$454,200
315	Accessory Electric Equipment	\$455,000	\$2,905	\$383,818	\$319	\$149,828	\$9,434	\$128,600
316	Miscellaneous Plant Equipment	\$72,500	\$8,799	\$69,992	\$12,019	\$89,500	\$0	\$34,456
362	Station Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0
391	Office Furniture & Equipment	\$12,500	\$5,018	\$21,242	\$1,631	\$12,500	\$0	\$4,500
392	Transportation Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$188,000
398	Miscellaneous Equipment	\$6,000	\$1,503	\$1,000	\$0	\$1,000	\$5,180	\$8,000
	Total	\$2,001,000	\$617,332	\$2,291,378	\$2,713,830	\$1,552,328	\$467,400	\$2,061,391

Capacity Factor For:

2017 64.50%
2018 55.90%
2019 62.40%
2020 58.00%
2021 63.7 % SEPT YTD
2022 63% Projected

Budget/Capital and St. Capacity Factor

12. CY2022 BUDGET PROPOSED



November 17, 2021

Vermont Climate Council

Dear Vermont Climate Council Members,

We write representing the electric utilities – Burlington Electric Department, Green Mountain Power, and Vermont Public Power Supply Authority - that jointly own and operate the McNeil Generating Station in Burlington, and on behalf of the IBEW that represents McNeil's unionized workforce, to share our deep concerns over language¹ proposed by the Agriculture and Ecosystems Subcommittee that would, if implemented, have significant and far-reaching negative impacts. Below we will provide some important contextual information on the McNeil Generating Station, and the economic and environmental benefits of the plant, our plans to support further energy innovation at McNeil, and outline our specific concerns with the proposed language of the Subcommittee.

McNeil Generating Station Economic and Environmental Benefits for Vermont

The McNeil Generating Station is currently the largest energy producing plant in the state, and one of the few resources on the Vermont grid that is dispatchable – that is, the output is not limited by the hourly and daily availability of sun, wind, and water; it can be adjusted based on changes in regional power market conditions. McNeil supports 80 jobs at the plant and in the wood supply chain, and independent analysis shows it provides over \$49 million in annual economic benefits for Vermont.² This included, in 2019, purchases of \$4 million of wood across eight Vermont counties — Addison, Chittenden, Franklin, Lamoille, Orleans, Rutland, Washington and Windsor.

In addition to McNeil's importance economically, the McNeil team is focused on sustainability as well. McNeil is relatively unique in having four professional licensed foresters on staff who work to ensure the plant has a sustainable managed wood supply. This includes having harvesting standards in place requiring our wood to come from managed sites with plans to protect wildlife and water quality and promote forest growth. Most of McNeil's wood supply comes from forest residues, which is wood left over from traditional logging for higher-value products. By providing a market for low-value residues, McNeil provides critical support for forest lands and supports jobs for Vermonters who steward those lands. McNeil also uses sawmill byproducts and urban waste wood from our Waste Wood Yard as fuel.

We have made significant investments in McNeil to support air quality, including a \$12 million regenerative selective catalytic reduction system in 2008 that helped reduce nitrogen oxide emissions to levels well below those allowed under state regulations. McNeil's particulate stack emissions are seven times lower than the level allowed under Vermont state regulations, and eleven times lower than the federal level.

¹ See 11-12-21 Biomass Suggested Language, available at: <https://climatechange.vermont.gov/node/322>

² See Innovative Natural Resource Solutions, Economic Impact of McNeil Station, Included in Burlington Electric Department Integrated Resource Plan 2020 (p. 79, 82-84), available at: https://www.burlingtonelectric.com/sites/default/files/IRP2020/2020_IRP_Appendices.pdf

As a renewable generating plant, McNeil's production reduces New England's reliance on fossil fuels for electricity generation. Independent analysis from Innovative Natural Resource Solutions found that in 2019 alone, McNeil's production "kept 77,491 tons of carbon emissions from occurring at alternative electricity generation facilities."³ The third-party analysis further found that timberlands providing McNeil's wood supply in Vermont and New York have been increasing their contribution to carbon sequestration even as they provide sustainable harvests for McNeil. Further, the report noted that "Carbon contained in wood fuel is already part of the above-ground carbon cycle, unlike fossil fuels which take ancient carbon that has been sequestered for millions of years and adds it to the atmosphere." Similarly, the U.S. EPA has stated that "The use of biomass from managed forests can provide numerous environmental benefits. Specifically, forest biomass for energy production can bolster domestic energy production, provide jobs to rural communities, and promote environmental stewardship by improving soil and water quality, reducing wildfire risk, helping to ensure our forests remove carbon from the atmosphere. ... Biogenic CO₂ emissions resulting from the combustion of biomass from managed forests at stationary sources for energy production are carbon neutral."

Energy Innovation at McNeil

The McNeil plant is increasingly an important locus for energy innovation.

The most prominent project under consideration is to make the long-held community goal of providing district energy from McNeil a reality. Currently, the district energy project is in stage 3⁴ of a multi-year feasibility review expected to conclude in the next few months. Partners for this effort include Burlington Electric Department, the City of Burlington, the McNeil Joint Owners, Ever-Green Energy, VGS, UVM Medical Center, UVM, and others. The district energy project would involve creating a steam loop system that would utilize waste heat and additional steam from McNeil to support decarbonization at major commercial customer sites in Burlington. The district energy project is estimated to reduce commercial sector thermal greenhouse gas emissions in Burlington by 12-15%, making it the single-biggest step Burlington can take to support progress towards its local Net Zero Energy 2030 goal. This project would necessarily involve adding new infrastructure at McNeil to carry the renewable steam to customers, in order to reduce their fossil fuel use.

District Energy has been broadly supported at the local, state, and federal level. The Vermont Legislature explicitly supported Burlington Electric's efforts to pursue feasibility analysis for this district energy system using its Thermal Energy and Process Fuels funds through Act 31 of 2019. Further, the Burlington City Council has unanimously supported taking steps to pursue district energy in Burlington. In addition, Senator Leahy has included over \$5 million in federal funds for district energy in Burlington in pending federal appropriations legislation.

In addition to District Energy, McNeil is working with UVM to host a new solar research center on-site near the existing Waste Wood Yard. This solar research center has been supported by Senator Sanders, and is intended to provide opportunities for faculty and students to carry out real-world renewable energy research, and provide workforce training opportunities as well. The license agreement for the solar research

³ See Innovative Natural Resource Solutions, Economic Impact of McNeil Station, Included in Burlington Electric Department Integrated Resource Plan 2020 (p. 88), available at:

https://www.burlingtonelectric.com/sites/default/files/IRP2020/2020_IRP_Appendices.pdf

⁴ See District Energy Phase 3 Announcement, available at: <https://www.burlingtonvt.gov/Press/mayor-miro-weinberger-burlington-electric-department-vgs-uvm-medical-center-ever-green-energy>.

center was approved by the Burlington City Council unanimously in September 2020, and it is currently in the permitting process.

These are just two of the most significant energy innovation projects underway at McNeil, with others under consideration.

Significant Concerns with Proposed Biomass Language

With the above context, we are deeply concerned that the proposed biomass language from the Agriculture and Ecosystems Subcommittee would have far-reaching and negative impacts on McNeil. These include:

Prohibiting District Energy: The language defines expansion of an existing biomass generation facility to include "...an increase in the physical footprint, emissions, or any increased impact on adjacent communities..." We are concerned that this could be read as an effective prohibition on any expansion of infrastructure at existing wood energy facilities such as McNeil. This would appear to prohibit McNeil from advancing the district energy project because such a project would necessarily involve adding some infrastructure at McNeil. This would be directly contrary to Vermont's climate goals, however, because district energy represents an opportunity to improve efficiency at McNeil by turning it into a combined heat and power facility and represents an opportunity to significantly reduce fossil fuel use for thermal sector applications in Burlington. Further, district energy is a major pathway outlined in Burlington's Net Zero Energy Roadmap⁵, and this prohibition proposed by the Subcommittee would be at odds with Burlington's community climate goals. We urge the Council not to advance the recommendation to prohibit new infrastructure at existing plants, and to instead advance language that clearly supports district energy projects such as the one proposed at McNeil that can reduce fossil fuel use and greenhouse gas emissions.

Creating Shutdown Criteria for Existing Wood Energy Plants: The language from the Subcommittee proposes that if existing plants cannot meet a vague and undefined set of criteria "then the facilities be closed" and "job transition assistance provided to employees." We find this disturbing given the Subcommittee, to our knowledge, neither sought nor received any testimony or information from McNeil, or its employees (including its unionized workforce represented by the IBEW). Forcing a shutdown of McNeil would lead to additional fossil fuel use for electric generation in New England, because the ISO-New England's primary marginal fuel is presently natural gas and this is likely to remain the case for a long time even as substantial new renewable power sources are added to the region's generation mix. ISO-New England, the regional grid operator, has noted that the region is heavily reliant on natural gas, and the lack of fuel diversity creates reliability concerns, particularly in the winter-time when natural gas is utilized for heating and supplies for power generation can be constrained. Closing McNeil would exacerbate the region's fuel diversity challenge, harm regional reliability, and take away one of the few remaining dispatchable generating plants in Vermont. It would eliminate 80 jobs at the plant and in the wood supply chain. It would cause adverse impacts for customers of our utilities that rely on the electricity generated from McNeil. This recommendation for closing existing plants based on ill-defined criteria not otherwise contained in the plant's underlying permits, and contrary to state renewable energy laws and policies, should not be included in the Council's final recommendations. To propose such a step without even taking testimony on the impacts to the affected workforce, utility customers, communities, and broader Vermont economy is neither good process nor good policy.

⁵ www.burlingtonelectric.com/nze

Limiting Local Wood Supply – The Subcommittee proposal also would restrict existing plants from obtaining any wood supply outside of Vermont. While McNeil generally procures wood supply from a 60-70 mile radius of the plant, this includes supply from upstate New York as well as many Vermont counties.


Limiting McNeil from obtaining any wood supply from states other than Vermont could limit McNeil's ability to run, and negatively impact its ability to participate in the regional ISO-New England energy market and

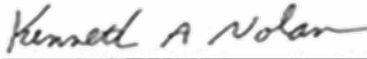
support the reliability of the local and regional grid. While McNeil supports Vermont's forestry economy, and is a significant purchaser of local wood in Vermont, we believe there would be unintended consequences from a ban on purchasing wood supply from upstate New York. It is also not clear that a restriction of wood supply is needed to achieve policy goals, as McNeil's foresters already focus on procuring wood from sustainably managed sites to achieve some of the same goals outlined in the Subcommittee's draft.

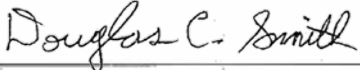
Conclusion

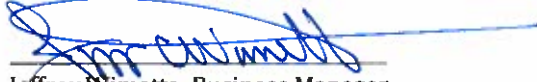
We thank the Members of the Climate Council for considering our comments today, and respectfully request that the Subcommittee language be substantially revised to support continued improvement at existing wood energy facilities, instead of prohibiting needed projects such as district energy or creating shutdown criteria that jeopardize jobs and renewable energy resources in Vermont. While we are disappointed that the Subcommittee made such recommendations without engaging with McNeil and its hard-working employees, we stand ready to work with the full Council to help Vermont achieve its climate goals.


Thank You,


Darren Springer, General Manager
Burlington Electric Department


Ken Nolan, General Manager
VPPSA


Doug Smith, Director of Power Supply
Green Mountain Power


Jeffrey Wimette, Business Manager
IBEW Local 300


Jim Dutra, Chief Steward
Burlington Electric Department/McNeil Generating Station