

**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*

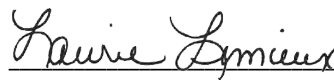
[+1 802-489-6254](tel:+18024896254)

Conference ID: 154 453 814#

**AGENDA**  
**Regular Meeting of the Board of Electric Commissioners**  
**Wednesday, April 13, 2022– 5:30 p.m.**

- |  |                |
|--|----------------|
| 1. Agenda  | 5:30 (5 min.)  |
| 2. Minutes of the March 9, 2022 Meeting  | 5:35 (5 min)   |
| 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 February (Discussion): E. Byrne                                  | 6:00 (10 min.) |
| 7. Fiscal Year 23 Draft Budget (Discussion)(Expected Executive Session):<br>E. Byrne | 6:10 (20 min.) |
| 8. Renewal of BED's Line of Credit with Key Bank (Discussion and Vote):<br>E. Byrne  | 6:30 (5 min.)  |
| 9. Synapse Net Zero Energy Roadmap (Discussion) D. Springer:                         | 6:35 (15 min.) |
| 10. BED Low-Income Rate: (Discussion and Vote): J. Gibbons                           | 6:50 (10 min.) |
| 11. Commissioners' Check-In  | 7:00 (5 min.)  |

Attest:

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

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

If anyone from the public wishes to speak during the public forum portion of the Commission Meeting and/or wishes to be present for the Meeting of the Board of Electric Commission via Microsoft Teams, please email [llemieux@burlingtonelectric.com](mailto:llemieux@burlingtonelectric.com) to receive a link to the meeting, or call (802) 489-6254, Conference ID: 154 453 814#

## TABLE OF CONTENTS (for 04/13/22 meeting)

### \*\*\* FYI \*\*\*

- Minutes of the March 9, 2022 Meeting
- March Monthly Report
- Dashboard
- FY22 February Financials
- FY23 Draft Budget
- Summary of Proposal of Terms and Conditions Renewal of BED's Line of Credit with Key Bank
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**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: April 7, 2022  
Subject: **March 2022 Highlights of Department Activities**

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### **General Manager**

- **ARPA Assistance/Resumption of Disconnect for Non-Payment** – Over \$ 1million in ARPA funds has been applied to residential customer accounts that had past due balances as of late March. Commercial customers with past due balances will be receiving communications asking them to pay them and offering a hardship exemption certification that provides access to ARPA funds for commercial customers as well. Our goal as stated was to help clear the backlog of arrearages prior to resumption of disconnect for non-payment policy in May. That will always remain a final resort, with customer care taking many steps to work with customers prior to any disconnection for non-payment. State arrearage assistance programs remain available as well, and we've continued to help customers access those.
- **District Energy** – We are having now weekly meetings with UVMMC, and every other week with UVM, in an effort to conclude Phase 3. Funding from Senator Leahy has now been finalized as part of recent omnibus appropriations bill signed by President Biden.
- **New Radio Ad and Digital Ads and Bill Inserts** – As noted in the Communications section, we have a new radio ad focused on EV rebates (including Chair Stebbins) running on Star 92.9 and WVMT. We also have digital ads running, and a new bill insert forthcoming focusing on heat pump water heaters.
- **NZE Revenue Bond** – Per the longer update in Center for Innovation section, the NZE Revenue Bond has been issued, with much appreciation to the BED'ers who helped move this forward to fruition.
- **Resumption of In-Person Meetings** – BED staff is prepared, with the Commission's agreement, to resume in-person Commission meetings in May.
- **Cyber Security** – BED staff are undergoing a mandatory cyber security training, as we take further steps with leadership from our new IT Director and IT team members to implement additional measures on this front.
- **Legislative Update** – The Thermal Energy Charter Change has passed the Senate and is headed to the Governor. BED testified in the Senate and House in support. BED also testified in support of Clean Heat Standard legislation, and at a cyber security hearing in House Energy & Technology.

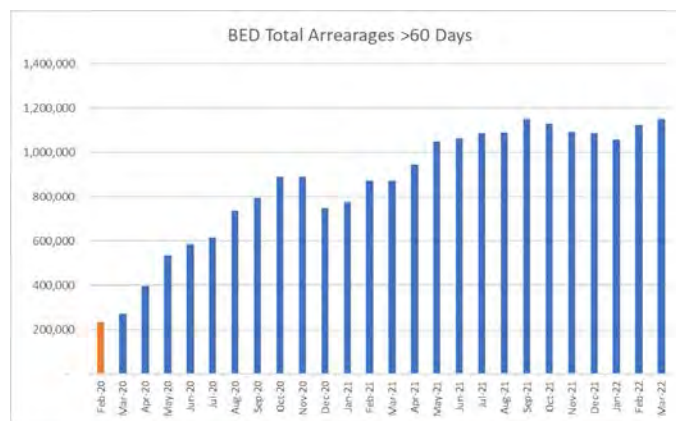
### **Center for Innovation - Emily Stebbins-Wheelock**

- Continued sponsorship of IT Forward implementations.

- Sponsoring internal team reviewing rebate process for efficiencies and effectiveness.

## Finance & Accounting

- Successful pricing, issuance, and closing of the 2022 revenue bond:
  - Moody's affirmed A3 rating for the bonds, with stable outlook.
  - BED borrowed \$20M of project fund proceeds with an average life of 14.2 years at total interest cost of 3.49%.
  - Bonds have a call option in 2032 which would allow BED to refinance these bonds for savings in the future
  - Of the combined \$18.045M of Bonds to sell, the BED received investor orders of \$38.55M, over 2.1x oversubscribed with 7 different investors participating on the sale. Investor classes included Bond Funds, Separately Managed Accounts (professional retail investors), Broker/Dealers and retail investors. The oversubscription allowed the BED to lower yields on the financing anywhere between 2-3 basis points depending on the maturity.
  - Total Proceeds: \$21.30M
    - Construction Fund: \$20.00M
    - Debt Service Reserve Fund: \$1.01M
    - Issuance Costs: \$0.19M
    - Underwriter's Discount/Bond Insurance Premium: \$0.15M
- Continued work on FY2023 budget development.
- Continued work with Policy & Planning on final documentation of REC and Tier 3 accounting change for external audit support.
- Continued work on assessing new GASB Standard 87-Leases for implementation in FY22.
- Hired staff accountant (internal promotion); posted accounts payable position.
- Received updated terms to renew Key Bank Line of Credit.
- Started the planning process for the development of a 2022 rate case.
- Applied the first \$1.08M of ARPA funds to residential customer accounts in arrears on April 4. The remaining ARPA funds will be applied to commercial accounts in arrears between now and the end of FY 2022.
- Monitoring receivables in response to COVID19: as of March 31, 2022, BED's total non-current receivables had increased \$557,500 or 36.05% compared to the end of February 2022. Arrearages >60 days were \$1,149,926.



### **Information Services**

- Onboarding new System and Support Analyst (Larry Keyes) who started with BED on 3/28.
- Onboarded Oracle database consulting firm to cover MDMS data migration.
- Significant progress made on IT Forward projects; continued focus on these efforts.
- Continued security analysis and improvements.
- Selected proposal for new backup solution and preliminary disaster recovery architecture plans.

### **Policy & Planning**

- EEU's overall performance assessment approved; EEU services to continue for another 11 years.
- Filed revised tariffs with PUC.
- Filed revised Service Quality and Reliability Plan.
- Received State of Vermont Rate Design Initiative Grant funded through the DOE.
- Submitted additional comments in storage rulemaking.
- Encore filed Section 248 permit request for Solar Test Center.
- Riled Tier 3 results for 2021.
- Met with VEC staff on potential coordination.
- Work on revised McNeil fuel price proposal.
- Research Packetized Energy device transitions.
- Met with VELCO on economics of K42 line upgrade; VT system reliability/restoration; and Black Start.
- Submitted State of VT Multifamily EVSE grant.
- Submitted District Energy funding opportunity request.
- Started DeltaClimaVT 2022 "sprints."
- Selected ARC pilot project location.
- Support for VEIC review of McNeil carbon accounting.
- Developed model for budgeting REC cash flow needs.
- Acquired additional VT Tier 1 RECs.
- UNH sustainability fellowship interviews.
- Monitoring 2022 legislative committee activity.
- Work on net metering customer issue with PSD.
- Executed Vermont Consortium agreement.
- Closed out REC position for 2021 (purchased RECs to cover generation shortfall).

### **Sustainability & Workforce Development**

- Hosted Ventilation Improvement Program meeting with CEDO regarding program's installment of 9 ventilation systems for Burlington's smaller commercial customers and non-profit entities.
- Hosted monthly project meeting of the Vermont Low Income Trust for Electricity-funded effort to expand EV access for low-income residents through car sharing and enhanced charging infrastructure.
- Assisted with District Energy DOE funding proposal; wrote project's diversity, equity, and inclusion plan.

- Participated in first Renewable Energy Vermont’s conference co-chair meeting; devised conference theme and list of prospective keynote speakers.
- Worked with Energy Services to train CapStone’s new energy coaches, including information on BED’s NZE incentives, policies, and programs and lessons on outreach and support of low-income Burlingtonians.
- Participated in the Urban Sustainability Directors Network Gas Transition learning group co-chair meeting.
- Presented NZE strategy to Burlington’s Conservation Board.
- Quarterly meeting with UVM’s Director of Sustainability.
- Chaired Employee Engagement Committee; discussing onboarding activities and information for new staff.
- Attended Burlington High School and Burlington Technical Center Advisory Group meeting. This group, comprised of City staff, BHS teachers and administrators, student representatives, and others, provides feedback to the architecture and design teams including input on important transportation considerations.
- Attended UVM’s Inclusive Excellence Symposium including presentations on equitable climate action.
- Preparatory meetings for Mayor’s NZE Town Halls and facilitated March 30 conversation with Saul Griffith of ReWiring America.
- Facilitated a meeting between Energy Services and the City group working on Accessory Dwelling Units, including BED’s prospective role in supporting heat pump deployment and energy efficient structures.
- Joined 2030 District executive meeting; set agenda for April Steering Committee meeting and planned several May events, including an energy benchmark training and annual membership gathering.
- Participated in monthly Racial Equity Workshop and final White Accountability group meeting.

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

#### **Safety**

- Conducted testing qualification exam for Switching & Tagging Level 2.
- Conducted meeting for “Draft” of special safety considerations for Solar Safety.
- Conducted Confined Space Manual review meeting.
- Performed various COVID-19 mitigation prevention measures.

#### **Environmental.**

- Conducted the cooling tower fill RFP walkthrough.
- Conducted priority pollutant wastewater sampling for permit renewal.
- Conducted monthly wastewater sampling.

#### **Risk Management**

- New Claims Investigations (2 total, both involving poles).
- Prepare OSHA log for Safety Director.
- Meet on EVSE demo and Spark Charge projects.

- Create liability releases for: RMI Ash hauler, EVSE pole mounted charger, BSOA (Touch a Truck).
- Continue to assist in preparing/submitting DHS grant(s) application.
- Met with City attorney and Engineering on railroad project agreement.
- Host DHS on-site Dashboard review.
- Send out BCP Emergency contact list Version #6 .

### **Purchasing/General Services**

- Monthly meeting with the Electric Bucket Truck Vendor.
- Monthly meeting with the state on our grant for Electric Bucket Truck.
- Submitted grants for three projects with DHS.

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

#### **Engineering & Operations**

- Completed the rebuild of 1L4 circuit on North Avenue from pole P3132 to pole P3149.
- Completed the street lighting upgrade on North Avenue from pole P3147 to Pole P3164.
- Energized the new service at the airport expansion project.
- Completed the secondary wire upgrade and load balance on Lakeside Avenue.
- Installed SCADA-controlled motor operator to 227S switch on Park Street.
- Responded to 18 trouble calls.
- Completed 10 service requests and 20 street lighting repairs.
- Resumed training at the Gas Turbine.
- Performed fiber splicing and field commissioning of the switch for the 227S project on Park Street.
- Completed field commissioning of the new 5-way padmounted switch for the UVM LCOM/Firestone project.
- Developed communications scheme and began testing new padmounted capacitor bank for the UVM LCOM/Firestone project.
- Released settings for a new aerial capacitor bank to be installed on South Willard Street to accommodate UVM load growth on 2L5 circuit.
- Analyzed and prepared trip out reports for several outages that occurred during the windstorm on March 6.
- Reviewed upcoming fiber splicing work for the Shelburne Street Roundabout Project.
- Attended a utility relocation coordination meeting with VTrans for the Shelburne Street Roundabout Project.
- Attended coordination meetings with VELCO for upgrades to the ICCP link.
- Awarded RFP for Appletree Point civil work.
- Released the design and work order for the following projects:
  - New 400A service to 45-57 Lakeside Avenue
  - Lakeside Avenue Transformer and Secondary Upgrade
- Continued to analyze load shedding plans in the unlikely event of controlled outages being requested by VELCO and ISO New England.
- Continued analysis of projected increased system peak loading due to Net Zero Energy.
- Interviewed and hired for the Utility Services Coordinator II position.
- Interviewed and hired for the Power System Coordinator I position.

- Posted the position of Director of Grid Services.

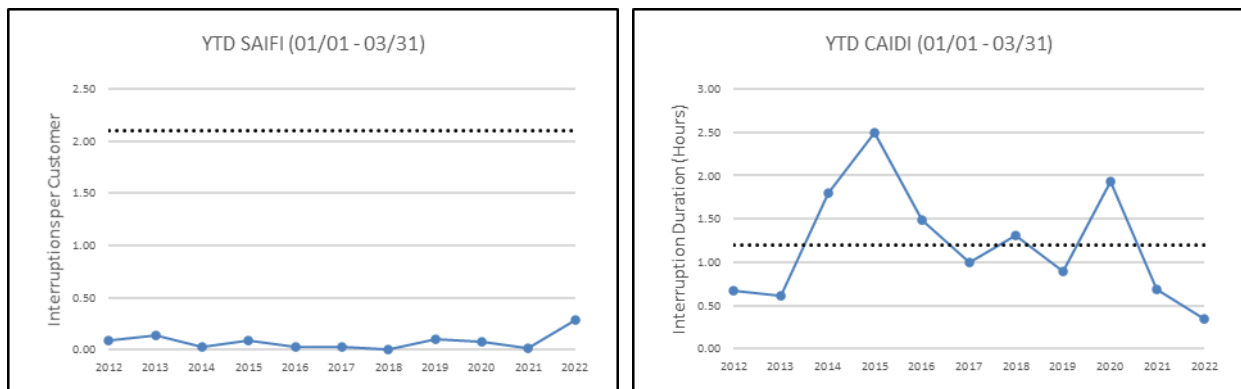
### Grid Services

- Waiting on equipment delivery to start the SCADA firewalls and network switches replacement projects.

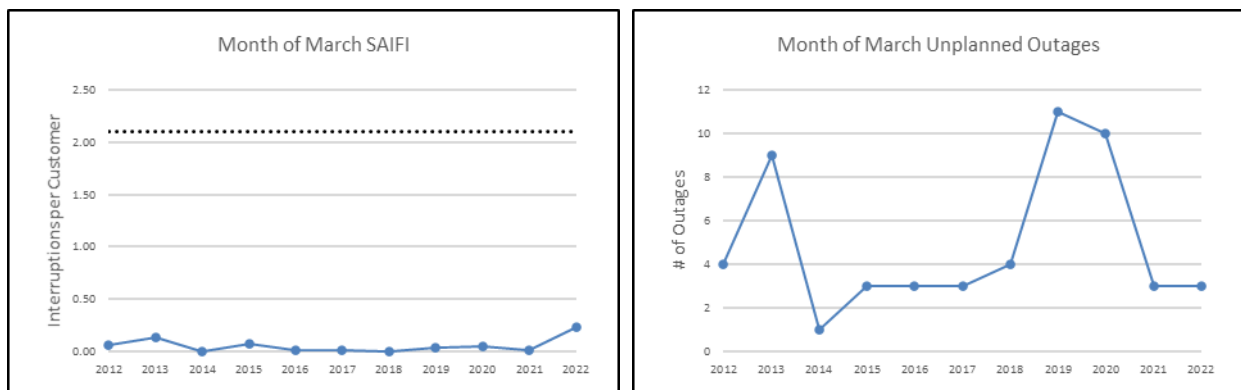
#### *SAIFI & CAIDI Outage Metrics:*

BED's distribution system experienced 15 outages in March 2022 (3 unscheduled and 12 scheduled). BED's SAIFI for the Month of March was 0.23 interruptions per customer and CAIDI was 0.38 hours per interruption. BED's YTD SAIFI is 0.29 interruptions per customer and YTD CAIDI is 0.34 hours per interruption.

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

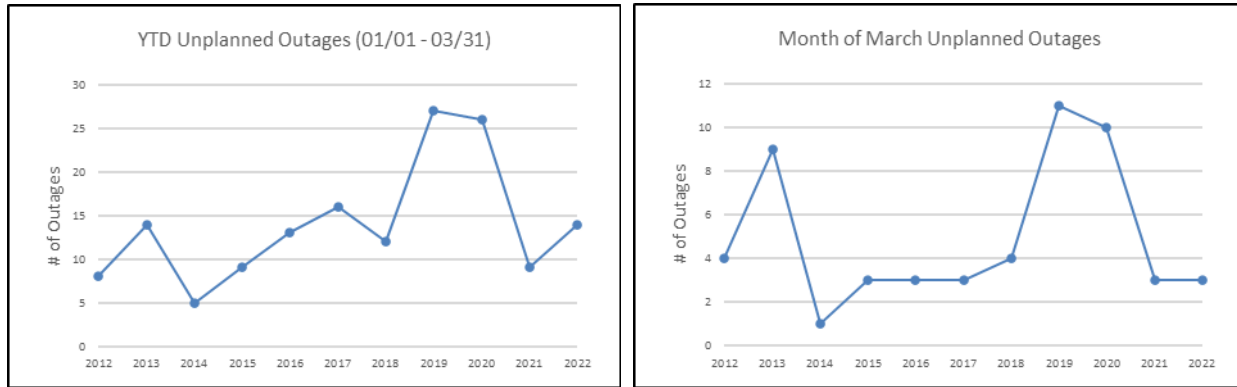


The following figure shows BED's historical March SAIFI and CAIDI:





The following figure shows BED's historical Unplanned Outages:



## GENERATION

### McNeil Generating Station

Month Generation: 2,5342 MWh  
 YTD Generation: 9,5332 MWh  
 Month Capacity Factor: 68.1%  
 Month Availability: 86.91%  
 Hours of Operation: 519.5 hrs.

There was a total of 5,261 hours of reductions for the month due to poor wood quality, waterwall tube leaks, and plugged cyclone cones. We have been offline but available for a duration due to wood supply running thin. Working to build stores for mid-summer and winter runs. Currently working on items in preparation for the upcoming outage and to free up personnel hours for larger projects during the outage.

### Winooski One Hydroelectric Station

Monthly Generation: 3,849.97 MWH (113.001% of average)  
 YTD Generation: 7,236.213 MWH (89.89% of average)  
 Month Capacity Factor: 69.928%  
 Annual Capacity Factor: 45.27%  
 Month Availability: 99%

Winooski is in the spring fishing period and is staffed to support that as such. Run time and operation has been with river flow patterns.

### Burlington Gas Turbine

Month Generation: 137.379 MWh  
 YTD Generation: 167.186 MWh  
 Month Capacity Factor: 0.803%  
 Month Availability: 97.160%  
 Hours of Operation Unit A: 11.9  
 Hours of Operation Unit B: 11.9

There was six total operations of the asset this month. There were two self-scheduled operations, one for asset operability confirmation and training and one for operability confirmation after a fuel oil leak

occurred during a dispatched operation. The fuel oil leak was completely contained within the GT building and was not a reportable event however the leak resulted in approximately 18.5 hours of unavailability for cleanup and repair activities. The dispatched operation referenced above was an audit request by BED to set asset capacity during the Winter season with ISO NE and was successful. There were three additional ISO NE dispatched operations based on economics which were all successful. Lastly there were approximately 5 hours of reduction due to VELCO breaker maintenance where the asset Ecomax was set at 11.5 MW with ISO NE. The asset is fully functional and in service at the end of the month with no reductions in place.

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

Month Generation: 7.5 MWh (-38% from previous year)  
 YTD Generation: 11.4 MWh  
 Month Capacity Factor: 9.5%  
 Month Availability: 100%

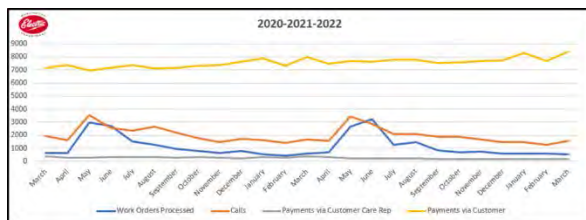
#### *Solar (Airport 499 kW)*

Month Generation: 48.7 MWh (-21% from previous year)  
 YTD Generation: 94 MWh  
 Month Capacity Factor: 13.1%  
 Month Availability: 100%

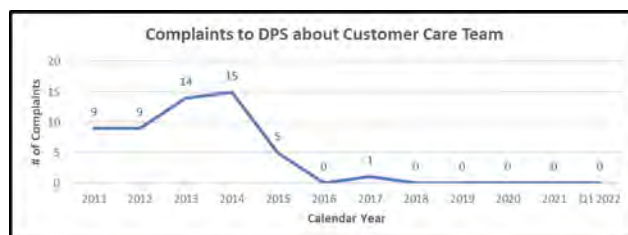
### **Center for Customer Care & Energy Services – Mike Kanarick**

#### **Customer Care**

- **Call Answer Time (75% in 20 seconds):** March 2022 85.8%, February 85.2%, January 83.9%, December 2021 84.6%, November 85.2%, October 77.7%. March 2021 89.1%, February 93.1%, January 86.7%, December 2020 84.2%, November 85%, October 84.4%. Call answer time up 0.6% from last month.
- **March 2022 Stats:** please see dashboard for additional metrics categories.



**\*Please note that our account balances greater than \$500 was substantially reduced to 16 accounts with the application of more than \$1M in ARPA funds in early April.**



## Communications and Marketing

- Temporary Energy Assistance Program to offset 7.5% rate increase: to help offset BED's first-rate increase in 12 years we have been offering income-qualified customers temporary assistance in the form of a monthly bill credit through June 2022. So far 90 (up from 79, 75, 69, and 58) customers have applied with 67 approved, 22 awaiting verification, and 1 found ineligible. Customers can learn about eligibility requirements and apply by visiting [burlingtonelectric.com/rates](http://burlingtonelectric.com/rates).
- Vermont Emergency Rental Assistance Program (VERAP - [erap.vsha.org](http://erap.vsha.org)): launched by State in April 2021 "to help alleviate income pressure on tenants and landlords and restore stability to the rental community." VERAP helps tenant households with paying rent, as well as paying utility and home energy costs. BED has approved 709 of 972 (up from 591 of 866 February, 560 of 818 January, 478 of 696 December, 411 of 639 November, 312 of 561 October, and 280 of 461 September) program applicants for a total of \$568k (up from \$474k, \$434k January, \$353k December, \$323k November), of which BED has received \$533k (up from \$436k, \$388k January, \$263k December, \$212k November).
- Vermont Homeowner's Assistance Program (VHAP): launched by the State of Vermont through the Vermont Housing Finance Agency (VHFA) in January 2022 to help prevent home foreclosure and displacement with assistance for overdue mortgage payments, homeowners association fees, property taxes, and utilities. So far, BED has certified 12 applicants and received our first payment of \$1,289.
- National Lineworker Appreciation Day: on April 18, we will be recognizing via social media BED's dedicated and hard-working lineworkers for all they do for the Burlington community.
- Net Zero Energy Podcast: we hope you've had a chance to take a listen to BED's new Net Zero Energy Podcast at [www.burlingtonelectric.com/podcast](http://www.burlingtonelectric.com/podcast), including our latest episode published in early April with guest Jesse Beck, a Burlington architect and resident, who is transitioning his home to Net Zero Energy.
- Radio ad: for the 1<sup>st</sup> time, BED is trying out radio advertising with a 60-second spot running from March 31 through April 13. The spot will air 36 times per week on WEZF Star 92.9 FM and WVMT 620 AM, 96.2 FM (18 times per week on each station). Mayor Miro Weinberger, Commission Chair Gabrielle Stebbins, and GM Darren Springer are the radio spot participants. The script follows:

MIRO WEINBERGER Hi, I'm Burlington Mayor Miro Weinberger. I am proud of our community's efforts to become a Net Zero Energy city by 2030.

GABRIELLE STEBBINS I'm Gabrielle Stebbins, Chair of the Burlington Electric Commission. In Burlington, we are taking our commitment to address the climate emergency seriously.

DARREN SPRINGER I'm Darren Springer, General Manager of Burlington Electric Department. There has never been a more important time to consider driving electric. In addition to reducing air pollution and greenhouse gas emissions, you will save on fuel costs by charging with our 100 percent renewable electricity for the equivalent of 70 cents a gallon.

MIRO WEINBERGER Global events point to the need, once and for all, to eliminate our dependence on oil, and stop economically supporting nations whose actions are contrary to our values.

GABRIELLE STEBBINS Driving electric keeps more dollars in our local economy, instead of sending them out-of-state or out-of-country.

DARREN SPRINGER If you're considering purchasing or leasing a new or pre-owned electric vehicle, please visit [burlingtonelectric.com](http://burlingtonelectric.com) and learn about the significant rebates available to help you drive electric today.

- Town Hall Meetings with the Mayor: on March 30, Mayor Miro Weinberger hosted a virtual Town Hall meeting with Dr. Saul Griffith, an engineer and inventor, who founded Otherlab, an independent R&D lab where he serves as chief scientist helping government agencies and Fortune 500 companies understand energy infrastructure and deep decarbonization. Dr. Griffith is the author of Electrify and The Big Switch, was awarded a MacArthur "Genius Grant" in 2007, and is a founder of Rewiring America, a non-profit on a mission to electrify everything. BED organized the event that was co-hosted by VECAN and that more than 135 people attended. On April 6, the date of preparation of this report, the Mayor will be hosting another virtual Town Hall meeting, organized by BED, featuring Dr. John Sterman, Professor of Management at the MIT Sloan School of Management, and faculty director of the MIT Sloan Sustainability Initiative. Dr. Sloan is a prolific author of works spanning corporate strategy, operations, energy policy, public health, and climate change. During the Town Hall meeting, Dr. Sterman will be demonstrating the En-ROADS climate solutions simulator.
- North Avenue News: our April column encourages Burlingtonians to take advantage of our Net Zero Energy rebates, in particular for driving electric given the rapidly increasing prices at the gas pump, and our ad headline is "So Many Rebates" and also promotes electric vehicles.
- March 2022 Website and Facebook Highlights
  - Overall site-wide pageviews for March 2022 = 23,967
    - February = 17,126
    - January = 19,000
    - December = 18,374
    - 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
  - Unique homepage pageviews for March 2022 = 7,282
    - February = 5,831
    - January = 6,380
    - December = 6,346
    - 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
- Full site traffic for March 2022 – big bump on March 6 from 5-6pm due to outage caused by storm with high winds.



- 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.

Burlington Electric Department	8777	6657	7237	7353	7246	8186	7845	8464	9164	9085	9667	6884	7234	6550	7571	7130	7071	7497	9277
My Bill	2758	2585	3122	2670	2737	2825	2943	2846	3033	3295	3235	3087	3228	3046	3532	3308	2995	3258	3651
Waste Wood Yard	653	237	527	804	1649	1069	1045	1082	1212	1160	1569	2034	1110	367	979	761	1756	1545	1303
Report A Problem	516	70	95	385	93	235	119	79	153	135	93	60	88	80	80	121	76	140	721
Stop or Start Service	323	202	248	279	306	298	454	867	803	1079	2599	622	337	279	336	277	330	366	502
E-billing	266	266	340	345	274	276	376	345	522	451	337	380	352	368	495	528	397	394	669
Contact Us	555	360	445	439	448	460	577	642	638	731	949	468	560	413	417	467	414	436	547
McNeil Generating Station	557	255	374	379	644	443	347	339	447	429	627	791	517	395	525	507	734	634	548
Heat Pumps	559	331	382	264	394	477	406	496	567	369	82	40	39	46	30	n/a	18	36	36
Rebates	917	488	450	377	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	732	508	549	419	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	121	49	57	27	49	91	106	113	138	233	255	257	280	504	283	208	158	152	171
Stop or Start Service	323	202	248	279	306	298	454	867	803	1079	2599	622	337	279	336	277	330	366	502
Leadership Team	269	237	265	196	222	206	243	276	228	240	212	198	308	218	286	207	193	190	269
Rates & Fees	246	180	221	203	166	214	178	132	143	247	310	184	212	218	161	140	139	190	190
Usage Tracker Registration	145	120	156	142	127	114	94	154	177	223	107	118	150	196	185	209	147	154	201
RFP	534	597	366	152	270	243	452	497	455	158	143	439	393	471	404	258	387	400	383
Residential   Ways to Save	155	146	147	157	164	156	172	194	172	220	217	173	175	163	137	159	137	212	172
Electric Vehicles	356	296	222	244	296	289	272	265	245	332	247	258	246	218	210	190	208	296	219
E-Bikes	206	89	78	76	78	161	168	265	207	192	223	242	196	117	106	109	117	131	174
Net Zero Energy News	27	30	33	26	32	67	204	129	115	178	210	132	187	195	228	179	225	222	241
Electric Vehicles	356	296	222	244	296	289	272	265	245	332	247	258	246	218	210	190	208	296	219
COVID-19 Updates	11	11	17	16	22	79	153	166	397	540	335	275	332	301	349	337	323	281	83
Our Energy Portfolio	124	54	58	48	88	104	96	59	42	n/a	51	110	102	101	49	51	53	84	125
Electric Lawn Mowers & Leaf Blowers	n/a	23	49	39	94	117	150	133	184	229	408	312	176	79	131	70	157	101	88
RFP Detail	422	413	214	n/a	94	49	258	334	185	n/a	23	401	199	414	303	148	293	321	403
Defeat The Peak	16	11	8	12	12	n/a	11	137	22	155	11	17	20	35	n/a	n/a	10	20	n/a
Commercial   Ways to Save	63	45	30	43	37	41	98	55	39	62	26	46	59	33	37	41	34	53	33

- Top-performing Facebook posts
  - Boosted posts about our financial assistance programs
  - New podcast episode with Passive House expert and resident Arthur Chukhman

03/11/2022 8:11 AM		We understand too many Vermonters continue to			3.7K		484 23	
03/03/2022 1:21 PM		New episode! #BTV resident and #architect Arthur			5K		351 24	
03/02/2022 9:12 AM		We are providing money to apartment building owners			569		14 8	

Blue: clicks / Red: comments, shares

## Energy Services

### *UVM*

- Lighting Upgrade Projects / Completed or in-progress:
- Christie-Wright-Patterson Dorm common area (corridor and stairwell) fixtures are being replaced with new LED fixtures. Approximately 300 fixtures are involved, and the materials are on order.
- Harris-Millis – Corridor and classroom fixtures are being retro-fitted with new LED technology including integrated controls. This involves 50 fixtures, and the materials are now being put on order.
- Howe Library – Stack Lighting Fixture Replacements and General Area Lighting Fixture retrofits. Approximately 325 fixtures have been retrofitted and 50 fixtures for stack lighting have been replaced. These projects are now complete, and a final site visit is pending.
- Stafford Greenhouse Grow Lighting – UVM is moving ahead with plans to replace all of their existing HID-technology grow-lights with new LED fixtures. This month, BED developed a rebate offer to assist in this energy efficiency work. The upgrades may be done in two phases, and BED has structured the incentive package to conform with that process.

### *UVMMC*

- Overall project activity is slowed due to UVMMC staff focus on pandemic related issues.

### *Other Services*

- Hannaford North Ave / Renovation – BED is working with VEIC on energy savings measures associated with this supermarket renovation project. VEIC won the contract to assist Hannaford's with several store renovations in New England. An additional measure which has just been identified as being included is a permanent leak detection system associated with the store refrigeration rack. This will be handled as an entirely separate project, with rebate finalization work beginning immediately.
- Burlington High School Downtown / HVAC Upgrades -The high school is temporarily being housed in the old Macy's building until a new school building can be constructed on North Avenue. Two failures of large variable speed drives (50HP) in the HVAC system have occurred. BED is assisting with rebates for replacing these drives, which otherwise would be in by-pass with motors running at 100% speed. One of these drive replacement projects has been completed, and the second one is in progress.
- Hotel Burlington / Facility Lighting Project – The owner of this downtown hotel on Battery St. accepted a lighting proposal from an out-of-state lighting contractor. This project involves the upgrading of 600 + existing lighting fixtures to LED technology, and the replacement of about 65 existing fixtures with new LED flat panels. The project was completed this month with some adjustments made to savings calculations based on an increase in scope. A BED site visit has been completed and a rebate payment is pending.
- Waterfront Diving Center / High Bill – Their monthly electric bill recently doubled for one month, resulting in an inquiry with Energy Services. Analysis of AMI data showed several specific time

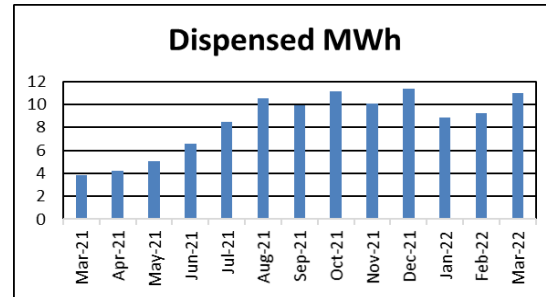
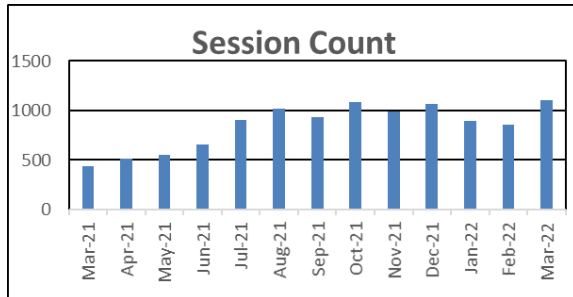
frames during the month where unusually high usage occurred over several days. The cause for this is yet unknown. A BED site visit is pending.

- King St. Laundry / Gas Dryers End-of-Life - The new owner of this facility is looking to replace 10 commercial natural gas dryers. BED has been working with them to determine if fuel switching to electric heat pump drying is feasible.
- Main St. Landing / 60 Lake St. – Domestic Hot Water Fuel Switch – The owner of this large multi-use commercial building on Burlington’s Waterfront is investigating a DHW fuel switch from natural gas to electric, via a 120-gallon heat pump water heating system. This project is large enough to go beyond the scope of prescriptive heat pump measures and is now being evaluated as a custom Tier 3 project by BED.
- Cathedral of St. Paul / High Bill Inquiry – This organization has recently joined the Burlington 2030 District, which has quantified goals for energy use reductions in different building types throughout the city. An interesting feature of this building is that it is mostly all concrete construction. It has been noted that the monthly electric bill for the building is quite high. A BED walkthrough was completed last month. This month a VGS /BED visit took place to look at opportunities for building envelope improvements and optimum furnace replacements for end-of-life equipment.
- YMCA – 298 College St. / Re-Commissioning – This new facility in downtown Burlington has been in operation since early 2020. However, both electric and natural gas consumption has been higher than expected over that period. BED is assisting the owner in investigating adjustments to the DDC system which will reduce energy use without impacting occupant comfort. Improved control sequences are being considered and a BED site visit to further assist in this work occurred at the end of this month.
- COTS (“Committee on Temporary Shelter”) Addition at 278 Main St – This project is an addition to an existing building that houses individuals that might otherwise be homeless. The addition will constitute (4) studio, (5) 1-bedroom, (7) 2-bedroom apartments for a total 12,750 sq. ft. of floor area. An initial energy model has been developed for the structure. A virtual meeting was held this month with the Owner and the design team so that BED could confirm the energy savings incentive structure for the project, as well as the process we are using to develop an energy savings claim.
- Hula Office Complex / Lakeside Ave – This two-building new construction project on the shores of Lake Champlain has been in operation for over a year. It is notable in that all heating and cooling is provided by ground-source heat pumps supplied by an open loop geothermal system. The calibration of the original energy model to the actual electrical usage of the building is now in progress. BED is assisting by providing DDC trend data from the facility’s building automation system. The process is going well, and it looks as though this calibration step will be complete by next month, whereupon the second rebate payment will be disbursed.
- Weatherization coordination with VGS- VGS requested electrical account usage histories (with customer permission) for 3 SF and 4 MF buildings (representing 16 living units) this month for the purpose of weatherization audit preparation and building energy use analysis. This brings the total TTD (2021-2022) requests to 122 SF and 78 MF buildings (representing 244 living units).
- Eight homes are now enrolled in the BTV NZE Home Pilot Program with VGS. Each owner will receive a comprehensive NZ roadmap that is customized for their home and budget.

#### *Electric Vehicles*

- The EVSE dispensed a total of 11.0 MWh and supported 1,105 sessions.

- The top 3 sales were 64, 67 & 76 kWh and occurred at the Cherry St. and College St. garages.
- The top 10 sessions (0.9% of total) accounted for 5.4% (596 kWh) of the total monthly sale. The ten sessions ranged from 50kWh-76kWh.
- The EVSE served 481 unique drivers.
- Session Count and Dispensed Energy plots from the from the public charging network are shown below.



- Number of EV and PHEV rebates to date – 361 (of this 62 LMI rebates to date as shown below)
  - New All Electric Vehicle – 148
  - New All Electric Vehicle (LMI) – 26
  - New PHEV – 98
  - New PHEV (LMI) – 33
  - Used All Electric Vehicle – 26
  - Used All Electric Vehicle (LMI) – 2
  - Used PHEV- 14
  - Used PHEV (LMI) – 1
  - All Electric Vehicle (\$50K plus) – 13
- Number of customer loans with lending partners to date – 5
- Number of customers currently participating in the new EV Rate- 109
- Number of EV home charging stations rebates to date – 57

#### Electric Lawn Equipment to Date

- Number of e-mower rebates to date – 397 (11 commercial & 386 residential)
- Number of e-leaf blowers to date – 33

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

- Total Number of Heat Pump Technology rebates to date- 647 (of this 98 LMI rebates to date as shown below):
  - Number of ductless heat pumps to date – 406
  - Number of LMI eligible ductless heat pumps to date – 82
  - Number of centrally ducted heat pumps to date – 118
  - Number of LMI eligible centrally ducted heat pumps to date – 11
  - Number of air-to-water heat pumps to date – 1
  - Number of commercial VRF heat pump systems to date - 2
  - Number of geo-thermal heat pump systems to date – 1
  - Number of heat pump hot water heaters to date – 21
  - Number of LMI eligible heat pump hot water heaters participants to date – 5



**Electric E-Bikes to Date**

- Number of e-bike rebates to date – 275

**Electric Induction Stove Tops to Date (new offering in Jan 2021)**

- Number of induction Stove Tops rebates to date – 13

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

- Number of snow blower rebates to date – 2

## BED 2021-2022 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Mar 2022 Actuals	Feb 2022 Actuals	Jan 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual	2018 Yearly Actual
<b>Engage Customers and Community</b>								
Call answer time 75% within 20 seconds	75%	86%	85%	90%	avg 82%	avg 81%		
Delinquent accounts >\$500	0	16	571	513	avg 529	avg 201		
Disconnects for non-payment	0	0	0	0	0	45		
# of residential weatherization completions	10		0	0	5	3	11	11
Weatherization completions in rental properties		0	0	0	0	0	TBD	TBD
# or % of homes or SF weatherized		TBD	TBD	TBD	TBD	TBD	0	0
Champ Challenge weatherization participants		2	3	3	0	1	TBD	TBD
# of commercial building with improved thermal envelopes		0	1	0	5	5	0	0
% of EEU charge from LMI customers spent on EE services for LMI customers		TBD	TBD	TBD	TBD	TBD	TBD	TBD
<b>Strengthen Reliability</b>								
SAIFI (AVG interruptions/customer) (annual target)	< 2.1	0.23	0.01	0.06	0.22	1.50	1.03	0.43
CAIDI (AVG time in hrs to restore service) (annual target)	< 1.2	0.38	1.4	0.12		0.55	0.75	0.93
Distribution System Unplanned Outages (annual target)	82	3	7	4	44	90	98	78
McNeil Forced Outages	0	1	0	2	5	21	TBD	TBD
W1H Forced Outages	0	0	0	0	9	2	TBD	TBD
GT Forced Outages	0	0	0	0	2	3	TBD	TBD
<b>Invest in Our People, Processes, and Technology</b>								
Avg. # of days to fill positions under recruitment	120	76	102	115	68	179		
# of budgeted positions vacant	0	9	9	10	avg 9	6	NA	NA

## BED 2021-2022 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Mar 2022 Actuals	Feb 2022 Actuals	Jan 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual	2018 Yearly Actual
<b>Innovate to Reach Net Zero Energy</b>								
<i>Tier 3 Program</i>								
# of residential heat pump installs	See NZE Roadmap Goals below	26	13	20	315	203	10	0
# of commercial heat pump installs		0	1	1	4	13	0	0
# of residential hot water heat pump installs		0	1	0	14	6	4	0
# of commercial hot water heat pump installs		0	0	0	0	0	0	0
Heat pump rebates		26	14	21	328	212	0	0
Heat pump hot water heater rebates		1	1	0	15	3	0	0
LMI heat pump rebates		4	6	0	28	6	4	0
Heat pump technology installs in rental properties		1	1	1	14	9	TBD	TBD
LMI heat pump hot water heater rebates		1	0	0	2	0	1	0
EV rebates - new		5	2	6	67	14	36	44
EV rebates - pre-owned		3	0	1	7	8	2	0
LMI EV rebates		0	0	0	11	7	7	0
PHEV rebates - new		6	0	0	41	10	17	14
PHEV rebates - preowned		1	0	1	6	5	3	0
LMI PHEV rebates		5	1	1	13	6	2	1
Public EV chargers in BTV (total)		27 ports	27 ports	27 ports	27 ports	27 ports	14	14
Public EV charger energy dispensed (kWh)		11,000	9,200	8,860	86,570	35,690	78,000	67,931
Home EV charging station rebates		0	0	1	32	20	12	0
EV rate charging customers (total)		109	106	102	40	40	28	4
Level 2 charger rebates		0	0	0	10	0	1	0
Level 1 charger rebates		0	0	0	0	1	0	0
E-bike rebates		0	3	4	88	36	65	62
E-mower rebates		1	1	2	154	95	142	NA
E-forklift rebates		0	0	0	0	0	0	0
MWE of Tier 3 measures installed		1,973	829	1,730	23,763	35,112	3,342	
% Tier 3 obligation met with program measures	100%	27%	15%	10%	159%	283%	31%	30%

## BED 2021-2022 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Mar 2022 Actuals	Feb 2022 Actuals	Jan 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual	2018 Yearly Actual
<i>Net Zero Energy Roadmap Goals</i>								
# of solar net metering projects installed		3	1	4	29	24	33	52
No. of homes receiving NZE Home Roadmaps		2	1	2	10	7		
Residential heat pumps for space heating (no. of homes)	2020: 3963	NA	NA	NA		891, 22% of goal	572	NA
Commercial heat pumps for space heating (SF floor space served)	2020: 1190	NA	NA	NA		1304, 110% of goal	374	NA
Residential heat pumps for water heating (no. of homes)	2020: 1466	NA	NA	NA		92, 6% of goal	87	NA
Commercial heat pumps for water heating (SF floor space served)	2020: 263	NA	NA	NA		0	-	NA
EV registrations in BTV (light-duty)	2020: 548	NA	NA	NA		356, 65% of goal	291	NA
Greenhouse gas emissions (1000 metric tons CO2)	2020: 190	NA	NA	NA		182, 104% of goal	211	NA
Fossil fuel consumption (billion BTU)	2020: 3207	NA	NA	NA		3142, 102% of goal	3,619	NA
<i>Demand Response</i>								
<b>Manage Budget and Risks Responsibly</b>								
<i>Safety &amp; Environmental</i>								
No. of workers' compensation/accidents per month	0	0	1	0	4	8		
Total Paid losses for workers' compensation accidents (for the month)	\$225,000 annual	\$382	\$396	\$757	\$ 93,612	\$ 165,402	\$38,288	\$ 255,273
Lost Time Incident Rate (days/year) (Dec numbers reflect annual results)	<= 3.5	N/A	N/A	N/A	0.0	0.93	0.89	1.89
Lost Time Severity Rate (days/year) (Dec numbers reflect annual results)	<= 71	N/A	N/A	N/A	0.0	41.71	78.2	109.75
Lost work days per month	0	0	0	0	0.0	45		116
NOx reporting levels to EPA (Quarterly) (lbs/mmbtu)	<0.075	0.07	0.07	0.071	0.07	0.07		
# of reported spills, waste water incidents (monthly)	0	0	0	0	4	4		
Phosphorus levels to DEC in lbs (monthly/yearly total)	<0.8/37	0.104/1.52	0.067/1.71	0.145/1.83	2.028		1.169	
# of new power outage claims reported (monthly)	1	0	0	0	7	4		
# of new auto/property/other liability claims reported (monthly)	2	2	0	0	18	27		

## BED 2021-2022 Strategic Direction Dashboard

Metrics by Strategic Initiative	Target	Mar 2022 Actuals	Feb 2022 Actuals	Jan 2022 Actuals	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual	2018 Yearly Actual
<i>Purchasing &amp; Facilities</i>								
# of Purchase Orders for Inventory (Target: avg for winter months)	42	56	39	70	644	593		
\$ value of Purchase Orders for Inv. (Target: avg dollars spent during winter)	\$78,000	\$626,698	\$231,292	\$566,870	\$ 3,278,620	975,531		
# of stock issued for Inventory (Target: avg during winter months)	320	531	556	387	4,402	4,545		
\$ value of stock issued for Inventory (Target: avg. during winter)	\$ 65,000	\$ 141,090	\$ 71,107	\$ 39,432	855,456	1,086,478		
# of posters pulled from poles monthly (Target: goal to remove each month)	58	164	76	96	2,728	627		
# of Spark Space and Auditorium setup/breakdowns monthly (Target: Covid impact)	3	7	3	2	88	87		
<i>Finance</i>								
Debt service coverage ratio	1.25		5.26	5.15	NA-FY basis	NA-FY basis	NA-FY basis	NA-FY basis
Adjusted debt service coverage ratio	1.5		1.43	1.39	NA-FY basis	NA-FY basis	NA-FY basis	NA-FY basis
Days unrestricted cash on hand	>90		145	142	NA-FY basis	NA-FY basis	NA-FY basis	NA-FY basis
<i>Power Supply</i>								
McNeil generation (MWH) (100%)	per budget	25,342	33,825	36,165	273,355	192,696		
McNeil availability factor	100%	87%	100%	96%	80%			
McNeil capacity factor	per budget	68%	100.7%	97.2%	62.4%			
Winooski One generation (MWH)	per budget	3,850	1,751	1,635	24,752	21,194		
Winooski One availability factor	100%	99%	98%	98%	97%			
Winooski One capacity factor	per budget	69%	35%	30%	37%			
Gas Turbine generation (MWH)	NA	137.4	13.7	16.1	373	441		
Gas Turbine availability factor	100%	97%	100%	93%	96%			
Gas Turbine capacity factor	NA	0.8%	0.09%	0.09%	0.21%			
BTV solar PV production (mWh)		396	235	156	5,015	5,182		
Cost of power supply - gross (\$000)			\$2,409	\$2,116	\$30,285	\$31,081		
Cost of power supply - net (\$000)			\$746	\$2,116	\$22,134	\$23,388		
Average cost of power supply - gross \$/KWH			\$0.09	\$0.07		\$0.10		
Average cost of power supply - net \$/KWH			\$0.03	\$0.07		\$0.08		

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

**Wednesday, March 9, 2022, 5:30 pm**

The regular meeting of the Burlington Electric Commission was convened at 5:34 pm on Wednesday, March 9, 2022 via Microsoft Teams Video Meeting.

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

Commissioners Chagnon, Herendeen, Moody, Stebbins, and Whitaker (arrived 5:28 pm) participated via Microsoft Teams.

Staff members present included Darren Springer, Paul Alexander, Emily Byrne, Andy Elliston, James Gibbons, Mike Kanarick, Munir Kasti, Laurie Lemieux (Board Clerk), Betsy Lesnikoski, Dave MacDonnell, and Paul Pikna.

**1. Agenda**

There were no changes to the Agenda.

**2. February 9, 2022 Meeting Minutes**

Commissioner Herendeen asked that the February 9, 2022 minutes be amended to correct the following statement from *“several communities in Burlington”* to read as follows:

*Commissioner Herendeen stated that several towns have already reduced the number of lights they had by a large number.*

Commissioner Moody made a motion to approve the minutes of the February 9, 2022 Commission Meeting as amended; the motion was seconded by Commissioner Chagnon.

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

Commissioner Chagnon. Aye  
Commissioner Herendeen. Aye  
Commissioner Moody. Aye  
Commissioner Stebbins. Aye

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

### **3. Public Forum**

Tim Devlin, Assistant City Attorney, was present for the meeting.

### **4. Commissioners' Corner**

Commissioner Herendeen thanked Ms. Stebbins-Wheelock and other staff members for including the degree day information that was requested.

Commissioner Herendeen stated that the department has installed a couple of EV fast chargers recently. The data shows that it takes approximately 30 minutes to charge a car to go 300 miles, (30 kW hours). If we compare that 30 minutes to the 3-4 minutes a customer would be at a gas pump, fast charging still seems to be an issue.

Commissioner Stebbins stated that the charging market is constantly evolving, and we will see substantial changes within the coming years.

Commissioner Herendeen stated that he was on the bike path along the lake on Sunday around 5:00 pm when the wind storm blew through. The City experienced an outage at that time, and Commissioner Herendeen wondered if the outage was caused by the wind storm.

Mr. Springer stated that the outage was caused by a tree limb down on the lines on the bike path. BED did experience other smaller outages scattered throughout the City, and at one point had several thousand customers without power. The team restored power to approximately 2/3 of the customers within 5 minutes, and all customers were back online within two hours.

Commissioner Herendeen asked if street lighting would be discussed at the meeting this evening. Commissioner Stebbins stated that the department has reached out to the Illuminating Engineering Society (IES) regarding light level reduction several times and is awaiting a reply. Commissioner Stebbins has requested a Street Lighting Primer for the April meeting to refresh the Commission regarding lighting issues and to learn what other communities are using for standard levels. Mr. Springer stated that Mr. Kasti and Mr. Elliston have been working on getting a response from the IES and cannot promise an answer in time for the April Commission meeting. Also, the April Commission meeting will have an extremely full agenda that will include 4-5 items. The Commission meeting can include the lighting primer, or the Commission can hold the item until the May meeting. Commissioner Stebbins agreed and stated that, if the department has not heard back from the IES, this item will be discussed at the May meeting.

### **5. GM Update**

Mr. Springer stated that McNeil had an historic run in January, with 24/7 production during one of the most expensive periods in ISO-New England history. This run created a positive economic impact for BED, which is part of the January financial update, and also helped reduce the region's

reliance on fossil fuel generation during the winter. Mr. Springer stated that he expects this will have a positive impact in February also, although probably not as significant as January. Mr. Springer offered appreciation to the McNeil operations teams for their great work this winter, and to our foresters for keeping the plant well-supplied with wood.

Mr. Springer stated that the department is in the process of reviewing the initial materials for the FY23 budget. We talked extensively with the Commission and the City Council last year following the 7.5% rate increase and let them know that, in all likelihood, the department would need another rate adjustment and expected this adjustment to be more moderate than the 7.5%, possibly 5%. The inflation environment that we are in is not helping and is creating more challenges. Our goal is to deliver a budget for FY23 that may include a rate adjustment proposal, one that we predict will be more moderate than last year's. BED has been in communication regularly with our larger customers who have expressed a desire to stay in touch given the significant impact that a rate increase would have on their budget development processes. We have had regular financial meetings with UVM and UVM Medical Center to let them know what we are seeing and what our trajectory looks like so they can make their own budget determinations.

On March 2, 2022, Moody's announced that BED's forthcoming Net Zero Energy Revenue Bonds have received an A3 rating, with a stable outlook. As with our A3 rating on existing revenue bonds announced last year, Moody's credited the recovery in the local economy following the pandemic, BED's forward looking renewable energy and climate mitigation strategies, and our financial management and rate plans. This is positive news as we move towards issuing the bonds this spring.

Mr. Springer stated that customers will receive a letter soon outlining BED's plans to support customers who still have pandemic-related arrearages as of February 28, 2022 with application of the \$1.3 million in City ARPA funds. Customers who have past due balances from the pandemic will see the application of ARPA funds on either their March or April bills. Going forward, BED will resume our regular policy of disconnection for nonpayment starting May 1. We will continue to work with customers who need assistance via our temporary energy assistance program, our budget payment plans, and available state assistance programs for renters and homeowners.

Mr. Springer stated that the Burlington Charter Change related to thermal energy has passed House Government Operations, House Appropriations, and the full House. It will now move to the Senate for consideration.

Mr. Springer stated that work is progressing on District Heating and that in addition to the information in the monthly report, BED has scheduled meetings over the course of the next few weeks with UVM and UVM Medical Center and that the partners are working toward the conclusion of phase three. Mr. Springer reported hearing about movement in Congress with a likelihood that the Omnibus Appropriations Bill will be advancing in the near future. We received confirmation that the District Energy Funding that Senator Leahy appropriated for the City is in the final version of that bill. We expect that the funding will be available once that bill is passed. We also are applying



for competitive funds that would further lower the cost of the project, expand more infrastructure to the Intervale Center to help more of its buildings potentially join the project, and expand control technology for automation at UVM Medical Center.

Mr. Springer stated that the Policy & Planning team will present on ideas for a permanent BED low-income rate in FY23 to replace our temporary energy assistance program, which runs through the end of FY22. Our goal is to have a low-income rate ready in FY23, to support customers in need of long-term assistance. This will be important as we will face additional upward rate pressure in the next several years, although we've moderated that upward pressure through the Revenue Bond strategy. The Commission can expect to have a proposal for a vote in April, along with several other key financial items, including renewal of our KeyBank line of credit and presentation of a draft budget.

Mr. Springer stated that BED currently is considering a proposal from ChargePoint to replace our two outdated 25 kW CHAdeMO chargers with new, 62.5 kW fast chargers that are compatible with CCS and CHAdeMO charging. These would be the first modern fast chargers located in the City, and some of the fastest anywhere in the state. They would be funded through the Revenue Bond with funding that was included in our FY22 budget. We'll have more to report on this at the April meeting and, if necessary, may bring approvals for multi-year agreements with ChargePoint to support the chargers to the Commission at that meeting as well.

Also in April, we expect to have the updated Synapse Net Zero Energy Roadmap data for 2021.

Mr. Springer stated that he submitted a commentary to Vermont Business Magazine and Vermont Digger that supports the Clean Heat Standard Proposal that the Legislature is considering, makes points relative to previous work with McNeil, and addresses various RES energy project policy changes.

## **6. FY22 January Financials**

Ms. Byrne presented the budget-vs-actual results for the month of January FY22. The Department had a net income of \$557K in January compared to a budgeted net loss of \$337K. On the revenue side, actual sales to customers were favorable to budget by \$195K. Residential sales were up \$205K, and commercial sales were down \$12K. Ms. Byrne noted that, for the year-to-date, actual sales to customers are within 0.3% of budget. Other revenues, mainly EEU, were down \$36K. There are no REC receipts to report in January.

Power supply expenses were \$605K less than budget, as a result of transmission and purchased power being under budget. McNeil had excess generation during January and received higher than budgeted prices for generation. Other operating expenses were down \$79K compared to budget. Other income was up \$6K, interest expense was under budget by \$12K.

For FY22 year-to-date, actual net income is \$698K or 35% better than budget. Sales to Customers is

\$90K ahead of budget. Other revenues are down due to EEU. Power supply revenues are ahead by \$171K or 4% for the year. McNeil REC revenue is tracking the budget, helping make up for lower performance for wind, hydro, and other REC generators. On the expense side, power supply is under budget by \$1,264K, driven by purchase power, transmission, and fuel costs all coming in under budget. Operating expenses are running below budget by \$953K.

As of January, the Department has spent 32% of the FY22 capital budget and has an operating cash balance of \$10.6M, or 142 days cash on hand. The debt service coverage ratio is 5.15 and the adjusted debt service coverage ratio is 1.39.

## **7. McNeil Side Track Lease**

Ms. Lesnikoski stated that, as part of the required delivery of wood chips to fuel the McNeil Generating Station, Burlington Electric Department (BED) has leased from the New England Central Railroad (NECR) land, track, and switches near the plant. Two outmoded leases from 1983 and 1984 are now being replaced by an updated lease to modernize contract terms and provide clarity for party responsibilities and costs. The new terms have been agreed to by both BED and NECR staff.

The Commission asked several questions regarding the expiration date, lease cost, and changes from the previous leases. These questions were answered by Ms. Lesnikoski and Mr. Devlin to the Commission's satisfaction.

BED requested that the Burlington Electric Commission approve the Sidetrack Lease agreement and recommend approval by the Board of Finance and City Council at their next meetings on March 21, 2022.

Commissioner Whitaker made a motion to approve and recommend that the City Council authorize the General Manager of the Burlington Electric Department to execute a Sidetrack Lease with the New England Central Railroad to facilitate the delivery of wood chips to the McNeil Generating Station, subject to review and approval of the City Attorney's Office; the motion was seconded by Commissioner Moody.

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

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

Results: 5 Ayes with 0 Nays, the motion carries.

## **5. Low Income Rate**

Mr. Gibbons stated that the purpose of this agenda item is to give the Commissioners some idea of what BED is considering and to solicit comments, rather than to present the item and ask for a vote all in one meeting. Mr. Gibbons stated that it is his intent to bring the proposed tariff language for action at the next meeting.

Mr. Gibbons stated that there are two Energy Assistance Programs that are approved in Vermont. One is at VGS and the other is at Green Mountain Power. Both programs are structured fairly similarly, and both use stated percentage discount off the rates and charges that otherwise would have applied. Both programs are using an outside entity, the Department of Children and Families, to determine eligibility for the rate. So, if you're qualified at the Department of Children and Families, you're also qualified for the rate. Both have slightly different income thresholds; one is 185% of the federal poverty level and the other is 150%. At this time, BED is not aware of any other Vermont utilities offering a low-income rate.

The BED team did review Austin Energy's program that offers a flat discount per month for the customer charge. Essentially, they offset your customer charge. Eligibility is determined at the city level. Austin Energy uses a higher level of 200% of federal poverty level as its cut-off.

BED also looked at Sacramento Municipal Utility District (SMUD), one of the biggest municipal utilities in the country. SMUD does a tiered monthly discount that reduces the customer energy charges. The discount is dollar-based, tiered based on the federal poverty level, and determined yearly, so it changes over time and by participant income level.

At this time, BED staff is leaning toward a percentage discount for eligible customers. It has the merit of having a structure that is approved and in use at two other regulated utilities in Vermont. That structure also means: the higher the bill, the more assistance you receive, as opposed to a flat credit.

The BED team is looking into the implementation side and, if we cannot implement as an actual percentage reduction in the bill, there may be a work-around that would involve filing tariffs for income-qualified customers that were a stated percent lower than the other applicable tariffs. For example, if we wanted to do a 5% eligible discount, we could file a residential rate for eligible customers that was 5% lower than the standard RS rates.

Our plan is to come up with an estimate of not only the structure, but also the impact on our financials of the structure for the Commission by the next meeting. Mr. Gibbons stated that we are cognizant that, currently, a significant reduction in revenues due to offering this rate is not built in our budgeting assumptions.

Once all the calculations are done, we would be able to propose a pilot rate structure that would have an 18-month duration, and that potentially could be extended beyond 18 months. The pilot rate structure would not require the full regulatory approval process that BED would normally have to go through. At the end of the 18 months, if we decided that we wanted to continue, we would provide 45 days' notice and, if there were no objection during that 45 days, the rate would continue beyond the 18-month window.

Mr. Gibbons stated that we are looking for Commission input at this time. Then, our goal for the next meeting would be to: calculate the eligible customer pool based on a threshold; provide a proposed rate structure, including the eligibility criteria, that defined what the assistance would be; ; and calculate the economic impact this structure would have on BED finances. After presenting all of this information, we would ask the Commission to vote on the proposed rate.

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

Commissioner Moody asked about the City stipend for Board and Commission members.

Mr. Springer stated that there was an effort during the pandemic to offer stipends for participation on Boards and Commissions in an effort to ensure participation and increase the pool of candidates for such participation on Boards and Commissions. The intent of the City is to continue to fund these stipends over the long run. as the City engages in its budgeting process over the next few months, there may be more clarity about the stipends.

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

Results: 5 Ayes with 0 Nays, the motion carries.

The meeting of the Burlington Electric Commission adjourned at 7:01 p.m.

Attest:

  
Laurie Lemieux, Board Clerk



*FY 2022  
Financial Review  
February*

*April 4, 2022*

# **Burlington Electric Department Financial Review**

**FY 2022**

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## FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of February FY22

(\$000)	Full Yr Budget	CURRENT MONTH			YEAR TO DATE		
		Budget	Actual	Variance	Budget	Actual	Variance
Sales to Customers	48,172	3,996	3,928	(69)	33,109	33,130	22
Other Revenues	3,978	292	197	(95)	2,513	2,018	(495)
Power Supply Revenues	8,404	1,883	1,663	(220)	6,058	6,009	(49)
<b>Total Operating Revenues</b>	<b>60,554</b>	<b>6,171</b>	<b>5,787</b>	<b>(384)</b>	<b>41,680</b>	<b>41,157</b>	<b>(522)</b>
Power Supply Expenses	32,155	2,675	2,409	266	21,364	19,834	1,530
Operating Expense	21,543	1,616	1,365	252	13,469	12,264	1,205
Depreciation & Amortization	6,007	501	510	(9)	4,005	4,083	(78)
Gain/Loss on Disp of Plant	291	148	125	23	291	241	50
Taxes	3,935	334	284	50	2,635	2,219	416
<b>Sub-Total Expenses</b>	<b>63,932</b>	<b>5,274</b>	<b>4,693</b>	<b>581</b>	<b>41,763</b>	<b>38,641</b>	<b>3,123</b>
<b>Operating Income</b>	<b>(3,378)</b>	<b>898</b>	<b>1,095</b>	<b>197</b>	<b>(84)</b>	<b>2,517</b>	<b>2,601</b>
Other Income	6,588	377	463	86	4,758	3,096	(1,662)
Interest Expense	2,402	201	189	12	1,593	1,541	51
<b>Net Income (Loss)</b>	<b>808</b>	<b>1,074</b>	<b>1,368</b>	<b>294</b>	<b>3,080</b>	<b>4,071</b>	<b>991</b>

### Year-to-Date Results:

- **Sales to Customers** down \$22,000 (within budget). Residential Sales up \$767,920 and Non-Residential Sales down, \$800,700.
- **Other Revenues** down \$495,000 (19.7%)
  - a. DSM billable (customer driven) down \$422,000.
- **Power Supply Revenues** down \$49,000 (1%)
  - a. McNeil REC revenue of \$3,442,000 compared to a budget of \$3,030,000.
  - b. Wind REC revenue of \$1,987,000 compared to a budget of \$2,277,000.
  - c. Hydro REC revenue of \$459,000 compared to a budget of \$585,000.
  - d. Other REC revenue of \$122,000 compared to a budget of \$167,000.
- **Power Supply Expenses** down \$1,530,000 (7%)
  - a. Purchased Power down \$1,313,000.
  - b. Transmission Fees down \$139,000.
  - c. Fuel down \$78,000.
- **Taxes** down \$416,000 (16%)
  - 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 \$1,205,000 (9%)
  - a. Various items are less than budget. This includes outside services (\$447,000), materials & supplies (\$147,000), DSM (rebates & outside services) (\$99,000), transportation clearing & building Clearing, (\$115,000) and uncollectible accounts (\$72,500). Offset by higher expense due to the credit for A&G (“Admin and General Expenses”) charged to Capital projects was less than planned, \$297,300.
- **Other Income** down \$1,662,000
  - a. Budget assumed \$750,000 of ARPA. Also, assumed customer contributions for Shelburne Road roundabout relocation, \$616,700, UVM LCOM, \$116,200 & Champlain Pkwy, \$303,800.

## FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of February FY22

Capital Spending – February YTD (\$000's)				
Plant Type	Full Yr. Budget	Budget	Actual	% Spent
Production	\$1,017	\$610	\$222	22%
Other	192	153	0	0%
Transmission	1,150	1,150	0	0%
Distribution	3,577	2,456	2,120	59%
General	2,034	1,244	604	30%
<b>Total</b>	<b>\$7,970</b>	<b>\$5,615</b>	<b>\$2,946</b>	<b>37%</b>

- (1) **Production** – Timing of projects at McNeil, \$105,000 and Gas Turbine, \$84,900. 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) **Transmission** – VT Transco equity purchase deferred.
- (4) **Distribution** – Timing of various projects.
- (5) **General** – IT Forward project was budgeted throughout the year; YTD expenses of \$470,100 compared to a budget of \$928,700. Pole mount routers YTD expenses of \$13,700 vs budget of \$101,300. Electric Bucket Truck replacement was budgeted throughout the year, delivery has been delayed until FY 2024.

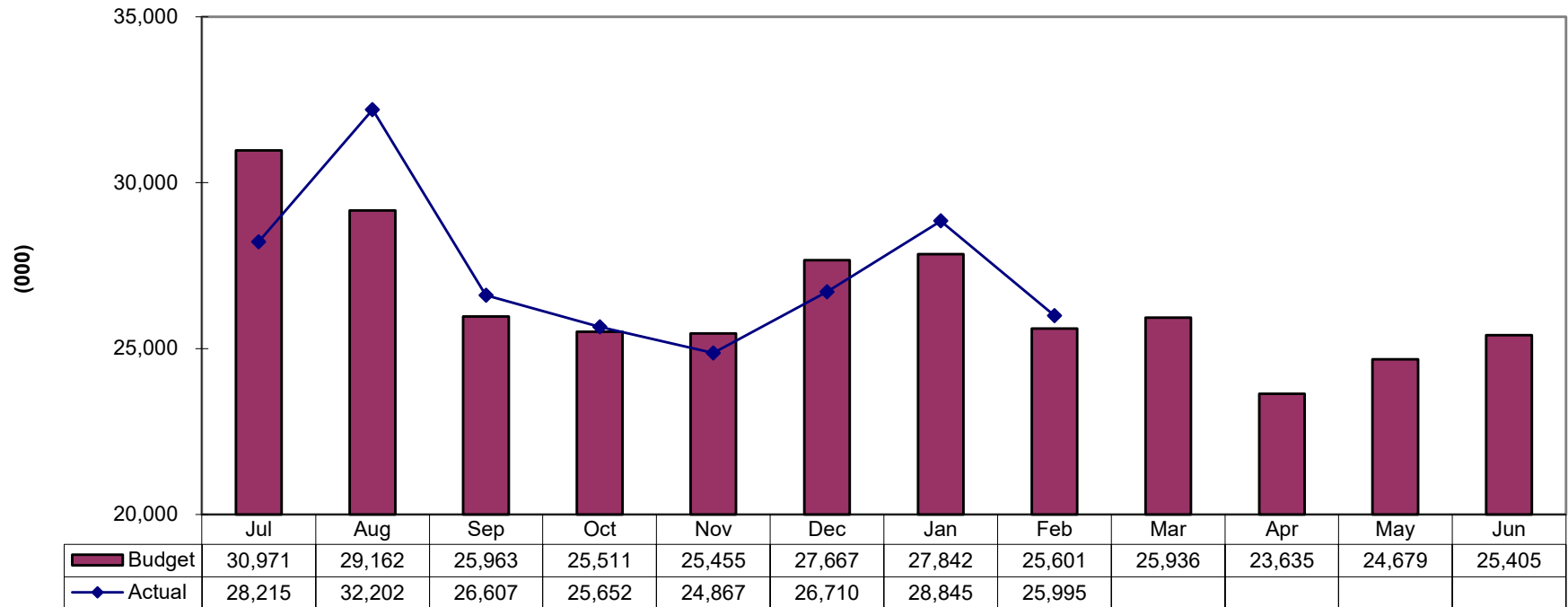
As of February 28, 2022 Cash and Investments	
Operating Funds	\$10,765,300
Operating Fund – CDs	\$1,160,200
Total Operating Fund	\$11,925,500

Credit Rating Factors				
	"A"	"Baa"	Current	3 Year Average
Debt Service Coverage Ratio	1.25	1.25	5.26	3.81
Adjusted Debt Service Coverage Ratio	1.50	1.10	1.43	0.95
Cash Coverage - Days Cash on Hand	90	30	145	125



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

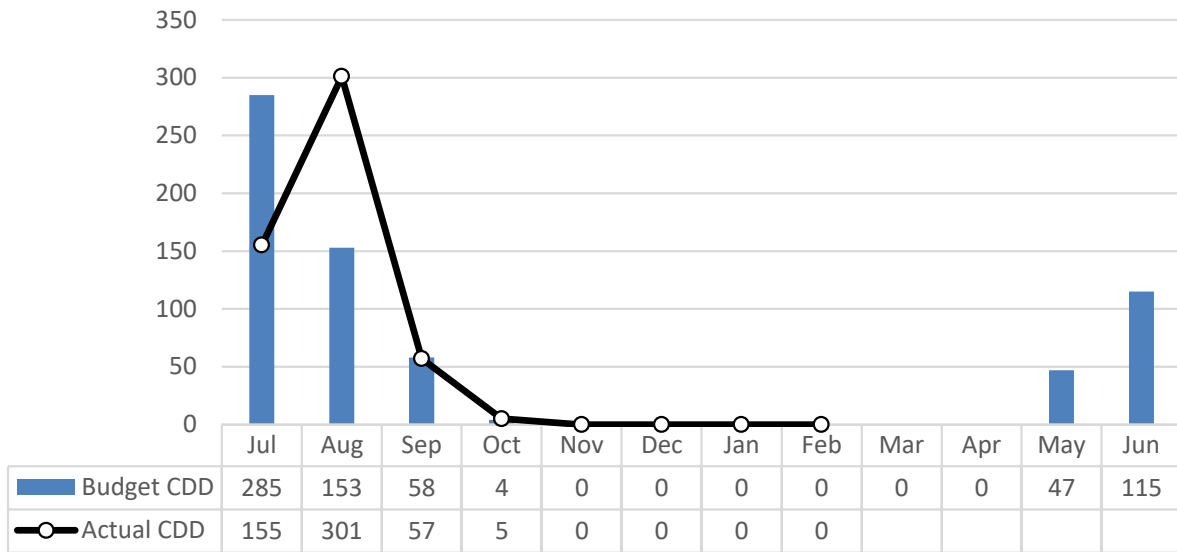
**Total Sales to Customers - KWH  
Monthly**



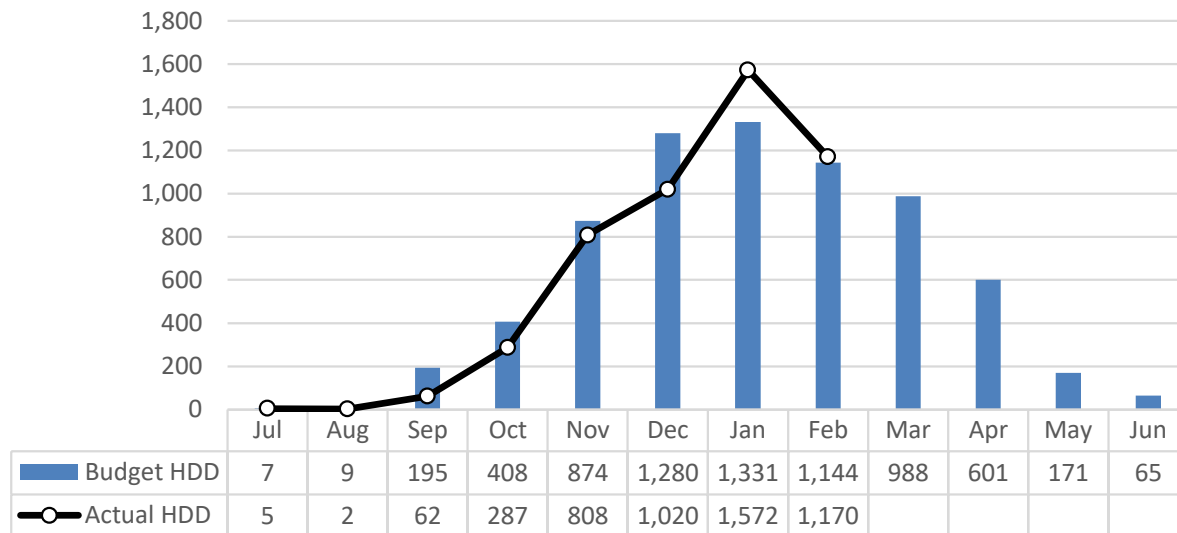
KWH Sales to Customers (YTD)												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>Budget</b>	30,971	60,134	86,097	111,608	137,063	164,730	192,571	218,172	244,108	267,743	292,422	317,827
<b>Actual</b>	28,215	60,417	87,024	112,676	137,543	164,253	193,098	219,092				

## FY 2022

### Cooling Degree Days (CDD)



### Heating Degree Days (HDD)

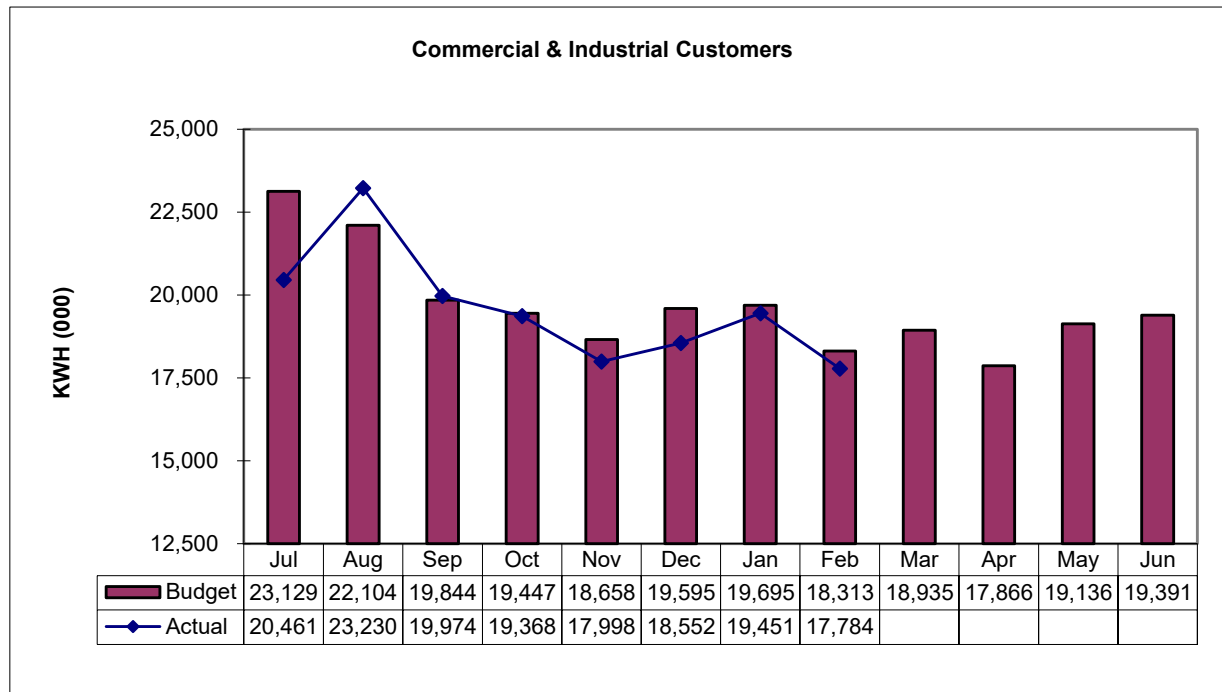
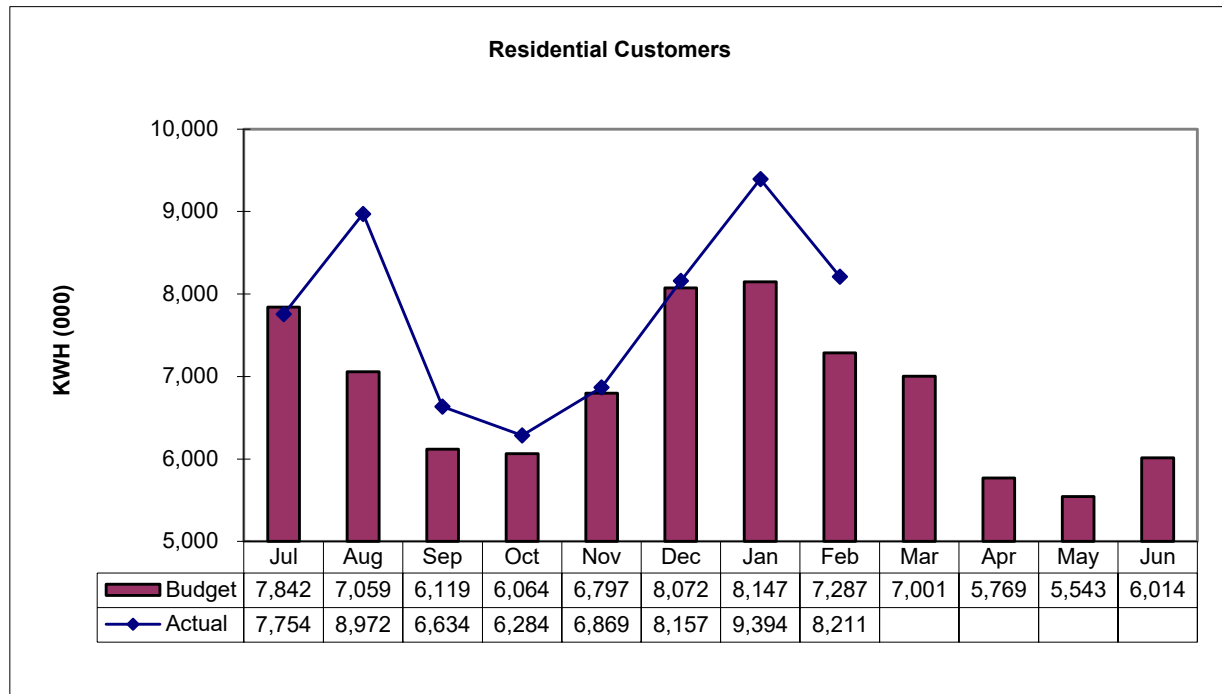


### Average Monthly Temperature

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget	72	70	63	50	39	27	21	22	32	45	58	67
Actual	70	74	56	56	38	32	14	23				

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

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



*Street Lighting is included with Commercial & Industrial Customers.*

# **Net Power Supply Costs** **February - FY 2022**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<b>Expenses:</b>							
Fuel (p. 7)	\$940	\$1,049	(\$109)	(1)	\$6,233	\$6,154	\$78 (1)
Purchased Power (p.11)	959	497	462	(2)	9,304	7,991	1,313 (2)
Transmission Fees - ISO	577	617	(40)	(3)	4,482	4,840	(358) (3)
Transmission Fees - Velco	132	102	30	(4)	891	293	598 (4)
Transmission Fees - Other	67	144	(77)	(5)	455	556	(101) (5)
Total Expenses	2,675	2,409	266		21,364	19,834	1,530
<b>Revenues:</b>							
Renewable Energy Certificates - McNeil	1,077	1,031	(46)		3,030	3,442	412
Renewable Energy Certificates - Wind	600	449	(151)		2,277	1,987	(290)
Renewable Energy Certificates - Hydro	137	135	(2)		585	459	(126)
Renewable Energy Certificates - Other	69	48	(21)		167	122	(45)
Total Revenues	1,883	1,663	(220)		6,058	6,009	(48) (6)
Net Power Supply Costs	\$792	\$746	\$46		\$15,307	\$13,825	\$1,482
Load (MWh)	25,951	26,375	423		221,521	225,015	3,493
\$/MWh	\$30.52	\$28.30	(\$2.23)		\$69.10	\$61.44	(\$7.66)

## **Current Month:**

- (1) See detail on page 7.
- (2) See detail on page 11.
- (3) ISO-NE Transmission over Budget due to higher rate and January Peak Load.
- (4) VELCO Transmission under Budget due to lower BED Share of Common charges (VELCO set winter peak).
- (5) NYPA Transmission over 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 lower 91 VTA Common charges, including a reduction for the return of accumulated deferred income tax for 2020 and 2021.
- (5) NYPA Transmission over Budget.
- (6) RECs expected to come in 6% under Budget due to under budget Wind and Hydro Production

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

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<b><u>FUEL:</u></b>							
<b>McNeil:</b>							
Fuel Consumed	681	769	(88)	(1)	4,375	4,359	17
Swanton Yard	61	77	(16)	(1)	387	503	(116)
Train Deliveries	124	132	(9)	(1)	787	763	24
Labor & Other Expenses	65	66	(2)	(2)	601	448	153
Total McNeil Fuel	930	1,045	(114)		6,151	6,073	78
Gas Turbine	10	4	6	(3)	81	81	(0)
<b>Total Fuel</b>	940	1,049	(109)		6,233	6,154	78

**Current Month:**

(1) McNeil produced 16,913 MWh (7% over Budget). Woodchip costs (per ton) were 6% over Budget. (p. 9)

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

(3) GT produced 14 MWh (36% under Budget).

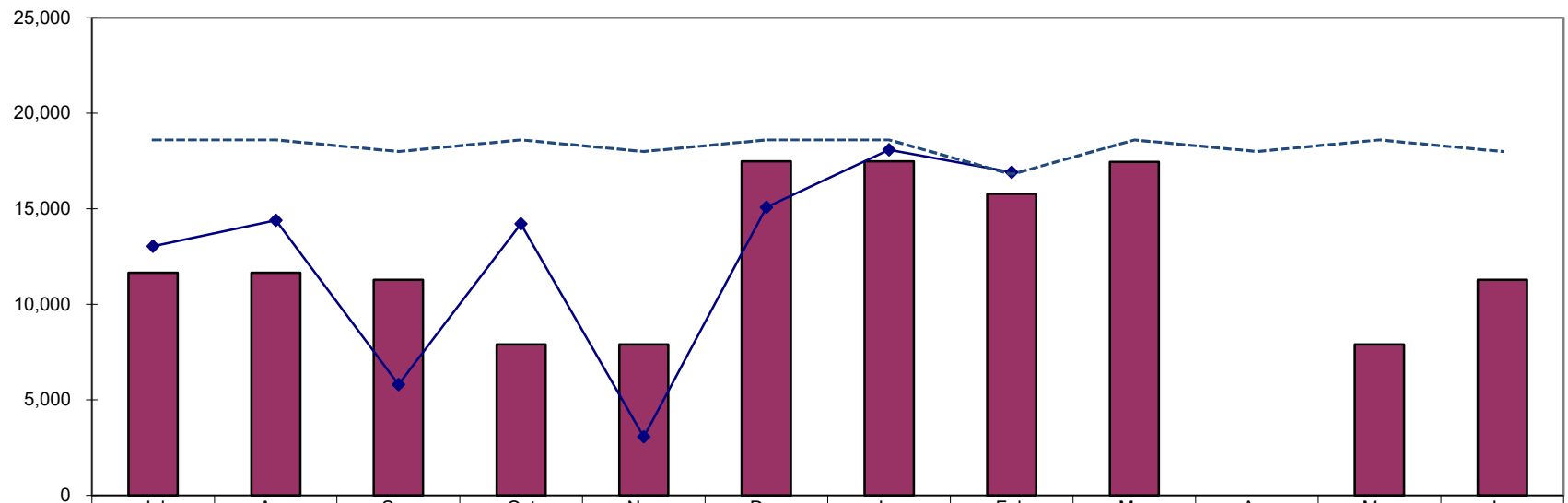
**YTD:**

(1) Variance due to incentive price payments for wood deliveries.

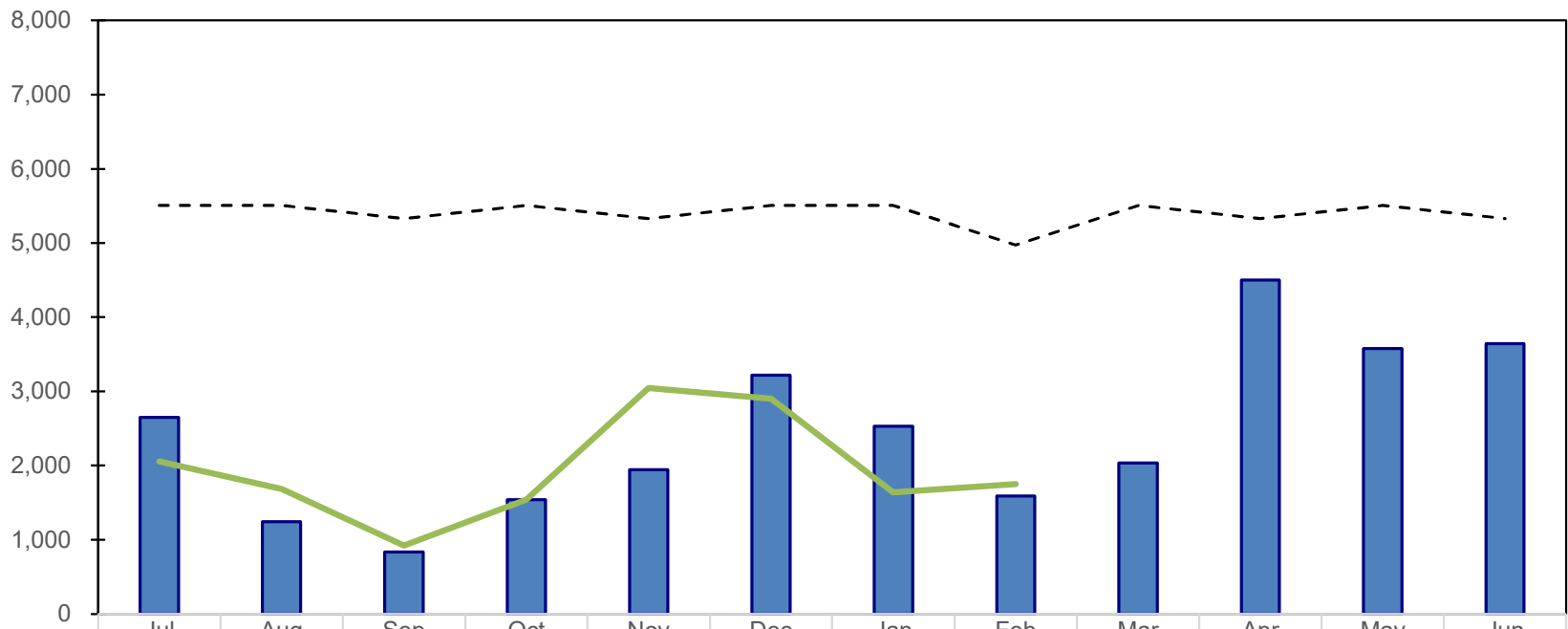
(2) See Current Month.

(3) GT produced 273 MWh (15% over Budget).

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

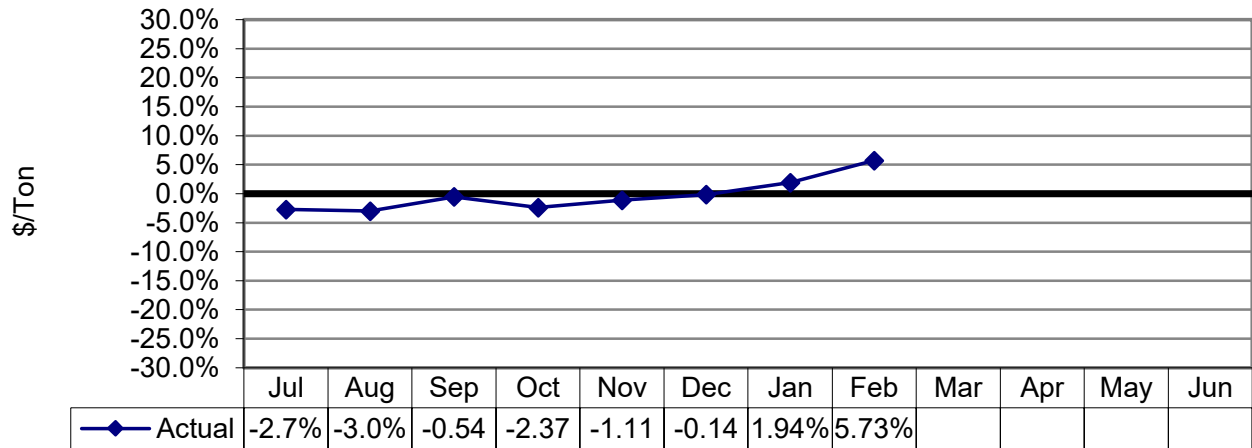


**Burlington Electric Department  
Winooski One - MWH Production  
FY 2022**

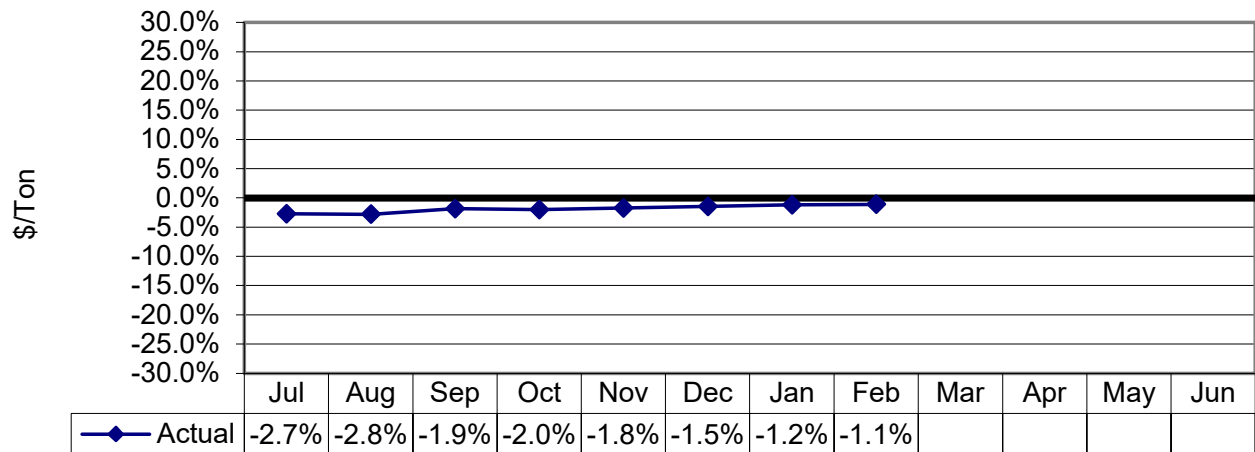


## Burlington Electric Department Fiscal Year 2022

### 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**  
**February - FY 2022**

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
<b><u>PURCHASED POWER:</u></b>							
Non-Energy (capacity)	100	111	(11)		887	1,039	(152)
<b>Energy:</b>							
Georgia Mountain Wind	251	365	(114)	(1)	2,207	1,925	281 (1)
Hancock Wind	344	306	38	(2)	2,276	1,564	712 (2)
VT Wind	246	305	(59)	(3)	1,701	1,666	34 (3)
Hydro Quebec	221	230	(9)	(4)	1,844	1,882	(39) (4)
Great River Hydro	156	156	0		1,331	1,330	1
In City Solar Generators	42	40	2		487	472	15
NYPA	5	7	(2)		49	67	(18)
VEPPI	0	0	0		0	0	0
ISO Exchange	(486)	(1,076)	589	(5)	(1,941)	(2,386)	445 (5)
Velco Exchange	0	(1)	1		0	(7)	7
Total Energy	778	332	447		7,953	6,515	1,439
Ancillary Charges	8	(1)	10		36	(10)	46
Miscellaneous	72	56	16		428	447	(20)
<b>Total Purchased Power Expense</b>	<b>959</b>	<b>497</b>	<b>462</b>		<b>9,304</b>	<b>7,991</b>	<b>1,313</b>

**Current Month:**

- (1) Production 46% over Budget.  
 (2) Production 4% over Budget. Rate 15% under Budget due to Financial Adjustment.  
 (3) Production 24% over Budget.  
 (4) Rate 4% over Budget.  
 (5) Energy Prices over Budget. McNeil (7%) and Wind (21%) Production over Budget.

**YTD:**

- (1) Production 13% under Budget. Lower CY21 production will result in lower REC revenues in FY22. (Fourth turbine back on line 11/18)  
 (2) Production 16% under Budget. Rate 18% under Budget due to Financial Adjustment. Lower CY21 production will result in lower REC revenues later in FY22.  
 (3) Production 2% under Budget. Lower CY21 production will result in lower REC revenues in FY22.  
 (4) Rate 2% over Budget.  
 (5) Energy Prices over Budget.

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

<b>Description</b>	<b>Budget</b>	<b>Actual</b>	<b>Variance</b>	<b>% Variance</b>	<b>*</b>
Labor-Regular	5,431,474	5,141,038	290,436	5%	
Labor-Overtime	339,630	359,107	(19,477)	6%	
Labor-Temporary	6,500	0	6,500	100%	a
Labor-Overhead	2,075,272	2,021,821	53,451	3%	b
Outside Svcs	1,560,323	1,112,858	447,465	29%	c
DSM (rebates & outside services)	1,331,111	1,231,700	99,411	7%	d
Materials & Supplies	558,279	410,889	147,390	26%	e
Insurance	484,541	458,939	25,602	5%	
A & G Clearing	(547,185)	(249,905)	(297,280)	54%	f
Other - RPS Compliance	447,593	638,190	(190,597)	43%	
Other	1,780,549	1,138,957	641,592	36%	g
<b>Operating and Maintenance Expense</b>	<b>13,468,088</b>	<b>12,263,594</b>	<b>1,204,494</b>	<b>9%</b>	

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

(b) See page 13.

(c) Timing of various items; GT & W1 (\$66,300), McNeil Plant (\$22,200), tree trimming (\$104,500) and REC Broker commission fees (\$43,400). Actual DPS billback expenses for rate case less than projected (\$148,600).

(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 (\$35,300), McNeil Plant (\$38,600) & Safety (\$17,300).

(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; Training (\$48,000), Transportation Clearing (\$62,800), Building Clearing, (\$52,300), Dues & Fees (\$17,400), Utilities (\$44,700) and Uncollectible Accounts (\$72,500).

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

<b>Labor - Overhead</b>	<b>(000's)</b>				
	<b>Budget</b>	<b>Actual</b>	<b>Variance</b>	<b>%</b>	
Pension	\$1,013	\$953	\$60	6%	(a)
Medical Insurance	1,002	970	32	3%	(b)
Social Security Taxes	628	547	81	13%	(a)
Workers Compensation Ins.	229	234	(5)	-2%	(b)
Dental Insurance	62	56	5	9%	(b)
Life Insurance	14	13	2	12%	(b)
	<b>\$2,947</b>	<b>\$2,773</b>	<b>\$174</b>	<b>6%</b>	

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

		Current Month			Year - To - Date		
	Ref	Budget	Actual	Variance	Budget	Actual	Variance
<b>Operating Revenues</b>							
Sales to Customers	p.3	3,996	3,928	(69)	33,109	33,130	22
Other Revenues		292	197	(95) (a)	2,513	2,018	(495) (a)
Total Operating Revenues		4,288	4,124	(164)	35,622	35,148	(473)
<b>Net Power Supply</b>	p.6	792	746	46	15,307	13,825	1,482
<b>Operating Expenses</b>							
Operating and Maintenance	p.12	1,616	1,365	252	13,469	12,264	1,205
Depreciation & Amortization		501	510	(9)	4,005	4,083	(78)
Gain/Loss on Disp of Plant		148	125	23	291	241	50
Revenue Taxes		52	53	(1)	384	381	3
Property Taxes Winooski One		42	41	1	337	330	7
Payment In Lieu of Taxes		239	190	50 (b)	1,914	1,508	405 (b)
Total Operating Expenses		2,599	2,284	315	20,399	18,807	1,593
<b>Other Income and Deductions</b>							
Interest/Investment Income		4	5	1	36	41	5
Dividends		372	364	(9)	2,905	2,885	(20)
Customer Contributions/Grant Proceeds		1	102	102 (c)	1,790	186	(1,604) (c)
Other		0	(9)	(9)	27	(16)	(43)
Total Other Income & Deductions		377	463	86	4,758	3,096	(1,662)
<b>Interest Expense</b>		201	189	12	1,593	1,541	51
<b>Net Income</b>		1,074	1,368	294	3,080	4,071	991

**Current Month:**

(a) Energy Efficiency Program cost reimbursement was less than planned, \$85,500.

(b) Actual includes city reappraisal.

(c) Actual includes grant proceeds, \$83,000.

**Year - To - Date:**

(a) Energy Efficiency Program cost reimbursement was less than planned, \$422,000.

(b) See current month.

(c) Budget assumed \$750,000 of ARPA funds in July and customer contributions for Shelburne Road roundabout relocation, \$616,700, UVM LCOM project, \$116,200, and Champlain Pkwy, \$303,800. Actual includes other billable and grant proceeds of \$126,600.

**Burlington Electric Department  
Capital Projects - FY22**

	<b>\$000</b>			
	<b>Full Year Budget</b>	<b>Budget</b>	<b>February Actual</b>	<b>Variance</b>
<b>McNeil (BED 50% Share)</b>				
ESP Mechanical Field Rebuild	225		46	(46)
Routine Station Improvements	107	64	2	62
Backup Boiler Feed Pump/Insurance	103	103	132	(29)
Turbine Control System Upgrade/Insurance	37	9		9
Augers Replaced	30	30		30
Elevator Geared Equipment & Controls	25			0
Turbine Extraction Valve Actuators	20	20		20
Belt Fire Suppression/Insurance	17	17		17
Cooling Tower Fill Drift Eliminators	15			0
Disc Screen	15			0
Chemical Feed Pump Replacement/Upgrade	15			0
ESP Wire Replacement	13		1	(1)
Safety Valve Replacements	12			0
GSU Transformer	11	11		11
Analyzer Upgrades for Chemical Treatment	9	9	11	(2)
Char Ash Conveyor	10	10		10
Station Tools & Tool Boxes	7	4		4
DC Lube Oil Pump Contractor Upgrade/Insurance			2	(2)
Other	24	22	1	21 (a)
Total McNeil Plant	697	300	195	105
 (a) Budget includes energy efficiency improvements, farmhouse repair, probe ladder, perimeter fence upgrade, radio upgrades, rigging equipment and office equipment. Actual includes computer replacement.				
<b>Hydro Production</b>	221	212	13	199 (a)
 (a) Budget assumed Unit #3 bearing replacement, \$125,000. Project will not happen in this FY.				
<b>Gas Turbine</b>	98	98	14	85
Total Production Plant	1,017	610	222	389
 <b>Other</b>				
Direct Current Fast Charger (Level 3)	85	68		68
Packetized Energy	52	42		42
Public Level 2 EV Charge	33	27		27
Policy & Planning Research & Dev	21	17		17
Total Other	192	153	0	153
 <b>Transmission Plant</b>				
VT Transco Investment	1,150	1,150		1,150 (a)
Total Transmission Plant	1,150	1,150	0	1,150

(a) Deferred.

**Burlington Electric Department  
Capital Projects - FY22**

	<b>\$000</b>			
	<b>Full Year Budget</b>	<b>Budget</b>	<b>February Actual</b>	<b>Variance</b>
<b>Distribution Plant-General</b>				
<b>Aerial</b>				
Scarff Avenue Rebuild	701	455	626	(170)
Appletree Point Rebuild	258	258	5	254
1L4 P3149 to P3169 Reconductor	162	122	26	96
1L4 P3132 to P3149 Reconductor	140	140	94	46
Replace Condemned Poles	118	18	3	15
Replace Recloser 252R	48	48	0	47 (a)
227S Automation	47	47	25	22
Ferguson Ave, Wells St			39	(39) (b)
Rebuild 3L4 Long Spans			32	(32) (b)
Rebuild 1L4 Long Spans PH2			10	(10) (c)
3L1 Circ P396 to P404			6	(6)
3L1 Circ-Neu P156 to P1563			42	(42)
Total Aerial	1,474	1,088	907	181

(a) Revenue bond project, changed to 234R-North Avenue.

(b) FY21 project that was delayed. Work is now complete.

(c) FY21 project that was delayed. Estimated total is \$36K.

**Underground**

Replace Switch (756,757,758,730-Battery/Pearl St)	204		5	(5)
Replace Switch (303,307,308,309-Main/S Prospect)	137		2	(2)
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)
Replace 234R - North Avenue			46	(46) (c)
Total Underground	341	0	154	(154)

(a) Additional work from FY21 project due to issues with new switch.

(b) New project added. Work is complete.

(c) Revenue bond project, changed from 252R. Project is complete.

**Customer Driven/City Projects**

Champlain Parkway C6	644	322		322 (a)
Champlain Parkway C6 (CAFC)	(608)	(304)		(304) (a)
UVM LCOM Project (Larner College of Medicine)	391	391	180	211
UVM LCOM Project (CAFC)	(116)	(116)		(116)
UVM Athletic Facility	101	101	17	84
Shelburne St Roundabout Relocation	630	630	24	606
Shelburne St Roundabout Relocation (CAFC)	(617)	(617)		(617)
Total Underground	425	407	221	186

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

**Burlington Electric Department  
Capital Projects - FY22**

	<b>\$000</b>			
	<b>Full Year Budget</b>	<b>Budget</b>	<b>February Actual</b>	<b>Variance</b>
<b>Other</b>				
SCADA Networking Upgrade/Firewall Replacement	296	296	143	152
Distribution Transformers	194	118	308	(190)
SCADA Network Switches Replacement	98	34		34
Field Device Network Upgrades	67	67	14	53
Communication Equipment Emergency Repair	27	19	2	17
SCADA Servers Virtualization	0		6	(6)
Other			19	(19)
Total Other	682	534	492	41
Total Distribution Plant-General	2,922	2,029	1,775	254
<b>Distribution Plant - Blanket</b>				
Lighting	159	81	157	(76)
Lighting (Rebate)	(6)	(3)		(3)
Underground	194	108	156	(49)
Underground (CAFC)			(42)	42
Aerial	106	70	51	19
Aerial (CAFC)			(17)	17
Meters	125	117	10	107
Gas Detectors	4		4	(4)
Tools & Equipment - Distribution/Technicians	30	20	20	(0)
Substation Maintenance	16	11		11
Replace Corroded Vista CT's/PT's	20	15	5	10
Substation-Temperature Alarms	8	8		8
Total Distribution Plant - Blanket	655	427	346	82
Total Distribution Plant	3,577	2,456	2,120	336

**Burlington Electric Department  
Capital Projects - FY22**

	<b>\$000</b>			
	<b>Full Year Budget</b>	<b>Budget</b>	<b>February Actual</b>	<b>Variance</b>
<b>General Plant</b>				
Computer Equipment/Software	1,806	1,132	573	559 (a)
Vehicle Replacement	165	50	0	50 (b)
Buildings & Grounds	55	55	31	24 (c)
Other	8	8	0	8 (d)
<b>Total General Plant</b>	<b>2,034</b>	<b>1,244</b>	<b>604</b>	<b>640</b>

(a) Budget includes IT Forward, \$928,670, Lake Street Network switch replacement, \$37,000, OpenWay upgrade, \$24,600 and Pole Mount Routers, \$101,3000. Actual includes IT Forward, \$470,085 Shared Data Center, \$9,400 and Pole Mount Routers, \$13,700.

(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 FY24.

(c) Budget includes fence for solar array, \$19,000, Dispatch AC, \$14,000, security cameras, \$13,000, sign replacements, \$5,000 and ID printer, \$4,000. Actual includes dispatch AC relocation, new heat pump at GT for dispatch, ID printer replacement and chair for system operations. Fence for solar array has been delayed to FY23.

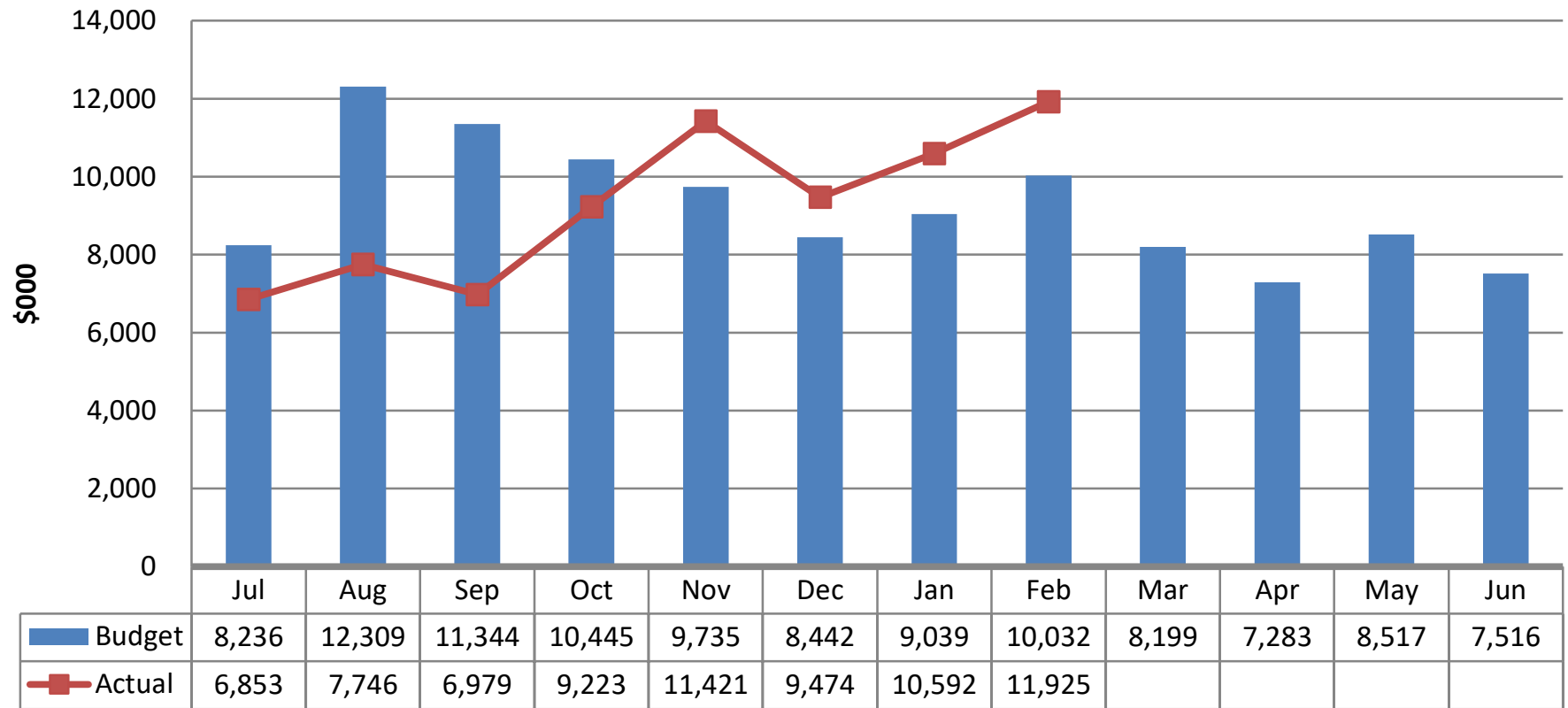
(d) Budget includes training yard materials & AED purchase for Pine Street.

<b>Sub-Total Plant</b>	<b>\$7,970</b>	<b>\$5,615</b>	<b>\$2,946</b>	<b>\$2,669</b>
Add: CAFC* reclass to "Other Income"	1,346	1,040	59	980
<b>Total Plant</b>	<b>\$9,316</b>	<b>\$6,654</b>	<b>\$3,005</b>	<b>\$3,649</b>

\* Customer Advances (Contributions) for Construction.



## Operating Cash - FY 2022 Monthly Ending Balance





**City of Burlington**  
**Summary Proposal of Terms and Conditions**  
**For \$5,000,000**  
**Secured Credit Facility**

**March 24, 2022**

The proposed terms and conditions are provided for discussion purposes only and do not constitute an offer, agreement or commitment to lend. The actual terms and conditions upon which the Bank might extend credit to the Borrower are subject to the satisfactory completion of due diligence, formal credit approval, satisfactory review of documentation and other such terms and conditions as are determined by the Bank and, as such, are not binding by acceptance of Borrower.

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**Overview of Credit Facility**

<b><u>Credit Facility:</u></b>	\$5,000,000 Revolving Credit Facility.
<b><u>Use of Proceeds:</u></b>	Revenue Anticipation Note that provides working capital financing for Burlington Electric Department.
<b><u>Borrower:</u></b>	City of Burlington.
<b><u>Lender:</u></b>	KeyBank National Association.
<b><u>Closing Date:</u></b>	TBD
<b><u>Availability:</u></b>	Amounts under the Credit Facility may be drawn, repaid and reborrowed through Maturity, subject to compliance with the terms and conditions of the loan documentation.
<b><u>Maturity:</u></b>	Two years from the date of closing.
<b><u>Repayment:</u></b>	Interest due monthly on all principal outstanding.
<b><u>Security:</u></b>	The Credit Facility constitutes a General Obligation of the Borrower that is secured by the full faith and credit of the Borrower.
<b><u>Interest Rates:</u></b>	A floating rate equal to the Daily SOFR Rate (the "index") plus 100 basis points (the "Margin") plus 10 basis points Credit Spread Adjustment.

"Daily SOFR" means, for any day (a "SOFR Interest Day"), an interest rate per annum (rounded in accordance with KeyBank's customary practice) equal to the greater of (a) the secured overnight financing rate ("SOFR") for the day that is five Business Days prior to (i) if such SOFR Interest Day is a Business Day, such SOFR Interest Day, or (ii) if such SOFR Interest Day is not a Business Day, the Business Day immediately preceding such SOFR Interest Day, and (b) 0.25% (the "Floor"), with any change in Daily SOFR due to change in SOFR being effective from and including the effective date of such change in SOFR without notice to the Borrower.

SOFR for any Business Day is currently published by the Federal Reserve Bank of New York on its website (currently at <http://www.newyorkfed.org>) at approximately 8:00 a.m. (New York City time) on the immediately succeeding Business Day. SOFR published on 03/24/22 for the preceding Business Day is 0.27%.

The SOFR option will include an interest rate floor of 0.25%. If the Daily SOFR Rate is greater than or equal to the Floor, there is no change to calculation of the interest rate indicated above. Where the Daily SOFR Rate is less than the indicated Floor, the Floor will be used in place of the Daily SOFR Rate and then the Margin will be added to the Floor to produce the applicable interest rate on the Facility.

In the event SOFR is discontinued or no longer deemed an appropriate reference rate, SOFR will be replaced with an alternative thereto, including any necessary adjustment to normalize the new reference rate to the discontinued SOFR reference rate, in accordance with customary SOFR discontinuation language to be included in the loan documentation. Lender does not warrant or accept any responsibility for and shall not have any liability with respect to the (1) SOFR determination, (2) the occurrence of a trigger to cause transition away from SOFR, or (3) the adequacy of any replacement of SOFR.

Any replacement of SOFR with an alternative as discussed above will also have a commensurate floor, normalized to the new reference rate

The Bank will charge a 10 basis point annualized unused fee to be paid quarterly in arrears.

**Origination Fee:** Waived.

**Default Pricing:** Upon the occurrence and during the continuance of any Event of Default, all interest rates will be set at 4% per annum above the otherwise applicable rate.

**Interest Payments:** Interest will be calculated on an actual/360 day basis and paid monthly.

**Conditions  
Precedent:**

Customary for facilities of this type, including, but not limited to:

- Satisfactory documentation, including without limitation, satisfactory representations and warranties and opinions of counsel.
- Borrower would obtain all required regulatory approvals and such approval would be in a form acceptable to the Bank.
- The Bank's satisfaction with the terms and conditions of the Borrower's other debt obligations.
- Satisfactory evidence of solvency.

**Reporting**

**Requirements:**

To include periodic financial reporting, including, but not limited to, draft audited annual financial statements within 180 days of fiscal year end, certified annual audited financials within 270 days of fiscal year end, annual budgets within 120 days of fiscal year end, and other information that may from time to time be requested by the Bank.

**Other Terms**

**and Conditions:**

Normal and customary provisions for facilities of this type.

**Events of Default:**

Usual for a Facility and transaction of this type and others reasonably specified by the Lenders, including without limitation, nonpayment of principal, interest, fees or other amounts, violation of covenants, breach of representations and warranties, cross-defaults to other indebtedness, certain bankruptcy and insolvency events, material judgments, actual or asserted invalidity of any loan documents or security interests, change of control defaults, and other defaults as will be set forth in the Credit Agreements. The Bank's obligation to continue to advance will be suspended if there is a default.

**MAC Clause:**

The Material Adverse Change clause will be removed from the Credit Agreement.

**Increased Costs,**

**Change of**

**Circumstances:**

The Credit Agreement will contain certain customary provisions protecting the Lender in the event of unavailability of funding, capital adequacy requirements, reserves, increased costs and funding losses.

**Governing Law:**

The State of Vermont

**Expenses and**

**Indemnification:**

Borrower will pay all reasonable fees and expenses incurred by the Bank as it relates to this credit facility. These will include, without limitation, legal, and other direct out-of-pocket expense. The Bank will provide an estimate of its legal council fees at the time of Commitment.

**Expiration:**

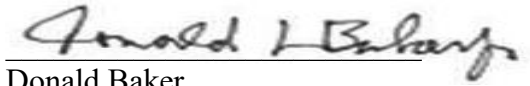
This shall expire in its entirety at 5:00 p.m. Eastern Standard Time on April 29, 2022.

**Acceptance:**

Your signature below affirms your request that the Bank further develop this Proposal consistent with the terms and conditions reviewed herein.

We appreciate your consideration and look forward to a continuation of our mutually beneficial relationship.

**KeyBank, National Association**



Donald Baker  
Senior Relationship Manager & Market President

Accepted:

**Burlington Electric Department**

By: \_\_\_\_\_  
Duly Authorized Representative

Date: \_\_\_\_\_

# Burlington Electric Assistance Program



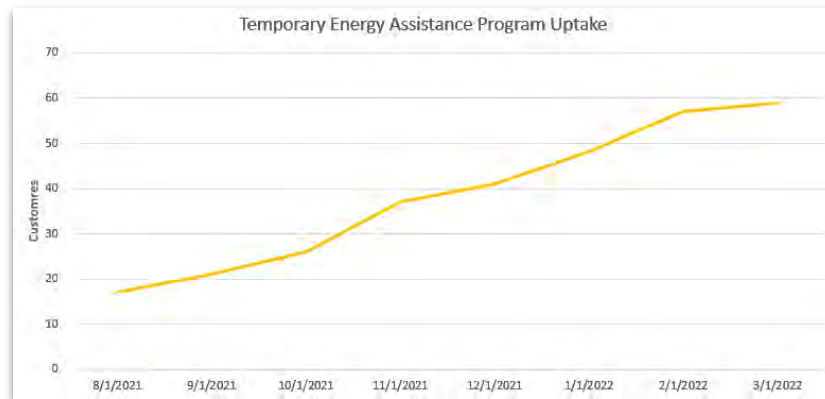
*BED Proposal*



# Temporary Energy Assistance Program

## Burlington Electric

- Running from August 1, 2021 through June 30, 2022
- 7.5% discount on electric bill for residential customers (offsetting rate increase)
- Eligibility based on participation in either:
  - State of Vermont Fuel Assistance Program (185% of FPL) or
  - Housing Choice Voucher (Section 8) Program (50% of median income for the county = \$47,950 for 4-person HH)
- Current Participants: 59 customers (0.5% eligible adoption)
- Average participant's monthly bill:
  - 470 kWh / month<sup>1</sup>
  - \$79.19 / month (before credit)
  - \$5.94 / month average credit



<sup>1</sup> This program does not have a full summer of billing data, electric bills may be higher due to air conditioning during these months



# Other Electric Assistance Programs

## Vermont Gas Systems

- 20% discount on natural gas bills for residential customers
- Eligibility determined by the Vermont Department for Children and Families (DCF)<sup>1</sup>
- Income threshold  $\leq$  185% of the Federal Poverty Level

## Green Mountain Power

- 21.5% discount off the energy and customer charge (TOU option)
- Eligibility determined by the Vermont Department for Children and Families (DCF)<sup>1</sup>
- Household Income Threshold  $\leq$  150% Federal Poverty Level

## Austin Energy (TX)<sup>2</sup>

- \$10 per Month (Customer Charge)
- Eligibility determined by the City of Austin
- Income threshold  $\leq$  200% Federal Poverty Level

## Sacramento Municipal Utility District (CA)<sup>3</sup>

- Tiered monthly discounts that reduce customer and energy charges
- Eligibility depends on household income relative to the Federal Poverty Level

### Monthly maximum EAPR discount

Amounts are based on how your income compares to the Federal Poverty Level and can include a discount on energy use and a \$10 System Infrastructure Fixed Charge discount.

Federal Poverty Level	2019	2020	2021	2022
0% - 50%	\$50	\$60	\$70	\$70
>50% - 100%	\$40	\$41	\$42	\$42
>100% - 150%	\$30	\$25	\$20	\$20
>150% - 200%	\$30	\$20	\$10	\$10

<sup>1</sup> VTDCF: <https://dcf.vermont.gov/benefits/eap>

<sup>2</sup> Austin Energy [Customer Assistance Program](#)

<sup>3</sup> SMUD [Energy Assistance Program Rate](#)





# Burlington Water Resources

## Water Resources Assistance Program (WRAP)<sup>1</sup>

- Waived fixed monthly meter fee (\$7.95) which is roughly 10% bill discount for a typical 4 person HH<sup>2</sup>
- Income threshold  $\leq$  200% of the Federal Poverty Level
- Eligibility determined by other programs in Burlington with eligibility at or below 200% of FPL (list below):
  - Head Start Reach Up (TANF), Supplemental Security Income (SSI), 3SquaresVT (SNAP), National School Lunch Program, WIC, Lifeline, Vermont Crisis Fuel, Medicaid, CHIP, Housing Choice Voucher Program, Public Housing Program, CEDO's Access Modification Program, CEDO's Home Repair Program, Vermont Fuel Assistance (LIHEAP), Vermont Gas Energy Assistance

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<sup>1</sup> WRAP: <https://www.burlingtonvt.gov/water/WRAP>

<sup>2</sup> Champlain Water District water usage - <https://www.champlainwater.org/178/Historical-Rates-Impact-on-Average-Annual>



# BEAP Recommendation

## Assistance - 12.5% discount for eligible customers

- Existing participants will all be better off under this proposal
- Structurally consistent with GMP/VGS
- Assistance scales with usage (either due to seasonality or electrification changes)
- Would continue to offset 2021 rate increase and a portion of any subsequent adjustments

## Eligibility Criteria Unchanged - 185% of Federal Poverty Level (FPL)<sup>1</sup>

- All current participants will transition “automatically”
- Continued use of external qualification/verification
- Consistent with VGS threshold

## Shown as a Negative Surcharge (i.e. discount) on the electric bill

- Gross consumption and gross bill will still be shown
- Impact of assistance will still be shown along with net bill owed
- Simplifies assessment of program cost impacts

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<sup>1</sup> GMP ≤ 150%, VGS ≤ 185%, DPW ≤ 200%



# BEAP - Impact Analysis

## Eligible Customers × Assistance × Adoption

**Customer Eligibility** is reflected by the income distribution of Burlington. As the % of Federal Poverty Level (FPL) increases, more customers become eligible to take part in the BEAP.

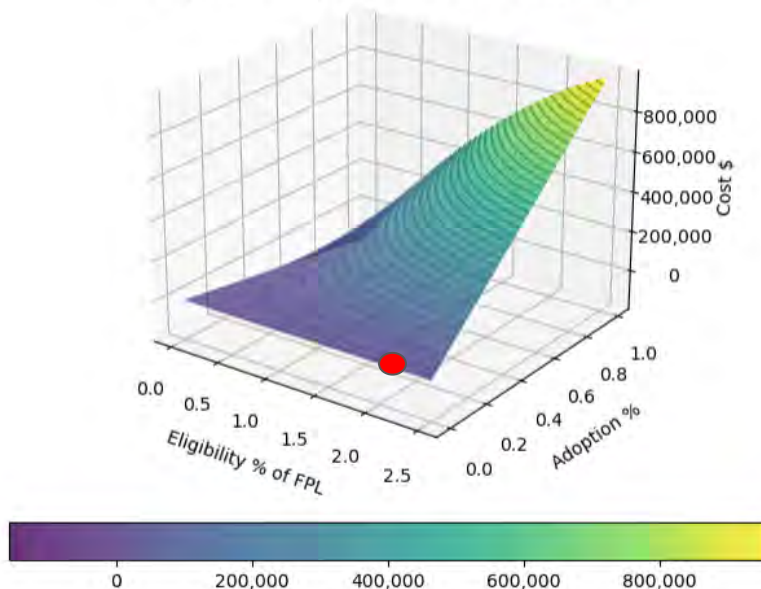
**Assistance** is easier to increase in the future and change the criteria to make more customers eligible than to change either factor in the other direction to manage the impact of the program

**Adoption** is an unknown variable, but can be judged by BED's temporary assistance program along with uptake in other assistance programs.<sup>1</sup>

<sup>1</sup> % of Eligible Customers: BED: 0.5%, GMP: 25%  
% of Residential Customers: BED: 0.3%, GMP: 5%  
[GDS 2019 Report](#) indicates an enrollment range of 5-15% of all residential customers

### BEAP Annual Expense

12.5% Bill Assistance  
Approximately \$9.9/month per customer

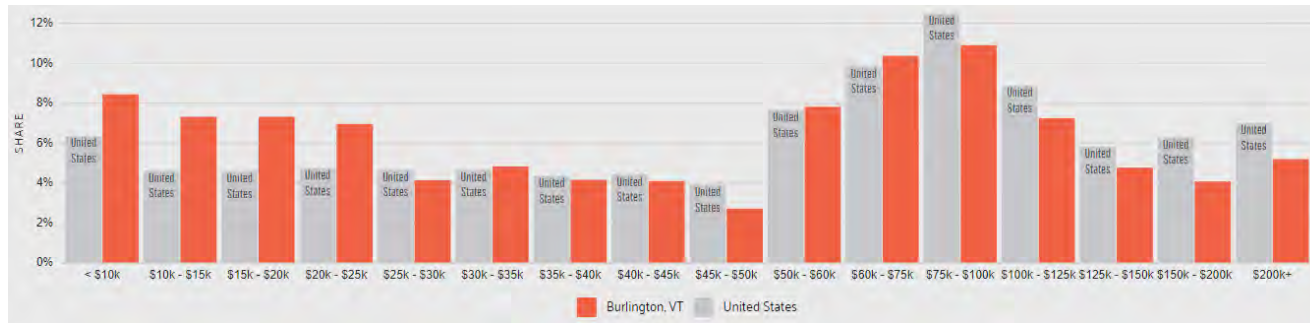


● Current adoption of the temporary energy assistance program



# BEAP - Assumptions

- Burlington Household Income Distribution based on 2018 Census data<sup>1</sup>
- 2021 Federal Poverty Rate for Household of 2.2: \$18,136
- Adoption Percentages: low 5%, medium 14% and high 25% of Eligible Customers
- Electricity Usage based on BED's Temporary Energy Assistance Program



<sup>1</sup> American Community Survey for 2018 - annual survey conducted by the US Census performed annually, <https://datausa.io/profile/geo/burlington-vt/>

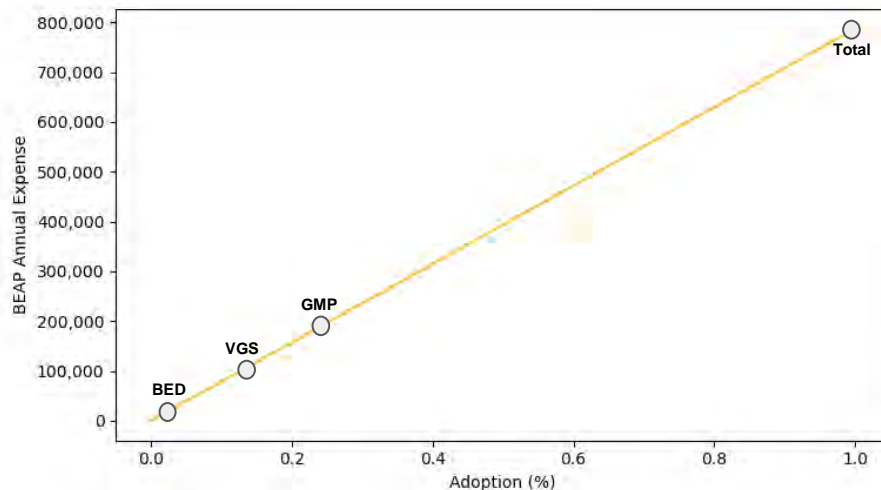
<sup>2</sup> GMP EAP Report: <https://publicservice.vermont.gov/sites/dps/files/documents/GDS%20Assessment%20of%20the%20GMP%20Energy%20Assistance%20Program%20Nov%202019.pdf>



# Estimated BED Economic Impact

- Program assistance will represent a loss of retail revenues (effectively a cost to all customers)
- Current economic impact - \$0 due to use of ARPA funds
- Expected impact annually - \$110k (14% adoption by eligible customers)
- Maximum impact annually at 100% participation of estimated eligible customers ~ \$787k
- Unspent ARPA funds may be available to support program initially

Adoption Scenario	Annual Impact (\$)
.05% (BED)	\$ 39 k
14% (VGS)	\$ 110 k
25% (GMP)	\$ 197 k
100% (Total)	\$787 k





## Resolution

The commission approves BED seeking approval for an 18-month pilot energy assistance program, based on a 12.5% discount to BED charges for residential non-net metering customers whose household income is less than or equal to 185% of the Federal Poverty Level, to take effect on or after July 1, 2022.

### **BED will monitor and report on:**

- Participation (customers and percentage of estimated potential participation)
- Cost impacts
- Potential revisions to either assistance or eligibility

### **Executive Session Wording**

1. I move to find that premature general public knowledge of the upcoming FY23 Draft Budget with the Commission would clearly place the Burlington Electric Department at a substantial disadvantage per Title 1, Section 313 (a)(1) of the Vermont Statutes.
2. I move that the Commission enter into executive session with Burlington Electric Department Staff to discuss the FY23 Budget with the Commission under the provisions of Title 1, Section 313(a) (1) (A) of the Vermont Statutes.

### **Renewal of BED's Line of Credit with Key Bank**

I make a motion to authorize Burlington Electric Department to enter into the revolving line of credit with KeyBank.

### **BED Low-Income Rate**

I make a motion to adopt the BED Low Income Rate as presented and recommend adoption of this rate to the Board of Finance and City Council.