

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

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

+1 802-489-6254

Conference ID: 636 059 465#

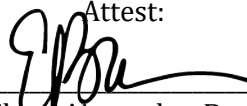
LARA BONN
MICHELLE HOBBS
SCOTT MOODY, CHAIR
ANDY VOTA
BETHANY WHITAKER, VICE CHAIR

AGENDA

**Regular Meeting of the Board of Electric Commissioners
Wednesday, February 12, 2025 – 5:00 PM**

1. Agenda
2. Minutes of the January 8, 2025 Meeting
3. Public Forum
4. Commissioners' Corner (Discussion)
5. GM Update
6. Financial review (Discussion) – Emily Stebbins-Wheelock
7. Battery Storage (Discussion and Vote)
8. McNeil RFP (Discussion and Vote)
9. Executive Session – McNeil Commercial Items
10. Commissioners' Check-In

Attest:



Elena Alexander, Board Clerk

If anyone from the public wishes to speak during the public forum portion of the Commission Meeting and/or wishes to be present for the Meeting of the Board of Electric Commission via Microsoft Teams, please email ealexander@burlingtonelectric.com to receive a link to the meeting.

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

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

Wednesday, January 8, 2025

The regular meeting of the Burlington Electric Commission was convened at 5:03 pm on Wednesday, January 8, 2025, at Burlington Electric Department, 585 Pine Street, Burlington, Vermont, and on Microsoft Teams.

Attendance

- Channel 17 was present to record this meeting.
- Commissioners Lara Bonn, Michelle Hobbs, Scott Moody, Andy Vota, and Bethany Whitaker were present.
- Staff members Elena Alexander, Paul Alexander, Nate Gunesch, Mike Kanarick, Munir Kasti, Ajey Pandey, Darren Springer, and Emily Stebbins-Wheelock were present at 585 Pine St.
- Staff members Rodney Dollar, James Gibbons, and Amber Widmayer were present via Microsoft Teams.
- Public member Pike Porter was present via Microsoft Teams.

Agenda

- There were no changes to the Agenda.

Meeting Minutes

- Commissioner Vota made a motion to approve the minutes of the December 11, 2024, Commission Meeting; Commissioner Hobbs seconded the motion. Vote: 4 ayes 0 nays (Commissioner Bonn arrived after the vote).

Public Forum

- No members of the public were present during this time.

Commissioners Corner

- There were no comments at this time.

General Manager's Update

General Manager Springer provided an update on the following:

- RFP issued for up to a 5-megaWatt battery storage project, with multiple bids being considered.

- Collaboration with the Department of Permitting and Inspections on the Energy Benchmarking Ordinance being implemented for commercial buildings that are 10,000 – 49,999 square feet.
- The Marketplace Garage now has a new public Level 3 fast charger up and running.
- The EV Charging Grant agreement has been submitted; we are awaiting response from the Federal Highway Administration.
- Today BED announced the new enhanced rebates and incentives for 2025 focusing on more options for low-income customers, including increased e-bike rebates, EV rebates, electric mower rebates and incentives for heat pumps.
- Two pilot programs have been introduced: one for a heat pump bill credit related to Dynamic Organics and another Moduly, a modular battery system that requires no installation.

FY25 November Financials

Ms. Stebbins-Wheelock presented the November results:

- November net income was \$824,000, falling short of the budgeted \$883,000 by nearly \$60,000.
- Other revenues were \$59,000 less than budget due to lower EEU reimbursements and renewable energy certificate revenues were \$66,000 less than budget.
- Net power supply expenses were over budget by \$50,000. McNeil production was 14% higher than budget, which resulted in higher fuel costs by \$24,000; purchased power expenses were unfavorable by \$52,000; and transmission costs were favorable by \$26,000.
- Other operating and maintenance expenses were favorable to budget by \$134,000, despite the error in health insurance expenses which will be corrected starting with January results.
- Other income was \$26,000 less than budget.
- Year-to-date net income is \$2.5 million against a budget of \$3.2 million, with a \$736,000 shortfall worsening slightly this month.
- As of November, the Department has spent 27% of its capital budget for the year, with Generation spending 44%, including on the Winooski Dam project. Related to Distribution capital projects, several switches required for the 2025 projects have arrived. Major IT projects include the new SCADA replacement which should go live within the next week and the CIS, which should kickoff within the next two weeks.
- Operating cash balance as of November 30, 2024 was \$11.16 million, exceeding the budgeted \$10.765 million by about \$400,000 and equating to 146 days cash on hand considering the \$10 million Line of Credit.
- Debt Service Coverage Ratio of 4.96, Adjusted Debt Service Coverage Ratio of 1.30.
- General Manager Springer pointed out that December and January have had very high energy prices. Day-ahead prices are currently running \$200+ per day in comparison to \$30-\$40 per day. McNeil has been running steady through these times and we are benefitting

from the higher energy exchange rate with ISO. Ms. Stebbins-Wheelock added that the prices are generally in line with the average megaWatt hour prices that we've assumed in the budget for these winter months.

- Mr. Gibbons expressed that energy prices are based on Boston day temperatures of around 20 degrees. These will increase significantly if temperatures drop in to negative digits.

Moduly battery Storage pilot contract.

- The Moduly battery storage pilot program aims to provide residential customers with modular UL-listed storage devices.
- Units run on a 110V outlet and are suitable for renters and homeowners with the ability to discharge energy back to the circuit during peak periods.
- Each unit includes an inverter with stackable modular 2.5 kW batteries.
- BED will acquire 10 units:
 - 6 – 5.0 kW units
 - 4 – 7.5 kW units
- Units will be loaned to customers for the test period (rotating basis) and will return to BED upon completion of the pilot program at which time can be used in reducing BED's own load.
- The program includes a one-time capital expense of \$73,000 for the devices, with an annual operating cost projected at \$10,000 for years 2 and 3. Operating costs would be capped at \$10,000 if BED decides to expand into a larger program.
- BED will have access to Moduly's web services for control of the devices for peak reduction.
- Devices include outlets that can be utilized in times of power outages.
- Commissioner Hobbs mentioned the risk of battery fires. General Manager Springer confirmed that the Department has been discussing lithium battery risk with the Fire Department and has been exploring whether we can support the Fire Department with equipment to better address lithium battery fires.
- Commissioner Bonn thanked BED for bringing this to the community as a different type of modularization.

Commissioner Whitaker made the motion:

"I move that the General Manager shall have the authority to execute with Moduly a power supply related contract, and a related non-disclosure agreement, substantially in the form provided to the Commission, with a term not to exceed five years, for a battery energy storage pilot program."

Commissioner Bonn seconded the motion. Vote: 5 ayes 0 nays

Dynamic Organics Contract for Building GIANTS

- A contract with Dynamic Organics will integrate building management systems for HVAC controls.
- The contract includes:
 - NDA covering the customer and BED information per BED's privacy policy.
 - 45 commercial/industrial enrolled sites.
 - Onboarding and enrolling support.
 - Design of the building controls system modifications and related documentation.
 - Building controls system programing.
 - Integration of customers system with Dynamic Organics platform.
- Dynamic Organics has track record from initial pilot project
 - 2 large commercial buildings
 - 22 retail customers
 - BED Pine Street Office
- Contract Cost
 - \$15,111 per enrolled site totaling \$810,000
 - Quarterly contract fees (\$7,500 year 1, \$10,000 year 2 and \$15,000 year 3)
 - 50% Federal grant matching funds
- Enrollment is anticipated for June 2025.
- Commissioner Whitaker and Bonn requested regular updates on the program including, who is enrolling, demographics, load management and peak production. Mr. Gibbons agreed to quarterly reporting with the flexibility of more/less frequent as time goes on.

Commissioner Hobbs made the motion:

"I move that the General Manager shall have the authority to execute with Dynamic Organics a power supply related contract, and a related non-disclosure agreement, substantially in the form provided to the Commission, with a term not to exceed five years, for flexible load management services."

Commissioner Vota seconded the motion. Vote: 5 ayes 0 nays

Commissioners' Check-In

Commissioner Whitaker asked for an update on the confidential negotiations of the McNeil plant. General Manager Springer agreed to add an executive session for the McNeil discussion at the February meeting.

Adjourn

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

Hobbs, Commission vote; 5 ayes 0 nays.

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

Minutes drafted by Elena Alexander, Board Clerk and edited by Emily Stebbins-Wheelock, CFO & Manager of Strategy and Innovation

Attest: _____

Elena Alexander, Board Clerk



To: Burlington Board of Electric Commissioners

From: Darren Springer, General Manager

Date: February 7, 2025

Subject: January **2025 Highlights of Department Activities**

General Manager – Darren Springer

- **Federal Grants Uncertainty** – BED’s contacts in FWHA related to our \$4.85 million EV charging grant have gone silent per the day 1 executive order, and our funding is on hold. We are staying in touch with Senator Sanders Office and State AOT contacts as well as national coalition groups working on these issues as we wait to learn more. BED’s other major competitive grant, to support heat pumps and end use demand manage for electric heating technologies, was already obligated and we are submitting reimbursements and waiting to see how the federal government processes them, following the 90 day freeze. Lastly, Congressionally Directed District Energy funds from Senator Leahy (\$5 million) appear not to be significantly impacted at this time. BED has been notified on all grants that any further community benefits work or environmental justice related work will no longer be eligible for reimbursement under the Trump Administration.
- **Grant Award** – BED is pleased to be selected through the state’s VW Settlement Funds for a grant award to procure a second all electric bucket truck for our lineworkers, with matching funds from our revenue bonds. BED was first in Vermont to acquire an all electric bucket truck for our crew, and this will add a second electric bucket truck to our fleet. Grant acceptance items will be at Board of Finance and City Council on 2/10.
- **Expanded efficiency program flexibility** – The Legislature may consider options to expand flexibility for efficiency programs (including BED’s) to focus greater amount of resources on emissions reduction projects as opposed to electric efficiency. We will work with Efficiency Vermont on concepts, which would build on pilot programs we’ve had and supported for the last several years. Testimony begins on 2/12 in Senate Natural Resources and Energy Committee.

Center for Innovation – Emily Stebbins-Wheelock

- Coordinating efforts to track and respond to federal and state funding opportunities; received NEPA approval for Charging & Fueling Infrastructure grant; worked with City to pre-register re direct pay incentive filing; and continuing to work with FEMA and VT Dept of Public Safety on grants for July 2023 and July 2024 flood damage at Winooski One.
- Continued sponsorship of IT Forward implementations.
- Coordinated review and updates of Vermont System Planning Committee representatives and procedures.

- Coordinating Policy & Planning and Finance team financial analysis to support McNeil joint owner negotiations.
- Coordinating REC process review for owned generation assets.

Finance & Billing

- Recruiting for Accounting Administrator position.
- Began FY26 budget development.
- Revised Travel & Expense policy approved by Labor Management Committee.
- Revised vehicle rates for billable work orders approved by Management.
- Continued work on RFP development for new financial information and work order management systems.
- Close out and reimbursement received for DPS Electric Vehicle Supply Equipment Grant.
- Continued work on updating credit card policy and an RFP for procurement card program.
- Attended American Public Power Association accounting trainings.

Information Services

- Survalent SCADA/ADMS project; phase three currently underway.
- BED hosted Department of Energy Idaho National Laboratory instructors for a two-day cybersecurity training. We had representation from 8 Vermont utilities and several other New England utilities.
- Customer Information System: BED and SpryPoint project officially kicked off on January 23rd. Data gathering and questionnaires are in progress. Expect significant team engagement during the month of February.
- Financial Information System RFP: work continues to document and develop requirements.
- Distributed Energy Resource Management System: The project team, with VPPSA and WEC, is developing technical requirements. An additional pre-RFP demo was completed in January.
- Budget development for FY26 is underway.
- Deployed a RMM (Remote Monitoring and Management) with patch, vulnerability, and remote support tools.
- Continued participation on the State of Vermont's Cybersecurity Advisory Board.
- Ongoing phishing and security testing of our users.

Policy & Planning

- McNeil efficiency contract review and negotiation.
- Began updating five-year forecast and budgeting.
- Preparation for Feb 2025 ISO-NE market changes.
- Start of legislative season – in-person monitoring of bills and proceedings.
- VELCO Utility Data Subcommittee meetings – data needs template.
- PUC approved 2025 EEC rate and initiated a subsequent proceeding.
- Submitted annual 5.200 (resource report) to DPS/PUC.
- Review of potential Canadian tariff implications.
- Large customer rate and project discussions.

- Net Metering REC aggregation qualification approved; clarification requested.
- Answered vendor questions re utility-scale storage RFP.
- Winooski One FERC relicensing study season prep and Public Safety Plan research.
- Continued work on Building GIANTS project; Dynamic Organics contract and C&I site visits.
- Reviewed multiple contracts.
- DERMS pre-RFP demos and informational utility calls.
- Addressed Engineering questions re: Moduly residential storage pilot.
- ISO-NE Planning Procedure meetings to respond to distributed resource data requests.
- Research into BED multi-family metering procedures.

Sustainability & Workforce Development

- Continued work on script for “heating and cooling” video, including role of heat pumps in Net Zero Energy. Collaborated with CVOEO’s Community Ambassadors for input and feedback. Submitted quarterly report to DEED.
- Discussed next steps vis-à-vis equity, community outreach and workforce development for Building GIANTS and CFI grants given federal Executive Orders.
- Started Thursday, 3:00-5:00 pm Office Hours at the Flecher Free Library to connect with BED customers on rebates, offer technical support, and answer questions related to electric bills and other issues.
- Prepped social media posts for Communications team.
- Co-facilitated January Mayor’s climate group meeting. Honed and edited draft inventory of city-wide climate-related mitigation and adaptation work.
- Joined Partners for Places funding call and brainstormed with Fletcher Free Library staff on prospective proposal.
- Joined City discussions on Municipal Investment Fund grant and role of BED in proposal.
- In conjunction with Communications team, edited and released new podcast episodes including with Sarah Camille Wilson, Director, Old Spokes Home, and Mona Tolba, VT Language Justice Access translator and community leader.
- Conducted interview on Burlington’s NZE efforts with Boston University’s Small City Actions to Lower Emissions (SCALE) study.
- Drafted internship description in preparation for summer student support.
- Joined BED-VGS collaboration meetings with senior leadership and “storytelling” sub-committee.
- Prepped for Town Meeting TV interview with Neale Lunderville and Darren Springer on VGS-BED collaboration and synergy.
- Scheduled spring and summer Equity and Energy shows.
- Drafted proposal to American Public Power Association’s DEED program to fund energy benchmarking for small and medium-sized commercial and industrial properties in support of City’s Benchmarking Ordinance. Coordinated meeting with DPI, Building Electrification Institute, CX Associates and Burlington 2030 District to unpack benchmarking process in support of City Benchmarking ordinance.
- Participated in Burlington 2030 District Executive Committee meeting and set agenda for

February meeting. Coordinated budgetary discussion between BED and 2030 District Director on 2025 contract.

- Orchestrated January's Lunch and Learn, featuring Energy Action Network's 2024 report and BED's efforts to address state-level goals.

Center for Safety and Risk Management – Paul Alexander

Safety

- Conducted weekly operational safety/ops meeting.
- Conducted inspections of fire extinguishers.
- Chaired Labor Management Committee and provided a safety update.
- Completed and submitted RC48 Expense & Capital FY26 budget.
- Completed new employee safety orientation
- Completed OSHA 300 2024 Year End Log
- Completed annual submission of 2024:
 - Bureau of Labor Statistic report
 - OSHA Incident Tracking report
 - SQRP report
- Provided operations/generation supervisors weekly safety summary.
- Completed weekly OSHA 300 reporting.

Environmental

- Completed EPA Q4 data submission
- Completed the state QER for 2024 Q4
- Conducted wastewater sampling
- Worked on capital budgets
- Regenerated the demineralizers
- Completed the McNeil annual emissions inventory
- Assisted with REC processes review meetings

Risk Management

- New Claims Investigations (4 total: 3 pole claims, 1 legal).
- 2 new employee Workers' Compensation/Accidents/Loss Control orientation.
- Extensive work on preparing/submitting FY'26 expense and capital budget
- Confirm with local entity on evac plans
- Register for RIMS conference classes.
- Attend contract ticket process meeting
- Participate in monthly Safety iPi forum
- Complete employee performance evaluation
- Review COB's FY'25 direct costs (insurance) for Finance
- VW grant app for next All electric line truck accepted!
- Sit in on Director Ops 2nd round interview
- Chair LMC monthly meeting
- PRIMA's "Let's Talk Tuesday" webinar (Workers' Comp)
- OSHA Recording training webinar via NSC
- Work with BED's Travel Policy subcommittee on new version
- VT CPCU Chapter meeting (AI)
- Attend UKG/NEOVOG training

- Review forester's replacement vehicle
- OSHA's Fall protection webinar

Purchasing/General Services

- Welcome new employee to Center for Center Hugh Valaitis from McNeil Station
- RFP C-1 Replacement
- RFP Key Fob System
- RFP Plotter for Distribution
- RFP Energy Storage System
- RFP McNeil Reclaimer Repairs
- RFP McNeil ESP Field Rebuild
- McNeil Cyclone Refractory Repairs
- RFP's for Transformers Restock
- RFP for Barrel Switches
- Garage Door maintenance Pine St & GT
- Fire System Testing Pine St & GT

Center for Operations & Reliability – Munir Kast

Engineering, Grid Services & Operations

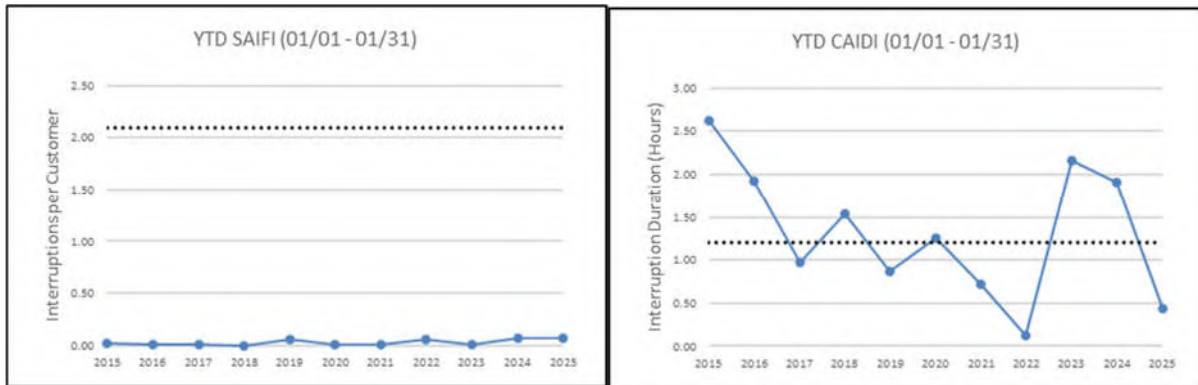
- Continued rebuild work of the underground system on Summit Ridge.
- Issued estimates for service upgrades at #78 Pine Street, #131 Church Street, #25 Booth Street and #53/55 Central Ave.
- Completed service upgrades at #11 Rock Point Road, #41 Adams Street, #71 Hungerford Terrace, #40 Kingsland Terrace, #32/34 Drew Street, #168 North Prospect Street, #28 Charlotte Street and #18 Cloarec Court.
- Completed transition to our new SCADA system and migration to the new Dispatch Center. This completes Phases 1 and 2 of the SCADA ADMS project. Phase 3 will be completed in FY26 consisting of the Distribution Management System (DMS) and the Outage Management System (OMS) for Phase 4 will be completed in FY27.
- Released workorder for the primary overhead rebuild of Dunder Road to field crews.
- Released workorder for the replacement of both padmount switches at Main Street Reservoir.
- Completed the transfer of primary, secondary and services to new poles on Archibald Street.
- Completed energizing new underground conductors for Cathedral Square on Battery Street and Pearl Street.
- Continued setting and transferring condemned poles.
- Continued replacing overloaded transformers throughout the city.
- Completed repairing lights on the Beltline.
- Started the removal of old poles on Sunset Cliff.
- Started the replacement of our underground conductors from the College Street Substation to Main Street along Battery Street.
- Started the process of replacing the 4 and 5-way switch at the Reservoir on Main Street
- Distribution staff participated in the project kickoff for the new CIS/SpryMobile system.

- Darren Springer presented BED Lineman plaques, donated and created by a previous superintendent, to BED's two newest linemen that recently graduated from the apprenticeship program.

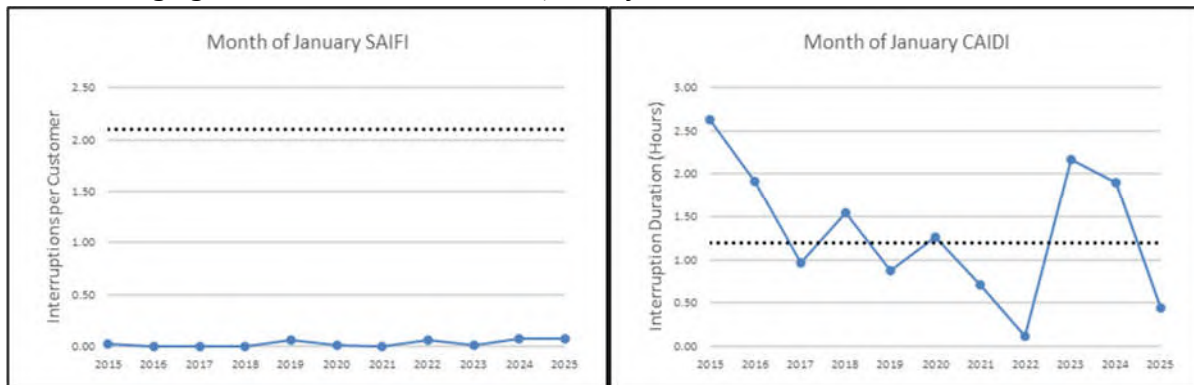
SAIFI & CAIDI Outage Metrics:

BED's distribution system experienced 23 outages in January 2025 (3 unscheduled and 20 scheduled). BED's SAIFI for the Month of January was 0.07 interruptions per customer and CAIDI was 0.44 hours per interruption. BED's YTD SAIFI is 0.07 interruptions per customer and YTD CAIDI is 0.44 hours per interruption.

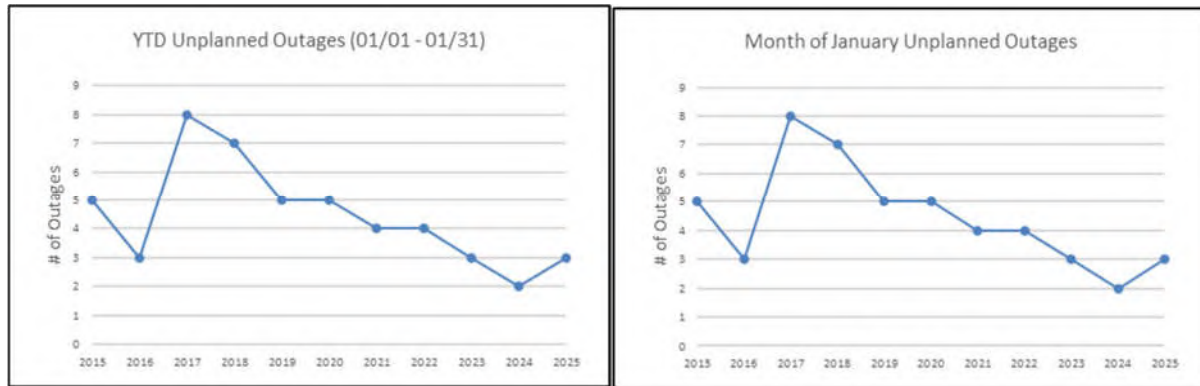
The following figure shows BED's historical YTD SAIFI and CAIDI:



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



The following figure shows BED's historical Unplanned Outages:



Generation

McNeil Generating Station

Month Generation: 32,680 MWh
 YTD Generation: 32,680 MWh
 Month Capacity Factor: 87.8%
 Month Availability: 100%
 Hours of Operation: 638.32 hours

Routine maintenance, preventative maintenance, and process improvement projects were conducted at McNeil. A Yard Worker and Working Crew Lead position were filled.

Winooski One Hydroelectric Station

Monthly Generation: 1,082.58 MWh (42.64% of average)
 YTD Generation: 1,082.58 MWh (42.64% of average)
 Month Capacity Factor: 19.66%
 Annual Capacity Factor: 19.66%
 Month Availability: 90% due to low HWEL

Routine maintenance, preventative maintenance, and process improvement projects were conducted at Winooski One in addition to continuing the bladder replacement project.

Burlington Gas Turbine

Month Generation: 6.87 MWh
 YTD Generation: 6.87 MWh
 Month Capacity Factor: 0.0004%
 Month Availability: 97%
 Hours of Operation Unit A: 1.5 hours
 Hours of Operation Unit B: 1.5 hours

Training, an operational run, and preventative maintenance checks were conducted at the Gas

Turbine. There was a small outage due to a sensing line plugging which caused startup failures.

Solar (Pine Street 107 kW)

Month Generation: 3 MWh (+97% from previous year)
 YTD Generation: 3 MWh
 Month Capacity Factor: 3.8%
 Month Availability: 100%

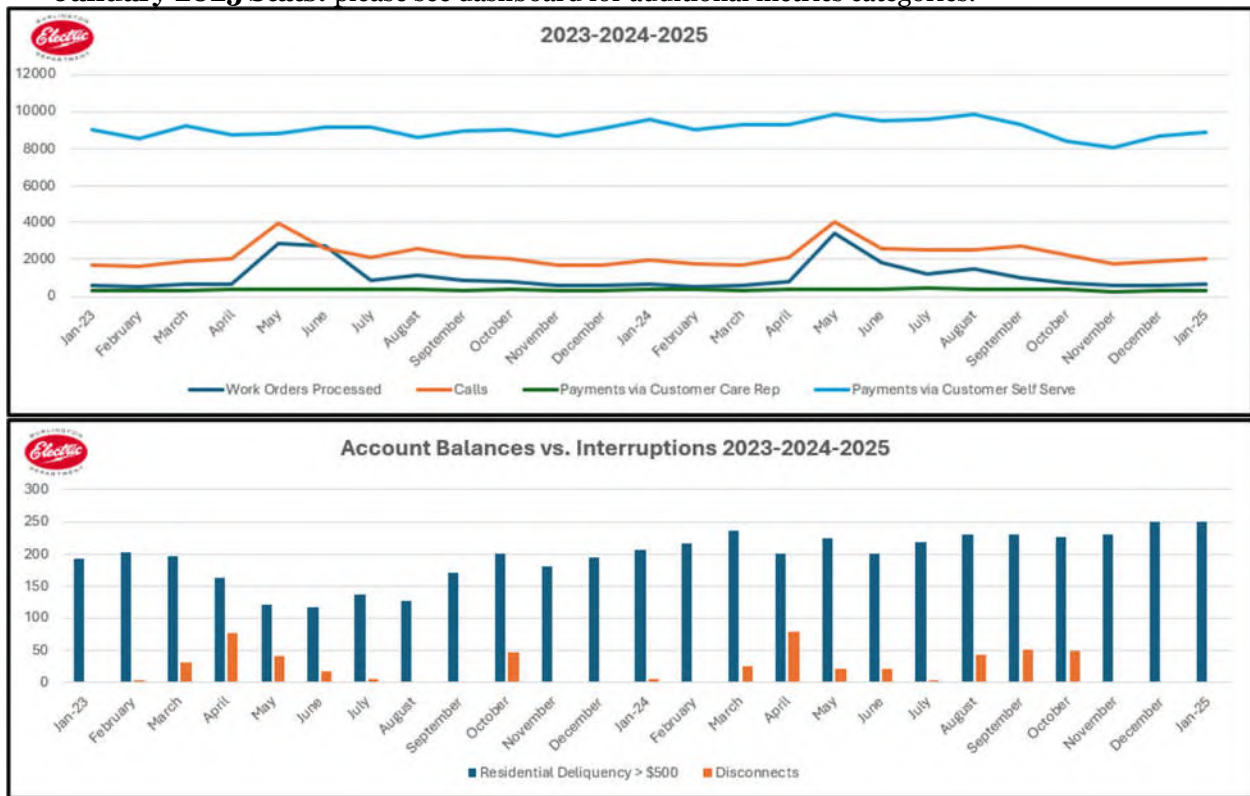
Solar (Airport 499 kW)

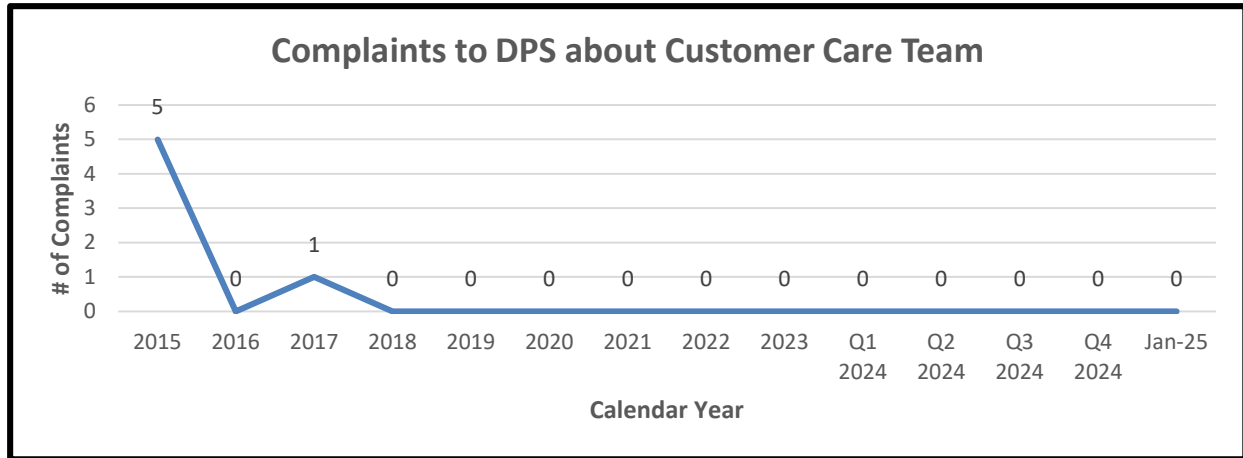
Month Generation: 18 MWh (+108% from previous year)
 YTD Generation: 18 MWh
 Month Capacity Factor: 5.0%
 Month Availability: 100%

Center for Customer Care & Energy Services – Mike Kanarick

Customer Care

- **Call Answer Time (75% in 20 seconds):** January 2025 86.4%, December 2024 83.4%, November 84.0%, October 80.6%, September 75.2%, August 83.0%. January 2024 86.7%, December 2023 88.6%, November 88%, October 84.8%, September 76.2%, August 77.0%.
- **January 2025 Stats:** please see dashboard for additional metrics categories.

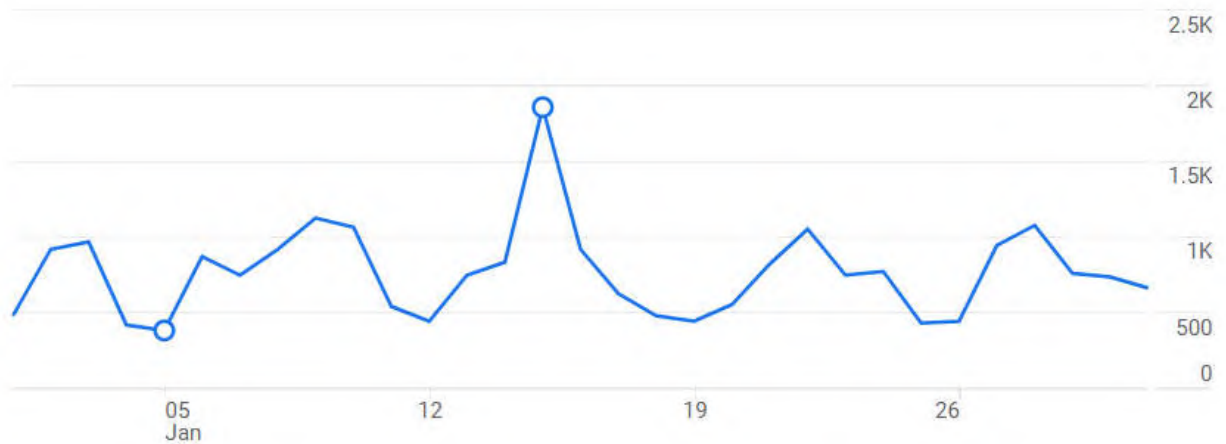




Communications and Marketing

- 2025 NZE Incentives: on January 8, Mayor Emma Mulvaney-Stanak and General Manager Darren Springer announced new and expanded Net Zero Energy electrification incentives that will provide significant financial assistance to Burlingtonians and reduce fossil fuel usage, with additional incentives for low-income customers. Check out the [press release](#).
- BED Annual Report: our yearly update was included in the City of Burlington Annual Financial Report that will be distributed at the polling places on Town Meeting Day and soon will be available on the [City website](#).
- Annual Net Zero Energy Calendar Contest: 2025 calendars are available at the BED reception desk.
- Net Zero Energy Festival – A Supercharged Day of Family Fun: please mark your calendars for Saturday, September 20, 2025 (rain date September 21) from 10am-2pm. Planning soon will begin for our 4th annual NZE Festival to help our community continue to learn how to take steps to meet our Net Zero Energy city goal by 2030. We again will have many activities and provide much information for folks of all ages, including: food trucks, DJ &/or live music, raffles, E-Bike test rides and EV test-drives, mobile bike repair unit, bike parking, heat pump, solar, and lawn care vendor partners, walking, biking, and carsharing advocates, BED energy experts, CHAMP, and more.
- Net Zero Energy Podcast: we invite you to take a listen at burlingtonelectric.com/podcast. Our latest episode features Sarah Camille Wilson, Executive Director at Old Spokes Home (OSH) in the Old North End of Burlington. Sarah shares information about OSH programs that help make biking accessible to everybody.
- North Avenue News: our February column and ad both promote our enhanced and new NZE rebates for 2025.
- Website and Facebook Highlights
 - Overall site-wide pageviews for January 2025 = 23,653
 - December 2024 = 20,787
 - November = 17,793
 - October = 26,469
 - September = 29,558
 - August = 24,904
 - July = 23,183
 - June = 30,133
 - May = 27,971

- April = 20,221
- March = 17,841
- February = 20,104
- January = 28,240
- Unique homepage pageviews for January 2025 = 4,739
 - December 2024 = 6,959
 - November = 6,713
 - October = 5,248
 - September = 5,183
 - August = 5,795
 - July = 5,541
 - June = 11,531
 - May = 6,428
 - April = 4,753
 - March = 4,747
 - February = 4,750
 - January = 5,273
- Defeat the Peak email notification list = 813 (as of February 5, 2025)
- **Full site visits for January 2025**
 - Spike on January 15 due to large outage in Old North End and New North End.



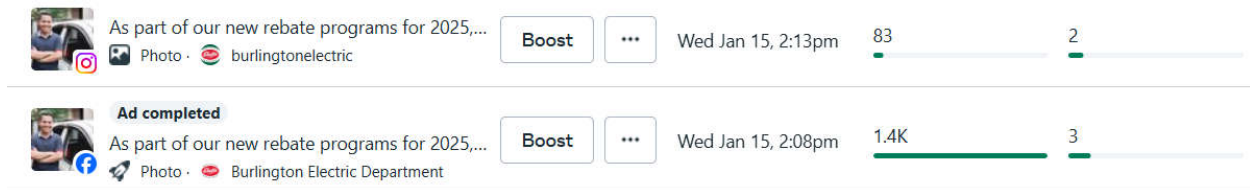
- Visitors by website page

page title	Jan 2025	Dec 2024	Nov 2024	Oct 2024	Sep 2024	Aug 2024	Jul 2024	June 2024	May 2024	Apr 2024	Mar 2024	Feb 2024	Jan 2024
Burlington Electric Department	8193	6959	6713	8405	8508	9615	8949	10321	10317	7349	19583	7431	8218
Careers	318	259	229	285	263	245	242	214	218	184	318	271	295
Commercial Ways to Save	40	37	22	32	13	34	47	30	20	22	30	31	22
Contact Us	671	535	561	705	763	797	783	762	1486	604	908	531	561
Defeat The Peak	7	17	24	2	5	25	265	133	10	3	151	3	2
E-Bikes	322	58	60	102	154	328	263	291	300	211	167	89	83
E-billing	258	172	308	282	374	266	310	287	181	160	276	228	183
Electric Vehicles	364	313	217	253	278	320	301	328	305	356	392	288	404
EV Chargers	153	151	115	121	126	111	144	128	158	227	227	197	206
Heat Pumps	472	259	284	331	216	263	374	397	369	315	366	285	330
How To Pay My Bill	1880	1709	1782	2075	1997	1986	1792	1849	1429	1259	149	2363	1782
Lawn Care	95	41	64	75	79	106	140	126	205	138	65	60	38
Leadership Team	266	189	162	269	225	240	251	225	226	249	236	191	280
McNeil Generating Station	340	358	671	617	450	586	517	553	611	686	876	990	501
Net Zero Energy News	11	14	18	10	5	16	9	13	2	2	16	5	15
Net Zero Energy Podcast	32	52	25	24	19	41	13	33	44	48	55	30	49
Rates & Fees	287	224	193	401	254	230	239	281	225	188	239	232	177
Our Energy Portfolio	55	47	94	64	72	60	61	95	59	93	100	100	70
Rates & Fees	287	224	193	401	254	230	239	281	225	188	239	232	177
Rebate Center	1071	528	569	559	524	568	682	617	615	683	728	589	672
Rebates	883	510	472	511	463	545	613	569	602	590	674	564	609
Report A Problem	518	111	165	180	740	1631	633	1556	1320	152	445	97	283
Residential Ways to Save	183	144	111	141	158	191	167	145	183	121	216	138	137
RFP	692	545	209	365	379	355	587	341	378	431	407	522	498
RFP Detail	1020	323	6	387	334	185	699	111	904	846	478	1602	841
Stop or Start Service	233	243	210	393	313	777	690	825	2145	607	400	273	255

- Top-performing Facebook & Instagram posts (note logo in lower right corner of each photo)

Podcast with BED's Bill Parizo, Rebate announcement, High-Mileage Driver plan announcement.

	New podcast episode! Bill Parizo, Director of ...	Boost	...	Tue Jan 7, 10:41am	321	8
	New podcast episode! Bill Parizo, Director of ...	Boost	...	Tue Jan 7, 10:40am	111	3
	**ENHANCED REBATES FOR 2025 ANNOUNC...	Boost	...	Thu Jan 9, 10:55am	292	3
	**ENHANCED REBATES FOR 2025 ANNOUNC...	Boost	...	Thu Jan 9, 10:54am	152	1



Energy Services

UVM

- **Stafford Hall Chilled Water Upgrade** – This lab-hood intensive research building has been cooled with four air-to-water DX Air Handler Units since its construction in the mid-1990's. A project to connect the cooling system to the central plant chilled water system was completed, to improve reliability and reduce energy and maintenance costs. A BED site visit has verified the completion of the project. BED is providing data to a third-party engineering company so that an updated savings analysis can be completed. We are in the final steps of creating a rebate offer and closing out the project.
- **Greenhouse #10 LED Grow Lighting Retrofit** – BED received news this month that the new (QTY=18) LED grow light fixtures have arrived and are being installed. A savings calculation and incentive package had previously been delivered to UVM for the project. Some issues with the fixtures are now being worked out. BED will complete a site visit as soon as installation is complete.
- **Trinity Campus Chilled Water Study** – UVM is interested in the potential construction of a chilled water plant near Farrell Hall. This plant would provide cooling up to 11 buildings in the Trinity Campus. UVM funded an engineering study for this work, which was recently completed. The purpose of the study is to determine the chilled water capacity required, specify required pipe sizing, and to estimate capital and annual costs as well as greenhouse gas emissions for the new plant. This month, BED attended a presentation by the engineering sub-contractor, explaining the details of the study and providing a summary of its findings.
- **UVM - Health Science Research / Absorption Chiller Replacement** – One of two steam absorption chillers in this research building is planned to be replaced with an 1,000 ton electric chiller. DDC trending data was used to calculate the steam / natural gas offset from the absorption chiller. Final NG offset calculations have been completed and BED has developed a Tier 3 offer for this project. The new electric chiller is to arrive near the end of March 2025 and the system is to be up-and-running in time for the summer cooling season.
- **UVM Physical Plant East Avenue / Lighting Retrofit** – This project renovated the second floor of this UVM Physical Plant building. It involved the retrofit of about QTY=120 2x2 and 2x4 fluorescent fixtures to LED. After some delay, the project was completed in mid-2024. BED is awaiting updated project information so that our incentive offer can be updated to the latest design parameters.
- **University Heights / TLED LED Upgrades** – BED is working with an engineering subcontractor to UVM to investigate the savings associated with the upgrading of T8 fluorescent lamps to LED TLED technology. The lamps are being replaced as they fail in this large and mostly residential facility at the south end of the campus.

UVMMC

- Dish Room Renovation Project - BED has been reviewing the documentation for this project, which includes a new dish machine and conveyor system, and an updated and more effective ventilation system. This dish machine services the kitchen that delivers meals to the in-patients of the main hospital. This represents approximately 450 meals, provided three times a day. We have worked in tandem with VGS to offer several incentives to modify the project to gain higher efficiencies and energy cost reductions. The dish-room equipment order was placed before the end of the year, and it appears that the Medical Center did take advantage of incentive offers to order the most cost-efficient equipment available.
- HVAC Re-commissioning Budgeting Process – The hospital recently received a detailed re-commissioning report from their engineering subcontractor, for the purpose of developing a budget for major upgrades to their DDC sequences of operations. BED is working with that engineering company to create incentive estimates for completing the various energy saving measures.

Other Services

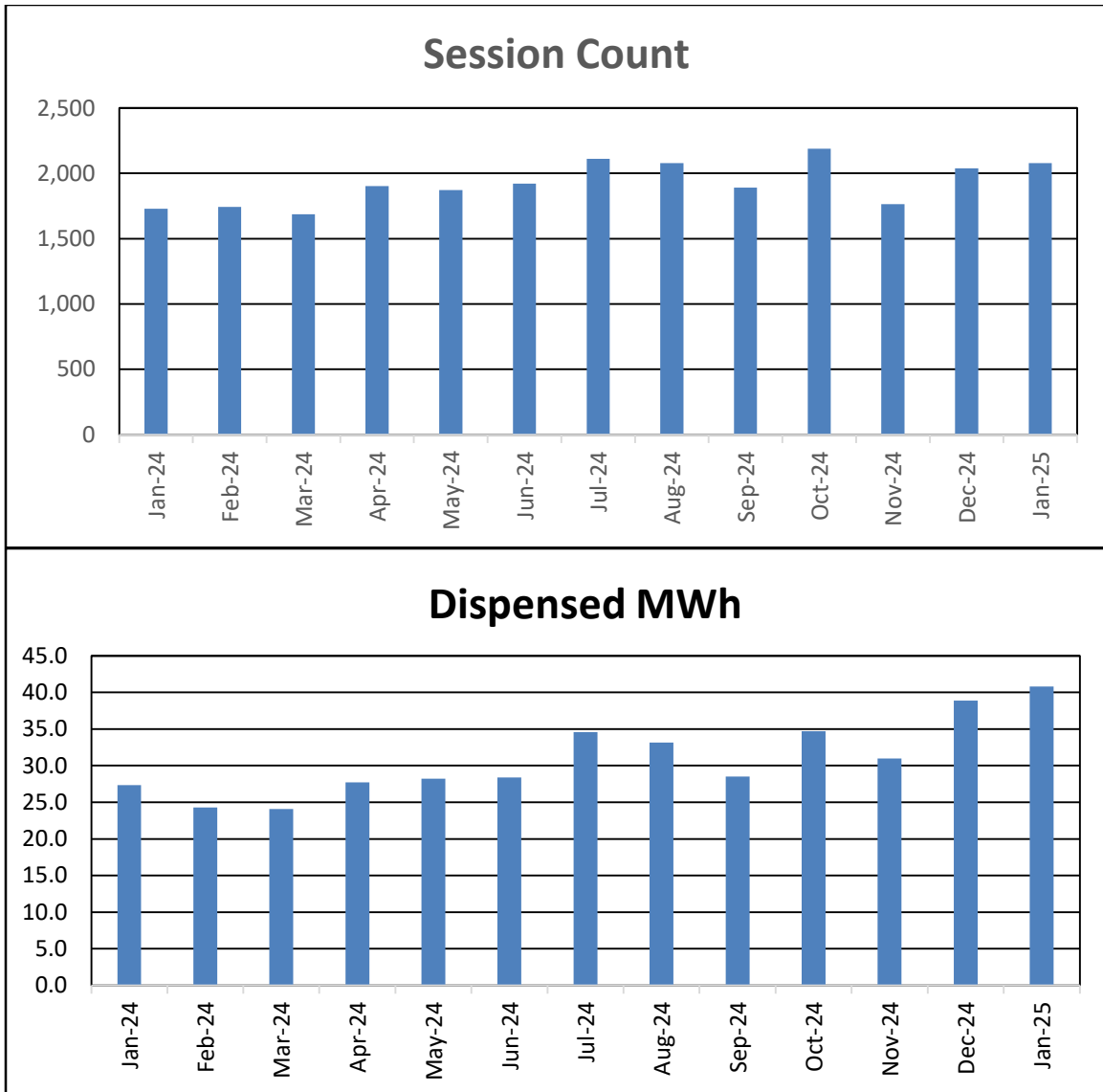
- RHINO FOODS / Warehouse Refrigeration Expansion Project – BED attended an update meeting this month with some positive news. Engineering design is continuing for the expansion, with the latest Go / No go date a few months away. Rhino has received a grant to purchase an electric “yard horse” to replace an existing diesel unit and has received a separate grant to assist in installing a solar PV array on the roof of the new expansion building, should that project move on to completion.
- Village Hydroponics / Shipping Container Vegetable Grow Facility – After some delay, this facility is now up and running and in full production. It is a non-profit whose mission reads: *Village Hydroponics is at the forefront of innovative agriculture in Burlington, Vermont, utilizing hydroponic technology inside of a shipping container to grow fresh, nutrient-rich produce even in the coldest and darkest winter months. Our mission is to nourish our community when other farms cannot, champion food justice, and promote environmental sustainability. By utilizing controlled environment agriculture and mutual aid methods to grow and distribute vegetables through the entire off season, we can take a pivotal step in our community's self-sufficiency.* Now that stable operation has been established, BED is updating our original efficiency incentive offer based on the latest operating parameters.
- City Market Downtown / Warehouse and Front-End LED Lighting Retrofit - BED completed a walkthrough of this project this month. It involves the replacement of QTY=35 early technology LED high-bay fixtures with the latest high efficiency LED products, including advanced controls to schedule the lighting operation to be the most efficient possible. An incentive is pending once the project documentation is fully available.
- Rhino Foods / Warehouse LED Lighting Retrofit – The electrician for this project contacted BED with lighting project information: QTY=13 8 ft, 2-Lamp fixtures to be replaced with the same quantity of LED 8-ft strip lights. BED created a rebate offer last month. BED completed a walk-through of the project this month, and a rebate payment has been scheduled.
- Cambrian Rise / Buildings 100 & 154 Low Income MF – BED was approached by the design team for this project, providing to us the initial design documentation and inquiring about the incentive process. These two attached buildings are being developed through a partnership

between Champlain Housing Trust and EverNorth. It includes QTY=40 rental apartments and QTY=30 condos for sale. BED has been working closely with the owner to develop a plan to allow utility master metering of 40-unit rental apartment building.

- Burlington High School / New Construction Project – BED is working with the project manager and the design team for this facility, to begin to develop an energy efficiency offer for the project. A meeting was also recently held with the energy modeler to discuss the process in more detail. A preliminary energy modeling report is now available which estimates Tier 3 and EEU savings for this building. Once the modeling work is verified, BED will create a preliminary incentive offer.
- City Place South NC / Commissioning Rebate – City Place South is fully designed, in construction and is to be occupied early summer 2025. BED has received from the energy modeler baseline and proposed models, and an initial energy savings estimate is now available. We have also received invoices for envelope and MEP commissioning of the building, representing what has been spent to date.

Electric Vehicles

- The EVSE (ChargePoint, Flo & AmpUp) dispensed a total of 40.8MWh and supported 2,077 sessions.
- The ChargePoint EVSE served 792 unique drivers.
- The top 3 sales on the ChargePoint network were 106kWh, 118kWh, and 128kWh and occurred at the Cherry St. Garage and the Marketplace Garage DCFC.
- Approximately 36% (or 14.5MWh) of the energy sold from the entire network is attributed to the Pine St. and Marketplace Garage DCFC's.
- The Pease Lot DCFC is complete. Activation is in process.
- Station BE01 remains inaccessible due to Main St. construction.
- The Murray St. pole-mounted AmpUp station was repaired and reinstalled Jan. 24.
- The Time of Use pricing functionality offered through AmpUp has been programmed from 12AM-12PM. There are a number of issues that their software team is resolving.
- The BED meter for the Oakledge Park station has been installed. The station was off-line for 10 days. BPRW needs to be compensated for the energy that was billed through their meter since July 2023.
- *Session Count plot, Dispensed Energy plot, and Location Table* from the public charging network below.



Provider	Location	#Ports / L2 or DCFC	kWh	% of Total
ChargePoint	Church & Main	2/L2	0.0	0.0%
ChargePoint	Cherry St Garage	2/L2	2,414.4	5.9%
ChargePoint	Cherry St Garage	2/L2	2,339.5	5.7%
ChargePoint	585 Pine St.	2/L2	1,395.0	3.4%
ChargePoint	585 Pine St.	1/DCFC	8,856.6	21.7%
ChargePoint	Marketplace Garage	1/DCFC	5,694.6	14.0%
ChargePoint	617 Main St. UVM	2/L2	873.8	2.1%
ChargePoint	81 Carrigan Dr. UVM	2/L2	899.9	2.2%
ChargePoint	210 Colchester Ave. UVM	2/L2	1,813.2	4.4%
ChargePoint	146 Univ. Pl UVM	2/L2	1,402.5	3.4%
ChargePoint	95 Summit St. CC	2/L2	716.7	1.8%
ChargePoint	Hannaford	2/L2	909.5	2.2%
ChargePoint	Hannaford	2/L2	1,118.4	2.7%
ChargePoint	175 Lakeside Ave. CC	2/L2	486.6	1.2%
ChargePoint	122 Main St.	1/L2	1,370.3	3.4%
ChargePoint	College St. Garage	2/L2	2,155.3	5.3%
ChargePoint	College St. Garage	2/L2	2,624.0	6.4%
ChargePoint	Oakledge Park	2/L2	255.0	0.6%
	Sub Total		35,325	86.6%
AmpUp	33-35 Intervale Ave	1/L2	644	1.6%
AmpUp	141 Maple St	1/L2	1131	2.8%
AmpUp	11 Spruce St	1/L2	432	1.1%
AmpUp	39 Front St	1/L2	1546	3.8%
AmpUp	33 Murray St	1/L2	0	0.0%
	Sub Total		3753	9.2%
FLO	585 Pine St.	2/L2	1,720	4.2%
	Sub Total		1,720	4.2%
	Total		40,798	100.0%

- Number of EV and PHEV rebates to date – 973 (of this 221LMI rebates to date as shown below)
 - New All Electric Vehicle – 440
 - New All Electric Vehicle (High-Mileage Driver) – 1
 - New All Electric Vehicle (LMI) – 117
 - New PHEV – 197
 - New PHEV (LMI) – 54
 - Used All Electric Vehicle – 77
 - Used All Electric Vehicle (LMI) – 35
 - Used PHEV- 38
 - Used PHEV (LMI) – 15
 - New All Electric Vehicle (\$60K plus) – 26
 - New PHEV (\$60K plus) – 4
- Number of customer loans with lending partners to date – 5
- Number of customers currently participating in the new EV Charging Rate- 351
- Number of E-Motorcycle rebates to date – 2

Electric Vehicle Charging Stations

- Number of home EV charging stations rebates to date – 288
- Number of Multi-family EV charging stations rebates to date – 1
- Number of Multi-family Non-EVmatch-LMI charging stations rebates to date (LMI) – 3
- Number of Multi-family EVmatch Public charging stations rebates to date – 2
- Number of Multifamily EVmatch Non-Public – 9
- Number of Multi-family Non-EVmatch charging stations rebates to date – 3
- Number of Multifamily EVmatch Non-Public – LMI – 1
- Number of Multifamily Non-EVmatch Non-Public – LMI – 8
- Number of Level 2 Workplace charging stations rebates to date – 35

Electric Lawn Equipment to Date

- Number of e-mower rebates to date – 800 (11 commercial & 789 residential)
- Number of e-leaf blowers to date – 105
- Number of Residential e-Trimmers – 114
- Number of Residential e-chainsaws – 25

Heat Pump Installations to Date

Total Heat Pump Installations including Multi-Family New Construction Projects & Installations in existing buildings since the September 2019 NZEC announcement –

- **2,934 installations**

Installations since the September 2019 NZEC announcement

Number of Heat Pump Technology rebates to date- 1,443 (of this 183 LMI rebates to date as shown below)

- Number of ductless heat pumps to date – 831
- Number of LMI eligible ductless heat pumps to date – 152
- Number of centrally ducted heat pumps to date – 315
- Number of LMI eligible centrally ducted heat pumps to date – 18
- Number of air-to-water heat pumps to date – 3
- 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 – 108
- Number of LMI eligible heat pump hot water heaters participants to date – 13

Electric E-Bikes to Date

- Number of e-bike rebates to date – 763

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

- Number of induction Stovetops rebates to date – 93

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

- Number of snow blower rebates to date – 30

BED 2024-2025
Strategic Direction Dashboard

	Target	January 2025 Actuals	2024 Yearly Actual	December 2024 Actuals	November 2024 Actuals	October 2024 Actuals	September 2024 Actuals	August 2024 Actuals	July 2024 Actuals	June 2024 Actuals	May 2024 Actuals	April 2024 Actuals	March 2024 Actuals	Feb 2024 Actuals	Jan 2024 Actuals	2023 Yearly Actual	2022 Yearly Actual	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
Engage Customers and Community																				
Call answer time 75% within 20 seconds	75%	86%	avg 81%	83%	84%	81%	75%	83%	77%	75%	69%	86%	88%	88%	87%	avg 82%	avg 82%	avg 82%	avg 81%	
Delinquent accounts >\$500	0	251	avg 223	251	231	227	230	230	219	201	224	201	237	216	206	avg 168	avg 188	avg 529	avg 201	
Disconnects for non-payment	0	1	308	2	1	49	52	44	4	22	21	79	26	2	6	224	12	0	45	
Energy Assistance Program Customers (program lifetime)	NA	852	843	843	835	821	803	794	294	275	267	263	259	251	246	234				
Energy Assistance Program Customers (currently enrolled)	300	774	770	770	766	762	748	757	259	241	237	238	237	232	227	219				
# of residential weatherization completions	10	0	7	0	1	0	0	0	1	0	1	0	1	1	2	11	5	5	3	11
Weatherization completions in rental properties		0	3	0%	0	0	0	0	0	1	0	0	1	0	1	8	6	0	0	TBD
# or % of homes or SF weatherized		TBD	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0
# of commercial building with improved thermal envelopes		0	5	0	0	0	0	1	1	0	0	0	1	1	1	6	4	5	5	0
Total annual mWh saved via the EE programs (annual goal)	4,099	61	1116	1,116	940	913	780	647	464	433	390	377	347	325	193	2,940	4053			3057
Total residential annual mWh saved via the EE programs (cumulative for year)	743	28	333	333	299	286	257	142	241	220	120	115	105	80	50	494	862			917
Total commercial sector annual mWh saved via the EE programs (cumulative for year)	3,356	33	783	783	641	627	523	505	142	213	270	262	242	245	143	2,447	3191			2140
% of EEU charge from LMI customers spent on EE services for LMI customers (cumulative for 2024- 2026 3-year EEU performance period)	\$ 297,026	\$ 167,552	\$ 155,814	\$ 155,814	\$ 142,600	\$ 124,467	\$ 109,498	\$ 98,558	\$ 89,711	\$ 78,738	\$ 60,576	\$ 33,024	\$ 28,609	\$ 20,951	\$ 9,160	\$ 504,942	\$ 335,234	TBD	TBD	TBD
Strengthen Reliability																				
SAIFI (AVG interruptions/customer) (annual target)	< 2.1	0.07	1.63	0.01	0.01	0.02	0.25	0.26	0.24	0.24	0.36	0.13	0.02	0.02	0.07	0.56	1.05	0.17	1.48	1.01
CAIDI (AVG time in hrs to restore service) (annual target)	< 1.2	0.44		1.56	2.64	0.72	0.45	0.77	1.27	1.27	0.47	1.75	1.82	0.8	1.90	0.94	0.67	1.49	0.55	0.75
Distribution System Unplanned Outages (annual target)	82	3	69	0	2	6	7	16	8	8	1	5	10	4	2	39	61	44	90	98
McNeil Forced Outages	0	0	10	1	0	0	0	1	1	3	0	0	2	1	1	5	14	5	21	TBD
W1H Forced Outages	0	0	3	0	0	0	0	2	1	0	0	0	0	0	0	2	6	9	2	TBD
GT Forced Outages	0	1	2	0	0	0	0	0	1	0	0	0	0	1	0	9	6	2	3	TBD
Invest in Our People, Processes, and Technology																				
Avg. # of days to fill positions under recruitment	120	232	253	250	273	307	343	293	251	241	260	210	198	219	191	219	100	68	179	
# of budgeted positions vacant	0	11	avg 12	13	11	11	11	10	9	10	11	11	14	15	14	avg 12	avg 9	avg 9	6	NA

BED 2024-2025 Strategic Direction Dashboard																				
	Target	January 2025 Actuals	2024 Yearly Actual	December 2024 Actuals	November 2024 Actuals	October 2024 Actuals	September 2024 Actuals	August 2024 Actuals	July 2024 Actuals	June 2024 Actuals	May 2024 Actuals	April 2024 Actuals	March 2024 Actuals	Feb 2024 Actuals	Jan 2024 Actuals	2023 Yearly Actual	2022 Yearly Actual	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
Innovate to Reach Net Zero Energy																				
Tier 3 Program																				
# of residential heat pump installs	See NZE Roadmap Goals below	31	176	11	20	18	13	7	31	19	17	10	6	11	13	186	255	315	203	10
# of commercial heat pump installs		0	5	1	0	1	0	0	0	0	1	0	1	1	0	8	4	4	13	0
# of residential hot water heat pump installs		5	28	7	1	2	14	0	1	2	0	0	0	0	1	31	26	14	6	4
# of commercial hot water heat pump installs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heat pump rebates		31	185	12	21	19	13	7	31	21	18	11	7	12	13	206	271	328	212	0
Heat pump hot water heater rebates		5	28	7	1	2	14	0	1	2	0	0	0	0	1	47	18	15	3	0
LMI heat pump rebates		0	35	5	1	0	4	4	0	6	4	2	5	3	1	21	43	28	6	4
Heat pump technology installs in rental properties		0	3	0	0	0	0	0	1	0	0	1	0	1	0	8	10	14	9	TBD
LMI heat pump hot water heater rebates		0	2	0	0	0	0	0	0	0	1	0	1	0	0	6	1	2	0	1
EV rebates - new		18	125	16	13	16	15	10	4	5	12	10	8	9	7	103	53	67	14	36
EV rebates - pre-owned		1	23	3	0	3	3	0	3	2	3	2	0	3	1	16	18	7	8	2
LMI EV rebates		5	50	0	2	6	6	2	5	2	11	3	0	12	1	26	9	11	7	7
PHEV rebates - new		7	44	5	3	8	5	7	1	2	5	2	1	2	3	25	27	41	10	17
PHEV rebates - preowned		5	8	0	0	0	1	1	0	1	2	2	0	0	1	6	12	6	5	3
LMI PHEV rebates		0	11	1	1	1	4	0	0	0	0	1	1	0	2	5	15	13	6	2
Public EV chargers in BTV (total)		40 ports	40 ports	40 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	32 ports	27 ports	27 ports	14
Public EV charger energy dispensed (kWh)		40,800	355500	38,900	31,000	34,700	28,600	33,200	34,600	28,400	27,600	26,600	21,200	23,900	26,800	244,300	151,360	86,570	35,690	78,000
Home EV charging station rebates		18	82	9	7	11	3	7	6	2	14	5	1	10	7	72	70	32	20	12
EV charging rate customers (total)		351	347	347	335	327	317	310	301	291	288	278	272	267	260	246	157	40	40	28
Level 2 charger rebates		1	22	0	16	0	0	0	0	2	0	0	0	0	4	10	11	10	0	1
Level 1 charger rebates		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	1	0
E-bike rebates		27	169	8	18	6	19	19	18	32	24	15	0	4	6	147	152	88	36	65
E-mower rebates		2	109	4	0	6	8	7	17	20	35	11	0	1	0	135	159	154	95	142
E-forklift rebates		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
MWE of Tier 3 measures installed		1,698	26,120	3,101	2,790	2,372	2,149	1,450	1,409	1,184	5,439	1,163	1,102	1,477	2,483	22,374	22,837	23,763	35,112	3,342
% Tier 3 obligation met with program measures	100%	7%	122%	122%	108%	95%	84%	74%	67%	60%	55%	29%	24%	19%	12%	117%	131%	159%	283%	31%
Net Zero Energy Roadmap Goals																				
# of solar net metering projects installed		1	13	0	3	1	1	1	0	0	3	0	1	0	3	32	33	29	24	33
No. of homes receiving NZE Home Roadmaps		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	7	10	7	
Residential heat pumps for space heating (no. of homes)	2022: 8615	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,952, 18% of goal	1,749	1,448	1,112	925
Commercial heat pumps for space heating (1000 SF floor space served)	2022: 5397	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	431, 7% of goal	411	405	374	374
Residential heat pumps for water heating (no. of homes)	2022: 4365	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	289, 7% of goal	243	224	208	203
Commercial heat pumps for water heating (1000 SF floor space served)	2022: 1019	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	-
EV registrations in BTV (light-duty)	2022: 2294	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	829, 22% of goal	699	549	361	296
Greenhouse gas emissions (1000 metric tons CO2)	2022: 150	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	191, 127% of goal	191	188	185	214
Fossil fuel consumption (billion BTU)	2022: 2418	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,983, 136% of goal	3,285	3,171	3,182	3,660

BED 2024-2025 Strategic Direction Dashboard																				
	Target	January 2025 Actuals	2024 Yearly Actual	December 2024 Actuals	November 2024 Actuals	October 2024 Actuals	September 2024 Actuals	August 2024 Actuals	July 2024 Actuals	June 2024 Actuals	May 2024 Actuals	April 2024 Actuals	March 2024 Actuals	Feb 2024 Actuals	Jan 2024 Actuals	2023 Yearly Actual	2022 Yearly Actual	2021 Yearly Actual	2020 Yearly Actual	2019 Yearly Actual
Demand Response																				
Manage Budget and Risks Responsibly																				
Safety & Environmental																				
No. of workers' compensation/accidents per month	0	0	7	0	1	0	1	0	1	0	2	0	0	1	1	8	16	4	8	
Total Paid losses for workers' compensation accidents (for the month)	annual	\$66,100	\$272,353	\$9,476	\$4,675	\$10,778	\$56,420	\$7,474	\$19,547	\$5,762	\$9,707	\$17,106	\$18,267	\$63,890	\$49,251	\$98,393	\$ 145,102	\$ 93,612	\$ 165,402	\$38,288
Lost Time Incident Rate (days/year) (Dec numbers reflect annual results)	<= 3.5 annual	N/A	0.99	0.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.0	1.99	0.0	0.93	0.89
Lost Time Severity Rate (days/year) (Dec numbers reflect annual results)	<= 71 annual	N/A	9.90	9.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	107.4	112.63	0.0	41.71	78.2
Lost work days per month	0	0	avg 10	0	0	0	0	0	0	0	0	28	31	29	31	avg 12	avg 9	0.0	45	
NOx reporting levels to EPA (Quarterly) (lbs/mmbtu)	<0.075	0.068	0.06	0.068	0.068	0.000	0.069	0.069	0.067	0.070	0.0	0.068	0.068	0.068	0.067	0.06	0.06	0.07	0.07	
# of reported spills, waste water incidents (monthly)	0	0	4	1	0	0	0	0	0	1	0	0	0	1	1	2	6	4	4	
Phosphorus levels to DEC in lbs (monthly/yearly total)	<0.8/37	0.153/1.965	1.87	0.05/1.870	0.00/1.847	0.091/1.851	0.074/1.76	0.072/1.758	0.048/1.76	0.001/1.761	1.072/1.792	0.078/0.769	0.181/0.984	.144/ .84	0.058/0.746	0.705	0.688	2.028		1.169
# of new power outage claims reported (monthly)	1	0	6	0	0	0	0	0	0	1	0	1	2	1	1	3	5	7	4	
# of new auto/property/other liability claims reported (monthly)	2	4	24	4	2	3	1	1	4	1	3	3	0	2	0	36	27	18	27	
Purchasing & Facilities																				
# of Purchase Orders for Inventory (Target: avg for winter months)	42	51	738	57	46	67	67	66	96	48	51	81	61	46	52	541	636	644	593	
\$ value of Purchase Orders for Inv. (Target: avg dollars spent during winter)	\$78,000	\$142,579	\$ 6,613,883	\$105,878	\$122,445	\$415,700	\$1,790,084	\$1,108,085	\$1,126,954	\$240,018	\$117,867	\$247,432	\$531,018	\$79,778	\$728,624	\$2,481,531	\$ 4,861,023	\$ 3,278,620	975,531	
# of stock issued for Inventory (Target: avg during winter months)	320	631	7,207	542	456	720	534	571	482	692	598	760	655	679	518	6,777	6,187	4,402	4,545	
\$ value of stock issued for Inventory (Target: avg. during winter)	\$ 65,000	\$ 66,331	\$ 2,352,360	\$ 84,126	\$ 40,067	\$ 141,778	\$ 97,720	\$ 65,751	\$ 161,492	\$ 237,512	\$ 510,425	\$ 327,594	\$ 349,677	\$ 113,948	\$ 222,270	\$ 1,925,781	\$ 2,200,233	855,456	1,086,478	
# of posters pulled from poles monthly (Target: goal to remove each month)	58	40	351	38	35	0	98	18	0	105	0	57	0	0	0	592	900	2,728	627	
# of Spark Space and Auditorium setup/breakdowns monthly (Target: Covid impact)	3	15	199	10	16	21	16	17	10	15	18	17	21	14	24	207	132	88	87	
Finance																				
Debt service coverage ratio (avg of previous 12-months)	1.25		4.10 FY24	5.11	4.96	4.83	4.86	6.22	4.73	4.47	4.95	4.34	4.78	4.49	5.04	3.81 FY23	4.61 FY22	4.26 FY21	3.77 FY20	3.56 FY19
Adjusted debt service coverage ratio (avg of previous 12-months)	1.5		1.25 FY24	1.34	1.30	1.26	1.30	1.41	1.25	1.37	1.56	1.35	1.51	1.41	1.61	1.29 FY23	1.22 FY22	1.08 FY21	0.93 FY20	0.90 FY19
Days unrestricted cash on hand (incl line of credit)	>90		146 FY24	148	146	154	160	160	146	149	120	111	108	119	122	93 FY23	120 FY22	121 FY21	120 FY20	109 FY19
Arrearages >60 days		\$ 480,633	\$ 470,940	\$ 470,940	\$ 466,148	\$ 421,214	\$ 380,532	\$ 409,006	\$ 390,295	\$ 413,803	\$ 390,164	\$ 380,953	\$ 410,127	\$ 381,759	\$ 381,652	\$ 392,196	\$ 408,903	\$ 1,087,769	\$ 749,054	
Power Supply																				
McNeil generation (MWH) (100%)	per budget	32,680	197,044	31,662	17,096	-	28,057	17,654	10,031	12,434	0	16,986	10,442	22,834	29,848	184,798	228,981	273,355	192,696	
McNeil availability factor	100%	100%	66%	92%	100%	47%	99%	53%	53%	39%	0%	70%	73%	71%	90%	84%	67%	80%		
McNeil capacity factor	per budget	88%	45%	85%	47%	0%	78%	47%	27%	34.5%	0%	47%	28.1%	65.6%	80.2%	42.3%	52.4%	62.4%		
Winooski One generation (MWH)	per budget	1,083	29,498	1,355	1,316	1,031	1,054	2,784	2,803	1,990	2,758	4,033	4,182	2,627	3,565	36,318	25,350	24,752	21,194	
Winooski One availability factor	100%	90%	98%	90%	99%	98%	98%	98%	97%	97%	99%	99%	99%	99.0%	99.0%	97.2%	98.3%	97%		
Winooski One capacity factor	per budget	20%	48%	25%	25%	19%	20%	51%	58%	59%	50%	76%	76%	58%	65%	56%	41.7%	37%		
Gas Turbine generation (MWH)	NA	6.9	484	30.7	19.9	17.96	0.0	56.2	51.9	181.6	11	16	47.5	5.6	45.6	475	356	373	441	
Gas Turbine availability factor	100%	97%	98%	100%	96%	98%	98%	99%	98%	100%	89%	100%	98%	98%	100%	46.7%	54.5%	96%		
Gas Turbine capacity factor	NA	0.0%	0.1%	0.2%	0.0	0%	0.0%	0.0%	0.4%	0.4%	0%	0%	0.0%	0.0%	0.3%	0.2%	0.2%	0.21%		
BTV solar PV production (mWh)		215	5,020	139	230	459	538	528	675	585	607	452	403	322	82	4,681	5,260	5,015	5,182	
Cost of power supply - gross (\$000)			\$34,858	\$2,908	\$3,013	\$2,578	\$3,117	\$3,039	\$3,108	\$3,130	\$2,182	\$3,026	\$2,924	\$3,004	\$2,830	\$30,002	\$36,755	\$30,285	\$31,081	
Cost of power supply - net (\$000)			\$27,984	\$2,908	\$1,500	\$2,578	\$3,117	\$809	\$3,108	\$3,130	\$255	\$3,026	\$2,924	\$3,004	\$1,625	\$22,710	\$27,487	\$22,134	\$23,388	
Average cost of power supply - gross \$/KWH			\$0.11	\$0.10	\$0.12	\$0.10	\$0.11	\$0.10	\$0.09	\$0.11	\$0.08	\$0.12	\$0.11	\$0.12	\$0.10	\$0.09	\$0.11	\$0.09	\$0.10	
Average cost of power supply - net \$/KWH			\$0.08	\$0.10	\$0.06	\$0.10	\$0.11	\$0.03	\$0.09	\$0.11	\$0.01	\$0.12	\$0.11	\$0.12	\$0.06	\$0.07	\$0.08	\$0.07	\$0.08	



*FY 2025
Financial Review
December*

February 3, 2025

Burlington Electric Department Financial Review

FY 2025

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FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of December FY25

(\$000)	Full Yr Budget	CURRENT MONTH			YEAR TO DATE		
		Budget	Actual	Variance	Budget	Actual	Variance
Sales to Customers	56,090	4,888	5,027	139	28,750	29,105	356
Other Revenues	3,881	372	297	(75)	1,895	1,689	(206)
Power Supply Revenues	7,631	0	0	0	3,828	3,742	(85)
Total Operating Revenues	67,602	5,260	5,324	64	34,472	34,536	64
Power Supply Expense (Net)	35,540	2,912	2,907	5	17,986	17,762	224
Operating Expense	22,912	1,795	1,846	(51)	10,848	10,711	137
Depreciation & Amortization	5,832	486	494	(8)	2,916	2,950	(34)
Taxes	3,615	300	292	8	1,814	1,722	93
Sub-Total Expenses	67,899	5,493	5,540	(47)	33,564	33,145	419
Operating Income	(298)	(233)	(216)	17	908	1,391	483
Other Income & Deductions	6,855	466	602	136	3,964	2,854	(1,110)
Interest Expense	3,204	263	264	(2)	1,627	1,586	42
Net Income (Loss)	3,354	(29)	122	151	3,244	2,660	(585)

Year-to-Date Results:

- **Sales to Customers** up \$355,700 (1.2%). Residential Sales were up \$260,700 and Non-Residential Sales up \$91,700.
- **Other Revenues** down \$206,000 (5%)
 - a. DSM billable (customer driven).
- **Power Supply Revenues** down \$86,000 (2%)
 - a. McNeil REC revenue of \$1,726,000 compared to a budget of \$1,517,000.
 - b. Wind REC revenue of \$1,432,000 compared to a budget of \$1,710,000.
 - c. Hydro REC revenue of \$524,000 compared to a budget of \$601,000.
 - d. Other REC revenue of \$60,000 compared to a budget of \$0.
- **Power Supply Expenses (Net)** down \$224,000 (1%)
 - a. Fuel down \$610,000.
 - b. Purchased Power up \$330,000.
 - c. Transmission up \$56,000.
- **Operating Expenses** down \$137,000 (1.3%)
- **Taxes** down \$93,000 (5.1%)
 - a. Actual Winooski One Property Tax is \$228,300 lower than budget assumption for the year.
 - b. Actual Payment in Lieu of Tax (PILOT) is \$63,500 higher than budget assumption for the year.
- **Other Income & Deductions** down \$1,110,000 (28%)
 - a. Timing of customer contribution/grant proceeds unfavorable (\$1,415,000).
 - b. Timing of jobbing unfavorable (\$65,200).
 - c. Offset by unrealized gain on investment \$112,800.

FINANCIAL HIGHLIGHTS – BUDGET VS ACTUAL as of December FY25

Capital Spending – December YTD (\$000s)				
Plant Type	Full Yr. Budget	Budget	Actual	% Spent
Production	\$2,446	\$1,440	\$1,569	64%
Other	369	231	153	41%
Transmission	577	577	577	100%
Distribution	5,797	3,806	1,911	33%
General	2,478	1,334	105	4%
Total	\$11,667	\$7,389	\$4,316	37%

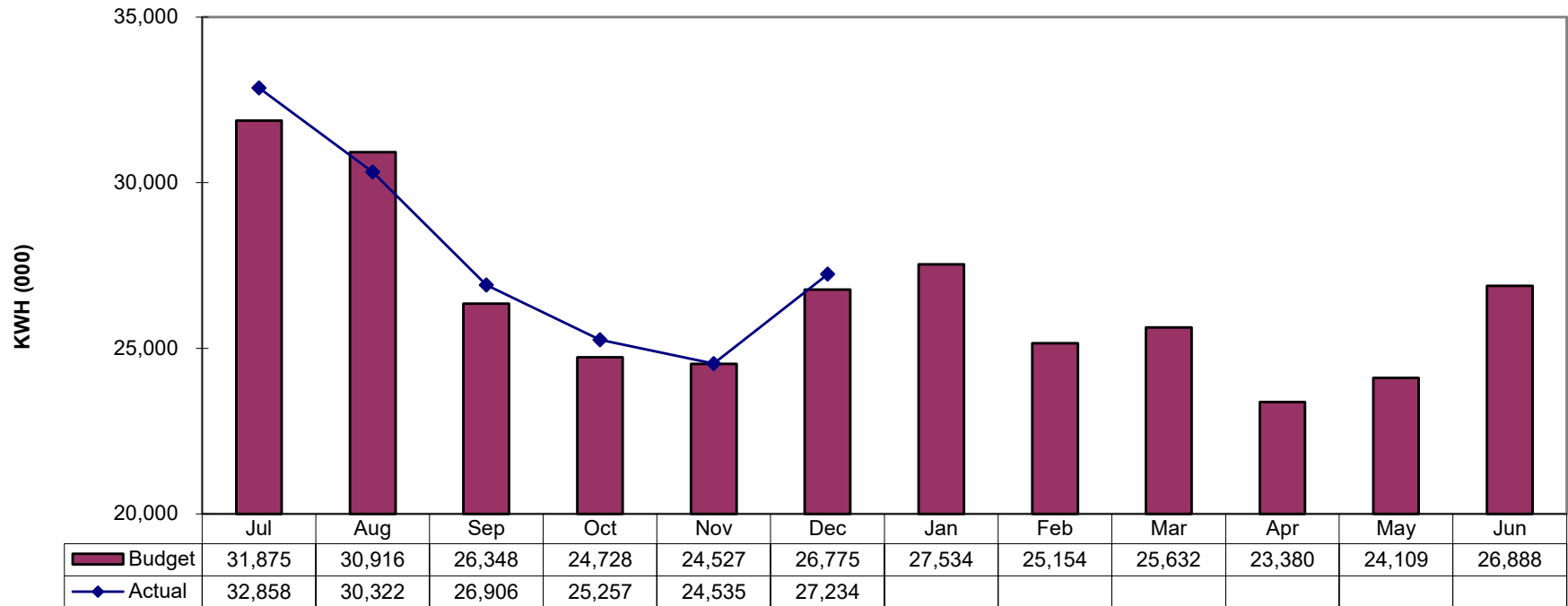
- (1) **Production** – Timing; YTD budget includes replacement rail cars (\$50,000) and catalyst replacement for NOx system (\$226,000) at the McNeil Plant. Offset by timing of planned FEMA contribution for large inflatable dam replacement at Winooski One hydro.
- (2) **Distribution** – Timing of various projects.
- (3) **General** – Timing; budget includes IT Forward CIS implementation \$699,600, key fob system replacement, \$68,200 and new SCADA room, \$64,800.

As of December 31, 2024 Operating Cash and Investments	
Operating Funds	\$9,974,540
Operating Fund – CDs	\$981,830
Total Operating Cash	\$10,956,370

Credit Rating Factors – December 2024				
	"A"	"Baa"	Current	3 Year Average
Debt Service Coverage Ratio	1.25	1.25	5.11	4.19
Adjusted Debt Service Coverage Ratio	1.50	1.10	1.34	1.25
Cash Coverage - Days Cash on Hand	90	30		
- With \$10M Line of Credit			148	128
- Without Line of Credit			84	

**Burlington Electric Department
Fiscal Year Ending June 30, 2025**

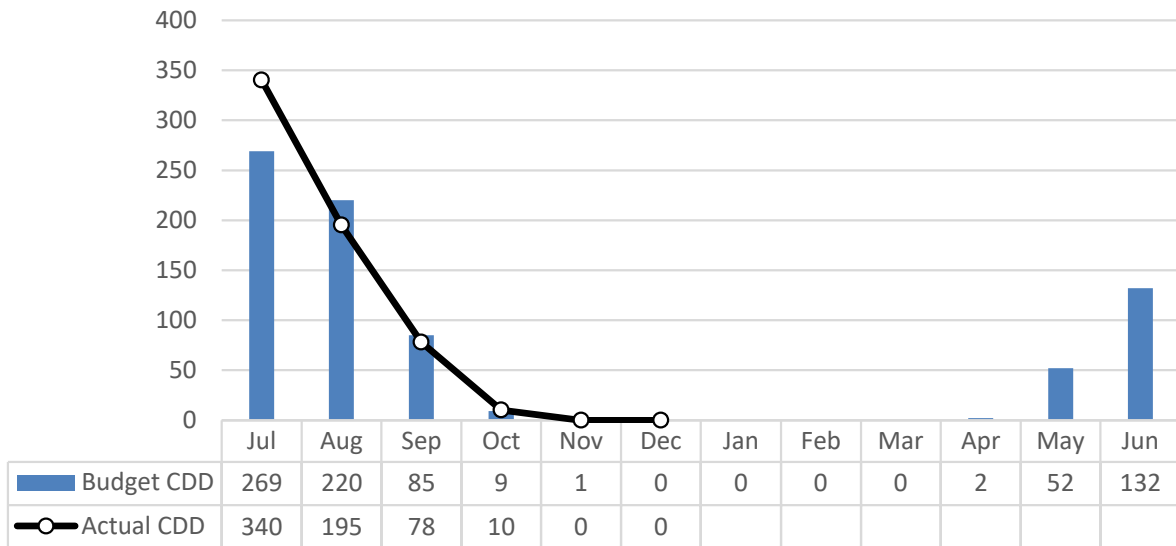
**Total Sales to Customers - KWH
Monthly**



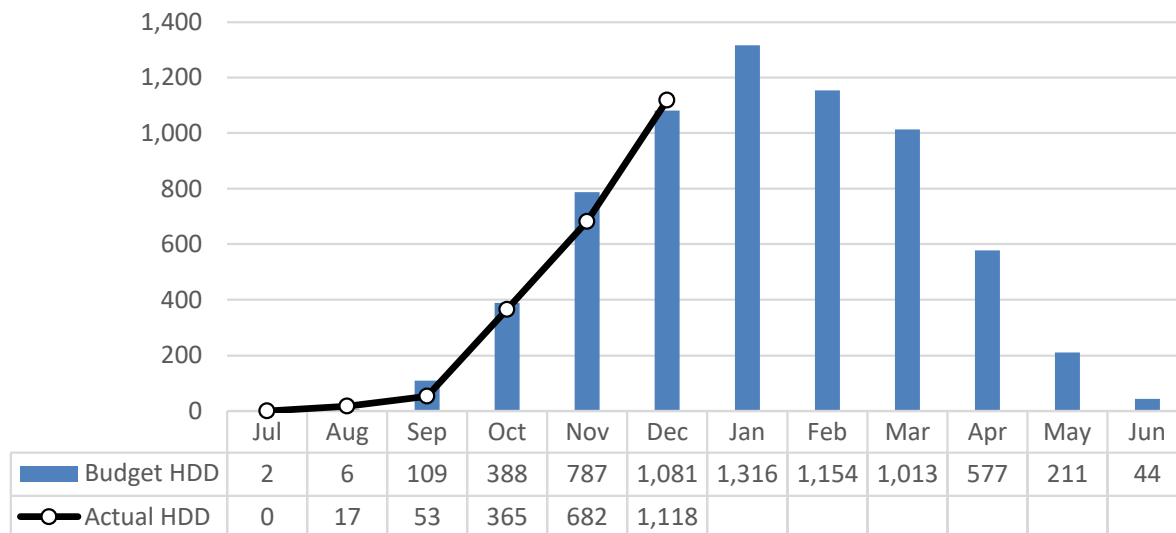
KWH Sales to Customers (YTD)												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget	31,875	62,791	89,139	113,867	138,394	165,169	192,703	217,857	243,489	266,869	290,978	317,865
Actual	32,858	63,180	90,086	115,343	139,878	167,112						

FY 2025

Cooling Degree Days (CDD)



Heating Degree Days (HDD)

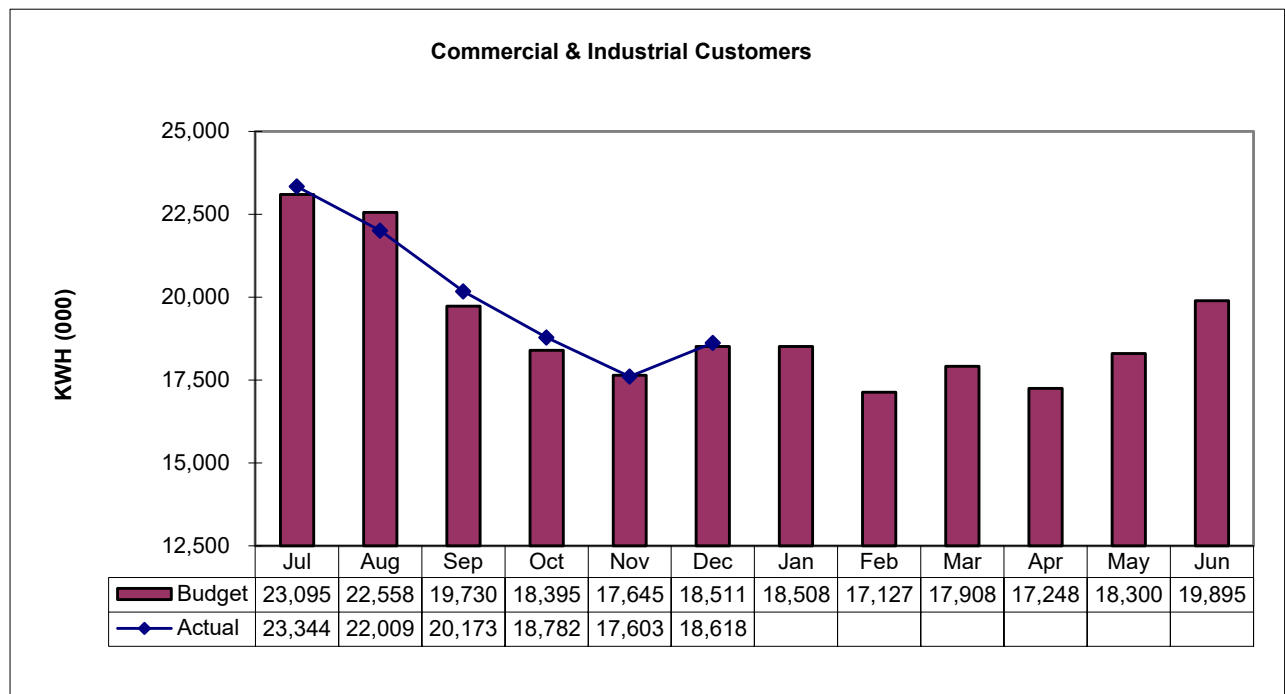
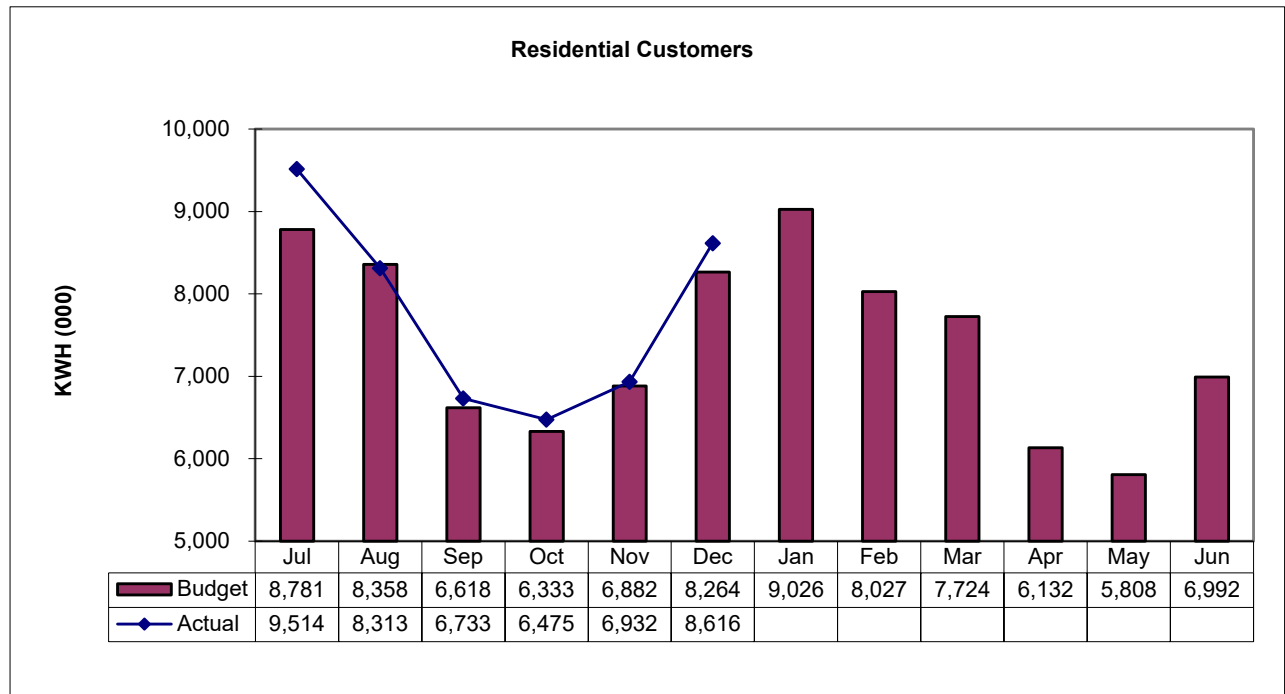


Average Monthly Temperature

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget	73	72	64	53	39	30	22	24	32	46	60	68
Actual	76	70	66	53	42	29						

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, 2025
KWH Sales**



Street Lighting is included with Commercial & Industrial Customers.

Net Power Supply Costs
December - FY 2025

	(\$000)						
	Current Month				Year-to-Date		
	Budget	Actual	Variance		Budget	Actual	Variance
Expenses:							
Fuel (p. 7)	\$1,164	\$1,099	\$65	(1)	\$4,532	\$3,922	\$610 (1)
Purchased Power (p.11)	812	1,025	(214)	(2)	8,179	8,509	(330) (2)
Purchased Power Adjustment (p 11)	43	43	(0)		260	260	(0)
Transmission Fees - ISO	580	516	63	(3)	3,889	4,043	(154) (3)
Transmission Fees - Velco	229	137	93	(4)	697	655	42 (4)
Transmission Fees - Other	84	87	(3)		428	373	56 (5)
Total Expenses	2,912	2,908	4		17,986	17,762	224
Revenues:							
Renewable Energy Certificates - McNeil	0	0	0		1,517	1,726	209
Renewable Energy Certificates - Wind	0	0	0		1,710	1,432	(278)
Renewable Energy Certificates - Hydro	0	0	0		601	524	(76)
Renewable Energy Certificates - Other	0	0	0		0	60	60
Total Revenues	0	0	0		3,828	3,742	(85) (6)
Net Power Supply Costs	\$2,912	\$2,908	\$4		\$14,158	\$14,020	\$138
Load (MWh)	27,437	27,870	433		169,621	171,278	1,656
\$/MWh	\$106.14	\$104.34	(\$1.80)		\$83.47	\$81.85	(\$1.62)

Current Month:

(1) See detail on page 7.

(2) See detail on page 11.

(3) ISO-NE Peak Load under Budget.

(4) VELCO Common charges and BED share under Budget.

YTD:

(1) See detail on page 7.

(2) See detail on page 11.

(3) ISO-NE Peak Load over Budget.

(4) VELCO Common charges under Budget

(5) NYPA NYISO Transmission charges under Budget.

(6) REC Sales under Budget due to lower McNeil and Wind production in Calendar Year 2024.

**Net Power Supply Costs
December - FY 2025**

	(\$000)							
	Current Month			Year-to-Date				
	Budget	Actual	Variance		Budget	Actual	Variance	
<u>FUEL:</u>								
McNeil	1,149	1,088	61	(1)	4,439	3,849	590	(1)
Gas Turbine	15	11	4		93	73	20	(2)
Total Fuel	<u>1,164</u>	<u>1,099</u>	<u>65</u>		<u>4,532</u>	<u>3,922</u>	<u>610</u>	

Current Month:

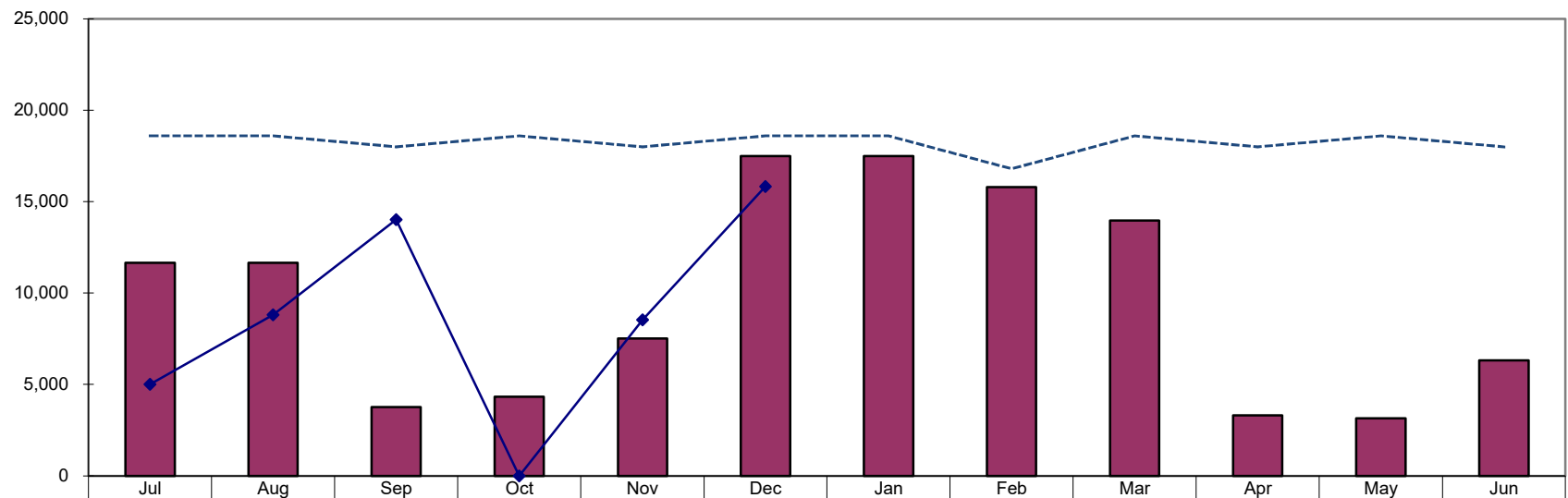
(1) McNeil production 9% under Budget. Wood Price per Ton 4% under Budget. (p. 8)

YTD:

(1) McNeil production 7% under Budget. Wood Price per Ton 3% under Budget. (p. 8)

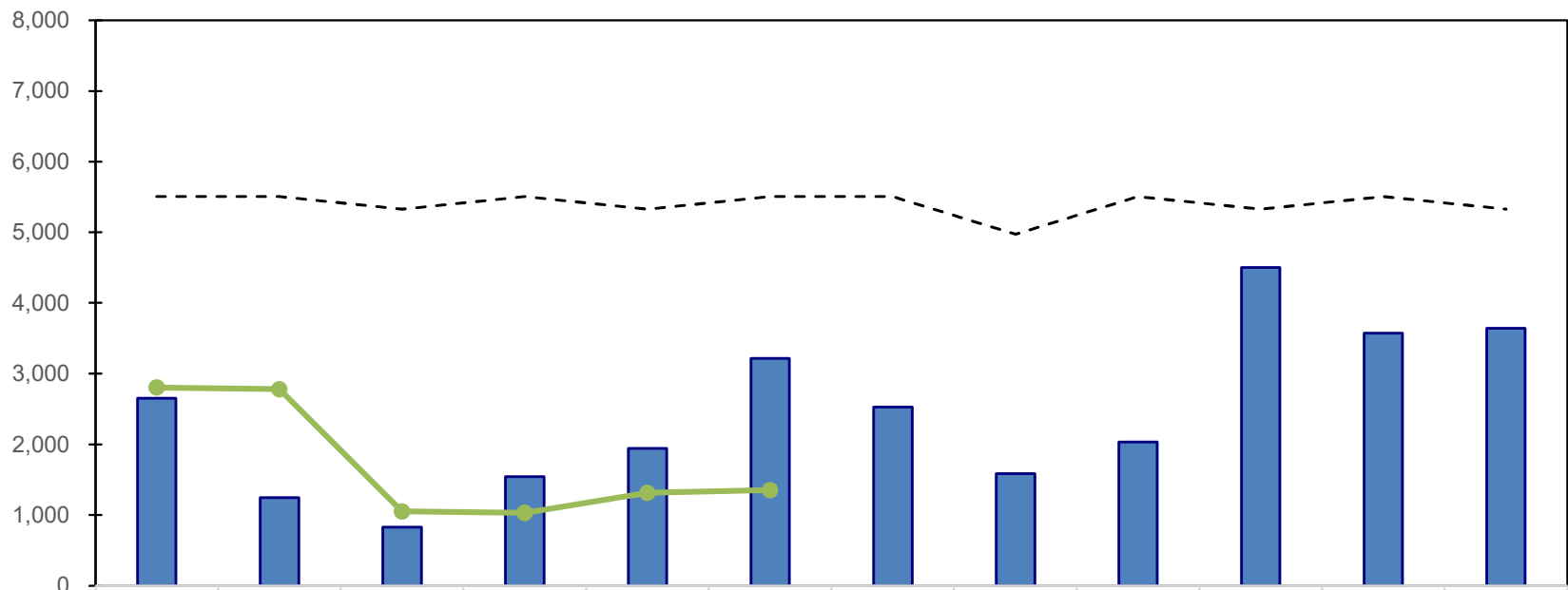
(2) GT production (176 MWh) 7% under Budget.

**Burlington Electric Department
McNeil Plant - MWH Production (50%)
FY 2025**



 Budget	11,656	11,656	3,760	4,324	7,520	17,484	17,484	15,792	13,968	3,300	3,150	6,317
 ◆ Actual	5,016	8,822	14,029	0	8,548	15,831						
 Maximum	18,600	18,600	18,000	18,600	18,000	18,600	18,600	16,800	18,600	18,000	18,600	18,000

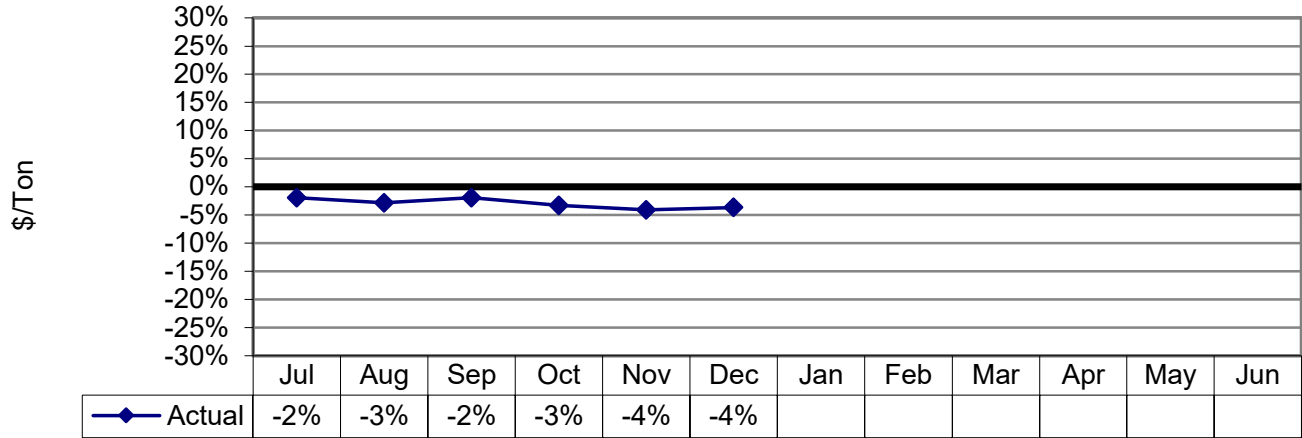
**Burlington Electric Department
Winooski One - MWH Production
FY 2025**



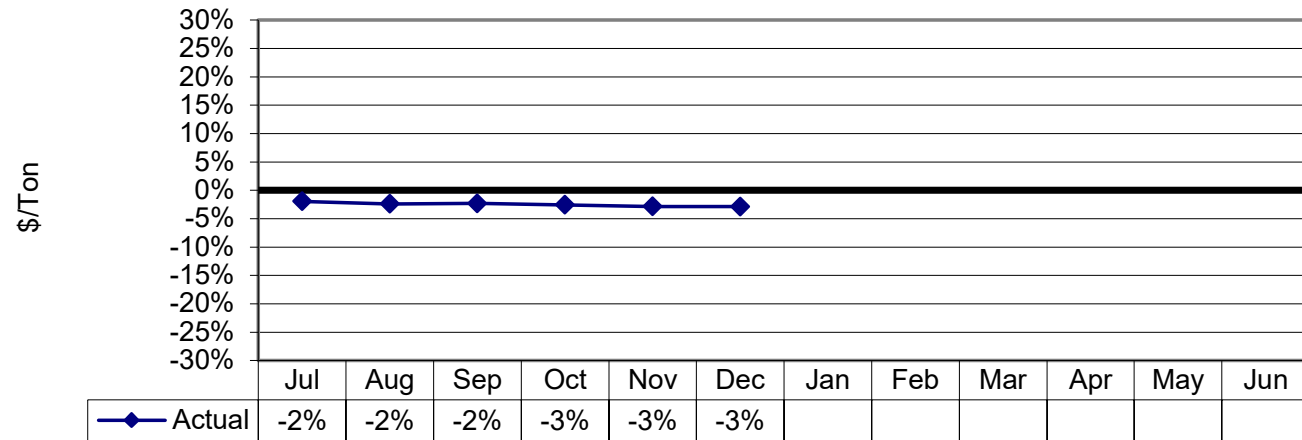
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget	2,650	1,246	832	1,541	1,942	3,216	2,531	1,587	2,032	4,503	3,575	3,643
Actual	2,803	2,784	1,054	1,032	1,316	1,355						
Maximum	5,506	5,506	5,328	5,506	5,328	5,506	5,506	4,973	5,506	5,328	5,506	5,328

Burlington Electric Department Fiscal Year 2025

Woodchips Price Per Ton Monthly Variance



Woodchips Price Per Ton Year-to-Date Variance



* Wood only. Does not include other costs.

**Net Power Supply Costs
December - FY 2025**

	(\$000)					
	Current Month			Year-to-Date		
	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
<u>PURCHASED POWER:</u>						
Non-Energy (capacity)	62	37	25	426	334	92
Energy:						
Georgia Mountain Wind	312	353	(41)	1,659	1,585	74
Hancock Wind	342	298	44	1,383	1,293	90
VT Wind	259	222	37	1,142	1,297	(155)
Hydro Quebec	301	300	1	1,829	1,826	3
Great River Hydro	179	179	0	1,064	1,111	(47)
In City Solar Generators	26	24	1	423	437	(14)
NYPA	7	6	1	38	43	(5)
ISO Exchange	(775)	(719)	(56)	(318)	(231)	(87)
ISO Exchange Adjustment	43	43	(0)	260	260	(0)
FirstLight	0	162	(162)	0	387	(387)
Velco Exchange	0	(1)	1	0	(4)	4
Total Energy	<u>694</u>	<u>868</u>	<u>(174)</u>	<u>7,478</u>	<u>8,004</u>	<u>(526)</u>
Ancillary Charges	(5)	17	(21)	(97)	(91)	(6)
VT RES Tier 1 Compliance Expense	54	93	(39)	325	172	153
Miscellaneous-Other	50	54	(4)	308	351	(43)
Total Purchased Power Expense	<u>855</u>	<u>1,069</u>	<u>(214)</u>	<u>8,440</u>	<u>8,769</u>	<u>(330)</u>

Special Note ()**

Adjustment to reduce expense and create regulatory asset by amount of ISO Exchange excess winter energy revenue shortfall (\$4,162,233) and record one-eighth (\$520,279) as amortization in FY24.

Current Month:

- (1) Production 13% over Budget.
- (2) Production 13% under Budget.
- (3) Production 14% under Budget.
- (4) McNeil (9%), Winooski One (58%), and Wind (6%) Production under budget.
- (5) FirstLight contract not in Budget.
- (6) VT RES Tier 1 Compliance budgeted monthly, expensed quarterly.

YTD:

- (1) Production 4% under Budget.
- (2) Production 6% under Budget.
- (3) Includes additional congestion relief charge not in Budget.
- (4) Associated RECs not Budgeted under Energy.
- (5) Production over budget.
- (6) McNeil (7%), Winooski One (9%), and Wind (4%) Production under budget.
- (7) FirstLight contract not in Budget.
- (8) VT RES Tier 1 Compliance budgeted monthly, expensed quarterly.

Burlington Electric Department
Operating and Maintenance Expense by Spending Category
FY 2025 - December YTD

	Budget	Actual	Variance	% Variance	*
Labor-Regular	4,393,683	4,503,794	(110,111)	3%	a
Labor-Overtime	216,766	250,137	(33,371)	15%	b
Labor-Temporary	200	160	40	20%	
Labor-Overhead	1,894,884	2,115,915	(221,031)	12%	c
Outside Services	1,234,538	1,042,503	192,035	16%	d
DSM (rebates & outside services)	1,029,664	955,386	74,278	7%	e
Materials & Supplies	484,539	404,415	80,124	17%	f
Insurance	386,423	316,176	70,247	18%	
A & G Clearing	(612,164)	(363,352)	(248,812)	41%	g
Other - RES Tier 3 Compliance	474,861	389,050	85,811	18%	
Other	1,345,070	1,096,312	248,758	18%	h
Operating & Maintenance	10,848,464	10,710,496	137,968	1%	

(a) Labor is impacted by the amount of capital (vs. expense) work.

(b) Areas higher than planned include Distribution, \$11,800 and McNeil Plant, \$29,800; offset by areas lower than planned include System Operations, (\$12,800).

(c) See page 13.

(d) Timing of various areas.

(e) 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.

(f) Timing of various areas.

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

(h) Timing; various areas are less than budget including, Maintenance Contracts (\$85,100), Education & Training (\$35,800), Transportation Clearing (\$100,700) and Utilities (\$20,600).

**Burlington Electric Department
Budget vs Actual Spending Analysis
FY 2025 - December YTD**

Labor - Overhead	Budget	(000's)		%	
		Actual	Variance		
Pension	\$965	\$909	\$56	6%	(a)
Medical Insurance	1,040	1,333	(293)	-28%	(b)
Social Security Taxes	528	478	50	9%	(c)
Workers Compensation Ins.	208	162	46	22%	(b)
Dental Insurance	47	44	3	7%	(b)
Life Insurance	10	10	(0)	-2%	(b)
Childcare Contribution Tax	30	27	3	11%	(d)
	\$2,830	\$2,964	(\$134)	-5%	

Rates Table:	Budget
<i>Pension (a)</i>	14.13%
<i>Social Security (c)</i>	7.65%
<i>Childcare Payroll Tax</i>	0.44%

(a) Function of labor cost.

Includes pension per Actuarially Determined Employer Contribution (ADEC), \$1,843,800 and amortization of IBEW Pension back payment, \$87,041.

(b) Budget provided by the City during budget development. Actual YTD reflects an error that will be corrected throughout the remainder of the year.

(d) New tax as of July 1, 2024 is 0.44% of wages. Budget had assumed .33% of wages.

Net Income
FY 2025 - December (\$000)

		Current Month			Year - To - Date		
	Ref	Budget	Actual	Variance	Budget	Actual	Variance
Operating Revenues							
Sales to Customers	p.3	4,888	5,027	139	28,750	29,105	356
Other Revenues		372	297	(75) (a)	1,895	1,689	(206) (a)
Power Supply Revenues	p.6	0	0	0	3,828	3,742	(86)
Total Operating Revenues		<u>5,260</u>	<u>5,324</u>	<u>64</u>	<u>34,472</u>	<u>34,536</u>	<u>64</u>
Operating Expenses							
Fuel	p.6	1,164	1,099	65	4,532	3,922	610
Purchased Power	p.6	855	1,068	(212)	8,440	8,769	(329)
Transmission	p.6	893	740	153	5,014	5,070	(56)
Operating and Maintenance	p.12	1,795	1,846	(51)	10,848	10,711	137
Depreciation & Amortization		486	494	(8)	2,916	2,950	(34)
Revenue Taxes		52	51	1	325	326	(1)
Property Taxes Winooski One		45	26	19 (b)	269	155	114 (b)
Payment In Lieu of Taxes		203	216	(12) (c)	1,221	1,241	(20) (c)
Total Operating Expenses		<u>5,493</u>	<u>5,540</u>	<u>(46)</u>	<u>33,564</u>	<u>33,144</u>	<u>420</u>
Other Income and Deductions							
Interest/Investment Income		38	42	4	250	331	80
Dividends		373	382	9	2,236	2,259	23
Customer Contributions/Grant Proceeds		69	30	(38) (d)	1,633	218	(1,415) (d)
Gain/(Loss) on Disp of Plant		(18)	(15)	3	(178)	(15)	163
Other		5	163	158 (e)	22	61	38 (e)
Total Other Income & Deductions		<u>466</u>	<u>602</u>	<u>136</u>	<u>3,964</u>	<u>2,854</u>	<u>(1,110)</u>
Interest Expense		263	264	(2)	1,627	1,586	42
Net Income		<u>(29)</u>	<u>122</u>	<u>151</u>	<u>3,244</u>	<u>2,660</u>	<u>(585)</u>

Current Month:

- (a) Energy Efficiency Program cost reimbursement was lower than planned, \$76,900.
- (b) Actual Winooski One tax bill is lower than budget assumption by \$228,300 for the year.
- (c) Actual Payment in Lieu of Tax (PILOT) is higher than budget assumption by \$63,500 for the year.
- (d) Budget includes customer contributions for Champlain Parkway (\$29,400), Great Street-Main Street (\$2,300) and other overhead and underground billable. Also, grant income for "Building Giants" (Federal 50% share) (\$24,100). Actual includes various grant income.
- (e) Timing of jobbing \$137,700 and unrealized gain on investment, \$22,600.

Year - To - Date:

- (a) Energy Efficiency Program cost reimbursement was lower than planned, \$260,120.
- (b) See current month.
- (c) See current month.
- (d) Budget includes Winooski One FEMA reimbursement (75%) for inflatable dam (\$1,057,500), and other customer contributions for Champlain Parkway (\$191,000), Winooski bridge rebuild (\$34,800) and other overhead and underground billable. Also, grant income for FEMA reimbursement for July '23 flooding at Winooski One (\$101,800) and "Building Giants" (Federal 50% share) (\$144,300). Actual includes overhead & underground billable and various grant income.
- (e) Timing of jobbing unfavorable (\$65,200); offset by unrealized gain on investment, \$112,800.

**Burlington Electric Department
Capital Projects - FY25**

	\$000			
	Full Year Budget	Budget	December Actual	Variance
McNeil (BED 50% Share)				
Ash Silo Pug Mill/Auger Upgrade (312)	25			0
Catalyst Replacement for Nox System (312)	450	450	226	225
Condensate Motor (314)	10			0
Condensate Pump (314)	15			0
Cooling Tower Make-Up Pumps Replaced (314)	8			0
ESP Mechanical Field Rebuild	284		5	(5)
Farmhouse Improvements (311)	10			0
McNeil - IT Forward FIS	38			0
Reclaimer Rebuild (312)	30			0
Replace Water & Sewer Lines at the Farmhouse (311)	28			0
Replacement Rail Cars (312)	50	50		50
Routine Station Improvements ¹	188	94	38	56
Safety Valve Replacements (312)	13			0
Station Tools & Tool Boxes (312)	8	4	3	1
Turbine Control System Upgrade/Insurance (314)	0		21	(21)
Woodchip Dryer (1 of 2) (312)	38		1	(1)
Loader repair	0		(25)	25
Other	16	10		10
Total McNeil Plant	1,209	608	268	340

(a) Budget includes perimeter fence upgrade, rigging equipment, portable radios upgrade, energy efficiency improvements and furniture.

Hydro Production	980	653	1,293	(640)
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(a) Full year budget assumes inflatable dam project at a cost of \$1.3M with 75% reimbursement from FEMA of \$1.1M.

Gas Turbine	257	180	9	171
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(a) Timing; budget assumed roof replacement in August, \$97,600, delayed until spring.

Total Production Plant	2,446	1,440	1,569	(129)
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Other

Direct Current Fast Chargers (Level 3)	171	120	113	7
Distributed Energy Resources	33	20		20
EV Charger Installations (Level 2)	127	63	40	23
EV Chargers/Staging Plan	13	13		13
P&P R&D	26	15		15
Total Other	369	231	153	78

**Burlington Electric Department
Capital Projects - FY25**

	\$000			
	Full Year Budget	Budget	December Actual	Variance
Transmission Plant				
VT Transco Investment	577	577	577	0
Total Transmission Plant	577	577	577	0
Distribution Plant-General				
Aerial				
Archibald St Rebuild	66	66	25	41
Barrett Street Rebuild			10	(10)
Dunder Road Rebuild	58	58	0	58
Killarney Drive Rebuild	0		(3)	3
North St Rebuild P1577-1486	0		110	(110)
Replace 2L5 Circuit from P2349-913S	0		21	(21)
Replace Condemned Poles	110	110	60	51
South Cove Road East Rebuild	145	130	16	114
South Cove Road West Rebuild	184	166	4	161
Total Aerial	563	530	243	287
Underground				
Battery St Phase II Replace UG Cable	517	414	3	411
Cathedral Square Rebuild	41	41	33	8
College St (Pine - St Paul St) Replace UG Cable	148		62	(62)
Fern Hill UG Rebuild	0		4	(4)
Replace 2L5 Cable 913s to UH248	0		34	(34)
Summit Ridge Rebuild	63	63	153	(90)
Switch 305S/325S/326S (Main St Reservoir)	258	258		258
Switch 322/323/324S (Main St and Univ Hts)	242	242		242
Switch 817S/912S/913S (Main St Reservoir)	151	151	92	59
Total Underground	1,421	1,169	381	788
Customer Driven/City Projects				
Champlain Parkway-Billable	345	224	10	214
Champlain Parkway (CAFC)	(294)	(191)	(327)	136
City Place Streetlighting	306			0
City Place Streetlighting (CAFC)	(197)			0
Great Street Initiative	0		0	(0)
Great Street-Main Street	23	15	4	11
Great Street-Main Street (CAFC)	(23)	(15)		(15)
Winooski Bridge Rebuild	35	35		35
Winooski Bridge Rebuild (CAFC)	(35)	(35)		(35)
Total Underground	161	33	(312)	346

**Burlington Electric Department
Capital Projects - FY25**

	\$000			
	Full Year Budget	Budget	December Actual	Variance
Other				
College St Breaker Racking Device	25	25		25
Distribution Transformers-Purchase	1,590	1,113	127	986
Distribution Transformers-Install	6	4	8	(4)
Communication Equipment Emergency Repair	15	6		6
ADMS SCADA Upgrade (Phase I/11)	617	432	615	(184)
ADMS SCADA Upgrade (Phase III/IV)	542			0
SCADA Servers PC's and Monitors	0		39	(39)
SCADA Video Display	0		0	(0)
SCADA Equipment	128	128	1	127
Other				0
Total Other	<u>2,922</u>	<u>1,707</u>	<u>791</u>	<u>915</u>
 Total Distribution Plant-General	<u>5,066</u>	<u>3,439</u>	<u>1,103</u>	<u>2,336</u>
 Distribution Plant - Blanket				
Aerial	146	53	44	9
Aerial (CAFC)	(64)	(23)	(33)	11
Underground	321	168	348	(179) (a)
Underground (CAFC)	(132)	(66)	238	(304)
Meters	178	132	54	78
Lighting	223	79	136	(57)
Tools & Equipment - Distribution/Technicians	30	12	19	(7)
Replaces Failed SCADA Field Equipment	11	4		4
Substation Maintenance	18	6	2	4
Total Distribution Plant - Blanket	<u>731</u>	<u>367</u>	<u>808</u>	<u>(441)</u>

(a) Actual includes prior year progress billing that was reversed, \$277,368 in September (wf 36863 - City Place).

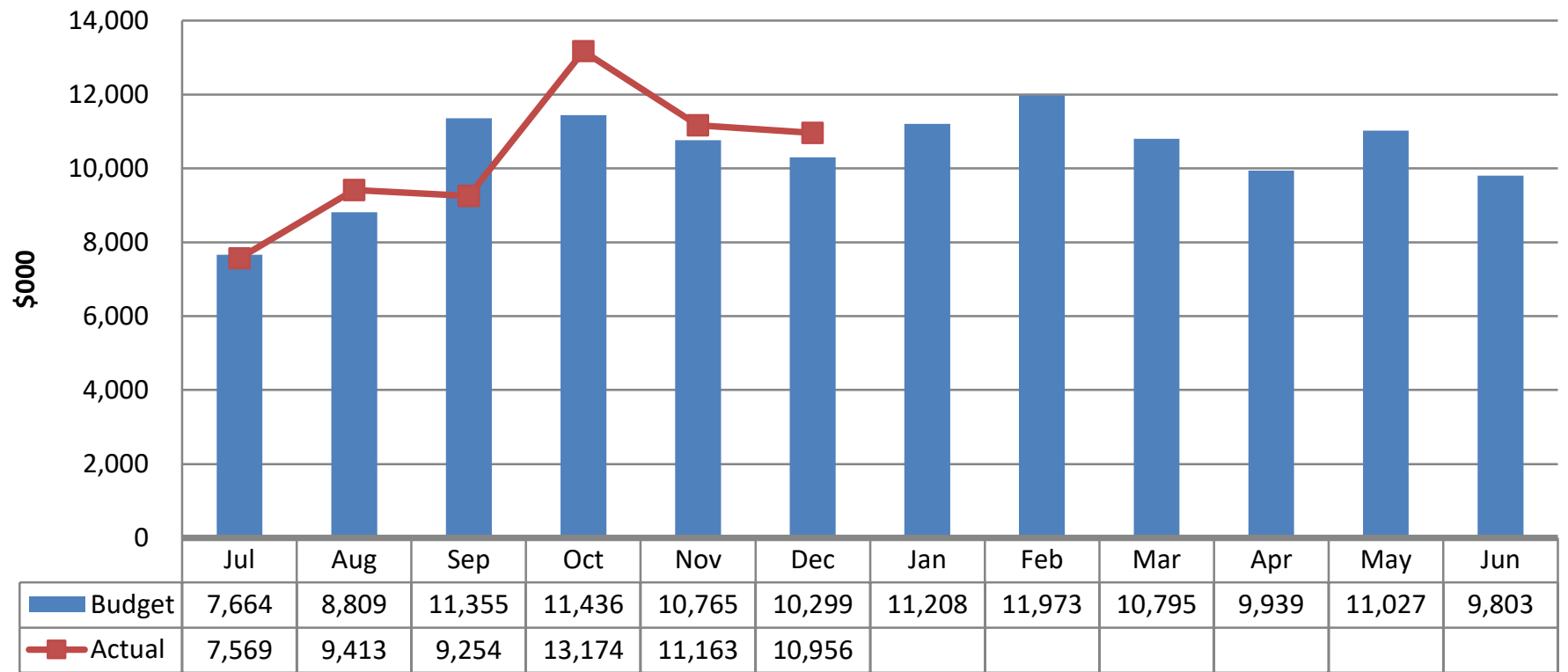
Total Distribution Plant	<u>5,797</u>	<u>3,806</u>	<u>1,911</u>	<u>1,895</u>
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**Burlington Electric Department
Capital Projects - FY25**

	\$000			
	Full Year Budget	Budget	December Actual	Variance
General Plant				
Computer Equipment/Software	2,127	984	63	921 (a)
Vehicle Replacement	191	190		190
Buildings & Grounds	155	155	42	113 (b)
Gas Detectors	5	5		5
Total General Plant	2,478	1,334	105	1,229
Sub-Total Plant	\$11,667	\$7,389	\$4,315	\$3,074
Add: CAFC* reclass to "Other Income"	1,803	1,387	122	1,265
Total Plant	\$13,470	\$8,776	\$4,438	\$4,338

* Customer Advances (Contributions) for Construction.

Operating Cash - FY 2025 Monthly Ending Balance



LETTER OF AGREEMENT

1. BACKGROUND

Burlington Electric Department ("**BED**"), Green Mountain Power ("**GMP**"), and Vermont Public Power Supply Authority ("**VPPSA**"), collectively (the "**Parties**", each a "**Party**"), enter into this Letter of Agreement (this "**Agreement**") to permit BED to pursue installation of a battery storage system at the McNeil Generating Station ("**McNeil**"). BED has done work to scope the potential for a 5-megawatt battery storage system at McNeil and is interested in pursuing installation of such a battery storage system for the reliability, peak reduction, and other benefits such a system may provide.

This Agreement by the Parties, who collectively comprise the Joint Owners of McNeil, enables BED to contract for and install at McNeil a battery storage system with a capacity no greater than 5 megawatts / 20 megawatt-hours for BED's exclusive benefit, while the Parties negotiate separately and concurrently on a potential transfer of ownership shares in the McNeil plant and site per the Letter of Agreement on that subject dated October 10, 2024.

2. RESPONSIBILITIES & ASSIGNMENT OF COSTS

It is understood by the Parties that BED will undertake contracting for and arrange installation of a battery storage system at its own cost and will not seek cost recovery from another Party for work undertaken pursuant to this Agreement, unless a battery storage system is installed and there is not a transfer of ownership shares of McNeil, in which case the provisions outlined in section 5 of this Agreement will take effect, which include options for the Parties to reach agreement to share costs and economic benefits of the battery storage system or for BED to provide compensation to the other Joint Owners for the use of the site as a means of sharing value from such system with GMP and VPPSA.

The Parties agree that, if ownership shares transfer from GMP and VPPSA to BED subsequent to installation of a battery storage project at McNeil, BED will have sole responsibility for the costs of eventual decommissioning and any environmental remediation that is attributable to the battery storage project contemplated in this Agreement and, to the extent necessary to effectuate this intent, will, to the fullest extent permissible under applicable law, indemnify GMP and VPPSA for any costs and expenses assigned to or incurred by them regarding battery storage decommissioning and environmental remediation. This responsibility is distinct from decommissioning and environmental remediation costs for the McNeil plant and site, which will be addressed in any ownership share transfer agreement.

3. TERM

This Agreement shall commence upon the date it is executed by all of the Parties, and shall expire on the sooner of any executed approved agreement to transfer ownership shares in McNeil by GMP and VPPSA to BED, or November 15, 2025, unless the Agreement is renewed prior to that date by all Parties. The Parties agree to negotiate in good faith a successor to this Agreement as needed in the event that BED enters into a contract for battery storage installation at McNeill.

4. CONFIDENTIALITY

4.1 All information or documentation received by a Party to this Agreement (the "**Receiving Party**") regarding the business affairs or trade secrets of another Party to this Agreement (the "**Disclosing Party**"), including information and documentation pertaining to or arising from the business relationship between the Parties, shall be deemed to be confidential and proprietary to the Disclosing Party ("**Confidential Information**") provided that it is marked as such at the time of disclosure. Except as otherwise provided herein, the Receiving Party shall not directly or indirectly disclose any such Confidential Information or documentation to any third party without the prior written consent of the Disclosing Party. Confidential Information may only be disclosed to the extent that such disclosure is expressly authorized by the Disclosing Party or to the extent that such disclosure is required by law, including, but not limited to, disclosures required by the Vermont Public Records Act. The Parties confirm that the fact that they are in discussions with respect to McNeil transfer of ownership shares, including, as applicable, the fact that they have executed this Agreement, and the Agreement once it is executed, is not Confidential Information. Any proposals offered by a party to affect any transfer of ownership shares shall be considered Confidential Information, whether provided in writing or during discussions and regardless of whether it is identified as Confidential Information at the time of disclosure or not.

4.2 Upon reasonable notice and request from the Disclosing Party, the Receiving Party will return or cause to be returned to the Disclosing Party all the Disclosing Party's Confidential Information in the Receiving Party's possession and will not retain any copies or other reproductions, records or documents thereof. The Receiving Party will, upon reasonable notice and request from the Disclosing Party, delete, destroy or have deleted or destroyed all reproductions, records and

documents in the Receiving Party's possession containing the Disclosing Party's Confidential Information or relating to the Receiving Party's review of the Disclosing Party's Confidential Information. The obligation to delete or destroy records of Confidential Information extends to any document prepared by the Receiving Party that substantially embodies or contains extracts from the Disclosing Party's Confidential Information. Notwithstanding the foregoing, the Receiving Party may retain the Confidential Information and all information and materials contained therein or annexed thereto as follows: (a) one physical copy to comply with legal, regulatory or compliance obligations, and (b) multiple copies may be retained in electronic format on standard system back-up tapes or other standard system back-up media according that Party's standard electronic back-up and archival procedures but if recovered as part of any system recovery activities shall be deleted at that time.

4.3 Notwithstanding the foregoing, the Receiving Party may, if required to do so, to comply with the preparation for and conduct of submissions requested by regulatory agencies, use such Confidential Information or documentation pertaining to or arising from the Project provided notice of such use is provided to the Disclosing Party in advance of such use.

4.4 It shall not be a breach of the confidentiality obligations hereof for a Receiving Party to disclose Confidential Information where, but only to the extent that, such disclosure is required by law or applicable legal process, including but not limited to Vermont's Access to Public Records Law, 1 V.S.A. Ch. 5, Subch. 3, provided that in such case the Receiving Party shall (i) give the earliest notice practical to the Disclosing Party that such disclosure is or may be required and (ii) take reasonable efforts to protect Confidential Information from public disclosure, including reasonably cooperating with the Disclosing Party to protect the confidential or proprietary nature of the Confidential Information which must be so disclosed. The Disclosing Party shall be responsible for and shall bear the costs of all legal or administrative proceedings seeking to prevent the public release of such Confidential Information, and the Receiving Party shall reasonably cooperate in preventing public disclosure of such information, provided that the Receiving Party shall not be required to bear any costs of litigation in seeking to prevent public release of information.

4.5 The obligations of confidentiality set out above shall not apply to material, data or information that was known to the Receiving Party prior to its receipt thereof, that is generally available or becomes available to the public without breach of this Agreement, or that has been obtained from a third party having the right to disclose the same. The confidentiality covenants of the Parties shall survive the termination of this Agreement for a period of two years from the date of termination.

5. PROCESS IN THE EVENT OWNERSHIP SHARE TRANSFER DOES NOT TAKE PLACE

The Parties acknowledge that if BED does proceed with installation of a battery storage system at McNeil, and if there is not ultimately a transfer of ownership shares in McNeil from GMP and VPPSA to BED, that the Parties will negotiate in good faith to a) provide value from the battery storage system installation to GMP and VPPSA through either a site lease agreement, or b) an agreement to share costs and economic benefits of the battery with the Joint Owners based on their pro rata share of the McNeil site. If neither of these options are agreeable to all Parties, the Parties may pursue another option for value sharing agreed to by all Parties. Notwithstanding the above, neither GMP nor VPPSA are obligated to engage in negotiations pursuant to b) if they do not choose to.

6. DEFINITIVE AGREEMENT

The Parties acknowledge that they intend to be bound by the terms of this Agreement, but only to the extent of the commitments set forth herein.

7. MISCELLANEOUS

This Agreement shall be governed by the laws of the State of Vermont, without reference to conflict of law rules, and venue for any dispute arising from this Agreement shall be proper in Chittenden County, Vermont, notwithstanding any other law. The Parties represent that they each have the authority to enter into this Agreement. This Agreement supersedes any prior negotiations, verbal agreements or other agreements among or between the Parties regarding the specific subject matter of this Agreement, the battery storage system, and nothing herein shall supersede or modify the Joint Owners agreements already in place between the Parties. This Agreement may be executed in counterparts, each of which shall be deemed an original, and it may be executed electronically, and an electronic copy or other facsimile shall be treated as an original. No modification of this Agreement or waiver of the terms and conditions hereof shall be binding on the Parties unless approved in writing by the Parties, notwithstanding the passage of time. No party may assign to a third party the whole or any part of its rights and obligations under this Agreement without the prior written consent of the other Parties. There are no third-

party intended beneficiaries of this Agreement. This Agreement shall not be construed against its drafter but shall instead be construed in such manner as best effectuates the objects and purposes hereof. The Parties are independent contractors, and no Party has any authority under this Agreement to bind another Party in any manner other than as laid out herein.

8. ACCEPTANCE AND BINDING OBLIGATIONS

Each of the Parties agree to this Agreement this _____ day of _____, 2025.

BURLINGTON ELECTRIC DEPARTMENT

Per: _____

Name:

Title:

GREEN MOUNTAIN POWER

Per: _____

Name:

Title:

VERMONT PUBLIC POWER SUPPLY AUTHORITY

Per: _____

Name:

Title:

I move that the General Manager shall have the authority to execute the proposed Battery Storage Agreement, substantially in the form provided to the Commission.

I move that the Burlington City Council Transportation, Energy and Utilities Committee approves and recommends to the Full City Council the 2 RFPs related to Forestry and the McNeil emissions reduction.



Burlington Electric Department
585 Pine St #4864
Burlington, VT 05401

October 30, 2024 – Revised January 29, 2025 To whom it concerns,

Please accept this letter proposal in response to your Request for Proposal RFP# 013-25 Emissions Assessment and Reduction Analysis for McNeil.

1 Situation, Background and Understanding

The McNeil Plant plays an important role in the city of Burlington with respect to providing reliable, clean, cost effective to the city of Burlington, providing power to the joint owners as well as providing capacity and frequency regulation services to Vermont and ISO-NE. Additionally, the plant provides important economic benefits to the local and regional economy supporting the forestry industry and supporting sustainable forestry practices in New York and Vermont. The plant also is classified as a renewable energy generator, producing Renewable Energy Credits.

The City of Burlington built the plant in 1984, and is operated under joint ownership with BED (50%), Green Mountain Power (31%) and Vermont Public Power Authority (19%). In earlier decades, the plant operated at a much lower capacity factor in 30% to 40%. In more recent years, the plant operates at a higher utilization factor, estimating a 52% capacity factor in 2022. The plant is dispatched by BED on an economic basis, considering the marginal operating cost and marginal revenues including wholesale energy and renewable energy credit value.

In 2008, the joint owners invested \$12 million to install a Regenerative Selective Catalytic Reduction system to reduce NOx emissions. This investment contributed to the plant qualifying as a renewable energy generator for the purposes of selling Renewable Energy Credits, including Connecticut's Class 1 RECs.

In 2023, the Burlington City Council approved advancing the development of a \$42 million district energy system, providing thermal energy to the University of Vermont Medical Center, incorporating a heat recovery system, construction of a thermal loop, and an electric boiler. The system is estimated to provide 125,000 MMBtu per year to UVMHC.

Wood chips are generally sourced within 60 miles of the plant from New York and Vermont. The wood chips typically cost between \$22 and \$33 per ton delivered by truck. Delivery by rail adds about \$7 per ton in cost. At full load, the plant consumes approximately 76 wet tons of wood per hour. According to one calculation for 2021, the McNeil plant emitted 453,563 tons of CO2 at the stack (i.e. without accounting for specific fuel types or any carbon benefit from the biomass cycle) as well as emitting additional materials including methane, nitrous oxides, carbon monoxide, Benzene, Formaldehyde and ultra-fine toxic particles.

The city of Burlington prepared a strategic plan in 2019 that sets a net zero energy target for the city including thermal energy and ground transportation energy, with the objective to eliminate fossil fuel use and greenhouse gas emissions. Within this context, BED operates the McNeil plant with energy production from local and regional wood chips, recognizing that the calculation of carbon cycle

associated with wood fired power plants is complex with several different approaches to calculating carbon impacts.

In recent years, biomass power plants have faced economic and environmental challenges. States such as New Hampshire have historically provided subsidies to wood fired power plants, to support the favorable characteristics including renewable resources, supporting the regional forestry industry and a local energy source. The advent of low-cost wind and solar power have provided states a lower cost renewable option, resulting in many state legislatures reducing their financial subsidies for wood fired power plants.

Issues have also been raised by environmental groups with respect to how carbon emissions are calculated and considered. The use of biomass with sustainable forestry practices provides a basis for a closed loop carbon cycle. However, the issue of timing of carbon absorption and carbon release has been raised. In addition, there are other pollutants emitted as a function of operating a wood fired thermal power plant. These issues have come before the Burlington City Council, with the result being an interest on the part of BED in investigating potential pathways to reduce stack carbon emissions at the McNeil power plant.

The purpose in issuing the RFP is to provide BED with approaches and their associated impacts and implications to potentially reduce the environmental footprint of the McNeil station while retaining the energy production benefits of the plant.

2 Goals, Objectives and Outcome

2.1 Goals and Objectives

November 20, 2023 City Council Resolution	Scope of Work
• Authority for BED to sell steam to UVMC; • Improve McNeil Plant efficiency by 10%; • Limit wood consumption to peak year in the past fifteen years; • Not increase wood consumption associated with district energy; • Investigate viability of the installation of a wood chip drying system to improve McNeil Plant efficiency; • Study timeframes to transition away from the need for conventional wood chip combustion; • Generate and implement a plan to reduce McNeil Plant stack GHG emissions by at least 25% in the next five years and 50% in the next ten years; • Identify opportunities to utilize the McNeil Plant for additional energy needs; • Analyze the impacts of the current wood chip operation at the McNeil Plant; Analyze potential means to reduce or eliminate emissions of stack carbon dioxide and other GHGs and other emissions into the atmosphere;	• Analyzing the impacts, both negative and positive, of the current wood chip based energy production at McNeil; • Analyzing opportunities to reduce stack-related carbon dioxide emissions and other greenhouse gas emissions from McNeil; • Analyze the opportunity to repower McNeil, including with different fuels that would significantly reduce greenhouse gas emissions at the stack as bridge measure until truly low carbon sources of electricity such as wind, solar, hydropower and storage technologies can reliably and affordably meet the needs of Burlington ratepayers, including low and moderate-income ratepayers; • Analyzing technologies that would significantly reduce greenhouse gas emissions in the future, including more efficient combustion; • Analyzing the possible utilization of the McNeil Site for additional energy needs including energy storage and/or thermal energy provision; • Analyzing the opportunities for expansion of innovative partnerships at McNeil such as the UVM solar research center newly located at the McNeil site; and • Analyzing the scale and types of renewable energy generation and energy storage needed if McNeil was not in service and Burlington still needed lowest-carbon emissions renewable generation that is both reliable and

2.2 Outcome

BED is looking to use the deliverable associated with this project to help shape future energy initiatives at McNeill.

3 Task Plan

3.1 Start-up Meeting

The purpose of the start-up meeting is to ensure that the project's plan, schedule, goals, objectives, activities and deliverables are aligned with BED's interests and intent, and to ensure that the respective roles and responsibilities are known, and needed information and resources are identified and available.

The agenda will include a review on the project's goals, objectives, deliverables and outcomes, process, participants, information sources, in-person meetings, stakeholders and community engagement or involvement and the project timeline. The meeting can also include an initial discussion of potential emission reduction initiatives considered for McNeil, an understanding of the role of McNeil within the BED system, a review of BED stakeholders and a review of how potential initiatives are characterized and evaluated at BED.

3.2 Establish Evaluation Criteria, Final Report Outline, Modelling Approaches and Outcomes

The interim and final reports will conform to approaches and standards guided by BED experience and interests with input from local stakeholders. Potential initiatives for mitigating carbon and other emissions will be characterized and evaluated against a standard set of criteria developed for this project. Potential initiatives will also be modelled from both engineering and financial perspectives, considering thermal and mass balances, specifies equipment and performance characteristics, and expected capital requirements, cash flows and financial returns.

3.3 Characterize the McNeil Plant

This task includes characterizing the McNeil Plant and analyzing the positive and negative impacts of the Plant. Characterizing the Plant includes establishing an understanding of the Plant in terms of systems, operating profile, efficiency, utilization rates, emissions and emissions controls, role within BED, role within ISO-NE, REC markets, and land usage profile.

This task also includes analyzing and characterizing the positive and negative impacts of the current wood chip-based energy production at McNeil.

3.4 Future Roles for McNeil and Establishing BED's Planning Context

Determining the future role and potential uses for McNeil's facilities and site. There are several planning scenarios which should be considered. The assessments to be considered and evaluated include:

1. Analyze the scale and types of renewable energy generation and energy storage needed if McNeil was not in service.
2. Analyze the possible utilization of the McNeil site for additional energy needs including energy storage and/or thermal energy provision.
3. Analyze the possible utilization of the McNeil plant for alternative energy production technologies/repowering of the existing facility/alternate fuel opportunities.
4. Analyze opportunities for innovative partnerships at the McNeil site.

3.4.1 Development of Future Scenarios

The future of the BED system will be the result of a series of decisions and multiple factors over time. These factors potentially include (1) expansion of variable renewable energy power generation in New

October 30, 2024

Page

England including behind the meter solar and offshore wind; (2) continued cost reductions in PV; (3) continued cost and performance improvements of stationary battery energy systems; (4) increased penetration of heat pump heating systems throughout the Northeast; (5) continued increasing

penetration of battery electric vehicles; (6) expansion of the district energy network including the addition of chilled water services and looped geothermal; and (6) increasing pressures for broad carbon mitigation actions and initiatives. Any future planning for BED has likely incorporated most if not all of these trends and form the context for any decisions that are made with regards to the McNeil station.

The Velerity team will work with BED to developed one or more highly probable future scenarios, specifically incorporating the factors identified above. The team will then evaluate the implications associated with each of the potential pathways for BED including, as identified above, operating without McNeil, forecasting how McNeil could be used in the future, and identifying potential energy related uses for the McNeil site.

3.4.2 Future Without McNeil

The Velerity team will work with BED to identify the operating requirements that would need to be satisfied in the absence of the McNeil Plant, and develop optimal resource configurations to deliver the same capabilities as McNeil, considering reliability, economics, rate impacts, carbon intensity and MWh volume.

3.4.3 Potential Energy Uses for the McNeil Site

Based on the scenarios developed, the potential uses for the McNeil site will be identified. Potential may include energy storage, geothermal, expanded district energy, chilled water provisioning, efuel production, etc.

3.5 Identify, Characterize and Evaluate Potential Solutions

The project team will identify potential initiatives to increase plant efficiency and reduce stack emissions at the McNeil Plant. The options will be identified, characterized, analyzed and evaluated using the 25% and 50% reduction targets as established in the November 20, 2023 City Council Resolution.

3.5.1 Establish Characterization Categories and Screening and Evaluation Criteria

Each of the potential initiatives to reduce McNeil emissions will be screened and evaluated in two stages. The first stage will be to evaluate a broad set of opportunities and produce a shorter list for more detailed modelling and evaluation.

The potential characterization elements for screening and evaluation potentially include:

1. Scale
2. Ability to dispatch
3. Economics
4. Reliability
5. Impact on emissions
6. Efficiency
7. Impact on ratepayers
8. Capital Requirements
9. Operating cost impacts
10. Implications for BED revenues from ISO-NE wholesale markets

3.5.2 Potential Solutions

There are a range of potential initiatives that can be pursued at McNeil to reduce emissions.

Optimization & Efficiency	Fuel Switching / Blending	Plant Retrofit
- Boiler design and sizing for part load operations - Staged combustion - Gasification - Pre-heating combustion air - Automated air/fuel ratio modulation with oxygen sensors and thermocouples - Fuel parameters considering wood hardness, chip size, moisture content - Boiler maintenance frequency	- Renewable Natural Gas - Delivered Green Hydrogen - Biogenic Hydrogen from the wastewater treatment plants - Biogenic methane from the wastewater treatment plants - Delivered green ammonia	- Waste wood pyrolysis - Combined cycle
		Carbon Capture
		Amine carbon capture

3.5.3 Initial Characterization and Screening

There are a range of potential initiatives that will be evaluated. Each of the potential initiatives to reduce McNeil emissions will be screened and evaluated in two stages. The first stage involves the characterization and screening of a broad set of potential initiatives. The screening will be based on critical threshold factors, such as scale, technology readiness and economics.

3.5.4 Detailed Evaluation and Modelling

A shorter list of potential initiatives that pass the threshold requirements will be evaluated in much more detail, including technical and financial modelling.

3.6 Prepare Interim Report

An interim report will be prepared and submitted to BED sixty days after the consulting agreement is signed. The interim report will provide initial findings including a preliminary screening and evaluation of the potential emission reduction initiatives, and the identification and characterization of the most likely carbon reduction initiatives.

3.7 Prepare Final Report

The final report will be prepared and prospectively delivered one-hundred and twenty days after the consulting agreement is signed. The date the final report is delivered may be subject to the timing of the final review of a draft final report on the part of BED.

4 Deliverables

4.1 Interim Report

Velerity will prepare and provide to BED an interim report sixty days after the consulting agreement is signed.

4.2 Final Report

The final report will include the results of each of the analyses and investigations as part of this project. Velerity will work with BED to prepare an outline of the final report that conforms to the needs and interests on the part of BED and core stakeholders.

5 Management and Principal Investigators

The principal investigators for this project are Brad Bradshaw, Katherine Birnie, Charlie Krueger and Kathleen McKenna. The principal investigator for this assignment is Brad Bradshaw who will be

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responsible for day-to-day activities, tasks and deliverable associated with this engagement. I

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understand that BED will assign someone to provide general direction and policy decisions on behalf of BED.

There will be regular communications and updates covering project accomplishments, status, plans and challenges. The objective for frequent communications is to make sure that progress and plans are well aligned with BED's needs, interests and priorities each step of the way.

5.1.1 Donald S. Bradshaw, Jr. (Brad)

Mr. Bradshaw is the President of Velerity and leads the company's consulting engagements. Mr. Bradshaw is an experienced senior executive who has held senior level positions in consulting and clean energy companies. Mr. Bradshaw has significant experience in the energy industry.

Mr. Bradshaw has spent decades working with utility companies around the world, on growth strategies and other areas. Mr. Bradshaw has extensive experience helping utilities and companies understand and evaluate potential markets and applications of advanced energy equipment, and has experience in solar energy, energy storage, renewable natural gas and hydrogen.

Mr. Bradshaw was a Senior Consultant in Arthur D. Little's advanced energy group, advising energy companies around the world on strategy, product development and marketing. In addition, Mr. Bradshaw co-founded the Northeast Clean Energy Council (NECEC). Mr. Bradshaw majored in engineering at Dartmouth College and has an MBA in Finance from Babson College

5.1.2 Katherine Birnie

Katherine Birnie has 25 years of experience at the intersection of business and the environment, including renewable energy, land-based environmental offsets and land conservation.

Katherine is a skilled leader with deep cross-disciplinary experience in project management, business development, sales, and finance. As Senior Project Manager at Peaks Renewables (a subsidiary of natural gas utility Summit Utilities), she led hydrogen project development, focusing on green hydrogen as an industrial decarbonization application and in the natural gas distribution system. As Managing Director at Ecosystem Investment Partners, she led all commercial transactions, structuring over \$320mm in environmental offset sales.

Katherine holds a BA in Biology with a concentration in Environmental Studies, cum laude, from Williams College. She also holds an MBA from the Tuck School of Business at Dartmouth. She is on the Board of the Exemplary Forest Investment Fund and the Advisory Board of the Appalachian Mountain Club.

5.1.3 Charles Kruger

Charles Krueger is an expert in the fields of chemical, process, and materials technologies primarily applied to alternative energy, energy storage, and energy efficiency. Recent projects include hydrogen materials, waste-to-energy processing, compressed air energy storage, and thermal energystorage. Mr. Krueger has particular expertise in the field of catalysis and complex chemical transformations.

Mr. Krueger was the Chief Technology Officer of Hy9 Corporation, where he oversaw technology innovation and product development including developing hydrogen separation technology for producing PEM fuel cell quality hydrogen and the HGS-M 5 kWe methanol-to-hydrogen generator for the backup power market. In addition, Mr. Krueger was the co-inventor on 9 issued US patents, and served as the primary investigator on several federally funded grants to advance hydrogen purification

technology. Mr. Krueger worked on the ammonia production model and the Sustainable Aviation Fuels business model as part of the Hydrogen Roadmap study.

Mr. Krueger has a Doctor of Philosophy (Ph.D.) in Chemical Engineering from the Massachusetts Institute of Technology (MIT), a Masters of Science in Chemical Engineering from MIT, and Bachelors Degree in Chemical Engineering from the University of Pennsylvania.

5.1.4 Kathleen McKenna

Ms. McKenna has extensive experience in the energy field, encompassing project management, HVAC design and engineering, energy control systems design and commissioning, end-user energy system analysis and modelling, energy efficiency, and demand management.

Ms. McKenna worked on the Puerto Rico Hydrogen Roadmap study, identifying and characterizing equipment and developing project energy and financial models using the NREL H2 Fast software modelling tool. Ms. McKenna also conducted technology and cost research for development of capex & opex expenditures associated with offshore wind to hydrogen to ammonia processes including: offshore wind turbines, desalination, electrolysis, air separation units.

Ms. McKenna holds a B.S. in Mechanical Engineering and is a Certified Energy Manager. Ms. McKenna is a board member of the New England Association of Energy Engineers, and is an active member of the City of Medford's Energy and Environment Committee. In addition, Ms. McKenna is also a Solar Coach for the City of Medford's state sponsored Solarize Medford program.

6 Selected Qualifications

6.1.1 Carbon Emission Reduction Plan for the Fifth Largest Wastewater Treatment Plant in the United States

Identified, characterized and evaluated several carbon reduction approaches to reduce carbon emissions by 60,000 tons per year for the fifth largest wastewater treatment plant in the United States. Evaluated the technical and economic potential for synthetic methane and methanol production as a carbon mitigation strategy for a massive wastewater treatment plant, capturing carbon from various processes in the plant, including a thermal combustion plant and native wastewater processes. Evaluated source and characterization of carbon emissions, identified potential technical solutions, characterized carbon mitigation solutions, prepared engineering designs including mass balance, thermal balance and chemical reactions, specified equipment, and prepared detailed economic and financial analyses.

6.1.2 Renewable Natural Gas and Green Hydrogen Project Development – Financial Modelling and Market Development

Conducted detailed scoping studies for multiple green hydrogen and renewable natural gas projects in the Northeastern United States. Identified host properties, characterized feedstocks, and identified off-takers for project outputs. Modified project designs to optimize financial returns. Core analysis focused on evaluating the technology and financials of a waste wood pyrolysis system for producing electricity for a major paper mill.

6.1.3 Bio-Mass-to-Energy Project - Developed Business Plan & Financials

Developed the business plan and financials for a proposed bio-mass energy project, converting food

waste into methane for electricity generation. A waste processing company did not have the expertise to prepare business plan and financials and establishing accurate pricing for multiple value streams in the business. Prepared detailed financials incorporating primary market research to establish accurate tipping fees, methane pricing for electricity generation and fees for residual soil additive.

6.1.4 Turned Around Largest District Heating/Cooling System in the United States

Developed the business strategy for the largest district energy heating and cooling system in the United States. Evaluated strategic options to expand financial performance including fuel sourcing strategies, generation system modifications, renegotiation of electricity sales contracts, and system expansion.

6.1.5 Energy Storage Company Business & Product Strategy

Worked with the CEO and senior management team to redirect company's strategy, based on a thorough assessment of market opportunities that would leverage the company's particular technology. The company's initial focus on backup power systems for telecom remote terminal units met significant market resistance. Based on my recommendation, the company repurposed their products to target the multi-billion electric grid auxiliary services market.

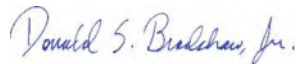
7 Budget and Timeline

The project as described in this proposal is expected to be complete by March 31, 2025 based on having the authority to proceed on or close to November 15, 2024, and that there are no exceptional circumstance outside of our control that impact the proposed project schedule. If there are any factors which impact the project schedule, the Velerity team will communicate those circumstances to BED. Based on the scope of work and task plan provided above, we estimate that this project will require a Total Budget of \$25,000 Professional Services.

The project budget for professional hours includes any and all normal professional office expenditures associated with the project, such as copies, telephone, internet, etc. Certain aspects of the work and associated schedule may be dependent on the availability and timeliness of certain pieces of information, as well as potentially other factors. If there are any delays or changes that might impact the scope of the work, or the completeness and timeliness of the final product, those factors will be immediately brought to your attention. At this time, we do not expect there to be any challenges associated with completing the project on time and within budget.

We appreciate having the opportunity to work with the Burlington Electric Department on this important initiative.

Sincerely,



Donald S. Bradshaw, Jr.
President
Velerity LLC



Velerity LLC and Burlington Electric Department Consulting Project Terms and Conditions

1. Definitions

- 1.1. "Consultant" refers to Velerity LLC, including its employees, agents, and subcontractors.
- 1.2. "Client" refers to Burlington Electric Department
- 1.3. "Services" refers to the consulting services described in the proposal.
- 1.4. "Proposal" refers to the attached proposal provided to the Client on October 30, 2024, and same as amended pursuant to Section 2.3 below, including details such as the scope of work, specific deliverables, milestones, timelines, staff and resources allocated to the project.
- 1.5. "Agreement" refers to these Terms and Conditions along with any attachments between the Consultant and Client.
- 1.6. "Parties" collectively refers to the Burlington Electric Department and Velerity LLC.

2. Scope of Services

- 2.1. Velerity LLC (Consultant) agrees to provide consulting services (Services) as outlined in the proposal provided to Burlington Electric Department (Client) on October 30, 2024, or same as amended.
- 2.2. The scope of work contained in the Proposal details specific deliverables, milestones, timelines, staff and resources allocated to the project.
- 2.3. Any changes or additions to the scope of services must be agreed upon in writing by both Parties.

3. Term of Agreement

- 3.1. This Agreement shall commence on the latter of the two dates on which the Parties affix their signatures. The Agreement shall remain in force until the earlier of (a) the date Services are complete or (b) one year unless the Agreement is terminated in accordance with Section 9 below.
- 3.2. The Proposal includes a deliverable date for the final report, knowing that the Client may request additional changes, edits or modifications.
- 3.3. Any extensions or renewals to the Term of Agreement must be agreed to in writing by both Parties.

4. Fees And Payment Terms

- 4.1. The Client agrees to pay the Consultant the fees specified in the Proposal.
- 4.2. Invoices will be issued on a monthly basis (calendar months) with payment due within thirty (30) days of the invoice date.

- 4.3. Monthly invoices will include professional services fees and any other pre-approved expenses, with the professional service hours and rates identified by project team member.
- 4.4. All payments are to be made to Consultant either via check at its principal office identified on the face of the invoice or via electronic payment.
- 4.5. The Client shall reimburse the Consultant for reasonable and necessary expenses incurred in connection with the performance of services which have been pre-approved in writing by Client.
- 4.6. In the event Consultant is required to commence collection action to recover unpaid invoices for Services rendered, Consultant shall be entitled to extraordinary expenses incurred including and but limited to attorney's fees.
- 4.7. Client may not hold back or offset any amounts owed to Consultant in satisfaction of any claims asserted by Client against Consultant under any other Agreement.

5. *Responsibilities of the Parties*

- 5.1. The Consultant agrees to perform the Services with reasonable care, skill and diligence.
- 5.2. The Client agrees to provide timely access to information, personnel and resources necessary for the Consultant to perform the Services.
- 5.3. Delays in the project timeline caused by the Client, including access to information, access to personnel and other resources, may result in schedule adjustments or additional fees. The Consultant will promptly bring to the Client's attention any factors which may impact the project schedule.
- 5.4. The Client warrants that all information provided to the Consultant is accurate and complete to the best of their knowledge.

6. *Confidentiality*

- 6.1. Both Parties agree to keep confidential any proprietary or sensitive information disclosed during the term of this Agreement.
- 6.2. Client shall indicate any information Client provides which is considered confidential information.
- 6.3. Confidential information shall not include information that is publicly available, independently developed outside of this Agreement, or disclosed by a third party without breach of confidentiality.
- 6.4. The obligation established by this Section shall survive any termination of the Agreement.

7. *Intellectual Property*

- 7.1. Any pre-existing intellectual property of the Consultant used in the performance of the Services remains the property of the Consultant.
- 7.2. Any work products of deliverables created specifically for the Client under this Agreement will be the property of the Client upon full payment of all fees and expenses.

- 7.3. Any pre-existing intellectual property of the Client used in the performance of the Services remains the property of the Client.

8. *Limitation of Liability*

- 8.1. Consultant shall not be liable for any indirect, incidental or consequential damages arising from the performance of the Services.
- 8.2. The Consultant's total liability under this Agreement shall not exceed the total fees paid by the Client for the services.

9. *Termination*

- 9.1. Termination for Convenience - Either party may terminate this Agreement with 30 days advance written notice.
- 9.2. If terminated pursuant to 9.1, the Client agrees to pay for services rendered and expenses occurred consistent with the Proposal and amendments incurred up to the termination date.
- 9.3. Termination for Cause - Either Party may terminate this Agreement immediately if the other party breaches a material term of this Agreement and fails to remedy the breach or provide an acceptable plan to remedy the breach within fifteen (15) days of receiving notice of the breach. In the event of termination under Section 9.3, Client shall only be liable for payment for work product delivered prior to the Notice of Termination for Cause.

10. *Governing Law and Dispute Resolution*

- 10.1. This Agreement shall be governed by and construed according to the laws of the State of Vermont, U.S.A. Exclusive jurisdiction and venue for any litigation arising under this Agreement is in the federal and state courts located in Chittenden County, Vermont and both Parties hereby consent to such jurisdiction and venue for this purpose.
- 10.2. Any disputes arising under this Agreement shall first be resolved through good faith efforts on the part of the Parties. If unresolved, the dispute may be submitted to mediation or arbitration as agreed upon by the Parties.

11. *Force Majeure*

- 11.1. Neither Party shall be liable for delays or non-performance caused by events beyond their reasonable control and not reasonably predictable at the time of execution of the Agreement, if and to the extent caused directly or indirectly, by act of God, acts of the Buyer, acts, rules, or regulations of governmental authority, strikes or other concerted acts of workers, lockout, fires, floods, storm or accident, earthquakes, or other natural disasters, epidemics, war, riots, sabotage, difficulties or delays in public transportation or in public or postal delivery services, fuel shortages, inability to obtain from Seller's usual sources of supply, inability to obtain suitable or sufficient energy, labor, machinery, facilities, supplies, or materials as and when

required, failure of any third party to honor its contractual commitments, or by any circumstances beyond Seller's control whether similar or dissimilar in nature.

12. Entire Agreement

- 12.1. This Agreement constitutes the entire understanding between the Parties and supersedes any prior agreements or understandings, written or oral.

13. Notices

- 13.1. All notices under this Agreement shall be in writing and delivered to the respective addresses provided by the Parties in this Agreement or sent electronically.

14. Severability

- 14.1. If any provision of this Agreement is found to be invalid or unenforceable, the remaining provisions shall remain in full force and effect.

15. Independent Contractor

- 15.1. The Consultant is an independent contractor and not an employee or agent of the Client.

16. Acceptance

- 16.1. By signing below, both Parties acknowledge and accept the terms and conditions in this Agreement

By signing below, both Parties agree to these Terms and Conditions:

For Velerity LLC:

Name: _____

Signature: _____

Title: _____

Date: _____

For Burlington Electric Department:

Name: _____

Signature: _____

Title: _____

Date: _____

I move that the Electric Commission approve, and recommend to the Transportation Energy and Utilities Committee and the City Council approve the proposed contract with Velerity for work related to a study of options for the McNeil Generating Station.

I move that the Burlington City Council Transportation, Energy and Utilities Committee approves and recommends to the Full City Council the 2 RFPs related to Forestry and the McNeil emissions reduction.

