



PERFORMANCE MEASURES REPORT 2017





YEAR IN REVIEW

BURLINGTON ELECTRIC DEPARTMENT
Neale F. Lunderville, General Manager

The Burlington Electric Department (BED) is pleased to present the 2017 Performance Measures Report. BED produces this annual report to help achieve organizational goals and shares the findings for the benefit of our customers and the Burlington City Council.

In 2017, BED continued to focus on our mission to serve the energy needs of our customers in a safe, reliable, affordable, and socially responsible manner. Our updated 2018 Strategic Direction aims to position BED to meet the changing demands of a dynamic energy sector and to become a “utility of the future.” Further, the plan builds on our progress from prior years, including our long-standing, successful energy efficiency programs and our being the first city in the nation to source 100 percent of our power from renewable generation. BED had been working toward this goal for more than a decade and

reached this extraordinary milestone with the purchase of the Winooski One Hydroelectric Facility in September 2014. Importantly, none of BED’s primary energy producing resources – biomass, hydro, wind, solar – relies on fossil fuels and, therefore, BED is well-insulated from sudden and unpredictable swings in the energy market.

To help achieve our “net zero energy city” vision of producing or sourcing as much renewable energy as we consume, we launched several exciting new initiatives in 2017 that have continued into 2018. For the first time, BED has been offering our customers rebates for the purchase or lease of qualifying plug-in hybrid and full electric vehicles (EVs) and has partnered with local car dealers to provide special offers for our customers. Importantly, we created an enhanced rebate for low- and moderate-income customers and



launched an EV financing partnership with three local credit unions to help our customers buy down interest rates at the point of sale, helping make driving electric more accessible. Additionally, BED is designing an EV charging program that will complement these rebates and financing opportunities by providing a special EV electric rate and charging hardware to allow customers to take advantage of lower-cost, off-peak charging.

one or more of our six solar installer partners.

To help cut emissions and create another clean transportation option, BED is working with Green Mountain Transit, the Vermont Agency of Transportation, and other partners in an effort to add up to four new electric buses to the local fleet. We already have arranged for and hosted two e-bus pilot programs with buses from two different e-bus manufacturers

In 2017, BED continued to focus on our mission to serve the energy needs of our customers in a safe, reliable, affordable, and socially responsible manner.

BED is offering rebates for select electric bike and conversion kit purchases. Visit burlingtonelectric.com/ev and burlingtonelectric.com/ebike to learn more.

To make the process of “going solar” easy for our customers, we launched our new Solar Shopper program. Quite simply, you visit burlingtonelectric.com/solar, answer 10 questions, and, within three business days, receive estimates from

having transported Burlingtonians and visitors to town through our city streets, and we hope to help put more e-buses on Burlington’s streets in the near future.

Achieving our bold net zero vision truly is a team effort that requires all Burlingtonians to participate. To ensure participation by all, BED will continue to look for additional opportunities to enhance our program offerings for low- and moderate-income customers



in the future, as we already have done with our EV program.

BED's energy efficiency programs will continue to play a major role in getting Burlington to net zero. BED already has begun this effort by offering Passive House and net zero building training to designers and builders. BED is working with partners from three new construction projects considering net zero design. Further, in partnership with Vermont Gas Systems, BED launched energyChamp for residential customers, allowing them to take power over their energy use with a new and easy-to-use website – energyChamp.org – designed to help customers visualize and understand their electric and thermal energy use in general terms, affordably improve their

efficiency, and protect the planet.

BED continues to push forward along its renewability path, having commissioned several solar projects that it now owns. Energy deliveries under a long term contract with a 2.5-megawatt solar array located in Burlington, began in late 2017. BED began receiving power under a new 10-year wind contract in December 2016 and, in December 2017, executed a two-year contract with Great River Hydro for part of the output from the Connecticut River Dams located in Vermont.

Energy innovation is at the heart of BED's strategic plan. In summer 2017, BED ran a voluntary peak reduction program called "Defeat the Peak" to test customer willingness to reduce loads on critical days. This program was a test-bed for future rates that BED will use to engage

the City in an effort to reduce load during peak energy times. Also in 2017, BED began piloting advanced water heater load control devices to allow BED to modify the consumption patterns of electric water heaters without affecting our customers' comfort. Grid benefits are gained with these controls as they make use of existing water heaters and transform them into thermal batteries. Finally, BED is continuing to build out a robust charging network by leveraging Volkswagen settlement funds.

In 2017, BED continued to lead Mayor Miro Weinberger's renewed effort (launched in September 2016) to create a district energy system (DES) in Burlington. A DES both would use steam extraction and capture and repurpose waste heat from BED's McNeil Generating

Station to heat buildings in Burlington and result in a number of benefits, including increased reliability, cost predictability, environmental stewardship through reduced greenhouse gas emissions, and property enhancement. The City, BED, and its potential customers – the University of Vermont Medical Center, the University of Vermont, Burlington City Place (mall redevelopment project), the State of Vermont (its Cherry Street buildings), the Federal government (its Elmwood Avenue building), and Burlington hotels – have engaged Corix Utilities, a leading developer, implementer, and operator of sustainable and successful district energy systems across North America.

The system being proposed for Burlington would provide heating and domestic hot water and consist of a central energy plant located at McNeil Generating Station, a hot water distribution system from McNeil to connected customers, and energy transfer stations located

at each customer site. BED and Corix are actively involved in risk assessment, creation of regulatory oversight, as well as customer pricing and rate design, technical needs, and permitting related to this potential project. While the cost-efficient, environmental goal of establishing a district energy system in Burlington has eluded the City for many years, we are cautiously optimistic that we may be able to accomplish this goal, which has the potential to bring meaningful savings and long-term energy stability to a number of Burlington's major employers and would serve as a significant milestone on our journey toward becoming a net zero energy city.

In November 2017, Moody's Investors Service affirmed BED's A3 credit rating. Moody's cited a number of credit strengths, including "strong and focused management working on industry transition, including ensuring utility fixed cost recovery through rate structure" and "diverse and substantially renewable

power supply resource mix, which mitigates industry challenges such as market price disruptions and carbon regulation." Further, Moody's listed continued financial success by the City as a factor that could contribute to future BED upgrades. This affirmation followed ratings increases in December 2016 (to A3 from Baa1 – first "A" rating since 2010) and in November 2015 (to Baa1 from Baa2). Strong financial management is part of BED's continued commitment to the customers we serve. As our recent Moody's ratings confirm, our focus on financial management, coupled with adapting to a changing energy market, allows our team to lead on energy innovation.

BED is proud to serve Burlington and will continue to be responsive to the community. This report is intended to help explain what we do and to help us measure our progress over time. We invite your comments and suggestions by [clicking here](#).

We have created this report as an electronic download available on our website, rather than in print form, saving many trees and \$1,500 in printing costs.

2017 SERVICE QUALITY & RELIABILITY

100%

Customer requested work completed by promised delivery date

0%

Customer bills found inaccurate

0%

Customer bills estimated

Target

2.1

Actual

0.7

Average number of customer interruptions per year

Target

1.2

Actual

0.9

Average hours of customer interruption

Target

≤3.5

Actual

0.96

Lost time incident rate**

Target

≤71

Actual

1.92

Lost time severity rate**

* From Service Quality and Reliability Plan (SQRP) submitted quarterly to the Vermont Department of Public Service

** See page 22 for more information.



ABOUT BED

Delivering public power to Burlington since 1905

Burlington Electric Department (BED) is a department of City government and an essential part of Burlington's infrastructure. BED is Vermont's largest municipally owned electric utility serving more than 20,000 customers. BED is the exclusive provider of electric service to the City of Burlington, an area of approximately 16 square miles, and to the Burlington International Airport in South Burlington.

As a municipal utility, BED is an expression of the community's commitment to not-for-profit rates, local control, and sustainability.

A public power utility offers customers the right to participate directly in the most important decisions about the future of the utility. Such participation demonstrates the importance of community-based decisions about our

energy future because they reflect local values such as renewable energy and a drive toward becoming a net zero energy city.

BED is a recognized national leader in green energy with the recent milestone achievement of sourcing 100 percent of our power from renewable generation. With a focus on low and stable rates and a commitment to energy efficiency, BED's 20,000 customers use less power today than they did in 1989, at rates that have not changed since 2009.

BED currently has approximately 115 full-time employees working between our Pine Street headquarters and the McNeil Generating Station in the Intervale. In addition to its 50 percent ownership share of the McNeil Station, BED owns and operates a fleet



of generation including Winooski One Hydroelectric Facility, a large solar array at the Airport, a roof-mounted solar array at the Pine Street offices, and a gas turbine facility for emergency power. BED also purchases power both in Vermont and regionally, including wind power from Georgia Mountain Community Wind, Vermont Wind in Sheffield, Hancock Wind in Maine, and hydroelectric power from small Vermont producers, the Vermont hydro plants located on the Connecticut River, as well as larger units in New York and Quebec.

With strong support from Mayor Miro Weinberger and the City Council, BED has entered contracts for the purchase of energy from renewable resources, and we have advanced initiatives to meet our net zero goals. These forward thinking decisions allow BED to provide stably-priced power to our customers and to lead through energy innovation.

We thank our community members for their support of many ballot items over the years, including the revenue bond to acquire Winooski One – a key link to helping us

Our customers used less electricity in 2017 than they did in 1989.

BED has proudly operated its own energy efficiency programs since 1990, serving both residential and commercial customers with technologies and incentives to save money and use less energy. Even with advances in renewable energy, efficiency remains the foundation of our work to keep Burlington sustainable.

to achieve our renewable generation goals – and votes to support strong energy efficiency measures and improve system reliability.



RATES & BILLS

The average Burlington residential customer paid \$376 less per year than the statewide average and lower than the average for every state in the region.

BED provides electric service to 16,876 residential customers and 3,885 commercial and industrial customers. For a variety of reasons, including a very large number of students, BED's turnover in residential accounts is more than 6,000 per year.

On the other hand, BED has two large customers that represent 29 percent of total sales. Commercial and industrial customers use much more electricity than residential customers and account for 53 percent of revenues.

Whether residential, commercial or industrial, BED customers expect and deserve certain fundamental services: reliable and safe electricity, exceptional customer service, and affordable bills. BED last raised its rates nine years ago, in 2009, and does not expect an increase in 2018.

Although rates are an important indicator, they tell only part of the story. A customer's bill reflects the rate times the amount of electricity used. Thus, customers who are more efficient and use less power have lower bills.

Residential Customers

BED's residential rates were 7.8 percent lower than the statewide average in 2016. In addition to competitive rates, Burlington residents have managed their electric use through energy efficiency. The combination has produced relatively stable bills for Burlington residents over the years. Burlington's average residential bills were 33 percent less than the statewide average in 2016.

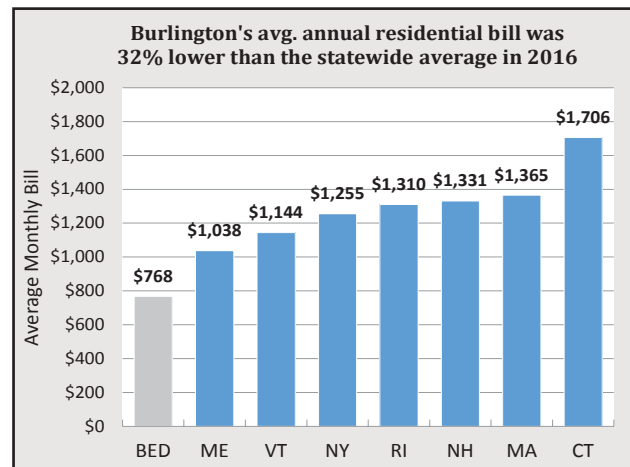
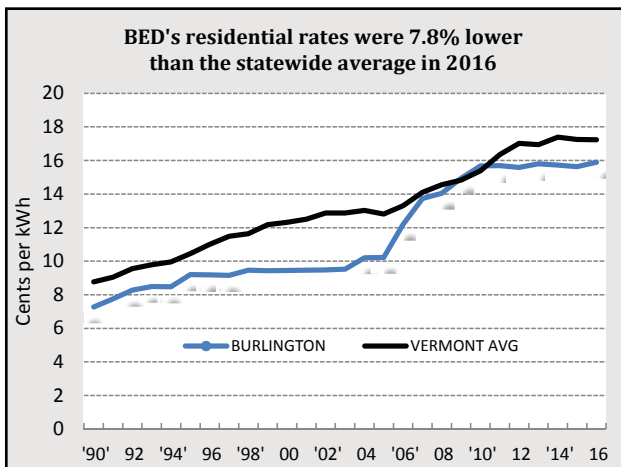
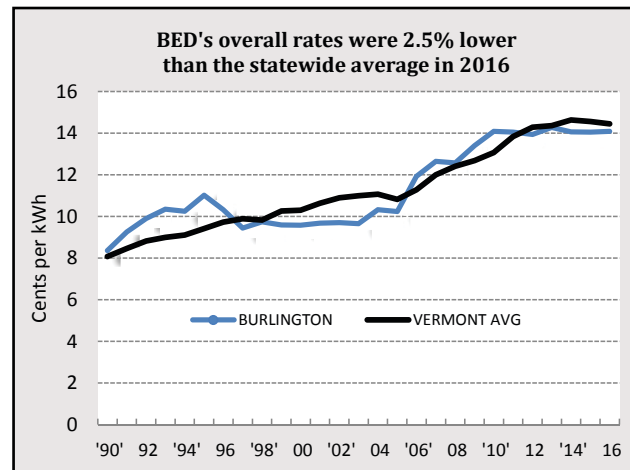
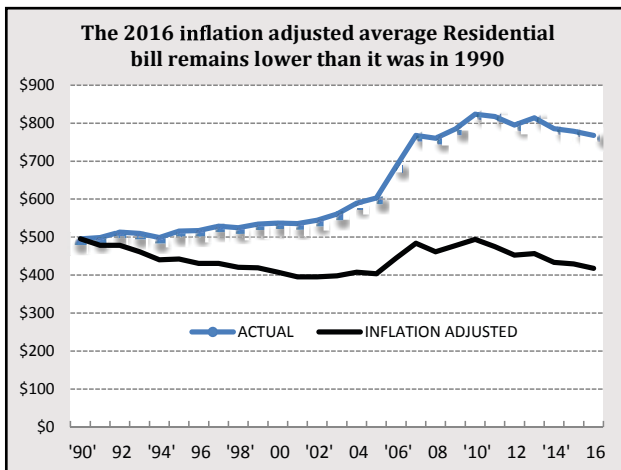
In 2016, an average Burlington residential customer paid \$376 less per year than the statewide average and

lower than the average for every state in the region. Overall, this represented aggregate savings of \$6.2 million – money that could be saved or spent in the local economy. These savings also help lower housing costs, which is important in Burlington’s tight housing market. Some of the difference in usage and bills reflects the number of small rental units in Burlington.

The 2016 inflation-adjusted average annual residential bill was still lower than in 1990. This is especially noteworthy in contrast to the fluctuating costs of other energy sources. For example, according to the U.S. Department of Energy, the inflation-adjusted price of natural gas for residential customers in 2016 was 33 percent higher than in 1990.

	Rate / kWh	Average Residential Bill
Burlington	15.89¢	\$768
Vermont	17.23¢	\$1,144

Utilities have different rate designs that make comparisons difficult. The easiest way to measure performance is to compare average revenues per kilowatt-hour – total revenue divided by kWh sales. This is called “average rates” and is a standard measure for the price of electricity to the consumer. The most recent rate data from the Vermont Department of Public Service is for calendar year 2016.



Commercial & Industrial Customers

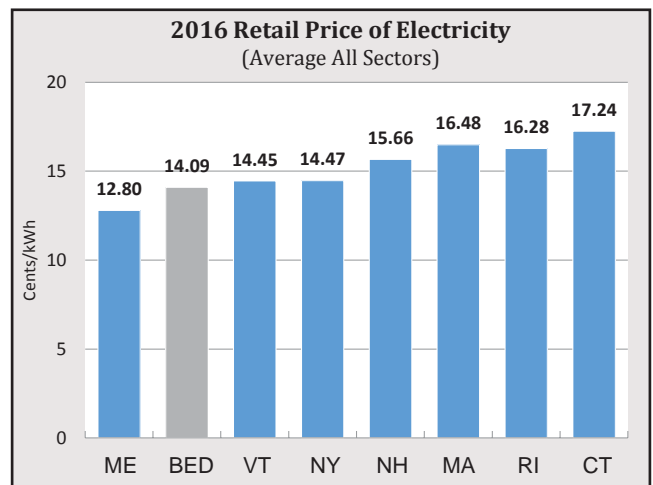
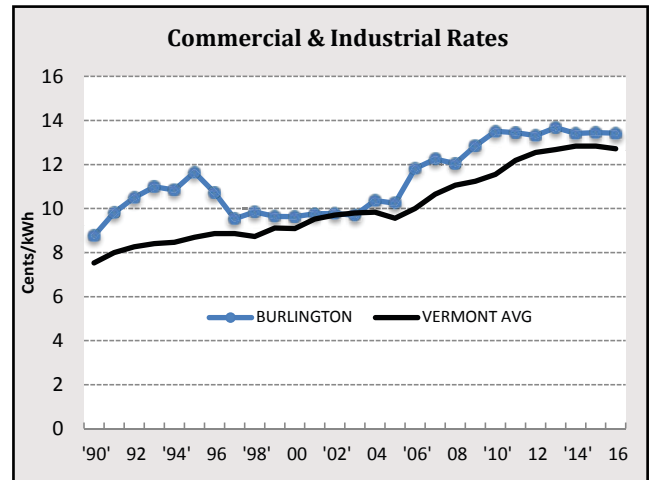
Commercial and industrial rates have not increased since 2009. Although BED's rates remain slightly higher than the statewide average, the gap has closed in recent years as rates from other utilities continue to rise.

As the long-term contracts entered into by BED in recent years have started to deliver energy, and we depend less on the New England spot markets, BED's average rates have stabilized.

In addition, BED made its final payment on the majority of its outstanding revenue bonds in 2014 (including those for the McNeil Plant). No longer having this financial obligation has reduced costs and will continue to help stabilize rates going forward.

The bottom right graph shows a comparison of BED's overall rates with other New England states. To the extent that electric rates are a real or perceived issue for economic development, Burlington is in good shape within the region.

In any case, rates still represent only half the picture. Along with the efforts to reduce rates, BED's Energy Services staff has helped commercial and industrial customers reduce their consumption through energy efficiency initiatives.



BED IN THE COMMUNITY

In 2017, our employees engaged with the Burlington community through many meaningful community events, including the Spectrum Sleep Out, Kids Day at Burlington's Waterfront Park, BED's annual Energy Efficiency Calendar Contest open to all Burlington 4th graders, Art Hop and



Our BED team is proud to participate in these and other activities in an effort to give back to the community we love so much.



Kids Hop, and the Operation Fire Cuffs holiday toy drive, benefiting the University of Vermont Children's Hospital.

As part of United Way's "Live United" campaign, BED raised over \$12,000 from employees to support United Way charities.



BED TO THE RESCUE

Burlington Electric was proud to send multiple lineworker crews and a bucket truck to St. Thomas in the U.S. Virgin Islands this past fall to assist in restoring the power grid that was destroyed as part of the devastation from Hurricanes Irma and Maria in September 2017. Our BED crews, understanding all too well the devastation that comes with powerful and unrelenting weather events and the importance of joining together to rebuild, volunteered for travel far away from their family and friends to help others in need. While in St. Thomas, they worked 16+ hours days to help get our friends in St. Thomas get the power grid functioning again.

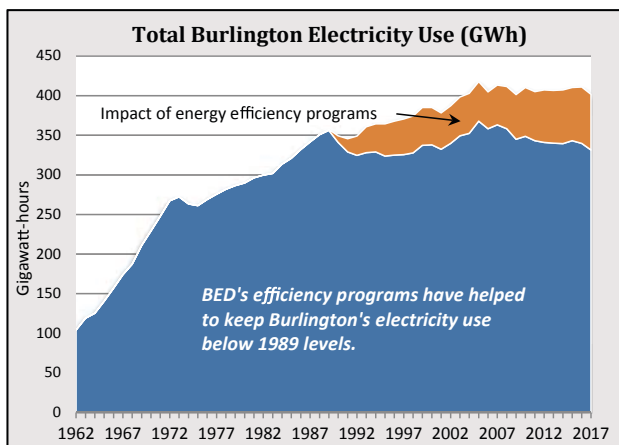




ENERGY EFFICIENCY

In 2017, BED customers received incentives for hundreds of energy efficiency improvements including nearly 32,000 LED bulbs and fixtures, 114 high-efficiency washing machines and clothes dryers, and nearly 100 high-efficiency refrigerators.

BED has developed and administered energy efficiency programs that have become a model for others around the country and the world. These services provide Burlington homes and businesses, including municipal buildings and schools, with a complete range of energy efficiency solutions that have proven to be extremely effective over the past 28 years. In fact, Burlington's annual electricity consumption in 2017 was about four percent lower than in 1989 when the programs began. In other words, we are meeting the needs of a growing local economy with less electricity than we used a quarter century ago. During the same period, statewide use of electricity increased by 10.5 percent.



Through 2017, BED has invested more than \$31.2 million in efficiency efforts. These funds have leveraged an additional \$32.5 million from customers for a total of \$63.7 million invested since the inception of the programs. During 2017 alone, BED saved 6,500 mWh of energy from efficiency measures installed, which will result in 78,000 mWh of savings over the useful life of the installed measures. This is equivalent to providing energy to about 1,385 Burlington residential customers for 12 years.

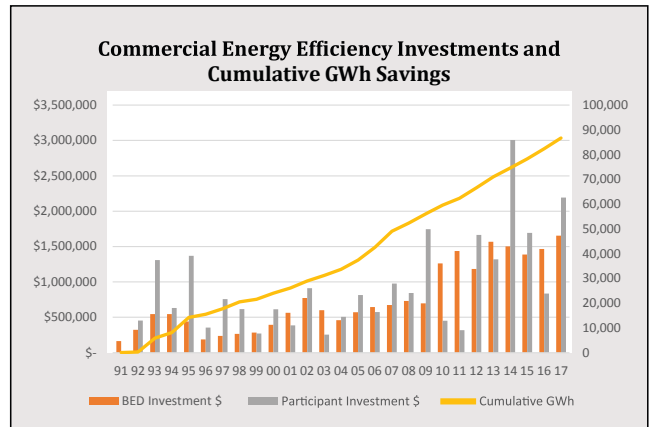
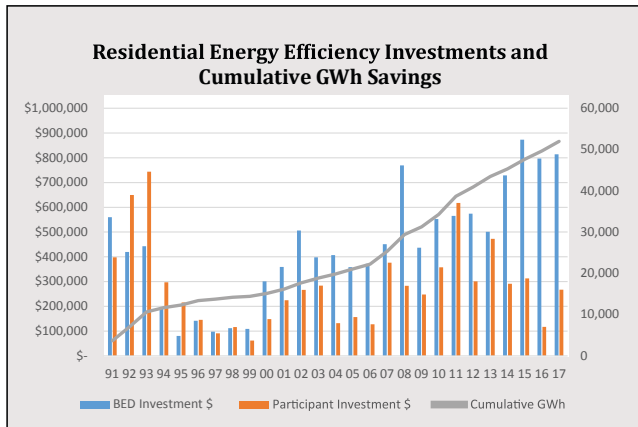
Energy Efficiency in the Community

BED's energy efficiency programs will continue to play a major role in BED's strategic vision to make Burlington to a net zero energy city. BED continues to offer deep energy retrofit and net zero building training to designers and builders. BED also is working on multiple new construction projects throughout the City with partners, including the University of Vermont,

University of Vermont Medical Center, and several new commercial and residential developments. Further, BED, in partnership with Vermont Gas Systems, continues to offer energyChamp for residential customers, allowing them to take power over their energy use by engaging with an easy-to-use website – energyChamp.org – designed to help customers visualize and understand their energy use, affordably improve their efficiency, and protect the planet.

All customers pay for efficiency in their bills, so BED has programs tailored for all rate classes. The graphs on this page show the distribution of resources and savings for residential, commercial, and industrial customers.

Energy efficiency continues to be a win-win situation for Burlington customers through the avoidance of increasingly costly electricity purchases, their associated infrastructure growth and capital expenses, and their environmental impacts.





SUSTAINABILITY

We are committed to long-term systemic change in the electric, thermal, and transportation sectors.

In 2016, shortly after BED announced its strategy to transition Burlington to become a net zero energy city in the electric, thermal, and transportation sectors, the Burlington Sustainability Program relocated from the Community and Economic Development Office (CEDO) to BED. The Sustainability Program focuses on supporting the City's energy transition and is committed to cross-sector collaboration to ensure long-term and systemic change.

Program activities this year included: leading the development of a Burlington 2030 District (a private sector driven initiative to reduce greenhouse gases from transportation, water, and building energy use by 50 percent by 2030); coordinating and managing the Mayor's climate change prevention efforts after he created and launched the new Vermont Climate Pledge Coalition, including the orchestration of a state-wide

Climate and Energy Summit; and working with a variety of City departments and partners, including the Chittenden Area Transportation Management Association, the Chittenden Solid Waste District, Local Motion, the Urban Sustainability Directors Network (USDN), and other organizations on low-carbon transportation, renewable heating and cooling, and energy benchmarking.

The Sustainability Program continues to pursue and engage in various projects with partner cities around the country, including a grant through the USDN Innovation Fund to design and advance a pilot project on renewable heating and cooling, and launch the Equity and Energy Transformation Coalition. This past year, the Program helped secure funds to advance the development of net zero energy mobile homes, including work with the Vermont Energy Investment Corporation and Vermont-based manufacturer Vermod.



POWER SUPPLY

Harnessing biomass, hydro, wind, and solar energy

BED's power supply reflects a number of considerations including cost, renewability, predictability and reliability, diversity, and other economic and environmental impacts. While cost is always critical, other factors influence purchase decisions. BED has succeeded in maintaining comparatively low and stable rates, while continuing our commitment to renewables and, to the extent possible, keeping money in Vermont by supporting Vermont-based renewable generation.

In 2015, Vermont enacted a renewable energy standard (RES). An RES is a requirement that utilities serving Vermont customers provide specific amounts of the energy that their customers use from renewable resources.

Beginning in 2017, Vermont's RES has three distinct requirements to help the state's energy sector advance

in its efforts to become powered by renewable energy sources. First, Vermont utilities will need to ensure that 55 percent of the energy they provide comes from existing renewable resources. Second, part of the 55 percent must come from new net metered or small renewable resources. Third, Vermont utilities will be required to look for ways to substitute electric energy for fossil fuels where it can be done in an economical manner, such as replacing gas cars with electric vehicles. The target percentages for all of these requirements have begun to increase periodically in 2018.

BED essentially has already met the full targets for providing existing renewable energy, i.e. the 75 percent level for existing renewable resources that will apply in 2032. Likewise, based on its resource portfolio, BED filed a petition with the State Public Utility Commission



documenting that, as of 2015, BED possessed, owned, and contracted renewable resources sufficient to meet 100 percent of its expected retail sales in 2017. In recognition of this achievement, BED was able to modify its targets for the second RES requirement that addresses new renewable resources. BED will accept new net metering resources, and retire the Renewable Energy Certificates (RECs) from these resources, but has no specific volume target.

contract for 2.5 MW of solar PV (South Forty Solar) in Burlington that has successfully come fully online as of January 2018. BED is excited about these new resources and, further, about the fact that the energy prices for the Great River Hydro contract are lower than those of the Nextera hydro contract it replaced. In a further effort to increase its resource portfolio, BED is moving forward with a battery storage microgrid project located at the Burlington International Airport.

BED has succeeded in maintaining comparatively low and stable rates while continuing our commitment to renewables.

In December 2016, Hancock Wind in Maine became operational and provides BED with a 13.5 MW entitlement to its energy pursuant to a 10-year contract. At the close of 2017, BED signed its most recent hydro contract with Great River Hydro for 7.5 MW during on-peak hours for two years. This acquisition replaced an expiring Maine hydro contract with local Vermont hydro (from dams located on the Connecticut River). BED signed a

Beginning in 2004, BED's analyses of supply options consistently have found that renewable resources were the best course of action. However, such resources generally come at a premium price. To maintain stable rates, BED can sell the rights to the renewable aspects of the output from the McNeil Plant and other renewable resources such as wind, hydro, and solar projects in the form of RECs. BED participates as a seller and a



buyer of RECs in the New England market and, importantly, once all transactions are accounted for, BED's power is 100 percent renewable.

Of BED's calendar year 2016 purchases (the last full year settled with the New England Power Pool Generation Information System), 100 percent was sourced from renewable resources before accounting for REC transactions. This percentage of energy from renewable resources has continued in 2017, though final reporting is not yet available.

BED sold many of the RECs from McNeil and its wind and hydro resources. After accounting for the sale of RECs, 20 percent of BED's needs were met with renewable

energy in 2016 before allowing for the REC purchasing activities discussed in the following paragraph. The RECs from these valuable sources were sold to reduce the rate impacts of purchasing long-term renewable resources. The Burlington Electric Commission currently has approved the sale of RECs five years into the future and continues to review the economics of selling RECs to control rates versus retaining the ability to claim renewability.

BED also buys RECs from some generators that have existed for many years and, therefore, command a lower price. By doing so, BED creates revenue from REC sales to keep rates lower, while still maintaining a renewable power

supply and supporting the operations of these existing renewable resources. After accounting for all REC transactions, including both REC sales and purchases, BED's supply portfolio was served 100 percent from renewable resources. In fact, for 2016, BED retired RECs in excess of its energy needs and expects to do so again for 2017.

Integrated Resource Plan

On November 15, 2017, the Vermont Public Utility Commission approved BED's 20-year integrated resource plan (IRP). As BED's energy needs are met largely through owned generation and purchase power agreements, the focus of the current IRP centered on strategic

McNEIL STRONG FOR 34 YEARS

Located in Burlington's Intervale, the McNeil Generating Station is managed and operated by BED under a joint ownership agreement with Green Mountain Power and Vermont Public Power Supply Authority. Commissioned in 1984, the 50 MW biomass plant is Vermont's largest generator of electricity.



electrification programs designed to encourage the adoption of small scale distributed generation (i.e. behind the meter PV) and emerging technologies such as electric buses, all-electric vehicles, electric bikes, and EV charging stations. Customers are encouraged to visit burlingtonelectric.com/irp, where results from this process have been posted.

McNeil Generating Station

After 34 years of producing renewable energy, the McNeil Generating Station continues to contribute to the local economy, the station purchased 404,467 tons of wood during calendar year 2017 (CY17), the majority of which was

purchased within a 60-mile radius of the plant from approximately 82 wood suppliers bringing sustainably harvested wood chips to the plant six days a week. During CY17, the plant produced 268,976 net MWh of power, The plant had a capacity factor of 61.4 percent. The annual capacity factor for McNeil is defined as the ratio of its actual output to its potential output if it were possible for it to operate at full capacity continuously for one year.

The McNeil Waste Wood Yard ground 6,435 tons of waste wood at a cost of \$11.73 per ton or \$75,482.55 in grinding costs. If we purchased 6,435 tons at \$28/ton (our normal cost for purchasing chips) the cost would have been \$180,180.

The grinding saved \$104,697 in fuel costs for CY17. This waste wood, if not used for the production of electricity, would have found its way to a landfill and taken up valuable space.

Two types of ash are produced at McNeil: fly ash, which is used as an organic fertilizer; and bottom ash, which is used as an aggregate in construction. All the fly ash produced at McNeil is recycled, being hauled away and spread on fields at 60 farms as an organic fertilizer to improve soils and increase crop yields. The McNeil Plant is proud of its commitment to sustainability as it works to recycle 100 percent of its wood ash each year.

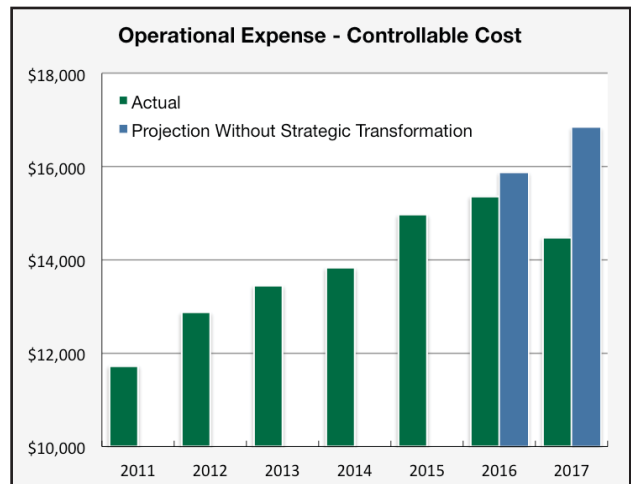
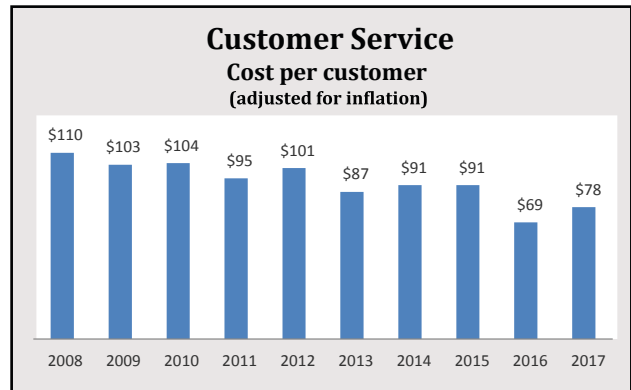
Keeping Costs Low

Since 2015, BED has been undergoing a strategic transformation as part of the transition to “Utility 2.0”. These efforts have included a voluntary buyout and reorganization, which reduced employee head count from 133 to less than 120, as well as a bottom-up management review to update and streamline policies, processes, and procedures to lower costs.

In 2016, BED signed a four-year contract with its employee union, International Brotherhood of Electrical Workers Local 300, which ensures competitive pay for employees, while managing labor costs for BED.

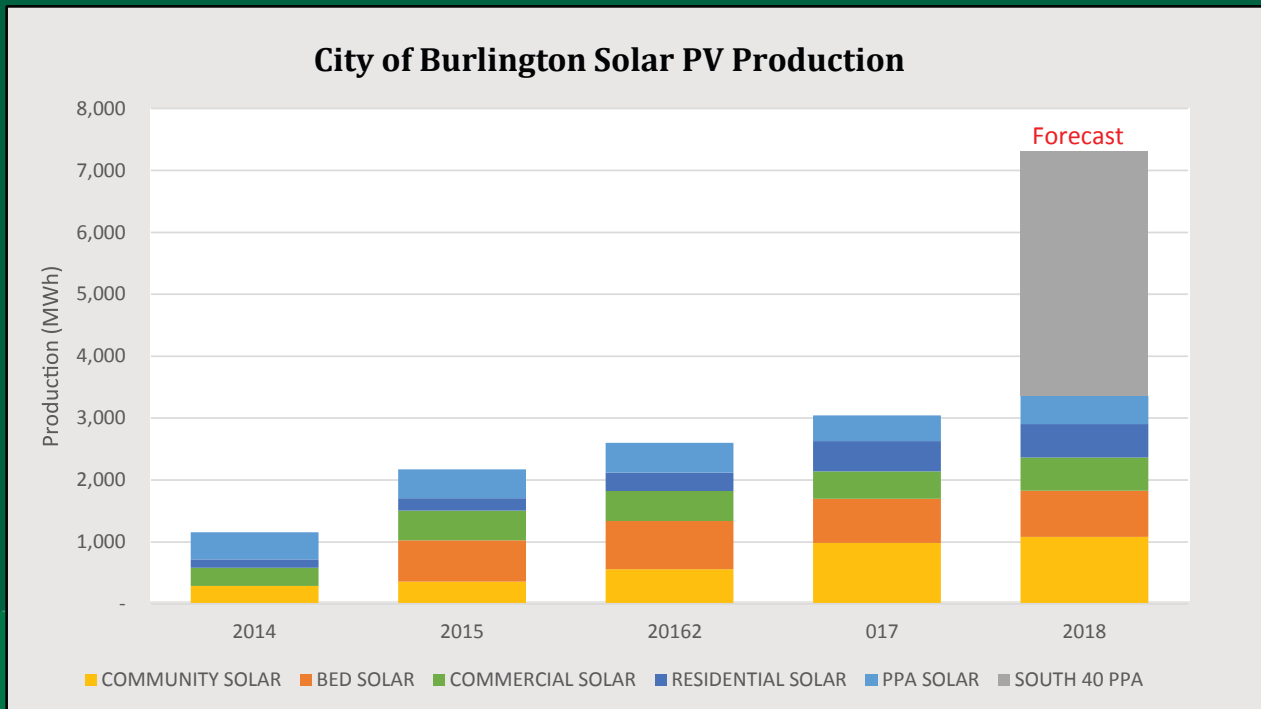
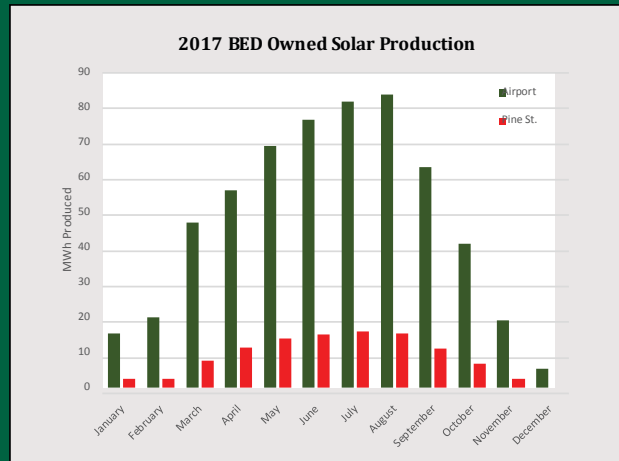
Despite market pressures, BED has stabilized costs and not sought a rate increase since 2009. Adjusted for inflation, the cost per customer has declined since 2005. Among other things, this reflects considerable savings from consolidating job functions and the productivity of our staff.

The average cost of maintaining the distribution system is \$1.7 million a year. In addition, BED makes long-term investments to improve the system, to extend its useful life, and to accommodate new development. Capital projects include equipment upgrades, line extensions, and new underground conduits and cables.



CATCHING SOME RAYS

Between BED's solar array at the Burlington International Airport and the array at the Pine Street offices, we produced 711 MWh of electricity for our customers. By harnessing the power of the sun, BED produced energy when we needed it the most: in the summer. BED is a summer-peaking utility, meaning that our largest loads are during summer months. Solar helps ease the load. Total energy deliveries from solar resources in Burlington include those from the two BED-owned arrays mentioned above, from a number of solar arrays under contract to BED, and from arrays under the Vermont net metering programs. Total solar output from these sources continues to climb and will see a large increase again in 2018 with the commissioning of South Forty Solar. Below is the annual photovoltaic generation that BED has seen over the last five years with forecasted generation for 2018.





SAFETY IS OUR #1 VALUE

In 2017, BED maintained its unwavering commitment to SAFETY as our number one value. BED’s philosophy of uninhibited and transparent communications is the center point of the safety program.

The State Quality Reporting numbers were the lowest in 25 years since the benchmark program began. The measured areas include LTIR (Lost Time Incident Rate), which is the number of incidents with days away from work. Another measured area is LTSR (Lost Time Severity Rate), which is the number of lost work days over the whole year.

	BED 2017	SQRP Baseline
LTIR	0.96	≤ 3.5
LTSR	1.92	≤ 71

Throughout the year, there has been a focus on initiatives that lead to continuous improvement in safety critical areas such as: update of the accident prevention manual; pre-job safety briefings; confined space entry procedures; and lock out tag out (LOTO). There has been an increase in field visits by the Safety Director to address personnel questions and deviations in real time.

The foundation of a strong safety program is a culture of engagement by every employee and recognition that safety for every employee has no beginning and no end, but rather is a constant. BED strives for a STAR mentality:

Stop what you are doing;
Think before you do it;
Act on it; and
Review what you just did.

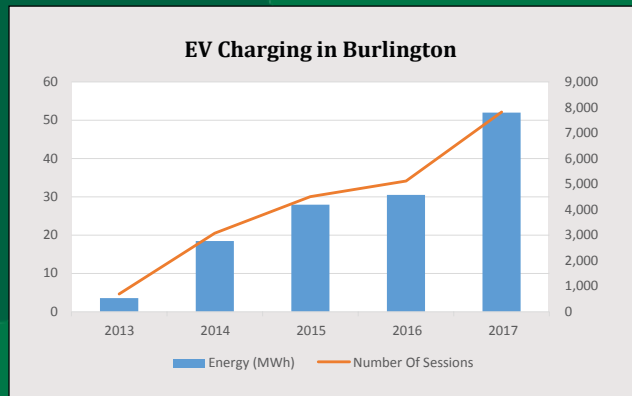
PLUGGED IN



After our first electric vehicle (EV) charging station came online in May 2013, BED has not looked back. Since then, we have added 14 stations for a combined total of 26 ports available for charging. With a robust network for public charging around Burlington in place, BED now is offering a \$1,200 rebate for the purchase or lease of an EV and an \$1,800 rebate to qualified lower income customers. Additionally, BED currently is designing an EV charging rate to allow customers to recharge their vehicles at a time when it is cheaper to serve electricity. By working together to charge during ideal times, EV drivers and BED can save money and make the electric grid more efficient.

BED also is providing assistance to Green Mountain Transit (GMT) to transition part of its diesel bus fleet to battery electric buses. In winter 2018, GMT issued




a request for proposal to source four battery electric buses. Vendor selection is expected by June 2018, with delivery by January 2019. Each bus is expected to displace up to 7,025 gallons of diesel fuel annually and avoid 77 tons of CO₂. Meanwhile, BED has partnered with Local Motion and other local retailers to offer a \$200 incentive toward the purchase of an electric bike.



SOCIAL MEDIA

This year, Burlington Electric took its marketing and social media efforts to an all new and award-winning level. For the first time ever, BED earned an Award of Merit silver medal acknowledgement from the American Public Power Association (APPA) for its social media and website work.

Additionally, BED's social media photos often have appeared in the APPA's Public Power Daily online communication, and two of those photos (highlighted to the right) landed in the APPA's Instagram montage of the top nine photos of the year.

-  facebook.com/BurlingtonElectric
-  @BurlingtonElec
-  @BurlingtonElectricDepartment



GIVING BACK

As a municipal entity, BED is not required to pay property taxes. However, BED makes an annual payment in lieu of taxes (PILOT). In FY17, BED paid \$2,275,586. We collect a 3.5 percent franchise fee for the City.

This is significant because these payments come from all customers. This is a more equitable distribution to finance City operations and is an important benefit of public power.

Fiscal Year	Payment in Lieu of Taxes	City Franchise Fees	Totals
2013	\$1,770,701	\$1,637,827	\$3,408,528
2014	\$1,872,967	\$1,659,807	\$3,532,774
2015	\$1,950,434	\$1,648,148	\$3,598,582
2016	\$2,186,381	\$1,640,470	\$3,826,851
2017	\$2,275,586	\$1,605,945	\$3,881,531
5 Yr. Totals	\$10,056,069	\$8,192,197	\$18,248,266



**BURLINGTON
ELECTRIC
DEPARTMENT**

BURLINGTON ELECTRIC COMMISSION
Gabrielle Stebbins, Chair – Scott Moody, Vice Chair
Sabina Haskell – Robert Herendeen – Tim Perrin

585 Pine Street • Burlington, VT 05401
802.658.0300 • www.burlingtonelectric.com