



**BUDGET  
FISCAL YEAR 2016**

**July 1, 2015 to June 30, 2016**

**City Copy 5-19-15**

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## MEMORANDUM

To: Burlington City Council  
Burlington Board of Finance

From: Neale F. Lunderville, General Manager 

Date: May 20, 2015

Subject: **Fiscal Year 2016 Budget Proposal**

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Please find within the proposed FY2016 budget for the Burlington Electric Department (BED). The proposed budget has been crafted to meet BED's core mission of serving the energy needs of our customers in a safe, reliable, affordable and socially responsible manner, while promoting energy efficiency and innovation. The proposed budget will not raise customer rates and is designed to stabilize BED's financial condition through the careful reduction of base operating expenses, labor cost reduction through the voluntary buyout, and targeted increases in non-customer revenues. Finally, the proposed budget reflects BED's efforts to modernize its systems, processes, policies, and procedures to make the enterprise more flexible and nimble for the changes ahead.

Here are the key components of BED's proposed FY2016 budget:

- **No Rate Increase:** We will achieve a balanced budget without raising customer rates. The last rate increase for Burlington customers was in 2009.
- **Reduced O&M Expenses:** We have reduced controllable operations and maintenance (O&M) expenses by \$1.2 million over the FY2015 budget. This includes line item reductions in overtime and various administrative expenses, plus a projected \$865,000 in labor savings from the voluntary buyout program.
- **Robust Capital Program:** We have once again made a major investment in capital improvements designed to improve safety and reliability of our grid, new solar and energy storage technology, as well as investments in critical information technology systems.
- **Improved Bond Rating Metrics:** We have designed the budget to meet Moody's "A" bond rating criteria for days cash on hand (greater than 90 days), debt service coverage (greater than 1.25) and adjusted debt service coverage (greater than 1.10). While this alone does not ensure a bond rating increase, it will place BED in a much stronger position than in recent years.

We are excited to embark on a period of transformation at BED. Our proposed FY2016 budget will ensure that we can start the work of creating the "utility of the future" while providing our customers with the exceptional service they deserve, at a price they can afford, and without compromising safety and reliability.

Thank you for your consideration.

Burlington Electric Department  
Budget for the Year Ending June 30, 2016

**Key Assumptions**

**Revenues/Income**

- No rate filing. (June 2009 last filing)
- Rate re-design assumed to be revenue neutral.
- Sale of McNeil Renewable Energy Credits of \$5.8 million. (Same \$5.8 million of FY15 Budget)
- Sale of Wind Renewable Energy Credits of \$3.2 million. (Similar level as FY14 and FY15)
- UVM Medical Center project Grant income of \$1.8 million. (Five year average of \$1.95 million)

**Expenses**

- Voluntary Buyout savings of \$865,000. (base model assumption)
- Floyd Associates expense and savings (\$775,000) assumed to be cost neutral.
- Labor and benefits per IBEW contract and City assumptions.
- Amortization up \$478,800. (Winooski One Market value over book value) over 20 year period.

**Capital**

- Total Capital of \$10.7 million. (Net of Contribution, \$8.4 million)
- UVM Medical Center upgrades \$1.8 million.
- Other Distribution Capital \$3.8 million. (Averaged \$3.3 million for past 3 years)
- IT Capital of \$1.27 million. (Averaged \$207,000 for past 3 years)
- Efficiency Improvements of \$735,000.
- Community Solar and Storage of \$1,765,000.

**Cash/Financing**

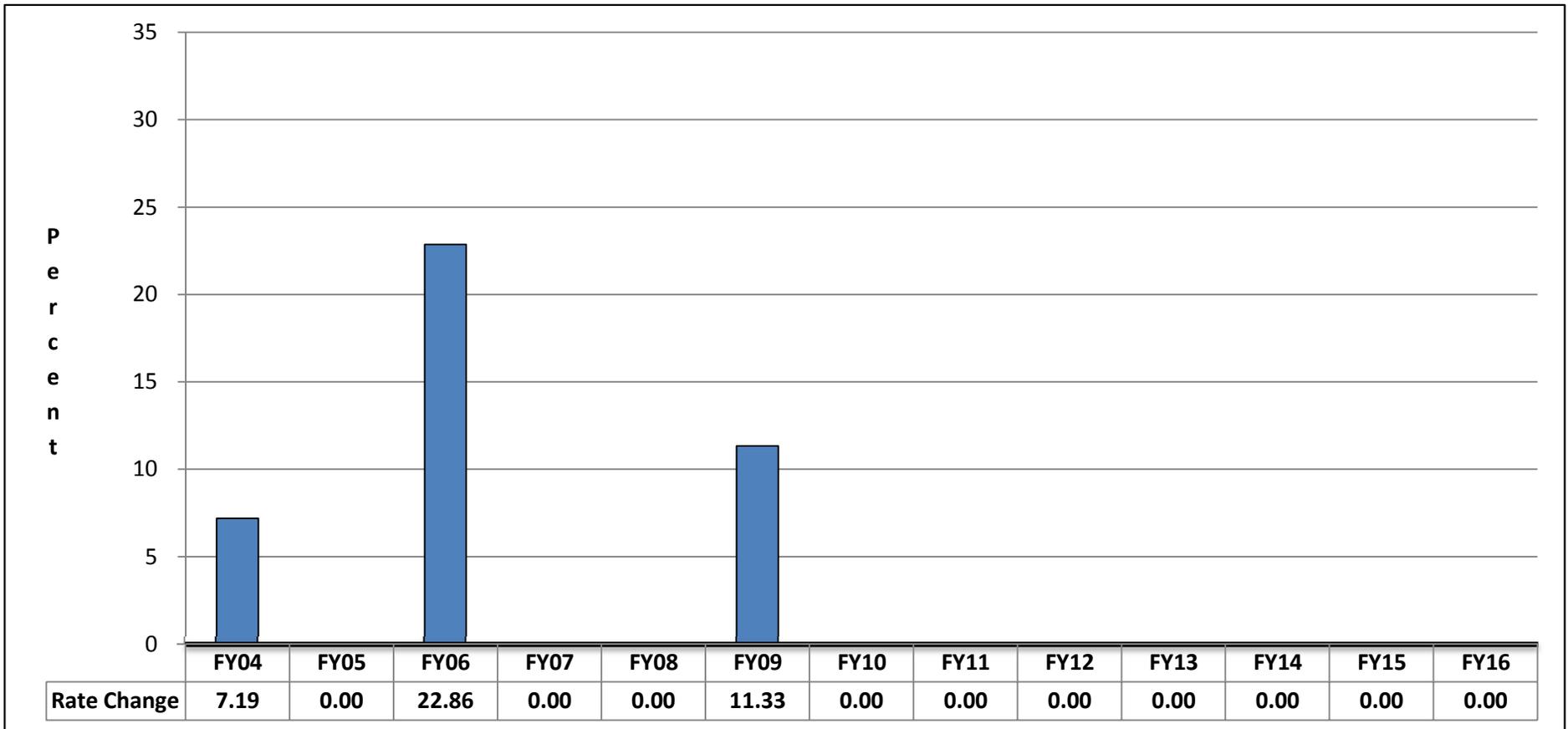
- \$3 million General Obligation Bond (annual).
- Voluntary Buyout payments \$2.5 million (Oct – Dec).
- Voluntary Buyout Reserve Fund of \$2.5 million.

**Bond Indicators**

- 1.25 Debt Service Coverage met. (5.33 for FY16; 1.83 in FY12 trending up)
- 1.50 Adjusted Debt Service Coverage met. (1.78 for FY16; 1.10 in FY12 with steady trend upward)
- Days cash on hand 93 days for FY16. (64 days in FY13 continued upward trend)

## No rate increase projected for FY2016

*Last increase in 2009*



- 7.19% January 2004; 22.86% May 2006; 11.33% June 2009

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Income Statement (000's)**

<b>Schedule 1</b>	<b>Actual FY 12</b>	<b>Actual FY 13</b>	<b>Actual FY 14</b>	<b>Budget FY 15</b>	<b>Budget FY 16</b>
<b>OPERATING REVENUES:</b>					
Sales to Customers	\$48,190	\$48,147	\$47,009	\$47,619	\$47,898
Misc Revenues - Power Supply	3,840	7,433	11,602	10,002	10,091
Misc Revenues - Other	4,544	4,506	4,948	3,616	3,488
<b>Total Operating Revenues</b>	<b>56,574</b>	<b>60,087</b>	<b>63,559</b>	<b>61,236</b>	<b>61,477</b>
<b>OPERATING EXPENSES:</b>					
Fuel	7,136	8,304	10,561	9,614	11,047
Purchased Power	17,097	14,695	14,839	16,899	15,616
Transmission Expense	4,705	4,883	6,569	6,164	6,517
Operation and Maintenance	14,185	14,772	15,799	17,546	16,322
Depreciation & Amortization	6,987	6,379	7,561	5,410	5,754
Taxes	2,194	2,352	2,482	3,076	3,131
<b>Total Operating Expenses</b>	<b>52,304</b>	<b>51,386</b>	<b>57,811</b>	<b>58,710</b>	<b>58,387</b>
<b>NET OPERATING INCOME</b>	<b>4,270</b>	<b>8,701</b>	<b>5,748</b>	<b>2,526</b>	<b>3,089</b>
<b>OTHER INCOME &amp; DEDUCTIONS:</b>					
Dividends	2,400	2,619	2,908	3,135	3,236
Interest Income	200	208	206	80	58
Grant/Customer Income	2,746	3,226	255	1,293	2,256
Other Income, Net	292	332	200	72	64
<b>Total Other Income/Deductions</b>	<b>5,638</b>	<b>6,386</b>	<b>3,570</b>	<b>4,580</b>	<b>5,615</b>
<b>INCOME BEFORE INTEREST EXPENSE</b>	<b>9,908</b>	<b>15,087</b>	<b>9,318</b>	<b>7,106</b>	<b>8,704</b>
<b>INTEREST EXPENSE</b>	<b>6,018</b>	<b>7,711</b>	<b>7,427</b>	<b>3,521</b>	<b>3,300</b>
<b>NET INCOME (LOSS)</b>	<b>\$3,890</b>	<b>\$7,376</b>	<b>\$1,890</b>	<b>\$3,585</b>	<b>\$5,404</b>

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Sales to Customers**

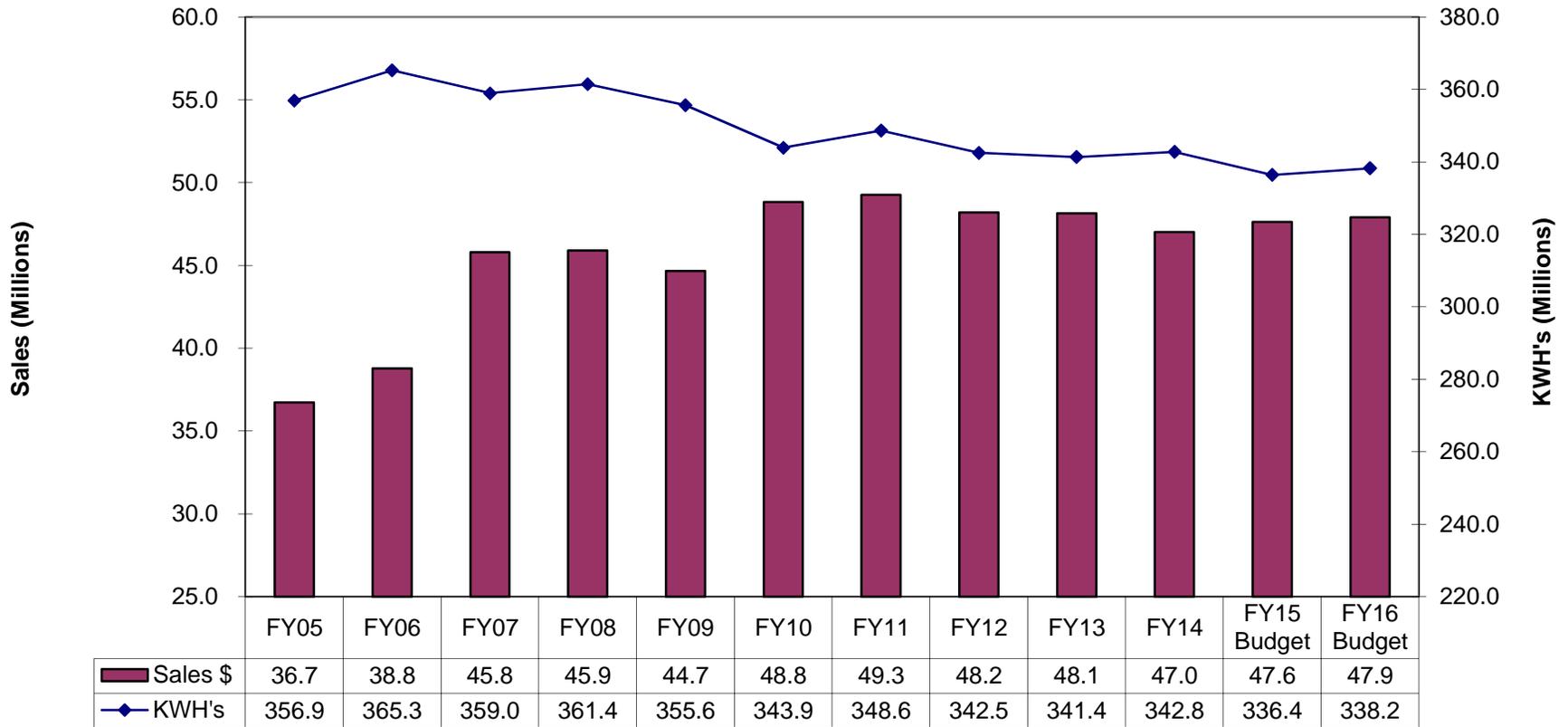
(\$000's)	Actual FY 12	Actual FY 13	Actual FY 14	Budget FY 15	Budget FY 16
<b>Dollars:</b>					
Residential	\$13,091	\$13,395	\$13,537	\$13,235	\$13,028
Commercial / Industrial	34,303	33,918	34,024	33,499	34,295
Street Lights (1)	797	835	(553)	885	575
Total Sales to Customers	\$48,190	\$48,147	\$47,009	\$47,619	\$47,898
<b>MWH:</b>					
Residential	82,850	85,222	85,783	83,840	82,564
Commercial / Industrial	255,222	251,619	252,309	247,906	253,137
Street Lights	4,408	4,512	4,668	4,675	2,539
Total Sales to Customers - MWH	342,480	341,353	342,759	336,422	338,241
<b>Cost Per KWH:</b>					
Residential	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16
Commercial / Industrial	0.14	0.14	0.14	0.14	0.14
Street Lights (1)	0.18	0.18	0.18	0.18	0.18
Total Sales to Customers - Cost Per KWH	0.14	0.14	0.14	0.14	0.14

(1) FY14 includes billing error adjustment (\$1,450,000). FY16 reflects revised billing.

**Assumptions:**

- "Average" weather conditions.
- No rate adjustments.
- Energy efficiency program impacts.
- No rate design changes between classes.

### Burlington Electric Department Total Sales to Customers



**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

<b>Miscellaneous Electric Revenues</b>	<b>Actual FY 12</b>	<b>Actual FY 13</b>	<b>Actual FY 14</b>	<b>Budget FY 15</b>	<b>Budget FY 16</b>
<b>Forfeited Discounts (450)</b>					
Late Payment Fees	\$37,249	\$47,081	\$35,924	\$41,600	\$40,100
<b>Service Revenues (451)</b>					
Initial Fees	188,210	166,985	202,462	177,700	188,600
Other Service Fees (1)	32,605	45,223	20,215	30,200	27,800
Total Service Revenues	220,815	212,208	222,677	207,900	216,400
<b>Rent from Electric Property (454)</b>					
Leased Lights (2)	122,198	115,228	100,965	122,000	137,800
Smartlights Leased (3)	1,623	388	53	100	100
Pole Attachments (4)	101,065	101,593	105,205	102,800	158,000
Conduit Rental (5)	23,784	23,784	23,784	23,800	24,000
Total Rent from Electric Property	248,670	240,993	230,007	248,700	319,900

\* Note, for most revenue projections we used a three year average.

(1) Includes reconnects, collections, temporary service and other fees.

(2) FY16 assumes \$25,000 of additional revenue.

(3) Program ended in January 2010. (Existing leases will continue until expired.)

(4) FY16 assumes \$50,000 additional revenue based on rate adjustment and additional attachments.

(5) Fees from VELCO and Burlington Telecom, per Agreements.

Rate of \$0.7175/foot effective July 1, 2010 includes all applicable taxes.

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

<b>Miscellaneous Electric Revenues</b>	<b>Actual FY 12</b>	<b>Actual FY 13</b>	<b>Actual FY 14</b>	<b>Budget FY 15</b>	<b>Budget FY 16</b>
<b>Electric Revenues (456) - Other</b>					
Miscellaneous (1)	50,634	75,179	90,262	46,900	72,200
New England Power Co. (2)	1,948,464	1,948,464	1,948,464	162,400	0
EEU Program Cost Reimbursement (3)	2,024,301	1,957,723	2,404,925	2,905,800	2,815,200
Winooski One Hydro - Fish Passage					16,800
Electric Vehicle Charging Stations					6,400
Residential Time of Sale	640	1,150	1,320	2,400	1,200
Demand Response Program Reimbursement (4)	13,649	23,544	14,915	0	0
<b>Total Electric Revenues - Other</b>	<b>4,037,688</b>	<b>4,006,060</b>	<b>4,459,886</b>	<b>3,117,500</b>	<b>2,911,800</b>
<b>Electric Revenues (456) - Power Supply</b>					
Highgate Transmission Credit	284,272	309,970	364,421	366,000	366,000
Renewable Energy Credits - McNeil (5)	3,123,097	5,240,679	7,571,163	5,795,900	5,823,000
Renewable Energy Credits - Wind (6)	427,440	1,857,268	3,543,373	3,485,300	3,162,100
Renewable Energy Credits - Hydro (7)	4,815	4,791	9,782	354,600	468,800
Renewable Energy Credits - Standard Offer (8)		20,710	112,847		212,600
Renewable Energy Credits - Solar (9)					58,300
<b>Total Electric Revenues - Power Supply</b>	<b>3,839,624</b>	<b>7,433,418</b>	<b>11,601,586</b>	<b>10,001,800</b>	<b>10,090,800</b>
<b>Total</b>	<b>\$8,384,046</b>	<b>\$11,939,760</b>	<b>\$16,550,080</b>	<b>\$13,617,500</b>	<b>\$13,579,000</b>

(1) Includes reimbursement for scrap metal.

(2) Debt service reimbursement from Newport contract buyout, July 2003 - July 2014.

(3) Energy Efficiency Charge funded for State energy efficiency programs, effective, January 2003. (PSB Budget/Order of Sept. 2014)

(4) Forward Capacity Market-Other Demand Response program. (Per PSB order of 12/06.) Complete May, 2014.

(5) FY16 assumes \$41/Mwh ; FY15 assumed \$43/Mwh .

(6) FY16 assumes \$51/Mwh ; FY15 assumed \$55/Mwh.

(7) FY16 assumes \$16/Mwh; FY15 assumed \$20/Mwh.

(8) FY16 assumes \$52/Mwh. FY14 was \$60/Mwh.

(9) FY16 assumes \$52/Mwh. Includes BED-owned array on the airport parking garage (beginning Feb. '15) and on the roof at BED.

**Burlington Electric Department**  
**Budget for the Year Ending June 30, 2016**

<b>Net Power Supply Costs (000's)</b>	<b>FY 12</b>	<b>FY 13</b>	<b>FY 14</b>	<b>Budget FY 15</b>	<b>Budget FY 16</b>
<b>Expenses:</b>					
Fuel (p. 10)	\$7,136	\$8,304	\$10,561	\$9,614	\$11,047
Purchased Power (p. 11)	17,097	14,695	14,839	16,899	15,616
Transmission Fees	4,705	4,883	6,569	6,164	6,517
Highgate (1)	88	98	119	148	143
<b>Total Power Supply - Expenses</b>	<b>29,026</b>	<b>27,981</b>	<b>32,088</b>	<b>32,825</b>	<b>33,324</b>
<b>Revenues:</b>					
Transmission Contracts (2)	284	310	364	366	366
Renewable Energy Credits - McNeil (3)	3,123	5,241	7,571	5,796	5,823
Renewable Energy Credits - Wind (4)	427	1,857	3,543	3,485	3,162
Renewable Energy Credits - Hydro (5)	5	5	10	355	469
Renewable Energy Credits - Standard Offer (6)	0	21	113	0	213
Renewable Energy Credits - Solar (7)	0	0	0	0	58
<b>Total Power Supply - Revenues</b>	<b>3,840</b>	<b>7,433</b>	<b>11,602</b>	<b>10,002</b>	<b>10,091</b>
<b>Net Power Supply Costs</b>	<b>\$25,187</b>	<b>\$20,547</b>	<b>\$20,487</b>	<b>\$22,823</b>	<b>\$23,233</b>

(1) Includes Operations & Maintenance expenses and Property Taxes.

(2) Includes Highgate Transmission from ISO-NE.

(3) FY16 assumes \$41/Mwh ; FY15 assumed \$43/Mwh.

(4) FY16 assumes \$51/Mwh ; FY15 assumed \$55 Mwh.

(5) FY16 assumes \$16/Mwh ; FY15 assumed \$20/Mwh.

(6) FY16 assumes \$52/Mwh. FY14 was \$60/Mwh.

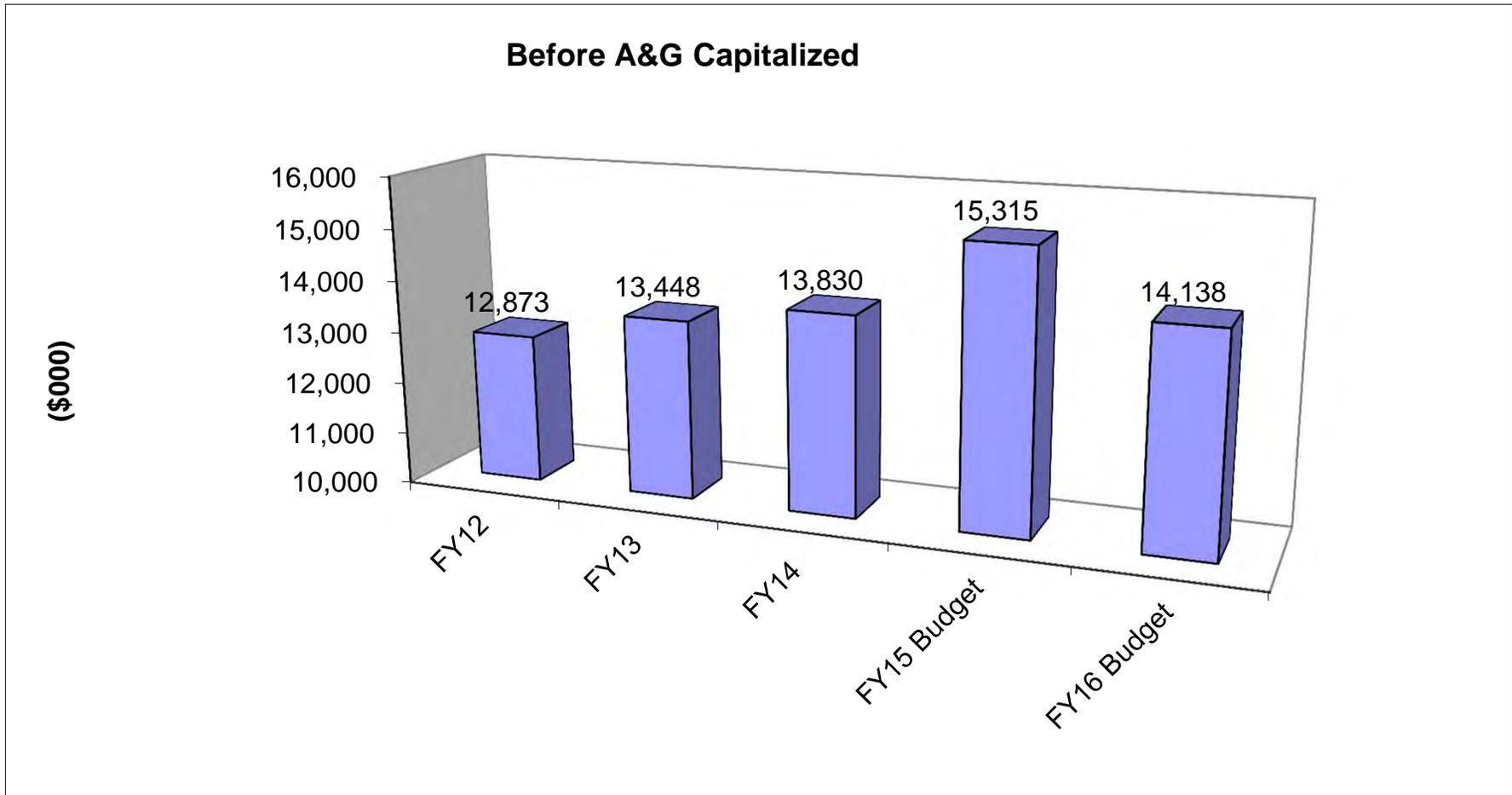
(7) FY16 assumes \$52/Mwh. Includes BED-owned array on the airport parking garage (beginning Feb. '15) and on the roof at BED.

**Burlington Electric Department**  
**Budget for the Year Ending June 30, 2016**  
**Operational Expense**

	Actual FY 12	Actual FY 13	Actual FY 14	Budget FY 15	Budget FY 16	
<b>Labor Expense</b>						
Labor-Regular	\$5,956,088	\$6,244,606	\$6,778,268	\$7,043,400	\$7,242,400	(1)
Labor-Overtime	222,616	306,317	296,172	359,600	272,100	(2)
Sub-Total Labor	6,178,704	6,550,923	7,074,440	7,403,000	7,514,500	
Labor-Overhead (p. 1 - LOH Tab)	2,625,912	2,694,998	3,374,388	2,982,000	3,032,800	
Total Labor w/ Overhead	8,804,616	9,245,921	10,448,828	10,385,000	10,547,300	
<b>Non-Labor Expense</b>						
Office Supplies	20,041	21,433	17,803	25,600	19,900	
Materials & Supplies	896,768	841,984	832,812	807,500	874,200	
Publications	7,152	3,815	5,299	4,900	4,100	
Training	52,092	72,566	89,662	193,100	230,500	(3)
Education	0	719	10,058	17,500	21,000	(4)
Business Meetings	9,177	18,921	14,936	21,400	19,400	
Phone - Long Distance	1,578	2,028	467	3,300	3,100	
Maintenance Contracts	200,631	217,626	437,997	480,200	563,500	(5)
Dues and Fees	85,805	98,465	93,309	122,500	134,000	(6)
Advertising	70,359	30,485	18,093	15,800	67,500	(7)
Building Clearing	381,832	410,286	375,221	446,700	404,200	
Transportation Clearing	229,276	240,383	249,717	312,400	260,700	(8)
Admin & General Capitalized	(769,600)	(681,634)	(504,056)	(767,700)	(724,200)	(9)
Allocations to McNeil	(3,966)	(3,996)	(4,302)	(4,300)	(7,900)	(10)
Outside Services (p. 6)	2,335,689	2,608,639	1,585,931	2,265,800	3,246,500	
Transmission	4,704,769	4,883,344	6,569,318	6,163,900	6,517,500	
Rentals & Leases	83,214	80,548	109,424	100,600	56,600	(11)
Group Insurance (p. 7)	214,089	376,437	388,706	448,100	406,300	
Printing and Forms	22,109	21,619	18,928	27,300	16,800	
Computer Supplies	47,365	47,529	43,183	45,000	46,900	
Computer Software	15,981	3,511	1,710	19,800	4,700	(12)
Postage	93,157	103,256	118,816	113,400	113,400	
Utilities	136,608	89,089	59,177	81,400	57,100	(13)
Highgate Billing	57,805	47,992	68,036	93,200	93,200	(14)
DSM Rebates	1,047,853	744,417	1,114,715	1,250,200	1,202,400	(15)
Uncollectible Accounts	136,455	121,863	177,164	202,200	180,000	(16)
Claims Settlements	11,643	5,013	447	1,300	400	
Other	(2,321)	3,406	27,219	834,500	(1,519,700)	(17)
Total Non-Labor Expense	10,085,561	10,409,744	11,919,790	13,325,600	12,292,100	
Total Operational Expense	\$18,890,177	\$19,655,665	\$22,368,618	\$23,710,600	\$22,839,400	
Less EEC Expenses (reimbursed)	(2,024,301)	(1,957,723)	(2,404,924)	(2,905,799)	(2,815,221)	
Less Power Supply - Transmission	(4,704,769)	(4,883,344)	(6,569,318)	(6,163,900)	(6,517,500)	
Less Power Supply - Highgate	(57,805)	(47,992)	(68,036)	(93,200)	(93,200)	
Total Operational Expense	\$12,103,302	\$12,766,606	\$13,326,340	\$14,547,701	\$13,413,479	
A & G Add Back	\$12,872,902	\$13,448,240	\$13,830,396	\$15,315,401	\$14,137,679	

See analysis, page 4.

## Burlington Electric Department Operational Expense - Controllable Cost



- *FY15 included added expenses for Winooski One Hydro purchase (\$936,000 for labor & other).*
- *Since FY12 costs are up, on average, 2.6% per year, before inflation is factored in.*

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Operational Expense**

- (1) **Labor – Regular** – Labor is impacted by the amount of capital (vs. expense) work. FY15 assumed approximately 8% of labor allocated to Capital and FY16 assumes 8.7%. FY16 assumes projected cost-of-living and merit pay. Also includes new positions (Director of Information Technology, C&I Energy Efficiency Engineer, and Sr. Distribution Engineer) and filling of several vacancies.
- (2) **Labor – Overtime** – Impacted by the amount of capital (vs. expense) work and the amount of work we use contractors for.
- (3) **Training** - includes training for the McNeil Plant (breaker timing, boiler operations, maintenance), Distribution (CDL, APPA Engineering & Operations, ROW/Line Extension, Cable Locator), Power Resources (ISO-NE, eMeter, Renewable Energy, APPA), Energy Services (Energy Technology), Engineering (System Design, and Planning), IS (Drupal, eMeter/Oracle, security, SunGard), Finance (fixed assets), Meter Department (metering school, AIM), Technicians (SCADA Security, Televent, Substation & Breaker Maintenance), and various skills training.
- (4) **Education** – The Department’s Qualified Degree Program. Also includes Apprentice Lineworker Program costs of \$16,400 for FY16 and \$14,700 for FY15.
- (5) **Maintenance Contracts** – FY16 includes an increase of \$111,000 over FY15 budget for IT related contracts. FY15 included increases for McNeil turbine maintenance, \$34,000 and IT contracts, \$31,000. FY14 included new agreements related to Smart Grid deployment.
- (6) **Dues and Fees** – FY16 includes FERC License fee (\$12,000) for Winooski One Hydro.
- (7) **Advertising** – FY16 includes \$50,000 additional marketing and customer engagement activities.
- (8) **Transportation Clearing** – Vehicle maintenance and gasoline is provided by DPW. Impacted by the amount of Capital (vs. Expense) work and by the amount of work we use contractors for.
- (9) **Admin & General Capitalized** – Contingent on Capital projects.
- (10) **Allocations to McNeil** – Certain incidental BED administrative costs are allocated to McNeil joint owners. (Most costs are charged directly).
- (11) **Rentals & Leases** – Includes safety clothing for Operations and McNeil Plant also FY16 assumes the lease for safety clothing will end. Reimbursement for employees would begin in FY17. Includes copier leases for various areas.
- (12) **Computer Software** – Software is capitalized to “Intangible Plant”. This is for smaller software purchases which are expensed. (FY15 included Vlocity Software for SAN Defragmentation, \$14,000.)

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Operational Expense**

- (13) **Utilities** – FY16 assumes cell phone usage and tablet data usage will be consolidated under the Purchasing area (exception of Foresters) and a cost reduction per employee.
- (14) **Highgate Billing** – FY16 budget is based on approved calendar year 2015 budget from Highgate.
- (15) **DSM Rebates** - \$2,815,200 is included in “Other Revenues” to cover these and other costs.
- (16) **Uncollectible Accounts** – FY16 based on FY15 experience.
- (17) **Other** - FY16 includes assumed savings from the voluntary buyout and efficiency study. This account also includes meter reader mileage and employee recognition awards/lunch. FY15 included contingency for Winooski One Hydro (\$827,000) other than labor and overheads.

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

Taxes (000's)	Actual FY 12	Actual FY 13	Actual FY 14	Budget FY 15	Budget FY 16
<b>Property Taxes</b>					
Payment in Lieu of Taxes - BED	\$1,087	\$1,209	\$1,293	\$1,451	\$1,526
Payment in Lieu of Taxes - McNeil	546	549	568	626	605
Property Taxes - Highgate Station	31	50	50	55	50
Property Taxes - Winooski One (1)				400	402
Sub-Total - Property Taxes	1,664	1,808	1,911	2,532	2,584
<b>PILT Tax Rates (2)</b>	<b>\$2.27</b>	<b>\$2.37</b>	<b>\$2.52</b>	<b>\$2.60</b>	<b>\$2.52</b>
<b>Revenue Taxes</b>					
Gross Revenue Tax (.5%) (3)	283	300	324	306	307
Gross Receipts Tax (.5%) (4)	241	241	243	238	239
Sub-Total - Revenue Taxes	524	541	567	544	546
Over/Under Allocation of Social Security Taxes	6	2	4	0	0
<b>Total Taxes</b>	<b>\$2,194</b>	<b>\$2,352</b>	<b>\$2,482</b>	<b>\$3,076</b>	<b>\$3,131</b>

(1) Based on \$16M value.

(2) FY16 based on the 2014-2015 City Tax bill.

(3) Tax to finance operations of Public Service Department and Board. Effective for all utilities (electric, phone, gas, water & cable). Tax applies to total revenues less resales.

(4) Effective July 1, 1990 for deposit to State of VT "Home Weatherization Assistance Fund". Charged to sellers of heating oil, electricity, gas and coal (phone, cable and water excluded). Tax applies to "Sales to Customers" only.

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Dividend Income**

	Actual FY 12	Actual FY 13	Actual FY 14	Budget FY 15	Budget FY 16
VT TRANSCO LLC (1)	2,205,359	2,452,221	2,740,691	2,967,800	3,069,000
VELCO (2)	\$166,089	\$165,945	\$165,945	\$166,200	\$166,200
VELCO (3)	28,214	1,119	1,194	1,200	1,200
Total Dividend Income	<u>\$2,399,662</u>	<u>\$2,619,285</u>	<u>\$2,907,830</u>	<u>\$3,135,200</u>	<u>\$3,236,400</u>

*(1) Assumes quartely dividends (distributions) and assumes no additional investment in Fiscal Year 2016.*

*(2) Assumes quarterly dividend of \$2.88/share on 14,038 shares of Class B and 392 shares of Class C Common Stock.*

*(3) VELCO Class C Preferred Stock, dividend \$0.04 on 7,464 shares.*

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

<b>Other Income, Net</b>	<b>Actual FY 12</b>	<b>Actual FY 13</b>	<b>Actual FY 14</b>	<b>Budget FY 15</b>	<b>Budget FY 16</b>
<b>Interest Income - Operating</b>					
Checking Accounts	\$3,475	\$7,104	\$8,437	\$3,600	\$6,200
Debt Service Reserve Fund (1)	175,412	182,389	182,688	72,000	46,200
Debt Service Funds (1)	417	356	470		3,300
Renewal & Replacement Fund	119	190	34	100	100
Construction Fund	17,640	17,427	14,328	4,300	200
Customer Loans RLF (2)			266		1,900
Other (3)	3,053	965	0	0	0
<b>Total Interest Income Operating</b>	<b>200,116</b>	<b>208,431</b>	<b>206,223</b>	<b>80,000</b>	<b>57,900</b>

**Interest Rates (%)**

Checking Accounts	0.25	0.25	0.24	0.15	0.01
Debt Service Reserve (CD)	1.9	1.9	1.9	2.00	2.00
Debt Service Funds	0.01	0.01	0.01	0.01	0.01
Renewal & Replacement Fund	0.01	0.01	0.01	0.01	0.01
Construction Fund	0.25	0.01	0.01	0.20	0.01

(1) FY15 assumed DSF and DSRF invested balances reduced with expired 2001/02 Series Revenue Bonds bonds..

(2) Revolving Loan Fund through PACE and Commercial loans.

(3) Includes Lincoln Logging loan.

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

Other Income, Net	Actual FY 12	Actual FY 13	Actual FY 14	Budget FY 15	Budget FY 16
<b>Miscellaneous Non-Operating Income</b>					
City/Customer Contribution (1)	476,396	92,148	142,736	1,256,500	2,227,100
Street Light - LED Rebate	48,900	46,000	112,750	36,000	28,800
CSWD (Wastewood Yard) (2)	30,000	30,000	30,000	30,000	30,000
City Franchise Fee Admin Billing (3)	29,041	29,041	29,041	29,000	12,400
VELCO Director	27,507	14,000	19,000	15,000	15,000
Morrisville & Hardwick Electric Dispatch (4)				11,500	23,000
Grant Income - ARRA (5)	2,220,436	3,087,879			
Rental Income from Chase Hydro Property (6)	103,333	151,062	153,503		
Winooski River Water Rights - Sugarbush					4,000
Total Miscellaneous Non-Operating Income	2,935,613	3,450,130	487,030	1,378,000	2,340,300
<b>Other Deductions</b>					
BED Donation for Warmth Program (7)	(12,000)	(12,000)	(12,000)	(13,500)	(20,000)
Total Other Deductions	(12,000)	(12,000)	(12,000)	(13,500)	(20,000)
<b>Total Other Income - Net</b>	<b>\$3,123,729</b>	<b>\$3,646,561</b>	<b>\$681,253</b>	<b>\$1,444,500</b>	<b>\$2,378,200</b>

(1) FY16 includes Waterfront Lighting, UVM Medical Center, UVM, Shelburne Street Roundabout, EV Charging Stations and CCTA St. Paul Street upgrade. FY15 was primarily for Waterfront (North Access).

(2) Agreement with Chittenden Solid Waste District, effective 1/1/11 through 12/31/15. (Annual payments to BED in consideration of BED's assumption of the operation and maintenance of the site).

(3) City contribution to BED for the cost of processing the franchise fee. Revised in FY15 to reflect lower admin. costs.

(4) FY16 reflects new contract.

(5) Smart Grid Project at 50% of actual cost.

(6) December 1991 agreement with Winooski One Partnership (lease of land and land/water rights). Ended with purchase of Winooski One.

(7) This is BED's donation (in addition to us forwarding customer donations on billing payments).

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Interest Expense**

	Actual FY 12	Actual FY 13	Actual FY 14	Budget FY 15	Budget FY 16
General Obligation Bonds (1)	\$1,649,042	\$1,806,381	\$1,975,066	\$2,129,500	\$2,066,700
Revenue Bonds (2)	1,985,360	1,747,642	1,362,776	1,411,700	1,260,100
Credit Enhancement Fee (3)	206,584				
<b>Total Long Term Debt Interest</b>	<b>3,840,986</b>	<b>3,554,023</b>	<b>3,337,842</b>	<b>3,541,200</b>	<b>3,326,800</b>
Amortization of Debt Discount	6,425	18,200	18,969	1,400	1,500
Amortization of Deferred Debt Costs (4)	2,264,280	4,315,745	4,326,293	2,200	2,200
Amortization of Debt Premium	(223,294)	(248,803)	(268,880)	(23,600)	(30,300)
Line-of-Credit	129,959	71,358			
Other Interest			13,211		
<b>Total Interest Expense</b>	<b>\$6,018,356</b>	<b>\$7,710,523</b>	<b>\$7,427,435</b>	<b>\$3,521,200</b>	<b>\$3,300,200</b>

**Debt Outstanding - Y/E**

General Obligation Bonds (1)	\$41,385,000	\$44,685,000	\$45,810,000	\$46,771,000	\$45,558,000
Revenue Bonds (2)	\$41,150,000	\$33,600,000	\$25,910,000	\$29,840,000	\$26,960,000

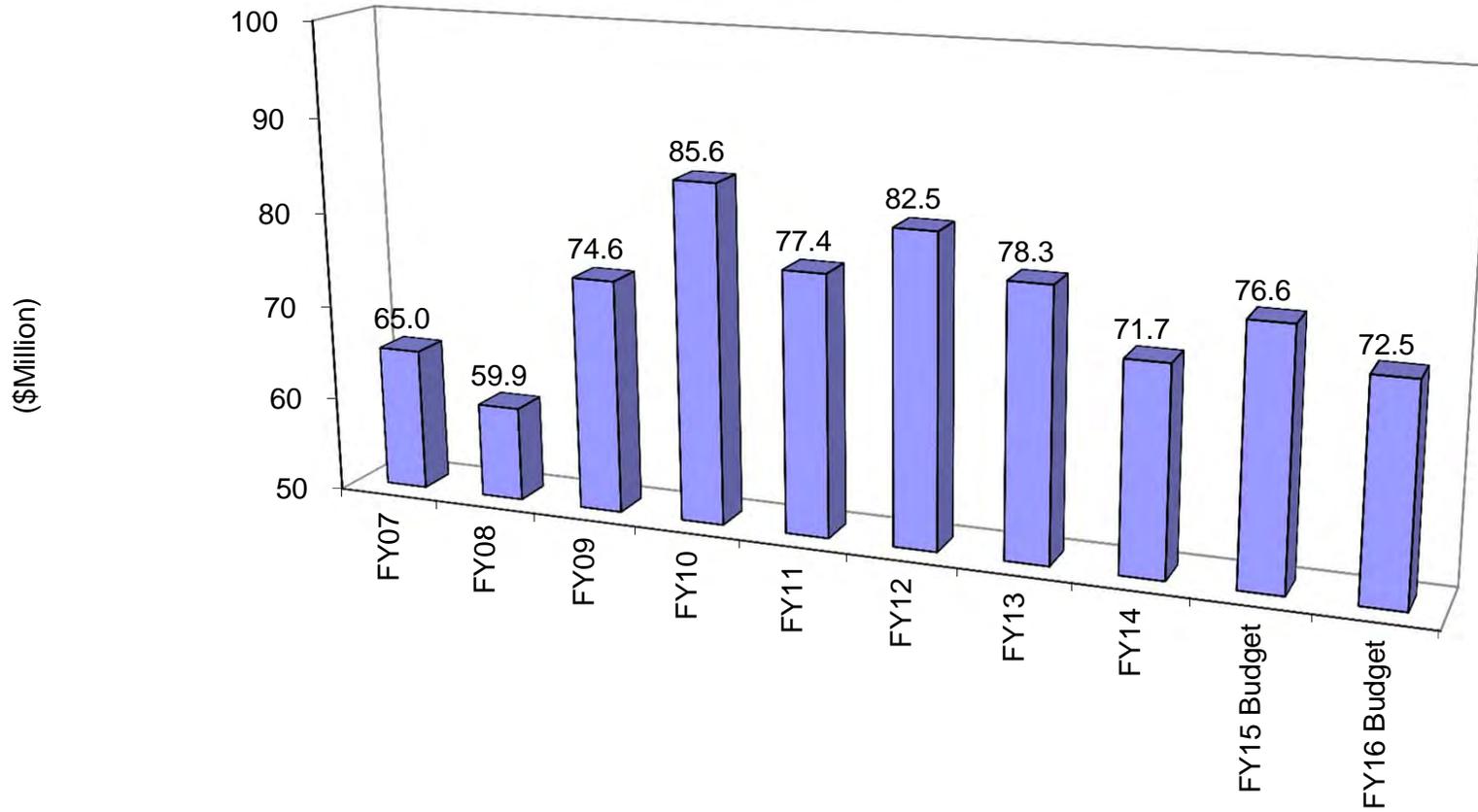
(1) FY16 assumes \$3M annual GOB @ 3%.

(2) FY15 assumed \$12M for Winooski One @ 3.8%; offset by \$8M of other bonds being paid off.

(3) Ended in FY12 (.5% of outstanding General Obligation Bonds, payable to the City).

(4) 2001/2002 Revenue Bonds now fully paid. FY15/16 is remaining Loss on Advance Refunding of GOB #32 through 2017.

### Burlington Electric Department BED Outstanding Long Term Debt



- (1) FY09 and FY10 includes \$36.6M GOB's issued 4/09 and 10/09.
- (2) FY12 includes \$11.9M Revenue Bond for ARRA, Highgate and VELCO investment.
- (3) FY13 to FY15 assumes \$3M annual GOB. (Voters approved March 2012).
- (4) At the end of FY14 all Revenue Bonds and GOB's issued prior to 2004 are now paid off.
- (5) FY15 assumes \$12M Revenue Bond for Winooski One Hydro.

**Burlington Electric Department  
Budget - FY2016  
Labor Overhead**

	<b>Actual FY 12</b>	<b>Actual FY 13</b>	<b>Actual FY 14</b>	<b>Budget FY15</b>	<b>Budget FY16</b>
<b>TOTAL LABOR (1)</b>	\$9,090,093	\$9,555,602	\$9,645,869	\$10,496,300	\$10,825,500
<b>LABOR OVERHEAD</b>					
Medical Insurance (2)	1,296,352	1,349,085	1,401,248	1,431,500	1,571,100
Dental Insurance (2)	95,569	93,567	92,896	96,300	90,000
Life Insurance (2)	13,841	13,518	13,160	13,400	11,200
Social Security Taxes	671,708	708,298	721,213	803,000	828,200
Workers Compensation Ins. (2)	461,502	307,524	843,255	508,700	559,700
Pension (3)	1,437,055	1,565,372	1,577,271	1,627,800	1,643,800
<b>Sub-total Labor Overhead</b>	3,976,027	4,037,364	4,649,043	4,480,700	4,704,000
Health Ins (Employee Contribution) (4)	(227,379)	(242,588)	(246,768)	(269,210)	(351,511)
Pension (Employee Contribution) (5)	(242,290)	(248,549)	(268,503)	(291,831)	(301,753)
Health Care Buyout (6)	15,679	16,830	16,606	16,798	17,198
<b>Total Labor Overhead</b>	\$3,522,037	\$3,563,057	\$4,150,378	\$3,936,457	\$4,067,935
<b>Labor Overhead Rate</b>	<b>41.41%</b>	<b>39.89%</b>	<b>45.81%</b>	<b>40.28%</b>	<b>40.36%</b>
<b>Pension Rate</b>	<b>15.68%</b>	<b>16.91%</b>	<b>17.80%</b>	<b>16.51%</b>	<b>16.18%</b>

(1) Includes Overtime, and McNeil @ 100%.

(2) FY16 provided by the City.

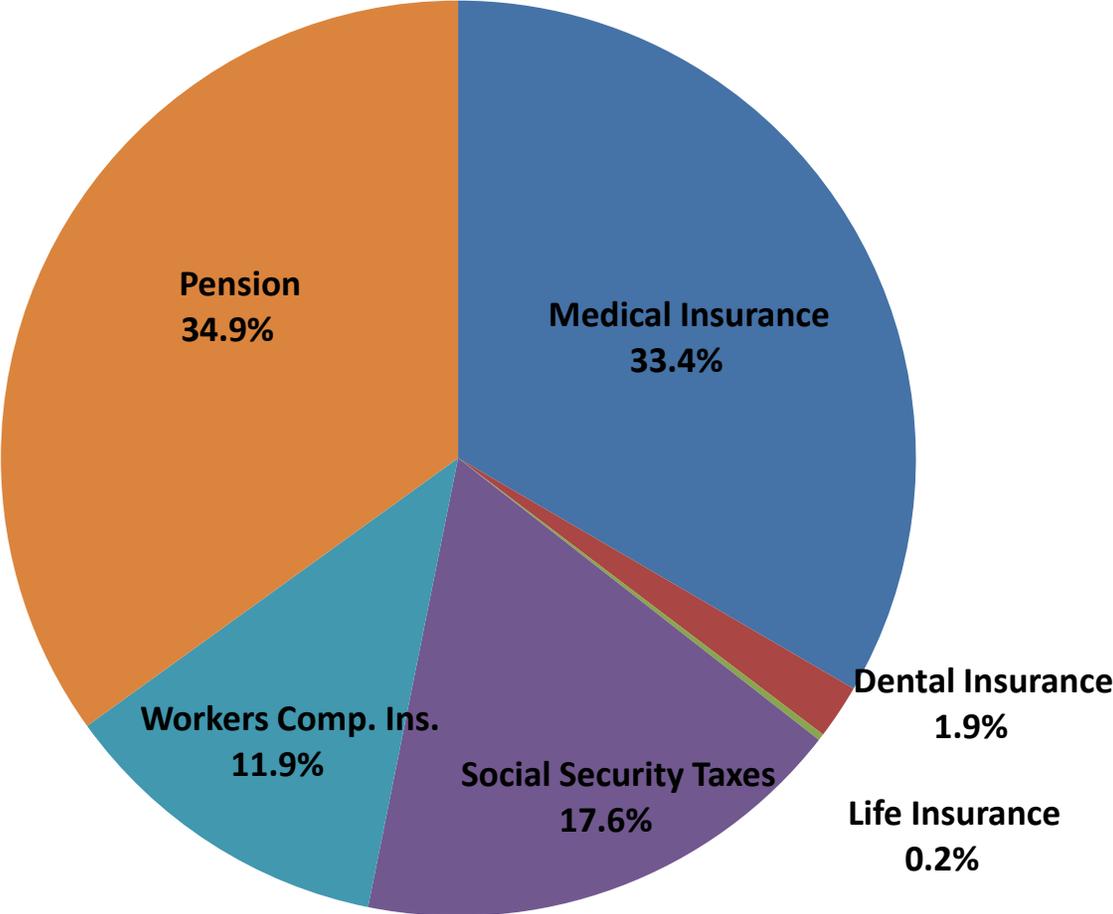
(3) FY16 amount provided by the City per retirement valuation report.

(4) FY16 assumes 4.16%.

(5) 3% for non-union employees; 4% for IBEW employees electing to remain with the same plan.

(6) \$1,000 for IBEW employees; \$800 non-union.

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Labor Overhead**



**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Payments to the City**

	<b>Actual FY12</b>	<b>Actual FY13</b>	<b>Actual FY14</b>	<b>Budget FY15</b>	<b>Budget FY16</b>
Payments In Lieu of Taxes	\$2,192,056	\$2,319,626	\$2,441,169	\$2,703,000	\$2,736,000
Health Insurance	1,296,352	1,349,085	1,401,248	1,431,500	1,571,000
Pension	1,437,055	1,565,372	1,577,271	1,627,800	1,643,800
Workers Compensation	461,502	307,524	843,255	508,700	559,700
Dental Insurance	95,569	93,567	92,896	96,300	90,000
Life Insurance	13,841	13,518	13,160	13,400	11,200
Subtotal - Total Fringe Benefits	3,304,319	3,329,066	3,927,830	3,677,700	3,875,700
Insurance Reserve (1)	67,236	6,508	38,792	66,500	0
Auto/Mobile Equipment Insurance	26,865	26,105	40,293	31,270	39,200
Crime/Emp. Practice Insurance (2)	1,484	13,480	786	5,527	18,000
Subtotal - Liability/Property Ins.	95,585	46,093	79,871	103,297	57,200
Vehicle Maintenance (DPW)	98,678	130,914	129,860	145,800	121,700
Risk Management Fee (3)	18,638	19,851	27,116	20,265	27,900
Indirect Cost (4)	494,004	443,529	310,658	403,200	385,500
Subtotal - City Services	611,320	594,294	467,634	569,265	535,100
Credit Enhancement Fee (5)	206,584				
Tree Trimming (Parks & Rec.)	33,065	24,145	25,012	25,000	25,500
Subtotal - Other	239,649	24,145	25,012	25,000	25,500
<b>Total</b>	<b>\$6,442,929</b>	<b>\$6,313,224</b>	<b>\$6,941,516</b>	<b>\$7,078,262</b>	<b>\$7,229,500</b>

**Note: This schedule does not include franchise fees, which are collected on behalf of the City. Includes McNeil at 100%.**

(1) Eliminated in FY15. FY13 includes credit for July-May, 2012 (\$60,200).

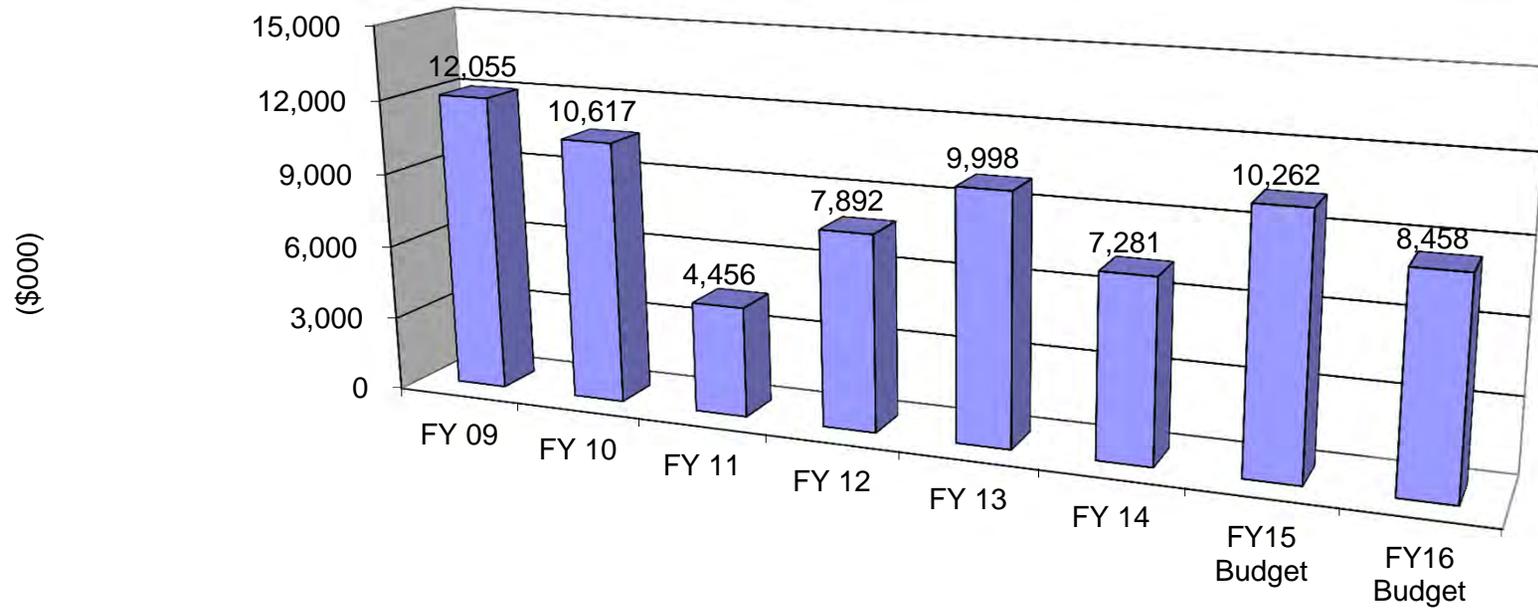
(2) Per City, EPLI combined with Crime October 2014. FY13 includes true-up for Jul-May, 2012, \$8,500.

(3) Allocated by the Clerk/Treasurer's Office and managed by the Human Resources Department. Provides oversight and administration of the workers' compensation, health, dental, life and general insurance.

(4) FY16 includes the addition of City Attorney's office. Covers government support services to all City Departments at varying levels. The following are included in this allocation; General Administration, Human Resources, General Governmental Activity, City Hall Occupancy Costs, and Assessor's Office.

(5) Fee ended after FY12.

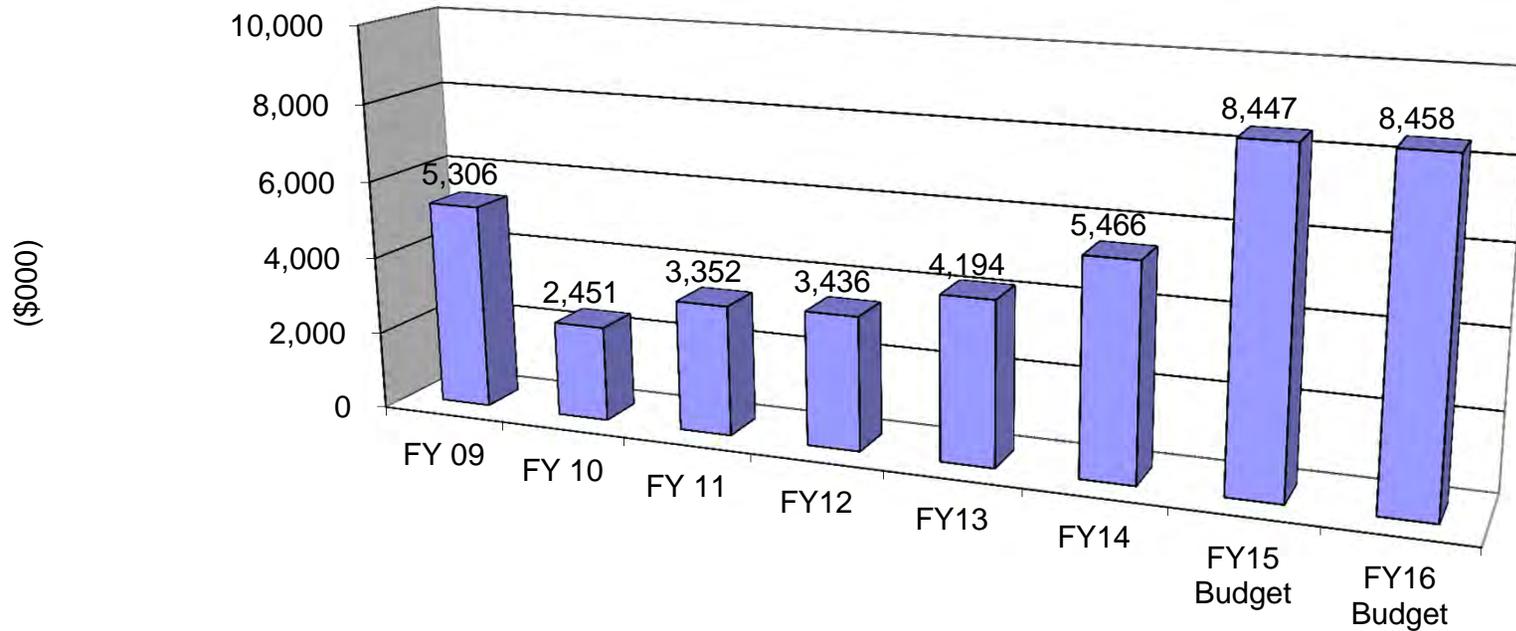
### Burlington Electric Department Capital Spending - Net



Plant Type	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	Budget FY 15	Budget FY 16
Production	1,981	363	739	172	999	566	1,736	2,991
Distribution	2,635	1,884	2,189	2,983	2,857	3,939	5,334	3,384
Transmission	6,749	6,896	250	1,572	3,800	1,815	1,815	0
General	690	204	424	281	338	961	1,377	2,083
ARRA		1,270	854	2,884	2,004			
<b>Total</b>	<b>\$12,055</b>	<b>\$10,617</b>	<b>\$4,456</b>	<b>\$7,892</b>	<b>\$9,998</b>	<b>\$7,281</b>	<b>\$10,262</b>	<b>\$8,458</b>

- FY09 includes \$1,553,000 for McNeil NOx project and \$6,343,000 for Velco Investment.
- FY10 includes \$5,245,000 for VT Transco Investment and \$1,270,000 for ARRA (50% share of costs).
- FY11 includes \$854,000 for ARRA (50% share of costs).
- FY12 includes \$1,150,000 for VT Transco Investment, \$398,000 for Highgate Converter Station and \$2,884,000 for ARRA (50% share).
- FY13 includes \$2,797,000 for VT Transco Investment, \$1,002,000 for Highgate Converter Station and \$2,004,000 for ARRA (50% share).
- FY14 includes \$1,815,000 for VT Transco investment and \$1,460,000 for Queen City Sub switchgear replacement.
- FY15 includes \$1,815,000 for VT Transco Investment, \$1,000,000 for Gas Turbine Control Upgrade and \$1,590,000 for Airport Solar.
- FY16 assumes no VT Transco investment.

**Burlington Electric Department  
Capital Spending (less Velco Equity & ARRA)**



Plant Type	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	Budget FY 15	Budget FY 16
Production	1,981	363	739	172	999	566	1,736	2,991
Distribution	2,635	1,884	2,189	2,983	2,857	3,939	5,334	3,384
General	690	204	424	281	338	961	1,377	2,083
<b>Total</b>	<b>\$5,306</b>	<b>\$2,451</b>	<b>\$3,352</b>	<b>\$3,436</b>	<b>\$4,194</b>	<b>\$5,466</b>	<b>\$8,447</b>	<b>\$8,458</b>

- FY09 includes \$1,553,000 for McNeil NOx project.
- FY12 includes \$398,000 for Highgate Converter Station .
- FY13 includes \$1,002,000 for Highgate Converter Station.
- FY14 includes \$1,460,000 for Queen City Sub switchgear replacement.
- FY15 includes \$1,000,000 for Gas Turbine Control Upgrade and \$1,590,000 for Airport Solar.

**Burlington Electric Department  
Capital Projects - FY2016**

	<b>Project Total</b>	<b>Customer Contribution</b>	<b>Net Cost</b>
McNeil Plant (BED 50% Share)	\$1,150,156		\$1,150,156
Gas Turbine Plant	70,000		70,000
Wind Turbine Plant	6,078		6,078
Community Solar and Storage	1,765,000		1,765,000
Efficiency Improvement Capital Fund	735,000		735,000
Distribution Plant	5,639,814	(2,255,811)	3,384,003
Computer Equipment/Software	1,270,289		1,270,289
Building & Grounds	32,800		32,800
Other Equipment	44,957		44,957
<b>Total Plant</b>	<b>\$10,714,093</b>	<b>(\$2,255,811)</b>	<b>\$8,458,282</b>

**BURLINGTON ELECTRIC DEPARTMENT  
FY 2016  
BUDGET SOURCES OF POWER**

**PURCHASED POWER**

Source	Contract Expires	Nominal MW (1)	Market MW (2)	MWH	% of Total MWh	Type of Generation	Delivery Point	Comments
Vermont Wind	2021	16.000	2.120	36,066	10.3%	wind	NrthEast VT	Began operation in October 2011
ISO Exchange	n/a	n/a	29.900	(5,970)	-1.7%	exchange	VT Zone	Net purchases from (sales to) ISO-NE
Vermont Electric Power Producers, Inc.	2015-2020	2.394	0.995	7,756	2.2%	small hydro	Varies (in VT)	State mandated purchases from Vermont small power producers. Contracts with varying end dates
GMC Wind	2037	10.000	1.110	26,922	7.7%	wind	Milton/Georgia	Production began 12/31/12
Standard Offer	Various	1.784	0.649	4,770	1.4%	renewable	Varies (in VT)	Purchases under new feed-in contracts. Prices very high
NY Power Auth - St Law	2017	0.059	0.050	552	0.2%	lg hydro	NY-NE Border	Low cost contract through the Vermont Dpt of Public Svc
NY Power Auth - Niagara	2025	2.558	2.187	14,358	4.1%	lg hydro	NY-NE Border	Low cost contract through the Vermont Dpt of Public Svc
Nextera	2017	5.000	0.000	43,920	12.6%	small hydro	Maine	Purchase of energy & RECs from small Maine hydro
BED Solar	n/a	0.944	(3)	1,128	0.3%	solar	Burlington	BTV parking garage began production February, 2015. BED garage production expected in July 2015.
Hancock Wind	2025	13.500	0.000	17,333	5.0%	wind	VT Zone	The 10 year contract is projected to begin on January 1, 2016
HydroQuebec	2038	5.000	0.000	19,440	5.6%	lg hydro	Highgate	Deliveries commence November 1, 2015

**GENERATION**

Source	Contract Expires	Nominal MW (1)	Market MW (2)	MWH	% of Total MWh	Type of Generation	Delivery Point	Comments
McNeil	N/A	25.000	26.000	153,301	43.9%	wood	McNeil Sub	Projected to continue operation for forecast period
BED Gas Turbine	N/A	25.000	18.428	208	0.1%	oil	Burlington	Projected to continue operation for forecast period
Winooski One	N/A	7.400	3.650	29,297	8.4%	small hydro	Burlington	Plant was purchased and sale was final as of September 1, 2014

**GRAND TOTAL SOURCES**

**85.089      349,081      100.0%**

(1) Nominal MW represents the nameplate of or entitlement to the resource

(2) Market MW represents the average monthly MW for the resource in the Forward Capacity Market (allowing for rating, reliability, partial periods and intermittent resource adjustments)

(3) BED's solar projects do not have a market capacity rating. Instead they reduce BED's load at peak hours.

**Burlington Electric Department  
 Long Term Financial Forecast (FY16-FY20)  
 Net Power Cost – Key Assumptions**

**OVERALL COMMENTS AND NOTES**

The most significant changes between the FY16 budget and the budget prepared one year ago are:

- BED has revised its five year energy market projections slightly downwards to reflect current markets; however, the winter months continue to be projected to be much more expensive than summer or shoulder months.
- This budget reflects an increase in anticipated capacity factor for McNeil. In prior budget years, the capacity factor has been planned at 61%, however for this budget year, the capacity factor has been increased to 70%
- The Standard Offer projects have a much higher projection for online production than was accounted for in FY15
- This budget reflects any presold RECs at the actual value of the contracts. The CT REC docket has been resolved favorably with the clarification that Vermont RECs can be used for CT compliance for at least 2015 and 2016 (and if a VT RPS is adopted after that as well). BED has revised its REC projections to reflect current markets. At this point, REC revenues have been projected to continue for the forecast period, and the costs of a Vermont RPS have not been explicitly modeled (but are not expected to significantly alter the budgeted net cost of REC sales and purchases).

**ENERGY MARKETS & RESOURCES**

**Spot Market Energy Prices**

- BED has revised its wholesale energy price projection in all periods covered by the five year budget to reflect current market expectations
- Expected base load (around-the-clock) power price forecasts

	<b><u>FY15 Budget</u></b>	<b><u>FY16 Budget</u></b>
○ FY16	\$58.12	\$47.85
○ FY17	\$54.19	\$42.62
○ FY18	\$54.56	\$42.32
○ FY19	\$54.99	\$43.24
○ FY20		\$44.29

**Hedge (Planned) Purchases**

- There are currently no hedge contracts due to market exposure being minimal through the forecast period based on assumed resources. Additional hedge purchases can be made if needed.
- Based on McNeil’s assumed operation during 70% of the hours, existing resources, and already executed contracts, BED expects to have contracted resources to meet the following percent of BED’s projected loads.

	<b><u>FY15 Budget</u></b>	<b><u>FY16 Budget</u></b>
o FY15	92.2%	
o FY16	97.7% (no hedge kWh)	101.7%
o FY17	106.3% (no hedge kWh)	108.8%
o FY18	98.2%	101.6%
o FY19	92.3%	95.1%
o FY20		97.4%

**McNeil**

- 50% Ownership – 25 MW
- McNeil is assumed to operate at a 70% capacity factor. There is potential for increased production if fuel deliveries can be increased. The value of increased production if it occurs (i.e. production in excess of budget) will be a function of off-peak energy prices and REC revenues.
- McNeil provides energy equal to approximately 43.9% of BED’s load at a 70% capacity factor in FY2016 (43.2% of BED’s total FY16 projected resources)
- Wood prices assumed:
  - o \$36.50 per ton for first half of FY2016 (July 2015 – December 2015)
  - o \$37.25 per ton for second half of FY2016 (January 2016 – June 2016)
  - o +3% escalation per year thereafter
- **REC sales assumed for budget period**
- **REC sales for the forecast period under 5 year contract with CT for 20% of BED’s McNeil RECs**

**BED Gas Turbine**

- Not a significant energy source

- BED Gas Turbine is expected to provide energy equal to 0.06% of Burlington Electric's load for FY16
- Significant value in non-energy markets (capacity, reserves, etc.)

### **NYPA**

- Contracts continue through 2017 (St Lawrence) and 2025 (Niagara)
- Niagara is by far the larger resource
- 65% capacity factor (i.e. no non-firm deliveries) assumed
- NYPA is expected to provide energy equal to 4.3% of Burlington Electric's load for FY16

### **VEPPI**

- Continues according to the contract term for each resource
- VEPPI contracts will continue to expire by their terms
  - o Going forward, Ryegate will not be assigned to BED as long as McNeil serves one-third of BED's load
  - o Ryegate was not assigned to BED's load for FY2015 and is not assumed to be assigned to BED in FY16
- VEPPI is expected to provide energy equal to 2.2% of Burlington Electric's load for FY16

### **STANDARD OFFER**

- Standard Offer resource deliveries began in July 2010
- Fuel types are currently a mix of solar, farm methane, biomass, wind, hydro, and LFG
- Future volumes hard to predict as the program consists of a large number of small units with uncertain development capabilities
- BED has attempted to project future deliveries in the FY16 budget based on the assumption that the increased standard offer targets will be developed over the coming years
- The long term price set under feed in tariffs is very high

- Standard Offer resources are expected to provide energy equal to 1.4% of Burlington Electric's load for FY16
- **REC sales assumed for budget period**

### **Vermont Wind**

- Vermont Wind became commercial on October 19, 2011
- BED entitled to 16 MW of 40 MW Project total (40%) for ten years from the commercial operations date
- Estimated capacity factor approximately 26%
- Vermont Wind is expected to provide energy equal to 10.3% of Burlington Electric's load for FY16
- **REC sales assumed for budget period**

### **Nextera Hydro**

- Nextera Hydro had a unit contingent contract for 10 MW from January 2013 through December 2014 and has a 5 MW unit contingent contract from January 2015 through December 2017 from small hydro facilities located in Maine
- The RECs from this resource will be retained by Burlington Electric for renewability purposes
- Nextera Hydro is expected to provide energy equal to 12.6% of Burlington Electric's load for FY16

### **Solar Generation**

- Currently, BED contracts to purchase 413 kW of output from six solar generators around the city of Burlington
- BED increased the amount of solar generation by 499 kW by adding the BED-owned array on the Burlington International Airport parking garage which began commercial operations in February 2015.
- BED is planning to further increase the amount of solar generation by 122 kW with a project on the roof of BED. This project is expected to be complete and in production by Summer 2015
- BED has projected an additional increase in the amount of solar generation by 2500 kW to reflect the South Forty Solar project. This is expected to be complete and in production by January 2017
- Solar Generation is projected to provide energy equal to 0.3% of Burlington Electric's load for FY16
- **REC sales assumed for budget period**

### **Georgia Mountain Community Wind**

- GMCW began commercial output on December 31, 2012
- GMCW is budgeted to operate at a 31% capacity factor
- Georgia Mountain Community Wind is projected to provide energy equal to 7.7% of Burlington Electric's load for FY16
- **REC sales assumed for budget period**

### **Winooski One**

- The VEPPi contract ended on March 31, 2013
- BED attained full ownership of the facility beginning September 1, 2014. Winooski One is projected to provide energy equal to 8.4% of Burlington Electric's load for FY16
- Winooski One qualifies to sell relatively valuable Massachusetts Class II (non-waste) RECs
- **REC sales assumed for budget period**

### **Hydro Quebec**

- The BED portion of the Hydro Quebec contract will begin in November 2015. It is factored into market exposure for FY16+ (see above under Hedge Purchases)
- Hydro Quebec is expected to provide energy equal to 5.6% of Burlington Electric's load for FY16

### **Hancock Wind**

- Commercial operations are expected to begin January 2016 and is factored into market exposure for FY16+ (see above under Hedge Purchases)
- BED will be entitled to 13.5 MW of the project
- Estimated capacity factor 26%
- Hancock Wind is expected to provide energy equal to 5.0% of Burlington Electric's load for FY16

## **CAPACITY MARKETS**

### **Capacity Market Prices**

- New market rules changed BED's capacity position beginning June 1, 2010
- BED's capacity obligation is charged one price and resources may be paid a different value (generally lower for the forecast period)

- The projected capacity charge for each kw of capacity obligation, and payment rate for each kw of market capacity provided by BED resources, for the period are:
  - o 

<u>Capacity Period</u>	<u>Charge</u>	<u>Payment</u>
June 13 to May 14	\$2.95	\$2.52
June 14 to May 15	\$3.21	\$2.86
June 15 to May 16	\$3.43	\$3.13
June 16 to May 17	\$3.15	\$2.74
June 17 to May 18	\$7.03**	\$7.45**
- BED is a net purchaser of capacity (i.e. total charges for load exceed resource payments) – see capacity position below
- \*\* Capacity charge and payment rates from June 2017 – May 2018 are significantly increased over prior periods

**Projected Capacity Position**

BED is generally expected to be buying approximately 35% of its capacity needs from the ISO-NE market over the next five fiscal years.

<b>Average Monthly Capacity Position</b>					
	2016	2017	2018	2019	2020
	<b><u>FY2016</u></b>	<b><u>FY2017</u></b>	<b><u>FY2018</u></b>	<b><u>FY2019</u></b>	<b><u>FY2020</u></b>
McNeil	26.0	26.0	26.0	26.0	26.0
BED Gas Turbine	18.4	18.2	18.2	18.2	18.2
SPEED/FEED IN TARIFF	0.6	0.8	0.9	1.0	1.2
NYPA	2.2	2.4	2.4	2.4	2.4
VEPPI	1.0	0.2	0.0	0.0	0.0
Vermont Wind	2.1	2.1	2.1	2.1	2.1
GMCW	1.1	1.1	1.1	1.1	1.1
Winooski One	3.7	3.7	3.7	3.7	3.7
HQICC	3.0	3.1	3.1	3.1	3.1
FCM Market Purchase	29.7	29.0	31.6	31.3	31.1
<b>TOTAL REQUIREMENT</b>	<b>88.0</b>	<b>86.6</b>	<b>89.1</b>	<b>88.9</b>	<b>89.0</b>
Percent Hedged	66.2%	66.5%	64.6%	64.8%	65.0%
Percent Market Purchase	33.8%	33.5%	35.4%	35.2%	35.0%

**RENEWABLE ENERGY CREDITS**

FY16 continues to benefit from the strong recovery FY13, FY14 and FY15 observed in the projected market value per renewable energy credit. REC Revenues are forecasted to remain a significant offset to BED’s power costs over the forecast period. Historical and projected values are as follows:

REC REVENUE SUMMARY									
Year	<u>Actual REC Revenues</u>	<u>FY15 Budget REC Revenues</u>	<u>FY16 Budget REC Revenues</u>						<u>Notes</u>
FY2008	\$ -								
FY2009	\$ 1,648,484								Partial Year - McNeil Qualified Q4-2008
FY2010	\$ 1,624,454								** See Note Below
FY2011	\$ 3,211,612								McNeil Only - VT Wind Delayed
FY2012	\$ 3,503,822								REC Value Falls, VT Wind Partial Year
FY2013	\$ 7,123,448								Recover in REC Prices - Full Yr VT Wind
FY2014	\$ 11,237,165								Very strong REC markets
FY2015		\$ 9,273,441							
FY2016		\$ 8,590,503	\$ 9,724,798						
FY2017		\$ 6,736,850	\$ 10,774,164						
FY2018		\$ 5,677,094	\$ 8,992,496						
FY2019		\$ 5,243,354	\$ 7,581,133						
FY2020			\$ 6,965,776						
<p>** A change from recording REC revenues from when the power is generated to when the REC is delivered caused a one time loss of REC income (but did not affect cash flow) - Combined effect estimated at over \$1,200,000 of REC revenue that would have been record in FY2010 on a REC delivery basis being recorded in FY2009</p>									

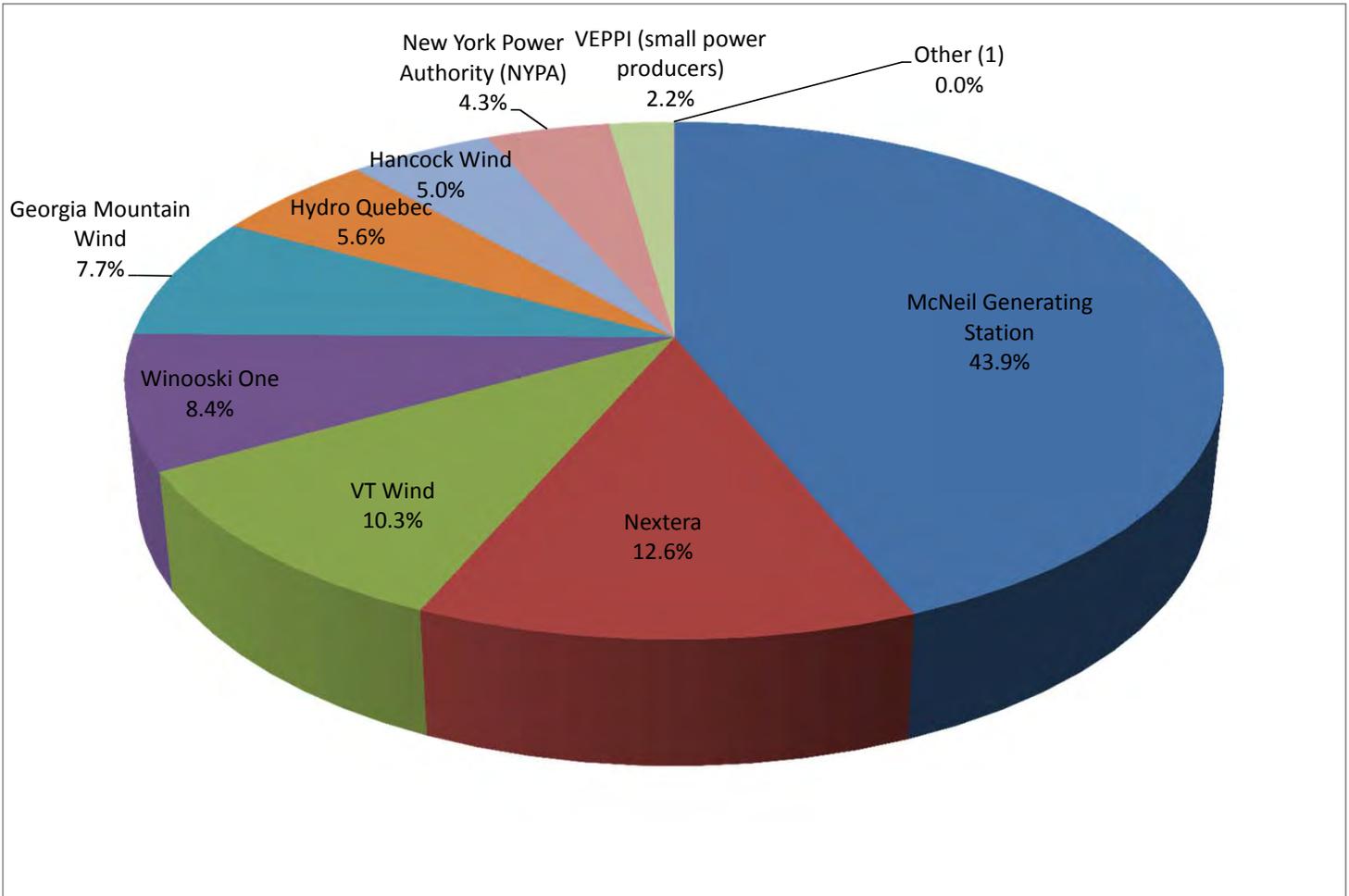
## TRANSMISSION

Transmission charges, particularly ISO-NE transmission charges for use of the New England transmission system, continue to be a significant expense (though this is by no means unique to BED). Beginning in 2010, BED is also paying VELCO transmission costs related to the East Avenue Project, which are included in the VELCO transmission charges shown below (these specific facilities charges are approximately \$500,000 per year and continuing for the forecast period).

Past and projected transmission charges in this forecast (and the values from last year's budget runs) are:

<b>TRANSMISSION TRENDS</b>							
Historical & FY15 Forecast Transmission Expense							
	<u>ISO-NE</u>	<u>VELCO</u>	<u>GMP</u>	<u>Other</u>	<u>TOTAL</u>	<u>Notes</u>	<u>FY15 Budget Comparison</u>
					<u>Transmission</u>		
FY2005	\$ 1,354,865	\$ 329,616	\$ 333,696	\$ 55,606	\$ 2,073,783	Actual	
FY2006	\$ 1,317,881	\$ 438,484	\$ 333,696	\$ 67,746	\$ 2,157,806	Actual	
FY2007	\$ 1,492,208	\$ 165,659	\$ 333,696	\$ 69,383	\$ 2,060,946	Actual	
FY2008	\$ 1,727,499	\$ 1,138,279	\$ 259,589	\$ 68,569	\$ 3,193,937	Actual	
FY2009	\$ 2,513,582	\$ 584,002	\$ 329,270	\$ 49,406	\$ 3,476,260	Actual	
FY2010	\$ 3,220,858	\$ 838,421	\$ 277,204	\$ 58,268	\$ 4,394,751	Actual	
FY2011	\$ 3,584,512	\$ 108,169	\$ 1,351	\$ 54,108	\$ 3,748,140	Actual	
FY2012	\$ 3,341,192	\$ 1,340,648	\$ 16,630	\$ 4,940	\$ 3,748,140	Actual	
FY2013	\$ 3,990,748	\$ 758,461	\$ 125,710	\$ 5,233	\$ 4,880,153	Actual	
FY2014	\$ 4,621,302	\$ 1,626,381	\$ 315,819	\$ 431	\$ 6,563,934	Actual	
FY2015	\$ 4,950,086	\$ 1,216,710	\$ 206,691	\$ 2,067	\$ 6,375,554	8 Act + 4 Mo. Fcst	\$ 6,163,900
FY2016	\$ 5,222,712	\$ 1,264,687	\$ 27,479	\$ 2,583	\$ 6,517,460	FY16 Forecast	\$ 6,721,984
FY2017	\$ 5,517,351	\$ 1,273,238	\$ 28,166	\$ 2,583	\$ 6,821,338	FY16 Forecast	\$ 6,941,671
FY2018	\$ 5,981,727	\$ 1,031,841	\$ 28,870	\$ 2,583	\$ 7,045,021	FY16 Forecast	\$ 7,438,793
FY2019	\$ 6,262,481	\$ 1,445,837	\$ 29,591	\$ 2,583	\$ 7,740,492	FY16 Forecast	\$ 7,854,773
FY2020	\$ 6,703,808	\$ 1,267,525	\$ 30,331	\$ 2,583	\$ 8,004,248	FY16 Forecast	

**Budget Power Supply - MWh by Source  
Fiscal Year 2016**



<b>Source</b>	<b>MWH</b>	<b>%</b>
McNeil Generating Station	153,301	43.9%
Nextera	43,920	12.6%
VT Wind	36,066	10.3%
Winooski One	29,297	8.4%
Georgia Mountain Wind	26,922	7.7%
Hydro Quebec	19,440	5.6%
Hancock Wind	17,333	5.0%
New York Power Authority (NYPA)	14,910	4.3%
VEPPI (small power producers)	7,756	2.2%
Other (1)	136	0.0%
<b>Total</b>	<b>349,081</b>	<b>100.0%</b>

(1) Includes Standard Offer (4,770 Mwh), BED Solar (1,128 Mwh), Gas Turbine (208 Mwh) and ISO Exchange (a credit of 5,970 Mwh as a result of net purchases from sales to ISO-NE).

**Burlington Electric Department**  
**Budget for the Year Ending June 30, 2016**  
**Debt Coverage (000's)**

	Actual FY 12	Actual FY 13	Actual FY 14	Budget FY 15	Budget FY 16
Total Operating Revenues	\$56,574	\$60,087	\$63,559	\$61,236	\$61,477
Total Operating Expenses	52,304	51,386	57,811	58,710	58,387
Less: Depreciation & Amortization (1)	(6,987)	(6,379)	(7,561)	(5,410)	(5,754)
Less: Payment in Lieu of Taxes (2)	(1,633)	(1,758)	(1,861)	(2,077)	(2,132)
Total Operating Expenses - Adjusted	43,684	43,249	48,390	51,223	50,502
Net Operating Income - Adjusted	12,890	16,838	15,169	10,014	10,975
Total Other Income	5,639	6,386	3,570	4,580	5,615
(Less) Grant/Customer Income	(2,697)	(3,180)	(255)	(1,293)	(2,256)
Net Income Available for Debt Service	15,833	20,044	18,484	13,301	14,334
Debt Service on Revenue Bonds - NEPCO (100%) (3)	1,948	1,948	1,949	0	0
Net Income Available for Other Debt Service	13,884	18,096	16,534	13,301	14,334
Debt Service on Revenue Bonds - Other (125%)	7,587	7,490	7,484	2,313	2,690
Debt Service Coverage Ratio (4)	1.83	2.42	2.21	5.75	5.33

(1) Deducted as a non-cash expense.

(2) Lower priority than debt service per bond covenants.

(3) 100% because paid for by 3rd party (NEPCO).

(4) Revenue bond covenants require a minimum debt ratio of 1.25.

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

<b>Debt Coverage Adjusted (\$000)</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>Budget FY15</b>	<b>Budget FY16</b>
Total Operating Revenues	56,574	60,087	63,559	61,236	61,477
Total Operating Expenses	52,304	51,386	57,811	58,710	58,387
Less: Depreciation & Amortization	(6,987)	(6,379)	(7,561)	(5,410)	(5,754)
Less: Payment in Lieu of Taxes	(1,633)	(1,758)	(1,861)	(2,077)	(2,132)
Total Operating Expenses - Adjusted	43,684	43,249	48,390	51,223	50,502
Net Operating Income - Adjusted	12,890	16,838	15,169	10,014	10,975
Total Other Income	5,638	6,386	3,570	4,580	5,615
(Less) Grant/Customer Income	(2,697)	(3,180)	(255)	(1,293)	(2,256)
Net Income Available for Debt Service	15,832	20,044	18,484	13,301	14,334
Deduct: Payment in Lieu of Taxes	(1,633)	(1,758)	(1,861)	(2,077)	(2,132)
Adjusted Net Income Available for Debt Service	14,199	18,286	16,623	11,224	12,202
Debt Service					
Revenue Bonds (NEPCO)	1,948	1,948	1,949	0	0
Revenue Bonds (Other)	7,587	7,490	7,484	2,313	2,690
General Obligation Bonds	3,349	3,681	4,014	4,169	4,169
Total Debt Service	12,884	13,119	13,447	6,482	6,859
<b>Adjusted Debt Service Coverage Ratio</b>	<b>1.10</b>	<b>1.39</b>	<b>1.24</b>	<b>1.73</b>	<b>1.78</b>

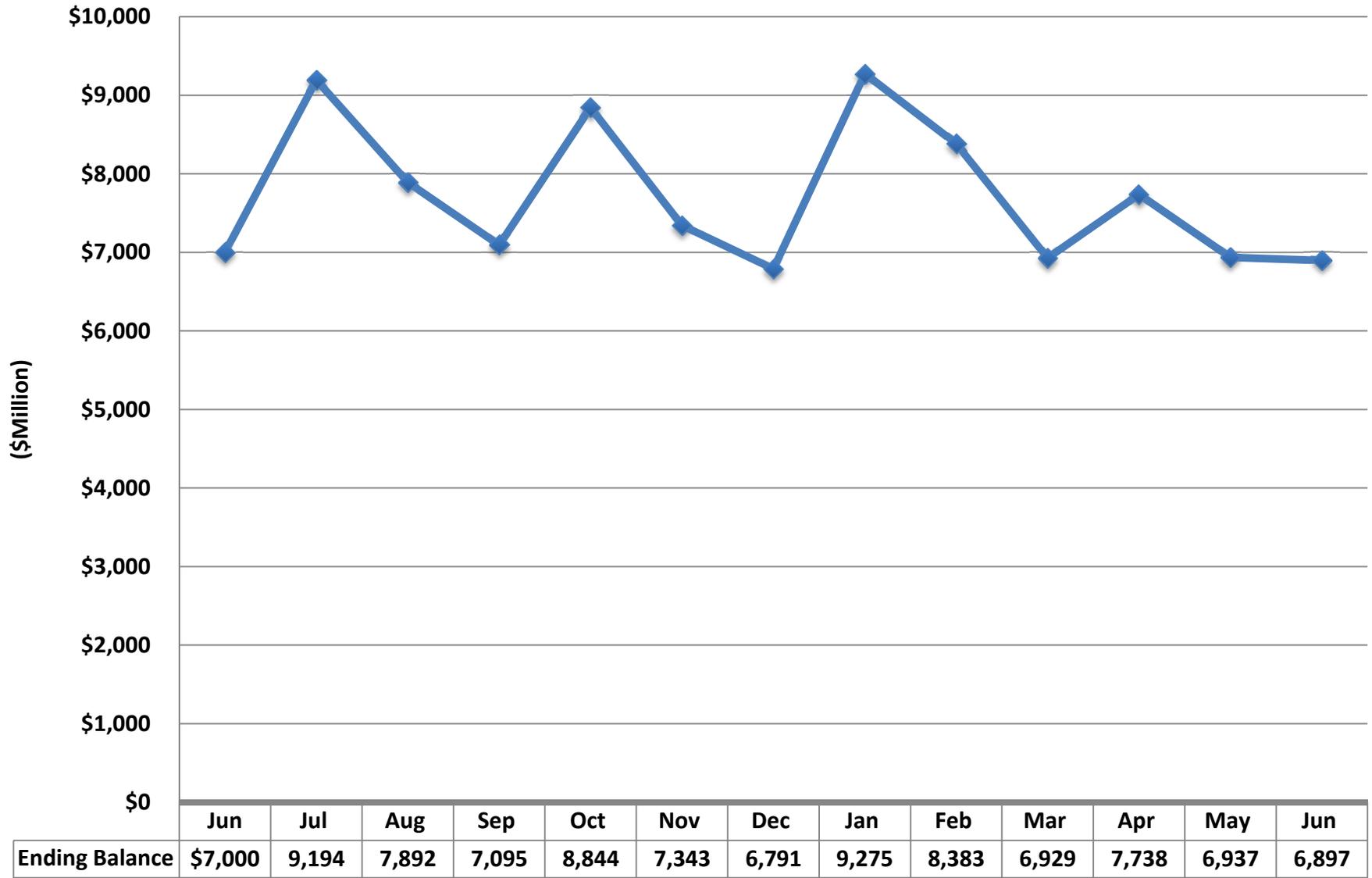
**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Cash Flow (000's)**

<b>Schedule 2</b>	<b>Jul 2015</b>	<b>Aug 2015</b>	<b>Sep 2015</b>	<b>Oct 2015</b>	<b>Nov 2015</b>	<b>Dec 2015</b>	<b>Jan 2016</b>	<b>Feb 2016</b>	<b>Mar 2016</b>	<b>Apr 2016</b>	<b>May 2016</b>	<b>Jun 2016</b>	<b>Budget FY 16</b>
<b>BEGINNING BALANCE</b>	\$7,000	\$9,194	\$7,892	\$7,095	\$8,844	\$7,343	\$6,791	\$9,275	\$8,383	\$6,929	\$7,738	\$6,937	\$7,000
<b>SOURCES OF FUNDS:</b>													
<b>Total Operating Revenues</b>	7,321	4,780	4,434	6,372	3,887	4,515	6,967	4,125	4,294	6,166	3,977	4,638	61,477
<b>Other Income</b>													
Dividends	767	0	42	767	0	42	767	0	42	767	0	42	3,236
Interest and Other Income	31	7	7	(6)	11	12	14	7	7	14	7	12	122
Customer Contribution/Grant Income	316	530	462	297	282	220	29	29	29	29	10	24	2,256
<b>Total Other Income</b>	<b>1,114</b>	<b>537</b>	<b>511</b>	<b>1,058</b>	<b>293</b>	<b>274</b>	<b>810</b>	<b>35</b>	<b>77</b>	<b>811</b>	<b>17</b>	<b>78</b>	<b>5,615</b>
<b>Other Sources of Funds</b>													
GOB Annual					400			375	400	375	820	630	3,000
Voluntary Buyout Reserve				833	833	834							2,500
Renewal & Replacement Fund Transfer						135						135	269
<b>Total Other Sources of Funds</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>833</b>	<b>1,233</b>	<b>969</b>	<b>0</b>	<b>375</b>	<b>400</b>	<b>375</b>	<b>820</b>	<b>765</b>	<b>5,769</b>
<b>TOTAL SOURCES OF FUNDS</b>	<b>15,435</b>	<b>14,510</b>	<b>12,836</b>	<b>15,358</b>	<b>14,257</b>	<b>13,100</b>	<b>14,569</b>	<b>13,811</b>	<b>13,155</b>	<b>14,281</b>	<b>12,552</b>	<b>12,417</b>	<b>79,860</b>

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016  
Cash Flow (000's)**

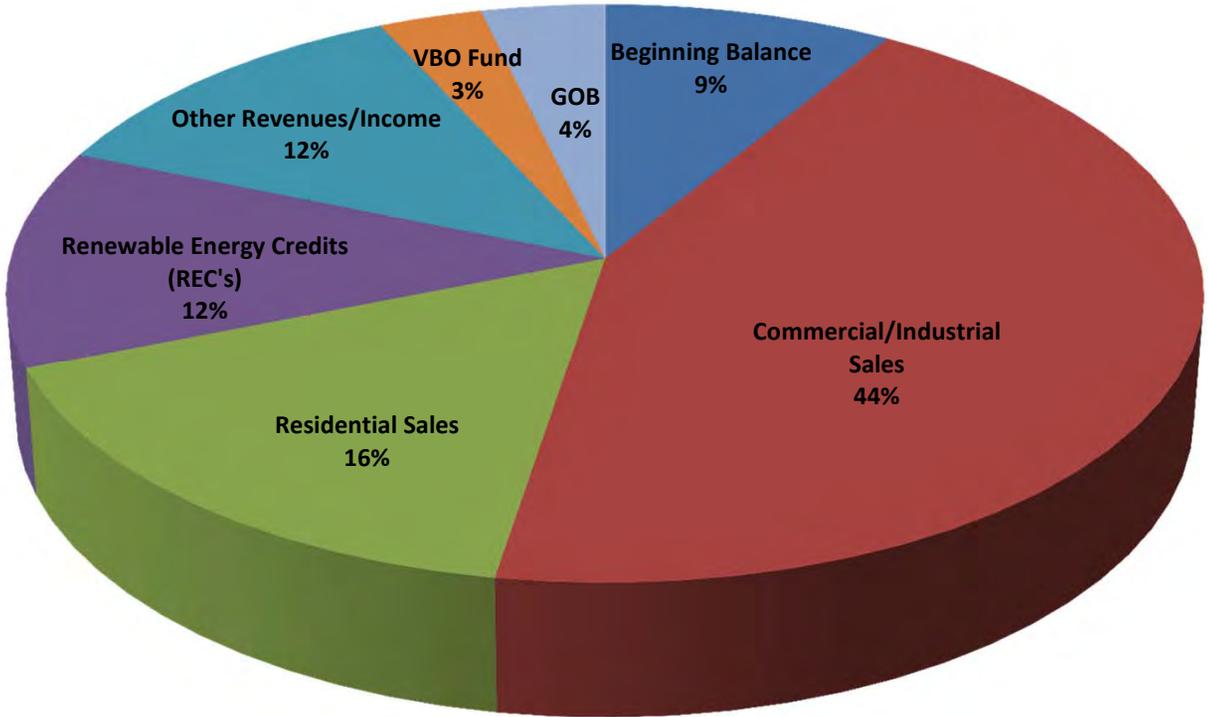
<b>Schedule 2</b>	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Budget FY 16
<b>USES OF FUNDS:</b>													
Total Operating Expenses	4,636	4,163	3,882	4,212	4,084	4,133	4,180	3,855	4,287	4,226	3,994	3,658	49,311
Taxes - Gross	57	633	50	66	633	0	57	101	533	368	101	533	3,131
Net Operations Expenses	4,693	4,797	3,933	4,277	4,718	4,133	4,237	3,955	4,819	4,594	4,095	4,191	52,442
<u>Capital Spending</u>													
McNeil	699	1,119	1,189	783	749	727	431	859	793	840	707	668	9,564
BED	236	91	7	7	7	8	18	6	6	501	206	56	1,150
Total Capital Spending	935	1,209	1,196	790	756	735	449	864	799	1,342	914	723	10,714
<u>Voluntary Buyout</u>													
				833	833	833							2,500
<u>Debt Service</u>													
G.O. Bonds	366	366	366	366	361	361	361	361	361	361	361	360	4,349
Revenue Bonds	224	224	224	224	224	224	224	224	224	224	224	224	2,690
Total Debt Service	590	590	590	590	585	585	585	585	585	585	585	584	7,039
Renewal & Replacement Fund	22	22	22	22	22	22	22	22	22	22	22	22	269
<b>TOTAL USES OF FUNDS</b>	6,241	6,619	5,741	6,514	6,915	6,309	5,293	5,427	6,226	6,543	5,616	5,521	72,964
<b>ENDING BALANCE - OPERATING</b>	\$9,194	\$7,892	\$7,095	\$8,844	\$7,343	\$6,791	\$9,275	\$8,383	\$6,929	\$7,738	\$6,937	\$6,897	\$6,897

**Burlington Electric Department  
Budget for the Year Ending June 30, 2015  
MONTHLY CASH**



**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

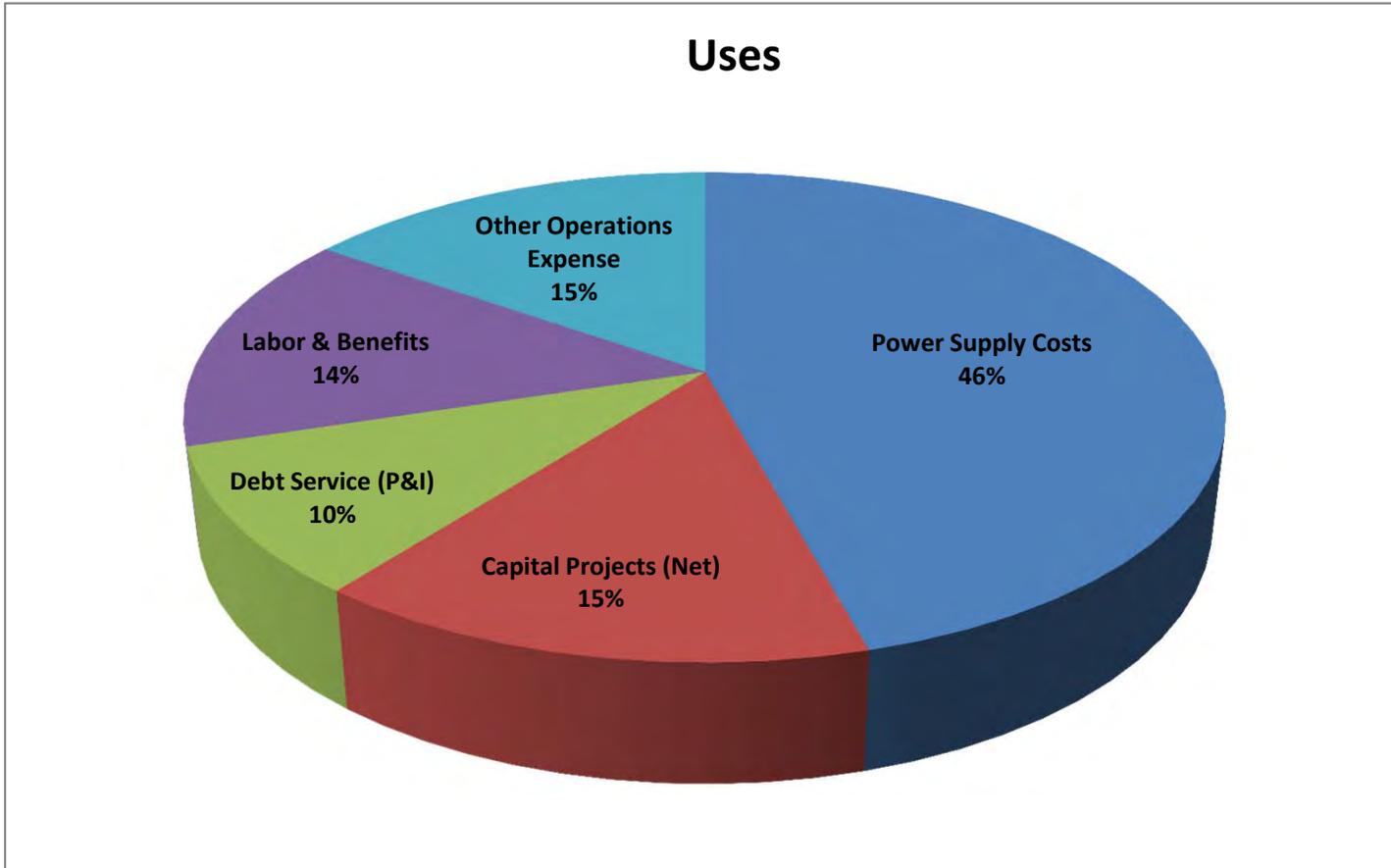
**Sources**



<b>Where the money comes from (\$000)</b>	
Beginning Balance	\$7,000
Commercial/Industrial Sales	34,870
Residential Sales	13,028
Renewable Energy Credits (REC's)	9,725
Other Revenues/Income	9,469
VBO Fund	2,500
GOB	3,000
<b>Total</b>	<b>\$79,591</b>

*Total Net of Renewal & Replacement Fund*

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**



<b>Where the money goes (\$000):</b>	
Power Supply Costs	\$33,274
Capital Projects (Net)	10,714
Debt Service (P&I)	7,039
Labor & Benefits	10,547
Other Operations Expense	11,121
<b>Total</b>	<b>\$72,695</b>

*Total Net of Renewal & Replacement Fund*

**Burlington Electric Department  
Budget for the Year Ending June 30, 2016**

Cash Coverage	FY13	FY14	Budget FY15	Budget FY16
Cash Accounts - Operating	2,033,804	4,465,716	7,513,739	7,776,468
Cash Accounts - McNeil (1)	857,032	642,860	534,000	579,800
(Plus) Line-of-Credit Available	5,000,000	5,000,000	5,000,000	5,000,000
<b>Unrestricted Cash and Investments</b>	<b>7,890,836</b>	<b>10,108,576</b>	<b>13,047,739</b>	<b>13,356,268</b>
Total Operating Expenses	51,358,217	57,811,274	58,709,918	58,387,480
(less) Depreciation Expense	(4,633,426)	(4,844,228)	(4,332,800)	(4,197,700)
(less) Amortization Expense	(1,745,563)	(2,716,391)	(1,077,700)	(1,556,500)
<b>Adjusted Operating Expenses</b>	<b>44,979,228</b>	<b>50,250,655</b>	<b>53,299,418</b>	<b>52,633,280</b>
<b>Days Cash on Hand (with LOC)</b>	<b>64</b>	<b>73</b>	<b>89</b>	<b>93</b>

*(1) McNeil FY15 and FY16 budgets based on 3 year average actual*

<b>A</b>	<b>Baa</b>
90-149	30-89