



# Borough of Madison



## Electric Utility Presentation, Nov 14, 2016



# Proposed Quarterly Report

Going forward, Council will receive quarterly financial reports.

## Borough of Madison Electric Cash Receipts for 2010-2016

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Estimated 2016 in Budget	Actual 2016
First Quarter	\$ 5,000,704	\$ 5,393,655	\$ 5,378,486	\$ 5,342,961	\$ 5,840,064	\$ 5,457,888	\$ 5,230,000	\$ 5,225,575
Second Quarter	5,331,106	5,195,524	4,902,237	5,092,850	5,084,063	4,940,168	5,015,000	4,976,208
Third Quarter	7,288,407	5,980,601	6,650,137	7,166,898	6,214,762	6,680,431	6,540,000	7,458,141
Fourth Quarter	5,563,437	5,781,504	5,762,994	5,574,455	5,393,280	5,788,007	5,515,000	
<b>Total</b>	<b>\$ 23,183,654</b>	<b>\$ 22,351,284</b>	<b>\$ 22,693,853</b>	<b>\$ 23,177,164</b>	<b>\$ 22,532,169</b>	<b>\$ 22,866,494</b>	<b>\$ 22,300,000</b>	
1st and 2nd Qtr	\$ 10,331,810	\$ 10,589,179	\$ 10,280,722	\$ 10,435,811	\$ 10,924,127	\$ 10,398,056	\$ 10,245,000	\$ 10,201,783

## Borough of Madison Electric Power Purchase Costs from Edmunds for 2010-2016

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Estimated 2016 in Budget	Actual 2016
First Quarter	\$2,656,961	\$2,391,367	\$2,244,548	\$2,375,259	\$2,352,831	\$1,864,738	\$1,840,000	\$1,873,813
Second Quarter	3,876,284	3,714,413	3,282,048	3,468,499	4,586,519	2,593,240	2,740,000	2,436,241
Third Quarter	5,041,697	4,419,377	4,568,081	4,697,066	3,027,634	3,306,021	2,840,000	2,909,215
Fourth Quarter	4,854,672	4,566,512	4,788,124	5,199,374	3,170,039	3,242,242	2,921,000	
<b>Total</b>	<b>\$ 16,429,614</b>	<b>\$ 15,091,669</b>	<b>\$ 14,882,801</b>	<b>\$ 15,740,199</b>	<b>\$ 13,137,024</b>	<b>\$ 11,006,242</b>	<b>\$ 10,341,000</b>	
1st and 2nd Qtr	\$ 6,533,245	\$ 6,105,779	\$ 5,526,596	\$ 5,843,758	\$ 6,939,350	\$ 4,457,979	\$ 4,580,000	\$ 4,310,054

Reminder... Budgeted appropriations stay on the books for a full year after the budget closes. This allows for bills from November and December to be paid in the following year. Unspent appropriations lapse into surplus at the end of the following year. As such, savings on “power purchase costs’ are not realized until the end of the following year.



# Proposed Quarterly Report

Going forward, Council will receive quarterly kWh metering reports.

**Borough of Madison**  
**Electric kWh purchased as shown on Constellation and PJM Bills**  
**for 2010-2016**

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016
First Quarter	32,713,073	31,790,932	29,430,847	30,790,259	31,759,888	32,506,800	30,696,000
Second Quarter	35,041,253	32,159,906	31,709,767	32,023,470	31,597,019	32,513,200	31,932,400
Third Quarter	42,098,732	40,384,203	40,404,070	34,445,911	38,130,650	42,245,800	43,555,500
Fourth Quarter	21,425,089	29,128,972	29,827,133	38,645,563	30,588,760	30,442,700	
<b>Total</b>	<b>131,278,147</b>	<b>133,464,013</b>	<b>131,371,817</b>	<b>135,905,203</b>	<b>132,076,317</b>	<b>137,708,500</b>	
1st and 2nd Qtr	67,754,326	63,950,838	61,140,614	62,813,729	63,356,907	65,020,000	62,628,400

**Borough of Madison**  
**Electric kWh billed thru the Borough's Billing System**  
**for 2010-2016**

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016
First Quarter	32,398,202	30,431,976	27,747,242	29,963,442	30,682,068	30,610,106	28,880,014
Second Quarter	32,078,764	29,157,762	28,193,491	29,830,615	28,998,447	28,385,032	28,781,884
Third Quarter	41,292,028	40,267,279	40,235,805	41,014,282	36,165,461	40,359,943	40,966,478
Fourth Quarter	29,533,851	26,845,458	27,950,603	29,914,792	27,002,138	28,336,343	
<b>Total</b>	<b>135,302,845</b>	<b>126,702,475</b>	<b>124,127,141</b>	<b>130,723,131</b>	<b>122,848,114</b>	<b>127,691,424</b>	
1st and 2nd Qtr	64,476,966	59,589,738	55,940,733	59,794,057	59,680,515	58,995,138	57,661,898

# Straight Dividend



- Giving a set \$\$ amount to each customer.
- Benefits
  - Based on past financial performance.
  - Not a permanent rate cut.
- Challenges
  - Hard to administer.
  - Significant administrative and software expenses.
  - Who gets the benefit? What if someone moves out of town?

# Performance Adjustment



- Billing Software provider offered a “Performance Adjustment” as a possible solution. This is offered by other utilities and already a part of the Flexi-Bill system.
- Total adjustment is based on an annual dollar amount using past financial performance.
- Dollar amount is set with goal of retaining at least \$1.5 million in ‘free balance’.
- Set by Council in January via resolution annually. Applied monthly from Feb 1<sup>st</sup> of each year thru January 31<sup>st</sup> of the following year.
- CFO calculates the monthly reimbursement which is applied to each kilowatt-hour (kWh) supplied under all kWh based tariffs (residential and commercial) for the entire year, which is then applied to all bills from Feb 1 - January 31.
- Note, there are three or four lines on an electric bill, depending on the type of account:
  - kWh consumption (Performance Adjustment only impacts this)
  - Service Charge
  - Interest
  - Demand

# Actual Bills



Borough of Madison  
 Utility Billing Department  
 50 KINGS ROAD  
 MADISON, NJ 07940  
 (973) 593-3045

Account # 11232.00  
 Date Due 11/16/2016

JIM & SARA BURNET

**IMPORTANT INFORMATION ABOUT YOUR BILL**

**ESTIMATED BILL** - When an actual meter reading is not obtained, the bill is estimated. The estimated bill is based on previous usage.

**NEED ADDITIONAL INFORMATION?**

Please visit the "Let Us Know" section at [www.rosenet.org](http://www.rosenet.org) if you have a request, inquiry or complaint. You may also telephone, write or visit the office. Billing inquiries should be brought to our attention before the DATE DUE on the bill. We welcome an opportunity to serve you.

**Office Hours:** 8:00 AM to 4:30 PM Monday-Friday

		Balance Forward			\$0.00
		Payment Made on 9/27/2016			\$350.20
	Read Date	Previous Read	Current Read	Consumption	Amount
Electric	9/14/2016 - 10/14/2016	8,794	9,559	765	\$149.38
Service Charge					\$4.86
Interest					\$0.00
				<b>Total Electric</b>	<b>\$154.24</b>
				<b>Total Current Charges</b>	<b>\$154.24</b>
				<b>Total Amount Due</b>	<b>\$154.24</b>

# Illustrative Bill



Borough of Madison  
 Utility Billing Department  
 50 KINGS ROAD  
 MADISON, NJ 07940  
 (973) 593-3045

Assuming a 1.2 cent per kWh  
 Performance Adjustment which is  
 generated off of the consumption line.

Account # 11232.00  
 Date Due 11/16/2016

JIM & SARA BURNET

### IMPORTANT INFORMATION ABOUT YOUR BILL

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		Balance Forward			\$0.00
		Payment Made on 9/27/2016			\$350.20
	Read Date	Previous Read	Current Read	Consumption	Amount
Electric	9/14/2016 - 10/14/2016	8,794	9,559	765	\$149.38
Service Charge					\$4.86
Interest					\$0.00
				<b>Total Electric</b>	<b>\$154.24</b>
				<b>Performance Adjustment</b> $765 \times .0120 =$	<b>\$ -9.18</b>
				Total Current Charges	\$145.06
				Total Amount Due	\$145.06

# Commercial Bill



Borough of Madison  
Utility Billing Department  
50 KINGS ROAD  
MADISON, NJ 07940  
(973) 593-3045

Account # 49622.00  
Date Due 11/16/2016  
Service Address 23 MAIN STREET

SHORT STORIES

The rebate as written would only impact the kWh portion of a commercial account as well.

## IMPORTANT INFORMATION ABOUT YOUR BILL

**ESTIMATED BILL** - When an actual meter reading is not obtained, the bill is estimated. The estimated bill is based on previous usage.

## NEED ADDITIONAL INFORMATION?

Please visit the "Let Us Know" section at [www.rosenet.org](http://www.rosenet.org) if you have a request, inquiry or complaint. You may also telephone, write or visit the office. Billing inquiries should be brought to our attention before the DATE DUE on the bill. We welcome an opportunity to serve you.

**Office Hours:** 8:00 AM to 4:30 PM Monday-Friday

			Balance Forward		\$0.00
			Payment Made on 9/29/2016		\$520.25
	Read Date	Previous Read	Current Read	Consumption	Amount
Electric	9/15/2016 - 10/14/2016	1,429	1,598	1,690	\$246.57
Service Charge					\$9.75
Interest					\$0.00
				Total Electric	\$256.32
Demand 99			0.98	9.80	\$110.48
				Total Demand	\$110.48
				Total Current Charges	\$366.80
				Total Amount Due	\$366.80

Commercial accounts also pay demand charges which help pay for capacity costs. This charge would not change.



# Benefits to this approach



- Very easy to administer.
- Based on past performance.
- Not permanent.
- Voted on annually by Council via resolution during the budget cycle. Does not require extra hearings nor a revamp of all rate classes.
- Gives flexibility in case the Borough experiences better than expected performance or higher than anticipated expenses.
- A good compromise between a permanent rate cut and a lump sum \$\$ dividend.
- The Borough may eventually adopt time of use rates for commercial customers once smart meters are in place.

# Electric Utility Performance

Presented to Council on October 24, 2016



## Borough of Madison

### Schedule of Electric Utility Surplus Balances (in 000's) as of December 31st

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Actual	Rev Est	Est	Est									
1 Balance at Beginning of Year	\$7,079	\$7,387	\$8,959	\$4,477	\$2,718	\$4,822	\$4,683	\$5,373	\$6,322	\$6,496	\$8,155	\$10,095	\$11,106
2 Less: Utilized in Municipal Budget	(4,360)	(4,360)	(3,450)	(3,450)	(2,656)	(3,356)	(3,516)	(3,722)	(5,796)	(6,233)	(7,199)	(7,200)	(7,200)
3 Add: Generated in Current Year	4,668	5,932	(1,032)	1,691	4,760	3,217	4,206	4,671	5,970	7,892	9,139	8,211	8,073
4 Balance at Year End	<b>\$7,387</b>	<b>\$8,959</b>	<b>\$4,477</b>	<b>\$2,718</b>	<b>\$4,822</b>	<b>\$4,683</b>	<b>\$5,373</b>	<b>\$6,322</b>	<b>\$6,496</b>	<b>\$8,155</b>	<b>\$10,095</b>	<b>\$11,106</b>	<b>\$11,979</b>
Free Balance on 1/1 after surplus 4a transfer	\$2,719	\$3,027	\$5,509	\$1,027	\$62	\$1,466	\$1,167	\$1,651	\$526	\$263	\$956	\$2,895	\$3,906

Surplus Estimates have been revised using the "Medium" figure below.

## Borough of Madison

### Schedule of Electric Utility Sales and Performance (in 000's) as of December 31st

Revised October 24, 2016

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2016 New			New	New
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Budget Est 3/14/16	Estimates 10/18/16			2017	2018
												Low	Medium	High	Est	Est
<b>ACTUAL REVENUES</b>																
5 Cash Collections	\$14,450	\$15,342	\$16,623	\$19,536	\$23,184	\$22,351	\$22,694	\$23,177	\$22,411	\$22,839	\$22,300	\$22,900	\$23,100	\$23,450	\$22,400	\$22,500
6 MRNA + Fund Balance Realized Cancellation of CY/PY	573	610	453	232	406	188	135	195	768	42	100	100	100	100	100	100
7 Appropriations	604	857	820	1,296	993	927	710	506	669	826	675	900	970	1,020	675	675
<b>BUDGETED EXPENSES</b>																
8 Block Contracts	(8,200)	(8,200)	(16,000)	(16,200)	(16,500)	(16,800)	(16,000)	(15,800)	(14,000)	(11,713)	(6,750)	(6,750)	(6,750)	(6,750)	(6,350)	(5,800)
9 Capacity											(2,265)	(2,265)	(2,265)	(2,265)	(2,470)	(2,993)
10 Transmission											(529)	(529)	(529)	(529)	(552)	(725)
11 Spot, Admin, Ancillaries, etc											(797)	(797)	(797)	(797)	(802)	(809)
12 Admin & Operating	(2,359)	(2,677)	(2,928)	(3,173)	(3,223)	(3,349)	(3,233)	(3,307)	(3,678)	(3,702)	(3,725)	(3,795)	(3,795)	(3,795)	(3,895)	(3,980)
13 Elec Utility Capital*	(400)	0	0	0	(100)	(100)	(100)	(100)	(200)	(400)	(895)	(895)	(895)	(895)	(895)	(895)
14 Total Surplus Generated	<b>\$4,668</b>	<b>\$5,932</b>	<b>(\$1,032)</b>	<b>\$1,691</b>	<b>\$4,760</b>	<b>\$3,217</b>	<b>\$4,206</b>	<b>\$4,671</b>	<b>\$5,970</b>	<b>\$7,892</b>	<b>\$8,114</b>	<b>\$8,869</b>	<b>\$9,139</b>	<b>\$9,539</b>	<b>\$8,211</b>	<b>\$8,073</b>
												low	medium	high		

Since our last meeting, JCPL filed with FERC asking for a 53% increase in what they charge the Borough for Transmission effective January 1, 2017. The Borough will be challenging this legally, but worst case scenario, the Transmission charges above for 2017 would be \$820,000+. That is \$270,000 more than originally estimated for 2017.



# Borough of Madison



QUESTIONS?



# Electric Rate Cut/Dividend Scenarios -

Scenario 1 – Est. Cash Collections Average \$22.3M, Free Balance Cap of \$1.5M

	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate
1 Balance at Beginning of Year	\$ 4,683	\$ 5,373	\$ 6,322	\$ 6,496	\$ 8,155	\$ 10,095	\$ 9,358	\$ 9,256	\$ 9,774
2 Less: Utilized in Municipal Budget	(3,516)	(3,722)	(5,796)	(6,233)	(7,199)	(7,200)	(7,200)	(7,200)	(7,200)
3 Add: Generated in Current Year	4,206	4,671	5,970	7,892	9,139	6,463	7,098	7,718	7,337
4 Balance at Year End	\$ 5,373	\$ 6,322	\$ 6,496	\$ 8,155	\$ 10,095	\$ 9,358	\$ 9,256	\$ 9,774	\$ 9,912

Free Balance on 1/1 after surplus tx \$ 1,167 \$ 1,651 \$ 526 \$ 263 \$ 956 \$ 2,895 \$ 2,158 \$ 2,056 \$ 2,574

Free Balance Cap \$ 1,500 Free Balance After Rate Reduction \$ 1,495 \$ 1,458 \$ 1,556 \$ 1,474

	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Actual	Actual	Actual	Actual	Medium	Estimate	Estimate	Estimate	Estimate
<b>REVENUES</b>									
5 Cash Collections	\$ 22,694	\$ 23,177	\$ 22,411	\$ 22,839	\$ 23,100	\$ 22,300	\$ 22,300	\$ 22,300	\$ 22,300
less Rate Cut						\$ (1,400)	\$ (700)	\$ (500)	\$ (1,100)
5a Actual Estimated Cash Collections						\$ 20,900	\$ 21,600	\$ 21,800	\$ 21,200
6 MRNA + Fund Balance Realized	135	195	768	42	100	100	100	100	100
7 Cancellation of CY/PY Appropriations	710	506	669	826	970	675	675	675	675
<b>EXPENSES</b>									
8 Block Contracts	(16,000)	(15,800)	(14,000)	(11,713)	(6,750)	(6,350)	(5,800)	(5,300)	(5,000)
9 Capacity					(2,265)	(2,470)	(2,993)	(2,993)	(2,993)
10 Transmission					(529)	(800)	(800)	(800)	(800)
11 Spot, Admin, Ancillaries, etc					(797)	(802)	(809)	(809)	(809)
12 Admin & Operating	(3,233)	(3,307)	(3,678)	(3,702)	(3,795)	(3,895)	(3,980)	(4,060)	(4,141)
13 Elec Utility Capital*	(100)	(100)	(200)	(400)	(895)	(895)	(895)	(895)	(895)
14 Total Surplus Generated	\$ 4,206	\$ 4,671	\$ 5,970	\$ 7,892	\$ 9,139	\$ 6,463	\$ 7,098	\$ 7,718	\$ 7,337

	Rate Reduction for the Year	-6.3%	-3.1%	-2.2%	-4.9%
Avg. Annual Household Electric Bill	\$	2,064.00	\$ 2,064.00	\$ 2,064.00	\$ 2,064.00
Avg. Monthly	\$	172.00	\$ 172.00	\$ 172.00	\$ 172.00
Monthly Change	\$	(10.80)	\$ (5.40)	\$ (3.86)	\$ (8.48)
Annual Savings	\$	129.58	\$ 64.79	\$ 46.28	\$ 101.81

# Electric Rate Cut/Dividend Scenarios -

Scenario 2 – Est. Cash Collections Average \$22.6M, Free Balance Cap of \$1.0M

	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate
1 Balance at Beginning of Year	\$ 4,683	\$ 5,373	\$ 6,322	\$ 6,496	\$ 8,155	\$ 10,095	\$ 9,158	\$ 9,056	\$ 9,474
2 Less: Utilized in Municipal Budget	(3,516)	(3,722)	(5,796)	(6,233)	(7,199)	(7,200)	(7,200)	(7,200)	(7,200)
3 Add: Generated in Current Year	4,206	4,671	5,970	7,892	9,139	6,263	7,098	7,618	7,437
4 Balance at Year End	\$ 5,373	\$ 6,322	\$ 6,496	\$ 8,155	\$ 10,095	\$ 9,158	\$ 9,056	\$ 9,474	\$ 9,712

Free Balance on 1/1 after surplus tx \$ 1,167 \$ 1,651 \$ 526 \$ 263 \$ 956 \$ 2,895 \$ 1,958 \$ 1,856 \$ 2,274

Free Balance Cap \$ 1,000 Free Balance After Rate Reduction \$ 995 \$ 958 \$ 956 \$ 974

	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Actual	Actual	Actual	Actual	Medium	Estimate	Estimate	Estimate	Estimate
<b>REVENUES</b>									
5 Cash Collections	\$ 22,694	\$ 23,177	\$ 22,411	\$ 22,839	\$ 23,100	\$ 22,600	\$ 22,600	\$ 22,600	\$ 22,600
less Rate Cut						\$ (1,900)	\$ (1,000)	\$ (900)	\$ (1,300)
5a Actual Estimated Cash Collections						\$ 20,700	\$ 21,600	\$ 21,700	\$ 21,300
6 MRNA + Fund Balance Realized	135	195	768	42	100	100	100	100	100
7 Cancellation of CY/PY Appropriations	710	506	669	826	970	675	675	675	675
<b>EXPENSES</b>									
8 Block Contracts	(16,000)	(15,800)	(14,000)	(11,713)	(6,750)	(6,350)	(5,800)	(5,300)	(5,000)
9 Capacity					(2,265)	(2,470)	(2,993)	(2,993)	(2,993)
10 Transmission					(529)	(800)	(800)	(800)	(800)
11 Spot, Admin, Ancillaries, etc					(797)	(802)	(809)	(809)	(809)
12 Admin & Operating	(3,233)	(3,307)	(3,678)	(3,702)	(3,795)	(3,895)	(3,980)	(4,060)	(4,141)
13 Elec Utility Capital*	(100)	(100)	(200)	(400)	(895)	(895)	(895)	(895)	(895)
14 Total Surplus Generated	\$ 4,206	\$ 4,671	\$ 5,970	\$ 7,892	\$ 9,139	\$ 6,263	\$ 7,098	\$ 7,618	\$ 7,437

	Rate Reduction for the Year	-8.4%	-4.4%	-4.0%	-5.8%
Avg. Annual Household Electric Bill	\$	2,064.00	\$ 2,064.00	\$ 2,064.00	\$ 2,064.00
Avg. Monthly	\$	172.00	\$ 172.00	\$ 172.00	\$ 172.00
Monthly Change	\$	(14.46)	\$ (7.61)	\$ (6.85)	\$ (9.89)
Annual Savings	\$	173.52	\$ 91.33	\$ 82.19	\$ 118.73

# Electric Rate Cut/Dividend Analysis

## Summary

- A Positive Rate Adjustment versus 2016 Rates, is easily achieved without raising taxes, or cutting capital spending or endangering our AAA Bond Rating.
- Key Decisions to be made:
  1. Will Council commit to holding the transfer to the Municipal Budget at \$7.2M per year?
  2. At what level do we Cap “Free Balance” - \$1.5M, 1.0M, . . . ?
  3. What is estimated future average Cash Collections? Average has been \$22.8M, but we have been budgeting \$22.3 – 22.5M
  4. What estimated cost of Transmission? Cost is going up from \$500K to as much as \$850K
  5. What is the accurate estimate of the cost of our Wholesale Block Contracts?
  6. How do we allocate the Savings? Across the board reductions/dividends