City of Urbana, Illinois
Municipal Electric Aggregation Report
2015 Quarter 3

MUNICIPAL
ELECTRIC
AGGREGATION

POWER IS MONEY.

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Background

The City of Urbana voters approved municipal electric aggregation in the March 20, 2012 primary. It is a way for the city to buy electricity in bulk for city residents and small businesses at a cheaper price.

The Municipal Electric Aggregation program includes the purchase of Renewable Energy Credits (REC) for all the electricity used by everyone opted into the aggregation group. The cost of the RECs is built into the $0.04746 price per kilowatt hour paid by electricity users in the aggregation group. RECs offset the emissions generated by traditional power generation by laying claim to and accounting for the associated attributes of renewable energy generation.

The Plan of Operation and Governance that oversees the Municipal Electric Aggregation Program calls for the winning bidder, Homefield Energy, to provide three reports to the City on a quarterly basis. Those reports are:

- **Power Mix Report.** A report showing that (1) the Supplier generated or purchased electricity with the claimed attributes in amounts sufficient to match actual consumption by customers; (2) the electricity was supplied to the interconnected grid serving the customers; and (3) the same generated electricity was not sold to more than one consumer. The report will show the source of the power and demonstrate that the power was provided in accordance with Renewable Portfolio Standards and federal Clean Air Act regulations and permits.

- **RECs Report.** A report providing competent and reliable evidence to support the fact that the Supplier purchased properly certified RECs in a sufficient quantity to offset the non-renewable energy provided in the mix.

- **Aggregation Report.** A report showing the number of customers in the Program and the total cost for energy provided to the Program as compared to the Ameren's default tariff service rates. In addition, the Supplier will report its customer education efforts.

In addition to the reporting required of the city's municipal electric aggregation vendor, city staff has also included information about electricity production in our subregion, the state, and utility company serving the region.

http://www.epa.gov/cleanenergy/energy-resources/egrid/index.html

Homefield Energy's RECs are tracked in "M-RETs", a renewable energy credits tracking database. This tracking system is essentially a "bank account" for RECs. Renewable energy projects register with the system by providing basic information such as their size, location, owner name, and resource type (e.g. wind, solar, biomass).

As the projects operate, a qualified reporting entity reports the actual metered electric generation by the project to the tracking system. The tracking system then creates and issues RECs, each with a unique serial number, to the project's tracking system account. After the RECs are issued to buyers such as Homefield Energy, they can be transferred to a retirement account, meaning the RECs have been used for a purpose and can no longer be transferred or used for another purpose. This demonstrates compliance with renewable portfolio laws. Each REC in a tracking system has its own serial number generated by the system, allowing Homefield Energy to identify the exact RECs retired on our customers' behalf.

Generating Facility	Fuel Type	Certificate Vintage	Certificate Serial Numbers	Quantity
Pomeroy Wind Farm - Pomeroy I	Wind	01/2015	536-IA-01-2015-39318-1 to 20000	20000
Pomeroy Wind Farm - Pomeroy II	Wind	01/2015	537-IA-01-2015-39319-1 to 1664	1664
Adair Wind Farm 1 - Adair Wind Farm I	Wind	03/2015	754-IA-03-2015-40525-11982 to 11984	3

Renewable Energy Credits (RECs) were retired for 90% of Urbana's total usage. Retiring RECs is the act of purchasing and recording a REC to ensure it is only used for carbon offset purposes once. As RECs are retired, new resources must be built to meet future renewable energy requirements. As an Illinois Alternative Retail Electric Supplier (ARES), Ameren Energy Marketing (doing businesses as "Homefield Energy") is required to submit an Renewable Portfolio Standard (RPS) compliance filing with the ICC each year based on total load served during the planning year of June 1 to May 31. State RPS law requires that power companies source 10% of their generation from renewable sources. Therefore, next August when Homefield Energy submits their RPS compliance filing, they will retire RECs in accordance with the RPS to account for the 10%.

Community	**100% Green**	**Price / kwh**	**Jul Billed kWh**	**Aug Billed kWh**	**Sep Billed kWh**	**Q3 2015 Billed kWh**	**Q3 2015 Voluntary RECs**
Urbana	**Yes**	**0.04746**	8,421,557	8,458,308	7,194,418	24,074,283	21,667
Total Usage	24,074,283	kWh					
IL RPS 10%	2,407,428	kwh					
Usage less RPS	21,666,855	kwh					
RECs for Urbana	21,667	(each REC represent 1000 kWh of usage)					

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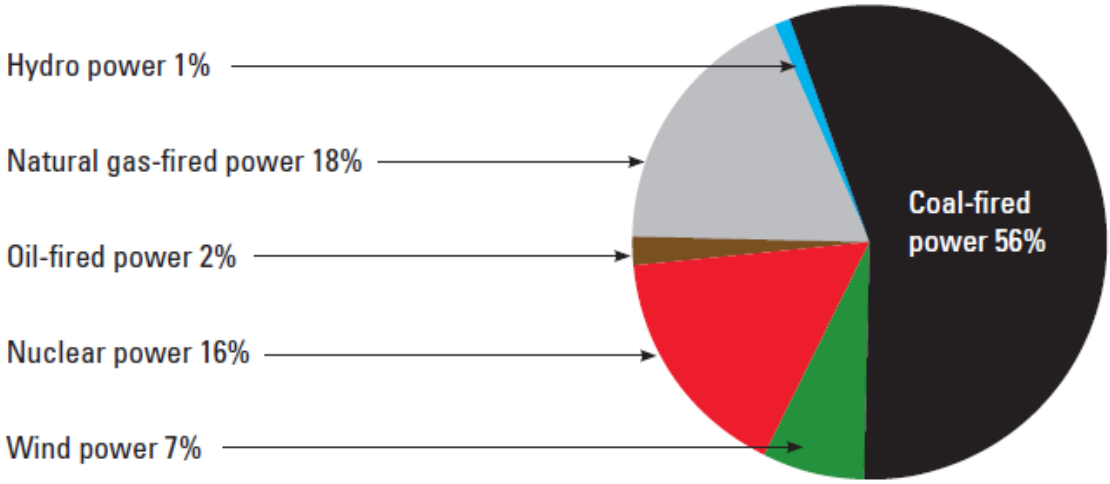
* Indicates number of accounts billed in the month. Due to bill cycles, some accounts may have billed twice in October and not in November

Bill Month	# of Accounts Billed*	kWh	Price per kwh	Customer Cost	Price to Compare	Customer Cost if on Ameren Illinois supply	Customer Savings	PEA	Total Savings w/PEA
July	12,992	8,421,557	$0.04746	$399,687.10	0.05966	$502,430.09	$102,743.00	$0.00095	$94,742.52
August	12,726	8,458,308	$0.04746	$401,431.30	0.05966	$504,622.66	$103,191.36	$0.00131	$92,110.97
September	11,050	7,194,418	$0.04746	$341,447.08	0.05966	$429,218.98	$87,771.90	$0.00137	$77,915.55
Total/Average	**12,256**	**24,074,283.00**	**$0.04746**	**$1,142,565.47**	**$0.05966**	**$1,436,271.72**	**$293,706.25**	**$0.0012**	**$ 264,769.04**

Sources of electricity supplied for the 12 months ending June 30, 2015 for Ameren Illinois



Sources of electricity supplied for the 12 months ending June 30, 2015	Percentage of total
Biomass power	0%
Coal-fired power	56%
Hydro power	1%
Natural gas-fired power	18%
Nuclear power	16%
Oil-fired power	2%
Solar power	0%
Wind power	7%
Other resources	0%
TOTAL	100%

https://www.icc.illinois.gov/Electricity/utilityreporting/EnvironmentalDisclosure.aspx

The highlighted row is the subregion which contains the City of Urbana.

Year 2010 eGRID Subregion Emissions - Greenhouse Gases

eGRID subregion acronym	eGRID subregion name	Carbon dioxide (CO_2) Emissions (tons)	Carbon dioxide (CO_2) Total output emission rate (lb/MWh)	Methane (CH_4) Emissions (lbs)	Methane (CH_4) Total output emission rate (lb/GWh)	Nitrous oxide (N_2O) Emissions (lbs)	Nitrous oxide (N_2O) Total output emission rate (lb/GWh)	Carbon dioxide equivalent (CO_2e) Emissions (tons)	Carbon dioxide equivalent (CO_2e) Total output emission rate (lb/MWh)
AKGD	ASCC Alaska Grid	3,350,817.0	1,256.87	139,035.5	26.08	38,279.9	7.18	3,358,210.3	1,259.64
AKMS	ASCC Miscellaneous	317,398.6	448.57	26,527.0	18.74	5,208.6	3.68	318,484.5	450.10
AZNM	WECC Southwest	104,967,483.8	1,177.61	3,424,005.1	19.21	2,802,975.8	15.72	105,437,897.1	1,182.89
CAMX	WECC California	64,799,260.4	610.82	6,044,809.1	28.49	1,278,773.3	6.03	65,060,940.8	613.28
ERCT	ERCOT All	210,366,837.2	1,218.17	5,820,108.3	16.85	4,859,884.0	14.07	211,181,230.4	1,222.88
FRCC	FRCC All	130,376,587.7	1,196.71	8,478,102.7	38.91	2,995,217.6	13.75	130,929,866.5	1,201.79
HIMS	HICC Miscellaneous	1,963,642.7	1,330.16	218,438.7	73.98	40,985.9	13.88	1,972,289.1	1,336.02
HIOA	HICC Oahu	6,393,027.4	1,621.86	782,825.4	99.30	176,679.8	22.41	6,428,632.4	1,630.90
MROE	MRO East	26,009,237.7	1,610.80	784,331.9	24.29	888,770.5	27.52	26,155,232.6	1,619.84
MROW	MRO West	156,444,752.4	1,536.36	5,809,874.5	28.53	5,354,351.3	26.29	157,335,680.5	1,545.11
NEWE	NPCC New England	46,905,984.7	722.07	9,322,707.0	71.76	1,685,853.4	12.98	47,265,180.4	727.60
NWPP	WECC Northwest	112,891,853.5	842.58	4,300,901.6	16.05	3,502,980.9	13.07	113,479,975.1	846.97
NYCW	NPCC NYC/Westchester	12,733,660.7	622.42	974,161.1	23.81	114,582.6	2.80	12,761,649.6	623.78
NYLI	NPCC Long Island	8,115,858.7	1,336.11	989,929.6	81.49	124,943.6	10.28	8,145,619.2	1,341.01
NYUP	NPCC Upstate NY	24,165,154.6	545.79	1,443,157.6	16.30	641,283.5	7.24	24,279,706.7	548.37
RFCE	RFC East	137,558,868.7	1,001.72	7,434,984.1	27.07	4,210,267.5	15.33	138,289,527.5	1,007.04
RFCM	RFC Michigan	74,602,328.8	1,629.38	2,789,651.5	30.46	2,457,844.2	26.84	75,012,586.0	1,638.34
RFCW	RFC West	449,994,271.4	1,503.47	10,897,168.6	18.20	14,813,680.5	24.75	452,404,812.2	1,511.52
RMPA	WECC Rockies	61,839,528.9	1,896.74	1,477,560.7	22.66	1,904,448.4	29.21	62,150,232.8	1,906.27
SPNO	SPP North	62,457,258.2	1,799.45	1,444,401.4	20.81	1,986,994.1	28.62	62,780,408.5	1,808.76
SPSO	SPP South	117,325,297.0	1,580.60	3,444,187.9	23.20	3,095,469.5	20.85	117,841,258.7	1,587.55
SRMV	SERC Mississippi Valley	90,967,299.2	1,029.82	3,650,522.7	20.66	1,900,187.0	10.76	91,300,158.7	1,033.58
SRMW	SERC Midwest	123,042,911.4	1,810.83	2,783,643.6	20.48	4,019,051.2	29.57	123,695,092.6	1,820.43
SRSO	SERC South	183,236,856.9	1,354.09	6,176,437.4	22.82	5,653,138.2	20.89	184,177,945.9	1,361.05
SRTV	SERC Tennessee Valley	163,960,526.8	1,389.20	4,177,202.5	17.70	5,290,412.2	22.41	164,824,401.3	1,396.52
SRVC	SERC Virginia/Carolina	167,452,188.6	1,073.65	6,766,296.6	21.69	5,502,582.8	17.64	168,376,135.0	1,079.57
U.S.		**2,542,238,893.0**	**1,232.35**	**99,600,972.2**	**24.14**	**75,344,845.9**	**18.26**	**2,554,963,154.4**	**1,238.52**

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