City of Urbana, Illinois
Municipal Electric Aggregation Report
2015 Quarter 4

MUNICIPAL ELECTRIC AGGREGATION

POWER IS MONEY.

City of Urbana 400 South Vine Street, Urbana, IL 61801
Public Works Department 706 South Glover Street, Urbana, IL 61802
http://urbanaillinois.us
http//www.facebook.com/CityofUrbana

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	Generation Period	Certificate Serial Numbers	Quantity
Ashtabula Wind - Ashtabula Wind	Wind	03/2015	03/2015	489-ND-03-2015-40814-1 to 15554	15554

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%.

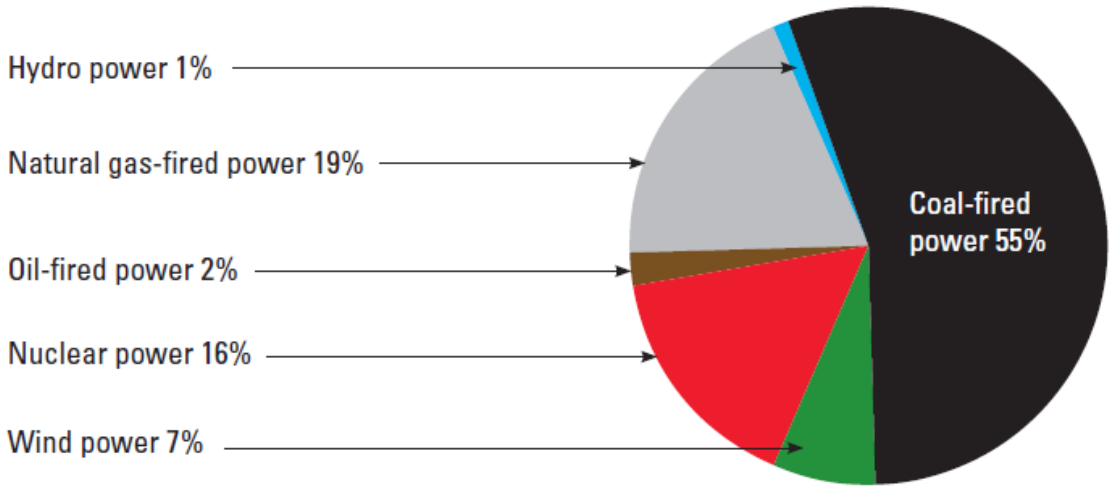
Community	100% Green	Price / kwh	Oct Billed kWh	Nov Billed kWh	Dec Billed kWh	Q4 2015 Billed kWh	Q4 2015 Voluntary RECs
Urbana	**Yes**	**0.04746**	5,114,663	5,776,023	6,391,071	17,281,757	15,554
Total Usage	17,281,757	kWh					
IL RPS 10%	1,728,176	kwh					
Usage less RPS	15,553,581	kwh					
RECs for Urbana	15,554	(each REC represent 1000 kWh of usage)					

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

* 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 Supply	Customer Savings	PEA	Total Savings w/PEA
October	10,810	5,114,663	$0.04746	$242,741.91	$0.06768	$346,160.39	$103,418.49	$0.00088	$98,917.58
November	10,556	5,776,023	$0.04746	$274,130.05	$0.06768	$390,921.24	$116,791.19	$0.00081	$112,112.61
December	10,092	6,391,071	$0.04746	$303,320.23	$0.06768	$432,547.69	$129,227.46	$0.00085	$123,795.05
Total/Average	**10,486**	**17,281,757.00**	**$0.04746**	**$820,192.19**	**$0.06768**	**$1,169,629.31**	**$349,437.13**	**$0.00085**	**$334,825.23**

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



Sources of electricity supplied for the 12 months ending September 30, 2015	Percentage of total
Biomass power	0%
Coal-fired power	55%
Hydro power	1%
Natural gas-fired power	19%
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

eGrid Subregion Emissions – Greenhouse Gasses

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

1. eGRID2012 Subregion Emissions – Greenhouse Gases

eGRID subregion acronym	eGRID subregion name	Carbon dioxide (CO_2)		Methane (CH_4)		Nitrous oxide (N_2O)		Carbon dioxide equivalent (CO_2e)	
		Emissions (tons)	Total output emission rate (lb/MWh)	Emissions (lbs)	Total output emission rate (lb/GWh)	Emissions (lbs)	Total output emission rate (lb/GWh)	Emissions (tons)	Total output emission rate (lb/MWh)
AKGD	ASCC Alaska Grid	3,382,037.0	1,268.73	140,402.7	26.34	40,490.5	7.59	3,389,787.2	1,271.64
AKMS	ASCC Miscellaneous	384,195.8	481.17	29,787.0	18.65	5,666.3	3.55	385,386.8	482.66
AZNM	WECC Southwest	102,534,225.3	1,152.89	3,317,864.6	18.65	2,686,986.1	15.11	102,985,545.7	1,157.96
CAMX	WECC California	67,187,988.1	650.31	6,429,630.8	31.12	1,172,434.9	5.67	67,437,084.4	652.72
ERCT	ERCOT All	205,873,315.5	1,143.04	6,015,952.8	16.70	4,443,235.0	12.33	206,625,056.6	1,147.21
FRCC	FRCC All	118,861,947.3	1,125.35	8,459,346.4	40.05	2,503,826.1	11.85	119,338,507.3	1,129.86
HIMS	HICC Miscellaneous	1,760,031.8	1,200.10	199,673.8	68.08	37,202.0	12.68	1,767,894.6	1,205.46
HIOA	HICC Oahu	5,939,881.8	1,576.38	681,311.9	90.41	162,405.3	21.55	5,972,208.4	1,584.95
MROE	MRO East	21,794,875.8	1,522.57	695,782.7	24.30	731,606.9	25.55	21,915,580.6	1,531.00
MROW	MRO West	145,305,369.2	1,425.15	5,627,262.8	27.60	4,947,215.7	24.26	146,130,871.2	1,433.25
NEWE	NPCC New England	38,377,520.5	637.90	8,764,225.4	72.84	1,288,397.3	10.71	38,669,246.4	642.75
NWPP	WECC Northwest	95,734,309.7	665.75	3,622,959.4	12.60	2,983,818.8	10.38	96,234,699.4	669.23
NYCW	NPCC NYC/Westchester	15,851,201.7	696.70	1,160,747.0	25.51	133,430.3	2.93	15,882,764.1	698.08
NYLI	NPCC Long Island	7,280,232.8	1,201.20	947,931.1	78.20	119,618.7	9.87	7,308,726.9	1,205.90
NYUP	NPCC Upstate NY	16,873,346.4	408.80	1,287,300.2	15.59	315,913.7	3.83	16,935,829.7	410.31
RFCE	RFC East	112,888,707.9	858.56	6,954,055.7	26.44	3,020,840.1	11.49	113,429,807.1	862.68
RFCM	RFC Michigan	68,119,780.7	1,569.23	2,635,889.2	30.36	2,093,696.0	24.12	68,471,962.7	1,577.34
RFCW	RFC West	391,126,291.4	1,379.48	9,701,816.8	17.11	12,286,300.3	21.67	393,132,519.0	1,386.55
RMPA	WECC Rockies	57,993,856.1	1,822.65	1,378,226.1	21.66	1,790,072.3	28.13	58,285,775.9	1,831.82
SPNO	SPP North	59,782,627.7	1,721.65	1,403,934.9	20.22	1,885,096.3	27.14	60,089,349.8	1,730.49
SPSO	SPP South	117,500,299.0	1,538.63	3,627,540.2	23.75	3,050,862.7	19.98	118,011,271.9	1,545.32
SRMV	SERC Mississippi Valley	95,886,176.4	1,052.92	3,816,210.1	20.95	1,931,912.9	10.61	96,225,693.1	1,056.65
SRMW	SERC Midwest	113,709,694.8	1,710.75	2,603,196.3	19.58	3,655,614.1	27.50	114,303,633.0	1,719.68
SRSO	SERC South	146,477,427.2	1,149.05	5,777,614.3	22.66	3,948,687.2	15.49	147,150,138.6	1,154.32
SRTV	SERC Tennessee Valley	153,167,116.4	1,337.15	3,982,959.3	17.39	4,761,521.4	20.78	153,946,973.3	1,343.96
SRVC	SERC Virginia/Carolina	135,132,027.1	932.87	6,937,947.2	23.95	4,229,617.5	14.60	135,860,466.3	937.90
U.S.		**2,298,924,483.4**	**1,136.53**	**96,199,568.7**	**23.78**	**64,226,468.3**	**15.88**	**2,309,886,780.4**	**1,141.95**

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