

# Municipal Electric Aggregation



## City of Urbana, Illinois Municipal Electric Aggregation Report 2013 Quarter 3



POWER IS MONEY.

### **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 \$0.04055 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 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.

### Power Mix Report - Provided By Homefield Energy

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.

Tower Mix Report - 110	 		 
	Transfer	Action	*6,705 RECs were retired in Q2
	AMURBANA MA Vol RECs 2012 RFP	SubAccount	
	M753	M- RETS	
	Victory Wind Farm - Victory Wind Farm	Generating Facility	
	Wind	Fuel Type	
	Renewable	Certificate Type	
	04/2012	Certificate Vintage	
	04/2012	Generation Period	
	-2012-21040- 4	Certificate Serial Numbers	
	15,704	Quantity	
		WI RRC Adjusted Quantity	4

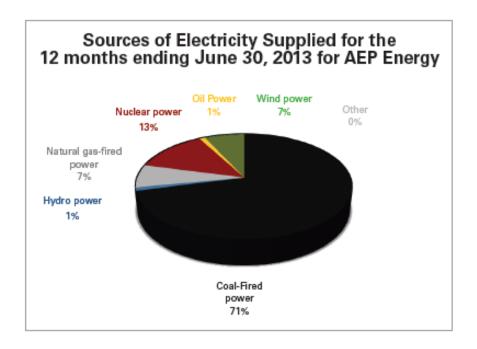
### Renewable Energy Credits Report - Provided By Homefield Energy

Renewable Energy Credits (RECs) were retired for 92% 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 8% 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 8%.

Community	100% Green	Price / kwh	Jul Billed kWh	Aug Billed kWh	Sep Billed kWh	Q3 2013 Billed kWh	Q3 '13 Voluntary RECs
Urbana	Yes	0.04055	9,093,645	6,826,563 8,437,125	8,437,125	24,357,333 22,409	
Total Usage	24,357,333	kWh					
IL RPS 8%	1,948,587	kwh					
Usage less RPS	22,408,746	kwh					
RECs for							
Urbana	22,409	(each RE	(each REC represent 1000 kWh of usage)	000 kWh of u	ısage)		

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

September	Sentember	August	July	Bill Month
11,403	11 /82	12,904	13,494	# of Accounts Billed
0,437,123	8 /37 175	6,826,563	9,093,645	kWh
\$0.040.00	\$0 0 <b>/</b> 055	\$0.04055	\$0.04055	Price per kwh
0,437,123 30.04030 3342,123.42	¢2/7 175 /7	\$0.04055 \$276,817.13	9,093,645 \$0.04055 \$368,747.30 0.04680	<b>Customer Cost</b>
0.04000		0.04680	0.04680	Price to Compare
,40,740	¢301 8E7 1E	\$319,483.15	\$425,582.59	Cost if on Ameren Illinois supply
332,/32.03		\$42,666.02	\$56,835.28	<b>Customer Savings</b>
\$132,233.33	¢157 722 22			Total Savings
0.01207	0 01 207	0.00990	0.00805	PEA
-345/104.07	-\$49 104 0 <b>7</b>	-\$24,916.95	-\$16,368.56	PEA Savings
٥٥.٤٥٥,٥٣٠	-¢00 280 E8			PEA Total Savings



### Sources of Electricity Supplied for the 12 months ending June 30, 2013

### MISO Residual Mix

The following distribution of energy resources was used to produce electricity in the MISO Region from the Residual Mix.

Biomass power	0%
Coal-fired power	71%
Hydro power	1%
Natural gas-fired power	7%
Nuclear power	13%
Oil-fired power	1%
Solar power	0%
Wind power	7%
Other resources	0%
Unknown resources purchased from other companies	0%
TOTAL	100%

The MISO System average emission levels are based on data for the system mix for the first quarter, 2013.

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

U.S.	SRVC	SRTV	SRSO	SRM	SRMV	SPSO	SPNO	RMPA	RFC\	RFCM	RFCE	NYUP	NYLI	NYC	NWP	NEW	MRO	MROE	HIOA	HIMS	FRCC	ERCT	CAMX	AZNM	AKMS	AKGD	eGRID subregion acronym
	SERC Virginia/Carolina	/ SERC Tennessee Valley	SERC South	SRMW SERC Midwest	V SERC Mississippi Valley	SPP South	SPP North	A WECC Rockies	RFCW RFC West	M RFC Michigan	E RFC East		NPCC Long Island	NYCW NPCC NYC/Westchester	NWPP WECC Northwest	NEWE NPCC New England	MROW MRO West	E MRO East	HICC Oahu	HICC Miscellaneous	FRCC All	FRCOT All	X WECC California	MECC Southwest	S ASCC Miscellaneous	f	eGRID subregion name
1,134,441.5	80,187.5	67,069.4	70,962.7	27,319.6	50,443.7	43,413.8	21,159.4	17,516.6	146,174.7	29,501.5	73,537.6	24,408.3	6,002.5	13,914.0	68,188.2	36,906.5	53,894.9	8,881.2	1,925.6	881.5	65,716.1	101,910.6	73,662.1	48,647.5	701.1	1,514.9	Nameplate capacity (MW)
3,951,097,802.2	293,154,419.6	238,173,939.7	252,713,667.3	112,061,747.1	165,358,644.7	140,443,029.2	65,008,815.6	62,070,098.9	561,623,124.7	88,251,703.2	261,151,661.8	88,081,534.5	9,431,561.8	40,501,288.1	269,325,957.1	121,742,618.3	190,640,178.1	29,587,725.5	7,991,409.4	3,019,123.5	208,123,783.6	337,031,899.7	212,768,947.3	186,138,763.9	1,364,176.9	5,337,982.5	Net Generation (MWh)
44.4675	45.1039	58.8034	52.1843	79.7879	22.7319	55.2342	73.8392	67.7689	69.8826	71.9861	35.3677	14.4853	0.0000	0.0000	29.8340	11.8606	69.0860	68.9039	18.0201	1.9907	23.6531	32.9816	7.3284	38.5979	0.0000	11.8133	Coal
1.1174	0.6421	0.9387	0.3499	0.0884	1.4534	0.1667	0.2559	0.0435	0.4022	0.4093	0.7271	0.9024	12.9940	1.7869	0.3352	1.5048	0.1515	2.3652	77.6079	69.8707	4.4222	1.0518	1.3637	0.0598	31.2972	13.6743	<u>Q</u>
23.3119	8.9501	8.6065	22.3083	1.0399	45.0929	33.8651	7.8088	22.5989	3.5051	9.5071	17.1304	18.9282	77.3406	55.8586	15.1503	41.9731	2.3997	4.9759	0.0000	0.0000	54.8319	47.8308	53.0498	35.6808	3.8526	66.0333	Gas
0.3414	0.1921	0.0087	0.0748	0.0122	0.8605	0.2189	0.0368	0.0000	0.3533	0.5982	0.8437	0.3570	4.5546	0.4808	0.1462	1.6223	0.1600	0.1206	2.2104	7.1345	0.6348	0.1257	0.2087	0.0013	0.0000	0.0000	Geno Other
1.3779	2.0466	0.7817	2.9228	0.1270	1.9253	1.2052	0.0289	0.0911	0.5057	1.8820	1.3211	1.5950	5.1108	0.5357	1.0927	5.9158	1.1844	3.2381	2.1615	3.3481	1.7398	0.1215	2.7167	0.3166	0.4773	0.0000	eration re
6.8033	1.6491	8.5808	4.0925	1.7552	1.7270	5.5274	0.1377	4.3045	0.7949	0.0000	1.2358	30.7898	0.0000	0.0185	46.5021	7.0413	4.3578	2.7096	0.0000	3.7312	0.0099	0.1539	12.7172	6.0901	63.8578	8.4791	esource I
20.2185	41.3467	22.1286	18.0664	17.0754	25.9742	0.0000	13.4882	0.0000	23.5563	15.2782	42.9614	30.5892	0.0000	40.8410	2.4632	29.7601	13.9045	15.2608	0.0000	0.0000	13.9907	12.3127	14.9288	16.4726	0.0000	0.0000	Generation resource mix (percent) ther ther biomass Hydro Nuclear Win
1.8614	0.0000	0.1516	0.0000	0.1140	0.0000	3.7798	4.4044	5.0659	0.9355	0.3391	0.4050	2.3530	0.0000	0.4784	3.8023	0.3110	8.6647	2.3228	0.0000	8.3278	0.0000	5.3314	2.7635	0.5008	0.5151	0.0000	ent)
0.0223	0.0016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0412	0.0000	0.0000	0.0055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0460	0.0046	0.0000	0.3003	0.1012	0.0000	0.0000	Solar
0.3799	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.5541	0.0000	0.0000	0.0000	0.0000	5.5510	0.0000	0.0000	4.3676	2.1789	0.0000	0.0000	Geo-
0.0984	0.0678	0.0000	0.0010	0.0000	0.2347	0.0027	0.0000	0.0860	0.0644	0.0000	0.0023	0.0000	0.0000	0.0000	0.1199	0.0109	0.0914	0.1030	0.0000	0.0000	0.7130	0.0906	0.2553	0.0000	0.0000	0.0000	Other unknown/ purchased fuel

# Year 2009 eGRID Subregion Resource Mix