



# Municipal Electric Aggregation



## City of Urbana, Illinois Municipal Electric Aggregation Report 2015 Quarter 1



# 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://urbanaininois.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 \$0.04055 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.

**Power Mix Report – Provided By Homefield Energy**

---

M-RETS ID	Generating Facility	Fuel Type	Certificate Type	Certificate Vintage	Generation Period	Certificate Serial Numbers	Quantity
M467	Tatanka Wind Power, LLC - Tatanka Wind Power, LLC	Wind	Renewable	07/2014	07/2014	467-ND-07-2014-36733-1 to 27548	27,548

## 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	Jan Billed kWh	Feb Billed kWh	Mar Billed kWh	Q1 2015 Billed kWh	Q1 2015 Voluntary RECs
Urbana	Yes	0.04746	10,719,490	9,363,565	10,189,430	30,272,485	27,548
Total Usage		30,272,485					
IL RPS 9%		2,724,524					
Usage less RPS		27,547,961					
RECs for Urbana		27,548					

(each REC represent 1000 kWh of usage)

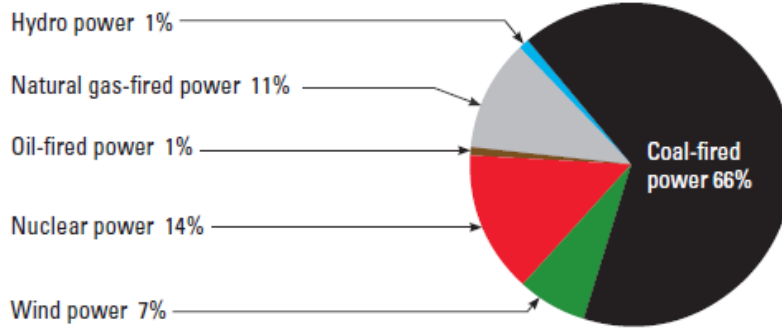
## Aggregation Report – Provided By Homefield Energy

\* 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	Customer	# 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	
January	Urbana	13,000	10,719,490	\$0.04746	\$508,747.00	0.04574	\$490,309.47	(\$18,437.52)	0.00497	-\$71,713.39	
February	Urbana	12,082	9,363,565	\$0.04746	\$444,394.79	0.04547	\$425,761.30	(\$18,633.49)	0.00561	-\$71,163.09	
March	Urbana	14,573	10,189,430	\$0.04746	\$483,590.35	0.04547	\$463,313.38	(\$20,276.97)	0.00058	-\$26,186.84	
* Indicates number of accounts billed in the month.										\$0.0037	-\$169,063.32

**Ameren Illinois**

**Sources of electricity supplied for the 12 months ending June 30, 2014 for Ameren Illinois**



Sources of electricity supplied for the 12 months ending June 30, 2014	Percentage of total
Biomass power	0%
Coal-fired power	66%
Hydro power	1%
Natural gas-fired power	11%
Nuclear power	14%
Oil-fired power	1%
Solar power	0%
Wind power	7%
Other resources	0%
Unknown resources purchased from other companies	0%
<b>TOTAL</b>	<b>100%</b>

<b>AVERAGE AMOUNT OF EMISSIONS and AMOUNTS OF NUCLEAR WASTE per 1000 kilowatt-hours (kWhs) PRODUCED from KNOWN sources for the 12 months ending June 30, 2014</b>	
Carbon Dioxide	1,571 lbs
Nitrogen Oxides	0.91 lbs
Sulfur Dioxide	1.86 lbs
High-Level Nuclear Waste	0.0008 lbs
Low-Level Nuclear Waste	0.0002 ft <sup>3</sup>

**Footnote** – Additional information on companies selling electrical power in Illinois may be found at the Illinois Commerce Commission's website ([www.icc.illinois.gov](http://www.icc.illinois.gov)). The disclosure of this information is required under Section 16-127 of the Electric Service Customer Choice and Rate Relief Law of 1997 and the rules of the Illinois Commerce Commission, 83 Ill. Adm. Code 421.

## eGrid Subregion Emissions – Greenhouse Gases

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 <sub>2</sub> ) Emissions (tons) Total output emission rate (lb/MWh)	Methane (CH <sub>4</sub> ) Emissions (lbs) Total output emission rate (lb/GWh)	Nitrous oxide (N <sub>2</sub> O) Emissions (lbs) Total output emission rate (lb/GWh)	Carbon dioxide equivalent (CO <sub>2</sub> e) Emissions (tons) Total output emission rate (lb/MWh)
AKGD	ASCC Alaska Grid	3,350,817.0	139,035.5	38,279.9	3,358,210.3
AKMS	ASCC Miscellaneous	317,398.6	26,527.0	5,208.6	318,484.5
AZNM	WECC Southwestern	104,967,483.8	3,424,005.1	2,802,975.8	105,437,897.1
CAMX	WECC California	64,799,260.4	6,044,809.1	1,278,773.3	65,060,940.8
ERCT	ERRCOT All	210,366,837.2	5,820,108.3	4,859,884.0	211,181,230.4
FRCC	FRCC All	130,376,587.7	8,478,102.7	2,995,217.6	130,929,866.5
HIMS	HICC Miscellaneous	1,963,642.7	218,438.7	40,985.9	1,972,289.1
HIOA	HICC Oahu	6,393,027.4	782,825.4	176,679.8	6,428,632.4
MROE	MRO East	26,009,237.7	784,331.9	888,770.5	26,155,232.6
MROW	MRO West	156,444,752.4	5,809,874.5	5,354,361.3	157,335,680.5
NEWE	NPCC New England	46,905,984.7	9,322,707.0	1,685,853.4	47,265,180.4
NWPP	WECC Northwest	112,891,853.5	4,300,901.6	3,502,980.9	113,479,975.1
NYCW	NPCC NYC/Westchester	12,733,660.7	974,161.1	114,582.6	12,761,649.6
NYUL	NPCC Long Island	8,115,858.7	989,929.6	124,943.6	8,145,619.2
NYUP	NPCC Upstate NY	24,165,154.6	1,443,157.6	641,283.5	24,279,706.7
RFCE	RFC East	137,558,868.7	7,434,984.1	4,210,267.5	138,289,527.5
RFEM	RFC Michigan	74,602,328.8	2,789,651.5	2,457,844.2	75,012,586.0
RFOW	RFC West	449,994,271.4	10,897,168.6	14,813,680.5	452,404,812.2
RMPA	WECC Rockies	61,839,528.9	1,477,560.7	1,904,448.4	62,150,232.8
SPNO	SPP North	62,457,258.2	1,444,401.4	1,986,994.1	62,780,408.5
SPSO	SPP South	117,325,297.0	3,444,187.9	3,095,469.5	117,841,258.7
SRMV	SERC Mississippi Valley	90,967,299.2	3,650,522.7	1,900,187.0	91,300,158.7
SRMW	SERC Midwest	123,042,911.4	2,783,643.6	4,019,051.2	123,695,092.6
SRSO	SERC South	183,236,856.9	6,176,437.4	5,653,138.2	184,177,945.9
SRTV	SERC Tennessee Valley	163,960,526.8	4,177,202.5	5,290,412.2	164,824,401.3
SRVC	SERC Virginia/Carolina	167,452,188.6	6,766,296.6	5,502,582.8	168,376,135.0
U.S.		2,542,238,893.0	99,600,972.2	75,344,845.9	2,554,963,154.4