## Ameren Missouri

Renewable Energy Standard Compliance Report 2014

## Prepared in Compliance with 4 CSR 240-20.100

April 15, 2015

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## Introduction

The Missouri Renewable Energy Standard (RES) began as a public initiative and was placed on the Missouri ballot during the November 4, 2008 election. Labeled as Proposition C, it requires the three investor owned utilities (IOUs) in the state (Ameren Missouri, Empire District and Kansas City Power \& Light) to acquire renewable energy resources as a percentage of the total retail sales that each utility makes to its customers in the state.

After an extensive rule making process involving stakeholders from the Missouri Public Service Commission, the PSC staff, Office of Public Council, MIEC, MEDA, the three IOUs, various wind, solar and biomass developers, etc., the Public Service Commission published final rules on July 7, 2010.

As part of the statute and rule making, Section (7) (B) requires that the IOUs file a plan that covers their intended compliance measures for the current year plus the immediately following 2 years.

There are two basic forms of compliance that are required under the RES. Compliance with what we term the "non-solar" RES relates to compliance using renewable energy credits (RECs) and/or actual energy that includes the REC from all forms of qualified renewable generation resources (wind, hydro, biomass, etc.) as certified by the Missouri Department of Natural Resources (MoDNR). In 2013, the group within DNR responsible for providing renewable certification was transferred from the DNR to the Missouri Department of Economic Development. There is a separate component, the "solar" RES that requires compliance which can only be met with solar RECs (S-RECs) or actual energy that includes the REC from solar generation resources.

There are also two basic means by which compliance is deemed to have been achieved. The first is based on providing enough RECs to meet the MWh requirements as stated in the paragraph above. The other is related to the $1 \%$ rate cap calculation. Based on that calculation, a utility will be deemed to be in compliance with the RES once the cost of compliance is equal to or greater than the $1 \%$ calculation. Thus a utility could fall short of meeting the MWhs deemed necessary but if the $1 \%$ calculation is met then the utility is deemed to be in full compliance.

The following table details the renewables percentage requirements of the retail electric sales for the non-solar and solar RES:

| $\frac{\text { Time Period }}{2011-2013}$ |  | Total Renewable Requirement |  |
| :--- | :---: | :---: | :---: |
| $2014-2017$ | $2 \%$ |  | $\underline{\text { Solar* }}$ |
| $2018-2020$ | $5 \%$ |  | $2 \%$ |
| 2021 -forward | $10 \%$ | $2 \%$ |  |
|  | $15 \%$ |  | $2 \%$ |

[^0]As referenced above, the MoDED is responsible for certifying all eligible renewable resources that can be utilized by the IOUs in meeting the requirements of the RES. DNR rule 10 CSR 140-8.010 (2), contains the list of all eligible renewable resources allowed to meet the compliance with the RES.

Ameren Missouri's compliance with the RES, as demonstrated in this report, adheres to the use of only those renewable resources as currently defined by the above referenced rule.

In addition, the RES rules allow for the banking of RECs for up to a three year time period. This will allow for the use of eligible RECs generated from January 1, 2010 to the current time period in meeting the RES requirements for calendar year 2013.

Any generation and/or RECs from a Missouri renewable resource are entitled to a factor of 1.25 applied to each MWh or REC.

The following information in this report will demonstrate the specific means by which Ameren Missouri met its obligations under both the non-solar and solar RES for 2014.

# RES Compliance <br> Section (7) (A) $1 \mathbf{A}$ 

## Total Retail Electric Sales

Ameren Missouri reports its total retail electric sales annually to the Federal Energy Regulatory Commission (FERC) in a report called the FERC Form 1. For the reporting year ended December 31, 2014, Ameren Missouri's total retail electric sales were 37,022,539 MWhs.

## Section (7) (A) 1 B

## Total Jurisdictional Revenue

Total sales to ultimate consumers as reported on the FERC Form 1 for the CY 2014 and associated with the above referenced MWh's were $\$ 3,112,533,428$

## Section (7) (A) 1 C

## Retail Sales Supplied by Renewable Resources

Ameren Missouri is the owner and operator of the Keokuk Hydro-electric Generation Station located on the Mississippi River in Keokuk, Iowa. The station consists of 15 separate generators. The individual nameplate ratings range from 7.2 to 8.8 MWs.

The Keokuk Hydro-electric Generation Station was certified as a qualified renewable energy resource by the MoDNR on September 28, 2011. The total generational output from the Keokuk facility for the CY 2014 was 869,832 MWhs.

In June, 2009 Ameren Missouri and Pioneer Prairie Wind Farm I LLC entered into a 15 year power purchase agreement. Ameren Missouri is purchasing 102.3 MWs of nameplate generation from the Pioneer Prairie Wind Farm consisting of 62 turbines, located in north east Iowa. The facility site covers approximately 10,000 acres of land located in Mitchell County, Iowa in Wayne and Stacyville Townships.

The Pioneer Prairie Wind Farm was certified as a qualified renewable energy resource by the MoDNR on September 28, 2011. The total generational output from the Pioneer Prairie Wind Farm supplied to Ameren Missouri customers for the CY 2014 was
** $\quad$ ** MWhs.
In December, 2010 Ameren Missouri completed construction of approximately 100 kW of various PV solar technologies at its headquarters office building.

The Ameren Missouri headquarters solar installation was certified as a qualified renewable generation facility by the MoDNR on September 28, 2011. The total generational output of this facility during CY 2014 was 91 MWhs. In accordance with RSMo 393.1030, and as this facility is located in the state of Missouri, a factor of 1.25 is applied to the generation from this facility such that the generation counts as 113 MWhs towards the compliance requirements.

On June 16, 2012, the Maryland Heights Renewable Energy Center (MHREC), became commercially operational. This facility burns methane gas produced by the IESI Landfill in Maryland Heights, MO in 3 Solar 4.9 MW Mercury 50 gas turbines to produce electricity.

On August 27, 2012, the MHREC was certified as a qualified renewable energy resource by the MoDNR. The generational output from the MHREC for CY 2014 was 58,974 MWhs. In accordance with RSMo 393.1030, and as this facility is located in the state of Missouri, a factor of 1.25 is applied to the generation from this facility such that the generation counts as $73,718 \mathrm{MWhs}$ towards the compliance requirements.

On November 14, 2014, Ameren's first utility scale solar facility became commercially operational. The O'Fallon Renewable Energy Center (OREC) is a 5.7 MW(DC) PV facility located in O’Fallon, MO. On April 3, 2015, MoDED certified OREC as a renewable resource.

## Section (7) (A) 1 D

## RECs Created by Utility Owned Renewable Resources

Ameren Missouri is the owner and operator of the Keokuk Hydro-electric Generation Station located on the Mississippi River in Keokuk, Iowa. The station consists of 15 separate generators. The individual nameplate ratings range from 7.2 to 8.8 MWs.

The Keokuk Hydro-electric Generation Station was certified as a qualified renewable energy resource by the MoDNR on September 28, 2011. The total generational output from the Keokuk facility for the CY 2014 was 869,832 MWhs.

The value of the energy generated by Keokuk for CY 2014 was $\$ 32,016,477$ as determined by the locational marginal pricing through the Midwest Independent System Operator (MISO).

The RECs generated from the Keokuk facility are on Ameren Missouri's books at zero cost and value. There are two reasons for this. First, due to the restrictive nature of utilizing hydroelectric to meet Renewable Portfolio Standards (RPS) in other states, there is a very limited market in which the associated Keokuk RECs could be utilized outside of Missouri. Second, the RECs created by this generation are an added benefit to Ameren

Missouri rate payers as the capital and operational costs associated with Keokuk are already a part of the existing rate structure. Since the company has not incurred any additional costs above or beyond in order to acquire these RECs, the benefit to the rate payers is in the ability of Ameren Missouri to utilize these RECs to meet compliance and not incur any additional cost in the process.

In December, 2010 Ameren Missouri completed construction of approximately 100 kW of various PV solar technologies at its headquarters office building.

The Ameren Missouri headquarters solar installation was certified as a qualified renewable generation facility by the MoDNR on September 28, 2011. The total generational output of this facility during CY 2014 was 91 MWhs. In accordance with RSMo 393.1030, and as this facility is located in the state of Missouri, a factor of 1.25 is applied to the generation from this facility such that the generation counts as 113 MWhs towards the compliance requirements.

The full generational output of this solar facility is consumed at the company's headquarters building. This represents approximately $0.4 \%$ of the total electric consumption at the building.

There is no assigned value of the electricity generated as Ameren does not bill itself for generational requirements.

The value of the S-RECs could be stated as between ** $\square *$ which represents the cost of the S-RECs procured from both $3^{\text {rd }}$ party brokers in the national market and the price paid to Ameren Missouri customers.

However, assigning such a value has no bearing on the cost implications related to compliance with the MoRES. There is no reason to assign a notional value since the cost of capital and O\&M associated with the generation from this facility represents the cost of compliance with the MoRES and only those values will be utilized to determine the impact against the $1 \%$ rate cap limitation.

Ameren Missouri will use all generation from this solar installation to meet current and future MoRES compliance requirements.

On June 16, 2012, Ameren Missouri's Maryland Heights Renewable Energy Center (MHREC), became commercially operational. This facility burns methane gas produced by the IESI Landfill in Maryland Heights, MO in 3 Solar 4.9 MW Mercury 50 gas turbines to produce electricity.

On August 27, 2012, the MHREC was certified as a qualified renewable energy resource by the MoDNR. The generational output from the MHREC for CY 2014 was 58,974 MWh. In accordance with RSMo 393.1030, and as this facility is located in the state of Missouri, a factor of 1.25 is applied to the generation from this facility such that the generation counts as 73,718 MWhs towards the compliance requirements.

The value of the 2014 generation is estimated to be ${ }^{* *} \square{ }^{* *} / \mathrm{MWh}$ or ${ }^{* *} \square{ }^{*} \quad$ based the contracted purchase price of the methane gas and the heat rate of the generators.

On November 14, 2014, Ameren Missouri's newest generation facility, the O'Fallon Renewable Energy Center (OREC) became commercially operational. This facility is a 5.7 MW(DC) PV solar facility. On April 3, 2015, MoDED certified OREC as a renewable resource.

## Section (7) (A) 1 E

## RECs Acquired and Retired

During CY 2014, Ameren Missouri purchased energy including the associated RECs from the Pioneer Prairie Wind Farm. A total of ** ** RECs were acquired in CY 2014 under the terms of the 15 year power purchase agreement.

A total of 58,974 RECs were generated from the Maryland Heights Renewable Energy Center in CY 2014. In accordance with RSMo 393.1030, and as this facility is located in the state of Missouri, a factor of 1.25 is applied to the generation from this facility. Thus the RECs generated toward compliance requirements are 73,718 .

In CY 2014, Ameren Missouri purchased S-RECs generated by Ameren Missouri customers thru the Standard Offer Contract (SOC) that was established in 2011.

Originally, there were two contract types: For systems sized less than 10 kW , Ameren Missouri utilizes a program established by the U.S. DOE called PV Watts to determine the annual generational output from systems installed in the region. Customers who have these size systems are paid a lump-sum up-front payment equal to the generation from their system for a 10 year period. Those RECs are then used over the 10 year period to meet the solar compliance requirement. For systems 10 kW or larger installed prior to January 1, 2013, a five year contract is used but an additional meter is required and customers are paid based on actual production. For systems 10 kW or larger installed after January 1, 2013 and before August 28, 2013, the contract term was extended to 10 years. Due to the implementation of the provisions associated with HB 142, systems greater than 10 kW that are installed after August 28, 2013 no longer require a second meter and their generational output is determined in the same fashion as systems less than 10 kW , utilizing the PV Watts formula.

However, on Aug. 28, 2013, due to the passage of HB 142, the RES law was amended. That amendment provided that if a customer accepts a solar rebate form the utility, the SRECs transfer to the utility. Due to this change, the SOC program was discontinued and the $\$ 1.0$ million SOC cap was not reached; $\$ 743,240$ was actually paid to customers for SREC purchases in 2014.

All S-RECs associated with the customer installed net metered systems, as well as the generation at the Ameren Missouri headquarters facility are entitled to the 1.25 factor as they represent Missouri based generation.

During CY 2014, Ameren Missouri acquired 42,769 solar RECs from its customers under terms of the Standard Offer Contract. Of this amount, 36,625 RECs came from systems less than 10 kW in size and 6,144 were associated with systems 10 kW or larger in size. The S-RECs procured from customers with systems 10 kW or larger are metered separately and not paid for until the following year.

Additionally, in 2014 the Department of Energy increased the PV watts capacity factor for the St. Louis region to $15.4 \%$ from $14.4 \%$. This new percentage has been applied to all installations as of January 1, 2014 regardless of their original installation date.

The S-RECs acquired from customers will also be eligible for the 1.25 factor application as stipulated in RSMo 393.1030.

Ameren Missouri retired a total of 1,525,621 Keokuk RECs (910,448 vintage 2011 and 615,173 vintage 2012) and 288,483 vintage 2011 Pioneer Prairie RECs to meet the nonsolar requirement. To meet the solar requirement, 14,350 SRECs, vintages 2012 and 2013, purchased from third party brokers and 18,139 SRECS generated from Ameren Missouri customers from 2011 thru 2014 were retired.

## Section (7) (A) 1 F

## Source of RECs Acquired

See Sections (A) 1 D and E above

## Section (7) (A) 1 G

## RECs Carried Forward

RECs being carried forward through the 3 year banking provision are as follows:

| Facility | RECs | S-RECs |
| :---: | :---: | :---: |
| Keokuk | 1,747,617 |  |
| Pioneer Prairie | * |  |
| MHREC | 159,102 |  |
| OREC |  | 612 |
| WREGIS Accts. |  | 0 |
| Ameren Customers |  | 41,259 (1) |

1) These values do not include the in-state factor of 1.25 for those RECs affiliated with in state production and includes the generation from the Ameren Headquarters solar installation.

## See Exhibit 1 for details

## Section (7) (A) 1 H

## Gains or Losses from Purchases or Sales

Not applicable. There were no sales of RECs and all procurement was either utilized to meet CY 2014 requirements or has been banked in Ameren Missouri's NAR account and will be used for future compliance requirements.

## Section (7) (A) 1 I

## RECs from Non-Utility Owned Resources

## Non-solar

Facility Owner: EDP Renewables
Facility Name:
Resource Type:
Pioneer Prairie Wind Farm I
Wind
Location:
Mitchell County, Iowa
Wayne and Stacyville Townships
Turbines:
Vestas V82
1.65 MW per turbine

## See Exhibit 2 for Affidavit

## See Exhibit 3 for Meter Reads and Payments

## Solar

Ameren Missouri was granted a waiver by the Missouri Public Service Commission on January 11, 2012; File No. EO-2012-0150 for all reporting requirements associated with S-RECs purchased by Ameren Missouri from the various brokers and from its utility customers who have installed small scale solar generation facilities at their homes and businesses.

## Section (7) (A) 1 J

## Customer Solar Rebates

During CY 2014, Ameren Missouri processed and paid 1,965 requests for solar rebates. No rebates are processed until all required meter work has been performed.

## Section (7) (A) 1 K

## Customer Denied Rebates

There were no rebate denials.

## Section (7) (A) 1 L

## Funds Expended for Solar Rebates

During CY 2014, Ameren Missouri paid out $\$ 60,481,500$ associated with solar rebates.

## See Exhibit 4 for Solar Rebate Tariff details

## S-REC Contract Terms and Conditions

Beginning in 2013, Ameren Missouri made available a Standard Offer Contract at $\$ 5 / \mathrm{MWh}$ to purchase the S-RECs from customers who installed less than 100 kW of solar at their homes and/or businesses and met all net metering requirements as applicable under tariffs filed by Ameren Missouri and approved by the MoPSC.

Originally, there were two contract types: For systems sized less than 10 kW , Ameren Missouri utilizes a program established by the U.S. DOE called PV Watts to determine the annual generational output from systems installed in the region. Customers who have these size systems are paid a lump-sum up-front payment equal to the generation from their system for a 10 year period. Those RECs are then used over the 10 year period to meet the solar compliance requirement. For systems 10 kW or larger installed prior to January 1, 2013, a five year contract is used but an additional meter is required and customers are paid based on actual production. For systems 10 kW or larger installed after January 1, 2013 and before August 28, 2013, the contract term was extended to 10 years. Due to the implementation of the provisions associated with HB 142, systems greater than 10 kW that are installed after August 28, 2013 no longer require a second meter and their generational output is determined in the same fashion as systems less than 10 kW , utilizing the PV Watts formula.

The total dollars spent to purchase customer S-RECs was capped at $\$ 1.0$ million for 2013.

However, on Aug. 28, 2013, due to the passage of HB 142, the RES law was amended. That amendment provided that if a customer accepts a solar rebate from the utility, the SRECs transfer to the utility. Due to this change, the SOC program was discontinued and the $\$ 1.0$ million SOC cap was not reached; $\$ 743,240$ was actually paid to customers for SREC purchases in 2014.

## See Exhibit 5 for SREC Purchase Tariff

## Section (7) (A) 1 M

## Utility Compliance with RES Plan

See Exhibit 6 for company Affidavit

## Exhibit 1 Keokuk REC's

| Sub-Account | Sub-Account ID | NAR ID | Asset | Fuel/Project Type | Certificate Vintage | Certificate Serial Numbers | Quantity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Sep-12 | NAR-REC-160-IA-09-2012-5010-19522 to 32306 | 12,785 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Oct-12 | NAR-REC-160-IA-10-2012-5051-1 to 34636 | 34,636 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Nov-12 | NAR-REC-160-IA-11-2012-5154-1 to 44942 | 44,942 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Dec-12 | NAR-REC-160-IA-12-2012-5484-1 to 46589 | 46,589 |
|  |  |  |  |  |  | 2012 KEOKUK Totals | 138,952 |
|  |  |  |  |  |  |  |  |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Jan-13 | NAR-REC-160-IA-01-2013-5550-1 to 44580 | 44,580 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Feb-13 | NAR-REC-160-IA-02-2013-5935-1 to 63409 | 63,409 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Mar-13 | NAR-REC-160-IA-03-2013-6150-1 to 82673 | 82,673 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Apr-13 | NAR-REC-160-IA-04-2013-6209-1 to 62320 | 62,320 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | May-13 | NAR-REC-160-IA-05-2013-6486-1 to 59193 | 59,193 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Jun-13 | NAR-REC-160-IA-06-2013-6648-1 to 50124 | 50,124 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Jul-13 | NAR-REC-160-IA-07-2013-6899-1 to 76127 | 76,127 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Aug-13 | NAR-REC-160-IA-08-2013-7184-1 to 68385 | 68,385 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Sep-13 | NAR-REC-160-IA-09-2013-7324-1 to 47641 | 47,641 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Oct-13 | NAR-REC-160-IA-10-2013-7514-1 to 64256 | 64,256 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Nov-13 | NAR-REC-160-IA-11-2013-7658-1 to 66642 | 66,642 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Dec-13 | NAR-REC-160-IA-12-2013-9223-1 to 53483 | 53,483 |
|  |  |  |  |  |  | 2013 KEOKUK Totals | 738,833 |
|  |  |  |  |  |  |  |  |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Jan-14 | NAR-REC-160-IA-01-2014-9452-1 to 49761 | 49,761 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Feb-14 | NAR-REC-160-IA-02-2014-9620-1 to 52073 | 52,073 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Mar-14 | NAR-REC-160-IA-03-2014-10174-1 to 77002 | 77,002 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Apr-14 | NAR-REC-160-IA-04-2014-10349-1 to 77331 | 77,331 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | May-14 | NAR-REC-160-IA-05-2014-13577-1 to 66055 | 66,055 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Jun-14 | NAR-REC-160-IA-06-2014-13980-1 to 70781 | 70,781 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Jul-14 | NAR-REC-160-IA-07-2014-14243-1 to 48324 | 48,324 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Aug-14 | NAR-REC-160-IA-08-2014-15953-1 to 86898 | 86,898 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Sep-14 | NAR-REC-160-IA-09-2014-19177-1 to 82621 | 82,621 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Oct-14 | NAR-REC-160-IA-10-2014-20631-1 to 89355 | 89,355 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Nov-14 | NAR-REC-160-IA-11-2014-21186-1 to 79206 | 79,206 |
| Keokuk | 273 | GEN160 | Keokuk | Hydroelectric Water | Dec-14 | NAR-REC-160-IA-12-2014-26981-1 to 90425 | 90,425 |
|  |  |  |  |  |  | 2014 KEOKUK Totals | 869,832 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Keokuk RECs carried forward | 1,747,617 |

## Exhibit 1 <br> Maryland Heights Renewable Energy Center REC's

| Sub-Account | Sub-Account ID | NARID | Asset | Fuel/Project Type | Certificate Vintage | Certificate Serial Numbers | Quantity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Apr-12 | NAR-REC-331-MO-04-2012-4800-1 to 1623 | 1,623 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | May-12 | NAR-REC-331-MO-05-2012-4801-1 to 4166 | 4,166 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jun-12 | NAR-REC-331-MO-06-2012-4794-1 to 3433 | 3,433 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jul-12 | NAR-REC-331-MO-07-2012-4795-1 to 4351 | 4,351 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Aug-12 | NAR-REC-331-MO-08-2012-4796-1 to 5292 | 5,292 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Sep-12 | NAR-REC-331-MO-09-2012-4797-1 to 5391 | 5,391 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Oct-12 | NAR-REC-331-MO-10-2012-4979-1 to 5065 | 5,065 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Nov-12 | NAR-REC-331-MO-11-2012-5035-1 to 3328 | 3,328 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Dec-12 | NAR-REC-331-MO-12-2012-5054-1 to 4801 | 4,801 |
|  |  |  |  |  |  | 2012 MHREC Total | 37,450 |
|  |  |  |  |  |  |  |  |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jan-13 | NAR-REC-331-MO-01-2013-5155-1 to 5721 | 5,721 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Feb-13 | NAR-REC-331-MO-02-2013-5478-1 to 5061 | 5,061 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Mar-13 | NAR-REC-331-MO-03-2013-5544-1 to 5645 | 5,645 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Apr-13 | NAR-REC-331-MO-04-2013-5931-1 to 4363 | 4,363 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | May-13 | NAR-REC-331-MO-05-2013-6154-1 to 4649 | 4,649 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jun-13 | NAR-REC-331-MO-06-2013-6248-1 to 5332 | 5,332 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jul-13 | NAR-REC-331-MO-07-2013-6483-1 to 5350 | 5,350 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Aug-13 | NAR-REC-331-MO-08-2013-6656-1 to 5117 | 5,117 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Sep-13 | NAR-REC-331-MO-09-2013-6754-1 to 5246 | 5,246 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Oct-13 | NAR-REC-331-MO-10-2013-7108-1 to 5373 | 5,373 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Nov-13 | NAR-REC-331-MO-11-2013-7320-1 to 5324 | 5,324 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Dec-13 | NAR-REC-331-MO-12-2013-7470-1 to 5497 | 5,497 |
|  |  |  |  |  |  | 2013 MHREC Total | 62,678 |
|  |  |  |  |  |  |  |  |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jan-14 | NAR-REC-331-MO-01-2014-7663-1 to 4819 | 4,819 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Feb-14 | NAR-REC-331-MO-02-2014-9166-1 to 4803 | 4,803 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Mar-14 | NAR-REC-331-MO-03-2014-9449-1 to 5144 | 5,144 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Apr-14 | NAR-REC-331-MO-04-2014-9908-1 to 4281 | 4,281 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | May-14 | NAR-REC-331-MO-05-2014-10166-1 to 4343 | 4,343 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jun-14 | NAR-REC-331-MO-06-2014-10316-1 to 3926 | 3,926 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Jul-14 | NAR-REC-331-MO-07-2014-13607-1 to 4378 | 4,378 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Aug-14 | NAR-REC-331-MO-08-2014-14001-1 to 4747 | 4,747 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Sep-14 | NAR-REC-331-MO-09-2014-14248-1 to 4897 | 4,897 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Oct-14 | NAR-REC-331-MO-10-2014-19028-1 to 5921 | 5,921 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Nov-14 | NAR-REC-331-MO-11-2014-19256-1 to 5903 | 5,903 |
| Maryland Heights | 371 | GEN331 | MHREC | BLF | Dec-14 | NAR-REC-331-MO-12-2014-20647-1 to 5812 | 5,812 |
|  |  |  |  |  |  | 2014 MHREC Total | 58,974 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | MHREC RECs Carried forward | 159,102 |

## Exhibit 1

O'Fallon Renewable Energy Center (OREC) S-REC's

Nov 2014343.5
Dec $2014 \quad 268.9$
2014 Total 612.4

HIGHLY CONFIDENTIAL



HIGHLY CONFIDENTIAL


NP































































|  |  | Exhibit 1 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | meren Missour |  |  |
|  | Headquarte | Solar Gener | on Facility |  |
|  |  | 100 kW |  |  |
|  |  | eration CY 201 |  |  |
|  |  | Meter \# |  |  |
|  | '02812523 | '02832563 | '10263066 | Total |
| Month | MWh | MWh | MWh | MWh |
| Jan | 4.3335 | 0.3395 | 0.1729 | 4.8460 |
| Feb | 3.9523 | 0.3259 | 0.1594 | 4.4376 |
| Mar | 8.1466 | 0.4278 | 0.2177 | 8.7921 |
| Apr | 8.6396 | 0.4075 | 0.2080 | 9.2552 |
| May | 9.5925 | 0.4413 | 0.2252 | 10.2590 |
| Jun | 9.4051 | 0.4207 | 0.2177 | 10.0435 |
| Jul | 10.1793 | 0.4582 | 0.2363 | 10.8737 |
| Aug | 8.4619 | 0.4141 | 0.2009 | 9.0769 |
| Sep | 8.0110 | 0.4350 | 0.2047 | 8.6508 |
| Oct | 6.4019 | 0.3842 | 0.1838 | 6.9699 |
| Nov | 4.1265 | 0.3111 | 0.1340 | 4.5717 |
| Dec | 2.5683 | 0.1793 | 0.0800 | 2.8277 |
| Total | 83.8186 | 4.5448 | 2.2407 | 90.6041 |

HIGHLY CONFIDENTIAL



HIGHLYCONFIDENTIAL
**


HIGHLYCONFIDENTIAL


NP

## Exhibit 4

## UNION ELECTRIC COMPANY ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. 6 | 2nd Revised | SHEET NO. 88 |
| :---: | :---: | :---: |
| CANCELLING MO.P.S.C. SCHEDULE NO. 6 | 1st Revised | SHEET NO. 88 |

APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR

SOLAR REBATE

## PURPOSE

The purpose of this Rider $S R$ is to implement the solar rebate established through $\$ 393.1030$ RSMO and to establish the terms, conditions and procedures which the Company will rely on in accepting rebate applications and authorizing rebate payments to eligible participants for a qualifying solar electric system.

## AVAILABILITY

*The Company will not suspend payment of solar rebates in 2013 and beyond unless the solar rebate payments reach an aggregate level of $\$ 91.9$ million (the "specified level") incurred subsequent to July 31,2012 as defined in the Non-Unanimous Stipulation and Agreement approved by the Missouri Public Service Commission ("Commission") in File Number ET-2014-0085 ("Stipulation"). If and when the solar rebate payments are anticipated to reach the $\$ 91.9 \mathrm{million}$ level, the Company will file with the Commission an application under the 60 -day process as outlined in $\$ 393.1030 .3$ RSMO. to cease payments beyond the specified level in the year in which the specified level is reached and all future calendar years, in accordance with the approved Stipulation. Details concerning the current payment levels are posted on the Company's website at www. ameren. com.

All retail customers (customer) of Company are eligible for the solar rebate with the following limitations and conditions:

1. The customer must be an active account on the Company's system and in good payment standing.
2. The System must be permanently installed on the customer's premise.
3. The customer must declare the installed System will remain in place on the account holder's premise for the duration of its useful life which shall be deemed to be a minimum of ten (10) years.
4. The solar modules and inverters shall be new equipment and include a manufacturer's warranty of ten (10) years.
5. No retail electric account will be eligible for a solar rebate for more than twenty-five kilowatts ( 25 kW ) of new or expanded capacity irrespective of the number of meters/service points associated with the account.
6. The system or expansion of an existing system must not become operational until after December 31, 2009 and must become operational on or before June 30, 2020.
7. The system shall meet all requirements of 4 CSR 240-20.065 and Company's Electric Power Purchases from Qualified Net Metering Units tariff.
8. The system must be situated in a location where a minimum of eighty-five percent ( $85 \%$ ) of the solar resource is available to the System.
*Indicates Addition

| DATE OF ISSUE | November 26,2013 | DATE EFFECTIVE | December 22, 2013 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Warner L. Baxter | President \& CEO | St. Louis, Missouri |
|  | NAME OF OFFICER | TITLE | ADDRESS |

## Exhibit 4

## UNION ELECTRIC COMPANY ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. 6 | 2nd Revised | SHEET NO. 88.1 |
| :---: | :---: | :---: |
| CANCELLING MO.P.S.C. SCHEDULE NO. 6 | 1st Revised | SHEET NO. 88.1 |

APPLYING TO
MISSOURI SERVICE AREA

RIDER SR<br>SOLAR REBATE (Cont'd.)

## *AVAILABILITY (Cont'd.)

9. For a System of ten kilowatts ( 10 kW ) and larger, the customer must execute an affidavit for Company's use in complying with $\$ 393.1030$ RSMo. The affidavit can be obtained from Company's website www.ameren.com.

## **DEFINITIONS

Application Requirements - All Net Metering Application and Solar Rebate Application information necessary to receive an approval from Company as defined on Company's website ww, ameren.com provided to Company including but not limited to accurate account number, name and service address matching customer billing information, all of the Net Metering Application, all fields of Solar Rebate Application except the "System Installation Date," customer and developer signatures, System plans, specifications, warrenties and wiring diagram.

Completion Requirements - All System installation and final documentation requirements as defined on Company's website www.ameren. com provided to Company including but not limited to the System installation date, all required signatures, approval of the local inspection authority having jurisdiction (if applicable), copies of detailed receipts and invoices, System photo(s), taxpayer information form and affidavit (if applicable).

Net Metering Application - Section A. Through Section D. of a "Interconnection Application/Agreement for Net Metering Systems with a Capacity of 100 kW or Less" which can be obtained from Company's website www.ameren.com.

Operational Date - The date that the Company installs a bi-directional meter and permits parallel operation of the System with Company's electrical distribution system in accordance with Company's "Electric Power Purchases From Qualified Net Metering Units" tariff.

Qualification Date - The date that determines a customer's relative position in the Reservation Queue.

Rebate Commitment - Company's written communication to customer, by letter or email, confirming that solar rebate funding is available for a Solar Rebate Application submitted by customer.
Reservation Queue - The list of all complete Net Metering Applications that have been received by Company which have not expired and have not been paid a Solar Rebate.

Solar Rebate Application - Sections H. and I. of a "Interconnection
Application/Agreement for Net Metering Systems with a Capacity of 100 kW or Less" which can be obtained from Company's website www.ameren.com.

System - Qualifying solar electric system
*Indicates Reissue *Indicates Addition

| DATE OF ISSUE | November 26, 2013 | DATE EFFECTIVE | December 22, 2013 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Warner L. Baxter | President \& CEO | St. Louis, Missouri |
|  | NAME OF OFFICER | TITLE | ADDRESS |

## Exhibit 4

UNION ELECTRIC COMPANY ELECTRIC SERVICE

$$
\begin{aligned}
\text { MO.P.S.C. SCHEDULE NO. } & 6 \\
& 6
\end{aligned} \quad \text { Ist Revised } \quad \text { SHEET NO. } 88.2
$$

APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR <br> SOLAR REBATE (Cont'd.)

## *REBATE RATE SCHEDULE

Subject to the Availability provisions of this Rider SR, complete and accurate Solar Rebate Applications received by Company or postmarked on or before December 31st of any year, and for which the System becomes operational on or before June 30th of the following year, will be eligible for a solar rebate according to the following schedule:

| Application Received | Operational Status |  |
| :---: | :---: | :---: |
| $31 s t$ of the year | June 30th of the year | Rebate Rate per Watt |
| 2013 | 2014 | \$2.00 |
| 2014 | 2015 | \$1.50 |
| 2015 | 2016 | \$1.00 |
| 2016 | 2017 | \$0.50 |
| 2017 | 2018 | \$0.50 |
| 2018 | 2019 | \$0.50 |
| 2019 | 2020 | \$0.25 |

If a customer has satisfied all of the System Completion Requirements by June 30th, of indicated years, but the Company is not able to complete all of the Company's steps needed to establish an Operational Date on or before June 30 th, the Rebate Rate will be determined as though the Operational Date was June 30 th . If it is subsequently determined that the customer or the System did not satisfy all Completion Requirements required of the customer on or before June 30 th , the rebate rate will be determined based on the Operational Date.

## **RESERVATION QUEUE

Company will establish a Reservation Queue for solar rebate payments based on System Qualification Dates. A customer, and their developer, whose Net Metering Application and Solar Rebate Application are approved will be notified in writing, by letter or email that either:

1. Solar rebate funds have been committed for their System, subject to the Qualification Date not changing and the commitment not expiring, or
2. Solar rebate funds cannot be guaranteed for their System

At least twice monthly, Company will notify in writing, by letter or email, those customers and their developers that did not receive a Rebate Commitment but for which a Rebate Commitment is now being made as a result of other Systems that have dropped out of the Reservation Queue. Details concerning the Reservation Queue are posted on the Company website at www.ameren.com.


## Exhibit 4

## UNION ELECTRIC COMPANY ELECTRIC SERVICE

|  | MO.P.S.C. SCHEDULE NO. 6 | 1st Revised | SHEET NO. 88.3 |
| :---: | :---: | :---: | :---: |
| CANCELLING | MO.P.S.C. SCHEDULE NO. 6 | Original | SHEET NO. 88.3 |

APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR <br> SOLAR REBATE (Cont'd.)

*QUALIFICATION DATE AND REBATE COMMITMENT
The Qualification Date will be the date Company receives a Net Metering Application and Solar Rebate Application that satisfy the Application Requirements and are subsequently approved by Company for construction.

Company will only make a Rebate Commitment to a customer that has a Qualification Date and the customer, and their developer, will be notifed in writing, by letter or email, of any deficiencies in the Application Requirements that will prevent a Rebate Commitment by Company.

Company's Rebate Commitment to a customer will expire if:

1. The System has not attained an Operational Date within six (6) months of the Qualification Date and the Company has not granted a six (6) month extension of the Rebate Commitment based upon the customer's submission of a report of substantial progress requesting the extension which incluces proof of purchase of the major System components, demonstration of partial System construction and building permit (if required), or
2. The System has not attained an Operational Date within twelve (12) months of the Qualification Date, or
3. The System is not constructed in accordance with the design submitted by the customer and approved by Company, thereby causing the Net Metering Application to become invalid.

If a customer has satisfied all of the Completion Requirements but the Company is not able to complete all of the Company's steps needed to establish an Operational Date by the expiration of the Rebate Commitment, the Rebate Rate will be determined as though the Operational Date was achieved prior to the expiration. If it is subsequently determined that the customer or the System did not satisfy all Completion Requirements required of the customer on or before the expiration date, the Rebate Commitment will expire and no payment will be made.
*Indicates Addition


## Exhibit 4

## UNION ELECTRIC COMPANY ELECTRIC SERVICE



APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR <br> SOLAR REBATE (Cont'd.)

*REBATE PAYMENT
The amount of the rebate will be the combined direct current (DC) rating of the solar module(s) in watts from the manufacturer's specification sheet(s) for the new System or the current expansion of an existing System multiplied by the rebate rate as determined by the Rebate Rate Schedule provisions of this Rider SR.

A rebate payment will not be issued until:

1. A complete and accurate Solar Rebate Application has been accepted by Company and a Rebate Commitment made by Company, and
2. Customer has satisfied all Completion Requirements, and
3. An "Interconnection Application/Agreement for Net Metering Systems with a Capacity of 100 kW or Less"has been executed by the customer and Company, and
4. The System is operational.
*SOLAR RENEWABLE ENERGY CREDITS (SREC'S)
On and after August 28, 2013, as a condition of receiving a solar rebate, customer shall transfer to Company all right, title and interest in and to the solar renewable energy credits ("SRECs") associated with the new or expanded System that qualified customer for the solar rebate for a period of ten (10) years from the date Company confirmed that the System was installed and operational.

Rebate payments made by Company prior to August 28, 2013, do not entitle Company to any right, title and interest in the SRECs produced by the portion of the System for which the rebate payment was made.

SRECs produced by the System, for which a rebate is received, cannot be sold or promised for sale to any other party by customer or used by customer for any environmental or "green" program for a period of ten (10) years from the date Company confirmed that the System was installed and operational.

The number of SRECs produced annually will be determined by Company using PVWatts software developed by the U.S. Department of Energy (DOE) with the result rounded to the tenths digit.
*Indicates Change

| DATE OF ISSUE | November 26, 2013 | DATE EFFECTIVE | December 22, 2013 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Warner L. Baxter | President \& CEO | St. Louis, Missouri |
|  | NAME OF OFFICER | TITLE | ADDRESS |

## Exhibit 4

UNION ELECTRIC COMPANY ELECTRIC SERVICE


APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR <br> SOLAR REBATE

## PURPOSE

The purpose of this Rider $S R$ is to implement the solar rebate established through $\$ 393.1030$ RSMO and to establish the terms, conditions and procedures which the Company will rely on in accepting rebate applications and authorizing rebate payments to eligible participants for a qualifying solar electric system.

## AVAILABILITY

*The Company will not suspend payment of solar rebates in 2014 and beyond until the solar rebate payments reach an aggregate level of $\$ 91.9$ million (the "specified level") incurred subsequent to July 31, 2012 as defined in the Non-Unanimous Stipulation and Agreement approved by the Missouri Public Service Commission ("Commission") in File Number ET-2014-0085 ("Stipulation"). Solar rebate payments are anticipated to reach the specified level during 2014. The Company has filed with the Commission an application under the 60 -day process as outlined in $\$ 393.1030 .3$ RSMo. to cease payments when the specified level is reached and all future calendar years, in accordance with the approved Stipulation, and the Commission has determined that the the maximum average retail rate increase, as specified in $\$ 393.1030 .3$ RSMo., will be reached when the specified level of payments has been made. Details concerning the current payment levels are posted on the Company's website at wWw.ameren.com.

All retail customers (customer) of Company are eligible for the solar rebate with the following limitations and conditions:

1. The customer must be an active account on the Company's system and in good payment standing.
2. The System must be permanently installed on the customer's premise.
3. The customer must declare the installed system will remain in place on the account holder's premise for the duration of its useful life which shall be deemed to be a minimum of ten (10) years.
4. The solar modules and inverters shall be new equipment and include a manufacturer's warranty of ten (10) years.
5. No retail electric account will be eligible for a solar rebate for more than twenty-five kilowatts ( 25 kW ) of new or expanded capacity irrespective of the number of meters/service points associated with the account.
6. The System or expansion of an existing system must not become operational until after December 31, 2009 and must become operational on or before June 30, 2020.
7. The System shall meet all requirements of 4 CSR 240-20.065 and Company's Electric Power Purchases from Qualified Net Metering Units tariff.
8. The System must be situated in a location where a minimum of eighty-five FILED percent ( $85 \%$ ) of the solar resource is available to the System.
*Indicates Change
ET-2014-0350; YE-2014-0494

| DATE OF ISSUE | May 23, 2014 | DATE EFFECTIVE | September 19, 2014 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Michael Moehn | President \& CEO | St. Louis, Missouri |
|  | NAME OF OFFICER | TITLE | ADDRESS |

## Exhibit 4

## UNION ELECTRIC COMPANY ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. | 6 |  |  |
| ---: | :--- | ---: | :--- |
|  | 6 | 2nd Revised | SHEET NO. 88.1 |
|  | 1st Revised | SHEET NO. 88.1 |  |

APPLYing TO
MISSOURI SERVICE AREA

## RIDER SR <br> SOLAR REBATE (Cont'd.)

## *AVAILABILITY (Cont'd.)

9. For a System of ten kilowatts ( 10 kW ) and larger, the customer must execute an affidavit for Company's use in complying with $\$ 393.1030$ RSMo. The affidavit can be obtained from Company's website www.ameren.com.

## **DEFINITIONS

Application Requirements - All Net Metering Application and Solar Rebate Application information necessary to receive an approval from Company as defined on Company's website www.ameren.com provided to Company including but not limited to accurate account number, name and service address matching customer billing information, all of the Net Metering Application, all fields of Solar Rebate Application except the "System Installation Date," customer and developer signatures, System plans, specifications, warrenties and wiring diagram.

Completion Requirements - All System installation and final documentation requirements as defined on Company's website www.ameren.com provided to Company including but not limited to the System installation date, all required signatures, approval of the local inspection authority having jurisdiction (if applicable), copies of detailed receipts and invoices, System photo(s), taxpayer information form and affidavit (if applicable).

Net Metering Application - Section A. through Section D. of a "Interconnection Application/Agreement for Net Metering Systems with a Capacity of 100 kW or Less" which can be obtained from Company's website www.ameren.com.

Operational Date - The date that the Company installs a bi-directional meter and permits parallel operation of the System with Company's electrical distribution system in accordance with Company's "Electric Power Purchases From Qualified Net Metering Units" tariff.

Qualification Date - The date that determines a customer's relative position in the Reservation Queue.

Rebate Commitment - Company's written communication to customer, by letter or email, confirming that solar rebate funding is available for a Solar Rebate Application submitted by customer.

Reservation Queue - The list of all complete Net Metering Applications that have been received by Company which have not expired and have not been paid a Solar Rebate.

Solar Rebate Application - Sections H. and I. of a "Interconnection
Application/Agreement for Net Metering Systems with a Capacity of 100 kW or Less" which can be obtained from Company's website www.ameren.com.

System - Qualifying solar electric system
*Indicates Reissue *Indicates Addition

| DATE OF ISSUE | November 26, 2013 | DATE EFFECTIVE | December 22, 2013 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Warner I. Baxter | President \& CEO | St. Louis, Missouri |

## Exhibit 4

UNION ELECTRIC COMPANY ELECTRIC SERVICE


APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR

SOLAR REBATE (Cont'd.)
*REBATE RATE SCHEDULE
Subject to the Availability provisions of this Rider SR, complete and accurate Solar Rebate Applications received by Company or postmarked on or before December 31st of any year, and for which the System becomes operational on or before June 30th of the following year, will be eligible for a solar rebate according to the following schedule:

| on or before December | Achieved on or before |  |
| :---: | :---: | :---: |
| 31st of the year | June 30th of the year | Rebate Rate per Watt |
| 2013 | 2014 | \$2.00 |
| 2014 | 2015 | \$1.50 |
| 2015 | 2016 | \$1.00 |
| 2016 | 2017 | \$0.50 |
| 2017 | 2018 | \$0.50 |
| 2018 | 2019 | \$0.50 |
| 2019 | 2020 | \$0.25 |

If a customer has satisfied all of the System Completion Requirements by June 30th, of indicated years, but the Company is not able to complete all of the Company's steps needed to establish an Operational Date on or before June 30th, the Rebate Rate will be determined as though the Operational Date was June 30 th . If it is subsequently determined that the customer or the System did not satisfy all Completion Requirements required of the customer on or before June 30 th, the rebate rate will be determined based on the Operational Date.

## **RESERVATION QUEUE

Company will establish a Reservation Queue for solar rebate payments based on System Qualification Dates. A customer, and their developer, whose Net Metering Application and Solar Rebate Application are approved will be notified in writing, by letter or email that either:

1. Solar rebate funds have been committed for their System, subject to the Qualification Date not changing and the commitment not expiring, or
2. Solar rebate funds cannot be guaranteed for their System

At least twice monthly, Company will notify in writing, by letter or email, those customers and their developers that did not receive a Rebate Commitment but for which a Rebate Commitment is now being made as a result of other Systems that have dropped out of the Reservation Queue. Details concerning the Reservation Queue are posted on the Company website at www,ameren.com.
*Indicates Change **Indicates Addition


## Exhibit 4

## UNION ELECTRIC COMPANY ELECTRIC SERVICE



APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR <br> SOLAR REBATE (Cont'd.)

*QUALIFICATION DATE AND REBATE COMMITMENT
The Qualification Date will be the date Company receives a Net Metering Application and Solar Rebate Application, or the date that is postmarked if delivered by the U.S. Postal Service, that satisfy the Application Requirements and are subsequently approved by Company.

Company will only make a Rebate Commitment to a customer that has a Qualification Date and the customer, and their developer, will be notifed in writing, by letter or email, of any deficiencies in the Application Requirements that will prevent a Rebate Commitment by Company.

Company's Rebate Commitment to a customer will expire if:

1. The System has not attained an Operational Date within six (6) months of the Rebate Commitment date and the Company has not granted a six (6) month extension of the Rebate Commitment based upon the customer's submission of a report of substantial progress requesting the extension which includes proof of purchase of the major System components, demonstration of partial System construction and building permit (if required), or
2. The System has not attained an Operational Date within twelve (12) months of the Rebate Commitment date, or
3. The System is not constructed in accordance with the design submitted by the customer and approved by Company, thereby causing the Net Metering Application to become invalid.

If a customer has satisfied all of the Completion Requirements but the Company is not able to complete all of the Company's steps needed to establish an Operational Date by the expiration of the Rebate Commitment, the Rebate Rate will be determined as though the Operational Date was achieved prior to the expiration. If it is subsequently determined that the customer or the System did not satisfy all Completion Requirements required of the customer on or before the expiration date, the Rebate Commitment will expire and no payment will be made.

[^1]February 15, 2014

| date of issue | January 27, | DATE EFFECTIVE | Feioruaty 20, 2014 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Warner L. Baxter | President \& CEO | St. Louis, Missouri |
|  | NAME OF OFFICER | TITLE | ADDRESS |

## Exhibit 4

MO.P.S.C. SCHEDULE NO $\qquad$ 6 $\qquad$ sheetno. $\qquad$
CANCELLING MO.P.S.C. SCHEDULE NO. $\qquad$
$\qquad$ SHEET NO. $\qquad$
APPLYING TO
MISSOURI SERVICE AREA

## RIDER SR <br> SOLAR REBATE (Cont'd.)

## *REBATE PAYMENT

The amount of the rebate will be the combined direct current (DC) rating of the solar module(s) in watts from the manufacturer's specification sheet(s) for the new System or the current expansion of an existing System multiplied by the rebate rate as determined by the Rebate Rate Schedule provisions of this Rider $S R$.

A rebate payment will not be issued until:

1. A complete and accurate Solar Rebate Application has been accepted by Company and a Rebate Commitment made by Company, and
2. Customer has satisfied all Completion Requirements, and
3. An "Interconnection Application/Agreement for Net Metering Systems with a Capacity of 100 kW or Less"has been executed by the customer and Company, and
4. The system is operational.

## *SOLAR RENEWABLE ENERGY CREDITS (SREC'S)

```
On and after August 28, 2013, as a condition of receiving a solar rebate, customer
shall transfer to Company all right, title and interest in and to the solar
renewable energy credits ("SRECs") associated with the new or expanded System that
qualified customer for the solar rebate for a period of ten (10) years from the date
Company confirmed that the System was installed and operational.
Rebate payments made by Company prior to August 28, 2013, do not entitle Company to
any right, title and interest in the SRECs produced by the portion of the System for
which the rebate payment was made.
SRECs produced by the System, for which a rebate is received, cannot be sold or
promised for sale to any other party by customer or used by customer for any
environmental or "green" program for a period of ten (10) years from the date
Company confirmed that the System was installed and operational.
The number of SRECs produced annually will be determined by Company using pVWatts
software developed by the U.S. Department of Energy (DOE) with the result rounded to
the tenths digit.
```



## Exhibit 5

## UNION ELECTRIC COMPANY

ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. 6 | 1st Revised | SHEET NO. 89 |
| :---: | :---: | :---: |
| CANCELIING MO.P.S.C. SCHEDULE NO. | Original | SHEETNO. 89 |

APPLYING TO
MISSOURI SERVICE ARRA

## RIDER SP

SOLAR RXINEWARLI ENERGY CREDIT PURCHASE

## PURPOSE

```
The purpose of this rider is to provide a mechanism for eligible customers to sell
and Company to purchase the Renewable Energy Credits associated with energy
generated by solar electric systems operating under Company's Electric Power
Purchases Erom Qualified Net Netering Units tariff herein.
```


## AVAILABILITY

This rider is available to any retail electric customer operating a solar electric system in compliance with Company's approved net metering tarifE.
*Availability of service under this rider shall be limited to those customers for which an "Interconnection Application/Agreement for Net Metering Systems with a Capacity of 100 kW or Iess" is received by Company or postmarked on or before August 27 , 2013, and commitments offered by Company on or before December 31 , 2013, and by the cumulative total of the actual payment commitments and estimated payment commitments offered by Company during 2013, of up to $\$ 1,000,000$ with at Ieast $\$ 350,000$ (35\&) being reserved specifically for commitments under the Iump Sum Offer as described below.

## TERM

This rider shall be effective through December 31, 2014 , and will terminate thereafter unless modified or extended. In the event that this rider expires, all commitments offered by Company on or before December 31, 2013, will be honored for their full term

## DEFINITIONS

1. REC - Renewable Energy Credit, or Renewable Energy Certificate means a tradable certificate, that is either certified by an entity approved as an acceptable authority by the Missouri Fublic Service Commission (Commission) or as validated through the Commission's approved REC tracking system or a generator's attestation and further defined in 4 CSR 240-20.100 Electrac Utility Renewable Energy Standard Recruirements.
2. SREC - Solar Renewable Energy Credit - A REC produced by a solar electric resource.
3. SREC Price - $\$ 5.00$ per SREC.
4. Retail Account Holder - The customer of record taking service from Company under any of Company' $=$ retail electric tariffs.
*Indicates Change

| DATE OFISSUE | July 29, 2013 | DATE EFFECTIVE | August 28, 2013 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Warner L. Baxter | President $\&$ CEO | St. Louis, Missouri |
|  | NAME OF OFFICER | TITLE | ADDRESS |

## Exhibit 5

## UNION ELECTRIC COMPANY

ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. 6 | 2nd Revised | SHEET NO. 89.1 |  |
| ---: | :--- | ---: | :--- |
|  | 6 | 1st Revised | SHEET NO. 89.1 |

RIDTR SP
SOLAR RXINTWABLI ENGRGY CREDIT PURCHASE (Cont'd.)

## DEFINITIONS (Cont'd.)

5. Customer-Generator - the owner, lessee, or operator of an electric energy generation unit that meets all of the following criteria:
a. Is powered by a renewable energy resource.
b. Is located on premises that are owned, operated, leased or otherwise controlled by the party as Retail Account folder and which corresponds to the service adiress for the retail account.
C. Has received approval from Company to interconnect with and operate in parallel phase and synchronization with Company's electric distribution system.
d. Meers all applicable safery, performance, interconnection, and reliability standards endorsed by the net metering rule, 4 CSR $240-$ 20.065 (1) (C) 6 and 4 CSR 240-20.065 (2) (C) 7 .
6. PVWatts - A program available from the U.S. Department of Energy (DOE) that estimates the kilowatt-hour (kWh) production of a solar electric system based on specific system parameters.
7. Incremental System Capacity - Any additional capacity installed by customer subsequent to Company having entered into a Net Metering Application/Agreement wich Customer-Generator under Company's Electric Power Purchases from Qualified Net Ketering Units tariff. Revising the capacity of a pending Net Metering Application/Agreement that has not yet become effective constitutes a design change for that pending Application/Agreement and will not be considered Incremental 3ystem Capacity.

## STANDARD OFFBRS

Company will purchase SRECs produced and owned by a Customer-Generator under either the Lump Sum Offer or the Annual Payment Offer listed below based on the $D C$ nameplate capacity of the Customer-Generator's system. Oniy SRECs produced after January 1,2013 are eligible for either Standard Offer. Payments will only be made to the Retail Account Holder.

* Lump Sum Offer applies to systems whose installed DC nameplate capacity is less than 10 kW and, at customer's option, any systems of 10 kW or larger but not greater than $100 \mathrm{k} \|$ that have not already executed an agreement under the Annual Payment offer:
+ Indicates Change

| DATE OFISSUE | September 10, 2013 | date effective | October 10, 2013 |
| :---: | :---: | :---: | :---: |
| ISSUED BY | Warner L. Baxter | $\frac{\text { President } G \text { CEO }}{\text { TITLE }}$ | St. Louis, Missouri |
|  | NAME OF OFFICER |  | ADDRESS |

## Exhibit 5

UNION ELECTRIC COMPANY
ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. 6 |  |  |  |
| ---: | :--- | ---: | :--- |
| CANCELING MO.PS.C. SCHEDULE NO. | 6 | 2nd Revised | SHEET NO. 89.2 |
|  | Ist Revised | SHEET NO. 89.2 |  |

APPLYING TO
MISSOURI SERVICE ARRA

## RIDIR $S P$

SOLAR RGNEWABLE ENBRGY CREDIT PURCHASE (Cont'd.)

## STANDARD OFFARS (Cont'd.)

+. 1. Company will offer to purchase 1008 of the $3 R E C$ produced during the first 120 calendar months (10 years) following the execution of the agreement or the operational date of the Customer-Generator whichever occurs later.
+4 2. The numbers of BRECs produced annually will be determined by Company using PVWatts software with the result rounded to the tenths digit.
3. Company will make a single payment up-front for all BRECs purchased over the term of the agreement according to the following formula:
$\mathrm{U}_{\mathrm{p}}$-Front Payment $=$ Annual GRECs produced w 10 years a SREC Price.

+ Annual Payment Offer is available, at customer's option, to systems whose installed DC nameplate capacity is 10 kN or larger but not greater than 100 kN :

1. Company will offer to purchase 100 \& of the SRECs produced during the first 120 calendar months (10 years) following the execution of the agreement or the operational date of the Customer-Generator whichever occurs later.
2. Customer-Generator must make provisions for Company to meter all energy produced by the system. The numbers of 3 RECs produced annually will be determined by those meter readings with total SRECs available for purchase being kilowatthour energy divided by 1,000 with the result rounded to the tenths digit.
3. Company will make payments annually no later than March 31 based upon actual $3 R E C$ produced as measured by meter readings from the 12 biling periods ending appronimately December 31 of the immediately preceding year. This will result in eleven (11) payments over the ten (10) year term for most agreements with the first and last payment being for less than a full twelve (12) month period according to the following formula:

Annual Payment $=$ SRECs produced $\%$ SREC Price

## INCRMMRNTAL SYSTHM CAPACITY

```
When a customer adis Incremental System Capacity, Company will make an offer to purchase the SRECs associated with only the Incremental System Capacity.
1. If the total capacity of the system remains eligible for the Iump Sum Offer, then Company will provide a Iump Sum Offer for the Incremental System Capacity -
2. If the Incremental Bystem Capacity results in a total capacity that erceeds the capacity limit of the Iump Sum Offer, then the Annual Payment Offer will apply to the Incremental System Capacity. The number of SRECs purchased under the Annual Payment Offer will be the total number of SRECs produced by the system less any GRECs already purchased under the Iump Sum OEfer durzng the same period.
*Indicates Change **Indicates Reissue
```



## Exhibit 5

UNION ELECTRIC COMPANY ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. 6 |  | 1st Revised | SHEET NO. 89.3 |
| :---: | :---: | :---: | :---: |
| CANCELUING MO.P.S.C. SCHEDULE NO. 6 | 6 | Original | SHEET NO. 89.3 |

APPLYING TO
MISSOURI SERVICE ARRA

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SOLAR RXNIWABLE ENERGY CREDIT PURCHASE (Cont'd.)

* OWIERSHIP CHANGI

If the Retail Account Holder associated with a Customer-Generator facility that has received payment under the Lump Sum Offer changes during the term of an agreement, the new Retail Account Holder will not be eligible for a contract until such time as the term of the existing Iump Sum Offer has expired.

If the Retail Account Holder associated with a Customer-Generator facility that has entered into an agreement under the Annual Payment Offer changes during the term of the agreement, the original Retail Account Holder will receive payment For all SRECs produced prior to the change and waives all rights to payment for SRECs produced after the change. Payments associated with SRECs produced subsequent to the change in the Retail Account Holder will be made to the new Retail Account Holder provided the new Retail Rccount Holder executes a new agreement for the balance of the five (5) year term.

## CONTRACT/OFFER

Company will only accept a request for a standard offer contract if the CustomerGenerator has submitted and Company has accepted a completed application for net metering service.

Company will provide a commitment to customer for either the Lump Sum Offer or the Annual Payment Offer provided that Company's cumulative total of the actual payment commitments and estimated payment commitments have not exceeded the amount (s) indicated uncier "AVAILABIIITY".

For a Customer-Generator that is not yet operational (new systems), Company's commitment will be presented to customer upon acceptance by Company of CustomerGenerator's design. For a Customer-Generator that is already operating under Company's Electric Power Purchases from Qualified Net Metering Units tariff herein, and has not previously received a Standard OEfer from Company, Company's commitment will be presented to customer within ninety (90) days of January 1 , 2013. Customers that previously received a Standard Offer from Company but did not accept the offer remain eligible to receive an offer, upon request and subject to availability, but will not be solicited again by Company.

Company's commitment will expire after twelve (12) months if any of the following conditions have not been met:

1. The Customer-Generator has not become operational or
2. the customer has not executed and returned the agreement or
3. Customer-Generator has not satisfied the metering requirements of the Annual Payment Offer.
*Indicates Reissue


## Exhibit 5

UNION ELECTRIC COMPANY
ELECTRIC SERVICE

| MO.P.S.C. SCHEDULE NO. | 6 | Ist Revised | SHEET NO. 89.4 |
| ---: | :--- | ---: | :--- |
|  | 6 | Original | SHEET NO. 89.4 |

APPLYING TO
MISSOURI SERVICE ARRA

RID.
SOLAR RTINHWABLE ENBRGY CREDIT PURCHASE (Cont'd.)

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CONTRACT/OFFER (Cont'd.)
* In the event Customer-Generator revises the nameplate capacity from that which
    Company's offer was based upon:
    1. If the change is not more than a lof increase or decrease in nameplate
        capacity, Company will present a revised SREC offer based on the revised
        nameplate capacity, or
        2. If the change is more than a lof increase or decrease in nameplave capacity,
        Company's offer will become void. Availability and Term of this tariffewill
        determine whether Company will present a revised offer.
Company will enter into an agreement and initiate the Lump Sum Offer or the
Annual Payment Offer only after the Customer-Generator has become operational.
Any agreement executed between Company and customer under prevzous versions of
this rider remain valid under the terms specified in that agreement.
In the event that Company ceases entering into new agreements as a result of
meeting the cumulative total payment commitment referenced above and subsequently
authorizes additional expenditures, Customer-Generators whose design was accepted
by Company but did not receive an offer will be given the opportunity to
participate under this xider in the order that their design was accepted by
Company.
Inquiries related to this tariff, net metering service and Rider SR - Solar
```

Rebate should be made to:

```
                        One Ameren Plaza
                        1901 Chouteau Avenue
            P.O. Bow 66149, MC 1450
                        St. Louis MO 63103
                Att: General Executive, Renewables
```

GINERAL RULES 5 REGULATIONS
In addition to the above specific rules and regulations, all of Company's General
Rules and Regulations shall apply to the supply of service under this rider.

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*Indicates Reissue
```



## AFFIDAVIT OF COMPLIANCE WITH 2014 COMPLIANCE PLAN

COMES NOW Christopher Iselin, affiant, being of legal age, and upon being first duly sworn on his oath, states:

1. I am Senior Vice President, Power Operations \& Energy Management for Ameren Missouri. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103.
2. As Senior Vice President, Power Operations \& Energy Management, I am responsible for ensuring Ameren Missouri's compliance with the Renewable Energy Standard (RES).
3. I certify that Ameren Missouri is in compliance with the RES compliance plan filed in April of 2014 for the calendar year 2014.
4. I hereby swear and affirm that the information contained in this Affidavit is true and correct.

## Further, affiant sayeth not.



Subscribed and sworn to before me this $15^{\text {th }}$ day of Opal , 2015.


Notary Public

My commission expires:

$$
2-21-18
$$

BECKET. EAVES
Notary Public i - Notary Seal State of Missouri Commissioned for St. Louis City
My Commission Expires: February 211,2018
Commission Number. 14938572


[^0]:    *Solar percentages are applied to the Total Renewable Requirement RES amounts

[^1]:    *Indicates Change

