Ameren Missouri

Renewable Energy Standard Compliance Report 2012

Prepared in Compliance with 4 CSR 240-20.100

April 15, 2013



Table of Contents

Page
NTRODUCTION4
ECTION (7) (A) 1 A: TOTAL RETAIL ELECTRIC SALES
ECTION (7) (A) 1 B: JURSIDICTIONAL REVENUE6
ECTION (7) (A) 1 C: RETAIL SALES SUPPLIED BY RENEWABLES6
ECTION (7) (A) 1 D: RECS CREATED BY UTILITY OWNED RESOURCES
ECTION (7) (A) 1 E: RECS ACQUIRED, SOLD & RETIRED
ECTION (7) (A) 1 F: REC SOURCES10
ECTION (7) (A) 1 G: RECS CARRIED FORWARD10
ECTION (7) (A) 1 H: GAINS OR LOSSES FROM PURCHASE OR SALES10
ECTION (7) (A) 1 I: RECS FROM NON-OWNED UTILITY RESOURCES11
ECTION (7) (A) 1 J: CUSTOMER SOLAR REBATES11
ECTION (7) (A) 1 K: CUSTOMERS DENIED REBATES11
ECTION (7) (A) 1 L: SOLAR REBATES AND S-REC CONTRACTS12
ECTION (7) (A) 1 M: UTILITY COMPLIANCE WITH RES PLAN12

Exhibit 1: RECs Carried Forward in NAR Account

Exhibit 2: Non-Utility Owned Resource Affidavit

Exhibit 3: REC Meter Reads/Payments

Exhibit 4: Solar Rebate Tariff

Exhibit 5: S-REC Purchase Customer Tariff

Exhibit 6: Utility RES Compliance Plan Affidavit

Introduction

The Missouri Renewable Energy Standard (MoRES or 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 procure 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) (A) 1 requires that the IOUs file a report on the status of the electric utility's compliance with the renewable energy standard for the most recently completed calendar year.

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). There is a separate component, the "solar" RES that requires compliance which can only be met with solar RECs or actual energy that includes the REC from solar generation resources.

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

	RES	
Time Period	Requirement	Solar*
2011-2013	2%	2%
2014-2017	5%	2%
2018-2020	10%	2%
2021-forward	15%	2%

^{*(}Solar percentages are part of the total RES requirement and are applied to the total RES percentages)

As referenced above, the MoDNR is responsible for determining all eligible renewable resources that can be utilized by the IOUs in meeting the requirements of the RES. MoDNR 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 and certified by the MoDNR.

In addition, the RES rules allow for the banking of RECs for up to a three year time period. This has allowed the use of eligible RECs generated from January 1, 2009 to the current time period in meeting the RES requirements for calendar year 2012.

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

The following information in this report will demonstrate the specific means in which Ameren Missouri met its obligations under both the non-solar and solar RES for 2012.

RES Compliance Section (7) (A) 1 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, 2012, Ameren Missouri's total retail electric sales were 36,745,907 MWhs.

Section (7) (A) 1 B

Total Jurisdictional Revenue

Total sales to ultimate consumers as reported on the FERC Form 1 for the CY 2012 and associated with the above referenced MWhs were \$2,836,180,604.

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 2012 was 754,125 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 2012 was ** HC

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

6

generational output of this facility during CY 2012 was 104 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 130 MWhs towards the compliance requirements.

On June 16, 2012, Ameren Missouri's newest generating station, 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 2012 was 37,450 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 46,813 MWhs towards the compliance requirements.

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 2012 was 754,125 MWhs.

The value of the energy generated by Keokuk for CY 2012 was \$16,474,966 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 2012 was 104 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 130 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 ** HC which represents the cost of the S-RECs procured from both 3rd 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 newest generating station, 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 2012 was 37,450 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 46,813 MWhs towards the compliance requirements.

The value of the 2012 generation is estimated to be ** HC based the contracted purchase price of the methane gas and the Heat Rate of the generators.

Section (7) (A) 1 E

RECs Acquired and Retired

During CY 2012, Ameren Missouri purchased energy including the associated RECs from the Pioneer Prairie Wind Farm. A total of 319,489 RECs were acquired in CY 2012 under the terms of the 15 year power purchase agreement.

A total of 37,450 RECs were generated from the Maryland Heights Renewable Energy Center in CY 2012. 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 total RECs generated toward compliance requirements is then 37,450 x 1.25 or 46,813.

In CY 2012, Ameren Missouri purchased S-RECs generated by Ameren Missouri customers thru the Standard Offer Contract that was established in 2011. Customers who install solar generation sized less than 100 kW are eligible to sell their S-RECs to Ameren Missouri for \$50 per REC.

There are 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, a five year contract is used but an additional meter is required and customers are paid based on actual production.

Funding for the program was limited to \$2.0 million and was fully subscribed such that over the 10 year period, Ameren Missouri should receive approximately 40,000 S-RECs from its customers.

During CY 2012, Ameren Missouri acquired 2,851 solar RECs from its customers under terms of the Standard Offer Contract. Of this amount, 717 RECs came from systems less than 10 kW in size and 2,134 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.

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 632,197 Keokuk RECs and 88,023 Pioneer Prairie RECs to meet the non-solar requirements while retiring a total of 14,698 S-RECs that were acquired from various third party brokers in 2011 and 2012 to meet the solar requirements for CY 2012.

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:

<
*
*

^{*}An additional 5,000 S-RECs were contracted for in CY 2012 but are 2013 vintage and will not be delivered until early 2014.

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 2012 requirements or has been banked in Ameren Missouri's NAR account and will be used for future compliance requirements.

^{**} These values do not include the in-state factor of 1.25 for those RECs affiliated with in state production.

Section (7) (A) 1 I

RECs from Non-Utility Owned Resources

Non-solar

Facility Owner: EDP Renewables

Facility Name: Pioneer Prairie Wind Farm I

Resource Type: 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 2012, Ameren Missouri processed and paid 403 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 was one customer rebate denial because the electric accounts were not in the applicant's name.

Section (7) (A) 1 L

Funds Expended for Solar Rebates

During CY 2012, Ameren Missouri paid out \$9,056,840 associated with solar rebates.

See Exhibit 4 for Solar Rebate Tariff details

S-REC Contract Terms and Conditions

Ameren Missouri made available a Standard Offer Contract 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.

There were two basic contract offers:

(1) Systems less than 10 kW and (2) systems 10kW up to 100 kW

All RECs were purchased at the rate of \$50 per MWh.

For systems less than 10 kW, no additional metering was required; however existing meters were replaced with bi-directional meters. Ameren Missouri utilized calculations from PV Watts to determine the amount of generation expected to occur in the Ameren Missouri service territory based on the DC wattage of the installation. Ameren Missouri would then make an up-front payment of \$50 per REC based on the full estimated output of the system for a 10 year period.

For systems 10 kW or larger, a second meter was required. All generation is metered and customers are paid \$50 per S-REC based on the actual generation from their system. These payments are made by March 31 of the following year. Contracts are for a term of 5 years.

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	NARID	Asset	Fuel/Project Type	Certificate Vintage	Certificate Serial Numbers	Quantity
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Jan-10	NAR-REC-160-IA-01-2010-1121-1 to 88773	88,773
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Feb-10	NAR-REC-160-IA-02-2010-1122-1 to 83114	83,114
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Mar-10	NAR-REC-160-IA-03-2010-1123-1 to 66155	66,155
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Apr-10	NAR-REC-160-IA-04-2010-1124-1 to 72349	72,349
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	May-10	NAR-REC-160-IA-05-2010-1125-1 to 81703	81,703
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Jun-10	NAR-REC-160-IA-06-2010-1126-1 to 70991	70,991
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Jul-10	NAR-REC-160-IA-07-2010-1127-1 to 60407	60,407
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Aug-10	NAR-REC-160-IA-08-2010-1128-1 to 66032	66,032
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Sep-10	NAR-REC-160-IA-09-2010-1129-1 to 87254	87,254
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Oct-10	NAR-REC-160-IA-10-2010-1130-1 to 77912	77,912
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Nov-10	NAR-REC-160-IA-11-2010-1131-1 to 89428	89,428
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Dec-10	NAR-REC-160-IA-12-2010-1225-1 to 86128	86,128
Total							930,246
							,
Keokuk	273	GEN160	Keokuk - Keokuk	Hydroelectric Water	Jan-11	NAR-REC-160-IA-01-2011-1396-1 to 93450	93,450
Keokuk	273	GEN160		Hydroelectric Water	Feb-11	NAR-REC-160-IA-02-2011-1403-1 to 71752	71,752
Keokuk	273	GEN160		Hydroelectric Water	Mar-11	NAR-REC-160-IA-03-2011-1449-1 to 87479	87,479
Keokuk	273	GEN160		Hydroelectric Water	Apr-11	NAR-REC-160-IA-04-2011-1456-1 to 55409	55,409
Keokuk	273	GEN160		Hydroelectric Water	May-11	NAR-REC-160-IA-05-2011-1463-1 to 67493	67,493
Keokuk	273	GEN160		Hydroelectric Water	Jun-11	NAR-REC-160-IA-06-2011-1748-1 to 66618	66,618
Keokuk	273	GEN160		Hydroelectric Water	Jul-11	NAR-REC-160-IA-07-2011-1843-1 to 84874	84,874
Keokuk	273	GEN160		Hydroelectric Water	Aug-11	NAR-REC-160-IA-08-2011-2393-1 to 93905	93,905
Keokuk	273	GEN160		Hydroelectric Water	Sep-11	NAR-REC-160-IA-09-2011-2431-1 to 72804	72,804
Keokuk	273	GEN160		Hydroelectric Water	Oct-11	NAR-REC-160-IA-10-2011-2498-1 to 64345	64,345
Keokuk	273	GEN160		Hydroelectric Water	Nov-11	NAR-REC-160-IA-11-2011-3207-1 to 73783	73,783
Keokuk	273	GEN160		Hydroelectric Water	Dec-11	NAR-REC-160-IA-12-2011-3427-1 to 78536	78,536
Total	270	02.11200	neonan neonan	nyarocicomo mater	200 11	10 10 10 10 10 10 10 10 10 10 10 10 10 1	910,448
Total							310,440
Keokuk	273	GEN160	Kenkuk - Kenkuk	Hydroelectric Water	Jan-12	NAR-REC-160-IA-01-2012-3496-1 to 62742	62,742
Keokuk	273	GEN160		Hydroelectric Water	Feb-12	NAR-REC-160-IA-02-2012-3550-1 to 69591	69,591
Keokuk	273	GEN160		Hydroelectric Water	Mar-12	NAR-REC-160-IA-03-2012-3596-1 to 81498	81,498
Keokuk	273	GEN160		Hydroelectric Water	Apr-12	NAR-REC-160-IA-04-2012-3649-1 to 86250	86,250
Keokuk	273	GEN160		Hydroelectric Water	May-12	NAR-REC-160-IA-05-2012-3729-1 to 84289	84,289
Keokuk	273	GEN160		Hydroelectric Water	Jun-12	NAR-REC-160-IA-06-2012-4210-1 to 83775	83,775
Keokuk	273	GEN160		Hydroelectric Water	Jul-12	NAR-REC-160-IA-07-2012-4298-1 to 79610	79,610
Keokuk	273	GEN160		Hydroelectric Water	Aug-12	NAR-REC-160-IA-08-2012-4977-1 to 47897	47,897
Keokuk	273	GEN160		Hydroelectric Water	Sep-12	NAR-REC-160-IA-09-2012-5010-1 to 32306	32,306
Keokuk	273	GEN160		Hydroelectric Water	Oct-12	NAR-REC-160-IA-10-2012-5051-1 to 34636	34,636
Keokuk	273	GEN160		Hydroelectric Water	Nov-12	NAR-REC-160-IA-11-2012-5154-1 to 44942	44,942
Keokuk	273	GEN160		Hydroelectric Water	Dec-12	NAR-REC-160-IA-12-2012-5484-1 to 46589	46,589
Total	2/3	SLIVIOU	REGRUK REGRUK	Tryatociccine Water	DCC 12	10 11 11 12 2012 3404 1 to 40303	
IUlai							754,125
Grand Total							2,594,819

Exhibit 1 Maryland Heights Renewable Energy Center REC's

Sub-Account	Sub-Account ID	NAR ID	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
Total							37,450

14

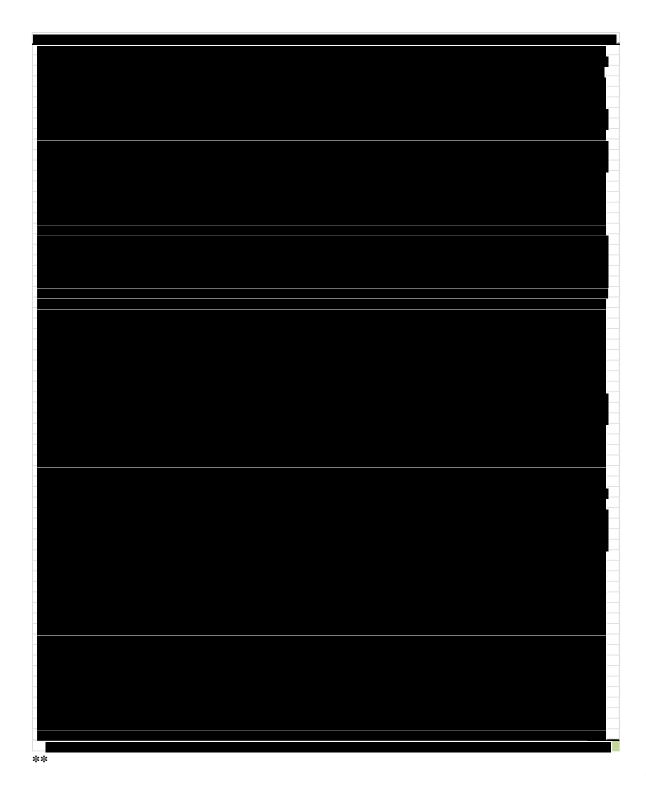
HIGHLY CONFIDENTIAL

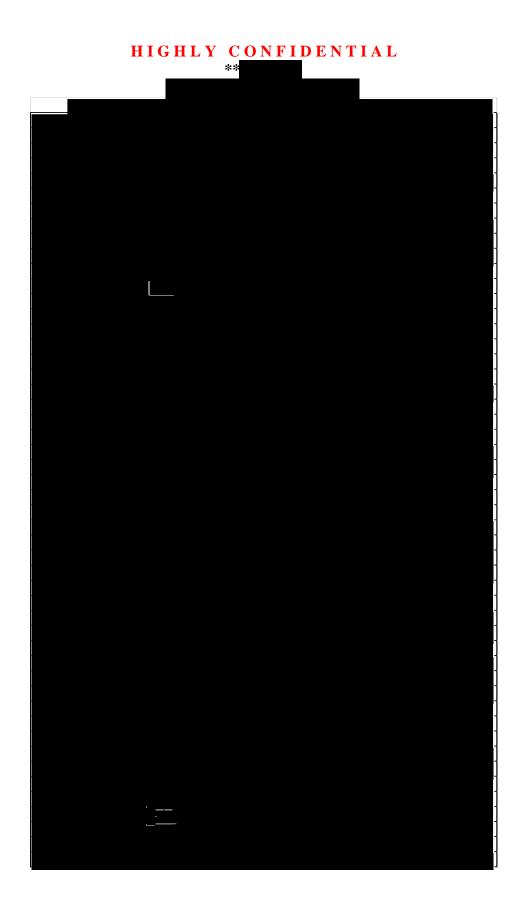


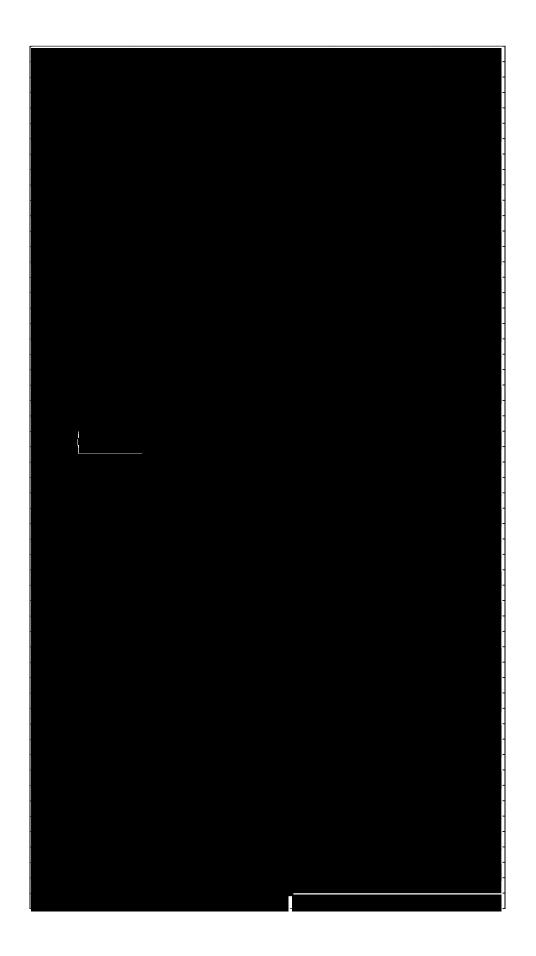


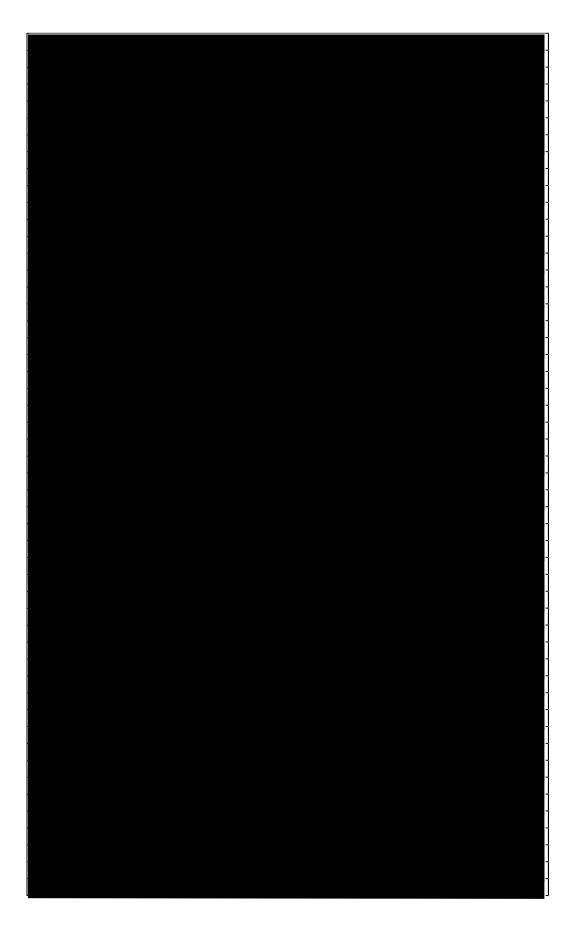
HIGHLY CONFIDENTIAL

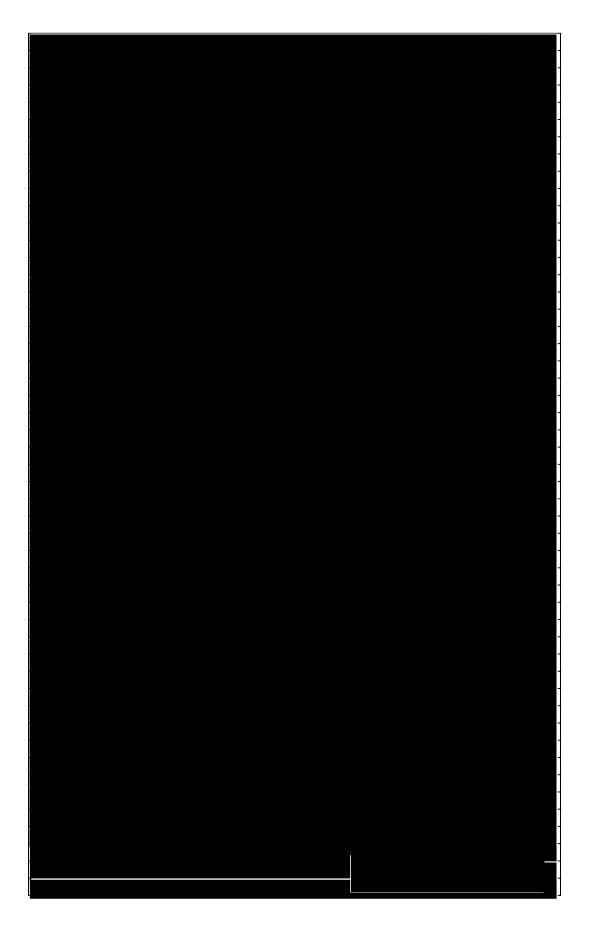












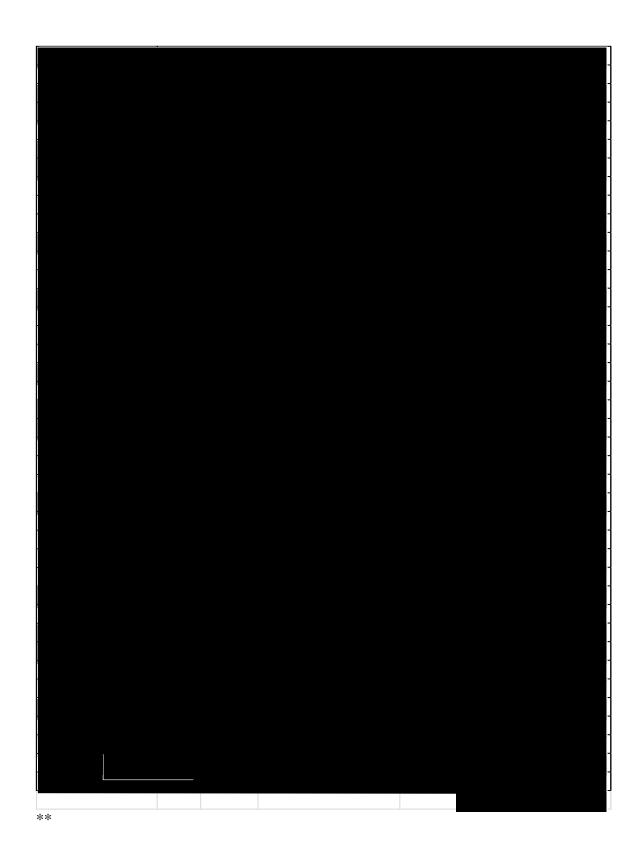
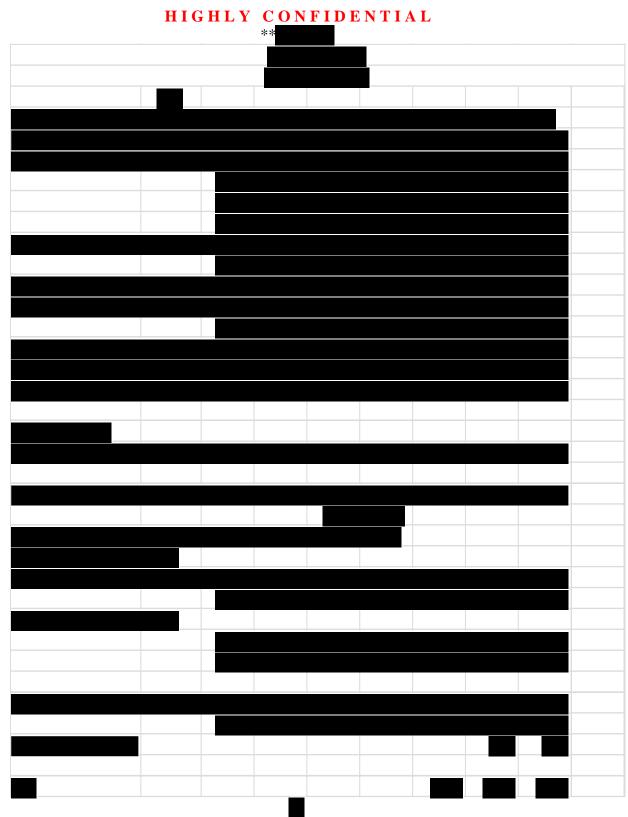
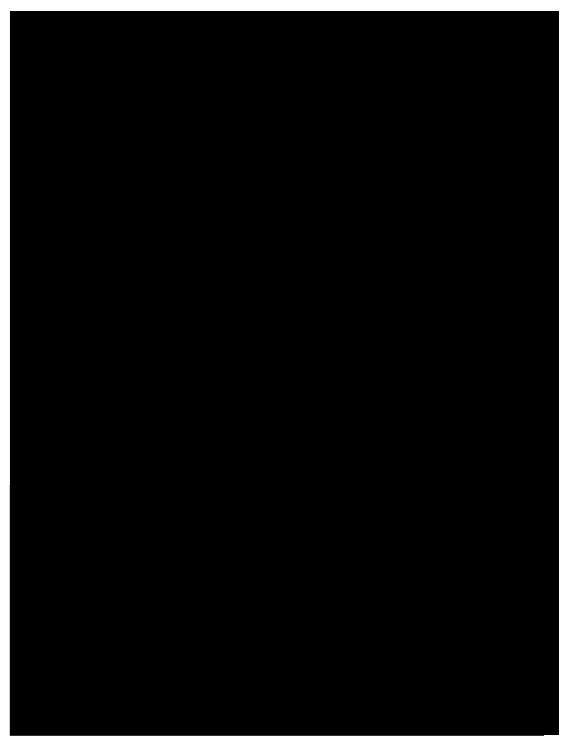


		Exhibit 1						
	Ar	meren Missoເ	ıri					
Headquarters Solar Generation Facility								
		100 kW						
	Gei	Generation CY 2012						
Meter Reading								
(mWhs)		N	leter Numbe	r	Total			
Month		<u>2812523</u>	<u>2832563</u>	<u>10263066</u>	<u>mWhs</u>			
Jan		4.920548	0.327895	0.168936	5.417			
Feb		5.870963	0.32963	0.191004	6.392			
Mar		8.443029	0.412489	0.243279	9.099			
Apr		9.258455	0.42268	0.253431	9.935			
May		11.786688	0.512971	0.333092	12.633			
Jun		11.933705	0.495111	0.320955	12.750			
Jul		10.865451	0.468958	0.246559	11.581			
Aug		9.937479	0.464606	0.230549	10.633			
Sep		7.858544	0.399289	0.193412	8.451			
Oct		7.052436	0.401664	0.195573	7.650			
Nov		5.14012	0.346116	0.162687	5.649			
Dec		3.01411	0.232409	0.086326	3.333			
Total		96.081528	4.813818	2.625803	103.521			
These 1	LO4 S-RECs are	entitled to th	e 1.25 in-sta	te factor.				







NP **

HIGHLY CONFIDENTIAL

UNION ELECTRIC COMPANY ELECTRIC SERVICE MO.P.S.C. SCHEDULE NO. 5 1st Revised SHEET NO. 122.14

CANCELLING MO.P.S.C. SCHEDULE NO. 5 Original SHEET NO. 122.14

APPLYING TO M

MISSOURI SERVICE AREA

Rider SR - Solar Rebate

Purpose

The purpose of the Solar Rebate Rider is to implement the solar rebate established through §393.1030 RSMo and to establish the terms, conditions and procedures which Company will rely on in accepting rebate applications and authorizing rebate checks to eligible participants.

* Availability

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

- The retail customer must be an active account on the Company's utility system and in good payment standing.
- The solar electric system must be permanently installed on the retail customer's premise.
- The retail customer must declare the installed solar electric 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.
- The solar modules and inverters shall be new equipment and include a manufacturers warranty of ten (10) years.
- The maximum rebate for each retail electric account is \$50,000 irrespective of the number of meters/service points associated with the account
- The solar electric system or expansion of an existing solar electric system must not become operational until after December 31, 2009.
- The solar electric system shall meet all requirements of 4 CSR 240-20.065 and Company's "Electric Power Purchases from Qualified Net Metering Units" tariff.

Rebate Application

Company will not accept rebate applications which are incomplete or which are not accompanied by or preceded by an "Interconnection Application/Agreement for Net Metering Systems with a capacity of 100 kW or less". Both the Rebate Application and the Net Metering Application/Agreement can be obtained from Company's web site www.ameren.com.

Customer will be notified in writing, by letter or email, that the rebate application 1) has been accepted or 2) notified of the deficiency resulting in the rebate application not being accepted. Applications accepted by Company will expire after twelve (12) months if the customer has not satisfied the terms of Company's "Electric Power Purchases from Qualified Net Metering Units" tariff or if the solar electric system has not become operational.

* Indicates Change.

DATE OF ISSUE	October 31,	2011 DATE EFFECTIVE	November 30, 2011
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

Ex	khibit 4		
UNION ELECTRIC COMPANY	ELECTRIC S	SERVICE	
MO.P.S.C. SCHEDULE N	IO. <u>5</u>	1st Revised	SHEET NO. 122.1
CANCELLING MO.P.S.C. SCHEDULE N	NO. 5	Original	SHEET NO. 122.1
APPLYING TO N	ISSOURI SER	VICE AREA	
Rider	SR - Solar	Rebate (Cont'd.)	
* Rebate Payment			
The amount of the rebate w			_
of the solar module(s) in a sheet(s). A rebate payment Application/Agreement for a Less has been executed by Solar Electric Rebate Appl solar electric system is o	t will not be Net Meterine the custome: ication has	be issued until: 1) an g Systems with Capacity r and Company, 2) a com	Interconnection y of 100 kW or mplete Missouri
Suspension of Rebate Payme	nt		
In certain circumstances, rebates that can be issued provision of §393.1030 RSM from the statute. In the particular year, Company waccepted but suspended Reb chronological order based operational.	in a given o which lim event that l ill notify a ate Applica	year in order to compl its the retail rate imp Rebate Payments are sus each affected rebate ap tions will be processed	ly with the pact resulting spended in a pplicant. The d in
Solar Renewable Energy Cre	dits (SREC'	s)	
Customer retains ownership solar electric system.		_	ration of the
* Indicates Reissue.			

DATE OF ISSUE	October 31, 2011	DATE EFFECTIVE_	November 30, 2011
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

<u>5</u>	MO.P.S.C. SCHED	ULE NO.	5		1st R	evised	SHEET NO.	122.16
	CANCELLING MO.P.S.C. SCHED	ULE NO.	5		Ori	ginal	SHEET NO.	122.16
APPLYING TO		MISSO	URI	SERVICE	ARMA			

RIDER SP - SREC Purchase

Purpose

The purpose of this tariff 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 Schedule 1 - Electric Power Furchases from Qualified Net Metering Units.

* <u>Availability</u>
This tariff is available to any retail electric customer operating a solar electric system in compliance with Company's approved net metering tariff.

Availability of service under this rider shall be limited by the cumulative total of the actual payment commitments and estimated payment commitments entered into by Company during 2012, of up to \$2,000,000 with at least \$700,000 (35%) being reserved specifically for commitments under the Lump Sum Offer as described below.

This tariff shall be effective through December 31, 2012, and will terminate thereafter unless modified or extended. In the event that this tariff expires, all commitments made by Company prior to the expiration will be honored for their full term.

- 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 Public Service Commission or as validated through the Missouri Public Service Commission's approved REC tracking system or a generator's attestation and further defined in 4 CSR 240-20.100 Electric Utility Renewable Energy Standard Requirements.
- 2. SREC Solar Renewable Energy Credit A REC produced by a solar electric resource.
- 3. SREC Price \$50.00 per SREC.
- 4. Retail Account Holder The customer of record taking service from Company under any of Company's retail electric tariffs.
- 5. Customer-Generator the owner, lessee, or operator of an electric energy generation unit that meets all of the following criteria:
 - Is powered by a renewable energy resource.
 - · Is located on premises that are owned, operated, leased or otherwise controlled by the party as Retail Account Holder and which corresponds to the service address for the retail account.
 - Has received approval from Company to interconnect with and operate in parallel phase and synchronisation with Company's electric distribution system.
 - Meets all applicable safety, 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(1)(C)7.
- * Indicates Change.

DATE OF ISSUE	October 31, 201	.1 DATE EFFECTIVE	January 1, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

	MO.P.S.C. SCHEDULE NO.	5	 1st Revised	SHEET NO.	122.17
2	CANCELLING MO.P.S.C. SCHEDULE NO.	5	 Original	SHEET NO.	122.17

APPLYING TO

MISSOURI SERVICE AREA

RIDER SP - SREC Purchase (Cont.)

- PVWatts A program available from the U.S. Department of Energy that estimates the 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 with Customer-Generator under Company's Electric Power Purchases from Qualified Net Metering 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 System Capacity.

* Standard Offers

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 DC nameplate capacity of the Customer-Generator's system. Only SRECs produced after the effective date of this tariff 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 $\ensuremath{\text{kW}}\xspace$:

- 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.
- The numbers of SRECs produced annually will be determined using PVWatts software with the result rounded to the tenths digit.
- Company will make a single payment up-front for all SRECs purchased over the term of the agreement according to the following formula: Up-Front Payment = Annual SRECs produced x 10 years x SREC Price.
- * Annual Payment Offer applies to systems whose installed DC nameplate capacity is 10 kW or larger but not greater than 100 kW:
 - Company will offer to purchase 100% of the SRECs produced during the first 60 calendar months (5 years) following the execution of the agreement or the operational date of the Customer-Generator whichever occurs later.
 - Customer-Generator must make provisions for Company to meter all energy produced by the system. The numbers of SRECs produced annually will be determined by those meter readings with total SRECs available for purchase being kWh energy divided by 1,000 with the result rounded to the tenths digit.
- * Indicates Change.

DATE OF ISSUE	October 31,	2011 DATE EFFECTIVE	January 1, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	MAME OF OFFICER	TITLE	ADDRESS

UNION ELECTRIC COMPANY ELECTRIC SERVICE MO.P.S.C. SCHEDULE NO. 5 1st Revised SHEETNO. 122.18 Original SHEETNO. 122.18 CANCELLING MO.P.S.C. SCHEDULE NO. 5 APPLYING TO MISSOURI SERVICE AREA RIDER SP - SREC Purchase (Cont.) · Company will make payments annually no later than March 31 based upon actual SRECs produced as measured by meter readings from the 12 billing periods ending approximately December 31 of the immediately preceding year. This will result in six (6) payments over the five (5) 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 x SREC Price. Incremental System Capacity When a customer adds Incremental System Capacity, Company will make an offer to purchase the SRECs associated with only the Incremental System Capacity. If the total capacity of the system remains eligible for the Lump Sum Offer, then Company will provide a Lump Sum Offer for the Incremental System Capacity. If the Incremental System Capacity results in a total capacity that exceeds the capacity limit of the Lump 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 SRECs already purchased under the Lump Sum Offer during the same period. Ownership Change 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 Lump 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 Account Holder executes a new agreement for the balance of the five (5) year term. * Indicates Change.

DATE OF ISSUE	October 31,	2011 DATE EFFECTIVE	January 1, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

UNION ELECTRIC COMPANY ELECTRIC SERVICE

_	MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	122.19
5	CANCELLING MO.P.S.C. SCHEDULE NO.	5	Original	SHEET NO.	122.19

APPLYING TO MISSOURI SERVICE AREA

RIDER SP - SREC Purchase (Cont.)

Contract/Offer

Company will only accept a request for a standard offer contract if the Customer-Generator 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 under "Availability".

* For a Customer-Generator that is not yet operational (new systems), Company's commitment will be presented to customer upon acceptance by Company of Customer-Generator's design. For a Customer-Generator that is already operating under Company's Schedule 1 - Electric Power Purchases from Qualified Net Metering Units, and has not previously received a Standard Offer from Company, Company's commitment will be presented to customer within ninety (90) days of the effective date of this tariff. 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 six (6) 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.

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.

* 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 tariff 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. Box 66149, MC 611 St. Louis MO 63103 Att: General Executive, Renewables

General Rules & 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.

* Indicates Change.

DATE OF ISSUE	October 31,	2011 DATE EFFECTIVE	January 1, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS