

EVERGY MISSOURI METRO
2022 ANNUAL RENEWABLE ENERGY
STANDARD COMPLIANCE PLAN

April 2022



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SECTION 1: INTRODUCTION

Evergny Metro - Missouri (“EMM” or “Company”), a Missouri Corporation, has filed its 2022 Annual Renewable Energy Standard Compliance Plan (“2022 Plan”) in compliance with the Missouri Public Service Commission’s (“Commission”) Electric Utility Renewable Energy Standard Requirements [4 CSR 240-20.100] that became effective September 30, 2010 and as amended by Missouri House Bill 142 becoming law on August 28, 2013. Section (8) of the rule requires that each public utility file with the Commission a Renewable Energy Standard (RES) Compliance Plan by April 15 of each year.

Specifically, Section 8 (B) of the rule requires that the plan cover the current year and the immediately following two (2) calendar years. The RES compliance plan shall include, at a minimum:

- A. A specific description of the electric utility’s planned actions to comply with the RES;

- B. A list of executed contracts to purchase RECs (Renewable Energy Credits) (whether or not bundled with energy), including type of renewable energy resource, expected amount of energy to be delivered, and contract duration and terms;

- C. The projected total retail electric sales for each year;

- D. Any differences, as a result of RES compliance, from the utility’s preferred resource plan as described in the most recent electric utility resource plan filed with the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning;

E. A detailed analysis providing information necessary to verify that the RES compliance plan is the least cost, prudent methodology to achieve compliance with RES requirements

F. A calculation of the RES retail impact limit calculated in accordance with section (5) of this rule. The calculation should be accompanied by workpapers including all the relevant inputs used to calculate the retail impact limits for the planning interval which is included in the RES compliance plan. The electric utility may designate all or part of those calculations as highly confidential, proprietary, or public as appropriate under the commission's rules; and

G. Verification that the utility has met the requirements for not causing undue adverse air, water, or land use impacts pursuant to subsection 393.1030.4. RSMo, and the regulations of the Department of Natural Resources.

The 2022 Plan represents EMM's planned renewable compliance efforts that are currently underway and that will continue through 2022-2024 to achieve the requirements of 4 CSR 240-20.100.

SECTION 2: RES COMPLIANCE PLAN

Rule (8) (B) 1: The plan shall cover the current year and the immediately following two (2) calendar years. The RES compliance plan shall include, at a minimum -

2.1 RULE (8) (B) 1 A:

A specific description of the electric utility's planned actions to comply with the RES;

2.1.1 NON-SOLAR COMPLIANCE

Table 1 below provides information regarding EMM's wind resources used to meet RES requirements.

Table 1: Evergy Metro Missouri Wind Resources Information

Project Name	Contracting Parent Company	Location	Project Size (MW)	Metro-MO Share (MW)	COD Date	Term (Years)	Estimated Annual Energy (MWh)
Cimarron II	Duke / Sumitomo	Gray County, KS	131.1	131.1	6/1/2012	20	532,849
Spearville 3	EDF Renewable Energy	Ford County, KS	100.8	100.8	10/1/2012	20	338,511
Slate Creek	EDF Renewable Energy	Slate County, KS	150	150	12/30/2015	20	536,041
Waverly	EDP Renewables	Coffey County, KS	200	200	1/4/2016	20	792,811
Osborn	NextEra	DeKalb County, MO	200	120	12/15/2016	20	438,200
Rock Creek	Enel Green Power, NA	Atchison County, MO	300	180	11/8/2017	20	722,105
Pratt	NextEra	Pratt County, KS	244	110	12/13/2018	30	419,816
Prairie Queen	EDP Renewables	Allen County, KS	200	90	8/10/2019	20	255,005
Total			1525	1081			

EMM has banked RECs available to meet its RES requirements based on RECs unexpired at the end of 2020, in addition to the RECs created from wind facilities' actual generation in 2021. Accordingly, the RECs generated from these renewable resources in addition to the banked RECs will fulfill EMM's Missouri RES non-solar requirements for the 2022 - 2024 RES Compliance Plan period shown in Table 3 below.

2.1.2 SOLAR COMPLIANCE

EMM anticipates that the acquisition of Solar Renewable Energy Credits (SRECs), principally from EMM retail customers that have received rebates for solar facility installations, will be sufficient for compliance with the Missouri solar energy requirements for the 2022 - 2024 RES Compliance Plan period. The SRECs will be transferred to EMM from qualified customer-generator's operational solar electric systems as a condition of receiving the solar rebate, a change instituted with Missouri House Bill 142 becoming law on August 28, 2013. SRECs produced from these solar electric systems will be transferred to EMM for a period of 10 years.

In addition, as part of the SmartGrid project, EMM constructed solar installations shown in Table 2 below.

Table 2: Evergy Metro Missouri SmartGrid Solar Installations

Installation	Completion Date	Size (kW)
Paseo High School	Apr-12	99.18
Innovation Park – Evergy Midtown	Oct-12	5.0
Midwest Research Institute	May-13	10.56
Blue Hills Solar	May-13	10.08
UMKC Flarsheim Hall	Jul-13	4.32
UMKC Student Union	Jul-13	5.28
Evergy Crosstown Substation	Apr-14	29.33
Total		163.8

These solar installations were part of the plan to install approximately 180 kW of utility owned and operated solar in and around the SmartGrid demonstration project

area. The generation from these facilities will be distributed to EMM's service territory and is expected to provide qualified SRECs. The final installation of SmartGrid solar was completed in the second quarter of 2014. Due to lien and legal restrictions, no solar facilities were installed on residential properties.

Also, in 2016 EMM acquired a building (Evergy Connect) at 1710 Paseo in Kansas City, Missouri that contains a 25-kW solar facility. The facility qualifies for RES compliance. The facility began providing energy to the grid in June 2016.

2.1.3 STANDARD OFFER CONTRACT

EMM does not have a Standard Offer Contract tariff in place at this time.

2.2 RULE (8) (B) 1 B:

A list of executed contracts to purchase RECs (whether or not bundled with energy), including type of renewable energy resource, expected amount of energy to be delivered, and contract duration and terms;

Table 1 above provides the details of EMM's wind PPAs, estimated energy output, and contract duration.

To comply with the Missouri 2022 - 2024 solar RES requirements, EMM expects to utilize SRECs transferred from qualified customer-generator's operational solar electric systems as a condition of receiving the solar rebate. Those SRECs will be registered through the North American Renewables Registry.

2.3 RULE (8) (B) 1 C:

The projected total retail electric sales for each year;

EMM's projected Missouri retail electric sales and associated RES requirements are provided in Table 3 below.

Table 3: Evergy Metro Missouri Projected Missouri Retail Sales and RES Requirements

Year	Projected Retail Electric Sales (MWh)	Estimated Non-Solar Requirement (MWh)	Estimated Solar Requirement (MWh)
2022	8,377,087	1,231,432	25,131
2023	8,339,325	1,225,881	25,018
2024	8,311,638	1,221,811	24,935

2.4 RULE (8) (B) 1 D:

Any differences, as a result of RES compliance, from the utility’s preferred resource plan as described in the most recent electric utility resource plan filed with the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning;

With respect to renewable generation, the 2021 Evergy Metro Missouri Triennial IRP filed on April 30, 2021 under Case EO-2021-0035 did not assume that the Preferred Plan included renewable additions to meet RES compliance.

2.5 RULE (8) (B) 1 E:

A detailed analysis providing information necessary to verify that the RES compliance plan is the least cost, prudent methodology to achieve compliance with the RES;

The existing Spearville 1 wind generating facility being utilized for non-solar compliance was installed prior to passage of the RES rules and was justified and constructed as part of EMM’s Comprehensive Energy Plan. The 48 MW Spearville 2 facility was constructed in 2010. Accordingly, the wind energy provided by this facility represents the least cost approach for achieving non-solar compliance for the 2022 - 2024 RES Compliance.

In August 2011, a wind generation RFP was issued to cover Evergy Metro Missouri and Evergy Missouri West non-solar requirements. An evaluation of the proposals

received was conducted and resulted in execution of two separate 20-year PPAs. The first PPA was with Duke Energy Renewables and Sumitomo Corp for the Cimarron II wind facility, and the second with EDF Renewable Energy for the 100.8 MW Spearville 3 wind facility.

EMM executed 20-year PPAs for wind facilities currently in-service as follows: with EDP Renewables for Waverly and Prairie Queen; with EDF Renewable Energy for Slate Creek; with NextEra Energy Resources for Osborn and Pratt; and with Enel Green Power for Rock Creek.

Note that these wind contracts were entered because of favorable economics to take advantage of low-cost energy prices and not directly attributable to RES compliance. These PPAs will also be used to meet future EMM non-solar RES requirements.

2.5.1 THIRD PARTY SOLAR SREC PROCUREMENT

EMM does not expect to require procurement of third party SRECs for the foreseeable future, based on the inclusion of SRECs transferred from qualified customer-generator's operational solar electric systems as a condition of receiving solar rebates, along with future solar installations to be owned by EMM.

2.6 RULE (8) (B) 1 F:

A calculation of the RES retail impact limit calculated in accordance with section (5) of this rule. The calculation should be accompanied by workpapers including all the relevant inputs used to calculate the retail impact limits for the planning interval which is included in the RES compliance plan. The electric utility may designate all or part of those calculations as highly confidential, proprietary, or public as appropriate under the commission's rules;

See Attachment A for the RES retail impact calculation.

2.7 RULE (8) (B) 1 G:

Verification that the utility has met the requirements for not causing undue adverse air, water, or land use impacts pursuant to subsection 393.1030.4., RSMo, and the regulations of the division [Division of Energy, Department of Natural Resources].

The qualified customer-generator's solar electric systems from which SRECs will be acquired to achieve solar RES compliance will not be owned by EMM, as customers would be responsible for ensuring that these facilities have not caused any undue adverse air, water, or land use impacts.

Wind generation specifically conforms to the eligible renewable energy resources listed in section (2) of Missouri Department of Natural Resources – Division of Energy (MDNR-DOE) rule 4 CSR 340-8.010. EMM's owned wind facilities, Spearville 1 and 2, comply with all local, state, and federal environmental regulations. All other PPA-contracted wind facilities listed in Table 1 above are owned by other entities that are responsible for ensuring that they have not caused any undue adverse air, water, or land use impacts.

All generating facilities utilized by EMM to meet the requirements of the Missouri RES have, to its knowledge, received all necessary environmental and operational permits and are in compliance with any necessary federal, state and/or local requirements related to air, water and land use.

EMM will submit additional information as required by the MDNR-DOE in order to review the energy sources and environmental impact so long as there are appropriate provisions for confidential treatment of any sensitive information. EMM will grant or obtain access to facility sites and records for MDNR-DOE.