

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of a Working Case to Explore)
Emerging Issues in Utility Regulation.) File No. EW-2017-0245

UTILITIES' JOINT COMMENTS

These Comments, submitted jointly by Ameren Missouri (“Ameren”), Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West (“Evergy”), and The Empire District Electric Company (“Empire”) (collectively, the “Utilities”) address the attached changes suggested to the third draft rule circulated by the Staff on October 2, 2019. The Utilities appreciate Staff (“Staff”) for the Missouri Public Service Commission’s (“Commission”) efforts at incorporating feedback received in comments that were filed by stakeholders on July 16, 2018, in response to the second draft prepared by Staff. The rest of these Comments accompany the attached mark-up as **Attachment A**.

- Definition (B) –
 - In the second sentence, the words “providing electricity and” are added to clarify that thermal energy is only provided in conjunction with electricity being provided by a Distributed Energy Resource.
 - The term Distributed Generation is already defined in the IRP Rule CSR 4240-22.020. The definition of Distributed Generation used here should be consistent with the definition already prescribed in the IRP rules.
- Subsection (2)(A)1 – The new language “including areas of low, medium, and high penetration” is struck. It is unclear how one would determine what “low, medium, and high” is and even if it were clear there is no need for the utility to categorize

the penetration; users of the information will be able to readily see what distributed generation and storage is on the system, and where.

- Subsection (2)(C) –
 - New language for (2)(C) is struck as it is unclear how to accomplish this tracking nor is there any clear justification or purpose for imposing the administrative burden such tracking, however it might be done, would require.

- Subsection (3) –
 - Although not marked as such, the new language “conduct a comparative analysis of traditional distribution equipment and” is struck and replaced with the original language “consider, at a minimum, the potential for cost-effective” that was included in the second draft. The new language inserted in the new draft changes the meaning of the paragraph, whereas the new language would be a hybrid of a potential study for DER and comparative analysis of DER with traditional distribution equipment, or non-wires alternative analysis.
 - Typically, a potential study is viewed from the potential for customer adoption. The study would include both utility-incented DER adoption and “naturally occurring DER” (DER adoption that would naturally occur as a result of technology or pricing changes).
 - The comparative analysis would only be done during distribution planning to determine if T&D upgrade deferral opportunities with

DERs exists. This analysis is already addressed by the language in Section (4).

- In addition, the referenced 420 CSR 4240-22.010 contains optional provisions in evaluating other constraints. The newly added language in the first sentence of Subsection (3) would have turned this into a mandate.
- The language “to the utility’s triennial compliance filing case” is added at the end of Subsection (3) to clarify the referenced work performed will be completed when the triennial compliance filing is made by a utility.
- Subsection (4)(B)6 – The term “etc.” is struck as it is unnecessary, indefinite, and unclear. The rule should not leave the parties to guess as to what it means.
- Subsection (4)(C) – While not stricken in the Utilities’ mark-up, the Utilities have questions regarding why “customer-owned DERs” is added to the language. This basically implies all DER with that addition. Also regarding Subsection (4)(C) –
 - The language “using the total resources cost test, and any additional tests the utility deems relevant,” is added to be consistent with how this is handled in the MEEIA rules.
 - It would be helpful if there is a reference tying this requirement to a specific Volume in the IRP.

WHEREFORE, the Utilities appreciate the opportunity to provide these suggestions and look forward to discussing them further as the workshop process proceeds.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I do hereby certify that a true and correct copy of the foregoing document has been hand delivered, emailed or mailed, postage prepaid, this 1st day of November 2019, to all counsel of record.

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**Attorneys for Evergy Missouri Metro and
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Title 20
DEPARTMENT OF
COMMERCE AND
INSURANCE

Division 4240—Public Service
Commission Chapter 22—Electric
Utility Resource Planning

20 CSR 4240-22.055 Distributed Energy Resource Analysis

PURPOSE: This rule specifies the minimum standards for the scope and level of detail required for Distributed Energy Resource analysis and reporting. Planning for future Distributed Energy Resources is to be conducted as part of electric utility resource planning, but due to rapidly evolving technology, relative speed of deployment, and site specific characteristics, this regulation requires some targeted analysis that is different from other rules in Chapter 22.

(1) Definitions. For purposes of this rule:

(A) Congestion means a situation where the desired amount of electricity is unable to flow due to physical limitations;

(B) Distributed Energy Resource (DER) means a resource that can provide all or some of a customer's immediate electricity and power needs and can also be used to either reduce demand, modify the net consumption of electricity used by customers or supply electricity to satisfy the energy, capacity, or ancillary service needs of the distribution grid. The resources, if providing electricity or providing electricity and thermal energy, are connected to the distribution system and close to load. Examples of different types of DERs include, but are not limited to, distributed generation (DG), distributed energy storage, demand response, and energy efficiency;

(C) Distributed Generation ~~means any generation that employs small-scale or modular technologies to produce electricity close to the end-users of power and is interconnected to the electric utility's distribution systems defined in CSR 4240-22.020.~~ Examples of different types of DG include solar photovoltaic, wind, combined heat and power (CHP) and thermal energy.

(2) Distributed Generation and Distributed Energy Storage Database. Electric utilities shall create, and update annually, a database of information on distributed generation and distributed energy storage for purposes of evaluating current penetration and planning for future increases in the levels of distributed generation for distributed energy and distributed energy storage.

(A) Electric utilities will be responsible for maintaining the following information in the database:

1. Existing distributed generation and distributed energy storage presently connected to the utility's grid, ~~including areas of low, medium and high penetration;~~

2. Information characterizing the location (according to Geographic Information System coordinates) on the distribution circuits where distributed generation and distributed energy storage are connected;

3. Aggregated capacity of distributed generation and distributed energy storage for each circuit and annual peak load of each circuit;

4. Relevant interconnection standard and standby service requirements, as applicable, that specify distributed generation and distributed energy storage performance capabilities; and

5. Summaries of the utility's DER Adoption Potential Studies performed to comply with section (3) and the DER planning process evaluation under section (4).

(B) To the extent that the utility is not in possession of all of the information required herein, it shall state which information it does not possess, the reason the information is not possessed, and how the electric utility plans to obtain the information for future filings for planning purposes.

~~(C) The utility shall separately track the costs associated with creating, maintaining and updating this database, and make these costs available upon request.~~

(3) DER Adoption Potential. As part of each triennial compliance filing, the utility will ~~conduct a comparative analysis of traditional distribution equipment and~~ consider, at a minimum, the potential for cost-effective DER within its service territory to help fulfill the fundamental planning objective and associated constraints or limitations set out in 420 CSR 4240-22.010. This study must cover no less than a twenty (20)- year planning horizon, and will consider both utility-owned DER and non-utility-owned DER. With respect to all DERs except utility-incentivized DG, utility-incentivized CHP, utility-owned or managed energy storage, and utility-incentivized energy storage, the study requirement can be satisfied by relying upon assessments of market potential developed as part of the utility's load analysis and load forecasting pursuant to 4 CSR 240-22.030, the utility's supply-side resource analysis pursuant to 420 CSR 4240-22.040, the utility's transmission and distribution analysis pursuant to 420 CSR 4240-22.045; and/or the utility's demand-side resource analysis pursuant to 420 CSR 4240- 22.050, provided that references to such analyses are included in the study described herein. The assessment of potential shall evaluate options for utility incorporation of existing and potential DER into the utility's Chapter 22 electric utility resource planning. The utility will include methodologies used to develop the low, medium, and high DER penetration scenarios, including subjective probabilities, the DER adoption rates, geographic deployment assumptions, expected DER load profiles (for both individual and bundled installations), and any other relevant assumptions factored for the DER penetration scenario discussion. Information and analysis under this section shall be made available upon request to any party to the utility's triennial compliance filing case.

(4) Evaluating DERs as part of the Chapter 22 electric utility resource planning. As part of each triennial compliance filing, the utility will include evaluation of and planning for future levels of DERs, and how they will be integrated into the utility's distribution system.

(A) In order to facilitate DER, the evaluation will acknowledge and reference the obligation of utilities to provide cost-based interconnection and standby service to qualifying facilities, as defined in the Public Utility Regulatory Policy Act of 1978.

(B) DERs will be evaluated in 420 CSR 4240-22.045 transmission and distribution analysis. This analysis includes existing and potential utility-owned DERs and non-utility-owned DERs. The utility shall describe and document:

1. Reliability concerns including areas of congestion that could be improved by DERs;

2. Reliability concerns including areas of congestion that could be exacerbated by DERs;

3. Avoided or deferred transmission and distribution costs as defined in 420 CSR 4240-22.045(2) associated with, but not limited to decreased congestion, reduced transmission or distribution network losses resulting from the implementation of DERs;

4. Transmission and distribution costs associated with, but not limited to, additional transmission and distribution equipment upgrade costs attributed to increased congestion or increased transmission or distribution network losses resulting from the implementation of DERs;

5. Acceleration or modification of planned transmission and distribution improvements and associated costs and benefits due to increased penetration of DERs. This includes information on areas with existing or forecasted abnormal voltage or frequency issues that may benefit from the utilization of advanced inverter technology; and

6. The impact of investment in transmission and distribution system equipment on other utility programs, such as demand response, and efficiency programs, ~~etc.~~, in each of the low, medium, and high DER penetration scenarios.

(C) Evaluation of future deployment of cost-effective DER is to be based on utility-owned or managed DERs and customer-owned DERs. Cost-benefit analysis of deployment of DER as an alternative to traditional resources using the total resource cost, and any additional tests the utility deems relevant, will be included.

(D) The utility will evaluate the potential for integration of utility and customer-owned DERs to impact grid reliability, to beneficially modify customer energy consumption, and to delay or reduce the size of utility supply-side resources additions.

(E) The evaluation, including 420 CSR 4240-22.030 load analysis and load forecasting, must address no less than a twenty (20)-year planning horizon, on a year-by-year basis to assess annual and cumulative impacts of low, medium, and high DER deployment.

(F) The evaluation must address an estimate of the reduction or increase in transmission and distribution line losses. The utility may focus its analysis on particular portions

of its transmission and distribution systems based on factors including, but not limited to, the need for location-specific upgrades.

(5) The requirements of 420 CSR [4240-22.055](#) shall apply to an electric utility effective with the due date of its first Chapter 22 triennial compliance filing occurring at least one year after the effective date of 420 CSR 4240-22.055.