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

NOTICE OF FOURTH DRAFT RULE FOR COMMENT AND FISCAL IMPACT ESTIMATES

COMES NOW the Staff of the Missouri Public Service Commission, by and through counsel, and for its *Notice of Fourth Draft Rule for Comment and Fiscal Impact Estimates* in this matter hereby states:

1. The Commission opened this docket to gather information and facilitate discussions of emerging issues in utility regulation. One of the realizations arising from the docket was the need for Commission rule/regulation provisions regarding the distributed energy resources options available to electric utilities. Staff previously submitted red-lined drafts of the proposed modifications to the rules and has continued to gather comments from the docket's interested stakeholders.

2. Staff has compiled the most recent comments and suggestions of the interested stakeholders and now files in this docket a new draft rule reflecting proposed modifications based on those comments and suggestions.

3. At this time, Staff asks the stakeholders to please provide comments regarding the cost or fiscal impact of the proposed amendments and identify the specific amendment which it believes will cause that impact. Estimates of these costs, including as much detail as possible are appreciated.

4. Staff asks that all interested parties to this docket provide their comments on cost estimates no later than 30 days from the date of this filing, or February 14, 2020.

WHEREFORE, Staff prays the Commission will accept this *Notice of Fourth Draft Rule for Comment and Fiscal Impact Estimates*; direct interested parties to this docket to provide comments no later than February 14, 2020; and grant such other and further relief as the Commission considers just in the circumstances.

/s/ Whitney Payne
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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Postal Mail, postage prepaid, on this 15th day of January, 2020, to all counsel of record.

/s/Whitney Payne

Title 20—
DEPARTMENT OF
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 is defined in CSR 4240-22.020. ~~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 system.~~ 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~~ as further summarized by areas of high, medium, and low 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 20 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 20 CSR 4240-22.030, the utility's supply-side resource analysis pursuant to 20 CSR 4240-22.040, the utility's transmission and distribution analysis pursuant to 20 CSR 4240-22.045; and/or the utility's demand-side resource analysis pursuant to 20 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 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 into the DER penetration scenario discussion. Information and analysis under this section completed at the time of the utility's triennial compliance filing 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~~ utility's obligations as defined in the Public Utility Regulatory Policy Act of 1978 with regard to small power production and cogeneration.

(B) DERs will be evaluated in 20~~4~~ 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 204 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, energy efficiency programs, and any other relevant utility programs, etc., in each of the low, medium, and high DER penetration scenarios;

(C) Evaluation of future deployment of cost-effective DER, in accordance with 20 CSR 4240-22.045, is to be based on utility-owned or managed DERs and customer-owned DERs. Cost-benefit analysis of deployment of DER as an alternative instead of to traditional resources 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 20 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 20 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 20 CSR 4240-22.055.

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1. Existing distributed generation and distributed energy storage connected to the utility's grid as further summarized by areas of high, medium, and low penetration;
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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.

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