Title 4 – DEPARTMENT OF ECONOMIC DEVELOPMENT
Division 240 – Public Service Commission
Chapter 3 – Filing and Reporting Requirements

PROPOSED RULE

4 CSR 240-3.164 Electric Utility Demand-Side Programs Filing and Submission Requirements

PURPOSE: This rule sets forth the information that an electric utility must provide when it seeks approval, modification or discontinuance of demand-side programs.

(1) As used in this rule, the following terms mean:

(A) Avoided cost or utility avoided cost means the cost savings obtained by substituting demand-side programs for existing and new supply-side resources. Avoided costs include: avoided utility costs resulting from energy savings and demand savings associated with generation, transmission and distribution facilities and avoided probable environmental costs. The utility shall use its most recently adopted preferred resource plan to calculate its avoided costs.

(B) Baseline energy forecast means a reference end-use forecast of energy in the absence of any new demand-side programs but including the effects of naturally occurring energy efficiency and any codes and standards that were in place and known to be enacted at the time the forecast is completed.

(C) Baseline demand forecast means a reference end-use forecast of demand in the absence of any new demand-side programs but including the effects of naturally occurring energy efficiency and any codes and standards that were in place and known to be enacted at the time the forecast is completed.

(D) Demand means the rate of electric power use over an hour measured in kilowatts (kW).

(E) Demand-side portfolio or portfolio of programs means all of a utility's demand-side programs at a defined point in time.

(F) Demand-side program means any program conducted by the utility to modify the net consumption of electricity on the retail customer's side of the meter including, but not limited to, energy efficiency measures, load management, demand response, and interruptible or curtailable load.

(G) Demand-side program plan means a particular combination of demand-side programs to be delivered according to a specified implementation schedule and budget.

(H) Economic potential means energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast respectively resulting from customer adoption of all cost-effective measures, regardless of customer preferences.

(I) Electric utility or utility means any electric corporation as defined in section 386.020, RSMo.

(J) Energy means the total amount of electric power that is used over a specified interval of time measured in kilowatt-hours (kWh).

(K) Energy efficiency means measures that reduce the amount of electricity required to achieve a given end-use.

(L) Evaluation, measurement and verification or EM&V means the performance of studies and activities intended to evaluate the process of and to estimate the energy and demand savings and other effects from demand-side programs.

(M) Maximum achievable potential means energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast respectively resulting from expected program participation and ideal implementation conditions. Maximum achievable potential establishes a maximum target for demand-side savings that a utility can expect to achieve through its demand-side programs and involves incentives that represent a very high portion of total programs costs and very short customer payback periods. Maximum achievable potential is considered the hypothetical upper-boundary of achievable demand-side savings potential, because it presumes conditions that are ideal and not typically observed.

(N) Measure means any device, technology or operating procedure that makes it possible to deliver an adequate level and quality of energy service while:

1. Using less energy than would otherwise be required; or

2. Altering the time pattern of electricity so as to require less generating capacity or to allow the electric power to be supplied from more fuel-efficient units.

(O) The non-participant test (sometimes referred to as the ratepayer impact measure or RIM)is a measure of the difference between the change in total revenues paid to a utility and the change in total cost incurred by the utility as a result of the implementation of demand-side programs or demand-side rates. The benefits are the avoided cost as a result of implementation. The costs consist of incentives paid to participants, other costs incurred by the utility and the loss in revenue as a result of diminished consumption. Utility costs include the costs to administer, deliver and evaluate each demand-side program or demand-side rate.

(P) Participant test means the test of the cost-effectiveness of demand-side programs that measures the economics of a demand-side program from the perspective of the customers participating in the program.

(~~P~~Q) Program pilot means a demand-side program designed to operate on a limited basis for evaluation purposes before full implementation.

(~~Q~~R) Realistic achievable potential means energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast respectively resulting from expected program participation and realistic implementation conditions. Realistic achievable potential establishes a realistic target for demand-side savings that a utility can expect to achieve through its demand-side programs and involves incentives that represent a moderate portion of total program costs and longer customer payback periods when compared to those associated with maximum achievable potential.

(~~R~~S) Societal cost test means the total resource cost test with the addition of societal benefits (externalities such as, but not limited to, environmental or economic benefits) to the total benefits of the total resource cost test.

(~~S~~T) Staff means all commission employees, except the secretary of the commission, general counsel, technical advisory staff as defined by section 386.135 RSMo, hearing officer, or regulatory judge.

(~~T~~U) Technical potential means energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast respectively resulting from a theoretical construct that assumes all feasible measures are adopted by customers of the utility regardless of cost or customer preference.

(~~U~~V) Total resource cost test or TRC means the test of the cost-effectiveness of demand-side programs that compares the avoided utility cost to the sum of all incremental costs of end-use measures that are implemented due to the program (including both utility and participant contributions), plus utility costs to administer, deliver and evaluate each demand-side program to quantify the net savings obtained by substituting the demand-side program for supply-side resources.

(~~V~~W) Utility cost test means the test that compares the avoided utility costs to the sum of all utility incentive payments, plus utility costs to administer, deliver and evaluate each demand-side program to quantify the net savings obtained by substituting the demand-side program for supply-side resources.

(2) When an electric utility files for approval of demand-side programs or demand-side program plans as described in 4 CSR 240-20.094(3), the electric utility shall file or provide a reference to which commission case contains the following information. All models and spreadsheets shall be provided as executable versions in native format with all formulas intact:

(A) A current market potential study. The current market potential study shall use primary data and analysis for the utility's service territory. The determination of whether to conduct a market potential study for the utility's service territory or for all statewide investor-owned electric utilities shall be at the discretion of the electric utility. If the current market potential study of the electric utility that is filing for approval of demand-side programs or a demand-side program plan is part of a statewide investor-owned electric utilities market potential study, the sampling methodology shall reflect each utility's service territory and shall provide statistically significant results for that utility. The current market potential study shall be updated with primary data and analysis no less frequently than every four (4) years. To the extent that primary data for each utility service territory is unavailable or insufficient, the market potential study may also rely on or be supplemented by data from secondary sources and relevant data from other geographic regions. The current market potential study shall be prepared by an independent third party and shall include at least the following:

1. Complete documentation of all assumptions, definitions, methodologies, sampling techniques, and other aspects of the current market potential study;

2. Clear description of the process used to identify the broadest possible list of measures and groups of measures for consideration;

3. Clear description of the process used to determine technical potential, economic potential, maximum achievable potential and realistic achievable potential for a twenty (20)-year planning horizon for major end-use groups (e.g., lighting, space heating, space cooling, refrigeration, motor drives, etc.) for each customer class; and

4. Identification and discussion of the twenty (20)-year baseline energy and demand forecasts. If the baseline energy and demand forecasts in the current market potential study differ from the baseline forecasts in the utility's most recent 4 CSR 240-22 triennial compliance filing, the current market potential study shall provide a comparison of the two (2) sets of forecasts and a discussion of the reasons for any differences between the two (2) sets of forecasts. The twenty (20)-year baseline energy and demand forecasts shall account for the following:

A. Discussion of the treatment of all of the utility's customers who have opted out;
B. Changes in building codes and/or appliance efficiency standards;
C. Changes in customer combined heat and power applications; and
D. Third party and other naturally occurring demand-side savings.

5. Each electric utility and its stakeholders are encouraged to form an advisory collaborative for the development of the potential study scope. The advisory collaborative should also work together in the evaluation of the potential study bids to assess the qualifications of bidders and proposed approaches.

(B) Demonstration of cost-effectiveness for each demand-side program and for the total of all demand-side programs of the utility. At a minimum, the electric utility shall include:

1. The total resource cost test and a detailed description of the utility's avoided cost calculations and all assumptions used in the calculation. To the extent that the portfolio of programs fails to meet the TRC test, the utility shall examine whether the failure persists if it considers a reasonable range of uncertainty in the assumptions used to calculate avoided costs;

2. ~~In instances where the calculation of the total resource cost test does not demonstrate cost-effectiveness, t~~The utility shall also include calculations for the utility cost test, the participant test, the non-participant test and the societal cost test; and

3. The impacts on annual revenue requirements and net present value of annual revenue requirements as a result of the integration analysis in accordance with 4 CSR 240-22.060 over the twenty (20)-year planning horizon.

(C) Detailed description of each proposed demand-side program to include at least:

1. Customers targeted;
2. Measures included;
3. Customer incentives;
4. Proposed promotional techniques;
5. Specification of whether the program will be administered by the utility or a contractor;
6. Projected gross and net annual energy savings;
7. Proposed annual energy savings targets and cumulative energy savings targets;
8. Projected gross and net annual demand savings;
9. Proposed annual demand savings targets and cumulative demand savings targets;
10. Net-to-gross factors;
11. Size of the potential market and projected penetration rates;
12. EM&V plan including at least the proposed evaluation schedule and the proposed approach to achieving the evaluation goals pursuant to 4 CSR 240-3.163(7) and 4 CSR 240-20.093(7);
13. Budget information in the following categories:
    A. Administrative costs listed separately for the utility and/or program administrator;
    B. Program incentive costs;
    C. Estimated equipment costs;
    D. Estimated installation costs;
    E. EM&V costs; and
    F. Miscellaneous itemized costs, some of which may be an allocation of total costs for overhead items such as the market potential study or the statewide technical reference manual.
14. Description of any strategies used to minimize free riders;
15. Description of any strategies used to maximize spillover; and
16. For demand-side program plans, the proposed implementation schedule of individual demand-side programs.

~~(D) Demonstration and explanation in quantitative and qualitative terms of how the utility's demand-side programs are expected to achieve all cost-effective demand-side savings over the life of the programs. Should the expected demand-side savings fall short of the incremental annual demand-side savings levels and/or the cumulative demand-side savings levels used to demonstrate that the utility's demand-side programs are expected to achieve all cost-effective demand-side savings in accordance with 4 CSR 240-20.094(2), the utility shall provide detailed explanation of why the incremental annual demand-side savings levels and/or the cumulative demand-side savings levels cannot be expected to be achieved, and the utility shall bear the burden of proof.~~

~~E~~D. Designation of demand-side programs which are supported by the electric utility and at least one (1) other electric or gas utility (joint demand-side programs).

(3) Designation of program pilots. For programs designed to operate on a limited basis for evaluation purposes before full implementation (program pilot), the utility shall provide as much of the information required under section (2) subsections (C), (D) and (E) as is practical and shall include explicit questions that the program pilot will address, the means and methods by which the utility proposes to address the questions the program pilot is designed to address, a provisional cost-effectiveness evaluation, the proposed geographic area and duration for the program pilot.

(4) When an electric utility files to modify demand-side programs as described in 4 CSR 240-20.094(4), the electric utility shall file a complete explanation for and documentation of the proposed modifications to each of the filing requirements in section (2). All models and spreadsheets shall be provided as executable versions in native format with all formulas intact.

(5)When an electric utility files to discontinue a demand-side program as described in 4 CSR 240-20.094(5), the electric utility shall file the following information. All models and spreadsheets shall be provided as executable versions in native format with all formulas intact:

(A) Complete explanation for the utility's decision to request to discontinue a demand-side program;

(B) EM&V reports for the demand-side program in question; and

(C) Date by which a final EM&V report for the demand-side program in question will be filed.

(6) Variances. Upon request and for good cause shown, the commission may grant a variance from any provision of this rule.

(7) Rule review. The commission shall complete a review of the effectiveness of this rule no later than four (4) years after the effective date, and may, if it deems necessary, initiate rulemaking proceedings to revise this rule.

AUTHORITY: section 393.1075, RSMo 2009