# **Demand-Side Programs Investment Rule**

[Note: Redlined versions of only Sections 2, 4, 6, 9, 10, 11 and 12 are included in this draft (other sections do not appear). Although MIEC may not be in full agreement with other sections, at this time MIEC is submitting specific language only for these sections.]

# 2. Definitions

PURPOSE: This rule defines terms used in the rules comprising 4 CSR 240-\_\_\_\_\_.

The following words and terms, when used in this chapter, shall have the meanings shown below:

"After-tax discount rate" means the utility's weighted cost of capital reduced by the utility's composite federal and state income tax rate multiplied by the utility's weighted cost of debt.

"Avoided cost" means the cost savings obtained by substituting demand-side resources for existing and new supply resources as calculated in 4 CSR 240-22.050.

"Baseline forecast" means the metric against which savings are measured. This estimates what would happen in the absence of any demand-side programs, and includes naturally occurring energy efficiency and codes and standards are in place.

"Benefit/cost ratio" means the ratio of the present value of benefits to the present value of costs.

"Cost effectiveness tests" means one of the four acceptable economic tests used to compare the present value of applicable benefits to the present value of applicable costs of a demand-side option or program. The tests are the total resource cost test, participant test, the ratepayer impact test, the societal test and utility test. An option or program passes a benefit/cost test if the benefit/cost ratio is equal to or greater than one.

"Commission" means the Public Service Commission of Missouri.

"Customer" means those who take service from an electric utility under rates in a tariff on filed with the commission.

"Customer incentive" means an amount or amounts provided to or on behalf of customers for the purpose of having customers participate in demand-side programs.

"Demand response" means measures that decrease peak demand or shift demand to off-peak periods.

"Demand-side investment mechanism" may include when approved by the commission, without limitation, any combination of the following: decoupling, recovery of fixed costs

(lost margin revenue), capitalization of investments in and expenditures for demand-side programs, rate design modifications, accelerated depreciation on demand-side investments, and allowing the utility to retain a portion of the net benefits of a demand-side program for its shareholders.

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

"Economic potential" means a theoretical construct that assumes all cost effective measures are adopted by customers, regardless of customer preferences.

"Electric Utility" or "Utility" means an "electrical corporation" as defined in section 386.020, RSMo.

"Energy efficiency" means measures that reduce the amount of electricity required to achieve a given end use.

"Evaluation, measurement and verification" (EM&V) means the performance of studies and activities intended to determine the actual savings and other effects from demandside programs and measures.

"Evaluation, measurement and verification independent evaluator" means an independent third party approved by the commission that performs EM&V tasks as assigned by the Commission

"Free riders" means those program participants who would have done what a demandside program intends to promote even without the program.

"Gross savings" means the change in energy and demand requirements for program participants.

"Interruptible or curtailable rate" means a rate under which a customer receives a reduced charge in exchange for agreeing to allow the electric utility to withdrawal the supply of electricity under certain specified conditions.

"Maximum achievable potential" takes into account expected program participation, based on customer preferences resulting from ideal implementation conditions. Maximum achievable potential establishes a maximum target for demand-side savings that a utility can hope to achieve through its demand-side program and involves incentives that represent a substantial portion of the incremental cost combined with high administrative and marketing costs. It is commonly-accepted in the industry that maximum achievable potential is considered the hypothetical upper-boundary of achievable savings potential simply because it presumes conditions that are ideal and not typically observed in real-world experience.

"Net societal benefits" means the present value of benefits less the present value of costs as defined in the societal test.

"Participant test" means an economic test used to compare the present value of benefits to the present value of costs over the useful life of demand-side option or program from the participant's perspective. Present values are calculated using a discount rate appropriate to the class of customers to which the demand-side option or program is targeted. Benefits are the sum of the present values of the customers' bill reductions, tax credits, and customer incentives for each year of the useful life of a demand-side option or program. Costs are the sum of present values of the customer participation costs (including initial capital costs, ongoing operations and maintenance costs, removal costs less a salvage value of existing equipment, and the value of the customer's time in arranging installation, if significant) and any resulting bill increases for each year of the useful life of the option or program. The calculation of bill increases and decreases must account for any time-differentiated rates to the customer or class of customers being analyzed.

"Pilot program" means and program or project which generally is designed as a test or trial to demonstrate the effectiveness of a full program. For purposes of this rule, a pilot program is distinct from other program designs in that it shall include explicit questions that the pilot will address; explicit evaluation, measurement and verification methods designed to address pilot questions, estimates of program costs and savings, a provisional cost effectiveness evaluation, and shall be of limited duration until reassessment after a predetermined periods.

"Preferred resource plan" means the same definition found in 4 CSR 240-22.

"Program year" means...

"Ratepayer impact measure test" means an economic test used to compare the present value of the benefits to the present value of the costs over the useful life of a demand-side option or program from a rate level or electric utility's bill perspective. Present values are calculated using the utility's discount rate. Benefits are the sum of the present values of utility avoided capacity and energy costs (excluding the externality factor) and any revenue gains due to the demand-side options for each year of the useful life of the option or program. Costs are the sum of the present values of utility increased supply costs, revenue losses due to the demand-side options, utility program costs, and customer incentives for each year of the useful life of the option of utility avoided capacity and energy, increased utility supply costs, and revenue gains and losses must use the utility's costing periods.

"Realistic achievable potential" represents what is considered to be realistic estimates of demand-side potential based on realistic parameters associated with demand-side program implementation (i.e. limited budgets, customer acceptance barriers, etc.)

"Seasonal peak demand" for an electric utility means the maximum hourly demand that occurred during that season.

"Societal test" means an economic test used to compare the present value of the benefits to the present value of the costs over the useful life of a demand-side option or program from a societal perspective. Present values are calculated using a 12-month average of the 10-year and 30-year Treasury Bond rate as the discount rate. The average shall be calculated using the most recent 12 months at the time the electric utility calculates its benefit/cost tests for its demand-side program plan. Benefits are the sum of the present values of the utility avoided supply and energy costs including the effects of externalities. Costs are the sum of the present values of utility program costs (excluding customer incentives), participant costs, and any increased utility supply costs for each year of the useful life of the option or program. The calculation of utility avoided capacity and energy and increased utility supply costs must use the utility costing periods.

"Spillover" means measures installed by customers independently of a demand-side program that occur due to the general influence or awareness building effects of the program.

"Technical potential" means a theoretical construct that assumes all feasible measures are adopted by customers, regardless of cost or customer preferences.

"Technical Reference Manual" or "TRM" means a deemed savings document that provides specific efficiency thresholds and formulas to use in calculating energy-efficiency savings in the absence of utility-specific EM&V data.

"Total resource cost test" or "TRC" is a test of the cost-effectiveness of demand-side programs that compares the sum of avoided utility costs plus avoided probable environmental costs 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 resources. The TRC test shall be applied at the plan level rather than the component, program or measure level and shall be the deciding test to determine if a plan will be deemed cost-effective.

"Useful life" means the number of years a demand-side option will produce benefits as determined by the utility. For analysis purposes, the useful life of a demand-side option shall not exceed 20 years.

"Used for service" means a commission approved demand-side program which has been implemented and is delivering program measures to customers.

"Utility cost test" means an economic test used to compare the present value of the benefits to the present value of the costs over the useful life of an energy efficiency option or program from the utility revenue requirement perspective. Present values are calculated using the utility's discount rate. Benefits

are the sum of the present values of each year's utility avoided capacity and energy costs (excluding the externality factor) over the useful life of the option or program. Costs are the sum of the present values of the utility's program costs, customer incentives, and any increased utility supply costs for each year of the useful life of the option or program.

AUTHORITY: 393.1075, RSMo 2009

# 4. Review of Demand-Side Program Plans

*PURPOSE:* Stakeholder advisory group participation in development of and Commission review and approval of a utility's demand-side program plan shall be governed by the following procedures:

A. Stakeholder advisory group. Each electric utility shall offer those interested the opportunity to participate as a member of its stakeholder advisory group concerning development of its demand-side program plan. At a minimum, the stakeholder advisory group shall meet quarterly. The electric utility shall provide all members of the stakeholder advisory group the opportunity to offer suggestions and comment on a draft of each demand-side program plan the utility proposes to file, and to review and comment on an existing approved plan.

B. Contested case proceeding. The filing of an application for approval of a demand-side program plan shall initiate a contested case proceeding. All testimony, exhibits, and workpapers shall be filed with each application for approval of a demand-side program plan before the commission. Likewise, an application to modify an approved demand-side program plan shall initiate a contested case proceeding before the commission. All supporting testimony, exhibits, and workpapers filed by any party must be cross-referenced to the demand-side program plan requirements. Any portion of any plan, application, testimony, exhibit, or workpaper which is based upon or derived from a computer program shall when filed include the name and description of the computer program, and all reasonably necessary data inputs and outputs associated with each such portion in hard copy and electronic format.

C. Procedural schedule. To facilitate completion of the contested case proceeding within six months from the date the application to approve or modify a demand-side program is of filed by an electric utility, a procedural schedule based on the following guidelines shall be established:

i. Prepared direct testimony, exhibits, and work papers in support of the filing date of initial filing. <u>All models and spreadsheets shall be provided as executable</u> <u>versions in native format with all formulas intact</u>. ii. Testimony, exhibits, and work papers of all other parties—filed not later than seven weeks from the date of the initial filing. <u>All models and spreadsheets shall</u> <u>be provided as executable versions in native format with all formulas intact.</u>

iii. Electric utility response to proposals<u>and responses of other parties to each</u> <u>other</u>—filed not later than 11 weeks from the date of the initial filing

iv. Responses of all parties to all discovery shall be completed within 7 calendar days of submission.

iv. Hearing (cross-examination of all testimony)—initiated not later than 14 weeks after the initial filing.

vi. Briefs of all parties—filed not later than 17 weeks after the initial filing.

vii. Reply briefs of all parties—filed not later than 18 weeks after the initial filing.

vii<u>i</u>. Additional time may be granted a party upon a showing of good cause for the delay including, but not limited to:

- a. Delay of completion of a previous procedural step.
- b. Delays in responding to discovery requests.
- c. Conflicts

viiix. Settlements.

### D. Commission Approval.

i. The commission shall approve, modify or reject the utility's demand-side program plan and any applicable demand-side program tariff sheets. If the commission rejects the demand-side program plan, it shall issue an order in which it states the reasons for rejecting the plan and set a schedule by which the electric utility will file a new plan addressing the reasons for rejection. If the commission modifies a plan, it shall issue an order in which it outlines the modifications.

ii. A program filed under these rules shall not be implemented until the commission issues an order expressly approving the program.

iii. The commission may approve utility specific settlements and tariff provisions to ensure that electric utilities can achieve the state goal of capturing all cost effective demand –side savings.

E. Modified plan—refiling. If the commission rejects or modifies a utility's demand-side program plan, the commission may require the electric utility to file a modified plan and may specify the minimum acceptable contents of the modified plan.

F. Variances. Upon request and for good cause shown, the commission may grant a variance from any demand-side program plan requirement imposed by this section. If the

variance request is granted, the utility shall file a copy of the commission order with the utility's demand-side program plan.

G. Prudence reviews. The commission may conduct a contested case to evaluate the reasonableness and prudence of the utility's implementation of its demand-side program plan. The burden shall be on the electric utility to prove it has taken all reasonable actions to implement its approved demand-side program plan.

AUTHORITY: 393.1075, RSMo 2009

# 6. Customer Participation & Opt-Out Provisions

A. Any customer meeting one or more of the following criteria shall be eligible to opt-out of participation in utility offered demand-side programs:

i. The customer has one or more accounts within the service territory of the electric utility that has a demand of five thousand kilowatts or more;

ii. The customer operates an interstate pipeline pumping station, regardless of size; or

iii. The customer has accounts within the service territory of the electric utility that have, in aggregate, a <u>coincident</u> demand of two thousand five hundred kilowatts or more, and the customer has a comprehensive demand-side or energy efficiency program and can demonstrate an achievement of savings at least equal to those expected from utility-provided programs.

**B**. The utility shall make available standard notification forms requesting all relevant information to determine customer eligibility to opt-out of participation in demand-side programs. For purposes of determining eligibility under A(i) the measure of demand is the highest billing demand during the 12 months preceding the opt-out notification. For purposes of determining eligibility under A(ii) the measure of demand is the sum of the highest billing demands of the individual accounts during the 12 months preceding the opt-out notification.

C. Customers qualifying to opt-out under A(i) or A(ii) may notify the utility by means of a letter addressed to the utility, or alternatively, may elect to complete an opt-out form provided by the utility. However, completion of a utility opt-out form shall not be required.

Customers desiring to opt-out under A(iii) . . . [to be provided by others]

i The utility shall notify the customer and commission of its acceptance, or rejection of a customer's notification to opt-out of participation in demand-side programs within 10 days of when the customer notifies the utility of its election to opt out, unless the customer, withdraws its election before then.

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**iiD**. Customers of a utility who opt-out of participation in demand-side programs offered by the utility shall <u>not</u> be charged <u>none-any</u> of the costs <u>for of</u> demand-side programs of the utility in accordance with the Missouri Energy Efficiency Investment Act (section 393.1075, RSMo 2009 Supp.)<u>, or</u> this rule, <u>or any other authority</u> nor shall any of the costs be assigned to any account of the customer or its affiliates and subsidiaries.

**iii**<u>E</u>. Customers who opt-out of participating in the demand-side programs of a utility shall still be allowed to participate in interruptible or curtailable rate schedules or tariff provisions offered by the electric utility.

F. A customer who participates in demand-side programs initiated after August 1, 2009 shall be required to participate in program funding for a period of three years following the last date when the customer received an incentive or a service.

iv. Any customer who opts out shall continue to be allocated costs until all costs have been recovered from any programs the customer was eligible to participate prior to opting out.

**v**<u>G</u>. Customers that have opted out of participation in demand-side programs shall not subsequently be eligible to participate in demand-side programs except... under <u>the</u> <u>following guidelines:</u> established by the commission in rulemaking.

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AUTHORITY: 393.1075, RSMo 2009

### 9. Demand-Side Investment Mechanism - General Provisions

A. In order for a program to qualify for inclusion in a demand-side investment mechanism, the program:

i. Shall be approved by the commission prior to implementation;
 a. Program-related costs incurred prior to the electric utility's initial demand-side program plan shall not be included in the demand-side investment mechanism.

ii. Shall be implemented in accordance with the approved demand-side program plan and tariff sheets;

iii. Shall have been shown in an annual demand-side program report that it has been used for service and is delivering measures to customers;

iv. Shall have efficiency and/or demand savings capable of measurement and verification and shall result in energy or demand savings and are beneficial to all customers in the customer class in which the program is proposed;

v. Shall be monitored and evaluated for cost-effectiveness;

a. If a program is determined to be not cost-effective the electric utility shall identify the causes why. That a program is not cost-effective shall not be sufficient grounds alone for disallowing cost recovery. However, the electric utility shall propose modification or termination of a program that fails to meet expected results.

vi. Shall have undergone an evaluation by a commission approved EM&V independent evaluator.

B. After meeting the requirements established in paragraph A of this section, an electric utility may request in a general rate case that the commission approve a demand-side investment mechanism.

i. As part of the general rate case as discussed in Section B, the commission may approve a demand-side investment mechanism for demand-side programs that value demand-side investments at least equal to traditional investments in supply and delivery infrastructure.

ii. In setting rates, the commission shall <u>fairly</u> apportion the costs and benefits of demand-side programs to each customer class <u>using the following guidelines:</u>
a. (possibly allocate costs to the customer class in which program is designed and using a demand allocator for demand response programs or with an energy allocator for energy efficiency programs; or the allocators decided by the commission in a rate case?) To the extent identifiable, costs (including incentives, services, administration, EM&V and others) shall be assigned to the rate schedules of customers receiving the DSM device or service. Where more than one rate schedule is eligible, costs that cannot be specifically attributed to a single rate schedule shall be allocated among all eligible rate schedules.

b. In allocating the costs between rate schedules, the utility shall estimate the demand-related portion and the energy-related portion using the relationship between the demand-related and energy-related avoided costs that were used to justify the DSM measure or program.

c. In allocating the costs between rate schedules, the demand-related portion will be allocated on the contribution to seasonal peak demand of each rate schedule. For summer peaking utilities, the summer peak demand will be used, and for utilities with dual summer and winter peaks, the average of the summer and winter peak demands will be utilized. Energy-related costs will be allocated in proportion to rate schedule energy. Both demand and energy allocation factors will be adjusted to the generation level.

d. In assigning or allocating costs to rate schedules, no cost shall be attributed based on the load characteristics of customers who have opted out of the utility's DSM program.

iiic. In a general rate case proceeding, the commission may, when in the public interest, reduce or exempt the allocation of demand-side program costs to low income classes, as a subclass of residential service. Any such costs not charged to low income customers will be assigned to other customers within the residential class.

**iv**<u>C</u>. All charges attributable to demand-side programs approved by the commission shall clearly be shown as a separate line item on bills to the utility's customers.

CD. Duration of demand-side investment mechanism and requirement for general rate case. Once a demand-side investment mechanism is approved by the commission, it shall remain in effect for a term of not more than four (4) years unless the commission earlier authorizes the modification, extension, or discontinuance of the demand-side investment mechanism in a general rate proceeding, although an electric utility may submit proposed rate schedules to implement periodic adjustments to its demand-side investment mechanism between general rate proceedings.

i. If the commission approves a demand-side investment mechanism for an electric utility, the electric utility must file a general rate case with the effective date of new rates to be no later than four (4) years after the effective date of the commission order implementing the demand-side investment mechanism, assuming the maximum statutory suspension of the rates so filed.

ii. The four (4)-year period shall not include any periods in which the electric utility is prohibited from collecting any charges under the demand-side investment mechanism, or any period for which charges collected under the mechanism must be fully refunded. In the event a court determines that the demand-side investment mechanism is unlawful and all moneys collected are fully refunded as a result of such a decision, the electric utility shall be relieved of any obligation to file a rate case.

AUTHORITY: 393.1075, RSMo 2009

#### 10. Demand-Side Investment Mechanism - Cost Recovery

A. Utilities may recover their actual costs expended to implement and evaluate demandside programs that the commission approves and the utility implements.

i. Costs incurred after a demand-side program plan is approved and before the program costs are included in a commission-approved demand-side investment

mechanism shall be charged to a regulatory asset account and <u>incur-accrue</u> a carrying charge before they are recovered. The carrying charge shall be the allowance for funds used during construction rate the commission last approved for the utility;

ii. Costs will remain in the regulatory asset account until the program costs are included in a commission approved demand side investment mechanismbase rates in a subsequent general rate case. At that time the costs in the regulatory asset account will be amortized and recovered in rates over a period of three years and recovered in rates over three years years consistent with the number of years over which avoided cost benefits were attributed to the demand-side measure in performing benefit/cost ratio calculations.

B. Utilities shall maintain accounting plans and procedures to account for all demandside program costs in accordance with generally accepted accounting principles.

C. In the general rate case, as discussed in Section 9(b), each utility shall file the costs it proposes to recover in the demand-side investment mechanism. Costs proposed to be included in the cost recovery portion of the demand-side investment mechanism will be the total of:

i. The costs the electric utility expects to incur in the subsequent 12 month period in implementation of its demand side program;

ii. The positive or negative difference, over the past 12-month period under the automatic adjustment mechanism, between the actual revenues collected and the actual cost incurred, including carrying charges accrued on the balance; and

iii. Excluding any previously recovered costs that, in a prudence review as described in section 4 of this rule the commission has determined were imprudently incurred.

AUTHORITY: 393.1075, RSMo 2009

#### **11. Demand-Side Investment Mechanism - Lost Revenues**

A. In the general rate case, as discussed in Section 9(b), each utility may file an application to include, as part of its demand-side investment mechanism, a means to eliminate its incentive to increase sales between rate cases and ensure that the success of its demand-side program does not cause it financial harm;

i. Recovering lost revenues is an allowable track if decoupling is not allowed by the commission.

B. Lost revenues should be determined through the independent EM&V process as established by the commission;

C. The proposed demand side investment mechanism may not diminish in any respect current customer incentives to undertake effort or investment to increase the efficiency with which they use energy; and

D. Minimum requirements for application...

AUTHORITY: 393.1075, RSMo 2009

# 12. Demand-Side Investment Mechanism - Performance Incentives

A. Utilities have an opportunity to produce earnings i. <u>Bb</u>ased on the value created by their efforts under an approved demand-side program, as indicated by achieving the energy and demand savings in an approved plan per the actual costs and benefits following the results of evaluation, measurement and verification.

ii. For strong performance compared to applicable goals
 a. With no earnings available for achieved savings less than 75% of the greater of the default targets above or the plans goals; and
 b. With greater reward for increasing benefits beyond planning estimates.

iii. A<u>a</u>t a level comparable to that available for investment in supply-side resources. In determining this level, appropriate adjustments may be made to recognize, as adjusted for the differing risks of the two types of resources.

### B. Penalty for poor performance?

CB. In the general rate case, as discussed in Section 9(b) each utility may file an application propose to include, as part of its proposed demand-side investment recovery mechanism, a process to improve its earnings opportunity for achievements under its demand side program plan consistent with the commission's policy mechanism by which the utility can share in the benefits of the verified cost savings resulting from the implementation of the utility's demand-side program as compared to the most economical supply-side program.

BC. The Commission may impose a Ppenalty for poor performance?.

AUTHORITY: 393.1075, RSMo 2009