

EXHIBIT 1

Demand-Side Resource Analysis Proposed Revisions to IRP Rules

(1) 4 CSR 240-22.050 (2)

Current requirement:

Section 22.050(2) in its entirety specifies the required methods for calculating and allocating avoided costs.

Proposed Alternative:

Insert following the first paragraph of section (2)

As an alternative to the procedure outlined in subsections (A) – (D), the utility may use a forecast of the market cost of power, including any regulatory capacity cost, for the calculation of avoided capacity and running costs. If the utility chooses the market cost of power approach, any reference to avoided new generation (or avoided generation, or avoided capacity, or avoided generation capacity, or avoided peaking capacity, or avoided energy, or avoided running cost) in section 22.050(2) shall be deemed to refer to the market cost of power. If this alternative method is employed, the utility shall adjust this market price to account for transmission and distribution avoided costs as well as probable environmental costs pursuant to 4 CSR 240-22.040(2)(B).

In addition, the utility shall describe its method for (1) grouping hourly forecasted prices into avoided cost periods to reflect significant differences in the seasonal and/or hourly variation in prices, and (2) for allocating regulatory capacity costs to these periods.

Rationale:

One of the primary requirements of the Electric Utility Resource Planning rule is to consider demand-side resources on an equivalent basis with supply-side alternatives. In this particular section of the rule, this requirement is manifested by requiring the utility to calculate supply-side costs for use in the demand-side cost-effectiveness screening. This basic concept is still as valid today as it was when the rule was developed. However, the prescriptive method detailed in this section to achieve the “equivalent treatment” is outdated. In fact, the extremely prescriptive steps and the lack of flexibility could lead to the demand-side resources receiving a less than equal treatment during screening. This rule modification allows a utility to use a method of calculating avoided costs that is more reflective of modern wholesale markets and will further support the “equivalent treatment” requirement.

EXHIBIT 1

The market cost of power better represents the value of an avoided kW or kWh in today's market. The two most important reasons that the forecast of power cost methodology is superior are as follows:

- 1) Even if the utility does not require additional capacity or energy in the near-term, thus suggesting that the value of DSM would be low, an avoided kWh or kW could have substantial value by enabling the utility to sell the incremental load into the market. For both supply-side and demand-side resources, this value would be captured in the "Integrated Resource Analysis" (4 CSR 240-22.050). However, to the extent that the utilities avoided costs are less than the value received from market sales (both capacity and energy), potentially demand-side programs that could show cost-effective in integration might be screened out in the cost-effectiveness screening.
- 2) It is rare that an individual utility is neither long nor short on generation (i.e. generating resources) and if a utility's resources exactly meets its demand, the situation will change in the near future due to load growth. In fact, a particular utility's resource needs (or avoided capacity and energy costs) is somewhat dynamic due to changes in load and resources. These variations in resource needs can translate into varying avoided costs over time which in turn can cause vacillation in demand-side programs screening as cost-effective leading to fluctuations in demand-side spending. Since the wholesale markets (i.e. MISO) encompass numerous utilities, the market as a whole is subject to less resource fluctuations. Using the forecast for market power cost would facilitate more consistent investment in demand-side resources.

(2) 4 CSR 240-22.050 (3)(F)

Current requirement:

End-use measures that pass the probable environmental benefits test must be included in at least one (1) potential demand side program.

Proposed Alternative:

If the utility does not include each end-use measure that passes the probable environmental benefits test in at least one potential demand-side program, it shall provide an explanation as to why that measure was not appropriate for inclusion.

Rationale:

This section addresses the cost-effectiveness screening of end use measures. Typically several hundred measures are screened to determine which measures should be included in the energy efficiency programs that will be assessed in subsequent stages of the analysis. The objective of that program analysis step is to combine measures in such a way that the program represents a compelling program offering to a particular market segment. The initial list of measures can

EXHIBIT 1

include those that, while passing a simple cost-effectiveness test, are not easily or logically bundled with other measures as part of a program, and the design of a program solely to incorporate these measures may be inefficient and inconsistent with best practice program design. The intent of this rule modification is to create the flexibility to exclude measures passing the cost-effectiveness screen if the projected impacts are extremely small or if those measures cannot logically be bundled into programs or offered as a cost-effective stand-alone program. The utility would be required to present the results of the full measure screening and a justification as to why any cost effective measures would be excluded from further analysis. Absent this rule modification, there is a greater premium placed on a qualitative screening process that can eliminate measures expected to have little impact in the market due to applicability or feasibility.

(3) 4 CSR 240-22.050 (4)

Current requirement:

The utility shall estimate the technical potential of each end-use measure that passes the screening test.

Proposed Alternative:

The utility shall prepare an estimate of the achievable potential of programs screened as cost-effective under 4 CSR 240-22.050 (7). Achievable potential is understood to be equivalent to the incremental and cumulative demand reduction and energy savings described in Section 22.050 (7)(A). An estimate of achievable potential shall be prepared for multiple portfolios of programs, where at least one portfolio represents a very aggressive approach to encouraging program participation.

Rationale:

Three “types” of potential are sometimes estimated as part of a DSM analysis.

- Technical potential represents the amount of energy/demand reduction one might expect if all existing, replaceable energy-using equipment was replaced with its most efficient, available alternative irrespective of cost. This measure provides an indication of what might be considered the “latent efficiency” of the area of study (e.g. a utility’s service territory).
- Economic potential represents the amount of energy/demand reduction one might expect if all existing, replaceable energy-using equipment was replaced with its most efficient, available and cost-effective alternative, where cost-effectiveness is measured by the probable environmental benefits test. This measure does not address the impacts of the attempt to capture this potential on the present value of revenue requirements, nor does it address the basic issue of whether consumers would be expected to actually adopt this level of efficiency. It is a broad measure of the “latent economic efficiency” of the area of study.
- Achievable potential represents amount of energy/demand reduction one might expect based on consumer adoption of cost-effective energy

EXHIBIT 1

efficiency measures in response to utility-sponsored energy efficiency programs. This measure explicitly attempts to reflect consumer behavior in response to awareness, costs and incentives, and is estimated as the amount of energy/demand reduction over-and-above that expected to be realized by consumers acting in their self-interest (so-called “naturally-occurring” energy efficiency).

Estimates of the technical potential of end use measures reflect engineering calculations and are rarely if ever used in the design of energy efficiency programs. The key to the IRP process is having estimates of what is achievable, as those estimates will be central to the integration process. The most straightforward approach to this need is to develop estimates of the achievable potential associated with the programs that are analyzed. The nature of the program analysis process outlined in the rule ensures that the estimates produced in this fashion will be based on most of the measures screened as cost-effective under 4 CSR 240-22.050 (3)(F).

(4) 4 CSR 240-22.050 (6)(D)

Current requirement:

Design a marketing plan and delivery process to present the menu of end-use measures to the members of each market segment and to persuade decision-makers to implement as many of these measures as may be appropriate to their situation.

Proposed Alternative:

Include a delivery strategy that outlines the anticipated approach to promotion and delivery of the programs to the target market segment. This delivery strategy shall include basic information regarding marketing and implementation strategy as an element of program design and will outline approach, channels, and incentive, outreach and administrative processes. The strategies should be detailed enough to provide the utility and the parties with a sense of the proposed approaches as a basis for estimating program costs.

Rationale:

Typically, marketing and implementation plans are prepared following the finalization of the integrated plan. The marketing plan can and should be quite detailed with respect to marketing strategy, tactics, collateral and channels, and the “delivery process” typically is represented by an implementation plan that provides considerable detail on program processes and procedures pertaining to recruiting, technical services, incentive fulfillment, verification and quality control. The current rule implies that such detail might be provided during the IRP development process. However, developing such detail would be inefficient since it is likely that some of the programs examined at this stage might never be implemented. The utility is likely to develop several DSM portfolios with different program mixes, recognizing that only one such portfolio actually will be

EXHIBIT 1

implemented. More important, detailed marketing and implementation plans should be prepared by the entities actually implementing the programs to ensure that accountability and expertise are properly aligned. The alternative language calls for the preparation of basic marketing and delivery strategies for each program considered in the process.

(5) 4 CSR 240-22.050 (9)

Current requirement:

Evaluation of Demand-Side Programs. The utility shall develop evaluation plans for all demand-side programs that are included in the preferred resource plan selected pursuant to 4 CSR 240-22.070(6). The purpose of these evaluations shall be to develop the information necessary to improve the design of existing and future demand-side programs, and to gather data on the implementation costs and load impacts of programs for use in cost-effectiveness screening and integrated resource analysis.

Proposed Alternative:

Evaluation of Demand-Side Programs. The utility shall develop process and impact evaluation strategies for all demand side-side programs that are included in the preferred resource plan. These strategies shall outline the proposed approach to the impact and process evaluation for the programs. Parts (A), (B) and (C) of the rule shall be considered advisory for purposes of developing these broad strategies. The utility shall develop evaluation plans consistent with 4 CSR 240-22.050 (9) after final programs have been selected and detailed implementation plans have been prepared.

Rationale:

As is the case with marketing plans and implementation processes, evaluation plans typically are developed only after a final set of programs have been adopted. Moreover, evaluation plans can only be prepared once detailed program implementation plans have been completed. Detailed evaluation plans should be developed consistent with the provisions of the rule, but not at this stage. Evaluation plan effectiveness also requires that the plans should be developed by the entities retained by the utility to perform the evaluation(s). The effect of this rule modification is simply to defer the detailed plans required until after a final program set has been selected and detailed program designs have been prepared.

EXHIBIT 1

(6) 4 CSR 240-22.050 (11)(C)

Proposed Requirement:

The results of the utility benefits test for each end-use measure that passes the probable environmental benefits test.

Rationale:

Consistent with suggestion (3) proposed above.

(7) 4 CSR 240-22.050 (11)(D)

Current requirement:

Documentation of the methods and assumptions used to develop the avoided cost estimates developed pursuant to section (2) including

1. A description of the type and timing of new supply resources, including transmission and distribution facilities, used to calculate avoided capacity costs;
2. A description of the assumptions and procedure used to calculate avoided running costs;

Proposed Alternative:

If the utility chooses the forecast of market cost of power alternative for 4 CSR 240-22.050 (2)(C), the following is substituted for this portion of the rule:

Documentation of the methods and assumptions used to develop the avoided cost estimates developed pursuant to section (2) including

1. A description of the assumptions and procedures used for avoided capacity costs including regulatory capacity, transmission and distribution facilities;
2. A description of the assumptions and procedure used to calculate market cost of power;

Rationale:

Consistent with suggestion (1) proposed above.

(8) 4 CSR 240-22.050 (11)(J)

Proposed Alternative:

A description of the process and impact evaluation strategies for demand-side programs that are included in the preferred resource plan and the results of any such evaluations that have been completed since the utility's last scheduled filing pursuant to 4 CSR 240-22.080.

Rationale:

Consistent with suggestion (5) proposed above.