Draft Demand-Side Management Rules

R14-2-1701 Applicability

A These rules shall govern the advancement and implementation of cost-effective and prudent demand-side management initiatives for all electric and natural gas utilities subject to the jurisdiction of the Commission that are classified as Class A according to A.A.C. R14-2-103(A)(3)(q), except for utilities that are electric transmission-only cooperatives. Smaller utilities may voluntarily participate either individually or in a group.

R14-2-1702 Definitions

A For the purposes of this Article, the following definitions apply unless context otherwise requires:

1) Adjustment mechanism: a provision of a rate schedule, authorized in advance by the Commission, which allows for increases and decreases in rates reflecting increases and decreases in specific costs incurred by a utility.
2) Baseline: the level of electric and/or natural gas demand and/or consumption and associated costs that would have occurred in the absence of the DSM program.
3) Combined heat and power ("CHP"): distributed generation using a primary energy source to simultaneously produce electrical energy and useful process heat.
4) Demand-side management ("DSM"): the planning, implementation, and evaluation of programs to shift peak load to off-peak hours, to reduce peak demand ("kW"), and/or to reduce energy consumption ("kWh" or "therms") in a cost-effective manner. DSM may include energy efficiency, load management, and demand response.
5) Demand response: all intentional modifications to electric and natural gas consumption patterns of customers affecting the timing or quantity of customer demand and usage. Demand response programs are used to reduce customer energy usage in response to prices, market conditions, or threats to system reliability. Demand response programs may include dynamic pricing/tariffs, price-responsive demand bidding, contractually obligated curtailment, voluntary curtailment, and direct load control/cycling.
6) Distributed generation ("DG"): electric generation sited at a customer premises (customer side of the meter) providing electric energy to the customer load on that site.
7) Energy efficiency: products, services, or practices aimed at saving energy in end-use applications generally by substituting technically more advanced (compared to what is presently used in a specific situation) equipment or practices to produce the same or an improved level of end-use service with less energy use. Examples include high-efficiency appliances; efficient lighting products and systems; high-efficiency heating, ventilating, and air conditioning ("HVAC") systems or control modifications; advanced electric motor drives; efficient building design; and efficient operation and maintenance practices.
8) Incremental benefits: improvements in societal welfare, including but not limited to avoided environmental impacts and the avoided fuel cost, purchased power cost, new capacity cost, transmission cost, and/or distribution cost.

9) Incremental costs: the additional cost of DSM programs and measures relative to baseline cost.
10) Load Management: deliberate actions sponsored by a utility to reduce peak demands or improve system operating efficiency. Examples include direct control of customer demands through utility-initiated interruption or cycling, thermal storage, and education to encourage customers to shift loads.
11) Market transformation: strategic efforts to induce lasting structural or behavioral changes in the market that result in increased adoption of energy-efficient technologies, services, and practices.
12) Net benefits: incremental benefits resulting from DSM minus the incremental costs of DSM.
13) Self-direction: an option made available to qualifying customers of sufficient size, in which the amount of money paid by each qualifying customer toward a DSM adjustor is tracked for an individual customer and is made available for use by the customer for DSM investments upon application by the customer.
14) Societal Test: a cost-effectiveness test of the net benefits of DSM measures and programs that starts with the Total Resource Cost Test but includes non-market benefits to society, such as reduced environmental effects of energy production and delivery, due to DSM.
15) Total Resource Cost Test: a cost-effectiveness test that measures the net benefits of a DSM program as a resource option, including both incremental measure and utility costs. The TRC test excludes incentives paid by utilities. The TRC test also excludes non-market benefits to society, such as reduced environmental effects of energy production and delivery.
16) Utility Cost Test: a cost-effectiveness test that measures the net change in a utility's revenue requirement resulting from a DSM program. The test compares the reduction in marginal energy and demand costs with utility program costs, incentive payments, and increased supply costs for a period in which load is increased. This test does not include any net costs incurred by participants.

R14-2-1703 Goals and Objectives

A The following objectives shall be considered in the advancement and implementation of cost-effective and prudent demand-side management initiatives:

1) Achieve cost-effective energy savings and peak demand reductions;
2) Advance market transformation to achieve cost-effective DSM benefits through approaches that achieve sustainable savings and reduce the need for future market interventions;
3) Ensure a level of program funding adequate to achieve the DSM targets;
4) Implement DSM programs that provide an opportunity for all utility customer segments to participate; and
5) Allocate a portion of DSM resources to the low-income customer segment.

B DSM Goals

1) The Commission shall establish DSM goals for all applicable utilities that consider and are consistent with the characteristics of each specific utility's service territory and the approach to DSM in that service territory. Examples of DSM goals may include the following:

a) Percentage reductions in load growth;
b) Benefits in dollars;
c) Net benefit goals;
d) Savings in kW, kWh, therms, gallons, or BTUs;
e) Savings as a percent of total resources to meet load;
f) Expenditures on DSM as a percent of retail revenue; or
g) Amount of spending on DSM programs.

C Program Goals

1) Program goals shall be established by the Commission for DSM benefits, energy savings, and/or peak demand reductions for utilities subject to R14-2-1701 through R14-2-1718.
2) Goals for peak demand reductions in kW or therms may be met in part with demand response programs that are designed to reduce load during peak usage hours.

R14-2-1704 Portfolio Plans

A Utilities shall submit to the Commission a DSM portfolio plan within six months of the adoption of these rules.

B The portfolio plan shall include:

1) An overall DSM portfolio goal;
2) Descriptions of DSM programs to be undertaken in compliance with R14-2-1701 through R14-2-1718;
3) Estimated levels of energy and capacity savings, utility costs, societal benefits and costs, and other benefits (quantified where reasonably possible) of the planned programs;
4) Marketing and delivery plans, including an implementation schedule;
5) Measurement and evaluation plans; and
6) A description of the administration of the programs.

C Utilities shall file subsequent DSM portfolio plans biennially with the Commission for approval. Specific program plans can be filed for approval at any time. If programs are filed for approval contemporaneously with the DSM portfolio plan, the items of information listed

in the *Commission Review and Approval of DSM Programs* section R14-2-1705 must be included in the filing.

D Existing Commission-approved plans and programs will continue in effect until the Commission takes action on a new plan.

E Staff may develop standard tables, outlines, and guidelines for the plans.

R14-2-1705 Commission Review and Approval of DSM Programs

A Prior to implementing a new DSM program, utilities must obtain Commission approval. Utilities shall file a copy of the program proposal with Docket Control and notify interested parties of the filing. Interested parties shall have 20 calendar days to file written comments about the proposed program.

B Each program proposal shall include the following items:

1) Description of the program;
2) Objectives and rationale for the program;
3) Market segment at which the program is aimed;
4) Estimated level of program participation;
5) Estimate of baseline;
6) Estimated societal benefits and savings from the program;
7) Estimated societal costs of the programs;
8) Marketing and delivery strategy;
9) Utility costs and budget;
10) Implementation schedule;
11) Monitoring and evaluation plan; and
12) Proposed performance incentives.

C Staff shall recommend approval of a DSM program if it is consistent with R14-2-1701 through R14-2-1718. Staff may request modifications of proposed or on-going programs to ensure consistency with R14-2-1701 through R14-2-1718. However, the Commission shall allow utilities adequate time to notify customers of program modifications.

R14-2-1706 Parity and Equity

A Each utility shall develop and propose DSM programs for residential, non-residential, and low-income customers so that all customer segments have the opportunity to benefit from DSM.

B DSM funds collected from residential and non-residential customer segments shall be allocated proportionately to those customer groups to the extent reasonable.

C DSM funds collected from ratepayers of a given utility shall be allocated to DSM programs for customers in that utility's service territory to the extent reasonable.

D The utility costs of DSM programs for low-income customers shall be borne by all customer classes.

E All customers shall pay to support DSM through a non-bypassable mechanism.

F Self-direction may be reviewed by the Commission in utility rate cases or other forums.

R14-2-1707 Portfolio and Program Reporting Requirements

A Utilities shall report annually to the Commission on the progress of their DSM portfolios including each pre-approved DSM program. Annual reports shall be due on March 1 of each year. At a minimum, the reports shall include:

1) Predetermined overall DSM portfolio goals;
2) A description of the progress towards meeting the portfolio goals;
3) A list of the programs included in the DSM portfolio organized by customer segment;
4) Findings from any research projects;
5) Information on each program including:
   a) A brief description of each program;
   b) Predetermined program goals, objectives, and savings targets;
   c) The level of customer participation for each program;
   d) Costs incurred during the reporting period disaggregated by type of cost, such as administrative costs, rebates, and monitoring costs;
   e) A description and results of evaluation and monitoring activities;
   f) Savings in kW, kWh, therms, gallons, and BTUs;
   g) Benefits and net benefits in dollars;
   h) Program-specific performance incentive calculations;
   i) Problems encountered and proposed solutions;
   j) Proposed program modifications; and
   k) Proposed program terminations.

B Utilities shall file quarterly status reports that shall consist of a tabular summary of expenditures compared to the budget. Quarterly reports shall be due 45 days after the end of a calendar quarter.

C All reports shall be available to the public and filed in Docket Control. The Commission shall determine for each utility whether these reporting requirements shall supercede existing DSM reporting requirements.

D Staff may develop standard tables, outlines, and guidelines for reports.

R14-2-1708 Cost Recovery

A Utilities shall recover their net incremental costs to plan, design, implement, and evaluate DSM programs. In order to qualify for cost recovery, each program must be:

1) Approved prior to implementation;
2) Implemented in accordance with the approved program plan; and
3) Monitored and evaluated for cost-effectiveness.

B Utilities shall monitor and evaluate DSM programs to reliably ensure that they are cost-effective. Utilities shall propose modification or termination of programs that are failing to meet expected results.

C To effectively implement programs, cost recovery shall be concurrent (on an annual basis) with DSM spending.

D DSM funds may be used for market studies, consortium membership, labor costs for portfolio development, and other items for which the costs are difficult to allocate to individual DSM programs.

E To the extent goods and services used for DSM have value for other utility functions, programs, or services, funding shall be divided and allocated proportionately.

F Utilities shall allocate costs in accordance with Generally Accepted Accounting Principles.

R14-2-1709 Performance Incentives and Lost Revenue

A Performance incentives for achieving or exceeding Commission-designated goals may be appropriate as determined by the Commission.

B The Commission shall determine whether a utility may be allowed to recover lost net revenue.

R14-2-1710 Funding Mechanisms

A Funding shall be provided either through base rates, a surcharge mechanism, and/or an adjustment mechanism. Until such funding can be established for a utility in a rate case, the utility may request that the Commission grant the authority to establish a deferral account.

R14-2-1711 Applications Eligible for Funding

A DSM programs promoting energy efficiency, demand response, load management, or combined heat and power on the customer side of the meter that reduce peak demand or conserve energy may be approved by the Commission.

B DSM funds may be used for research and development such as applied technology assessment.

C CHP projects may be eligible for funding if they include heat or energy recovery which is used to displace space heating, water heating, or other loads.

D Non-CHP Distributed Generation (DG) may be used by customers as a means to help them participate in a demand response program.

R14-2-1712 Cost Effectiveness

A The incremental benefits to society of the overall DSM portfolio shall exceed the incremental costs to society of the overall DSM portfolio. The incremental benefits to society of the individual DSM programs shall exceed the incremental costs to society of the individual DSM programs.

B Cost-effectiveness shall be determined by the Societal Test. Costs to society equal the total incremental costs of the DSM program (including incremental utility costs and incremental customer/vendor costs). The benefits to society include avoided environmental impacts and the avoided fuel cost, purchased power cost, new capacity cost, transmission cost, and distribution cost.

C Other economic factors such as the costs and benefits associated with reliability may be included in the analysis. Electric utilities may consider savings of natural gas; natural gas utilities may consider savings of electricity. The analysis shall reflect the expected life of the savings resulting from DSM measures. Uncertainty about future streams of costs or benefits should be reflected in cost/benefit or other analyses where practicable and appropriate. In addition to the cost-effectiveness test, a utility or program administrator should consider the impact on rates, economic development, customer costs, and other economic impacts.

D Environmental costs or the value of environmental improvements shall be quantified when possible, reasonable, and cost-efficient. At a minimum, utilities shall make a good faith

effort to quantify water consumption savings and air emission reductions. Other environmental impacts may be considered qualitatively.

E The standard cost effectiveness analysis may not be appropriate for certain types of DSM programs.

1) Market Transformation Programs: Cost effectiveness shall be measured by the success of a program in achieving results, such as market effects compared to its costs.

2) Educational Programs: Utilities shall attempt to estimate the energy and peak demand savings that result from educational efforts that raise awareness about energy use and opportunities for saving energy.

3) R&D and Pilot Programs: Individual research and development and pilot programs do not have to demonstrate cost-effectiveness.

4) Low-Income Programs: Measures included in low-income programs shall be generally cost-effective.

R14-2-1713 Baseline Estimation

A The baseline for determining the incremental costs and benefits of a DSM program shall be a reasonable estimate of the level of electric and/or natural gas demand and/or consumption and associated costs that would have occurred in the absence of the DSM program.

B For demand response programs, customer load profile information may be used to verify baseline consumption patterns and the peak demand savings resulting from demand response actions.

R14-2-1714 Fuel Neutrality

A Ratepayer-funded DSM shall be developed and implemented in a fuel-neutral manner. For those installations/applications that have multiple fuel choices, the baseline used in the cost effectiveness analysis shall utilize the same fuel source as the installation/application.

B Electric utility program funds shall be used for electric measures. Natural gas utility program funds shall be used for natural gas measures. However, either natural gas utilities or electric utilities may fund thermal envelope improvements.

R14-2-1715 Monitoring, Evaluation, and Research

A Utilities shall monitor and evaluate all DSM programs to reliably ensure that they are cost-effective. Monitoring and evaluation should:

1) Determine participation rates, energy savings, and demand reductions;
2) Assess the utility's program implementation process;
3) Provide information on whether to continue, modify, or terminate a program; and
4) Determine the persistence and reliability of DSM.

B Evaluation and research may also be conducted for program planning, product development, and program improvement. Evaluation and research includes market studies, market research, and other technical research for planning purposes.

R14-2-1716 Program Administration and Implementation

A Utilities may use energy service companies and/or other external resources to implement DSM programs.

B The Commission may establish independent program administrators who would be subject to the relevant requirements of R14-2-1701 through R14-2-1718.

R14-2-1717 Leveraging and Cooperation

A Utilities shall make reasonable use of cost sharing, leveraging, or other opportunities available from customers, vendors, manufacturers, government agencies, other utilities, and others that increase the effectiveness of the DSM program and/or lower its costs.

R14-2-1718 Other Approaches to DSM

A In general, the Commission supports other approaches to DSM, including building codes, appliance efficiency standards, shared savings legislation, and actions in other forums that would complement the advancement and implementation of cost-effective and prudent demand-side management initiatives.