199—35.2 (476) Definitions. 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.

"Assessment of potential" means development of energy and capacity savings available from actual and projected customer usage by cost-effectively applying commercially available technology and improved operating practices to energy-using equipment and buildings and considering market factors including, but not limited to, the effects of rate impacts, the need to capture lost opportunities, the nonenergy benefits of measures, uncertainty associated with industry restructuring, the strategic value of energy efficiency to the utility, and other market factors.

"Avoided cost" means the cost the utility would have to pay to provide energy and capacity from alternative sources of supply available to utilities as calculated pursuant to the formulas in subrules 35.9(7) and 35.10(4).

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

"Benefit/cost 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 an energy efficiency program or plan. The tests are the participant test, the ratepayer impact test, the societal test, and the utility cost test. A program or plan passes a benefit/cost test if the benefit/cost ratio is equal to or greater than one.

"*Capacity purchase*" or "*sale commitment*" means electric generating capacity which a utility has committed to purchase or sell by means of contracts or other enforceable agreements.

"Contract deliverability" means the maximum firm capacity which a utility has under contract with its suppliers.

"*Customer incentive*" means an amount or amounts provided to or on behalf of customers for the purpose of having customers participate in energy efficiency programs. Incentives include, but are not limited to, rebates, loan subsidies, payments to dealers, rate credits, bill credits, the cost of energy audits, the cost of equipment given to customers, and the cost of installing such equipment. Customer incentives do not include the cost of information provided by the utility, nor do they include customers' bill reductions associated with reduced energy usage due to the implementation of energy efficiency programs. For the purposes of energy efficiency pricing strategies, incentive means the difference between a customer's bill on an energy efficiency customized rate and the customer's bill on a traditional rate considering factors such as the elasticity of demand.

"*Customer persistence*" means a customer's consistent use of energy efficient equipment or operating practices over time. For example, a nonpersistent customer may initially adopt the use of compact fluorescent lights, but replace efficient lights with incandescent lights when the former wear out. By contrast, a persistent customer will replace burned out efficient lamps with energy saving lamps after the initial trial.

"Customer's side of the meter" means point of delivery. For reference, the utility's side of the meter refers to activities from and including generation or energy supply up to the point where the customer takes delivery, which may be the customer's billing meter or an unmetered fixture.

"Economic potential" means the energy and capacity savings that result in future years when measures are adopted or applied by customers at the time it is economical to do so. For purposes of this chapter, economic potential may be determined by comparing the utility's avoided cost savings to the incremental cost of the measure.

"*Energy efficiency measures*" means activities on the customers' side of the meter which reduce customers' energy use or demand including, but not limited to, end-use efficiency improvements; load control or load management; thermal energy storage; or pricing strategies.

"Energy savings performance standards" means those standards which shall be cost-effectively achieved, with the exception of low-income weatherization and tree planting programs, and includes the annual capacity savings stated in either kW or dth/day or Mcf/day and the annual energy savings stated in either kWh or dth or Mcf.

"Firm throughput" means firm sales of gas and gas transported over the utility's distribution facilities under firm transportation arrangements.

"Fixed operations and maintenance costs" means operations and maintenance costs which do not vary with changes in energy generation or supply.

"Free riders" means those program participants who would have done what an energy efficiency program intends to promote even without the program.

"Gross operating revenues" means all revenues from intrastate operations includable in the operating revenue accounts of the prescribed uniform system of accounts except:

- 1. Provisions for uncollectible revenues;
- 2. Amounts included in the accounts for interdepartmental sales and rents;
- 3. Wholesale revenue;
- 4. Revenues from the sale of natural gas used as a feedstock by customers; and
- 5. Revenues from the sale of transportation service.

"Incremental cost" means the difference in the customer's cost between a less energy efficient measure and a more energy efficient measure.

"*Marginal energy cost*" for a gas utility means the cost associated with supplying the next thousand cubic feet (Mcf) or dekatherm (dth) of gas.

"Marginal energy cost" for an electric utility means the energy or fuel cost associated with generating or purchasing the next kWh of electricity.

"Market barrier" means a real or perceived impediment to the adoption of energy efficient technologies or energy efficient behavior by consumers.

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

"Off-peak period" means the days and weeks not included in the gas utility's peak period.

"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 an energy efficiency measure or program from the participant's perspective. Present values are calculated using a discount rate appropriate to the class of customers to which the energy efficiency measure 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 an energy efficient measure 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 measure 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.

"Peak day demand" means the amount of natural gas required to meet firm customers' maximum daily consumption.

"*Peak period*" for a gas utility means the days and weeks when the gas utility's highest firm throughput is likely to occur.

"Phase-in technical potential" means the technical potential for energy and capacity savings from the adoption of commercially available technology and operating practices when existing equipment is replaced or new equipment is installed. For example, if an energy-using unit of equipment has a ten-year lifetime, the phase-in technical potential in any one year might be one-tenth of the total number of such units in existence plus units projected to be installed.

"Process-oriented industrial assessment" means an analysis which promotes the adoption of energy efficiency measures by examining the facilities, operations and equipment of an industrial customer in which energy efficiency opportunities may be embedded and which includes:

1. The identification of opportunities which may provide increased energy efficiency in an industrial customer's production process from the introduction of materials to the final packaging of the product for shipping by:

- Directly improving the efficiency or scheduling of energy use;
- Reducing environmental waste; and

• Technological improvements designed to increase competitiveness and to achieve cost-effective product quality enhancement;

2. The identification of opportunities for an industrial customer to improve the energy efficiency of lighting, heating, ventilation, air conditioning, and the associated building envelope;

3. The identification of cost-effective opportunities for using renewable energy technology in "1" and "2" above.

"Program delivery and support mechanisms" means methods used by the utility to promote the adoption of energy efficiency options by customers. Program delivery and support mechanisms may include but are not limited to informational, educational, or demonstration techniques, technical assistance, or energy audits. Program delivery and support mechanisms may target specific options and markets, or address a variety of options across any number of energy efficiency programs.

"Purchased gas adjustment (PGA) year" means the 12-month period beginning September 1 and ending August 31.

"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 an energy efficiency measure or program from a rate level or utility 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 energy efficiency measures for each year of the useful life of the measure or program. Costs are the sum of the present values of utility increased supply costs, revenue losses due to the energy efficiency measures, utility program costs, and customer incentives for each year of the useful life of the measure or program. The calculation of utility avoided capacity and energy, increased utility supply costs, and revenue gains and losses must use the utility costing periods.

"Revenue requirement per net kW per year" for an electric utility means an annual cost amount calculated by the economic carrying charge for each year of the supply option's life such that when each annual amount is discounted by the utility's after-tax discount rate the sum of the discounted amounts equals the supply option's capital cost inclusive of income taxes on the return.

"Saturation" or *"market saturation"* means a comparison (using fractions or percentages) of the number of units of a particular type of equipment or building component to the total number of units in use which perform the particular function under study.

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

"Sensitivity analysis" means a set of evaluation methods or procedures which provides an estimation of the sensitivity of final results to changes in particular input data or assumptions.

"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 an energy efficiency measure 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 utility calculates its benefit/cost tests for its energy efficiency plan in subrule 35.8(6). 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 supply costs for each year of the useful life of the measure or program. The calculation of utility avoided capacity and energy and increased utility supply costs must use the utility costing periods.

"System energy losses" for an electric utility means net energy which is generated, purchased, or interchanged by a utility but which is not delivered either to ultimate customers or used for interdepartmental sales expressed as a percentage of net energy.

"Take-back effect" means a tendency to increase energy use in a facility, or for an appliance, as a result of increased efficiency of energy use. For example, a customer's installation of high efficiency light bulbs and then operating the lights longer, constitutes "taking-back" some of the energy otherwise saved by the efficient lighting.

"Target market" means a group of energy users who are the intended participants in an energy efficiency program.

"Technical potential" means the demand and energy savings which could occur if every existing piece of equipment or operating practice were changed to a technically feasible level of energy efficiency.

"Technically viable" means that a measure is appropriate for customers' equipment and buildings and Iowa's climatic conditions.

"Total throughput" means all volumes of natural gas flowing through the utility's distribution system.

"Transportation volume" means the volume of natural gas flowing through the utility's distribution system which is not owned or sold by the utility.

"Useful life" means the number of years an energy efficiency measure will produce benefits.

"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 measure 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 measure 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 measure or program. The calculation of utility avoided capacity and energy and increased utility supply costs must use the utility costing periods.

"Variable operations and maintenance costs" means operations and maintenance costs which vary with the amount of energy generated or supplied.