199—35.8 (476) Assessment of potential and energy efficiency plan requirements. A utility’s plan shall include a range of programs which address all customer classes across its Iowa jurisdictional territory. At a minimum, the plan shall include a program for qualified lower-income residential customers, including a cooperative program with any community action agency within the utility’s service area. The utility shall consider including in its plan a program for tree planting. Advertising which is part of an approved energy efficiency program is deemed to be advertising required by the board for purposes of Iowa Code section 476.18(3). The utility’s assessment of potential and energy efficiency plan shall include a summary not to exceed five pages in length written in a nontechnical style for the benefit of the general public. Each utility’s assessment of potential and accompanying energy efficiency plan shall include the following:

35.8(1) Assessment of potential and determination of performance standards. The utility shall file with the board an assessment of the potential for energy and capacity savings available from actual and projected customer usage by applying commercially available technology and improved operating practices to energy-using equipment and buildings. The utility’s assessment shall address the potential energy and capacity savings in each of ten years subsequent to the year the assessment is filed. Economic and impact analyses of measures shall address benefits and costs over the entire estimated lives of energy efficiency measures. At a minimum, each utility’s assessment of potential shall include data and analyses as follows:

a. A base case survey projecting annual peak demand and energy use of customers’ existing and estimated new energy-using buildings and equipment. The base case survey shall identify the annual peak demand and energy savings projected to occur from customers’ adoption of measures in the absence of new or continued demand-side management programs by the utility.

b. A survey to identify and describe all commercially available energy efficiency measures and their attributes needed to perform an assessment of potential energy and capacity savings, including but not limited to all relevant costs of the measures, utility bill savings, utility avoided cost savings, peak demand and energy savings, measures’ lifetimes, current market saturation of the measures, market availability of the measures, and non-energy-related features, costs and benefits.

c. A description of the methods and results for any screening or selection process used to identify technically viable energy efficiency measures. The utility shall explain its elimination of measures from further consideration. The utility shall provide an assessment of either annual economic potential or annual phase-in technical potential for peak demand and energy savings from projected adoption of technically viable measures, describing its methods and assumptions.

d. An assessment of the annual potential for utility implementation of the following special programs:

1. Peak demand and energy savings from programs targeted at qualified low-income customers, including cooperative programs with community action agencies;

2. Implementation of tree-planting programs; and

3. Peak demand and energy savings from cost-effective assistance to homebuilders and homebuyers in meeting the requirements of the Iowa model energy code.

e. An identification of the utility’s proposed performance goals for peak demand and energy savings from utility implementation of cost-effective energy efficiency programs and special programs. The utility shall identify annual goals, by energy efficiency program and total plan, for five years subsequent to the year of the filing. The utility may constrain or accelerate projected utility implementation of programs from estimates of economic or phase-in potential, based on its assessment of market potential. The utility may consider market factors including, but not limited to, market barriers to implementation of programs, the effects of rate impacts, lost opportunities which decrease future implementation of measures or programs, the nonenergy benefits and detriments of programs, uncertainty associated with industry restructuring, the strategic value of energy efficiency to the utility and other market factors it deems relevant. The utility shall fully describe its data and assumptions. In lieu of the data required in (1) through (5) below, the utility may reference relevant data and analyses.
filed in its energy efficiency plan, pursuant to subrule 35.8(2). The utility shall describe its analyses and results for factors relevant to the development of performance goals, including:

1. Cost-effectiveness tests. The utility shall analyze for cost-effectiveness proposed programs, using the societal, utility, ratepayer impact and participant tests. The utility’s analyses shall use inputs or factors realistically expected to be avoided costs filed pursuant to rules 35.9(476) and 35.10(476) or avoided costs determined by the utility’s alternative method. If the utility uses a test other than the societal test as the criterion for determining the cost-effectiveness of utility implementation of energy efficiency programs and plans, the utility shall describe and justify its use of the alternative test or combination of tests and compare the resulting impacts with the impacts resulting from the societal test.

2. Cost-effectiveness threshold(s). The utility shall describe and justify the level or levels of cost-effectiveness, if greater or less than a benefit/cost ratio of 1.0, to be used as a threshold for cost-effective utility implementation of programs. The utility’s threshold of cost-effectiveness for its plan as a whole shall be a benefit/cost ratio of 1.0 or greater.

3. A description of the proposed programs to be implemented, proposed utility implementation techniques, the number of eligible participants and proposed rates of participation per year, and the estimated annual demand and energy savings.

4. The budgets or levels of spending for utility implementation of programs, including proposed special programs addressing low-income, tree-planting and home-building assistance measures.

5. The rate impacts and average bill impacts, by customer class, resulting from utility implementation of programs.

f. An optional sensitivity analysis. If the utility’s proposed standards differ from the level of energy and capacity savings resulting from the utility’s current plan by more than 25 percent, the utility shall provide a sensitivity analysis identifying key variables, including levels of spending, and showing their impact on cost-effectiveness, energy savings, and capacity savings. The purpose of the sensitivity analysis shall be to explore the range of potential for utility implementation of programs.

35.8(2) Proposed energy efficiency plan, programs, and budget and cost allocation. The utility shall file with the board an energy efficiency plan listing all proposed new, modified, and existing energy efficiency programs. The following information shall be provided:

a. The analyses and results of cost-effectiveness tests for the plan as a whole and for each program. Low-income and tree-planting programs shall not be tested for cost-effectiveness, unless the utility wishes to present the results of cost-effectiveness tests for informational purposes. The utility shall analyze proposed programs and the plan as a whole for cost-effectiveness, using the societal, utility, ratepayer impact and participant tests. If the utility uses a test other than the societal test as the criterion for determining the cost-effectiveness of utility implementation of energy efficiency measures, the utility shall describe and justify its use of the alternative test or combination of tests and compare the resulting impacts with the impacts resulting from the societal test. The utility shall describe and justify the level or levels of cost-effectiveness, if greater or less than a benefit/cost ratio of 1.0, to be used as a threshold for determining cost-effectiveness of programs. The utility’s threshold of cost-effectiveness for its plan as a whole shall be a benefit/cost ratio of 1.0 or greater.

The utility shall provide an explanation of its sensitivity analysis identifying key variables showing the impact on cost-effectiveness. If appropriate and calculable, the utility shall adjust the energy and demand savings for the interactive effects of various measures contained within each program and shall adjust energy and demand savings of the plan as a whole for the interactive effects of programs. For the plan as a whole and for each program, the utility shall provide:

1. Cost escalation rates for each cost component of the benefit/cost test that reflect changes over the lives of the options in the potential program and benefit escalation rates for benefit components that reflect changes over the lives of the options;

2. Societal, utility cost, ratepayer impact measure, and participant test benefit/cost ratios; and

b. Descriptions of each program. If a proposed program is identical to an existing program, the utility may reference the program description currently in effect. A description of each proposed program shall include:
   (1) The name of each program;
   (2) The customers each program targets;
   (3) The energy efficiency measures promoted by each program;
   (4) The proposed utility promotional techniques, including the rebates or incentives offered through each program; and
   (5) The proposed rates of program participation or implementation of measures, including both eligible and estimated actual participants.

c. The estimated annual energy and demand savings for the plan and each program for each year the measures promoted by the plan and program will produce benefits. The utility shall estimate gross and net capacity and energy savings, accounting for free riders, take-back effects, and measure degradation.

d. The budget for the plan and for each program for each year of implementation or for each of the next five years of implementation, whichever is less, itemized by proposed costs. The budget shall be consistent with the accounting plan required pursuant to subrule 35.12(1). The budget may include the amount of the remittance to the Iowa energy center and the center for global and regional environmental research and the alternative energy revolving loan fund. The plan and program budgets shall be categorized into:
   (1) Planning and design costs;
   (2) Administrative costs;
   (3) Advertising and promotional costs;
   (4) Customer incentive costs;
   (5) Equipment costs;
   (6) Installation costs;
   (7) Monitoring and evaluation costs; and
   (8) Miscellaneous costs.
   Cost categories shall be further described by the following subcategories:
   Classifications of persons to be working on energy efficiency programs, full-time equivalents, dollar amounts of labor costs, and purpose of work;
   Type and use of equipment and other assets, including types of assets required and use of asset; and
   the name of outside firm(s) employed and a description of service(s) to be provided.

e. The rate impacts and average bill impacts, by customer class, resulting from the plan and each program.

f. A monitoring and evaluation plan. The utility shall describe in complete detail how it proposes to monitor and evaluate the implementation of its proposed programs and plan and shall show how it will accumulate and validate the information needed to measure the plan’s performance against the standards. The utility shall propose a format for monitoring reports and describe how annual results will be reported to the board on a detailed, accurate and timely basis.

35.8(3) to 35.8(8) Rescinded IAB 1/13/99, effective 2/17/99.

35.8(9) Coordination with other utilities and participation in plan preparation. The utility shall provide the following reports:
   a. A report which explains the results of attempts to coordinate energy efficiency programs with other gas or electric utilities sharing its service territory within the boundaries of incorporated municipalities having a population of 1000 or more individuals.
   b. A report on the participation of interested persons in the preparation of the assessment of potential and energy efficiency plan pursuant to subrules 35.8(1) and 35.8(2). The report shall identify the persons with whom the utility consulted, the date and type of meetings held or other contacts made, and the results of the meetings and contacts.
35.8(10) *Pilot projects.* Pilot projects may be included as a program, if justified by the utility. Pilot projects shall explore areas of innovative or unproven approaches, as provided in Iowa Code section 476.1. The proposed evaluation procedures for the pilot project shall be included.

35.8(11) to 35.8(13) Rescinded IAB 1/13/99, effective 2/17/99.