Iowa Association of
Electric Cooperatives
A Touchstone Energy® Cooperative

June 30, 2006

Ms. Judi Cooper
Executive Secretary
Iowa Utilities Board
350 Maple Street
Des Moines, Iowa 50319-0069

Subject: IAEC Informational Joint 2006 Energy Efficiency Filing for certain Electric Cooperatives

Dear Ms. Cooper:

Enclosed please find an original and three copies of the Iowa Association of Electric Cooperatives' joint filing for 38 electric cooperatives' energy efficiency filing in 2006 for the years 2004-2007. This filing is being made in compliance with Iowa Administrative Code 199—Chapter 36 which allows for electric cooperatives to jointly file energy efficiency information and generally requires:

- a description of each individual program, including the purpose or goal of the program, and the energy using facilities, equipment, or customer behavior that the program was designed to change;
- annual energy and peak demand savings, annual dollar savings, and, if available, nonpeak demand savings from the program;
- a description of the method(s) for determining the annual energy savings, peak demand savings, nonpeak demand savings, and annual dollar savings, whether engineering estimates, surveys, metering, or other methods;
- annual number of program participants;
- annual and total costs of the program;
- date the program was initiated, terminated, and the reason for termination; and
- other relevant information.

This filing is being filed for informational purposes only. If you have any questions, or if can be of further assistance, please advise.

Sincerely,

Regi Goodale
Director of Regulatory Affairs

John Perkins OCA (3 copies)
IDNR (1 copy)

Executive Summary

Iowa's electric cooperatives are committed to providing safe, reliable, environmentally responsible and affordable electric service. Energy efficiency most certainly is a significant component of this commitment. Iowa's electric cooperatives have been dedicated to energy efficiency for many years. This has been demonstrated with the devotion of resources and commitment to educating member-consumers on the benefits of using energy in an efficient manner.

The commitment to energy efficiency is often exemplified in the electric cooperative's day-to-day business practices with members. This filing focuses only on the demand-side components of energy efficiency. However, there are many energy efficiency measures deployed on the supply-side of the business and in other areas of providing electric service to member-consumers. The supply-side management programs include upgrading and maintaining distribution lines to minimize line losses, evaluating transformers, analyzing conductors, locating substations near larger loads and metering systems. In addition, cooperative power suppliers strive to make the generation and transmission of electricity more efficient.

The RECs participating in the IAEC joint energy efficiency filing during 2004 have invested approximately $7.5 million in energy efficiency and saved the member-consumers approximately $13.8 million in 2004.[1] It is projected that for 2006 the RECs will invest $8.3 million and achieving savings within 2006 at about $19.9 million. The details for the cost effectiveness of each program and for each individual REC for each of the four years reported are contained in the body of this report.

[1] The savings would be much larger if the savings related to interruptible pricing programs were quantified.

What is Energy Efficiency?

This filing has categorized the RECs' energy efficiency programs into four major categories:

I. Incentives for Energy Efficient Technologies
II. Demand Response Programs
III. Energy Audit & Technical Support Programs
IV. Educational & Research Programs

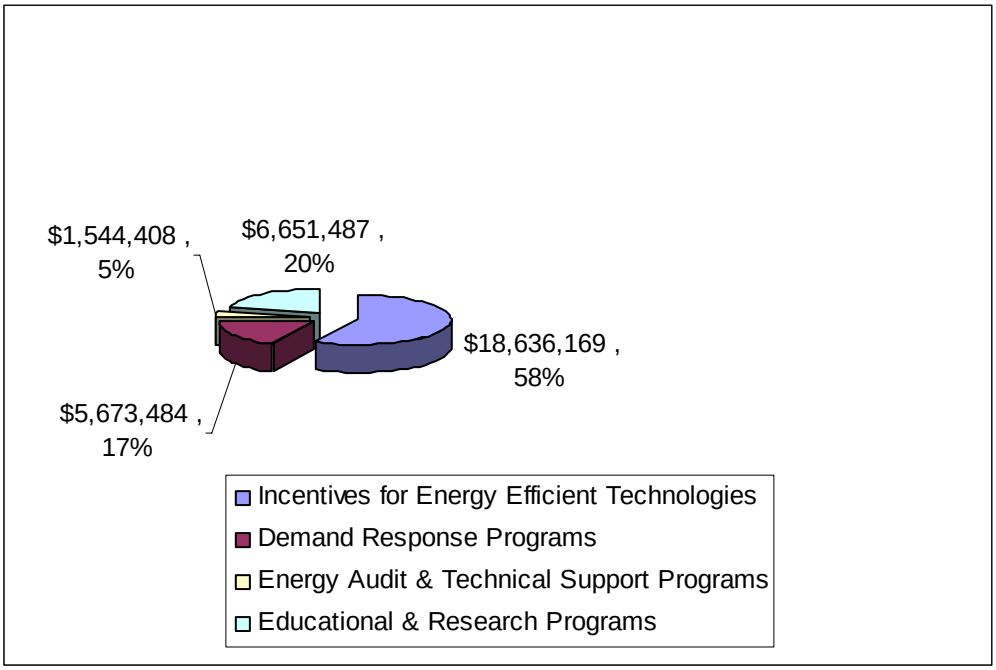
Category I "**Incentives for Energy Efficient Technologies**" includes 13 programs with incentives for high efficient appliances including high efficient air conditioners, water heaters, dishwashers and refrigerators. It also includes programs with incentives for geothermal and other heat pumps as well as incentives for high efficient electric motors, adjustable drive motors, pre-coolers in dairy operations, and incentives for high efficient interior and exterior lighting measures as well as a low interest loan program.

Category II "**Demand Response Programs**" includes 9 programs. Measures within these programs include: residential time-of-day pricing, commercial and industrial time-of-day, time-of-use (seasonal pricing), dual-fuel space heating, control space heating and/or air conditioning, industrial interruptible pricing, electric thermal storage space heating and air conditioning, water heater load control, crop drying (including off-peak crop drying) and irrigation load control.

Category III "**Energy Audit & Technical Support Programs**" includes measures related to expert energy services and energy audit services.

Category IV "**Educational & Research Programs**" includes measures related to model housing education, domestic water heater enhancement, member information and education, peak alert program, *Iowa REC News* energy information, and Iowa Energy Center and Center for Global Regional Environmental Research. Note: Since electric cooperatives are organized based upon 7 cooperative principles one of which is specifically identified as Education and Training, a greater emphasis may be seen in this category for electric cooperatives than for other types of utilities that are operated on a for-profit basis or are owned by government.

Total investments for energy efficiency for the years 2004-2005 (actual and projected) in the 4 major categories are as follows:



Electric Cooperatives and Energy Efficiency

It is the intent of Iowa's RECs, to continue offering energy efficiency programs that provide mutual benefits into the future. Iowa's cooperatives have initiated and implemented programs that encourage the efficient use of the members' resources, the cooperatives' resources and our nation's natural resources. These programs put the interests of the member-consumers first. The cooperatives' programs have resulted in savings in demand and energy. These savings are a result of new energy efficient appliances and equipment, improved efficiencies of existing and new structures and the changing attitude of the members. The cooperatives have undertaken substantial activities that are a part of their current and future load-management and time-of-use programs. Future programs will be developed to encourage the efficient use of electricity, while ensuring the comfort and savings for the member-consumers.

The cooperatives will continue to strive for the most efficient use of electricity by their members because energy matters to all of us. Cooperatives are watchful for the latest technologies that become feasible to offer their members. For the RECs, energy efficiency and other service-related programs are an important part of striving for total member-consumer satisfaction.

Iowa's RECs are continuing to report energy efficiency information under the title of "Energy Matters." This title represents the thoughts of the RECs in working toward making Iowa a more sustainable energy state. Also, this title is accompanied by a theme we have chosen that refers to "A partnership to educate and assist REC members regarding energy efficiency." This theme helps illustrate how

important we feel partnerships are with our members. These partnerships provide valuable feedback, enabling cooperatives to continue providing viable energy efficiency programs today and in the future.

The energy efficiency goals of the RECs include the following:

- Striving for every kW or kWh generated to be used in the most efficient manner possible.
- Maintaining or improving the productivity level and comfort levels of our members while using energy wisely and efficiently.
- Improving Iowa's indoor and outdoor air quality.
- Promoting the use of new energy efficient technologies.
- Delivering electricity at a competitive price.
- Preserving existing energy sources to provide for future generations.
- Giving an ultimate value to members' energy dollars.
- Working toward less dependence on foreign energy.

In order to accomplish these goals the RECs have developed a partnership with their members. Through this partnership the RECs educate, encourage and assist their members on energy matters, on the following:

- Using energy wisely and efficiently.
- Purchasing energy efficient appliances and equipment.
- Building energy efficient homes and buildings.
- Improving the efficiency levels of existing homes and buildings.
- Changing usage patterns.
- Showing members' economic paybacks for many types of energy efficiency efforts.
- Sharing information on new energy efficient products and technologies.

In addition to educating, encouraging and assisting member-consumers with energy efficiency programs, Iowa's cooperatives also provide education and training to trade allies and cooperative employees. The cooperatives work very closely with trade allies in the education and training area. An example is the annual *"Momentum is Building"* Conference. This conference is held to bring trade allies together with electric cooperative personnel from across the state to exchange ideas and explore new technologies. The trade allies include those involved in the construction industry and other areas of providing service related to products that consume energy in rural Iowa.

Contents of this Report

This report provides extensive information on 30 different energy efficiency programs offered by Iowa's electric cooperatives during the reporting period. The details of the report provide:

- Specific program goals for each program
- Basic description of each program
- Member-consumer behavior expected from participating in the program
- Methods used to calculate program kilowatt and kilowatt-hour savings

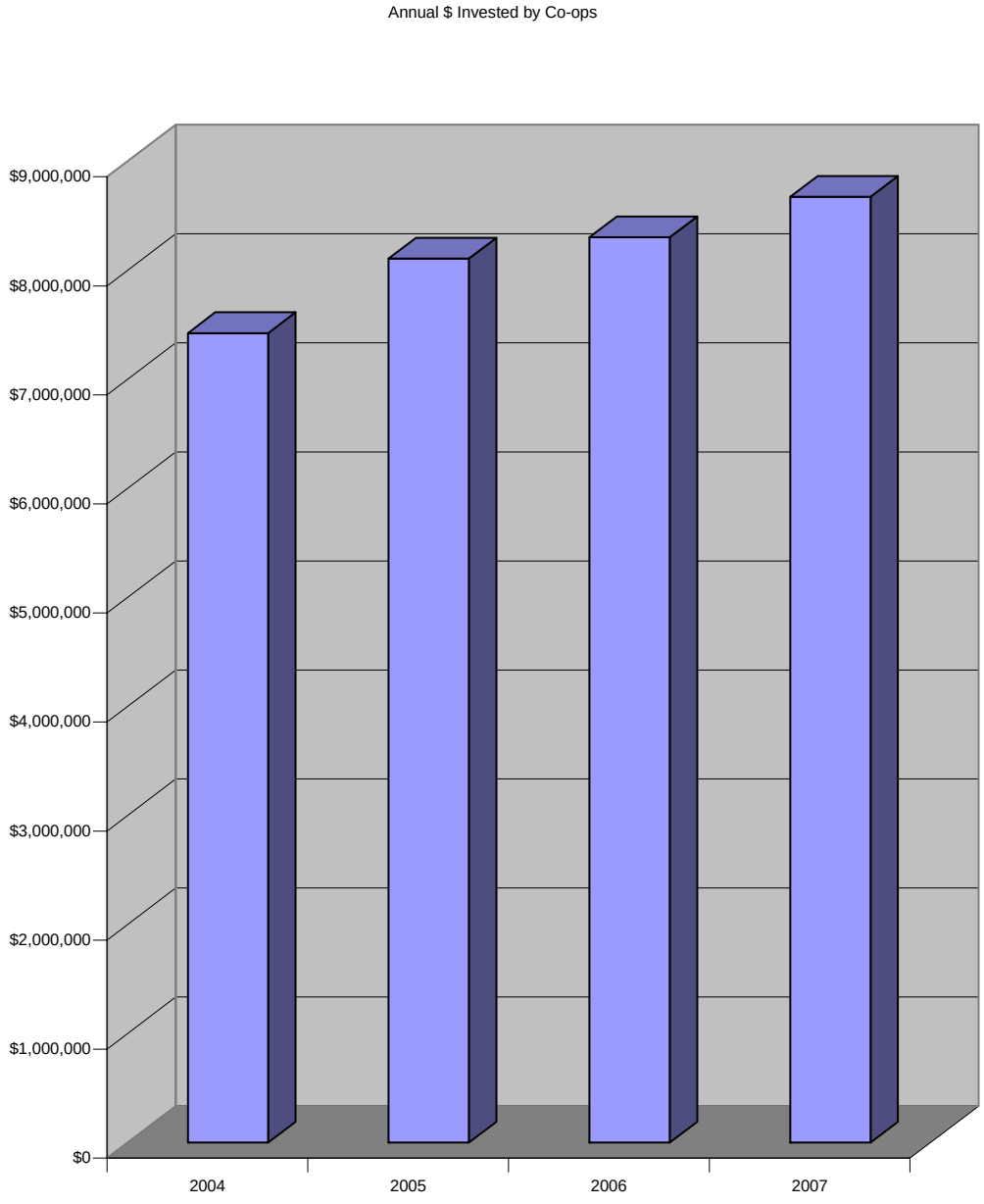
Reporting Period

This filing reports information for four different years. Two of the four years, 2004 and 2005, include expenditures and savings computed based upon actual participation levels. The data reported for 2006 and 2007 is all based upon estimated participation levels. This filing represents the eighth joint informational filing on energy efficiency by Iowa's electric cooperatives over the years. These filings together have reported data to the Iowa Utilities Board since 1990.

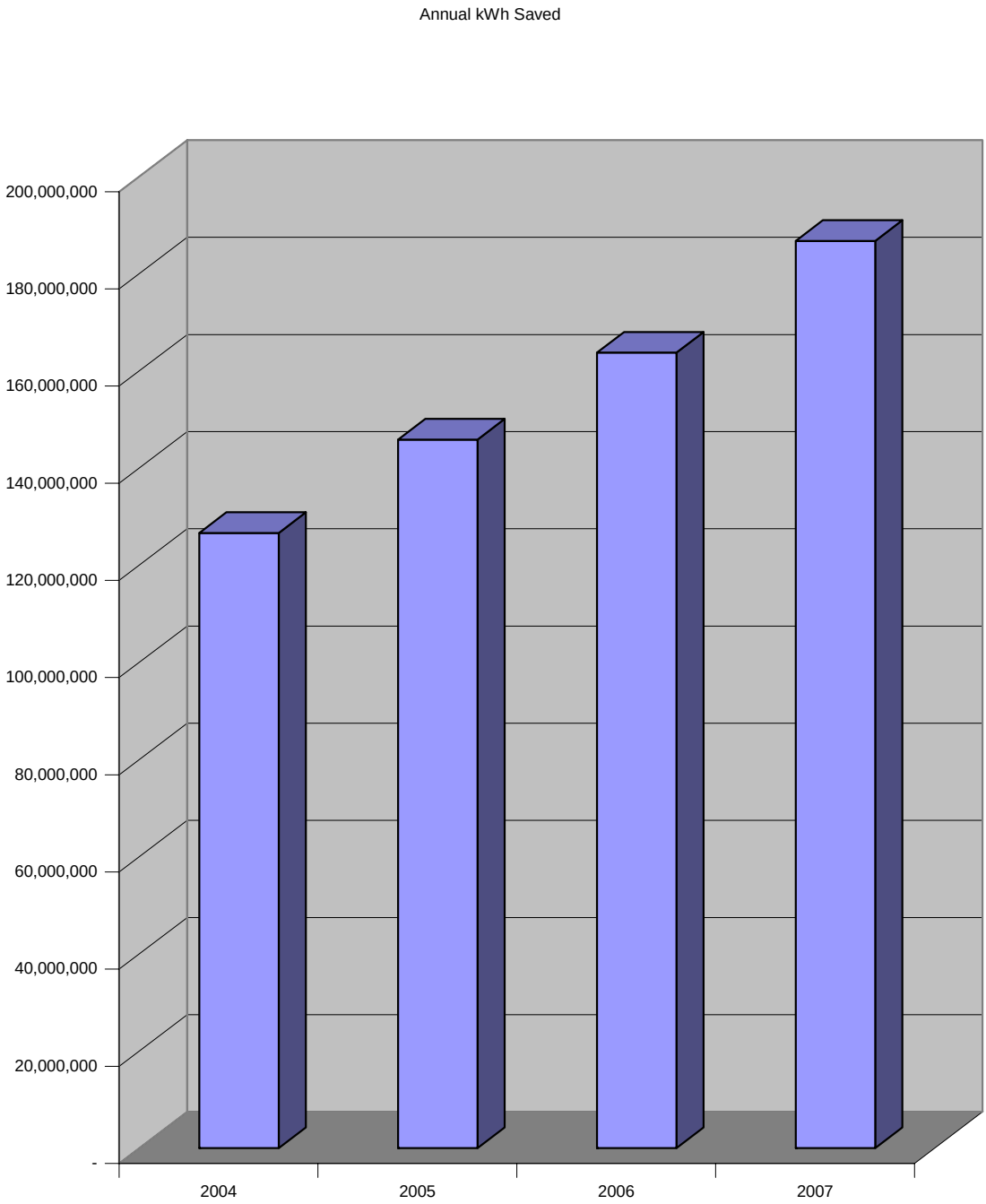
Summary of the Results 2004-2007

Iowa's electric cooperatives, during the reporting period for this report, have recovered the costs associated with energy efficiency programs on a "pay-as-you go" approach. This has always been the approach used by Iowa's electric cooperatives. Another approach used by some of Iowa electric utilities has been a "deferred" approach, where the costs are incurred in one time period and deferred for recovery from customers in a later time period. The "deferred" approach can and does cause significant dollars to be incurred in carrying charges. Because Iowa's RECs have not deferred any energy efficiency costs, the RECs have incurred $0 in carrying charges in the reporting period and in all previous reports and years. Additionally, the electric cooperatives have not incurred or recovered from member-consumers any dollars associated with rewards for implementing energy efficiency programs. Because of the governance structure and the not-for-profit configuration of an electric cooperative, including a reward for implementing energy efficiency programs would unnecessarily increase the costs of implementing the programs and take resources away from other critical programs. The cooperative business model passes the savings from energy efficiency onto the member-consumers automatically.

The following is a chart which shows the actual dollars invested by the electric cooperatives' participating in the July 2006 IAEC joint energy efficiency filing. The data for the years 2004 and 2005 are actual and the data for 2006 and 2007 are estimated.

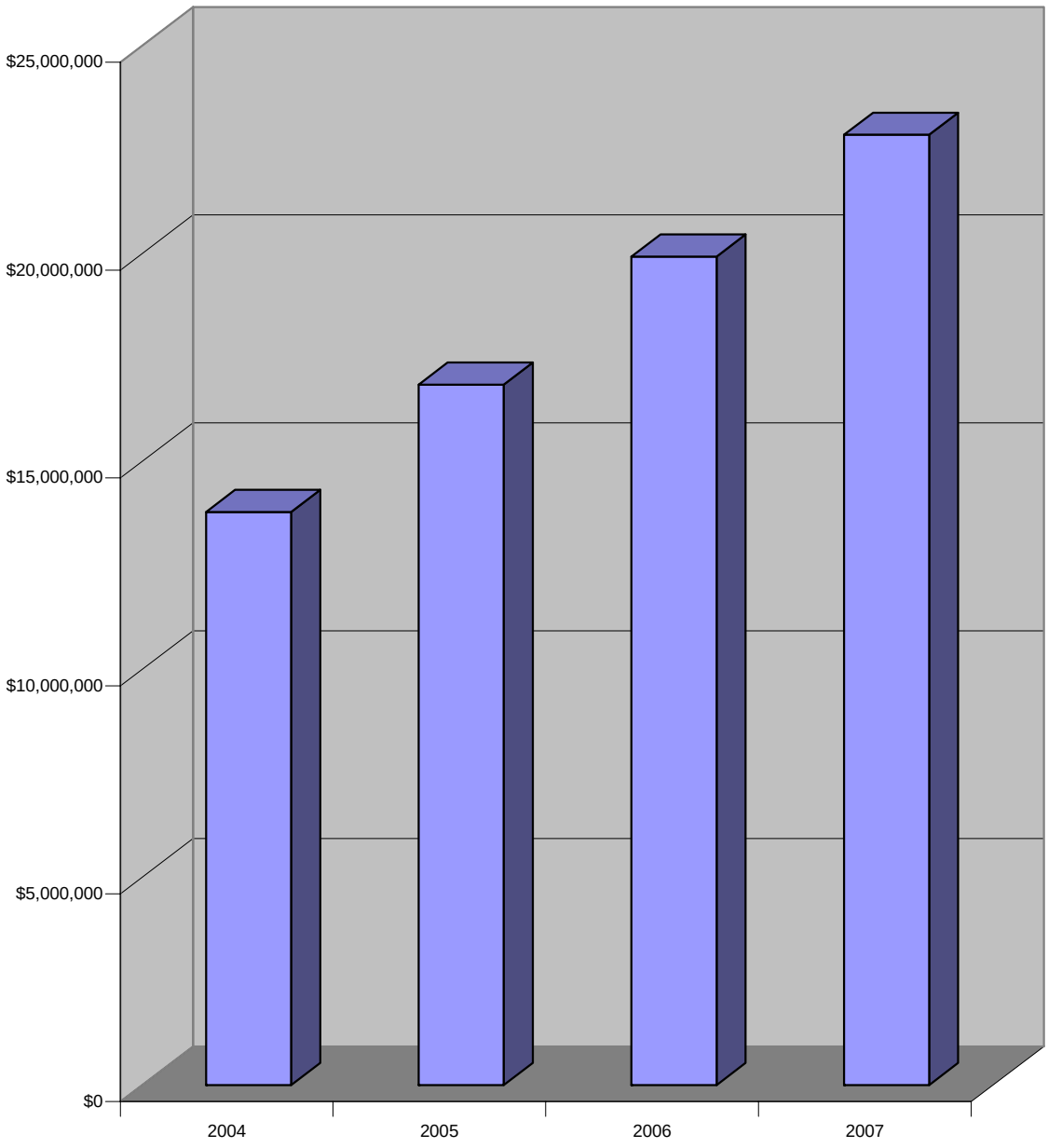


kWh savings: The amount of energy not used because of an energy efficiency program, measured in kilowatt-hours (kWh) of electricity.



Dollar savings: The reduction in the dollars spent on electricity service by member-consumers and by the cooperatives as the result of the energy efficiency programs.

Annual $ Saved by Member-Consumers



Notes for Report Reader

It is important for the reader of this report to understand that even though the electric cooperatives report energy efficiency information on a joint basis, the program offerings can differ significantly on a geographic basis or from cooperative to cooperative. Several factors drive this phenomenon. First, serving the needs of the membership of an individual cooperative is critical. Each cooperative's member-consumers may have different needs because of the geographic location of the electric cooperative member-consumers or because of other factors. For example, the economics of deploying a given technology such as ground source heat pumps may differ significantly from the far northeast corner of Iowa to the far southwest corner of the state. Additionally, whether the cooperative is a summer peaking utility or a fall peaking utility may influence the program offerings. While there has been a significant amount of consistency in reporting this data for the electric cooperatives over the past seven joint reports, significant care must be taken in attempting to compare the cooperative data to that of other utilities. The manner in which savings are computed for a given measure can and do differ between the types of utilities. For example, one could compute the savings of installing a high-efficient air conditioner based upon the kWhs saved only in the year reported. Whereas another approach may be to compute the kWhs saved by the same air conditioner over the life of the unit and report those in the year in which the unit was installed or put into operation. Thus, assumptions and computation methodology can significantly change the end results. Another significant area includes claimed savings. For example, the RECs report on their interruptible program, but do not include any kWhs or KW savings for these programs in contrast to what may be reported by other utilities.

While there may not necessarily be one "right" way of reporting or making assumptions, it is critical for the reader to understand the potential pitfalls if an attempt is made in making comparisons between utilities or when aggregating data.