

FINAL REPORT

Energy Efficiency Plans and Programs Study Committee

February 2009

MEMBERS:

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AUTHORIZATION AND APPOINTMENT

The Legislative Council created the Energy Efficiency Plans and Programs Study Committee for the 2008 Legislative Interim pursuant to the passage of S.F. 2386 during the 2008 Legislative Session, which provided, in Section 8:

The Legislative Council is requested to establish an interim study committee to examine the existence and effectiveness of energy efficiency plans and programs implemented by gas and electric public utilities, with an emphasis on results achieved by current plans and programs from the demand, or customer, perspective, and to make recommendations for additional requirements applicable to energy efficiency plans and programs that would improve such results. In conducting the study and developing recommendations, the Committee shall consider testimony from the lowa Utilities Board, rate and nonrate-regulated gas and electric utilities, the Consumer Advocate, state agencies involved with energy efficiency program administration, environmental groups and associations, and consumers.

The Legislative Council authorized the Committee for two meetings which were held on November 13, 2008, and December 3, 2008.



I. November 13, 2008, Meeting

A. Overview

The primary focus of the Committee's first meeting concerned a summary of existing energy efficiency program requirements by the lowa Utilities Board, a discussion of current energy efficiency plans and programs being offered by investor and consumer-owned gas and electric public utilities and the identification of future plans and programs, and perspectives on the necessity for and content of energy efficiency plans and programs offered by several energy efficiency policy groups or agencies.

B. Iowa Utilities Board (IUB)

Mr. John Norris, Chairperson, IUB, accompanied by Ms. Joan Conrad, Legislative Liaison, IUB, stated that all Iowa gas and electric utilities are working on new energy efficiency plans as a result of the passage of 2008 Iowa Acts, ch. 1133 (S.F. 2386), and summarized the requirements and timeframes applicable to such plans as established in the legislation. Mr. Norris presented data indicating that Iowa ranks third in the U.S. in per capita spending on energy efficiency, that investor-owned utility spending for energy efficiency and load management has significantly increased in recent years, that there is a high projected cost for achieving energy efficiency goals, and highlighted new programs being proposed by investor-owned utilities. IUB has met with municipal utilities and rural electric cooperative representatives to discuss implementation of the S.F. 2386 requirements. Committee discussion included the extent to which energy efficiency planning effectiveness hinges on consumer behavior, the need for training and education relating to energy efficiency, and the merits of disclosing energy efficiency program-related costs on utility customer bills.

C. Utility Plans and Programs

- 1. MidAmerican Energy. Ms. Diane Munns, Vice President of Regulatory Affairs and Energy Efficiency, MidAmerican Energy, summarized factors responsible for the renewed emphasis on energy efficiency in the past two years, and stated that unlike many other states, lowa continued to pursue energy efficiency program implementation throughout the preceding two decades when general interest in such programs waned nationally. Ms. Munns stated that lowa is recognized as a leader in energy efficiency, and that this has been accomplished while keeping utility rates relatively low. She identified program administration, coordination, and education as areas for improvement; called for improved monitoring and verification system development to document energy savings; and maintained that in times of economic downturn the need to be aggressive in energy efficiency planning is intensified.
- 2. Alliant Energy. Ms. Kim King, Manager of Energy Efficiency and Demand Side Management, Alliant Energy, provided information regarding Alliant's current energy efficiency program results, and identified energy efficiency plan target levels and actual savings under the current plan, and projected targets through 2013 under the utility's

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new plan. She also provided data relating to Iowa based upon an energy efficiency scorecard developed by the American Council For An Energy-Efficiency Economy, and recommended several new energy efficiency program components.

- 3. Rural Electric Cooperatives (RECs). Mr. Regi Goodale, Director of Regulatory Affairs, Iowa Association of Electric Cooperatives, summarized the impact of S.F. 2386 on the energy efficiency planning process for RECs, and identified a three-to-one cost-benefit ratio applicable to REC investment in energy efficiency. He noted as significant differences between RECs and investor-owned utilities impacting the planning process, the fact that RECs only provide electrical service, that plan implementation can be challenging given the relatively low customer density, and that small commercial and industrial customers tend to operate differently in a rural setting.
- 4. Municipal Utilities. Mr. Bob Haug, Executive Director, Iowa Association of Municipal Utilities, discussed an energy efficiency assessment process currently underway involving municipal utilities in compliance with S.F. 2386, stated that 84 association members have added at least one new energy efficiency program in the past two years, and indicated that a number of new programs are being developed. Mr. Haug said that local conditions vary widely for municipal utilities, observed a need for additional programs targeted at low-income individuals, and particularly emphasized that low-income and rental utility customers are paying disproportionately for efficiency benefits they do not receive.

D. Energy Efficiency Plan Perspectives

- 1. Iowa Policy Project (IPP). Mr. David Osterberg, Executive Director, IPP, provided a legislative history of the development of energy efficiency planning requirements in lowa, highlighted by the Energy Efficiency Act of 1990. He stated that the demand for electricity in lowa is increasing at a higher rate than in many other states, summarized and provided copies of IPP reports, advocated collaboration in the provision of energy efficiency programs between utilities, and referred to energy efficiency as being at odds with the normal business model of a utility prompting a need for integration of energy efficiency in a utility's planning process.
- 2. Office of Consumer Advocate (OCA). Mr. John Perkins, Consumer Advocate, OCA, accompanied by Ms. Jennifer Easler, Attorney, OCA, provided a copy of a draft report relating to the status of energy efficiency programs in Iowa, and noted positive trends and opportunities for improvement relating to energy efficiency. It was observed that an increasing level of coordination and collaboration was both necessary and beginning to occur, and noted that in the absence of a single provider of energy efficiency programming, it is necessary to build off existing utility infrastructure to distribute the advantages of energy efficiency across the state. Future opportunities and challenges identified included continued and consistent monitoring and evaluation of programs, rate design consistent with energy efficiency objectives, incorporating load



management, continued progress on coordination, and the development of appropriate program criteria.

3. Office of Energy Independence (OEI). Ms. Roya Stanley, Director, OEI, provided an overview of energy efficiency policy approaches and relayed OEI recommendations relating to energy efficiency. Energy demand in the U.S. is anticipated to increase by more than one-third by 2030, but that this projection does not necessarily have to become reality. She indicated that energy efficiency creates jobs in an economic downturn, that cost is more significant to energy consumers than the source of the energy being consumed, and that energy efficiency is a low risk, high return endeavor.

Energy independence recommendations include creating energy efficiency portfolio standards which encourage efficient generation, transmission, and usage; promoting smart growth planning to facilitate compact growth, transit-oriented development, integrated transit networks, and mixed use development; coordinating core energy efficiency programs involving simplification, setting standards for industry-wide programs, and state leadership; and making energy efficiency a priority by requiring least-cost planning and the pursuit of all efficiency resource alternatives before new generation capacity is approved.

- 4. Iowa Environmental Council (IEC). Mr. Nathanial Baer, Energy Program Director, IEC, addressed energy efficiency from the consumer perspective, indicating that consumers need access to effective, comprehensive energy efficiency information, analysis, and programs. He stated that energy efficiency saves consumers money, improves quality of life, increases property value, improves the environment, creates direct jobs, and helps retain more money in the local economy. Pie charts or graphs depicting average household energy use, whole-house savings measures, and household energy savings potential were supplied. Mr. Baer also discussed the merits and shortcomings of a utility-based energy efficiency model, and advocated policy changes to establish minimum standards for all utility energy efficiency programs and energy savings goals and to provide IUB with statutory authority over all utilities similar to that currently possessed with regard to investor-owned utilities.
- 5. Plains Justice. Ms. Carrie LaSouer, President, Plains Justice, related input she received from lowans on the topic of energy efficiency, and recommended requiring the highest level of energy efficiency programming coordination among lowa utilities and their efficiency partners to increase consumer knowledge and access and provide economic stimulus. Ms. LaSouer additionally recommended requiring investor-owned utilities to perform integrated resource planning and establishing efficiency as the "first fuel" by requiring that all electric and natural gas resource needs to be met first through available energy efficiency and demand reduction resources that are cost-effective or less expensive than adding to supply.

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II. December 3, 2008, Meeting

A. Overview

The primary focus of the Committee's second meeting concerned discussions of utility plan incentives and administration approaches from a national perspective, energy-related components of the State Building Code and implementation issues, and demand load management procedures. Committee members also identified potential recommendations awaiting final determination prior to the start of the 2009 Legislative Session.

B. Decoupling and Third-party Administration

Mr. Richard Seldano, Director, Regulatory Assistance Project, discussed various approaches to administration of energy efficiency programs and identified business incentives that support, and discourage, energy efficiency. He emphasized that the fundamental issue regarding energy efficiency programs offered by utilities is how to organize energy efficiency to make good business sense, and summarized and contrasted the three basic approaches to energy efficiency plan administration consisting of utility administration, state administration, and third-party administration. Mr. Seldano related Vermont's success in switching to third-party administration, and stated that all three approaches can work, or fail, depending on local circumstances. He also discussed the concept of decoupling, removing the link between revenue levels and sales volumes and thereby a disincentive on the part of utilities to promote energy efficiency concepts which lower energy usage.

C. Alternative Fuels Energy Efficiency Plans and Programs

Ms. Debra Grooms, Executive Director, Iowa Propane Gas Association, described the propane gas industry in the state and some of the energy efficiency and outreach activities available to propane consumers. She characterized the industry as highly competitive and diverse in structure, and unregulated as a utility. Ms. Grooms discussed the federal Department of Energy's Energy Star Program from the propane industry's perspective, and federal tax incentives and credits applicable to propane furnaces, boilers, and water heaters. She advocated giving energy-saving credits to electricity providers conducting energy efficiency programs that result in the more efficient use of propane and other alternate forms of fuel.

D. State Energy/Building Code Energy Efficiency Requirements

Mr. Stuart Crine, State Building Code Commissioner, accompanied by Mr. Mike Coveyou, Planning and Research Administrator, Department of Public Safety, discussed the requirements and implementation of legislation enacted in 2008 regarding energy efficiency aspects of the State Building Code. They indicated that the state energy code now applies statewide to any commercial construction and new construction of one-and two-family residences, and that lighting efficiency standards apply to all construction and to new and replacement lighting in existing buildings. Energy review and life cycle cost analysis requirements were discussed, as were new sustainable design initiatives. Additionally, Mr. Crine discussed the creation and operation of, and goals identified by, the Commission on Energy Efficiency Standards and Practices.



E. Load Management

Mr. Norris, Chairperson, Iowa Utilities Board, and Mr. Perkins, Consumer Advocate, Office of Consumer Advocate, offered their perspectives on the practice of load management by utilities, whereby electricity use is reduced at critical times such as peak periods of usage or during system emergencies. Mr. Norris described customer incentives for load management participation, the history and cost of load management programs, efforts to expand load management enrollment, and anticipated future savings resulting from the program. Mr. Perkins related his office's perspective that load management may not be properly viewed as an energy efficiency program and when characterized as such could give a false impression regarding the amount being spent by utilities on energy efficiency efforts.

F. State Energy/Building Code—Local Perspectives

- 1. Iowa State Association of Counties. Mr. Nathan Bonnett, Public Policy Specialist, lowa State Association of Counties, discussed administration and enforcement efforts relating to the building code at the county level. Mr. Bonnett identified 10 counties having adopted some version of the code, stated that administration differs from one county to the next, and presented case studies pertaining to code implementation. Barriers to code adoption by counties include cost concerns, slow development rate under current conditions, lack of consideration by county boards of supervisors, and a perception of invasiveness in primarily rural areas. Education regarding the benefits of a building code combined with options such as Code Chapter 28E agreements with cities and maintaining local control were identified as key in encouraging counties to adopt the code.
- 2. Iowa League of Cities. Ms. Shannon Paseka, Research and Fiscal Analyst, Iowa League of Cities, distributed a draft copy of a survey intended to elicit information from cities regarding how they are currently handling building and energy codes in their communities, including the extent to which they employ enforcement mechanisms for noncompliance.
- 3. Building Inspection. Mr. Phil Delafield, Chief Building Inspector, Community Development Department, City of Des Moines, described the building inspections process in Des Moines, indicating that his department does not conduct separate energy efficiency compliance inspections, due primarily to cost and timing factors. Inspectors do attempt to confirm what a developer is proposing relating to energy efficiency. Mr. Delafield advocated standardization to level the playing field between urban and rural areas regarding implementation of the code, education aimed at builder organizations and raising consumer awareness, and ongoing inspector training in energy efficiency standards and construction techniques.

G. Black Hills Energy

Ms. Susan Walter, Manager, Government Affairs, Black Hills Energy, provided an overview of the company and customer profile. She stated that there is general agreement that current energy

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efficiency programs result in lower natural gas usage per customer and that reductions in natural gas usage have a significant financial impact on utilities. Ms. Walter recommended that any consideration of increases in energy efficiency program spending should mitigate the related reduction in revenues, and that Black Hills Energy favors revenue stabilization through an innovative rate design possibly incorporating concepts such as decoupling.

H. Climate Change Advisory Council Recommendations

Mr. Frank Cownie, Mayor, City of Des Moines, and Vice-Chairperson of the council, addressed efforts by the council to develop scenarios to reduce statewide greenhouse gas emissions by specified statutory levels. Mayor Cownie indicated that the council has heeded the numerous indicators that current environmental practices need to be changed, and encouraged putting mutually supportive incentives in place that are consistently administered to facilitate an improved partnership between the state and local governments.

I. Potential Recommendations

The following potential recommendations were contributed by Committee members at the conclusion of the meeting, pending additional consideration and final determination subsequent to the meeting:

- 1. Focus on educating consumers regarding the value of energy efficiency.
- 2. Enhance efforts to enforce the state building/energy code by providing financial incentives to facilitate compliance in new and existing homes—such as forgivable loans, low-interest loans, etc.
- 3. Position the state to lead by example—lower thermostats, reduce air conditioning, install lower-wattage lighting and turn off lights when not in use, and make sure construction of state building maximizes energy efficiency.
- **4.** Require 100 percent participation by public utilities in energy efficiency plans and programs, either individually or by partnering, to ensure that all citizens of the state have access to energy efficiency programs that are proven successful.
- 5. Allow utilities to complete required assessments and implement energy efficiency plans to expand their energy efficiency efforts, and analyze the results of these assessments and efforts, prior to instituting additional energy efficiency policy requirements or mandates.
- **6.** Allocate 10 percent of amounts contained within the Iowa Power Fund for consumer education in Iowa regarding their energy usage, purchasing decisions, and energy efficiency product/appliance alternatives.
- 7. Base all future energy efficiency programs or requirements on the economic impact to lowa taxpayers, utility rate-payers and energy users, and do not require utilities to



increase rates or fees to consumers or increase taxes to pay for mandated energy efficiency activities or required investments.

- **8.** Recognize the value of energy efficiency planning in reducing customer energy usage, thereby assisting lowa citizens financially and stimulating the economy.
- **9.** Educate consumers on the cost of energy efficiency programs, and disclose the portion of their utility bill attributable to these programs on each monthly statement received from their utility provider. Also require utility disclosure, if not currently being provided, of a customer's annual energy consumption.
- **10.** Reinforce that compliance with the state building/energy code is a consumer protection issue—promotes safety.
- **11.** Encourage consumer education by utility companies of the cost/benefit ratio resulting from the purchase and installation of energy efficient products, appliances, and heating/cooling systems.
- **12.** Create incentives to facilitate energy efficiency investment such as a sales tax holiday or other tax incentives. Consider instituting a state income tax credit for energy efficiency which would parallel the recently extended federal income tax credit.
- **13.** Adjust how property is assessed to include the value of energy efficiency improvements such as geothermal systems, and consider tax credits for the installation of such systems.
- **14.** Evaluate state regulation of the rate-making structure and create regulatory options to increase efficiencies in the system without impacting utility rates or increasing taxes.

J. Congressional Delegation

In addition, Committee members unanimously approved a draft version of a letter to be sent to lowa's congressional delegation requesting reform regarding the ratings accuracy, accountability for inaccurate ratings, and independent testing of manufacturers' energy saving claims with regard to the federal Energy Star Program.

III. Final Recommendations

Based upon the proposed recommendations submitted for further consideration at the conclusion of the December 3 meeting, the following list of final recommendations was distributed by e-mail to Committee members on January 14, 2009, with the notation that they would be considered to have been accepted by Committee members and referred to the General Assembly for further consideration absent an indication of disapproval from a majority of members from either chamber or a submission of a proposal for a substantive revision of a recommendation received on or before that date:

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- 1. Ensure that all citizens of this state have access to proven, successful energy efficiency programs regardless of geographic location, energy mix, or service provider.
- **2.** Focus on educating consumers regarding the value of energy efficiency.
- **3.** Enhance efforts to enforce the state building/energy code by providing financial incentives to facilitate compliance in new and existing homes, including but not limited to forgivable and low-interest loans.
- **4.** Position the state to lead by example by lowering thermostats, reducing air conditioning, lowering lighting-wattage and turning off lights when not in use, and requiring energy efficiency in state building construction.
- **5.** Allocate 10 percent of amounts contained within the Iowa Power Fund for consumer education in Iowa regarding consumer energy usage, purchasing decisions, and energy-efficient product/appliance alternatives.
- **6.** Recognize the value of energy efficiency planning in reducing customer energy usage, thereby assisting lowa citizens financially and stimulating the economy.
- **7.** Reinforce that compliance with the state building/energy code is a consumer protection issue which promotes safety.
- **8.** Encourage consumer education by utility companies regarding the cost/benefit ratio resulting from the purchase and installation of energy-efficient products, appliances, and heating/cooling systems.
- **9.** Consider instituting a state income tax credit for energy efficiency which would parallel the recently extended federal income tax credit.
- **10.** Adjust how property is assessed to include the value of energy efficiency improvements such as geothermal systems, and consider tax credits for the installation of such systems.
- **11.** Evaluate regulation of the rate-making structure and create regulatory options to increase efficiencies in the system without impacting utility rates or increasing taxes.

Proposed Amendment. As of January 21, 2009, no input from Committee members was received regarding 10 of the 11 recommendations, and they were accordingly considered to have been adopted by the Committee as of that date. Senator Ward proposed a substantive revision to recommendation number 10, which would modify the recommendation to read as follows:

10. Consider tax credits to encourage installation of energy efficiency improvements such as geothermal systems.

This substantive revision was disseminated to Committee members in an e-mail message dated January 22, 2009, with the notation that if a majority of members from both chambers indicated support for the modified version, it would be substituted for the original version on the recommendations list. Committee members supporting the change were requested to so indicate



by e-mail by January 24, 2009. As of that date, an insufficient number of responses were received from Committee members to support substituting the proposed revision, and accordingly the original list of Final Recommendations was considered adopted.

IV. Materials Filed With the Legislative Services Agency

The following materials listed were distributed at or in connection with the meetings and are filed with the Legislative Services Agency. The materials may be accessed from the "Additional Information" link on the Committee's Internet webpage:

http://www.legis.state.ia.us/aspx/Committees/Committee.aspx?id=237

- **1.** 12/3/2008 Black Hills Energy.
- **2.** 12/3/2008 Decoupling—Regulatory Assistance Project.
- **3.** 12/3/2008 Energy Efficiency Administration and Business Incentives—Regulatory Assistance Project.
- **4.** 12/3/2008 Energy Efficiency Program Administrative Structures—Regulatory Assistance Project.
- **5.** 12/3/2008 Energy Star Letter—Sent to Each Member of Iowa's Congressional Delegation.
- **6.** 12/3/2008 Iowa League of Cities—Survey Draft.
- 7. 12/3/2008 Iowa Propane Gas Association Handout.
- **8.** 12/3/2008 Iowa Propane Gas Association Presentation.
- **9.** 12/3/2008 Load Management.
- **10.** 12/3/2008 Load Management—OCA Handout.
- **11.** 12/3/2008 State Energy/Building Code—County Perspectives.
- **12.** 12/3/2008 State Energy/Building Code Presentation.
- **13.** 11/13/2008 2007 Energy Efficiency Study Committee Recommendations.
- **14.** 11/13/2008 Alliant Energy Presentation.
- **15.** 11/13/2008 Energy Star Article.
- **16.** 11/13/2008 Global Climate Change Position Statement.
- **17.** 11/13/2008 Iowa Association of Electric Cooperatives Materials.

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- **18.** 11/13/2008 Iowa Association of Municipal Utilities.
- **19.** 11/13/2008 Iowa Environmental Council Presentation.
- 20. 11/13/2008 Iowa Policy Project Materials.
- **21.** 11/13/2008 Iowa Utilities Board Presentation.
- 22. 11/13/2008 Office of Consumer Advocate—Draft Energy Efficiency Report.
- **23.** 11/13/2008 Office of Consumer Advocate Presentation.
- **24.** 11/13/2008 Office of Energy Independence Presentation.
- 25. 11/13/2008 Plains Justice Presentation and Materials.
- **26.** 11/5/2008 Introductory Materials—Background Information Mailing.

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