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ENERGY EFFICIENCY PROGRAMS

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I. Introduction

Rising demand for limited sources of energy is generating increasing levels of concern and attention internationally, at the federal level, and through various state initiatives. Efforts to enhance or achieve energy efficiency range from identifying and developing new and alternative forms of energy production to refining the manner in which existing energy sources are applied and utilized.

While the concept of energy efficiency is generally understood to refer to an action or approach which results in an energy “savings,” definitions of the term vary. Some representative examples:

- Energy efficiency refers to the reduction of energy consumption on the basis of technological and economic changes and changes in behavior, through which the same or a higher standard or degree of comfort is assured.
- Energy efficiency can be defined in terms of how much energy it takes to perform a certain amount of work.
- Energy efficiency can be defined as the use of products or systems that use less energy to do the same or a better job as conventional products or systems.
- Energy efficiency means doing the same thing but using less energy to do it.
- Energy efficiency means using energy in the most economical way possible and keeping its use to a minimum.
- Energy efficiency means using improved technology to decrease energy demand.

The Code of Iowa does not expressly define energy efficiency, but the concept is addressed in the form of state agency programs, policies, and directives; building code regulations; project financing options; and requirements imposed upon gas and electric utilities.¹ The objective of this Legislative Guide is to summarize existing Code provisions dealing with energy efficiency, with a focus on energy efficiency programs and requirements. Unless otherwise indicated, references in this guide are to the 2013 Iowa Code. References to the Iowa Administrative Code are current through September 20, 2012.

II. State Agency Energy Efficiency Requirements

A. Energy Efficiency and Comprehensive Engineering and Life Cycle Cost Analyses

State agencies and political subdivisions of the state are required to complete or perform energy-related reviews or analyses under specified circumstances involving the lease or lease-purchase of energy-related buildings or equipment, construction or renovation of public buildings, execution of competitive bidding or product purchasing procedures, and obtaining specified financing for energy efficiency improvements. Generally, these reviews or analyses involve the performance of one or a combination of

¹ A related concept, “energy conservation measure,” is defined in Iowa Code § 7D.34(1), and “energy management improvement” is defined in Iowa Code § 473.19(2), as subsequently discussed in this guide.



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three procedures — a comprehensive engineering analysis, a life cycle cost analysis, and an energy analysis.

1. State Agency Lease and Lease-purchase Agreements

A state agency is permitted to enter into a lease or lease-purchase agreement relating to real or personal property or facilities to be used in connection with an energy conservation measure, subject to the approval of the Executive Council.² For this purpose, an energy conservation measure is defined as “installation or modification of an installation in a building which is primarily intended to reduce energy consumption or allow the use of an alternative energy source, which may contain integral control and measurement devices.”³ State agencies to which this provision applies include a board, department, commission, or authority of or acting on behalf of the state having the power to enter into contracts for the acquisition of property in its own name or in the name of the state. However, the General Assembly, the court system, the Governor, and political subdivisions of the state are not included.⁴

Under terms of such an agreement, the state agency either pays rental costs from the annual appropriations by the General Assembly to the state agency or from other funds legally available to the agency.⁵ Prior to requesting Executive Council approval, an agency seeking to improve the energy efficiency of a building is required to submit the results of a comprehensive engineering analysis performed on the building by an engineering firm approved by the Economic Development Authority through a competitive selection process.⁶ Selection of the engineering firm is also subject to council approval.⁷ Prior to approving a lease or lease-purchase in connection with an energy conservation measure, the council, in conjunction with the authority, conducts a review of the engineering analysis to determine that leasing or purchasing the properties or facilities will result not only in an energy cost-savings to the state, but also that the amount of the savings will allow for cost recovery within six years after initial acquisition.⁸

It should be noted that Iowa Code section 12.28 specifically exempts financing agreements for energy conservation measures from the \$1 million maximum financing limitation otherwise applied to state agencies. Energy management improvements for which financing is facilitated with the assistance of the Economic Development Authority pursuant to Iowa Code chapter 473 are also exempted.⁹

2. Facilitated Financing

An energy analysis is required to be performed by state agencies, political subdivisions of the state, school districts, area education agencies, and community colleges that are receiving financing for energy management improvements facilitated

² Iowa Code § 7D.34.

³ Iowa Code § 7D.34(1)(a).

⁴ Iowa Code § 7D.34(1)(b).

⁵ Iowa Code § 7D.34(2)(a).

⁶ Iowa Code § 7D.34(2)(b).

⁷ Iowa Code § 7D.34(2)(b).

⁸ Iowa Code § 7D.34(2)(c).

⁹ Iowa Code § 12.28(6).



by the Economic Development Authority. Financing programs to which this requirement applies are discussed in Part III of this guide.

3. State Agency Purchases — Public Improvement Projects — Life Cycle Cost Analysis Application

The concept of “life cycle cost analysis” is utilized in connection with requirements relating to state agency purchases of energy-consuming products, public improvements, and public building construction and renovation efforts.

a. State Agency Product Procurement

The Department of Administrative Services, institutions under the control of the State Board of Regents, the Department of Transportation, the Department for the Blind, and other state agencies purchasing energy-consuming products either directly or through competitive bidding procedures are required to develop standards and specifications applicable to such purchases and to include life cycle cost and energy efficiency in criteria relating to those standards and specifications.¹⁰ “Life cycle cost” is defined for this purpose as the expected total cost of ownership during the life of a product.¹¹

b. Public Improvements and Construction

A contract for a public improvement or construction of a public building, including new construction or renovation of an existing public building, by the state or an agency of the state must, prior to being let for bidding, be subject to at least one design proposal reflecting the lowest life cycle cost possible in light of existing commercially available technology.¹² Intent language contained in the applicable Code section discourages construction of public buildings based upon lowest acquisition cost in favor of contracts based upon life cycle costs to reduce, among other factors, energy consumption.¹³

More specific and stringent life cycle cost analysis provisions apply in the case of public buildings or facilities in excess of 20,000 square feet or which exceed a specified energy consumption threshold for heating or cooling and which are constructed or renovated by a state agency, political subdivision of the state, school district, area education agency, or community college. Iowa Code chapter 470 establishes a public policy that energy management is of primary importance in the design such publicly owned facilities, and mandates that a public agency responsible for the construction or renovation of a facility include as a design criterion the requirement that a life cycle cost analysis be conducted with the objective of optimizing energy efficiency at an acceptable life cycle cost.¹⁴ Elements of the analysis are identified to include specification of energy management objectives, identification of the energy needs of the facility and

¹⁰ Iowa Code § 8A.311(19).

¹¹ Iowa Code § 8A.301(3).

¹² Iowa Code § 72.5(1).

¹³ Iowa Code § 72.5(4).

¹⁴ Iowa Code § 470.2.



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energy system alternatives to meet those needs, and the cost of energy system alternatives.¹⁵

A completed analysis is required to be submitted to the State Building Code Commissioner (in the State Fire Marshal Division of the Department of Public Safety) who reviews the analysis in consultation with the Economic Development Authority.¹⁶ A public agency may request an exemption from implementing certain aspects of an analysis for specified reasons, including the particular purpose of the facility or renovation, preservation of historical architectural features, site considerations, and health and safety concerns.¹⁷ Otherwise, the agency is required to implement the recommendations contained in the analysis.¹⁸ These provisions do not apply to certain buildings used as maximum security detention facilities or to the renovation of property nominated to or entered in the National Register of Historic Places, designated by statute, or included in an established list of historic places compiled by the Historical Division of the Department of Cultural Affairs.¹⁹

B. State Building Code Energy Efficiency Requirements

The State Building Code contained in Iowa Code chapter 103A is applicable to all buildings and structures owned by the state or an agency of the state, to a governmental subdivision of the state where the governing body of the subdivision has enacted an ordinance accepting the application of the code, to a city with a population exceeding 15,000 that has not adopted a local building code substantially in accordance with nationally recognized standards, and to all newly constructed buildings and structures not owned by the state but with construction costs paid for in whole or in part with state-appropriated moneys.²⁰

1. Residential Construction

The building code requires new single-family or two-family residential construction to comply with energy conservation requirements adopted by the State Building Code Commissioner based upon a nationally recognized standard or code for energy conservation. The requirements previously did not prohibit a governmental subdivision from adopting or enacting a minimum energy standard that is substantially in accordance and consistent with energy codes and standards developed by a nationally recognized organization in existence on or after July 1, 2002. Legislation enacted during the 2008 Legislative Session eliminated the ability of a governmental subdivision to adopt a minimum energy standard other than energy conservation requirements of the State Building Code, expressly providing that energy conservation requirements adopted by the State Building Code Commissioner and approved by the State Building Code Advisory Council are applicable to new single-family or two-family residential construction commenced on or after July 1, 2008, and such requirements

¹⁵ Iowa Code § 470.3(1).

¹⁶ Iowa Code § 470.7(1).

¹⁷ Iowa Code § 470.8.

¹⁸ Iowa Code § 470.8.

¹⁹ Iowa Code § 470.5.

²⁰ Iowa Code § 103A.10(2).



supersede and replace any minimum requirements enacted by a governmental subdivision prior to that date and applicable to such construction. The legislation also specified that the commissioner may provide training to builders, contractors, and other interested persons on the adopted energy conservation requirements.²¹

2. Nonresidential Construction

The State Building Code also contains energy efficiency-related provisions applicable to larger-scale construction, requiring the specifications for all buildings constructed after July 1, 1977, which exceed a total volume of 100,000 cubic feet of enclosed space that are heated or cooled, to be reviewed by a registered architect or licensed engineer for compliance with applicable energy efficiency standards. A statement that a review has been accomplished and that the design is in compliance with energy efficiency standards must be filed with the State Building Code Commissioner prior to commencement of construction. If the specifications relating to energy efficiency for a specific structure have been approved, additional buildings may be constructed from those same plans and specifications without need of further approval if construction begins within five years of the date of approval, and alterations of a structure which has previously been approved will not require another review if the basic structure of the building remains unchanged.²²

3. Thermal and Lighting Efficiency Standards

The State Building Code Commissioner adopts rules relating to the conservation of energy through thermal efficiency standards.²³ The standards are applicable to the construction of all buildings intended for human occupancy and which are heated or cooled, and include lighting efficiency standards applicable to the construction of all buildings intended for human occupancy which are lighted and applicable to new and replacement lighting in existing buildings.²⁴ Construction projects are exempt from thermal efficiency standards if the commissioner determines that their application to a particular building or class of buildings would be unreasonable or impracticable.²⁵ Notwithstanding these requirements, energy conservation standards are not to be interpreted as requiring the replacement or modification of any existing equipment or feature solely to ensure compliance with the standards.²⁶

4. Sustainable Design or Green Building Standards

The State Building Code Commissioner is also directed, after consulting with and receiving recommendations from the Department of Natural Resources, to adopt rules specifying standards and requirements for sustainable design and construction based upon or incorporating nationally recognized ratings, certifications, or classification systems, and procedures relating to documentation of compliance.²⁷ “Sustainable design” is defined to refer to construction design intended to minimize negative

²¹ Iowa Code § 103A.8A.

²² Iowa Code § 103A.19(3).

²³ See Iowa Admin. Code 661-103.

²⁴ Iowa Code §§ 103A.7(2) and 103A.10(4).

²⁵ Iowa Code §§ 103A.8(7) and 103A.10(4).

²⁶ Iowa Code § 103A.8(7).

²⁷ Iowa Code § 103A.8B, Iowa Admin. Code 661-310.



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environmental impacts and to promote the health and comfort of building occupants, including but not limited to measures to reduce consumption of nonrenewable resources, minimize waste, and create healthy, productive environments.²⁸ Application of these standards is limited, however, to instances expressly authorized by statute or as established by another state agency by rule, as opposed to having general applicability.²⁹

5. Commission on Energy Efficiency Standards and Practices

Legislation enacted during the 2008 Legislative Session established a Commission on Energy Efficiency Standards and Practices within the Department of Public Safety for the two-year period beginning July 1, 2008, and ending June 30, 2010. Commission membership was comprised of specified state agency directors or designees; engineering, architectural, and utility professionals; planning and zoning commission or county board of supervisor members, local building officials, and consumers. The commission was charged with evaluating energy efficiency standards applicable to existing or newly constructed residential, commercial, and industrial buildings and vertical infrastructure at the state and local level and making suggestions for their improvement and enforcement. The commission was also charged with developing recommendations for new energy efficiency standards, incentives for energy-efficient construction, and a statewide energy efficiency building labeling or rating system for residential, commercial, and industrial buildings or complexes. The commission submitted a report to the Governor and the General Assembly regarding its activities and recommendations on January 1, 2011.³⁰

C. Economic Development Authority — Transfer of Responsibility — Historical Perspective

Additional energy efficiency-related requirements or specifications concern the scope and responsibilities of the Economic Development Authority, previously referenced in this guide.

By way of background, legislation enacted during the 2007 Legislative Session established Iowa Code chapter 469 creating an Office of Energy Independence. The director of the office was required to lead outreach and public education efforts concerning energy efficiency; coordinate and monitor all existing state and federal energy efficiency grants, programs, and policy; advise the Governor and General Assembly concerning energy efficiency policy and legislation; establish performance measures for determining the effectiveness of energy efficiency efforts; develop, with the assistance of public and private partners, an energy independence plan; and prepare and submit an annual report that includes an assessment of needs and fiscal recommendations relating to energy efficiency efforts.

²⁸ Iowa Code § 103A.3(23).

²⁹ Iowa Code § 103A.8B.

³⁰ 2008 Iowa Acts ch. 1133 (SF 2386). Department of Public Safety, Commission on Energy Efficiency Standards and Practices Final Report is available at http://www.dps.state.ia.us/fm/building/energy/PDF/commission_on_energy_efficiency_standards_and_practices_final_report.pdf (last visited Sept. 25, 2012).

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The 2007 legislation also provided for the establishment of an Iowa Power Fund. Among other purposes, the fund was to be used to improve energy efficiency and encourage, support, and provide for research, development, commercialization, and the implementation of energy technologies and practices.³¹ Legislation enacted during the 2009 Legislative Session transferred primary responsibility for a wide-ranging number of energy-related measures and programs from the Department of Natural Resources to the office.³²

Iowa Code chapter 469 was repealed during the 2011 Legislative Session, resulting in the reassignment of responsibility for energy-related measures and programs to the Economic Development Authority. Provisions were made regarding transfer of funds under the control of the Office of Energy Independence to the authority, continuation of licenses, permits, or contracts issued or entered into by the office by the authority, continued administration by the authority of grants or loans awarded from the Iowa Power Fund and federal grant funds, and transfer of responsibility to the authority for energy-related measures and programs previously transferred from the Department of Natural Resources to the office.³³ The authority continues to administer grants or loans awarded by the office prior to the repeal of Iowa Code chapter 469, but no new Iowa Power Fund applications have been or will be accepted by the authority.

One of the primary energy efficiency-related responsibilities acquired by the authority as a result of the repeal of Iowa Code chapter 469 concerns administration of Iowa Code chapter 473, relating to energy development and conservation. Iowa Code section 473.3 states:

The goal of this state is to efficiently utilize energy resources to enhance the economy of the state by decreasing the state's dependence on nonrenewable energy resources from outside the state and by reducing the amount of energy used. This goal is to be implemented through the development of policies and programs that promote energy efficiency, energy conservation, and alternative and renewable energy use by all Iowans, through the development and enhancement of an energy efficiency and alternative and renewable energy industry, through the commercialization of energy resources and technologies that are economically and environmentally viable, and through the development and implementation of effective public information and education programs.

State government shall be a model and testing ground for the use of energy efficiency, energy conservation, and alternative and renewable energy systems.

In furtherance of this goal, the authority is directed to compile and annually update information relating to the historical use and distribution of energy in Iowa; the growth rate of energy consumption in the state, including rates of growth for each energy source; a projection of Iowa's energy needs at a minimum through the year 2025; the impact of meeting the state's energy needs on the state's economy and environment; and an evaluation of renewable energy sources and their potential.³⁴

³¹ 2007 Iowa Acts ch. 168 (HF 918).

³² 2009 Iowa Acts ch. 108 (SF 471).

³³ 2011 Iowa Acts ch. 118 (HF 590).

³⁴ Iowa Code § 473.7(1).



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The authority is also required to collect and analyze data to use in forecasting future energy demand and supply for the state; to develop, recommend, and implement with other appropriate agencies public and professional education and communication programs in energy efficiency, energy conservation, and alternative and renewable energy; to develop a program to annually give public recognition to innovative methods of energy conservation, energy management, and alternative and renewable energy production; and to administer federal funds for energy conservation, energy management, and alternative and renewable energy programs.³⁵

The authority is further directed to complete an annual report to assess the progress of state agencies in implementing energy management improvements, alternative and renewable energy systems, and life cycle cost analyses, and on the use of renewable fuels, to provide an assessment of the economic and environmental impact of this progress, and to make recommendations on technological opportunities and policies necessary for continued improvement.³⁶

The legislation repealing Iowa Code chapter 469 also transferred to the authority responsibility for the administration of several other energy efficiency-related functions previously administered by the Department of Natural Resources (and not specifically addressed elsewhere in this guide). These include making available energy efficiency-related continuing education courses for design professionals in coordination with the State Board of Engineering and Land Surveyors, the Board of Architectural Examiners, and the Board of Landscape Architectural Examiners pursuant to Iowa Code section 272C.2, and receiving results relating to energy audits from school districts and performing related functions pursuant to Iowa Code section 279.44.

III. Energy Efficiency Programs and Services

Energy efficiency-related provisions in the Code also take the form of programs or services for which other state agencies, political subdivisions of the state, or citizens may qualify. As described below, these programs and services include energy efficiency recommendations for applicants from the Department of Economic Development, low-income energy assistance and weatherization programs, energy efficiency project financing options, qualification for designation as an energy city, requirements imposed by the Iowa Utilities Board upon or offered by gas and electric utilities, and energy efficiency programs conducted or administered by the Iowa Propane Education and Research Council.

A. Economic Development Authority Applicant Referral Assistance

Applicants receiving funding assistance from the Economic Development Authority in connection with efforts to encourage investment in low-income or other areas of the state to promote economic development also receive information from the authority regarding the nature and source of other technical assistance available in the state to assist the applicant on design and management matters concerning energy efficiency and waste reduction.

³⁵ Iowa Code § 473.7(2), (3), (8), (9).

³⁶ Iowa Code § 473.15.

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The authority reviews the extent to which recommendations made to grant recipients are in fact implemented.³⁷

B. Low-income Energy and Weatherization Assistance

The Division of Community Action Agencies of the Department of Human Rights administers federal and state programs relating to the provision of assistance to low-income individuals regarding energy bill payments and weatherization programs to enhance energy efficiency. An Energy Utility Assessment and Resolution Program is directed at low-income individuals in need of a deferred payment agreement to address home energy utility costs. Pursuant to the program, community action agencies are required to analyze a program participant's financial situation, review the participant's resource and money management options, assist in negotiating a deferred payment agreement with the participant's energy utility, develop a written household energy affordability plan, and provide energy-related training and assistance.³⁸

Iowa Code section 216A.93 also directs the division, in addition to low-income energy assistance, to provide weatherization programs. As provided by administrative rule, the purpose of the program is "to assist in achieving a healthful dwelling environment and maximum practicable energy conservation in the dwellings of low-income persons, particularly those of elderly and handicapped persons, in order to both aid those persons least able to afford higher utility costs and to conserve needed energy."³⁹ Assistance in the form of weatherization materials, e.g., insulation, storm windows, caulking, weather stripping, and other related items, and related training and technical assistance is provided to qualifying low-income individuals pursuant to the program.⁴⁰ Notice of the existence of assistance programs is required to be provided to customers facing utility disconnection by rate-regulated gas and electric utilities.⁴¹

C. Energy Efficiency Financing and Investment

The Economic Development Authority, in coordination with the Department of Administrative Services, administers programs involving financing options for energy efficiency improvements and upgrades.

1. Building Energy Management Program

The Building Energy Management Program provides several forms of indirect financial assistance to the state, state agencies, political subdivisions of the state, school districts, area education agencies, community colleges, and nonprofit organizations. For these entities, the program is charged with promoting energy program availability, developing or identifying guidelines and model energy techniques for the completion of energy analyses, providing technical assistance for conducting or evaluating energy analyses, providing or facilitating loans, leases, and other methods of alternative financing to implement energy management improvements or energy analyses, providing assistance for obtaining insurance on the energy savings expected

³⁷ Iowa Code § 15.109(3).

³⁸ Iowa Code § 216A.104.

³⁹ Iowa Admin. Code 427-5.1.

⁴⁰ Iowa Admin. Code 427-5.3.

⁴¹ Iowa Code § 476.20(2).



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to be realized from the implementation of energy management improvements, facilitating self-liquidating financing, and assisting the Treasurer of State with financing agreements entered into on behalf of state agencies to finance energy management improvements pursuant to Iowa Code section 12.28.⁴²

An “energy management improvement” is defined as the construction, rehabilitation, acquisition, or modification of an installation in a facility or vehicle which is intended to reduce energy consumption, energy costs, or allow the use of alternative and renewable energy.⁴³ Operational expenses and administrative costs incurred through operation of the program are funded through a Building Energy Management Fund under the control of the authority and the department.⁴⁴ Annual deposits or allocations to the fund cannot exceed \$1 million.⁴⁵

2. Energy Loan Program

An Energy Loan Program is established in Iowa Code section 473.20 to facilitate the energy-related loan process for political subdivisions of the state, school districts, area education agencies, community colleges, and nonprofit organizations for implementation of energy management improvements identified in an energy analysis.

The Economic Development Authority, in coordination with the Department of Administrative Services, may facilitate a loan for cost-effective energy management improvements which are the subject of an energy management plan, including an energy analysis, and is required to approve the facilitated loans.⁴⁶ “Loans” are defined as loans, leases, or alternative financing arrangements.⁴⁷ The authority has implemented the “facilitation” of loans by assisting with financing through private banks and lending institutions on a self-liquidated basis whereby the amount financed is gradually repaid through savings realized from implementation of the energy-efficient improvement or device. Entities receiving loan facilitation are directed to design and construct the most energy cost-effective facilities feasible and may use the facilitated financing to cover the amount by which the cost of purchasing energy-efficient devices and materials specified in the plan exceeds the cost of complying with minimum building code energy efficiency standards, unless other lower cost financing is available.⁴⁸

Not all energy management improvements identified in an energy analysis are required to be implemented in a facilitated financing situation, provided the entity that prepared the analysis demonstrates to the department that the facility subject to the analysis is unlikely to utilize or operate the improvement over the full period of the expected savings payback of all costs associated with implementing the improvement.⁴⁹ Otherwise, the state, state agencies, political subdivisions of the state, school districts, area education agencies, and community colleges are required

⁴² Iowa Code § 473.19(1).

⁴³ Iowa Code § 473.19(2).

⁴⁴ Iowa Code § 473.19A(1).

⁴⁵ Iowa Code § 473.19A(3).

⁴⁶ Iowa Code § 473.20(2).

⁴⁷ Iowa Code § 473.20(4).

⁴⁸ Iowa Code § 473.20(5).

⁴⁹ Iowa Code § 473.20(6).

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to implement all identified energy management improvements for which financing is facilitated by the authority for the entity.⁵⁰

Iowa Code section 473.20A authorizes facilitation of loans on a self-liquidating basis by the authority.

D. Energy City Designation Program

The Economic Development Authority administers an Energy City Designation Program, with the objective of encouraging cities to develop and implement innovative energy efficiency programs.

To qualify for designation as an energy city, a city must submit an application to the authority detailing community-based plans for energy reduction projects, energy-efficient building construction and rehabilitation, efforts to secure local funding for energy efficiency plans, involvement of local schools and community organizations, any existing or proposed ordinances encouraging energy efficiency and conservation, and community recycling efforts. Additionally, an applicant city is required to issue a proclamation and organize an energy day observance with a commemorating event and awards ceremony for leading energy-efficient community businesses, groups, schools, or individuals.⁵¹ The authority is directed to award designations to cities of varying populations, to identify and publicize state grant and loan programs relating to energy efficiency, and to develop, with other state agencies, a procedure for coordinating preferences for the awarding of grants or making of loans to applicants designated as energy cities.⁵²

E. Energy Efficiency Plans and Programs — Iowa Utilities Board

Energy efficiency programs are required to be developed and offered to customers of gas and electric public utilities that are under the purview of the Iowa Utilities Board. The programs can be offered either directly by the utility or by a third party or agent contracting with the utility.⁵³ The programs are detailed within energy efficiency plans which are filed with the board.⁵⁴ Energy efficiency plans other than programs for qualified low-income persons and programs relating to tree planting, education, and assessments of consumers' needs for information to make effective choices regarding energy use and energy efficiency, are, in general, required to be cost-effective.⁵⁵

1. Rate-regulated (Investor-owned) Utilities

With regard to gas and electric utilities subject to rate regulation pursuant to Iowa Code chapter 476, energy efficiency plans are required to be developed and filed with the board and must include a range of programs offering energy efficiency opportunities tailored to the needs of all customer classes, including residential, commercial, and industrial customers. Programs relating to low-income energy assistance can take the form of a countywide or communitywide program in

⁵⁰ Iowa Code § 473.13A.

⁵¹ Iowa Code § 473.41(1).

⁵² Iowa Code § 473.41(2).

⁵³ Iowa Code § 476.6(14).

⁵⁴ Iowa Code § 476.6(16). For applicability to certain electric utilities, municipally owned utilities, and gas utilities, see Iowa Code §§ 476.1A(1)(g), 476.1B(1)(l), and 476.1C(1).

⁵⁵ Iowa Code § 476.6(14).



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cooperation with one or more community action agencies within a utility's service area. Iowa agencies and contractors are to be utilized to the maximum extent that is cost-effective in implementing programs contained within the plans.⁵⁶

Additionally, rate-regulated gas and electric utilities are required to submit to the board an assessment, based on actual and projected customer usage, of potential energy and capacity savings available through the application of commercially available technology and improved operating practices to energy-using equipment and buildings. Based on the assessments, and in consultation with the Economic Development Authority, the board develops specific capacity and energy savings performance standards for incorporation into a utility's energy efficiency plan. The board may approve, reject, or modify submitted plans, may conduct contested case proceedings, and must periodically report the energy efficiency results, including energy savings of each utility, to the General Assembly.⁵⁷

2. Nonrate-regulated (Consumer-owned) Utilities

Energy efficiency plans are also required to be filed with the board by nonrate-regulated gas and electric utilities but are not subject to board approval. Electric public utilities having fewer than 10,000 customers, electric cooperative corporations and associations, municipally owned utilities furnishing gas or electricity, and gas public utilities having fewer than 2,000 customers must submit plans which are, on the whole, cost-effective. Plans may be submitted individually or in combination with other similarly classified utilities and may be waived by the board in whole or in part if a utility can demonstrate superior results with existing energy efficiency efforts. As in the case of rate-regulated utilities, the board must periodically report the energy efficiency results, including energy savings, achieved by electric public utilities having fewer than 10,000 customers, electric cooperative corporations and associations, and municipally owned utilities, to the General Assembly.⁵⁸

3. Energy Efficiency Goals and Reporting

Legislation enacted during the 2008 Legislative Session established new requirements relating to the assessment of energy efficiency savings potential and the establishment of energy efficiency goals and programs by nonrate-regulated gas and electric utilities and imposed new reporting responsibilities applicable to the board with regard to all gas and electric public utilities.⁵⁹

In a requirement comparable to provisions noted above that apply to rate-regulated gas and electric public utilities, nonrate-regulated utilities are now required to assess, from actual and projected customer usage, maximum potential energy and capacity savings available through cost-effective energy efficiency measures and programs, taking into account the utility service area's historic energy load, projected demand, customer base, and other relevant factors. Based on this assessment, the utility is then required to establish an energy efficiency goal, which may be separately

⁵⁶ Iowa Code § 476.6(16)(a).

⁵⁷ Iowa Code § 476.6(16)(b).

⁵⁸ Iowa Code §§ 476.1A-476.1C.

⁵⁹ 2008 Iowa Acts ch. 1133, § 5 (SF 2386).

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established for different customer groupings, and cost-effective programs to meet that goal.

The legislation contains a nonexclusive list of various forms or types of energy efficiency programs, including efficiency improvements to a utility infrastructure and system and activities conducted by a utility intended to enable or encourage customers to increase the amount of heat, light, cooling, motive power, or other forms of work performed per unit of energy used. For these purposes, in the case of a municipal utility, other utilities and departments of the municipal utility are considered “customers” to the same extent that such utilities and departments would be considered customers if served by an electric or gas utility that is not a municipal utility. Examples of energy programs include activities which lessen the amount of heating, cooling, or other forms of work which must be performed, including but not limited to energy studies or audits, general information, financial assistance, direct rebates to customers or vendors of energy-efficient products, research projects, direct installation by the utility of energy-efficient equipment, direct and indirect load control, time-of-use rates, tree planting programs, educational programs, and hot water insulation distribution programs.

Nonrate-regulated utilities were required to begin the process of determining their cost-effective energy efficiency goal by July 1, 2008, to submit a progress report to the board on or before January 1, 2009, and to complete the process and submit a final report to the board on or before January 1, 2010. The report was required to contain the goal arrived at and, for each measure utilized by the utility in meeting the goal, the measure’s description, projected costs, and an analysis of its cost-effectiveness utilizing existing cost-effectiveness tests already applicable to rate-regulated utilities.⁶⁰ Individual nonrate-regulated utilities or groups of such utilities were allowed to collaborate in satisfying these requirements and could file a joint report, subject to the board's ability to request and require individualized information from a particular utility. After submitting a final report, subsequent reports identifying progress in meeting the goals, and relating any updates or amendments to energy plans and goals, were required to be submitted to the board on January 1, 2012, and are required every even-numbered year thereafter.⁶¹

Based upon its evaluation of the reports required to be filed by nonrate-regulated utilities pursuant to the legislation, and the assessments and plans required to be filed by rate-regulated utilities pursuant to Iowa Code section 476.6, subsection 16, paragraph “b,” the board was directed to submit reports summarizing the evaluations to the General Assembly by January 1, 2009, and again by January 1, 2011, respectively. The reports submitted by the board were required to include the goals established by each utility, the projected costs of achieving the goals, potential rate impacts, and a description of the energy efficiency programs offered and proposed by

⁶⁰ For cost-effectiveness tests applicable to rate-regulated utilities, see Iowa Code § 476.6(14).

⁶¹ Iowa Code § 476.6(16)(c).



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each utility or groups of utilities. The reports could contain recommendations relating to the achievability of intermediate and long-term energy efficiency goals.⁶²

F. Iowa Propane Education and Research Council

Programs and projects authorized for development by the Iowa Propane Education and Research Council include energy efficiency programs dedicated to weatherization; acquisition and installation of energy-efficient customer appliances that qualify for energy star certification; installation of low-flow faucets and showerheads; and energy efficiency education. Additionally, the council is authorized to establish by rule quality standards relating to weatherization and appliance installation.⁶³ The council is directed to include a summary of energy efficiency programs, if developed, in its annual report summarizing the council's activities.⁶⁴

G. Iowa Summer Youth Corps and Iowa Green Corps Programs

Two volunteer youth service programs provide energy efficiency-related service opportunities. The Iowa Summer Youth Corps Program, administered by the Iowa Commission On Volunteer Service, was established to provide meaningful summer enrichment programming to Iowa youth. Included in specified service-learning activities available pursuant to the program are energy conservation activities in the youth's community, including conducting educational outreach on energy conservation and working to improve energy efficiency in low-income housing and public spaces.⁶⁵ The Iowa Green Corps Program, administered by the commission in collaboration with the Department of Natural Resources, the Department of Workforce Development, and the Iowa Utilities Board, was created to utilize federal AmeriCorps or Iowa Summer Youth Corps volunteers to provide capacity building activities, training, and implementation of major transformative projects in communities including, among other objectives, an emphasis on energy efficiency.⁶⁶

IV. Miscellaneous Provisions

In addition to the provisions discussed in Parts I through III of this guide, several other references to energy efficiency programs or requirements exist in the Iowa Code.

A. State Vehicle Fleet

The Director of the Department of Administrative Services is required to consider energy efficiency in assigning motor vehicles for use directly by the department or through the department for other specified state agencies. Standards applicable to such assignments are required to be developed by the director to assure assignment of the most

⁶² Iowa Code § 476.6(16)(d). For content of reports, see Iowa Utilities Board, Energy Efficiency Plans, Operating Plans and Annual Reports, available at http://www.state.ia.us/government/com/util/energy/energy_efficiency/ee_plans_reports.html (last visited Oct. 1, 2012).

⁶³ Iowa Code § 101C.3(8).

⁶⁴ Iowa Code § 101C.3(10).

⁶⁵ Iowa Code § 15H.5.

⁶⁶ Iowa Code § 15H.6.

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energy-efficient vehicle or combination of vehicles available for a trip. Special work vehicles and law enforcement vehicles are exempt from the standards.⁶⁷

B. School District Physical Plant and Equipment Levy

One of the authorized uses for property tax revenue derived from the physical plant and equipment levy imposed by school districts is for energy conservation.⁶⁸

C. State Transportation Commission

Among the duties listed for the State Transportation Commission is consideration of energy and environmental issues in transportation development and promoting the efforts of political subdivisions in developing energy-efficient public transit systems, including bus and rail systems.⁶⁹

D. Energy-efficient Lighting

All exterior floodlighting owned by a city or by a public utility, including but not limited to street and security lighting, must be replaced when worn out with high-pressure sodium lighting or lighting with equivalent or better energy efficiency, as established by the Iowa Utilities Board by administrative rule. This requirement does not apply to period lighting that has a minimum efficiency rating of 58 lumens per watt or to stadium or ballpark lighting, but, in the latter case, worn-out lighting must be replaced with the most energy-efficient lighting available at the time of replacement.⁷⁰

E. Iowa Energy Center

Iowa Code section 266.39C establishes an Iowa Energy Center at Iowa State University, with several specified objectives:

- Striving to increase energy efficiency in all areas of Iowa energy use.
- Serving as a model for state efforts to decrease dependence on imported fuels and to decrease reliance on energy production from nonrenewable, resource-depleting fuels.
- Conducting research on energy efficiency and conservation that will improve the environmental, social, and economic well-being of Iowans, minimize the environmental impact of existing energy production and consumption, and reduce the need to add new power plants.
- Assisting Iowans in assessing technology related to energy efficiency and alternative energy production systems and supporting educational and demonstration programs that encourage their implementation.
- Conducting and sponsoring research to develop alternative energy systems that are based upon renewable sources and that will reduce the negative environmental and economic impact of energy production systems.

⁶⁷ Iowa Code § 8A.362(4)(d).

⁶⁸ Iowa Code § 298.3(1)(g).

⁶⁹ Iowa Code § 307.10(5), (7).

⁷⁰ Iowa Code §§ 364.23 and 476.62.



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- Developing a program to provide assistance to rural residents for energy efficiency efforts.
- Cooperating with the State Board of Education in developing a curriculum which promotes energy efficiency and conservation.⁷¹

The center is advised by an advisory council, and the director and staff are employees of Iowa State University. State funds appropriated to the center are to be used to sponsor research grants and projects submitted on a competitive basis by Iowa colleges and universities and private nonprofit agencies and foundations, and for employee salaries and benefits. The center is also authorized to solicit grants and funding from public and private nonprofit agencies and foundations.⁷² An additional source of funding for the center, along with the Center for Global and Regional Environmental Research established by the State Board of Regents at the University of Iowa, consists of remittances to the Treasurer of State by regulated and nonrate-regulated gas and electric utilities of one-tenth of 1 percent of total gross operating revenues during a calendar year derived from their intrastate public utility operations. A schedule of remittances is established by the Iowa Utilities Board by administrative rule. The remittances are annually submitted to the Iowa Utilities Board.⁷³ Eighty-five percent of the remittances are allocated to the Iowa Energy Center, with the remaining 15 percent allocated to the Center for Global and Regional Environmental Research.⁷⁴

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⁷¹ Iowa Code § 266.39C(1), (5), (6).

⁷² Iowa Code § 266.39C(2), (3).

⁷³ Iowa Admin. Code 199-17.7.

⁷⁴ Iowa Code § 476.10A(1).