

Chapter PSC 136

ELECTRIC AND GAS CONSERVATION

PSC 136.01	General	PSC 136.06	Conservation standards for conversion of an existing residential structure to an electric spaceheating system
PSC 136.02	Definitions	PSC 136.10	Disconnection or refusal of service
PSC 136.04	Conservation standards for converting existing structures to natural gas spaceheating service		
PSC 136.05	Nonessential uses of natural gas		

PSC 136.01 General. (1) Chapter PSC 136, constitutes a general order of the public service commission, authorized by ss. 227.014 and 196.97, Stats.

(2) The requirements of ch. PSC 136 shall be observed by all public utilities, both privately and publicly owned, engaged in the manufacture, mixing, purchasing, storage, transmission and/or distribution of gaseous fuel, or the supply of electric energy and provision of electric service, except as may be provided in ss. PSC 136.04 and 136.06.

History: Emerg. cr. eff. 11-1-79; cr. Register, February, 1980, No. 290, eff. 3-1-80; am. (2), Register, February, 1985, No. 350, eff. 3-1-85.

PSC 136.02 Definitions. In this chapter:

(1) "Accessible" means capable of being reached without removal or major alteration of any part or parts of the permanent structure.

Note: Accessible areas include uninsulated areas which can be drilled and plugged.

(2) "Conversion" means installation of a permanent electric or gas spaceheating system to replace in whole or in part a spaceheating system which used a different fuel.

Note: Conversion includes installation of a dual-fuel or add-on heat pump system but does not include installation of gas or electric heat in new additions to an existing residential structure.

(3) "Energy audit" means an energy use analysis for spaceheating which complies with the Residential Conservation Service program for the heating system which has been or will be installed.

(4) "Existing residential structure" means a one or two-family dwelling constructed prior to December 1, 1978.

(5) "Spaceheating system" means equipment which uses gas or electric energy either directly or through mechanical processes to provide heat for space conditioning.

(6) "Unheated area" means a space which is thermally isolated outside a building envelope.

History: Cr. Register, February, 1985, No. 350, eff. 3-1-85.

PSC 136.04 Conservation standards for converting existing structures to natural gas spaceheating service. (1) The provisions of this section shall apply only to those investor-owned utilities set forth below:

Register, February, 1985, No. 350

- (a) Lake Superior district power company
- (b) Madison gas and electric company
- (c) Northern states power company
- (d) Superior water, light and power company
- (e) Wisconsin fuel and light company
- (f) Wisconsin gas company
- (g) Wisconsin natural gas company
- (h) Wisconsin power and light company
- (i) Wisconsin public service corporation
- (j) Wisconsin southern gas company

(2) Nothing in s. PSC 136.04 shall preclude special and individual consideration being given to exceptional or unusual situations. The rule may be modified or waived by the public service commission in particular cases whenever said rules are shown to be impracticable for special reasons. Upon due investigation of the facts and circumstances involved and after hearing if required, the commission may order requirements as to individual utilities or service which shall be lesser, greater, other or different from those provided in the rules of this section.

(3) Before natural gas spaceheating service can be rendered to existing residential structures converting to a gas spaceheating system, each utility listed in sub. (1) shall perform an energy audit and require that the following conservation standards be met:

(a) Ceiling or attic insulation: If a structure has insulating material with insulation value less than R-19, the customer shall install insulation to a level of R-38. If insulation materials equal to a level of R-38 cannot be installed because of inadequate space between the ceiling and the roof, then as much insulation as space permits shall be installed. Exception: If the structure has existing insulation material with a value of R-11 or more and the customer is installing batt insulation, the customer need only install additional insulation material with a value of R-19.

(b) Sill box area insulation shall be installed to a level of R-19, unless physically impractical.

(c) Floor insulation over vented crawl spaces or unheated basements shall reach a level of R-19. In a heated crawl space, insulation materials with an R factor of at least 5 shall be installed on the walls.

(d) In unheated areas, insulation shall be installed on all heating ducts, cold air returns, and hot water pipes.

(e) Windows shall be double-glazed or have storms.

(f) All doors exposed to the outside atmosphere shall have a storm door or equivalent insulated door.

(g) Weatherstripping shall be installed on all movable doors and windows exposed to an unheated space. Caulking shall be installed whenever 2 different materials or parts of a structure meet, such as chimney openings, around windows and doors, etc.

(h) If a new central heating unit is to be installed, the equipment shall meet the energy efficiency requirements of s. Ind 22.13, Wis. Adm. Code, which are as follows:

Combustion spaceheating equipment shall be provided with electronic ignition and automatic flue dampering, except sealed com-

bustion equipment or equipment located in enclosures and provided with combustion air need not be provided with flue dampering.

(i) Ventilation above the ceiling/attic insulation shall be installed. The free ventilating area shall be at least 1/300 of the horizontal area. One half of the venting should be near the eaves and the other half near the top of the roof.

(j) If a structure is unable to meet all required standards, other methods of energy conservation may be substituted such that the energy savings will be the same or greater. This substitution shall be based on heat loss calculations performed in a normally accepted manner. Such substitutions may include but are not limited to the following:

1. Furnace modifications as suggested by the utility; or

2. Insulation materials equal to R-5 on the inside walls of a heated basement.

(4) Before natural gas service can be rendered for commercial or industrial spaceheating use in buildings constructed before July 1, 1978, each utility listed in sub. (1) shall require that the following conservation standards be met:

(a) Design heat loss, excluding infiltration and ventilation, through above-grade gross walls and roofs facing heated interiors shall not exceed 13 BTU per hour per square foot for the total building envelope;

(b) If a building exceeds the heat loss of par. (a) above, the building may receive gas service provided that it demonstrates additional innovative building or system designs that will reduce fuel consumption to a level equal to or less than fuel consumption which results from complying with par. (a) above;

(c) All exterior windows and doors shall be designed to limit leakage into or from the building and shall be weatherstripped; and

(d) Special use buildings such as greenhouses, inflatable structures, and the like, or any building exempt from the heating and ventilating requirements of ch. ILHR 63, Wis. Adm. Code, are exempt from these requirements.

(5) Prior to rendering natural gas spaceheating service to an existing rental unit, as defined in s. ILHR 67.04 (16), which is converting to natural gas spaceheating, each utility shall inform the rental unit owner of the additional conservation requirements of s. ILHR 67.05. The requirement of this subsection is in addition to subs. (3) and (4).

History: Emerg. cr. eff. 5-2-80; cr. Register, January, 1981, No. 301, eff. 2-1-81; cr. (5), Register, December, 1983, No. 336, eff. 1-1-84; reprinted to correct error, Register, June, 1984, No. 342; am. (3), Register, February, 1985, No. 350, eff. 3-1-85.

PSC 136.05 Nonessential uses of natural gas. (1) A utility or other person shall not install, connect, or cause to be installed or connected to the distribution system any device which constitutes a nonessential use of natural gas, in accordance with sub. (3), unless such device has been received by any person prior to the effective date of this rule, including item inventories held by retailers and wholesalers.

Register, February, 1985, No. 350

(2) For purposes of determining a nonessential use of natural gas, the public service commission shall consider the following criteria:

- (a) Necessity of use;
- (b) Availability and reasonableness of alternative fuel to provide a substitute service;
- (c) Public health, safety and unusual hardship factors; and
- (d) Compatibility of natural gas use with energy policy.

(3) In accordance with the preceding criteria, the use of natural gas in the following devices or for the following purposes is considered to be nonessential:

- (a) Gas lights;
- (b) Snowmelting equipment;
- (c) Residential swimming pool heaters, unless provided with a passive solar blanket which covers the entire surface of the pool or an active solar system which uses a solar collector with a surface area of at least 50% of the pool's surface area; and
- (d) Heating areas containing swimming pools, porches, workshops, garages or other areas of marginal or seasonal use unless insulated to energy conservation standards as specified in chs. Ind 22 and ILHR 63, Wis. Adm. Code.

(4) The rule designating a nonessential use of natural gas may be modified or waived by the commission for reasons of health, safety or unusual hardship.

History: Cr. Register, February, 1980, No. 290, eff. 3-1-80; am. (3) (c), Register, January, 1982, No. 313, eff. 2-1-82; am. (3) (c), r. (3) (d), renum. (3) (e) to be (3) (d), Register, March, 1982, No. 315, eff. 4-1-82.

PSC 136.06 Conservation standards for conversion of an existing residential structure to an electric spaceheating system. (1) The provisions of this section shall apply only to those investor-owned utilities set forth below:

- (a) Lake Superior district power company
- (b) Madison gas and electric company
- (c) Northern states power company
- (d) Superior water, light and power company
- (e) Wisconsin electric power company
- (f) Wisconsin power and light company
- (g) Wisconsin public service corporation

(2) Nothing in s. PSC 136.06 shall preclude special and individual consideration being given to exceptional or unusual situations. The rule may be modified or waived by the public service commission in particular cases whenever it is shown to be impracticable for special reasons. Upon due investigation of the facts and circumstances involved and after hearing if required, the commission may order requirements as to individual

Register, February, 1985, No. 350

utilities or service which shall be lesser, greater, other, or different from those provided in the rules of this section.

(3) Before electric spaceheating service may be furnished to an existing residential structure converting to an electric spaceheating system, each utility listed in sub. (1) shall perform an energy audit and require that the following conservation standards be met:

(a) *Ceiling or attic.* If the structure has ceiling or attic insulating material with insulation value less than R-19, the customer shall install insulation to a level of R-38. If inadequate space exists between ceiling and roof to install insulation to the level of R-38, then the customer shall install as much insulation as space permits.

Note: If the structure's ceiling or attic is insulated to a value of not less than R-11 and the customer chooses to add batt insulation, the additional insulation need only have a value of R-19.

(b) *Sill box.* Sill box area insulation shall be installed to a level of R-19, unless physically impractical.

(c) *Floor.* In accessible areas, floor insulation over vented crawl spaces or unheated basements shall be installed to a level of R-19. In heated crawl spaces, insulation with an R factor of 5 shall be installed on the walls.

(d) *Unheated areas.* In unheated areas, insulation shall be installed on all heating ducts, cold air returns, and hot water pipes.

(e) *Windows.* Windows shall be double-glazed or have storms.

(f) *Outside doors.* Each door exposed to the outside atmosphere shall have a storm door or equivalent insulated door.

(g) *Weatherstripping and caulking.* Weatherstripping shall be installed on all movable doors and windows exposed to an unheated space. Caulking shall be installed whenever two different materials or parts of a structure meet, such as areas around chimney openings, around windows and doors, and similar areas.

(h) *Side walls.* Where no insulation exists in accessible outside walls, side wall insulation of R-11 shall be installed.

(i) *Ventilation.* A free ventilating area of not less than 1/300 of the horizontal area shall be installed above ceiling or attic insulation.

Note: One-half of venting near the eaves and the other half near the top of the roof is recommended. Where no vapor barrier is present, a free ventilating area of not less than 1/150 of the horizontal area is recommended.

(j) *Substituted standards.* For existing residential structures unable to meet the conversion standards required by this section, other methods of energy conservation may be substituted if the energy savings are equivalent. Substitutions shall be based on heat loss calculations performed by the utility.

History: Cr. Register, February, 1985, No. 350, eff. 3-1-85.

PSC 136.10 Disconnection or refusal of service. Gas or electric service may be disconnected or refused for failure to comply with the regulations contained in this chapter as specified in ss. PSC 113.132 and 134.062. If a customer has converted without notifying the appropriate utility and

Register, February, 1985, No. 350

has failed to comply with the requirements of s. PSC 136.06, the utility may allow the customer not more than 6 months to comply with those requirements.

History: Emerg. cr. eff. 11-1-79; cr. Register, February, 1980, No. 290, eff. 3-1-80; am. Register, February, 1985, No. 350, eff. 3-1-85.

Next page is numbered 359