

701—209.2(423) Fuel exemption certificates.

209.2(1) *Use of fuel exemption certificates.* The use and acceptance of fuel exemption certificates must comply with Iowa Code section 423.45(5). For purposes of this subrule, terms mean the same as defined in Iowa Code section 423.45(5).

209.2(2) *Necessary information.* A fuel exemption certificate, as defined in Iowa Code section 423.45(5), must be dated and contain the following information, including but not limited to:

- a. The seller's name and address;
- b. The purchaser's name and address;
- c. The type of fuel purchased, such as electricity or propane;
- d. Description of the purchaser's business, such as farmer or manufacturer;
- e. A general description of the type of processing in which the fuel is consumer, such as grain drying, raising livestock, generating electricity, or the manufacture of tangible personal property;
- f. Claimed exemption percentage.

209.2(3) *Additional documentation.* The seller may demand from the purchaser additional documentation attached to the fuel exemption certificate, which is reasonably necessary to support the claim of exemption for fuel consumed in processing; however, additional documentation is not required under the circumstances listed in Iowa Code section 423.45(5) "f." In the absence of separate metering, documentation reasonably necessary to support a claim for exemption must consist of either an electrical consultant's survey or of a document prepared by the purchaser in accordance with the requirements of subrule 209.2(5).

209.2(4) *Exemption determination.* When the amount of the exemption is modified pursuant to Iowa Code section 423.45(5) "d," a purchaser must notify the seller of any change in percentage.

209.2(5) *Determining percentage of electricity used in processing.* When electricity is purchased for consumption both for processing and for taxable uses, and the use of the electricity is recorded on a single meter, the purchaser must allocate the use of the electricity according to taxable and nontaxable consumption if an exemption for nontaxable use is to be claimed. The calculations that support the allocation, if properly performed, can serve as the documentation reasonably necessary to support a claim of exemption for fuel used in processing. The following method with its alternative table may be used to determine the percentage of electricity used on the farm or in a factory that is exempt by virtue of its being used in processing. Paragraph 209.2(5) "e" provides information on alternative methods of computing exempt use, including exempt use by a new business. First, the base period for the calculations must be selected.

a. Ordinarily, the 12 months previous to the date upon which the exemption is calculated are used as the base period for determining the percentage of electricity exempt as used in processing. The immediately previous 12-month period is used because it is a span of time that is (1) recent enough to accurately reflect future electric usage; (2) extended enough to take into account variations in electrical usage resulting from changes in temperature occurring with the seasons; and (3) is not so long as to require unduly burdensome calculations. However, individual circumstances can dictate that a shorter or longer period than 12 months will be used or that some 12-month period other than that immediately previous to the date upon which the exemption certificate is filed, will be used.

EXAMPLE 1: Farmer A files a fuel exemption certificate for the period beginning January 1, 2022. The year 2021 had a very mild winter, a relatively cool summer, and a very dry autumn. Farmer A uses no electricity for grain drying and substantially less electricity than usual for heating and cooling his livestock buildings. Farmer A must use a 12-month period that is more representative of his usual exempt electrical consumption than that of January through December 2021.

EXAMPLE 2: Company A manufactures its product in a factory that has no windows and is heavily insulated. The factory always runs 40 hours per week, 52 weeks per year. Because of these and other circumstances, Company A's electrical usage does not vary significantly from month to month, and it is easy enough to document this. Company A can calculate its percentage of exempt use of electricity based on a one-month, rather than a 12-month, period.

EXAMPLE 3: Company B manufactures widgets. The "economic cycle" for widget production is, on average, 36 months long. During this economic cycle, there are times when, for months at a time, the

factory will operate three shifts. At other times, for weeks at a time, the entire factory will be shut down and its personnel laid off. The only accurate way to determine the exempt percentage of electricity used is to calculate electrical use over the entire economic cycle. Therefore, 36 months, rather than 12 months, would be the base period.

b. Calculating kilowatts used per hour by various electrical devices. The first step in computing the percentage of exemption is to determine the number of kilowatts used per hour for each device in the farm or factory. If kilowatts consumed per hour of a device's use is not listed on the device or otherwise readily obtainable, formulas can be used to determine this information.

(1) Lights. For incandescent bulbs, add rated wattages and divide by 1,000. For fluorescent lights, add rated wattages plus an additional 20 percent of rated wattages, then divide by 1,000.

Incandescent Lights:

$$\frac{\text{Watts}}{1,000} = \text{Kilowatts Per Hour}$$

Fluorescent and Other High Intensity Lights:

$$\frac{\text{Watts} + .20 (\text{Watts})}{1,000} = \text{Kilowatts Per Hour}$$

(2) Devices other than lights. For these devices, use the wattage rating given by the manufacturer and divide by 1,000 to obtain approximate kilowatts used per hour of operation.

$$\frac{\text{Watts}}{1,000} = \text{Kilowatts Per Hour}$$

If an appliance does not list a watt rating, tables provided by Iowa State University Cooperative Extension Service can be used, especially by farmers who are attempting to compute their exempt percentage of electricity used. Persons using a table are reminded to convert watts to kilowatts before proceeding to further calculations.

c. The average number of kilowatts consumed per hour of operation for any one device must next be multiplied by the total number of hours that the device is operated during the base period. A person may use intermediate calculations.

(1) EXAMPLE 1: Assume that a machine used in processing consumes 20 kilowatts per hour of operation. The machine is operated, during a 12-month base period, 40 hours per week during 50 weeks. The machine is not placed in operation when the factory is closed for two weeks' vacation. Exempt use is calculated as follows:

$$\begin{array}{rcccl} \text{Kilowatts} & & & & \text{Weeks operated in 12-month} \\ \text{per hour} & \times & \text{Hours operated} & \times & \text{period equals number of} \\ & & \text{per week} & & \text{exempt kilowatt hours} \end{array}$$

In this example, $20 \times 40 \times 50 = 40,000$ exempt kilowatt hours.

(2) EXAMPLE 2: Assume that a grain dryer uses 30 kilowatts per hour of operation. During a 12-month base period, the grain dryer is used in processing 200 hours per month, for 3 months. The calculation for total number of kilowatt hours of exempt use for the 12-month period is as follows:

$$\begin{array}{rcccl} \text{Kilowatts} & & & & \text{Number of months of exempt} \\ \text{per hour} & \times & \text{Hours operated} & \times & \text{use equals total number of} \\ & & \text{per month} & & \text{exempt kilowatt hours} \end{array}$$

In this example, $30 \times 200 \times 3 = 18,000$ exempt kilowatt hours.

(3) EXAMPLE 3: The following is a very simplified example of a worksheet for determining the percentage of electricity qualifying for exemption when a single meter records both exempt and taxable use.

d. *Example worksheet.* The following is a simplified example of a worksheet for determining the percentage of electricity qualifying for exemption when a single meter records both exempt and taxable use.

	Kilowatts Per Hour of Operation	Average Hours of Operation Per 12-Month Base Period	Average Kilowatt Hours Per 12-Month Base Period	Total
<i>All Exempt Usage</i>				
Production Machine #1	10	1000	10000	
Production Machine #2	10	1000	10000	
Other	10	1000	10000	
Total Exempt Usage				30000(A)
<i>All Taxable Usage</i>				
Air Conditioners	10	3000	30000	
General Lighting	10	3000	30000	
Office Equipment	10	3000	30000	
Space Heaters	10	3000	30000	
Other	10	3000	30000	
Total Taxable Usage				150000(B)
Total—All Usages				180000(C)
$\frac{30000}{180000} \text{ or } \frac{A}{C} = \text{Percentage of Electricity Purchase Qualifying for Exemption} = 16.60\%$				

The number actually used in the base period can be determined by reference to billings for the base period. If the number of kilowatt hours calculated to have been used does not approximate the number actually used in the base period, the calculations are deficient and should be performed again. Once the precise percentage of exemption has been calculated, that percentage must be applied during any period for which a purchaser is requesting exemption. Any substantial and permanent change in the amount of electricity consumed or in the proportion of exempt and nonexempt use of electricity is an occasion for recomputing the exempt percentage and for filing a new exemption certificate.

e. *Alternative methods.* The following are nonexclusive alternatives to the above method of determining the percentage of electricity, which is exempt because it is used in processing.

(1) If currently only one meter exists to measure both exempt and nonexempt use of electricity, the most accurate method of determining exempt and nonexempt use may be separate metering of these two uses. This possibility is especially practical if all exempt use results from the activities of one machine, however large.

(2) If separate metering is impossible or impractical, it may be useful to employ the services of an energy consultant. If using an energy consultant’s service is impractical, it may be possible to secure, from the manufacturer of a machine used in processing, the number of kilowatts that a machine uses per hour of operation. Often, these manufacturer’s studies give a more accurate measure of a machine’s use of electricity than the formulas set out in paragraph 209.2(5) “b” above. This circumstance is especially true with regard to large electric motors.

(3) If a business is new, and no historical data exists for use in calculating exempt and nonexempt percentages of electricity or other fuel consumed, any person calculating future exempt use must make the best projections possible. If calculating future exempt use with no past historical data to serve as a basis for the calculations, it is suggested that conservative estimates of exempt use be made. Using these conservative estimates can avoid future liability for sales tax on the part of the purchaser of the electricity. Possibly, in calculating exempt use of fuel for a new business, historical data from existing similar businesses can be used if available from persons not in direct competition with the person claiming the exemption. The calculation and the exemption certificate must be updated once data from an accurate 12-month cycle, or other appropriate cycle, is available.

209.2(6) *Applicability.* The provisions of subrule 209.2(5) explaining the determination of the percentage exemption for electricity also apply to other types of fuel, such as natural gas, LP, etc., when used for exempt purposes.

This rule is intended to implement Iowa Code section 423.45.

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