

Republic of Latvia
Cabinet
Regulation No. 243
Adopted 19 April 2016

Regulations Regarding the Energy Efficiency Requirements for Centralised Heating Supply Systems in the Possession of a Licensed or Registered Energy Supply Merchant, and the Procedures for Conformity Examination Thereof

*Issued pursuant to
Section 46, Paragraph five of the Energy Law*

I. General Provisions

1. The Regulation prescribes the energy efficiency requirements for centralised heating supply systems in the possession of a licensed or registered energy supply merchant, and the procedures for conformity examination thereof.
2. The following terms are used in the Regulation:
 - 2.1. external heating supply networks – heating supply networks which connect the heating source with individual heating points;
 - 2.2. net thermal energy – the quantity of thermal energy which is transferred by the heating source in its outlet;
 - 2.3. nominal thermal input – the maximum thermal input which has been determined by the manufacturer of boilers or cogeneration installation and which can be ensured by the relevant installation during continuous operation, using the principal heating fuel, with the efficiency factor specified by the manufacturer;
 - 2.4. net efficiency factor of the heating source – the relation between the quantity of thermal energy transferred by the heating source into the network within a specific interval of time and the quantity of thermal energy consumed in this period time and determined according to the lowest calorific value of the heating fuel;
 - 2.5. heating source – an aggregate of technological equipment, structures and infrastructure which is intended for the production of thermal energy;
 - 2.6. net efficiency factor of heating supply networks – the proportion between the quantity of thermal energy supplied to the users of the centralised thermal supply system within a specific interval of time and the quantity of thermal energy received from the heating source in this period of time.

II. Requirements for Centralised Heating Supply Systems in the Possession of a Licensed or Registered Energy Supply Merchant

3. The centralised heating supply system shall be equipped with such accounting measuring equipment (hereinafter – measuring equipment) or a system for accounting the quantity and quality of the solid fuel supplied (hereinafter – accounting scheme) which permits to determine the following by performing measuring:
 - 3.1. the net thermal energy;

- 3.2. the quantity of thermal energy consumed by users of the centralised heating supply system within a specific time interval;
- 3.3. the quantity of heating fuel consumed for the production of thermal energy.

4. If an energy supply merchant is engaged in the production of thermal energy only, it shall ensure such measuring equipment or accounting scheme which permits to determine the net thermal energy and the quantity of heating fuel consumed for the production of thermal energy by performing measuring, but the measuring equipment or accounting scheme permitting to determine the quantity of thermal energy consumed by users of the centralised heating supply system within a specific time interval shall be ensured by an energy supply merchant which is engaged in transmission, distribution of and trading in thermal energy to users of the centralised heating supply system.

5. If an energy supply merchant is engaged in the production, transmission, distribution of and trading in thermal energy to users of the centralised heating supply system, it shall ensure such measuring equipment or accounting scheme which permits to determine the net thermal energy, the quantity of thermal energy consumed by users of the centralised heating supply system within a specific time interval, as well as the quantity of heating fuel consumed for the production of thermal energy.

6. Upon using net thermal energy, an energy supply merchant shall, according to Annex to this Regulation, determine and register the measurements of the quantity of thermal energy consumed by users of the centralised heating supply system within a specific time interval, the quantity of heating fuel consumed for the production of thermal energy, and of other indicators:

- 6.1. energy efficiency indicators of the heating source – within the time period from 1 November to 30 April not less than once in 10 days, and within the time period from 1 May to 31 October not less than twice a month, but if solid fuel is used as a heating fuel, not less than once a month;

- 6.2. energy efficiency indicators of the centralised heating supply system – not less than once a month;

- 6.3. total annual energy efficiency indicators which are submitted by the merchant to the Public Utilities Commission (hereinafter – the Regulator) by 1 March of the following year.

7. In order to determine the measures for improving energy efficiency and to analyse the reasons for deterioration of energy efficiency indicators, an energy supply merchant shall register the energy efficiency indicators of heating sources in the journal of energy efficiency indicators (hereinafter – the journal) in accordance with the requirements referred to in Paragraph 9 of this Regulation.

8. The existence of the journal and the data registered in the journal shall be checked by the Regulator.

9. The following requirements are laid down for the energy efficiency indicators to be registered in the journal:

- 9.1. the net efficiency factor of thermal energy production by the heating source for a boiler with the nominal capacity in a calendar year may not be lower than:

- 9.1.1. 92%, if gaseous fuel is used in the installation;

- 9.1.2. 85 %, if liquid fuel is used in the installation;

- 9.1.3. 75 %, if solid fuel is used in the installation;

- 9.2. the actual total energy production efficiency factor of cogeneration installations installed in a cogeneration electricity plant in a calendar year may not be lower than:
- 9.2.1. 80%, if gaseous or liquid fuel is used in production of energy;
 - 9.2.2. 75%, if solid fuel is used in production of energy;
- 9.3. the efficiency factor of a solar-thermal collector which has been determined in annex to its certificate, may not be lower than:
- 9.3.1. 70%, if an evacuated solar-thermal collector is used;
 - 9.3.2. 75%, if a flat plate solar-thermal collector is used;
- 9.4. the energy efficiency class of a heat pump may not be lower than C;
- 9.5. the relative heat losses in a heating supply network starting from 2018 may not exceed 19% per year, but from 2019 – 17% per year.

III. Procedures for Conformity Examination of Centralised Heating Supply Systems in the Possession of a Licensed or Registered Energy Supply Merchant

10. A licensed or registered energy supply merchant which has a centralised heating supply system in its possession, shall, not less than once a year, perform analysis of fuel gas of heating sources and regulate the ratio of air and heating fuel supplied in order to prevent chemically incomplete combustion of the heating fuel or air inflow in the furnace.
11. Each year the Regulator shall randomly inspect licensed or registered energy supply merchants which have centralised heating supply systems in their possession in order to check the fulfilment of the duty referred to in Paragraph 7 of this Regulation.
12. If infringements of fulfilment of the duties referred to in Paragraphs 6 and 7 of this Regulation and of the requirements referred to in Paragraph 9 of this Regulation are established, the Regulator shall assign the merchant to ensure their fulfilment within six months.
13. If infringements of fulfilment of the duty referred to in Paragraph 7 of this Regulation are established, the Regulator shall assign the merchant to ensure the fulfilment of the abovementioned duty within six months and in addition to submit registered measurements of energy efficiency indicators which conform to the following permissible values in a calendar year:
- 13.1. oxygen concentration in fuel gasses conforms to the values specified by the manufacturer of the boiler installation or burner. If none have been specified, they shall be range from 2 to 3.5 per cent by volume, but if solid fuel is used – from 6 to 11 per cent by volume;
 - 13.2. electricity consumption per one unit of thermal energy produced does not exceed 25 kWh/MWh;
 - 13.3. the quantity of additional network water feed does not exceed 0,25 m³ per one MWh of thermal energy transferred into networks, except the case if networks of the centralised heating supply system in possession of merchants or heating sources are reconstructed or renewed or are built anew.
14. If after a repeat check infringements of the fulfilment of the duties referred to in Paragraphs 12 and 13 of this Regulation are established, forced execution of the administrative act is initiated.

IV. Closing Provision

15. Paragraphs 9 and 13 of this Regulation shall be applied to centralised heating supply systems in possession of licensed or registered energy supply merchants from 1 January 2018. Until 31 December 2016 the energy supply merchants referred to in this Paragraph shall submit a development and reconstruction plan to the Regulator indicating therein how conformity with the requirements referred to in Paragraph 9 and 13 of this Regulation will be ensured.

Prime Minister

Māris Kučinskis

Deputy Prime Minister, Minister for Economics

Arvils Ašeradens

Registration and Determination of Energy Efficiency Indicators of the Heating Source and Centralised Heating Supply System

1. Energy efficiency indicators of the heating source shall be registered and determined in accordance with Table 1 of this Annex, if the merchant is engaged in production of thermal energy only.

Table 1

No.	Item	Time period*/values	Indicators
1.	Consumption of the heating fuel	Quantity in natural units of measurement	
1.1.	Consumption of the heating fuel (if there are several types of heating fuel in the heating source which have different natural units of measurement)	Quantity in natural units of measurement	
2.	Consumption of the heating fuel	MWh	
2.1.	Consumption of the heating fuel according to types (if there are several types of the heating fuel in the heating source)	MWh	
3.	Calorific value of the heating source	MWh/quantity of the heating source in natural units of measurement	
3.1.	Calorific value of the heating fuel for each type of the heating fuel	MWh/quantity of the heating source in natural units	
4.	Gross thermal energy	MWh	
5.	Gross efficiency factor of the heating source (Item 4/Item 2 x 100)	%	
6.	Oxygen concentration in fuel gases	per cent by volume	
7.	Total electricity consumption of the heating source	kWh	
8.	Consumption of electricity per one gross unit of thermal energy (Item 7/Item 4)	kWh/MWh	
9.	Quantity of water for additional feed to the boiler circuit**	m ³	
10.	Quantity of water for additional feed to the boiler circuit or network per one MWh (Item 9/Item 4)	m ³ /MWh	

2. Energy efficiency indicators shall be registered and determined in accordance with Table 2 to this Annex, if the merchant is engaged in transmission, distribution of and trading in thermal energy to end users.

Table 2

No.	Item	Time period*/values	Indicators
1.	Quantity of thermal energy received in networks the heating source of which is transferring in its outlet	MWh	
2.	Quantity of thermal energy sold to consumers	MWh	
3.	Heat losses in the network	MWh	
4.	Relative heat losses in the network (Item 3/Item 1 x 100)	%	
5.	Consumption of electricity for heat transmission and distribution***	kWh	
6.	Consumption of electricity per one unit of thermal energy sold (Item 5/Item 2)	kWh/MWh	
7.	Water flow in the network	m ³	
8.	Water cooling quality in the network (Item 2/Item 7)	MWh/m ³	
9.	Quantity of water for additional feed to the network****	m ³	
10.	Quantity of water for additional feed to the network per one MWh (Item 9/Item 1)	m ³ /MWh	

3. If one merchant is engaged in production, transmission, distribution of and trading in heat to end users, Tables 1 and 2 of this Annex shall be filled in.

Notes.

1. * The time period may not exceed the period indicated in Paragraph 6 of Cabinet Regulation No. 243 of 19 April 2016, Regulations Regarding the Energy Efficiency Requirements for Centralised Heating Supply Systems in the Possession of a Licensed or Registered Energy Supply Merchant, and the Procedures for Conformity Examination Thereof. The time period shall be indicated by entering the dates restricting it.

2. ** To be completed, if the boiler circuit and circuit of heating supply networks have been hydraulically separated.

3. *** The consumption of electricity which is accounted in addition to the consumption of electricity registered in heating sources for transmission and distribution of the network water.

4. **** The quantity of additional feed which is accounted in addition to the quantity of water registered in heating sources for additional feed to heating supply networks.

Deputy Prime Minister, Minister for Economics

Arvils Ašeradens