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REG. no. 959 of 7 December 1990: Regulations concerning the generation, conversion, transmission, trading, distribution and use of energy etc. (The Energy Act Regulations)

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Regulations concerning the generation, conversion, transmission, trading, distribution and use of energy etc. (The Energy Act Regulations)

Chapter 1. General provisions

Section 1-1. Scope

These regulations apply to the planning, construction and operation of installations for the generation, conversion, transmission and distribution of electrical energy, thermal energy generated in district heating and district cooling plants and likewise to the trade in electrical energy.

0 Amended by Regulation no. 1456 of 14 December 2001 (effective 1 January 2002)

Section 1-2. Purpose

These regulations shall ensure that the generation, conversion, transmission, trading, distribution and use of energy are conducted in a way that efficiently promotes the interests of society, which includes taking into consideration any public and private interests that will be affected.

Chapter 2. Administrative procedures

Section 2-1. Application

An application for a licence must meet the requirements specified in section 2-1 of the Energy Act, plus any other requirements that derive from these regulations.

Section 2-2. *Awarding of a licence*

Licences shall be awarded pursuant to the Energy Act on the basis of objective, transparent and non-discriminatory criteria.

Chapter 3. Electrical installations

Section 3-1. *Mandatory licence requirement for electrical installations*

Electrical installations requiring a licence pursuant to section 3-1 of the Act are installations with a voltage greater than 1000 Volts alternating current and/or 1500 Volts direct current.

Section 3-2. *The content of applications for a licence for electrical installations*

Insofar as it is appropriate, an application for a licence for electrical installations shall include the following items:

- a) a description of the applicant and his activities
- b) a technical and economic description of the installation, including the physical design of the installation and any auxiliary installations such as roads etc.
- c) how the installation fits into the energy plan
- d) the planned date for the start-up and completion of the installation
- e) an account of the installation's adaptation to the landscape with necessary drawings and maps
- f) the effect on public interests and possible measures to mitigate the impact
- g) the results of any environmental impact assessments
- h) the effect on private interests, including the interests of landowners and other holders of rights
- i) the need for permits pursuant to some other Act, including the relation to municipal plans pursuant to the Planning and Building Act.

Section 3-3. *Local area licence*

A local area licence may be granted for the construction and operation of a distribution system with a nominal voltage up to and including 22 kV.

A local area licence may also be granted for cabled installations and expansions of existing transformer and switching stations with a nominal voltage up to and including 132 kV, provided that these are located within a geographically limited area that is essentially urban in nature.

Section 3-4. *Conditions for licences for electrical installations*

a) *Operation and maintenance*

The licensee is obligated to keep the installation in satisfactory operationally reliable condition at all times, including providing for maintenance and modernisation that ensures a satisfactory delivery quality.

b) *Environment and landscape*

In the planning, design and operation of the installation, the licensee is obligated to see that the least possible disturbance to the environment and landscape is inflicted on the general public insofar as this can be achieved without unreasonable costs or disadvantages for the licensee.

c) *Emergency preparedness*

The licensee is obligated to see that consideration is given to emergency preparedness in the planning, design and operation of the installation.

d) *Closure and clean-up of installations*

When an installation is shut down, the former licensee is obligated to remove the shut-down installation and insofar as it is possible to restore the landscape to its natural condition.

The Norwegian Water Resources and Energy Directorate may set a deadline for this work and make decisions regarding this restoration.

Section 3-5. (Repealed by Regulation no. 1456 of 14 December 2001, effective 1 January 2002)

Section 3-6. (Repealed by Regulation no. 1456 of 14 December 2001, effective 1 January 2002)

Section 3-7. (Repealed by Regulation no. 1456 of 14 December 2001, effective 1 January 2002)

Section 3-8. (Repealed by Regulation no. 1 of 2 January 2002.)

Chapter 4. Trade in electrical energy

Section 4-1. *The purpose of the trading licence*

The purpose of the licensing arrangement for trade in electrical energy is to ensure efficient power trading and network operations that promote the interests of society by arranging matters to promote an efficient power market and efficient operation, utilisation and development of the electricity grid. Consideration shall be given to public and private interests that will be affected.

Section 4-2. *The scope of the trading licence*

The licensing arrangement encompasses all forms of delivery of electrical energy.

Entities that trade electricity or that may have some form of monopoly, must have a trading licence. This applies, for example, to entities that own or operate a distribution or transmission grid.

Entities in which the operation requiring a licence is of limited scope may be awarded a licence on simplified conditions.

Exempted from the mandatory licence requirement are:

- a) installations on farms or in rural communities that do not have high voltage installations
- b) dissemination of electricity to dwellings or commercial activities in connection with the leasing or administration of all or some parts of buildings or installations
- c) municipalities and counties for the part of their activities that involves the withdrawal of power supplied under **licence** terms and the resale of that power to energy utilities and other entities in which the municipality or county has a stake, as long as this is within the constraints specified in the Watercourse Regulation Act and the Industrial Concession Act.
- d) cases where the mandatory licence requirement must be regarded as obviously unnecessary.

In case of doubt as to whether a licence is required, the decision will be made by the Norwegian Water Resources and Energy Directorate.

Section 4-3. *The content of applications for a trading licence*

An application for a licence for trade in electrical energy shall be submitted to the Norwegian Water Resources and Energy Directorate and shall provide documented information about:

- a) the applicant's name and activity
- b) the applicant's organisation and ownership
- c) the previous year's accounts and annual report, or if it is a new company, its articles of association, opening balance sheet and budget in accordance with Act no. 56 of 17 July 1998 relating to annual accounts (the Accounting Act) and generally accepted accounting principles.

Section 4-4. Conditions for a trading licence

a) *Internal organisation and accounts*

The licensee is obligated to keep accounts pursuant to the provisions of Act no. 56 of 17 July 1998 relating to annual accounts (the Accounting Act). The accounts shall be prepared in accordance with generally accepted accounting principles

The licensee shall divide the activities into independent operating categories with separate budgets and accounts (profit and loss statement and balance sheet), and provide separate accounting information about each of these operating categories.

Direct and indirect internal transfers of funds between monopoly activities and other activities that the licensee operates shall be clearly entered in the accounts.

Accounts in accordance with paragraphs one and two shall be filed with the Norwegian Water Resources and Energy Directorate pursuant to the same provisions regarding filing with the national register of annual company accounts that are specified in Act no. 56 of 17 July 1998 relating to annual accounts.

b) *Revenue from the sale of grid services*

The Norwegian Water Resources and Energy Directorate specifies yearly income caps for each individual licensee. Over a period of time, the revenue shall cover the costs of operation and depreciation of the grid, while giving a reasonable rate of return on invested capital assuming efficient operation, utilisation and development of the grid.

The main principles for the calculation of the income cap shall be re-evaluated periodically. Each period shall have a minimum duration of 5 years. The licensee shall be ensured a minimum rate of return. The rate of return attained by the licensee shall not be unreasonably high.

c) *Other operations*

There shall be an economically correct distribution of joint costs for the establishment and operation of grid installations that are also used for other

operations beside the transmission of electrical energy.

d) *Market access and tariffs*

The licensees shall ensure that there is market access for all customers who want grid services at non-discriminatory and objective point tariffs and terms. Point tariffs are defined here as tariffs that are referred to the customer's point of connection to the grid and that are independent of agreements concerning the purchase and/or sale of power.

The licensees set the tariffs. Tariffs are defined here as all prices and other financial remuneration that the licensee specifies for connection to and use of electrical grid installations. The tariffs shall be designed so that they give signals whenever possible about efficient utilisation and efficient development of the grid. The tariffs can be differentiated according to objective and verifiable criteria based on relevant grid conditions.

e) *Impartial behaviour*

The conduct of grid companies shall be impartial and non-discriminatory. Further provisions may be specified to ensure impartial behaviour.

f) *Information to customers*

The licensee shall provide information about tariffs and conditions for the use of the grid on his own initiative.

The licensee is obligated to give customers information upon request about the calculation of tariffs and conditions that are relevant for the customer.

g) *Coordination of grid and grid services*

The Norwegian Water Resources and Energy Directorate may specify the installations that will be included in the central grid in an individual decision.

The Norwegian Water Resources and Energy Directorate may specify requirements for the coordination of tariffs and the division of the grid and grid services, and further conditions for determining which installations shall be included.

Section 4-5. Metering, settlement and invoicing

Metering, settlement and invoicing shall be done in a way that ensures easy market access and facilitates efficient power trading. Among other things, this applies to settlement of power in the balancing market, change of supplier, metering, settlement and invoicing of grid services and electrical energy, and joint invoicing of grid services and electrical energy.

Invoicing is done in a way that helps make the end user more aware of his consumption of electrical energy.

Section 4-6. The purpose of a marketplace licence

A licence for an organised marketplace (marketplace licence) has the purpose of helping to promote efficient price formation in the power market by facilitating efficient, appropriate, trustworthy trading systems and trading rules.

Consideration shall be given to public and private interests that will be affected.

Section 4-7. The scope of the marketplace licence

This licensing arrangement encompasses the organisation or operation of a marketplace for trade in electrical energy for physical delivery.

If there is any doubt as to whether a licence is required, the decision will be made by the Norwegian Water Resources and Energy Directorate.

Section 4-8. Conditions for a marketplace licence

- a) The licensee shall do his best to help facilitate an efficient price formation and an adequate flow of electric power.
- b) The licensee shall behave in an impartial and non-discriminatory manner, which entails ensuring the players impartial and efficient access to information that is important to price formation.
- c) The licensee shall devise an appropriate infrastructure, trading rules, player agreements, along with systems for providing security and settlements that ensure reliability and predictability for the players.
- d) The licensee's income from the organisation and operation of the marketplace shall cover the costs of and provide a reasonable rate of return on efficient operation.
- e) The licensee has a duty to disclose information to the authorities.
- f) The marketplace shall help facilitate an efficient execution of responsibility for

system operation.

Section 4-9. *Duration of the licence*

A licence for trade in electrical energy and a marketplace licence may be granted with a duration of up to 10 years.

The licence may not be transferred.

Chapter 5. District heating plants.

Section 5-1. *Mandatory licence requirement for a district heating plant*

District heating plants that require a licence are plants with an output greater than 10 MW (10 MJ/s).

Plants with a lower output may be considered for licensing in the cases where the owner so wishes out of consideration for making a mandatory connection pursuant to section 66a of the Planning and Building Act.

District heating plants that shall heat public institutional buildings, large commercial buildings, industrial operations, housing cooperatives or commonhold associations may be exempted by an individual decision from the mandatory licence requirement.

Section 5-2. *The content of applications for a licence for a district heating plant*

Insofar as it is appropriate, an application for a licence shall include the following items:

- a) a description of the applicant and his activities
- b) a technical and economic description of the plant, including the physical design of the plant
- c) how the plant fits into the energy plan and to any major intermunicipal or regional district heating plants
- d) the planned date for the start-up and completion of the installation
- e) effect on public interests and possible measures to mitigate the impact
- f) the results of any environmental impact assessments
- g) effect on private interests, including the interests of landowners and other holders of rights
- h) the need for permits pursuant to some other Act, including the relation to the Pollution Control Act, the Act relating to flammable goods and to liquids and gases

under pressure, the Planning and Building Act etc.

- i) information about prices and other terms of delivery if the applicant assumes that a statute will be introduced concerning mandatory connection pursuant to section 66a of the Planning and Building Act.

Section 5-3. Conditions for a licence for a district heating plant

a) *Operation and maintenance*

The licensee is obligated to keep the plant in satisfactory operationally reliable condition at all times, which includes providing for maintenance and modernisation that ensures the customers a reliable supply of energy.

b) *Environment and landscape*

In the planning, design and operation of the plant, the licensee is obligated to see that the least possible disturbance to the environment and landscape is inflicted on the general public insofar as this can be achieved without unreasonable costs and disadvantages for the licensee.

c) *Emergency preparedness*

In the planning, design and operation of the plant, the licensee is obligated to see that consideration is given to emergency preparedness.

d) *Closure and clean-up of plants*

When a plant is shut down, the former licensee is obligated to remove the shut-down plant and to restore the landscape to its natural condition insofar as that is possible.

It may be decided that buried components of the plant shall not be dug up again.

The Norwegian Water Resources and Energy Directorate may set a deadline for this work and make decisions regarding this restoration.

Chapter 5A. System operation, rationing and delivery quality

Section 5A-1. System operation

System operation shall be exercised in a way that efficiently promotes the interests of society. The system operator shall see that there will be an instantaneous balance at any given time between the total generation and the total consumption of power taking into account the power exchanges with interconnected foreign systems. Arrangements shall be made to promote a satisfactory delivery quality in all parts of the country.

The system operator shall coordinate the planned actions of everyone who owns or fully or partly operates an installation for power generation or a grid, plus trading companies, end users and an organised marketplace pursuant to section 4-5 of the Energy Act, in order to ensure an instantaneous balance.

The system operator shall have an impartial and independent relation to the players in the power market.

Whenever possible, the system operator shall employ policy instruments that are based on market-based principles, including the operation and development of a balancing market.

The system operator shall monitor the development of the power supply system and keep the authorities regularly informed about the trend in the power and energy balance.

The system operator shall help facilitate the development of the transmission grid in a way that efficiently promotes the interests of society.

In difficult operational situations, the system operator may requisition power supplies by demanding that all available regulated capacity in power generation and consumption shall be reported in the balancing market. In completely special operational situations, the system operator may carry out a brief mandatory disconnection of consumption in order to maintain the balance. In the event of mandatory disconnection pursuant to this paragraph, a cost may be imposed on the system operator.

Those who are encompassed by decisions made by the system operator during system operation are obligated to comply with these decisions.

Section 5A-2. Rationing

The Ministry may implement rationing when there is a scarcity of electrical energy due to extraordinary circumstances, and it is deemed necessary out of consideration for the public interest so as to ensure that the energy will be utilised in the best possible way.

Rationing includes the planning and implementation of enforced reductions in supply and the requisitioning of electrical energy and district heating.

The Ministry appoints a rationing authority that is responsible for planning and administrative implementation of any measures required in connection with electricity rationing. This responsibility includes necessary measures before, during and after the actual rationing period, including:

- a) being informed at all times about circumstances that are important for the evaluation of the power coverage
- b) analysing the power situation and assessing whether the conditions have been met for implementing or terminating rationing

- c) informing the Ministry when rationing may be relevant and suggesting necessary measures
- d) making sure that the necessary plans and procedures have been prepared at all times for reliable and efficient notification and reporting of the initiation, implementation and termination of rationing
- e) Monitoring to ensure that imposed preparatory measures are implemented.

The rationing authority shall arrange matters so that market-based policy instruments are employed as much as possible before rationing is initiated.

Measures in connection with rationing shall be implemented in a way that efficiently promotes the interests of society and imposes as few disadvantages as possible on those who are affected. Efforts shall be made to implement the rationing in accordance with reasonable and verifiable criteria.

The rationing shall be implemented in accordance with specified plans prepared in consultation with national, regional and local authorities and relevant grid owners.

The rationing authority is responsible for necessary informative measures in connection with a rationing situation.

When rationing is introduced, the rationing authority shall keep the Ministry regularly informed of developments

The rationing authority or the party to whom the rationing authority delegates authority may issue the orders that are necessary to ensure an efficient planning and implementation of the rationing.

Section 5A-3. *Delivery quality*

Requirements for the delivery quality may be imposed on the players in the power supply system. Requirements for the delivery quality may, among other things, be minimum requirements for what may be regarded as satisfactory delivery quality.

Anyone who provides electrical energy is obligated to inform associated players about the level of delivery quality that can be expected. Private agreements may be entered into about a different delivery quality.

Chapter 5B. Energy planning

Section 5B-1. *Energy planning*

As a basis for a development of the energy system that efficiently promotes the interests of society and for applications for a licence for an electrical installation and district heating plant, all licensees shall take part in the energy planning work and coordinate the individual energy plans with each other.

Energy plans shall encompass the generation, transmission, distribution and use of electrical energy. In this planning, consideration shall be given to possibilities for the use of district heating, flexible energy solutions, heat recovery, domestic consumption of gas, measures for energy economising in new buildings and renovations, the effect of making use of energy control systems on the demand side etc.

In accordance with an order from the Norwegian Water Resources and Energy Directorate, a licensee is obligated to draw up long-term energy plans and to coordinate the preparation of energy plans within a specifically defined planning area.

Mandatory energy plans shall be submitted to the Norwegian Water Resources and Energy Directorate. The Norwegian Water Resources and Energy Directorate may require that all necessary documentation of a technical or economic nature for the follow-up of the energy planning work be submitted.

Chapter 6. Emergency preparedness.

Section 6-1. *Purpose*

Emergency preparedness in the power supply system shall prevent and limit damage to life and property caused by natural conditions, technical failure, terrorist acts and sabotage or by rationing pursuant to section 5A-2 during peacetime, during a state of emergency and in a time of war.

Section 6-2. *The Power Supply Preparedness Organisation (KBO)*

KBO is composed of the entities responsible for the power supply system under ordinary operating conditions.

KBO shall establish a satisfactory emergency preparedness by:

- a) conducting systematic analyses and evaluations

- b) implementing contingency measures at all installations of importance for the nation's power supply system
- c) ensuring the integrity, confidentiality and accessibility of information, resources, installations and systems that are important for the management, operation and rehabilitative capacity of the power supply system
- d) being able to carry out an effective crisis management
- e) being able to carry out an effective rehabilitation of their own operations in the event of damage, destruction or other disruptions.

Section 6-3. Contingency measures

The Norwegian Water Resources and Energy Directorate may approve contingency measures at all installations that are covered by section 6-3 of the Energy Act, and for telecommunications systems and computer installations that are necessary for the operation of the power supply system, or that transfer, store and process classified or other sensitive information about these installations and for administrative buildings and emergency rooms.

Decisions about contingency measures may include:

- a) the execution of measures that protect installations, systems and their personnel from damage caused by natural conditions, technical failure, terrorist acts or sabotage during peacetime, during a state of emergency and in a time of war
- b) the purchase, utilisation and installation of components, the development or reinforcement of installation components and other measures that may help reduce the vulnerability of an installation or of the power supply system in its entirety
- c) orders regarding security guards.

Section 6-4. Preventive security measures

KBO is responsible for the implementation of preventive security measures at all units and systems of importance for the management and operation of the nation's power supply system, and for units that have sensitive or classified information about these systems.

Preventive security measures include requirements for:

- a) the protection of important information systems and sensitive or classified information. Among other things, this includes the power supply system with

operation control centres, telecommunications and control systems, systems for management and especially important power supply installations, defence and contingency measures, rehabilitative capacities, damage from extensive power failure and dam breaks.

- b) personnel control of persons with access to sensitive or classified information about the power supply system or with access to important installations for management and operation.
- c) restrictions on visits to installations of crucial importance to the nation's power supply system.
- d) entering into security agreements with suppliers, consultants, service providers etc. in connection with the construction, rebuilding, expansion and operation of important power supply installations, including major operational control systems.
- e) protection of important power supply installations and other resources, including physical security and access control, among other things, both during construction and at existing installations.

Act no. 10 of 20 March 1998 relating to preventive security services (the Security Act) will apply to the hiring or engagement of foreign nationals in the power supply system.

Section 6-5. *Financial framework and state subsidy*

The total financial framework for ordered and executed contingency measures shall be evaluated in light of the installation's importance in the power supply system.

Anyone who executes measures pursuant to these regulations shall cover the expenses that this entails themselves.

For new installations, the owner pays for all contingency measures pursuant to resolutions specified by the Norwegian Water Resources and Energy Directorate. As defined here, new installations also include installations that are rebuilt or expanded in such a way that their importance increases significantly, or that are rebuilt so that previously executed measures and plans must be amended considerably. If costs are considerable, a subsidy may be applied for and granted.

For existing installations, a subsidy of up to fifty per cent may be granted upon application through a **resolution** concerning contingency measures. The same applies to a substantiated purchase of spare parts or emergency materials and repair equipment.

Section 6-6. *Fees*

To cover the Norwegian Water Resources and Energy Directorate's expenses for the work on emergency preparedness for power supplies, an annual fee is collected.

This fee is set for each individual power company on the basis of installed capacity in power plants, transformer stations and grid stations on 1 January of the year for which the fee is calculated. The rates shall be regulated so that the total fees are equivalent to the actual expenses incurred by the Norwegian Water Resources and Energy Directorate in the emergency preparedness work.

Section 6-7. *Implementation and supervision*

Internal controls shall be established for emergency preparedness for power supplies. All units in KBO shall establish measures for ensuring that requirements specified in or pursuant to these regulations shall be met. It must be possible to document that these measures have been established and met.

Chapter 7. Miscellaneous provisions

Section 7-1. *Competence*

The Norwegian Water Resources and Energy Directorate may issue regulations to implement and supplement these regulations to the extent that they apply to:

- a) further requirements for applications
- b) financial and technical reporting
- c) revenue from the sale of grid services
- d) distribution of joint costs among network operations and other operations
- e) market access and tariffs
- f) impartial behaviour
- g) information to customers
- h) coordination of grid and grid services
- i) metering, settlement and invoicing
- j) marketplace
- k) responsibility for system operation
- l) rationing
- m) delivery quality
- n) energy planning

o) Emergency preparedness.

Section 7-2. *Monitoring and control*

The Ministry monitors compliance with provisions specified in or pursuant to the Energy Act. When authority pursuant to the Act and these regulations is delegated to the Norwegian Water Resources and Energy Directorate, this also includes authority pursuant to the first sentence.

The licensee shall assist in conducting the monitoring. Among other things, this includes obtaining information and documentation that is necessary in order to conduct monitoring.

Section 7-3. Orders

The Ministry may issue the orders that are necessary for implementation of provisions specified in or pursuant to the Energy Act. When authority pursuant to the Act and these regulations is delegated to the Norwegian Water Resources and Energy Directorate, this also includes authority pursuant to the first sentence.

Section 7-4. Dispensation

In special cases, the Ministry may grant an exemption from these regulations, provisions issued pursuant to these regulations or conditions specified in licences issued pursuant to the Energy Act. When authority pursuant to the Act and these regulations is delegated to the Norwegian Water Resources and Energy Directorate, this also includes authority pursuant to the first sentence.

Section 7-5. Entry into force and transitional rules

These regulations enter into force on 1 January 1991.

Applications for a trading licence shall be submitted to the Norwegian Water Resources and Energy Directorate by 1 March 1991.

Section 7-6. Relation to older standard conditions etc.

When these regulations enter into force, the Standard Conditions for Licences for Electrical Installations and the Standard Conditions for Construction and Operation of State-owned Installations Approved by the Ministry of Industry on 20 August 1975 with Subsequent Amendments will be repealed. The standard conditions apply to existing installations until previously awarded licences expire.

Guidelines for applications, for administrative procedures and concerning the relation to other legislation and other public authorities will apply as long as they agree with these regulations until they are superseded by new guidelines.