

# Appendix to the agreement on the use of power reserve

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# RULES RELATING TO THE MAINTAINING OF READINESS FOR USE OF A POWER PLANT UNIT, ITS OPERATION, AND HANDLING OF ELECTRICITY PRODUCED BY THE POWER PLANT UNIT

#### 1 MAINTAINING OF READINESS FOR USE OF A POWER PLANT UNIT

The Producer shall maintain the technical functioning of the power plant unit at the level required by the following starting times:

- in the winter period of 1 December to 28 February, the starting time is at the most 12 hours
- at other times, from 1 March to 30 November, the starting time is a maximum of one (1) month.

If the circumstances so require, Fingrid may agree sufficiently early, however, at least one week in advance, with the Producer that the finishing of the 12 hour starting readiness is postponed. Correspondingly, the parties can also agree on advancing the beginning of the winter period.

The Producer shall agree on the timing of repairs influencing the 12 hour starting readiness of the power plant unit with Fingrid.

The Producer shall make sure that the power plant unit has valid agreements concerning electricity transmission.

The costs of the power reserve arrangement shall not include the actual annual overhaul of the power plant unit or major capital investments relating to power plant technology.

# 1.1 Operating personnel

The Producer shall make sure that it has continuously sufficient operating personnel while the power plant unit is in the 12 hour starting readiness. The Producer shall make sure that the operating personnel have sufficient expertise.

When the period for starting readiness is one month, the Producer shall keep the personnel working at the power plant unit at a minimum.

# 1.2 Fuel supply

During the winter period, the power plant unit shall have sufficient fuel for at least 200 hours of full power production. The Producer shall agree with Fingrid on how the fuel supply will be replenished in conjunction with a potential longer production period.

# 1.3 Emission rights

The power plant unit shall have a valid emission permit.

The Producer shall make sure that the power plant unit has the necessary statutory emission rights in accordance with the schedule relating to the reporting of annual emissions and to the invalidation of the rights, corresponding to the actual production volume.

# 1.4 Environmental permits

During the agreement period, the power plant unit shall have all necessary valid environmental permits for each production period of 200 hours at full power.

### 1.5 Trial operation

The power plant unit shall carry out successful trial operation annually at a period of time agreed upon separately with Fingrid before the 12 hour starting readiness commences. The trial operation is used for ensuring the technical functioning of the plant and the expertise of the operating personnel. The Producer shall be responsible for the execution and costs of the trial operation.

#### 2 OPERATION OF POWER PLANT UNIT FOR THE NEEDS OF THE SYSTEM

#### 2.1 General rules

The transmission system operators in Finland and Sweden apply uniform principles to the use of the power reserve so as to ensure the optimum use of the capacity in the Nordic power system and so as to minimise the market impacts of the arrangement.

Fingrid does not participate directly in the sales of electricity which has been produced by capacity covered by the agreement, but the Producer is responsible for the sales of electricity. A power plant unit is started either through the Elspot market or at Fingrid's request. The Producer shall inform Fingrid of the starting and finishing times of production at the power plant unit immediately as starting and finishing take place.

The Producer accepts that Nord Pool Spot AS has a right to execute the monitoring of the Producer's electricity sales bids and to report them in retrospect to Fingrid.

# 2.2 Power reserve capacity on Elspot market

#### 2.2.1 Submitting and processing of bids

The Producer shall offer the total capacity available at any given time to the Elspot market for a specific hour, considering the starting time.

In the Elspot trading system, the power reserve capacity in Finland constitutes one power reserve bid based on the volume for the bidding area of Finland. Correspondingly, the power reserve capacity in Sweden constitutes one power reserve bid based on the volume for the bidding area of Sweden. No price is set for the power reserve bids.

A power reserve bid is taken into account in Elspot calculation if no balance between demand and supply is reached with the available bids made at market terms in the bidding area of Finland and/or Sweden.

Power reserve capacity in both Finland and Sweden is activated at a ratio to the power reserve capacities offered between the countries and within the available transmission capacity as prescribed in the appendix to these rules.

# 2.2.2 Pricing of bid

When a bid is activated, Nord Pool Spot AS sets a price for the power reserve capacity on the basis of the last commercial hourly bid on the Elspot market, as follows:

- If the price of the last commercial hourly bid is under 1999.9 €/MWh, the bid price for the power reserve is the price of the last commercial hourly bid added by a calculatory component of 0.1 €/MWh. The bid price for the power reserve cannot be below the variable production costs of the most expensive power plant unit.
- In other cases, the bid price for the power reserve is 1999.9 €/MWh.

The variable production costs used in Finland are the variable costs (€/MWh) of condensing power plants firing heavy fuel oil, with the value of the emission rights (€/MWh) required by production and the starting costs added to these costs. The fuel price used is the most recent available average monthly price of heavy fuel oil, published by the Finnish Oil and Gas Federation. The Supplier shall deliver this price information individually of each power plant unit to Fingrid at least monthly, and Fingrid delivers the most expensive price information further to Nord Pool Spot AS.

## 2.2.3 Activation of power reserve capacity

When a power reserve bid is activated, Nord Pool Spot informs the bidding Producer of the activated volume of power reserve.

The Producer shall inform Fingrid of the power plant units to be started and their operating plans with technical conditions (such as minimum powers of power plant units).

The transmission system operators (TSOs) in Finland and Sweden verify the technical feasibility of the operating plans reported by the Producer. This verification covers the transmission restrictions within the countries, potential changes in cross-border transmission capacities between the countries, minimum powers and starting times of power reserve capacity, and other technical conditions.

If the above conditions indicate that the operating sequence must be changed, the TSOs in Finland and Sweden as well as the TSO in Finland and the Producer make an agreement on the necessary changes. These changes are implemented between the parties by means of power transactions.

When a bid is activated in Finland, Fingrid and the Producer agree on the details pertaining to starting and stopping. When a bid is activated and the power plant unit is started for one hour only, the Producer and Fingrid can also make an agreement on a power transaction for the hour preceding the activation so as to ensure starting.

The power transaction between Fingrid and the Producer shall be concluded at the variable production costs as per item 2.2.2.

# 2.3 Capacity on the regulating power market

### 2.3.1 Submitting and processing of bids

When a power plant unit is operated below full power, the Producer shall submit a power plant specific up-regulation bid to the regulating power market of the available capacity, considering the power plant specific power increase capacity. The variable

production costs of the power plant as per item 2.2.2 shall be used as the price of the bid.

A necessary volume of the bids is activated after all regulating bids with market terms have been activated.

### 2.3.2 Determination of price

The price of the most expensive bid activated on the regulating power market is set as the price of an activated regulating bid; however, at least the Elspot price of the corresponding hour.

# 2.4 Starting and stopping of capacity at Fingrid's request

If the bids submitted to the Elspot market are not realised and if the production plans and load forecast for the following calendar day or for the next few hours suggest that production by the power plant unit is necessary in view of the system, Fingrid will request the Producer to start the plant within the 12 hour starting time.

The Producer is obliged to start a power plant unit covered by the agreement whenever Fingrid requests this.

When the plant begins to generate electricity, the Producer shall offer it to the regulating power market as specified under item 2.3. If the capacity is not activated on the regulating power market, the Producer shall conclude a power transaction with Fingrid at the variable production costs as per item 2.2.2.

Fingrid shall inform the Producer at least one hour before the stopping of the power plant unit when the unit is no longer needed for the needs of the system.

# 3 OPERATION OF POWER PLANT UNIT FOR THE PRODUCER'S OWN NEEDS

If the Producer wishes to use the power plant unit for its own needs or for sales outside the bids referred to under item 2 of these rules, this shall be agreed upon in advance with Fingrid. Upon receiving the relevant consent, the Producer is responsible for all costs relating to the starting, operation and re-storage of the power plant unit.

Electricity production for the Producer's own account is not covered by the obligation of the public service, so this can only take place during extraordinary situations such as in the event of serious damage at the Producer's other power plants. Such use of the power plant unit shall not jeopardise the fulfilment of the obligation of the public service. These extraordinary situations can only take place between 1 March and 30 November. When the Producer uses the power plant unit in said damage situations, the Producer shall reimburse to Fingrid the maintenance compensation for the corresponding period for one month.

If the Producer uses the power plant unit exceptionally between 1 March and 30 November for sales outside the bids referred to under item 2 of these rules, the calculatory sales proceeds of electricity shall be divided in equal proportions between Fingrid and the Producer. The proceeds shall be calculated as the difference between the Elspot price for area Finland and the variable costs of the power plant unit, including the impact of emission rights but excluding starting costs. The fuel price used is the most recent available average monthly price of heavy fuel oil, published by the Finnish Oil and Gas Federation. The impact of emission rights is calculated in accordance with the closing price for each day of the December futures product of the

current year, quoted at Nord Pool. If the production costs of the power plant unit exceed the calculatory sales proceeds, the Producer alone is responsible for the costs. The produced volume of electricity is determined on the basis of the separate settlement in accordance with item 4, delivered by the Producer to Fingrid. Moreover, the Producer shall reimburse to Fingrid the maintenance compensation for the period in question for one month.

#### 4 HANDLING OF ELECTRICITY PRODUCED IN BALANCE SETTLEMENT

The production by the power plant unit and all actual sales related to the production are handled in accordance with valid balance settlement rules.

Moreover, the electricity produced by the power plant unit, actual sales relating to the bids in accordance with item 2 of these rules, power transactions carried out with Fingrid, and use of electricity produced for the Producer's own needs shall be handled in a separate settlement. The Producer shall submit a separate monthly settlement report to Fingrid for all those periods during which the power plant unit has been in production.

The separate settlement is used for continuously calculating a deviation arising from an imbalance between production and sales. The Producer is responsible for the purchase and sales of balancing power required to cover this imbalance.

#### 5 HANDLING OF SALES PROCEEDS FROM ELECTRICITY

Up to a cumulative amount of 4,000 €/MW, the Producer can hold the sales proceeds from electricity production to cover for example balancing power costs resulting from production inaccuracy and the overhead costs of the power plant. The cumulative amount is calculated separately for each period of 3 months during which the power plant unit is in the 12 hour starting readiness.

When calculating the cumulative amount, the sales proceeds of electricity are composed of actual sales to the Elspot and regulating power markets during the winter period on the basis of bids specified under item 2 of these rules. The sales proceeds are the difference between the corresponding prices for area Finland and the variable costs of the power plant unit including the impact of emission rights and taking into account the starting costs of the unit. The fuel price used is the most recent available average monthly price of heavy fuel oil, published by the Finnish Oil and Gas Federation. The impact of emission rights is calculated in accordance with the closing price for each day of the December futures product of the current year, quoted at Nord Pool. The variable and starting costs of the power plant unit are based on the technical data on the unit.

Proceeds exceeding the above cumulative amount shall be divided in equal proportions between Fingrid and the Producer. However, the total sum of the compensation for keeping the power plant unit in readiness for use and the sales proceeds received by the Producer shall not exceed the acceptable costs caused by the fulfilment of the obligation of the public service. If the sales proceeds exceed the acceptable limit, the compensation received by the Producer for keeping the power plant unit in readiness for use is reduced. The Energy Market Authority makes the decision, in retrospect, on the acceptable total compensation to be received by the Producer and on the handling of proceeds which potentially exceed the acceptable limit.

Fingrid's share of the potential sales proceeds or of the calculatory proceeds specified under item 3 of these rules is used for reducing the costs resulting from maintaining

the readiness for use. However, Fingrid's total share of the proceeds can be at the most equal to the annual total costs of maintaining the readiness for use, added by a compensation for attending to the duties specified in this agreement.

The Producer shall report the actual sales proceeds to Fingrid monthly in conjunction with the separate settlement.

#### 6 INFORMATION EXCHANGE AND REPORTING

The production of a power plant unit covered by the agreement shall be measured in real time by Fingrid's Power System Control Centre.

The Producer shall report the following regularly to Fingrid:

- Action for maintaining readiness for use during both maintenance periods within 2 weeks from the finishing of the relevant period.
- Separate settlement information monthly, including actual electricity sales, corresponding production with variable costs and starting costs, and cumulative sales proceeds.
- The Producer shall inform Fingrid immediately of all events which have prevented the 12 hour starting readiness, of failed starts, and of all disturbances during the operating period of the unit, and the Producer shall send related reports to Fingrid no later than within 2 working days after the event.
- Trial operation.
- Fuel reports always after finished production periods.

#### 7 AMENDMENTS AND CHANGES TO THE RULES

If the rules and conditions relating to the agreement need to be changed due to legislative amendments or other action by authorities, they shall be subjected to the approval of the Energy Market Authority before they come into effect.

#### 8 FORCE MAJEURE

In the event of force majeure, the parties have the right to restrict the maintaining and operation of condensing power capacity covered by this agreement or to interrupt it entirely.

Cases of force majeure are deemed to cover any events which the parties could not have prevented through reasonable caution and which make the contractual performance impossible or impair it essentially or make it financially or otherwise unreasonable.

Cases of force majeure include war, country's internal unrest, vandalism, sabotage, explosion, fire, flooding, storm or other exceptional weather conditions, general interruption in traffic, strike or stoppage of a key employee group, lock-out ordered by an employer organisation, measures by authorities, or some other similar reason with as significant and unusual consequences. Force majeure is also considered to cover such damage in the power production or power transmission system caused by the above causes for which no reasonable preparations could have been made, taking into account the principles for electricity supply security generally applied to the Nordic power systems.

The parties shall inform each other of the occurrence of force majeure as well as of its end without delay.

#### 9 CANCELLATION OF CONTRACT

If an agreement party breaches intentionally the obligation of the public service or has, while fulfilling the obligation of the public service, offered electricity produced by a power plant unit covered by the arrangement to the market at a price which obviously aims to raise the market price of electricity clearly above the general price level at that time, the Energy Market Authority makes a decision on cancelling the agreement and on the potential collection of compensations already paid.

Appendix Activation of power reserve capacity in the areas of Finland and Sweden within the Elspot market