

28.1.2013

## **RULES FOR THE MAINTAINING OF READINESS FOR USE OF POWER PLANT UNITS COVERED BY THE PEAK LOAD CAPACITY SYSTEM, FOR THE USE OF SUCH POWER PLANT UNITS, AND FOR MAKING THE ELECTRICITY PRODUCED AVAILABLE TO THE MARKET**

Fingrid or its subsidiary Finextra (hereafter Fingrid) sets the following rules for the maintaining of readiness for use of power plant units covered by the peak load capacity, for the use of such power plant units, and for making the electricity produced available to the market.

These rules are applied to the power plant unit and to the holder of the power plant (hereafter Producer) and also to the relevant share of a shared power plant unit and to the holder of such share.

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

#### **1.1 General rules**

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 twelve (12) hours

at other times, from 1 March to 30 November, the starting time is a maximum of one (1) month.

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.

#### **1.2 Operating personnel**

The Producer shall ensure that it has sufficient personnel in terms of quantity and expertise to carry out the obligations laid down in these rules.

#### **1.3 Fuel supply**

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

#### **1.4 Emission allowances**

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 allowances in accordance with the schedule relating to the reporting of annual

28.1.2013

emissions and to the invalidation of the allowances, corresponding to the actual production volume.

#### 1.5 Environmental permits

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

#### 1.6 Trial operation

The power plant unit shall carry out successful trial operation annually at a period of time agreed upon separately with Fingrid no more than one month before the 12 hour starting readiness commences. The trial operation is used for ensuring the technical functioning of the power plant unit and the expertise of the operating personnel. The length of the trial operation shall be sufficiently long to verify this, but no more than 12 hours without a reason justified in advance.

The Producer shall be responsible for the execution and costs of the trial operation. The proceed from electricity sales received by the Producer for trial operation does not affect the maintenance compensation of readiness for use, specified under section 6.

## **2 USE OF POWER PLANT UNIT FOR THE NEEDS OF THE POWER SYSTEM**

### 2.1 General rules

Fingrid and the transmission system operator in Sweden (hereafter SvK) apply uniform principles to the availability of the peak load capacity in the electricity market and to the use of the peak load capacity so as to ensure the optimal use of the peak load capacity in the Nordic power system and to minimise the market impacts of the peak load capacity arrangement.

The Producer is responsible for the sales of electricity produced through the capacity covered by the agreement to the market. A power plant unit is started either through the Elspot market or at Fingrid's request.

The Producer accepts that Nord Pool Spot AS (hereafter NPS) has a right to monitor the electricity sales bids made by the Producer and to report them in retrospect to Fingrid and to the National Regulatory Authority.

### 2.2 Variable production costs

In order to estimate the variable production costs, the Producer shall supply Fingrid with the price information (hourly price, €/MWh) of each power plant unit at least on a monthly basis. When calculating the variable production costs, the following factors are taken into account: fuel costs, value of the emission allowances required by production (€/MWh), and starting costs. On the basis of the Producers' suggestions, Fingrid accepts annually the statistic(s) used as the basis of the fuel costs and the method of determining the value of emission allowances.

28.1.2013

## 2.3 Peak load capacity on Elspot market

### 2.3.1 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. When making the bid, the Producer does not give a price to the capacity offered.

In the Elspot trading system, the peak load capacity in Finland constitutes one peak load capacity bid based on the volume for the bidding area of Finland. In Sweden, the peak load capacity bids are set for the various bidding areas.

A peak load capacity 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 areas of Finland and/or Sweden.

Peak load capacity in Finland and Sweden is activated in the Elspot market on a ratio to the peak load capacities offered between the countries and within the available transmission capacity. The appendix presents examples of how the activation is carried out in a situation where the transmission capacity between Finland and Sweden does not restrict the activation of the peak load capacity, and in a situation where there is no available transmission capacity between Sweden and Finland while there is a need for peak load capacity in Finland.

### 2.3.2 Pricing of bid in NPS

When a bid is activated, NPS sets a price for the peak load capacity on the basis of the highest commercial hourly bid in the Elspot market.

### 2.3.3 Activation of peak load capacity

When a peak load capacity bid is activated, NPS informs the bidding Producers of the activated volume of peak load capacity. The activated peak load capacity is determined on a ratio to the bids given of the various Producers' power plant units. On the basis of the information submitted by NPS, the Producer shall inform Fingrid of the power plant units to be started and of their operating plans with technical conditions.

Fingrid and SvK verify the feasibility of the operating plans reported by the Producers and make a decision of the power plants to be started and of their optimal operating sequence. 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 peak load capacity, and other technical and commercial conditions. The goal is to start those power plant units reported by the Producers as available for starting which, within the framework of the above conditions, produce the activated peak load capacity volume reported by NPS at the lowest production costs.

If the operating sequence established in the Elspot market must be changed, Fingrid and SvK as well as Fingrid and the Producer shall agree on the necessary changes. These

28.1.2013

changes shall be implemented using fixed transactions between the Producer and Fingrid within the starting times of the power plant units.

When a bid is activated in Finland, Fingrid and the Producer shall agree on the details pertaining to starting and stopping. When a power plant unit starts for just one hour, the Producer and Fingrid can agree on a fixed transaction for the preceding hour in order to ensure the electricity production of the power plant unit in the hour in question.

The Producer is responsible for the costs of the balance deviation resulting from the starting and stopping of the power plant.

#### 2.3.4 Pricing of transactions when a bid is activated in NPS

A fixed transaction between Fingrid and the Producer is closed at the Elspot price if a power plant unit is not started in Finland.

If a power plant unit is started in Finland, the potential fixed transaction is carried out using the variable production costs which are calculated in accordance with item 2.2 of these rules. The appendix presents examples of pricing upon the activation of the peak load capacity when it is decided to start a power plant unit in Finland and when one is not started in Finland.

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

The Producer is obliged to start a power plant unit covered by the agreement whenever Fingrid requests this either for the needs of the peak load capacity system or for other power balance management needs relating to the management of system responsibility. When Fingrid requests the starting of a power plant unit, the Producer shall start the plant unit to the agreed power and close a fixed transaction of this with Fingrid. The variable production costs in accordance with item 2.2 shall be taken into account in the costs of the first hour of operation. Moreover, the Producer shall submit a bid to the balancing power market in accordance with item 2.5.

When a power plant unit is no longer required for the needs of the power system, Fingrid shall inform the Producer of the stopping of the power plant unit at least one hour in advance.

#### 2.5 Peak load capacity in the balancing power market

##### 2.5.1 General rules

The Producer shall arrange its operations so that the Producer is entitled to participate in the balancing power market in accordance with the valid rules of the balancing power market.

When peak load capacity is started either in the Elspot market or at Fingrid's request, the Producer is obliged to submit to the balancing power market an ear-marked up-regulating bid of the available production capacity concerning a specific power plant unit, taking into account the power increase capability of the specific power plant unit.

28.1.2013

Of these bids, Fingrid activates a necessary volume after all balancing power bids made at market terms have been activated.

#### 2.5.2 Handling of balancing bids when peak load capacity is activated in the Elspot market

The Producer shall offer the peak load capacity to the balancing power market at the power plant's variable production costs, which are calculated in accordance with item 2.2, without starting costs.

The price of the most expensive market-term balancing bid activated in the balancing power market is set as the price of an activated balancing bid; however, at least the Elspot price of the corresponding hour.

#### 2.5.3 Handling of balancing bids when peak load capacity is started at Fingrid's request

When the power plant unit starts to generate electricity, the Producer shall offer the capacity to the balancing power market at the power plant's variable production costs, which are calculated in accordance with item 2.2, without starting costs.

The price of the most expensive market-term balancing bid activated in the balancing power market is set as the price of an activated balancing bid; however, at least the Elspot price of the corresponding hour.

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

Electricity production for the Producer's own account is not covered by the obligation of the public service referred to in the act on the peak load capacity, so this can only take place during extraordinary situations such as in the event of serious damage at the Producer's other power plants in Finland. Such use of the power plant unit shall not jeopardise the fulfilment of the obligation of the public service. These extraordinary situations can take place at times other than between 1 December and 28 February.

If the Producer wishes to use the power plant unit for its own needs, this requires a separate consent granted by Fingrid in these extraordinary cases. Upon receiving the relevant consent, the Producer is responsible for all costs relating to the re-commissioning, starting, operation and re-storage of the power plant unit.

If the Producer uses the power plant unit exceptionally outside the period of 1 December to 28 February for sales outside the bids referred to under item 2 of these rules, Fingrid does not pay the Producer a maintenance compensation for those days on which the power plant unit has been in the Producer's own use. When calculating the Producer's own use, all periods in excess of 24 hours reducing the maintenance compensation for every commencing 24 hour period shall be taken into account cumulatively. The reduction of the maintenance compensation shall be calculated on a daily basis by dividing the maintenance compensation for the entire agreement period by the number of days in the agreement period.

28.1.2013

## **4 HANDLING OF ELECTRICITY PRODUCED IN IMBALANCE SETTLEMENT**

The production by the power plant unit and all actual sales related to the production are handled in accordance with valid imbalance settlement rules. The Producer is responsible for drawing up the imbalance settlement.

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

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 imbalance power required to cover this imbalance.

## **5 UNAVAILABILITY OF POWER PLANT UNIT**

### **5.1 Reports**

The Producer shall inform Fingrid without delay of changes in the starting readiness of the power plant unit and of other issues which may limit the use of the power plant unit or prevent it altogether, such as a failure of the power plant unit. Moreover, the Producer shall submit a UMM notification to NPS of generators in excess of 100 MW or of power plant units in excess of 200 MW, if the generator or power plant unit is not in a starting readiness required by the peak load capacity system.

### **5.2 Fees**

The maintenance compensation specified under item 6 is not paid for the period of time when the power plant unit is not available to the peak load capacity system as specified under item 1 of these rules. When calculating the unavailability time, all unavailability periods in excess of 24 hours reducing the maintenance compensation for every commencing 24 hour period shall be taken into account cumulatively. The reduction of the maintenance compensation shall be calculated on a daily basis by dividing the maintenance compensation for the entire agreement period by the number of days in the agreement period.

## **6 MAINTENANCE COMPENSATION FOR READINESS FOR USE**

The compensation to be paid for the maintenance of the peak load capacity is determined on the basis of a bid submitted by the Producer offering production capacity to the system and a procurement decision for peak load capacity, made by the National Regulatory Authority.

The maintenance compensation for readiness for use is paid to the Producer in retrospect in periods of three months commencing at the beginning of a calendar year. The Producer shall send an invoice concerning the maintenance of readiness for use in the previous three months on the 6th day of the month following an invoicing period or on



28.1.2013

the following first weekday. Fingrid shall pay the maintenance compensation within two months after the end of the invoicing period.

The sales proceed received by the Producer is deducted from the maintenance compensation if the Elspot market price and/or the up-regulating price in the balancing power market is higher than the variable production cost of a power plant unit participating in the peak load capacity arrangement. The deducted sales proceed is calculated as the difference between the Elspot price / up-regulating price in the balancing power market and the variable production cost of a power plant unit participating in the peak load capacity arrangement as far as the volume of peak load capacity started in the Elspot market / balancing power market is concerned. When the above difference is calculated, the Elspot price is used when a bid is activated in the Elspot market, and the up-regulating price in the balancing power market is used when a bid is activated in the balancing power market.

A sales loss credited to the Producer is added to the maintenance compensation if the Elspot market price and/or up-regulating price in the balancing power market is smaller than the variable production cost of a power plant unit participating in the peak load capacity arrangement. The sales loss is calculated as the difference between the Elspot price / up-regulating price in the balancing power market and the variable production cost of a power plant unit participating in the peak load capacity arrangement as far as the volume of peak load capacity started in the Elspot market / balancing power market is concerned. When the above difference is calculated, the Elspot price is used when a bid is activated in the Elspot market, and the up-regulating price in the balancing power market is used when a bid is activated in the balancing power market.

## **7 INFORMATION EXCHANGE AND REPORTING**

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

The Producer shall report the following to Fingrid:

- Planned timing of trial operation, and trial operation report covering the issues stated under item 1.6.
- 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, sales proceeds from the sales, usage compensations to be paid, and corresponding production with variable production costs and starting costs.
- The Producer shall inform Fingrid immediately of all events which have prevented the 12 hour starting readiness of a power plant unit, of failed starts, and of all disturbances during the operating period of the unit. The Producer shall send related reports to Fingrid no later than within 2 working days after the event.
- Fuel reports always after finished production periods.

28.1.2013

Fingrid has the right to deliver the reports to the National Regulatory Authority upon request.

## **8 AMENDMENTS AND CHANGES TO THE RULES**

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

## **9 DISSOLUTION OF AGREEMENT, AND REFUNDING AND RECOVERY OF MAINTENANCE COMPENSATIONS**

The dissolution of the peak load capacity agreement and the refunding and recovery of the maintenance compensations take place as stipulated under Sections 16 and 17 of the peak load capacity act.

If the Producer violates intentionally the obligation of the public service, the National Regulatory Authority may order the peak load capacity agreement to be cancelled and may require the Producer to refund the compensations that Fingrid has paid the Producer by virtue of the agreement, if the peak load capacity agreement has been cancelled as stipulated under Section 16, Subsection 1 of the peak load capacity act or if the Producer has otherwise violated the peak load capacity agreement.

## **10 FORCE MAJEURE**

In the case of force majeure, Fingrid and the Producer have the right to restrict the maintaining and operation of power plant capacity specified in these rules or to interrupt it completely.

Cases of force majeure are deemed to cover any events which the Producer or Fingrid could not have prevented through reasonable caution and which make the fulfilment of these rules 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.

Fingrid and the Producer shall inform each other of the occurrence of force majeure as well as of its end without delay.

The maintenance compensation is not paid for the period of force majeure.

Appendix Activation and pricing of peak load capacity in the areas of Finland and Sweden within the Elspot market



28.1.2013

**Appendix to the rules of use of peak load capacity****ACTIVATION AND PRICING OF PEAK LOAD CAPACITY IN THE AREAS OF FINLAND AND SWEDEN WITHIN THE ELSPOT MARKET****Activation**

The Producer in Finland and Svenska Kraftnät in Sweden shall offer the total peak load capacity available at any given time to the Elspot market for a specific hour, considering the starting time.

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

A peak load capacity bid is taken into account in Elspot calculation if no balance between demand and supply is reached with the bids made at market terms in the bidding areas of Finland and/or Sweden.

Peak load capacity in both Finland and Sweden is activated on a ratio to the peak load capacities offered between the countries and within the available transmission capacity as prescribed in the below examples.

**Example 1, transmission capacity between Finland and Sweden does not restrict the activation of peak load capacity**

Presumptions:

- Peak load capacity in Finland 600 MW
- Peak load capacity in Sweden 2000 MW
- No balance is reached between demand and supply in the Elspot market in the price areas of Finland and Sweden. The peak load capacity to be activated so as to reach a balance is 200 MW.

Activated peak load capacities (total 200 MW):

a) Transmission restrictions within Sweden do not limit the activation of peak load capacity

- In the bidding area of Finland 46.2 MW ( $200 \text{ MW} \times 600/2600$ )
- In the bidding areas of Sweden 153.8 MW ( $200 \text{ MW} \times 2000/2600$ ).

b) Transmission restrictions within Sweden limit the available peak load capacity in Sweden to 1000 MW

- In the bidding area of Finland 75 MW ( $200 \text{ MW} \times 600/1600$ )
- In the bidding areas of Sweden 125 MW ( $200 \text{ MW} \times 1000/1600$ ).

28.1.2013

**Example 2, there is no available transmission capacity from Sweden to Finland, there is need for peak load capacity in Finland**

Presumptions:

- Peak load capacity in Finland 600 MW
- Peak load capacity in Sweden 2000 MW
- Capacity missing in the Elspot market in price area Finland: 200 MW.

Activated peak load capacities (total 200 MW):

- In the bidding area of Finland 200 MW
- In the bidding areas of Sweden 0 MW.

**Pricing****Example 1, peak load capacity is activated in Elspot, the activated power is below the minimum power of the power plant unit, and it is decided to start the power plant unit**

- Fingrid decides to start the power plant unit, and the unit is started to the minimum power.
- The Producer receives the compensation created in the Elspot market for the activated volume of power.
- Fingrid and the Producer conduct a fixed transaction for a volume corresponding to the difference between the volume of power activated within the peak load capacity arrangement and the minimum power of the plant. This transaction is closed at the variable production costs of the power plant unit, including the starting costs in the first hour up to the minimum power.
- If the price in the Elspot market is lower than the variable production cost of a power plant unit participating in the peak load capacity arrangement, Fingrid compensates, within the peak load capacity arrangement, to the Producer the difference between the Elspot price and the variable production cost of the power plant unit as far as the volume activated in the Elspot market is concerned.
- If the price in the Elspot market is higher than the variable production cost of a power plant unit participating in the peak load capacity arrangement, the Producer compensates, within the peak load capacity arrangement, to Fingrid the difference between the Elspot price and the variable production cost of the power plant unit as far as the volume activated in the Elspot market is concerned.

**Example 2, peak load capacity is activated in Elspot, the activated power is above the minimum power of the power plant unit, and it is decided to start the power plant unit**

28.1.2013

- Fingrid decides to start the power plant unit, and the unit is started to the activated power.
- The Producer receives the compensation created in the Elspot market for the activated volume of power.
- If the price in the Elspot market is lower than the variable production cost of a power plant unit participating in the peak load capacity arrangement, Fingrid compensates, within the peak load capacity arrangement, to the Producer the difference between the Elspot price and the variable production cost of the power plant unit as far as the volume activated in the Elspot market is concerned, including the starting costs in the first hour up to the minimum power.
- If the price in the Elspot market is higher than the variable production cost of a power plant unit participating in the peak load capacity arrangement, the Producer compensates, within the peak load capacity arrangement, to Fingrid the difference between the Elspot price and the variable production cost of the power plant unit as far as the volume activated in the Elspot market is concerned, including the starting costs in the first hour up to the minimum power.
- If it is agreed that the power of the power plant unit is higher than the activated power, Fingrid and the Producer conduct a fixed transaction for a volume corresponding to the difference between the volume of power activated within the peak load capacity arrangement and the agreed power of the power plant unit. This transaction is closed at the variable production costs of the power plant unit, excluding the starting costs.

**Example 3, peak load capacity is activated in Elspot, but the power plant unit is not started**

- Fingrid decides that the power plant unit is not started.
- The Producer sells the activated volume of power to the Elspot market at the Elspot price determined by the market.
- The Producer buys a corresponding volume of power from Fingrid through a fixed transaction and at the same price.
- No power production, costs or proceeds for the Producer.