

## **RULES FOR THE MAINTENANCE 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 MAINTENANCE 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 a maximum of twelve (12) hours.

at other times the starting time is a maximum of one (1) month.

During the winter period, the power plant unit must be prepared for at least 200 hours of usage time at the full power according to the use agreement.

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.

#### **1.4 Emissions permit and rights**

The power plant unit shall hold a valid emissions 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 emissions and to the invalidation of the allowances, corresponding to the actual production volume.

1.5 Environmental permits

The power plant unit shall hold a valid environmental permit which allows for the unit to act as peak load capacity as required by these rules.

1.6 Trial operation before the winter period

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 to ensure the technical functioning of the power plant unit and the expertise of the operating personnel. During the trial operation, the plant must be synchronised with the electricity network and it must produce over 80% of the electrical power offered by the plant to the peak load capacity system for at least one hour. 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 proceeds from electricity sales received by the Producer for trial operation does not affect the maintenance compensation of readiness for use, specified under section 6.

1.7 Possibility of trial operation during the winter period

In order to ensure the power plant unit's 12-hour starting readiness, Fingrid may trial a power plant once during the winter period. Fingrid will inform the Producer of the trial at least 12 hours before the trial operation.

During the trial operation, the plant must be synchronised with the electricity network and it must produce the power plant's minimum power for at least one hour. The length of the trial operation shall be 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 proceeds from electricity sales received by the Producer for trial operation does not affect the maintenance compensation of readiness for use, specified under section 6.

Trial operation carried out during the winter period will be taken into account when calculating the readiness for 200 hours of use referred to in section 1.1 of the rules.

## 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.<sup>1</sup>

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 Energy 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.

### 2.3 Peak load capacity on the Elspot market

#### 2.3.1 Submitting and processing of bids

During the winter period 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.

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 on market terms...

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.

#### 2.3.2 Pricing a 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.

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<sup>1</sup> Danish transmission system operator Energinet.dk is planning to implement peak load arrangements corresponding to peak load capacity from the start of 2016. If Energinet.dk joins the procedures applied to the entry onto and use of the peak load capacity markets in Finland and Sweden, the peak load capacity located in Denmark will be taken into account in accordance with the corresponding principles.

If the price of the highest commercial hourly bid is lower than the variable production costs for a peak load capacity plant, NPS will set the price of the peak load capacity in accordance with the variable production costs for the plant.

If a second auction is taken into use in the Finnish price area, the peak load capacity will only be taken into account in the price calculation of the second auction round.

### 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 volumes of 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 on 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 economic 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 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 given power plant unit is not started.

If a power plant unit is started, the potential fixed transaction is carried out using the variable production costs which are calculated in accordance with item 2.2 of these rules

### 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. In addition, the Producer shall submit a bid to the balancing power market in accordance with section 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 on the balancing power market

The Producer shall arrange its operations so that it 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.

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.

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

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 for 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 Peak Load Capacity Act (*Laki sähköntuotannon ja -kulutuksen välistä tasapainoa varmistavasta tehoreservistä 117/2011*), 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 separate consent granted by Fingrid in these extraordinary cases. Once consent has been obtained, the Producer is responsible for all costs relating to the recommissioning, 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 its own needs, Fingrid shall not pay the Producer maintenance compensation for those days on which the power plant unit has been in the Producer's own use.

The use of the power plant for the Producer's own purposes will incur the loss of the maintenance compensation for the entire day in question.

The amount of daily maintenance compensation shall be calculated by dividing the maintenance compensation for the entire agreement period by the number of days in the agreement period.

#### **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.

In addition, 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 the 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. In addition, the Producer is also obligated to submit UMM notifications in accordance with NPS' rules.

##### **5.2 Fees**

The maintenance compensation specified under section 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 section 1 of these rules. During the winter period, a minimum of one hour of unavailability will incur the loss of maintenance compensation for the entire day in question.

#### **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 Energy 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 the given period, or on the first subsequent weekday. Fingrid shall pay the maintenance compensation within two months after the end of the given period.

The sales proceeds received by the Producer are 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 Produce shall report the following to Fingrid:

- Planned timing of trial operation, and trial operation report covering the issues stated under section 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.

Fingrid has the right to deliver reports to the Energy Authority upon request.

Fingrid has the right to publish actual electricity production at a power plant unit covered by the agreement, as well as actual sales volumes on the Elspot and balancing power markets.

## **8 REVIEW AND AMENDMENTS TO RULES**

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

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

The dissolution of the peak load capacity agreement and the refunding and recovery of the maintenance compensation take place as stipulated under Sections 16 and 17 of the Peak Load Capacity Act (Laki sähköntuotannon ja -kulutuksen välistä tasapainoa varmistavasta tehoreservistä, 117/2011).

If the Producer intentionally violates the obligation of the public service, the Energy Authority may order the peak load capacity agreement to be cancelled and may require the Producer to refund the compensation 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 the other party without delay of the occurrence and end of any force majeure event.

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

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