



**INDEPENDENT  
BULGARIAN  
ENERGY EXCHANGE**  
YOU SELL, WE DELIVER CONFIDENCE

# Operational Rules for Day Ahead Market segment (DAM)

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INDEPENDENT BULGARIAN ENERGY EXCHANGE

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## **Appendixes:**

1. Product specifications

[Appendix 1](#)

## Chapter I. General provisions

1. The current rules are Appendix N<sup>o</sup>1 to the Power Exchange Operational Rules.
2. These operational rules for the Day Ahead Market (DAM) treat the conditions and opportunities for concluding transactions on this market segment, part of the organized power exchange, as well as the process of determining the clearing price and clearing volume for each delivery interval.
3. The Day Ahead market is operated on auction basis, hereinafter called **trading session**, while the settlement of all concluded transactions is carried out at the same price for all trading participants – the **clearing price** for the respective delivery interval.
4. IBEX is a counterparty to all the transactions concluded as a result of the participation of the registered members on this market segment.
5. The trading on the Day Ahead market segment is conducted in Central European Time (CET).

## Chapter II. Trading

### Trading system

6. Trading on the Day Ahead market for electricity is done via an Electronic trading system (EST – DAM).
7. For the participation on the Day Ahead market every trading participant has basic portfolio and additional portfolios in accordance to Art. 49 of the Power Exchange Operational Rules.
8. The EST-DAM is with limited and non-transferrable access.

### Trading days, hourly trading interval, trading stages

9. Trading days in accordance with this document are every day of the week 365/366 days in a year.
10. Bid submission period – the period in which purchase and sale bids may be submitted in the electronic trading system until closure of the power exchange session in the trading day (D-1).
11. Terms for submission of bids:
  - 11.1. An initial term for submission of bids - each week on Monday the auctions for the following two weeks shall be opened. At the discretion of the power exchange operator the respective auction sessions may be opened earlier or later than announced.

- 11.2. Deadline for submission of bids - trading participants registered on the power exchange may submit bids, change or delete already submitted bids until 12:00 CET (13:00 EET) in the trading day (D-1).
12. The terms for setting and announcing the results of the auction sessions are in compliance with the generally adopted rules of the PCR in accordance with Art. 64.
13. The Operator of the electricity power exchange can make amendments in the trading day, the trading period or in the trading stages in particular cases if this is in the interest of conducting unhindered trading or to secure fair market conditions, as in all cases the changes must be in accordance with the rules and procedures adopted for the PCR. All changes are to be communicated to all trading participants via e-mail and/or via publication on the website of the Operator.

## **Messages**

14. Messages sent during the period of submission of bids which refer to trading are sent to the e-mails specified by the persons responsible for trading and/or are announced on the website of the operator.

## **Products**

15. The products traded on the power exchange are: products permitted to be traded on the power exchange for electricity defined in Appendix N<sup>o</sup> 1 to this document.

## **Obligations derived from submission of bids by trading participants**

16. The bids submitted by trading participants through the DAM Electronic Trading system shall be deemed binding and shall be stored in it. Information generated by the DAM Electronic trading system on the basis of the bids submitted by trading participants shall be deemed binding regarding the respective participant who has submitted the bid.
17. Transactions concluded on the power exchange are a firm commitment of the respective trading participant for supply of electricity in case of an accepted sale bid or an obligation to accept a delivery of electricity in case of an accepted purchase bid.
18. Each transaction shall be bound to one delivery day, one delivery interval and one market area.
19. Each trading participant shall be obliged to take the necessary measures against unauthorized or external access to their software and hardware for access to the Electronic trading system and respectively to protect its codes/passwords for access to the trading system.
20. In case of technical difficulties arising in the course of the auction session, the responsible for trading person shall contact the power exchange operator identifying itself with certain information requested by the power exchange operator.
21. If because of technical difficulties (blocking of the account, connection problems, etc.) a trading participant is not able to submit a bid, then the responsible for trading Person shall have the right to send a bid to the power exchange operator via an e-mail using a Microsoft Office Excel file format template available for downloading from the DAM Electronic Trading System and, notifying in advance the operator for this on the contact phone numbers. The Operator ex officio enters the bid on behalf of the participant. The

bid must be submitted not later than fifteen (15) minutes before the deadline for submission of bids.

22. A bid submitted ex officio shall be deemed registered only when the Operator has confirmed its registration into the DAM Electronic trading system, via e-mail to the relevant Person responsible for trading.
23. Submission of a bid by the operator upon the request of a trading participant shall generate equal obligations for the trading participant to submission of a bid by the participant in the DAM Electronic trading system as of the time of registration and irrespective of the time of confirmation.
24. The trading participant shall have the obligation to procure the necessary measures against unauthorized sending of information to the power exchange Operator.
25. Following submission of a bid by the trading participant, the respective person responsible for trading who has submitted the bid is to be available on the phone at any time until the bid submitted is valid.
26. The trading participant who has concluded a transaction on the Day Ahead market shall guarantee that the respective person responsible for trading remains available within 30 (thirty) minutes following announcement of the results of the respective trading session.

### **Purchase and sale bids**

27. Day ahead market participants shall send sale and purchase bids for the delivery day (D) by the deadline for submission of bids pursuant to Art.11.2.
28. Each day comprises 24 (24) consecutive delivery intervals, (one) hour each, the first delivery interval starting 00:00 CET (01:00 EET) on the delivery day.
29. On the day of transition from summer to winter time the hourly interval between 02:00 – 03:00 CET (03:00 – 04:00 EET) is repeated twice (2).
30. On the day of transition from winter to summer time the hourly interval between 02:00 – 03:00 CET (03:00 – 04:00 EET) is removed.
31. Bids for sale of electricity and bids for purchase of electricity sent by Day Ahead market participants are to meet the following conditions:
  - 31.1. Each bid may contain two hundred (200) price-quantity pairs, including the highest and lowest price pairs;
  - 31.2. Each price-quantity pair of the purchase bid defines the maximum price which the participant would pay for a certain quantity of electricity;
  - 31.3. Each price-quantity pair of the sale bid defines the minimal price at which the participant would sell a certain quantity of electricity;
  - 31.4. A participant may send only one sale and/or purchase bid for each delivery interval for the particular market area containing up to two hundred (200) price-quantity pairs;
  - 31.5. Bids are a firm commitment for delivery or purchase of electricity in their execution on the power exchange for electricity.
32. Bids submitted by trading participants may contain at least the price-quantity pairs with the highest and lowest price and are to enter the trading system before the bid submission deadline in accordance with Art. 11.2.

33. All bids entered into the trading system are marked with a timestamp.
34. Bids submitted by trading participants may be altered or cancelled until the bid submission deadline in accordance with Art. 11.2. Changes made by trading participants are registered in the trading system, and only the latest submitted bid that is valid has a binding effect upon the trading participant.
35. Each trading participant shall be responsible for the contents of the submitted bids as well as for changes made until the bid submission deadline in the DAM Electronic trading system.

### **Purchase and sale bids format**

36. Each bid must contain at least two price-quantity pairs including the highest and lowest price defined by IBEX in Appendix N<sup>o</sup> 1 to this document.
37. IBEX may change the price range set in Appendix N<sup>o</sup> 1 with at least 4 (four) days notification.
38. In entering the values of quantities for hourly products by trading participants, the requirement should be met that in case of a purchase bid, the quantity requested is entered with (+) whereas in a sale bid the quantity offered is entered with (-).
39. The DAM electronic trading system allows entering sale and purchase bids in EUR and BGN. Each trading participant specifies the bidding currency during its registration process. Afterwards each market participant has the right to change its bidding currency by sending a request to the Operator no later than 3 (three) working days before the day in which he wants the change to be reflected.
40. A bid submitted by a trading participant in the electronic system of the power exchange in BGN contains prices in BGN/MWh, up to 1 (one) decimal point and quantities in MW, up to 1 (one) decimal point.
41. A bid submitted by a trading participant in the electronic system of the power exchange in EUR contains prices in EUR/MWh, up to 1 (one) decimal point and quantities in MW, up to 1 (one) decimal point.
42. In registering of price-quantity pairs in purchase bids by trading participants, the respective prices have to be ranged in ascending order and the quantities have to be in ascending order.
43. In registering of price-quantity pairs in sale bids by trading participants, the respective prices and quantities for delivery have to be ranged in ascending order.

### **Purchase and sale bids verification**

44. After a bid has been entered into the trading system, the process of data verification starts. The following main verifications of the values entered are done:
  - 44.1. Verification for compliance with the auction parameters (Appendix N<sup>o</sup> 1);
  - 44.2. Monotony verification - the system verifies whether the indicated price-quantity pairs are presented in such a way that prices are arranged in ascending order and quantities – in compliance with Art. 44 and Art. 45.
  - 44.3. Verification of the number format in the price-quantity pairs, values of the prices indicated and quantities are to correspond to those in Art. 42 and Art. 43.

## **Suspension of trading**

45. The power exchange operator may at any time suspend trading if it is established that:
  - 45.1. A problem has occurred in the DAM Electronic trading system;
  - 45.2. Trading is in conflict with the requirements of applicable law;
  - 45.3. An emergency PCR procedure has been activated by the Euphemia algorithm coordinator.
46. A measure undertaken by the power exchange operator shall be compulsory for all trading participants.
47. Irrespective of the provisions in Art. 45, IBEX may suspend trading for certain trading participants in case of non-compliance with these rules, the Settlement rules and the Market Conduct Rules.

## **Bid cancellation**

48. Each bid entered by a trading participant in the DAM Electronic trading system may be cancelled at the stage of bid submission by the respective trading participant or on behalf of the trading participant upon inability at the side of the respective trading participant.
49. The bid may be canceled on behalf of the power exchange operator, if this is in the interest of security and fair execution of power exchange trading or the relevant bid create breach of the EMR, these rules, the Settlement rules for Day Ahead and Intraday Markets, Market Conduct rules or the applicable law.
50. An offer, submitted by a trading participant can be cancelled after the trading session's completion by the service provider responsible for operating the Day Ahead market, only if the given offer impedes the successful conduct of the process for calculation of the clearing price or allocation of traded volumes for the Bulgarian market zone.
51. Any decision to delete or modify an offer for the reasons stated above shall be announced to both the Trading participant and Energy and Water Regulation Commission (EWRC) in written form.

## **Chapter III. Concluding transactions**

### **Right to submit bids**

52. Only participants registered on the DAM segment of the power exchange for electricity through the persons nominated as responsible for trading shall have the right to submit bids in the DAM Electronic trading system.
53. Each person responsible for trading shall trade on behalf of a certain trading participant and shall have an individual username and password for access to the DAM Electronic trading system.
54. Bids submitted in the DAM Electronic trading system are stored in the system and may be changed until the bid submission deadline.

### Clearing price. Demand and supply curves

55. Clearing price is the price at which all transactions are concluded and is calculated for a certain market area, certain delivery day and certain delivery interval - hour.
56. Clearing price is the intersection point between the demand and the supply curves calculated by the algorithm EUPHEMIA. Demand and supply curves are formed using the linear interpolation method.
57. The demand curve is determined for each delivery hour by aggregating in one curve of all price-quantity pairs from the purchase bids, and the points being connected in a curve through the linear interpolation method.
58. The supply curve is determined for each delivery hour by aggregated in one curve of all price-quantity pairs from the sale bids, the points being connected in a curve through the linear interpolation method.
59. When there are no demand or supply bids or there is no intersection between the supply and demand curves, supply and demand volumes will be equal to zero.
60. In case of no demand or supply quantities, for a delivery interval, the market clearing price for the respective interval will not be calculated and the traded volume will be zero.
61. When there is no intersection between the supply and demand curves, then clearing price equals to average price between the prices that result in volumes equal to zero.
62. Where at the bid submission stage there are hourly intervals in which there is no intersection of the demand and supply curves or there are no sale and/or purchase bids, the power exchange operator may publish on its website information for these hourly intervals with a view to optimize the traded volume.

### Determining auction session results

63. The process of calculation of the clearing price and traded volumes shall be done in compliance with the PCR algorithm - Euphemia whose description is to be found on IBEX's website.
64. All standard procedures and calculation stages and publishing auction sessions results are in accordance with regular procedures and rules of the PCR:
  - 64.1. 12:00 CET (13:00 EET) – bid submission deadline;
  - 64.2. 12:42 – 12:55 CET (13:42 – 13:55 EET) – publishing clearing prices for the delivery day and the respective volumes traded;
  - 64.3. 12:55 – 13:05 CET (13:55 – 14:05 EET) – publishing results of trading for selected participants in the Electronic trading system
65. In emergency situations related to delay of the calculation of the market clearing prices and results from trades calculated by the common European EUPHEMIA algorithm and PCR consortium, or for other reasons beyond the control of the market operator, the deadlines under Art. 64.1 and Art. 64.2 may be extended to 15:00 CET (16:00 EET).
66. If the PCR consortium and the EUPHEMIA algorithm are not able to complete the calculation of the market clearing prices and traded volumes till 15:00 CET (16:00 EET), the power exchange operator announces the relevant trading session for cancelled. As clearing prices for the hourly intervals of the respective delivery day, the clearing prices from the last financial day are defined ex officio in the delivery day is a financial day, or



the clearing prices from the last non-financial day, if the delivery day is a non-financial day. All the traded volumes remain equal to 0 (zero).

67. In the cases, described under Art. 65 and Art. 66, the power exchange operator shall notify the trading participants by publishing a notification message on its website and/or by sending a notification message to the emails specified by the persons responsible for trading.

### **Results publication**

68. The clearing prices, calculated by the common European EUPHEMIA algorithm, are calculated in accordance with the rules established by the PCR consortium and are published on the power exchange operator website in case of a normally ongoing trading session, according to the terms in Art. 64.2.
69. Prices are published in BGN for MWh and are published up to the second decimal point while the traded quantity of electricity - up to the first decimal point.
70. The purchase and/or sale volumes awarded to each trading participant, as well as the respective clearing prices are available in the Electronic trading system on the day of trading in accordance with the hourly schedule referred to in Art. 64.3
71. In case a trading participant disagrees with the presented results, the trading participant has the right to submit an objection via e-mail or fax by 13.30 CET (14:30 EET) on the trading day. The operator shall send a reply to the trading participant by 16.00 CET (17:00 EET). Submission of an objection shall not release the respective trading participant from their obligations arising from their participation in the power exchange.

### **Sellers and Buyers' obligations**

72. Each trading participant is bound by the auction session results in accordance with the physical and financial settlement arising from the bid submitted by them.
73. Each trading participant shall be obliged to perform their obligations in accordance with the physical and financial settlement arising from the bid submitted by them.

### **Schedules**

74. Upon closure of each DAM auction session, exchange schedules shall be registered for each trading participant, which has concluded transactions on the power exchange in the MMS system of the Electricity System Operator, which are mandatory for the participant and the respective balancing group coordinator responsible for the participant's imbalances.
75. In case the results of a market session are published with delay, but before the deadline stipulated in Art. 66 the Operator has the right to request an extension of the gate closure time for schedule nomination with ESO EAD.

**Hourly products**

<b>Parameters</b>	<b>Value</b>	<b>Remark</b>
Value	1	Hour
Symbol	Hj	j=01, 02, 03, .... , 24
Minimal step, volume	0,1	MWh/h
Minimum/ maximum price	-1000/6000 -500/3000	BGN/MWh EUR/MWh
Price step	0,1 0,1	BGN/MWh EUR/MWh