BALANCING MARKET RULEBOOK

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SECTION I

GENERAL PROVISIONS

CHAPTER 1

OBJECTIVE OF THE BALANCING MARKET ~~REGULATION~~RULEBOOK

Article 1. Balancing market

1. The Balancing Market is governed by the applicable law, including the principles and provisions of Laws 4001/2011 and 4425/2016 and Regulation (EU) 2017/2195, as ~~applicable~~in force each time.

~~Article 2. Balancing Market Regulation~~

2. The Balancing Market consists of the Balancing Capacity Market, the Balancing Energy Market and the Imbalance Settlement.
3. The Balancing Service Providers submit Balancing Energy Offers and Balancing Capacity Offers to the Balancing Market on behalf of the Balancing Service Entities they represent.
4. In the context of the Balancing Market, the HETS Operator executes the Integrated Scheduling Process (ISP) for the commitment (synchronization) or de-commitment (desynchronization) of Balancing Service Entities and for the commitment of Balancing Capacity as described in SECTION II of this Rulebook.
5. The HETS Operator operates the Balancing Energy Market for the activation of Balancing Energy Offers for manual and automatic FRR and issues manual and automatic FRR Dispatch Instructions to Balancing Service Entities, as described in SECTION III of this Rulebook.
6. The Balancing Market operates throughout the year, for each calendar day.

Article 2. ~~Regulation~~Balancing Market Rulebook

1. The Balancing Market Rulebook is adopted in ~~accordance~~line with the provisions of Articles 17 and 18 of Law 4425/2016.
2. The aim of the Balancing Market ~~Regulation aims~~Rulebook is to define the terms and conditions for the operation of the Balancing Market and in particular to:
   a) designate the Participants in the Balancing Market~~,~~ and describe the ~~corresponding~~relevant registration ~~process,~~procedure.
   b) set out detailed rules and conditions under which Participants may participate in the Balancing Market, including their rights and obligations, ~~as well as to~~ and determine the ~~dispute~~ procedures that shall apply to the settlement ~~procedures~~of disputes between the Participants and the HETS Operator ~~of the Hellenic Electricity Transmission System (HETS),~~

c) define the rights and obligations of the HETS Operator ~~towards~~vis-à-vis the Participants ~~regarding~~in connection to their participation in the Balancing Market,

d) describe the interface between the Balancing Market, the Day~~-~~-Ahead Market and the ~~Intraday~~Intra-Day Market, including the exchange of information between the Power Exchange and the HETS Operator,

e) ~~define in detail~~ set out detailed rules for the validation ~~rules for~~of Balancing Energy Offers and Balancing ~~Power~~Capacity Offers by the HETS Operator,

f) describe the input data, the operation, and the results of the Integrated Scheduling Process,

g) describe the interface between the Integrated Scheduling Process and the Energy Balancing Market,

h) describe the input data, the operation and the results of the Energy Balancing Market,

i) define the ~~Accounting Accounts~~accounts kept by the HETS Operator for the purposes of the Balancing Market Settlement,

~~1) define the Balancing Market Settlement procedures,~~

j) determine the penalties for the Participants in the event of non-compliance with the provisions of this ~~Regulation~~Rulebook,

k) define the ~~procedure for the Settlement of the~~ Balancing Market~~, the Imbalances and the Non-Compliance Charges,~~ Settlement procedure,

l) define the procedure for exchanging information with ~~the~~ other stakeholders,

m) specify the reporting and monitoring obligations of the HETS Operator in relation to the Balancing Market, and

n) define the procedures for the protection of commercially sensitive information.

3. Unless otherwise ~~specified, the~~defined, all capitalized terms used in this ~~Regulation~~Rulebook shall have the ~~meanings~~meaning specified in ~~Article 3~~Article 3 of this ~~Regulation~~Rulebook.

4. This ~~Regulation~~Rulebook shall be amended upon recommendation by the HETS Operator, which shall be approved by RAE following a public consultation conducted by the Authority, and shall be published in the Government Gazette in accordance with the provisions of Article 17(2)(p) of Law 4425/2016. The amendment process can also ~~be initiated~~start at the initiative of RAE. The new text of the ~~Regulation~~Rulebook, as amended each time, shall be published in a consolidated version on the website of the HETS Operator. The body of the consolidated text shall indicate the ~~aforementioned~~ amendments, the conditions of validity thereof and any other point that facilitates public information. This codification is informal and shall in no case take precedence over the above texts as approved by RAE and published in the Government Gazette.

5. Any amendment to this ~~Regulation~~Rulebook shall automatically govern the applicable Balancing Service Contract ~~applicable~~concluded between the HETS Operator and the ~~Registered~~registered Balancing Service Provider, and the applicable Balance Responsible Party Contract ~~of a Contracting Party with Balancing Responsibility~~ concluded between the HETS Operator and the ~~Registered Contracting~~registered Balance Responsible Party ~~with Balancing Responsibility~~, without the need for the ~~Registered~~registered Balancing Service Provider / the ~~Registered Contracting~~Balance Responsible Party ~~with Balancing~~

Responsibility to take any action butand without prejudice to the right of the Registeredregistered Balancing Service Provider or the Registered Contractingregistered Balance Responsible Party to request the termination of the Balancing Service Contract or the Balance Responsible Party Contract of a Contracting Party with Balancing Responsibility,, as stipulated in accordance with Article 24Article 7 of this RegulationRulebook.

6. The Balancing Market RegulationRulebook is supplemented by methodologies, parameters and other specific approvals foreseen therein and decided by the Regulatory Authority for Energy (RAE), upon recommendation by the HETS Operator, and is published in the Government Gazette in accordance with Article 18(4) of Law 4425/2016.

7. In view of theFor an effective implementation of the provisions of the Balancing Market RegulationRulebook, the HETS Operator may issue Technical Decisions, which regulate to specify the details inof technical issues withof a non-regulatory contentnature. The Technical Decisions shall be issued following a public consultation and shall be posted on the website of the HETS Operator. The HETS Operator shall send to RAE the drafts of the Technical Decisions to be submitted to public consultation andas well as the Approvedapproved Technical Decisions. In the event of any contradiction between the provisions of this RegulationRulebook and the corresponding Technical Decisions, the provisions of this RegulationRulebook shall prevail.

8. Technical Decisions shall be amended by decision of the HETS Operator either on its own initiative or at the request of RAE or of third parties that have a legitimate interest, pursuant to the procedure of the preceding paragraph.

9. BeforePrior to the operationimplementation of the target-model of the European Union for the internal electricity market, the HETS Operator shall submit to RAE the methodologies, parameters and other special approvals provided for in this RegulationRulebook, which shall be approved in accordance with Article 18 par. 4 of Law 4425/2016.

10. The Participants shall be liable to the HETS Operator for the timely and full performance of their obligations under this Rulebook and for the completeness and accuracy of the information and data submitted to the HETS Operator. This liability includes any act or omission of their representative bodies, their servants, their agents and, in particular, of the persons they use for the performance of their obligations under this Rulebook.

11. The HETS Operator shall not be liable to the Participants for the performance of the actions set out in this Rulebook, unless it has acted with malice or gross negligence. The HETS Operator shall take the appropriate measures to prevent any operational issues in the systems it manages and shall try to restore any failure or malfunction, as soon as possible.

Article 3. Definitions

In addition toApart from the definitions provided forcontained in the current legislation, and specifically, in particular, in Law 4425/2016 and Law 4001/2011 as well as, in Union legislation, for the purposes of implementing this Regulation,in the Day-Ahead & Intra-Day Markets Trading Rulebook, in the belowClearing Rulebook for Balancing Market Positions and in the HETS Grid Code, the terms below, whether stated in the singular or plural, shall have the following meaning, as they may be referred to in singular or plural number.for the purpose of implementation of this Rulebook.

1. Energy Balancing Market: It shall have the meaning of Article 5(l) of Law 4425/2016, i.e. the market where Participants offer electricity, which is used by the HETS Operator to

maintain the System frequency within a predetermined range, as well as the balance between electricity generation and demand ~~balance~~, while observing the electricity exchange programs with neighbouring countries.

2. Balancing ~~market~~Market: It shall have the meaning of Article 5(j) of Law 4425/2016, i.e. the Electricity Balancing Market, which includes the Balancing ~~Power~~Capacity and Balancing Energy Markets and the ~~Imbalances~~Imbalance Settlement ~~Procedure~~procedure.
3. Day ~~-~~-Ahead Market: It shall have the meaning of Article 5(g) of Law 4425/2016, i.e., the Electricity Market, in which electricity purchase and sale transactions are performed with the obligation of physical delivery on the day ahead (Delivery Day) and in which the transactions performed on Energy Financial Instruments with physical delivery are declared.
4. ~~Reserve~~Balancing Capacity Market: It shall have the meaning of Article 5(k) of Law 4425/2016, i.e. the market in which capacity is offered to cover the System's reserve requirements, which (capacity) is retained by the Participants for a predetermined period of time.
5. Market Time Unit: It shall have the meaning of Article 2(19) of Regulation (EU) 543/2013. i.e. the period for which the market price is established or the shortest possible common time period for the two ~~Bidding~~bidding zones, if their market time units are different.
6. ~~Marketing Authorization~~Trading License: The ~~authorization~~license granted to carry out the activity of electricity trading ~~activities~~.
7. Production License: The license granted to carry out the activity of electricity generation ~~activity~~.
8. Supply License: The license granted to carry out the activity of electricity supply ~~activity~~.
9. RES Aggregator License: The license granted to carry out the activity of representing RES electricity producers in accordance with Article 13 of Law 4001/2011.

~~1. Demand Response Aggregator License: The license granted to carry out the activity of representing electricity consumers in accordance with Article 13 of Law 4001/2011.~~

10. Direct Clearing Member: The Clearing Member, as defined in the Clearing Rulebook for Balancing Market Positions, which participates in the clearing procedures of the Clearing House and is responsible for the fulfillment of obligations arising from the Positions it represents in accordance with the Clearing Rulebook for Positions on Balancing Market.

~~10.~~11. Upward Balancing Energy: The Balancing Energy that corresponds to more generated energy or less consumed energy in relation to the Market Schedule.

12. Balancing Capacity Offer Maximum Price: The upper limit on the pricing of Balancing Capacity Offers, which is imposed for technical reasons, in accordance with Article 51 of this Rulebook.
13. Balancing Energy Offer Maximum Price: The upper limit on the pricing of Balancing Energy Offers, which is imposed for technical reasons, in accordance with Article 55 of this Rulebook.
14. Safety Maximum Reservoir Level: The maximum level per reservoir, above which the owners of Dispatchable Hydro Generating Units connected to the Reservoir may submit mandatory hydro injection declarations for the above Units to avoid overflow.
15. Force Majeure: It shall have the meaning referred to in Article 26 of this Rulebook.

~~11.~~16. Imbalance: It shall have the meaning of Article 2(8) of Regulation (EU) 2017/2195, i.e. the ~~amount of~~ energy ~~which is~~volume calculated for a Balance Responsible Party and ~~represents~~representing the difference between the ~~dispatched amount~~allocated volume attributed to ~~the specific~~that Balance Responsible Party and the final position (Market Schedule) of ~~the said party,~~ that Balance Responsible Party, including any ~~adjustments to the imbalances~~imbalance adjustment applied to ~~the~~that Balance Responsible Party, within a given ~~Imbalances~~Imbalance Settlement Period.

17. ~~Auto-supplying~~Initial Settlement: It shall have the meaning of Settlement specified in Article 107(2), of this Rulebook.

18. Auto-producer: It shall have the meaning of Article 2, paragraph 3(e) of Law 4001/2011, i.e. the producer that generates electricity mainly for its own use and injects any surplus energy into the transmission system or the distribution network.

~~12.~~19. Self-Supplied customer: It shall have the meaning of Article 5(1)(o) of Law 4425/2016, i.e. the natural or legal person that chooses to purchase energy directly from the Energy Markets for its own exclusive use.

~~13.~~20. Automatic Generation Control (AGC): The automatic load-frequency control procedure, which aims to reduce the frequency restoration control error ~~at~~to zero in accordance with the provisions of Regulation (EU) 2017/1485~~-~~.

~~2. Event of Force Majeure: It shall have the meaning referred to in Article 25 the Balancing Market Regulation~~

21. RES Producer Certificate: The certificate provided for in Law 4685/2020.

22. General Clearing Member: The Clearing Member, as defined in the Clearing Rulebook for Balancing Market Positions, which participates in the settlement procedures of the Clearing House and is responsible for the fullfillment of obligations arising from the Balancing Market Positions of contracted Participants or the HETS Operator in accordance with the above Rulebook.

~~3.~~ Declared ~~Unit~~ Characteristics: The characteristics ~~specified~~defined as a combination of the following technical and ~~functional~~operational elements of the Balancing ~~Services~~Service Entity ~~that~~and constitute the actual technical ~~capabilities~~capacity of the Balancing ~~Services~~Service Entity for a specific Dispatch Period and Dispatch Day:

~~1)~~ (a) Registered ~~Operating~~ Characteristics,

~~2)~~ (b) Techno-Economic Declaration,

~~3)~~ (c) Non-Availability Declaration ~~of Maximum Continuous Generating Capability~~

~~4) Non-availability declaration~~ (total or partial), ~~as applicable~~

~~14.~~23. and (d) Major Outage Declaration ~~of Major Breakdown~~.

~~4.~~ Major Outage Declarations ~~of Maximum Continuous Generating Capability The declarations submitted by the Balancing Service Providers pursuant to Article 43 of this Regulation for each Dispatch Period.~~

~~15.~~24. ~~Declaration of Major Breakdown~~: The declarations submitted by the Balancing Service Providers pursuant to ~~Article 45 of this Regulation~~Article 48 of this Rulebook.

~~16.~~25. Non-~~availability declarations~~Availability Declarations: The declarations submitted by Balancing Service Providers pursuant to ~~Article 44~~Article 47 of this ~~Regulation~~Rulebook

for each Dispatch Day during which the Available Capacity for a Balancing Service Entity is reduced.

~~17.~~26. Techno-Economic Declarations: The declarations submitted by Balancing Service Providers for each Dispatch Day pursuant to ~~Article 49 of this Regulation~~Article 44 of this Rulebook regarding the techno-economic data of the Balancing Service Entities they represent.

~~18.~~27. Integrated Scheduling Process (ISP): It shall have the meaning of Article 2(19) of Regulation (EU) 2017/2195, i.e. ~~the~~an iterative process that uses at least integrated scheduling process ~~offers~~bids that contain commercial data, complex technical data of individual power generating facilities or demand facilities and explicitly includes the start-up characteristics, the latest control area adequacy analysis and the operational security limits as an input to the process.

28. Inter-Zonal Corridor: A virtual link between two Bidding Zones, which is used to model the flow between the Bidding Zones.

~~19.~~29. Available Capacity: The capacity of the Balancing Service Entity ~~resulting on the basis~~as per Article 43 of ~~the Techno-Economic Declaration and the Declaration of Maximum Continuous Capability of Production Units decreased by any non-available capacity~~this Rulebook.

~~20.~~30. RES and ~~Guarantee~~Guarantees of Origin Operator (DAPEEP): The public limited company provided for in Article 118 of Law 4001/2011.

31. Settlement or Cash Settlement: The process implemented by the Clearing House for the fulfillment of cash obligations and the collection of the corresponding claims from the Clearing of Positions and Non-Compliance Charges in accordance with this Rulebook and the terms of the Clearing Rulebook for Balancing Market Positions.

~~21.~~32. Distribution Network Operator: It shall have the meaning of Article 2(3)(j) of Law 4001/2011, i.e. the legal person exercising, under the provisions of Law 4001/2011, the duties of an Electricity or Natural Gas Distribution Network Operator, including the Operators of the Closed Electricity or Natural Gas Distribution Networks.

~~22.~~33. Hellenic Electricity Distribution Network Operator (HEDNO): The public limited company provided for in Article 123 of Law 4001/2011. ~~4001/2011.~~

~~23.~~34. HETS Operator: The public limited company provided for in Article 97 of Law 4001/2011. ~~4001/2011.~~

~~5. Administratively Defined Imbalance Price Cap: The higher price that can be applied in the case that because of the simultaneous activation of upward and downward balancing energy in an Imbalance Settlement Period the Imbalance Price is much higher than the most expensive activated Balancing Energy Offer.~~

~~6. Administratively Defined Balancing Power Offer Cap: The higher price of Balancing Power Offer that is approved by RAE, in accordance with Article 53 of this Regulation.~~

~~7. Administratively Defined Balancing Energy Offer Lower Limit: The lower price of Balancing Energy Offer that is approved by RAE, in accordance with Article 57 of this Regulation.~~

~~8. Administratively Defined Balancing Energy Offer Cap: The higher price of Balancing Energy Offer that is approved by RAE, in accordance with Article 57 of this Regulation.~~

35. Corrective Settlement: It shall have the meaning of Settlement specified in paragraph 3, Article 107 of this Rulebook.

36. Testing operation: The status of a Balancing Service Entity, which is registered in the HETS Operator Registry, during tests or operational controls.

37. Commissioning operation: The status of a pre-registered Balancing Service Entity in the course of the tests or operational controls that are conducted for its connection to the HETS, as set out in the connection contract and the relevant provisions of the HETS Grid Code, so that it can be registered in the HETS Operator Registry.

~~24.~~38. Imbalance Settlement: It shall have the meaning of Article 2(9) of Regulation (EU) 2017/2195, i.e. ~~the~~a financial settlement mechanism for charging or paying ~~balance responsible parties~~Balance Responsible Parties for their ~~imbalances~~Imbalances.

39. Clearing of Positions: The processes of notification of Positions by the HETS Operator to the Clearing House and their finalization by the Clearing House, calculation of net cash obligations and claims arising from the Positions, valuation of collateral, calculation and coverage of Margin requirements, as well as the announcement of Clearing results to Clearing Members, management of the Clearing Capital, management of cases of defaulting Clearing Members and any other similar issue in relation to credit risk management as set out in the Clearing Rulebook for Balancing Market Positions.

~~25.~~40. Balancing Market Settlement: The transparent calculation of the quantities of ~~energy~~Balancing Energy and ~~capacity~~Balancing Capacity and the relevant Imbalances, and the calculation of the monetary value of the ~~Participants' charges~~debits and credits to Participants, as detailed in ~~Article 78.~~Article 76 of this Rulebook.

41. Clearing Member: An undertaking, as defined in the Clearing Rulebook for Balancing Market Positions, which participates in the Clearing House System for the clearing of the Positions it represents and is responsible to the Clearing House for the fulfillment of cash obligations arising from the relevant Positions in accordance with the provisions of Law 4425/2016 and the provisions specified in the above Rulebook.

~~26.~~42. Load Representative: Balance Responsible Parties representing ~~entities~~Entities that ~~absorb~~offtake energy from the HETS or the electricity ~~distribution~~Distribution network, ~~besides~~other than Demand Response Aggregators.

43. ~~Balancing energy~~Trader: The natural or legal person that performs the energy activity of electricity trading, as stipulated in Law 4001/2011.

44. Minimum Available Capacity: The capacity defined in Article 43 of this Rulebook.

45. Safety Minimum Reservoir Level: The minimum level per reservoir, above which the Dispatchable Hydro Generating Units Providers connected to the Reservoir may submit declarations of maximum daily energy injection constraint for the above Units.

46. Minimum up time: It is the minimum time of operation, as set out in the Registered Characteristics of the Balancing Service Entity, between a start-up and the next shut-down.

47. Minimum down time: It is the minimum time of operation, as set out in the Registered Characteristics of the Balancing Service Entity, between a shut-down and the next start-up.

~~27.~~48. Balancing Energy: The energy provided by a Balancing Service Provider and used by the HETS Operator to make a balance~~.~~, i.e. to cover the generation/demand imbalances. It is divided into Upward and Downward Balancing Energy.

~~28.~~49. Priority Price-Taking (Sell/Buy) Orders: The ~~Priority Price-Taking Sell/Buy Orders~~priority price-taking (sell/buy) orders are ~~hourly hybrid~~ one-step ~~Step-wise Sell/Buy~~Hourly Hybrid (sell/buy) Orders that are submitted ~~with~~to the Day-Ahead Market and the Intra-Day Market (Intra-day Auctions), at a price equal to the highest/lowest acceptable price ~~at the Day-Ahead Market and the Intra-Day Market~~, namely at the ~~Administratively Defined~~ Market Order Upper/Lower Price~~, which is applied~~ that applies to each of the ~~aforementioned~~above Markets.

50. Dispatch Instruction: The instruction issued by the HETS Operator, determining active power generation, active power increase or decrease, synchronization or desynchronization, provision of reserves and other Ancillary Services and, in general, the mode of operation of Balancing Service Entities.

51. Ancillary Service: It shall have the meaning of Article 2(3)(q) of Law 4001/2011, i.e. a service necessary for the operation of a transmission or distribution system, such as voltage control, frequency control, provision of reserves, provision of reactive power, Transmission System black start and load fluctuation monitoring.

~~29.~~52. Frequency Restoration Reserve (FRR): It shall have the meaning of Article 3(7) of Regulation (EU) 2017/1485, that is, the active power reserves available to restore system frequency to the nominal frequency and, for a synchronous area consisting of more than one load~~-~~ frequency control area, to restore power balance to the scheduled value. It is divided into FRR with automatic~~,~~ activation and FRR with manual activation (automatic and manual FRR).

53. Frequency Containment Reserve~~:~~ (FCR): It shall have the meaning of Article 3(~~7~~6) of Regulation (EU) 2017/1485, that is, the active ~~capacity reserve~~power reserves available to contain ~~the System~~system frequency after the occurrence of an imbalance ~~occurs to~~.

~~30.~~54. Reliability Year: The period of time starting on 1st October of a calendar year and ending on 30th September of the ~~capacity balance~~following calendar year.

~~31.~~55. Bidding Zone: Bidding zone is defined under Article 2(3~~(2~~) of Regulation (EU) 543/2013, i.e. the largest geographical area within which market participants are able to exchange energy without capacity allocation. The Bidding Zones are approved by decision of RAE, upon recommendation by the Transmission System Operator, following a relevant study as provided for in the HETS ~~Operation~~Grid Code.

~~32.~~56. Physical Delivery Day: It shall have the meaning of Article 5(f) of Law 4425/2016, that is, the day on which the quantities of energy traded on the Electricity Markets are delivered.

~~33.~~57. Dispatch Day: It has the meaning ~~provided for~~specified in ~~Article 35~~Article 36 of this ~~Regulation~~Rulebook, that is, the day to which the ISP refers, which coincides with the Physical Delivery Day of the Day-Ahead Market and the ~~Intraday~~Intra-Day Market. ~~The~~ Dispatch Day D ~~begins on~~starts at 01:00 ~~Eastern European Time~~EET of calendar day D and ends ~~on~~at 01:00 ~~Eastern European Time~~EET of calendar day D +1.

58. Termination Date: The date referred to in Article 7, paragraph 3 of this Rulebook.

59. Positions: The cash claims and the corresponding obligations of the Participants and the HETS Operator arising in relation to the Balancing Market, excluding Non-Compliance Charges, as calculated by the HETS Operator in accordance with Article 76 of this Rulebook and entered into the Clearing House system on the basis of the relevant notifications to the HETS Operator, under the terms of the Clearing Rulebook for Balancing Market Positions.

~~34.~~60. Balancing Capacity: A volume of reserve capacity that a ~~balancing service provider~~Balancing Service Provider has agreed to hold in each Dispatch Period and in respect to which the ~~balancing service provider~~Balancing Service Provider has agreed to submit ~~offers~~bids to the HETS Operator for a corresponding volume of ~~balancing energy to the Transmission System Operator (TSO)~~Balancing Energy for the duration of the contract.

~~35.~~61. Downward Balancing Energy: The Balancing Energy that corresponds to less generated energy or more consumed energy in relation to the Market Schedule.

62. Clearing Rulebook for Balancing Market Positions: The Rulebook issued by the Clearing House and approved by RAE in accordance with article 13(2) of Law 4425/2016.

~~36.~~63. Consumer: It shall have the meaning of Article 2 (n) of Law 4001/2011, ~~that is, the Customer of Electricity~~i.e., electricity Customers, excluding ~~the~~ Natural Gas ~~Systems~~System and Distribution ~~Networks~~Network Operators ~~and the~~, as well as Electricity Transmission ~~Systems~~System or Distribution ~~Networks~~Network Operators.

~~37.~~64. Dispatchable Generating Units: The power generating units ~~registered in~~ with a valid production license, which are located on the mainland or on the interconnected islands, have made and activated a connection to HETS, have submitted an operating license and have an installed capacity over 5 MW, for which the ~~Units Register~~HETS Operator may issue Dispatch Instructions, provided they are not RES Units, Emergency Reserve Units, and only during the period for which an Ancillary Service Contract or a Supplementary System Energy Contract is not in force or is not ~~applicable~~implemented, in accordance with ~~Article 4 of~~ the HETS ~~Operation~~Grid Code.

~~38.~~65. Dispatchable Generating Units with ~~Alternate~~Alternative Fuel: Dispatchable Generating Units having the obligation or the ability to operate both with primary and alternative fuels.

~~39.~~66. Dispatchable ~~CHP~~HECHP Units: Partial cogeneration units with an installed capacity over 35 MWe which, by decision of RAE, have been designated as Dispatchable High Efficiency CHP Units ~~pursuant to Article 4 of HETS Operation Code~~.

~~40.~~67. Multi-~~Axis~~Shaft Combined Cycle Dispatchable Generating Units: Combined Cycle Dispatchable Generating Units in which gas turbines and steam turbines are located on different axes and are connected to distinct generators.

~~41.~~68. Emergency Situation: The Situation described in the HETS ~~Operation~~Grid Code.

69. Registered Characteristics: The technical and operational characteristics of Balancing Service Entities that remain stable every Dispatch Day, unless modified by the Balancing Service Providers. They are submitted as provided for in the HETS ~~Operation~~Grid Code.

70. Balancing Energy Offer Minimum Price: The lower limit on the pricing of Balancing Energy Offers, which is imposed for technical reasons, in accordance with Article 55 of this Rulebook.

71. Balancing Capacity Offer Minimum Price: The lower limit on the pricing of Balancing Capacity Offers, which is imposed for technical reasons, in accordance with Article 51 of this Rulebook.

~~42.~~72. HETS Grid Code: The Code specified in Article 96 of Law 4001/2011.

~~9. Maximum Continuous Generation Capability: It shall have the meaning provided for in Article 43 of this Regulation.~~

~~10. Transitory Mechanism for the Optimal Forecasting Accuracy: It shall have the meaning of Article 2(9) of Law 4414/2016, i.e. the mechanism for calculating charges, differentiated by technology and/or by category of stations, imposed on the owners of RES and CHP power plants which are obliged to participate directly in the electricity market.~~

~~11. Balancing Market Production Units Register: The Registry provided for in Article 9 of this Regulation.~~

73. ~~Balancing Service Providers~~Maximum Available Capacity: The capacity defined in Article 43 of this Rulebook.

74. Maximum Net Capacity: The maximum level of capacity that a Balancing Service Entity can maintain for any period of time, provided that it operates under ISO conditions, it is not constrained by any equipment, technical or other limitations pertaining to the institutional or financial framework governing the Entity's operation, and that the internal service, as well as any other auxiliary load have been taken into consideration.

75. Maximum Net Capacity in AGC mode: It is the Maximum Net Capacity of the Entity while operating under Automatic Generation Control (AGC). It is expressed in MW. The Maximum Net Capacity in AGC mode cannot exceed the Maximum Net Capacity.

76. Maximum contribution to FCR: It is the technical capacity of a Balancing Service Entity to offer Frequency Containment Reserve, as derived from the test results and specified in the Registered Characteristics. It is defined separately for upward and downward Frequency Containment Reserve. It is expressed in MW.

77. Maximum contribution to automatic FRR: It is the technical capacity of a Balancing Service Entity to offer automatic Frequency Restoration Reserve, as derived from the test results and specified in the Registered Characteristics. It is defined separately for upward and downward automatic Frequency Restoration Reserve. It is expressed in MW.

78. Maximum contribution to manual FRR: It is the technical capacity of a Balancing Service Entity to offer manual Frequency Restoration Reserve, as derived from the test results and specified in the Registered Characteristics. It is defined separately for upward and downward manual Frequency Restoration Reserve. It is expressed in MW.

~~43.~~79. HETS Operator Registry: The Registry provided for in ~~Article 4~~Article 4 of this ~~Regulation~~Rulebook.

80. Balancing Market Generating Units Registry: The Registry provided for in Article 11 of this Rulebook.

81. Balancing Service Providers Registry: The Registry provided for in Article 5 of this Rulebook.

~~44.~~82. Balance Responsible Parties Registry: The Registry provided for in ~~Article 5~~Article 5 of this Regulation.

~~45.~~83. Dispatchable RES Units Portfolio ~~Register~~Registry: The Registry provided for in ~~Article 10~~Article 12 of this Regulation.

~~46.~~84. Dispatchable Load Portfolio Registry: The Registry provided for in ~~Article 11 of this Regulation~~Article 13 of this Rulebook.

85. RES Unit: A unit generating electricity from Renewable Energy Sources (RES) as defined in Law 3468/2006.

47.86. RES Units with Market Participation Obligation: The RES unitsUnits for which a Contract for Differential State Aid Support has been concluded in accordance with the provisions of Law 4414/2016 as well as the RES unitsUnits covered by the provisions of Article 3 (19) and article 12A of Law 4414/2016.

48.87. RES Units without Market Participation Obligation: The RES units for which a Feed-in Tariff Agreement has been concluded in accordance with the provisions of Law 4414/2016, as well as the RES unitsUnits for which a Power Purchase Agreement has been concluded in accordance with the provisions of Article 12 of Law 3468/2006 or a similar electricity purchase and sale agreement prior to the entry into force of Law 3468/2006.

49.88. Balance Responsible Entities: EntitiesThe entities represented by Balance Responsible Parties in accordance with Article 8Article 10 of this RegulationRulebook.

50.89. Balancing Service Entities: Balancing ServiceThe units or portfolios that are capable of providing Balancing Services to the HETS Operator and are represented by the Balancing Service Providers in accordance with Article 8 of this RegulationArticle 10 of this Rulebook.

90. Final Settlement: It shall have the meaning of Settlement as laid down in paragraphs 4 and 6, of this Rulebook.

51.91. Producer: The holder of a Production License or a relevant exemption from the obligation ofto obtain a Production License issuance.

52.92. Balancing Service Provider —(BSP:): It shall have the meaning of Article 23(8) of Regulation (EU) 2017/2195, .i.e. thea market Participant in the Market with Balancing Service Unitsunits or Portfolios that isportfolios able to provide Balancing Services to the HETS Operator.

53.93. Imbalance Settlement Period: The time unit for which the Imbalance of the Balance Responsible Parties is calculated.

12. Dispatch Period: It shall have the meaning provided forspecified in Article 35Article 36 of this RegulationRulebook, that is, thea period, which is set at of time that lasts for half an hour. The first Dispatch Period of Dispatch Day D is 01:00 – 01:30 Eastern European Time.

54.94. Certified Energy Measurement Data: The Certified Measurement Data as described in the HETS Operation CodeEET.

55.95. Market Schedule: The net energy schedule (net position) resulting from all transactions of the entity on the wholesale market (i.e. transactions inon the Energy Financial Market, the Day-Ahead Market or the IntradayIntra-Day Market) as defined in the Power Exchange RegulationDay-Ahead Market & Intra-Day Market Trading Rulebook.

96. ISP Schedule: The indicative generation/consumption schedule for each Balancing Service Entity and for each Dispatch Period of the Dispatch Day as it derives from the ISP solution system.

97. Supplier: The natural or legal person that performs the energy activity of electricity Supply, as stipulated in Law 4001/2011.

98. Default Supplier: The electricity Supplier as defined in article 58 of Law 4001/2011.

99. Supplier of Last Resort: The electricity Supplier as defined in article 57 of Law 4001/2011.

100. Adjusted Dispatch Instruction: The Dispatch Instruction modified in such a way as to take into account the availability of the Balancing Service Entity as laid down in the "Activated Balancing Energy Calculation Methodology".

~~56.~~101. Balancing Energy Deficit Premium: ~~The~~A price determined by Decision of RAE ~~that gives~~, which provides a premium on top of the manual FRR Upward Balancing Energy Price, if during an Imbalance Settlement Period energy ~~was injected~~ from Contracted Generating Units or Supplementary Energy from Emergency Imports was injected or Load Cuts were performed.

~~57.~~102. Balancing Energy Offer: ~~The~~A Balancing Energy Offer corresponds to the intention to provide ~~an~~ upward or downward Balancing Energy in relation to the Market Schedule ~~concerning~~of the respective Balancing ~~Services~~Service Entity. ~~The~~ Balancing Energy Offers are described in ~~Article 56~~Article 54 of this ~~Regulation~~Rulebook.

~~58.~~103. Balancing Capacity ~~Bid: The~~Offer: A Balancing Capacity ~~Bid~~Offer corresponds to the intention to provide reserves for Reserve Capacity products. ~~The~~ Balancing Capacity ~~Bids~~Offers are described in ~~Article 52~~ Article 50 of this ~~Regulation~~Rulebook.

104. Ramp Up Rate: The rate of increase of the active power of a Balancing Service Entity, expressed in MW/min, when the Entity is committed and not in the start up or shut down phase.

105. Ramp Down Rate: The rate of decrease of the active power of a Balancing Service Entity, expressed in MW/min, when the Entity is committed and not in the start up or shut down phase.

106. Ramp Up Rate in AGC mode: The rate of increase of the active power of a Balancing Service Entity, expressed in MW/min, when operating under AGC.

107. Ramp Down Rate in AGC mode: The rate of decrease of the active power of a Balancing Service Entity, expressed in MW/min, when operating under AGC.

~~59.~~108. Balance Responsible Party ~~(~~BRP~~:~~): It shall have the meaning ~~of~~specified in Article 23(7) of Regulation (EU) 2017/2195, i.e. ~~the~~a Market Participant or its ~~selected~~chosen representative responsible for its ~~Imbalances~~imbalances.

~~60.~~109. Balancing Service Contract: The contract concluded with the HETS Operator upon ~~the~~ registration of the Participants in the Balancing Service Providers Registry, in accordance with Article 5of this Rulebook.

110. Balance Responsible Party Contract: The contract concluded with the HETS Operator upon ~~the~~ registration of the Participants in the Balance Responsible Parties Registry~~.~~, in accordance with Article 5 of this Rulebook.

~~61.~~111. HETS Operator Transactions Contract: The contract between the HETS Operator and the Participants registered in the HETS Operator Registry, which is concluded as provided for in the HETS Grid Code.

~~62.~~112. Contracted Generating Units: The ~~production units~~Dispatchable Generating Units that have concluded Supplementary System Energy Contracts or Ancillary Services Contracts with the HETS Operator in accordance with the HETS Code.

~~63.~~113. Participant: The participant in the Balancing Market, either as a Balancing Service Provider or as a Balance Responsible Party.

114. Supplementary Settlements: The Corrective Settlement or the Final Settlements.

64.115. Supplementary Energy from Emergency Imports: It shall have the meaning ofspecified in the HETS OperationGrid Code, i.e. the active power quantity of active capacity of imports, which is provided to the System under the responsibility of the System Operator, in is responsible for providing to the System in order to meetcover the needs in Supplementary System Energy.

65.116. Balancing Market System: TheA system that performs all the processes and all the necessary calculations, and records all the data and the results of the Balancing Market in terms of ISP, the Balancing Energy Market and the Settlement of the Balancing Market Settlement. The Balancing Market System is described in Article 15of Article 14 of this RegulationRulebook.

66.117. Emergency Plan: It shall have the meaning of the Planmeans a plan that is drawn up in accordance with Article 73 of Law 4001/2011.

67.118. Technical Decisions: The technical decisions provided for in Article 18 of Law 4425/2016 and Annex I of this RegulationRulebook.

119. Technically Minimum Generation: The minimum level of capacity that a Balancing Service Entity can maintain for any period of time, provided that it operates under ISO conditions, it is not constrained by any equipment, technical or other limitations pertaining to the institutional or financial framework governing the Entity's operation, and provided that the internal service and any other auxiliary load have been taken into consideration.

120. Technically Minimum Generation under Automatic Generation Control (AGC): The Technically Minimum Generation of an Entity when it is operating under Automatic Generation Control (AGC). It is expressed in MW. Technically Minimum Generation under Automatic Generation Control (AGC) may be higher or equal to Technically Minimum Generation.

68.121. Manual FRR Upward Balancing Energy Price: The price calculated in accordance with Article 86Article 85 of this Regulation,Rulebook, based on which compensates the Balancing Service Providers that provide Manual FRR Upward Balancing Energy are remunerated.

69.122. ImbalancesImbalance Price, (IP_t^+):: The price which is calculated in accordance with Article 88Article 88 of this Regulation byRulebook based on which the ContractingBalance Responsible Parties are charged or credited or debited with Balancing Responsibility for their respective imbalances.

70.123. Manual FRR Downward Balancing Energy Price: The price calculated in accordance with Article 86Article 85 of this Regulation,Rulebook based on which compensates the Balancing Service Providers that provide Manual FRR Downward Balancing Energy are remunerated.

71.124. Balancing Services: They are withinmust be interpreted according to the meaning of Article 2(3) of Regulation (EU) 2017/2195, i.e. Balancing Energy or ReserveBalancing Capacity, or both.

72.125. Clearing House: It shall have the meaning of Article 2(p) of Law 4425/2016, i.e., the intermediary public limited company between counterparties in Energy Market transactions, becoming the buyer to every seller and the seller to every buyer for the purposes of clearing the relevant transactions.

~~73.~~126. RES Aggregator: It shall have the meaning of Article 2 (22) of Law 4414/2016~~, i.e. the natural or legal person who undertakes to represent the RES and CHP power plant owners in the electricity market~~.

~~74.~~127. Last Resort RES Aggregator: It shall have the meaning of Article 2 (23) of Law 4414/2016~~, that is, the RES Aggregator that undertakes to represent a RES and CHP power plant owner in the electricity market in cases of temporary inability to be represented by an Aggregator~~.

~~75.~~128. Demand Response Aggregator: It shall have the meaning of Article 5(2)(o) of Law 4425/2016.

129. Dispatchable Load Portfolio Baseline: A load calculated by the HETS Operator, which corresponds to the electricity that would have been consumed by the Dispatchable Load Portfolio if it hadn't received a Dispatch Instruction to activate a Balancing Energy Offer.

130. Physical Transmission Right: The right ascribed to the holder for physical delivery of a specific quantity of electricity within a specified time unit between two bidding zones and in a specific direction.

~~76.~~131. Dispatchable Load Portfolio: A load portfolio, that includes one or more loads which are connected to a ~~particular~~specific Bidding Zone and which, based on their technical capacity, offer Balancing Services to the HETS Operator. A Dispatchable Load Portfolio shall be represented by a Demand Response Aggregator. A Dispatchable Load Portfolio that includes only one load can be represented by one Consumer. Each Pumped Storage Hydro Generating Unit shall be a distinct Dispatchable Load Portfolio and shall be represented by one Producer.

~~77.~~132. Non-Dispatchable Load Portfolio: ~~The~~A load portfolio~~,~~ that includes one or more loads which are connected to a ~~particular~~specific Bidding Zone and which do not offer Balancing Services to the HETS Operator. Each Non-Dispatchable Load Portfolio shall be represented by one Supplier or one Consumer.

~~78.~~133. RES Units Portfolio without Market Participation Obligation:~~-~~ The RES Units Portfolio for which either a Feed-in Tariff Agreement has been concluded in accordance with the provisions of Law 4414/2016, or a Power Purchase Agreement has been concluded in accordance with the provisions of Article 12 of Law 3468/2006 or a similar electricity purchase and sale agreement prior to the entry into force of Law 3468/2006~~,~~, which (Units) are connected to a specific Bidding Zone. RES Units Portfolios without Market Participation Obligation shall be represented by DAPEEP. DAPEEP has balancing responsibility for the RES Units Portfolios without Market Participation Obligation.

~~79.~~134. Dispatchable RES Units Portfolio: The RES units portfolio, that includes one or more RES ~~units~~Units with Market Participation Obligation which are connected to a ~~particular~~specific Bidding Zone and which, based on their technical capacity, offer Balancing Services to the HETS Operator. A Dispatchable RES Units Portfolio shall be represented by one RES Producer or by one RES Aggregator.

~~80.~~135. Non-Dispatchable RES Units Portfolio: The RES units portfolio, that includes one or more RES units with Market Participation Obligation connected to a particular Bidding Zone and which do not offer Balancing Services to the HETS Operator. Each Non-Dispatchable RES Units Portfolio shall be represented by one RES Producer or by one RES Aggregator.

~~81.~~136. Non-Compliance Charges: The charges provided for in ~~Chapter 21~~CHAPTER 21 of this ~~Regulation~~Rulebook.

~~82.~~137. Power Exchange: A public limited company that manages one or more Energy Markets and/or Energy Financial Markets.

CHAPTER 2

CONTRACTS AND REGISTRATION PROCEDURE

Article 4. HETS Operator Registry

1. The HETS Operator keeps the HETS Operator Registry, which consists of the following individual Registries:
   a) the Balancing Service Providers Registry in accordance with Article 5 of this Rulebook,
   b) the Balance Responsible Parties Registry in accordance with Article 5 of this Rulebook,
   c) the Balancing Market Generating Units Registry in accordance with Article 11 of this Rulebook,
   d) the Dispatchable RES Units Portfolio Registry in accordance with Article 12 of this Rulebook, and
   e) the Dispatchable Load Portfolio Registry in accordance with Article 13 of this Rulebook,
2. Upon registration in the HETS Operator Registry, the registrants expressly and unreservedly accept the provisions of this Rulebook and the HETS Grid Code and the Methodologies, parameters and other special approvals, Technical Decisions and Manuals issued in accordance therewith, as amended each time and in force, and they are bound to comply with their content.
3. For their registration in the HETS Operator Registry, the interested parties shall file an application as laid down in the procedure specified in Article 8 of this Rulebook and the Technical Decision "Procedure for registration in the HETS Operator Registry".
4. The HETS Operator shall not be responsible for the completeness, correctness and trueness of the data provided by the Participants and entered in the HETS Operator Registry. The Participants are exclusively liable therefor.

~~Article 4.~~Article 5. Balancing Service Contract and Balance Responsible Party Contract

1. Natural or legal persons, in one or more of the following capacities, shall be entitled to register in the Balancing Service ~~Provider~~Providers Registry kept by the HETS Operator, as long as they are able to provide Balancing Services:
   a) Producer, holder of a Production License or a relevant ~~Exemption~~exemption from the obligation of Production License issuance, as long as he/she owns a power generating

unit with a valid production license in force, which is located on the mainland or on the interconnected islands and has an installed capacity over 5 MW,

b) ~~Renewable Energy Sources (~~RES~~)~~ Producer, holder of a RES Production License or a RES Producer Certificate or a relevant ~~Exemption~~exemption from the obligation of a Production License Issuance, for RES ~~units~~Units with Market Participation Obligation, as long as he/she owns a RES unit and he/she is not represented by a RES Aggregator,

~~b)~~c) Auto-producer,

~~c)~~d) RES Aggregator, holder of ~~RES Aggregator License, including RES Last Resort~~a RES Aggregator~~,~~ License for RES ~~units~~Units with Market Participation Obligation,

e) Demand Response Aggregator, holder of a relevant license, and

~~d)~~f) Consumer, including Self-Supplied customers, providing demand response services, as long as they are not represented by a Demand Response Aggregator ~~license, as well as~~.

~~1) Consumer, providing Demand Response services.~~

~~The interested parties shall apply for registration in accordance with the procedure set out in Article 6 hereof and the Technical Decision "~~Registration ~~Procedures~~ in the Balancing ~~Market Registries" and shall be required to comply with~~Service Providers Registry is mandatory for producers under item (a).

2. For registration in the Balancing Service Providers Registry, the terms and conditions ~~as~~ described in the ~~"~~"Terms and Conditions ~~of~~for Balancing Service Providers~~", which are~~" must be fulfilled, as approved by decision of RAE~~, upon the~~ following a recommendation ~~of~~by the Operator, ~~by means of Article~~as set out in article 18~~(~~, par. 4~~)~~ of Law 4425/2016.

3. Upon ~~their~~ registration in the Balancing Service ~~Provider~~Providers Registry, the ~~above~~ natural or legal persons of paragraph 1 of this Article (Balancing Service Providers) ~~shall~~ conclude a Balancing Service ~~Agreement~~Contract with the HETS Operator, ~~the~~whose content ~~of which shall be~~ is identical to the provisions of this ~~Regulation~~Rulebook. The Balancing Service Contract ~~shall be~~is deemed ~~to have been~~as concluded between the parties upon ~~the~~ registration in the Balancing Service ~~Provider~~Providers Registry and shall ~~be~~ not be subject to any ~~other formality~~further formalities.

~~Article 5. Balance Responsible Party Contract~~

4. Natural or legal persons, in one or more of the following capacities, ~~shall~~are obliged to be registered in the Balance Responsible Party Registry kept by the HETS Operator:

a) Producer, holder of a Production License or a relevant ~~Exemption~~exemption from the obligation of Production License issuance, as long as he/she owns a power generating unit with a valid production license in force, which is located on the mainland or on the interconnected islands and has an installed capacity over 5MW,

~~1) Supplier, holder of a Supply License,~~

~~2) Marketer, holder of Marketing License,~~

~~3)~~ RES Producer, holder of ~~an~~a RES Production License or a RES Producer Certificate or a relevant ~~Exemption~~exemption from the obligation of a Production License Issuance, for RES ~~units~~Units with Market Participation Obligation,

b) ~~RES~~ as long as he/she owns a RES unit and it is not represented by a RES Aggregator, ~~holder of~~

c) Auto-producer,

~~b)~~d) RES Aggregator, holder of a RES Aggregator License~~,~~ for RES ~~units~~Units with Market Participation Obligation, including Last Resort RES Aggregator.

~~c)~~e) Demand Response Aggregator, ~~holder of Demand Response Aggregator~~holders of a relevant license,

~~4) Consumer, as well as~~

f) Consumer, including Self-Supplied Customers, providing demand response services, as long as they are not represented by a Demand Response Aggregator,

g) Suppliers, holders of a Supply License, including Suppliers of Last Resort and Default Suppliers,

h) Self-Supplied customer,

i) Trader, holder of a Trading License, and

~~d)~~j) DAPEEP, which is the Operator of the RES Units Portfolio without Market Participation Obligation.

~~The~~ For registration in the Balance Responsible Parties ~~shall be designated as Load Representatives, representing Entities that absorb energy from the HETS or the Distribution Network, besides Demand Response Aggregators.~~

~~The term 'RES Aggregator' shall also include the Last Resort RES Aggregator, unless otherwise explicitly stated.~~

5. ~~The interested parties shall apply for registration in accordance with the procedure set out in Article 6 hereof and the Technical Decision "Registration Procedures in Balancing Market Registries" and shall be required to comply with~~Registry, the terms and conditions ~~provided for~~described in the ~~"~~"Terms and Conditions ~~of Balance Responsible Parties", which are~~ for Balancing Service Providers" must be fulfilled, as approved by decision of RAE~~, upon the~~ following a recommendation ~~of~~by the Operator, ~~with~~ as set out in article 18 ~~(~~, par. 4~~)~~ of Law 4425/2016.

6. Upon ~~their~~ registration in the Balance Responsible Parties Registry, the ~~above~~ natural or legal persons of paragraph 4 of this Article (Balance Responsible Parties) ~~shall~~ conclude a Balance Responsible Parties Contract with the HETS Operator, ~~the~~whose content ~~of which~~ is identical to the provisions of this ~~Regulation~~Rulebook. The Balance Responsible Party Contract ~~shall be~~is deemed ~~to have been~~as concluded between the ~~Parties~~parties upon ~~the~~ registration in the Balance Responsible Parties Registry and shall not be subject to any ~~other formality~~further formalities.

Article 6. Dispute Resolution

1. In the event of a dispute between the parties in the Balancing Service / Balance Responsible Parties Contract, the HETS Operator and the registered Balancing Service Provider / registered Balance Responsible Party shall initially seek an amicable settlement by mutual consultation in accordance with paragraph 2. To that end, the party raising the dispute shall send a notice to the other party, stating:

a) the Balancing Service Contract or the Balance Responsible Parties Contract between the Parties,

b) the reason for the dispute, and

c) a request for a future meeting, with a view to the amicable settlement of the dispute.

2. The parties shall meet within twenty (20) business days from communication of the notice. The parties must conduct the consultations in good faith and in accordance with business conventions in order to settle the dispute. The results of the consultations shall be reflected in a report, which shall be signed by their representatives and shall be binding upon the parties.

3. If no agreement is reached or no response is received within thirty (30) business days from the date of the above request for a meeting, either party may refer the issue for resolution in accordance with paragraph 4 of this Article.

4. In the event that the dispute is not resolved through the amicable settlement process, the parties may refer the dispute to RAE, through the complaint procedure under Article 34 of Law 4001/2011, or on the basis of paragraph 8, article 5 of Regulation 2017/2195, or resort to the process of resolution through arbitration, in accordance with the provisions of article 37 of Law 4001/2011 and the arbitration mechanism of RAE, or to another arbitration body or the competent courts. For the resolution of any dispute regarding the interpretation or the implementation of this Rulebook, the Greek law shall apply.

5. Recourse to amicable settlement, arbitration or litigation pursuant to this Article shall not relieve the parties of their duty to perform their obligations under this Rulebook and the Balancing Service Contract of the registered Balancing Service Provider or the Balance Responsible Party Contract of the registered Balance Responsible Party.

6. This Article shall also apply after the termination of the Balancing Service Contract of the registered Balancing Service Provider or the Balance Responsible Party Contract of the registered Balance Responsible Party.

Article 7. Termination of the Balancing Service Contract or the Balance Responsible Party Contract

1. The Balancing Service Contract / Balance Responsible Party Contract shall be dissolved by termination by one of the Parties, in accordance with the provisions of this Article.

2. Each Balancing Service Provider / Balance Responsible Party is entitled to terminate the Balancing Service Contract / Balance Responsible Party Contract at any time, provided that:

a) the Balancing Service Provider / Balance Responsible Party has no outstanding obligations (overdue or not) against the HETS Operator or the Clearing House that derive from this Rulebook or the HETS Grid Code or the Clearing Rulebook for Balancing Market Positions at the Termination Date specified in paragraph 3 of this Article, or in the event that no Clearing House operates in the Balancing Market, it does not have any outstanding obligations (overdue or not) against the HETS Operator that derive from this Rulebook or the HETS Grid Code at the Termination Date specified in paragraph 3 of this Article, and

b) the Balancing Service Provider / Balance Responsible Party has no obligation to participate in the Balancing Market, on the basis of this Rulebook.

3. In the case of paragraph 2 of this Article and subject to the conditions described therein, the termination shall be notified in writing through a bailiff, and shall enter into force and take effect after a period of thirty (30) business days from such notification to the HETS Operator or after the expiry of the period specified by the party that terminates the contract, which period cannot be less than thirty (30) business days from the date of notification ("Termination Date") under any circumstances. The termination shall enter into force as soon as the terminating party adduces a certificate from the Clearing House proving that it has no outstanding obligations, overdue or not, against the Clearing House that derive from this Rulebook. In the event that no Clearing House operates in the Balancing Market, the termination shall enter into force in accordance with the provisions of the first item of this paragraph.

4. The HETS operator may terminate the Balancing Service Contract / Balance Responsible Party Contract in the following cases:

   a) if the registered Balancing Service Provider / registered Balance Responsible Party does not meet the conditions for the lawful exercise of an electricity activity and/or the conditions for participation in the Balancing Market, or

   b) if the registered Balancing Service Provider / registered Balance Responsible Party is in breach of its obligations against the Clearing House, or is subject to a measure on the basis of the Clearing Rulebook for Balancing Market Positions, and, in particular, to limitations regarding its participation in the Clearing of Positions and Cash Settlement procedures carried out by the Clearing House, to suspension of its capacity to act as a Clearing Member or deletion, or, in the event that no Clearing House operates in the Balancing Market, it hasn't submitted guarantees in accordance with Article 115 of this Rulebook or it has financial obligations against the HETS Operator deriving from this Rulebook that have fallen due, or

   c) if the registered Balancing Service Provider / registered Balance Responsible Party has not submitted guarantees for the charges forseen in the HETS Grid Code or it has financial obligations against the HETS Operator deriving from the HETS Grid Code that have fallen due, or

   d) if the registered Balancing Service Provider / registered Balance Responsible Party has lost the capacity to act as a Clearing Member or if is not on a contract with a General Clearing Member for the settlement of the cash claims and obligations it may have in accordance with the provisions in the Clearing Rulebook for Balancing Market Positions.

5. The HETS operator may terminate the Balancing Service Contract / Balance Responsible Party Contract in the following cases:

   a) if the registered Balancing Service Provider / registered Balance Responsible Party repeatedly breaches its obligations under this Rulebook or the Balancing Service Contract / Balance Responsible Party Contract, or the HETS Grid Code, or

   b) if the measure of deletion has been imposed on the registered Balancing Service Provider / registered Balance Responsible Party on the basis of the Clearing Rulebook for Balancing Market Positions,

6. In the cases of paragraphs 4 and 5 of this Article, the termination shall be notified in writing through a bailiff and shall enter into force and take effect as of the date of its service.

7. The Balancing Service Contract / Balance Responsible Party Contract shall be dissolved ipso jure if the HETS Operator Transactions Contract provided for in the HETS Grid Code is terminated.

8. The termination of the Balancing Service Contract / Balance Responsible Party Contract with Self-Supplied customers or Consumers, whose facilities are connected to HETS, shall mean that electricity supply shall cease for these facilities. In the event of termination of the Balancing Service Contract / Balance Responsible Party Contract with Self-Supplied customers or Consumers, whose facilities are connected to the Distribution Network, the HETS Operator shall notify the competent Distribution Network Operator, in order to take the necessary action to interrupt power supply as provided for in the Distribution Network Operation Code.

9. The registered Balancing Service Provider / registered Balance Responsible Party whose Balancing Service Contract / Balance Responsible Party Contract is terminated, shall continue to be liable to the HETS Operator and the Clearing House, in accordance with the provisions of this Rulebook, the Clearing Rulebook for Balancing Market Positions and the HETS Grid Code, for obligations incurred prior to the termination.

10. In the cases of paragraph 4 of this Article, as of the termination of the Balancing Service Contract / Balance Responsible Party Contract and deletion from the HETS Operator Registry, all the obligations of the deleted participant under this Rulebook shall fall due and immediately payable.

11. The HETS Operator is required to notify the termination of the Balancing Service Contract / Balance Responsible Party Contract to RAE, the Power Exchange, the Clearing House, and any other person deemed necessary, as soon as possible.

~~Article 6.~~Article 8. Procedure ~~of~~for registration in the Balancing ~~service providers~~Service Providers Registry and the Balance Responsible Parties Registry

1. The interested party that wishes to register in the Balancing Service Providers Registry and/or the Balance Responsible Parties Registry shall submit the following to the HETS Operator:

~~1) Registration~~ A registration application~~.~~

~~2) solemn declaration, declaring~~ whereby it declares that~~:~~

~~i.~~ it expressly and unconditionally accepts this ~~Regulation and the~~ Rulebook, the HETS Grid Code and the Methodologies, parameters, special approvals, Technical Decisions ~~referred to therein.~~

~~ii. it is not subject to bankruptcy declaration proceedings or any other proceedings pursuant to the bankruptcy law or other legislation affecting its solvency~~ and ~~the rights of its creditors,~~

~~iii. it is not subject to bankruptcy, compulsory administration proceedings or any other similar legal proceedings affecting the rights of its creditors,~~

a) ~~for the Consumers, additional solemn declaration~~Manuals issued in accordance thereof, as amended and in force each time, and that ~~they accept the right of the HETS Operator to discontinue the supply of electricity to them if the Consumer is unable to meet the financial~~it is obliged to comply with their content, including the fulfillment of the cash obligations ~~arising from its participation in the Balancing Market,~~deriving therefrom.

b) ~~documents proving~~A solemn declaration by the interested party or its legal representative, indicating the documents attached to the Registration Application.

~~b)~~c) Documents evidencing the legal incorporation and operation of the interested party, and the legal representation of the applicant by the person signing the application and the above declarations~~,~~.

~~3) signed Contract with~~Certificate from the Clearing House ~~in accordance with the applicable law, if~~confirming that a ~~corresponding body operates~~Clearing Account has been created for the ~~Balancing Market,~~

~~c)~~d) ~~guarantees~~Participant as a Direct Clearing Member, or that a Clearing Account has been created for the Participant as a General Clearing Member, or Guarantees, in accordance with Article 115 in ~~case~~the event that no Clearing House operates~~,~~ in the Balancing Market, for any reason~~, for the Balancing Market~~ whatsoever.

e) ~~Together~~Guarantees in accordance with the HETS Grid Code.

f) A Production License or RES Producer Certificate or Supply License or Trading License or RES License or Demand Response Aggregator License, depending on the capacity of the interested party. If the interested party acts in many Capacities, it should adduce an appropriate license for each capacity.

g) For RES Producers, a Copy of the Contract for Differential State Aid Support or a certificate from DAPEEP regarding the operational status of the RES and the HPCHP Units covered by the provisions of par. 19, Article 3 of Law 4414/2016.

2. Along with the Application, the Applicant ~~pays~~shall pay the ~~Application Fee,~~application fee, which is determined by decision of RAE, upon ~~the~~ recommendation of the HETS Operator.

3. The HETS Operator shall register the ~~Applicant Participant in the Balancing Service Providers Registry or the Balance Responsible Parties~~ applicant in the HETS Operator Registry within fifteen (15) business days from the day of submission of ~~the corresponding~~a complete application. Upon registration, the HETS Operator shall issue a relevant certificate~~. The~~ to the interested party. A copy of the certificate shall be notified to RAE, the Distribution Network Operator, the Clearing House and the Power Exchange.

~~4. Upon registration in the Balancing Service Providers Registry, the HETS Operator shall create and maintain a record that includes the Entities for which the Balancing Service Provider is responsible.~~

~~5. Upon registration in the Balance Responsible Parties Registry, the HETS Operator shall create and maintain a record that includes the Entities for which the Balance Responsible Party is responsible.~~

~~6.~~4. Details regarding the registration in the Balancing Service Providers Registry and the Balance Responsible Parties Registry ~~shall be~~are specified in the Technical Decision "Procedures for Registration in the ~~Balancing Market~~HETS Operator Registry".

~~Article 7.~~Article 9. Rejection of application for registration in the ~~Balancing Service Providers~~ HETS Operator Registry ~~and the Balance Responsible Parties Registry~~

1. The HETS Operator may reject the application for registration in the ~~Balancing Service Providers Registry and the Balance Responsible Parties~~HETS Operator Registry, when:

a) the ~~Applicant~~applicant has not submitted a complete application or has not paid the ~~Application Fee~~application fee in accordance with ~~Article 4, Article 5, and Article 6,~~Article 5 and Article 8 of this Rulebook,

b) ~~the Applicant,~~ in the past, the Applicant has been in breach of its obligations under an earlier Balancing Service Contract or a Balance Responsible Party Contract or a HETS Operator Transaction Contract, resulting in the termination of the Contract, unless the circumstances giving rise to the termination have ceased to exist,

c) the conclusion of a Balancing Service Contract or a Balance Responsible Party Contract with the ~~Applicant~~applicant Participant is a reason of breach ~~by~~on the part of the HETS Operator of any term of any mandatory legal or regulatory obligation as laid down in the applicable legislation,

d) the ~~Applicant owes arrears from the Balancing Market~~applicant has outstanding financial obligations to the HETS Operator~~.~~ for any reason whatsoever that have fallen due,

e) the relevant requirements, as set out in this ~~Regulation~~Rulebook and the HETS Grid Code, are not met.

2. The HETS Operator shall justify the rejection of the Application. The rejection shall be notified to RAE, the Distribution Network Operator, the Clearing House and the Power Exchange.

3. The Applicant may lodge an objection within ten (10) business days from the notification of the above rejection, on which the HETS Operator shall decide within ten (10) business days. The above objection and decision shall be notified to RAE, the Distribution Network Operator, the Clearing House and the Power Exchange.

CHAPTER 3

REGISTRIES OF ENTITIES

~~Article 8.~~Article 10. Entities

1. The entities participating in the Balancing Market shall be ~~categorised~~categorized into Balancing ~~Services~~Service Entities and Balance Responsible Entities. The Balancing Service Entities shall be represented by Balancing Service Providers, while the Balance Responsible Entities shall be represented by the Contracted Balance Responsible Parties.

2. The Balancing Service Entities shall be entitled to provide Balancing Energy and/or ~~Reserve~~Balancing Capacity and shall include the following categories:

~~1) Production Unit: Conventional Dispatchable Production Unit with an installed capacity over 5 MW, which offers Balancing Services to the HETS Operator. This category shall also include Dispatchable CHP Units over 35 MWe. A Production Unit shall be represented by one Producer.~~

~~2) Dispatchable RES Units Portfolio: RES Units portfolio, that includes one or more RES Units with Market Participation Obligation connected to a particular Bidding Zone and which, based on their technical capacity, offer Balancing Services to the HETS~~

~~Operator. A Dispatchable RES Units Portfolio shall be represented by one RES Producer or a RES Aggregator.~~

~~3) Dispatchable Load Portfolio: Load portfolio, that includes one or more loads connected to a particular Bidding Zone and which, based on their technical capacity, offer Balancing Services to the HETS Operator. A Dispatchable Load Portfolio shall be represented by a Demand Response Aggregator. Dispatchable Load Portfolio that includes only one load can be represented by one Consumer.~~

a) Dispatchable Generating Unit,

b) Dispatchable RES Units Portfolio,

c) Dispatchable Load Portfolio.

3. The Contracted Generating Units ~~shall~~are also ~~be~~ included in the Entities, but they are not referred to in paragraph 2 of this Article as they ~~shall~~do not participate in the Balancing Market procedures. The Contracted Generating Units shall provide additional services in any situation that may lead to ~~not covering~~ the load ~~network~~ and/or ~~the~~ reserve requirements not being covered during the Integrated Scheduling Process (ISP~~) upon~~), following conclusion of a relevant contract, as stipulated in the HETS Grid Code.

4. Entities with Balance Responsibility ~~shall be~~are the entities that assume responsibility for the imbalances they cause and include the Balancing ~~Services~~Service Entities referred to in paragraph 2 of this Article as well as the following entities:

~~1) Non-Dispatchable RES Units Portfolio: RES units portfolio, that includes one or more RES units with Market Participation Obligation connected to a particular Bidding Zone and which do not offer Balancing Services to the HETS Operator. Every Non-Dispatchable RES Units Portfolio shall be represented by one RES Producer or a RES Aggregator.~~

~~2) Non-Dispatchable Load Portfolio: Load portfolio, that includes one or more loads connected to a particular Bidding Zone and which do not offer Balancing Services to the HETS Operator. Every Non-Dispatchable Load Portfolio shall be represented by one Supplier or one Consumer.~~

a) Non-Dispatchable RES Units Portfolio,

b) Non-Dispatchable Load Portfolio,

~~a)~~c) RES Units Portfolio without Market Participation Obligation~~: RES Units Portfolio without Market Participation Obligation connected to a specific Bidding Zone., RES Units Portfolios without Market Participation Obligation shall be represented by DAPEEP. DAPEEP shall be balance responsible for the RES Units Portfolios without Market Participation Obligation.~~

~~b)~~d) Import Portfolios and Export Portfolios.

~~Article 9.~~Article 11. Balancing Market ~~Production~~Generating Units ~~Register~~Registry

~~1.~~ The HETS Operator shall keep a Balancing Market ~~Production~~Generating Units ~~Register. In order to register a Production Unit in~~ Registry for the ~~Balancing Market Production~~registration of the Dispatchable Generating Units ~~Register, at least the following conditions must be met:~~

1) the Production Unit must be registered in the System Operator Units Register, as provided for in the HETS Operation Code,

2.1. the Production Unit mustthat have successfully completed the relevant pre-selectionqualification tests described in the "Balancing Service Provider Terms and Conditions". for Balancing Service Providers".

3. The information included in the Balancing Market ProductionGenerating Units Register includes the following information Registry and any supporting documents required for each Production Unit.

1) the Energy Identification Code (EIC)registration therein are described in detail in the Technical Decision "Procedures of the Production Unit,

2) the geographical location of the Production Unit,

3) the contact details of the Production Unit operator,

4.2. the Registered Operating Characteristics of the Production Unit in accordance with the provisions ofRegistration in the HETS Operation Code,Operator Registry".

4) In addition, the following technical characteristics are declared:

i. maximum contribution in downward Frequency Containment Reserve (FCR),

ii. maximum technical capability to provide upward and downward manual Frequency Restoration Reserve (FRR), and

iii. Minimum load for the provision of manual FRR

iv. the production level from the synchronization state to the minimum production state of each Production Unit, i.e. the exact production level for up to twelve (12) half-hour steps,

5) the identifier of the Meter(s) which record(s) the output of the Production Unit,

6) the node to which the Production Unit is electrically connected, or in the case of a Production Unit that is not connected to a node, the node which is electrically closer to the Production Unit,

7) the Bidding Zone to which the Production Unit belongs,

8) the information whether the Production Unit is a Multi-Axis Combined Cycle Dispatchable Unit or an Alternative Fuel Dispatchable Unit.

5. For the Dispatchable Units of Auto-producers, the Dispatchable CHP Units, the Dispatchable Alternate Fuel Units and the Dispatchable Multiple-Axis Combined Cycle Units, the provisions of this Regulation relating to the Dispatchable Production Units are applicable, unless otherwise expressly stated.

6.3. The Producer is requiredobliged to immediately informnotify the HETS Operator aboutof any modification ofin the Production Unit'sGenerating Unit data entered in the Balancing Market ProductionGenerating Units RegisterRegistry.

4. The Production Units are For a power generation unit which has a valid production license, is located on the mainland or on the interconnected islands and has an installed capacity over 5 MW to be put in the Commissioning operation or to perform pre-qualification tests, the unit must have been pre-registered in the Balancing Market Generating Units Registry.

5. Details on pre-registration are provided in the Technical Decision "Procedures of Registration in the HETS Operator Registry".

~~7.~~6. Dispatchable Generating Units shall be deleted from the ~~Production~~Generating Units ~~Register when~~Registry if they permanently cease to operate, as a result of a relevant decision by RAE.

7. As regards Dispatchable Auto-producer Units, Dispatchable HPCHP Units, Dispatchable Units with Alternative Fuel and Dispatchable Multi-Shaft Combined Cycle Units, the provisions of this Rulebook relating to Dispatchable Generating Units shall apply, unless otherwise expressly stated.

~~Article 10.~~Article 12. Dispatchable RES Units Portfolio ~~Register~~Registry

1. The HETS Operator ~~keeps~~shall keep a Dispatchable RES Units Portfolio ~~Register in which~~ Registry for the registration of the Dispatchable RES Units Portfolios ~~with Market Participation obligation are registered,~~ that have successfully completed the relevant pre-~~selection~~ qualifiaction tests described in the "Terms and Conditions ~~of~~for Balancing Service Providers~~".~~".

~~2.~~ The ~~HETS Operator keeps and updates~~information included in the Dispatchable RES Units ~~Portfolio Register, which contains at least the following information~~ Portfolios Registry and any supporting documents required for ~~each Dispatchable RES Units Portfolio represented by an RES Producer or a RES Aggregator:~~

~~1) the EIC Code of the Entity,~~

~~2) the geographical location(s),~~

~~3) the Bidding Zone,~~

~~4) the RES technology,~~

~~5) the RES Units connected to High Voltage or Medium Voltage that~~registration therein are ~~part of the Portfolio,~~

~~6) the Registered Operating Characteristics of the Dispatchable RES Units Portfolio according to the provisions of the HETS Operating Code (as applicable to conventional Production Units), modified with the following technical characteristics:~~

~~i. maximum contribution to downward FCR,~~

~~ii. maximum technical capability to provide upward and downward FRR,~~

~~7) the identifier (s) of the Meter (s) which record (s) the output of each individual RES Unit belonging to the Dispatchable RES Unit Portfolio,~~

~~3.~~2. ~~the node (s) to which each individual RES Unit belonging to a Dispatchable RES Unit Portfolio is electrically connected in the case it is directly connected to the HETS or the node (s) that is (are) electrically closer to it,~~described in ~~the case it is connected to the Distribution Network,~~detail in the Technical Decision "Procedures of Registration in the HETS Operator Registry".

~~8) the Bidding Zone to which the Dispatchable RES Unit Portfolio belongs~~

~~4.~~3. Each RES Producer/RES Aggregator is ~~required~~obliged to immediately ~~inform~~notify the System Operator of any ~~change concerning~~changes in the data held in the Dispatchable RES Unit Portfolios Registry.

4. For a Dispatchable RES Units Portfolio to be put in Commissioning operation or to undergo pre-qualification tests, the Portfolio must have been pre-registered in the Dispatchable RES Units Portfolio Registry.
5. Details on pre-registration are provided in the Technical Decision "Procedures of Registration in the HETS Operator Registry".

~~Article 11.~~Article 13. Dispatchable Load Portfolio Registry

1. The HETS Operator ~~keeps~~shall keep a Dispatchable Load Portfolio Registry ~~in which~~for the registration of the Dispatchable ~~RES~~ Load Portfolios ~~are registered,~~ that have successfully completed the relevant pre-~~selection~~qualification tests described in the "Terms and Conditions of Balancing Service Providers".

~~2. The HETS Operator keeps and updates the Dispatchable Load Portfolio Registry, which contains the following~~ information ~~for each Dispatchable Load Portfolio represented by a Demand Response Aggregator:~~

~~1) the EIC Code of the Entity,~~

~~2) the geographical location(s),~~

~~3) the Registered Operating Characteristics of the Dispatchable Load Portfolio according to the provisions of the HETS Operating Code, modified with the following technical characteristics:~~

~~i. maximum contribution to upward and downward FCR,~~

~~ii. technical maximum output capacity under Automatic Generation Control (AGC) while providing automatic FRR,~~

~~iii. technical minimum output capacity under Automatic Generation Control (AGC) while providing automatic FRR,~~

~~iv. maximum technical capability to provide upward and downward FRR,~~

~~v. a technical minimum corresponding to the 'minimum production load', if it is not zero,~~

~~vi. minimum in operation/out of operation time, similar to the corresponding characteristics of the Production Unit, if it is not zero,~~

~~vii. minimum and maximum delivery period for the supply of Balancing Energy,~~

~~viii. minimum base load period (i.e. minimum time interval between two successive activations of the Balancing Energy),~~

~~ix. maximum frequency of activations for the supply of Balancing Energy during a day,~~

~~x. output power increase rate and output power decrease rate, and~~

~~xi. the load change rate in the Automatic Generation Control (AGC) mode, if applicable,~~

~~4) the individual loads~~ included in the ~~Portfolio,~~

~~5) the identifier (s) of the consumption Meter (s) which record(s) the consumption of each individual load belonging to the Dispatchable Load Portfolio,~~

3.2. the node (s) to which each individual load belonging to a Dispatchable Load Portfolio is electrically connectedDispatchable Load Portfolios Registry and any supporting documents required for registration therein are described in detail in the Technical Decision "Procedures of Registration in the case that the individual load is directly connected to the HETS or the node (s) that is (are) electrically closer to it, in the case that the individual load is connected to the Distribution Network andHETS Operator Registry".

6) the Bidding Zone to which the Dispatchable Load Portfolio belongs.

4.3. Each Response Demand Aggregator and each Consumer participating in the Balancing Market as Balancing Service Provider is obliged to immediately informnotify the SystemHETS Operator of any change concerningchanges in the data held in the Dispatchable Load Portfolios Registry.

Each Dispatchable Pumped-Storage hydro Generating Unit shall be a distinct Dispatchable Load Portfolio. CHAPTER 4

GENERAL BALANCING MARKET PRINCIPLES

Article 12. General Balancing Market Description

2. The Balancing Market includes the Balancing Capacity Market, the Balancing Energy Market and the Imbalances Settlement.

3. The Balancing Service Providers submit Balancing Energy Offers and Balancing Capacity Bids in the Balancing Market on behalf of the Balancing Services Entities they represent.

4. In the context of the Balancing Market, the HETS Operator performs the Integrated Scheduling Process (ISP) for the commitment (synchronization) or de-synchronization of Balancing Services Entities and for the Balancing Capacity commitment as described in Section II of this Regulation.

5. The HETS Operator operates the Balancing Energy Market for the activation of the Manual and Automatic FRR Balancing Energy Offers and issues Manual and Automatic FRR Dispatch Instructions to Balancing Services Entities as described in Section III of this Regulation.

6.1. The Balancing Market operates throughout the year, for each calendar day.

Article 13. Clearing House Contract

1. The Producers representing the above Units are obliged to immediately notify the HETS Operator may assign operations relating to the settlement of transactionsany changes in the Balancing Market to a Clearing House, data held in accordance with the provisions of Article 12 of Law 4425/2016.

5.4. The Clearing House shall perform, inter alia, the following operations:Dispatchable Load Portfolios Registry.

1) act as the counterparty of the Participants, where defined, for transactions concluded in the Balancing Market, with respect to the financial rights and obligations arising from such transactions.

2) implement pricing, money transfer and risk management procedures resulting from the participation in the Balancing Market in accordance with the Settlement Regulation.

5. ~~calculate the margin requirements for each Clearing Member, and inform the Clearing Members of the securities or the guarantees needed to be~~ For a Demand Response Load Portfolio to be put in the Commissioning operation or to undergo pre-qualification tests, the Portfolio must have been pre-registered in the Dispatchable Load Portfolio Registry.

   ~~3) Details on pre-registration are~~ provided ~~to meet these margin requirements.~~

   ~~4) cover possible deficits~~in the Technical Decision "Procedures of Registration in the ~~Balancing Market that may arise due to a payment deficit, lack of payment, and even a Breach by a Clearing Member, in accordance with the Settlement Regulation.~~

   ~~5) provide reporting services to Clearing Members and Non-Clearing Members with respect to information on fulfillment of financial obligations.~~

   ~~6) keep a complete and accurate record of all money transfers and risk management data. The form of record keeping is determined as the Clearing House can reasonably define. All money transfers and risk management data should be kept as they are for at least five (5) years from the date when the money transfer and the Risk Management Data were generated for the first time (or created for the first time, if the date is earlier).~~

   ~~7) keep the Accounting Accounts for each Participant.~~

6. ~~keep the Accounting Account for the collection of the applicable fees of the Participants by the~~ HETS Operator ~~in accordance with the provisions of this Regulation.~~Registry".

CHAPTER 4

   ~~8) submit reports to the HETS Operator with regard to the operations assigned by the HETS Operator to the Clearing House, and~~

   ~~9) provide the HETS Operator with access to all data held by the Clearing House regarding the activities assigned to the Clearing House by the HETS Operator.~~

~~2. The Clearing House complies with all the obligations set forth in the applicable legislation, the Balancing Market Regulation and the Decisions adopted for its implementation.~~

~~Article 14. Balancing Market Surveillance~~

~~The Regulatory Authority for Energy (RAE) supervises the exercise of the rights and obligations of the HETS Operator and the Participants in the market under this Regulation, in accordance with the applicable law.~~

~~CHAPTER 5~~

BALANCING MARKET SYSTEM

~~Article 15.~~Article 14. Balancing Market System Description

1. The Balancing Market System ~~performs~~shall perform all ~~processes~~the procedures and all the necessary calculations and ~~records~~shall record all the data and the results of the Balancing Market in ~~terms of~~ connection to the ISP, the Balancing ~~Capacity Market, the~~

~~Balancing~~ Energy Market, and the Balancing Market Settlement. The Balancing Market System ~~includes~~shall include the following subsystems:

~~1)~~ the ~~Balancing Service Providers~~HETS Operator Registry ~~and the Balance Responsible Parties Registry,~~

a) ~~the Balancing Market Production Units Register, the Dispatchable RES Units Portfolios Register and the Dispatchable Load Portfolios Register~~,

b) the Physical Transmission Rights Declaration Submission System of the HETS Operator,

c) the Balancing Market Bidding Submission System,

d) the Dispatch Information Administration System, including: the Load Forecasting~~/~~ / RES Injection Forecasting~~/~~ / Reserve Requirements Forecasting Mechanism, the interface with the Power Exchange for ~~acquiring~~ acquisition of the Market Schedules of all ~~the~~ Entities, the Integrated Schedule Process solution mechanism and the Balancing Energy Market solution mechanism, ~~RTBM clearing system,~~the mechanism that produces the Dispatch Instructions ~~mechanism~~ in real time and the interface with the Supervisory Control and Data Acquisition System (SCADA).

e) the Balancing Market Settlement System, which carries out all ~~Clearing~~Settlement calculations and processes, ~~as well~~and serves as the interface with the Clearing House, and

f) the Participant Communication System and the data bases required for the operation of the above.

2. The HETS Operator ~~operates~~shall operate and ~~maintains~~maintain the Balancing Market System. The Balancing Market System must be fully compatible with the functions provided for in this ~~Regulation~~Rulebook.

3. The HETS Operator shall take the appropriate measures to prevent any operational issues in the Balancing Market System and shall try to restore any failure or malfunction, as soon as possible. The HETS Operator shall not be liable to the Participants for any loss they may incur due to any unforeseen failure or malfunction in the Balancing Market System, even temporary ones, or due to any loss of data from the Balancing Market System, or due to any malicious use of the Balancing Market System or the data therein by third parties.

~~3.~~4. The Balancing Market System supports the commonly accepted principles of good ~~trading practice,~~business practices, it is based on modern, appropriate, and reliable information and communication technologies and complies with strict standards of ~~uninterruptible~~uninterrupted operation, increased reliability and integrity of information.

~~4.~~5. The Balancing Market System databases are protected by an appropriate security system that does not allow ~~non-unauthorized persons to have~~ access to classified information to unauthorized persons. The System itself provides protection against deletion of information from the databases.

~~Article 16.~~Article 15. Access to the Balancing Market System

1. The HETS Operator shall provide the ~~forecasted~~specified access to the Balancing Market System if the following conditions are met:

a) the ~~Registered~~registered Balancing Service Provider~~/Registered~~ / registered Balance Responsible Party has fulfilled the authentication requirements ~~as specified in the~~

Technical Decision "Balancing Market System Rules". These requirements may include, inter alia, the obligation to provide an electronic certificate for signature, encryption or other authentication technology purposes, and

b) the Balancing Market representative(s) of the Registered Balancing Service Provider/Registeredregistered Balance Responsible Party, for whom the user account (s) is (are) created in the Balancing Market System, has (have) succeeded in the suitability test conducted by the HETS Operator on the proper use of the Balancing Market System, as described in the Technical Decision "Balancing Market Rules".

2. The HETS Operator shall confirm the creation of the User Account (s) or send a rejection note to the Registeredregistered Balancing Service Provider/ / Balance Responsible Party, no later than five (5) Business Days afterbusiness days from the completion of the suitability test by the Balancing Market representative(s) of the Registeredregistered Balancing Service Provider/Balance Responsible Party. The confirmation or rejection shall be sent viaby any means to the operational competent person designated by representative of the Registeredregistered Balancing Service Provider / Balance Responsible Party.

3. If the conditions referred to in paragraph 1 of this Article are not met, the HETS Operator is required to send a reasonedshall notify the registered Balancing Service Provider / Balance Responsible Party of the rejection note and to refuseshall not grant access to the Balancing Market System.

Article 17.Article 16. Balancing Market System Certification

1. The HETS Operator shall ensure that the Balancing Market System is certified by an independent inspection firm that certifies the, which shall certify compatibility with the functions and the procedures included in this RegulationRulebook and in the Technical Decision "Balancing Market Rules", and proceedshall conduct either:

   a) ina full inspection, or

   b) ina partial inspection of the changes and their impact on the remainder of the Balancing Market System.

   TheSuch certification takesshall take place every time the Balancing Market System is significantly modified. The HETS operator shall publish the inspection certificationcertificate on its website.

2. The Every time the HETS Operator shall each time determine the requirement forwhether a full inspection or partial inspection is needed time at its discretion.

Article 18.Article 17. Communication between the HETS Operator and the Participants

1. The communicationCommunication between the HETS Operator and the Balancing Service Providers / Balance Responsible PartiesParticipants, which includes all notifications or submissions provided for by the provisions ofin this RegulationRulebook, shall be performed viaby electronic means through the Balancing Market System. In case communication viathrough the Balancing Market System is not possible for any reason, or in casescase of emergency, communication can take place viaby other means such as telephone, email or fax at the discretion of the HETS Operator.

2. The HETS Operator shall use the appropriate international standards to establish appropriate interconnection protocols for the PartiesParticipants to communicate with the

Balancing Market System ~~using the appropriate international standards~~ and shall make these interconnection protocols available to all ~~persons~~ requesting ~~it~~persons. The ~~Contracting Parties~~Participants shall put into service systems that are suitable for effective communication with the Balancing Market System operated by the HETS Operator.

3. The Balancing Market System automatically issues ~~communication receipts~~an acknowledgment of receipt, which is sent directly to the Participants through the Participants Communication System.

4. In the event of a total or partial ~~breakdown~~unavailability of the Participants Communication System, the HETS Operator shall immediately notify all the Participants by sending a relevant notice ~~using~~by any appropriate means, specifying the procedure to be followed for further communication and the expected amount of time required to restore the ~~breakdown. Immediately after~~system availability. As soon as the ~~breakdown restoration~~system is restored, the HETS Operator shall ~~inform~~notify all Participants electronically.

5. In any case, the ~~communication through the~~ Participants Communication System ~~is a priority~~ shall be the preferred route of communication as long as there is no ~~breakdown.~~unavailability issue. In ~~this~~that case, the provisions ~~of the~~on Emergency Situations, as defined in the HETS ~~Operation~~Grid Code, shall apply.

6. Each ~~Contracting Party~~Participant shall comply with specific standards ~~for the communication~~in its communications with the HETS Operator~~, as described in the Technical Decision "Balancing Market System Rules".~~. These standards shall apply with regard to the operational capability, ~~the~~ reliability and ~~the~~ safety of its own communication centers and the appropriate computer and data networking equipment. The equipment ~~shall~~must be used by the ~~Contracting Party~~Participants only for their communications with the Balancing Market System.

7. Each ~~Contracting Party is~~Participant shall be responsible for the provision and maintenance ~~(at the expense of the Contracting Party) of~~ of telephone, fax and e-mail equipment at its own expense.

8. ~~Participants'~~The HETS Operator shall not be liable to the Participants for the timely transmission of offers, declarations or other data from the Participants, or for technical failures in the systems and the equipment used by the Participants to communicate with the Balancing Market System.

~~Article 19.~~Article 18. Participants Support

The HETS Operator shall inform the Participants about the Balancing Market System and shall provide ~~them with~~ support and instructions ~~in order to~~ so that they can get a suitable and compatible ~~user~~ system for ~~communicating~~their communication with the Balancing Market System~~.~~

~~Article 20.~~Article 19. Record Keeping

1. The HETS Operator shall keep a record of all the information used for ~~exercising~~ the execution of its responsibilities under this ~~Regulation~~Rulebook, for at least five (5) years. The HETS Operator shall provide ~~to~~ the Participants with a copy of the information pertaining to them, in editable form, at their request.

2. All data generated by the Balancing Market System are the property of the HETS Operator.

~~Article 21.~~Article 20. Publication of Information by the HETS Operator

The HETS Operator shall publish on its web site, at the end of each calendar month, information on the ~~dispatch process for~~operation of the ~~previous~~Balancing Market in the preceding calendar month, which shall include at least the following items:

a) the total electricity and maximum total ~~system~~HETS load per Dispatch Day,

b) the zonal imbalances per ~~FRR Imbalances~~ Imbalance Settlement Time Period,

c) any important HETS events,

d) aggregate information on Dispatch Instruction violations by Balancing Service Providers.

CHAPTER 5

Hydro Resources Management

Article 21. General Obligations for the Hydro Resources Management

1. The Balancing Service Providers representing Dispatchable Hydro Generating Units, including Dispatchable Pumped-Storage hydro Generating Units shall submit to the HETS Operator the following hydro management declarations:
   a) Yearly ahead hydro usage declarations,
   b) Weekly mandatory hydro management declarations and
   c) Daily mandatory hydro injection declarations.
2. The Balancing Service Providers representing Dispatchable Hydro Generating Units are required to:
   a) submit to the HETS Operator annual curves regarding reservoir reserves for the last ten (10) years, on a monthly basis. As for the new power stations of Dispatchable Hydro Generating Units, given that the historical data on water levels are limited, they must submit the estimated curves and shall take into account any available historical data.
   b) inform the HETS Operator about the reservoir water level of the Dispatchable Hydro Generating Unit and any changes expected, and about the water supply to the reservoir of the Dispatchable Hydro Generating Unit (instantaneous or average for a specific period), one day before the Dispatch Day or on an ad hoc basis, as the HETS Operator deems appropriate.
   c) take into account the current level of the relevant water reserves, any forecasts for the evolution of these reserves, their obligations for water supply, irrigation and ecological supply, and ensure that the Safety Minimum Reservoir Level is constantly maintained when planning the operation of these Units and, in particular, at the time of submission of hydro management declarations and at the time of submission of Techno-Economic Declarations, which include information on the maximum daily energy injection for the Generating Units in question.

d) notify the HETS Operator of the forecasted changes in any components affecting mandatory hydro management as soon as possible after the occurrence of the emergency.

e) notify the HETS Operator, on a weekly basis, of the daily quantity of water in cubic meters and the corresponding energy in MWh that came through the spillway for each reservoir.

3. The height of the Safety Maximum Reservoir Level and the Safety Minimum Reservoir Level shall be determined for each Dispatchable hydro Generating Unit by RAE following a proposal of the relevant Balancing Service Provider and an opinion of the HETS Operator.

4. The Balancing Service Providers representing Dispatchable hydro Generating Units that are connected to the reservoir may:

a) submit mandatory hydro injection declarations for the above Units to avoid an overflow only when the water level in the relevant reservoir is expected to be equal or higher that the Safety Maximum Reservoir Level.

b) submit declarations of maximum daily energy injection constraint for the above Units only when the water level in the relevant reservoir is expected to be equal or higher that the Safety Minimum Reservoir Level.

5. Upon expiration of the Dispatch Day, the HETS Operator shall immediately publish the quantity of energy injected by each Dispatchable hydro Generating Unit for each Imbalance Settlement Period of the Dispatch Day.

6. The HETS Operator shall submit to RAE, on a monthly basis, a report containing the submitted requests for amendment of the weekly mandatory hydro management declarations, which shall provide the reasons for their submission, the relevant evidence submitted by the Balancing Service Providers, their acceptance or rejection by the HETS Operator and any other relevant information.

7. The HETS Operator shall send to RAE, by the end of the following month, a report including at least the following information on a daily basis and for each Dispatchable hydro Generating Unit.

a) the water level in the relevant reservoir,

b) curves on reservoir reserves,

c) total injected energy,

d) mandatory hydro injection declarations with distinct reference to the quantities by reason of overflow,

e) pumping energy.

8. The HETS Operator shall inform the Energy Exchange with regard to the mandatory hydro injection declarations in accordance with the provisions of the Day-Ahead & Intra-Day Markets Trading Rulebook.

9. Details on the hydro resources management may be specified in the Technical Decision “Integrated Scheduling Process”.

Article 22. Yearly Ahead Hydro Usage Declarations

1. The yearly ahead hydro usage declaration refers to the upcoming twelve months and shall be submitted on a rolling basis up to five (5) days before the start of the first month to which it refers. The yearly ahead hydro usage declaration shall be submitted to the HETS Operator, accompanied by the evidence on the maximization of the hydro recourses value and the overall benefit of using the Dispatchable hydro Generating Units for the electricity sector.
2. The yearly ahead hydro usage declaration shall determine for each month of the following twelve-month period, as a sum for all Dispatch Periods of the Dispatch Days of the month, as a sum for all Dispatchable hydro Generating Units of each Balancing Service Provider, and for three hydrological scenarios (high, low and intermediate total inflows) the following:
   a) the schedule of forecasted energy injection due to mandatory operation,
   b) the schedule of forecasted generation of additional energy,
   c) the expected water inflows in the reservoirs, and
   d) the forecasted water reserves in the reservoirs at the end of the month.
3. Within one (1) month from the expiration of each Reliability Year, the Balancing Service Providers representing Dispatchable hydro Generating Units shall submit to the HETS Operator and to RAE a report on the hydro recourses management during the previous Reliability Year. The report shall include:
   a) the real data of paragraph 1 of this Article,
   b) a comparison with the corresponding yearly ahead hydro usage declarations and evidence on the imbalances, and
   c) evidence on the maximization of the hydro recourses value and the overall benefit of using the Dispatchable hydro Generating Units for the electricity sector.

Article 23. Weekly Mandatory Hydro Management Declarations

1. The weekly mandatory hydro management declaration shall be submitted by the relevant Balancing Service Providers every Thursday by 12:00 EET and shall refer to a period of seven Dispatch Days in total starting on the following Saturday. The weekly mandatory hydro management declaration shall specify the estimated quantity of mandatory energy injection for each Dispatchable hydro Generating Unit and for each Dispatch Period of the Dispatch Days to which the declaration refers and shall correspond to the following mandatory operations:
   a) water supply,
   b) irrigation, and
   c) ecological supply
2. The Balancing Service Providers representing Dispatchable Hydro Generating Units must substantiate the energy quantity declarations for the mandatory operations on a weekly basis, by submitting data on the said operations and on the inflow-outflow water balance in the reservoirs. The data substantiating the declarations shall be both actuarial and budget data and shall be published on the website of the HETS operator. The weekly mandatory

hydro management declaration of each Dispatchable hydro Generating Unit is binding and cannot be amended for the energy quantities of item (c), paragraph 1 of this Article.

3. The Balancing Service Providers representing Dispatchable hydro Generating Units may submit a request for amendment of the weekly mandatory hydro management declaration with regard to the information of paragraph 1 of this Article for emergency reasons, which include cases of violation of the Safety Maximum Reservoir Level, other safety reasons or special works and third-party claims. The Balancing Service Provider shall fully substantiate the request for amendment. The HETS Operator may request additional information at a later stage if in its judgment the justification is not complete. In case of amendment of the weekly mandatory hydro management declaration, the HETS Operator shall notify the Participants as soon as possible.

Article 24. Daily Mandatory hydro Management Declarations

1. Balancing Service Providers representing Dispatchable hydro Generating Units are required to notify the HETS Operator of a forecasted change in any components affecting mandatory hydro management as soon as possible after the occurrence of the event. In particular, they are required to inform the HETS Operator with regard to:
   a) the water level in the reservoir of the Dispatchable hydro Generating Units and the expected changes therein, especially if a violation of the Safety Maximum Reservoir Level is ascertained or forecasted,
   b) the water supply in the reservoir of the Dispatchable hydro Generating Unit (instantaneous or average for a specific period),
   c) any necessary measures taken for the safety of the reservoir dams when increased water supplies are observed,
   d) the modification of irrigation needs,
   e) special works and third-party claims or
   f) other safety reasons (Force Majeure).
2. Balancing Service Providers representing Dispatchable hydro Generating Units are required to submit to the HETS Operator daily mandatory hydro injection declarations until 09:30 EET of the previous Dispatch Day. Furthermore, they are required to submit to the HETS Operator daily hydro mandatory injection declarations as soon as possible after the occurrence of an event affecting the management of mandatory waters.
3. A deviation of the daily hydro mandatory injection declaration from the weekly mandatory hydro management declaration is allowed only in the following cases:
   a) modification of water supply needs,
   b) modification of irrigation needs,
   c) avoidance of overflow,
   d) special works and third-party claims and
   e) other safety reasons (Force Majeure)
4. Any deviation of the daily mandatory hydro injection declaration from the weekly mandatory hydro management declaration shall be fully substantiated by the Balancing Service Provider. The HETS Operator may request additional information at a later stage

if in its judgment the justification is not complete. In case of amendment of the weekly mandatory hydro management declaration, the HETS Operator shall notify the Participants as soon as possible.

5. If an amended daily mandatory hydro injection declaration is submitted during the Dispatch Day to which the declaration refers, the HETS Operator shall:

   a) depending on the extent of the amendment, decide if an execution of an ad-hoc ISP is required,

   b) include the amended daily mandatory hydro injection declarations in the Balancing Energy Market, and

   c) have the possibility to allocate the additional quantities within the Dispatch Day, so that the operation of the HETS is ensured and the operation of the Balancing Market is not disturbed to the extent possible.

CHAPTER 6

MISCELLANEOUS

~~Article 22.~~Article 25. Balancing Market Fee~~:~~

1. The expenditure related to the obligations of the HETS Operator in accordance with this ~~Regulation~~Rulebook, which are considered reasonable, efficient and proportionate, as well as ~~a~~their rate of return ~~on them~~, shall be recovered by the Operator through a Balancing Market Fee payable by every Balancing Service Provider and Balance Responsible Party.
2. The Balancing Market Fee ~~is defined annually,~~ shall be determined every year, at least two months before the ~~beginning~~start of ~~each~~the year, upon proposal by the HETS Operator and approval by RAE. ~~The definition~~In the determination of the Balancing Market Fee for each year ~~may take into consideration~~ corrections ~~concerning~~from previous years shall be taken into account, if ~~required~~necessary.
3. The Balancing Market Fee ~~comprises~~may comprise the following elements:

   a) A Fixed Participation Fee to be paid by every Participant for participation in the Balancing Market ~~per Participant. This~~. The fee shall be paid on a monthly basis and may be ~~differentiated by~~ different for every Category of Participant.

   b) A Proportional Balancing Fee, per Participant~~. This~~, in accordance with the following paragraph. The fee shall be paid on a monthly basis.

4. The Proportional Balancing Fee shall be charged to Balance Responsible Parties based on ~~the~~their monthly ~~quantity of imbalances~~ energy imbalance quantities and to Balancing Service Providers based on ~~the~~their monthly ~~quantity of balancing energy provided~~activated Balancing Energy quantities.
5. The Balancing Market Fees shall be collected ~~monthly by the HETS Operator or~~every month by the Clearing House~~, if the provisions of Article 13 of this Regulation have entered into force. In this case, the Clearing House shall give~~ and shall be paid to the HETS Operator ~~the Fees received pursuant to Article 106 of this Regulation.~~ .

Article 23. Dispute resolution

1. With no prejudice to paragraphs 5 and 6 of this Article, if there is a dispute, the HETS Operator and the Registered Balancing Service Provider / Registered Balance Responsible Party shall initially seek an amicable settlement by mutual consultation in accordance with paragraph 2. To this end, the Party raising the dispute shall send a notice to the other Party, stating:

   1) the Balancing Service Contract or the Balance Responsible Party Contract between the Parties,

   2) the reason for the dispute, and

   a) a request for a future meeting, with a view to the amicable settlement of the dispute.

2. The Parties shall meet within twenty (20) business days from the meeting request and try to resolve the dispute amicably. If no agreement is reached or no response is received within thirty (30) business days of the date of the above meeting request, either Party may refer the issue to the management of the Parties, in order to resolve the dispute in accordance with paragraph 3.

3. The Authorized Representatives of the HETS Operator and the Registered Balancing Service Provider / Registered Balance Responsible Party shall meet within twenty (20) business days from the meeting request and try to resolve the dispute amicably, in good faith and in accordance with good business practices. The results of the negotiations shall be reflected in a report signed by the representatives, that is binding on the Parties.

4. In the event that the dispute is not resolved through the amicable settlement process, the parties may refer the dispute to RAE, either through the complaint procedure under Article 34 of Law 4001/2011, or to be resolved by arbitration, in accordance with the provisions of article 37 of Law 4001/2011 and the arbitration mechanism of RAE, or to another arbitration body or the competent courts. For the resolution of any dispute referred to in the interpretation or the implementation of this Regulation, the Greek law applies.

5. Appealing for amicable settlement, arbitration or litigation pursuant to this Article shall not relieve the parties of their obligations under this Regulation and the Balancing Services Provider Contract of the Registered Balancing Service Provider or the Balance Responsible Party Contract of the Registered Balance Responsible Party.

6. This Article shall also apply after the termination of the Balancing Service Provider Contract of the Registered Balancing Service Provider or the Balance Responsible Party Contract of the Registered Balance Responsible Party.

Article 24. Termination of the Balancing Service Provider Contract or the Balance Responsible Party Contract

1. The Balancing Service Provider Contract / the Balance Responsible Party Contract is dissolved by termination by one of the Parties, in accordance with the provisions of this Article.

2.1. Each Balancing Service Provider / Balance Responsible Party is entitled to terminate the Balancing Service Contract / Balance Responsible Party Contract at any time, provided that:

1) the Balancing Service Provider / Balance Responsible Party has no outstanding (past due or not) liabilities against the Clearing House on the Termination Date specified in paragraph 3 of this Article, and

2) the Balancing Service Provider / Balance Responsible Party has no obligation to participate in the Balancing Market, based on this Regulation.

3. In the case of paragraph 2 of this Article, the termination shall be notified in writing, with a bailiff, and shall enter into force and take effect thirty (30) business days after its notification to the HETS Operator or after the expiry of the period specified by the party that terminates the contract, which in no case may be less than thirty (30) business days from the date of notification ("Termination Date").

4.1. The HETS operator may terminate the Balancing Service Contract / Balance Responsible Party Contract in the following cases:

1) if the Registered Balancing Service Provider / Registered Balance Responsible Party does not meet the conditions for the lawful exercise of an electricity activity and/or the conditions for participating in the Balancing Market, or

2) if the Registered Balancing Service Provider / Registered Balance Responsible Party repeatedly breaches its obligations under this Regulation or the Balancing Service Contract / Balance Responsible Party Contract, or

3) if the Registered Balancing Service Provider / Registered Balance Responsible Party breaches its obligations against the Clearing House.

5. In the case of paragraph 4 of this Article, the termination shall be notified in writing with a bailiff and shall come into force and produce its results upon notification.

6. The HETS Operator is required to notify the termination of the Balancing Service Contract / Balance Responsible Party Contract to RAE, to the Power Exchange, the Clearing House, and any other person deemed necessary, as soon as possible.

7. In the event of termination of a Balance Responsible Party Contract, which concerns the representation of one or more Load Representatives, the HETS Operator is required to inform the Last Resort Supplier as soon as possible, so that the respective customers will be transferred to the Last Resort Supplier.

8. The Balancing Service Provider / Balance Responsible Party whose Balancing Service Contract / Balance Responsible Party Contract is terminated, shall continue to be liable against the HETS Operator and the Clearing House, in accordance with the provisions of this Regulation, for liabilities incurred prior to the termination.

Article 25.Article 26. Force Majeure

1. For the purpose of this Rulebook Force majeureMajeure events for the implementation of this Regulation areshall mean all events that affect the performance of obligations arising from this RegulationRulebook, and are beyond the control of the party affected by them and which could not behave been anticipated or prevented, despite the diligence that any prudent party might showhave shown.

2. If any Party (the "Non-Fulfilling Party")party is unable to fulfill any of its obligations under this RegulationRulebook due to a case of Force Majeure events, the fulfillment of mutual claims and obligations arising from the corresponding Balancing Service Contract or the

Balance Responsible Party Contract ~~is~~shall be suspended for the Force Majeure ~~Period~~period.

3. In case of ~~an Event of~~ Force Majeure event, the HETS Operator or ~~a Registered~~the registered Balancing Service Provider / ~~Registered~~registered Balance Responsible Party ~~who~~that invokes ~~an Event of~~ Force Majeure~~, has~~ event, shall have the following obligations:
   a) it ~~is~~shall be required to send to the other ~~Party~~party a notice, as soon as possible, describing the nature of ~~the~~ Force Majeure event and its probable duration, and to continue to give reports with reasonable frequency during the period of Force Majeure event.
   b) it ~~makes~~shall make every possible effort to limit the consequences of ~~the~~ Force Majeure event, as soon as possible, after the ~~event~~occurrence of Force Majeure event,
   c) it ~~cooperates~~shall cooperate with the other ~~Party~~party in ~~order to find~~the interest of finding the best way to continue their activities ~~as far as~~to the extent possible in accordance with this ~~Regulation~~Rulebook.
4. If ~~the~~ Force Majeure continues for a period longer than six (6) months, the HETS Operator or any ~~Registered~~registered Balancing Service Provider / ~~Registered~~registered Balance Responsible Party may~~, with notification to the other Party and for as long as the Force Majeure continues after this six month period,~~ unilaterally ~~terminates~~terminate the Balancing Service Contract or the Balance Responsible Party Contract, respectively~~.~~, by notice to the other party. The termination shall take effect within ten (10) business days ~~after~~ from the date of the notice ~~is given~~ or at any later date specified in the Termination Notice.

~~Article 26.~~Article 27. Notices

1. In addition to communication through the Balancing Market System as described in ~~Article 18~~Article 17 or otherwise specified in this ~~Regulation~~Rulebook, any notice or other communication in the context of or in connection with this ~~Regulation~~Rulebook shall be conducted by personal delivery, or by post, fax or email, and shall be addressed to the representative of the other ~~Party~~party, as ~~it is~~ defined in the Balancing Service Contract / Balance Responsible Party Contract, or as ~~it is~~ notified by the ~~Registered Balancing Service Provider / Registered Balance Responsible Party~~registered Participant.
2. In particular, for ~~the~~any communication concerning (i) the conclusion of the Balancing Service Contract / Balance Responsible Party Contract pursuant to ~~and~~ Article 5, communication shall be conducted by personal delivery only or by post, with proof of receipt, or (ii) ~~its~~the termination thereof, according to ~~Article 24, shall be served~~Article 7, by ~~a~~ bailiff service.
3. All ~~notifications~~notices and other communications, ~~are~~shall be deemed to have been received by the ~~Party~~party they are addressed to, as follows:
   a) in ~~the~~ case of personal delivery or delivery by post, at the time of delivery,
   b) in ~~the~~ case of ~~a~~ fax, at the time indicated on the proof of delivery of the sender's facsimile machine,
   c) in ~~the~~ case of e-mail, at the time ~~of sending~~ the e-mail was sent, indicated on the proof of sending.

4. If a notification or other announcement has been received outside the working hours of a business day, it ~~is~~shall be deemed to have been received at the beginning of the ~~next business day's~~ working hours on the following business day.

~~Article 27.~~Article 28. Transparency – Confidentiality

1. The HETS Operator shall comply with all the rules laid down ~~by~~in the applicable legislation ~~on~~regarding transparency and ~~publication~~disclosure of information ~~for~~with respect to the transactions carried out in the context of the Balancing Market, and, in particular, with the provisions of:
   a) Regulation (EU) 1227/2011 of the European Parliament and of the Council of 25 October 2011 on the integrity and the transparency of the wholesale energy market,
   b) Implementing Commission Regulation (EU) 1348/2014 of 17 December 2014 on the reporting of data for the implementation of Article 8 (2) and (6) of Regulation (EU) 1227/2011 of the European Parliament and of the Council on the integrity and the transparency of the wholesale energy market, and
   c) Commission Regulation (EU)~~c543~~ 543/2013 of 14 June 2013 on submission and publication of data in electricity markets and on amending Annex I to Regulation (EC) 714/2009 of the European Parliament and of the Council,
   d) ~~-~~Commission Regulation (EU) 2017/2195 of 23 November 2017 on establishing a guideline on electricity balancing,
   e) or any other relevant regulatory act or law.
2. The HETS Operator shall provide to third parties, and, in particular, to the ~~Balancing Service Providers / Balance Responsible Parties, at~~Participants, following a reasoned request, information relating to transactions carried out in the framework of the Balancing Market, provided that:
   a) ~~such an~~this act is not contrary to a provision of law,
   b) the information does not constitute commercially sensitive information and its provision does not ~~contain~~entail unfair commercial or competitive advantages to third parties and, in particular, to ~~Registered Balancing Service Providers / Registered Balance Responsible Parties~~the registered Participants and
   c) ~~The~~the third party, including the ~~Registered Balancing Service Providers / Registered Balance Responsible Parties shall be~~registered Participants, is bound by a confidentiality ~~obligation~~clause.
3. General information on the operation of the System as well as information on statistical data is not considered to be confidential.
4. Without prejudice to paragraph 3 of this Article, the HETS Operator and any Registered Balancing Service Provider / Registered Balance Responsible Party ~~who~~that receives confidential information in connection with this ~~Regulation~~Rulebook shall preserve the confidentiality of such information and shall not disclose, report, publish, communicate, transfer or use, directly or indirectly, any part of the confidential information for a purpose other than that for which it was notified to it.
5. Without prejudice to paragraph 3 of this Article, the HETS Operator or the Registered Balancing Service Provider / Registered Balance Responsible Party may disclose confidential information of another party:

a) to the extent provided for in this ~~Regulation~~Rulebook or the Clearing Rulebook for Balancing Market Positions,

b) to the extent required, in order to comply with the applicable national or European legislation as provided for in paragraph 1 of this Article,

c) to the extent required by competent courts or authorities during proceedings before them, in which the addressee participates,

d) if required for the proper fulfillment of its duties and obligations under applicable law and this ~~Regulation~~Rulebook, or

e) if required for the ~~issuance~~issuing of licenses or approvals by the competent authority.

6. Moreover, the obligations arising from this Article shall not apply:

a) if the ~~Party~~party receiving the information can prove that, at the time of disclosure, such information was already publicly available,

b) if the ~~Party~~party receiving the information presents evidence that, ~~from the time of~~since the notification~~,~~ the information has been legally received by a third party or made available to the public,

c) to confidential information disclosed in accordance with legal and regulatory arrangements in an ~~integrated~~aggregated form, from which no information relevant to a particular Market Participant can ~~derive~~be deducted,

d) to information whose publication is explicitly provided for ~~by~~in the present ~~Regulation~~Rulebook.

7. The confidentiality obligations of this Article shall remain in effect for the entire duration and for a period of five (5) years from the termination of the Balancing Service Contract or the Balance Responsible Party Contract.

8. The conclusion of a Balancing Service Contract or Balance Responsible Party Contract and the exchange of confidential information shall not give rise to any right to patents, knowledge or any other form of ~~intellectual property~~copyright in respect of information or tools made available or sent by one ~~Party~~party to another ~~pursuant to~~by virtue of this ~~Regulation~~Rulebook.

~~9. By decision of RAE, upon recommendation by the HETS Operator, a procedure for informing third parties and publishing the monitoring data of the Balancing Market System is standardized, which ensures in a uniform and systematic way the observance of transparency and the safe informing of the public, and also the principle of confidentiality.~~

~~Article 28.~~Article 29. Release and Assignment

The Registered ~~Balancing Service Provider / Registered Balance Responsible Party~~Participant may not release or assign any of the rights or obligations arising from the Balancing Service Contract or the Balance Responsible Party Contract, or this ~~Regulation.~~Rulebook to third parties. In particular, the above persons are allowed to assign the Clearing of Positions they may possess to a Clearing Member with respect to their cash obligations and the corresponding claims arising from such Positions in accordance with the Clearing Rulebook for Balancing Market Positions

~~Article 29.~~Article 30. Applicable law and jurisdiction

1. This ~~Regulation~~Rulebook is governed by and interpreted in accordance with the Greek law.
2. The courts of Athens are competent for resolving any dispute that may arise from or in connection with this ~~Regulation~~Rulebook.

~~Article 30.~~Article 31. Language and Currency

1. If this ~~Regulation~~Rulebook is translated into English, in the event of ~~a~~ discrepancy between the Greek text and the English version, the Greek text ~~prevails~~shall prevail over the English language version.
2. For the purposes of implementation of the provisions of this ~~Regulation~~Rulebook, all amounts ~~are~~shall be in Euros.

~~Article 31.~~Article 32. Waiver

Omission or delay in the exercise of any right, power or judicial remedy, or individual or partial exercise of any such right, power or judicial remedy provided for by law or by this ~~Regulation~~Rulebook, shall not constitute a waiver of this or any ~~such~~other right, power or judicial remedy.

~~Article 32.~~Article 33. ~~Entire~~ Entirety of the agreement

1. This ~~Regulation~~Rulebook, the Balancing Service Contract ~~or~~, the Balance Responsible Party Contract ~~is~~the HETS Grid Code and the HETS Transactions Contract constitute the entire agreement between the HETS Operator and each ~~Registered~~ registrant in the HETS Operator Registry.

~~3.~~ If any provision of this Rulebook or the Balancing Service ~~Provider / Registered~~ Contract or the Balance Responsible Party~~.~~

~~1.~~2. ~~If any provision of this Regulation or the Balancing Service~~ Contract or the ~~Balance Responsible Party~~HETS Grid Code or the HETS Transactions Contract is declared null, unenforceable or unlawful by the competent courts, or according to an arbitration or by order of a competent authority, such nullity, non-enforceability or unlawfulness shall not prejudice or affect the remaining provisions of this ~~Regulation~~Rulebook, the Balancing Service Contract or the Balance Responsible Party Contract or the HETS Grid Code or the HETS Transactions Contract, which shall continue to be in force and have legal effects.

~~Article 33.~~Article 34. Special cases

1. Regarding ~~the~~ Emergency Situations, the provisions of the HETS ~~Operation~~Grid Code and the Natural Gas Emergency Plan shall apply.
2. In the event that the operation of the Balancing Market is impossible, in particular due to an Emergency Situation, or ~~a~~ failure of the Balancing Market System or of the other electronic systems of the HETS Operator, the HETS Operator shall apply the "Rules for Suspension and Restoration of ~~the~~ Market Activities", approved by RAE, upon the recommendation of the HETS Operator according to the provisions of ~~Article~~paragraph 4, article 18 ~~(4)~~ of Law 4425/2016.

SECTION II

INTEGRATED SCHEDULING PROCESS

CHAPTER 7

GENERAL PROVISIONS

~~Article 34.~~Article 35. Scope

This section presents:

1) the exchange of information between~~, on the one hand,~~ the Day-Ahead Market and the ~~Intraday~~Intra-Day Market~~,~~ on the one hand and ~~on the other hand~~ the Balancing Market on the other,
2) the procedure and the conditions for the submission of a Total or Partial Non-Availability Declaration by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent,
3) the procedure for the submission of a Techno-Economic Declaration by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent,
4) the procedure for the submission of ISP Balancing Energy Offers by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent,
5) the procedure for the submission of Balancing Capacity ~~Bids~~Offers by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent, and
6) details on the implementation of the Integrated Scheduling Process (ISP).

~~Article 35.~~Article 36. General Provisions for the Integrated Scheduling Process

1. ISP aims to (a) ~~bind~~commit the ~~short-term necessary~~ Balancing Capacity needed in the short term and (b) to achieve a schedule that meets the technical constraints of the HETS and the Balancing ~~Services~~Service Entities based on ex ante estimation of any ~~system imbalances~~HETS Imbalances.
2. All procedures and actions related to ISP shall refer to a specific Dispatch Day D.
3. The Dispatch Day to which the ISP refers, coincides with the Delivery Day of the Day-Ahead Market and the ~~Intraday~~Intra-Day Market. ~~The~~ Dispatch Day D starts at 01:00 ~~Eastern Europe Time~~EET of calendar day D and ends at 01:00 ~~Eastern Europe Time~~EET of calendar day D +~~-~~1.
4. A Dispatch Day consists of individual Dispatch Periods. The duration of each Dispatch Period is set at half an hour. The first Dispatch Period of Dispatch Day D is 01:00 – 01:30 ~~Eastern European Time~~EET.
5. The ISP is ~~performed in~~executed at three scheduled times:
   a) one (ISP1) which is ~~performed~~executed at 17:~~00 Eastern European Time~~30 EET on calendar day D-1 and covers all Dispatch Periods of Dispatch Day D,

b) one (ISP2) which is ~~performed~~executed at 00:00~~:00 Eastern European Time~~ EET on calendar day D and covers all Dispatch Periods of Dispatch Day D, and

c) one (ISP3) which is ~~performed at 10:30 Eastern European Time~~executed at 12:00 EET on calendar day D and covers the last twenty~~-~~four (24) Dispatch Periods of Dispatch Day D,

6. The HETS Operator may ~~perform~~execute the ~~ISD~~ISP at any time for all or for certain Dispatch Periods ~~("on~~(“ad-hoc ISP~~-demand"),~~"), in ~~case that an~~the event ~~occurs,~~of an occurrence which significantly affects the scheduling of the ~~units~~Balancing Service Entities and the dispatch of the Balancing Capacity. Such events include but are not limited to, significant changes in the ~~Non-Dispatchable~~zonal Load ~~forecast~~Forecast, or ~~the~~zonal RES ~~Portfolio without Market Participation Obligation forecast~~Units Forecast, or the availability of resources, or the ~~system~~HETS conditions.

7. The following products are used in the ISP:

a) upward and downward Balancing Energy without distinction ~~in~~between manual FRR and automatic FRR;

b) the following Balancing Capacity products:

i. Upward and downward FCR,

ii. Upward and downward automatic FRR, and

iii. Upward and downward manual FRR.

8. The submission of the Balancing Capacity ~~Bids~~Offers and the ISP Balancing Energy Offers of the Balancing ~~Services~~Service Providers to ISP, for Dispatch Day D starts at 14:00 ~~Eastern European Time~~EET on calendar day D-1 and ends at ~~16:00 Eastern Europe Time~~17:30 EET on calendar day D-1. During this time period, the Balancing Service Providers may submit Offers for the Balancing Service Entities they represent, as many times as they wish. Only the last validated Offers shall be taken into consideration in the ~~performance~~execution of the ISP.

9. The Deadline for the Submission of ISP Offers is set at ~~16:00.~~ 17:30 EET.

10. The HETS Operator shall draw up a timetable for the activities governing the actions required for the ~~performance~~execution of the ISP ~~that includes~~, which shall include the actions required during ~~the~~ calendar days D and D-1. This timetable ~~is~~shall be published on the website of the HETS Operator.

11. ~~Transfer~~Details on the ISP are provided in the Technical Decision “Integrated Scheduling Process”.

~~Article 36.~~Article 37. Transmission of information to the HETS Operator within the framework of the ISP.

1. The Power Exchange shall ~~transfer~~transmit to the ~~Balancing Market~~HETS Operator, for each Market Time Unit of each Dispatch Day, ~~not~~no later than 15 minutes after the ~~latest Offer Submission Deadline to the~~last Local ~~Intraday Auction~~ Intra-Day Auctions Gate Closure Time or the Complementary Regional ~~Intraday~~Intra-Day Auction or the Continuous ~~Intraday Transactions~~Intra-Day Trading, the following information:

a) The Scheduled Energy Exchanges and the corresponding purchase prices, for each ~~cross~~inter-zonal corridor, as calculated in the results of the Day-Ahead Market and the

~~Intraday~~Intra-Day Market. The ~~scheduled~~Scheduled Energy Exchanges shall be submitted to the HETS Operator in order to calculate any ~~Cross-zonal~~remaining Inter-Zonal Capacity after the solution of the ~~Intraday~~Intra-Day Market.

b) The Market Schedules, i.e. the algebraic sum of the ~~quantities~~energy volumes of the accepted Day-Ahead and ~~Intraday~~Intra-Day Market Orders ~~for each of the following Entities for each~~per Market Time Unit of the Dispatch Day for each of the following Entities:

i. ~~Production~~Dispatchable Generating Units,

~~ii. Production~~Dispatchable Generating Units ~~under commissioning~~ or ~~Test Run,~~

~~iii.~~ii. RES Units ~~under commissioning or Test Run~~in Testing operation,

iii. generating units or RES Units in Commissioning operation,

iv. Dispatchable RES Units Portfolios per Bidding Zone,

v. Non-Dispatchable RES Units Portfolios per Bidding Zone,

vi. ~~Dispatchable~~ Load Portfolios per Bidding Zone,

vii. ~~Non-~~Pumping Load from Dispatchable ~~Load Portfolios per Bidding Zone~~Pumped Storage Hydro Generating Units,

viii. RES Units Portfolio without Market Participation Obligation per Bidding Zone.

c) The Market Schedules related to the HETS Losses per ~~zone~~Bidding Zone, as calculated in the results of the Day-Ahead Market and the ~~Intraday~~Intra-Day Market.

~~2. Details on the transfer of information from the Power Exchange to the HETS Operator are contained in the Technical Decision "Data Exchange with the Power Exchange".~~

~~3.~~2. The Distribution Network Operators shall notify the HETS Operator as soon as possible in case of disconnection:

a) of any component of the Distribution Network that may affect the normal operation of the ~~electricity system~~HETS in real time,

b) of any load connected to the Distribution Network which may affect the ~~Non-Dispatchable~~zonal Load Forecast performed by the HETS Operator in the context of the Balancing Market operation, and

c) of any RES Unit connected to the their Distribution Network, which may affect the ~~Non-Dispatchable~~zonal RES ~~Portfolios~~ Forecast performed by the HETS Operator in the context of the Balancing Market operation.

3. ~~Details on the transfer of information from the~~ The Distribution Network Operators ~~to~~shall immediately notify the HETS Operator ~~are contained in the Technical Decision "Data~~, on justifiable grounds, if they plan to have a load curtailment or any other Network operations that are expected to cause a decrease in load in excess of ten (10) MW at a specific point of connection to the HETS.

4. The Load Representatives that have submitted a Buy Order to the Electricity Markets managed by the Power Exchange are obliged to immediately notify the HETS Operator of any possible changes in the energy volumes that correspond to the load meters they represent. The Load Representatives that have not submitted a Buy Order to the Electricity Markets managed by the Power Exchange for load meters they represent on the Dispatch Day in question, in accordance with the ~~Distribution Network Operators".~~Meter to Load

Representative Correspondence Table as defined in the HETS Grid Code, are obliged to notify the HETS Operator of any possible changes in the total load they expect those load meters to offtake for each Dispatch Period of the Dispatch Day.

5. The RES Producers and~~ / /~~or RES Aggregators representing ~~Non-Dispatchable~~ RES Units Portfolios, shall submit injection forecasts for each Dispatch Period of the Dispatch Day no later than two (2) hours prior to the ~~performance~~execution of each scheduled ISP.

CHAPTER 8

HETS OPERATOR OBLIGATIONS

~~Article 37.~~Article 38. HETS Operator ~~obligations~~Obligations

1. In the framework of the ISP, the HETS Operator ~~prepares~~shall prepare and then ~~publishes~~publish on its website the following forecasts for each Dispatch Period of the Dispatch Day, seven (7) hours before the Expiration of the ~~ISP~~ Submission Deadline for the ISP:
   a) ~~the Non-dispatchable~~The zonal Load ~~Zonal Forecasting~~Forecasts,
   ~~1) the Zonal Forecasting for RES Portfolio without Market Participation Obligation,~~
   b) ~~the Non-dispatchable~~The zonal RES Units ~~Zonal Forecasting~~Forecasts,
   c) the zonal and systemic upward and downward ~~system requirements,~~HETS needs in FCR, automatic FRR, and manual FRR.
2. The above forecasts shall be updated by the HETS Operator and published on its website three (3) hours prior to the ~~performance~~execution of each scheduled ISP.
3. The HETS Operator shall keep records of the data and the parameters used for the above forecasts, as well as the results of ~~these~~such forecasts for each calendar year.
4. The HETS Operator shall not be ~~held responsible~~liable for the accuracy of ~~its~~the forecasts it prepares in the framework of its obligations under this ~~Regulation~~Rulebook.
5. The HETS Operator shall publish statistical data on the accuracy of the above forecasts within two (2) months from the end of each calendar year. The above data ~~are~~shall be communicated to RAE.
6. The HETS Operator shall determine the ~~cross~~inter-zonal transfer capacity between the internal Bidding Zones and identify the imbalances in the import/export schedules in the interconnections for the ~~solution~~execution of the ISP.
7. The HETS Operator ~~performs~~shall publish on its website the ~~ISP, notifies to~~availability of the Dispatchable Generating Units based on the Non-Availability Declarations three (3) hours prior to the execution of each scheduled ISP.
8. The HETS Operator shall calculate the constraints in the maximum daily energy injection from Dispatchable Natural Gas Units for the total of Dispatchable Natural Gas Units or for individual groups of Dispatchable Natural Gas Units after having received the volumes of the maximum daily Natural Gas consumption from DESFA.

~~7.~~9. The HETS Operator shall execute the ISP, it shall notify each Balancing Service Provider of the ISP results ~~of the ISP~~ that ~~relate~~refer to the Balancing ~~Services~~Service Entities it represents and ~~publishes these~~ shall publish the results on its website.

~~Article 38.~~Article 39. ~~Non-dispatchable Load~~ Zonal Load Forecasting

The HETS Operator shall prepare the ~~Non-dispatchable~~zonal Load ~~Zonal Forecasting, taking into account,~~Forecasts for the Dispatch Periods under consideration, taking into account the following information:

a) Historical data of Non-~~dispatchable~~Dispatchable Load Portfolios and ~~statistical data resulting~~statistics deriving from the processing of the historical data, including, but not limited to, the evolution of ~~the~~ load per energy use category,

b) the weather ~~forecasts~~forecast, historical data on load ~~data in~~under similar weather conditions, comparable ~~statistical data~~statistics, as well as the ~~load~~ covariance of load and ~~the~~ weather ~~conditions~~ parameters,

c) events that the HETS Operator ~~knows in advance that will occur~~already anticipates,

d) operations in the HETS and/or the Distribution Network affecting the half-hourly energy offtake ~~in~~at a Transmission Meter, ~~for~~of which the HETS Operator has been informed, and

e) other information collected and ~~communicated~~notified to the HETS Operator.

~~Article 39.~~Article 40. Zonal RES Units Forecasting ~~for RES Portfolio without Market Participation Obligation~~

The HETS Operator shall prepare the ~~Zonal Forecasting for~~zonal RES ~~Portfolio without Market Participation Obligation, taking into account,~~Units Forecasts for the Dispatch Periods under consideration, taking into account the following information:

a) historical data on injections of RES ~~Portfolios without Market Participation Obligation~~Units, as well as ~~statistical data that derive~~statistics deriving from the processing of the historical data,

~~1) weather forecasts (wind speed, sunshine, etc.), historical data of injections of RES Portfolios without Market Participation Obligation in similar weather conditions, comparable statistical data, as well as the covariance of RES injections and weather parameters,~~

~~2) events that the HETS Operator knows in advance that will occur,~~

~~3) other information collected and communicated to the HETS Operator.~~

~~Article 40. Non-dispatchable RES Units Zonal Forecasting~~

~~The HETS Operator shall prepare the Non-dispatchable RES Units Zonal Forecasting, taking into account, for the Dispatch Periods under consideration, the following information:~~

~~1) historical data on injections of Non-dispatchable RES Units, as well as statistical data that derive from the processing of the historical data,~~

b) ~~weather forecasts (wind speed, sunshine, etc.),~~ historical data ~~of~~on injections of ~~Non-dispatchable~~ RES Units ~~Portfolios in~~under similar weather conditions, comparable

~~statistical data~~statistics, as well as the covariance of ~~Non-dispatchable~~ RES Units ~~Portfolios~~ injections and weather parameters,

c) events that the HETS Operator ~~knows in advance that will occur~~already anticipates,

~~2) injection forecasts for each Dispatch Period of the Dispatch Day submitted by RES producers and/or RES Aggregators representing the Non Dispatchable RES Units Portfolios,~~

d) other information collected and ~~communicated~~notified to the HETS Operator.

Article 41. Determination of Zonal/Systemic Balancing Capacity Needs

The HETS Operator ~~determines~~shall determine the ~~Zonal~~zonal and ~~Systemic~~system needs ~~for~~in Balancing Capacity for the (a) ~~ISP~~FCR, (b) automatic FRR and (c) manual FRR, in order to ensure an adequate system response~~/~~ / regulation~~/~~ / reserve within acceptable limits ~~specified~~established in the HETS ~~Operation~~Grid Code, taking into account the particular characteristics of the HETS, as defined in the "Methodology for ~~the~~ Determination of Zonal/Systemic Balancing Capacity Needs", which is approved by RAE upon recommendation by the HETS Operator ~~according to~~in accordance with the provisions of ~~Article~~article 18 (4) of Law 4425/2016.

CHAPTER 9

OBLIGATIONS OF BALANCING ~~SERVICES~~SERVICE PROVIDERS

Article 42. General Obligations of Balancing ~~Services~~Service Providers

1. ~~The~~ Balancing ~~Services~~Service Providers ~~who represent Production~~ representing Dispatchable Generating Units have the obligation to submit to the HETS Operator:
   a) ISP Balancing Energy Offers,
   b) Balancing Capacity ~~Bids~~Offers,
   ~~a) Techno-Economic Declarations,~~
   c) Techno-Economic Declarations,
   ~~c)~~d) Non-Availability Declarations ~~in case of non-availability~~ and
   ~~d)~~e) Major Outage Declarations ~~of Maximum Continuous Generating Capability~~.
2. ~~The~~ Balancing ~~Services~~Service Providers representing Dispatchable RES Units Portfolios or Dispatchable Load Portfolios are entitled to submit to the HETS Operator:
   a) ISP Balancing Energy Offers and
   b) Balancing Capacity ~~Bids~~Offers.
3. In ~~the event~~case that the Balancing ~~Services~~Service Providers representing Dispatchable RES Units Portfolios or Dispatchable Load Portfolios do submit to the HETS Operator ISP Balancing Energy Offers and/or Balancing Capacity ~~Bids~~Offers, they are required to submit for ~~this~~that particular Dispatch Day:
   a) Techno-Economic Declarations,

~~1) Techno-Economic Declarations, and~~

b) Non-~~Availability Declarations in case of non-~~availability Declarations and

c) Major Outage Declarations.

4. The Balancing ~~Services~~Service Providers representing Balancing ~~Services~~Service Entities in ~~test run~~ Testing operation are required to submit to the HETS Operator ~~Declarations of~~ Operation Schedule Declarations for the Units in ~~a test mode.~~Testing operation.

5. The Balancing ~~Services~~Service Providers representing ~~Production~~generating units / RES Units in ~~commissioning~~ Commissioning operation or ~~Test Run and RES Producers representing~~ Dispatchable Generating Units / RES Units in ~~commissioning or Test Run have the right~~Testing operation are entitled to submit to the HETS Operator updated ~~commissioning or Test Run Schedules~~ Commissioning or Testing operation schedules for their ~~units~~Units, for each Dispatch Period of the Dispatch Day ~~at the latest~~, no later than one (1) hour prior to the ~~performance~~execution of the ISP. The imbalances arising between the updated schedules and the Market Schedule for these ~~units are integrated~~Units shall be incorporated into the ~~imbalance of the system~~HETS Imbalance.

6. The Balancing ~~Services~~Service Providers ~~who represent Hydroelectric Production~~representing Dispatchable Hydro Generating Units have the obligation to submit to the HETS Operator ~~Declarations of Water~~Hydro Resources ~~Obligatory Injections~~Management Declarations in accordance with CHAPTER 5 of this Rulebook.

~~7.~~ The ~~Dispatchable Natural Gas Units~~Balancing Service Providers representing Dispatchable Hydro Generating Units shall submit, if required, to the HETS Operator~~, Declarations of Maximum Daily Energy Injection Constrain in accordance with Article 33 of this Regulation.~~

~~8.~~7. ~~The Dispatchable Hydroelectric Units Providers submit, if required, to the HETS Operator~~ Declarations of Maximum Daily Energy Injection ~~Constrain~~Constraint in accordance with ~~Article 33~~CHAPTER 5 of this ~~Regulation~~Rulebook. The Regulatory Authority for Energy, exercising its powers, ~~inspects~~shall check the above declarations.

Article 43. Available Capacity

1. Available Capacity means the Capacity of the Balancing Service Entity deriving from the Techno-Economic Declaration decreased by any non-available capacity which is declared as set out in this Chapter.

2. The Available Capacity of Dispatchable Generating Units is used in the ISP and the Balancing Energy Market.

3. Minimum Available Capacity means the Technically Minimum Generation, as modified by the Balancing Service Entity.

4. Maximum Available Capacity means the Maximum Net Capacity, as modified on the basis of the Non-Availability Declarations and the Major Outage Declarations by the Balancing Service Entity. In case of Total Non-Availability, Maximum Available Capacity is zero. In case of Partial Non-Availability, Maximum Available Capacity is modified on the basis of the Non-Availability Declaration.

Article 44. Techno-Economic Declarations

1. Balancing Service Providers representing Dispatchable Generating Units, Dispatchable Load Portfolios or Dispatchable RES Units Portfolios and having this obligation pursuant to Article 42 of this Rulebook, shall submit to the HETS Operator, separate Techno-Economic Declarations for each Balancing Service Entity they represent.
2. Balancing Service Providers representing Dispatchable Generating Units with Alternative Fuel are required to submit separate Techno-Economic Declarations for the operation both with the primary and the alternative fuel.
3. The Producers representing Dispatchable Multi-Shaft Combined Cycle Generating Units are additionally required to submit separate Techno-Economic Declarations for all possible configurations (combinations of gas turbine and steam turbine operation) of their Dispatchable Generating Units.
4. The Techno-Economic Declarations shall include the data of the following tables. The financial data of the Techno-Economic Declaration must reflect the actual operating costs of the Balancing Service Entities.

<table>
<tr><th colspan="6">A. Technical parameters</th></tr>
<tr><td colspan="3">Description</td><td>Numerical value</td><td colspan="2">Unit of measurement</td></tr>
<tr><td colspan="3">Maximum daily energy injection</td><td></td><td colspan="2">MWh</td></tr>
<tr><td colspan="6">B. Variable Cost Parameters for Dispatchable Thermal Generating Units</td></tr>
<tr><td colspan="2" rowspan="3">Fuel cost by fuel type</td><td>Fuel A</td><td></td><td colspan="2" rowspan="3">€/unit of quantitative measurement</td></tr>
<tr><td>Fuel B</td><td></td></tr>
<tr><td>Fuel C</td><td></td></tr>
<tr><td colspan="2" rowspan="3">Lower Heating Value of Fuel by fuel type</td><td>Fuel A</td><td></td><td colspan="2" rowspan="3">GJ/unit of quantitative measurement</td></tr>
<tr><td>Fuel B</td><td></td></tr>
<tr><td>Fuel C</td><td></td></tr>
<tr><td colspan="2" rowspan="11">Percentage composition of fuels on each capacity interval of the Specific Heat Consumption function.</td><td>Net Generation Level (MW)</td><td>Fuel A (%)</td><td>Fuel B (%)</td><td>Fuel C (%)</td></tr>
<tr><td>1.</td><td></td><td></td><td></td></tr>
<tr><td>2.</td><td></td><td></td><td></td></tr>
<tr><td>3.</td><td></td><td></td><td></td></tr>
<tr><td>4.</td><td></td><td></td><td></td></tr>
<tr><td>5.</td><td></td><td></td><td></td></tr>
<tr><td>6.</td><td></td><td></td><td></td></tr>
<tr><td>7.</td><td></td><td></td><td></td></tr>
<tr><td>8.</td><td></td><td></td><td></td></tr>
<tr><td>9.</td><td></td><td></td><td></td></tr>
<tr><td>10.</td><td></td><td></td><td></td></tr>
<tr><td colspan="2">Average Special cost of raw materials besides fuel for all capacity intervals</td><td colspan="2">Net Generation Level (MW)</td><td colspan="2">Cost (euro/MWh)</td></tr>
</table>

of the Specific Heat Consumption function.		
Average Special cost of additional maintenance costs due to operation, (excluding fixed maintenance costs) for all capacity intervals of the Specific Heat Consumption function.	**Net Generation Level (MW)**	**Cost (euro/MWh)**
Average special cost of CO^2 emissions for all capacity intervals of the Specific Heat Consumption function.	**Net Generation Level (MW)**	**Cost (euro/MWh)**

5. The fuel cost referred to in the Techno-Economic Declarations corresponds to all costs incurred by the Balancing Service Provider for the supply of fuel irrespective of the type of individual cost factors. The cost per one unit of fuel quantity shall be calculated as if the fuel was supplied to the Balancing Service Provider by an independent third party at a uniform fuel price for each unit of fuel quantity. In case that fuel cost cannot be evidenced by documents, it shall be calculated as the ratio between the total expenses or the total cost for fuel supply, as recorded over a reasonable period of time, and the total quantity of fuel supplied to the Balancing Service Provider for the Dispatchable Generating Unit over the same period of time.
6. A Techno-Economic Declaration submitted for a Dispatchable Auto-producer Unit, shall refer only to the part of Unit Capacity that corresponds to the Registered Capacity of the Unit, as defined in the Balancing Market Generating Units Registry.
7. By the end of week W+1, the HETS Operator shall send to RAE the minimum variable cost of power generation incurred by the Dispatchable Thermal Generating Units for each day of Settlement Week W. The cost for each Dispatchable Thermal Generating Unit is calculated based on the data in the above table as set out in the "Variable Cost Parameters for Thermal Production Units Calculation Methodology".

Article 45. Techno-Economic Declaration Submission Procedure

1. Techno-Economic Declarations shall be submitted for each Dispatch Day, within the Deadline for Submission of the ISP Offers. During that period, Balancing Service Providers may submit Declarations for the Balancing Service Entities they represent as many times as they wish. Only the last validated Declarations shall be taken into consideration in the execution of the ISP.

~~Article 43.~~ The Techno-Economic Declaration may refer to one or more Dispatch Days. ~~Maximum Continuous Generation Capability~~

~~1. The Maximum Continuous Generation Capability of the Production Units is defined for each Dispatch Period as the maximum generation capacity that may be supplied by the Production Unit during the Dispatch Period, taking into account at least the following:~~

~~1) capacity deduction due to aging of the equipment,~~

2) operation under conditions other than those under which the Registered Capacity was measured,

3) level of hydroelectric units reservoirs,

4) fuel availability.

2. The Maximum Continuous Generation Capability of the Production Units for each Dispatch Period is calculated by the respective Balancing Service Provider according to the calculation rules included in the "Maximum Continuous Generation Capacity Calculation Methodology", which is approved by RAE upon recommendation by the HETS Operator according to the provisions of Article 18 (4) of Law 4425/2016.

3. The Balancing Services Providers are required to declare for each Dispatch Day the Maximum Continuous Generation Capacity of the Production Units they represent per Dispatch Period no later than two (2) hours prior to the Expiration of the Bidding Submission Deadline. If the Maximum Continuous Generation Capacity is not declared, it is considered equal to the Registered Capacity, as recorded in the Balancing Market Production Units Register.

4. Fifteen (15) days after the end of each calendar month the Balancing Services Providers are required to send to the HETS Operator and to RAE a detailed calculation of the Maximum Continuous Generation Capacity of the Production Units they represent for each day of the previous month in accordance with the "Maximum Continuous Generation Capacity Calculation Methodology". RAE may impose sanctions if it finds that the Maximum Continuous Generation Capacity declarations of the Production Units are significantly different from the actual Maximum Continuous Generation Capacity.

Article 44. Submission of Non-availability Declarations

2. The Balancing ServicesA more recent Techno-Economic Declaration shall replace the one preceding it, provided it is submitted in accordance with paragraph 1 of this Article.

3. Declarations submitted to the ISP shall be taken into consideration for the execution of ISP1, ISP2 and ISP3, as well as for any ad-hoc ISP. Any submission of a Techno-Economic Declaration after the Expiration of the Deadline for Submission of ISP Offers (for the first Dispatch Day to which the Declaration refers) shall not be accepted.

Article 46. Acceptance and Rejection of the Techno-Economic Declaration by the HETS Operator

The HETS Operator shall accept the Techno-Economic Declarations provided that they have been submitted in time and comply with the requirements set out in Article 44 and Article 45 of this Rulebook. In the event that a Techno-Economic Declaration does not meet the above requirements, the last legally submitted Declaration for the corresponding Dispatch Day shall apply.

Article 47. Non-Availability Declarations

1. The Balancing Service Provider is required to submit directly to the HETS Operator a Declaration of Total or Partial Non-availabilityAvailability for each ProductionDispatchable Generating Unit or Dispatchable RES Units Portfolio or Dispatchable Load Portfolio that it represents and for which it has a correspondingthat obligation according to Article 42Article 42 of this RegulationRulebook for each Dispatch

Day ~~where there is~~on which the Balancing Service Entity has a reduced Available Capacity~~.~~ in comparison to the one arising out of the Declared Characteristics. Reduced Available Capacity may occur in ~~the event~~case of ~~a~~ failure ~~due to~~for technical reasons, related to the operation or the safety of its facilities, or for other reasons, ~~reasons~~ which make it impossible to generate electricity and/or provide Balancing Services at the level of ~~the~~ Maximum ~~Continuous Generation~~Net Capacity.

2. The Producers representing Dispatchable ~~Alternate~~Units with Alternative Fuel ~~Units~~ are required to submit separate Non-Availability Declarations for the operation of their Dispatchable Generating Units ~~with~~ both with the primary and the alternative fuel.

~~1.~~3. The Producers representing Dispatchable ~~Multiple Axis~~Multi-Shaft Combined Cycle Generating Units are ~~required~~obliged to submit separate Non-Availability Declarations for each ~~operation layout~~configuration of their Dispatchable Generating Units.

~~2.~~4. The Total or Partial Non-~~availability~~Availability Declarations shall include at least the following:

α) the Dispatch Periods within ~~the~~a Dispatch Day or the Dispatch Days ~~for which~~when non-availability is expected to occur,

β) the Non-~~available~~Available Capacity for each Dispatch Period of the Dispatch Day or ~~the~~ Dispatch Days, and

γ) ~~a~~a detailed technical description of the reasons for the total or ~~the~~ partial non-availability.

~~3.~~5. Without prejudice to the provisions of ~~Article 46~~Article 49 hereof, Non-Availability Declarations shall remain in effect for all the Dispatch Periods to which they refer, unless they are revoked or amended by the Balancing ~~Services~~Service Providers ~~who~~that submitted them.

~~Article 45.~~Article 48. Major Outage Declaration ~~of Major Breakdown~~

1. The Balancing Service Provider is required to submit directly to the HETS Operator a Major ~~Breakdown~~Outage Declaration for each ~~Production~~Dispatchable Generating Unit or Dispatchable RES ~~Unit~~ Units Portfolio or Dispatchable Load Portfolio ~~that~~ it represents and for which it has ~~a corresponding~~that obligation under ~~Article 42~~Article 42 of this ~~Regulation~~Rulebook, for each Dispatch Day on which the inability exists, if the respective Balancing ~~Services~~Service Entity is unable to operate for technical reasons, for a period that is expected to exceed a continuous period of ten (10) days~~, for each Dispatch Day during which the inability exists.~~ in periods of high-demand (from 15th June to 15th August and from 10th December to 31st January) and two months for the remainder of the year.

2. The Producers representing Dispatchable ~~Alternate~~Generating Units with Alternative Fuel ~~Units~~ are required to submit separate ~~Non-Availability~~Major Outage Declarations for the operation of their Dispatchable Generating Units ~~with~~ both with the primary and the alternative fuel.

~~1.~~3. The Producers representing Dispatchable ~~Multiple Axis~~Multi-Shaft Combined Cycle Generating Units are ~~required~~obliged to submit separate Major ~~Breakdown~~Outage Declarations for each ~~operation layout~~configuration of their Dispatchable Generating Units.

~~2.~~4. The Major ~~Breakdown~~Outage Declarations shall include at least the following:

α) the Dispatch Days ~~for~~on which the ~~inability~~failure is expected to occur

β) ~~a~~a detailed technical description of the causes of the ~~inability~~failure and the expected recovery time.

~~3.~~5. Major ~~Breakdown~~Outage Declarations shall remain in effect for all the Dispatch Periods to which they refer, unless they are revoked or amended by the Balancing ~~Services~~Service Providers ~~who~~that submitted them.

~~Article 46.~~Article 49. Acceptance and Rejection of Non-Availability Declarations and Major ~~Breakdown~~Outage Declarations

1. The HETS Operator ~~accepts~~shall accept the submitted Non-Availability or Major ~~Breakdown~~Outage Declarations provided they meet the conditions of this Chapter. In ~~the event that~~case the submitted Declarations do not meet the conditions of this Chapter, the ~~Declaration~~Declarations shall not be ~~rejected~~accepted by a reasoned decision of the Operator, which shall be ~~communicated~~notified to the Balancing Service Provider and to RAE.
2. The Balancing Service Provider ~~shall have the right~~is entitled to object to the decision of the HETS Operator within five (5) days from the notification of the decision. The HETS Operator shall issue a final reasoned decision on ~~this~~the objection within five (5) days from the notification of the objection. If no decision is issued within ~~this~~that period, the objection shall be ~~taken into consideration implicitly~~considered to have been tacitly rejected.
3. In ~~the event that~~case the Partial Non-~~availability~~Availability Declaration or the Total Non-~~availability~~Availability Declaration or the Major Outage Declaration for a Dispatch Period is rejected, the Available Capacity of the ~~Production~~ Dispatchable Generating Unit shall be equal to ~~the~~ Maximum ~~Continuous Generation Capability~~Available Capacity.

~~Article 47.Article 1. Available Capacity~~

~~1. Available Capacity means the Capacity of the Balancing Service Entity resulting based on the Techno-Economic Declaration and the Declaration of Maximum Continuous Capability of Production Units decreased by any non-available capacity, that is declared according to this Chapter.~~

~~The Available Capacity of the Production Units is used in the ISP and in the~~

CHAPTER 10

BALANCING CAPACITY OFFERS TO THE ISP

Article 50. Submission of Balancing Capacity Offers to the ISP

~~2.~~ Balancing ~~Energy Market.~~

~~Article 48. Techno-Economic Declarations~~

~~1. The Balancing Service Providers representing Production Units, Dispatchable Load Portfolios and Dispatchable RES Units Portfolios and having a corresponding obligation pursuant to Article 42 of this Regulation, shall submit to the HETS Operator, separate~~

~~Techno-Economic Declarations for each Balancing Service Entity they~~ Capacity Offers represent~~.~~

~~2. Producers representing Dispatchable Alternate Fuel Units are required to submit separate Techno-Economic Declarations for the operation with both the primary and the alternative fuel.~~

~~3. The Producers representing Multi-Axis Combined Cycle Production Units are additionally required to submit separate Techno-Economic Declarations for all possible operation layouts (combinations of gas turbine and steam turbine operation) of their Production Units. They are also required to submit, in the context of the Techno-Economic Declarations, the time intervals and the capacity steps required for the transition between the various operation layouts.~~

~~4. The Producers representing Dispatchable Hydroelectric Units with pumping ability are required to submit separate Techno-Economic Declarations for the production and the pumping.~~

~~Article 49. Content of the Techno-Economic Declarations~~

~~1. The Techno-Economic Declarations include the data of the following tables. The Technical Data of the Techno-Economic Declarations must be in accordance with the actual operating technical information for each Balancing Service Entity. The financial data of the Techno-Economic Declaration must reflect the actual operating costs of the Balancing Services Entities.~~

~~A. Technical parameters~~		
~~A1. Technical Operating Characteristics of the Balancing Service Entity~~		
~~Description~~	~~Numeric value~~	~~Measurement unit~~
~~Minimum additional time added to the time for the synchronization in case of recall from total non-availability condition~~		~~half hours~~
~~Maximum daily energy injection~~		~~MWh~~
~~A2. Technical Data of Balancing Services Entity for Balancing Energy and Balancing Capacity~~		
~~Technical capability to Provide Balancing Capacity for Upward Frequency Containment Reserve~~		~~MW~~
~~Technical capability to Provide Balancing Capacity for Downward Frequency Containment Reserve~~		~~MW~~
~~Maximum Load under Automatic Generation Control (AGC) (for providing automatic FRR)~~		~~MW~~
~~Minimum Load under Automatic Generation Control (AGC) (for providing automatic FRR)~~		~~MW~~

~~Rate of change of generation/demand for the provision of manual FRR~~			~~MW/min~~
~~Rate of change of generation/demand under Automatic Generation Control (AGC)~~			~~MW/min~~
~~A3. Technical data of Dispatchable Load Portfolios~~			
~~Minimum and maximum delivery period for the supply of Balancing Energy~~			~~half hours~~
~~Minimum base load period~~			~~half hours~~
~~Maximum frequency of activations for the supply of Balancing Energy during a day~~			~~times/day~~
~~B. Variable Cost Parameters for Thermal Production Units~~			
~~Fuel cost per fuel type~~	~~Fuel A~~		~~€/quantitative measurement unit~~
	~~Fuel B~~		
	~~Fuel C~~		
~~Lower fuel calorific power per fuel type~~	~~Fuel A~~		~~GJ/quantitative measurement unit~~
	~~Fuel B~~		
	~~Fuel C~~		

~~Percentage composition of fuels on each capacity point of the Specific Heat Consumption formula.~~	**~~Net Production Level (MW)~~**	**~~Fuel A (%)~~**	**~~Fuel B (%)~~**	**~~Fuel C (%)~~**

~~Average specific cost of raw materials besides fuel for all capacity levels of the Specific Heat Consumption formula.~~	~~**Net Production Level (MW)**~~		~~**Cost (euro/MWh)**~~	
~~Average specific cost of additional maintenance costs due to operation, (excluding fixed maintenance costs) for all capacity levels of the Specific Heat Consumption formula.~~	~~**Net Production Level (MW)**~~		~~**Cost (euro/MWh)**~~	
~~Average specific cost of additional labor costs due to fixed operational costs, (excluding fixed labor costs) for all capacity levels of the Specific Heat Consumption formula.~~	~~**Net Production Level (MW)**~~		~~**Cost (euro/MWh)**~~	

~~2. The Table is completed as follows:~~

~~1) For each Production Unit, the Techno-Economic Declaration must contain all the items listed in Table A above, except for Part A3.~~

~~2) For each Dispatchable RES Units Portfolio, the Techno-Economic Declaration must contain only parts A1 and A2.~~

~~3) For each Dispatchable Load Portfolio, the Techno-Economic Declaration must contain only parts A1, A2 and A3.~~

~~3. The information listed in part A2 of the Techno-Economic Declaration must comply with the specific design and performance specifications for thermal and hydroelectric units in accordance with the HETS Operation Code. This information may deviate from the specifications only if an exemption from these specifications has been granted in advance in accordance with the HETS Operation Code, and only for the period for which the exemption applies.~~

~~4. The fuel cost referred to in the Techno-Economic Declarations corresponds to all costs incurred by the Producer for the supply of fuel irrespective of the type of the individual cost factors. The cost per unit of the fuel quantity is calculated as if the fuel was supplied to the Producer by an independent third party with a uniform fuel price for each unit of the fuel quantity. In the case that the fuel cost cannot be evidenced by documents, it is calculated as the ratio of the total expenses or the total cost for fuel supply, as recorded over a reasonable period of time, divided by the total quantity of fuel supplied to the Producer for the Production Unit over the same period of time.~~

5. The HETS Operator shall send to RAE by the end of the following month the minimum variable production cost for the thermal Production Units for each day of the previous month. The cost for each Production Unit is calculated based on the data in the above table as set out in the "Methodology of Calculation of Variable Cost of Thermal Production Units".

6. Techno-Economic Declaration submitted for Dispatchable Autoproducer Unit, concerning only the part of the Unit capacity that corresponds to the Registered Capacity of the Unit, as defined in the Production Units Register.

7. Declared Unit Characteristics means the characteristics specified as a combination of the following technical and functional elements of the Balancing Services Entity that constitute the actual technical capabilities of the Balancing Services Entity for a specific Dispatch Period and Day:

   1) Registered Operating Characteristics,

   2) Techno-Economic Declaration, and

   3) Declaration of Maximum Continuous Generating Capability

   4) Non-availability declaration (total or partial), as applicable

   5) Declaration of Major Breakdown.

Article 50. Techno-Economic Declaration Submission Procedure

1. The Techno-Economic Declaration is submitted for each Dispatch Day within the Deadline for Submission of ISP Offers. During this time period, Balancing Service Providers may submit Declarations for the Balancing Service Entities they represent as many times as they wish. Only the last validated Declarations shall be taken into consideration in the performance of the ISP.

2. The Techno-Economic Declaration may refer to one or more Dispatch Days. A more recent Techno-Economic Declaration, if submitted in accordance with paragraph 1 of this Article, shall replace the previous one.

3. Declarations submitted to ISP shall be taken into consideration for the performance of ISP1, ISP2 and ISP3, as well as for any requested ISP. The submission of the Techno-Economic Declaration after the Expiration of the Deadline for Submission of ISP Offers (for the first Dispatch Day to which the Declaration refers) is not acceptable.

Article 51. Acceptance and Rejection of the Techno - Economic Declaration by the HETS Operator.

The HETS Operator shall accept the Techno - Economic Declarations provided they have been submitted in time and they comply with the requirements set out in Articles 48 to Article 50 of this Regulation. In the event that a Techno – Economic Declaration does not meet the above requirements, the last legally submitted Declaration regarding the corresponding Dispatch Day shall apply. In the event that no legal declaration exists for a Balancing Service Entity, the HETS Operator shall consider the Registered Characteristics of the Balancing Service Entity as its Declared Characteristics.

~~CHAPTER 10~~

~~ISP Balancing Capacity Bids~~

~~Article 52. Submission of ISP Balancing Capacity Bids~~

1. ~~The Balancing Capacity Bids correspond to~~ the intention to provide reserves for the Balancing Capacity products referred to in ~~Article 35 (7) of this Regulation~~Article 36, paragraph 7 of this Rulebook:
   a) Upward and downward FCR,
   b) Upward and downward automatic FRR, and
   c) Upward and downward manual FRR.
2. The Balancing ~~Services~~Service Providers representing ~~Production~~Dispatchable Generating Units ~~of~~ that are registered in the Balancing Market ~~Production~~Generating Units ~~Register~~Registry are ~~required~~obliged to submit to the ISP, for each Balancing Capacity product ~~to the ISP~~:
   a) an upward Balancing Capacity ~~Bid~~Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total upward ~~quantity of~~ Balancing Capacity ~~according~~quantity that corresponds to ~~its~~the Registered ~~Operating~~ Characteristics, and
   b) a downward Balancing Capacity ~~Bid~~Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total downward ~~quantity of~~ Balancing Capacity ~~according~~quantity that corresponds to ~~its~~the Registered ~~Operating~~ Characteristics.

~~3. Producers representing Dispatchable Alternate Fuel Units are required to submit separate Balancing Capacity Bids for the operation with both the primary and the alternative fuel.~~

3. The Producers representing Dispatchable ~~Hydroelectric~~Generating Units with ~~pumping ability~~Alternative Fuel are ~~required~~obliged to submit separate Balancing Capacity Offers for the operation both with the primary and the alternative fuel.
4. The Producers representing pumped storage Dispatchable hydro Generating Units are obliged to submit separate Balancing Capacity ~~Bids~~Offers for ~~the production~~generation and ~~the~~ pumping. The submission of Balancing Capacity ~~Bids~~Offers for the pumping operation is not obligatory.
5. The Producers representing Dispatchable ~~Multiple Axis~~Multi-Shaft Combined Cycle Generating Units are required to submit separate Balancing Capacity ~~Bids~~Offers for each ~~operation layout~~configuration of their Units.

~~6. Balancing Services Providers are not required to submit upward and downward Balancing Capacity Bids in accordance with paragraph 2 of this Article for the Balancing Services Entities that they represent, only in the following cases:~~

~~1) for the period during which the Balancing Services Entity is in Scheduled Maintenance, in accordance with the HETS Operation Code, and~~

~~2) for the period of validity of the corresponding Total Non-availability Declaration or the Major Breakdown Declaration of the Balancing Services Entity.~~

~~7.~~6. The Balancing ~~Services~~Service Providers representing Dispatchable RES Units Portfolios are entitled to submit to the ISP:

a) an upward Balancing Capacity ~~Bid~~Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total upward Balancing Capacity quantity ~~of Balancing Capacity according~~that corresponds to ~~its~~the Registered ~~Operating~~ Characteristics (Maximum contribution to FCR, Maximum contribution to automatic FRR, Maximum contribution to manual FRR), and

b) a downward Balancing Capacity ~~Bid~~Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total downward ~~quantity of~~ Balancing Capacity ~~according~~quantity that corresponds to ~~its~~the Registered ~~Operating~~ Characteristics~~.~~ (Maximum contribution to FCR, Maximum contribution to automatic FRR, Maximum contribution to manual FRR).

7. ~~Self-supplying Customers and~~The Balancing Service Providers representing Dispatchable Load Portfolios~~, have the right to submit upward and downward Balancing Capacity Bids for a maximum quantity equal to the full technical ability to provide~~ are entitled to submit to the ISP:

a) an upward ~~and downward Balancing Energy.~~Balancing Capacity Offer per Balancing Service Entity for each Dispatch Period of the Dispatch Day, for a total quantity which shall be no higher than the total technical capacity to provide upward Balancing Capacity, and

b) ~~Offers~~a downward Balancing Capacity Offer per Balancing Service Entity for each Dispatch Period of the Dispatch Day for a total quantity which is no higher than the total technical capacity to provide downward Balancing Capacity.

8. The offers submitted to the ISP shall be taken into consideration for the ~~performance~~execution of ISP1, ISP2 and ISP3, as well as for any ~~requested~~ad-hoc ISP. ~~Re~~A re-submission of Offers before ISP2 and ISP3 or for any ~~requested~~ad-hoc ISP is not allowed.

Article 51. Content of the Balancing Capacity Offers

~~Article 53. The~~ Balancing Capacity ~~Bids~~

1. ~~The Balancing Capacity Bids~~Offers for each Balancing ~~Services~~Service Entity and for each Dispatch Period shall consist of individual steps ~~for~~and shall refer to all types of Balancing Capacity ~~Types~~ for which their Balancing ~~Services~~Service Entities have the ~~corresponding~~required technical capacity ~~based on~~as per their Registered Characteristics. Each step ~~contains a offer price in €/MW to two (2) decimal places and a non-negative price corresponding to the Balancing Capacity in MW to three (3) decimal places. The offer price in €/MW corresponds to each of the Dispatch Period Imbalance Settlement Period.~~

1. ~~The upward Balancing Capacity Bid includes up to ten (10) steps. The~~ shall contain the price of the Balancing Capacity ~~Bid that corresponds to each of the successive steps~~Offer in €/MW, accurate to two (2) decimal places, and the quantity of the Balancing Capacity Offer in MW, accurate to one (1) decimal place. The minimum quantity of the Balancing Capacity Offer shall be equal to one (1) MW.

2. The upward Balancing Capacity Offer shall include between one (1) and ten (10) steps. The Balancing Capacity Offer price for each successive step may not be reduced in relation to the price of the Offer for the preceding step.

2.3. The downward Balancing Capacity Offer shall include between one (1) and ten (10) steps. The Balancing Capacity Offer price for each successive step may not be reduced in relation to the offer price of the previousOffer for the preceding step.

3. The downward Balancing Capacity Bid includes up to ten (10) steps. The price of the Balancing Capacity Bid that corresponds to each of the successive steps may not be reduced in relation to the offer price of the previous step.

4. The Balancing Capacity quantities are expressed in MW, to one (1) decimal place.

5.4. In the stepwise Balancing Capacity Bids in stepsOffers of the Dispatchable Load Portfolios, the Balancing ServicesService Providers have the rightare entitled to include a specific quantity of Balancing Capacity per step, which is offered as a single setwhole and can, therefore, either be accepted in its entirety or rejected in its entirety by the ISP.

6.5. The Balancing Capacity BidsOffers for each Dispatch Period of athe Dispatch Day areshall be submitted separately for upward and downward FCR balancing capacity, Balancing Capacity, for upward and downward automatic FRR Balancing Capacity and for upward and downward automatic FRR balancing capacity and for upward and downward manual FRR balancing capacity.manual FRR Balancing Capacity. The price for each step of the above offers isshall be greater than zeroor equal to the Balancing Capacity Offer Minimum Price and less than or equal to the Administratively Defined Balancing Capacity Bid CapMaximum Price for each type of reserve. These capacity prices are The above Balancing Capacity Offer Prices shall be submitted in €/MW per hour per Dispatch Period, and shall be accurate to two (2) decimal places.

7.6. The numerical values of the Administratively Defined Balancing Capacity Bid CapOffer Minimum Price and the Balancing Capacity Offer Maximum Price are determined by decisionspecified in the Technical Decision of RAE upon recommendation by the HETS Operator. "Technical limits on bidding and clearing prices". This decisionTechnical Decision shall be madeissued at least two (2) months beforeprior to the date of applicationenforcement of the new values of the above mentioned limits.

Article 54.Article 52. Amendment and Acceptance of the Balancing Capacity BidsOffers

1. In the event that thea Balancing Capacity BidOffer is not submitted in accordance with Article 52Article 50 and Article 53Article 51, the Balancing Capacity BidOffer for all Dispatch Periods of the Dispatch Day shall be automatically rejected by the Balancing Market System. In thisthat case, the reasongrounds for the rejection isshall be notified to the Balancing ServicesService Providers through the Balancing Market System. The Balancing Service Provider may re-submit a Balancing Capacity BidOffer until the Expiration of the ISP Offer Deadline for the Submission Deadline.of ISP Offers. If the Balancing Capacity BidOffer is submitted in accordance with Article 52Article 50 and Article 53Article 51, the Balancing Capacity BidOffer shall be validated. Only Validatedthe last validated Balancing Capacity BidsOffers shall be taken into consideration for the performanceexecution of the ISP.

2. After the Expiration of the ISP Offer Deadline for the Submission Deadlineof ISP Offers, the Balancing Capacity BidsOffers cannot be modified and areshall be used as they are for the solution of ISP1, ISP2 and ISP3.

~~Article 55.~~Article 53. Consequences of ~~not submitting~~non-submission of Balancing Capacity ~~Bids~~Offers

1. In ~~the event~~case of non-submission or non-acceptance of Balancing Capacity ~~Bids~~Offers for a Dispatch Day ~~by~~ in connection with a Balancing Service Provider ~~who~~that is ~~required~~obliged to submit a ~~Reserve~~Balancing Capacity Offer in accordance with ~~Article 52~~Article 50, the HETS Operator shall impose on ~~it~~such Provider a Non-~~-~~Compliance Charge for that Dispatch Day, as described in ~~CHAPTER 21~~CHAPTER 21.
2. ~~In addition to~~Apart from imposing the Non-Compliance Charge referred to in paragraph 1 of this Article, the Balancing Market System shall automatically ~~generates~~create Balancing Capacity ~~Bids~~Offers for ~~each~~the respective ~~Production~~Dispatchable Generating Unit and for all Dispatch Periods of the Dispatch Day, ~~setting reserve~~establishing prices equal to the corresponding prices included in the last validated Balancing Capacity ~~Bid on~~Offer of the previous day. The Offers ~~generated~~which are created automatically by the Balancing Market System ~~are~~shall be considered as having been submitted by the Participant and ~~bring~~shall produce all the results provided for in this ~~Regulation~~Rulebook, as if these Offers had been submitted by the Participant.

CHAPTER 11

BALANCING ENERGY OFFERS TO THE ISP

~~Article 56.~~Article 54. Submission of Balancing Energy Offers to the ISP

~~Article 57. Submission of ISP Balancing Energy Offers~~

1. ~~The~~An ISP Balancing Energy Offer corresponds to the intention to provide ~~an~~ upward or downward Balancing Energy in relation to the Market Schedule ~~concerning~~of the respective Balancing ~~Services~~Service Entity. ~~The Market Schedule is the energy schedule that results from the Intraday Market solution and contains the algebraic sum of the quantities of the accepted Buy Orders of the Day-Ahead Market and the Intraday Market for each Entity.~~
2. ~~The~~An upward ISP Balancing Energy Offer is:
   a) ~~for Production~~the possibility of increase in the production level of the Dispatchable Generating Units and Dispatchable RES Units Portfolios~~, an increase to the Production Unit's production level in relation to the~~ in comparison to their Market Schedule,
   b) ~~for~~ the possibility of decrease in the consumption level of Dispatchable Load Portfolios~~, a decrease to the Portfolio's consumption level in relation to the~~ in comparison to their Market Schedule.
3. ~~The~~A downward ISP Balancing Energy Offer is:
   a) ~~for Production~~the possibility of decrease in the production level of the Dispatchable Generating Units and Dispatchable RES Units Portfolios~~, a decrease to the Production Unit's production level in relation to the~~ in comparison to their Market Schedule,

b) ~~for~~ the possibility of increase in the consumption level of Dispatchable Load Portfolios~~, an increase to the Portfolio's consumption level in relation to the~~ in comparison to their Market Schedule.

4. ~~The~~ The Balancing Service Providers representing Dispatchable Generating Units registered in the Balancing ~~Services Providers representing Production Units of the Balancing Market Production~~Market Generating Units ~~Register~~Registry are ~~required~~obliged to submit to the ISP:

a) an upward ISP Balancing Energy Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total upward ~~quantity of~~ Balancing Energy ~~corresponding~~quantity equal to the ~~Registered~~Maximum Net Capacity of the Balancing ~~Services~~Service Entity ~~according to~~as set out in its Registered ~~Operating~~ Characteristics, and

b) a downward ISP Balancing Energy Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total downward Balancing Energy quantity ~~of Balancing Energy corresponding~~equal to the ~~Registered~~Maximum Net Capacity of the Balancing ~~Services~~Service Entity ~~according to~~as set out in its Registered ~~Operating~~ Characteristics.

5. The Producers representing Dispatchable ~~Alternate Fuel~~ Generating Units with Alternative Fuel are ~~required~~obliged to submit separate Balancing Energy Offers for their operation both with ~~both~~ the primary and the alternative fuel.

6. The Producers representing pumped storage Dispatchable ~~Hydroelectric~~hydro Generating Units ~~with~~ are obliged to submit separate Balancing Energy Offers for generation and pumping ~~ability are required to submit separate Balancing Energy Offers for the production and the pumping.~~. The submission of Balancing Energy Offers for ~~the~~ pumping ~~operation~~ is not obligatory.

7. The Producers representing Dispatchable ~~Multiple Axis~~Multi-Shaft Combined Cycle Generating Units are ~~required~~obliged to submit separate Balancing Energy Offers for each ~~operation layout~~configuration of their Dispatchable Generating Units.

~~8. Balancing Services Providers representing Production Units of the Balancing Market Production Units Register are not required to submit upward and downward ISP Balancing Energy Offers in accordance with paragraph 4 of this Article for the Balancing Services Entities that they represent, only in the following cases:~~

~~1) for the period during which the Balancing Services Entity is in Scheduled Maintenance, in accordance with the HETS Operation Code, and~~

~~2) for the period of validity of the corresponding Total Non-availability Declaration or the Major Breakdown Declaration of the Balancing Services Entity.~~

~~9.~~8. The Balancing ~~Services~~Service Providers representing Dispatchable RES Units Portfolios are entitled to submit to the ISP:

a) an upward ISP Balancing Energy Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total upward Balancing Energy quantity ~~of Balancing Energy not more~~which shall be no higher than the Registered Capacity of the Balancing ~~Services~~Service Entity ~~according to~~as set out in its Registered ~~Operating~~ Characteristics and

b) a downward ISP Balancing Energy Offer per Balancing ~~Services~~Service Entity for each Dispatch Period of the Dispatch Day, for a total downward ~~quantity of~~ Balancing

Energy ~~not more~~quantity which shall be no higher than the Registered Capacity of the Balancing ~~Services~~Service Entity ~~according to~~as set out in its Registered ~~Operating~~ Characteristics.

9. ~~Self-supplying Customers and~~The Balancing Service Providers representing Dispatchable Load Portfolios~~, have the right~~ are entitled to submit to the ISP:

   a) an upward ISP Balancing Energy Offer per Balancing Service Entity for each Dispatch Period of the Dispatch Day for a total upward Balancing Energy quantity which shall be no higher than the full technical capacity to provide upward Balancing Energy, and

   ~~a)~~b) a downward ISP Balancing Energy ~~Offers~~Offer per Balancing Service Entity for each Dispatch Period of the Dispatch Day for a ~~maximum~~total downward Balancing Energy quantity ~~equal to~~which is no higher than the full technical ~~ability~~capacity to provide ~~an upward and~~ downward Balancing Energy.

10. The Balancing Service Providers representing Dispatchable RES Units Portfolios or Dispatchable Load Portfolios are ~~required~~obliged to submit upward and downward Balancing Energy Offers to the ISP, provided that they also submit the corresponding Balancing Capacity ~~Bids~~Offers.

11. ~~Offers~~The offers submitted to the ISP shall be taken into consideration for the ~~performance~~execution of ISP1, ISP2 and ISP3, as well as for any ~~requested~~ad-hoc ISP. ~~Re~~The re-submission of Offers is not allowed after the Expiration of the ~~Submission~~ Deadline for the Submission of ISP Offers.

12. In the event that it is impossible to cover the expected imbalances and/or the zonal/systemic Balancing Capacity requirements for a Dispatch Period of the Dispatch Day ~~the coverage of the expected imbalances and/or the Zonal/Systemic Balancing Capacity requirements is impossible~~, the HETS Operator ~~is~~shall be entitled to submit an ISP Balancing Energy Offer, for each of the Contracted Units for each Dispatch Period of the Dispatch Day~~, an ISP Balancing Energy Offer.~~. The Offer ~~Price~~price (€/MWh) ~~is~~shall be determined on the basis of the relevant Supplementary System Energy Contract.

~~Article 58.~~Article 55. Content of the ISP Balancing Energy Offers

1. The upward and downward ISP Balancing Energy Offers for each Balancing Service Entity and for each Dispatch Period shall consist of individual steps. Each step ~~contains a offer price~~ shall contain the price of the Balancing Energy Offer in €/MW, accurate to two (2) decimal places, and a ~~non-negative price corresponding to~~quantity representing the ~~loading~~generation/load level of the Balancing ~~Services~~Service Entity in MW, accurate to ~~three (3~~one (1) decimal ~~places~~place. The minimum quantity of the Offer shall be equal to one (1) MW.

2. The upward ISP Balancing Energy Offer ~~includes up to~~ shall include between one (1) and ten (10) steps. The price of the ISP Balancing Energy ~~offer that corresponds to~~Offer for each ~~of the~~ successive ~~steps~~step may not be reduced in relation to the ~~offer~~ price of the ~~previous~~Offer for the preceding step.

3. The quantity of the upward ISP Balancing Energy Offer taken into account in the ISP corresponds to the difference between the Available Capacity of the Balancing ~~Services~~Service Provider and the capacity resulting ~~according to~~from the Balancing Service Provider's Market Schedule, as in force at the time of submission of the Offer.

4. The downward ISP Balancing Energy Offer ~~includes up to~~shall include between one (1) and ten (10) steps. The price of the ISP Balancing Energy ~~offer that corresponds to~~Offer for each ~~of the~~ successive ~~steps~~step may not be increased in relation to the ~~offer~~ price of the ~~previous~~Offer for the preceding step.
5. The quantity of the downward ISP Balancing Energy Offer corresponds to the difference between ~~the~~ zero quantity ~~up to~~and the capacity resulting ~~according to~~from the Balancing Service Provider's Market Schedule as in force at the time of submission of the Offer.
6. The ISP Balancing Energy Offer prices ~~shall~~must be within the ~~Administratively Defined~~ Balancing Energy Offer ~~Cap~~Maximum Price and the ~~Administratively Defined~~ Balancing Energy Offer ~~Lower Limit~~Minimum Price, as in force for the Dispatch Period to which the Balancing Energy Offer corresponds.
7. The numerical values of the ~~Administratively Defined~~ Balancing Energy Offer ~~Lower Limit~~Minimum Price and the ~~Administratively Defined~~ Balancing Energy Offer ~~Cap shall be determined by decision of RAE upon~~ Maximum Price are specified in the ~~recommendation~~Technical Decision of the HETS Operator~~.~~ "Technical limits on bidding and clearing prices". This ~~decision~~Technical Decision shall be ~~made~~issued at least two (2) months ~~before~~prior to the date of ~~application~~enforcement of the new values of the above~~-mentioned~~ limits.
8. In the stepwise ISP Balancing Energy Offers ~~in steps~~ of the Dispatchable Load Portfolios, the Balancing Service Providers ~~shall have the right~~are entitled to include a specific quantity per step, which is offered as a ~~single set~~whole and can, therefore, either be accepted in its entirety or rejected in its entirety by the ISP.

~~Article 59.~~Article 56. Amendment and Acceptance of the ISP Balancing Energy Offers

1. In the event that an ISP Balancing Energy Offer ~~is~~was not submitted in accordance with ~~Article 56~~Article 54 and ~~Article 57~~Article 55, the ISP Balancing Energy Offer for all Dispatch Periods of the Dispatch Day shall be automatically ~~be~~ rejected by the Balancing Market System. In case of rejection, the grounds for the rejection shall be notified to the Balancing ~~Services~~Service Providers through the Balancing Market System. The Balancing Service Provider may re-submit an ISP Balancing Energy Offer until the Expiration of the ~~ISP Offer~~ Deadline for the Submission ~~Deadline. Where~~of ISP Offers. If the ISP Balancing Energy Offer is submitted in accordance with ~~Article 56~~Article 54 and ~~Article 57~~Article 55, the ISP Balancing Energy shall be ~~is~~ validated. Only ~~Validated~~the last validated ISP Balancing Energy Offers shall be considered for the ~~performance~~execution of the ISP.
2. After the Expiration of the ~~ISP Offer~~ Deadline for the Submission ~~Deadline~~of ISP Offers, the ISP Balancing Energy Offers cannot be modified and ~~are~~shall be used as they are for the ~~solution~~execution of ISP2 and ISP3.

~~Article 60.~~Article 57. Consequences of non-submission of ISP Balancing Energy Offers

1. In ~~the event~~case of non-submission of ISP Balancing Energy Offers for a Dispatch Day ~~by~~ in connection to a Balancing Service Provider ~~who~~that is ~~required~~obliged to submit an ISP Balancing Energy Offer in accordance with ~~Article 56~~Article 54, the HETS Operator shall

impose on ~~it~~such Provider a Non-~~-~~Compliance Charge for that Dispatch Day, as described in ~~CHAPTER 21.~~CHAPTER 21

2. ~~In addition to~~Apart from imposing the Non-Compliance Charge referred to in paragraph 1 of this Article, the Balancing Market System shall automatically ~~generates~~create ISP Balancing Energy Offers for ~~each~~the respective ~~Production~~Dispatchable Generating Unit and for all Dispatch Periods of the Dispatch Day, setting ~~Bidding~~bidding prices equal to the corresponding prices of the last validated ISP Balancing Energy Offer of the Balancing Service Entity on the previous day. The Offers ~~generated~~which are created automatically by the Balancing Market System ~~are~~shall be considered as having been submitted by the Participant and ~~bring~~shall produce all the results provided for in this ~~Regulation~~Rulebook, as if these Offers had been submitted by the Participant.

CHAPTER 12

~~PERFORMANCE~~EXECUTION OF THE INTEGRATED SCHEDULING PROCESS

~~Article 61.~~Article 58. Data of Integrated Scheduling Process

1. The HETS Operator shall ~~perform~~execute the ISP based on the following data, for each Dispatch Period concerned:

   a) The price~~-~~ - quantity ~~Pairs~~pairs of the stepwise ISP Balancing Energy Offers ~~in steps~~.

   b) The price-quantity ~~Pairs~~pairs of the Balancing Capacity ~~Bids~~Offers for ~~Upward~~upward and ~~Downward~~downward FCR, upward and downward automatic FRR and upward and downward manual FRR.

   c) The Registered ~~Operating~~ Characteristics of the Balancing ~~Services~~Service Entities.

   d) The Techno-Economic Declarations submitted by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent.

   e) The Total ~~or~~and Partial Non-~~availability~~Availability Declarations and the Major Outage Declarations submitted by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent.

   f) The ~~operation~~operational status of the Balancing ~~Services~~Service Entities at the start of the scheduling period, ~~i.e.~~namely the number of half-hours already in operation or out of operation and the scheduled injection or consumption at the ~~beginning~~start of the ISP scheduling period.

   g) The Market Schedules of all the Balancing ~~Services~~Service Entities.

   h) Any ~~updated schedules of the~~ updates to the scheduled operation of the generating units/RES Units in Commissioning operation.

   ~~h)~~i) Any updates to the scheduled operation of the ~~Production~~Dispatchable Generating Units/RES Units in ~~commissioning or in Test Run~~Testing operation.

   ~~i)~~j) The mandatory schedules for hydroelectric power generation ~~schedules~~, as submitted by the respective Producers to the HETS Operator through the daily mandatory hydro injection declarations.

j)k) The Zonalzonal Load Imbalances of Non-Dispatchable Load.

k)l) The Zonalzonal RES Units Imbalances of Non-Dispatchable RES Units.

1) The Zonal Imbalances of RES Portfolio without Market Participation Obligation.

l)m) The available flows in the cross-zonal corridorsInter-Zonal Corridors.

m)n) The Imbalances in import/export schedules schedule Imbalances at the interconnections specifiedimposed by the HETS Operator.

n)o) The system's zonal and systemic needs of the HETS in Balancing Capacity.

o)p) Events that are notified to the HETS Operator, in accordance with the HETS OperationGrid Code.

p)q) The Declarationsdeclarations of Maximum Daily Energy Injection Constrainmaximum daily energy injection constraint.

q)r) Other information collected and/or communicatednotified to the HETS Operator in accordance with the HETS OperationGrid Code, as well as other technical data and simulation data related toregarding the operation of the HETS.

2. On the basis of the data sent by the Power Exchange, the HETS Operator shall specifydetermine:

   a) the Final Internal Schedules per Dispatch Period of the Dispatch Day, which correspond to Generation and LoadBalancing Service Entities within the Greek territoryand Balance Responsible Entities in Greece and are equal to the Market Schedules sent fromby the Power Exchange, and

   b) the Final External Schedules per Dispatch Period of the Dispatch Day, which correspond to import/export schedules at the interconnections, and take into account the Market Schedules, the schedules among theTransmission System Operators, any imbalances due to technical constraints on the interconnectionsinterconnection lines and the import/export imbalances included in the latest Physical Energy Transmission Rights DeclarationDeclarations of the Participants, caused:

      i. either by the difference between the imported quantity included in the Market Schedule of a Participant and the Long-Termhis nomination of long-term Physical Energy Transmission Rights Declaration, for electricity imports viathrough an interconnection where there is an obligation for physical delivery,

      ii. or by the difference between the quantities of energy sold/bought inon the Day-Ahead Market that correspond to the short-term Physical Energy Transmission Rights and the quantities of energy sold/bought inon the Day-Ahead Market (s) of the neighboring countries that correspond to the same short term Physical Energy Transmission Rights.

Article 62.Article 59. Integrated Scheduling Process Optimization Methodology and Algorithm

1. The ISP is performedexecuted as a model of Mixed Integer Linear Programming model.

2. If the Balancing Energy prices of the ISP Balancing Energy Offers for the same Dispatch Period matcharithmetically coincide, and the equivalentrespective Balancing Energy quantities of thesesuch ISP Balancing Energy Offers are not fully included in the ISP

results, ~~then~~ the bidding sections ~~will~~shall be selected ~~by priority~~ in the following order of priority: (a) Dispatchable RES Units Portfolio, (b) Dispatchable ~~Hydroelectric~~hydro Generating Units, (c) Dispatchable Load Portfolio, and (~~c~~d) Dispatchable ~~Thermal~~thermal Generating Units. Among bidding sections under the same category, priority ~~is~~shall be given to the sections of the offers corresponding to the Balancing Service Entity with the highest ~~production/load change rate. Among~~Ramp Up Rate. For bidding sections ~~belonging to~~that come into the same category and ~~having~~have the same ~~production/load change rate, priority is given to the sections of the offers which were submitted earlier~~Ramp Up Rate there will be random selection.

3. If the Balancing Capacity prices of the Balancing Capacity ~~Bids for an Ancillary Service and~~ Offers for the same Dispatch Period arithmetically coincide, and the ~~equivalent~~respective Balancing Capacity quantities of ~~these~~those Balancing Capacity ~~Bids~~Offers are not fully included in the ISP results, ~~then~~ the bidding sections ~~will~~shall be selected ~~prioritized~~ in the following order of priority: (a) ~~of~~ Dispatchable RES Units Portfolio, (b) Dispatchable ~~Hydroelectric~~hydro Generating Units, (c) Dispatchable Load Portfolio, and (~~c~~d) Dispatchable ~~Thermal~~thermal Generating Units. Among bidding sections ~~under~~in the same category, priority ~~is~~shall be given to the sections of the offers corresponding to the Balancing Service Entity with the highest ~~production/load change rate. Among~~Ramp Up Rate. For bidding sections ~~belonging to~~that come into the same category and ~~having~~have the same ~~production/load change rate, priority is given to the sections of the offers which were submitted earlier~~Ramp Up Rate there will be random selection.

4. The Integrated Scheduling Process Optimization Algorithm is briefly described as follows:

   α) ~~From~~ The ISP execution produces:

   ~~1)~~ the ~~ISP performance, result:~~

   i. ~~the state of~~ commitment status (synchronization or de-synchronization) of each Balancing Service Entity, for each Dispatch Period of the Dispatch Day,

   ii. the upward and downward Balancing Capacity for FCR in MW per Balancing Service Entity for each Dispatch Period of the Dispatch Day,

   ~~iii. the upward and downward Balancing Capacity for automatic FRR in MW per Balancing Service Entity for each Dispatch Period of the Dispatch Day,~~

   ~~iv.~~iii. the upward and downward Balancing Capacity for ~~manual~~automatic FRR in MW per Balancing Service Entity for each Dispatch Period of the Dispatch Day, ~~and~~

   ~~v. the cross-zonal flows.~~

   iv. the upward and downward Balancing Capacity for manual FRR in MW per Balancing Service Entity for each Dispatch Period of the Dispatch Day, and

   v. the inter-zonal flows.

   ~~α)~~β) The algorithm works in such a way that the total Balancing Energy and Balancing Capacity procurement cost ~~of Balancing Energy and Capacity supply~~ is minimized. The total cost of Balancing Energy procurement may include the estimated cost for the activation of Balancing Capacity in real time, Total cost of Balancing Energy and Balancing Capacity ~~supply~~procurement means the sum of the Balancing Energy and Balancing Capacity ~~supply~~procurement for all Dispatch Periods of ~~the~~ Dispatch Day D in the case of ISP1 and ISP2, or for the remaining Dispatch Periods

of Dispatch Day D in the case of ISP3 and any other solution of ~~the requested~~any ad-hoc ISP during the Dispatch Day.

~~β)~~γ) The algorithm must comply with the following constraints:

i. the HETS Imbalances constraint ~~of system imbalances~~, according to which the sum of the allocated upward and downward ISP Balancing Energy is equal to the ~~imbalances of the system~~forecasted HETS Imbalances, per Bidding Zone and in total,

ii. the ~~cross~~inter-zonal constraints,

iii. the sum of the ~~ISP~~ Balancing Capacity for FCR of all Balancing ~~Services~~Service Entities ~~must be greater than or equal~~that have been chosen to ~~the total system requirements in ISP~~provide Balancing Capacity for FCR must be greater than or equal to the total requirements per Bidding Zone or/and of HETS as a whole in upward and downward Balancing Capacity for FCR,

iv. the sum of the Balancing Capacity for automatic FRR ~~Balancing Capacity~~ of all Balancing ~~Services~~Service Entities that have been chosen to provide Balancing Capacity for automatic FRR must be greater than or equal to the total ~~system~~ requirements per Bidding Zone or/and of HETS as a whole or of the bidding zone in ~~automatic FRR~~upward and downward Balancing Capacity for automatic FRR,

v. the sum of the ~~manual FRR~~Ramp Up or Ramp Down Rates of the Balancing ~~Capacity of all Balancing Services~~Service Entities that have been chosen to provide Balancing Capacity for automatic FRR must be greater than or equal to the total ~~system~~ requirements of HETS in Ramp Up and Ramp Down Rate for automatic FRR,

~~v.~~vi. the sum of the Balancing Capacity for manual FRR of all Balancing Service Entities that have been chosen to provide Balancing Capacity for manual FRR ~~Balancing Capacity~~must be greater than or equal to the total requirements per Bidding Zone or/and of HETS as a whole in upward and downward Balancing Capacity for manual FRR,

~~vi.~~vii. the updated operation schedules of ~~the operation of the Production Units~~generating units/RES Units in ~~commissioning or in Test Run~~Commissioning operation,

viii. ~~the~~ the updated operation schedules of Dispatchable Generating Units/RES Units in Testing operation,

~~vii.~~ix. the daily mandatory ~~hydroelectric generation programs~~hydro management declarations,

~~viii.~~x. the technical constraints of the ~~Production~~Dispatchable Generating Units that are included in their Declared Characteristics such as Balancing capacity supply constraints, Balancing Energy constraints, Technically Minimum Generation and Maximum Net Capacity and Available Capacity constraints under normal operation or under AGC, synchronization time, soak time ~~in the intermediate load~~ and de-synchronization time, time and output of the ~~Production~~Dispatchable Generating Unit between synchronization and the Technically Minimum Generation, the logical ~~state~~status of ~~the~~ commitment constraints, the minimum ~~in/out of operation~~ up/down time constraints, the ~~output capacity~~ramp rate of ~~change~~power output and Balancing Capacity of the Units constraints,

~~ix.~~xi. the constraints in the maximum daily energy injection from Dispatchable Natural Gas ~~Units based on the Declarations of Maximum Daily Energy Injection constraints from Dispatchable Natural Gas~~Generating Units,

~~x.~~xii. the constraints in the maximum daily energy injection from Dispatchable ~~Hydroelectric~~hydro Generating Units based on the ~~Declarations~~declarations of ~~Maximum Daily Energy Injection~~maximum daily energy injection constraints from Dispatchable ~~Hydroelectric~~hydro Generating Units,

~~xi.~~xiii. in each Dispatch Period the Pumped Storage Dispatchable ~~Hydroelectric Production~~hydro Generating Units ~~with simultaneous pumping ability~~shall operate either as ~~Production~~Dispatchable Generating Units or as pumping loads,

~~xii.~~xiv. in each Dispatch Period the Dispatchable Generating Units with Alternative Fuel ~~Units~~shall produce either with the primary or with the secondary fuel,

~~xiii.~~xv. in each Dispatch Period the Dispatchable ~~Multiple Axis~~Multi-Shaft Combined Cycle Generating Units ~~are in a~~ shall operate only ~~operation layout.~~in one configuration.

5. In the event that ~~for a Dispatch Period of the Dispatch Day the coverage of~~it is impossible to cover the forecasted imbalances and/or the zonal/systemic Balancing Capacity requirements ~~is impossible~~for a certain Dispatch Period of the Dispatch Day, the HETS Operator shall take the following ~~actions~~action:

   a) include ISP Balancing Energy Offers for Generating Contracted Units, and

   b) ~~solve again~~re-execute the ISP problem in order to ~~reach~~attain a feasible solution.

6. If, after ~~solving again~~attaining the ISP solution, according to paragraph 5 of this Article, ~~the coverage of the forecasted~~ infeasibilities still occur in covering the imbalances and/or the zonal~~/~~ / systemic Balancing Capacity requirements~~ remains impossible, then~~, the constraints ~~are~~shall be gradually ~~removed~~lifted and the ISP ~~is performed~~shall be executed again. The ~~order of removing the~~ constraints ~~is as follows~~shall be lifted in the following order:

   a) ~~At first~~First, the Balancing Capacity requirements constraint for upward and downward manual FRR is not implemented,

   b) Then, the Balancing Capacity requirements constraint for upward and downward automatic FRR is not implemented,

   c) ~~Further~~Afterwards, the Balancing Capacity requirements constraint for upward and downward FCR is not implemented,

   d) Finally, the ~~system imbalances~~HETS Imbalances constraint is not implemented.

7. The Dispatchable ~~Alternate~~Generating Units with Alternative Fuel ~~Units can~~may operate on ~~alternate~~the alternative fuel for the Dispatch Days for which the National Natural Gas System (ESFA) Operator has ~~set~~placed the ESFA at alert level (~~alarm status~~alert level 2) or at emergency level (alert ~~status~~level 3) according to the Emergency Plan. The fuel, primary or alternative, of the Dispatchable ~~Alternate~~Generating Units with Alternative Fuel ~~Units~~ in the above cases ~~is~~shall be decided on the basis of the ISP results. The Dispatchable ~~Alternate Fuel~~Generating Units with Alternative Fuel may only operate on one of the two fuel types in each Dispatch Period. The ISP algorithm shall take into account the Declared Characteristics corresponding to the fuel selected for each Dispatch Period.

8. The HETS Operator shall include in the ISP ~~Data~~data the declarations of maximum daily energy injection constraint ~~Declarations of Maximum Daily Energy Injection~~ from Dispatchable Natural Gas Generating Units. The quantity of injected electricity that is included in the ISP for the Dispatchable Natural Gas Generating Units, to which the submitted declarations of maximum daily energy injection constraint ~~Declarations of Maximum Daily Energy Injection~~ from Dispatchable Natural Gas Generating Units refer, may not exceed the quantity specified in the above declarations.

9. The HETS Operator shall include in the ISP ~~Data the~~data the declarations of maximum daily energy injection constraint ~~Declarations of Maximum Daily Energy Injection~~ from Dispatchable ~~Hydroelectric~~hydro Generating Units. The quantity of injected electricity that is included in the ISP for the Dispatchable ~~Hydroelectric~~hydro Generating Units, to which the submitted declarations of maximum daily energy injection constraint ~~Declarations of Maximum Daily Energy Injection~~ from Dispatchable ~~Hydroelectric~~hydro Generating Units refer, may not exceed the quantity specified in the above declarations.

~~Article 63.~~Article 60. Results of the Integrated Scheduling Process

1. The results of the ISP, shall provide:
   a) the commitment ~~(synchronization)/ desynchronization/~~ decommitment schedule of the Balancing ~~Services~~Service Entities,
   b) the ~~ISP~~ Balancing Capacity for FCR, manual FRR and automatic FRR ~~for~~in any direction (upward and downward) for each Balancing Service Entity and for each Dispatch Period of the Dispatch Day.
2. An indicative generation schedule shall also results from the ISP, for each Balancing Service Entity and for each Dispatch Period of the Dispatch Day ("ISP schedule"). The differences between the ~~indicative generation~~ ISP schedule ~~(ISP result)~~ and the automatic Dispatch Instruction mechanism (Balancing Energy Market) ~~are~~shall not be considered ~~as~~ deviations from the ISP.
3. ~~As~~ Without prejudice to paragraph 4 of this Article, as for the results of the ISP for ~~the~~ Balancing Capacity, the following shall apply:
   a) The results of ISP1 ~~are~~shall not be binding.
   b) The results of ISP2 ~~are~~shall be binding for the first twenty-four (24) Dispatch Periods of Dispatch Day D.
   c) The results of ISP3 ~~are~~shall be binding for the last twenty-four (24) Dispatch Periods of Dispatch Day D.
   d) The results of the ad-hoc ISPs shall be binding for the Dispatch Periods to which they refer.
4. The results of all ISP ~~performances are~~executions shall be binding with regard to the commitment schedule of the Balancing ~~Services~~Service Entities.
5. The Balancing Service Providers are ~~required~~obliged to comply with the binding results of the ISP ~~performances~~executions. In case of non-compliance, the Balancing Service Providers ~~are~~shall not be entitled to a fee and ~~are~~shall be subject to Non-Compliance Charges, in accordance with ~~CHAPTER 21 of this Regulation~~CHAPTER 21 of this Rulebook.

6. The HETS Operator shall publish the results forty-five (45) minutes after the ~~performance~~execution of each ISP. Within the same deadline, it ~~informs~~shall inform the Balancing Service Providers ~~who have submitted Accepted~~whose Balancing Energy and Balancing Capacity Offers ~~for~~were submitted to the ISP and accepted of the results of the ISP that concern them.
7. The HETS Operator may deviate from the results of the ISP in all cases where it ~~deems with~~has substantiated evidence to consider that ~~it~~such a deviation is necessary so as to ensure the safe operation of the ~~System~~HETS and the smooth operation of the Balancing Market.

~~Article 64.~~Article 61. Surveillance of the Results of the Integrated Scheduling Process

Until 11:00 ~~Eastern European Time~~EET on each D~~+~~ +1 calendar day, the HETS Operator shall ~~communicate to~~notify RAE ~~in editable form~~of all the data, the parameters and the results of the ISP that were ~~performed~~executed on ~~the~~ Dispatch Day D in editable form, in order for the Authority to supervise the normal operation of the ~~scheduling process~~ISP and to identify possible distortions in the results of the ISP and the scheduling of the Balancing ~~Services~~Service Entities.

SECTION III

BALANCING ENERGY MARKET

CHAPTER 13

GENERAL PROVISIONS

~~Article 65.~~Article 62. Scope

This Section presents:

a) the obligations of the HETS Operator in the framework of the Balancing Energy Market,

b) the obligations of the Balancing Service Providers in the framework of the Balancing Energy Market,

c) ~~the~~The transmission of data ~~transfer~~ between the Integrated Scheduling Process and the Energy Balancing Market,

d) the conditions and the procedure for the submission of Balancing Energy Offers by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities,

e) details ~~of~~regarding input data, the optimization model, the ~~solution~~clearing methodology, and the Balancing Energy Market results, and

f) the Dispatch Instructions issued for each of the Balancing Service Providers.

~~Article 66.~~Article 63. General ~~provisions~~Provisions

1. The Balancing Energy Market is the market in which quantities and prices are determined for the activation of Balancing Energy by the respective Balancing ~~Services~~Service Providers, in order to balance energy supply and demand, taking into account the Market Schedules and the state of the ~~system~~HETS in real time~~.~~. The Balancing Energy Market includes the manual FRR process and the automatic FRR process.
2. In the Balancing Energy Market, the following products are used:
   a) The upward and downward ~~manual FRR~~ Balancing Energy for manual FRR, which is activated by executing the manual FRR process for each ~~Manual~~manual FRR Time Unit. The Balancing Service Providers shall submit ~~Manual FRR~~ Balancing Energy Offers for manual FRR, that is, Balancing Energy Offers that correspond to the activation of the manual FRR.
   b) The upward and downward ~~Automatic FRR~~ Balancing Energy for automatic FRR, which is activated through the operation of the Automatic Generation Control. The Balancing Service Providers shall submit ~~automatic FRR~~ Balancing Energy Offers for automatic FRR, that is, Balancing Energy Offers that correspond to the activation of the automatic FRR.
3. The ~~Manual~~manual FRR Time Unit is defined as the 15-minute period, starting at 01:00 ~~Eastern Europe Time~~EET on the Dispatch Day. The manual FRR process is ~~performed~~executed periodically for each ~~Manual~~manual FRR Time Unit.

4. The manual FRR process ~~adopts~~shall adopt, without modification or review, the binding results of the ISP for each Balancing Service Entity unless the ~~relevant~~ Entity in question is subject to a forced interruption, resulting from ~~a Submission~~the submission of a Partial or Total Non-Availability Declaration or a Major ~~Breakdown~~Outage Declaration. In ~~this~~that case, the ~~Unit is~~Balancing Service Entity shall be considered unavailable and the ISP may be ~~performed~~executed again.

5. The Balancing Capacity for FCR, automatic FRR, and manual FRR, determined in the ISP, ~~based on~~as per ~~Article 61~~Article 59 of this ~~Regulation~~Rulebook, shall remain in effect during ~~each~~all Dispatch ~~Period~~Periods of the Dispatch Day. In ~~the event~~case that a ~~Generation Unit~~Balancing Service Entity is not available due to a failure, the ISP may be ~~performed~~executed again in order to award a Balancing Capacity for the FCR, automatic FRR and manual FRR that are actually available.

~~Article 67.~~Article 64. HETS Operator Responsibilities

1. The HETS Operator:

   a) ~~collects~~shall collect, in real time, the telemetered electricity generation/consumption values of the Balancing ~~Services~~Service Entities

   b) ~~realizes~~shall realize very short-term ~~Non-Dispatchable~~ zonal Load ~~Zonal~~ Forecasts for the ~~Manual~~manual FRR Time Unit of each ~~performance of the~~ manual FRR process that is performed,

   c) ~~realizes~~shall realize very short-term ~~Zonal~~zonal Forecasts for RES ~~Portfolio without Market Participation Obligation~~Units for the ~~Manual~~manual FRR Time Unit of each ~~performance of the~~ manual FRR process that is performed,

   ~~1) realizes very short-term Non-Dispatchable RES Units Zonal Forecasts for the Manual FRR Time Unit of each performance of the manual FRR process,~~

   d) ~~receives~~shall receive any updated Balancing Energy Offers and the Non-Availability Declarations of the Participants,

   e) ~~operates~~shall operate the Use Declaration Submission System of the HETS Operator,

   f) ~~calculates~~shall calculate the zonal ~~imbalances~~Imbalances to be covered by activating Balancing Energy Offers,

   g) ~~calculates~~shall calculate the remaining available flows of the ~~cross~~inter-zonal corridors for executing the manual FRR process,

   h) ~~performs~~shall perform the manual and automatic FRR processes,

   i) ~~issues~~shall issue and ~~sends~~send Dispatch Instructions to the Balancing ~~Services~~Service Entities,

   j) ~~issues~~shall issue and ~~sends~~send Automatic Generation Control Instructions to the Balancing ~~Services~~Service Entities,

   k) shall monitor the compliance of ~~the~~ Balancing ~~Services~~Service Entities with ~~the~~ Dispatch Instructions,

   l) ~~manages~~shall manage and ~~uses~~use the Dispatch ~~Information~~information Administration System and

m) ~~submits~~shall submit information to the Transparency Platform of the European Network of Transmission System Operators for Electricity (ENTSO-e) and the Agency for the Cooperation of Energy Regulators (ACER).

2. The HETS Operator is ~~required~~obliged to ~~keep~~maintain a complete database on the dispatch process, including:

   a) an ISP Schedule record,

   b) a Dispatch Instructions record,

   c) a proof of delivery record ~~of~~for the Dispatch Instructions.

3. The information contained in the above ~~files is~~records shall be kept by the HETS Operator for at least five (5) years from their entry. ~~The~~ Upon a reasoned request, the Balancing Service Providers shall have the right to access the above information for their Balancing ~~Services~~Service Entities as well as for other Balancing ~~Services~~Service Entities only in the context of dispute settlement in accordance with the procedure set out in the HETS ~~Operation Code, upon their reasoned request.~~Grid Code.

~~Article 68.~~Article 65. Dispatch Instructions

1. The HETS Operator shall issue Dispatch Instructions to the ~~Production~~Dispatchable Generating Units ~~with which~~whereby it ~~determines~~shall determine the Active ~~Capacity~~Power generation, their synchronization or de-synchronization with the ~~System~~HETS, the provision of Reserves and other Ancillary Services and, in general, their mode of operation. The System Operator shall issue Dispatch Instructions to the ~~to the~~ other Balancing ~~Services~~Service Entities ~~with which~~whereby it ~~determines~~shall determine the ~~Injection~~injection or offtake of Active ~~Capacity~~Power, the provision of Reserves and other Ancillary Services and, in general, their mode of operation.

2. In particular, the Dispatch Instructions issued by the HETS Operator in the framework of the Balancing Market, ~~are~~shall be as follows:

   a) Commitment Dispatch Instructions (i.e. ~~Synchronizations~~synchronization Dispatch Instructions for the ~~Production~~Dispatchable Generating Units) or ~~Disengagement~~decommitment (i.e. ~~De-Synchronization~~de-synchronization Dispatch Instructions for the ~~Generation~~Dispatchable Generating Units) in the framework of the ISP.

   b) Manual FRR Dispatch Instructions

   c) Automatic FRR Dispatch Instructions

   ~~1) Dispatch Instructions for purposes other than balancing, including but not limited to, Dispatch Instructions for Voltage Regulation or other Ancillary Services in accordance with the provisions of the HETS Operation Code.~~

3. In addition to the above Dispatch Instructions, the HETS Operator shall ~~issues~~issue other instructions for the activation of ~~Manual FRR~~ Balancing Energy Offers for manual FRR for purposes other than balancing, in order to ensure the reliable operation of the ~~System~~HETS, in particular as regards the ~~System~~HETS frequency, ~~the~~ voltage and ~~the~~ current at important nodes or elements of the HETS. The Balancing Energy Offers for manual FRR ~~Balancing Energy Offers~~ that are activated for purposes other than balancing ~~are~~shall be marked with indications.

4. The Dispatch Instructions ~~are~~shall be issued by the HETS Operator to the Balancing ~~Services~~Service Entities through the Dispatch ~~Information Management~~information Administration System, or verbally.

5. In ~~the event~~case of interruption or failure of the Dispatch ~~Information Management~~information Administration System, which makes the ~~issue~~issuing of Dispatch Instructions impossible, alternative ~~means~~ways of communication, such as telephone, e-mail and fax, shall be used.

6. Without prejudice to the specifications of the following paragraphs, Dispatch Instructions ~~are~~shall be mandatory for the Balancing Service Providers. The Balancing Service Providers shall ensure that the operational mode ~~of operation~~ of their Balancing Service Entities complies with the Dispatch Instructions and that they change their operation only upon a new Dispatch ~~Instructions~~Instruction. In case of non-compliance, the Balancing Service Providers ~~are not entitled to a fee and are~~shall be subject to Non-Compliance Charges, in accordance with ~~Article 100~~Article 101 of this ~~Regulation~~Rulebook.

7. When Compliance with a Dispatch Instruction is impossible due to constraints on the operation of a Balancing Service Entity, which constraints are included in the Balancing Service ~~Entity~~Entity's Declared Characteristics, then the respective Balancing Service Provider shall immediately ~~inform~~notify the HETS Operator both ~~via~~by telephone and e-mail or fax. In ~~this~~that case, the HETS Operator may withdraw the original Dispatch Instruction and issue a new one.

8. When Compliance with a Dispatch Instruction is impossible for reasons solely attributable to the security of the personnel or the facilities of a Balancing Service Entity, then the respective Balancing Service Provider shall immediately notify the HETS Operator. In ~~this~~that case, the HETS Operator may issue a new Dispatch Instruction taking into account the ~~new Declared Characteristics~~updated characteristics of the respective Balancing ~~Services~~Service Entity.

9. Balancing Service Providers ~~are~~shall be considered to comply with the Dispatch Instructions on the synchronization or de-synchronization of their Balancing ~~Services~~Service Entities, if they ~~perform~~execute them with a deviation of up to ten (10) minutes from the time specified in the orders, as described in the Technical Decision "Dispatch Instructions~~-~~".

10. In case of non-compliance of the Balancing Service Provider with the Dispatch Instruction, the HETS Operator shall point the fact to the ~~respective~~relevant Balancing Service Provider indicating the respective Balancing Service Entity, the Dispatch Instruction and the time ~~of its issue.~~it was issued. The Balancing Service Provider shall under no circumstances be relieved of its obligations under the Dispatch ~~Instruction~~Instructions and the consequences that may result from its non-compliance with these Instructions.

11. In the Dispatch Instructions issued for Dispatchable Units with Alternative Fuel ~~Units~~, the fuel type ~~is~~shall be specified.

~~Article 69.~~Article 66. Obligations of the Balancing Service Providers in the framework of the Balancing Energy Market

1. Participation in the manual FRR process is mandatory for all ~~Production~~Dispatchable Generating Units having that ~~have a corresponding~~ obligation, in accordance with the HETS ~~Operation~~Grid Code, for all their ~~available capacity~~Available Capacity, regardless of the ~~award of~~ Balancing Capacity ~~to~~awarded in the ISPs.

2. Participation in the manual FRR process is ~~mandatory~~optional for Dispatchable RES Units Portfolios and Dispatchable Load Portfolios, except for ~~their total~~the capacity~~,~~ volume corresponding to the manual FRR Balancing Capacity they were awarded ~~to~~in the ISPs~~.~~, for which participation is mandatory.

3. Participation in the automatic FRR process is mandatory for all ~~Production~~Dispatchable Generating Units having that ~~have a corresponding~~ obligation, in accordance with the HETS ~~Operation~~Grid Code, regardless of the ~~award of~~ Balancing Capacity ~~to~~awarded in the ISPs.

4. Participation in the automatic FRR process is ~~mandatory~~optional for Dispatchable RES Units Portfolios and Dispatchable Load Portfolios except for ~~their total~~the capacity~~,~~ volume corresponding to the automatic FRR Balancing Capacity they were awarded ~~to~~in the ISPs, for which participation is mandatory.

5. Participation in the manual FRR process shall confer the following obligations on the Balancing Service Providers:

   ~~a) the submission of Total or Partial Non-Availability Declarations, immediately after the occurrence of an event affecting their availability,~~

   a) the submission of Total or Partial Non-Availability Declarations and Major Outage Declarations, immediately after the occurrence of an event affecting their availability,

   b) the submission of upward ~~and downward manual FRR~~ Balancing Energy Offers for manual FRR by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent,

   ~~a)~~c) the submission of downward Balancing Energy Offers for manual FRR by the Balancing Service Providers for the Balancing Service Entities they represent,

   ~~b)~~d) availability for operation according to their Declared Characteristics, and

   ~~c)~~e) compliance with the Dispatch Instructions issued by the HETS Operator.

6. Participation in the automatic FRR process shall confer the following obligations on the Balancing Service Providers:

   a) the submission of Total or Partial Non-Availability Declarations, immediately after the occurrence of an event affecting their availability,

   ~~1) the submission of Total or Partial Non-Availability Declarations, as soon as reasonably possible after the occurrence of an event affecting their availability,~~

   b) the submission of upward ~~and downward automatic FRR~~ Balancing Energy Offers for automatic FRR by the Balancing ~~Services~~Service Providers for the Balancing ~~Services~~Service Entities they represent,

   c) the submission of downward Balancing Energy Offers for automatic FRR by the Balancing Service Providers for the Balancing Service Entities they represent

   ~~c)~~d) availability for operation according to their Declared Characteristics, and

   ~~d)~~e) compliance with the Dispatch Instructions issued by the HETS Operator.

7. Balancing ~~Services~~Service Providers ~~are~~shall not ~~required~~be obliged to submit upward and downward Balancing Energy Offers for manual FRR ~~Balancing Energy Offers and~~or upward and downward ~~automatic FRR~~ Balancing Energy Offers for automatic FRR for the

Balancing ~~Services~~Service Entities they represent and for which ~~there is~~ a corresponding obligation exists under paragraphs 1 to 4 of this Article, only in the following cases:

a) for the period during which the Balancing ~~Services~~Service Entity is in ~~Scheduled Maintenance~~scheduled maintenance, in accordance with the HETS ~~Operation~~Grid Code, and

b) for the period of validity of the corresponding Total Non-~~availability~~Availability Declaration or the Major ~~Breakdown~~Outage Declaration of the Balancing ~~Services~~Service Entity.

~~Article 70.~~Article 67. Submission of Balancing Energy Offers ~~in~~to the Balancing Energy Market

1. Balancing Energy Offers for manual and automatic FRR may be submitted no later than the Expiration of the Deadline for the Submission of Balancing Energy Market Offers ~~Submission~~. The Expiration of the Deadline for the Submission of Balancing Energy Market Offers ~~Submission~~ is fifteen (15) minutes prior to each ~~Manual~~manual FRR Time Period.

~~2. In the event that Manual FRR Balancing Energy Offers for Generation Units are not submitted at all, or are not submitted in time ,or are not accepted, then the ISP Balancing Energy Offers per Dispatch Period will automatically be converted into corresponding 15-minute Manual FRR Energy Market Offers. Each ISP Balancing Energy Offer per Dispatch Period is converted into two (2) equivalent 15-minute Manual FRR Balancing Energy Offers, in the same form and quantities and Balancing Energy prices as in the original offer. These automatically generated Offers shall be taken into consideration as submitted by the Participant and shall bring all the results provided for in this Regulation, as if these Offers had been submitted by the Participant.~~

~~3.~~2. The price of the Balancing Energy Offers for manual and automatic FRR submitted by the Balancing Service Providers pursuant to paragraph 1 of this Article, must be improved in relation to the price of the ISP Balancing Energy Offer submitted to the ISP for the Dispatch Period which includes the ~~Manual~~manual FRR Time Period. The term improved price means a lower price for upward Balancing Energy Offers and a higher price for downward Balancing Energy Offers.

~~4.~~3. In the event ~~the automatic FRR~~ that no Balancing Energy Offers for ~~the Balancing Service Entities~~ manual FRR are submitted for ~~which there was a corresponding obligation~~Dispatchable Generating Units at all, or if such offers are not submitted in time, or if they are not accepted, ~~then~~the ISP Balancing Energy Offers per Dispatch Period ~~will~~shall automatically be converted into corresponding 15-minute ~~automatic FRR~~ Energy Market ~~Energy~~ Offers~~.~~ for manual FRR. Each ISP Balancing Energy Offer per Dispatch Period ~~is~~shall be converted into two (2) equivalent 15-minute ~~automatic FRR~~ Balancing Energy Offers for manual FRR, in the same form and for the same Balancing Energy quantities and ~~Balancing Energy~~ prices as those in the original offer. These automatically ~~generated~~created Offers shall be ~~considered~~deemed as submitted by the Participant and shall ~~bring~~produce all the results provided for in this ~~Regulation~~Rulebook, as if ~~these~~the Offers had been submitted by the Participant.

4. In case the Balancing Energy Offers for automatic FRR for the Balancing Service Entities for which there was a corresponding obligation are not submitted in time or are not accepted, the ISP Balancing Energy Offers per Dispatch Period shall automatically be

converted into corresponding 15-minute Energy Market Offers for automatic FRR. Each ISP Balancing Energy Offer per Dispatch Period shall be converted into two (2) equivalent 15-minute Balancing Energy Offers for automatic FRR, in the same form and for the same Balancing Energy quantities and prices as those in the original offer. These automatically created Offers shall be deemed as submitted by the Participant and shall produce all the results provided for in this Rulebook, as if the Offers had been submitted by the Participant.

5. The energy quantities included in the upward and downward Balancing Energy Offers that are submitted to the Balancing Energy Market by the ~~Generation~~Generating Entities shall be ~~taken into consideration~~deemed to be generated/~~absorbed~~adsorbed at the ~~Production~~Dispatchable Generating Unit Meter Point.

CHAPTER 14

MANUAL FRR PROCESS

~~Article 71.~~Article 68. Manual FRR Process Input Data

The ~~ITM Manager~~HETS Operator shall draw up the results of a specific 15-minute solution of the Balancing Energy Market taking into consideration the following input data:

a) the Market Schedule for each Balancing Service Entity as ~~entered~~recorded by the Use ~~Declarations~~Declaration Submission System of the HETS Operator,

b) the ~~Production~~operation schedules of the Dispatchable Generating Units/RES Units ~~operating schedules~~ in ~~commissioning and test run~~Testing Operation, submitted by the respective Producers, through the ~~Module Statement Statements of Prototypes, through the operating~~operation schedules Declarations for units in ~~test run~~Testing operation,

c) ~~the mandatory production~~the operation schedules of the generating units/RES Units in Commissioning operation, submitted by the respective Producers, through the Declarations of operation schedules for ~~hydroelectric Production~~units in Commissioning Operation,

~~c)~~d) the mandatory generation schedules for Dispatchable hydro Generating Units, as submitted by the respective Producers through the ~~Water Resources Mandatory Injection Declaration~~daily mandatory hydro injection declarations,

~~d)~~e) the ~~deviations~~Imbalances in the import/export schedules ~~in~~at the interconnections used ~~in~~for the ISP solution ~~of the ISP, as well as any~~, along with actual ~~disconnection of~~ tripping on interconnections, if any,

~~e)~~f) the already ~~defined~~established flows ~~of~~in the ~~cross~~inter-zonal corridors between the Bidding Zones ~~coming~~deriving from the Market Schedule of all Entities, in order to calculate the ~~remaining~~ residual flows available ~~flows of~~in the ~~cross~~inter-zonal corridors for the solution of the Balancing Energy Market,

~~f)~~g) the information on ~~the~~ Balancing ~~Services~~Service Entities received by the Energy Management System (e.g. unit in or out of operation, SCADA measurements of the ~~units' generation~~production of Dispatchable Generating Units),

g)h) the condition of the Automatic Generation Control status of the Balancing ServicesService Entities that provide automatic FRR, which is received by the Energy Management System of the HETS Operator,

h)i) the awarded Balancing Capacity of the Balancing ServicesService Entities for upward and downward FCR, automatic FRR, and manual FRR, as received byfrom the last ISP solution,

i)j) the manual FRR Energy Offers for manual FRR according to Article 67,

j)k) the Available Capacity of all Balancing ServicesService Entities, based on the most recentrecently submitted Non-Availability Declarations,

k)l) the latest updated operation schedule of the Balancing ServicesService Entities that have activated a constraint in the maximum quantity of daily energy constraint,injection by their Techno-Economic Declaration,

l)m) the Declared Characteristics of the Balancing ServicesService Entities,

m)n) the initial generation/consumption level of the Balancing ServicesService Entities before and as close as possible to the start of the Manualmanual FRR Time Unit of the specific manual FRR process solution,

n)o) the Zonalzonal Load Imbalances of Non-Dispatchable Load,

o)p) the Zonalzonal RES Units Imbalances of RES Portfolio without Market Participation Obligation,.

1) the Zonal Imbalances of Non-Dispatchable RES Units,

Article 72.Article 69. the procedure of the performanceExecution of the Manual FRR Process

1. The manual FRR process is performedexecuted as a Mixed Integer Linear Programmingmixed integer linear programming model for each Manualmanual FRR Time Period.
2. The objective function for the solution of the manual FRR solution minimizes the cost for the coverage ofcovering the zonal imbalances for all the Bidding Zones, using the submitted upward and downward Manual FRR Energy Offers for manual FRR of the Balancing ServicesService Entities. The cost for covering the system'sHETS zonal imbalances derives from the Manual FRR Energy Offers for manual FRR that areget accepted.
3. The constraints of the manual FRR problem solution shall include at least:
   a) the zonal imbalanceImbalance constraint for each Bidding Zone,
   b) the constraints on electricity flows between the Bidding Zones,
   c) the technical constraints of the Balancing ServicesService Entities, and
   d) the constraints thatwhich ensure that the overall systemHETS requirements for ISP balancing capacityBalancing Capacity and automatic FRR are maintained,
   e) any restrictions on mandatory injections, and
   f) any constraints on maximum daily electricity injection from Dispatchable Generating Units.

4. In the event that for two or more Balancing Energy Offers pertaining to the same ~~Manual~~manual FRR Time Unit, the offer prices are identical and, at the same time, the respective Balancing Energy quantities of the above offers are not ~~all~~ included in their entirety in the results of the manual FRR solution, ~~then~~ the bidding sections ~~will~~shall be selected ~~prioritized~~ in the following order of priority: (a) Dispatchable RES Units Portfolio, (b) Dispatchable ~~Hydroelectric~~hydro Generating Units, (c) Dispatchable Load Portfolio, and (~~c~~d) Dispatchable ~~Thermal~~thermal Generating Units. Among bidding sections ~~under~~in the same category, priority ~~is~~shall be given to the sections of the offers corresponding to the Balancing Service Entity with the highest ~~production/load change rate. Among~~Ramp Up Rate. For bidding sections ~~belonging to~~ that come into the same category and ~~having~~have the same ~~production/load change rate, priority is given to the sections of the offers which were submitted earlier~~Ramp Up Rate there will be random selection.

5. In the event that no ~~viable solution results~~feasible result is produced for a ~~Manual~~manual FRR Time Unit from the ~~Manual~~manual FRR process solution, i.e. it is not possible to ~~meet~~cover the short-term forecasted imbalances~~,~~ by observing the constraints in paragraph 3 of this Article, the HETS Operator shall ~~perform again~~repeat the manual FRR process having, indicatively:

   a) included the ISP Balancing Energy Offers from Contracted Generating Units,

   b) relaxed the constraints in paragraph 3 (4) of this Article in order to achieve a ~~viable~~feasible solution.

   ~~In the event that~~If, after following the ~~aforementioned~~above steps, there is still no ~~viable~~feasible solution, ~~then~~ the manual FRR process ~~is~~shall be performed once again in accordance with the provisions on Emergency Situations ~~provisions~~, as defined in the HETS ~~Operation~~Grid Code.

6. During the manual FRR process solution, it is possible to ~~perform~~execute optimization for three consecutive 15-minute periods so that the effect of the ~~system~~HETS conditions during the next ~~Manual~~manual FRR Time Units is effectively taken into account for each ~~Manual~~manual FRR Time Unit. In this case, only the results of the first ~~Manual~~manual FRR Time Unit ~~are~~shall be binding. The results ~~concerning~~related to the subsequent ~~Manual~~manual FRR Time Units ~~are~~shall be indicative.

~~Article 73.~~Article 70. Immediate Activation of manual FRR

1. Immediate ~~Activation~~activation of manual FRR means the activation of the manual FRR Balancing Energy at a time that does not coincide with the scheduled periodic performances of the manual FRR process in 15-minute cycles.

2. The HETS Operator ~~has~~is entitled to proceed to an immediate activation of the ~~right to immediately activate the Manual~~manual FRR Balancing Energy and send the Dispatch Instructions to the Balancing ~~Services~~Service Entities in order to balance the ~~system~~HETS or to address technical constraints at any time between the scheduled solutions of the manual FRR processes.

3. To that end, the HETS Operator may, for example, ~~perform~~execute the manual FRR process within the 15-minute cycle and/or use two commitment rows it had created based on the submitted Balancing Energy Offers, one for the upward and one for the downward direction.

4. ~~In case of using~~When two rows ~~as mentioned above~~are used in accordance with the provisions of paragraph 3 of this Article, the quantity of ~~Manual~~manual FRR Balancing Energy that can be supplied by each Balancing Service Entity ~~is~~ shall be calculated ~~based~~ on the basis of the quantity of its Balancing Energy Offers and its technical characteristics. The HETS Operator ~~has the right~~is entitled to select and activate the ~~Manual~~manual FRR Balancing Energy sequentially by ~~the~~ order of commitment of the respective direction.
5. The Balancing Energy Offers that are related to the immediate activation of the manual FRR are taken into account when calculating the ~~Manual~~manual FRR Energy Price for the specific ~~Manual~~manual FRR Time Unit in the framework of the Balancing Market Settlement.
6. In the event that the HETS Operator issues Dispatch Instructions ~~other than~~that differ from the ~~outcome~~result of the manual FRR solution, ~~then~~ the HETS Operator shall submit a report to RAE justifying the selection of the Balancing ~~Services~~Service Entities that cover the ~~imbalance of the system.~~HETS Imbalance. The report shall be submitted for each month, within one (1) month from the end of the month to which it refers.

~~Article 74.~~Article 71. Manual FRR Dispatch Instructions

1. The results of executing the manual FRR process include the activation quantities of the upward and downward Balancing Energy Offers of the Balancing Energy Entities, that are used to issue Dispatch Instructions to Balancing ~~Services~~Service Entities, in order to achieve ~~system~~ balancing of the HETS.
2. The HETS Operator shall issue Dispatch Instructions to the Balancing ~~Services~~Service Entities for each ~~Manual~~manual FRR Time Unit, in accordance with the results of the manual FRR process.
3. Each subsequent Dispatch Instruction ~~replaces~~shall replace any preceding one, as regards the same ~~Manual~~manual FRR Time Unit.
4. In emergency situations, the HETS Operator may issue Dispatch Instructions to a ~~Production~~Dispatchable Generating Unit (with the agreement of the Balancing Service Provider) in order to operate at a capacity greater than the Registered Capacity, as specified in its Registered ~~Operating~~ Characteristics. In ~~this~~that case, there shall be no additional fee for the ~~Production~~Dispatchable Generating Unit.
5. In the event that the HETS Operator issues Dispatch Instructions ~~other than~~that differ from the ~~outcome~~result of the manual FRR solution, ~~then~~ the HETS Operator shall submit a report to RAE justifying the selection of the Balancing ~~Services~~Service Entities that cover the ~~imbalance of the system.~~HETS Imbalance. The report shall be submitted for each month, within one (1) month from the end of the month to which it refers.
6. The Balancing ~~Services~~Service Entities that are selected to provide Balancing Energy shall have the obligation to follow the Dispatch Instructions issued by the HETS Operator that concern the chosen quantities and the time period ~~that are selected~~.

~~Article 75.~~Article 72. Content of manual FRR Dispatch Instructions

1. The HETS Operator ~~issues~~shall issue Dispatch Instructions which shall determine the generation/offtake level of the Balancing ~~Services~~Service Entities.

2. The Dispatch Instruction ~~is~~shall be notified by the HETS Operator to the Balancing ~~Services~~Service Entity before or at the start of each ~~Manual~~manual FRR Time Unit, except in the case of Immediate Activation of the manual FRR.

3. The Dispatch Instruction ~~expires~~shall expire at the end of the ~~Manual~~manual FRR Time Unit ~~to~~in which the Dispatch Instruction was issued, unless a new Dispatch Instruction ~~is~~has been issued in the meantime.

4. The ~~performance~~execution by the Balancing Service Provider of the Dispatch Instruction relating to the Balancing Energy through the immediate activation of the manual FRR ~~begins~~shall begin immediately after the relevant Dispatch Instruction has been transmitted and ~~stops~~shall stop at the end of the ~~Manual~~manual FRR Time Unit in which the Dispatch Instruction was issued.

5. The Dispatch Instruction shall be applied as follows:

   a) The HETS Operator shall send to each Balancing Service Entity the generation/offtake level (in MW) to be ~~generated/absorbed~~produced/withdrawn by the Balancing Service Entity at the end of the ~~next Manual~~following manual FRR Time Unit.

   b) ~~Each~~ Once the manual FRR Time Unit starts each Balancing Service Entity ~~begins to increase~~shall begin by increasing or ~~decrease~~decreasing its generation/~~-~~offtake ~~from the beginning of the Manual FRR Time Unit~~ until ~~it reaches~~ the Dispatch Instruction level (in MW~~),~~) is reached, and then ~~remains at~~it shall preserve this level until the end of the ~~Manual~~manual FRR Time Unit.

   c) The ~~form of the~~ generation/offtake level during the ~~Manual~~manual FRR Time Unit ~~is~~shall be such that the ~~supplied~~ upward or downward Manual FRR Balancing Energy supplied is equal to the corresponding Manual FRR Balancing Energy that results from the ~~performance~~execution of the manual FRR process as described in the Technical Decision "Manual FRR".

6. For each ~~Production~~Dispatchable Generating Unit, the generation level determined by the Dispatch Instructions~~, is~~ shall be in accordance with the Declared Characteristics of the said ~~Production~~Dispatchable Generating Unit.

CHAPTER 15

AUTOMATIC FRR PROCESS

~~Article 76.~~Article 73. Activation of ~~automatic FRR~~the Balancing Energy for automatic FRR

1. The automatic FRR Balancing Energy ~~is~~shall be activated by using the Automatic Generation Control function of the HETS Operator for frequency control, as defined in Commission Regulation (EU) 2017/1485 of 2nd August ~~2~~ 2017 laying down the guidelines for the operation of the electricity transmission system.

2. All Balancing ~~Services~~Service Entities ~~for which~~ that were awarded an automatic FRR ~~has been awarded~~ in the last ISP ~~are~~shall be activated almost simultaneously by the HETS Operator for the supply of Automatic FRR Balancing Energy.

3. The criteria for activating the ~~Automatic FRR~~ Balancing Energy ~~are~~for automatic FRR shall be the ~~Automatic FRR~~ Balancing Energy Offer prices for automatic FRR and the rate of change of the output capacity ~~change rates~~ of the Balancing ~~Services~~Service Entities.
4. More details on the activation of the automatic FRR Balancing Energy are ~~included~~provided in the Technical Decision "Automatic FRR".

SECTION IV

BALANCING MARKET SETTLEMENT

CHAPTER 16

GENERAL PROVISIONS

~~Article 77.~~Article 74. ~~Clearing~~Imbalance Settlement Period

The 15-minute time period for which the Imbalance of the Contracted Balance Responsible Parties is calculated shall be called the Imbalance Settlement Period. The Balancing Energy~~, the imbalances,~~ and the Balancing Capacity ~~are cleared every 15 minutes. The above period is defined as Imbalances~~shall also be settled per Imbalance Settlement Period.

~~Article 78.~~Article 75. Balancing Market Accounts

1. The HETS Operator shall keep the following Balancing Market Accounts:
   a) Balancing Energy Account,
   b) ~~Energy~~ Account ~~provided~~for Energy supplied for purposes other than balancing,
   c) Imbalances Account,
   d) Balancing Capacity Account,
   e) ~~Premium~~Uplift Account,
   f) Non-compliance Charges Account,
   g) Balancing Market Fees ~~Accounts~~Account.
2. The Accounts ~~referred~~in items a) to ~~in~~e), paragraph 1 of this Article are not for accounting purposes and are ~~kept~~ solely kept for the ~~purpose of~~ monitoring of the Balancing Market by the HETS Operator.
3. The Accounts in items f) to g), paragraph 1 of this Article are for accounting purposes.

~~Article 79.~~Article 76. Balancing Market Settlement Object

1. ~~Settlement of the~~ Balancing Market Settlement means the transparent calculation of the quantities of ~~energy~~ Balancing Energy and ~~capacity~~Balancing Capacity and the calculation of the monetary value of the ~~charges~~Participants' debits and credits in the context of the ~~Participants~~Balancing Market, as detailed in paragraph 2 of this Article.
2. The Balancing Market Settlement ~~includes~~shall include the following calculations for each Dispatch Day:
   a) ~~balancing~~calculation of the Balancing Energy ~~Calculation~~ for ~~Manual~~manual FRR for each Balancing Service Entity and for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,
   b) ~~balancing~~calculation of the Balancing Energy ~~Calculation~~ for automatic FRR for each Balancing Service Entity, for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

c) calculation of the energy supplied for purposes other than balancing, for each Balancing Service Entity, for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

d) ~~imbalances~~ calculation of Imbalances, for each Balance Responsible Entity, for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

e) calculation of Imbalances Adjustment ~~calculation~~, for each Balance Responsible Entity, for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

f) ~~calculation of charges~~calculation of the Balancing Capacity for FCR for each Balancing Service Entity and for each Imbalance Settlement Period of the Dispatch Day,

g) calculation of the Balancing Capacity for manual FRR for each Balancing Service Entity and for each Imbalance Settlement Period of the Dispatch Day,

h) calculation of the Balancing Capacity for automatic FRR for each Balancing Service Entity and for each Imbalance Settlement Period of the Dispatch Day,

~~f)~~i) calculation of the debits and credits ~~of~~to the Balancing ~~Services~~Service Provider for Balancing Energy and Balancing Capacity for each of the Balancing ~~Services~~Service Entities it represents and for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

~~g)~~j) calculation of ~~charges~~the debits and credits ~~of~~to the Balancing ~~Services~~Service Provider for ~~Energy~~energy supplied for purposes other than balancing for each of the Balancing ~~Services~~Service Entities it represents and for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

~~h)~~k) calculation of ~~charges~~the debits and credits ~~of~~to the Balance Responsible Party for Imbalances for each of the Balance Responsible Entities it represents and for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

~~i)~~l) calculation of the cost of ~~the System losses~~HETS Losses, for each ~~Imbalances~~Imbalance Settlement Period ~~on~~of the Dispatch Day,

~~j)~~m) calculation of any ~~imposed~~ Non-Compliance Charges imposed,

~~k)~~n) ~~calculations~~calculation of charges and credits related to ~~Premium~~Uplift Accounts,

~~l)~~o) calculation of the Balancing Market Fees for each Participant, and

~~m)~~p) calculation of the amount that ensures the financial neutrality of the Balancing Market.

~~Article 80.~~Article 77. ~~Required information~~Information required for the performance of the Balancing Market Settlement

For the performance of the Balancing Market Settlement, the HETS Operator ~~uses~~shall use the following information:

a) the Market Schedule of every Balance Responsible Entity, as it ~~is configured in~~results from the Day-Ahead Market and the ~~Intraday~~Intra-Day Market,

b) the Balancing Energy Offers for manual FRR (quantity and price) per ~~Manual~~manual FRR Time Unit~~,~~ awarded in the Balancing Energy Market,

c) the Balancing Energy Offers for automatic FRR (quantity and price) per ~~Manual~~manual FRR Time Unit~~,~~ awarded in the Balancing Energy Market,

d) the activated energy offers for purposes other than balancing,

e) the Dispatch Instructions

f) the ~~supervisory control~~Supervisory Control and ~~data acquisition system~~Data Acquisition System (SCADA) measurements for the Balancing ~~Services~~Service Entities that supply automatic FRR Balancing Energy,

g) the Balancing Energy Offers for manual FRR and for automatic FRR of the Balancing ~~Services~~Service Entities ~~not~~ awarded ~~on~~in the Balancing Energy Market,

~~1) the Day-Ahead Market clearing prices per Physical Delivery Period,~~

h) the indications ~~highlighting~~marking the energy supplied for purposes other than balancing,

i) ~~the Certified Energy Measurement Data~~The certified energy measurement data for the Balancing ~~Services~~Service Entities and the interconnections,

j) the quantity of electricity absorbed by Low and Medium Voltage consumers, as notified to the HETS Operator by Distribution Network Operators,

k) the energy profiles per consumer category for non-telemetered Entities by the Distribution Network Operator,

l) the total injections of the RES ~~Production~~ Units connected to the Low Voltage Network, as notified to the HETS Operator by the Distribution Network Operators,

m) the Declared Characteristics of the Balancing ~~Services~~Service Entities,

n) any submitted Declarations of Total or Partial non-Availability or Major Outage Declarations of the Balancing ~~Services~~Service Entities,

o) the ISP results for ~~Upward~~upward and ~~Downward~~downward FCR, automatic FRR and manual FRR Balancing Capacity for the Balancing ~~Services~~Service Entities, in MW,

p) the Balancing Capacity ~~Buds~~Offers for the Balancing ~~Services~~Service Entities, and

q) the actual availability of the Balancing ~~Services~~Service Entities for the supply of any type of Balancing Capacity.

Article 78. Contract with the Clearing House

1. The HETS Operator shall assign the Clearing of Positions, risk management and Cash Settlement procedures that need to be performed in the context of the operation of the Balancing Market to a Clearing House, as set out in article 12 and 17 of Law 4425/2016 and this Rulebook. The Clearing House shall have a Clearing Rulebook for Balancing Market Positions, which shall be issued as laid down in articles 12 and 13, par. 2 of Law 4425/2016.

2. The Clearing House shall perform the Clearing of Positions, risk management and Cash Settlement procedures in accordance with this Rulebook, the Clearing Rulebook for Balancing Market Positions and the Implementing and Technical Decisions issued for their performance, and shall undertake all the duties and responsibilities arising from them vis-a-vis the HETS Operator and any other third party involved in their

implementation. The Participants shall be liable to fulfill the cash obligations arising from this Rulebook as set out in the Clearing Rulebook for Balancing Market Positions and in CHAPTER 22 and CHAPTER 23 of this Rulebook.

~~Article 81.~~Article 79. Obligations of the Distribution Network Operators under the Balancing Market Settlement ~~Process~~process

~~1.~~ ~~The~~ For the purposes of the Initial Settlement, the Distribution Network Operators shall ~~notify~~communicate to the HETS Operator ~~per Imbalances Settlement Period of month M~~, every day, D, for day D + 2, the ~~following information:~~

1. ~~the~~ex-ante estimated representation rates per Load Representative and per Profile Category~~, by the 20th calendar day of the month M-1 for the offtake and the month M~~ regarding the ~~offtake by consumers with simple meters that are connected to the~~ consumption of non-telemetered Low Voltage ~~Network of the Interconnected System,~~customers of the HETS as provided in the Hellenic Electricity Distribution Network Code.

2. ~~the~~For the purposes of the Initial Settlement, the Distribution Network Operators shall communicate to the HETS Operator, every day, D, for the previous day D-1, per Imbalance Settlement Period:

   a) The measurements / estimates of total electricity offtake corresponding to the telemetered consumers ~~with hourly meters~~ connected to the HETS Low Voltage ~~Network of the Interconnected System~~network, adjusted to the Transmission System - Distribution Network Limit, per Load Representative, ~~by the 18th calendar day of month M + 1 for month M~~as provided in the Hellenic Electricity Distribution Network Code,

   b) ~~the~~The measurements / estimates of total electricity offtake corresponding to the HETS Medium Voltage consumers ~~of the Interconnected System~~, adjusted to the Transmission System - Distribution Network Limit, per Load Representative, ~~by the 14th calendar day of month M + 1 for month M~~as provided in the Hellenic Electricity Distribution Network Code,

   c) ~~the~~ The measurements / estimates of total ~~generation of the~~ production by RES Units connected to the ~~Law~~HETS Low Voltage network ~~of~~, as provided in the ~~Interconnected System, adjusted to the Transmission System -~~Hellenic Electricity Distribution Network ~~Limit, by the 14th calendar day of month M + 1 for month M~~Code,

3. ~~The~~ For the purposes of the Corrective Settlement, the Distribution Network Operators shall ~~notify~~communicate to the HETS Operator ~~any updated~~, until Monday of Settlement W+6, for every Settlement Week, W, per Imbalance Settlement Period, the following revised data ~~on the~~ :

   a) The measurements / estimates of total electricity offtake ~~of the~~ corresponding to the telemetered consumers connected to the HETS Low ~~and~~ Voltage network, adjusted to the Transmission System - Distribution Network Limit, per Load Representative, as provided in the Hellenic Electricity Distribution Network Code,

   b) The measurements / estimates of total electricity offtake corresponding to the HETS Medium Voltage consumers ~~of the~~ , adjusted to the Transmission System - Distribution Network Limit, per Load Representative, as provided in the Hellenic Electricity Distribution Network Code,

c) The measurements / estimates of total production by RES Units connected to the Interconnected System~~, as well as on the generation of the RES units connected to the~~ Low Voltage network, as provided in the Hellenic Electricity Distribution Network Code,

4. For the purposes of the ~~Interconnected System, in accordance with paragraph 1, not later than the last day~~Final Settlement of ~~month M + 6, the last day~~the first Half-Year Settlement Period of ~~month M + 12~~year Y-1, the Distribution Network Operators shall communicate to the HETS Operator, by the twenty-sixth (26) Tuesday of year Y, the final measurements for Low Voltage customers and any corrections to the Medium Voltage customer measurements:

5. For the purposes of the Final Settlement of the second Half-Year Settlement Period of year Y-1, the Distribution Network Operators shall communicate to the HETS Operator, by the fifty-second (52) Tuesday of year Y, the final measurements for Low Voltage customers and ~~the last day of month M + 24. No correction is allowed~~any corrections to the Medium Voltage customer measurements:

~~2.~~6. Any corrections to the data ~~sent to the HETS Operator by the Distribution network Operators~~ provided in this Article after ~~the expiry of the above deadline~~expiration of the deadlines set out in paragraphs 4 and 5 of this Article, shall not be taken into account for the Balancing Market Settlement pursuant to this Rulebook.

~~Article 82.~~Article 80. Financial neutrality of the HETS Operator

The financial neutrality of the HETS Operator ~~from~~as a result of the operation of the Balancing Market is ensured through the ~~charges~~debits and credits ~~of the~~to Balance Responsible Parties, as described in Article 95 of this ~~Regulation~~Rulebook.

~~Article 83.~~Article 81. Technical Decision "Balancing Market Settlement".

Details and examples of calculations regarding the ~~clearing of the~~ Balancing ~~Energy~~ Market~~, the Balancing Power Market and the Imbalances~~ Settlement are described in ~~the~~ Technical Decision "Balancing Market Settlement".

CHAPTER 17

TRANSMISSION SYSTEM LOSSES

~~Article 84.~~Article 82. HETS ~~losses management~~Losses Management

1. The HETS Operator ~~predicts~~shall predict the HETS ~~losses~~Losses and ~~takes~~shall take the necessary ~~actions~~action to cover the said quantities of energy by submitting Priority Price-Taking Orders at the Day-Ahead Market ~~and the Intraday Market~~or/and the Intra-Day Market or/and through the Energy Financial Market or/and through contracts concluded following a tender.

2. The HETS Operator ~~calculates~~shall calculate the actual losses of the HETS~~,~~ and ~~calculates~~shall calculate the ~~charge~~debit/credit of ~~the Imbalances Settlement of~~ these losses to the Imbalance Settlement.

3. The total cost of ~~the~~ HETS Losses ~~is~~shall be recovered by the HETS Operator through the corresponding ~~Premium~~Uplift Account as defined in Article 93 of this ~~Regulation~~Rulebook.

~~Article 85.~~Article 83. HETS Losses Forecast

~~1. The~~ HETS Losses are estimated based on the "HETS Losses Calculation Methodology~~" and the table of the HETS Losses Coefficients. The HETS Losses Coefficients may have different numerical values for different Dispatch Periods and Dispatch Days, or may depend on the system load level.~~

~~2. ".~~ The HETS Operator shall ~~submit to RAE a proposal for~~use the "HETS Losses Calculation Methodology~~", which is approved by RAE in accordance with the provisions of Article 18 (4) of Law 4425/2016. This methodology may be modified within its validity period in case of a significant permanent change in the Transmission System topology, in particular due to the commitment of a new Production Unit or an interconnection line.~~

~~3. The HETS Operator is responsible for determining the table of HETS Losses Coefficients on a yearly basis, taking into account historical quantities of energy injection/offtake, on each HETS node and the approved "HETSS Losses Calculation Methodology". The HETS Operator shall submit the Table of HETS Losses Coefficients for approval at least three months prior to the start of the calendar year to which they relate.~~

~~Upon approval, the HETS Operator shall use the table of the HETS Losses Coefficients~~" for the hourly ~~forecast~~Forecast of the HETS ~~losses~~Losses that ~~should~~have to be purchased in ~~the Day-Ahead Market and the Intraday Market~~accordance with Article 82 of this Rulebook.

CHAPTER 18

~~IMBALANCES~~IMBALANCE AND BALANCING ENERGY SETTLEMENT

~~Article 86.~~Article 84. Calculation of Balancing ~~energy~~Energy and Imbalances ~~calculation~~

1. The activated energy ~~is calculated~~ for each ~~Imbalances~~Imbalance Settlement Period shall be calculated separately for the manual FRR, the automatic FRR and for ~~non-~~purposes other than balancing ~~purposes.~~. An upward activated energy ~~is~~shall be always calculated with a positive value, while the downward activated energy ~~is~~shall be always calculated with a negative value.

2. The ~~manual FRR~~ activated Balancing Energy for manual FRR is defined as follows:

   ~~1)~~ The ~~manual FRR~~ upward activated Balancing Energy for manual FRR of a Balancing ~~Services~~Service Entity *e* for an ~~Imbalances~~Imbalance Settlement Period t ~~-~~($ABE_{e,t}^{mFRR,up}$) is (a) ~~in respect of Production Units and~~ for Dispatchable ~~RES Units Portfolios, the additional energy corresponding to the manual FRR Adjusted Dispatch Instruction in relation to their respective Adjusted Market Schedules and (b) in respect of Dispatchable Load Portfolios, the decrease in energy consumption~~

~~corresponding to the manual FRR Adjusted Dispatch Instruction in relation to their respective Adjusted Market Schedules and~~

~~2) The manual FRR downward activated Balancing Energy of a Balancing Services Entity e for an Imbalances Settlement Period t ($ABE_{e,t}^{mFRR,dn}$) is (a) in respect of Production Units and Dispatchable RES Units Portfolios, the decrease of energy corresponding to the manual FRR Adjusted Dispatch Instruction in relation to their respective Adjusted Market Schedules and (b) in respect of Dispatchable Load Portfolios, the increase in energy consumption corresponding to the manual FRR Adjusted Dispatch Instruction in relation to their respective Adjusted Market Schedules.~~

~~3. The activated Energy supplied for non-balancing purposes is defined as follows:~~

a) ~~The upward Activated Energy for non-balancing purposes of a Balancing Services Entity e for an Imbalances Settlement Period t ($AOE_{e,t}^{mFRR,up}$) is (a) in respect of Production~~Generating Units and Dispatchable RES Units Portfolios, the additional energy corresponding to the Adjusted Dispatch Instruction for ~~non-balancing purposes~~manual FRR in relation to their respective ~~Adjusted~~ Market Schedules and (b) ~~in respect of~~ for Dispatchable Load Portfolios, the ~~lower~~decrease in energy consumption corresponding to the Adjusted Dispatch Instruction for ~~non-balancing purposes~~manual FRR in relation to their respective ~~Adjusted~~ Market Schedules and

b) The downward ~~Activated~~ activated Balancing Energy for ~~non-balancing purposes~~ manual FRR of a Balancing ~~Services~~Service Entity e for an ~~Imbalances~~Imbalance Settlement Period t (~~$AOE_{e,t}^{mFRR,dn}$~~ $ABE_{e,t}^{mFRR,dn}$) is (a) ~~in respect of Production~~for Dispatchable Generating Units and Dispatchable RES Units Portfolios, the ~~energy~~ decrease of energy corresponding to the Adjusted Dispatch Instruction for ~~non-balancing purposes~~manual FRR in relation to their respective ~~Adjusted~~ Market Schedules and (b) ~~in respect of~~ for Dispatchable Load Portfolios, the ~~additional~~increase in energy consumption corresponding to the Adjusted Dispatch Instruction for ~~non-balancing purposes~~ manual FRR in relation to their respective ~~Adjusted~~ Market Schedules.

3. The ~~Adjusted Dispatch Instruction, Adjusted Market Schedules and the Activated~~ activated Energy ~~are~~supplied for purposes other than balancing is defined as follows:

a) The upward activated energy for purposes other than balancing of a Balancing Service Entity e for an Imbalance Settlement Period t ($AOE_{e,t}^{mFRR,up}$) is (a) for Dispatchable Generating Units and Dispatchable RES Units Portfolios, the additional energy corresponding to the Adjusted Dispatch Instruction for purposes other than balancing in relation to the respective Market Schedules and (b) for Dispatchable Load Portfolios, the reduction in energy consumption corresponding to the Adjusted Dispatch Instruction for purposes other than balancing in relation to the respective Market Schedules, and

b) The downward activated energy for purposes other than balancing of a Balancing Service Entity e for an Imbalances Settlement Period t ($AOE_{e,t}^{mFRR,dn}$) is (a) for Dispatchable Generating Units and Dispatchable RES Units Portfolios, the energy decrease corresponding to the Adjusted Dispatch Instruction for purposes other than balancing in relation to the respective Market Schedules and (b) for Dispatchable Load Portfolios, the additional energy consumption corresponding to the Adjusted

Dispatch Instruction for purposes other than balancing in relation to the respective Market Schedules.

4. The Adjusted Dispatch Instruction and the activated energy shall be calculated according to the "Activated Balancing Energy Calculation Methodology", which takes into account at least the actual ~~Availability~~availability of the Balancing Service Entities~~, as well as the Adjustment of the Market Schedules based on the Declared Characteristics of the Balancing Service Entities.~~.

5. The Instructed Energy of a Balancing ~~Services~~Service Entity *e* for an ~~Imbalances~~Imbalance Settlement Period *t* is equal to the Market Schedule plus the upward ~~activated Manual FRR~~ Balancing Energy ~~plus the downward activated Manual FRR Balancing Energy plus the upward activated Energy for Non-Balancing purposes~~ activated for manual FRR plus the downward ~~Activated Energy for Non-Balancing purposes~~Balancing Energy activated for manual FRR plus the upward energy activated for purposes other than balancing plus the downward energy activated for purposes other than balancing, as given below:

$$INST_{e,t} = MS_{e,t} + ABE_{e,t}^{mFRR,up} + ABE_{e,t}^{mFRR,dn} + AOE_{e,t}^{mFRR,up} + AOE_{e,t}^{mFRR,dn}$$

In the above formula, the upward activated energy ($ABE_{e,t}^{mFRR,up}$, $AOE_{e,t}^{mFRR,up}$~~,~~) has a positive sign while the downward activated energy ($ABE_{e,t}^{mFRR,dn}$, $AOE_{e,t}^{mFRR,dn}$~~,~~) has a negative sign.

For the calculation of the Instructed Energy, a tolerance limit can be set per category of Balancing Service Entity by decision of ~~the Regulatory Authority~~RAE, upon ~~a~~ proposal by the HETS Operator.

6. The integral of the Supervisory Control and Data Acquisition System (SCADA) measurements of a Balance Responsible Entity *e* within an ~~Imbalances~~Imbalance Settlement Period *t* that are greater than the Instructed Energy, $INST_{e,t}$~~,~~, is defined as the SCADA Upward Quantity $SQ_{e,t}^{up}$.

7. The integral of the Supervisory Control and Data Acquisition System (SCADA) measurements of a Balance Responsible Entity *e* within an ~~Imbalances~~Imbalance Settlement Period *t* that are lower than the Instructed Energy, $INST_{e,t}$~~,~~, is defined as the SCADA Downward Quantity $SQ_{e,t}^{dn}$.

8. In the event that a Balancing Service Entity *e* operates under AGC during an ~~Imbalances~~Imbalance Settlement Period *t*, then:

   a) the ~~Upward manual FRR Activated~~upward Balancing Energy activated for ~~Production~~automatic FRR for Dispatchable Generating Units or Dispatchable RES Units Portfolio ~~has~~shall have a positive sign and ~~is~~shall be equal to~~-~~:

   $$ABE_{e,t}^{aFRR,up} = SQ_{e,t}^{up}$$

   b) the ~~Downward manual FRR Activated~~downward Balancing Energy activated for ~~Production~~automatic FRR for Dispatchable Generating Units or Dispatchable RES Units Portfolio ~~has~~shall have a negative sign and ~~is~~shall be equal to~~-~~:

   $$ABE_{e,t}^{aFRR,dn} = SQ_{e,t}^{dn}$$

c) the ~~Upward manual FRR Activated~~upward Balancing Energy activated for automatic FRR for Dispatchable Load ~~Portfolio has~~Portfolios shall have a positive sign and ~~is~~shall be equal to:

$$ABE_{e,t}^{aFRR,up} = SQ_{e,t}^{dn}$$

d) the ~~Downward manual FRR Activated~~downward Balancing Energy activated for automatic FRR for Dispatchable Load ~~Portfolio has~~Portfolios shall have a negative sign and ~~is~~shall be equal to:

$$ABE_{e,t}^{aFRR,dn} = SQ_{e,t}^{up}$$

9. The Imbalance of a Balance Responsible Entity *e* for an ~~Imbalances~~Imbalance Settlement Period *t* ~~is~~shall be equal to the difference between the quantity of energy that results on the basis of the Entity's certified measurement data and the Entity's Market Schedule as given below:

a) for ~~Production~~Dispatchable Generating Units or Dispatchable RES Units Portfolio:

$$IMB_{e,t} = MQ_{e,t} - MS_{e,t}$$

b) for Dispatchable Load Portfolio:

$$IMB_{e,t} = MS_{e,t} - MQ_{e,t}$$

In the above functions, a positive sign corresponds to more energy supply ~~(~~or less energy offtake~~)~~ by the Balance Responsible Entity, while a negative sign corresponds to less energy supply ~~(~~or more energy offtake~~)~~ in relation to its Market Schedule.

10. The Imbalances ~~Adjustment~~adjustment of a Balancing Service Entity *e* that provides Balancing Energy for manual FRR or energy for ~~non-~~purposes other than balancing ~~purposes~~ for an ~~Imbalances~~Imbalance Settlement Period *t* is given in the following functions:

a) for ~~Production~~Dispatchable Generating Units or Dispatchable RES Units Portfolio:

$$IMBADJ_{e,t} = MS_{e,t} - INST_{e,t}$$

b) for Dispatchable Load Portfolio:

$$IMBADJ_{e,t} = INST_{e,t} - MS_{e,t}$$

11. The Final Imbalance of a Balancing Service Entity *e* that ~~wasn't~~was not operating under AGC for an ~~Imbalances~~Imbalance Settlement Period *t* ~~equals~~shall be equal to the Imbalance plus the Imbalances ~~Adjustment~~adjustment as given below:

$$FIMB_{e,t} = IMB_{e,t} + IMBADJ_{e,t}$$

12. The Final Imbalance of a Balancing Service Entity *e* that was operating under AGC for an ~~Imbalances~~Imbalance Settlement Period *t* ~~equals~~shall be equal to zero.

13. The Final Imbalance of a ~~Balancing Service~~Balance Responsible Entity *e* that is not providing Balancing Services ~~equals~~shall be equal to the Imbalance as it is calculated on the basis of paragraph ~~10~~9. In particular:

a) ~~for Non-~~For Dispatchable RES Units Portfolio, RES Units Portfolio without Market Participation Obligation and Electricity ~~Imports~~Exports from the Interconnections, the Final Imbalance ~~equals~~shall be equal to

$$FIMB_{e,t} = MQ_{e,t} - MS_{e,t}~~.~~$$

~~a)~~b) for Non-Dispatchable RES Units Portfolio and Electricity Exports from the Interconnections the Final Imbalance ~~equals to $FIMB_{e,t} = MS_{e,t} - MQ_{e,t}$~~ .shall be equal to

$$FIMB_{e,t} = MS_{e,t} - MQ_{e,t}$$

The Final Positive Imbalance (a) for ~~Production~~Dispatchable Generating Units and Dispatchable RES Units Portfolios~~, corresponds~~ shall correspond to higher ~~measured~~metered energy injection compared to the respective Dispatch Instruction, and (b) for Dispatchable Load Portfolios ~~corresponds~~shall correspond to lower ~~measured~~metered energy consumption compared to the respective Dispatch Instruction.

The Final Positive Imbalance (a) for ~~Production~~Non-Dispatchable RES Units Portfolio and RES Units ~~Portfolios, corresponds~~Portfolio without Market Participation Obligation shall correspond to higher metered energy injection compared to the respective Market Schedule, and (b) for Non-Dispatchable Load Portfolios shall correspond to lower ~~measured~~metered energy consumption compared to the respective Market Schedule.

The Final Negative Imbalance (a) for Dispatchable Generating Units and Dispatchable RES Units Portfolios shall correspond to lower metered energy injection in real time compared to the respective Dispatch Instruction, and (b) for Dispatchable Load Portfolios ~~corresponds~~shall correspond to higher ~~measured~~metered energy consumption in real time compared to the respective Dispatch Instruction.

~~In case that the Market Schedule of a Balancing Service Entity e is less than the Technical Minimum of the Entity, then~~ The Final Negative Imbalance (a) ~~if the ISP zeroes the Entity's energy, the quantity from the Market Schedule up to zero is considered to be an imbalance, and (b) if the ISP loads the Entity at least to its Technical Minimum, the Energy from the~~ for Non-Dispatchable RES Units Portfolio and RES Units Portfolio without Market Participation Obligation shall correspond to lower metered energy injection compared to the respective Market Schedule ~~up to the Technical Minimum of the Entity is considered to be an imbalance.~~ , and (b) for Non-Dispatchable Load Portfolios shall correspond to higher metered energy consumption compared to the respective Market Schedule.

Details ~~as well as any~~and possible deviations in relation to the above~~,~~ are described in the "Activated Balancing Energy Calculation Methodology".

14. For Dispatchable Load Portfolios with the exception of pumping and for ~~Imbalances~~Imbalance Settlement Periods for which balancing energy is provided, the Market Schedule ~~is~~shall be considered equal to their Reference Load, which is calculated by the HETS Operator for the respective period, ~~that~~and corresponds to the electricity that would ~~be~~have been consumed by the Dispatchable Load Portfolio ~~in case~~had the relevant Balancing Energy Offers ~~were~~ not been activated. ~~The details~~Details and the rules for calculating the Reference Load are ~~included~~provided in the "Dispatchable Load Portfolios Reference Load Calculation Methodology".

~~Article 87.~~Article 85. ~~Manual FRR~~ Balancing Energy Price for manual FRR

1. ~~In the event~~If there is no congestion between ~~the~~ Bidding Zones, the ~~Manual FRR Upward~~upward Balancing Energy Price for manual FRR (in EUR/MWh), $BEP_{z,t}^{up}$, for each ~~Imbalances~~Imbalance Settlement Period, *t*, for the activation of ~~a Manual FRR Upward~~upward Balancing Energy ~~is~~for manual FRR shall be equal to the maximum of the Balancing Energy Offer prices ~~of~~for the manual FRR ~~offer~~ steps that were activated

to cover the ~~System Imbalance. In the event~~ HETS Imbalances. If there is congestion between ~~the~~ Bidding Zones, the ~~Manual FRR Upward~~upward Balancing Energy Price for manual FRR for each ~~Imbalances~~Imbalance Settlement Period, *t*, for the activation of ~~an Upward~~upward Balancing Energy for each Bidding Zone ~~is~~shall be equal to the maximum of the Balancing Energy Offer prices ~~of~~for the manual FRR ~~offer~~ steps that were activated to cover the ~~Zone Imbalance of~~deviation in the specific Bidding Zone, *z*.

2. ~~In the event~~If there is no congestion between ~~the~~ Bidding Zones, the ~~Manual FRR Downward~~ downward Balancing Energy Price for manual FRR (in EUR/MWh), $BEP_{z,t}^{dn}$, for each ~~Imbalances~~Imbalance Settlement Period, *t*, for the activation of ~~a Manual~~downward Balancing Energy for manual FRR ~~Downward Balancing Energy is~~ shall be equal to the ~~minimum~~maximum of the Balancing Energy Offer prices ~~of~~for the manual FRR ~~offer~~ steps that were activated to cover the ~~System Imbalance.~~HETS Imbalances. If there is congestion between ~~the~~ Bidding Zones, the ~~Manual FRR Downward~~downward Balancing Energy Price for manual FRR for each ~~Imbalances~~Imbalance Settlement Period, *t*, for the activation of ~~a Downward~~downward Balancing Energy for each Bidding Zone ~~is~~shall be equal to the ~~minimum~~the maximum of the Balancing Energy Offer prices ~~of~~for the manual FRR ~~offer~~ steps that were activated to cover the ~~Zone Imbalance of~~ deviation in the specific Bidding Zone, *z*.

3. The ~~Upward~~upward and ~~Downward Manual FRR~~downward Balancing Energy Offers for manual FRR activated for ~~non~~ purposes other than balancing ~~purposes are market~~shall be marked and excluded from the calculation of upward and downward ~~Manual FRR Balancing Energy.~~Balancing Energy prices for manual FRR. The upward and downward Balancing Energy Offers for manual FRR for the Balancing Service Entities and for the Imbalance Settlement Periods for which no Non-Compliance Charges have been calculated as set out in Article 105 shall be marked and excluded from the calculation of upward and downward Balancing Energy prices for manual FRR. The HETS Operator shall submit to RAE, prior to putting into operation the European Union ~~Target Model~~target model for the national electricity market, a list of ~~non~~ purposes other than balancing ~~purposes,~~, which shall be approved by RAE. ~~Such reasons~~Indicatively, such purposes include but are not limited to, the management of the ~~system~~HETS constraints, and the reallocation of ~~the~~ reserves.

4. If during an Imbalance Settlement Period energy ~~was injected~~ from Contracted Units or Supplementary Energy from Emergency Imports was injected, or Load Cuts were performed, the ~~manual FRR Upward~~upward Balancing Energy Price for manual FRR may be increased ~~with~~by the Balancing Energy Deficit Premium in €/MWh for the specific ~~Imbalances~~Imbalance Settlement Period. The Balancing ~~energy~~Energy Deficit Premium price in €/MWh shall be determined by a RAE Decision, upon recommendation by the HETS Operator.

5. ~~In case that~~If the calculation of the Balancing Energy Prices is impossible, in particular due to an Emergency Situation, or ~~a~~ failure of the Balancing Market System or of the other electronic systems of the HETS Operator, the HETS Operator shall apply the procedure provided for in the "~~Settlement~~ Rules for settlement in ~~the event~~case of ~~Suspension~~suspension of market activities".

~~Article 88.~~Article 86. Calculation of ~~charges and credits for~~ Balancing Energy debits and credits

1. The ~~charge~~debits or ~~credit of~~credits to the Balancing Service Providers for each Balancing Service Entity they represent, ~~for each manual FRR Activated~~ per Imbalance Settlement Period, for activated Balancing Energy for manual FRR or for ~~activated~~ energy activated for ~~non~~ purposes other than balancing ~~purposes~~ following a ~~Relevant~~relevant Dispatch Instruction ~~is~~shall be determined for each direction according to the following table:

	Positive Balancing Energy Price	**Negative Balancing Energy Price**
Upward Balancing Energy	Payment ~~by a~~from Clearing House to ~~a~~ Balancing Service Provider	Payment ~~by a~~from Balancing Service Provider to ~~a~~ Clearing House
Downward Balancing Energy	Payment by ~~a~~ Balancing Service Provider to ~~a~~ Clearing House	Payment ~~by a~~from Clearing House to ~~a~~ Balancing Service Provider

2. The ~~charge~~debits or ~~credit of~~credits to the Balancing ~~Services~~Service Providers for each Balancing Service Entity, *e*, ~~representing~~they represent, per ~~each Imbalances~~Imbalance Settlement Period, *t*, for the activated ~~Manual FRR~~ Balancing Energy ~~is~~for manual FRR shall be calculated as follows:

   a) For the activated ~~Upward Manual FRR~~upward Balancing Energy for manual FRR, as the product of the ~~amount of the~~ quantity of ~~activated Upward Manual FRR~~ upward Balancing Energy ~~multiplied by the Upward~~activated for manual FRR and the Price for upward Balancing Energy ~~Price~~ for manual FRR for ~~the~~a Bidding Zone, z, ~~to which the~~where a Balancing Service Entity, e, belongs:

$$ABEC_{e,t}^{mFRR,up} = ABE_{e,t}^{mFRR,up} \times BEP_{z,t}^{up}$$

   Where:

   $ABEC_{e,t}^{mFRR,up}$ The ~~charge~~debit or credit in € for the ~~activated Upward Manual FRR~~ upward Balancing Energy activated for ~~the~~manual FRR for a Balancing ~~Services~~Service Entity e and ~~the Imbalances~~an Imbalance Settlement Period t.

   $ABE_{e,t}^{mFRR,up}$ The ~~Upward Activated Manual FRR~~activated upward Balancing Energy for manual FRR in MWh for ~~the~~a Balancing Service Entity e and ~~Imbalances~~an Imbalance Settlement Period t.

   $BEP_{z,t}^{up}$ ~~-~~The ~~Upward Manual FRR~~Price for the activated upward Balancing Energy ~~Offer of the~~for manual FRR, in €/MWh, for a Bidding Zone, z, ~~in €/MWh to which the~~ where a Balancing Service Entity, e, belongs~~.~~.

b) For the activated ~~Downward Manual FRR~~downward Balancing Energy for manual FRR, as the product of the ~~amount of the~~ quantity of ~~activated Downward Manual FRR~~ downward Balancing Energy ~~multiplied by the Downward~~activated for manual FRR and the Price for downward Balancing Energy ~~Price~~ for manual FRR for ~~the~~a Bidding Zone, z, ~~to which the~~where a Balancing Service Entity, e, belongs:

$$ABEC_{e,t}^{mFRR,dn} = ABE_{e,t}^{mFRR,dn} \times BEP_{z,t}^{dn}$$

Where:

$ABEC_{e,t}^{mFRR,dn}$ The ~~charge~~debit or credit in € for the activated ~~Downward Manual FRR~~ downward Balancing Energy for ~~the~~manual FRR for a Balancing ~~Services~~Service Entity e and ~~the Imbalances~~an Imbalance Settlement Period t.

$ABE_{e,t}^{mFRR,dn}$ The ~~Downward Activated Manual FRR~~ activated downward Balancing Energy for manual FRR in MWh for ~~the~~a Balancing Service Entity e and ~~Imbalances~~an Imbalance Settlement Period t.

$BEP_{z,t}^{dn}$ ~~-~~The ~~Downward Manual FRR~~Price for the activated downward Balancing Energy ~~Offer of the~~for manual FRR, in €/MWh, for a Bidding Zone, z, ~~in €/MWh to which the~~ where a Balancing Service Entity, e, belongs~~-~~.

3. The ~~charge~~debits or ~~credit of~~credits to the Balancing ~~Services~~Service Providers for each Balancing Service Entity, *e*, they represent, per ~~each Imbalances~~Imbalance Settlement Period, for upward Balancing Energy activated for automatic FRR shall be calculated as the product of:

a) the quantity of activated upward Balancing Energy for automatic FRR by the Balancing Service Entity during the Imbalance Settlement Period, and

b) the largest value between the price for the upward Balancing Energy for manual FRR and the price of the Balancing Energy Offer for automatic FRR of the Balancing Service Entity corresponding to the quantity of upward Balancing Energy activated for automatic FRR by the Balancing Service Entity during the Imbalance Settlement Period. If the Price for the upward Balancing Energy for manual FRR has not been calculated, the relative price of the Balancing Energy Offer for automatic FRR of the Balancing Service Entity shall be used.

$$ABEC_{e,t}^{aFRR,up} = ABE_{e,t}^{aFRR,up} \times max\left(BEP_{z,t}^{up}, OPBE_{e,s,t}^{aFRR,up}\right)$$

Where:

$ABEC_{e,t}^{aFRR,up}$ the debit or credit in € for the activated upward Balancing Energy for automatic FRR for a Balancing Service Entity e and an Imbalance Settlement Period t.

$ABE_{e,t}^{aFRR,up}$ the activated upward Balancing Energy for automatic FRR for a Balancing Service Entity e and an Imbalance Settlement Period t.

$BEP_{z,t}^{up}$ the Price for the activated upward Balancing Energy for manual FRR for a Bidding Zone z and an Imbalance Settlement Period *t*. A Bidding Zone z is the zone where a Balancing Service Entity e is located.

$OPBE_{e,s,t}^{aFRR,up}$ the price in €/MWh of step s of the upward Balancing Energy Offer of a Balancing Service Entity, e, for automatic FRR for an Imbalance Settlement Period, t. The step s is what corresponds to the quantity $ABE_{e,t}^{aFRR,up}$.

4. The debits or credits to the Balancing Service Providers for each Balancing Service Entity, *e*, they represent, per Imbalance Settlement Period, for Balancing Energy activated for downward automatic FRR shall be calculated as the product of:

   a) the quantity of downward Balancing Energy activated for automatic FRR by the Balancing Service Entity during the Imbalance Settlement Period, and

   b) the smallest value between the price for the downward Balancing Energy for manual FRR and the price of the Balancing Energy Offer for automatic FRR of the Balancing Service Entity. If the Price for the downward Balancing Energy for manual FRR has not been calculated, the relative price of the Balancing Energy Offer for automatic FRR of the Balancing Service Entity shall be used.

$$ABEC_{e,t}^{aFRR,dn} = ABE_{e,t}^{aFRR,dn} \times min\left(BEP_{z,t}^{dn}, OPBE_{e,s,t}^{aFRR,dn}\right)$$

Where:

$ABEC_{e,t}^{aFRR,dn}$ The debit or credit in € for the activated downward Balancing Energy for automatic FRR for a Balancing Service Entity e and an Imbalance Settlement Period t.

$ABE_{e,t}^{aFRR,dn}$ the activated downward Balancing Energy for automatic FRR for a Balancing Service Entity e and an Imbalance Settlement Period t.

$BEP_{z,t}^{dn}$ ~~, for the activated~~ the Price for the activated downward Balancing Energy for manual FRR for a Bidding Zone z *and an Imbalance Settlement Period t.* A Bidding Zone z is the zone where a Balancing Service Entity e is located.

$OPBE_{e,s,t}^{aFRR,dn}$ the price in €/MWh of step s of the downward Balancing Energy Offer of a Balancing Service Entity, e, for automatic FRR for an Imbalance Settlement Period, t. The step s is what corresponds to the quantity $ABE_{e,t}^{aFRR,dn}$.

5. The Contracted Units offering Supplementary System Energy shall be paid in accordance with the terms and conditions of the relevant Supplementary System Energy Contract, as stipulated in the HETS Grid Code.

Article 87. Calculation of debits and credits for energy ~~for non-~~activated for purposes other than balancing ~~purposes, is~~

The debits or credits to the Balancing Service Providers for each Balancing Service Entity, *e*, they represent, per Imbalance Settlement Period, for energy activated for purposes other than balancing shall be calculated as follows:

a) as the sum~~, for each step,~~ of the products of all steps, which result from the multiplication of the quantity of upward ~~activated~~balancing energy ~~of the~~in each step ~~multiplied~~ by the ~~price~~Price of the ~~corresponding step of Upward Manual FRR~~ Offer

for upward Balancing Energy for ~~the respective~~manual FRR for that step and the corresponding Entity.

$$AOEC_{e,t}^{mFRR,up} = \sum_{s} \left(mFRRQ_{e,as,t}^{up} \times OPBE_{e,s,t}^{mFRR,up} \right)$$

Where:

$AOEC_{e,t}^{mFRR,up}$ The ~~charge~~debit or credit ~~in €~~ for the ~~activated Upward~~upward Balancing Energy activated for ~~non-~~purposes other than balancing ~~purposes~~ for ~~the~~a Balancing ~~Services~~Service Entity e and ~~the Imbalances~~an Imbalance Settlement Period t.

$mFRRQ_{e,as,t}^{up}$ ~~-~~the segment, as, of step, s, in €/MWh of the upward ~~Manual FRR~~ Balancing Energy Offer for manual FRR that has been validated ~~at the~~for a Balancing ~~Services~~Service Entity, e, ~~-~~for ~~the Imbalances~~an Imbalance Settlement Period, t~~-~~.

$OPBE_{e,s,t}^{mFRR,up}$ the price in €/MWh of step s of the upward ~~Manual FRR~~ Balancing Energy Offer of ~~the~~a Balancing ~~Services~~Service Entity~~,~~ e~~,~~ for ~~the Imbalances~~manual FRR for an Imbalance Settlement Period, t.

b) as the sum~~, for each step,~~ of the products of all steps, which result from the multiplication of the quantity of downward ~~activated~~balancing energy ~~of the~~in each step ~~multiplied~~ by the ~~price~~Price of the ~~corresponding step of Downward Manual FRR~~Offer for downward Balancing Energy for ~~the respective~~ manual FRR for that step and the corresponding Entity.

$$AOEC_{e,t}^{mFRR,dn} = \sum_{\overline{as}} \left(mFRRQ_{e,as,t}^{dn} \times OPBE_{e,s,t}^{mFRR,dn} \right) \sum_{s} \left(mFRRQ_{e,as,t}^{dn} \times OPBE_{e,s,t}^{mFRR,dn} \right)$$

Where:

$AOEC_{e,t}^{mFRR,dn}$ The ~~charge~~debit or credit ~~in €~~ for the ~~activated~~ downward ~~Manual FRR~~ Balancing Energy activated for ~~the~~purposes other than balancing for a Balancing ~~Services~~Service Entity e and ~~the Imbalances~~an Imbalance Settlement Period t.

$mFRRQ_{e,as,t}^{dn}$ ~~-~~the segment, as, of step, s, in €/MWh of the downward ~~Manual FRR~~ Balancing Energy Offer ~~validated at the Balancing Services Entity, e, -~~for ~~the Imbalances~~manual FRR that has been validated for a Balancing Service Entity, e, for an Imbalance Settlement Period, t~~-~~.

$OPBE_{e,s,t}^{mFRR,dn}$ the price in €/MWh of step s of the downward ~~Manual FRR~~ Balancing Energy Offer of ~~the Balancing Services Entity e for the Imbalances Settlement Period,t.~~

3. The charge or credit of the Balancing Services Providers for each Balancing Service Entity they represent, per each Imbalances Settlement Period for the activated upward automatic FRR Balancing Energy is calculated as the product:

1) of the quantity of activated upward automatic FRR Balancing Energy of the a Balancing Service Entity during the Imbalances Settlement Period, multiplied by

2) the maximum value between the upward Manual FRR Balancing Energy Price and the Automatic FRR Balancing Energy Offer Price of the Balancing Services Entity corresponding to the quantity of activated Upward Automatic FRR Balancing Energy of the Balancing Services Entity during the Imbalances Settlement Period. If the Upward Manual FRR Balancing Energy Price has not been calculated, then the relative price of the Automatic FRR Balancing Energy Offer of the Balancing Services Entity shall be used.

$$ABEC_{e,t}^{aFRR,up} = ABE_{e,t}^{aFRR,up} \times max\left(BEP_{z,t}^{up}, OPBE_{e,s,t}^{aFRR,up}\right)$$

Where:

$ABEC_{e,t}^{aFRR,up}$ The charge or credit for the activated Upward Automatic FRR Balancing Energy for the Balancing Services Entity e and the Imbalances Settlement Period t.

$ABE_{e,t}^{aFRR,up}$ the activated Upward Automatic FRR Balancing Energy for the Balancing Services Entity e and the Imbalances Settlement Period t.

$BEP_{z,t}^{up}$ The upward manual FRR Balancing Energy Price for the Bidding zone z and the Imbalances Settlement Period t. The Bidding Zone z is the zone in which the Balancing Services Entity e is located.

$OPBE_{e,s,t}^{aFRR,up}$ the price in €/MWh of step s of the upward automatic FRR Balancing Energy Offer of the Balancing Services Entity e for the Imbalances Settlement Period,t. The step s is what corresponds to the quantity $aFRR\_BE_{e,t}^{up}$.

4. The charge or credit of the Balancing Services Providers for each Balancing Service Entity they represent, per each Imbalances Settlement Period for the activated downward automatic FRR Balancing Energy is calculated as the product:

1) of the quantity of activated downward automatic FRR Balancing Energy of the Balancing Service Entity during the Imbalances Settlement Period, multiplied by

2) the minimum value between the downward Manual FRR Balancing Energy Price and the Automatic FRR Balancing Energy Offer Price of the Balancing Services Entity. If the downward Manual FRR Balancing Energy Price has not been calculated, then the Automatic FRR Balancing Energy Offer Price of the Balancing Services Entity shall be used.

$$ABEC_{e,t}^{aFRR,dn} = ABE_{e,t}^{aFRR,dn} \times min\left(BEP_{z,t}^{dn}, OPBE_{e,s,t}^{aFRR,dn}\right)$$

~~Where:~~

$ABEC_{e,t}^{aFRR,dn}$ ~~The charge or credit for the activated downward Automatic FRR Balancing Energy for the Balancing Services Entity e and the Imbalances Settlement Period t.~~

, e, for $ABE_{e,t}^{aFRR,dn}$ ~~the activated downward Automatic FRR Balancing Energy for the Balancing Services Entity e and the Imbalances Settlement Period t.~~

$BEP_{z,t}^{dn}$ ~~the downward~~ manual FRR ~~Balancing Energy Price for the Bidding zone z and the Imbalances Settlement Period t. The Bidding Zone z is the zone in which the Balancing Services Entity e is located~~for an Imbalance Settlement Period, t.

~~$OPBE_{e,s,t}^{aFRR,dn}$ the price in €/MWh of step s of the downward automatic FRR Balancing Energy Offer of the Balancing Services Entity e for the Imbalances Settlement Period,t. The step s is what corresponds to the quantity $aFRR\_BE_{e,t}^{dn}$.~~

~~5. The Contracted Units offering Supplementary System Energy are paid in accordance with the terms and conditions of the relevant Supplementary System Energy Contract.~~

~~Article 89.~~Article 88. ~~Imbalances Price~~ Calculation of the Imbalance Price

1. The price (in EUR/MWh) at which the imbalances are cleared ~~(in EUR/MWh)~~ per Imbalance Settlement Period ~~is~~shall be calculated as follows:

a) The ~~Imbalances~~Imbalance Price, IP_t , ~~is calculated~~ for an ~~Imbalances~~Imbalance Settlement Period t shall be calculated as the weighted average price of ~~all of~~ the activated ~~quantities of upward and downward~~ Balancing Energy ~~Offers (~~in the predominant direction (upward or downward) for manual and automatic FRR~~)~~ for ~~this Imbalances~~that Imbalance Settlement Period. The above weighted average price ~~is~~shall be calculated as the quotient of the total ~~cost~~ amount in € corresponding to the activation of balancing energy in the predominant direction (upward ~~and downward~~ manual ~~FRR, upward~~ and automatic FRR or downward manual and automatic FRR) ~~divided by~~and the algebraic sum of the activated balancing energy quantities~~.~~ in the dominant direction. The ~~Imbalances~~Imbalance Price, shall be calculated as follows:

IP_t ~~, always gets a positive value and is calculated as the absolute value of the following formula:~~ $= \frac{\sum_e ABEC_{e,t}^{mFRR,main\_dir} + \sum_e ABEC_{e,t}^{aFRR,main\_dir}}{\sum_e ABE_{e,t}^{mFRR,main\_dir} + \sum_e ABE_{e,t}^{aFRR,main\_dir}}$

~~$IP_t =$~~

~~$\left| \frac{\sum_e ABEC_{e,t}^{mFRR,up} + \sum_e ABEC_{e,t}^{aFRR,up} + \sum_e ABEC_{e,t}^{mFRR,dn} + \sum_e ABEC_{e,t}^{aFRR,dn}}{\sum_e ABE_{e,t}^{mFRR,up} + \sum_e ABE_{e,t}^{aFRR,up} + \sum_e ABE_{e,t}^{mFRR,dn} + \sum_e ABE_{e,t}^{aFRR,dn}} \right|$~~

~~In the event that for an Imbalances Settlement Period t~~Where:

$ABEC_{e,t}^{mFRR,main\_dir}$ The debit or credit in € for the activated Balancing Energy for manual FRR in the predominant direction for a Balancing Service Entity e and an Imbalance Settlement Period t.

$ABEC_{e,t}^{aFRR,main\_dir}$ The debit or credit in € for the activated Balancing Energy for automatic FRR in the predominant direction for a Balancing Service Entity e and an Imbalance Settlement Period t.

$ABE_{e,t}^{mFRR,main\_dir}$ The activated Balancing Energy for manual FRR in the predominant direction in MWh for a Balancing Service Entity e and an Imbalance Settlement Period t.

$ABE_{e,t}^{aFRR,main\_dir}$ The activated Balancing Energy for automatic FRR in the predominant direction in MWh for the Balancing Service Entity e and the Imbalance Settlement Period t.

The predominant direction is upward when the activated upward Balancing Energy for manual and automatic FRR for a specific Imbalance Settlement Period t is greater than the activated downward Balancing Energy for manual and automatic FRR. Similarly, the predominant direction is downward when the activated downward Balancing Energy for manual and automatic FRR for a specific Imbalance Settlement Period t is greater than the activated upward Balancing Energy for manual and automatic FRR.

~~a)~~b) If neither upward nor downward Balancing Energy was activated for an Imbalance Settlement Period t, the ~~Imbalances~~Imbalance Price ~~is~~OP_t shall be equal to the value of the avoided Balancing Energy activation and ~~is~~shall be calculated ~~as~~by finding the mean ~~value~~ of the following values:

i. the lower ~~Upward~~upward Balancing Energy Offer price for either manual or automatic FRR for ~~the specific Imbalances~~that Imbalance Settlement Period and

ii. the higher ~~Downward~~downward Balancing Energy Offer price for either manual or automatic FRR for ~~the specific Imbalances~~that Imbalance Settlement Period.

2. ~~Upon proposal by the HETS Operator and a decision of RAE, an Administratively Defined Imbalances Price Cap may be set. The Administratively Defined Imbalances Price Cap that can be applied in the case that due to the simultaneous activation of upward and downward balancing energy in an Imbalance Settlement Period, the Imbalances Price is much higher than the most expensive activated Balancing Energy Offer. Any deficit resulting from the Imbalances Settlement due to the application of the Administratively Defined Imbalances Price Cap is covered by the Premium Account 3 and is allocated and borne by~~Any deficit resulting from the Imbalance Settlement shall be apportion and allocated to the Balance Responsible Parties, as set forth in Article 95 of this ~~Regulation~~Rulebook.

3. ~~In case that~~If the calculation of the ~~Imbalances~~Imbalance Prices is impossible, in particular due to an Emergency Situation, or ~~a~~ failure of the Balancing Market System or of the other electronic systems of the HETS Operator, the HETS Operator shall apply the procedure provided for in the "~~Settlement~~ Rules for settlement in ~~the event~~case of ~~Suspension~~suspension of market activities".

~~Article 90.~~Article 89. Calculation of ~~Charges~~Debits and Credits from the ~~Imbalances~~Imbalance Settlement

1. The ~~Imbalances~~Imbalance Settlement is the ~~process by which~~procedure whereby the Balance Responsible Parties are charged or credited for the imbalances they cause. The ~~Imbalances~~Imbalance Settlement ~~is~~shall be initially performed per Balance Responsible Entity and then per Balance Responsible Party.

2. The Imbalance ~~Amount~~amount in € for an ~~Imbalances~~Imbalance Settlement Period t and a Balancing ~~Services~~Service Entity or Balance Responsible Entity e ~~is~~shall be calculated as the Final Imbalance, ~~$FIMB_{e,t}$,~~ in MWh, as calculated according to ~~Article 85~~Article 84, multiplied by the relative ~~Imbalance Price, IP_t ,~~ price in €/MWh as ~~calculated according to Article 88. Analytically~~follows:

   a) ~~In the case that~~ If the System Imbalance is non-zero:

   $$IMBC_{e,t} = FIMB_{e,t} \times IP_t$$

   b) ~~In the case that the System Imbalance is zero~~If neither upward nor downward Balancing Energy was activated for an Imbalance Settlement Period t:

   $$IMBC_{e,t} = FIMB_{e,t} \times ~~RP_t~~ OP_t$$

   Where:

   $IMBC_{e,t}$ the ~~Imbalances charge~~Imbalance debit or credit in € for ~~the~~a Balancing ~~Services~~Service Entity or ~~the~~a Balance Responsible Entity e and ~~the Imbalances~~ an Imbalance Settlement Period t.

   $FIMB_{e,t}$ the Final Imbalance quantity, $FIMB_{e,t}$, in MWh for ~~the~~a Balancing ~~Services~~Service Entity or ~~the~~a Balance Responsible Entity e and ~~the Imbalances~~ an Imbalance Settlement Period t.

   IP_t ~~-~~the ~~–~~Imbalance Price in €/MWh for ~~the Imbalances~~an Imbalance Settlement Period t.

   ~~RP_t~~ OP_t ~~-the weighted average settlement price~~mean, in €/MWh, of the ~~Day-Ahead Market~~lowest upward Balancing Energy Offer Price and the highest downward Balancing Energy Offer Price either for ~~all Bidding zones z~~automatic or for ~~the respective Market Time Unit, that is, the Market Time Unit within which the Imbalances~~ manual FRR for a specific Imbalance Settlement Period ~~is located~~t.

3. When the ~~Imbalance~~ amount ~~is estimated~~calculated for an Imbalance is found to be negative, the Balance Responsible Entity is required to pay ~~the calculated~~ that amount. When the ~~Imbalance~~ amount calculated for an Imbalance is ~~estimated~~found to ~~be~~ positive, the Balance Responsible Entity is entitled to collect ~~the calculated~~ that amount.

4. The Imbalance amount calculated for RES Units Portfolio without Market Participation Obligation ~~is~~shall be debitd/ credited to DAPEEP.

CHAPTER 19

BALANCING CAPACITY SETTLEMENT

~~Article 91.~~Article 90. Calculation of the supplied quantity of Balancing Capacity ~~Quantity Supplied~~

1. The Balancing Capacity Settlement Period is set to be equal to the ~~Imbalances~~Imbalance Settlement Period. In order to ~~match~~ensure that the ISP Dispatch Period corresponds with ~~Imbalances~~the Imbalance Settlement Periods, the half-hourly results for ISP Balancing Capacity shall be divided into two (2) equivalent 15-minute results.

2. For each Balancing Service Entity and for each ~~Imbalances~~Imbalance Settlement Period, the upward and downward Balancing Capacity ~~provided for provided~~supplied for FCR, automatic FRR and manual FRR ~~results~~shall be calculated taking into account:

   a) The ~~parts~~segments of the individual steps of the Balancing Capacity ~~Bid~~Offer that have been validated on the basis of the ~~latest~~last ISP ~~performance, the~~execution, whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period.

   b) the availability in MW of the Balancing ~~Services~~Service Entity for the provision of the service in real time.

   c) ~~-~~the percentage of ~~the~~a time period within an ~~Imbalances~~Imbalance Settlement Period ~~in which~~when the ~~-~~Balancing Service Entity ~~-~~was available for the provision of FCR in real~~-~~ time ~~upward FCR~~.

3. The ~~provided~~ upward and downward Balancing Capacity provided for FCR by ~~the~~a Balancing Service Entity e for ~~the Imbalances~~an Imbalance Settlement Period t ~~is~~shall be calculated as follows:

$$FCRQ_{e,t}^{up} = \sum_{s} \sum_{as} \left(FCRQ_{e,as,t}^{up}\right) \times T_{e,t}^{FCR,up}$$

$$FCRQ_{e,t}^{dn} = \sum_{s} \sum_{as} \left(FCRQ_{e,as,t}^{dn}\right) \times T_{e,t}^{FCR,dn}$$

where:

$FCRQ_{e,t}^{up}$ the ~~supplied~~ upward ~~FCR~~ Balancing Capacity, in MW~~,~~, supplied for FCR by ~~the~~a Balancing ~~Services~~Service Entity, *e*, for ~~the Imbalances~~an Imbalance Settlement Period *t*~~,~~.

$FCRQ_{e,as,t}^{up}$ the segment, as, of step, s, in MW of the upward ~~FCR~~ Balancing Capacity ~~Bid~~ Offer for FCR validated ~~at the~~for a Balancing ~~Services~~Service Entity, e, for ~~the~~a Dispatch Period which includes ~~the Imbalances~~an Imbalance Settlement Period, t, ~~based~~ on the basis of the last ~~performance of the~~ ISP~~, the~~ execution, whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period *t*.

$T_{e,t}^{FCR,up}$ the percentage of ~~the~~a time period within an ~~Imbalances~~Imbalance Settlement Period ~~t in which~~when the Balancing Service Entity ~~e~~ was available for the provision of ~~real-time~~ upward FCR~~,~~ in real time.

$FCRQ_{e,t}^{dn}$ the ~~supplied upward~~downward Balancing Capacity~~-~~, in MW, supplied for FCR ~~in MW,,~~ by ~~the~~a Balancing ~~Services~~Service Entity, *e*, for ~~the Imbalances~~an Imbalance Settlement Period, *t*~~,~~.

$FCRQ_{e,as,t}^{dn}$ the segment, as, of step, s, in MW of the downward ~~FCR~~ Balancing Capacity ~~Bid~~ Offer for FCR validated ~~at the~~for a Balancing ~~Services~~Service Entity, e, for ~~the~~a Dispatch Period which includes ~~the Imbalances~~an Imbalance Settlement Period, t, ~~based~~ on the basis of the last ~~performance of the~~ ISP~~, the~~ execution, whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period *t*.

$T_{e,t}^{FCR,dn}$ the percentage of ~~the~~a time period within an ~~Imbalances~~Imbalance Settlement Period ~~t in which~~when the Balancing Service Entity ~~e~~ was available for the provision of ~~real-time~~ downward FCR~~.~~ in real time

4. The ~~provided~~ upward and downward Balancing Capacity provided for manual FRR by ~~the~~a Balancing Service Entity e for ~~the Imbalances~~an Imbalance Settlement Period t ~~is~~shall be calculated as follows:

$$mFRRQ_{e,t}^{up} = \sum_{s}\sum_{as}\left(mFRRQ_{e,as,t}^{up}\right) \times T_{e,t}^{mFRR,up}$$

$$mFRRQ_{e,t}^{dn} = \sum_{s}\sum_{as}\left(mFRRQ_{e,as,t}^{dn}\right) \times T_{e,t}^{mFRR,dn}$$

where:

$mFRRQ_{e,t}^{up}$ the ~~supplied~~ upward Balancing Capacity~~-~~, in MW, supplied for manual FRR ~~in MW,,~~ by ~~the~~a Balancing ~~Services~~Service Entity, *e* ~~in real time~~, for ~~the Imbalances~~an Imbalance Settlement Period, *t*, in real time.

$mFRRQ_{e,as,t}^{up}$ the segment, as, of step, s, in MW~~,~~ of the upward ~~manual FRR~~ Balancing Capacity ~~Bid~~ Offer for manual FRR validated ~~at the~~for a Balancing ~~Services~~Service Entity, *e*, for ~~the~~a Dispatch Period which includes ~~the Imbalances~~an Imbalance Settlement Period, *t*, ~~based~~ on the basis of the last ~~performance of the~~ ISP~~, the~~ execution, whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period, *t*.

$T_{e,t}^{mFRR,up}$ the percentage of ~~the~~a time period within an ~~Imbalances~~Imbalance Settlement Period, *t* ~~in which the~~, when a Balancing Service Entity, *e*, was available for the provision of ~~real-time~~ upward manual FRR~~,~~ in real time.

$mFRRQ_{e,t}^{dn}$ the ~~supplied~~ downward Balancing Capacity~~-~~, in MW, supplied for manual FRR ~~in MW,,~~ by ~~the~~a Balancing ~~Services~~Service Entity, *e* ~~in~~

~~real time~~, for ~~the Imbalances~~an Imbalance Settlement Period, *t*, in real time.

$mFRRQ^{dn}_{e,as,t}$ the segment, as, of step, s, in MW~~,~~ of the downward ~~manual FRR~~ Balancing Capacity ~~Bid~~ Offer for manual FRR validated ~~at the~~for a Balancing ~~Services~~Service Entity, *e*, for ~~the~~a Dispatch Period which includes ~~the Imbalances~~an Imbalance Settlement Period, *t*, ~~based~~ on the basis of the last ~~performance of the~~ ISP~~, the~~ execution, whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period, *t*.

$T^{mFRR,dn}_{e,t}$ the percentage of ~~the~~a time period within an ~~Imbalances~~Imbalance Settlement Period, *t* ~~in which the~~, when a Balancing Service Entity, *e*, was available for the provision of ~~real time~~ downward manual FRR~~,~~ in real time.

5. The ~~provided~~ upward and downward Balancing Capacity, in MWh, supplied for automatic FRR~~, in MW,~~ by ~~the~~a Balancing Service Entity, *e*, for ~~the Imbalances~~an Imbalance Settlement Period, *t* ~~is~~, shall be calculated as follows:

$$aFRRQ^{up}_{e,t} = \sum_{s}\sum_{as}\left(aFRRQ^{up}_{e,as,t}\right) \times T^{aFRR,up}_{e,t}$$

$$aFRRQ^{dn}_{e,t} = \sum_{s}\sum_{as}\left(aFRRQ^{dn}_{e,as,t}\right) \times T^{aFRR,dn}_{e,t}$$

where:

$aFRRQ^{up}_{e,t}$ the ~~supplied~~ upward Balancing Capacity~~–~~, in MW, supplied for automatic FRR ~~in MW,,~~ by ~~the~~a Balancing ~~Services~~Service Entity, *e* ~~in real time~~, for ~~the Imbalances~~an Imbalance Settlement Period, *t*, in real time.

$aFRRQ^{up}_{e,as,t}$ the segment, as, of step, s, in MW~~,~~ of the upward ~~automatic FRR~~ Balancing Capacity ~~Bid~~ Offer for automatic FRR validated ~~at the~~for a Balancing ~~Services~~Service Entity, *e*, for ~~the~~a Dispatch Period which includes ~~the Imbalances~~an Imbalance Settlement Period, *t*, ~~based~~ on the basis of the last ~~performance of the~~ ISP~~, the~~ execution, whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period, *t*.

$T^{mFRR,up}_{e,t}$ the percentage of ~~the~~a time period within an ~~Imbalances~~Imbalance Settlement Period, *t* ~~in which the~~, when a Balancing Service Entity, *e*, was available for the provision of ~~real time~~ upward automatic FRR~~,~~ in real time.

$aFRRQ^{dn}_{e,t}$ the ~~supplied~~ downward Balancing Capacity~~–~~, in MW, supplied for automatic FRR ~~in MW,,~~ by ~~the~~a Balancing ~~Services~~Service Entity, *e* ~~in real time~~, for ~~the Imbalances~~an Imbalance Settlement Period, *t*, in real time.

$aFRRQ^{dn}_{e,as,t}$ the segment, as, of step, s, in MW~~,~~ of the downward ~~automatic FRR~~ Balancing Capacity ~~Bid~~ Offer for automatic FRR validated ~~at the~~for a Balancing ~~Services~~Service Entity, *e*, for ~~the~~a Dispatch Period which includes ~~the Imbalances~~an Imbalance Settlement Period, *t*, ~~based~~ on the basis of the last ~~performance of the~~ ISP~~, the~~ execution, whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period, *t*.

$T^{aFRR,dn}_{e,t}$ the percentage of ~~the~~a time period within an ~~Imbalances~~Imbalance Settlement Period, *t* ~~in which the~~, when a Balancing Service Entity, *e*, was available for the provision of ~~real-time~~ downward automatic FRR~~,~~ in real time.

~~Article 92.~~Article 91. Calculation of Balancing ~~Power~~Capacity Remuneration

1. For each Balancing Service Entity and for each ~~Imbalances~~Imbalance Settlement Period, the remuneration for the upward and downward Balancing Capacity supplied for FCR, automatic~~,~~ FRR and manual FRR, ~~results by~~shall be calculated taking into account the upward or downward Balancing Capacity supplied and the price of the respective Balancing Capacity ~~Bid~~Offer step~~,~~ that have been validated on the basis of the last ~~performance~~execution of the ISP, ~~the~~whose solution ~~time period of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period~~.~~,

2. ~~The~~ Similarly, the remuneration of ~~the~~a Balancing ~~Services~~Service Entity, e, for the Balancing Capacity supplied for ~~Upward~~upward and ~~Downward~~downward FCR, automatic FRR, and ~~Manual~~manual FRR in ~~the Imbalances~~an Imbalance Settlement Period t, ~~respectively,~~ is calculated as follows:

$$FCRC^{up}_{e,t} = \sum_{s}^{-}\sum_{as}^{-}\left(FCRQ^{up}_{e,as,t} \times OP^{FCR,up}_{e,s,t}\right)\frac{1}{4} \times \sum_{s}\sum_{as}\left(FCRQ^{up}_{e,as,t} \times OP^{FCR,up}_{e,s,t}\right) \times T^{FCR,up}_{e,t}$$

$$FCRC^{dn}_{e,t} = \sum_{s}^{-}\sum_{as}^{-}\left(FCRQ^{dn}_{e,as,t} \times OP^{FCR,dn}_{e,s,t}\right)\frac{1}{4} \times \sum_{s}\sum_{as}\left(FCRQ^{dn}_{e,as,t} \times OP^{FCR,dn}_{e,s,t}\right) \times T^{FCR,dn}_{e,t}$$

$$mFRRC^{up}_{e,t} = \sum_{s}^{-}\sum_{as}^{-}\left(mFRRQ^{up}_{e,as,t} \times OP^{mFRR,up}_{e,s,t}\right)\frac{1}{4} \times \sum_{s}\sum_{as}\left(mFRRQ^{up}_{e,as,t} \times OP^{mFRR,up}_{e,s,t}\right) \times T^{mFRR,up}_{e,t}$$

$$mFRRC_{e,t}^{dn} = \sum_{s}^{-} \sum_{as}^{-} \left(mFRRQ_{e,as,t}^{dn} \times OP_{e,s,t}^{mFRR,dn}\right) \frac{1}{4} \times \sum_{s} \sum_{as} \left(mFRRQ_{e,as,t}^{dn} \times OP_{e,s,t}^{mFRR,dn}\right) \times T_{e,t}^{mFRR,up}$$

$$aFRRC_{e,t}^{up} = \sum_{s}^{-} \sum_{as}^{-} \left(aFRRQ_{e,as,t}^{up} \times OP_{e,s,t}^{aFRR,up}\right) \frac{1}{4} \times \sum_{s} \sum_{as} \left(aFRRQ_{e,as,t}^{up} \times OP_{e,s,t}^{aFRR,up}\right) \times T_{e,t}^{aFRR,up}$$

$$aFRRC_{e,t}^{dn} = \sum_{s}^{-} \sum_{as}^{-} \left(aFRRQ_{e,as,t}^{dn} \times OP_{e,s,t}^{aFRR,dn}\right) \frac{1}{4} \times \sum_{s} \sum_{as} \left(aFRRQ_{e,as,t}^{dn} \times OP_{e,s,t}^{aFRR,dn}\right) \times T_{e,t}^{aFRR,dn}$$

where:

$FCRC_{e,t}^{up}$ the remuneration in € of ~~the~~a Balancing ~~Services~~Service Entity e for the ~~upward FCR~~ Balancing Capacity supplied for upward FCR in ~~the Imbalances~~an Imbalance Settlement Period t~~,~~.

$FCRC_{e,t}^{dn}$ the remuneration in € of ~~the~~a Balancing ~~Services~~Service Entity e for the ~~downward FCR~~ Balancing Capacity supplied for downward FCR in ~~the Imbalances~~an Imbalance Settlement Period t~~,~~.

$T_{e,t}^{FCR,up}$ the percentage of a time period within an Imbalance Settlement Period when the Balancing Service Entity was available for the provision of upward FCR in real time.

$T_{e,t}^{FCR,dn}$ the percentage of a time period within an Imbalance Settlement Period when the Balancing Service Entity was available for the provision of downward FCR in real time.

$mFRRC_{e,t}^{up}$ the remuneration in € of ~~the~~a Balancing ~~Services~~Service Entity e for the Balancing Capacity supplied for upward manual FRR ~~Balancing Capacity supplied in the Imbalances~~in an Imbalance Settlement Period t~~,~~.

$mFRRC_{e,t}^{dn}$ the remuneration in € of ~~the~~a Balancing ~~Services~~Service Entity e for the Balancing Capacity supplied for downward manual FRR ~~Balancing Capacity supplied in the Imbalances~~in an Imbalance Settlement Period t~~,~~.

$T_{e,t}^{mFRR,up}$ the percentage of a time period within an Imbalance Settlement Period, t, when a Balancing Service Entity, e, was available for the provision of upward manual FRR in real time.

$T_{e,t}^{mFRR,dn}$ the percentage of a time period within an Imbalance Settlement Period, t, when a Balancing Service Entity, e, was available for the provision of downward manual FRR in real time.

$aFRRC_{e,t}^{up}$ the remuneration in € of ~~the~~a Balancing ~~Services~~Service Entity e for the Balancing Capacity supplied for upward automatic FRR ~~Balancing Capacity supplied~~ in ~~the Imbalances~~an Imbalance Settlement Period *t*~~,~~.

$aFRRC_{e,t}^{dn}$ the remuneration in € of ~~the~~a Balancing ~~Services~~Service Entity e for the Balancing Capacity supplied for downward automatic FRR ~~Balancing Capacity supplied~~ in ~~the Imbalances~~an Imbalance Settlement Period *t*~~,~~.

$T_{e,t}^{mFRR,up}$ the percentage of a time period within an Imbalance Settlement Period, *t*, when a Balancing Service Entity, *e*, was available for the provision of upward automatic FRR in real time.

$T_{e,t}^{aFRR,dn}$ the percentage of a time period within an Imbalance Settlement Period, *t*, when a Balancing Service Entity, *e*, was available for the provision of downward automatic FRR in real time.

$OP_{e,s,t}^{FCR,up}$ the price in €/MW-hour of step *s*~~,~~ of the upward ~~FCR~~ Balancing Capacity ~~Bid~~Offer for FCR of ~~the~~a Balancing ~~Services~~Service Entity~~,~~ *e*~~,~~ that has been validated~~, based~~ on the basis of the last ~~performance~~execution of the ISP, ~~the~~whose solution ~~time limit of which includes the~~ timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period~~,~~ *t*~~,~~.

$OP_{e,s,t}^{FCR,dn}$ the price in €/MW-hour of step *s*~~,~~ of the downward ~~FCR~~ Balancing Capacity ~~Bid~~Offer for FCR of ~~the~~a Balancing ~~Services~~Service Entity~~,~~ e~~,~~ that has been validated~~, based~~ on the basis of the last ~~performance~~execution of the ISP, ~~the~~whose solution ~~time limit of which includes the~~ timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period~~,~~ *t*~~,~~.

$OP_{e,s,t}^{aFRR,up}$ the price in €/MW-hour of step *s*~~,~~ of the upward ~~automatic FRR~~ Balancing Capacity ~~Bid~~Offer for automatic FRR of ~~the~~a Balancing ~~Services~~Service Entity~~,~~ e~~,~~ that has been validated~~, based~~ on the basis of the last ~~performance~~execution of the ISP, ~~the~~whose solution ~~time limit of which includes the~~ timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period~~,~~ *t*~~,~~.

$OP_{e,s,t}^{aFRR,dn}$ the price in €/MW-hour of step *s*~~,~~ of the downward ~~automatic FRR~~ Balancing Capacity ~~Bid~~Offer for automatic FRR of ~~the~~a Balancing ~~Services~~Service Entity~~,~~ e~~,~~ that has been validated~~, based~~ on the basis of the last ~~performance~~execution of the ISP, ~~the~~whose solution ~~time limit of which includes the~~timeframe shall include that specific ~~Imbalances~~Imbalance Settlement Period~~,~~ *t*~~,~~.

$OP_{e,s,t}^{mFRR,up}$ the price in €/MW-hour of step *s*~~,~~ of the upward ~~manual FRR~~ Balancing Capacity ~~Bid~~Offer for manual FRR of ~~the~~a Balancing ~~Services~~Service Entity~~,~~ e~~,~~ that has been validated~~, based~~ on the basis of the last

performanceexecution of the ISP, thewhose solution time limit of which includes thetimeframe shall include that specific ImbalancesImbalance Settlement Period, *t*, and

$OP_{e,s,t}^{mFRR,dn}$ theThe price in €/MW-hour of step *s*, of the downward manual FRR Balancing Capacity BidOffer for manual FRR of thea Balancing ServicesService Entity, e, that has been validated, based on the basis of the last performanceexecution of the ISP, thewhose solution time limit of which includes thetimeframe shall include that specific ImbalancesImbalance Settlement Period, *t*.

3. The total remuneration of all the Balancing ServicesService Entities *e* for the Balancing Capacity supplied for Upwardupward and downward FCR, automatic FRR, and Downward FCR, automatic FRR, and Manualmanual FRR during the Imbalancesan Imbalance Settlement Period t, is calculated as follows:

$$BALCAP_t = \sum_e FCRC_{e,t}^{up} + \sum_e FCRC_{e,t}^{dn} + \sum_e mFRRC_{e,t}^{up} + \sum_e mFRRC_{e,t}^{dn} + \sum_e aFRRC_{e,t}^{up} + \sum_e aFRRC_{e,t}^{dn}$$

where:

$BALCAP_t$ the total remuneration of all the Balancing ServicesService Entities *e* for the Balancing Capacity supplied for Upwardupward and Downwarddownward FCR, automatic FRR, and Manualmanual FRR in the Imbalancesan Imbalance Settlement Period *t*.

4. In the event thatIf the calculation of the offerBalancing Capacity Offer prices is impossible, in particular due to an Emergency Situation, or a failure of the Balancing Market System or of the other electronic systems of the HETS Operator, the HETS Operator shall apply the "“Rules for settlement in case of suspension", of market activities”, approved by RAE, upon recommendation by the Operator according to the provisions of par. 4 of Article, article 18 of Law 4425/2016.

CHAPTER 19

CHAPTER 20

PREMIUMUPLIFT ACCOUNTS

Article 93.Article 92. HETS Operator Premium AccountsUplift Account

The Premium Account includesshall include the following individual accounts:

a) PAUA-1: SystemHETS Losses PremiumUplift Account

b) PAUA-2: Balancing Capacity PremiumUplift Account

c) PAUA-3: Financial Neutrality PremiumUplift Account

~~Article 94.~~Article 93. ~~PA~~UA-1 ~~System~~HETS Losses ~~Premium~~Uplift Account

1. The ~~PA~~UA-1 System Losses ~~Premium~~Uplift Account shall be used to allocate the ~~HETS losses~~ cost of HETS Losses, which is calculated as the sum of the amounts resulting from the Day-Ahead Market settlement ~~of,~~ the Intra-Day Market~~, the~~ settlement ~~of the Intraday Market~~ and the ~~Imbalances~~Imbalance Settlement for these ~~losses~~Losses.

2. The cost of ~~the~~ HETS ~~losses~~Losses shall be apportioned and allocated to ~~and borne by~~ the Balance Responsible Parties according to the ~~measured~~metered offtake of their customers ~~in~~from the Interconnected System in each Imbalance Settlement Period ~~–~~*t*~~,~~ as follows:

$$UPLIFT1_{p,t} = LOSSES_t \times \frac{MQ_{p,t}}{\sum_p MQ_{p,t}}$$

where:

$LOSSES_t$ the total cost of ~~the~~ HETS Losses, in ~~€~~€, as it results from the settlement of the Day-Ahead Market, the settlement of the ~~Intraday~~Intra-Day Market and the ~~Imbalances~~Imbalance Settlement for these ~~losses~~Losses for ~~the Imbalances~~an Imbalance Settlement Period t,

$MQ_{p,t}$ ~~the~~The offtake (calculated ~~in~~at the Transmission System - Distribution Network Limit) in MWh that corresponds to the ~~customers~~consumers of the Interconnected System per Balance Responsible Party p for ~~the Imbalances~~an Imbalance Settlement Period *t*,

~~Article 95.~~Article 94. ~~PA~~UA-2 Balancing Capacity ~~Premium~~Uplift Account

1. The ~~PA~~UA-2 Balancing Capacity ~~Premium~~Uplift Account shall be used to allocate the cost of the Balancing Capacity ~~supply~~supplied by the Balancing ~~Services~~Service Providers.

2. The cost of the Balancing Capacity supply for each ~~Imbalances~~Imbalance Settlement Period *t*, ~~BALCAPt,~~$BALCAP_t$, shall be allocated to and borne by the Balance Responsible Parties according to the ~~measured~~metered offtake of their customers in the Interconnected System in each Imbalance Settlement Period t as follows:

$$UPLIFT2_{p,t} = BALCAP_t \times \frac{MQ_{p,t}}{\sum_p MQ_{p,t}}$$

where:

$BALCAP_t$ the total remuneration of all ~~the~~ Balancing ~~Services~~Service Entities *e* for the Balancing Capacity supplied for ~~Upward~~upward and ~~Downward~~downward FCR, automatic FRR, and ~~Manual~~manual FRR ~~for the Imbalances~~in an Imbalance Settlement Period *t*.

$MQ_{p,t}$ the offtake (calculated ~~in~~at the Transmission System - Distribution Network Limit) in MWh that corresponds to the ~~customers~~consumers of the Interconnected System per Balance Responsible Party p for ~~the Imbalances~~an Imbalance Settlement Period *t*.

~~Article 96.~~Article 95. ~~PA~~UA-3 Financial Neutrality ~~Premium~~Uplift Account

1. The ~~PA~~UA-3 Financial Neutrality ~~Premium~~Uplift Account shall be used to allocate to Balance Responsible Parties any remaining balance after the calculation of the ~~charges~~debits and ~~the~~ credits calculated by the HETS Operator for the activated Balancing Energy for manual FCR ~~balancing capacity~~, the activated Balancing Energy for automatic FRR ~~balancing capacity~~, the energy ~~for non-balancing and clearing~~activated for purposes other than balancing and Imbalance Settlement. The above account shall include income or costs resulting from the intended exchanges of energy pursuant to article 50 of Regulation (EU) 2017/2195 and the unintended exchanges of energy pursuant to article 51 of Regulation (EU) 2017/2195.

2. ~~The~~The amount ensuring the financial neutrality of the HETS Operator in each ~~Imbalances~~Imbalance Settlement Period t, NEUTRt, ~~is~~shall be calculated as follows:

$$NEUTR_t = \sum_e ABEC_{e,t}^{mFRR,up} + \sum_e ABEC_{e,t}^{aFRR,up} + \sum_e AOEC_{e,t}^{mFRR,up}$$

$$+ \sum_e ABEC_{e,t}^{mFRR,dn} + \sum_e ABEC_{e,t}^{aFRR,dn} + \sum_e AOEC_{e,t}^{mFRR,dn} + \sum_p IMBC_{p,t}$$

$$\pm \sum IDEV_t + UDEV_t$$

where:

$NEUTR_t$ the amount ensuring the financial neutrality of the HETS Operator ~~for the Imbalances~~ in an Imbalance Settlement Period *t*,

$ABEC_{e,t}^{mFRR,up}$ the ~~charge~~debit or credit ~~of the~~to a Balancing ~~Services~~Service Entity e, for ~~the Imbalances~~an Imbalance Settlement Period t, for the upward Balancing Energy activated ~~Upward~~for manual FRR ~~Balancing Energy~~..

$ABEC_{e,t}^{aFRR,up}$ the ~~charge~~debit or credit ~~of the~~to a Balancing ~~Services~~Service Entity e, for ~~the Imbalances~~an Imbalance Settlement Period t, for the upward Balancing Energy activated ~~Upward~~for automatic FRR ~~Balancing Energy~~.

$AOEC_{e,t}^{mFRR,up}$ the ~~charge~~debit or credit ~~of the~~to a Balancing ~~Services~~Service Entity e, for ~~the Imbalances~~an Imbalance Settlement Period t, for the activated ~~Upward~~upward Energy supplied for ~~non-~~purposes other than balancing ~~purposes~~.

$ABEC_{e,t}^{mFRR,dn}$ the ~~charge~~debit or credit ~~of the~~to a Balancing ~~Services~~Service Entity e, for ~~the Imbalances~~an Imbalance Settlement Period t, for the downward Balancing Energy activated ~~Downward~~for manual FRR ~~Balancing Energy~~.

$ABEC_{e,t}^{aFRR,dn}$ the ~~charge~~debit or credit ~~of the~~to a Balancing ~~Services~~Service Entity e, for ~~the Imbalances~~an Imbalance Settlement Period t, for the downward Balancing Energy activated ~~Downward~~for automatic FRR ~~Balancing Energy~~.

$AOEC_{e,t}^{mFRR,dn}$ the ~~charge~~debit or credit ~~of the~~to a Balancing ~~Services~~Service Entity e, for ~~the Imbalances~~an Imbalance Settlement Period t, for the activated

~~Downward~~downward Energy supplied for ~~non-~~purposes other than balancing ~~purposes~~.

$IMBC_{p,t}$ the ~~charge~~debit or credit ~~for imbalances of the~~to a Balance Responsible Entity, *p*, for ~~the Imbalances~~an Imbalance Settlement Period, *t*. The ~~imbalances~~Imbalances for the HETS Losses are included.

$IDEV_t$ the debit or credit for intended exchanges of energy pursuant to article 50 of Regulation (EU) 2017/2195 for an Imbalance Settlement Period, *t*.

$UDEV_t$ the debit or credit for unintended exchanges of energy pursuant to article 51 of Regulation (EU) 2017/2195 for an Imbalance Settlement Period, *t*.

3. The cost for ensuring the financial neutrality of the HETS Operator~~-~~, $NEUTR_t$, for each ~~Imbalances~~Imbalance Settlement Period t~~-~~, shall be apportioned and allocated to ~~and borne by~~ the Balance Responsible Parties, p, according to the ~~measured~~metered offtake of their customers in the Interconnected System in each Imbalance Settlement Period *t*, as follows:

$$UPLIFT3_{p,t} = NEUTR_t \times \frac{MQ_{p,t}}{\sum_p MQ_{p,t}}$$

where:

$NEUTR_t$ the amount ensuring the financial neutrality of the HETS Operator in each ~~Imbalances~~Imbalance Settlement Period. *t*~~,~~.

$MQ_{p,t}$ the offtake (calculated ~~in~~at the Transmission System - Distribution Network Limit) in MWh that corresponds to the ~~customers~~consumers of the Interconnected System per Balance Responsible Party *p* for ~~the Imbalances~~an Imbalance Settlement Period *t*.

CHAPTER 21

NON-COMPLIANCE CHARGES

~~Article 97.~~Article 96. Consequences of ~~Illegal~~unlawful submission of Non-Availability Declarations

1. In the event of non-submission or ~~in the event of an~~ unlawful submission of a Non-Availability Declaration for a Balancing Service Entity *e* ~~as defined in~~according to ~~Article 46~~Article 47, the HETS Operator shall impose on the respective Balancing Service Provider a charge for month m equal to $NCAV_{e,m}$, ~~and it is~~which shall be calculated as follows:

$$NCAV_{e,m} = UNCAV \times (1 + A_{AV}) \times (NAV_e)^x \times \sum_{d \in m} NACAP_{e,d}$$

where:

UNCAV $UNCAV$ the unitary Non-Compliance Charge for unlawful Submission of Non-Availability Declarations in €/MW,

A_{AV} ~~———~~ A_{AV} a premium coefficient which may vary ~~per~~by category of Balancing ~~Services~~Service Entity,

NAV_e the number of Dispatch Days ~~within the~~in a calendar month ~~during~~for which the Balancing ~~Services~~Service Provider *p* ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted a Non-Availability Declaration for the Balancing Service Entity it represents ~~and which has~~, whose maximum value shall be equal to ~~NAV_{max}~~, NAV_{max},

NAV_{max} NAV_{max} the maximum value of NAV_e~~–~~, which may vary ~~per~~ by category of Balancing Service Entity ~~category~~, ,

x ~~———~~ x an exponential factor between 0 and 1, and

$NACAP_{e,d}$ ~~–~~ the Capacity of ~~the~~a Balancing ~~Services~~Service Entity *e*, in accordance with the Registered ~~Operating~~ Characteristics, which was not available and for which the Balancing Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted a Non-Availability Declaration for ~~the~~ Dispatch Day *d*.

2. The numerical values of the unitary charge ~~$UNCAV$~~, $UNCAV$, the maximum value of the serial counter ~~NAV_{max}~~, NAV_{max}, the exponential ~~coefficient x~~, factor x and the charge premium coefficient ~~A_{AV}~~, A_{AV}, shall be determined by decision of RAE, upon recommendation by the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

~~Article 98.~~Article 97. Consequences of unlawful ~~Submission~~submission of Techno-Economic Declaration

1. In the event of non-submission or unlawful submission of a Techno-Economic Declaration ~~of~~for a Balancing Service Entity e according to ~~Article 51~~Article 46, the HETS Operator shall impose on the respective Balancing Service Provider a charge for month m equal to $NCTD_{e,m}$, ~~and it is~~which shall be calculated as follows:

$$\text{~~}NCTD_{e,m}\text{~~}NCTD_{e,m} = UNCTD \times (1 + A_{TD}) \times (NTD_e)^x \times \sum_{d \in m} NSCAP_{e,d}$$

where:

~~where:~~

$UNCTD$ $UNCTD$ the unitary Non-Compliance Charge for unlawful ~~Submission~~submission of ~~Techno~~TTechno-Economic Declarations in €/MW,

A_{TD} ~~———~~ A_{TD} a premium coefficient which may vary ~~per~~by category of Balancing ~~Services~~Service Entity,

NTD_e the number of Dispatch Days ~~during~~in the current calendar month m, ~~during~~for which the Balancing ~~Services~~Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted a Techno-Economic Declarations for the Balancing Service Entity, e, it represents, ~~and which has~~whose maximum value shall be equal to ~~NTD_{max}~~ NTD_{max},

NTD_{max} NTD_{max} the maximum value of NTD_e~~–~~, which may vary ~~per~~ by category of Balancing Service Entity ~~category~~, ,

x ~~———~~ x an exponential factor between 0 and 1, and

$NSCAP_{e,d}$ the Capacity of ~~the~~a Balancing ~~Services~~Service Entity *e*, in accordance with its Registered ~~Operating~~Operation Characteristics, for which the Participant ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted a Techno-Economic Declaration for ~~the~~ Dispatch Day *d*.

2. The numerical values of the unitary charge ~~,~~ $UNCTD$, the maximum value of the serial counter $NTD_{\max}$, the exponential factor ~~*x*,~~x and the charge premium coefficient A_{TD}, shall be determined by decision of RAE, upon recommendation by the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

~~Article 99.~~Article 98. Consequences of non-submission of Balancing Energy Offers

1. In the event of non-submission or unlawful submission of ~~Manual FRR or automatic FRR~~ Balancing Energy Offers for manual FRR or automatic FRR for a Balancing Service Entity ~~*ee*~~, for a ~~Manual~~manual FRR Time Unit ~~t, of~~, t, for month ~~m, if~~m, when the respective Balancing Service Provider is under a relevant obligation, the HETS Operator shall impose a charge on the Balancing Service Provider for month m, ~~with the amount~~which shall be calculated as follows:

$$NCBEO_{e,m} = UNCBEO \times (1 + A_{BEO}) \times (NBEO_e)^x \times \sum_{t \in m} \left(BEOO_{e,t}^{up} + BEOO_{e,t}^{dn}\right)$$

where:

~~where:~~

$UNCBEO$ $UNCBEO$ the unitary Non-Compliance Charge for unlawful ~~Submission~~submission of Balancing Energy Offers in €/MWh,

A_{BEO} A_{BEO} a coefficient, the value of which depends on the number of ~~the~~ manual FRR Time ~~Unit, t, during~~Units t, for which the Balancing Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted Balancing Energy Offers for ~~the~~ Balancing ~~Services~~Service Entity e, ~~during one~~within a month,

$NBEO_e$ $NBEO_e$ the number of ~~Manual~~manual FRR Time Units within ~~the~~a calendar month, ~~during~~for which the Balancing ~~Services~~Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted Balancing Energy Offers for its Balancing Service Entity ~~e and which has~~*e*, whose maximum value shall be equal to $NBEO_{\max}$ ~~,~~$NBEO_{max}$

x ~~———~~ x an exponential factor between 0 and 1,

$BEOO_{e,t}^{up}$ $BEOO_{e,t}^{up}$ the Energy quantity for which the Balancing Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted an upward ~~Manual or Automatic FRR~~ Balancing Energy Offer for ~~the~~ manual or automatic FRR for Balancing ~~Services~~Service Entity ~~*ee*~~ for ~~the Manual~~manual FRR Time Unit ~~*tt*~~, although it had the relative obligation, in MWh, and

$BEOO_{e,t}^{dn}$ $BEOO_{e,t}^{dn}$ the Energy quantity for which the Balancing Service Provider

~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted ~~an~~a downward ~~Manual or Automatic FRR~~ Balancing Energy Offer for ~~the~~ manual or automatic FRR for Balancing ~~Services~~Service Entity *ee* for ~~the Manual~~manual FRR Time Unit ~~*tt*~~, although it had the relative obligation, in MWh~~.~~, and

2. The numerical values of the unitary ~~charge *UNCBEO*~~charge$UNCBEO$, the maximum value of the serial counter $NBEO_e$~~,~~ and the exponential factor ~~*x*,~~x and the charge premium coefficient ~~A_{BEO},~~A_{BEO}, shall be determined by decision of RAE, upon recommendation by the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

Article 99. Consequences of significant deviation from the Registered Characteristics

1. In the event that the HETS Operator ascertains a significant unfavorable deviation of the actual values of a Balancing Service Entity e, as they derive from the operation of the said Entity during the Integrated Scheduling Process, from the respective values in its Registered Characteristics, the HETS Operator shall impose a charge on the respective Balancing Service Provider for each day d of month m, which shall be equal to $NCDC_{e,d}$ and shall be calculated as follows:

$$NCDC_{e,d} = UNCDC_{e,char} \times NCAP \times (1 + A_{DC}) \times max\{(DC_{e,d} - DC_{TOL}), 0\}$$

where:

$UNCDC_{e,char}$ the unitary Non-Compliance Charge for a significant unfavorable deviation from the Registered Characteristics in €/MW, which may vary depending on the Registered Characteristic and on the Balancing Service Entity category.

A_{DC} a premium coefficient for the Charge which depends on the number of days within a month, when a significant unfavorable deviation from the Registered Characteristics is observed.

DC_{TOL} a coefficient representing the margin of tolerance, expressed as a percentage (%), for each of the Registered Characteristics, whose numerical value may vary by Registered Characteristic and by Balancing Service Entity,

$DC_{e,d}$ the daily average of DC figures on the Dispatch Day d in question for each Registered Characteristic of a Balancing Service Entity e, where DC represents the ratio between the absolute value of the difference in the numerical value of the Registered Characteristic of the Balancing Service Entity for which a significant unfavorable deviation from the value estimated for the said Registered Characteristic by the HETS Operator was ascertained and the numerical value of the relevant Registered Characteristic of the Balancing Service Entity, and it shall be calculated for each Dispatch Period.

The above daily charge shall not be imposed on the Balancing Service Provider for the first Dispatch Days, which shall be equal to a maximum number of days NDC, for which

a significant unfavorable deviation of the Registered Characteristics of the Balancing Service Entity e from the respective estimated values for the said Entity was ascertained.

2. significant unfavorable deviation means any instance where the numerical value of one of the Registered Characteristics of a Balancing Service Entity, as estimated by the HETS Operator, deviates at least by DC_{TOL}% from the declared numerical value:

   a) Maximum Available Capacity of a Balancing Service Entity, as it derives from the Registered Characteristics. the Non-Availability Declarations and the Declarations of Major Outage by the Balancing Service Entity.

   b) Technically Minimum Generation of the Balancing Service Entity in accordance with its Registered Characteristics.

~~1.~~3. The numerical values of the unitary charge $UNCDC_{e,char}$, the premium coefficient A_{DC}, the maximum number of days NDC and the tolerance margin DC_{TOL} shall be determined by decision of RAE, upon recommendation of the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

Article 100. Consequences of ~~not submitting~~ non-submission of Balancing Capacity ~~Bids~~Offers

1. In the event of non-submission or unlawful submission of Balancing Capacity Offers for FCR, ~~Manual FRR, and~~ automatic FRR ~~Balancing Energy Offers~~and manual FRR for a Balancing Service Entity ~~*e*~~*e* for a Dispatch Day ~~*d*, if~~*d*, when the respective Balancing Service Provider is under a relevant obligation, the HETS Operator shall impose a charge on the Balancing Service Provider~~,~~ for the month ~~m, with the amount~~ m, which shall be calculated as follows:

$$NCRO_{e,m} = UNCRO \times (1 + A_{RO}) \times (NRO_e)^x \times \sum_{d \in m} \left(DFCR_{e,d} + DaFRR_{e,d} + DmFRR_{e,d}\right)$$

where:

~~*UNCRO*~~ $UNCRO$ the unitary Non-Compliance Charge for unlawful ~~Submission~~submission of Balancing Capacity ~~Bids in €/MWh~~Offers €/MW,

~~*A*~~$_{RO}$ ~~A_{RO}~~ a coefficient, the value of which depends on the number of ~~the Imbalances Settlement Period~~Dispatch Periods, *t*, during which the Balancing Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted Balancing Capacity ~~Bids~~Offers for ~~the~~ Balancing ~~Services~~Service Entity e, ~~during one~~within a month,

NRO_e the number of Dispatch ~~Days within the~~ Periods in a calendar month~~, during~~ for which the Balancing ~~Services~~Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted a Balancing Capacity ~~Bids~~Offer for its Balancing Service Entity e, and ~~which has~~whose maximum value shall be equal to ~~*p*~~ ~~NRO_{max}~~ ~~,~~NRO_{max}.

~~NRO_{max}~~ ~~the~~NRO_{max} The maximum ~~values~~value of NRO_e,

x ——— x an exponential factor between 0 and 1,

$DFCR_e$ ——— $DFCR_{e,d}$ the ability of the Balancing ~~Services~~Service Entity ~~e~~ to supply ~~FCR~~ Balancing Energy for FCR e, in accordance with its Declared Characteristics, for which the Balancing ~~Services~~Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted a ~~FCR~~ Balancing Capacity ~~Bid~~Offer for FCR for the Dispatch Day ~~d~~, d,

$DaFRR_e$ ——— $DaFRR_{e,d}$ the ability of the Balancing ~~Services~~Service Entity ~~e~~ to supply ~~automatic FRR~~ Balancing Energy for automatic FRR e, in accordance with its Declared Characteristics, for which the Balancing ~~Services~~Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted ~~an~~ a Balancing Capacity Offer for automatic FRR ~~Balancing Capacity Bid~~ for the Dispatch Day ~~d~~, d, and

$DmFRR_e$ ——— $DmFRR_{e,d}$ the ability of the Balancing ~~Services~~Service Entity ~~e~~ to supply ~~manual FRR~~ Balancing Energy for manual FRR e, in accordance with its Declared Characteristics, for which the Balancing ~~Services~~Service Provider ~~has~~did not ~~submitted~~submit or ~~has~~ unlawfully submitted a ~~manual FRR~~ Balancing Capacity ~~Bid~~ Offer for manual FRR for the Dispatch Day ~~d~~, d,

2. The numerical values of the unitary charge ~~$UNCRO$~~, $UNCRO$, the maximum value of the serial counter ~~$NRO_{\max}$~~, NRO_{max} and the exponential factor ~~x~~, x and the charge premium coefficient ~~A_{RO}~~, A_{RO}, shall be determined by decision of RAE, upon recommendation ~~by~~of the HETS Operator. This decision shall be ~~issued~~published at least two months prior to the implementation of the new values of the above parameters.

Article 101. ~~–~~Consequences of significant imbalance in the supply of ~~Upward~~upward or ~~Downward~~downward Balancing Energy or Energy for ~~Non-Balancing~~ purposes other than balancing by a Balancing ~~Services~~Service Entity

1. In the event of a significant deviation in the performance of a Dispatch Instruction for upward or downward Balancing Energy or Energy for ~~non-Balancing~~ purposes other than balancing by a Balancing ~~Services~~Service Entity~~, e~~, i.e~~.~~, if the energy supplied by the Balancing ~~Services~~Service Entity ~~e~~e is significantly different from the ~~energy activated under the~~ Dispatch Instruction, the HETS Operator ~~imposes~~ shall impose a charge on the respective ~~Balance Responsible~~Balancing Service Provider for ~~the Imbalances~~Imbalance Settlement Period ~~t, a charge~~t, which ~~is~~shall be equal to $NCNPBE_{e,t}$, and shall be calculated as follows:

If $\left|\sout{INST_{e,t} - MQ_{e,t}}\right|\left|DINST_{e,t} - MQ_{e,t}\right| > \sout{TOL^{up}_{BE,e} \times \left|INST_{e,t} - MS_{e,t}\right|} TOL_{BE,e} \times NCAP_{e,t}$ then:

$$NCNPBE_{e,t} = UNCNPBE \times A_{NPBE} \times \left|DINST_{e,t} - MQ_{e,t}\right|$$

where:

$UNCNPBE$ = $\sout{\left|INST_{e,t} - MQ_{e,t}\right|}$

~~where:~~

$UNCNPBE$ = the unitary Non-Compliance Charge for significant imbalance in the supply of ~~Upward~~upward or ~~Downward~~downward Balancing Energy or Energy

for ~~Non-Balancing~~ purposes other than balancing by a Balancing ~~Services~~Service Entity they represent in €/MWh,

A_{NPBE} A_{NPBE} a coefficient, the ~~price~~value of which depends on the number of ~~Imbalances~~Imbalance Settlement Periods, *t*, ~~during~~in which ~~a~~the significant imbalance was observed, ~~during~~within the calendar month.

MQ_{et} ~~the measured~~$MQ_{e,t}$ The metered energy of the Balancing ~~Services~~Service Entity ~~e~~*e* for the ~~Imbalances~~Imbalance Settlement Period ~~t~~*t* adjusted ~~to~~for the HETS Losses and the Distribution Network Losses~~,~~ in MWh,

TOL_{be} TOL_{BE} the margin of tolerance for imposing Non-Compliance Charges on Balancing ~~Services~~

Service Providers for a significant ~~deviation~~imbalance in the supply of ~~Upward~~upward or ~~Downward~~downward Balancing Energy or Energy for ~~non-balancing~~ purposes~~, in percent (%).~~ other than balancing, expressed as a percentage (%). The above tolerance margin may ~~be different per~~vary by Balancing ~~Services~~Service Entity,

MS_{pt} ~~the Market Schedule per Balancing Services Entity e for the Imbalances Settlement Period t, in MWh,~~

~~$INST_{e,t}$ the Instructed Energy of the Balancing Services~~$NCAP_{e,t}$ the Maximum Net Capacity of a Balancing Service Entity *e* in MW. If the Balancing Service Entity is a Multi-Shaft Combined Cycle Generating Unit, the Maximum Net Capacity corresponding to the operation configuration that was running during the Imbalance Settlement Period *t* shall be taken into account,

$DINST_{e,t}$ the Dispatch Instruction received by the Balancing Service Entity *e* for an ~~Imbalances~~Imbalance Settlement Period *t*

2. A significant imbalance is considered to be ~~the imbalance~~ a deviation exceeding the ~~relevant~~ applicable tolerance margin TOL_{be} ~~.~~TOL_{BE}.

3. The numerical values of the unitary charge ~~$UNCNPBE$~~ ,$UNCNPBE$, the coefficient ~~A_{NPBE}~~ ,A_{NPBE} and the tolerance margin ~~TOL_{be}~~ ,TOL_{BE} shall be determined by decision of RAE, upon recommendation by the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

Article 102. Consequences of significant systematic demand imbalances

1. ~~In the case of systematic, within the calendar month m,~~If during a month m significant imbalances between the amount of energy measured ~~in all~~ during an Imbalance Settlement Period at the energy meters represented by a Load Representative ~~p in an Imbalances Settlement Period~~ *p* as a whole and the corresponding Market Schedules of the same Load Representative occur systematically, the HETS Operator shall impose a charge on the Load Representative ~~with an amount~~, which shall be equal to ~~$NCBAL_{p,m}$~~ $NBAL_{p.m}$ and shall be calculated on the basis of the total absolute ~~imbalances~~Imbalances

within the month ~~*mm*~~ and the active value of ~~the~~ imbalances within the month *m*.

2. ~~As~~A significant imbalance is considered to be the normalized absolute ~~imbalance~~deviation for the month m~~,~~ which exceeds the tolerance margin ~~$TOL_{ld,ADEV}$~~ $TOL_{ld,ADEV}$ or the normalized active value of the imbalances for the month ~~*mm*~~ which exceeds the tolerance margin ~~$TOL_{ld,RMSDEV}$~~ $TOL_{ld,RMSDEV}$.

3. The ~~imbalance for~~deviation $DEV_{p,t}$ in each ~~Imbalances~~Imbalance Settlement Period ~~*t*~~, ~~$DEV_{p,t}$~~ *t*, the monthly absolute ~~imbalance for~~ deviation $ADEV_{p,m}$ in month *m*, ~~$ADEV_{p,m}$~~, the normalized ~~absolute imbalance for~~standard deviation $NADEV_{p.m}$ in month *m*, ~~$NADEV_{p,m}$~~ the monthly active value ~~of the imbalances,~~ ~~$RMSDEV_{p,m}$~~ deviation $RMSDEV_{p.m}$ and the normalized active value ~~for~~deviation in month *m* ~~$NRMSDEV_{p,m}$, for the~~$NRMSDEV_{p.m}$, for Load Representative ~~*p*~~ *p* are defined as follows:

$$DEV_{p,t} = MS_{pt} + \sum_{e \in p}\left(ABE_{et}^{up} - ABE_{et}^{dn}\right) - MQ_{pt}$$

$$ADEV_{p,m} = \sum_{t \in m}\left|DEV_{p,t}\right|$$

$$NADEV_{p,m} = \frac{ADEV_{p,m}}{\sum_{t \in m}\left(MS_{p,t} + \sum_{e \in p}\left(SBE_{e,t}^{up} - SBE_{e,t}^{dn}\right)\right)}$$

$$RMSDEV_{p,m} = \sqrt{\sum_{t \in m} DEV_{p,t}^{\,2}}$$

$$NRMSDEV_{p,m} = \frac{RMSDEV_{p,m}}{\sum_{t \in m}\left(MS_{pt} + \sum_{e \in p}\left(ABE_{et}^{up} - ABE_{et}^{dn}\right)\right)}$$

~~where:~~

~~$DEV_{p,t}$~~

~~$DEV_{p.t} = MS_{p,t} - MQ_{p,t}$~~

~~$ADEV_{p,m} = \sum_{t \in m}\left|DEV_{p,t}\right|$~~

~~$NADEV_{p,m} = \frac{ADEV_{p,m}}{\sum_{t \in m} MQ_{p,t}}$~~

~~$RMSDEV_{p,m} = \sqrt{\sum_{t \in m} DEV_{p,t}^{\,2}}$~~

~~$NRMSADEV_{p,m} = \frac{RMSDEV_{p,m}}{\sqrt{\sum_{t \in m}\left[\left(MQ_{p,t}\right)^2\right]}}$~~

where:

$DEV_{p,t}$ the deviation of the metered offtake from the Market Schedule, ~~adjusted for each upward or downward Balancing Energy of the Dispatchable~~for the Load

~~Portfolios represented by a~~ representative p for the Imbalance Settlement Period t.

MS_{pt} The Market Schedule of the Load ~~Representative~~ p representative p for the ~~Imbalances Settlement~~Imbalance Setllement Period t~~t~~

~~MS_{pt} The Market Schedule of the Load Representative p for the Imbalances Settlement Period t,~~

~~ABE_{et}^{up}, ABE_{et}^{dn} the activated upward or downward Balancing Energy of the Dispatchable Load Portfolios represented by a Load Representative p for the Imbalances Settlement Period t, and~~

~~MQ_{pt} the~~ MQ_{pt} The offtake (calculated at the ~~Production Unit Metering Point) of the Load Representative p for the Imbalances Settlement Period t adjusted to the HETS Losses and the~~Transmission System - Distribution ~~Losses~~Network Limit) in MWh that corresponds to the consumers of the Interconnected System per Load representative p for the Imbalance Settlement Period t.

4. The monthly charge to the Load Representative ~~p~~ p for the month m ~~is~~shall be calculated as the maximum amount of sanctions resulting from the monthly absolute imbalances and the active values of the imbalances:

$$NCBAL_{p,m} = \max \begin{pmatrix} \left(UNCBAL_{ADEV} \cdot ADEV_{p,m}\right) \cdot \left(NADEV_{p,m} - TOL_{ld,ADEV}\right), \\ \left(UNCBAL_{RMSDEV} \cdot RMSDEV_{p,m}\right) \cdot \left(NRMSDEV_{p,m} - TOL_{ld,RMSDEV}\right), \\ 0 \end{pmatrix}$$

~~where:~~

$UNCBAL_{ADEV}$

$$NCBAL_{p,m} = \max \begin{pmatrix} \left(UNCBAL_{ADEV} \cdot ADEV_{p,m}\right) \cdot \left(NADEV_{p,m} - TOL_{ld,ADEV}\right), \\ \left(UNCBAL_{RMSDEV} \cdot RMSDEV_{p,m}\right) \cdot \left(NRMSDEV_{p,m} - TOL_{ld,RMSDEV}\right), \\ 0 \end{pmatrix}$$

where:

$UNCBAL_{ADEV}$ the unitary charge corresponding to Non-Compliance Charges to Load Representatives for the monthly normalized absolute imbalance,

$UNCBAL_{RMSDEV}$ $UNCBAL_{RMSDEV}$ the unitary charge corresponding to Non-Compliance Charges to Load Representatives for the monthly normalized active value ~~of the imbalances~~imbalance,

$TOL_{ld,ADEV}$ $TOL_{ld,ADEV}$ the tolerance ~~margins~~margin for imposing Non-Compliance Charges ~~to~~on Load Representatives for the monthly normalized absolute imbalance, and

$TOL_{ld,RMSDEV}$ $TOL_{ld,RMSDEV}$ the tolerance ~~margins~~margin for imposing Non-Compliance Charges ~~to~~on Load Representatives for the monthly ~~normalized~~ active value of ~~the~~ imbalances~~.~~,

5. The numerical values of the unitary charges ~~$UNCBAL_{ADEV}$~~, $UNCBAL_{ADEV}$ and $UNCBAL_{RMSDEV}$, and the tolerance margins $TOL_{ld,ADEV}$ and $TOL_{ld,RMSDEV}$, shall be determined by decision of RAE, upon recommendation ~~by~~of the HETS Operator. The maximum tolerance margins may be expressed on the basis of the offtake $MQ_{p,t}$ (calculated at the Transmission System - Distribution Network Limit) in MWh that corresponds to the consumers of the Interconnected System per Load representative p for the Imbalance Settlement Period t. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

6. ~~No~~ Non-Compliance Charges shall not be imposed ~~due to~~on the Last Resort Provider and the Default Provider for significant systematic imbalances in demand ~~to the Last Resort Provider and the Universal Service Provider~~ , and ~~solely~~only for the demand they represent in ~~such~~this capacity.

7. ~~-~~Non-Compliance Charges under this Article shall not be imposed with regard to the consumption of the auxiliary loads of Dispatchable Generating Units and RES Units.

8. The Imbalance Settlement Periods during which a Dispatch Instruction was issued for Balancing Energy supply from a Dispatchable Load Portfolio shall be excluded from the above calculation.

Article 103. Consequences of significant systematic imbalances in the ~~actual~~ production of ~~the Non-Dispatchable~~ RES Portfolios

1. ~~In the event of a~~ If significant ~~imbalance, within the calendar~~imbalances occur during a month m~~,~~ between the amount of energy generated ~~from the~~by a Non-Dispatchable RES Portfolio ~~in~~ or Dispatchable RES Portfolio during an ~~Imbalances~~Imbalance Settlement Period and the corresponding Market Schedule of the same Balancing ~~Services~~Service Entity ~~e~~, the HETS Operator shall impose a charge on the ~~respective~~relevant Participant ~~with an amount~~, which shall be equal to $NCBALR_{e,m}$ and ~~is~~shall be calculated ~~based~~ on the basis of the total absolute ~~imbalances~~Imbalances within the month m and the active value of ~~the~~ imbalances within the month *m*.

2. ~~As~~A significant imbalance is considered to ~~be the case where~~have occurred when the normalized absolute ~~imbalance~~deviation for the month m exceeds the tolerance margin ~~$TOL_{r,ADEV}$~~ $TOL_{r,ADEV}$, or the normalized active value of the imbalances for month m exceeds the tolerance margin $TOL_{r,RMSDEV}$.

3. The ~~imbalance for~~deviation in each ~~Imbalances~~Imbalance Settlement Period ~~t~~, ~~$DEV_{e,t}$~~ t, $DEV_{e,t}$ the monthly absolute ~~imbalance for~~deviation in month m, ~~$ADEV_{e,m}$~~, $ADEV_{e,m}$, the normalized ~~absolute imbalance for~~ standard deviation in month m, ~~$NADEV_{e,m}$~~, $NADEV_{e,m}$, the monthly active value ~~of the imbalances,~~ ~~$RMSDEV_{e,m}$~~, deviation, $RMSDEV_{e,m}$, and the normalized active value ~~for~~deviation in month m ~~$NRMSDEV_{e,m}$~~, $NRMSDEV_{e,m}$ for ~~the~~a Balancing ~~Services~~Service Entity ~~e~~ are defined as follows:

$$DEV_{e,t} = MS_{et} - MQ_{et}$$

$$ADEV_{e,m} = \sum_{t \in m} \left| DEV_{e,t} \right|$$

$$NADEV_{e,m} = \frac{ADEV_{e,m}}{\sum_{t \in m} MS_{et}}$$

$$RMSDEV_{e,m} = \sqrt{\sum_{t \in m} DEV_{e,t}^{\,2}}$$

$$NRMSDEV_{e,m} = \frac{RMSDEV_{e,m}}{\sqrt{\sum_{t \in m} MS_{et}^{\,2}}}$$

$$DEV_{e,t} = MS_{et} - MQ_{et}$$

$$ADEV_{e,m} = \sum_{t \in m} \left| DEV_{e,t} \right|$$

$$NADEV_{e,m} = \frac{ADEV_{e,m}}{\sum_{t \in m} MQ_{e,t}}$$

$$RMSDEV_{e,m} = \sqrt{\sum_{t \in m} DEV_{e,t}^{\,2}}$$

$$NRMSDEV_{e,m} = \frac{RMSDEV_{e,m}}{\sqrt{\sum_{t \in m} MQ_{e,t}^{\,2}}}$$

where:

$DEV_{e,t}$ the deviation from ~~where:~~

$DEV_{e,t}$ ~~—~~the Market Schedule ~~deviation~~ of the Balancing ~~Services~~Service Entity e for the ~~Imbalances~~Imbalance Settlement Period $~~t~~ t$,

MS_{et} MS_{et} the Market Schedule ~~per Balancing Services Entity e for the Imbalances Settlement Period t, and,~~

MQ_{et} ~~the generated energy~~ of the Balancing Service Entity e for the ~~Imbalances~~Imbalance Settlement Period t, and

MQ_{et} the energy generated by the Balancing Service Entity e for the Imbalance Settlement Period $~~t~~ t$ ~~adjusted to the HETS Losses and the Distribution Losses.~~.

4. The monthly charge corresponding to the Balancing ~~Services~~Service Entity e for the month m ~~is~~shall be calculated as the maximum amount of sanctions resulting from the monthly absolute ~~imbalances~~Imbalances and the active values of the imbalances:

$$NCBAL_{e,m} = \max \begin{pmatrix} \left(UNCBALR_{ADEV} \cdot ADEV_{e,m}\right) \cdot \left(NADEV_{e,m} - TOL_{r,ADEV}\right), \\ \left(UNCBALR_{RMSDEV} \cdot RMSDEV_{e,m}\right) \cdot \left(NRMSDEV_{e,m} - TOL_{r,RMSDEV}\right), \\ 0 \end{pmatrix}$$

~~where:~~

$UNCBALR_{ADEV}$

$$NCBAL_{e,m} = \max \begin{pmatrix} \left(UNCBALR_{ADEV} \cdot ADEV_{e,m}\right) \cdot \left(NADEV_{e,m} - TOL_{r,ADEV}\right), \\ \left(UNCBALR_{RMSDEV} \cdot RMSDEV_{e,m}\right) \cdot \left(NRMSDEV_{e,m} - TOL_{r,RMSDEV}\right), \\ 0 \end{pmatrix}$$

where:

$UNCBALR_{ADEV}$ the unitary Non-Compliance Charge for RES Units for the monthly normalized absolute imbalance,

$UNCBALR_{RMSDEV}$ $UNCBALR_{RMSDEV}$ the unitary Non-Compliance Charge for RES Units for the monthly ~~non-~~normalized active value ~~of the imbalances~~imbalance,

$TOL_{r,ADEV}$ $TOL_{r,ADEV}$ the tolerance margins for imposing Non-Compliance Charges to RES Units for the monthly normalized absolute imbalance, and

$TOL_{r,RMSDEV}$ $TOL_{r,RMSDEV}$ the tolerance margins for imposing Non-Compliance Charges to RES Units for the monthly normalized active value ~~of the imbalances.~~imbalance, and

5. The numerical values of the unitary charges ~~$UNCBALR_{ADEV}$;~~ $UNCBALR_{ADEV}$ and $UNCBALR_{RMSDEV}$, and the tolerance margins $TOL_{r,ADEV}$ and $TOL_{r,RMSDEV}$, shall be determined by decision of RAE, upon recommendation ~~by~~of the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

6. The Imbalance Settlement Periods during which a Dispatch Instruction was issued for Balancing Energy supply from a Dispatchable RES Units Portfolio shall be exclude from the above calculation.

Article 104. Non-Compliance Charge for import/export deviations

1. In the event of ~~a~~ difference between the Market Schedule ~~concerning~~referring to the imports/exports of a Participant and the corresponding Long-Term Physical Transmission Rights Declaration for the import/export of electricity through an interconnection for which there is an obligation for physical delivery, the HETS Operator shall impose a charge on the ~~corresponding~~ Participant for each ~~Imbalances~~Imbalance Settlement Period, ~~with an amount~~which shall be equal to the absolute value of the above deviation multiplied by the unitary charge for Cross-border Trade Physical Rights Imbalance UNCIR for imports and UNCER for exports.

2. In the event of ~~a~~ difference between the Market Schedule ~~concerning~~referring to the

imports/exports of a Participant and the corresponding implemented Schedule for the import/export of electricity through an interconnection, the HETS Operator shall impose a charge on the ~~corresponding~~ Participant for each ~~Imbalances~~Imbalance Settlement Period, ~~with an amount~~which shall be equal to the absolute value of the above deviation multiplied by the unitary charge for Cross-border Trade Imbalance ~~*UNCIR*~~UNCIT for imports and ~~*UNCER*~~UNCET for exports.

3. The numerical values of the unitary charges for Cross-border Trade Imbalances, UNCIR, UNCER, UNCIT and UNCET, shall be determined by decision of RAE, upon recommendation by the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

Article 105. Non-Compliance Charge for infeasible Market Schedule

1. ~~In the event that~~ If the Market Schedule of a Balancing Service ~~Provider~~Entity is not feasible~~,~~ based on its Declared Characteristics~~,~~ and its operational status, a charge shall be imposed on the respective ~~Participant shall be charged~~ Balancing Service Provider for each Market Time Period in which the infringement is established. ~~Particularly~~Indicatively, for the Dispatchable Production Units, an infeasible Market Schedule ~~is~~may include the following cases:

   a) The violation of the ~~Market Schedule, which is lower than the Technical Minimum Production, based on the Unit's~~ Declared Characteristics~~, unless the Unit is in the phase of~~ referring to the commitment or/and decommitment of the Balancing Service Entity (for instance, minimum up/down time, synchronization ~~or~~time, de-synchronization~~.~~ time, soak time etc.) or

~~1) the Market Schedule, which is greater than the Technical Minimum Production, based on the Unit's Declared Characteristics.~~

~~2) Market Schedules in consecutive Market Time Periods that are not feasible based on the declared upward or downward rate of the Production Unit.~~

   b) ~~——~~The violation of Maximum or/and Minimum Available Capacity, or

   c) The violation of Ramp Up or/and Ramp Down Rate:

   d) The violation of the maximum daily energy injection constraint.

2. In the event of an infeasible Market Schedule of a Balancing Service Entity e, the HETS Operator shall impose a charge on the respective Balancing Service Provider for month m, for each Market Time Period~~, with an amount~~ t, which shall be equal to $NCNAMS_{e,m}$~~, that it is~~ and shall be calculated as follows:

$$NCNAMS_{e,m} = \sum_{t \in m} \overline{UNCNAMS \times (1 + A_{NAMS}) \times A(MS_{e,t})} \sum_{t \in m} UNCNAMS_r \times (1 + A_{NAMS}) \times VQ_{e,t}$$

where:

~~*UNCNAMS*~~ $UNCNAMS_r$ the unitary Non-Compliance Charge for infeasible Market Schedule in €/MWh, which may vary depending on the cause of the infringement,

A_{NAMS} a premium coefficient which may vary perby category of Balancing ServicesService Entity,

$A(MS_{e,t})VQ_{e,t}$ The differencequantity of the infringement in MWh of the for the relevant Market Time Period t, for which the Balancing Services Entity's Market ScheduleService Entity, e, fromis charged.

3. When calculating the feasible levelquantity of production or consumption, basedthe infringement, $VQ_{e,t}$, tolerance margins may be applied, $TOL_{r,e}$, which may vary depending on its Declared Characteristicsthe cause of the infringement and the Market Schedule of the previous Market Time Period. Balancing Service Entity category.

4. The numerical values of the unitary charge $UNCNAMS$, and the chargecharges $UNCNAMS_r$, the premium coefficientcoefficients A_{NAMS}, and the tolerance margins, $TOL_{r,e}$, shall be determined by decision of RAE, upon recommendation by the HETS Operator. This decision shall be published at least two months prior to the implementation of the new values of the above parameters.

5. Details regarding the cases when an Infeasible Market Schedule is calculated, the relevant inspections and the method of calculation of the infringement quantity $VQ_{e,t}$ are specified in the Technical Decision "Balancing Market Settlement".

Article 106. Management of the amount of Nonnon-Compliance Charges

The total amount of Non-Compliance Charges gathered in the Non-Compliance Charges Account is paid to the HETS Operator. The amount gathered in the Non-Compliance Charges Account may be used by the HETS Operator to cover trade deficits or for other purposes upon a relevant Decision by RAE.

1. The balance in the non-Compliance Charges Account, which consists of the payments made for non-Compliance Charges, in accordance with CHAPTER 21 of this Rulebook, shall be used to cover any default of participants registered in the HETS Operator Registry or of Clearing Members, in accordance with the provisions of the HETS Grid Code, of this Article, of CHAPTER 23 of this Rulebook and of the Clearing Rulebook for Balancing Market Positions, and if there is no Clearing House in the Balancing Market, in accordance with this Article and CHAPTER 24 of this Rulebook.

2. The part of the Non-Compliance Charges Account that is used to cover Clearing Member defaults shall be the Prefunded Financial Resources, as defined in article 14 par. 3 of Law 4425/2016 and the Clearing Rulebook for Balancing Market Positions. The initial amount of Pre-Funded Financial Resources is set as a percentage (a%) of the available balance of the Non-Compliance Charges Account and recalculated on a quarterly basis or ad hoc in cases where the resources have been used due to a Clearing Member's default. At the time of recalculation, the Pre-Funded Financial Resources shall be increased by a% of the total Non-Compliance Charges which have been collected during the period since the previous calculation, taking also into account any income or costs for their management as well as any debits or credits arising from the management of the Clearing Member's default. The Pre-Funded Financial Resources as calculated above cannot be less than a% of the available balance of the Non-Compliance Charges Account as the latter stands on the second (2nd) business day prior to the day of calculation. If they are less, the Prefunded Financial Resources shall be set at α% of the funds available on the Non-Compliance Charges Account. The HETS Operator shall notify the Clearing House of the available

balance of the Non-Compliance Charges Account one (1) day prior to the day of recalculation. The Prefunded Financial Resources, as recalculated each time, shall be at the disposal of the Clearing House and shall be kept in an account of the Clearing House with the Bank of Greece with the HETS Operator as beneficiary.

3. At the time of the entry into force of this Rulebook, the balance of the Reserve Account of the HETS Operator pursuant to Decision No. 57/2012 of RAE shall be transferred to the Non-Compliance Charges Account, after deduction of any amounts needed to cover defaults that existed before the entry into force of this Rulebook.

4. The percentage α% shall be initially set at 50% and it may be updated annually by decision of RAE upon recommendation of the Clearing House and the HETS Operator.

5. The above shall apply accordingly even when no Clearing House operates in the Balancing Market.

CHAPTER 22

BALANCING MARKET SETTLEMENT ~~PROCESS~~PROCEDURE

Article 107. Balancing Market Settlement ~~Process~~Procedure

1. The Balancing Market Settlement ~~Process is~~ Procedure shall be implemented on a weekly basis. The Settlement Week W shall be defined as the time period between Monday, at 00:00 CET and the following Monday at 00:00 CET.

2. The Initial Settlement for Week W shall be carried out according to the following timeline:

   a) Until Thursday of week W+1, at 12:00 EET the HETS Operator shall inform the Participants of the results of the Initial Settlement.

   b) Until Thursday of week W+1, at 12:00 EET the HETS Operator shall inform the Clearing House about the details of the Initial Clearing results for the execution of its responsibilities pursuant to Article 78 of this Rulebook and the Clearing Rulebook for Balancing Market Positions.

3. The Corrective Settlement for Week W shall be carried out according to the following timeline:

   a) Until Wednesday of week W+6, at 12:00 EET the HETS Operator shall inform the Participants of the results of the Corrective Settlement.

   b) Until Monday of week W+7, at 12:00 EET the Participants shall submit to the HETS Operator any reasoned objections they may have as to the results of the Corrective Settlement.

   c) Until Thursday of week W+7, at 12:00 EET the HETS Operator shall inform the Participants of the results of the Corrective Settlement, having taken into account the objections raised by the Participants and having made the necessary corrections.

   d) Until Thursday of week W+7, at 12:00 EET the HETS Operator shall inform the Clearing House about the details of the Corrective Settlement results, having taken

into account the objections raised by the Participants and having made the necessary corrections, for the execution of its responsibilities pursuant to Article 78 of this Rulebook and the Clearing Rulebook for Balancing Market Positions.

4. For the purposes of the Final Settlement, each year Y shall be divided into two "Half-Year Settlement Periods" as follows: The first Half-Year Settlement Period shall include 26 Settlement Weeks starting on the first Monday of year Y, at 00:00 CET. The second Half-Year Settlement Period shall include the Settlement Weeks of the period starting on the twenty-sixth Monday of year Y, at 00:00 CET, and ending on the Sunday before the first Monday of year Y+1, at 24:00 CET.

5. The Final Settlement for the first Half-Year Settlement Period shall be carried out according to the following timetable:

   a) Until the twenty-sixth (26) Tuesday of year Y, the Network Operators shall submit to the HETS Operator the final measurements for Low-Voltage customers and any corrections in measurements for Medium-Voltage customers they may have for the first Half-Year Settlement Period of year Y-1.

   b) Until the thirty-fourth (34) Thursday of year Y, the HETS Operator shall inform the Participants of the results for the first Half-Year Settlement Period of year Y-1.

   c) Until the thirty-sixth (36) Thursday of year Y, the Participants shall submit to the HETS Operator any reasoned objections they may have as to the Final Settlement for the first Half-Year Settlement Period of year Y-1.

   d) Until the fortieth (40) Thursday of week Y, at 12:00 EET the HETS Operator shall inform the Participants of the results for the first Half-Year Settlement Period of year Y-1, having taken into account the objections raised by the Participants and having made the necessary corrections.

   e) Until the fortieth (40) Thursday of week Y, at 12:00 EET the HETS Operator shall inform the Clearing House of the inform for the first Half-Year Settlement Period of year Y-1, having taken into account the objections raised by the Participants and having made the necessary corrections, for the execution of its responsibilities pursuant to Article 78 of this Rulebook and the Clearing Rulebook for Balancing Market Positions.

6. The Final Settlement for the second Half-Year Settlement Period shall be carried out according to the following timetable:

   a) Until the fifty-second (52) Tuesday of year Y, the Network Operators shall submit to the HETS Operator the final measurements for Low-Voltage customers and any corrections in measurements for Medium-Voltage customers they may have for the second Half-Year Settlement Period of year Y-1.

   b) Until the eighth (8) Thursday of year Y+1, the HETS Operator shall inform the Participants of the results for the second Half-Year Settlement Period of year Y-1.

   c) Until the tenth (10) Thursday of year Y+1, the Participants shall submit to the HETS Operator any reasoned objections they may have as to the Final Settlement for the second Half-Year Settlement Period of year Y-1.

   d) Until the fourteenth (14) Thursday of year Y+1, at 12:00 EET the HETS Operator shall inform the Participants of the results for the second Half-Year Settlement Period of year Y-1, having taken into account the objections raised by the Participants and having made the necessary corrections.

e) Until the fourteenth (14) Thursday of year Y+1, at 12:00 EET the HETS Operator shall inform the Clearing House of the results for the second Half-Year Settlement Period of year Y-1, having taken into account the objections raised by the Participants and having made the necessary corrections, for the execution of its responsibilities pursuant to Article 78 of this Rulebook and the Clearing Rulebook for Balancing Market Positions.

7. As part of the performance of Supplementary Settlements, the HETS Operator shall:

a) make any necessary adjustment to or revision of the measurement data,

b) make any necessary adjustment to or revision of the data resulting from any Dispute settlement,

c) use updated or revised data submitted by the Power Exchange or the Distribution Network Operators,

d) use revised Balancing Service data.

8. A Corrective Settlement for a period or on a day that is not provided for in the timetable of this Article may only be performed by decision of RAE upon a reasoned request of the Participant or the Participants having a legitimate interest, provided that it can be proven that the failure to perform an additional Corrective Settlement shall be a threat to the viability of the interested party.

9. After the Final Settlement has been performed pursuant to the timetable of paragraphs 5 and 6 of this Article, no corrections to Settlement data or Settlement results can be made, except upon a reasoned request of the Participant or the Participants having a legitimate interest, provided that it can be proven that the failure to perform an additional Corrective Settlement shall be a threat to the viability of the interested party. The request shall be submitted to RAE and the settlement shall be performed again only after its decision. After the Final Settlement has been performed pursuant to the timetable of paragraphs 5 and 6 of this Article, corrections to Settlement data or Settlement results can also be made if this is required for the enforcement of a judicial decision or an arbitral award.

10. In the cases of paragraph 9 of this Article and if any amounts for debits or credits to Participants who are no longer registered in the HETS Operator Registry arise, the said amounts shall be allocated to the Balance Responsible Parties, p, depending on the metered offtake of their customers from the Interconnected System for Settlement Weeks W-11 to W-8 starting from the Settlement Week when the Settlement takes place:

$$CHARGE_p = AMOUNT \times \frac{MQ_{p,WS}}{\sum_p (MQ_{p,WS})}$$

where:

WS the period between W-11 and W-8 starting from the Settlement Week when the Settlement takes place

$AMOUNT$ the amount of debits or credits to the Participants who are no longer registered in the HETS Operator Registry

$MQ_{p,WS}$ the offtake (calculated at the Transmission System - Distribution Network Limit) in MWh that corresponds to the consumers of the Interconnected System per Balance Responsible Party p for a period WS

No corrections shall be made to the cash amounts calculated in the Final Settlements and allocated to the Balance Responsible Parties by reason of any revised data regarding the metered offtake $MQ_{p,WS}$ of their customers.

~~1.~~11. By way of exception to the timetable of paragraphs 1 to 6 of this Article, the Settlement of Non-Compliance Charges shall be performed on a monthly basis. The ~~clearing~~Settlement months correspond to calendar months. For each ~~Clearing~~ Settlement Month, M, ~~four clearings are~~the settlements shall be carried out according to the following ~~timetable~~timeline:

~~Initial Clearing~~	~~Last day if the month M+1~~
~~1st Corrective Clearing~~	~~Last day if the month M+7~~
~~2nd Corrective Clearing~~	~~Last day if the month M+13~~
~~Final Corrective Clearing~~	~~Last day if the month M+25~~

~~2. The Initial and the Corrective Clearings~~Until the penultimate Wednesday of the ~~Balancing Market~~ month M+2 the HETS Operator shall ~~be performed as follows:~~

a) ~~The HETS operator performs the necessary calculations according to SECTION IV. The results of the calculations (Clearing Results) and the relevant Clearing Data are communicated to~~inform the Participants ~~concerned via electronic means in accordance with the timetable set out in paragraph 1,~~of the Non-Compliance Charges.

~~1)~~ ~~the~~ Until the last Monday of the month M+2 the Participants ~~have the right to~~shall submit ~~a reasoned objection~~ to the HETS Operator ~~within two (2) Business Days from the notification of the Clearing Results to the Participants,~~

b) ~~The HETS Operator decides on~~ any reasoned objections ~~and proceeds to any necessary corrections within four (4) Business Days from the notification of the Clearing Results to the Participants,~~.

c) ~~The~~ Until the last Thursday of the month M+2 the HETS Operator ~~sends the Clearing Results to~~shall inform the Clearing House ~~within five (5) Business Days from the notification of the Clearing Results to~~of the Settlement results for Non-Compliance Charges, having taken into account the objections raised by the Participants and having made the necessary corrections.

Article 108. Content of Settlement results notified to the Participants

1. The ~~Clearing Data,~~Settlement results notified to the Balancing Service Providers ~~for the Initial Clearing Performance and for any Corrective Clearing Performance,~~shall include the following details:

a) The ~~name and the~~ ID of the Balancing ~~Services~~Service Provider,

b) The Market ~~Schedule~~Schedules of each Balancing ~~Services~~Service Entity,

c) The Dispatch Instruction of each Balancing ~~Services~~Service Entity per ~~Manual~~manual FRR ~~Timed~~Time Unit,

d) The measured quantity of Energy of the Balancing ~~Services~~Service Entity per ~~Imbalances~~Imbalance Settlement Period,

e) The activated Balancing Energy for automatic and manual FRR ~~Balancing Energy~~ of the Balancing ~~Services~~Service Entity per ~~Imbalances~~Imbalance Settlement Period,

f) The Balancing Capacity supplied by the Balancing ~~Services~~Service Entity per

~~Imbalances~~Imbalance Settlement Period and per Balancing Capacity Type,

g) The ~~Imbalances~~Imbalance and ~~Imbalances~~Imbalance Adjustment Quantities for the Balancing ~~Services~~Service Entity per ~~Imbalances~~Imbalance Settlement Period,

h) The ~~charge~~debit or credit for Balancing Energy and Balancing Capacity to the Balancing ~~Services~~Service Provider for the Balancing ~~Services~~Service Entity per ~~Imbalances~~Imbalance Settlement Period,

i) The ~~charge~~debit or credit to the Balancing ~~Services~~Service Provider for Imbalances ~~for~~of the Balancing ~~Services~~Service Entity per Imbalances Settlement Period,

j) Any ~~Non~~non-compliance Charge imposed on the Balancing ~~Services~~Service Provider per sanction type and ~~Imbalances~~Imbalance Settlement Period~~, and~~.

~~1) The Balancing Fee corresponding to the Balancing Services Provider.~~

2. ~~The Clearing Data,~~Settlement results notified to the Balance Responsible Parties ~~for the Initial Clearing Performance and for any Corrective Clearing Performance,~~shall include the following details:

a) The ~~name and the~~ ID of the Balance Responsible Party,

b) The Market Schedule of each Balance Responsible Entity represented by the Participant per ~~Imbalances~~Imbalance Settlement Period,

c) The total measured quantities of energy for all Balance Responsible Entities represented by the Balance Responsible Party per ~~Imbalances~~Imbalance Settlement Period,

d) The Imbalance quantity of all Balance Responsible Entities represented by the Balance Responsible Party per ~~Imbalances~~Imbalance Settlement Period, and

e) The ~~charge~~debit or credit to the Balance Responsible Party for each ~~Imbalances~~Imbalance Settlement Period.

Article 109. ~~When performing any Corrective Clearing, the~~ Pricing of Non-Compliance Charges

~~3.~~ The HETS Operator~~:~~

~~1) shall make any necessary adjustment or revision of the measurement data,~~

1. ~~shall make any necessary adjustment or revision~~issue the supporting documents needed for each month M on the basis of the ~~data~~Settlement of Non-Compliance Charges on the last Friday of month M+2.

~~2)~~ The amounts resulting from ~~any Dispute settlement,~~

~~3) shall use updated or revised data submitted~~the Settlement of Non-Compliance Charges shall be settled by the ~~Power Exchange or the Distribution Network Operators,~~

~~4) shall use revised Balancing Services data.~~

~~1.~~2. ~~Any corrections to~~ Clearing House, in accordance with the provisions of the Clearing ~~Data are also taken into account in the Clearing Results they are amended on the next set date of the Clearing Process, based on the timetable in paragraph 1. After the Final Corrective Clearing Performance date, no corrections to Clearing Data or Clearing~~

~~Results can be made, except upon a reasoned request from the Participant or the Participants having a legitimate interest. The request shall be submitted to RAE and the clearing shall be performed again only after its decision~~Rulebook for Balancing Market Positions.

3. In the event that a Participant defaults on its cash obligations for Non-Compliance Charges, the HETS Operator shall take any action needed to collect the due payment with interest.

4. Unless it is part of its responsibilities under this Article, the HETS Operator shall not be laible to the Participants, the Clearing Members or the Clearing House for covering any deficit in the Non-Compliance Charges Account that is created due to a defaulting Participant.

CHAPTER 23

DEFAULT MANAGEMENT

Article 110. Actions of the HETS Operator and the Clearing House in case of default

1. In the event of default of Clearing Members on their cash obligations pursuant to this Rulebook, the provisions of this Chapter and the Clearing Rulebook for Balancing Market Positions shall apply.

2. If a Clearing Member defaults on the performance of its cash obligations pursuant to this Rulebook:

   a) The Clearing House shall be obliged to immediately notify the HETS Operator.

   b) If the losses caused by the default are in excess of the collaterals provided for the relevant Clearing Account, of the share of the defaulting Clearing Member in the Clearing Capital and even of those of the other Clearing Members according to the Clearing Rulebook for Balancing Market Positions, the Clearing House shall notify the HETS Operator of the remaining portion of the loss and shall cover the said amount by using the balance in the Prefunded Financial Resources account, as specified in the Clearing Rulebook for Balancing Market Positions.

   c) If the balance of the Prefunded Financial Resources is insufficient to cover the loss, the Clearing House shall immediately notify the HETS Operator. The remaining portion of the loss shall be allocated to the Balance Responsible Parties, p, and shall be apportioned to them according to the metered offtake of their customers from the Interconnected System for Settlement Weeks W-11 to W-8 starting from the Settlement Week when the default was ascertained by the Clearing House.

$$CHARGE\_DEFAULT_{p,WS} = DEFAULT_W \times \frac{MQ_{p,WS}}{\sum_p MQ_{p,WS}}$$

where:

WS The period between W-11 and W-8 starting from the Settlement Week when the default was ascertained by the Clearing House

$DEFAULT_W$ The remaining portion of loss for Settlement Week W when the default was ascertained by the Clearing House.

$MQ_{p,ws}$ the offtake (calculated at the Transmission System - Distribution Network Limit) in MWh that corresponds to the consumers of the Interconnected System per Balance Responsible Party p for a period WS

No corrections shall be made to the cash amounts allocated and apportioned to the Balancing Responsible Parties by reason of any revised data regarding the metered offtake $MQ_{p,ws}$ of their customers which were calculated in the Final Settlements performed after the default, unless it is a correction of the remaining portion of loss made by the Clearing House.

d) The HETS Operator shall notify the Clearing House of the amount apportioned to each Balancing Responsible Party, so that the Clearing House can proceed with the Cash Settlement according to the provisions of the Clearing Rulebook for Balancing Market Positions.

e) If the cash cleared by the Clearing House in accordance with item (c) of this paragraph is insufficient due to non-payment by the Balance Responsible Parties so obliged on the basis of the above-mentioned apportionment, the respective amounts shall be re-apportioned as many times as necessary until the loss is fully covered by the Balance Responsible Parties which are up-to-date with their obligations, the procedure under item (c) being followed in all other cases. The Clearing House shall notify the HETS Operator of the relevant default and the defaulting Balancing Responsible Parties, in each apportionment cycle process, so that the HETS Operator can activate the subsequent cycle of the apportionment process as set out in paragraph 2 of this article.

f) The collection of the relevant cash obligations of the defaulting Clearing Member shall be carried out on the basis of the Vouchers/Invoices issued by the Clearing House, which serve as proof in favour of beneficiary Clearing Members and Participants and against the defaulting Clearing Member or Participant. The above Vouchers/Invoices, including the initial Invoice shall not serve as proof, neither in favour nor against the Clearing House or the HETS Operator. Details regarding the above Vouchers/Invoices are provided in the Clearing Rulebook for Balancing Market Positions.

g) The Balancing Responsible Parties that have paid the cash amounts apportioned to them in accordance with the procedures specified in items (e) and (f), paragraph 1, section 4.6 of the Clearing Rulebook for Balancing Market Positions may, by virtue of the Apportionment Procedure Non-Collection Voucher of item c), paragraph 2, section 4.6 of the Clearing Rulebook for Balancing Market Positions demand a return of the cash amounts paid in proportion to their percentage of participation in the relevant apportionment by instructing the HETS Operator to exercise their respective rights as their representative. Court costs of all kinds as well as other related expenses and expenses for the assignment of a third-party legal advisor shall be charged to the beneficiary Balancing Responsible Parties in proportion to their percentage of participation in the relevant apportionment cycle process and covered by them according to their relevant apportionment by the HETS Operator during the cash settlement procedure of the Clearing House. The HETS Operator shall assume no risk whatsoever with respect to either the assignment in accordance with the above or the positive outcome of the above demands.

h) The HETS Operator shall terminate the Balancing Service Contract and/or the Balance Responsible Party Contract of the Participants who are in default on their cash obligations in the framework of the Balancing Market.

3. In particular, as regards covering a Clearing Member defaulting on amounts owed for Supplementary Settlements from a previous period prior to the default of the Clearing Member, but calculated after the default:

a) If the balance of collateral or the share account balance of the defaulting Clearing Member that may have been withheld by the Clearing House in accordance with the provisions of the Clearing Rulebook for Balancing Market Positions is not sufficient to cover Supplementary Settlement that may arise in respect of the Positions of the above defaulting party or if no such balance exists, the Clearing House shall notify the HETS Operator of the remaining portion of loss and shall cover it from the balance of the Pre-Funded Financial Resources as specified in the Clearing Rulebook for Balancing Market Positions.

b) If the balance of the Prefunded Financial Resources is insufficient to cover the above loss, the Clearing House shall immediately notify the HETS Operator. In that case, the apportionment and reapportionment processes of items (c), (d) and (e), paragraph 2 of this Article shall be activated, until the loss is fully covered.

4. The HETS Operator shall not be exposed to any credit risk for the cash transactions pertaining to this Rulebook and the HETS Grid Code, and shall not be liable to the Participants, the Clearing Members or the Clearing House for covering any remaining loss that is created against the Participants due to default of another Participant registered in the HETS Operator Registry or another Clearing Member, over and above the performance of its duties, in accordance to this Chapter and the Clearing Rulebook for Balancing Market Positions. This also applies to the Clearing House.

5. The funds from the Non-Compliance Charges Account, including the Pre-Funded Financial Resources, that were used by the HETS Operator or the Clearing House to cover defaults shall only be restored if the amount due and covered by the Account is collected from the debtor in default. The HETS Operator and the Clearing House shall immediately notify RAE of the instances of default, but also of the measures taken and the timetable for the enforcement of such measures in order to ensure the uninterrupted operation of the Balancing Market.

CHAPTER 24

SPECIAL PROVISIONS FOR THE BALANCING MARKET SETTLEMENT IF NO CLEARING HOUSE OPERATES

~~Article 108.~~Article 111. ~~Implementation~~Application of Special Provisions ~~for the Transactions Clearing in the event that no Clearing House operates in the Balancing Market~~

In the event that no Clearing House operates, for any reason, ~~for~~in the Balancing Market, according to Article 12 of Law 4425/2016 ~~its powers shall be exercised by the HETS Operator, and the~~ the special provisions in accordance with ~~CHAPTER 23~~CHAPTER 24 shall apply.

~~Article 109.~~Article 112. HETS Operator Accounts

The HETS Operator shall keep accounts for accounting ~~accounts corresponding to Article 77 of this Regulation~~purposes in accordance with Article 75 of this Rulebook.

~~Article 110.~~Article 113. Invoicing and Settlement

The HETS Operator and the Participants shall issue the necessary documents ~~resulting~~ on the basis of the ~~Clearing~~Settlement Results for each month M until the 7th business day of ~~the~~ month M+2. For each month M, the payments to the HETS Operator shall be made by the 9th business day of ~~the~~ month M+2 and the payments to the Participants by the 10th business day of ~~the~~ month ~~M~~M+2.

~~Article 111.~~Article 114. Actions of the Operator in case of ~~Overdue Debts of the~~ Participant default

1. ~~In case of Overdue Debts of the~~If a Participant defaults on its cash obligations deriving from this Rulebook, the HETS Operator shall take the following ~~actions~~action:

   ~~1)~~ Take all necessary steps to satisfy the ~~arrears of~~amounts due by the Participant through the guarantees it has provided~~.~~

   ~~2)~~ in accordance with Article 115 of this Rulebook. If the guarantees are insufficient to fully cover the ~~arrears, the HETS Operator shall cover the deficit through the Non-Compliance Charges Account and up to the amount of its balance, and shall take all necessary steps to recover interest on arrears from the Participant with overdue debts, as well as any direct damage it suffered due to late payments.~~

   a) ~~In the event that~~ amounts due by the defaulting Participant, the HETS Operator shall cover them by using the guarantees ~~and the balance in the Non-Compliance Charges Account are not sufficient, the Operator may allocate its cost to the other Participants by offsetting their claims against the Balancing Market. The offset terms and conditions for cost allocation due to overdue debts of the participants shall be set out in the "Offset Methodology".~~on a pro rata basis.

   b) ~~The~~ If the guarantees are insufficient to fully cover the amounts due by the defaulting Participant, the HETS Operator shall cover the deficit by using the Non-Compliance Charges Account, up to a percentage (α%) of the balance on the Non-Compliance Charges Account, in accordance with Article 106 of this Rulebook.

   c) If the guarantees and the Non-compliance Charges Account balance are not sufficient to fully cover the amounts due by the defaulting Participant in accordance with items (a) and (b) of this paragraph, the HETS Operator shall allocate the remaining portion of the loss to the Balance Responsible Parties, *p*, in proportion to the metered offtake of their customers from the Interconnected System for the Settlement Months M-3 to M-2 of the Settlement Month when the default was ascertained by the HETS Operator.

$$CHARGE\_DEFAULT_{p,MS} = DEFAULT_M \times \frac{MQ_{p,MS}}{\sum_p MQ_{p,MS}}$$

   where:

   MS The period between M-3 and M-2 starting from the Settlement Month

when the default was ascertained by the Clearing House

$DEFAULT_M$ the remaining portion of loss for Settlement Month M when the default was ascertained

$MQ_{p,MS}$ the offtake (calculated at the Transmission System - Distribution Network Limit) in MWh that corresponds to the consumers of the Interconnected System per Balance Responsible Party p for a period MS

No corrections shall be made to the cash amounts allocated and apportioned to the Balancing Responsible Parties by reason of any revised data regarding the metered offtake $MQ_{p,MS}$ of their customers which were calculated in the Final Settlements performed after the default, unless it is a correction of the remaining portion of loss made by the HETS Operator.

d) If the cash cleared in accordance with item (c) of this paragraph is insufficient due to non-payment by the Balance Responsible Parties so obliged on the basis of the above-mentioned apportionment, the respective amounts shall be re-apportioned as many times as necessary until the loss is fully covered by the Balance Responsible Parties which are up-to-date with their obligations, the procedure under item (c).

e) The collection of the relevant cash obligations of the defaulting Participant or the defaulting Participants shall be carried out on the basis of the Vouchers/Invoices issued by the HETS Operator, which serve as proof in favour of beneficiary Participants and against the defaulting Participant. The above Vouchers/Invoices, including the initial Invoice shall not serve as proof, neither in favour nor against the HETS Operator.

f) The Balancing Responsible Parties that have ~~the right to~~paid the cash amounts apportioned to them in accordance with the procedures specified in items (c) and (d) of this paragraph may, by virtue of the Apportionment Procedure Non-Collection Voucher of item (e) of this paragraph, demand a return of the cash amounts paid in proportion to their percentage of participation in the relevant apportionment by instructing the HETS Operator to exercise their respective rights as their representative. Court costs of all kinds as well as other related expenses and expenses for the assignment of a third-party legal advisor shall be charged to the beneficiary Balancing Responsible Parties in proportion to their percentage of participation in the relevant apportionment cycle process and covered by them according to their relevant apportionment by the HETS Operator during the procedure for settlement of their claims and obligations in accordance with Article 114 of this Rulebook. The HETS Operator shall assume no risk whatsoever with respect to either the assignment in accordance with the above or the positive outcome of the above demands.

g) The HETS Operator shall terminate the Balancing Service Contract and/or the Balance Responsible Party Contract of the Participants who are ~~late~~ in ~~fulfilling~~default on their financial obligations in the framework of the Balancing Market~~, taking into account~~.

2. In particular, as regards covering a Participant defaulting on amounts owed for Supplementary Settlements from a previous period prior to the ~~interests~~default of the Participant, but calculated after the default:

α) If the balance of the guarantees of Article 116 of this Rulebook that may have been withheld by the HETS Operator is not sufficient to cover the amounts due as a result

of Supplementary Clearings or if no such balance exists, the HETS Operator shall cover it from the balance of the Non-Compliance Charges Account, as specified in item (b), paragraph 1 of this Article.

β) If the balance of the Non-Compliance Charges Account, as specified in item (a) of this paragraph is not sufficient to cover the above loss, the HETS Operator shall activate the apportionment and reapportionment processes of items (c) and (d) of par. 1 of this Article, until the loss is fully covered.

3. The HETS Operator shall not be exposed to any credit risk for the cash transactions pertaining to this Rulebook, and shall not be liable to the Participants ~~and the safe~~for covering any remaining loss that is created for the Participants due to default of another Participant, over and above the performance of its duties according to this Chapter.

4. The funds from the Non-Compliance Charges Account that were used by the HETS Operator to cover defaults shall only be restored if the amount due and covered by the Account is collected from the debtor in default.

~~2.~~5. The HETS Operator shall immediately notify RAE of the instances of default, but also of the measures taken and the timetable for the enforcement of such measures in order to ensure the uninterrupted operation of the ~~electricity market~~Balancing Market.

~~Article 112.~~Article 115. Provision of Guarantees

1. Each Participant is required, during the ~~validity~~term of the Balancing Service Contract and/or the Balance Responsible Party Contract, to ~~provide~~offer full guarantees for ~~the fulfillment of~~compliance with all its obligations arising from its participation in the Balancing Market.

2. The obligation to provide ~~a~~ full guarantee ~~is~~shall be fulfilled ~~either~~ by submitting a letter of guarantee or by depositing an amount ~~in~~into a special account kept by the HETS Operator, or ~~by~~in any other ~~legal~~lawful manner to which the HETS Operator ~~consents~~has consented.

3. Especially for the Letters of Guarantee, the Participants shall fulfill ~~these~~the above obligations only if they fully comply with the template published by the Operator on its website.

4. The methodology for determining the amount of guarantees and details on guarantees are ~~provided for~~set forth in the ~~"Methodology of Calculation of~~ "Balancing Market Participation Guarantees~~".~~ Calculation Methodology".

SECTION V

~~CHAPTER 24~~

TRANSITIONAL PROVISIONS

CHAPTER 25

TRANSITIONAL PROVISIONS ON NON-COMPLIANCE CHARGES

Article 116. Entry into Force of Non-Compliance Charges

1. The numerical values of the parameters of Non-Compliance Charges as specified in Article 96 to Article 105 of this Rulebook shall be specified to enter into force for the first time by Decision of RAE upon recommendation of the HETS Operator, which shall be submitted to RAE by15th July 2020.

2. The Non-Compliance Charges set out in Articles 96, 97, 98, 99, 100, 101 and 104, without prejudice to the provisions of Article 117, shall apply as from the date of the effective start of the operation of the Balancing Market. For the first month of operation of this Market, the imposed Charges shall be reduced by 50%.

3. The Non-Compliance Charges set out in Articles 102, 103 and 105, without prejudice to the provisions of Article 117, shall apply after the first quarter of operation of the Balancing Market. The Charges for the first quarter of operation of the Balancing Market shall only be calculated for the information of the Participants and shall not be allocated to them.

4. Within 2 months from the commencement of the operation of the Balancing Market, the HETS Operator shall submit a recommendation for the numerical values of the Non-Compliance Charges parameters as defined in Articles 96 to 105 of this Rulebook, which shall apply after the end of the first quarter of operation of the Balancing Market. The relevant approval Decision of RAE shall be issued within the same quarter.

CHAPTER 26

TRANSITIONAL PROVISIONS FOR RES

~~Article 113.~~Article 117. Commencement of balancing obligations for RES Units with Market Participation Obligation under a Contract for Differential State Aid Support

1. The RES Units ~~Portfolios~~ with Market Participation Obligation ~~acquire~~under a Contract for Differential State Aid Support (DSAS Contract), as set forth in Law 4414/2016, shall

start having balancing obligations after the end of the transitional period. The transitional period shall end upon commencement of the Continuous Intra-Day Trading in coupling operation, as defined in accordance with the ~~more specific terms set out in this Regulation by the development and operation of~~ provisions of the Day-Ahead & Intra-Day Markets Trading Rulebook.

2. Until the end of the transitional period:

a) The Reversal of the Difference in Income shall be calculated as per Article 119 and Article 120 of this Rulebook.

b) For RES Units with Market Participation Obligation under a DSAS Contract, the Article 103 of this Rulebook shall not apply.

Article 118. Explanation of symbols

For the purposes of calculation of Production Imbalances for RES Units with Market Participation Obligation under a DSAS Contract, each Non-Dispatchable RES Units Portfolio shall be generally symbolized as $e_{rep,oper,z}$, where:

rep the RES Unit Portfolio representative. Non-Dispatchable RES Unit Portfolios shall be represented by a RES Producer, a RES Aggregator or by the Last Resort RES Aggregator.

$oper$ the operational status, which is assigned a value depending on the case, either *norm_DSAS* (normal operation with Differential State Aid Support) which corresponds to normal operation under a DSAS Contract, or *com_DSAS* (commissioning operation with Differential State Aid Support) which corresponds to Commissioning operation under a DSAS.

z the HETS Bidding Zones.

Article 119. Calculation of Production Imbalances for RES Units with Market Participation Obligation under a DSAS Contract

1. The Final Imbalance of a Non-Dispatchable RES Unit Portfolio under a DSAS Contract, *e*, for an ~~Intraday Electricity~~Imbalance Settlement Period shall be equal to the difference between the quantity of energy that results on the basis of the Entity's certified measurement data and the Entity's Market ~~of sufficient liquidity,~~Schedule as ~~defined~~given below:

$$FIMB_{e_{rep,oper,z},t} = MQ_{e_{rep,oper,z},t} - MS_{e_{rep,oper,z},t}$$

Where:

$FIMB_{e_{rep,oper,z},t}$ The quantity of the Final Imbalance in MWh for a Non-Dispatchable RES Unit Portfolio under a Contract for Differential State Aid Support $e_{rep,oper,z}$ and the Imbalance Settlement Period *t*.

$MQ_{e_{rep,oper,z},t}$ The energy quantity at the Connection Point with the HETS or the Distribution Network, in MWh, resulting from the certified measurement data of the Non-Dispatchable RES Unit Portfolio

under a DSAS Contract for the Imbalance Settlement Period t $e_{rep,oper,z}$.

$MS_{e_{rep,oper,z},t}$ the Market Schedule of the Non-Dispatchable RES Unit Portfolio under a DSAS Contract for the Imbalance Settlement Period t. $e_{rep,oper,z}$

Article 120. Calculation of Debits and Credits for RES Units with Market Participation Obligation under a DSAS Contract

1. For each Imbalance Settlement Period t the HETS Operator shall calculate the debits / credits $IMBC\_A_{e_{rep,oper,z},t}$ in € and the debits / credits $IMBC\_B_{e_{rep,oper,z},t}$ in € for each Non-Dispatchable RES Unit Portfolio under a DSAS Contract e, as follows:

$$IMBC\_A_{e_{rep,oper,z},t} = FIMB_{e_{rep,oper,z},t} \times DAMP_{z,t}$$

and

$$IMBC\_B_{e_{rep,oper,z},t} = FIMB_{e_{rep,oper,z},t} \times (IP_t - DAMP_{z,t})$$

Where:

$FIMB_{e_{rep,oper,z},t}$ the quantity of the Final Imbalance, in Mwh, for the Non-Dispatchable RES Unit Portfolio $e_{rep,oper,z}$ and the Imbalance Settlement Period t.

$DAMP_{z,t}$ The price of the Day-Ahead Market in MWh for each Bidding Zone *z* for the relevant Market Time Unit.

2. The above debits / credits shall be collected or allocated by the Clearing House as follows:

   a) For a Non-Dispatchable RES Units Portfolio $e_{rep,oper,z}$ which is represented by a RES Producer or RES Aggregator in operational status *norm_DSAS* or *com_DSAS* and belongs to the Bidding Zone z,

      i. when the amount $IMBC\_A_{e_{rep,oper,z},t}$ is found to be negative, the RES Producer or RES Aggregator must pay the calculated amount, whereas when the amount $IMBC\_A_{ee_{rep,oper,z}t}$ is found to be positive, the RES Producer or RES Aggregator is entitled to collect the calculated amount,

      ii. when the amount $IMBC\_B_{e,t}$ is found to be negative, the calculated amount is charged to DAPEEP, whereas when the amount $IMBC\_B_{e,t}$ is found to be positive, the calculated amount is credited to the Market Subaccount of the Special Account of Article ~~5(7)~~143 of Law ~~4414/2016~~4001/2011 maintained by DAPEEP.

   b) For a Non-Dispatchable RES Units Portfolio $e_{rep,oper,z}$ which is represented by the Last Resort RES Aggregator in operational status norm_DSAS or com_DSAS and belongs to the Bidding Zone z,

      i. when the amounts $IMBC\_A_{e_{rep,oper,z},t}$ and $IMBC\_B_{e_{rep,oper,z},t}$ are found to be negative, they are charged to the Last Resort RES Aggregator,

ii. when the amounts $IMBC\_A_{e_{rep,oper,z},t}$ and $IMBC\_B_{e_{rep,oper,z},t}$ are found to be positive, they are credited to the Last Resort RES Aggregator,

3. Details regarding the Settlement of Imbalances of RES and HPCHP Portfolios are provided in the Technical Decision "Balancing Market Settlement".

CHAPTER 27

TRANSITIONAL PROVISIONS FOR THE HETS OPERATOR REGISTRY

Article 121. Registration in the HETS Operator Registry following the launch of the Balancing Market

1. The already registered Participants in the Participants Registry provided for in Decisions 56/2012 and 57/2012 of RAE (Government Gazette ~~A 149). In particular, the commencement of balancing obligations for~~ 104/B'/31.01.2012 and Government Gazette 103/B'/31.01.2012), are considered to:

   a) be temporarily registered in the Balancing Service Providers Registry or/and the Balance Responsible Parties Registry,

   b) unreservedly accept the provisions of this Rulebook and the HETS Grid Code and the Methodologies, parameters and other special approvals, Technical Decisions and Manuals issued in accordance therewith, as amended each time and in force, and they are bound to comply with their content,

   c) conclude ipso jure a Balancing Service Contract or a Balance Responsible Party Contract, depending on their capacity,

   d) conclude ipso jure a HETS Operator Transaction Contract, in accordance with the provisions of the HETS Grid Code.

2. The Participants temporarily registered in the HETS Operator Registry in accordance with paragraph 1 of this Article, shall be ipso jure deleted from the HETS Operator Registry, if, by 15th September 2020, (a) no certificate from the Clearing House has been transmitted to the HETS Operator by the Clearing House to attest that a Clearing Account has been created for the Participant as a Direct Clearing Member or a Clearing Account for the Participant as a General Clearing Member and (b) no guarantees have been submitted in accordance with the HETS Grid Code. Upon deletion, it shall be deemed that no Balancing Service Contract or Balance Responsible Party Contract with the HETS Operator exists with all the consequences deriving from the lack thereof.

~~1.~~3. The Dispatchable Generating Units registered in the Units Registry of Decision No. 57/2012 of RAE shall be automatically registered in the Balancing Market Generating Units Registry. For these units ~~shall be determined by decision of RAE, which shall be taken in the last quarter of the~~no pre-qualification tests shall be carried out for their already Registered Technical Characteristics. The technical characteristics that have not been tested shall be first declared by the Balancing Service Provider, no later than 1st August 2020, while the relevant tests must be carried out within a period of one (1) year ~~2021 and if there is at least one year's data from the operation of the continuous intraday~~

~~market~~from the entry into force of this Rulebook.

~~1. Until the date of application of the above paragraph, which is determined by decision of RAE:~~

~~1) the RES Units Portfolios with Market Participation Obligation are mandatorily and per technology declared, and they are subject to the Transitory Mechanism for the Optimal Forecasting Accuracy, as set out in the HETS Operation Code.~~

~~2) The procedure for calculating the Reversal of Revenues Deviation under the HETS operation Code is performed.~~

~~3) Article 102 of this Regulation is not applicable.~~

4. Until 30th November 2020, the participants temporarily registered in the HETS Operator Registry are obliged to submit an application for registration in the HETS Operator Registry, as set forth in Technical Decision "Procedures for Registration in the HETS Operator Registry". The HETS Operator shall proceed to permanently register in the HETS Operator Registry the temporarily registered participants that will have submitted a complete application for registration by 31st January 2021 and shall issue a certificate of registration. If no application for registration has been submitted within the above deadline, the temporarily registered participant shall be deleted ipso jure from the HETS Operator Registry and the Balancing Service Contract or/and a Balance Responsible Party Contract and the HETS Operator Transactions Contract shall be terminated as from the day following the expiration of the deadline, with all the consequences deriving from such termination.

CHAPTER 28

ENTRY INTO FORCE OF THE BALANCING MARKET RULEBOOK

Article 122. Entry into force of the Balancing Market Rulebook

1. Without prejudice to the provisions of paragraph 2 of this Article, this Rulebook shall enter into force upon the launch of the Day-Ahead, Intra-Day and Balancing Markets of Law 4425/2016.
2. The provisions set out in CHAPTER 2 and in CHAPTER 3, as well as in Article 122 of this Rulebook shall enter into force upon publication of RAE decision in the Government Gazette, whereby this Rulebook shall be approved.

ANNEX I

LIST OF TECHNICAL DECISIONS

~~S/N~~No.	Name of Technical Decision	Content of Decision
1	Procedures ~~of~~for registration in ~~Balance Market Registries~~the HETS Operator Registry	Detailed description of the application, submission, and registration procedures ~~in the BSP and~~for the ~~BRP Registries.~~HETS Operator Registry
~~2~~	~~Data Exchange with the Power Exchange~~	~~Description of procedures and data to be exchanged with the Power Exchange~~
~~3~~	~~Data Exchange with Distribution Network Operators~~	~~Description of procedures and data to be exchanged with Distribution Network Operators~~
~~4~~	~~Balancing Market System Rules~~	~~Description of the rules of the Balancing Market information system, description of communication standards, etc.~~
~~5~~2	Dispatch Instructions	Procedure for issuing and sending Dispatch Instructions
~~6~~3	Manual FRR	Details on the implementation of the manual FRR~~.~~
~~7~~4	Automatic FRR	Details on the implementation of the automatic FRR
5	Balancing Market Settlement	Details and examples of calculations for the settlement of the Balancing Energy Market.
6	Integrated Scheduling Process	Details on the Integrated Scheduling Process
~~8~~7	Technical limits on bidding and clearing prices in the Balancing Market ~~Settlement~~	~~Details~~Determination of Maximum and ~~examples of calculations regarding the clearing of~~Minimum Price Limits in the Balancing Energy ~~Market, the~~and Balancing Capacity ~~Market~~Offers and in the ~~Imbalances.~~clearing prices

ANNEX II

LIST OF METHODOLOGIES AND SPECIAL APPROVALS

~~1~~No.	Name of Methodology ~~of Determination of Zonal/Systemic Balancing Capacity Needs~~& Special Approval	~~Methodology of Determination of the zonal and systemic Balancing Capacity needs for (a) Frequency Containment Reserve, (b) automatic Frequency Restoration Reserve and (c) manual Frequency Restoration Reserve.~~Content of Methodology & Special Approval
~~2~~1	~~Maximum Continuous Generating Capability Calculation~~ Methodology of Determination of Zonal / Systemic Balancing Capacity Needs	~~Maximum Continuous Generating Capability of Production Units or Dispatchable RES Units Portfolios Calculation Methodology.~~Methodology for the Determination of the zonal and systemic Balancing Capacity needs for (a) Frequency Containment Reserve, (b) automatic Frequency Restoration Reserve and (c) manual Frequency Restoration Reserve.
~~3~~2	~~Dispatch Loads Portfolios Reference~~Dispatchable Load ~~Calculation~~Portfolio Baseline Methodology~~.~~	~~Dispatch Loads Portfolios Reference Load Calculation~~Baseline calculation Methodology used for ~~their clearing~~the settlement of Dispatchable Load Portfolio Reference Load
~~4~~3	Offsetting methodology	Offsetting methodology for the allocation of cost due to ~~overdue debts of~~defaulting participants, if a Clearing House does not operate in the market~~.~~
~~5~~4	Balancing Market Participation Guarantee Calculation Methodology	~~Guarantees~~ Calculation Methodology ~~if~~for guarantees in the event that a Clearing House does not operate in the market.
~~6~~5	Activated Balancing Energy Calculation Methodology	Calculation Methodology for Activated Balancing Energy, Adjusted Dispatch Instruction and Adjusted Market Schedule ~~Calculation Methodology.~~
~~7~~6	Variable Cost Parameters for Thermal Production Units Calculation Methodology	Calculation Methodology for Variable Cost Parameters for Thermal Production Units ~~Calculation Methodology based on~~on the basis of Techno-Economic data
~~8~~7	HETS Losses Calculation Methodology	Methodology ~~for estimating~~on the basis of which the HETS Losses ~~based on the table of HETS Losses Coefficients.~~are estimated
~~9~~8	Terms and Conditions of Balancing ~~Services~~Service Providers	Terms and Conditions according to Article 18 of Commission Regulation (EU) 2017/2195. Detailed description of Balancing ~~Services~~Service Provider ~~Preselection Procedures.~~pre-selection procedures
~~10~~9	Terms and Conditions of Balance Responsible Parties	Terms and Conditions in accordance with Article 18 of Commission Regulation (EU) 2017/2195.
~~11~~10	Rules for suspension and restoration of market activities	Rules for the suspension and ~~the~~ restoration of market activities in accordance with Article 36 of

		Commission Regulation (EU) 2017/2196
~~12~~ 11	~~Clearing~~Settlement rules in the event of market activity suspension	~~Clearing~~Settlement rules in the event of suspension of ~~the~~ market activities in accordance with Article 39 of Commission Regulation (EU) 2017/2196

ANNEX III

LIST OF ACRONYMS

RES	Renewable Energy Sources
AGC	Automatic Generation Control
DAPEEP	RES and Guarantee of Origin Operator
HEDNO	Hellenic Electricity Distribution Network Operator
ISP	Integrated Scheduling Process
DESFA	National Natural Gas System Operator
FRR	Frequency Restoration Reserve
FCR	Frequency Containment Reserve
EIC	Energy Identification Code
HETSO	Hellenic Electricity Transmission System Operator
ESFA	National Natural Gas System
RAE	Regulatory Authority for Energy
~~CHP~~HPCHP	High Performance Combined Heat and Power Generation
Aggregator	Aggregator
Last Resort Aggregator	Last Resort Aggregator
CET	Central European Time
EET	Eastern European Time
SCADA	Supervisory Control and Data Acquisition System