

Terms and Conditions for Restoration Service Providers (T&C RSP)

pursuant to Articles 4(2)(b), 4(3) and 4(4) of Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration

Date of submission for regulatory approval: DD/MM/YYYY



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THE BELGIAN TRANSMISSION SYSTEM OPERATOR ELIA, TAKING INTO ACCOUNT THE FOLLOWING

Whereas

- (1) Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration (hereinafter referred to as 'network code E&R') entered into force on 18 December 2017.
- (2) ELIA System Operator NV/SA (hereinafter referred to as 'ELIA') is responsible for the operation of the Belgian transmission system, for which it holds a right of ownership or at least a right of use. ELIA has been appointed Transmission System Operator (TSO), in accordance with the Law of 29 April 1999 concerning the organisation of the electricity market (hereinafter referred to as the "Electricity Law"), and guarantees the safety, reliability and efficiency of the Belgian transmission system.
- (3) This document constitutes a proposal by ELIA regarding the terms and conditions applicable to Restoration Service Providers or 'RSPs' (hereinafter referred to as the 'T&C RSP') and takes into account the requirements set up in Article 1 of the network code E&R:
 - (a) the management by TSOs of the emergency, blackout and restoration states;
 - (b) the coordination of system operation across the Union in emergency, blackout and restoration states;
 - (c) the simulations and tests to guarantee a reliable, efficient and fast restoration of the interconnected transmission systems to the normal state from the emergency or blackout states;
 - (d) the tools and facilities needed to guarantee a reliable, efficient and fast restoration of the interconnected transmission systems to the normal state from the emergency or blackout states.
- (4) Pursuant to Article 4(1) of the network code E&R, when applying this Regulation, Member States, regulatory authorities, competent entities and system operators shall:
 - (a) apply the principles of proportionality and non-discrimination;
 - (b) ensure transparency;
 - (c) apply the principle of optimisation between the highest overall efficiency and lowest total costs for all parties involved;
 - (d) ensure that TSOs make use of market-based mechanisms as far as is possible to ensure network security and stability;
 - (e) respect technical, legal, personal safety and security constraints;
 - (f) respect the responsibility assigned to the relevant TSO in order to ensure system security, including as required by national legislation;
 - (g) consult with relevant DSOs and take account of potential impacts on their system; and
 - (h) take into consideration agreed European standards and technical specifications.



- (5) Pursuant to Article 4(2)b of the network code E&R, the TSO develops the T&C RSP and submits them for approval to the relevant regulatory authority in accordance with Article 37 of Directive 2009/72/EC.
- (6) Pursuant to the Electricity Law, the Commission for Electricity and Gas Regulation (hereinafter referred to as 'CREG') is the relevant regulatory authority, tasked under Article 4(2) of the network code E&R, for approving the terms and conditions related to restoration services.
- (7) Pursuant to Article 4(3) of the network code E&R, the regulatory authority shall decide on the proposal of T&C RSP within six months from the date of submission by the TSO.
- (8) Pursuant to Article 7 of the network code E&R, the relevant TSO shall organise a public consultation on the T&C RSP for a period of not less than one month.
- (9) Pursuant to Article 4(4) of the network code E&R, ELIA developed and submitted a proposal for the T&C RSP by 18 December 2018. As this first proposal was not approved by the regulatory authority, the present document represents a new proposal.
- (10) Pursuant to Article 4(4) of the network code E&R, the T&C RSP shall be established either in the national legal framework or on a contractual basis. If established on a contractual basis, as required by national Law, they shall define at least:
 - (a) the characteristics of the service to be provided;
 - (b) the possibility of and conditions for aggregation; and
 - (c) for restoration service providers, the target geographical distribution of power sources with black start and island operation capabilities.
- (11) Currently, the (only) restoration service on a contractual basis foreseen at federal level is the blackstart service as defined in Article 2, 70° of the Electricity Law and Article 2, §1, 54° of the Royal Decree of 22 April 2019 establishing a federal technical regulation for the management of and access to the transmission grid (hereinafter referred to as 'Federal Grid Code').
- (12) Pursuant to Article 223 of the Federal Grid Code, the restoration services, among which the backstart service, are ancillary services. Articles 235 to 237 of the Federal Grid Code are applicable to these restoration services.
- (13) Pursuant to Article 12 *quinquies*, § 1, al. 2 of the Electricity Law, the TSO contracts these ancillary services according to transparent, non-discriminatory and market-based procedures.
- (14) Pursuant to Article 54 of the network code E&R, all relevant clauses in contracts and general terms and conditions of a TSO relating to system operation shall comply with the requirements of this Regulation. To that effect, those contracts and general terms and conditions shall be modified accordingly.
- (15) Elia will publish these T&C RSP on its website in the following reference languages: Dutch and French.

SUBMIT THE FOLLOWING PROPOSAL TO THE COMPETENT REGULATORY AUTHORITY



Article 1 Subject matter and scope

- (1) The T&C RSP are the proposed terms and conditions applicable to restoration service providers or RSPs pursuant to Article 4(2)b of the network code E&R.
- (2) Pursuant to Article 4(4) of the network code E&R, the terms and conditions to act as restoration service providers are set out on a contractual basis in the appendix to this proposal, including definitions, general conditions, and specific conditions for the Black Start Service.
- (3) Pursuant to Article 4(2) of the network code E&R, this proposal must be submitted to CREG for approval.
- (4) Pursuant to Article 4(7) of the network code E&R, ELIA may request amendments to these T&C RSP.

Article 2 Implementation Date

(1) These T&C RSP shall enter into force one month after the approval by CREG and not before January 1st 2021

Article 3 Language

(1) The reference languages for the T&C RSP are Dutch and French. The T&C RSP will be made available to affected market players in English for information and consultation purposes.

Article 4 General provisions

- (1) In these T&C RSP, unless the context require otherwise:
 - (a) The singular indicates the plural and vice versa;
 - (b) References to one gender include all other genders;
 - (c) The table of contents, titles and headings in these T&C RSP are for convenience only and do not affect their interpretation;
 - (d) The word "including" and its variations are to be construed without limitation;
 - (e) Any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.



APPENDIX: CONTRACT FOR RESTORATION SERVICES



Appendix: Contract for Restoration Services (hereafter referred to as the "Contract")



Contract Reference «Contract_Reference»

between

[Company], a company established under [Country] law with registered offices at [Address], company registration number [Number] and validly represented by [Name1] and [Name2], in their capacity of [Role1] and [Role2]; hereinafter referred to as the Service Provider, "Restoration Service Provider" or the "RSP"

and

ELIA SYSTEM OPERATOR S.A./N.V., a company established under Belgian law with registered offices at Keizerslaan 20, B-1000 Brussels, registered at the Crossroad Bank for Enterprises under number 476.388.378, and represented by [Name1] and [Name2], in their capacity of [Role1] and [Role2];

Hereinafter referred to as "Elia".

Elia and the Service Provider are referred to individually as "a Party" and collectively as "the Parties".

Paraaf RSP:



Whereas:

- Elia is responsible for the operation of the Belgian transmission system over which it has an ownership right or, at least, a right of use (hereinafter referred to as the "Elia Grid");
- Elia has been appointed as Transmission System Operator (hereinafter referred to as the "TSO"), in accordance with the Belgian law of 29 April 1999 concerning the organisation of the electricity market (hereinafter referred to as the "Electricity Law") and supervises the safety, reliability and efficiency of the Elia Grid;
- Elia must therefore ensure the provision of the requisite restoration services (the "Restoration Services" or the "Services") in accordance with the relevant provisions of the European Regulations, such as the Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration ("E&R NC") and the Belgian legislation;
- The RSP has expressed its willingness to become a Restoration Service Provider ("RSP") according to the terms and conditions of this Contract for Restoration Services;
- The Parties understand that this Contract is not a contract granting access to the Elia Grid.
- This Contract defines the mutual rights and obligations of Elia and the Service Provider relating to the provision of the Services;
- This Contract falls under the Terms and Conditions for Restoration Services.

The following has been agreed:



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PART I - GENERAL CONDITIONS

This Part I General Conditions is subject to a separate public consultation given that these will apply for a series of Terms and Conditions for ancillary services that will be proposed by Elia to the competent regulatory authority.



PART II - SPECIFIC CONDITIONS FOR THE BLACK START SERVICE



ART. II.1 DEFINITIONS



Balance Responsible Party or

BRP

As defined in Article 2 (7) of the EU Comission regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing and recorded in the

register of Balance Responsible Parties;

List of actions to be completed by the operator of a PGM Black Start Procedure

in order to perform the Black Start Service;

Black Start Service As defined in art. 2 § 1 54° of the Federal Grid Code;

Blackout State or "Blackout" As defined in Article 3 (22) of the Comission regulation

(EU) 2017/1485 of 2 August 2017 establishing a guideline

on electricity transmission system operation;

Blackout Procedure List of actions to be completed by the operator of a PGM

and which are designed to secure the PGM following a

Blackout:

CIPU Contract The contract for the Coordination of Injection of Production

> Units concluded with ELIA, or the regulated contract(s) that will replace this contract, in accordance with the dispositions in Art. 4 and Art. 377 of the Federal Grid Code;

CIPU Contract Holder A party having signed the CIPU Contract and bearing all

responsibilities originating from it;

The Elia Grid is divided in a number of electrical zones. Electrical zones

Elia assesses on a regular basis whether a review of the number of zones is needed. At the moment of submitting this contract the number of zones is ten: 380 kV, Hainaut East, Hainaut West, Langerbrugge East, Langerbrugge West, Ruien, Merksem, Stalen, Liège and Schaerbeek. However this number can change if operational security

analysis indicates a need;

Elia Grid or transmission grid The transmission grid as defined in Art. 2, 7° of the

Electricity Law;

Federal Grid Code The Royal Decree of 22 april 2019, establishing a federal

> technical regulation for the management of and access to the transmission grid, as amended from time to time;

Island Network or part of a network that is isolated and that works

in Island Operation as defined in Art. 2 (43) of the commission regulation (EU) 2016/631 of 14 April 2016 establishing a network code on Requirements for grid

connection of Generators hereinafter ("RfG");

Paraaf RSP:



Limited Energy Restoration Facility

Reservoir A Restoration Facility that has a constrained energy production capacity and/or a constant primary energy source supply, such as batteries, hydro reservoirs or thermal units that don't have a continuous fuel supply (i.e.

incinerators):

Power-Generating Module or

"PGM"

As defined in article 2 (5) of the comission regulation (EU) 2016/631 of 14 April 2016 establishing a network code on

requirements for grid connection of generators;

Restoration Plan As defined in art. 3 (5) of the E&R NC;

Restoration Service Provider

or "RSP"

Legal entity, as defined in Art.3 (1) of the E&R NC, and with whom ELIA has concluded a contract to provide

Restoration Services as referred in Art. 236 of the Federal

Grid Code:

Restoration Services Any service designed to restore power and energy supply

to the transmission system following a Blackout as defined in Art. 2 §1 53° of the Federal Grid Code, such as, but not

limited to, the Black-Start Service;

Electricity generating facility, comprising one or more Restoration facility

> PGMs connected to the same connection point on the transmission system and capable of providing a certain

Restoration Service:

Test Plan A plan identifying the equipment and capabilities relevant

> for the system defence plan and the Restoration Plan that have to be tested, as well as the periodicity and conditions for the tests, defined by Elia pursuant to article 43.2 of the

E&R NCand available on Elia's website:

Start-up time Time elapsed between the moment Elia requests that the

RSP activates a Restoration Facility until the time when that Restoration Facility has restored power to the busbar

of Elia's substation and is ready to accept load.

"RSP Name" Paraaf RSP:



ART. II.2 PROCUREMENT OF THE BLACK START SERVICE

- II.2.1 In application of Art. 236 § 2 of the Federal Grid Code, the RSP is the Grid User of a certain Restoration Facility or another party designated by the Grid User as per template in Annex 6. If the RSP is also the Balance Responsible Party for a certain Restoration Facility, the entry into force and validity of this Contract shall be predicated upon prior signature by the RSP (or another party appointed by the Grid User with which the RSP has an agreement as per template in Annex 6) of the CIPU Contract. If the RSP is not the BRP, the RSP shall ensure with the CIPU contract holder of the Restoration Facility that a CIPU contract is in force and valid;
- II.2.2 If a temporary or definitive closure of the Restoration Facility is announced, the present Contract ends at the same day as the closure foreseen by the article 4bis of the Electricity Law, unless, only in case of temporary closure, requested otherwise by Elia to ensure provision of the Service in a certain zone after the end of the temporary closure of the Restoration facility for the remaining term of this Contract.
- II.2.3 If in addition, the Restoration Facility also participates to the Strategic Reserve, the present Contract ends not earlier than the last day of the Strategic Reserve Contract;
- II.2.4 Should the RSP or the grid user change, the new parties assuming their respective roles also assume the obligations of their respective roles in this contract.
- II.2.5 Geographical distribution of Restoration Facilities

The target geographical distribution of the Black Start Service zones in Belgium is described in Annex 5.

If Elia cannot contract a Restoration Facility for one of the 4 regional zones as mentioned in Annex 5, Elia can consider the possibility of not contracting a Restoration Facility supplying Black-Start Service in the concerned regional zone only under the following condition: a Restoration Plan adapted to this regional zone can be established by either a 380 kV (380 kV electrical zone) power supply or an additional Black-Start Restoration Facility contracted in an adjacent regional zone (meaning 2 Restoration Facilities located in the same zone would be contracted by Elia).

II.2.6 Two (2) Restoration Facilities at most can be contracted by Elia in a same electrical zone because technical and operational limitations are introduced for the dispatching in its network restoration procedures.

ART. II.3 CONDITIONS FOR PARTICIPATION IN THE BLACK START SERVICE

- II.3.1 Prior to submitting an offer to provide the Service, a candidate should apply to become a qualified RSP. The conditions to become a qualified RSP are listed hereunder:
 - Provision of a declaration (referred to as "sworn statement") in which the candidate declares the fulfilment of the obligations related to payment of social security contributions in accordance with the legal provisions, fulfilment of the obligations related to payment of taxes in accordance with the legal provisions, and situation of non-bankruptcy.
 - 2) Proof of a sound financial and economical situation of the candidate.



A candidate RSP can apply by submitting a completed application form and the required documents, for the applicable service to Elia. The application form and the template for the sworn statement can be downloaded on Elia's website or requested by e-mail to contracting_as@elia.be, with the contractual responsible as designated in Annex 2 in copy.

II.3.2 <u>Aggregation rules</u>

If several PGMs and/or items of equipment composing a Restoration Facility and connected to the same connection point are needed in order to meet the obligations described in Art. II.3.3, they should be able to work together in such a way that they operate in a similar way to a single PGM on the high-voltage grid.

Moreover, these PGMs composing the same Restoration Facility must distribute their contribution in such a way as to maximise the dynamic stability margin.

- II.3.3 The RSP shall put at Elia's disposal Restoration Facilities that meet the following conditions:
 - Able to restore sufficiently stable power to sections of the transmission system, provide power to the auxiliary equipment at other Restoration Facilities and also accept loads;
 - 2) Equipped with an automatic system whereby each of the PGMs at the Restoration Facility guarantees a stable and coordinated contribution to the service;
 - 3) Respect the specifications for regulating voltage and reactive power production in the Federal Grid Code for each of the site's PGMs;
 - 4) Capable of absorbing at least 30 Mvar at the connection point and able to handle the connection of elements of the grid that generate up to 30 Mvar under steady state operating conditions;
 - 5) Capable of instantly accepting an offtake of at least 10 MW (with a cos phi \geq 0.8 inductive) and with a maximum active power volume (with a cos phi \geq 0.8 inductive), as stipulated in Annex 4:
 - without the frequency of the Island deviating from the 49-52 Hz range, even temporarily;
 - without the voltage at the connection point being lower than the shaded operating range in Figure 1, even temporarily;
 - able to cover the temporary currents and voltages at the connection point arising from the restoration of power to the elements mentioned above.

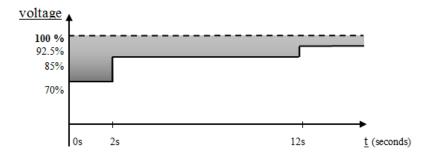


Figure 1:Minimum voltage operating range in black-start conditions



- 6) Able to provide the Black Start Service at least three times during the application of the restoration plan in order to cover a potential collapse of the Island during the grid restoration phase or the start-up of the Restoration Facility;
- 7) Equipped with a speed regulator that can control the frequency for each of the PGMs composing the Restoration Facility:
 - With a static error of less than 10 mHz. It must be possible for the normal power control and this frequency control to be used without there being an insensitive zone in respect of the frequency measured. It must be possible for the frequency set-point under steady state operating conditions to be controlled within the aforementioned range;
 - Based on a droop, the adjusting slope of which can be set at between 2 and 12
 % and the dead band of which can be set at between 10 to 200 mHz.
- 8) Able to shift to operational mode using one or another of the speed regulator operating modes, as defined above;
- 9) Equipped with a synchroscope, the operation of which it must be possible to bypass during paralleling;
- 10) Equipped with a single interface with Elia so that the presence of one or more PGMs composing the Restoration Facility is clear to Elia;
- II.3.4 For each of its Restoration Facilities, the RSP shall provide a detailed description of the behaviour under steady state and transitional operating conditions. This description shall include at least the information contained in the technical questionnaire completed during the procurement procedure for this restoration service and shall be kept up-to-date by the RSP at its own initiative. Elia shall be entitled to require the RSP to provide the latest up-to-date version at all times during the term of this Contract.
- II.3.5 The RSP shall conduct simulations prior to entry into force of this Contract. These simulations shall be used to validate the compliance of each of the PGMs of its Restoration Facilities with the Federal Grid Code (Compliance with the Federal Grid Code: Stability Study) and the E&R NC as well as the compliance of each of the Restoration Facilities with the requirements stipulated in Art. II.3. The RSP shall submit to Elia a report containing the results and conclusions of the simulations conducted.

ART. II.4 PROVISION OF THE BLACK START SERVICE

- II.4.1 Between the time when Elia requests the start-up of a Restoration Facility and the time when the installation is available to accept load, this Start-up Time must be equal to or less than (as stipulated in Annex 4):
 - 1.5 hours for a Restoration Facility that was operating at the time of the Blackout;
 - 3 hours for a Restoration Facility that was in shutdown mode at that time.

Once the voltage has been restored (on the high voltage side of the step-up transformer), the Restoration Facility must be able to operate for at least the subsequent 24 hours whilst being subject to offtake fluctuations, as defined above (fluctuations of at least 10 MW, up to a maximum stipulated in Annex 4).



- II.4.2 Elia shall stipulate the start-up procedures for the Restoration Facilities after consulting with the RSP. These procedures are part of the Restoration Plan.
- II.4.3 By way of exemption from Art. II.4.2, the RSP shall not be obliged to ensure that the Restoration Facilities remain available during maintenance work in the event of unforeseen incidents or events causing the outage of the Restoration Facility, about which the RSP shall notify Elia immediately. In such cases, a price reduction (reimbursement of the remuneration), as defined in Article II.8.2, shall be applied.
- II.4.4 For a RSP that holds three or more Restoration Facilities participating in the service, the RSP shall only plan the outage of one out of three Restoration Facilities (figure rounded up to the next unit) at any one time.

Moreover, Elia shall be entitled to postpone the planned outage of a Restoration Facility according to the modalities of the CIPU contract in order to prevent an excessive share of its Restoration Facilities being unavailable at the same time.

II.4.5 In the occurrence of any outage or any other event impacting the Restoration Facility's ability to deliver the Service (such as for example an outage of an auxiliary production unit, notwithstanding outages mentioned in Art. II.4.4), the RSP shall immediately notify Elia by email addressed to Elia's real-time operations contact person as per Annex 2. The communication shall pertain information on the Restoration Facility's availability to deliver the Service and the estimated duration of the unavailability.

Once the Restoration Facility becomes available again the RSP shall equally inform Elia in the same way.

The days of non-availability of the Service under this Article shall also be considered for the calculation of penalties as per Art. II.8.2.

II.4.6 The Restoration Facility is considered as available to supply the Black-Start Service according to the following rule:

The outage of a PGM of a Restoration Facility shall be defined on the basis of 'PU' and 'FO' statuses on day D-1, as specified within the framework of the CIPU Contract, and taking into account specifications regarding the minimal configuration (i.e. number of PGMs available) for the considered Restoration Facility to provide Black-Start Service as described in the restoration scenario drawn by Elia and specified in Annex 1.

On day D, the RSP's remuneration will be reduced proportionally to the number of quarter-hours for which the Restoration Facility has been unavailable. If the Restoration Facility is available for less than 48 quarter hours in a day, the Restoration Facility is considered as unavailable for the whole day.

If the CIPU procedures no longer apply to the PGMs of the Restoration Facility (e.g. during the summer period if the Restoration Facility is part of the Strategic Reserve), Elia shall determine, together with the RSP, an alternative method that allows for this information to be recovered in a manner that is similar to that described in the CIPU procedures.

Elia shall assess the annual availability of the PGMs of the Restoration Facility for each year of this Contract based on the definition of an outage stipulated in the present Article. The applicable penalty system is described in Art. II.8.2.



- II.4.7 For each Restoration Facility, the RSP must prove to Elia that it disposes at all times of sufficient primary energy resources to be able to deliver the Service in case of Blackout :
 - For Restoration Facilities that are not characterized as Limited Energy Reservoir Restoration Facilities, the RSP must provide Elia with proof that the site has guarantees of uninterrupted fuel supply during a Blackout and restoration state;
 - For Restoration Facilities that are characterized as Limited Energy Reservoir Restoration Facilities, Elia and the RSP must determine together a requirement of minimum energy content or minimum fuel stock to be available at all times and to be used to operate during a Blackout and restoration state. This requirement must be agreed explicitly and be notified in Annex 4. This minimum energy content is defined according to the role of the Restoration Facility in the Restoration Plan and the specific technical characteristics of the Restoration Facility, such as, but not limited to:
 - The MW capability of the Restoration Facility
 - The distance between the Restoration Facility and the power plant that needs to be re-energized in the restoration plan considering
 - The necessary power to re-energize the auxiliaries of the target power plant
 - The losses on the network elements
 - The minimum time necessary for the start-up of the to be re-energized power plant
 - The obligation to be able to start three times during the application of the restoration plan as provided in Art II.3.3
 - The type of restoration (zonal/380kV or for an adjacent zone)

ART. II.5 EXCHANGE OF DATA RELATING TO THE PERFORMANCE OF THE CONTRACT FOR THE BLACK START SERVICE

II.5.1 The exchange of data between the Parties relating to the performance of the Contract shall take place via real-time communication and/or via offline communication, as described below.

Real-time communication



- II.5.2 Real-time communication shall take the form of electronic messaging in accordance with the specifications established by Elia.
- II.5.3 The RSP shall ensure that Elia is informed in real time of all outages of the Restoration Facilities, as described in the CIPU contract as well as of the end of the outage period.
- II.5.4 Elia must be able to contact the RSP at all times in order to request the start-up of a Restoration Facility. This requires a voice-based communication channel (point to point) with a standalone capacity of at least 24 hours (without the need for an external energy source), which must be operational in the event of a Blackout, providing a link between the control room of each Restoration Facility and Elia's dispatching centre (a regional dispatching centre for voltage levels below 380 kV and the national dispatching centre for the voltage level 380 kV).
- II.5.5 In the event of a Blackout, Elia shall notify the RSP if it plans to make use of the RSP's Restoration Facility(ies). In such cases, Elia shall pass on its instructions to the RSP. Elia shall guide the restoration instructions.

Offline communication

- II.5.6 Any offline communications shall be made or confirmed via electronic messaging. The same shall apply to all data exchanged using the formats and software stipulated by Elia.
- II.5.7 The RSP shall ensure that Elia is notified about scheduled outages of the Restoration Facilities within the framework of the CIPU contract as well as of the end of the outage period.

ART. II.6 COMPLIANCE TESTING OF THE RESTORATION FACILITIES

II.6.1 Elia shall be entitled to check the efficiency and operation of the Restoration Facilities using tests in accordance to the Test Plan that is published at Elia's website¹ and added in Annex 7.

ART. II.7 REMUNERATION

II.7.1 The price for providing the Service by the Restoration Facilities included in this Contract, is defined in Annex 1 and is applied *prorata temporis* for the duration of the Contract.

Remuneration reduction rules are outlined in Art. II.9.

The agreed price shall cover the availability of the Black Start Service, which implies the availability of the Restoration Facility and the technical and operational capacity to provide the Black Start Service (including, in particular, the maintenance of the installations, maintenance of the procedures, staff training, as well as the RSP's internal tests and those requested by Elia, but under no circumstances the compensation foreseen under Article II.8.5).

II.7.2 Without prejudice to Article II.7.1, ELIA shall remunerate the Service Provider for any successful test conducted officially by ELIA except for the test limited to the Black Start inspection test. The remuneration per test shall be defined in Annex 1. In the case of a test that is limited to a Black Start inspection test, no ad-hoc remuneration is foreseen.

If a test, as foreseen under the Test Plan, fails and this failure cannot be attributed to a problem relating to the Elia Grid, the Restoration Facility shall be deemed to no longer be on the list of Generating Sites providing the Black Start Service. Remuneration shall be suspended, as foreseen in Art.II.8.5, and shall only resume once it has been proven, via a fresh conclusive

¹ At the moment of public consultation of this T&C RSP, the Test Plan is also consulted on the same page.



test paid for by the RSP, that the Restoration Facility can provide the Black Start Service. A price reduction shall also be granted in accordance with Article II.8.6.

II.7.3 The remuneration rules for a Black Start test, as described in Art.II.7.2, shall not apply for initial tests for new Restoration Facilities providing the Service as described in the Test Plan.

In this specific case, if a Restoration Facility fails two tests in a row and these failures cannot be attributed to a problem relating to the transmission system, the RSP shall be obliged to reimburse all remuneration paid by Elia since the date this Contract entered into force.

The Contract shall only take effect again once it has been proven, via a conclusive test conducted at the RSP's expense, that the Restoration Facility is able to provide the Black Start Service.

ART. II.8 PENALTIES FOR NON-PERFORMANCE OF THE CONTRACT FOR THE BLACK START SERVICE

II.8.1 A price reduction shall apply when a Restoration Facility is affected by a full or partial outage, as defined in Art. II.4.5. The price reduction for a one-day outage of a Restoration Facility shall amount to the daily remuneration for that Restoration Facility. The price and the price reductions shall be equal to the price indicated in Annex 1.

If several PGMs grouped together at the Restoration Facility and connected to the same connection point are needed to meet one of the obligations described in Art. II.3, the price reduction for a one-day outage of one of these PGMs shall amount to the daily remuneration for the whole Restoration Facility.

In the case of a Limited Energy Reservoir Restoration Facility, a price reduction equal to the daily remuneration as indicated in Annex 1 shall apply if, for at least one quarter hour of the day, the minimal primary energy volume or fuel stock agreed in Annex 4 is not respected, provided the Restoration Facility is available as foreseen in Art.II.4.5.

II.8.2 In addition to the remuneration reduction outlined in Art.II.8.1, the following penalty system shall apply in the event of an excessively long outage (evaluated over a period of one year) of a PGM located at the Restoration Facility:

Annual availability of the Restoration Facility	Penalty applied
Between 255 and 325 days	One month's remuneration
Between 146 and 254 days	Two months' remuneration
Less than 145 days	Three months' remuneration



If the Contract is concluded for less than one year, annual availability shall be calculated prorata temporis.

II.8.3 The sum of penalties provided in articles II.8.1 and II.8.2 is subject to an annual cap, without prejudice of the responsibility of the RSP for not respecting his obligations in accordance with Article I.6 of the General Conditions.

This cap is equal to the annual remuneration (i.e. number of days per year multiplied by daily remuneration) received by the RSP for the concerned Black-Start Restoration Facility (*prorata temporis* for the duration of the Contract) and specified in Article II.7.1.

- II.8.4 At the latest three months after the end of the year, Elia shall audit the availability of the Restoration Facilities in accordance with Art.II.8.2 and shall consequently apply the price reductions to the next monthly invoice.
- II.8.5 If a Black Start test report indicates, in accordance with the Test Plan, that the start-up failed or the RSP did not correctly observe the test specifications and, providing that Elia cannot attribute this to the transmission system, payment of the remuneration for the availability of the relevant Restoration Facility shall be suspended by Elia as of and including the day of the failed test and until the RSP achieves a successful test start-up. The cost of a new test or any new test start-up within this framework shall be borne in full by the RSP.
- II.8.6 If a Black Start test report indicates, in accordance with the Test Plan, that the start-up failed or the RSP did not correctly observe the test specifications and, providing that Elia cannot attribute this to transmission system, a price reduction equal to one (1) month's remuneration shall be payable by the RSP to Elia without prejudice to Art.II.8.5.
- II.8.7 The price payable by Elia shall be reduced by the cost of the price reductions determined in accordance with Articles II.8.1, II.8.2, II.8.5 and II.8.6, subject to any liability on the part of the RSP for failure to meet its obligations in accordance with Article I.6 of the General Conditions.

ART. II.9 INDEXATION OF THE REMUNERATION FOR THE BLACK START SERVICE

For year Y, the new unit price (€ / MW / h) shall be calculated as follows:

$$P(Y) = P(Y-1) * \frac{NI}{BI}$$

Where:

- o P(Y) = the unit price for year i
- Y = year for which the new price is determined
- Y-1 = the previous year
- NI = new index, equal to the average monthly consumer price index published on http://statbel.fgov.be/nl/statistieken/cijfers/economie/consumptieprijzen/ (in Dutch) for the last known 12 (twelve) months at the moment of the calculation of the index (which is performed on the month before delivery period).
- BI = base index, equal to the average monthly consumer price index published on http://statbel.fgov.be/nl/statistieken/cijfers/economie/consumptieprijzen/ (in Dutch) for the last known 12 (twelve) months preceding the NI period.



ART. II.10 INVOICING AND PAYMENTS FOR THE BLACK START SERVICE

- II.10.1 Without prejudice to Article I.5, by the fifteenth (15th) of each calendar month M, the RSP shall send Elia a draft report on the provision of the Black Start Service during the previous month (M-1). This report shall include the following data:
 - Outages at the Restoration Facility during the previous month (M-1) and a proposed price reduction based on these outages.
 - The results of any tests pursuant to Art. II.6.

By the twentieth (20th) of each calendar month, Elia shall send the RSP its agreement with this report or any comments relating thereto, as well as the calculation of the price reductions for the previous month (M-1) in accordance with the provisions of Articles II.8.1, II.8.2, II.8.5 and II.8.6, including the calculation method and all the data underpinning this calculation. If the RSP challenges the invoiced price reductions, the RSP shall notify Elia without delay. The parties shall then strive to reach an amicable settlement. Failing this, the dispute resolution procedure stipulated in Article I.13 of the General Conditions shall apply.

- II.10.2 By the twenty-fifth (25th) of each calendar month M, the RSP shall send Elia its monthly invoice, which shall include in addition to the elements mentioned in Art. I.5.1:
 - a. the remuneration, pursuant to Article II.7.1, for the service to be provided in the following month M+1;
 - b. the remuneration reductions for the month M-1 as calculated by Elia pursuant to Art. II.8, in accordance with Art. II.10.1;
 - c. any other amount payable under the terms of this Contract;

The appropriation structure to be used by the RSP is outlined in Annex 3.



ART. II.11 CONTRACT DURATION

The Parties agree that this Contract is valid from its date of signature until 31/12/2023 without prejudice to Art II.2.1 to Art. II.2.4.



Drawn up in Brussels in two originals, of which each Party concerned acknowledges having received one. The official version has been drawn up in Dutch and French, without one version taking precedence over the other; the English version is solely for information purposes.

ELIA System Operator N.V./S.A., represented by:

[•]	[•]	
[•]	[•]	
Date:	Date:	
RSP, represented by:		
[•]	[•]	
[•]	[•]	
Date:	Date:	



ANNEXES



ANNEX 1: BLACK START PGMS:

RESTORATION FACILITY XXX (LOT X: S/TART DATE – END DATE) COMPRISES PGMS A, B, C

A. <u>TOTAL: €XXX/day</u> <u>Total per test:€XXX/test</u>

B. Availability Criteria



ANNEX 2: CONTACT PERSONS

FOR ELIA:

1 Contract monitoring

[•]

Boulevard de l'Empereur 20

1000 Bruxelles

Tel.: +32 (0)2 546 7443

Fax: +32 (0)2 546 7840

Email: [•]

2 Invoicing and payments

Settlement

[•]

Boulevard de l'Empereur 20

1000 Brussels

Tel.: +32 (0)2 546 7062

Email: system.services@elia.be

Invoicing and payments

ELIA SYSTEM OPERATOR NV

[•]

Boulevard de l'Empereur 20

1000 Brussels

VAT no. BE 476.388.378

3 Real-time operations

National dispatching (Operations)

Chaussée de Vilvoorde 126

B-1000 Brussels

Tel.: +32 (0)2 382 2383

Fax: +32 (0)2 382 2139



Email: dispatching@elia.be Northern regional dispatching office (Noord) Southern regional dispatching office (Zuid) 4 Non real-time operations National dispatching (Duty) Chaussée de Vilvoorde 126 B-1000 Brussels Tel.: +32 (0)2 382 2308 Fax: +32 (0)2 382 2139 Email: dispatching@elia.be 5 Analysis and preparation of tests [•] Vilvoordselaan, 126 1000 Brussels Tel.: +32 (0)2 240 53 69 Email: [●]

FOR THE RSP:

1 Contract r	monitoring
2 Invoicing	and payments
2.1	Settlement
2.2	Invoicing and payments
0.01.0	(0.4.10.4.)
3 Real time	(24n/24n)
4 Non real-t	ime operations



ANNEX 3: APPROPRIATION STRUCTURE

Auxiliary service	Remuneration	Booking reference
Black Start	Base price	900101
	Reduction for outages	900102



ANNEX 4: TECHNICAL CHARACTERISTICS OF THE BLACK START PGMS

This Annex shall be completed based on the information provided in the technical questionnaire during the tender process.



ANNEX 5: GEOGRAPHIC DISTRIBUTION OF RESTORATION FACILITIES FOR THE BLACK START SERVICE

Elia contracts one Restoration Facility able to provide the Black Start Service in each of five following zones (1 380kV zone and 4 regional zones);

- The regional zones defined for the Black Start Service correspond to the aggregation of Electrical Zones as described below:
 - o North-West = Langerbrugge East, Langerbrugge West and Ruien
 - North-East = Merksem and Stalen
 - o South-West = Hainaut East, Hainaut West and Schaerbeek/Brussels
 - South-East = Liège
- The 380 kV Electrical zone, is supplied by a Black Start Restoration Facility connected to the 380 kV. If no Restoration Facility connected directly to the 380 kV zone can be found, Restoration Facility connected to lower voltage networks could also provide Black-start of the 380 kV zone if they are able to.



ANNEX 6: LETTER TEMPLATE FOR THE DESIGNATION BY GRID USER OF A RSP

ELIA System	Operator	NV
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To the attention of [•]

Keizerslaan 20

B-1000 Brussel

Date: dd/mm/yyyy

Subject: Agreement for the transfer of rights and obligations regarding the supply of Restoration Services to a RSP

	Grid User	RSP
Name		
Address		

[Grid User] declares that:

- 1. He agrees to transfer the rights and obligations of the Contract for Restoration Services for the delivery period of DD/MM/20XX² to 31/12/20XX to [RSP] located at [ADDRESS].
- 2. The access point (s) of the Black Start Restoration Facilities of the Grid User are covered by a valid BRP contract signed by the BRP and a valid CIPU contract signed by the CIPU contract holder
- 3. The Grid User shall ensure the proper transmission to the different parties referred to the previous point of the relevant information regarding the participation of the Restoration Facility to the Service as well as the relevant information relative to the production/unavailability plans of the Restoration Facility required by each of those parties to fulfil its obligations.
- 4. He is aware of the content of the concerned contract to be concluded by Elia and [RSP]
- 5. He will not take other commitments with respect to the delivery of Restoration Services.

[Grid User] recognizes and agrees that the contract between Elia System Operator and [RSP] for Restoration Services is without prejudice to its rights and obligations regarding the BRP and CIPU contracts.

[Grid User] and [RSP] recognize that Elia is not accountable for:

 A disagreement between [Grid User] and [RSP] regarding the production of energy and the delivery of Restoration Services.

28/30 «Contract_Reference»

Contract for Restoration Services

2019-10-14 V1/2019 "RSP Name"

Paraaf Elia: Paraaf RSP:

² Date of the effective transfer of the contract



2. A disagreement between [Grid User], [CIPU Contract Holder], [BRP] and/or [RSP] related to penalties, as provided in the contract for Restoration Services, and resulting from a faulty information provided by [Grid User].

[RSP] declares that he will inform [Grid User] in case of any modification regarding the delivery of the above mentioned service. If a change of [Grid User] occurs, this agreement between [Grid User] and [RSP] is no longer valid and [RSP] ensures that the new [Grid User] takes over the agreement under same terms and conditions.

[Grid User] with enterprise number [NUM], represented by:

Name:	Name:	
Function:	Function	
Date: dd/mm/yyyy	Date: dd/mm/yyyy	
[RSP] with enterprise number [NUM], represented by:		
Name:	Name:	
Function:	Function	
Date: dd/mm/yyyy	Date: dd/mm/yyyy	
For knowledge and agreement:		
Elia System Operator NV (Elia) with enterprise number 476.388.378, represented by:		
Name:	Name:	
Function:	Function:	
Date: dd/mm/yyyy	Date: dd/mm/yyyy	



ANNEX 7: TEST PLAN

The Test Plan is subject to a separate public consultation on the Elia website.