

Procurement process for Restoration Services

For Delivery Periods as of 01/01/2027

This procurement procedure has been put forward to the CREG for approval pursuant Article 8, §1/1, sixth paragraph, in accordance with the Belgian law of 29 April 1999 concerning the organization of the electricity market

This procurement will proceed according to Article 30 of the law of 23 October 2022 amending the Belgian law of 29 April 1999 concerning the organization of the electricity market transposing Directive (EUs) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU

Version for Public Consultation



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1 General information

1.1 Definitions

The definitions contained in the contract type for the Restoration Service Provider (T&C RSP) approved by the CREG and published on Elia's website (<u>Becoming a Restoration Service Provider (elia.be)</u>), apply to these Procurement Procedures.

1.2 Goal

The goal of this document is to inform candidates, interested in delivering the Black Start Service (RSP candidates), of the tendering process and awarding rules, to:

- Select qualified Restoration Service Providers who can make one or more Black Start PG proposals;
- Select Black Start PG proposals feasible of performing Black Start Service in line with the Restoration Plan;
- Award Black Start PG proposals of the RSP candidates through signature of the RSP Contract;

ELIA awards the Black Start Service to 1 (one) Black Start PG for each Black Start Service zone, pursuant to 1.5 Black Start Service zones concerned in this tender and the Restoration Plan.

1.3 Delivery period

The maximum period for which Elia is looking for Black Start Service is from 01/01/2027 until 31/12/2038;

Services offered with an existing Black Start Capability can only make an offer for the delivery period 01/01/2027-31/12/2029 (or a part of this). This is the minimal Delivery Period;

Services without existing Black Start Capability can offer for a delivery period of maximum 10 calendar years with a start at the latest on 01/01/2029;

The offered delivery period is divisible to be awarded per calendar year.

1.4 Type of procurement procedure

The tendering process ELIA applies, for awarding the Black Start Service, is the competitive dialogue as defined in Art. 121 of the law on public tendering of June 17^{th} 2016.



1.5

Black Start Service zones concerned in this tender

The 5 (five) Black Start Service zones are constituted as follows:

- 1 (one): the 380 kV part of the ELIA Grid. Any Black Start PG (proposal) whose Main Generator is connected directly to the 380kV part of the ELIA Grid is considered connected to the 380kV Black Start Service Zone.
- 4 (four) regional zones defined for the Black Start Service correspond to the aggregation of Electrical Zones (situation of 01/09/2022)¹ as described below:
 - North-West = Langerbrugge East, Langerbrugge West and Ruien;
 - North-East = Merksem and Stalen;
 - South-West = Hainaut East, Hainaut West and Schaerbeek/Brussels;
 - South-East = Liège;

Any Black Start PG (proposals), not connected to the 380 kV part of the ELIA Grid, is considered to be connected to that Black Start Service Zone in which the connection point of its Main Generator is located.

The Black Start Service zones concerned in this tender are shown in the table below, together with the respective starting date of the Delivery Period.

Black Start Service zone	As of:
380 kV part of the ELIA Grid	01/01/2027
North-West	01/01/2027
North-East	01/01/2027
South-West	01/01/2027
South-East	01/01/2027

 $^{^1}$ The electrical zones are subject to change according to the rules defined in the Rules for Coordination and Congestion Management. The situation of 01/09/2022 is taken as a reference and will be used for the duration of the Black Start Service contractual period. Changes to the electrical zones do not impact the Black Start contract.

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2

Selection of qualified Restoration Service Providers

Prior to submitting Black Start PG proposals an RSP candidate should apply to become a qualified Restoration Service Provider. The conditions to become a qualified Restoration Service Provider are listed hereunder:

- Provision of the application form;
- Provision of a declaration (referred to as "sworn statement") in which the RSP 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;
- Proof of a sound financial and economic situation of the RSP candidate;

The application form and template for the sworn statement can be downloaded on ELIA website (<u>Becoming a Restoration Service Provider (elia.be)</u>) or requested by e-mail, pursuant to 6 Communication.

An RSP candidate can apply before the deadline mentioned in 7 Timings.

ELIA will assess the applications and inform the qualified Restoration Service Providers and non-qualified Restoration Service Providers, before the deadline mentioned in 7 Timings, by email, of their (non-)qualification. In case of non-qualification, ELIA will add the justification for the non-qualification.



3

Submission of initial Black Start PG proposals

Qualified RSP candidates can submit Black Start PG proposals by providing ELIA following information:

- 1. A letter in which the qualified Restoration Service Provider:
 - a) Agrees with the provisions of the T&C RSP;
 - b) Indicates the validity of the offer until the day before the start date of the Black Start Service Delivery Period, as mentioned in 1.3 Delivery period;
- 2. In accordance with Art. 227 § 1 of the Code of Conduct, the RSP candidate is the Lead Grid User for the Black Start PG providing the Service or a third party appointed by the Lead Grid User as RSP candidate. In case of the designation by the Lead Grid User of a third party, the RSP candidate must provide Elia with a copy of the Elia Grid User Declaration as figuring in Annex 2.A of the T&C RSP signed by the Lead Grid User and the RSP candidate;
- 3. The constitution of each Black Start PG including the identification of the Blackstarter(s), Main Generator(s), and other Technical Units composing the Black Start PG by completing the concerned template in annex 1 of the T&C RSP. In case the Lead Grid User is not the grid user of all the Technical Units in the Black Start PG: a Grid User Declaration is provided to ELIA, as specified in the template of Annex 2.B. In case a Technical Unit is connected to a CDS/DSO grid: respectively a CDSO/DSO declaration is provided, as specified in the template of Annex 2.C/2.D;
- 4. The technical characteristics of each Black Start PG proposal by completing the data collection questionnaire referred to in annex 4 of the T&C RSP;
- 5. For each Black Start PG proposal, the proposed Delivery Period, complying with Section 1.3.
- 6. The offered prices for each Black Start PG proposal, by completing the concerned template(s) in annex 3 of the T&C RSP. The offered price should be composed out of following distinct elements, if applicable, accompanied by an explanation on the drivers of the price:
 - a) The capital cost for investing in the Black Start PG proposal's technical capability to comply with the T&C RSP and the Restoration Plan. This is a fixed cost, expressed in euro. In addition, the RSP candidate will need to provide a timing table for these investments.
 - b) The operational cost for maintenance of the Black Start PG proposal's technical capability to comply with the T&C RSP and the Restoration Plan including:
 - i. Cost for training of personnel;
 - ii. Cost for 24/7 availability of personnel;
 - iii. Cost for Black Start Service procedures;

The operational cost depends on the availability of the Black Start PG, pursuant to the T&C RSP and is expressed in euro/day. The reference year for the cost is 2025 and will be indexed according to Art. III.10.7 of the T&C RSP;



- c) The opportunity cost representing opportunity losses due to the contractual obligations pursuant Art. III.3.9 of the T&C RSP in case a minimum energy content needs to be reserved to provide the Black Start service. The opportunity cost depends on the availability of the Black Start PG, pursuant to the T&C RSP, and is expressed as a fixed amount in euro/day for each contract year or a formula. This formula will be fixed on a yearly basis and evaluated before the start of every new contract year (e.g. at the end of 2027, the fixed price for the entirety of 2028 will be calculated, similarly, at the end of 2028, the fixed price for the entirety of 2029 will be calculated,...). In case of a formula, the resulting price(s) are expressed in euro/day. ;
- d) The costs associated with the execution of a Black Start Capability Test 4 as foreseen in the Test Plan on the ELIA website (<u>link to the page "Emergency situations</u>"). This cost is expressed in euro/test; The reference year for the cost is 2025 and will be indexed according to Art. 10.7 of the T&C RSP;

All Black Start PG proposals including the required documents need to be submitted by e-mail, pursuant to 6 Communication, before the deadline mentioned in 7 Timings.



4

Selection of feasible Black Start PG Proposals

To select or reject a submitted Black Start PG proposal as a candidate for awarding, ELIA assesses its feasibility to provide the Black Start service in accordance with the Restoration Plan.

Technical specifications assessed by ELIA:

ELIA assesses the minimum technical requirements as stated in the specific conditions of the T&C RSP.

In addition, Elia will perform simulations to assess whether the Black Start PG, as defined in the offer, can execute the Restoration Plan. Based on these simulations, the required minimal reactive power absorption, required active power injection and the minimal volume for the limited energy reservoir (if applicable) are set.

Possible outcome of the assessment of minimum technical requirements and simulation of Black Start PG proposal's capability to execute the Restoration Plan:

The outcome of the first assessment, for each Black Start PG proposal, can be one of following possibilities concluding in a final assessment as either a feasible or unfeasible proposal

- The Black Start PG proposal is deemed feasible to execute the Restoration Plan. In which case the proposal is considered for awarding in accordance with Section 5. The RSP candidate can update the proposal before the deadline mentioned in 7 Timings. The updated proposal will be assessed in the final assessment and deemed **feasible** or **unfeasible**.
- The Black Start PG proposal is deemed **feasible**, **under certain conditions**, to execute the Restoration Plan. In such case:
 - ELIA will inform the qualified RSP candidates of the conclusion of the Black Start PG assessment, of their Black Start PG proposal(s), before the deadline mentioned in 7 Timings.
 - ELIA will justify its assessment to the qualified provider;
 - ELIA defines, in its justification, additional conditions the Black Start PG is deemed to comply with;
 - The qualified provider can send an updated proposal, respecting the additional conditions before the deadline mentioned in 7 Timings;
 - The updated proposal will be assessed in the final assessment and deemed **feasible** or **unfeasible**.
- The Black Start PG proposal is deemed **unfeasible** to execute the Restoration Plan. In such case:
 - The proposal is rejected.
 - ELIA will justify its assessment to the qualified Restoration Service Provider.

ELIA will inform the qualified Restoration Service Providers of the consideration or rejection of their Black Start PG proposal(s) before the deadline mentioned in 7 Timings.



5 Awarding of Black Start Service

 $\ensuremath{\mathsf{ELIA}}$ awards the Black Start Service to the RSP candidate using following criteria and process.

5.1 Awarding criteria

n°	Criteria	Weight
1	Lowest total cost (capital, operational, opportunity and test costs) [€/year]: - the capital and test costs (with the frequency as defined in the Test Plan) will be made variable using 365 operational days during the year, for the offered Delivery Period or a part thereof pursuant to Section 1.3. - In case a formula is offered for the opportunity costs, the cost for the first year will be calculated as input for the awarding process, using the parameters valid at the time of awarding process. In case a different price per contract year is offered, the weighted average, using the number of days that the respective price covers, will be calculated as input for the awarding process;	50%
2	Highest additional active power that can be injected [MW] on top of the active power injection required after the technical specifications assessment of ELIA	10%
3	Highest additional reactive power that can be absorbed [MVAr] on top of the reactive absorption required after the technical specifications assessment of ELIA	10%
4	Highest kinetic energy of the inertia [J];	5%
5	Highest instantaneous load acceptance [MW];	10%
6	Lowest Start-up Time while in operation (injecting power at the moment of the Black-Out) [min];	5%
7	Lowest Start-up Time when shut-down (not injecting power at the moment of the Black-Out) [min];	5%
8	 Highest operational simplicity to provide Black Start Service in accordance with the Restoration Plan [Scale of 1-4]; 1 or more transmission, distribution or CDS grid elements between the Blackstarter and the Main Generator(s) with a cascade of TUs between the Main Generator(s) and the Blackstarter 2 1 or more transmission, distribution or CDS grid elements between the Blackstarter and the Main Generator(s) and no cascade of TUs between the Main Generator(s) and no cascade of TUs between the Main Generator(s) and the Blackstarter 3. No transmission, distribution or CDS grid elements between the Blackstarters and the Main Generator(s) with a cascade of TUs between the Main Generator(s) and the Blackstarter 4. No transmission, distribution or CDS grid elements between the Blackstarter and the Main Generator(s) and the Blackstarter 4. No transmission, distribution or CDS grid elements between the Blackstarter and the Main Generator(s) and the Blackstarter 4. No transmission, distribution or CDS grid elements between the Blackstarter and the Main Generator(s) and no cascade of TUs between the Main Generator(s) and no cascade of TUs between the Main Generator(s) and the Blackstarter 	5%



5.2 Awarding process

- 1) All Black Start PG proposals that are deemed feasible will be selected during the awarding process.
- 2) ELIA gives each selected Black Start PG proposal a score for each of the awarding criteria;
- 3) ELIA groups the selected Black Start PG proposals per Black Start Service zone;
- 4) ELIA calculates the weighted awarding criteria score of each Black Start PG proposal (see example underneath) by attributing the maximum score for a given criterion to the best Black Start PG proposal within the Black Start Service Zone and attributing pro-rata scores, compared to the best offer, to the other Black Start PG proposals within the Black Start Service Zone;
- 5) ELIA ranks the selected Black Start PG proposals per Black Start Service zone;
- 6) The Black Start PG proposal with the highest weighted score per Black Start Service zone is awarded the Black Start Service if this Black Start PG proposal covers at least the minimal Delivery Period as mentioned in 1.3 Contractual period.

In case the Black Start PG proposal with the highest weighted score for a Black Start Service zone does not cover the minimal Delivery Period as mentioned in 1.3, Elia will calculate a new weighted score for all the Black Start PG proposals, or combinations of Black Start PG proposals, covering the minimal Delivery Period pursuant to 1.3, using their respective offered contract durations, or a part thereof. The Black Start PG proposal or the combination of Black Start PG proposals with the highest weighted score after this step is awarded the Black Start Service for a Black Start Service zone.

7) A Technical Unit can only be part of 1 (one) awarded Black Start PG in the same Delivery Period. In case multiple Black Start PG proposals contain the same unit, the Black Start PG with the highest weighted score will be selected. In case both scores are equal, Elia will provide a justification to select one of the Black Start PG proposals.

Black Start Service Zone without feasible Black Start PG:

In case no Black Start PG proposal connected to a certain Black Start Service Zone can be awarded the RSP Contract , ELIA will award an additional Black Start PG connected to another Black Start Service zone while respecting following rules:

- ELIA can award an additional Black Start PG proposal connected to the 380 kV or any Black Start Service zone adjacent to the concerned Black Start Service Zone without feasible Black Start PG;
- ELIA can contract a maximum of two Black Start PGs per Black Start Service Zone;

ELIA awards the additional Black Start PG proposal the RSP candidate pursuant to Section 5.



- Awarding of Black Start Service after the awarding procedure of the Black Start Service Zones with a feasible Black Start PG proposal(s).
- If no RSP contract can be awarded a new tendering process will be initiated for the concerned Black Start Service Zone(s).

5.3 Example of the comparison score of Black Start PG proposals:

There are two proposals considered here for a certain Black Start service zone. The detailed characteristics of the first proposal can be found in the third column and the characteristics of the second proposal can be found in the fourth column.

Proposal 1: This proposal consists of a test cost (50000 (test), an operational cost (1000 (day) and an opportunity cost (1200 (day). The contract duration is for 3 years. There were no additional minimal technical requirements imposed. The Blackstarter is located at a different voltage level than the Main Generator.

Proposal 2: This proposal consists of a capital cost investment $(2.000.000 \in)$, a test cost $(50000 \in/\text{test})$, an operational cost $(800 \in/\text{day})$. The contract duration is for 10 years. There were no additional minimal technical requirements imposed. The Blackstarter is located in direct connection with the Main Generator.

The second column shows the different criteria on which the proposals will be judged. In column five, the weights for the different criteria are translated into the absolute maximum score on a scale of hundred. In the final two columns the weighted score for each of the proposal is explicated. The Black Start PG proposal with the most favorable value for the criterion is given 100% of the maximum score. The other Black Start PG proposals are given a score based on their proportional value. For criteria where the highest value is desired, this results in the maximum score in proportion of their value divided by the value of the best scoring Black Start PG for the concerned criterion. For criteria where the lowest value is desired, this results in the maximum score in proportion of their value divided by the value of the value of the best scoring Black Start PG for the concerned criterion. For criteria where the lowest value is desired, this results in the maximum score in proportion to the value of the value of the best scoring Black Start PG for the concerned criterion (minimum value) divided by the value of the RSP Proposal.

n°	Criteria	Proposal 1	Proposal 2	Max score per criterion	Proposal 1 weighted score	Proposal 2 weighted score
1	Capital costs, operational costs, opportunity and test costs[€] (capital cost + test cost)/contract duration + (operational + opportunity costs);	2.245,66 = (50.000/3) / (365*3) + 1000 + 1200	1.393,61 = (2.000.000 + 50.000/3) / (365*10) + 800	50	31,03	50
2	The additional active power [MW];	200	300	10	6,67	10
3	The additional reactive power [MVAr];	60	110	10	5,45	10
4	Highest kinetic energy of the inertia [J];	15	18	5	4,17	5



5	Instantaneous load acceptance [MW];	15	20	10	7,5	10
6	Time to start providing Black Start Service while in operation [min];	5	20	5	5	1,25
7	Time to start providing Black Start Service when shut-down [min];	110	120	5	5	4,58
8	Highest operational simplicity to provide Black Start Service in accordance with the Restoration Plan [Scale of 1-4]	2	4	5	2,5	5
			SUM	100	67,32	95,83



6 Communication

For the goal of this tender and questions related to this tender, ELIA can be contacted through:

• Email: tender.rsp@elia.be

And, if applicable, the Key Account manager.

7 Timings

Following deadlines apply to this tendering process.

Who	What	Deadline
Candidate RSP	Application qualified Restoration Service Provider	
ELIA	Informing qualified and non-qualified Restoration Service Providers	
Candidate RSP	Submission of first Black Start PG proposal(s)	
ELIA	Assessment of the Feasibility of the Black Start PG proposal and the communication of this assessment.	
Candidate RSP	Submission of final Black Start PG proposal(s)	
ELIA	Communicate conclusion of final Black Start PG assessment;	
ELIA	Submission of tender report to the CREG;	
CREG	Assessment of the reasonability of the proposals;	
ELIA	Awarding of RSP contracts;	