

Call for Tender for Restoration Services 2021-2023

Bidding instructions and awarding criteria



Table of contents

1	General information				
	1.1	Minimal need of ELIA	3		
	1.2	Black-Start electrical zones	3		
2	Bido	5			
		General information			
	2.2	Alternative offers	6		
3	Awa	arding criteria			
		-			
Appendix 1 – Technical form for alternative offers					



1 General information

1.1 Minimal need of ELIA

Elia needs to contract BS restoration facilities to provide the Restoration Services for the delivery period of 01/01/2021 until 31/12/2023 with the following criteria:

Delivery period	Black-Start Electrical Zone	Number of BS restoration facilities
	380 kV	1
	North-West	1
01/01/2021-31/12/2023	North-East	1
	South-West	1
	South-East	1

Table 1 – Need for BS restoration facilities

In the absence of a BS restoration facility for one of those Black-Start electrical zones, Elia can consider the possibility of not contracting a BS restoration facility in the concerned Black-Start electrical zone only under the following conditions:

- ✓ A restoration plan adapted to this Black-Start electrical zone can be established either by a 380 kV BS restoration facility, either by an additional BS restoration facility contracted in an adjacent Black-Start electrical zone (i.e. 2 BS restoration facilities located in the same Black-Start electrical zone would be contracted by Elia).
- ✓ A maximum of 2 BS restoration facilities can be contracted by Elia in a same Black-Start electrical zone because technical and operational limitations are introduced in the network restoration procedures.

1.2 Black-Start electrical zones

The Black-Start electrical zones defined for the Black-Start service correspond to the aggregation of electrical zones defined in the CIPU contract, 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

The 380kV zone shall be supplied by a BS restoration facility connected to the 380 kV network, as stated in its connection contract. If none BS restoration facility compliant with this criterion is offered to Elia, a BS restoration facility connected to lower voltage networks could also be selected for the 380 kV zone, at the condition that a restoration plan for the 380 kV zone can be determined from this BS restoration facility.

Elia stays at disposal of the selected candidate RSP in case of doubt regarding the geographical situation of the offered BS restoration facility, or for any other additional information.



2 Bidding instructions

2.1 General information

A BS restoration facility can either be a single technical unit (as long as technical requirements fixed by Elia are satisfied) or several technical units located in the same BS restoration facility and connected to Elia network by the same connection point.

If several technical units are required to provide the Black-Start service, they have to be able to coordinate in such a way that their behaviour is similar to a single BS restoration facility regarding the high voltage network. Regarding CCGT units, the steam turbine in not eligible to provide Black-Start service.

The selected candidate RSP provides to Elia the following documents (containing all detail of the offer):

- 1. A letter where the selected candidate RSP:
 - ✓ agrees with the provisions of the <u>Contract for Restoration Services</u> as well as the overarching T&C;
 - ✓ indicates that his offer is valid until 31/12/2020.
- 2. The selected candidate RSP provides:
 - ✓ The offered BS restoration facility(ies);
 - ✓ The exact number of technical units located on each BS restoration facility and their EAN number;
 - ✓ The related Data Collection Questionnaire¹;
- 3. For each offered BS restoration facility, the selected candidate RSP details the offered prices with respect to the following rules:
 - ✓ A price expressed in €/day as mentioned in Art. II.7.1 of the <u>Contract for</u> <u>Restoration Services</u>. This price covers all costs for the delivery of the Restoration Services.
 - ✓ A price in €/test for the remuneration of any successful black-start test conducted officially by Elia² as mentioned in Art. II.7.2 of the Contract for Restoration Services. The modalities of the black-start tests are described in the Test Plan³.

The technical units that will be in the market for the delivery period, i.e. 01/01/2021 to 31/12/2023 included, are eligible to be part of a Contract for Restoration Services.

-

¹ The Data Collection Questionnaire will constitute the Annex 4 of the Contract for Restoration Services

² except for the test limited to the Black-start inspection test

³ The section of the Test Plan related to the black-start tests, which constitutes Annex 7 of the <u>Contract for Restoration Services</u>, has been approved by the Minister of Energy on 15 April 2020. As only this section is approved, a new version for other sections of the test plan must be submitted by 15 October 2020.



All offers including alternative offers (described below - see 2.2) have to be submitted to Elia at last on 3^{rd} July 2020.

2.2 Alternative offers

A selected candidate RSP who cannot meet all technical requirements specified in the <u>Contract for Restoration Services</u> is still allowed to offer to Elia the Restoration Services by an alternative offer. The selected candidate RSP has to point out the following elements in the technical form for alternative offer (Appendix 1):

- the technical requirement(s) which are not respected;
- the best performance reachable for each technical requirement that cannot be satisfied for the concerned offered BS restoration facility;
- the reason(s) why the specified technical criteria requested by Elia cannot be met.

However, the selected candidate RSP is not allowed to derogate to the criteria related to the requested start-up times for a BS restoration facility.

Elia will evaluate the technical feasibility of the alternative offer based on the information provided as defined above. Elia reserves the right to reject the offer based on the conclusion of its analysis.

The awarding criteria described below precise the stage at which alternative offers are considered in the selection proceeded by Elia.



3 Awarding criteria

- The offered BS restoration facilities are sorted by Black-Start electrical zone and rated in accordance with the cost for Elia. The cost considered by Elia for the ranking of each offered BS restoration facility amounts to the sum of the price in €/day and the price in €/test.
- 2) Elia checks the conformity of the offered BS restoration facility(ies) with regards to the technical criteria defined in the table below;
- 3) Only for the purpose of the selection and the ranking of offered BS restoration facilities, Elia adjusts the price offered by the selected candidate RSP, based on adjustment rules described in the table below. Elia uses information given in the technical form to assess if the thresholds for applying a reduction are reached.

Technical criteria	Technical minimum	Criteria for gaining an adjustment
	requested by Elia	of the offered price
Reactive power absorption at BS restoration facility connection point	30 Mvar, measured at connection point	If each technical unit included in the BS restoration facility is individually able to absorb 30 Mvar: price decrease of 10%.
Start-up time in operating mode (BS restoration facility was injecting energy when black-out occurred)	1h30	If both start up times in operating mode and in shutdown mode are respectively less than 1h and 2h:
Start-up time in shutdown mode (no energy injected by the BS restoration facility when black-out occurred)	3h	price decrease of 10%.
Instantaneous load	The BS restoration facility	If the BS restoration facility is able
acceptance	must be able to accept	to accept instantaneously a minimal
·	instantaneously a minimal load of 10 MW.	load of 20 MW:
		price decrease of 10%.
Minimal number of consecutive start-up in island mode.	3	
Nominal power of the BS restoration facility (without the steam turbine in case of		If nominal power of the BS restoration facility exceeds 200 MW:
CCGT unit)		price decrease of 20%.



Reliability of the BS restoration facility (based on the number of historic "PU" and "FO" ⁴ status of the CIPU nominations of the last 3 years for the concerned BS restoration facility(ies)	days of the last 3 years for which the BS restoration facility is not in « PU » or in	
Connection of the BS restoration facility to the Elia Grid	The BS restoration facility must be connected to a sub-station in which a voltage level of 150kV (or more) is present.	
Frequency control	The BS restoration facility must be equipped by a speed regulator that can control the frequency and that can be used without an insensitive zone with respect to the frequency measured.	

Example:

2 BS restoration facilities are candidate for the North-East zone and have offered the same price.

BS restoration facility 1 consists in:

- 2 technical units of 125 MW
- Each technical unit is able to absorb 40 Mvar
- All other technical criteria requested by Elia are satisfied.

BS restoration facility 2 consists in:

- 2 technical units of 80 MW
- Each technical unit is able to absorb 25 Mvar
- All other technical criteria requested by Elia are satisfied.

For the sake of the selection process, the BS restoration facility 1 will gain a 30 % decrease of its offered price (Nominal power > 200 MW + Mvar absorption capacity > 30 Mvar / technical unit), which can place this BS restoration facility in a better position for the final ranking of offers. The BS restoration facility 2 will not gain any decrease of its offered price.

4) Selection of solution: Elia selects, for each Black-Start electrical zone concerned, the solution with the best offered price after the price decrease adjustment (step 3) between BS restoration facilities for which all technical requirements described in the Contract for Restoration Services are satisfied.

⁴ PU = "Planned Unavailability"; "FO" = "Forced Outage"



5) If the needs of Elia are not fulfilled, Elia analyses the technical feasibility of the alternative offers (defined in 2.2) in the Black-Start electrical zone(s) for which no solution could be selected at step 4.

For the Black-Start electrical zone(s) for which no solution could be selected at step 4, Elia applies the same procedure described at step 4 to the solutions corresponding to alternative offers that have been validated as technically acceptable by Elia.

If two BS restoration facilities or more have been offered for the same Black-Start electrical zone and are both considered as technically acceptable, Elia selects the best offered price after adjustment (step 3).

After step 5, if one Black-Start electrical zone is not covered by a solution, Elia selects the best remaining solution consisting in an additional BS restoration facility in an adjacent Black-Start electrical zone as long as a restoration scenario can be defined from the considered BS restoration facility.

The selection for one Black-Start electrical zone is without prejudice to the right of Elia of awarding the selected solution as first choice for an adjacent zone, to the extent that Elia does not find other alternative for the considered Black-Start electrical zone at previous steps.

If several solutions are possible at this stage, Elia applies the following criteria leading to a new price adjustment (in addition of possible adjustments defined at step 3):

The shortest electrical distance (number of sub-stations) between the concerned BS restoration facility and the Black-Start electrical zone for which Elia is looking for a BS restoration facility is rewarded by a price decrease of 40%.



Appendix 1 – Technical form for alternative offers

For each BS restoration facility concerned by an alternative offer

If the selected candidate RSP submits an alternative offer for a BS restoration facility, he must specify:

- 1) The technical criteria that cannot be respected by the BS restoration facility $\frac{1}{2}$
- 2) The best performance that can be reached by the BS restoration facility for these technical criteria
- 3) The reason(s) why the selected candidate RSP cannot fulfil Elia requirements for these technical criteria
- 4) Possible alternative solutions proposed by the selected candidate RSP to compensate (for example: additional equipment installation,...)