

CALL FOR EXPRESSION OF INTEREST N°029/DCP/DAP/2021 RENOVATION OF THE DC AND AC AUXILIARIES OF THE EDEA POWER PLANT

<u>BATCH 01</u>: Supply and installation of three MV/LV transformers (15000/230 Volts three-phase 400KVA

BATCH 04: Renovation of the control system for unloader valves, compressors and sumps

Eneo is an electricity utility company owned by Actis and the Government of Cameroon, located at Avenue de Gaulle Douala-Bonanjo, in the Republic of Cameroon.

As part of its investment programme, Eneo intends to use part of its 2021 CAPEX budget to finance the following services

✓ <u>BATCH 01</u>: Supply and installation of three MV/LV transformers (15000/230 Volts three-phase

400KVA

- ✓ <u>BATCH 04</u>: Renovation of the control system for unloader valves, compressors and sumps
- 2. Summary description of the service:

<u>BATCH 01</u>: Supply and installation of three MV/LV transformers (15000/230 Volts three-phase 400KVA)

Supply and installation

Transformers	Number : 03
	15,000/230 Volts three phase; 50 Hz; 400 kVA
	Internal type: dry coated (trihal)
	Coupling Dyn11
	Adjustment range: +-2.5%; +-5
	Short circuit voltage: 6%.
	Protection against direct contact: IP31
	Thermal protection: insert O3 PT100 sensors in each transformer and have a protection relay for each transformer
Disconnect switches	Three line disconnect switches:
	HTA nominal current 30 A
	Three earthing switches :
	Nominal current on the HTA side approx. 100 A

Each transformer must be installed in a cell. This cell must have two disconnect switches, namely

-A line disconnect switch for visible separation upstream of the transformer.

-An earthing switch for earthing the transformer terminals.

On each cell, luminous indications of the position of the disconnect switches must be installed.

This supply must include the LV connection cables that will be used to connect the transformer to the TGBT, namely

At Edea 1: the cables had already been replaced

At Edea 3 (02 transformers): approximately 20 m for each transformer

N.B.: the output voltage of the transformers must be 230 Volts between phases.

<u>BATCH 04</u>: Renovation of the control system for unloader valves, compressors and sumps.

1. Renovation of the control system for unloader valves

The work to renovate the control system of the unloader valves will consist of:

- The replacement of all components that show the position of the unloader valves. The new detection system must show the position of the unloader valve in real time.
- Replacement of two unloader valve control cabinets in the unloader room.
- Installation of a SCADA system in the control room to monitor and control these

unloader valves. The control can be done both locally and remotely.

- Cable routing and connection from the unloader room to the control room.

2. Renovation of the control system of the Edea 2 and Edea 3 sump

The installation of the sump supervision system will be integrated into the same SCADA control system for the unloader valves.

a. Edéa 2 sump

The Edéa 2 sump is made up of three pumps for draining water. The expected service consists of:

- Replacement of the control cabinet for these three pumps: the control circuit must be separated from the power circuit.



- Replacement of the selector switch for starting and stopping the different pumps with an analogue system. The sensor should be in a tube for protection against objects in the sump.

- Start of 1st pump at 100 cm
- Start of 2nd pump at 150 cm
- Start of 3rd pump at 200 cm
- Feedback to SCADA and to the "factory flood" cabinet at 400 cm.

- Sending information on faults, sump water level and status (on or off) of the pumps to the SCADA system of the installed unloader valves

- Installation of an on/off float which acts as a back-up in case of failure of the analogue sensor.

<u>N.B:</u> The information should only be viewed on the SCADA system; no action should be taken from the control room.

b. Edéa 3 sump

The Edéa 3 sump is made up of four pumps for draining water. The expected service consists of:

- Replacement of two control cabinets for these four pumps: one cabinet for three pumps and the other cabinet for one pump.

- In the case of the cabinet for three pumps, the control circuits will be in one cabinet and the power circuits in the other.

- Replacement of two selector switches for starting and stopping the different pumps with an analogue system. The sensors must be in a tube for protection against objects in the sump.

- Start of 1st pump at 100 cm

- Start of 2nd pump at 150 cm
- Start 3rd pump at 200 cm
- Feedback to SCADA and to the "factory flood" cabinet at 400 cm.

- Sending information about the water level in the sump and the status (on or off) of the pumps to the SCADA system of the installed unloader values.

N.B : Information should only be viewed on the SCADA system, no action should be taken from the control room



- 3. Eneo therefore invites interested companies to submit their applications to provide the services described above. Eligible companies must provide information on their capacity and experience demonstrating that they are qualified to provide the services (documentation, references of similar services, experience in similar or identical assignments, etc.). To this end, interested companies are invited to use the expression of interest form attached to this call.
- 4. Local/Foreign Companies can apply.
- 5. Interested companies can obtain further information at the address mentioned below: Eneo Tenders: <u>Eneo.Tenders@eneo.cm</u>
- 6. Expressions of interest accompanied by relevant references in the field of the requested services should be sent by e-mail to Eneo Tenders : <u>Eneo.Tenders@eneo.cm</u> no later than the 15th day after the date of publication on our website with the subject "RENOVATION OF DC AND AC AUXILIARIES OF THE EDEA POWER PLANT" and the batch(es) interested in (you may be interested in one or both batches).
- 7. The submissions should not exceed 10 MB, in which case make several submissions in succession.
- 8. A shortlist of five to seven companies will be drawn up at the end of the call for expressions of interest and the tender will be executed in accordance with the procedures and timetable published in the invitation to tender. It should be noted that the interest expressed by a company does not imply any obligation on the part of Eneo to include this company in the shortlist.
- 9. Eneo also reserves the right to forward this Call for Expression of Interest to its approved suppliers in the relevant field of expertise.

The Director of Procurement