



LEADING **ENERGY EPC** COMPANY





# About Us

We are a leading energy infrastructure company specializing in **engineering, procurement, and construction** (EPC) services.

With a focus on high-voltage **grid connections** and **renewable energy** systems, we deliver robust and reliable solutions across the energy sector.



Our team of experts is committed to powering communities and industries through **innovative** and **sustainable energy solutions**.



# Complete EPC for Energy

ETHGroup means complete EPC services from **permits** and **design**, all the way to **testing** and **commissioning** for **systems up to 400kV**

**Project  
Management**

**Technical Engineering  
Consultancy**

**Construction  
& Installation**

**Engineering  
& Design**

**Procurement  
& Logistics**

**Testing  
& Commissioning**



# Certifications and Permits

## Authority

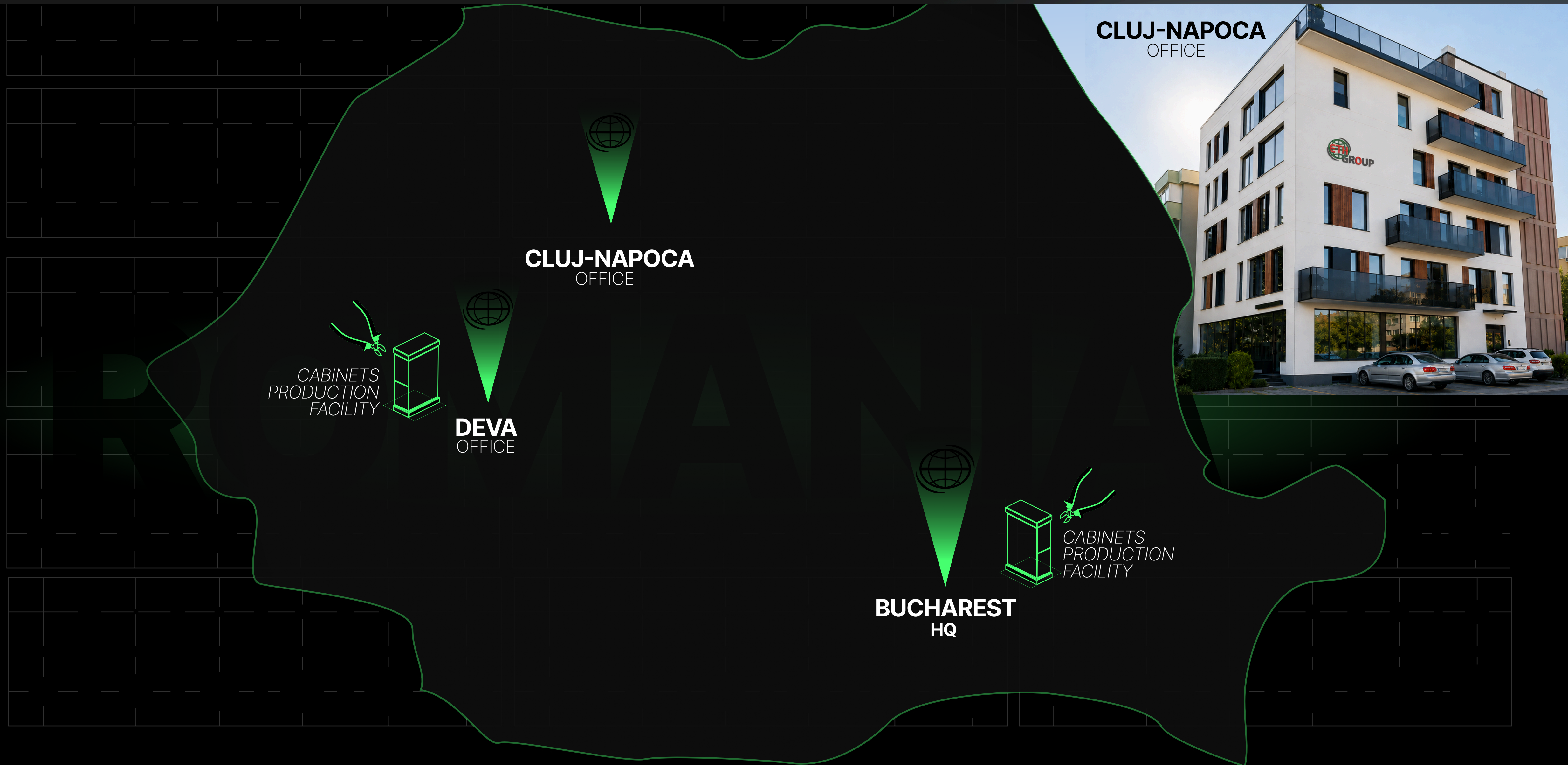
| ISO Standard                                    | State Approval                                                       | ANCEX Ministry of Foreign Affairs Department for Control of Exports | NATO - OTAN                                                                         | MApN, SRI, MoD National Intelligence Service              | ANRE National Authority for Energy Regulation        |
|-------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------|
| ISO 9001<br>ISO 14001<br>ISO 45001<br>ISO 27001 | Commercial, logistics and production activities of military products | Military equipment and dual use goods                               | AQAP 2110: Quality Assurance in Design, Development and Manufacturing Certification | Authorized to access and work with classified information | Design, Supply, Execution and Testing 0.4kV to 400kV |

## Authority

| INSEMEX GANEx                                                                                                 | IGSU Romanian General Inspectorate for Emergency Situations                                                                                                                                                                   | CNCAN National Council for Control of Nuclear Activity                                                                                                                                                                                                                                                                                                                                                                                 | ANPM National Agency for Environmental Protection                                             |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Services in technical installations in areas with danger of explosion, according to NEx Standard 01-06 / 2007 | Design and installation of systems, signaling, alarming and alerting installations in case of fire<br>Design and installation of fire extinguishing systems, except for those containing certain fluorinated greenhouse gases | <ul style="list-style-type: none"> <li>NMC-05: Design services for nuclear installations</li> <li>NMC-07: Product manufacturing and providing services for nuclear facilities</li> <li>NMC-08: Construction and installation of electrical systems in nuclear field</li> </ul> Services for the design of physical protection systems in the nuclear field<br>Works and Services intended for physical protection in the nuclear field | Collection, Transport, Storage, Treatment and Disposal of hazardous and non - hazardous waste |

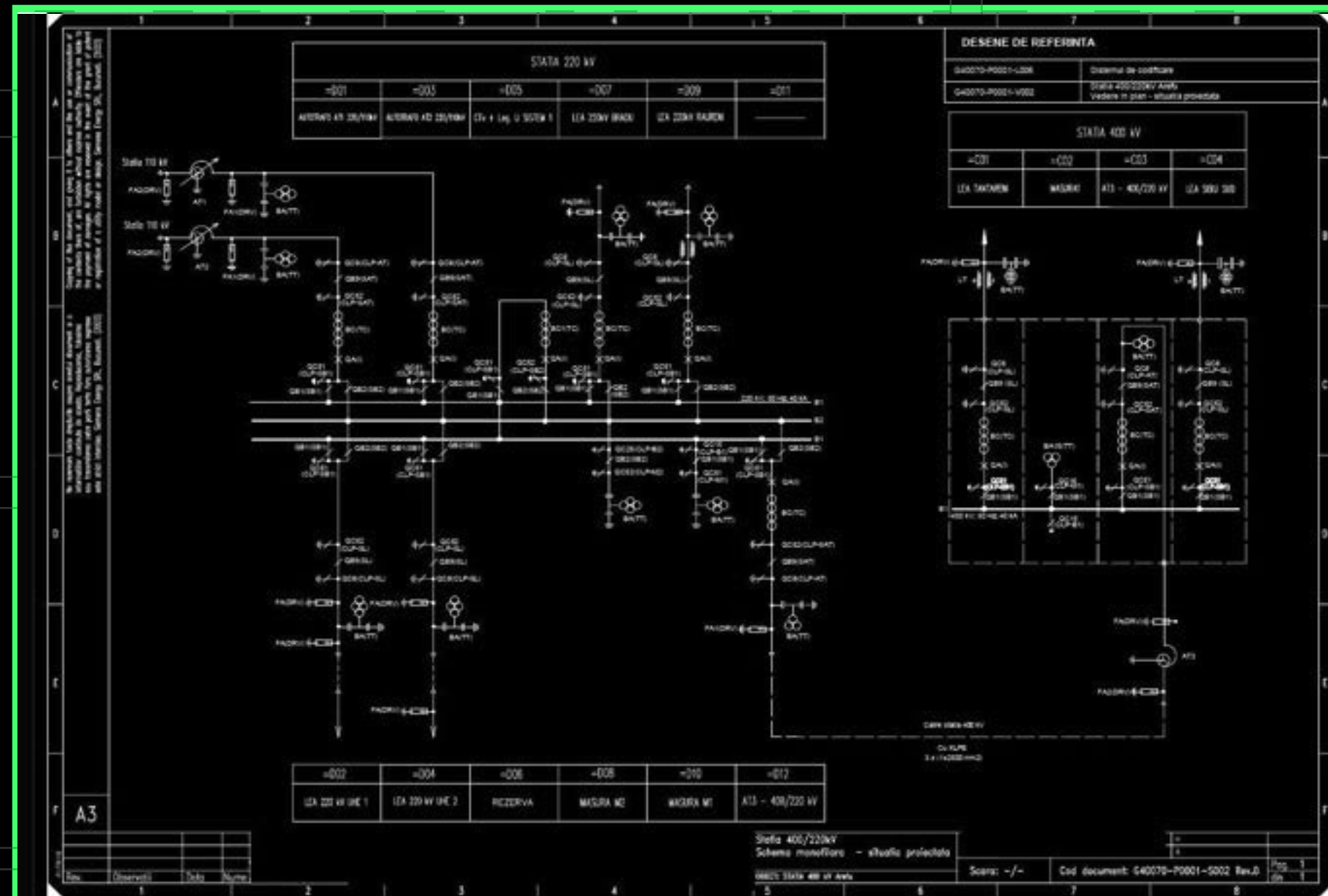


# Our Locations

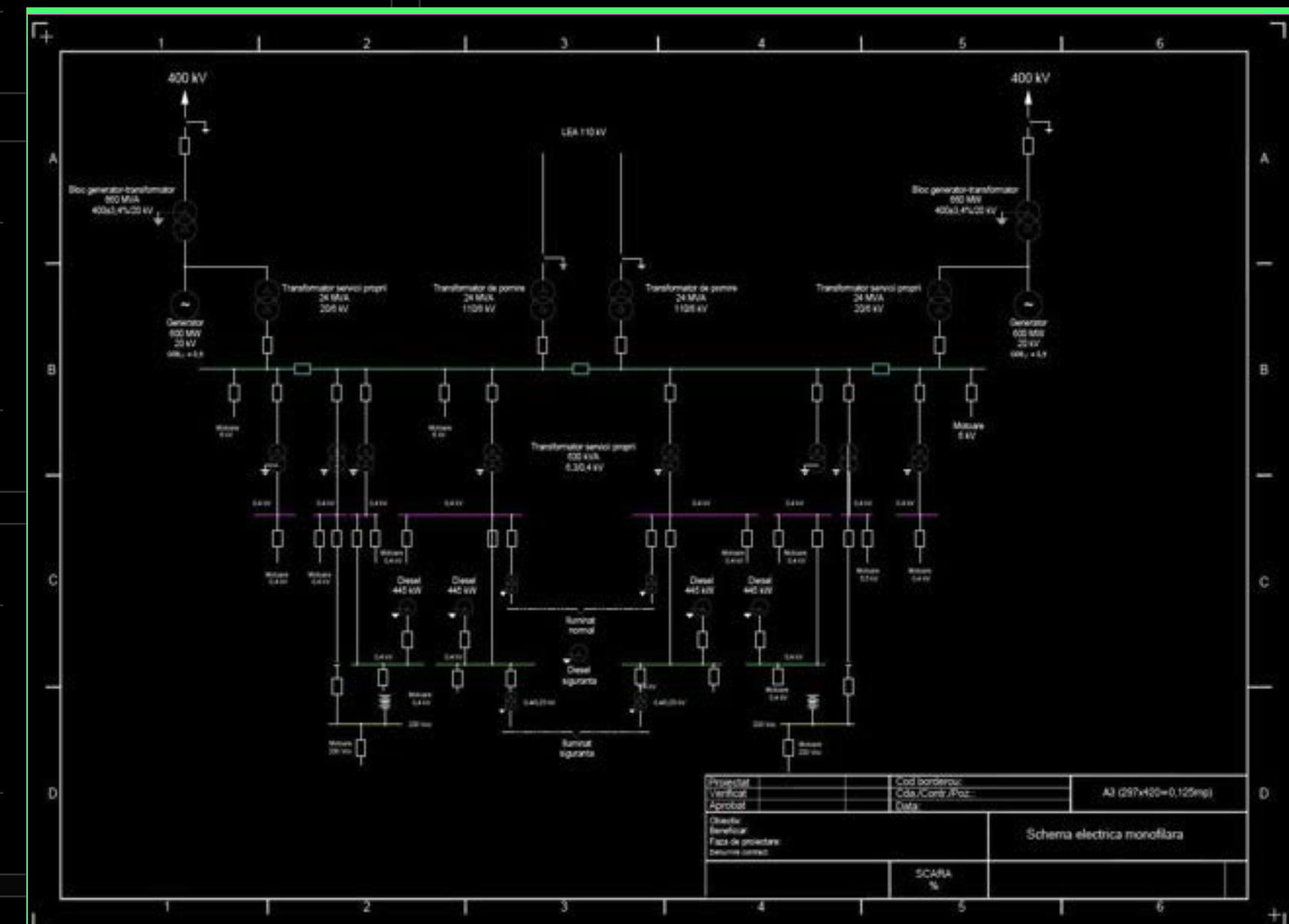




# Design of Substations and Electro-Energetic Systems up to 400kV



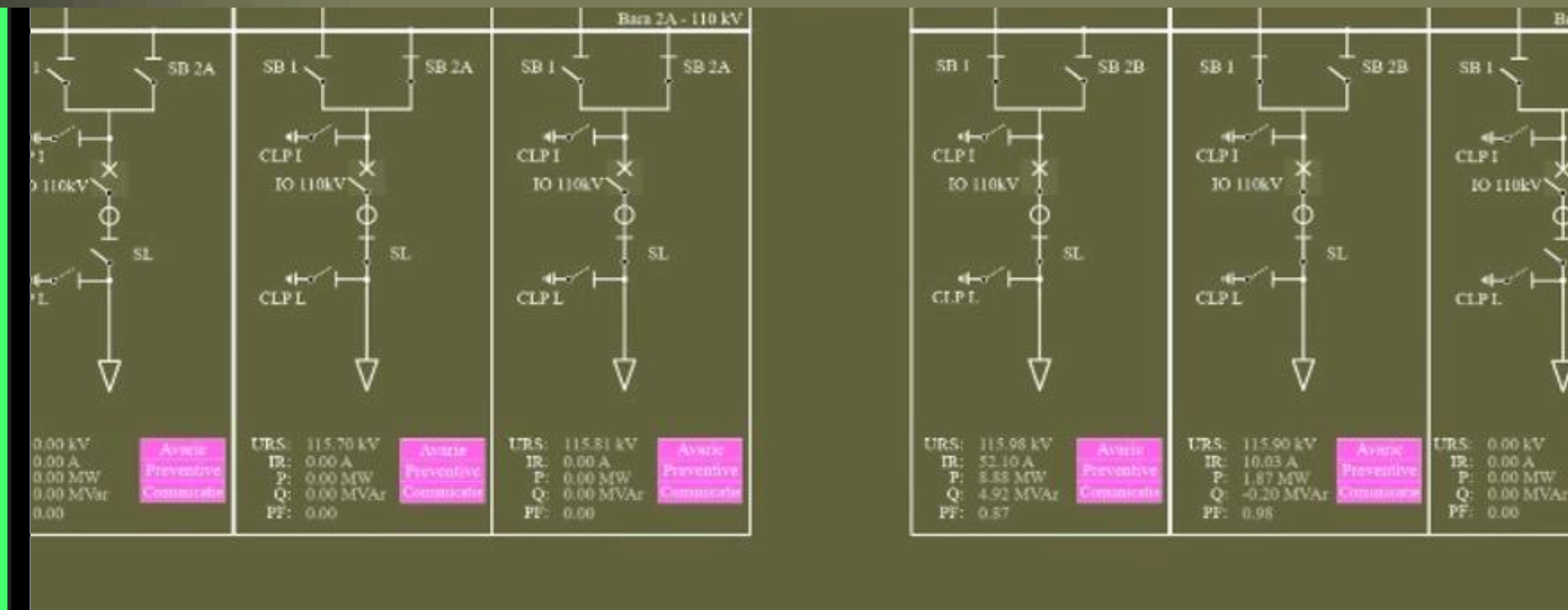
# Engineering and design of the 400/220 kV Arefu GIS substation



# Engineering and design of 220/33kV Calugareni power collecting substation for photovoltaic park Calugareni 2



## COS Targoviste, RO



## Engineering, design and execution of SCADA and protection systems

Donalam - AFV Beltrame Group SC1 110kV S/S  
– protections upgrade and SCADA  
implementation



Protections upgrade

Complete engineering, design and  
implementation of a SCADA system

Panels rehabilitation



## Complete 110/20kV DSO Substations refurbishment for DELGAZ GRID Romania (E.U. funding)



Design, detailed engineering and as built

Civil and electrical works

Protection and SCADA configuration

Complete mechanical and electrical tests

Commissioning and training for Client's personnel



## 110/20 kV DSO Substation Modernization

Strategic rebuild for one of Romania's  
largest 110 kV substations

@Roman, RO

Full EPC modernization of  
110/20 kV substation  
commissioned in 1958

Replacement of HV (20× 110kV  
bays) & MV (32× 20kV bays)  
equipment and busbar  
systems

New control center, SCADA  
integration and remote  
operation

MV section fully rebuilt in  
containerized format with  
reactive power compensation

Enhanced protection,  
automation & ground fault  
neutralization



## 220/110/20 kV Substation Modernization

Large-scale modernization of a  
strategic transmission hub

@Ghizdaru, RO

Full EPC modernization of  
220/110/20 kV substation

Primary & secondary systems  
upgraded across all voltage  
levels

Complete SCADA,  
protection, control &  
metering integration

20 kV MV section reengineered  
with new automation & neutral  
treatment

Civil works, buildings  
refurbishment & auxiliary  
power systems upgrade



# Selected Projects

## Construction of the Power Collection and Interconnection Substations for a 60MW Wind Power Plant



@Ruginoasa,RO



Design &  
Engineering

Procurement &  
Delivery

Construction &  
Installation

SCADA  
implementation

Testing and  
commissioning.



## Construction of the Grid Connection Substation for a 140MW Wind Power Plant

Construction of a complete 110 kV substation & 220kV connection with TSO

@Banca, RO

GIS Building

Control and telecommunications building

Foundations for autotransformers

Trenches, earthing, roads, fencing, perimeter lighting

Equipment installation, testing and commissioning including 2 × 200MVA Autotransformers





## Substation Modernization - Grid interface upgrade at hydro power hub

@Portile de Fier II, RO

EPC works for 110 kV autotransformer bays at a major hydro facility

Primary & secondary equipment integration (Hitachi Energy)

HV cable and overhead connection to 220/110 kV grid

Civil works: foundations, steel structures, cable trenches

Testing, protection tuning & SCADA adaptation for hydro integration



## Floating photovoltaic Solar Power Plant

@Grebla,RO

Design &  
Engineering

Procurement &  
Delivery

Construction &  
Installation

SCADA  
implementation

Testing and  
commissioning



## PV Solar Power Plants



@Bals, RO



@Barbatesti, RO

Design &  
Engineering

Procurement &  
Delivery

Construction &  
Installation

SCADA  
implementation

Testing and  
commissioning



## Hybrid Gas Power Plant & BESS System

20MW Gas + 2×6 MWh  
Battery Storage

@Racari, RO

Complete 110 kV  
grid interconnection

Medium voltage  
infrastructure (20 kV)

Integration of protection,  
metering & automation

System adaptation,  
testing & commissioning

Hybrid-ready SCADA  
for BESS operation



## BESS Installation & 110 kV Grid Connection for PV

50.6 MW / 200.6 MWh BESS System  
Full electrical installation & grid integration

Complete 110 kV grid  
interconnection &  
underground cable

Full BESS electrical  
installation (40 ESS /  
240 PCS / 6 STS)

New 110/20 kV – 63 MVA  
substation

Medium voltage  
infrastructure (20 kV)

ALO system  
implementation





## Rehabilitation of auxiliary power supply systems for Substations

@Zimnicea, RO

@Scaeni, RO

Engineering and design

Civil, construction and assembly works

Installation, tests and commissioning of equipment

Client's personnel training



## Capacitor Banks



Engineering and  
design

Civil, construction and  
assembly works

Installation, tests and  
commissioning of equipment

Client's personnel  
training



# Selected Projects

**Monitoring, Diagnosis and  
Maintenance for MV & HV  
equipment**







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