

CESI is a leading player in engineering, testing and power systems consulting for the electricity sector worldwide



CESI is well entrenched in the Middle East. Last Tuesday in Riyadh...



CESI helps Utilities, Governments and Regulators in RES integration, Interconnections, Transmission Planning, Smart-Meters and Micro-Grids

Power system development

1. **Tunur – Tunisia**
Definition of the schemes for the Transmission Corridor and Interconnection with Tunisian Network
2. **GECOL - Libya**
Defence Plan and Design of a Special Protection Scheme
3. **Egyptian Electricity Holding Company – Egypt**
Consultancy services relating to development of master plan for the Egyptian power transmission network
4. **NEPCO – Jordan**
Technical, financial and economic feasibility study for the reinforcement of a Jordanian power transmission corridor

Smart-grids and Micro-grids

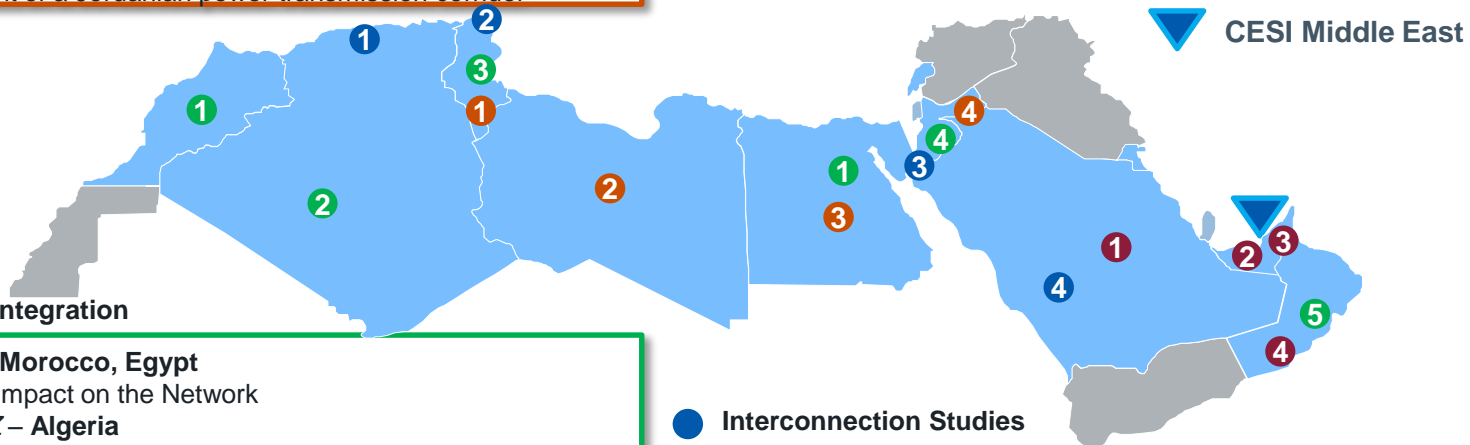
1. **ECRA– Saudi Arabia**
Smart Metering and Smart Grids Strategy for Saudi Arabia
2. **RWE – UAE**
Consultancy Services to Develop a Strategy for Advanced Metering Infrastructure
3. **DEWA – UAE**
Consultancy service for implementation and management of distributed renewable resources generators into DEWA Grid
4. **Authority for Electricity Regulation – Oman**
Technical Feasibility Study of Photovoltaic Plants in Rural Areas.

Renewables Integration

1. **ITALGEN – Morocco, Egypt**
Wind Farm Impact on the Network
2. **SONELGAZ – Algeria**
Interconnection study of the Adrar-In Salah network to the northern interconnection with the integration of RES
3. **Enel Green Power – Tunisia**
Assessment of the maximum power acceptable by non-programmable renewable sources
4. **RAECO – Oman**
Consultancy Services for Renewable Energy Implementation
5. **The Royal Hashemite Court – Jordan**
Integration of RES in the National Electric System of Jordan

Interconnection Studies

1. **GSE – ALGERIA**
Feasibility study for an HVDC between Algeria and Italy
2. **ELMED – Tunisia**
Cost-benefit analysis for HVDC between Italy and Tunisia
3. **SEC – Saudi Arabia**
Economic Assessment of the Saudi Arabia/Egypt Interconnection
4. **SEC – Saudi Arabia**
Technical specification for the HVDC link Central-West



We have advised the Arab Fund in crafting the infrastructure plan and the regional energy strategy to enable a common power market



- Existing Gas Pipeline
- Possible New Gas Pipeline
- Existing Electrical Interconnections
- Possible New Electrical Interconnections



- Review of generation plans in all Arab Countries up to 2030
- Identification of bottlenecks in internal networks that will result from increased flows over interconnections
- Preparation of pre-feasibility studies for identified electrical and gas projects

OUTCOMES

- 7 Recommended Electrical Interconnection Projects
- 3 Recommended major Gas Projects
- 35 b\$ expected benefit from the recommended projects