

## **Algeria: GRTE Distributed Control System Upgrade Technical Assistance**

The *Société Algérienne de Gestion du Réseau de Transport de l'Electricité* (“GRTE”) invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to execute Technical Assistance for the development of a distributed control system upgrade and replacement plan. The Proposal submission deadline is April 6, 2022 16:00 (EST)/ 21:00 Algeria Time (UTC/GMT +1). The U.S. firm selected will be paid in U.S. dollars from a \$588,100 grant to GRTE from the U.S. Trade and Development Agency.

### **About the Grantee**

GRTE is the Grantee for this TA. GRTE was established in 2004 as a subsidiary of Sonelgaz. GRTE is charged with the development, maintenance, and operation of the country's transmission system and ensuring the country has an adequate supply of electricity. Mrs. Zina Azzouzi will serve as the project manager for this activity and will receive oversight from her supervisor, Mr. Mourad Kaciaissa.

### **Project Background**

Algeria's current high voltage substation control and automation system infrastructure is sourced from an amalgamation of vendor systems and consists of aging, inefficient, and costly technology that lags in comparison to the most recent technological advancements in the industry. If left unaddressed, these challenges in the medium and long term will cause Algeria's transmission network to operate inefficiently, thus increasing system costs and reducing grid reliability and flexibility.

### **About the Technical Assistance**

The TA involves the development of a distributed control system upgrade and replacement plan that encompasses twenty (20) pre-determined high voltage electrical substations currently operating with outdated automation architecture. The TA involves developing a plan to convert six (6) pre-determined existing substations to group command stations. This aspect of the TA includes detailing the control and communication architecture required to monitor and reliably operate the station through automation. The TA also includes development of design specifications to support the full replacement of fourteen (14) existing substations with new substations equipped with automation functionalities. The proposed TA includes a technical assessment of the twenty (20) substations to identify the systems, tools, equipment, and approaches necessary for upgrading and replacement with technology required to modernize GRTE's grid operations. This includes both identification of hardware and software for incorporation into the grid, as well identifying short-term and long-term training needs for GRTE employees.