

Purpose

This Request for Proposal (RFP) is a search for multiple qualified candidate technology teams to support the secure design, development, testing, and deployment (aka SECDEVOPS) project for a Proof of Concept (PoC) Supervisory and Data Acquisition (SCADA) system capable of acquiring digitized data from customer provided networked Programmable Logic Controllers (PLCs), collecting and collating the PLC source data for display to networked Human Machine Interface (HMI) workstation systems for applicable SCADA system monitoring, and storage of the data on an opensource Data Historian SQL server for time based trend or other analysis, including integration of Artificial Intelligence (AI) and Machine Learning (ML) analysis techniques to support operational and business decisions.

Background

Central Virginia LNG, Inc. (CVALNG) is a privately held Liquified Natural Gas (LNG) distribution, storage, and delivery supplier for the central and western Virginia geographic area. As an LNG supplier involved in distribution and delivery to regional public electrical power grid generation and other customers, CVALNG is designated as a critical infrastructure entity that must comply with all United States Department of Homeland Security (DHS) critical infrastructure regulatory compliance regulations.

CVALNG is interested in engaging in partnerships with other organizations to encourage the development and integration of Artificial Intelligence (AI) and Machine Learning (ML) technologies to improve efficiencies of LNG distribution and delivery, as well as security of the LNG distribution and delivery infrastructure.

Scope

The project Statement of Work (SoW) will include the design, development, integration, testing, security certification, and documentation tasks necessary for the PoC developed systems to meet the customer's and systems specifications and requirements as defined in Appendix A, with the scope of the of the project finalized at the end of the RFP process and all project deliverables managed to meet the SoW as finalized by the RFP prior to project start on 25 August 2021.

The SoW effort will include all typical SECDEVOPS activities, including project management, infrastructure architecture, system installation and integration, programming, testing, and security testing required to develop and deploy this PoC system to CVALNG or other designated customers.

Schedule

The project SoW will require 32 weeks of total effort by the multiple project team(s). The project is scheduled to begin 25 August 2021 and to end no later than (NLT) 1 May 2022.

Budget

The budget of this project is to be estimated and delivered by the individual project teams as part of the RFP process. The individual teams will coordinate with the project Program Manager (PgM) to another designated contact person to define the budget estimate requirements and limits.

Project Technical System Requirements and Specifications

See Appendix A for the initial DRAFT list of requirements that will be further defined as the SoW based project progresses through the RFP process.

Project Management Requirements and Specifications

The project management method will be a team-based hybridized version of both traditional task schedule oriented “waterfall” for long-term task coordination and planning amongst multiple teams, combined with Agile methods for “Scrum-like” management status updates.

Program Manager,

Richard Bansley

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