

SINGLE SOURCE DETERMINATION (including brand name)

1. **CONTRACTING AGENCY:** U.S. Army Corps of Engineers (USACE), Walla Walla District (CENWW-CT), 201 North 3rd Avenue, Walla Walla, WA 99362
2. **DESCRIPTION OF ACTION:** The Little Goose DC and LV Switchgear Upgrades requirement will upgrade the direct current systems and low voltage switchgear at Little Goose Dam in Washington State. The project includes the procurement of nine (9) Allen Bradley brand PLC ControlLogix Systems 1756 Series and related components as an integral part of the upgrades. The Allen Bradley PLC hardware will be used to physically control the SQ breakers and provide remote indication for the SQ breakers and DC/AC system. Projects with similar scopes are also being performed at Lower Granite Dam and Lower Monumental Dam under different contracts.

Brand name components comprise only a portion of the acquisition. Accordingly, this justification and approval is limited to these components only. The estimated purchase price for the specified brand name equipment is [REDACTED]

3. **DESCRIPTION OF SUPPLIES/SERVICE:**

As part of the procurement of the DC and LV switchgear upgrades, new PLC equipment must be provided. This is a justification for brand name components, which will be purchased by the contractor who receives the construction contract. The portion of the acquisition requiring brand name products applies to the new control systems to include the design and installation of SCADA (supervisory control and data acquisition) controls which require the purchase of nine (9) new PLC ControlLogix Systems. Use of this product in the acquisition is essential to the Government's requirements, thereby precluding considerations of products manufactured by another company as it would not meet the Government's requirements.

Contract award is scheduled for October 2022. [REDACTED]

4. **AUTHORITY CITED:** FAR 13.106-1(b), Soliciting from a single source

- (1) For purchases not exceeding the simplified acquisition threshold, contracting officers may solicit from one source if the contracting officer determines that the circumstances of the contract action deem only one source reasonably available (e.g. urgency, exclusive licensing agreements, brand name or industrial mobilization).

5. **REASON FOR AUTHORITY CITED:**

- a. **BACKGROUND:** The three project sites: Lower Monumental Lock and Dam, Little Goose Lock and Dam, and Lower Granite Lock and Dam use multiple control systems consisting of Allen-Bradley PLC products. Existing Allen-Bradley control systems at the projects include: digital governors, the powerhouse bridge cranes, the intake cranes, spillway weirs, navigation lock, HVAC systems, various features of the fish ladders, and various drainage and unwatering pumps, and other items specific to each operating project. These systems represent a significant portion of the projects' control system infrastructure. Allen-Bradley

PLC controllers are used to gather data and control main unit generators and other ancillary equipment in the powerhouse and navigation lock.

To ensure that the new SQ breaker, Preferred AC, Governor Oil Pump, and DC system PLC based control and annunciation are maintainable, Allen-Bradley products are required. Other manufacturer's products are not fully compatible with the existing control system support capabilities at the three projects. Use of other manufacturer's products poses a risk of unacceptable delays for future repairs and power system maintenance leading to extended unplanned station service or main generating unit outages. Availability of the station service, Preferred AC, Governor Oil Pumps, and DC systems are critical to daily operations. Likewise, additional costs would be associated with procurement of other manufacturer's products (spare parts, software licenses, training, and potential reliance on outside vendor support).

The existing PLC systems at the three projects are composed of Allen-Bradley PLCs. Maintenance support for Allen-Bradley components is already in place including diagnostic equipment, software licenses, subscription to Rockwell (Allen-Bradley) technical support services, and spare parts. Future modifications of the PLC system would be facilitated by implementation of Allen-Bradley components. Allen-Bradley PLC systems' hardware is customized to Allen-Bradley products and other vendors' controllers, diagnostic equipment, and software are not compatible with existing Allen-Bradley equipment. Additionally, owing to new cybersecurity requirements per ECB 2018-11, the use of atypical control systems imposes a unique burden on preparing documentation to obtain Authority to Operate (ATO) due to the unfamiliarity of any software associated with the introduction of new, unique control systems at the operating project.

- b. **JUSTIFICATION:** The Allen-Bradley PLC equipment is an integral part of the SQ breaker, Preferred AC, Governor Oil Pump, and DC system and is specified to meet supportability requirements. Other manufacturer's products are not fully compatible with the existing control system support capabilities at the three projects. The use of other manufacturer's products would pose an unacceptable risk of problems leading to unplanned and extended station service or main generating unit outages.
- c. **IMPACT:** Substitution for the specified products would:
 - i. Increase the initial and recurring costs of programming software and licenses
 - ii. Increase the initial and recurring costs of spare parts inventory
 - iii. Increase labor time, travel, and expense to train personnel
 - iv. Decrease compatibility with existing systems and thus posing risk of unacceptable delays leading to extended unplanned outages
 - v. Decrease efficiency of engineers and technicians because of unfamiliarity with alternative systems

Implementation of a different brand of PLC will require the project personnel and design engineers to acquire the training and equipment necessary to design and maintain that system. Personnel will not be able to utilize existing knowledge or maintenance software licenses which are already owned. Personnel will be required to learn the intricacies of an additional PLC-based control system, increasing the complexity and duration of alterations or repairs. For any components that are not Allen-Bradley CompactLogix (PLC), additional funds will be required to purchase spare parts not common to existing Allen-Bradley automation

infrastructure. Additional software licenses, additional maintenance agreements, and additional cost for training and corresponding time for personnel to attend the additional training will be required. If components other than Allen-Bradley are used, it is expected that any outages of the systems requiring PLC diagnostics or repair would require longer durations to resolve due to the unfamiliarity of the systems to project staff, lack of comprehensive spare parts, and unestablished vendor support contacts. These longer repair durations could result in delayed outages of the main generating units or station service.

d. **ALTERNATIVES:** None.

6. **EFFORTS TO OBTAIN COMPETITION:** There are multiple distributors of Allen-Bradley products. This J&A shall be posted with the solicitation. Requiring this brand name is unlikely to limit competition among proposals. It will be possible for a contractor to obtain competitive pricing from multiple sources. The cost of the Allen-Bradley equipment is small in comparison to the total estimated cost of construction.
7. **FAIR AND REASONABLE COST DETERMINATION:** Based on catalog pricing, the anticipated cost of [REDACTED] for the Allen-Bradley equipment described above is fair and reasonable.
8. **MARKET RESEARCH:** Under the authority cited in FAR 13.106-1(b), I have determined that the particular brand name, or feature is essential to the Government's requirements and market research indicates that other companies' similar products, or products lacking the particular feature, do not meet or cannot be modified to meet the agency's needs. Allen-Bradley are the only compatible PLCs currently.
9. **INTERESTED SOURCES:** None.
10. **OTHER FACTS:** None.
11. **TECHNICAL CERTIFICATION:** I certify that the supporting data under my cognizance, which is included in this Brand Name Justification and Approval, are accurate and complete to the best of my knowledge and belief.

Sebastian Scheiff
Electrical Engineer

Signature: SCHEIFF.SEBASTIA N.1590405171
Digitally signed by SCHEIFF.SEBASTIAN.1590405171
Date: 2022.05.17 15:02:09 -07'00'

12. **REQUIREMENTS CERTIFICATION:** I certify that the supporting data under my cognizance, which is included in this Brand Name Justification and Approval, are accurate and complete to the best of my knowledge and belief.

Karen Robison
Project Manager

Signature: ROBISON.KARE N.K.1239595045
Digitally signed by ROBISON.KAREN.K.1239595045
Date: 2022.05.18 08:24:58 -07'00'

13. **FAIR AND REASONABLE PRICE DETERMINATION:** I hereby determine that the anticipated cost to the Government for this contract action will be fair and reasonable on the basis of adequate price competition as a result certified cost or price data will not be required. In addition, the price analysis will also be made by comparing the proposed price to the Independent Government Estimate.

Jani Long
Contracting Officer

Signature: LONG.JANI.C.1231624801
Digitally signed by LONG.JANI.C.1231624801
Date: 2022.05.13 15:48:42 -07'00'

14. CONTRACTING OFFICER DETERMINATION: I hereby determine the above-stated circumstances of this contract action deem that only one brand is available to meet the Government's need.

Jani Long
Contracting Officer

Signature: LONG.JANI.C.1231624801
Digitally signed by LONG.JANI.C.1231624801
Date: 2022.05.13 15:49:50 -07'00'

15. OFFICE OF COUNSEL DETERMINATION: In accordance with the requirements of UAI 5101.602-2-90, I have reviewed the J&A and determined it is legally sufficient.

Theresa Hampson
Deputy District Counsel

Signature: HAMPSON.THERESA.L.1374580937
Digitally signed by HAMPSON.THERESA.L.1374580937
Date: 2022.05.11 15:52:31 -07'00'