

## RESOLUTION NO

### RESOLUTION OF THE BOARD OF PUBLIC UTILITIES APPROVING THE SOLE SOURCE SPECIFICATION FOR SIEMENS PROGRAMABLE LOGIC CONTROLLERS FOR LAGUNA TREATMENT PLANT CHILLERS AND CLIMATE CONTROL UPGRADES AT ADMINISTRATION AND ANNEX BUILDINGS

WHEREAS, there is a need to replace the existing programmable logic controller (PLC) located within the Administration Building of the Laguna Treatment Plant, which exclusively uses Siemens products; and

WHEREAS, improvements to replace the PLC will be completed under the Laguna Treatment Plant Chillers and Climate Control Upgrades at Administration and Annex Buildings project; and

WHEREAS, in accordance with California Public Contract Code Section 3400, when a specific brand or trade name product is called for in connection with the construction or repair of a public works project, the contract specification must be followed by the words “*or equal*” so that bidders may furnish any equal product or service unless the award authority makes a finding that allows a specific brand or trade name for a particular product or service in order to match other products in use on a particular public improvement either completed or in the course of completion; and

WHEREAS, the existing 98 PLCs which will continue in use within the treatment plant are Siemens products; and

WHEREAS, in order to match the PLCs in use in the Plant, it is necessary to specify only Siemens products and services in the contract specifications; and

WHEREAS, approving such a sole source specification will maintain reliability and uniform compatibility with the existing equipment and minimize operational impacts.

WHEREAS, this action is categorically exempt from the California Environmental Quality Act (CEQA), pursuant to CEQA Guideline Sections 15301 and 15303, as the Project consists of a minor alteration of an existing public sewerage facility and the improvements are all located within the developed area of the Laguna Treatment Plant.

NOW, THEREFORE, BE IT RESOLVED that the Board of Public Utilities approves a sole source contract specification for:

- A. Power Supply
  - a. Each cabinet will have a Siemens SITOP PSU 24Vdc power supply. Each power supply shall be sized at a minimum of 120% of the combined manufacturer specified load for the equipment installed in the cabinet plus any analog and discrete I/O devices that may require 24Vdc power.
- B. Programmable Logic Unit
  - a. CPU Module (2 listed options, depending on the programming power)
    - i. The PLC CPU shall be a Siemens S7-1500 PLC model 1511-1 PN, part# 6ES7 511- 1AK01-0AB0, or
    - ii. The PLC CPU shall be a Siemens S7-1500 PLC model 1513-1 PN, part# 6ES7 513- 1AL01-0AB0.
- C. Digital Input Module
  - a. 24VDC digital input cards shall be Siemens S7-1500/ET 200MP model DI 32x24VDC HF part# 6ES7 521-1BL00-0AB0.
- D. Analog Input Module
  - a. Analog input cards shall be Siemens S7-1500/ET 200MP model AI 8xU/I/RTD/TC ST part# 6ES7 531-7KF00-0AB0.

- b. The AI module shall provide 24 VDC to power analog current loops, and the user may optionally decide whether or not to use the internal source or an external source
- E. Digital Output Module
  - a. Digital relay output cards shall be Siemens S7-1500/ET 200MP model DQ 32x24VDC/0.5A ST part# 6ES7 522-1BL00-0AB0.
  - b. Digital relay output cards shall be Siemens S7-1500/ET 200MP model DQ 8x230VAC/5A ST Relay part# 6ES7 522-5HF00-0AB0
- F. Analog Output Module
  - a. Analog output cards shall be Siemens S7-1500/ET 200MP model AQ 8xU/I HS part# 6ES7 532-5HF00-0AB0.
- G. Operator Interface Terminal
  - a. Thin-film transistor (TFT) color display, 16 million color, 1366 x 768-pixel resolution, 24 megabytes configuration memory, MPI/Profibus interface, Siemens TP 1900, P/N 6AV2124-0UC02-0AX0.

DULY AND REGULARLY ADOPTED by the City of Santa Rosa Board of Public Utilities this 15<sup>th</sup> day of August 2019.

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED: \_\_\_\_\_  
Daniel J. Galvin III, Chair

ATTEST: \_\_\_\_\_  
Gina Perez  
Recording Secretary

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney