

CITY OF SANTA ROSA
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES
FROM: RICHARD GIORDANELLA, WASTEWATER MAINTENANCE
SUPERINTENDENT, WATER DEPARTMENT
SUBJECT: BLANKET PURCHASE ORDER APPROVAL FOR INNOMOTICS
LLC.

AGENDA ACTION: MOTION

RECOMMENDATION

It is recommended by Santa Rosa Water and the Finance Department that the Board of Public Utilities, by motion, authorize a blanket purchase order as directed under agreement F002770 sections 3.9 and 5.2 for the duration of Technical Service Agreement F002770 to Innomotics LLC, New Kensington, Pennsylvania. The blanket purchase order will support the purchase and refurbishment of parts, equipment, and services for the Geysers Robicon GH180 Gen3 Variable Frequency Drives (VFD) and GH180Perfect Harmony cells in an amount not to exceed \$1.5 million dollars.

EXECUTIVE SUMMARY

On January 9th, 2024, the City of Santa Rosa entered a three (3) year Technical Service Agreement (TSA) F002770 with Innomotics under the City Manager's signature authority with the ability to establish a blanket purchase order as noted in sections 3.9 and 5.2 of the agreement to compensate for updating and refurbishing the Innomotics GH180 Gen3 Variable Frequency Drives/ GH180 Perfect Harmony cells. Innomotics is the sole source/manufacture of parts and services for the Robicon GH180 Gen3 Variable Frequency Drives (VFD) and GH180Perfect Harmony cells. Currently, the Geysers GH180 Gen3 Variable Frequency Drives (VFD) and GH180Perfect Harmony cells and associated equipment have exceeded their recommended service life.

BACKGROUND

The City of Santa Rosa owns and operates eight (8) SINAMICS GH180 PERFECT HARMONY Siemens variable speed drives. As part of the Geysers Recharge Project contract number 2000-841 file number 2003-0088 a total of 8 variable frequency drives (VFD) are in use to distribute and control flow throughout the Geysers pump stations; two (2) at Llano pump station, two (2) at Bear Canyon pump station, two (2) at Mayacamas pump station, and two (2) at the Pine Flat pump station.

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VFDs are a category of motor controller that drives an electric motor by varying the frequency and voltage of its power supply. The VFDs are integral in controlling the flow during system start-ups, normal flow operations, system shutdowns, and meeting contractual agreements. In addition, many of the cells in service are past the 10-year service rotation recommended by the manufacturer.

PRIOR BOARD OF PUBLIC UTILITIES REVIEW

Construction of the Geysers System was facilitated by a series of construction contracts that were reviewed and approved by the Board of Public Utilities from 2000 to 2003 when the project was completed and placed into service. The pump stations referenced herein were constructed as part of the overall construction of the Geysers System.

ANALYSIS

In 2020 the Geysers Distribution System was integrated with the Reclamation Distribution System and is maintained by the Regional Maintenance Section. The Regional Maintenance Section performed historical research in addition to the annual shutdown inspection requirements and has confirmed that the cells are past their recommended service life. After visual confirmation of the assets, the Regional Maintenance Section began to rotate the outdated cells and send out the removed cells for upgrades and refurbishment. This is in accordance with the original yearly preventive maintenance work orders and cell rotation plan adopted in 2011.

The Geysers system has a total of 96 GH180Perfect Harmony cells with only five (5) spare cells for the entire system, two of which are specific to the Llano pump station. The current process for repairing and refurbishing the drives with minimal spare cells will take approximately 30 years to replace all cells. Obtaining new and refurbished cells on a much more frequent and consistent basis is necessary to keep the Geysers system operating reliably.

The Water Department recommends the issuance of a Blanket Purchase order for Innomotics LLC which will allow us to follow a more timely approach to refurbishing the GH180Perfect Harmony cells. The Water Department proposes to replace a total of thirty-six (36) cells in the first year by purchasing and installing one set of twelve new cells, sending the removed cells out for refurbishment, then using them for the next VFD, and repeating the process, thus completing one whole pumping "string" throughout the hillside pump stations in one year. In the second year, staff propose to complete the remaining drives in the second pumping string, ending with a set of twelve spares for operational support and preventative life cycle rotations. This approach will complete the hillside pump stations (i.e., the stations on Pine Flat Road) and return them to a reliable operating state. In the third year, staff will address the remaining VFDs in the Llano pump station, adjacent to the Laguna Treatment Plant. The above-described approach will return all VFDs in the Geysers system to a reliable operational state in approximately three (3) years. The rotational spare cells will support the system

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while complying with the manufacturer recommended rotations ensuring efficient operations and limiting unexpected downtime.

FISCAL IMPACT

Funds for this support equipment will be provided by funds already appropriated in CIP JL Key 86656.

ENVIRONMENTAL IMPACT

The blanket purchase order is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15061(b)(3) and 15378 in that there is no possibility that the implementation of this action may have significant effects on the environment, and no further environmental review is required. However, the future refurbishment of parts, equipment, and services has been reviewed in compliance with the California Environmental Quality Act (CEQA) and is categorically exempt pursuant to CEQA Guidelines Section 15301 and 15302 as it consists of the repair and reconstruction of existing structures.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

Not applicable.

ATTACHMENTS

Attachment 1 – Technical Service Agreement

CONTACT

Richard Giordanella, Wastewater Maintenance Superintendent