Agenda Item #8.2
For Board Meeting of: September 20, 2018

CITY OF SANTA ROSA
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES
FROM: EMMA WALTON, DEPUTY DIRECTOR OF ENGINEERING RESOURCES
SANTA ROSA WATER
SUBJECT: FIRST AMENDMENT TO THE AGREEMENT FOR DESIGN, INSTALLATION, OPERATION, AND OWNERSHIP OF A MICROGRID DEMONSTRATION SYSTEM AT THE SANTA ROSA LAGUNA TREATMENT PLANT

AGENDA ACTION: MOTION

RECOMMENDATION

It is recommended by the Water Department that the Board, by motion, approve the First Amendment to the Agreement for the Design, Installation, Operation and Ownership of a Microgrid Demonstration System at the Santa Rosa Laguna Treatment Plant between Trane U.S. Inc. and the City of Santa Rosa and increase matching funds by $13,478.00 for a total matching fund value of $763,478.00.

EXECUTIVE SUMMARY

This proposed action will allow Trane, on behalf of the City, to purchase and install, as part of the Microgrid Project, a meter approved for use in the California Public Utilities Commission's (CPUC) Self Generation Incentive Program (SGIP) which will position the City to receive $160,000 to $240,000 in rebates over a five-year period.

BACKGROUND

California's electric grid is susceptible to the load fluctuations caused by the variability in renewable energy sources like solar. In July of 2014, the California Energy Commission (CEC) issued Grant Solicitation PON-14-301 Demonstrating Secure, Reliable Microgrids and Grid-Linked Electric Vehicles to Build Resilient, Low-Carbon Facilities and Communities in search of projects to help address the grid instability. In response, Trane, with approval from the City Council, submitted a grant application and listed the Laguna Treatment Plant (LTP) as the proposed microgrid demonstration project site. Trane's application was accepted, and in April of 2015, Trane entered into an agreement (EPC-14-059) with the CEC for a $4,999,804 grant (Grant) with $2,200,000

in matching funds provided by Trane for implementation of the a microgrid demonstration project (the Project). The Project includes three functional components:

1) Installation of a new 2-megawatt hour (Mwh) energy storage battery and associated communications, microgrid controller (MGC), and automation equipment;

2) Installation of post combustion exhaust treatment systems, including a selective catalytic reduction (SCR) units, on two of the four existing Cummins combined heat and power (CHP) engines and associated equipment;

3) Installation of a 125-kilowatt (kw) photovoltaic (PV) parking canopy system and associated equipment to be located above the LTP Administration Building Parking Lot.

In May of 2017, the Board of Public Utilities approved an Agreement for the Design, Installation, Operation and Ownership of a Microgrid Demonstration System at the Santa Rosa Laguna Treatment Plant between Trane and the City (Agreement) to allow for implementation of the Project. The Agreement included $750,000 in additional matching funds to be provided by the City to support the design and installation of one of the two SCR units. The City had previously budgeted for two SCR units during the 2015-16 Capital Improvement Program Budget process. Trane's Grant Application only included one SCR unit and the City chose to pay for the second unit using matching funds. Additionally, Section 2G of the executed Agreement allows for the City to implement and pay for additional work, requested by the City, that is not part of the Project as outlined in the Grant. Such work is defined in the Agreement as "Additional Requirements."

After execution of the Agreement, the City identified an opportunity to apply for and receive a rebate through the California Public Utilities Commission's (CPUC) Self Generation Incentive Program (SGIP) which provides incentives to support existing, new, and emerging distributed energy resources including advanced energy storage systems. The City is positioned to receive an SGIP incentive for the new battery that will be installed as part of the Project but to qualify, the City must upgrade the electrical metering equipment to comply with the CEC's list of "Eligible System Performance and Revenue Grade Meters."

PRIOR BOARD OF PUBLIC UTILITIES REVIEW

On October 21, 2014, the City Council, by motion, authorized the Mayor to sign a letter to the California Energy Commission authorizing Trane, through Rockwood Consulting, to list the Laguna Treatment Plant as a proposed Microgrid Project Demonstration site.

On December 17, 2015, the Board participated in a study session that gave an overview of how renewable energy sources (namely wind and solar) cause fluctuations in the grid and how the installations of microgrids throughout the system could help stabilize the

grid. The presentation also described what a microgrid consists of and how the LTP could function as an advanced microgrid.

On February 23, 2016, the Council, by motion, approved an NDA between Trane and the City for development and implementation of the Project and delegated signature authority to the Director of Santa Rosa Water. The Director of Santa Rosa Water subsequently signed the NDA.

On May 18, 2017, the Board, by resolution, approve the Agreement for the Design, Installation, Operation and Ownership of a Microgrid Demonstration System at the Santa Rosa Laguna Treatment Plant between Trane and the City and delegated signature authority to the Director of Santa Rosa Water to approve subsequent, related agreements.

ANALYSIS

The City is positioned to receive $160,000 to $240,000 in rebates over a five-year period through the SGIP. To qualify to receive these funds, the City must upgrade the electrical metering equipment to a CEC approved revenue grade meter.

For Trane to proceed with the purchase and installation of a CEC approved revenue grade meter, the City and Trane desire to execute the first amendment to the Agreement. The first amendment will increase the City's matching funds by $13,478.00 which will allow the City to reimburse Trane for the increased cost of the approved meter.

FISCAL IMPACT

The dollar value of the SGIP for the battery installation will depend on the actual performance of the battery but conservatively, the City could expect to receive $160,000 to $240,000 over a five-year period. This would be $80,000 at installation and $16,000 to $32,000 per year for five-years, depending on actual performance.

In addition to installing the approved meter, in order to be eligible for and receive the rebate funds, the City will need to complete an SGIP application as well as complete five-years of ongoing monitoring of system performance. The ongoing monitoring of system performance is required to be completed by a certified Performance Data Provider (PDP). The City is in the process of entering into a separate Professional Services Agreement (PSA) with Trane (a certified PDP) to complete the SGIP application and provide PDP services for a lump sum price of $24,780.00.

ENVIRONMENTAL IMPACT

To satisfy the requirements of the California Environmental Quality Act (CEQA), the CEC, as the Lead Agency, filed a Notice of Exemption (NOE) on May 1, 2015. The NOE cited a Categorical Exemption based on Title 14, Chapter 3, Article 19, Sections 15301

and 15303 of CEQA, 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 LTP.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

None.

ATTACHMENTS

- Attachment 1 – First Amendment to the Agreement for the Design, Installation, Operation and Ownership of a Microgrid Demonstration System at the Santa Rosa Laguna Treatment Plant between Trane U.S. Inc. and the City of Santa Rosa

CONTACT

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