Memorandum
MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by: _____ Date: 3/13/20
General Manager

DATE: March 13, 2020

TO: General Manager

FROM: Director of Engineering & Compliance/District Engineer

SUBJECT: Award Construction Contract for the CEC Grant ARV-17-036

RECOMMENDATION: That the Board award a construction contract to BSE Engineering Services, Inc. of Descanso, CA for the California Energy Commission (CEC) ARV-17-036 Grant project in the amount $1,275,000 for GCCS Improvements and Biogas Conditioning System Construction inclusive of approximately 10% contingency.

BACKGROUND

On July 16, 2016, the CEC released a notice of Grant Funding Opportunity GFO-15-606 Community-Scale and Commercial-Scale Advanced Biofuels Production. At that time, staff together with Cornerstone Environmental Group-Tetra Tech (CEG-TT) began development of conceptual project scoping and preparation of a pre-application submittal in the Community-Scale project category (public project). On August 24, 2016, Staff together with CEG-TT submitted the pre-application to CEC with the interest to be selected as a qualified submittal to gain eligibility to prepare a final application. On October 4, 2016, the CEC posted the results of the pre-application process and provided notice that the District's pre-application was selected as being eligible to submit a full grant application for consideration of final selection. At their regularly scheduled meeting on October 21, 2016, the District's Board of Director's approved the proposal by CEG-TT to assist Staff's preparation of the full grant application.

On November 14, 2017, the District's full grant application was submitted to the CEC proposing an estimated $3,647,989 project to convert biogas to a compressed natural gas (CNG) transportation fuel project. The District proposed to treat biogas generated by existing permitted operations in order to produce a renewable natural gas (RNG) that can be compressed and used as a CNG fuel for motorized vehicles. A biogas treatment system would be used to remove most of the non-methane constituents in the biogas in order to produce RNG. The biogas will be collected from existing permitted operations that could include a) LFG biogas from the Landfill, b) biogas from the Dry AD system, and c) biogas from the M1W regional wastewater treatment plant, or a combination of two or more of these existing biogas sources. The RNG produced will be directed to the District's CNG fueling facility located at the Franchise Truck Yard which then can be used by both the District's CNG fueled vehicles and the franchise waste collection trucks (currently GreenWaste Recovery's vehicles).

On February 17, 2017, the CEC posted results of the full grant application process which indicated that the District's project was one of six projects approved for grant funding. At that time, the District's project was the only project not awarded any funding.

On December 7, 2017, the California Energy Commission (CEC) announced as part of their Second Revised Notice of Proposed Award - GFO-15-606 - Community-Scale and Commercial-Scale Advanced Biofuels Production Facilities that the Monterey Regional Waste Management District had been approved for a matching funds Grant.

The Award consisted of a $1,816,800 Grant to convert biogas to a CNG transportation fuel ($3,647,989 overall project estimate (2017 basis)). On March 23, 2018, the Board approved the CEC Grant Award and initiated the project's design, permitting, and construction development. The selection of the equipment, which is the subject of this Staff Report, is a critical element of the design and permitting process. In March 2019, the Board approved the purchase of the Biogas Conditioning system equipment from Unison Solutions, Inc ($2,093,150). In addition, the Board approved the purchase of four media storage tanks ($1,094,875) for the pre-treatment of all landfill gas prior to its delivery to the gas plant, the enclosed flare, and the Grant project's biogas conditioning system.

DISCUSSION

On February 12, 2020, Staff issued a bid solicitation to four local construction companies for the construction of the various structural slab foundations associated with the biogas conditioning system equipment and media storage tanks. The construction work is anticipated to be conducted in two phases, so it is expected the selected contractor will mobilize/demobilize twice for the project. Phase I: The first phase of the work generally involves installation of five (5) hydrogen sulfide removal tanks (owner provided) and high density polyethylene (HDPE) piping and piping support from an existing landfill gas header to the tanks. The installation of fencing, replacement of seven (7) laterals connections, 42 horizontal well heads, 27 vertical well heads, and decommissioning of the existing concrete pads and associated piping will also be included in the Phase I scope of work.
Phase II: The Phase II work generally involves installation of vertical gas wells, and installation of associated HDPE piping to tie the wells into the existing gas collection and control system (GCCS). The proposed work is estimated to consist of 25 vertical wells to be drilled to a depth of 100 feet and 20 well abandonments. An assumption of 1,600 feet of 8-inch HDPE SDR-17 and 5,000 feet of 6-inch HDPE SDR-17 lateral piping with 50% above grade and 50% below grade piping was estimated for the new wells and associated laterals. The current quantity values and locations for the Phase II design are estimated. The Phase II design will commence after the completion of the Phase I work in order to re-evaluate the system vacuum and the extent of any necessary GCCS wellfield improvements. Final quantity values for the Phase II work can be expected after the completion of Phase II design; which is estimated to be within 90 days of contract award.

On March 13, 2020, the District received and publicly opened four bids. The four construction bids are summarized in the table below.

NAME OF BIDDER	BID AMOUNT
APTIM E & I, LLC	$1,725,678.00
Blue Flame Crew West, LLC	$1,579,370.00
BSE General Engineering, Inc.	$1,167,427.13
SCS Field Services, Inc.	$2,568,338.00

FINANCIAL IMPACT

Funds for the Grant project are budgeted in the current FY19/2020 budget in the amount of $2,500,000 (prior to Grant Fund reimbursements). Separate from ongoing design and permitting costs for the Grant project, the structural slab foundation contract is the first authorization for the project in FY19/2020 (refer to separate Board Report) in the amount of $247,000. For this second contract authorization, the GCCS Improvements and Biogas Conditioning System Construction, the low bid received was for $1,167,417.13 from BSE Engineering Services, Inc. A $1,275,000 budget authorization is being recommended by Staff to be inclusive of approximately a 10% contingency. Therefore, it is estimated that fiscal year costs for this project will utilize about $2,000,000 of the $2,500,000 fiscal year budget. Grant reimbursements to the District are anticipated to be $1,816,000.

STRATEGIC PLAN

The District's involvement in the CEC Grant Award process fits under several general policy directives cited in the District's "Pillars of Sustainability" plan. Principally under the Community and Environment pillars which speak to the protection of Public Health and the Environment whereby the project will reduce permitted emissions from the District's operations by transforming biogas to an RNG which then in turn is used in CNG fueled vehicles to reduce emissions in the community's transportation element. A net negative GHG emission reduction results from the conversion of the biogas to a CNG transportation fuel. It is also in the Community's interests that close to half of the project costs will be from grant funding and not District's funds.

CONCLUSION

Staff respectfully recommends that the Board approve award a construction contract to BSE General Engineering, Inc. of Descanso, CA for the California Energy Commission (CEC) ARV-17-036 Grant project in the amount $1,275,000 for GCCS Improvements and Biogas Conditioning System Construction inclusive of approximately 10% contingency.

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