FRESNO COUNTY FIRE
PROTECTION DISTRICT

Honor, Integrity, Cooperation & Professionalism

MEMORANDUM

Date: 11/15/2019

To: Board Directors

Attn: Mike Del Puppo
President

From: Fire District Staff

Subject: Solar Project: Project Funding and the PG&E Generating Facility Interconnection Agreement for Local Government Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT)

BOARD OF DIRECTOR'S BRIEFING PAPER

ISSUE:

Since 2008 the District's electrical costs have increased by 84%. It is anticipated that future electrical energy costs will continue to escalate year over year and the District can conservatively expect that its current electrical costs will at least double again within the next 25 years from $170K to over $340K annually.

BACKGROUND:

The District has pursued initiatives to help stabilize and/or reduce its general operating costs over the years. In the past, the District received a presentation on renewable energy from a solar contractor that identified a few turn-key options. However, the proposal(s) were either cost prohibitive and/or the return on investment (ROI) was not suitable to the District's desire to stabilize and/or improve its energy costs as quickly as possible. Therefore, the Board directed staff to continue to analyze options and develop opportunities that reduced the total project costs and improved the amortization or return on investment period. Recently, staff has been researching several solar options to identify the most feasible and practical solution to address the District's short- and long-term energy needs/goals.

DISCUSSION:

The Local Government Renewable Energy Self Generation Bill Credit Transfer Program (RES-BCT), formerly AB 2466, was established by the legislature effective January 1, 2009, and codified in Section 2830 of the Public Utilities Code. It allows a local government with one or more eligible renewable generating facilities to export energy to the grid and receive generation credits benefiting up to 50 accounts of the same local government. Prior to entering this program, the District needs to apply to PG&E for inclusion and to determine any transmission infrastructure costs (PG&E hardware costs) associated with developing our own renewable energy generating facility. This application process also requires the submittal of engineered plans for the desired solar production system as part of the transmission infrastructure cost assessment.

Staff determined that the most practical way to establish the actual costs to develop a solar farm would be to utilize an independent industry consultant to analyze our needs, develop our project scope, solicit estimates, and compare proposals for best value. On June 19, 2019, the Board of Directors directed staff to work with our industry consultant to apply for the RES-BCT program with PG&E to determine the specific size of system and savings that the District could anticipate from the program as compared to development costs. Recently, staff received notification from PG&E that the District does qualify for the program and must decide to enter the program within two (2) weeks to maintain eligibility.

The District needs a 407.2 kW system to meet 100% of our electrical energy needs annually. However, the RES-BCT program as compared to the District's electrical needs will allow us to build a smaller 274.56 kW system which would provide a conservative 58% of power offset. In addition, this size of production system will fit on land that the District already owns and is currently underutilizing at the Training Center.

Cost estimates were developed for owner/builder (District Staff) construction as compared to commercial contractor construction (Turn-Key Solar Contractor). The potential savings with owner/builder development is negligible at best and will not result in a best value outcome for the District. The best value development cost estimate was from Kuykendall Solar, a local commercial solar contractor. Their bid, outside of the unknown PG&E hardware costs, indicate that the District can contract for a turn-key ground mounted 274.56 kW solar production system for $551,865. PG&E indicates that their hardware costs will add $40,636 to the project costs for a total estimate of $592,501. Staff is estimating an additional project contingency of up to $50K for added site improvements and unexpected expenses which would bring the grand total development costs to just below $650K.

The District could finance the total project costs at the best and worst case estimate scenarios and still benefit from a Return on Investment (ROI) within 6.5-7.2yrs. This would allow the District to enjoy 20-25 years of electrical production ownership, with only minimal maintenance costs, resulting in significant savings

($1.75M-$2.6M) over that period. In addition, the annual finance payment for a five-year term would nearly match the District's current and expected electrical costs over the same five-year period. Therefore, the short-term gain would be cost stabilization/predictability and the long-term gain would result in significant savings year over year.

However, to further extend the District's savings and limit its exposure to debt financing, the District could cash-carry the construction costs. This option could extend the District's savings to $1.8M-$2.65M over the 20-25 year period and improve the ROI by one year to 5.5-6.1 yrs. In order to achieve this more favorable result, staff would seek savings opportunities within its current allocated budget to help cover construction costs and utilize reserve funds for the balance. In addition, if this funding strategy is the preferred option, staff would recommend that the District budget for the next two fiscal years include allocations to replenish the Capital Reserves equal to the expended funds plus interest.

At the October 2019 Board meeting, the Board directed staff to notify PG&E of the District's intention to move forward with the Generator Interconnection Agreement. Staff notified PG&E and PG&E provided the Generating Facility Interconnection Agreement for Local Government Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT). The District has until January 27, 2020 to sign and return the agreement.

ALTERNATIVES:

1. Authorize the Board President to sign the PG&E Generator Interconnection Agreement (GIA) and fund the project with operating cash and reserve funds if necessary. This option would include reserve fund reimbursement in future budget development/allocations.

2. Authorize the Board President to sign the PG&E Generator Interconnection Agreement (GIA) and direct staff to develop formal financing options for consideration at the next scheduled board meeting.

3. Not approve the Solar Farm Development Project and direct staff to cancel the RES-BCT application with PG&E.

IMPACTS *(Consider potential consequences related to each of the following areas of concern for proposed alternatives)*:

☒ Fiscal – District would have initial costs to fund the project but would realize significant savings after the first five to six years.

☐ Operational

☐ Legal – N/A

☐ Labor – N/A

☐ Sociopolitical – N/A

☐ Policy – N/A

☐ Health and safety – N/A

☒ Environmental – Renewable energy will have a positive impact on the District's environmental foot print.

☐ Interagency – N/A

RECOMMENDATION:

Staff is recommending that the District Board of Director's authorize Alternative #1, Authorize the Board President to sign the PG&E Generator Interconnection Agreement (GIA) and authorize the construction costs with operating/reserve funds to include a reserve fund reimbursement mandate in future District Budgets.

APPROVED:

Chris Bump, Assistant Chief

11/15/2019
Date