Board Agenda Item 5

DATE: February 4, 2020

TO: Board of Supervisors

SUBMITTED BY: Robert W. Bash, Director of Internal Services/Chief Information Officer

SUBJECT: Resolution and Solar Photovoltaic Energy Services Agreement with FFP, BTM Solar, LLC (Forefront Power)

RECOMMENDED ACTION(S):

1. **Conduct a public hearing in accordance with California Government Code § 4217.12 for the Board to determine that the terms of each of the proposed energy services agreements with FFP BTM SOLAR, LLC (ForeFront Power) (in recommended actions #3 and #4, below) are in the best interests of the County, and to find that the anticipated costs to the County for electrical energy or conservation services to be provided by the solar photovoltaic (PV) energy system (in recommended action #3 below) and the energy storage system (in recommended action #4 below) under each of those proposed agreements, respectively, will be less than the County's anticipated marginal costs for the purchase of such energy and conservation services in the absence of each such proposed agreement, respectively.**

2. **Adopt and authorize the Chairman to execute Resolution making the determinations and findings as described in recommended action #1 (Gov. Code, § 4217.12).**

3. **Approve and authorize the Chairman to execute Energy Services Agreement-Solar, Fresno County-Juvenile Justice Campus, including General Terms and Conditions of Energy Services Agreement, with ForeFront Power to finance, design, construct, install, operate, and maintain an approximately 27-acre, 3,585 kW (DC) (estimated) solar PV energy system (including solar panels) at the Juvenile Justice Campus, located at 3333 E. American Avenue, Fresno, CA, 93725 (the JJC), for the County to purchase energy at specified rates, for a possible twenty-five (25) year term, with an option to purchase the solar PV energy system after the 5th anniversary of commercial operation of the solar PV energy system.**

4. **Approve and authorize the Chairman to execute Energy Services Agreement-Energy Storage, Fresno County-Juvenile Justice Campus, including General Terms and Conditions of Energy Services Agreement, with ForeFront Power to finance, design, construct, install, operate, and maintain a 2,000 kW (AC/ 3,946 kWh DC) (estimated) energy storage system at the JJC, for the County to obtain energy conservation services, for a possible ten (10) year term, with annual extensions so long as the Agreement for the solar PV energy system (recommended action #3, above) stays in effect.**

5. **Authorize the Director of Internal Services/Chief Information Officer (CIO) (the Director/CIO) to approve and execute any further documents, instruments, estoppel and acknowledgement certificates, memoranda of agreements, all subject to the approval of the County Counsel as to legal form and Auditor-Controller/Treasurer-Tax Collector as to**

accounting form, necessary to finalize the recommended Agreements, including any financing that ForeFront Power might later obtain in relation to such Agreements.

6. **Authorize the Director/CIO to approve any change in energy storage system size, and amend the Energy Services Agreement - Energy Storage solely for updating the energy storage system size, subject to the approval of the County Counsel as to legal form and Auditor-Controller/Treasurer-Tax Collector as to accounting form.**

7. **Approve and ratify the Rule 21 Generator Interconnection Agreement with Pacific Gas & Electric Company (PG&E), dated June 25, 2018, previously executed by the County Purchasing Manager.**

This item was presented to your Board on November 19, 2019. After conducting a public hearing, your Board continued this matter to a date uncertain. In this item, Staff are returning to your Board with the same recommended Energy Services Agreements (ESAs), in substantially the same forms presented earlier to your Board, with certain revisions clarifying the Early Termination Fee in the ESAs, as explained in the Discussion Section, below, and now with additional information for the purpose of addressing certain questions raised earlier by your Board at that meeting.

The recommended ESAs have been made available to the County through the School Project for Utility Rate Reduction (SPURR) cooperative bid process described in the Discussion Section, below. The recommended ESAs are also known as power purchase agreements (PPAs).

Your Board's approval of the recommended actions will allow the County to enter into the recommended ESAs with ForeFront Power for the design, construction, installation, operation, and maintenance of the following energy systems: (1) an approximately 27-acre, 3,585 kW (DC) solar photovoltaic system (Solar PV System) that is expected to significantly reduce the County's electricity expenses at the Juvenile Justice Campus (JJC) through the possible 25-year term of the recommended ESA-Solar (i.e., initial 20-year term, and one optional 5-year renewal term); after the fifth anniversary of commercial operation of the Solar PV System, the County has the option to purchase the Solar PV System; and (2) a 2,000 kW (AC / 3,946 kWh DC) (estimated) energy storage system (Energy Storage System) at the JJC through the possible 10-year initial term of the recommended ESA-Energy Storage; after the initial 10-year term, the ESA-Energy Storage may renew annually (using the same Energy Storage System's existing equipment under the initial 10-year term), so long as the ESA-Solar for the Solar PV System remains in effect.

There is time sensitivity to this item, since ForeFront Power states that it receives up to 30% Internal Revenue Service (IRS) tax credits, which decrease incrementally each quarter. The PPA rate that ForeFront Power is offering to the County under the recommended ESAs is due in part to anticipated savings to be realized by ForeFront Power from these IRS tax credits if your Board approves the recommended actions (the County does not receive the IRS tax credits). This item is countywide.

ALTERNATIVE ACTION(S):

Your Board could choose to approve only those actions relating to the Solar PV System (but that would reduce estimated savings); alternatively, your Board could choose not to approve all of the recommended actions. In either such case, the County will continue to purchase energy from the local utility company at current rates. This will result in a lost opportunity for savings until an alternative energy savings project can be identified and funded.

As well, the County could directly go out to bid for these same energy conservation services, but it is the opinion of staff that the County will not obtain comparably favorable PPA rates on the open market as it is able to access in this item through the SPURR contract that resulted from SPURR's bid process, as discussed below.

FISCAL IMPACT:

There is no Net County Cost associated with the recommended actions. By design, the proposed Energy Services Agreement (ESA) for the Solar PV System is cashflow positive year one, since it is anticipated that the purchase price per kilowatt hour generated will be less than the County is currently paying for energy from Pacific Gas and Electric Company (PG&E). As a result, the County is expected to realize savings in all years of the ESA term.

The updated, anticipated gross cumulative savings for both recommended ESAs, together, including the Solar PV System and the Energy Storage System, is up to $17,560,905 over the initial 20- year term of the Agreements. The County is obligated under an agreement with UCM, which is the County's own contracted energy consultant, to pay UCM a portion of those savings, which is up to $400,224, resulting in the County's anticipated net cumulative savings for both recommended ESAs together, of up to $17,160,681.

DISCUSSION:

On November 19, 2019, ISD (the Department) staff presented to your Board the following:

- For requested approval: Two recommended Energy Service Agreements (ESAs) with ForeFront Power; the ESA-Solar; and ESA-Energy Storage (each incorporating the recommended General Terms and Conditions with ForeFront Power);
- For requested approval and ratification: A Rule 21 Generation Interconnection Agreement with PG&E; and
- For requested approval: A Resolution to make certain determinations that the terms of each of the recommended ESAs are in the best interests of the County, and to make certain findings relating to energy savings.

Following staff's presentation, your Board held a noticed public hearing pursuant to California Government Code § 4217.12 to make certain determinations and findings related to the recommended ESAs with Forefront Power. Your Board expressed reservations and voted to continue this matter to a date uncertain.

In this item, Staff are returning to your Board with the same recommended ESAs, in substantially the same forms presented earlier to your Board, with certain revisions clarifying the Early Termination Fee in the ESAs, as explained, below, and now with the following additional information for the purpose of addressing certain questions raised earlier by your Board. In addition, Staff are presenting a newly-revised recommended Resolution that includes an updated, new anticipated gross cumulative savings for both recommended ESAs, together, up to $17,560,905 (this results in net cumulative savings for both recommended ESAs together, of up to $17,160,681).

As required by Government Code § 4217.12, public notice of this hearing was given, at least two weeks in advance, on January 21, 2020. Specifically, the County posted notice of today's hearing in the same places as notices are given for Board meetings, as well as on the County's website under the heading "Announcements," and at the JJC Administration Buildings, where members of the public frequently visit.

In the interest of assisting your Board in reviewing this matter over the course of two Board meetings, a copy of the Board Agenda Item, and its exhibits, for November 19th relating to this matter accompanies this item. That prior Board Agenda Item needs to be referenced for a complete consideration of this item.

Overview: ESAs - Solar PV System and Energy Storage System

As discussed at your Board's November 19, 2019 meeting, under the recommended ESA-Solar, ForeFront Power would finance, design, construct, implement, operate, and maintain the Solar PV System, from which the County receives and purchases energy from ForeFront Power at specified, pre-negotiated power purchase agreement (PPA) rates.

Also, as discussed at your Board's November 19, 2019 meeting, the recommended ESA-Energy Storage relates to ForeFront Power's proposed energy storage system (battery system) that would reduce the County's peak electrical energy demand from PG&E, as well as electrically charge the system during off-peak hours and dispatch stored electric energy to the JJC during peak hours.

Both of the recommended ESA's share the same recommended General Terms and Conditions (no changes have been made to the General Terms and Conditions), with its key provisions identified in the accompanying November 19, 2019 Board Agenda Item.

As discussed further below, since November 19, 2019, certain identical revisions have been made to Schedule 3 of the ESA-Solar and Schedule 3 of the ESA-Energy Storage to add language that clarifies when and how the Early Termination Fee applies in the recommended ESAs, and to specifically tie the Early Termination Fee in each such Schedule 3 back to its applicable sections in the General Terms and Conditions. Those are the only changes to the recommended ESAs since the recommended ESAs were presented to your Board on November 19, 2019.

Procurement Process

On November 19, 2019, your Board raised questions why this project was not directly bid by the County pursuant to a County Request for Proposal (RFP) process.

The County's direct use of its own RFP process is not the exclusive means by which the County obtains competitive pricing. The County's Purchasing Manual states that contract buying groups are considered to take the place of competition if, in Purchasing's opinion, it is in the best interest of the County. The Department utilized the School Project for Utility Rate Reduction (SPURR) cooperative bid process described below. SPURR, a joint powers authority (i.e., a governmental agency), operates cooperative procurement programs for natural gas, electricity, renewable energy and energy storage, energy demand response, LED lights and controls, telecommunications and networking, and utilities data management and conservation. SPURR publicly describes itself as a buying group of public agencies focused on utility services.

UCM, the County's own energy consultant, analyzed the SPURR bid process, and determined that it is unlikely that a separate County RFP process would result in prices, terms, and/or conditions that are more favorable than SPURR's bid process. Even with the efficiencies in using the SPURR RFP process, the County needed to dedicate resources to negotiating the specific terms of the ESAs with SPURR's selected vendor.

A County RFP process for procuring an energy conservation project would have significant administrative costs associated with the length of the solicitation and contract negotiation process, which, in addition to identifying a location, would include identifying the scope of work, collecting data, identifying assumptions, writing the RFP, issuing the RFP, conducting site walks, evaluating proposals, awarding a vendor, responding to appeals, negotiating the terms, and going through the staff review and approval process for Board preparation.

In addition, the Department believes a County RFP of this complexity would have less predictable timing than the "piggyback" of another public agency's bid process (i.e. using SPURR) that the Department relied upon, which could hinder the County's ability to maximize tax incentives that indirectly benefit the County through negotiated PPA rates. Accordingly, the Purchasing Manager determined that utilizing SPURR to procure a Solar PV System would best meet the County's needs. The Department maintains that the benefits of the County's procurement through another public agency's bid process by "piggyback" for this project is the best option for the County.

By way of background, on July 19, 2017, SPURR issued an RFP seeking responsive proposals for solar energy and energy storage services. SPURR received eight responses to the RFP, and awarded the bid to ForeFront Power, LLC, an affiliate of ForeFront Power, in this item. The PPA rate and terms accepted by SPURR have been confirmed in the REAP Master Contract, dated October 26, 2017 (the RMC) between SPURR and ForeFront Power, LLC, which allows the County, as a public agency, to contract directly with ForeFront Power. One of SPURR's programs, the Renewable Energy Aggregated Procurement (REAP), allows member agencies to "piggyback" on SPURR's competitively-bid RFP to procure solar energy and energy storage solutions.

In December of 2017, Department staff informally worked with SPURR to investigate potential solar and energy storage opportunities for the County and Purchasing began conducting due diligence regarding these opportunities.

Department staff's due diligence included contacting references, and involving UMC, which is the County's own contracted energy consultant, to evaluate SPURR's procured PPA rate and terms.

As an extra step, not required by the County's bid process, but used as an added check against SPURR's awarded vendor's PPA rate, Department staff went further in June 2018 to test the then-current market conditions and invited solar vendors to offer a rate that staff could generally compare to the REAP Program's contracted PPA rate.

These vendors included Air Con Energy, CE Solutions, Engie Services, Noresco, Schneider-Electric, Sun Power, and Trane. Engie Services was the only vendor to respond to the rate check, and provided a rate that was slightly higher than the PPA rate provided under the REAP Program.

Following all of these steps, it appeared to Staff that ForeFront Power's PPA rate through the SPUUR program was competitive, and staff pursued negotiations with ForeFront Power for a solar energy system. The County's negotiations were lengthy, as they involved complex issues, and resulted in the final negotiated PPA rates discussed below, and in the recommended ESA's contractual terms described in the November 19, 2019 Board Agenda Item.

A representative from Engie Services US, appeared before your Board at its November 19, 2019 hearing on this matter, raising concerns about the procurement process relied upon by Department staff, and resulting in the recommended ESAs. The representative expressed dissatisfaction that he was unable to visit the County sites. However, this was just a "rate check," by the Department, and not an RFP process. That is, an informal request for companies to provide their best rate, given a list of four possible County site locations and energy interval data from each location (but this was not based on specific contractual terms). At your Board's November 19, 2019 public hearing, the representative also asserted to your Board that the ISD Director/CIO told him that the County would do an RFP for this project; the ISD Director/ISD disputes that assertion. It is also important to note that the representative's company, Engie Services US, was one of the bidders in SPURR's RFP process.

Government Code § 4217.12 allows public entities, such as the County, the flexibility to dispense with public bidding for energy conservation projects, when at a public hearing, the public entity's governing body finds this method to be in the entity's best interest. The Department believes the County has satisfied the requirements of Government Code § 4217.12, by presenting the recommended Resolution and ESAs. The Department also has relied upon the Purchasing Division's use of the contract buying groups, and in this case, the County Purchasing Manager made the determination that the Department's use of the SPURR RFP process is in the County's best interest.

Performance Guarantee and Estimated Savings

Under the recommended ESA-Solar, Forefront Power would provide electrical energy to the County at the final, negotiated PPA rate of $0.0710 kWh Rate ($/kWh).

Under the recommended ESA-Energy Storage, the County would pay ForeFront Power at the final, negotiated rate of $40.732 /year/kW AC for each year for the Energy Storage System's operation with the Solar PV System. This is a monthly payment during each calendar month equal to the annual payment ($40.732) multiplied by the Energy Storage System size in kilowatts AC (expected to be 2,000) divided by twelve.

At the November 19, 2019 Board Hearing, your Board expressed a desire for ForeFront Power to guarantee a certain amount of dollar savings set forth in its cash flow analysis. ForeFront Power stated that it cannot guarantee dollar savings, as dollar-based savings would necessarily depend on PG&E's future actions in setting its rates.

Although the recommended ESAs do not provide a guaranteed dollar-based savings, Forefront Power makes the following quantifiable guarantees under the ESAs, as applicable:

- Under the ESA-Solar, ForeFront Power guarantees to produce a certain amount of power at a specified minimum PPA rate (i.e., the minimum guaranteed output of the Solar PV System shall be <u>no less than 95% of the estimated annual production of the Solar PV System</u>, but subject to the following exclusions: acts or omissions of the County or the local electric utility including a defined disruption period; or an event of "force majeure").
    - If ForeFront Power does not meet the foregoing guarantee during a full term year, ForeFront shall credit the County an amount equal to the County's lost savings (based on a formula) on the next invoice or invoices during the following term year under the ESA.
- Under the ESA-Energy Storage ForeFront Power guarantees to provide a <u>"minimum guaranteed demand reduction"</u> (i.e. to reduce the County's peak electric energy demand from the local electric utility), and to provide <u>"minimum guaranteed energy arbitrage"</u> (i.e., to electrically charge the Solar PV System during specified off-peak hours and dispatch stored electric energy to the County during specified peak hours), both of which provide for quantifiable anticipated savings.
    - For each term year, if ForeFront Power does not provide at least the "minimum guaranteed demand reduction" or the "minimum guaranteed energy arbitrage," ForeFront Power shall credit the County an amount equal to the County's lost savings (based on a formula) on an invoice or invoices within ninety (90) days after the end of the term year under the ESA.

The Solar PV System is estimated to provide 80% of the energy consumed on site at the JJC, which provides the optimal savings to the County. PG&E will continue to provide electricity to the JJC site for any consumption that is not covered by the Solar PV System.

The amount of dollar cash flow savings originally estimated by ForeFront Power has increased since the November 19, 2019 Board Hearing. Specifically, PG&E has changed the "time of use" (TOU) hours for charging increased customer rates (i.e., increased the higher-rate period for higher electricity use), but the JJC site will be grandfathered on the TOU periods set by PG&E under the Interconnection Agreement. As a result, the Department expects an additional approximate $65,000 annually in total savings. But as stated earlier, those estimates are not part of the recommended Agreements.

Attachment A (revised) to the Resolution demonstrates the updated, anticipated energy savings for both the recommended ESA-Solar (for the Solar PV System) and recommended ESA-Energy Storage (for the Energy Storage System).

Energy Storage Benefits

At the November 19, 2019 Board Hearing, your Board had questions about the benefits and longevity of the Energy Storage System utilized in these recommended ESAs. The two services performed by the Energy Storage System are Demand Reduction Services and Energy Arbitrage Services.

- "Demand Reduction Services" means that the Energy Storage System would reduce the JJC's peak electric energy demand from PG&E. This is important, because demand charges are what the local utilities charge customers for each single highest 15-minute interval draw from the grid each month. By "shaving" off (i.e., reducing) that highest 15-minute interval draw, the JJC would have a lower peak electric energy demand, resulting in a lower demand-reduction charge. This is important, because these utility charges have increased approximately 6-10% annually over the past decade.

- "Energy Arbitrage Services" means that the Energy Storage System will electrically charge the Solar PV System during off-peak hours (when energy is lower-cost), and dispatch stored electric energy to the JJC during peak hours (when energy costs are high).

The recommended ESA-Energy Storage will have an initial term of 10 years, which means that the Energy Storage System will perform at a level of 100% for those 10 years. If during the term, the battery fails to shave the promised number of KW each year, or shift a specified amount of energy from expensive periods to less costly periods, ForeFront Power's fees under the recommended ESA-Energy Storage are reduced commensurately. During the term, ForeFront Power's fees under the ESA-Energy Storage would reduce to $0 if the battery does not perform at all. At the end of 10 years, the County can elect to have ForeFront Power remove the battery, or keep the battery in place for annual renewal terms; alternatively, the County could pursue negotiations with ForeFront Power for a new ESA-Energy Storage to replace the battery. The County can also elect to purchase the battery at year five of the term.

Clarification Regarding Reference to Exhibit B to Original Agenda Item (Early Termination Fees)

The original November 19, 2019 agenda item generally stated the following at page 6:

> The recommended Agreements [the ESAs] each contain a schedule of Early Termination Fees, if the County terminates that Agreement, upon at least 60 days' notice, before the end of the initial term, which is attached to this report as Exhibit B. However, if the County defaults, each recommended Agreement contains a provision that limits the Early Termination Fee that ForeFront may collect to the Early Termination Fee allocable to the then-fiscal year.

The recommended General Terms and Conditions in the recommended ESAs impose several limits on ForeFront Power's rights and remedies, which need to be read together with Exhibit B to the original Agenda Item.

Since the November 19, 2019 meeting, certain identical revisions have been made to Schedule 3 of the ESA-Solar and Schedule 3 of the ESA-Energy Storage to add language that clarifies when and how the Early Termination Fee applies in the ESAs, and to specifically tie the Early Termination Fee in each such Schedule 3 back to its applicable sections in the General Terms and Conditions.

Specifically, the Early Termination Fee applies as follows:

- County purchases the System (i.e., Solar PV System or Energy Storage System) (General Terms and Conditions Sec. 2.1(b)):
    - The County may terminate the ESA for any reason, other than for a non-appropriation of funds, upon sixty (60) days' prior written notice to ForeFront Power.

  - If the County terminates the ESA during the initial term of the applicable ESA, the County would pay the Early Termination Fee set forth on Schedule 3, Column 1 of the applicable ESA.

- County default under an ESA (General Terms and Conditions Sec. 11.2(b)):

  - In the event of a County default under an ESA, where ForeFront Power would not terminate the ESA, and would seek payment from the County as follows:
  - In this situation, the General Terms and Conditions of the ESAs impose several limits on ForeFront Power's right and remedies, which need to be read together with the applicable ESA (i.e., Exhibit B to the original Agenda Item, and now revised Exhibit B to this Agenda Item):

    - ForeFront's rights and remedies are limited to the County's then-current fiscal year;
    - ForeFront's rights and remedies are limited to the portion of the Early Termination Fee (Exhibit B to the original Agenda Item, which is as set forth in Column 1 of Schedule 3 in the General Terms) allocable only to the County's then-current fiscal year;
    - ForeFront's rights and remedies shall be without acceleration of any future payment by the County before any such payment is due and payable; and
    - ForeFront expressly waives any right and/or remedy at law or in equity to accelerate any payment before any such payment is due and payable by the County.

- County "cross default" under the ESAs (General Terms and Conditions Sec. 11.3(b)):

  - In the event of a County default under an ESA, that is considered a default under the other ESA (a "cross default") that is co-located at the JJC.
  - If ForeFront Power terminates the ESAs due to a County default, the County shall pay the portion of the Early Termination Fee (as set forth in Column 1 of Schedule 3) allocable only to the County's then-current fiscal year for all such terminated ESAs.
  - A cure of the original default shall be a cure of any such cross-default.

The recommended General Terms and Conditions in the recommended ESAs also provide that ForeFront Power's rights (including, but not limited to, the right to enforce any of the County's obligations) and remedies, and the County's obligations under the ESA, shall not be construed, or applied in any manner that violates the County's constitutional debt limitation.

A "redline" copy (showing changes from the November 19, 2019 version) of the revised Schedule 3 in the recommended ESAs is attached to this Item, and is referenced as Revised Exhibit B-Early Termination Fees.

<u>CEQA</u>

Staff from the Department of Public Works & Planning have evaluated the projects (i.e., the projects for the two ESAs) in compliance with the California Environmental Quality Act (CEQA), §§ 21000 et seq. guidelines, and have issued a categorical exemption of such projects based on those guidelines. If your Board approves the recommended ESAs, a notice of exemption will be filed by staff with the County Clerk upon approval of the ESAs that your Board may approve.

<u>REFERENCE MATERIAL:</u>

BAI#7, November 19, 2019

ATTACHMENTS INCLUDED AND/OR ON FILE:

Exhibit A - Location of the System
Exhibit B (revised) - Early Termination Fees for each of the ESAs (redline version)
BAI #7, November 19, 2019 (including its Exhibits)

On file with Clerk:
ESA - Solar
ESA - Energy Storage
General Terms and Conditions of Energy Services Agreement
PG&E Rule 21 Interconnection Agreement
Resolution

CAO ANALYST:

Yussel Zalapa