

Gonzales Electric Authority

AGENDA ITEM

EXECUTIVE DIRECTOR'S OFFICE

STAFF REPORT

TO: Honorable President Orozco and Board of Directors

DATE: September 8, 2020

FROM: René L. Mendez, Executive Director

SUBJECT: Energy Services Agreement Between the Gonzales Electric Authority and Bodega

Microgrid Generation LLC

RECOMMENDATION

Staff recommends the Board of Directors receive a report and consider approval of Resolution No. GEA-2020-02, authorizing the Executive Director to sign an Energy Services Agreement between the Gonzales Electric Authority (GEA) and Bodega Microgrid Generation LLC (Bodega Microgrid). The Energy Services Agreement would govern the development of an electric microgrid to serve the area in and around the Gonzales Agricultural Industrial Business Park (the Microgrid Program Area). Resolution No. GEA-2020-02 is attached to this staff report as Attachment 1.

BACKGROUND

On October 16, 2017, the City of Gonzales began work with ZeroCity LLC and its partner, OurEnergy, on the Gonzales Renewable Energy Project to study the feasibility and take steps to develop an electric power microgrid to serve the Microgrid Program Area. This work led to an action by the City Council on July 2, 2018 to approve in concept the Gonzales Renewable Energy Project and authorize the City Manager to continue project development.

On August 20, 2018, the Gonzales City Council authorized the creation of 1) the Gonzales Municipal Electric Utility (GMEU) to provide power and heat for the City of Gonzales community, and 2) GEA for the purpose of operating and managing the City's municipal electric enterprise system, and assisting GMEU in the development of cost-effective and efficient renewable energy opportunities. With this action, GEA/GMEU essentially assumed the responsibility to continue the development of the Gonzales Renewable Energy Project.

In September 2019, GEA sent out a Request for Interest to a group of prospective project partners to solicit their interest in developing, financing, constructing, and operating a microgrid power system. As a result of this invitation, on December 2, 2019, the Board of Directors authorized the Executive Director to execute a Memorandum of Understanding (MOU) between GEA and Concentric Power Inc. (Concentric Power) to exclusively negotiate in good faith to develop an electric microgrid to serve the Microgrid Program Area.

Concentric Power Inc. is a California-based energy company with offices in Salinas and Campbell. Their intent is to build an office, network operations center, assembly facility and maintenance shop in the Business Park concurrently with the microgrid project. At full build out, the Gonzales facility would be the largest location for Concentric in terms of both jobs and capabilities.

For the first half of this year, GEA and Concentric Power worked diligently to study the project in detail and develop the terms under which GEA and Bodega Microgrid—a business unit set up by Concentric Power specifically for the Gonzales project—would fund and develop an electric microgrid for the Microgrid Program Area. The MOU has been amended twice to provide the additional time needed for the parties to come to terms. The work completed under the MOU has resulted in a draft Energy Services Agreement, which is now ready for formal consideration by the Board of Directors.

On July 27, 2020, the Board of Directors held a study session on the proposed Energy Services Agreement, and the item is now before the Board of Directors for formal action.

This item is continued from the August 17th, 2020 Board meeting that was ironically cancelled because of a loss of power (blackout) for the community as a result of the high heat and fire conditions.

REVIEW & ANALYSIS

Financial Structure

The basic financial structure of the proposed microgrid project is a wholesale-retail arrangement.

- GEA would partner with Bodega Microgrid LLC (Project Entity for Concentric Power) to build and operate a system to provide <u>wholesale</u> electric power and related energy services to GEA.
- GEA would deliver the electric power to GMEU who, in turn, would sell <u>retail</u> electric power and related energy services to its customers in the Microgrid Program Area.

Investment in Physical Assets

The physical assets of the microgrid system itself would consist of two primary components: 1) an electric power generation system financed and owned by Bodega Microgrid, and 2) a utility-grade power distribution system financed and owned by GMEU. All system assets would be constructed and operated by Bodega Microgrid. Initially, the system would be operated completely separate from PG&E's power grid; Bodega Microgrid would begin the process for interconnecting the system to the energy grid soon after the Energy Services Agreement becomes effective.

Electric Power Generation System

Bodega Microgrid's electric power generation system would include the following components:

- The generation of electric power using solar panels and natural gas engines (housed in one or more engine rooms);
- The storage of electric power using battery energy storage systems;
- Gen-tie and metering between electric power generation assets and distribution systems in and adjacent to the Microgrid Program Area;

- The operation of an electric power transmission substation with the capacity to export electric power to the PG&E regional power grid;
- The sub-transmission and metering of electric power from the microgrid substation to the CAISO/PG&E power grid connection; and
- The command and control of electric power generation and storage.

The proposed microgrid would initially be rated at 14.5 megawatts (MW) of solar generation, supplemented by 10.0 MW of firm electric power, and 10.0 MW/ 27.5 megawatt-hour (MWh) battery energy storage system. Figure 1 shows the approximate location of components of the electric power generation system.

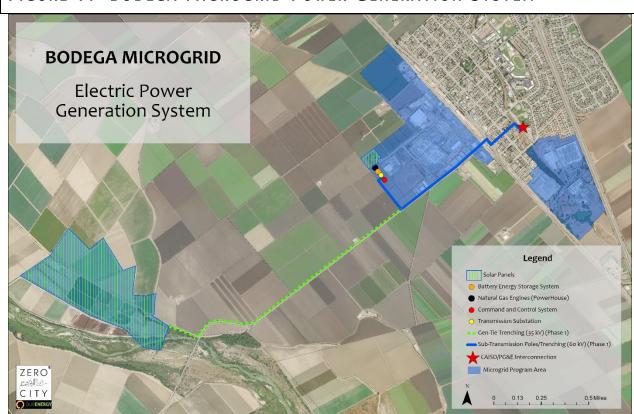


FIGURE 1: BODEGA MICROGRID POWER GENERATION SYSTEM

Source: ZeroCity LLC; Concentric Power, Inc.

Power Distribution System

GMEU's utility-grade power distribution system would include the distribution and metering of electric power to customers in the Microgrid Program Area. This would also include handling of incidental renewable electric power generated on-site by GMEU customers (i.e., electric power feed-in).

Within the Microgrid Program Area, electric energy distribution lines have been designed in a loop that is bordered by Bodega Lane on the west, Gonzales River Road on the south, Alpine Dr on the east, and Katherine Street on the north. Distribution lines would run off the loop to customers as needed. One

distribution spur is slated to run north of Alpine on Gonzales River Road, making a southward turn on Alta, until arriving at a point approximately 2,000 feet south of Gonzales River Road. This spur is intended to serve customers along Alta north of the Gonzales Cemetery. GMEU's electric distribution facilities will generally parallel existing PG&E distribution facilities in the area.

Figure 2 shows the proposed location of GMEU's proposed electric power distribution system to serve customers in the Microgrid Program Area.

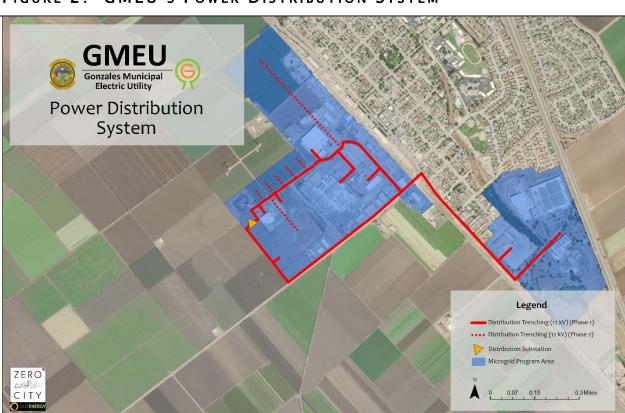


FIGURE 2: GMEU'S POWER DISTRIBUTION SYSTEM

Source: ZeroCity LLC; Concentric Power, Inc.

Energy Services Agreement

The proposed Energy Services Agreement being considered by the Board of Directors would be the primary agreement governing the relationship between the GEA and Bodega Microgrid over the next 30 years. The Energy Services Agreement contains provisions that cover the following three basic areas of interest:

- **Terms of Service**. Agreement provisions specify the services to be provided by Bodega Microgrid to GEA. This includes the amount of power and related energy services, the wholesale rate, methods of billing and payment, and provisions for terminating the arrangement.
- Systems and Operations. The Agreement contains terms that recognize the Parties' ownership
 positions and includes a provision wherein GEA may buy-out Bodega Microgrid's assets, or
 components thereof, in the future. It also includes provisions governing system design and
 installation, operations and maintenance, and performance guarantees. Finally, it contains a section

on "conditions precedent," which is a list of actions that must occur before GEA and Bodega Microgrid are obligated to perform under the Energy Services Agreement. This includes such things as procuring lease rights and permits, financing the Bodega Microgrid generation system, funding by GEA and GMEU for the distribution system, lockbox arrangements (to secure project cashflows, including payments to Bodega Microgrid for its services and revenues to GMEU), customer agreements, communication protocols, and royalty fees for any power exported to the power grid.

• **General Provisions.** The Agreement has a number of provisions that relate to the legal mechanisms that govern the Agreement, such as indemnification, liability, and dispute resolution.

The Energy Services Agreement also contains nine (9) appendices that show the Microgrid Program Area, describe the microgrid system, set energy service rates, schedule project milestones, set reimbursable costs, establish the process for early termination, guarantee Bodega Microgrid's performance, detail insurance requirements, and provide for future asset purchase.

The approval of the Energy Services Agreement would be granted under the provisions of Government Code 4217.12, which provides local government a streamlined procurement process for renewable energy projects. Government Code 4217.12 requires GEA's Board of Directors, when it takes formal action, to make the following two findings:

- 1. That the anticipated cost to the public agency for thermal or electrical energy or conservation services provided by the energy conservation facility under the contract, will be less than the anticipated marginal cost to the public agency of thermal, electrical, or other energy that would have been consumed by the public agency in the absence of those purchases.
- 2. That the difference, if any, between the fair rental value for the real property subject to the facility ground lease and the agreed rent, is anticipated to be offset by below-market energy purchases or other benefits provided under the energy service contract.

The Energy Services Agreement is attached to this staff report as Attachment 2.

Project Risks

The proposed microgrid project is the largest public works project undertaken by the City of Gonzales or its special districts or enterprises. The proposed project involves a combined initial investment of approximately \$70 million, which would be followed by additional investment in later years as the demand for electric service grows.

This level of investment is made possible by Bodega Microgrid's participation in the project. Approximately 85 percent of the initial \$70 million investment (~\$60 million) would be financed by Bodega Microgrid, and GMEU's contracts with retail customers would contain provisions to enable Bodega Microgrid to obtain this financing.

The remaining ~\$10 million investment would be financed by GMEU and would represent a significant financial liability for GEA/GMEU. The Executive Director would expect to offset this liability with revenues generated from the sale of electric power and related energy services to customers in the Microgrid Program Area, and GEA/GMEU's investment would be underwritten solely by these future project revenues. The commercial success of the project relies on GEA/GMEU's ability to provide retail electric service at competitive rates, while providing returns for both parties. This investment would be comprised of \$7 million to build and own the distribution system, and \$3 million either in cash or a line of credit to

provide working capital for the project. Over time, the line of credit would be retired as GMEU is able to build up reserves.

If, in the unlikely event, that one of the party's defaults during the term of the Energy Services Agreement, there are provisions for remedies intended to offset some of the non-defaulting party's losses. If necessary, customers would have the option of returning to the incumbent utility or community choice aggregator.

Project Benefits

The proposed microgrid project is expected to provide a range of benefits to the Gonzales Agricultural Industrial Business Park (GAIBP) and ultimately the Gonzales community, including:

- Local, clean, low-cost electric power that supports economic development in the Business Park and with it an expanding tax base and new jobs;
- Reliable electric power delivered 24/7, 365 days a year, with no PG&E "Public Safety Power Shutoffs;"
- Fast electric power hook-ups that avoid the long waits for PG&E grid improvements;
- Potential for lower municipal development impact and service fees made possible with microgrid revenues;
- Job and Economic Development;
- Funding for the infrastructure improvements needed to support the GAIBP and minimize the impact on the community; and ultimately
- Reinvestment in the Gonzales community.

CEQA

The proposed project is the approval of an Energy Services Agreement under the provisions of Government Code 4217.12, which provides a streamlined procurement process for renewable energy projects. The approval of an Energy Services Agreement is not a project per §15378 of the California Environmental Quality Act (CEQA) Guidelines. The Energy Services Agreement sets forth the business terms under which one party would produce and sell energy products to another. In and of itself, it does not directly or indirectly result in a physical change in the environment. Additionally, the Energy Services Agreement acknowledges that development of the generating system will require review under CEQA and, accordingly, does not commit GEA to a definite course of action pending such review.

If the Energy Services Agreement is approved, Bodega Microgrid and GMEU would each seek approval of a Conditional Use Permit to construct their respective components of the microgrid system. The approval of the Conditional Use Permits would be considered a project under CEQA, and the two applicants are expected to prepare a joint Initial Study that would likely result in a Mitigated Negative Declaration.

ALTERNATIVES

Staff proposes two alternatives to authorizing the Executive Director the Energy Services Agreement:

- 1. Direct the Executive Director to seek renewed negotiations with Concentric Power, Inc., to explore the possibility of improved business terms; or
- 2. Direct the Executive Director to cease efforts related to the Gonzales Microgrid Project and terminate the project.

BUDGET IMPACT

The approval of the Energy Services Agreement, if that is the choice of the Board of Directors, would commit the GEA (and GMEU) to pursuing capital funding roughly in the amount of \$10 million. This would represent a significant financial liability that the Executive Director would expect to offset with revenues generated from the sale of electric power and related energy services to customers in the Microgrid Program Area. Any loan procured as a result of approval of the Energy Services Agreement, would be underwritten solely by the revenue generated through the sale of electric power and related energy services. As mentioned above, the \$10 million is comprised of \$7 million to build the distribution system and \$3 million as an operating reserve; both of these items would be brought before your Board for approval in a future meeting.

To offset these costs, the purchase of the wholesale energy and services and operating expenses and overhead, the proposed microgrid project is projected to generate annual net revenues for GMEU of approximately \$500,000. Table 1 provides the details on this revenue projection.

Table 1: Projected Revenues

Project Costs	Amount
Debt service on \$10 million loan	\$750,000
Operating expenses/overhead	\$300,000
Purchase of wholesale energy and	\$4,200,000
services	
Subtotal	\$5,250,000
Project Revenues	
Revenue from retail sales (annual)	\$5,600,000
Incremental tax revenues (annual)	\$200,000
Subtotal	\$5,800,000
Net Benefit to GMEU (annual)	\$550,000
Cumulative benefit (30 years)	\$16,500,000

Sources: ZeroCity LLC, OurEnergy, Concentric Power, Inc.

CONCLUSION

In consideration of the information and conclusions discussed in this staff report, staff recommends the Board of Directors receive a report and consider approval of Resolution No. GEA-2020-02, authorizing the Executive Director to sign the attached Energy Services Agreement between the GEA and Bodega Microgrid.

Attachments:

- 1. Resolution No. GEA-2020-02
- 2. Energy Services Agreement

RESOLUTION NO. GEA-2020-02

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE GONZALES ELECTRIC AUTHORITY AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE AN AGREEMENT WITH BODEGA MICROGRID GENERATION, LLC, FOR ENERGY CONSERVATION SERVICES FOR GEA FACILITIES AS DEFINED BY THE ENERGY SERVICES AGREEMENT.

WHEREAS, Article V (Powers) of the "Joint Exercise of Power Agreement Creating the Gonzales Electric Authority" authorizes the Gonzales Electric Authority (GEA) to "plan, develop, acquire, construct, manage, maintain, repair, replace or operate any Public Capital Improvement;" and

WHEREAS, on December 3, 2019, the Executive Director executed a Memorandum of Understanding (MOU) between GEA and Concentric Power to guide the detailed project study for an electric microgrid to serve the Gonzales Agricultural Industrial Business Park; and

WHEREAS, as a result of the work undertaken under the MOU, a tentative agreement has been reached on the terms under which GEA and Concentric Power would fund and develop an electric microgrid for the business park; and

WHEREAS, California Government Code Section 4217.10 to 4217.18, authorizes the GEA to enter into an Energy Services Agreement for the implementation of energy related improvements if the Board of Directors finds that it is in the best interest of the GEA to enter into such Energy Service Contract and that the anticipated cost to the GEA for thermal or electrical energy or conservation services provided by Bodega Microgrid Generation LLC, under the agreement will be less than the anticipated marginal cost to the GEA of thermal, electrical, or other energy that would have been consumed by the GEA in absent of those purchases; and

WHEREAS, the proposed Energy Service Agreement by and between the GEA and Bodega Microgrid Generation LLC, for the implementation of certain energy measures whose cost to the GEA such for thermal or electrical energy or conservation services provided under the Energy Service Agreement will be less than the anticipated marginal cost to the GEA of thermal, electrical, or other energy that would have been consumed by the GEA in absent of the implementation of the improvements under the Energy Service Agreement.

WHEREAS, the proposed project is the approval of an Energy Services Agreement under the provisions of Government Code 4217.12, which provides a streamlined procurement process for renewable energy projects. The approval of an Energy Services Agreement is not a project per §15378 of the California Environmental Quality Act (CEQA) Guidelines. The Energy Services Agreement sets forth the business terms under which one party will produce and sell energy products to another. In and of itself, it does not directly or indirectly result in a physical change in the environment. Additionally, the Energy Services Agreement acknowledges that development of the generating system will require review under CEQA and, accordingly, does not commit GEA to a definite course of action pending such review.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Gonzales Electric Authority hereby authorizes the Executive Director to execute an agreement with Bodega Microgrid Generation LLC, for energy conservation services for GEA facilities as defined by the Energy Services Agreement.

PASSED AND ADOPTED by the Board of Directors of the Gonzales Electric Authority at a regular meeting duly held on the 8th day of September 2020 by the following vote:

AYES:	BOARD MEMBERS:	
NOES:	BOARD MEMBERS:	
ABSENT:	BOARD MEMBERS:	
ABSTAIN:	BOARD MEMBERS:	
		Maria Oranga Propidant
		Maria Orozco, President
ATTEST:		
René L. Mer	ndez, Secretary	