



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by: [Signature] Date: 4/16/21
General Manager

DATE: April 16, 2021
TO: General Manager
FROM: Director of Engineering & Compliance - District Engineer
SUBJECT: Authorize General Manager to Execute a New Power Purchase Agreement (PPA) with Monterey One Water (Subject to Final Review by Legal Counsel)

RECOMMENDATION: That the Board authorize the General Manager to execute a new Power Purchase Agreement (PPA) with Monterey One Water for the District’s generation and transmission of renewable energy to the Advanced Water Purification Facility (Subject to Final Review by Legal Counsel).

BACKGROUND

Providing renewable energy that is generated by the District’s Landfill Gas to Energy (LFGTE) to public water treatment facilities, be it the proposed desalination plant by California American Water or the Advanced Water Purification Facility (AWPF) by Monterey One Water (M1W), has been under discussion with the Board on the order of a decade now. In March 2016 the M1W and MRWMD Boards authorized the execution of a Power Purchase Agreement (PPA) for the District to provide a minimum of 1.8 megawatts (MW) of power to the AWPF at rates generally defined to equal to PG&E Industrial Rate Schedule, E-20 Primary Firm, Winter Part-Peak Energy plus a customer metering charge of \$1,000 per month. The District would also provide an easement across District property to M1W for the purposes that M1W would design, build, own, operate, and maintain the electrical transmission and controls infrastructure for the electrical connection to the AWPF.

Several significant facets have recently changed and the parties have concluded that a new PPA is required to address these changes. The major changes include the following:

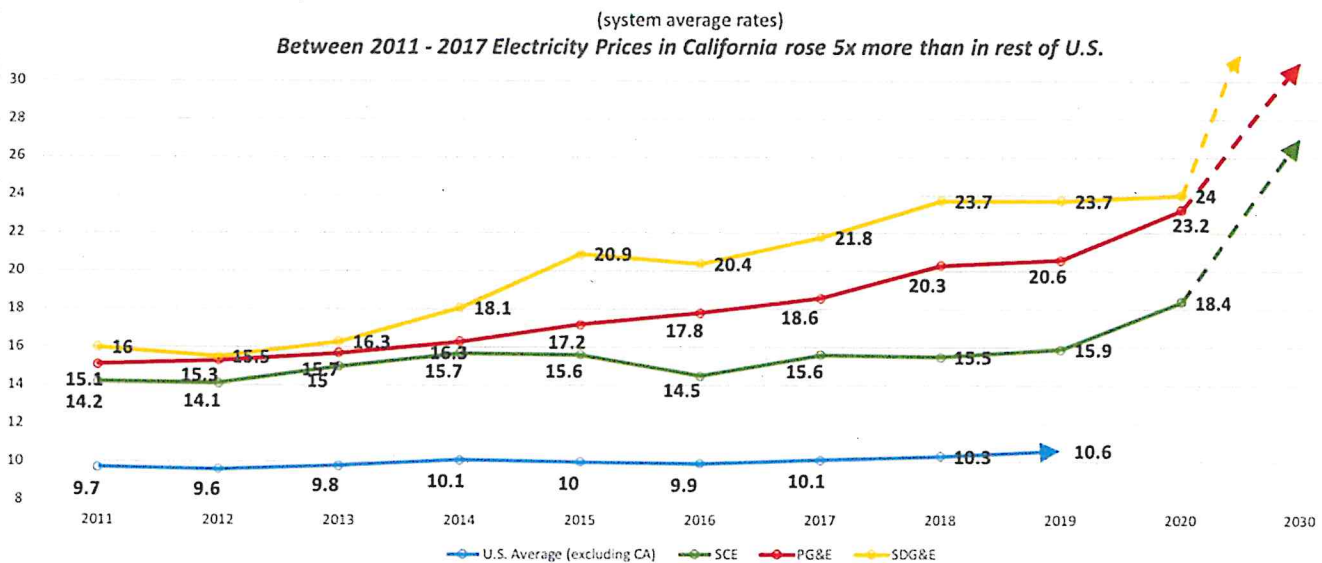
- The switchgear and transmission equipment were anticipated to be designed, constructed, owned, operated and maintained by M1W. The parties have recently agreed that the District will design, construct, own, operate and maintain the project improvements; most of which are located on District property.
- The experienced range of electrical demands are different than the anticipated demands estimated during project planning and used in the original PPA, and thus are also being revised.

District and M1W Staff have been working collaboratively with their common Legal Counsel, Wellington Law Offices, to draft a new version of the PPA consistent with the changes that have occurred and those that have been mutually agreed to by the two agencies.

DISCUSSION

The AWPf has a Design Demand power usage of ~2.5 MW. The Actual Demand power usage, based on historical data taken from March 2020 through February 2021, has been approximately 1.2 MW for the advanced treatment of approximately 3.5 million gallons per day (mgd). At the AWPf’s Phase I full design treatment capacity of 5 mgd, the Actual Demand power usage is expected to be on the order of 1.8 to 2 MW. This closely aligns with the 1.8 MW cited in the 2016 PPA as the minimum amount of renewable energy to be delivered by the District. The parties have agreed to amend the minimum amount to be delivered to 1.2 MW. This is commonly known as a “put or pay” contract condition.

The 2016 PPA indicates an improvement in the current price of electricity sold by the District. The existing agreement indicates that electrical rates would be on the order of about \$0.10 per kilowatt-hour (kwh) and greater. Compare those rates to the approximate \$0.04/kwh that the District has been receiving in recent times and the average cost of about \$0.16/kwh that has been experienced by M1W during the first year of AWPf operation. The 2016 PPA also has a fixed base rate of \$0.075/kwh and a variable, yet declining, rate of peak pricing. The two agencies have subsequently agreed to a fixed rate of \$0.125/kwh for the term of the new agreement. This is commonly considered as a ‘wholesale price’ rate. For illustrative comparison purposes, the following chart of ‘retail prices’ is presented for your information (Agriculture Energy Consumers Association (AECA) article with Sources: 2011-2017 CPUC website; 2018-2020 utility filings; Public Advocates Offices, Electric Rate Trends; CPUC, Utility Costs & Affordability of the Grid of the Future; SCE Customer Briefing).



FINANCIAL IMPACT

The new PPA proposes a fixed pricing rate of \$0.125/kwh for the District's generation and transmission of electricity to M1W's AWWPF. This is an increase of \$0.05/kwh to the base rate in the existing 2016 agreement and is a fairly common 'wholesale rate'. M1W previously paid that same rate to Zero Waste Energy for power generated by the District's Anaerobic Digester Pilot Project. The District recently opened its new EV Charging Stations using a net rate of \$0.125/kwh as the rate that it sells to users of electric vehicle charging station. The fixed rate agreement provides rate consistency that both agencies can rely upon. It is also a rate that staff considers will generate more revenue to the District in the early years compared to the 2016 agreement pricing. While the District anticipates spending on the order of 2 - 2.5 million dollars for the design and construction of the electrical connection to the AWWPF, the anticipated period for a return on investment is three (3) years under the new PPA terms based on the increased revenues forecasted. Given the various 'public benefits' of the project for both public agencies, the capital investment qualifies for use of the District's Bond Funds. The capital spending is proposed to occur primarily in FY21/22 and end in FY22/23 when construction is completed.

CONCLUSION

The District's renewable energy supply to M1W's AWWPF facility for the production of drinking water will have multiple benefits to the communities served by the two agencies. In addition, this collaborative solution will yield long-term sustainable operations of both facilities. Therefore, staff recommends that the Board authorize the General Manager to execute a new Power Purchase Agreement (PPA) with Monterey One Water for the District's generation and transmission of renewable energy to the Advanced Water Purification Facility (Subject to Final Review by Legal Counsel).


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