

Consent Item 10

TO: East Bay Community Energy Board of Directors

FROM: Chris Eshleman, Power Resources Manager

SUBJECT: Portfolio, Risk, and Valuation Management Software with cQuant.IO, Inc.

DATE: September 16, 2020

Recommendation

Adopt a Resolution authorizing the CEO to negotiate and execute an EBCE Consulting Services Agreement with cQuant.IO, Inc. ("cQuant"), for portfolio, risk, and valuation management software services for a 3-year subscription term with annual payments not to exceed \$151,000 in year 1, \$162,000 in year 2, and \$173,000 in year 3 with a one-time configuration and implementation fee of \$75,000 split of two payments of \$35,000 at contract signing and \$40,000 in July 2021. The total contract amount is not to exceed \$561,000.

Background and Discussion

East Bay Community Energy (EBCE) staff have been evaluating how to assess and manage risk associated with its energy portfolio and value long-term power contracts, EBCE staff issued a Request for Proposals (RFP) for an off-the-shelf software solution.

1. Assessment, Review and Selection Process

EBCE staff initiated an assessment of its portfolio, risk, and valuation management needs in Fall 2019, extending into Spring 2020. It was determined that staff would conduct portfolio, risk management, and long-term contract valuation in-house. To accomplish the work, software would be required to assess risks and value potential long-term Power Purchase Agreements (PPA). The software would replace existing Microsoft Excel-based models and reduce the need for consultants.

For the RFP, a scoring rubric was created to objectively score all respondents. Staff issued the RFP via EBCE's RFP email list and additionally posted it to EBCE's solicitation web page. The RFP was open from June 1st, 2020 and closed on July 3rd, 2020 and staff received a total of six responses. The scoring rubric graded and ranked responses based on experience, references, solution alignment, modeling methodology, and cost. After review, two finalists were selected, Ascend Analytics and cQuant.

Staff conducted further scoring assessments of these two finalists, and both scored equally, but staff members participating in the evaluation voted unanimously for cQuant. The following advantages were cited:

- Overall, the cQuant suite of products is more user friendly and allows for easier
 uploading, downloading, and manipulating of data from the models. The interface is
 entirely web-based and allows users to access from anywhere they have internet
 access. After the hands-on workshop, staff unanimously agreed that this was valued
 and cQuant's interface was best.
- cQuant was observed to have better connectivity capabilities, allowing EBCE to access all raw data natively, ensuring that EBCE will be able to integrate with our existing databases, Application Programming Interfaces (API), spreadsheets, and business intelligence platforms.
- cQuant has a modular design that allows for the efficient running of individuals models. Models can be stringed together to create an analytical chain that increases efficiency in commonly run processes.
- cQuant has an error handling system that is easy to understand. When the user inputs data incorrectly, the system will alert the user to where the problem lies. This feature is very helpful because input errors will occur, and other systems fail with little guidance to resolve.
- Cost estimates were provided as part of the RFP response from both providers on the shortlist. While Ascend Analytics had a lower cost (\$202,500 first-year costs vs. cQuant at \$226,000 for a comparable quote), both total costs are within a range of expectations. Staff determined that the premium associated with cQuant was justified given the capabilities and advantages associated with that platform, as described in the points above.

2. Proposed Subscription Services

EBCE staff reviewed and finalized the quote from cQuant. Below are the module components for the package proposed with descriptions:

- Spot Price Simulation simulate hourly and sub-hourly spot prices over a user-defined time horizon by parameterizing a stochastic simulation against historical data along with a liquid traded forward price curve.
- Basis Simulation simulate hourly and sub-hourly basis price spreads over a userdefined time horizon by parameterizing a stochastic simulation against spot price simulation outputs.
- Plant Dispatch Optimization optimize plant dispatch of traditional resources such as natural gas, biomass, biogas and geothermal.
- Advanced Battery Storage Optimization value and optimize storage technology dispatch to simulated power and ancillary services prices while maintaining operational constraints. Used in conjunction with simulated solar dispatch to value solar plus storage contracts.
- Weather and Load Forecasting forecast hourly or sub-hourly load over a user-defined time horizon by parameterizing a stochastic simulation model against historical data.
- ReAssure Renewable Energy Valuation compute the fair market value, forecast future energy production, and understand the risk for renewable energy contracts and production facilities.

- Net Position at Risk Composite generate cash flow at risk (CFaR) and gross margin at risk (GMaR) report for a portfolio of generation assets and financial positions or the individual assets themselves. Compute analytical value at risk (VaR) for a portfolio of financial contracts.
- Retail Pricing add forecasted retail revenue to net position metrics and asset valuation reporting.

EBCE staff will retain five (5) user licenses to cover staff in Power Resources, Local Development, and the Data and Analytics teams.

Fiscal Impact

Subscription term is for 3 years with annual payments, including implementation, not to exceed \$181,000 in year 1, \$197,000 in year 2, and \$173,000 in year 3. The total contract amount is not to exceed \$561,000. EBCE may terminate for convenience within the first year and may additionally reduce the number of active users at any point for a reduction in annual fees.

Attachments

A. Resolution Authorizing the CEO to Negotiate and Execute a Consulting Services Agreement with cQuant.io, INC.

RESOLUTION NO. A RESOLUTION OF THE BOARD OF DIRECTORS

OF THE EAST BAY COMMUNITY ENERGY AUTHORITY AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO NEGOTIATE AND EXECUTE A CONSULTING SERVICES AGREEMENT WITH CQUANT.IO, INC. TO PROVIDE SERVICES FOR THE USE OF A PORTFOLIO, RISK AND VALUATION MANAGEMENT SOFTWARE PLATFORM

WHEREAS The East Bay Community Energy Authority ("EBCE") was formed as a community choice aggregation agency ("CCA") on December 1, 2016, Under the Joint Exercise of Power Act, California Government Code sections 6500 *et seq.*, among the County of Alameda, and the Cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Piedmont, Oakland, San Leandro, and Union City to study, promote, develop, conduct, operate, and manage energy-related climate change programs in all of the member jurisdictions. The cities of Newark and Pleasanton, located in Alameda County, along with the City of Tracy, located in San Joaquin County, were added as members of EBCE and parties to the JPA in March of 2020.

WHEREAS there is a need for EBCE to subscribe to and operate a Portfolio, Risk and Valuation Management software platform to meet Power Resources, Local Development, and Data and Analytics objectives;

WHEREAS EBCE staff has conducted a thorough assessment of EBCE's requirements for a Portfolio, Risk, and Valuation Management software platform and evaluated several commercially available off-the-shelf software solutions via the issuance of a formal all-source Request for Proposals;

WHEREAS the services offered by cQuant.IO, Inc. was determined to be the best fit to meet the current and future needs of EBCE:

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The CEO is hereby authorized to negotiate and execute an EBCE Consulting Services Agreement to subscribe to cQuant.IO, Inc. services to establish a Portfolio, Risk and Valuation Management Software Platform for a three (3) year subscription term with annual payments not to exceed \$151,000 for the first year, \$162,000 for the second year, and \$173,000 for the third year, with a one-time configuration and implementation fee of \$75,000 split of two payments of \$35,000 at contract signing and \$40,000 in July 2021. The total amount of the Agreement is not to exceed \$561,000.

ADOPTED AND APPROVED this 16 th day of September 2020.
Dan Kalb, Chair
ATTEST:
Stephanie Cabrera, Clerk of the Board