

Mojave Water Agency

DATE: August 11, 2016

TO: Board of Directors

FROM: Kirby Brill, General Manager

BY: Darrell Reynolds, Director of Engineering

SUBJECT: CONSIDER AUTHORIZATION FOR NLINE ENERGY TO PROVIDE ADDITIONAL PROFESSIONAL ENGINEERING SERVICES FOR THE FINAL DESIGN OF THE DEEP CREEK HYDROELECTRIC PROJECT

RECOMMENDATION

Staff recommends that the Board of Directors consider approval of an authorization for NLine Energy to provide Additional Professional Engineering Services for the Final Design of the Deep Creek Hydroelectric Project.

PREVIOUS CONSIDERATION BY COMMITTEE/BOARD OF DIRECTORS

- Engineering & Operations Committee Meeting – February 10, 2009: The Committee discussed and recommended to the Board the authorize a feasibility study to RBF (prepared by R.W. Beck) for the Hydroelectric Project.
- Board of Directors Meeting – February 26, 2009: The Board discussed and approved the authorization of a feasibility study to RBF (prepared by R.W. Beck) for the Hydroelectric Project.
- Personnel, Finance & Security Committee Meeting – September 20, 2011: The Committee discussed and recommended to the Board the adoption of Resolution No. 938-11 regarding the intention to issue tax-exempt bonds for the Hydroelectric Project.
- Board of Directors Meeting – October 13, 2011: The Board discussed and adopted Resolution No. 938-11 regarding the intention to issue tax-exempt bonds should the Agency move forward with construction of the Hydroelectric Project.
- Board of Directors Meeting – November 8, 2011: The Board discussed and authorized additional services to SAIC (formerly R.W. Beck) for the SCE application phase of the Hydroelectric Project.
- Engineering & Operations Committee Meeting – October 9, 2012: The Committee discussed the results of the SIS Report from SCE application and the next steps if the Agency was to move forward with the Hydroelectric Project. The Committee did not approve moving forward with the Project.

- Engineering & Operations Committee Meeting – October 14, 2014: The Committee discussed changes to the law and other SCE requirements that will effect development of a hydroelectric project at Deep Creek. The professional services agreement with NLine Energy to proceed with engineering services to support a new application to SCE for the Deep Creek Hydroelectric Project was discussed.
- Board of Directors Meeting – November 6, 2014: The Board discussed the Deep Creek Hydroelectric Project and continued the item until the next Board meeting after the next Personnel, Finance & Security Committee Meeting to allow further discussion at the Committee.
- Personnel, Finance & Security Meeting – November 18, 2014: The Committee discussed the Deep Creek Hydroelectric project revenue projections.
- Board of Directors Meeting – December 11, 2014: The Board discussed the financial projections of a proposed hydroelectric turbine at Deep Creek. The Board approved a professional Services contract for NLine Energy to produce a 50% design and submit an interconnection Application with SCE.
- Engineering & Operations Committee Meeting – July 12, 2016: The Committee reviewed the 50% design, cost estimates, SCE Interconnection cost, and financial projects while considering entering into Interconnection Agreements with SCE. The Committee discussed NLine Energy's Phase II additional engineering services contract for final design through Bid Award. The Committee recommended these to the Board for consideration.

BACKGROUND AND ANALYSIS

Project Description:

The Deep Creek Hydroelectric Project is located at the existing Flow Control Facility just south of the Central Operations Facility on Deep Creek Road in Apple Valley. The proposed hydroelectric project will be constructed as a 20 cfs, 0.82 MW, 2 nozzle horizontal pelton turbine with induction generator powerhouse facility just east of the existing 30" PRV vault. Maximum annual flow through the Turbine at 20 cfs is 14,500 AF. SCE interconnection facilities will be constructed to the site.

Actions by MWA to date:

NLine Energy has completed the 50% design and report, processed and received the FERC exemption determination, completed and filed the CEQA notice of exemption, completed the SCE interconnection application and received back SCE interconnection Report with Interconnection costs, and has received from the SCE interconnection Agreement & the Interconnection Facilities and Financing Agreement.

NLine Energy Professional Services Proposal:

NLine Energy (ACWA preferred provider) provided professional services for the Phase I, 50% design of the Deep Creek Hydroelectric Project. The tasks included in the Phase I services were Initial investigation and technical memorandum, 50% design report &

plan, FERC Notice of Intent application package, CEQA IS/MND package & filing, SCE Interconnection application & supporting materials.

Staff has asked NLine Energy to provide a Phase II engineering design proposal. The Tasks include Final design & preparation of bid & construction documents, SCE electrical interconnection coordination/engineering, Continuing regulatory support services, Bidding & procurement support services, Continuing project management services & Financing /grant application support services. The cost proposal for these Phase II services is \$257,600. These professional engineering services will be through bid award.

Final Decisions to Construction the Deep Creek Hydroelectric Facility:

With receiving the SCE interconnection response/report and the interconnection costs the total project costs can be evaluated and the Board will determine whether to enter into the SCE interconnection agreements. If the Board decides to enter into these SCE Agreements, then MWA will need to complete the final designs in preparation for bidding out the construction and procuring the turbine and generator. The Board will be asked for authorization to bid this project. The final decision point to continue this project by the Board will be the award of a construction contract or authorization for procurement of the turbine & generator. Prior to award of the construction /procurement contracts, staff will present to the Board, the NLine Energy Phase III professional engineering services proposal for services through construction, startup & testing, and commissioning of the Deep Creek Hydroelectric facility.

FISCAL IMPACT

This authorization request for NLine Energy Phase II professional engineering services of \$257,600 is within the approved 2016/17 Capital Budget for the Deep Creek Hydroelectric Project.