

December 15, 2022

Mr. Karl Hagerman
Petersburg Municipal Power & Light
PO Box 329
Petersburg, AK 99833

Subject: Blind Slough Hydro Project Upgrades
Re: General Construction Contract Bid Evaluation and Recommendation

Dear Karl,

On December 12, 2022, the bid evaluation and recommendation process began for the general construction contract for the refurbishment of the Blind Slough Hydroelectric Project. This Work includes the removal of the old equipment and installation of new generating equipment, the demolition of the lower 150 feet of the original penstock, the construction of a new penstock with two new thrust blocks, construction of a hatchery flow release facility at the dam, and the construction of a new powerhouse bypass system and other related work. Three bidders submitted proposals as required by the bid documents issued by the Engineer, McMillen, Inc. (McMillen). All three bids were inspected and found to be complete (bid bond, etc.). The attached bid tabulation sheet documents show that these bids were completed and included the required information. It can also be noted that the three bidders were present at the mandatory job walk.

Table 1 summarizes the bids. The apparent low bidder is the MCG/Dawson Joint Venture (JV). Note that the MCG/Dawson JV provided a bid in its sealed envelope that was then modified by email prior to the bid opening resulting in a bid of \$5,692,000, note this does not include the optional bid item (installation of OWNER furnished armored fiber optic cable).

The Engineer provided the OWNER an opinion of probable construction cost. This cost estimate was developed based on the 100% design of the project and is consistent with a Class 2 level estimate (American Association for the Advancement of Cost Engineering). A Class 2 estimate is expected to have a range from -15% to +20%. The Engineer's Estimate¹, which includes the OWNER procured equipment but no other OWNER costs (engineering costs, permitting fees, etc.), estimated the probable construction cost will be between \$8,071,000 and \$10,761,000 in 2022 dollars. The Engineer's estimate of probable construction cost includes the optional bid item for the installation of the OWNER furnished armored fiber optic cable. The Engineer's estimate for the construction contract was \$6,665,400.

¹ McMillen, LLC Technical Memorandum dated October 13, 2022: 100% Design – Opinion of Probable Construction Cost Estimate

Table 1. Summary of Bids

		MCG/DAWSON JV			KNIGHT CONSTRUCTION	STURGEON ELECTRIC
BID ITEM #	DESCRIPTION	AMOUNT	MODIFICATION	BID	AMOUNT	AMOUNT
–	TOTAL	\$18,000,000.00	\$ (12,308,000.00)	\$5,692,000.00	\$ 7,769,749.00	\$14,631,070.12
Optional Bid Adder Price Items						
1	Install OWNER furnished new fiber optic cable from dam to powerhouse.	\$1,000,000.00	\$(948,000.00)	\$52,000.00	\$195,735.00	\$281,753.46
Unit Prices						
1	Rock excavation	\$1,000.00	\$750.00	\$1,750.00	\$2,500.00	\$2,640.00
2	Common excavation	\$1,000.00	\$(978.00)	\$22.00	\$33.00	\$33.00

MCG/Dawson JV Bid Review

The McMillen team (Joe Carson, Matt Lawson, Greg Clark, and Don Jarrett) reviewed the MCG/Dawson JV (Dawson) bid. Dawson submitted its sealed envelope in accordance with the requirements of the Instructions to Bidders (Specification Section 00 23 13). Modifications to the sealed bid were submitted electronically in a timely manner; the bid was updated and modified as permitted by Addendum 6. There are the following three relevant documents:

- MCG-DCI Qualifications
- Submitted Bid Documents
- MCG-DCI Bid Modifications

Bid Evaluation

Below is a summary of the requirements for the proposal. A detailed description of the requirements are included in the Information to Bidders and the Bid Proposal.

Section A: The Instructions to Bidders requires the Bid Proposal to include the following:

1. Describe Bidders approach to (i) install a new dam valve house bypass pipe to allow the release of hatchery flows during construction, (ii) install temporary erosion and sediment controls for ground disturbing work, (iii) demolish and remove old penstocks and supports, (iv) install the new penstock pipe and powerhouse bypass system in such a manner to integrate that

equipment fully and satisfactorily complies with the Project specifications, (v) perform other repairs to the existing penstock, (vi) demolish and remove the existing powerhouse and substation equipment and foundations, (vii) modify the tailrace pipe, (viii) prepare the powerhouse foundation for the new OWNER furnished and CONTRACTOR installed equipment, (ix) perform installation and commissioning of the OWNER furnished turbine-generator and related equipment all under the oversight of the turbine-generator supplier technician, (x) perform final grading and install permanent erosion and soil control measures, and (xi) perform final site cleanup.

2. Describe the proposed construction sequence with a detailed Project construction schedule. The proposed construction sequence and schedule is a significant part of the evaluation criteria. The supply of water to the Crystal Lake Fish Hatchery, operated by Southern Southeast Regional Aquaculture Association (SSRAA), is a major requirement of the Work of the Contract. Normally water is supplied from the Project tailrace directly to the hatchery. When the Project is shut down for the Work of the Contract, the normal supply of water to the hatchery will be temporarily discontinued. Prior to that shutdown, the CONTRACTOR will construct a bypass at the dam to supply water to the hatchery using the Crystal Creek diversion reach. The OWNER would like to minimize the time that the normal supply from the tailrace is stopped. SSRAA hatchery production risk increases after August. The OWNER would like the flow to return to the hatchery from the tailrace (using the powerhouse bypass system) no later than August 1, 2023.
3. Each Bidder's proposed approach to the Work will be evaluated based on cost, the above hatchery schedule issues, quality, and safety. Each Bidder's proposed approach to ensure the proper, seamless, and timely resumption of hatchery flows using the powerhouse bypass system will be an evaluation factor. The timely installation of the turbine-generator equipment will similarly be evaluated based on schedule, cost, and safety. Bidder will consider the estimated delivery date of the new penstock and powerhouse bypass system materials, the turbine generator, and ancillary equipment to ensure that these components will be installed immediately upon delivery to the Project site.

Section B: The Bid Proposal (Specification Section 00 24 13) requires the following information:

1. Provide a general description of the Bidder's company, including date formed, types of projects performed, and overall size of the firm.
2. Provide general information on the financial condition of the Bidder, including gross income for the previous three years and confirmation by the Bidder's bonding agent that bonds can be provided as required in these bid documents.
3. Provide one financial reference from a financial institution familiar with the Bidder.
4. Submit references including names, addresses, phone numbers, and email addresses for which the Bidder provided services on similar projects or installations that indicate the Bidder's capability to construct a project such as this one. Include construction and installation experience of similar projects. Comparable contracts should include the following:
 - a. Contract value of at least \$5 million
 - b. Major structures for water resource, pipelines, or water navigation

- c. Installation and startup of similar projects to that specified

If necessary, to cover the above criteria, up to six reference projects may be submitted.

5. Submit a detailed schedule for performing the Work and a description of the sequence of Work activities (Work Plan). Provide a detailed description of methods and procedures for major activities, particularly installation of steel pipe and turbine-generator equipment installation.
6. Submit a worker safety plan.
7. Submit documentation of the Bidder's safety record on recent projects.
8. Submit a list of major equipment and temporary facilities that the Bidder anticipates using, such as cranes, scaffolding, etc. State whether Bidder owns or will lease equipment, and whether Subcontractors will be used for the procurement of this equipment.
9. Submit an organizational chart and resumes for Bidder's project team. Bidder's project team should include the following key members:
 - o Home office project manager
 - o On-site project manager
 - o Project superintendent
 - o Office engineer or assistant project manager
 - o Equipment installation superintendent or lead installer
- a. Each of the team members listed above shall have at least eight years of engineering or construction/installation experience, including at least four or more years in a position comparable to that proposed for this Project. Include names, titles, and phone numbers for two client references for each key team member. In addition to needed technical skills and experience, the OWNER desires professionals who are particularly effective communicators and collaborators. These professionals must have demonstrated the ability to work well in a construction environment where rapid decision-making, creative problem-solving, and excellent planning and scheduling skills are required. Moreover, the ability to closely coordinate with OWNER's Project Representative and design is required. The Bidder must provide any specific credentials, training, or expertise each key project member possesses to demonstrate a collaborative, problem-solving project implementation approach for this type of project.
- b. The proposed team shall not be modified without the written authorization of the OWNER.
- c. The OWNER intends to confirm in its Agreement that the key project staff proposed by the CONTRACTOR will be obligated to perform on the project team, and that the CONTRACTOR will provide management and financial commitments to assure that the key project team members complete their project responsibilities without replacement by others, except with the consent of the OWNER.

For the Bidder's proposed project team, submit a list of projects that demonstrate the following:

- i. Experience with the installation of large diameter pipelines
- ii. Experience with the installation and startup similar to this Project

iii. Experience with hydroelectric project work

Note that it is desirable that these projects are ones where the proposed project team has worked on together. This is not a requirement, but experience of the proposed team, as a team on other projects, is preferred. Provide names, titles, and phone numbers of references for each project listed.

10. Provide Subcontractor experience. Provide two project references for comparable work for all listed in Part 1.11 of the Bid Proposal. For each such Subcontractor, provide the name of the project, a narrative description identifying the scope of the Subcontractor’s work, dollar value, owner, owner contact name, email, and telephone number. If these portions of the Work are not subcontracted, the above references should be provided as part of the Bidder’s qualifications in addition to the references required above.

Table 2 summarizes the review of the proposal requirements. As shown in the table, all requirements have been satisfied.

Table 2. Summary of Proposal Requirements Compliance

Evaluation Criteria and Proposal Requirements To Be Verified	Verified?	Comments
Business license and contractor’s license	Yes	
Attended mandatory job walk	Yes	
Bid bond	Yes	
Instructions to Bidders	Yes	
A.1 Construction approach	Yes	
A.2 Construction sequence	Yes	
A.3 Compliance with hatchery and turbine generator install schedules	Yes	
Bid Proposal	Yes	
B.1 Description of company	Yes	
B.2 Financial condition bidder	Yes	
B.3 One financial reference	Yes	
B.4 References for similar projects, including information related to contracts with a value of at least \$5 million, water resource projects, install/startup of similar equipment	Yes	
B.5 Detailed schedule	Yes	
B.6 Worker safety plan	Yes	Example
B.7 Bidders safety record	Yes	No recordable injuries since 2014
B.8 List of major equipment	Yes	
B.9 Organization chart with home office project manager, on-site project manager, project super, office engineer or assist project manager, and	Yes	

Evaluation Criteria and Proposal Requirements To Be Verified	Verified?	Comments
equipment install super. Each team member is to have eight years' experience. Include two client references for each.		
B.10 Subcontractor experience: Provide two references, and provide project name and details.	Yes	Details provided for electrical sub and civil excavation sub

The Bidder guaranteed schedule was reviewed; see Table 3. As shown in the table, some of the guaranteed dates are a little later than the OWNER target dates, but these guaranteed dates are acceptable for the overall project schedule.

Table 3. Bidder Guaranteed Schedule

Milestone	OWNER Target Date (mo/day/yr)	Bidder Guaranteed No. of Calendar Days from Notice to Proceed (number of days)	Guaranteed Date (based on number of days guaranteed)
1. Mobilize to site and start work.	May 1, 2023	106	May 3, 2023
2. Shut down hatchery water for the Project (after hatchery flow has been spilled for 7 days at the dam).	May 31, 2023	148	June 14, 2023
3. Complete penstock and powerhouse bypass work such that the spill at the dam can be stopped and hatchery flows can be delivered through the penstock.	September 11, 2023	251	September 25, 2023
4. Work under the Agreement is complete enough, and the turbine/generator system is ready to begin startup and commissioning Work.	September 12, 2023	252	September 26, 2023
5. Work under the Agreement is substantially complete, and the powerhouse is generating electricity for the use of the OWNER.	October 26, 2023	296	November 9, 2023
6. Work under this Agreement is 100% complete (including punch-list items, demobilization, and project closeout).	December 1, 2023	332	December 15, 2023

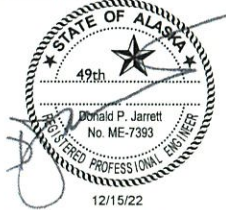
Recommendation

Based on our review of the Dawson proposal, we find it to be fully compliant with the requirements of the bid documents. The Dawson bid is clearly the low, responsive bid. The Engineer's estimate for the construction work, \$6,665,400, is expected to have a range of -15% to +20%, resulting in a possible range from \$5,665,590 to \$7,998,480. The Dawson base bid, at \$5,692,000 (this amount does not include the optional bid item), is within the range of expectations of the cost for this Work. We also recommend that OWNER accepts the optional bid item.

We recommend that Dawson JV be notified that they are deemed to be the low and responsive bidder and that PMP&L intends to recommend an award of a contract to them at the Borough Assembly meeting in early January.

Please let us know if you have any questions.

Sincerely,



Don Jarrett, P.E.
Project Manager

cc: File
Encl.