



# County of Los Alamos

## Council Meeting Staff Report

March 7, 2017

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|---------------------------------|--------------|
| <b>Agenda No.:</b>              | 4.A          |
| <b>Indexes (Council Goals):</b> | BCC - N/A    |
| <b>Presenters:</b>              | James Alarid |
| <b>Legislative File:</b>        | 9158-17      |

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### Title

Approval of Service Agreement AGR17-938 with Voith Hydro, Inc. for Field Services and Approval of Purchase of Mechanical Components from Voith Hydro, Inc, both for the Repair of the El Vado Hydroelectric Plant Shaft Seal

### Recommended Action

**I move that the Board of Public Utilities Approve Service Agreement AGR17-938 with Voith Hydro, Inc. for Field Services in the amount of \$120,000.00, plus applicable gross receipts tax, in a form acceptable to the County Attorney. I further move that the Board of Public Utilities authorize the Utility Manager to approve Proposal MB2-437 from Voith Hydro, Inc. for purchase of Mechanical Components for Repair of the El Vado Hydroelectric Plant Shaft Seal in the amount of \$52,117.00, plus applicable gross receipts tax.**

### Staff Recommendation

Staff recommends that the Board approve as presented.

### Body

In May 2016, during the final commissioning of the refurbished El Vado turbine and generator, the turbine shaft seal experienced excessive leakage. Commissioning was terminated as the leakage overwhelmed the unit's head cover pumps leading to the unit's shutdown due to head cover flooding. Since that time the contractor and the county have been in dispute as to which party is responsible for the repair of the shaft seal. Per the contractual dispute resolution process, the contractor has appealed to the County purchasing agent which resulted in the County purchasing agent concluding the responsibility for the repair is the contractors. The contractor appealed the purchasing agent's decision to the Los Alamos County Council. On November 9-10, 2016, hearings were held in front of the County Council to hear the contractor's appeal. The council concluded that the contract entered into between the contractor and Los Alamos County is a performance contract, and the County assessing liquidated damages or the County debarring the contractor were not appropriate at that time. The council direction was to have the parties attempt to resolve the dispute, considering their determination that the contract is a performance contract, and complete the contract.

The parties have been in settlement discussions since January 2017. A settlement has been tentatively reached pending review and approval of the party's legal representation.

The contractor proposed a repair that was a complete redesign of the manufacturer's original seal design that had operated maintenance free for 27 years. The contractor's proposed solution also include a filtered water and air compressor system that would require regular maintenance. Furthermore, the proposed solution would eliminate the redundant capabilities of the two headcover pumps, resulting in reduce reliability of the manufacturer's design. The proposed solution would have been an inferior application from the manufacturer's design.

The technical expertise on the shaft seal during the project lies with the contractor's subcontractors. The County was never provided the opportunity to communicate directly with the technical experts

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and information received was vague. The County chose to consult with the manufacturer of the turbine, Voith Hydro, Inc., on a solution to repair the leaking seal. Voith Hydro, Inc. reaffirmed that the manufacturer's original seal design should not be changed. At the request of the County Voith has evaluated the seal and provided a recommendation to complete the seal replacement. Proposal MB2-437 is to manufacture and deliver to the El Vado site the necessary replacement mechanical components to make the seal repair.

The County also requested Voith provide field supervision to the refurbishment contractor and County during the seal repair, if a settlement is reached and the refurbishment contractor completes the work. In addition, the County requested Voith provide a proposal to complete the seal repair in its entirety should the County not be able to execute a settlement with the refurbishment contractor. AGR17-938 is a service agreement with Voith Hydro, Inc. that will allow the County to hire Voith Hydro, Inc. to provide the field supervision only during the seal repair, complete the seal repair in its entirety and have an agreement in place should the County require additional services from Voith Hydro Inc.. The cost to provide field supervision, as the refurbishment contractor completes the repair, is estimated to cost \$16,000. The cost to complete the seal repair in its entirety is estimated to cost \$34,000.

### **Fiscal and Staff Impact**

The cost of the seal repair will be between \$64,000 and \$87,000. This amount is below the remaining approved project contingency. The cost to assess the seal failure proposed by the refurbishment contractor was in excess of \$92,000. This amount did not include performing the repair.

### **Attachments**

A - Proposal MB2-437 Voith Hydro, Inc.

B - AGR17-938 Voith Hydro, Inc.