



County of Los Alamos

Council Meeting Staff Report

September 15, 2021

Agenda No.: 6.F.
Indexes (Council Goals): DPU FY26 - 1.0 Provide Safe and Reliable Utility Services
Presenters: James Alarid
Legislative File: AGR0785-21

Title

Ratification of Expenses for Emergency Replacement of Motor for Otowi Well #4

Recommended Action

I move that the Board of Public Utilities Approve Expenses for Emergency Replacement of Motor for Otowi Well #4 in an Amount Not to Exceed, \$130,000, plus applicable Gross Receipts Tax.

Staff Recommendation

Staff recommends that the Board approve as presented.

Body

In June of 2021 Otowi Well #4 was taken out of service due to excessive noise believed to be from a worn thrust bearing in the motor. The motor was removed and sent to an electric motor shop to diagnose the problem. The motor was disassembled and inspected in the motor shop and the bearings were confirmed to be worn and in need of replacement. In addition, the stator and rotor of the motor were found to be contaminated with an oil/bearing-dust crust. The crust combined with the operating heat has begun to delaminate the motor windings. Photos of the motor condition are provided in Attachment D. The motor windings require either rewinding or replacement. A quote was obtained to refurbish the existing motor and to replace the motor with a new one. The cost to replace the motor was \$18,000 higher than the cost to refurbish. The decision was made to replace the motor since the 30-year old motor has already been rewound once before in 2002. A purchase order has been issued to the motor shop to proceed to manufacture a new motor. The new motor is scheduled to be installed before next spring when water demands increase. Staff estimated the expense to install the new motor at \$20,000 since it requires a custom coupler to be built and balancing.

Due to the urgency to bring the well back online, an emergency purchase was requested by the DPU, and authorized by the purchasing manager to purchase the new motor. We are seeking approval from the Board of Public Utilities (BPU) for expenses associated with replacement of the well motor which normally require approval by the BPU since the cost is above \$50,000. BPU's approval will demonstrate a clear and transparent record of this emergency procurement.

Alternatives

The emergency procurement of the new motor is in compliance with the County's procurement code and therefore, there is no other alternative to present.

Fiscal and Staff

The motor replacement will be paid for by operations funding which has been budgeted in FY2022 for major equipment replacement. A summary of the estimated replacement cost is provided below.

\$ 7,402.50	Alpha Southwest Removal of Motor (Attachment #1)
\$ 6,902.14	Lane Electric Diagnose Motor (Attachment #2)
\$ 93,070.60	Lane Electric Motor Replacement (Attachment #3)
\$ 20,000.00	Alpha Southwest Install New Motor (Estimate, awaiting formal quote)

\$127,375.24 Estimate Total Cost (excluding NMGRT)

Attachments

- A - Alpha SW Quotation - Remove Existing Motor
- B - Lane Electric Invoice - Diagnose Existing Motor
- C - Lane Electric Quotation - Furnish New Motor
- D - Motor Interior Photos