

# Staff Report

**TO:** Board of Directors

**FROM:** Gabe Aronow, PE, Director of Engineering  
Peter Wade, PE, Director of Power Systems  
Adrian Schneider, PE, Senior Engineer

**DATE:** June 24, 2025

**SUBJECT:** **Contract for the French Dam Hydraulic Line Replacement &  
Inlet Gate Actuator Refurbishment Project (Project No. C0020)  
(Consent)**

***ENGINEERING***

---

---

**RECOMMENDATION:**

Award a construction contract with Associated Underwater Services (AUS) for \$167,543 plus a 10% contingency totaling \$184,297 for the French Dam Hydraulic Line Replacement & Inlet Gate Actuator Refurbishment Project (the Project) and authorize the General Manager to execute the necessary documents and any contract change order within the contingency amount.

**BACKGROUND:**

The French Dam is the District's oldest reservoir (166 years old) and the 5<sup>th</sup> largest in capacity (13,840 acre-feet). In 1937 a 42" x 42" slide gate was installed at the toe of the upstream face of the dam, connected to a hydraulically operated ram (actuator). Hydraulic lines connect the ram to an operator's structure at the top of the dam. The slide gate is operated by pumping hydraulic fluid by hand from the top of the dam, which in turn operates the submerged actuator that is connected to the slide gate. Original hydraulic lines were 1¼" diameter steel pipe. Over time the hydraulic lines started to leak.

In 2004 the steel hydraulic pipes were replaced. They did not hold pressure, and smaller hydraulic hoses were pulled through the pipe to be used instead. Over the last 20 years the effort to raise the gate has become increasingly difficult. The hydraulic hoses installed in 2004 are too small in diameter, and the original 89-year-old hydraulic ram may be worn, allowing hydraulic fluid to bypass its seal.

An exploratory dive was conducted in October 2025 by AUS with the anticipation that detailed observations and measurements taken at that time would provide the

District with enough information to fabricate a new actuator off site at a mechanical shop. The dive conditions did not allow for gathering the necessary information needed for fabrication. The project was then requoted to get a revised cost for the anticipated work in 2026.

The 2026 work includes two dive events. The first event is from July 20<sup>th</sup> to 24<sup>th</sup>, at which time the hydraulic lines will be replaced with new ones, and the actuator will be removed and taken off site. The District will have a mechanical shop measure the existing ram and build a new ram matching the existing dimensions. A second dive event from October 12<sup>th</sup> through 15<sup>th</sup>, 2026 will include installation of the new actuator, connecting to the new lines, and then tested.

A request for quotes was sent to four diving companies on April 27, 2026. The following four quotes were received by May 20, 2026:

<b>Contractor</b>	<b>Quote</b>
AUS	\$167,543
Big Valley Divers	\$239,380
JF Brennan	\$251,588
Ballard Marine Construction	\$1,820,980

The cost differences between AUS and the next two higher bidders is due to AUS's use of a specialty breathing gas (NITROX) that will extend their dive times by three times. AUS conducted the last dive in October 2025 and has the most recent familiarity with the dam and actuator.

Staff recommends that the Board award a construction contract with AUS for \$167,543 plus a 10% contingency, totaling \$184,297.

**BUDGETARY IMPACT:**

The 2026 Project budget is \$250,000. The estimated cost to build a new actuator is \$30,000 and is not included in the scope of this contract.

AS

Attachments: None