

KERR PROJECT ACQUISITION: DUE DILIGENCE & STRUCTURAL EVALUATION

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In September 2015, the Confederated Salish and Kootenai Tribes' corporation, Energy Keepers, Inc. (EKI), plans to acquire the Kerr Hydroelectric Project, from the current owner PPL Montana.

Through provisions set forth in the current Federal Energy Regulatory Commission (FERC) license for the Kerr Project, CSKT has the exclusive and unilateral right to acquire the Kerr Project from PPL Montana, CSKT's current co-licensee. The sole action required to effectuate conveyance is payment of the conveyance price by CSKT to PPL Montana., The conveyance price is to be calculated from the actual cost of construction of the project (including improvements and upgrades) less depreciation. CSKT and PPL Montana have not been able to reach agreement on the amount of the conveyance price and are currently presenting their dispute to an arbitration panel which will issue a ruling on the matter by March 5, 2014..

The Tribes fought hard for the right to acquire the Project when the last FERC license was issued in 1985. For several decades, this opportunity has been seen by successive Tribal Councils as a primary option for CSKT's future economic development and self-sufficiency. Acquisition of the Kerr Project is also an important way for the Tribes to manage and reclaim natural resources that are critical to the Salish, Kootenai and Pend d'Oreille peoples of the Flathead reservation.

Today, only two years from the opportunity to own and operate the Kerr Project, EKI, the Tribally owned corporation responsible for the management of the Kerr Dam acquisition process, is in full swing-- evaluating, planning and preparing for the conveyance of this major hydroelectric facility.

One fundamental step toward conveyance was getting a sense of the structural condition of the Kerr Project Works, including the impoundment facility (i.e. dam), flood control components (i.e. spillway gates and spillway), the generating facility (i.e. water supply tunnels and powerhouse), the transmission facilities, and other support facilities (e.g. roads, bridges, shop, offices, staff houses, etc). Such a fundamental condition assessment is common business practice undertaken as a "due diligence" investigation of high value business assets prior to the agreement for purchase. Considering how significant this investment is for CSKT, then the due diligence condition assessment of the Kerr Project structures was of paramount importance before finally deciding to proceed with the purchase.

The Kerr Project Works are made up of thousands of individual parts. The parts must integrate structural, electrical, mechanical, and natural systems. The parts range from

huge to microscopic in scale. All of these parts have to function in a way that integrates seamlessly with the regional power grid to assure stable operations of systems both inside and outside of the Kerr Project boundaries. All of the Project's large structures have to be stable enough to assure public safety in event of a natural disaster. As a result, the complexity and scale of performing a due diligence condition assessment of the Kerr Project structures was a daunting task. Recognizing that, EKI sought a consultant with deep expertise in hydroelectric plants for evaluating the Kerr Project Works. MWH Americas (MWH), a large, premier engineering firm that specializes in hydropower engineering, construction and management consulting, was chosen for the task.

MWH is an industry leader in hydropower and water system infrastructure and water-related engineering, and consistently ranks in the top three firms in the United States for hydropower and water engineering. Based in the U.S., there are 7,500 employees within MWH, in over 130 offices, in 31 different countries throughout the world.

The company has performed hydropower engineering since 1920; has designed over 120 new hydropower projects that total over 70,000 megawatts; and acted as engineer for over 300 hydropower rehabilitation projects that total over 30,000 megawatts.

MWH's team for assessing Kerr Project's structures included 120 years collective hydropower engineering experience between three engineers, with over 75 condition assessments completed to date, on projects primarily located in the Pacific Northwest. Stan Hayes, vice president, project manager and lead mechanical engineer, led the MWH Kerr Project team. Hayes' specialty is in generating equipment, and for the last 20 years of his 35-year career, he has focused on Pacific Northwest hydropower facilities.

"Kerr Dam is an important and complex facility with high value equipment," said EKI Board Member Thomas Babineau. "With this being such an important investment for the Tribes, it is prudent for us to engage experts who have years of experience in vetting hydroelectric equipment and who can provide critical advice on the condition of the dam."

After gaining permission by the current owner, PPL Montana, the MWH team was allowed to investigate the Kerr Project Works, including the dam; spillway; spillway gates; unit intakes; water supply tunnels (also called penstocks); powerhouse and generating units; access road, bridge and tunnel; switchyard; and other miscellaneous project buildings.

The MWH engineering team studied each component and developed a thorough comprehensive report on the condition of the Kerr Project Works. In addition the MWH team used information from FERC Safety Inspections conducted annually by FERC, and the FERC Project Works Inspections conducted every five years, by external engineering consulting firms. The most recent of the more intense five-year inspections for Kerr Dam was conducted in 2011.

Some of the major findings of the MWH condition assessment include:

- In the 1980's, FERC mandated that all licensed hydropower projects must be capable of safely passing a calculated estimated probable maximum flood. Kerr Dam meets this mandate without any modifications.
- Kerr Project records indicated a series of timely renewals and replacements of various components, including turbine overhauls; generator rewinds; transformer replacements; unit and plant control replacements; and spillway erosion repair.
- The Kerr Project Works are being well maintained, and the typical industry inspections, maintenance and tests are being performed regularly, ultimately providing reliability and longevity.
- In summary, the MWH assessment rated the Kerr Project structures, equipment and systems to be in good to very good condition.

“Having MWH evaluate the components of the Kerr Project Works was a critical part of our investigation,” said Brian Lipscomb, CEO of EKI. “Not only did we get an opportunity for our experts to look at every structural aspect of the equipment and systems, they also provided us with a plan for ongoing investment into the facility to assure it will continue to operate safely into the future.”

With this information, EKI was able to make an educated determination that the Kerr Project was worth the investment for CSKT.

“It is kind of like getting a home inspection before you sign all the documents for a mortgage,” said Babineau. “There is still a lot more to think about and prepare for before the conveyance of the dam to the Tribes in 2015, but from an engineering and structural standpoint, understanding the quality of the equipment and the systems we plan to purchase were key in our decision to move forward.”

In the next article, plans regarding the operations and maintenance of Kerr Dam upon conveyance will be explored.

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