



**Meeting Date:** February 1, 2016

**Consent Docket Item #:** 2.a

**Report:** SUA-16-08

**Department:** Electric Utility

**Subject:** Sole Source Purchase of Industrial Substation 69 kV Circuit Breakers

**Budget Impact:** The Industrial Substation Expansion project is estimated to cost \$540,000. Funding for the project will come from the Electric Rate Stabilization Fund (RSF). The recommended sole source purchase amount of \$110,000 will come from an account fund established for this project in the RSF. This item requires no new appropriation or budget amendment and will not affect year-end projected balances.

**Prior Council Action or Part of an Approved Project:** Yes – Industrial Substation Expansion

**Related Items:** [SUA-14-52](#) [SUA-14-52 Attachment I](#)

**Recommendation:** Approve the sole source purchase of the 69 kV Circuit Breakers to Hitachi HVB, Inc. in the amount of \$110,000, authorize expenditures for this purchase from the Industrial Substation Expansion project fund established in the RSF up to \$115,500 (includes a 5% contingency), and authorize staff to enter into a purchase agreement.

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**Back-up Information:** On December 15, 2014, the Trustees authorized staff to execute an amendment to the professional services agreement with Burns & McDonnell (BMcD) for engineering and design services needed to expand the transmission side of Industrial Substation.

There are three types of 69kV circuit breakers: Oil, SF<sub>6</sub> and Vacuum. Within the last 15 years, federal environmental regulations require special containment under and monitoring of this style of breaker, which adds significantly to the life cycle cost. SF<sub>6</sub> type breakers are expensive to purchase and maintain because they use very expensive SF<sub>6</sub> gas. Also, the SF<sub>6</sub> gas is a potent greenhouse gas. Vacuum breakers have the lowest life cycle cost, are not subject to any environmental regulations and do not require expensive special containment structures and associated monitoring. Vacuum breakers rated at 69 kV are relatively new to the market and Hitachi HVB, Inc. is the only company who manufactures them. Stillwater Electric Utility has these breakers at two other substations and plans to use them in future projects to avoid potential environmental issues.