

SOUTH DAKOTA BOARD OF REGENTS

Budget and Finance

AGENDA ITEM: 7 – H

DATE: December 6-8, 2016

SUBJECT: BHSU Solar Project

Black Hills State University has been active in sustainable efforts taking leadership in addressing climate change by being a signatory on the American College and Universities President’s Climate Commitment and in reducing long-term energy costs with a history of investing in energy efficiency projects, saving the state of South Dakota thousands of dollars every year. Through these efforts, BHSU is actively working to create a more efficient and sustainable campus. Our next step is to invest in renewable energy. We are investigating a project to install solar panels on the roofs of several buildings on campus. These panels will produce an estimated 1.5 million kilowatt hours or approximately 17% of BHSU’s electricity use over a year. The solar panels are expected to produce between 10-25% of the monthly electrical need on campus, depending on the month.

BHSU currently pays \$0.03 per kilowatt hour to Western Area Power Administration (WAPA). Six months out of the year, BHSU exceeds its allocation from WAPA and then buys power from Black Hills Energy (BHE) at a rate of \$0.12 per kilowatt hour. The solar power will replace the power bought from BHE.

Two purchase/finance options are being pursued at this time. The first is to work with a utility investor who will buy the panels. The panels will be placed on the BHSU campus, but remain the property of the utility investor. BHSU will buy the power from the owner at a rate between \$0.072 and \$0.085, up to 40% lower than the current rate from BHE. The owner will be responsible to maintain them, so BHSU will not incur any additional costs. The first year cash savings is projected at \$10,000. Future year cash flow is dependent upon the cost escalator, which is being negotiated between 0-3% per year, and the rate increases from BHE, which have averaged 3-5% in recent years. The benefits to the private utility investor include the ability to meet governmental requirements to invest in renewable energy and tax incentives, which are not available to state entities. The second option is for BHSU to purchase the panels. The estimated cost is \$1.5-\$2 million with a simple payback of 13-17 years. An annual savings of \$126,000 is estimated with this option, but the payback only occurs if utility dollars are retained. With this option, BHSU owns the panels and the power, but is required to maintain/repair/replace the panels. This cost is not included in the simple payback.

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INFORMATIONAL ITEM

The Bureau of Administration negotiates all utility contracts for the state of South Dakota. Both BOA's attorney and the Board of Regents' General Counsel have been asked to review our current contracts to ensure this project is allowable. Initial contacts have also been made to WAPA and BHE to ensure their support of this project. BHSU hopes to bring a final contract to the Board for approval at the March 2017 meeting.