

**Sauk Valley Community College
January 28, 2019**

Action Item 4.3

Topic: **Solar Project Engineering**

Strategic Direction: **College Health – Metric 3 – Financial Stability – The College uses its revenue conservatively. The College pursues and utilizes alternative revenue streams.**

Presented by: **Dr. David Hellmich**

Presentation:

On September 24, 2018, the Board approved the administration’s request to proceed with the completion of the solar project engineering at a cost of \$28,900. It was specified as part of this approval that if the completed engineering provides information indicating the viability of completing the solar project, the administration will come back to the Board for overall project approval, which will contain adjusted information on the cost of the project, if needed.

Below is the information presented to the Board on September 24, 2018.

The College’s interconnection application has been approved by ComEd, thus qualifying the College for Solar Renewable Energy Credits (SRECs) if the project is pursued. Updated information below shows a payback of 7.3 to 8.6 years.

	Block 1	Block 4
System Size in kilowatts (kWh)	124.44	124.44
System Cost Calculation	(in \$’s)	(in \$’s)
Gross System Cost	\$278,880	\$278,880
<i>ComEd Rebates</i>	(\$31,110)	(\$31,110)
<i>Less Solar Renewable Energy Credits (SRECs)</i>	(\$150,570)	(\$133,215)
Net System Cost	\$97,200	\$114,555
Payback in Years	7.3	8.6
<u>FIRST-YEAR ESTIMATED ELECTRIC BILL SAVINGS</u>	<u>\$10,174</u>	<u>\$10,174</u>
<u>AVERAGE ESTIMATED ELECTRIC BILL SAVINGS</u>	<u>\$13,825</u>	<u>\$13,825</u>

Next is the updated information reflecting the engineering feedback coordinated by Willett Hofmann, which incorporates the following changes:

- Reduced system size from 124.44kW to 100Kw
- Increased estimated system cost
- Reduced ComEd rebates due to smaller size
- Assumed block 2 or 3 due to timing
- Reduced SREC's due to smaller kW size and different block pricing
- Assumed Sauk would energize the array in May adjusts the first year savings
- Reduced electrical bill savings due to smaller kW size

	Block 2	Block 3
System Size in kilowatts (kWh)	100.00	100.00
System Cost Calculation	(in \$'s)	(in \$'s)
Gross System Cost	\$348,000	\$348,000
<i>ComEd Rebates</i>	<i>(\$25,000)</i>	<i>(\$25,000)</i>
<i>Less Solar Renewable Energy Credits (SRECs)</i>	<i>(\$116,216)</i>	<i>(\$111,567)</i>
Net System Cost	\$231,759	\$211,433
Payback in Years	18.8	19.2
<u>First-Year Estimated Electric Bill Savings</u>	<u>\$7,868</u>	<u>\$7,868</u>
<u>Average Estimated Electric Bill Savings</u>	<u>\$11,020</u>	<u>\$11,020</u>

Recommendation:

The administration recommends the Board approve the Solar Project be taken out to bid, with the final decision to move forward with the project being made by the Board after bids have been received and the College has more definitive information regarding Solar Renewable Energy Credits.