SOLAR PRELIMINARY REPORT – Update 7-20-21



Roselle SD 12

July 20, 2021







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Background

- Energy Savings for Phase 1 Project
 - Over \$43,000/year Savings
 - Other Saving Opportunities?
- Solar Power was Investigated as part of Phase 1 Project
- Decided to Move Solar to Phase 2 Allowing District to:
 - Repair Roofs
 - Determine 2 Years of Energy Use
- Solar Power Could Save Another \$48,000/year More, Virtually Eliminating the Electric Bills at Both Schools



Potential Roselle Solar Locations



Lake Park HS Solar Installation Example





Financial Incentives

- Future Energy Jobs Act (FEJA) Legislation that enabled Illinois' solar incentives
- Net Metering Allows excess solar production to be credited to future bills
- ComEd Incentive Cash incentive paid in year one by Utility for installation of solar
- Renewable Energy Credits (RECs) Cash incentives paid in first five years of project subject to availability. Program closed now but may be available in 2022





SOLAR PROJECT - SUMMARY

Solar PV Project Sites:

Rooftop Solar Arrays - Spring Hills Elementary and Roselle Middle Schools

Combined Solar PV System Summary		Combined Project Financial Summary	
Solar PV kWdc System Size:	478.0 kWdc	PSI Turnkey Installation Budget:	\$ 1,321,914
Solar PV kWac System Size:	399.6 kWac	ComEd Rebate:	\$ 119,500
PV System Type:	Roof		
PV System Annual Generation:	587,750 kWh	Gross Savings in Year 1:	\$ 148,875
Bldg Annual Elec Usage:	588,177 kWh	Gross Savings over 20 Years:	\$ 1,341,597
Bldg Elec kWh Offset by Solar:	99.9%	Gross Savings over 30 Years:	\$ 2,253,488



Notes:

- 1. The estimated combined future REC incentive is \$383,000 \$432,000.
- 2. REC Income is contigent upon future REC prices, availability, and approval in the Illinois Power Agency Adjustable Block Program
- 3. Rebate value is estimated based on 2020 values and is subject to change.
- 4. Solar array design and location is contingent upon roof condition, building structure analysis, and village and county approval.





Benefits of Solar for Roselle

- Over \$2.2 million in savings over 30 years
- ComEd Incentive is about \$119,000
- Additional REC incentive could be up to \$500,000
- More predictable energy costs Easier to budget
- Creates a living laboratory for students
- Proven technology (already completed at Lake Park HS)

Next Step

July-August 2021

- Complete roof analysis
- Firm up cost savings and financing approach

September 2021

- Present to Administration and BOE detailed costs and savings
- Discuss any potential roof repairs or considerations

October 2021

- Contract for project
- Secure financing

