Solar in the Mining Industry

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Future Energy Jobs Act (FEJA) - 2017
- Provided an avenue to successfully finance solar projects in IL
- Created the Adjustable Block Program
- Caused more solar companies to invest in IL
- Created 3,900 clean energy jobs in 2017 alone

Source: Thelen Sand and Gravel
Behind-The-Meter Solar

- Behind-The-Meter Solar = On-site solar that provides power directly to the customer’s facility. It can be on the roof or on the ground.

Rooftop Solar System  Ground-Mount Solar System
Technological advancements in have decreased the cost per watt of solar systems and made solar more eco-friendly.

- Single-Axis Trackers vs. Fixed-Tilt
- Bi-facials
- Solar cell chemistry - improving efficiency
- Storage
Saving Money with Behind-The-Meter: Power Purchase Agreement

- No upfront cost
- Purchase electricity at a price lower than the current price of electricity
  - Can be fixed or escalate
- Electricity supply price estimated to increase about 1.5%-2% per year
Saving Money with Behind-The-Meter: System Ownership

- Pay for the system upfront
- Receive incentives from both the state and federal governments for owning the system
- Receive a Net Metering Credit when the system produces more energy than you’re using
System Ownership: Value Stack

- ~5 year payback period for 2 MWac
- ~$4M paid upfront to develop and install the system
- ~$3M profit
- ~7M cumulative savings
Next Steps

- Small amount of capacity left in the Solar Program
- Legislation might pass in the Spring
- Blocks are expected to step down 4%, so projects are most valuable now
- Apply to interconnect ASAP to be eligible to reserve program capacity