



## **1. WHY SOLAR?**

Sunflower Electric Power Corporation (Sunflower) and The Victory Electric Cooperative Assn., Inc. (Victory Electric) depend on a diverse fuel mix of natural gas, coal, wind, and solar for generation of the electricity. Traditional and renewable energy sources are part of Sunflower's fuel portfolio, which help ensure resource adequacy (availability). Sunflower takes a wholistic, all-of-the-above approach to energy generation. Offering an additional source for energy, especially in the hottest days of summer when the system experiences the highest demand, provides a fixed-price hedge against the market price of energy to help stabilize the cost of electricity.

Energy markets, weather, natural gas supplies and prices, and government energy policies are constantly fluctuating and affect energy costs, as reflected in the following chart showing the Energy Cost Adjustment (ECA), which is a variable charge or credit used to recover variable energy costs. The ECA changes from month to month based on wholesale pricing and the market rate for energy.



# **VICTORY ELECTRIC'S ECA RATES**

# 2. WILL FORD COUNTY BENEFIT FROM THE ENERGY PRODUCED BY THE BOOT HILL SOLAR PROJECT, OR WILL THE ELECTRICITY IT GENERATES BE SENT OUT OF STATE?

Sunflower will receive 100% of the power produced by the project for the benefit of its members. Sunflower's six member distribution cooperatives and one wholly owned subsidiary serve members in 58 central and western Kansas counties: Lane-Scott Electric Cooperative, Pioneer Electric Cooperative, Prairie Land Electric Cooperative, Southern Pioneer Electric Company, Victory Electric, Western Cooperative Electric, and Wheatland Electric Cooperative. All of Sunflower's members–including Victory, which serves Dodge City–will benefit directly from the value of the energy produced by Boot Hill Solar.

# 3. HOW WILL THIS AFFECT MY ELECTRICITY RATES?

The rate paid for electricity depends on multiple factors. The Boot Hill Solar Project will provide value to members from energy, capacity and transmission savings. As a not-for-profit cooperative, Victory Electric strives to provide reliable electricity at fair rates and to control costs as much as possible. Victory Electric's energy rates (charges for poles, transformers, metering–also referred to as "wire charges") have remained the same since 2017. Based on rate data from the U.S. Energy Information Administration, Victory Electric continues to provide some of the lowest electric rates in Kansas.

#### 4. WHAT BENEFITS WILL THE PROJECT BRING TO THE COMMUNITY?

The Boot Hill Solar Project will make substantial payments to local jurisdictions for the benefit of the community. The Boot Hill Solar Project will pay more than \$4 million to Ford County during its first 10 years of operations and in excess of \$1.5 million in local taxes every subsequent year it operates. In total, it is expected that the Boot Hill Solar Project will contribute more than \$50 million in direct payments to Ford County. The Boot Hill Solar Project will also provide more than \$2 million to USD 443 during the first ten years of operation, several permanent jobs, patrons for local business, and payments to participating landowners.

The Boot Hill Solar Project will also generate valuable on-peak solar power sold exclusively to Sunflower. This on-peak power will complement Sunflower's other generation resources and act as a hedge against high market energy prices, helping keep Sunflower's wholesale energy supply to Victory Electric and the other Sunflower member-owners as affordable and stable as possible.

# 5. WILL THE LAND THE SOLAR PROJECT SITS ON BE REMOVED FROM TAX ROLLS?

The land utilized by the Boot Hill Solar Project will remain on tax rolls, though its tax rate may change given the change in use. The Boot Hill Solar Project will use minimal public services and be a major contributor toward the tax base in Ford County.

### 6. WHY DODGE CITY?

Solar irradiance measures the rate at which solar energy falls onto a surface. Kansas has favorable solar irradiance conditions and generous sunshine, especially in the western part of the state, including Dodge City. With an average of 256 days of sunshine annually, Dodgy City's annual solar irradiance is generally higher than the U.S. national average. In addition, due to existing infrastructure in the area, the project will come online faster than comparable projects and avoid potentially costly transmission upgrades.

#### 7. WAS THERE AN OPPORTUNITY FOR PUBLIC INPUT ON THIS PROJECT?

Yes. Through an involved process that included several public meetings in 2023, Ford County adopted regulations that govern the permitting of projects like the Boot Hill Solar Project. The Boot Hill Solar Project followed Ford County's established permitting process, which included an application, public notice, public comment opportunities, and public meetings. After the completion of Ford County's established process, the Boot Hill Solar Project was awarded a permit by Ford County.

#### 8. HAS THE PROJECT TAKEN PEOPLE'S LAND WITHOUT THEIR CONSENT?

Land was not taken from any landowner for the Boot Hill Solar Project through eminent domain or otherwise. The Boot Hill Solar Project negotiated agreements with landowners interested in participating in the project. Those private land rights are the only rights utilized by the Boot Hill Solar Project.

#### 9. WILL THE LAND BE VIABLE FOR FARMING OR RANCHING?

The land utilized in the Boot Hill Solar Project will still be viable for farming or ranching in the future. Solar projects do not permanently prevent the ground they occupy from returning to productive pasture or farmland in the future. A solar project's utilization of land can be compared to placing that land in a Conservation Reserve Program–a landowner chooses not to farm or ranch their land for a period of time (earning a different revenue stream from that land during that period) and the land can later return to productive farming or ranching. During the project's lifetime, the solar panels are supported by driven piles, not set in concrete. After the project's lifetime, these piles and other project infrastructure are removed, and the land is restored.

# **10. WILL THE PROJECT GENERATE A LOT OF DUST?**

Like any construction project, the Boot Hill Solar Project will generate some dust during construction. However, in accordance with best practices, the Boot Hill Solar Project will implement wind erosion and dust control measures to minimize construction-related dust impacts. During operations, the Boot Hill Solar Project is not anticipated to generate more dust than other land uses in the area.

# 11. WILL THE PROJECT ALTER THE SCENIC VIEWS IN FORD COUNTY?

The Boot Hill Solar Project will generally not be visible from most places in Ford County. Solar panels are compact and low to the ground (less than 12 feet in height).

#### **12. WILL THE PROJECT USE A LOT OF WATER?**

Generally, solar photovoltaic projects do not use much water. Unlike thermal power projects that often use water for cooling, solar panels do not require cooling. In arid regions, a limited amount of water may be necessary to periodically wash solar panels. However, in the case of the Boot Hill Solar Project, the solar panels are anticipated to be primarily washed by rainfall. The only anticipated substantial use of water at the Boot Hill Solar Project is associated with the 12-18 months-long construction of the facility. After construction, water use will primarily be for the bathroom and kitchen facilities for the staff working on the project. The Boot Hill Solar Project will use substantially less water than the current users of the land.

#### 13. WILL SUNLIGHT REFLECTED FROM THE PROJECT IMPACT AIRPLANES?

Solar panels are designed to absorb sunlight and convert that sunlight into electricity. There are instances where at specific angles and at specific times of day sunlight can be reflected from the surface of solar panels. However, the Federal Aviation Administration and others have studied glare from solar projects and concluded that any impact on pilots is minimal and similar to the impacts from light reflecting off of water surfaces. Many large airports have installed solar panels at or near their facilities including Denver International Airport and Indianapolis International Airport.

#### 14. WILL THE PROJECT MODIFY THE WEATHER?

The Boot Hill Solar Project will not modify the weather. There is a study available to the public that suggests that enormous solar projects at a scale not actually contemplated *could* theoretically modify the weather. That study shows that a solar project that is as large as 20% of the Sahara Desert (roughly 700,000 square miles in size) could change regional rainfall and temperature patterns in its region. However, that same study also concludes that if a solar project were 5% of the size of the Sahara Desert (roughly 180,000 square miles in size), it would have negligible effects. The Boot Hill Solar Project is approximately 2 square miles in size, so it is a fraction of the size of the stylized example in that study.

# **15. CAN SOLAR PANELS WITHSTAND STORMS?**

Solar panels are more durable and resilient than many people assume and are constructed to withstand severe weather events. The solar facility will use a singleaxis tracking system that enables panels to be moved to a more vertical angle, reducing the threat of hail damage. The project will carry insurance specific to catastrophic weather events for necessary repairs, and Ford County regulations require the project to establish a decommissioning restoration fund and govern cleanup of the project at the end of life.