



February 23, 2026

**Dear Neighbor,**

TED Renewables, a Kansas-based company, is developing the proposed 130-megawatt (MW) Branch Line Solar Project in Sedgwick County, KS. According to county records, you own property near land that has been voluntarily leased for the project. Our team at TED is committed to providing factual and transparent information and want to open a line of communication with you as a neighbor to our proposed development.

We understand you may have some questions related to solar development – what would the project look like, how would it impact my family or daily life, and what process does this type of development have to go through here in Sedgwick County? This letter provides a general overview of the Branch Line Solar Project; additionally, an “Informational Booklet” is included within this letter that details more in-depth information regarding the process of development, the requirements we will comply with from the Wichita-Sedgwick County Unified Zoning Code, and additional information on solar in general.

You can also read about Branch Line Solar and TED Renewables at the Project website, [branchlinesolar.com](http://branchlinesolar.com). If you would like to connect with us directly as a neighbor to the project, either in person or on a phone call, please contact us at [info@branchlinesolar.com](mailto:info@branchlinesolar.com) to request a meeting.

Sincerely,

The Branch Line Solar Team  
[Info@branchlinesolar.com](mailto:Info@branchlinesolar.com)



## A FEW QUICK FACTS:

- **Setbacks:** Per county requirements, project structures will be set back at least 100 feet from the project boundary lines and roadways, and at least 250 feet from any dwelling. The project will retain existing vegetative screening, such as tree lines and brush, and additional vegetative screening will also be provided along applicable roadways and property lines as required by county regulations. These requirements have been incorporated into our site design.
- **Sound:** In a solar energy project, inverters are the only components that generate sound on a regular basis. Our project has been intentionally designed to locate inverters away from properties lines to allow this sound to dissipate. At the fence line, the project would produce about the same sound level as a window A/C unit placed 100 to 150 yards away.
- **Soils:** As part of the permitting process, we have created a vegetation management plan that minimizes soil disturbance, plants deep-rooted perennial vegetation to reduce runoff, manages weeds, and builds soil health. The project plans to use a seed mix that consists of native grasses and forbs. Once the project ends, the land can return to farming.
- **End of Operation:** County regulations require a decommissioning plan with money set aside in the form of a surety bond in the County's name to cover all costs. The county will periodically evaluate this plan to ensure the bond amount stays current with labor rates and inflation. This ensures the project will be decommissioned responsibly and that neither landowners nor taxpayers are left with the bill.
- **No Battery Storage:** Branch Line Solar does not include a battery energy storage system in the Conditional Use Application.

Please follow our Facebook page at **Branch Line Solar** and our website at **[www.branchlinesolar.com](http://www.branchlinesolar.com)** for periodic updates.

We're looking forward to getting to know more people in the community and hearing your thoughts.



## HERE'S A BRIEF OVERVIEW OF WHAT'S AHEAD:

- **Transmission Studies:** The project plans to connect to the 138 kilovolt (kV) transmission line that runs between a substation in Wichita and one northwest of Conway Springs. The regional grid operator (Southwest Power Pool - SPP) and local utility (Evergy) are conducting a formal study process to determine how much power can be connected to this line. This process is expected to be completed in the first half of 2026.
- **Permitting:** The project must meet all permitting requirements set by the Sedgwick County Zoning Code, in addition to following federal regulations. This process ensures the project complies with all applicable standards before moving forward. We will work closely with the county team to ensure full compliance with all current permitting regulations.
- **Environmental & Engineering Work:** Independent biologists and engineers have conducted in-depth studies of wetlands, soils, wildlife habitats, and weather conditions to ensure the project is designed responsibly and meets safety and environmental standards. These studies have been conducted in accordance with state and federal environmental guidelines, and we will continue to coordinate extensively with local and state offices throughout the project development cycle.
- **Construction:** Construction will only begin after the permit with Sedgwick County is approved, and utility agreements are finalized. If all goes as planned, construction could start in 2-3 years. Like all infrastructure projects though, timelines may change.

# BRANCH LINE SOLAR PROJECT

PUBLIC QUESTIONS & ANSWERS  
CONDITIONAL USE APPLICATION | SEDGWICK COUNTY  
FEBRUARY 2026



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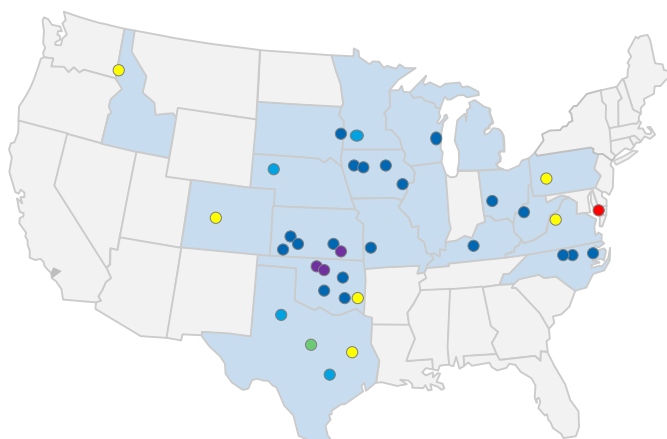
# HISTORY

Tyr Energy Development Renewables, LLC (TED Renewables) is a Kansas-based company focused on renewable and clean power development across the country. The TED Renewables team is committed to clean, low carbon power generation projects. We are recognized and respected for the creativity and integrity of our staff, the successes of our business, and the quality of our projects.

TED’s parent company, Tyr Energy Inc., has been actively involved in development, acquisition, and financing of electric power assets in North America for more than twenty years, with investment in more than 7,000 megawatts of generation capacity across the United States.

TED Renewables brings value through a creditworthy, committed parent and investment partners, coupled with experienced and disciplined focus on target markets, customers and assets consistent with our growth strategy.

**Tyr Energy / TED Renewables  
Operating & Development Portfolio**



- Fuel Peaker
- Gas Operating
- Wind Operating
- Solar Operating
- Solar Development
- BESS Development



Branch Line Solar is a utility-scale solar photovoltaic (PV) project proposed to generate clean, emission-free energy and substantial local revenues for Sedgwick County, Kansas. Branch Line Solar looks forward to working with the local community throughout the development of this project.

Branch Line Solar offers a new source of economic development for the community, with new tax revenue for schools and government services. The project will generate economic opportunities by creating both short-term (construction) and long-term (maintenance and operation) jobs in the local area, as well as supporting local businesses, shops, restaurants, and hotels through the spending of both short-term and long-term employees.

## ABOUT THE PROJECT

- 130-megawatt (MWac) capacity producing enough energy each year to power 28,000 homes.
- The project will utilize existing natural screening to minimize visual impacts, with additional tree planting and appropriate setbacks planned in areas more visible to neighbors or along high-traffic corridors.
- Landowners retain ownership of land during and after lease; the land will be ready to resume farming after the lease expires.
- Over \$150 million estimated total Project investment with substantial tax revenue reinvested into local and state communities.
- Helps local farmers and landowners diversify their income through solar lease payments that can be reinvested in their farms and communities.
- Construction is expected to begin as early as 2027.
- Life cycle: 30 years from date of commercial operation.



## LOCAL BENEFITS

- The Project will create 200+ jobs for 1-2 years during construction, and 3-4 long-term jobs during operation.
- Pollinator-friendly vegetation will be planted underneath the panels to allow the land to rest and rejuvenate while improving erosion control.
- Branch Line Solar will diversify Sedgwick County's economic portfolio with predictable, increased tax revenues of approximately \$24 million over the project life.
- At the end of its operational life, the majority of components will be recycled or reused, and the land will be restored to its original condition. The soil quality will be improved substantially due to the long resting period and the use of deep-rooted plants.
- Taxpayers and landowners are protected against decommissioning costs by Branch Line Solar's binding commitment with landowners and county to decommission the Project.

## ABOUT TED RENEWABLES

TED Renewables is a Kansas-based renewable energy developer. We believe in engaging and supporting the communities that host our projects because we know that true long-term value is created through transparency and working together. We are dedicated to responsible land development with both a thoughtful approach to environmental preservation and to delivering renewable project benefits to local communities.



**FOR THE LATEST INFORMATION ON BRANCH LINE SOLAR:**



**BranchLineSolarProject**

**Email: [info@branchlinesolar.com](mailto:info@branchlinesolar.com)**



# ECONOMIC BENEFITS TO SEDGWICK COUNTY



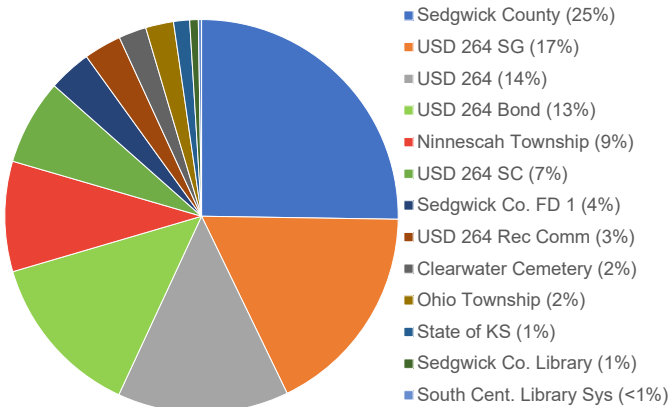
## Branch Line Solar Local Benefits

The project is expected to provide substantial local benefits to the greater Sedgwick County Community over the 30-year operating lifespan of the Project. The project represents an investment of over **\$150 million**, which will provide substantial tax revenues that are reinvested into local and state communities.

Over the Project's lifetime, it will generate approximately **\$24 million** in tax revenue that will benefit Sedgwick County, Clearwater School District, the County Fire Department, the local library, and other taxing entities within the Branch Line Solar taxing district. The pie chart below provides a more detailed breakdown of the approximate percentages allocated to each taxing district within the Branch Line Solar project area.

**The Clearwater School District will receive nearly 50% of the tax revenue generated from the Project**, helping to stabilize funding for the school district and allow for more opportunities to make necessary upgrades or funds for new resources for staff and students.

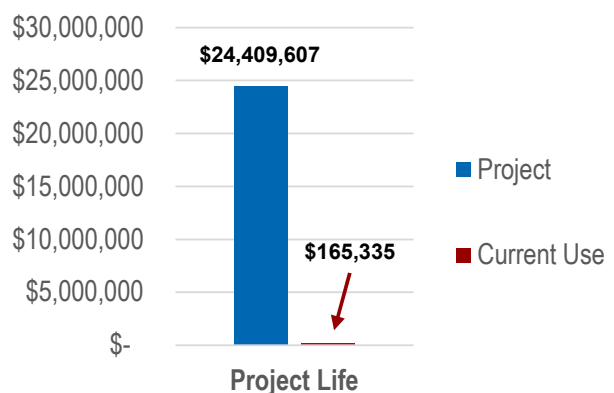
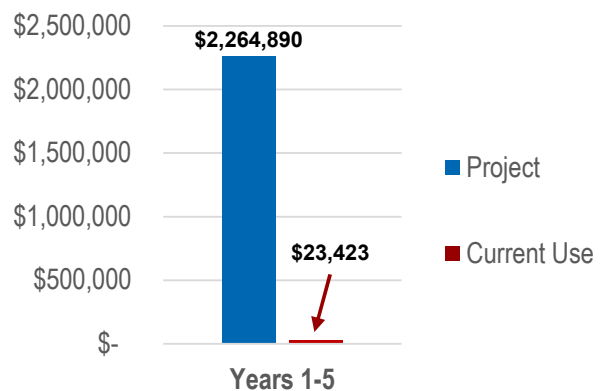
**Sedgwick County Tax Distributions\***



\*Based on a 2024 analysis of property tax rates in Sedgwick County.

During the first five years of operation, Branch Line Solar is projected to provide Sedgwick County and the other tax entities with an estimated **\$2.2 million** in tax revenue. Under the current land use, the property would provide approximately **\$23,423** in a five-year timeframe. Tax revenue from solar would **increase the local tax revenue by nearly 9,400%**. The following graphs highlight the projected tax revenue projected from solar and current land use. The first graph provides projections for the first five years of operations, while the second graph highlights the projected tax revenue over the 30-year operating lifespan of the project.

**Branch Line Solar Sedgwick County Tax Revenue Projections\*\***



\*\*Projections are based on estimated capital costs, project acreage, current state/local tax rates, and area land value comparisons.

# ECONOMIC BENEFITS TO SEDGWICK COUNTY



## Annual Landowner Payments

Local landowners have **voluntarily** chosen to lease their property to host the Branch Line Solar Project and will be compensated through annual lease payments over the life of the project. These payments help landowners, in most cases farmers, have an **additional income stream and increased revenue security** during volatile market years, which are becoming more common in the agricultural community. In most cases, landowners are only leasing a portion of their property for solar, allowing them to utilize the extra income to put towards new farm equipment, paying off debt, or reinvest in the community.

## Other than an additional revenue stream, why would a farmer or landowner lease their ground for solar?

Across the United States it has become more common for the next generation to choose another vocation rather than farming. Leasing land for solar helps support the local landowner in retaining ownership of the farm whether there is a generational gap in farming or a few tough years with the market. The stabilized income provides the security a family needs to keep the ground for generations to come.

## Short-Term & Long-Term Job Opportunities

Branch Line Solar will create **200+ jobs during the 1-2 years of construction**. During this time, the local economy will benefit from construction workers purchasing food from local grocery stores and restaurants, pumping gas at local stations, utilizing local accommodations (i.e. hotels, rentals, Airbnb's, etc.) and purchasing tools and other equipment at local or regional hardware stores.

Jobs during the construction phase will consist of heavy equipment operators, site managers, safety coordinators, pile driver operators, electricians, civil, mechanical, and electrical engineers, general laborers, and more. Once construction has been completed, the Project will staff up to **3-4 full-time** Operations & Maintenance (O&M) crew members who will oversee the day-to-day operations of the facility. Daily operations consists of routine maintenance of equipment, vegetation management, and other activities.

The O&M crew members are employees who typically reside within or near the County they are working in. Staff from an operating solar facility do not put heavy strains on local infrastructure, housing, or public services.

# SEDGWICK COUNTY PERMITTING



## Who has oversight over Solar Energy Conversion Systems (SECS) in Sedgwick County? What does the permit application entail?

In 2023, the Sedgwick County Board of Commissioners approved a moratorium for solar energy zoning applications to allow time for the Metropolitan Area Planning Commission (MAPC) to evaluate the current zoning code and update based on current standards for Solar Energy Conversion Systems (SECS). The MAPC conducted a variety of surveys, hosted open houses, and consulted with experts (Berkeley Group) in the industry to understand how to regulate SECS within Sedgwick County, Kansas. After one year of review, research, discussion, and updating the zoning code, the MAPC presented the Sedgwick County Board of Commissioners with an updated Unified Zoning Code (UZC) for SECS, which was approved on August 22, 2024, and the moratorium was lifted. Included in the Commission's approved solar ordinance was an additional set of revisions, which are the following:

The maximum Project area permitted under the solar ordinance is 1,500 acres.

- Branch Line Solar satisfies this requirement. The acreage leased within the fenced array will be approximately 650 acres.

The maximum number of contiguous sections of land a SECS Project area can be located on is six contiguous sections.

- Branch Line Solar meets this requirement.

The maximum distance an unattached portion of the SECS Project Area may be from the rest of the Project Area is one mile.

- Branch Line Solar meets this requirement.

Once a Conditional Use Application has been submitted to Sedgwick County and the application has been deemed “complete” by County Staff, meaning it meets all the requirements listed in Article II, Section B item 13 and Article III, Section D, item 6.pp of the Wichita-Sedgwick County Unified Zoning Code, then the formal permitting process will commence.

The County Staff will schedule a formal Public Hearing, in which they will present a recommendation to the MAPC based on the materials provided in the application. This process allows the County to conduct their due diligence in reviewing the application and offers an opportunity for the public to provide input based on the application in question.

# TIMELINE & COMPLETED ACTIVITIES



## What is the status of Branch Line Solar? What has the project completed thus far and when do you anticipate construction and operations to take place?

The Conditional Use Permit application was submitted to the Sedgwick County Staff in early February of 2026; at the time of this mailing the application is under review for completeness by the County Staff. The permitting process is expected to conclude sometime in Q2 2026.

Pending approvals, construction is currently slated for Q4 2027, with the site becoming fully operational in Q4 2028.

### 2026



The Conditional Use Permit application submitted



Permitting process expected to conclude

### 2027



Construction

### 2028



Operational

As part of the aforementioned due diligence and feasibility studies, Branch Line Solar has conducted several third-party engineering and environmental studies on the project site to ensure minimal impacts to neighboring properties, local wildlife, waterways, and the greater Sedgwick County community. A few of these studies are listed below, along with the applicable requirements from the Wichita-Sedgwick County Unified Zoning Code (UZC).

**Wetland and Waterway Delineation:** Identifies the location and extent of wetlands and waterways within the Project area.

Section 6d of the UZC states that “No SECS shall be sited, installed or developed on slopes of 15% or greater. Additionally, increased setbacks and buffers from wetlands, creeks/streams, and rivers may be required during project review and approval.”

The area within the Project fenceline does not have any slopes of 15% or greater.

Branch Line Solar has completed an onsite wetland delineation and is currently coordinating with the US Army Corps of Engineers to ensure the project remains fully compliant with federal regulations. No negative impacts to wetlands are anticipated as a result of the project.

### **Threatened and Endangered Species Studies:**

Evaluates the potential effects of the Project on federal or state listed threatened or endangered species.

Section 6i of the UZC requires all applicants to submit “an environmental Assessment to EPA standards that addresses the project’s impact, if any, on wildlife habitat; bird migration; the project’s potential to cause bird and bat strikes or death; officially listed flora and fauna; and flood zones.”

Branch Line Solar completed a threatened and endangered species field assessment utilizing a third-party team of biologists. This survey confirmed that no federal or state protected habitat is present in the project area, nor are adverse impacts to wildlife expected. These results were submitted to the Kansas Department of Wildlife & Parks, who confirmed the conclusions in the third-party assessment. Our application materials will include a copy of this correspondence.

**Glare Hazard Analysis:** Assesses potential impacts from reflected light at different times of year using Project-specific details including panel height, orientation, and angle.

Section 6h of the UZC requires all applicants to provide a “Solar Glare Hazard Analysis.”

Branch Line Solar has completed this study, which concluded no predicted glare concerns from the proposed solar site. Modern solar panel technology is designed to absorb light rather than reflect it, ensuring minimal impact from glare.

### **Cultural, Archaeological and Historical**

**Resources Survey:** Reviews catalogued archaeological sites and historic structures in and near the Project area.

The UZC does not have a specific requirement for this survey; however, Branch Line Solar conducted this survey to ensure no impact to local archaeological sites or historic structures. This study confirmed that no historical, cultural, or archeological sites are within our project area.

**Traffic and Transportation Study:** Reviews local road conditions to ensure that Project construction has no detrimental impact on local roadways.

Section 5g of the UZC requires all applicants to submit a traffic and transportation assessment that includes the time of day for operations and construction, a map showing desired routes for construction traffic, haul routes, and the type of vehicles used for bringing in materials during construction. The applicant must also meet with the Sedgwick County Department of Public Works, Kansas Department of Transportation, and other local groups that may determine traffic and haul routes for the proposed project.

Branch Line Solar prepared this study and will submit as part of our permit application. We have and will continue to coordinate extensively with Sedgwick County Public Works, local township, and KDOT officials to ensure full compliance with this requirement.

**Geotechnical Study:** Evaluates subsurface conditions relevant to Project construction.

The UZC does not have a specific requirement for this study; however, Branch Line Solar has



conducted geotechnical surveys on the project area to ensure our site design meets engineering standards and industry best practices.

**Decommissioning Plan & Security:** Outlines Branch Line Solar’s plan and commitment for decommissioning and site restoration at the end of the Project’s useful life.

Section 6c, 6i.1c, 6z, and 6aa of the UZC discuss specific requirements for decommissioning and reclamation of the site in Sedgwick County. Further information regarding decommissioning is included on **page 13** of this informational booklet.

**Community Impact Analysis:** Evaluates the direct and indirect economic benefit of the Project and analyzes any potential impacts (social and economic) to the community from an operational Solar Energy Conversion System (SECS).

Section 6f of the UZC require the applicant to assess “the anticipated short- and long-term economic impacts of the proposed development.”

Branch Line Solar worked with a team of local experts at the University of Kansas to complete this study, and a copy will be submitted as part of our application materials. The analysis concluded that the project will generate positive income for the Sedgwick County community through construction and operation jobs/wages, per diem spending by employees utilizing local services (i.e.. hotels, gas stations, grocery stores, etc.), lease payments to participating landowners, and annual tax payments to local tax districts. Furthermore, the assessment concluded that Branch Line Solar will provide substantial tax revenue to the Sedgwick County community that is six times greater than the current tax revenue provided by the property where the project will be sited.

# DECOMMISSIONING REQUIREMENTS



## What is Decommissioning?

Decommissioning is the process of removing project materials and restoring the land to its original state. A decommissioning plan is required before construction for all utility-scale renewable energy projects, including solar, defining who is responsible for decommissioning, the projected cost to decommission the project, and how removal of project materials and site remediation will be performed.

## Decommissioning Requirements in Sedgwick County, Kansas:

- Maintain appropriate liability insurance prior to the construction of the facility and maintain through the life of the project.
- Groundwater testing is required within ninety (90) days after the site has been decommissioned, and reclamation has occurred.
- Decommissioning and reclamation plan required to be submitted with the project's application and, if approved, updated **every five years** until decommissioning and reclamation of the site is complete.
- Proof of financial security in the form of cash held in escrow or in the form of a surety bond. Financial assurance shall include the full amount of estimated decommissioning and reclamation cost, not including salvage value. These costs will be evaluated by a third-party engineer as part of the five-year review process, and the surety bond will be updated accordingly if costs fluctuate.

Branch Line Solar has commissioned a draft decommissioning plan, in accordance with county regulations and industry best practices, and is contractually obligated in the land lease agreements to ensure proper and timely decommissioning of the project facilities. The steps to decommission and restore the project site would include the following steps.

- Disconnect the project from the power grid in coordination with the transmission owning utility.
- Install temporary erosion perimeter controls and best management practices (BMPs) to protect surrounding resources.
- Removing panels, posts, tracking systems, inverters, fencing and other equipment safely in accordance with the decommission plan submitted as part of the Conditional Use Permit application. Components like copper, aluminum, and steel will be recovered and recycled, and panels may be recycled or sold for reuse if still operationally useful.
- Restore the site to pre-construction conditions including topsoil replacement, vegetation/seeding, and grading if necessary.

# LAND USE & ENVIRONMENTAL IMPACT



Branch Line Solar has utilized the expertise of environmental consultants who are experts in their field of study and understand the necessary local, state, and federal requirements for properly siting a solar energy conversion system in Sedgwick County, Kansas. Through extensive desktop research and in the field studies and surveys, the Project team has designed the Project in such a way to mitigate potential impacts to local wildlife, local waterways, and neighboring parcels. The following section answers questions from the field as it relates to the use of the property for solar, as well as environmental concerns.

**\*\*Note:** Branch Line Solar's application will be thoroughly reviewed by the MAPC. It is our commitment to Sedgwick County to abide by the requirements set in place in the updated Unified Zoning Code (updated: August 2024), as well as follow industry standards and best practices while siting, building and operating this solar project. All necessary studies and reports required by the County, will be included in the Project's Conditional Use Application.

## How will the project impact farmland and local agriculture?

Responsible solar development provides benefits to both agriculture and ecosystems by improving soil health, retaining water, nurturing native species, and supporting native pollinators which support local food production. In addition, solar farms help farmers and landowners diversify their income by providing a reliable, drought-resistant revenue stream. This steady income means that farmers are less vulnerable to fluctuations in market prices on their products, uncertain trade regimes, and volatile annual weather, thus helping

farmers stay in business. Additionally, at the end of its useful life the project will be decommissioned, and the land will be available for all future potential uses, including traditional agriculture.

**Section 6f of the UZC** requires the applicant to submit a Community Impact Assessment with the Conditional Use Application. Since Branch Line Solar is being sited on voluntarily leased ground that is currently used for agriculture purposes, we are required to include in our Community Impact Assessment the anticipated impact the current enterprise (that being agricultural practices) has on the local economy, as well as assess how the local economy will be impacted from the loss of this enterprise if solar is sited on the property instead.

## Will Branch Line Solar impact wildlife?

Impacts on local wildlife are minimal. Environmental experts assess a project's footprint by conducting site-specific studies to understand and mitigate potential impacts on wildlife. The native plant species included in the proposed seed mix include a mixture of grasses and forbs that may provide habitat and feeding ground for a multitude of pollinators, birds and other small animals. Small local wildlife will be able to come and go through wildlife friendly fencing, including rabbits and other small mammals as well as turtles and other small reptiles. Fencing will be set back from public roadways, and larger animals, such as deer, will be able to safely traverse around the project area. The project will comply with state and federal wildlife regulations, including requirements of the United States Fish and Wildlife Service (USFWS) and the Kansas Department of Wildlife and Parks.

**Section 6i of the UZC** requires the applicant to submit an Environmental Assessment that

will address any potential impacts the project may have on wildlife habitat, bird migration, flood zones, and flora and fauna. The Kansas Department of Wildlife and Parks has confirmed that we are not impacting any sensitive species within the Project area.



### **Will the project obstruct wildlife patterns within the project area?**

The project will utilize wildlife-friendly fencing which will allow small animals, such as rabbits and reptiles, to go back and forth through the fencing. The project is not being sited on one contiguous square area of fenced ground. Rather, the project will be comprised of several fenced sections of ground connected underground to one another. Larger animals, such as deer, will be able to traverse through and around the total project area.

**Section 5d(3) of the UZC** requires the applicant to submit a Landscape Plan that identifies the location of wildlife corridors within the proposed solar facility site.

### **Once solar panels are removed, can the land be used again for agriculture?**

Yes. The Branch Line Solar Project will be located on private land under long term lease arrangements and at the end of the life of the project, the project will be decommissioned, and the land will be available again for farming. This is in stark contrast to other types of development, such as residential, commercial or industrial building projects, which often leave land unusable for agriculture again. During construction, native vegetation – often friendly to bees and other pollinators – will be planted. The deep roots of native vegetation retain more water than turf grass during heavy storms and periods of drought. They also retain topsoil and can improve soil health over time.

### **Do solar panels leach chemicals into the ground?**

Under normal operating conditions, solar panels do not leach chemicals into the ground.

Modern solar panels are primarily made of glass, aluminum, and silicon, and the small amounts of solid metals inside are fully sealed within durable encapsulant layers that prevent water or soil from ever coming into contact with them, even after decades of exposure to Midwest weather. Independent reviews from state energy agencies and scientific studies consistently find that solar panels pose little, if any, risk of releasing chemicals into soil or groundwater during normal use.

**Section 5g(6)(a)** of the UZC requests that the applicant provide information specific to the type of solar technology that is proposed to be used with the solar facility. This includes the make-up of the panel, the type of mounting system to be used, the height of cabling and transmission infrastructure, etc.

### **How will the project address water run-off and proper drainage?**

Branch Line Solar will file a Stormwater Pollution Prevention Plan (SWPPP) that specifically addresses runoff both during construction and while the project is operating. In addition, the project will plant deep-rooted vegetation beneath the solar panels and throughout the project footprint. Establishing deep-rooted vegetation throughout the array will allow the ground to rest and build nutrient-rich soil. The well-rested, nutrient-filled soil will also help with erosion control and water runoff impacts in, near, and around the solar site.

**Section 6j of the UZC** requires the applicant to provide information that addresses the following: storm water drainage, soil erosion, and sediment control. The applicant shall inform the permitting

authority (i.e. Sedgwick County) on how they intend to prevent drainage issues from occurring on the site. Sedgwick County Department of Environmental Resources, the Conservation District, and the Noxious Weed Department will review these plans as necessary.



**Will the project conduct regular water testing throughout the construction and operations of the project?**

Section 6i of the UZC requires the applicant to provide any soil and groundwater test results that may have been done as part of the site due diligence to the Director of Sedgwick County Department of Environmental Resources and Household Hazardous Waste. The testing is based on contaminants of concern listed by the EPA and may be subject to change.

Prior to construction commencing, the applicant will be required to conduct soil and groundwater testing, as well as every five years during the operational life of the SECS. Furthermore, after the site has been decommissioned and reclaimed in accordance with the zoning code, the owner of the facility shall conduct a final round of testing.

Branch Line Solar is committed to providing these test results based on the requirements of the zoning code and will comply with any further recommendations provided by the MAPC.

# SOLAR SAFETY



## Is there a fire risk associated with utility-scale solar power generation facilities?

The risk of fire at large-scale solar facilities is very low. The equipment used for such projects will be electronically monitored 24/7 and physically monitored throughout the standard work week. It is the number one priority to ensure the safe operation of a project facility and the safety of nearby residents and landowners. As the project is being developed, Branch Line Solar will work with local fire departments regarding all necessary procedures for the safe handling of fires within the facility. As a result of this prudent planning, fires within a project are highly unlikely to occur.

**Section 6v of the UZC** requires the applicant to identify the potential fire risk that may be associated with a sited solar facility. This includes identifying any risk of prescribed or nonprescribed burning. Furthermore, since Branch Line Solar is located in an unincorporated portion of Sedgwick County, the Sedgwick County Fire District #1 will need to review and approve our fire safety plans.

## Will stray voltage be a concern for livestock operations near the project?

No. Large-scale solar projects must follow strict electrical safety codes governing the design, construction, and operation of any project. With modern-day underground collection and transmission lines used in the construction of solar projects, stray voltage will not impact neighboring farms. On-site project staff will oversee the day-to-day operations of a solar farm to ensure the site continues to follow all applicable codes and regulations.

## Will the project emit any greenhouse gases?

No. Solar panels generate clean, renewable electricity and do not emit any greenhouse gases or other harmful emissions. This distinguishes solar energy from carbon-based electric generation, where carbon dioxide and other air pollutants are emitted as a byproduct of the generation process.

## Do solar panels create glare?

Solar panels are designed to ensure minimal reflection as any reflected light is lost energy; therefore, the panels are designed with anti-reflective coating to absorb the maximum amount of light. Residents are unlikely to experience any glare from solar panels, but if they do it would be weaker glare than from a building's window.

The project conducted a glare analysis as part of the Conditional Use Application process with Sedgwick County. The result of the study concluded no concern related to potential glare from the Branch Line Solar project.

**Section 6h of the UZC** requires all applicants to provide a Solar Glare Hazard Analysis.

# ADDITIONAL FREQUENTLY ASKED QUESTIONS



## How does the Project plan to address visibility?

Branch Line Solar plans to utilize existing trees and vegetation along adjacent public roadways as a natural buffer between the Project and public viewshed. The Project team has developed a vegetative screening plan that includes new landscape plantings, wildlife fencing, and natural vegetation to minimize project visibility from roads and nearby residences.

**Section 6h of the UZC** requires the applicant to submit a concept plan of the proposed facility, which includes “the location and nature of proposed buffers and Screening elements, including vegetative and constructed buffers, and existing landforms (i.e., natural berms, hills, rocky outcrops, etc.) intended to be used as a buffer or screening.” Branch Line Solar has developed visual simulations of what the site is anticipated to look like once operational.

## Will inclement weather damage panels?



Panels are capable of withstanding harsh Kansas weather like torrential rain, heavy snowfall, high winds, and hail. Engineering studies, as well as actual catastrophic events such as hurricanes, have shown that solar farms are able to hold up and continue producing energy. The project will be fully insured against impacts such as inclement weather. Any damaged infrastructure will be replaced and recycled at an appropriate facility.

## Are the solar panels cleaned?

Solar panels are typically cleaned naturally through rainfall or snow melting from the face of the panels. Operations and Maintenance (O&M) crew members will ensure panels are properly cleaned for efficiency and energy production purposes.

# MAP



-  Prelim Site
-  Urban Area of Influence



# SUPPLEMENTAL RESOURCES:

PROPERTY VALUES  
SOLAR HISTORY  
POWER GENERATION AND TRANSMISSION

## SOURCES

- 1 <https://www.cleanenergyresourceteams.org/chisago-county-boards-real-estate-update-shows-solar-has-no-impact-property-values>
- 2 <https://www.asfmra.org/blogs/asfmra-press/2021/02/16/solars-impact-on-land-values>
- 3 [https://psc.ky.gov/pscecf/2024-00406/tosterloh%40sturgillturner.com/01292025030138/3A\\_Lost\\_City\\_Appendix\\_A\\_Property\\_Value\\_Study.pdf](https://psc.ky.gov/pscecf/2024-00406/tosterloh%40sturgillturner.com/01292025030138/3A_Lost_City_Appendix_A_Property_Value_Study.pdf)
- 4 [https://www1.eere.energy.gov/solar/pdfs/solar\\_timeline.pdf](https://www1.eere.energy.gov/solar/pdfs/solar_timeline.pdf)
- 5 <https://www.energy.gov/eere/solar/how-does-solar-work>
- 6 <https://www.spp.org/about-us/>
- 7 <https://www.eia.gov/states/KS/analysis>
- 8 <https://www.eia.gov/energyexplained/electricity/delivery-to-consumers.php>
- 9 <https://www.spp.org/about-us/>

# PROPERTY VALUES



Over the last several years, utility-scale solar has been developed in rural areas to help meet the growing energy demands across the United States (U.S.). As with any new development, there are a lot of questions related to how the system works, how a project of this scale will benefit the community, and even what the impacts on neighboring property values are. Appraisers and Property Value experts across the Country have conducted hundreds of Property Value Impact Studies revolving around the question of – how does this solar project impact ‘my’ property value? These studies, which specifically evaluate the value of homes adjacent to or within proximity to (half mile to a mile away) a utility-scale solar site and have consistently shown that solar projects have an insignificant effect on neighboring property values.

## **1. (n.d.). Chisago County Board's real estate update shows solar has no impact on property values. Clean Energy Resources Team.<sup>1</sup>**

- Chisago County, Minnesota is home to one of the state's largest solar projects – the 100 MW North Star Solar Project. Once operational, community members were concerned with the potential impact on neighboring property values. Chisago County Assessor, John Keefe, decided to conduct a study of his own, analyzing the sale of 750 homes sold throughout Chisago County from January 2016 to October 2017. Of the 750 homes sold, 15 of them were adjacent to the North Star Solar Project. Data concluded that the 15 homes sold for just as much, if not more, than the other 735 homes sold throughout the county. The results concluded that there was no negative impact on property values.

## **2. American Society of Farm Managers & Rural Appraisers (2021, February 15). Solar’s Impact on Rural Property Values. The difference that experience makes when it comes to the perceived and actual impacts of solar on nearby property values. ASFMRA.<sup>2</sup>**

- The American Society of Farm Managers & Rural Appraisers reviewed several property value impact studies and interviewed numerous appraisers across the U.S. – both with experience in appraising properties around utility-scale solar facilities and those who have not. Those who have never conducted an appraisal near a solar facility concluded that there could be a negative impact on property values but have never conducted a study to quantify their speculation. Those interviewed from CohnReznick, Kirkland Appraisals, Halderman Real Estate and Farm Management, and ASFMRA's National Appraisal Review Committee, have conducted hundreds of appraisals near utility-scale solar facilities and concluded no negative impact to neighboring property values. Donald Fisher with ASFMRA even noted that solar helps positively impact the cost of land as it becomes competitive with other industries in certain markets.

## **3. Kirkland Appraisers, LLC (2025, January 29). Appendix A Property Value Impact Analysis. Public Service Commission of Kentucky.<sup>3</sup>**

- Kirkland Appraisers, LLC recently conducted a Property Value Impact Analysis on a 250 MW solar project, sited on 1,413 acres in Penrod, Muhlenburg County, Kentucky. The report concluded that there was no negative impact on neighboring homes or agricultural ground from the solar facility. It noted that incorporating setbacks and visual mitigation is a proper cause for ensuring the project is visually out of site; therefore, squandering the concerns of a visually unappealing development impacting neighboring property values.

# SOLAR HISTORY



Humanity utilizes the sun as a resource for light, heat, and of course, electricity. From the Greeks and the Romans utilizing mirrors and sunlight to ignite torches, to the discovery of electricity being produced when certain elements are exposed to light, the sun has been a resource for generations and there are countless opportunities for us to utilize the sun's energy to benefit our homes, businesses, and communities. Here are some interesting historical facts about the technology:<sup>4</sup>

- 1921** • The Nobel Prize in Physics was awarded to Albert Einstein “for his services to Theoretical Physics, and especially for his discovery of the law of the photoelectric effect.”
- 1954** • Daryl Chapin, Calvin Fuller, and Gerald Pearson developed the first silicon photovoltaic (PV) cell, capable of converting energy from the sun into power that could run every day electrical equipment.
- 1958** • The Vanguard I satellite used a small solar array to power its radios. Solar arrays continue to successfully power our satellites today.
- 1966** • Japan installed a 225-watt photovoltaic array on a lighthouse, which was the largest array at that time.
- 1978** • NASA's Lewis Research Center installed a 3.5-kilowatt photovoltaic (PV) system on the remote Papago Indian Reservation located in southern Arizona, which was used to pump water and provide electricity to 15 homes. Without a connection to a power line, this was the first solar electric village.
- 1980s** • The solar technology continued to advance as solar arrays began to power homes and businesses and were now being manufactured at a larger scale.
- 1982** • The first utility-scale solar power plant (1.1-megawatt) began operations in Hesperia, California.
- 2002** • First Solar began producing photovoltaic solar panels from its factory in Perrysburg, Ohio.
- 2015** • Burlington, Vermont became the first US city to use 100% renewable energy, 19% of which came from solar power.
- 2023** • Solar accounted for over 50% of new electricity capacity added to the grid.

# HOW SOLAR WORKS

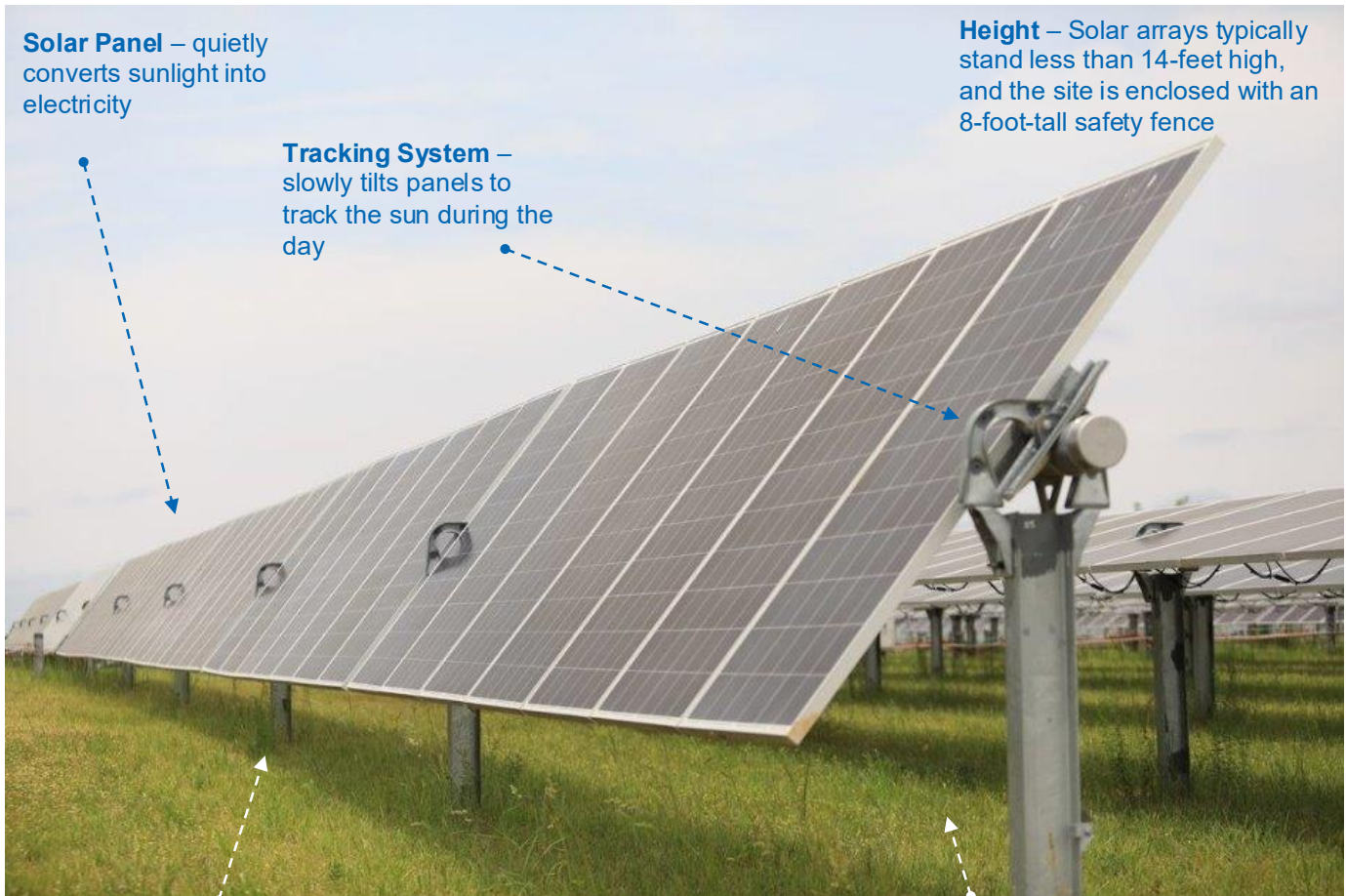


In just 90 minutes, enough sunlight strikes the earth's surface to handle the entire world's energy consumption for one year (energy.gov). By utilizing photovoltaic (PV) solar panels, we can capture a fraction of this energy to power our homes, businesses, and communities. This may raise a question, however – how does solar work and how do we use it?<sup>5</sup>

Solar panels used for solar projects, such as the proposed Branch Line Solar Project, are mounted on titled single-axis tracking systems that follow the sun from east to west, capturing the sun's energy throughout the day. As the sun shines onto a solar panel, the energy from sunlight is absorbed by the PV cells. The energy absorbed by the cells creates electrical charges that move in response to an internal electrical field with the cell – allowing electricity to flow (energy.gov). The energy absorbed by the panel, producing direct current (DC), is then transported through underground cabling to an inverter. The inverter will convert the direct current (DC) to alternating current (AC), which will then be transmitted to a substation to supply nearby power lines with locally sourced renewable energy.

The solar power that is absorbed and produced by the array can power homes, businesses, and communities in the area. Similar to water, the energy flows using the path of least resistance, meaning that if there is energy demand close to the solar array, then power from the array and other available energy resources will flow from the grid to fulfill that need. Once the need for energy at that source is fulfilled, energy will continue to flow down the line to meet additional energy demand. Power can also be directed by the local grid operator, Southwest Power Pool<sup>6</sup>, to ensure that power is being appropriately distributed across the grid. Adding power to the electric grid, sourced from a local solar array, allows our county and state to harness energy from our most abundant resource – the sun.

# HOW SOLAR WORKS



**Solar Panel** – quietly converts sunlight into electricity

**Tracking System** – slowly tilts panels to track the sun during the day

**Height** – Solar arrays typically stand less than 14-feet high, and the site is enclosed with an 8-foot-tall safety fence

**Posts** – The steel posts are driven directly into the soil 6-10 ft with no use of concrete.

**Natural vegetation** – soil around the arrays are planted with native species, keeping soil intact and supporting a healthy ecosystem.

# POWER GENERATION & TRANSMISSION



## Where Does Electricity Come From?

Kansas consumes more energy than it produces on its own – relying on the imports of neighboring states for power supply.<sup>7</sup> But how do we actually receive that power? Whether it's from a nearby coal, natural gas, or nuclear plant, wind farm, solar facility, or other generation source, ALL utility-scale power is transmitted through the grid, which is comprised of substations, transformers, and power lines that connect the source of generation (supply) to the public consumer (demand), typically by way of a public utility company.<sup>8</sup>

After most utility-scale power is generated – via coal, natural gas, nuclear, wind, solar, etc. - it is routed to the grid. For Kansas and other states of the Central Great Plains region, Southwest Power Pool (SPP) is the regional transmission organization (RTO) that oversees the movement of electricity across this portion of the country.<sup>9</sup> Similar to what Air Traffic Control does for the aviation field, SPP is the balancing authority, safely directing power from the supply to demand. They coordinate where power is needed during times of peak demand and ensure there is enough supply to meet the needs of the consumer throughout the year. Unlike our modern grocery or convenience stores that keep products stocked on the shelves, electrical power is almost instantly consumed once it's generated. Therefore, utilities are constantly balancing generation, minute to minute, with power consumption.

Similar to how water flows, power on the grid moves along the path of least resistance. If there is an energy need close to a generation site (coal, natural gas, nuclear, wind, or solar), the need will likely be fulfilled by that generation source. Once all the needs for energy near the generation site are fulfilled, energy will continue to flow down the

line to meet other energy demands. It is possible for power to be transmitted further from the site of generation to meet demands; however, the longer the transmission distance the less efficient the system. Utility-scale power generation supplied to the local grid generates local revenue and bolsters the resilience of the local transmission system. If you'd like to know more about how the electric grid works, visit:

<https://science.howstuffworks.com/environmental/energy/power.htm>



# POWER GENERATION & TRANSMISSION



## Benefits of Integrating Solar Energy:

As energy demand continues to rapidly increase in the U.S., every electron will be needed from all sources to support that growth. Solar energy can work in tandem with traditional energy generation sources in ways that will have many broader benefits, including:

- **Improved Grid Stability:** Solar power can help stabilize the grid by providing a reliable source of energy during peak demand periods, allowing for more efficient utilization of fossil fuel plants when solar production is low. Excess solar energy can also be stored in batteries or other storage systems to be used when solar generation is low, further smoothing out fluctuations in power supply. Branch Line Solar will not have a battery component included in the design of the project.
- **Cost-Effectiveness:** Combining solar with fossil fuels can potentially lower overall energy costs by utilizing solar during peak generation times, reducing the need to run fossil fuel plants at full capacity.
- **Reduced Emissions:** By increasing the usage of solar power, overall emissions and pollution can be significantly lowered, helping to improve environmental and public health.

## From Source to Demand

Let's break this down a bit further to better understand how power gets from the source – in this case, a renewable energy source, such as solar – to your home or business. The solar panels harvest energy from the sun. That energy is converted from direct current (DC) power to alternating current (AC) power by the inverter, which is located within the array, set back from the project's perimeter fencing. The power is then transported via medium-voltage cabling (typically underground) to the project substation, where the voltage is subsequently increased before being routed onto nearby transmission lines. The transmission lines transport the power to where there is demand-locally, in neighboring communities, or across the state.

Before the power being transmitted by high-voltage transmission lines can serve your home or business needs, the voltage is stepped down (reduced) through utility-owned substations or transformers and then routed to distribution lines connected to each consumer to supply you with power.

Tracking every electron from generation source to demand is impossible, but we can be certain that the power generated from Branch Line Solar will have the capacity to meet local energy demands by connecting to the local electrical grid. The energy generated by this project, along with energy from other sources, will help ensure Kansas consumers have access to affordable, reliable power that will facilitate the growth of new technologies in the 21st century and keep the state's economy strong.