CORNERSTONE SOLAR

Jefferson Township, Washington County, PA

Consolidated Conditional Use Application
Solar Energy Facility
Electrical Substation
Electrical Power Transmission Lines

Update February 2026

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1 Forward – Consolidated Conditional Use Permit Application

This application for consolidated conditional use permit (CUP) has been prepared in accordance with Jefferson Township, Washington County, Pennsylvania (PA) Zoning Ordinance (Zoning Ordinance) Section 210, Standards for Conditional Uses in Zoning Use Districts and Section 212, Solar Energy Development – Accessory Solar Energy Systems (ASES) and Solar Energy Facilities (SEF) Criteria and Standards.

Section 210.2 reads:

"210.2 General Standards for Conditional Uses: A conditional use shall be approved only if it is found to meet the following criteria:

> *1) The proposed use shall conform to the zoning use district and conditional use provisions contained in Article 2, the environmental protection and cultural resource preservation provisions of Article 3, the supplemental regulations contained in Article 4 and all other applicable provisions of this ordinance.*
>
> *2) The proposed use shall be sited, oriented, constructed, landscaped, and operated in a manner which does not impair the health, safety, or comfort of residents of the Township and does not adversely affect the use, enjoyment, and values of adjacent properties.*
>
> *3) The proposed use shall be compatible with the purposes and objectives of this ordinance and shall be consistent with the comprehensive plan."*

The Cornerstone Solar Project (Project) will include the installation of photovoltaic solar panel arrays and associated structures including overhead and underground electrical infrastructure, substation, collector lines, access roads, and operation facilities. The Project is located along the Pennsylvania-West Virginia (WV) state border on its western extent and is bisected by both Bethel Ridge Road and Miller Road. The site is bound on all sides with agricultural and residential land use.

Per the zoning ordinance, SEFs are permitted by CUP on a parcel located in the Township's SEF Overlay District. The proposed SEF is located entirely within the SEF Overlay District (see Appendix A, Figure 1). The permit process requires certain studies and plans to qualify the application for completeness; a completed application is then presented at a public hearing. The Applicant understands that a CUP shall be approved or denied by the Board of Township Supervisors in accordance with the procedures in Section 210 of the Township Zoning Ordinance and applicable Pennsylvania law.

The Applicant has prepared a complete permit application in accordance with the requirements of Section 212.1.A.1.a - u, as appropriate. The Application also addresses the requirements of Section 210.12 and 210.13 and includes the following plans, reports, studies and supporting documents:

- Project Narrative/Executive Summary
- SEF, Collector Line, and Substation Drawings
- Landowner Affidavits
- Property Identification
- Site Plan
- Relevant Studies/Reports/Certifications/Permits/Approvals
- Permit Status Matrix
- Manufacturer Specifications
- Safety Data Sheets
- Acoustical Study
- Viewshed Analysis
- Landscape Plan and Vegetation Management Plan
- Glare Study
- Certificates of Design Compliance
- Construction Transportation Plan
- Utility Confirmation
- Emergency Response Plan
- Decommissioning Plan
- Avian Protection Plan

The proposed Project also includes construction of a collector line and substations. The additional requirements for construction of electrical power transmission lines and electric substation are provided this application.

This narrative is being submitted to the Jefferson Township Board of Supervisors in support of the Project's Consolidated Conditional Use Application and other supporting material prepared according to the standards set forth in the Zoning Ordinance.

2 Executive Summary

Cornerstone Solar, LLC (Applicant) proposes to develop the Cornerstone Solar (Project), an approximately 200 MW AC Solar Energy Facility (SEF) located in Jefferson Township, Washington County, Pennsylvania (PA). The site is located approximately 25 miles southwest of Pittsburgh, with center coordinates at 40.315731, -80.509238. The Project extends to the PA / West Virginia (WV) state line on its western boundary and is bisected by Bethel Ridge Road and Miller Road. The Project is situated on reclaimed coal strip mine and agricultural land. The Project will span across twenty-one (21) different parcels owned by a total of six (6) individuals or entities totaling approximately 1,484 acres (Participating Parcels). The SEF development Project Area (defined as the area within the perimeter fence) will occupy approximately 730 acres, or roughly half of the aerial extent of the Participating Parcels.

On November 13, 2024, Jefferson Township adopted a Solar Ordinance that created a Solar Energy Facility (SEF) Overlay District and details the requirements for development of SEFs within the Township in accordance with industry standards. To meet the applicable Ordinance requirements, the Applicant retained engineering and environmental consultants, surveyors and initiated site-specific environmental studies, field surveys, data collection efforts, and environmental assessments beginning in early 2024. The investigations included stream and wetland identification, delineations, and evaluations of the existing environmental site conditions present at the site.

Environmental investigations initially consisted of desktop review of existing published sources of natural and cultural resources information and coordination with local, state, and federal agencies having jurisdiction (AHJs) to gather input to inform the project designs and to provide guidance with respect to required studies, surveys, and investigations. These agencies and information sources included the Pennsylvania Game Commission (PGC), Pennsylvania Boat Fish and Boat Commission (PFBC), United States Fish and Wildlife Service (USFWS), Pennsylvania Department of Natural Resources Conservation (PADCNR), Federal Emergency Management Agency (FEMA), US Army Corps of Engineers (USACE), Pennsylvania Department of Transportation (PENNDOT) District 12-0, Jefferson Township officials, Washington County officials, Burgettstown Area School District (BASD), and the Jefferson Township Volunteer Fire Department (JTVFD) among others. Environmental features such as streams and wetlands are delineated, cultural resources and cemeteries identified, existing vegetation and viewsheds analyzed for potential visual effects and glare, existing ambient and projected noise conditions, and plans for the protection of avian species that may be present or pass through the Project Area. In addition, the Pennsylvania Department of Environmental Protection (PADEP) online database of underground mines was referenced to determine locations of underground mines in the Project vicinity. Based on the PADEP 2025 Digitized Mined Areas Map[1], the Project is located outside underground mined areas

[1] PADEP, 11/07/2025, https://padep-1.maps.arcgis.com/home/item.html?id=7a41f8fa46e6421d91f3bc8396d4ed6f

(see Appendix A, Figure 2). The identified existing environmental feature locations and the required protective buffers have been accounted for in the project designs to meet the ordinance requirements. The Applicant will provide all necessary county, state, and/or federal approvals necessary for developing the site.

The Applicant also initiated the development of the SEF engineering designs for the following facilities in consideration of the existing environmental conditions:

- Preliminary solar array designs
- Preliminary inverter and supporting electrical component layout and designs;
- Preliminary overhead and underground collector line designs with connection to the existing electrical power grid;
- Preliminary substation design; and
- Temporary and permanent access routes, security fencing, and landscaping.

As part of the Project design development process, the Applicant organized and participated in meetings with Project stakeholders including landowners, local public officials, school district officials, and emergency services providers on several occasions to discuss the project and gather information to address their specific needs and requirements. The Applicant conducted specific meetings with the following officials and individuals as part of these efforts:

- JTVFD – 04/23/25 – Met with members of the JTVFD to discuss emergency response plan and potential equipment and training opportunities.
- JTVFD – 07/09/25 – Met with members of the JTVFD to discuss emergency response plan and review preliminary site plan.
- JTVFD – 10/07/25 – Met with members of the JTVFD to review first draft of emergency response plan.
- Burgettstown School District – 08/20/2025 – Met with Superintendent and Transportation Director to discuss construction transportation plan for the purpose of mitigating interactions with school transport.

Information gathered from the project stakeholders has been integrated into the Project plans to address specific needs and requirements. In addition, required environmental studies have been performed to inform the application and avoid adverse effects to the existing environment and residents located in the Project vicinity.

The sections below briefly discuss environmental studies and investigations conducted by the Applicant and summarize the results.

Natural Resources Inventory and Detailed Studies Summary

The following sections summarize environmental studies and analyses conducted on behalf of the Applicant in support of the Application.

Streams and Wetlands Identification and Delineations

The Applicant conducted wetland and watercourse delineations within the Project Study Area between July 8 and July 17, 2024 and between September 24 and September 26, 2024. The detailed results of the study are contained in the Wetland Delineation Report (July 2025). Sixty-five (65) wetlands and seventy-six (76) streams are identified within the Project Study Area. None are classified as High Quality or Exceptional Value streams according to PA Chapter 93 Water Quality standards. None of the delineated streams are anticipated to have a time-of-year restriction associated with PFBC "Wild Trout Streams" or PFBC "Approved Trout Waters (Stocked Trout Waters)," as those resources do not exist in the Study Area.

The Applicant has developed the site to avoid direct, permanent impacts to identified resources and to maintain the required 25-foot offset buffer from delineated wetlands and the required 50-foot offset buffer (assumed floodway area per Pennsylvania Department of Environmental Protection (PADEP) Chapter 105 regulations) from delineated streams to the greatest extent practicable. Proposed overhead utility line crossings of resources including Scott Run are anticipated. Prior to construction, the appropriate stream crossing permit registrations will be prepared and submitted to the PADEP. Wetlands and Waterways Section for authorization. The locations of streams and wetlands and associated buffer areas are depicted on the Site Plan in Appendix D1.

Threatened and Endangered Species

The Applicant conducted A Pennsylvania Natural Diversity Inventory (PNDI) review (PNDI-821092) for the Project to evaluate the potential presence of state or federally listed species (PNDI 2024). The PNDI review resulted in one (1) recommended conservation measure from the USFWS to avoid potential conflicts with protected avian and bat species that may be present. The Applicant will comply with the recommended conservation measure by adhering to a time-of year tree-cutting restriction and will not conduct any tree cutting, disturbance, inundation, and prescribed burning from October 1 to March 31. No other known species conflicts or further review or coordination was identified. These measures will help to minimize the risk of take or disturbance to avian species potentially occurring within the Project Area.

Cultural Resources Summary

The Applicant reviewed the Project area and vicinity using the online Pennsylvania State Historic and Archaeological Resource Exchange (PA-SHARE) program, which is the Pennsylvania State Historic Preservation Office's (PA SHPO's) online data management and cultural resources GIS tool. The preliminary review identified one (1) existing archeological site within the boundaries of the Participating Parcels but outside of the Project Area. The site has not been evaluated for

eligibility for inclusion in the National Register of Historic Places (NRHP). Due to the sensitivity of the locations of potential underground archeological materials, the general location of the site has not been depicted on the project mapping, drawings, or figures. The design of the SEF completely avoids the archeological site and all proposed SEF and related improvements are separated from the archaeological site by a protective buffer. The Applicant will accept as a condition of the Conditional Use Permit to provide documentation of concurrence between the Applicant and PA SHPO.

Cemeteries

Desktop reviews of available mapping and information sources did not reveal the presence of any cemeteries within the Project Area. One (1) cemetery, the Bethel Church Cemetery, was identified in the vicinity of the Project. It is in the northeast quadrant of the intersection of Bethel Ridge Road and Shades of Death Road and is not located within the Participating Parcels. On-site field investigations identified two (2), private, family cemetery plots located in wooded thickets at the east and west sides of Miller Road in the southern section of the Project. The plot to the west is located outside the Project Area. The plot to the east is located within the Participating Parcel boundary but is not within the Project Area nor will it be impacted by Project development. The SEF layout has been designed to completely avoid the cemetery site, and the site will be encircled on three (3) sides by perimeter security fencing. The cemetery access will be maintained through the unfenced area at the northwest corner. The locations of identified cemeteries are depicted on the SEF Plan, Appendix D1, Sheet 2 of 2.

Topographic Survey

In February 2025, the Applicant completed a LiDAR-based topographic survey to produce detailed elevation maps and orthophotography of the Participating Parcels. The resulting elevation data identified areas with slopes of 25 degrees or greater, and the siting of the Solar Energy Facility (SEF) was designed to minimize disturbance on these steeper slopes. Limited areas of steep terrain within the proposed Project Area will be graded to achieve a finished slope of less than 25 percent.

Prior to any grading activities, the Applicant will comply with all applicable stormwater management regulations and, as a condition of approval, will provide the Township with a copy of the approved NPDES Permit. In addition, before construction begins, the Applicant will submit a geotechnical report prepared by a professional engineer licensed in the Commonwealth of Pennsylvania, demonstrating that the Project will be structurally sound and will not contribute to slope instability, soil erosion, or increased stormwater runoff.

To further reduce stormwater impacts, forest clearing on slopes has been minimized. The required NPDES stormwater permit will be obtained prior to the issuance of the Township Building Permits, and stormwater management measures recommended by PADEP will be

implemented throughout both the construction and operational phases. A copy of the approved NPDES permit will be provided to the Township before the Building Permits are approved.

FEMA Floodplains

The Federal Emergency Management Agency (FEMA) maintains official maps that delineate areas of floodplains in the landscape to denote special hazard and risk premium zones. The FEMA National Flood Hazard Layer was reviewed for potential flood hazard areas. The Study Area is encompassed by Flood Insurance Rate Map (FIRM) panels 42125C0110E (effective date 9/30/2015), 42125C0120E (effective date 9/30/2015), and 42125C0140E (effective date 9/30/2015) which include minimal flood hazard (Zone X) areas, and approximately 3.67 acres of flood hazard (Zone A) associated with Scott Run and an unnamed tributary to Scott Run near the Study Area boundary (FEMA 2024). The extents of federally regulated, FEMA Floodways and 100-year Floodplains (Zone A) have been evaluated and are identified on the SEF Plans. FEMA Floodplains are located along Scott Run and its tributary. Scott Run roughly bisects the Project's northern and southern array fields and generally flows from northeast to southwest. The Project has been designed to avoid direct impacts to the floodplain areas, and no structures are located in the FEMA Floodway nor Zone A. The 34.5 kV transmission line has one (1) overhead, aerial crossing of Scott Run and the associated FEMA Floodway.. Prior to construction, the appropriate stream crossing permit registrations will be prepared and submitted to the PADEP, Wetlands and Waterways Section for authorization. The Applicant will provide the Township with copies of the required permits/registrations.

Regulated Materials

The Applicant shall coordinate with all applicable State and Federal agencies, as necessary, to ensure compliance with all pertinent statutes, regulations, and guidance related to the management of regulated materials. Should any State or Federal agency determine that additional data are required, the Applicant shall perform soil sampling and analysis in accordance with agency specifications to support the applicable permitting requirements.

Ambient Baseline Noise Monitoring

The Jefferson Township Solar Energy Systems Ordinance stipulates that ambient sound during operation of a SEF shall not exceed the existing sound levels as measured at the property line (baseline ambient sound) plus 10 dBA during daylight hours. At night, defined as one (1) hour after dusk, predicted sound levels from the Project shall not exceed the baseline ambient sound.

A pre-construction ambient sound survey was completed at the proposed facility property on June 16-17 and July 9-10, 2025 to characterize the existing sound environment (i.e., background) in the Project area. Short term sound level measurements were taken at various site property lines and near potential Noise Sensitive Areas (NSAs) (typically defined as residences, schools, hospitals, parks, etc.) for approximately ten (10) minutes at each location during multiple time periods. The Noise Measurement (NM) points are listed below:

- NM-1: At the Hidden Meadows Game Preserve
- NM-2: Directly West of Hidden Meadows Game Preserve
- NM-3: South of Hidden Meadows Game Preserve, on McCready Rd
- NM-4: South of Hidden Meadows Game Preserve, on McCready Rd, south of NM-3
- NM-5: South of Hidden Meadows Game Preserve, on McCready Rd, south of NM-4
- NM-6: Off Bethel Ridge Rd
- NM-7A and 7B: In pastures of property off Miller Rd.
- NM-8A and 8B: In pastures of property off Miller Rd.
- NM-9: Further North on Miller Rd.
- NM-10: South of NM-7 and NM-8 on Miller Rd.

Based on the predictive modeling, offsite sound levels due to facility operation will be below ambient levels and therefore will not exceed the threshold set by Jefferson Township during any time of day. The maximum modeled increase in total sound level at a monitoring point at the Project's property boundary was 0.3 dBA, which is considered imperceptible to the human ear. The very minor sound level increases attributable to the Project at its boundary are not expected to create any adverse impacts to nearby receptors.

Modeled sound level increases at potentially noise-sensitive receptors including nearby residences are lower still (<0.1 dBA). The sound levels are due primarily to the greater than 1,000-foot distance from the facility sound sources to any of the NSAs. Therefore, no additional sound mitigation is expected to be necessary during facility operation.

Project construction activities will be limited to between 7AM through 7PM, Monday through Friday and 7AM through 5PM on Saturday. No Project construction will occur on Sunday or recognized state or Federal Holidays. Individuals responsible for implementation and compliance with applicable noise standards will be the construction site manager and operations manager (see Appendix M for contact information). Due to the distance between the Project and the nearest residences, it is not expected that the Project will cause a nuisance to adjacent uses during Project construction. To reduce Project sound levels during construction, equipment idling and the use of backup beepers will be minimized, and construction truck traffic routes will avoid nearby residences to the extent practicable. Coordination will occur to minimize conflict between construction traffic and school traffic. The detailed information pertaining to the noise monitoring assessments are included in the Sound Impact Assessment Report dated August 2025 and included in Appendix G.

Visual Assessment and Photographic Data Collection

A viewshed analysis was performed within the Visual Study Area (VSA) to assist in the evaluation of potential visual impacts of the Project against the existing landscape. A viewshed analysis is an analytical tool used for forecasting visibility over a regional area. The final resulting output identifies geographic areas from which viewers may discern visual change associated with the Project, against the current landscape. As part of the data collection phase,

two (2) site visits were conducted in March and June 2025 for the acquisition of photographs for purposes of documenting the quality of the existing environment and developing photo-simulations at important locations, or Key Observation Points (KOP). Photographs were obtained from representative KOP locations that provide the most unobstructed view to the Project in conjunction with discreet viewing distances, compass directions, communities, and if applicable, visual resources.

To conduct the visual analyses, a two-mile VSA was established according to the Project's scale, magnitude, and breadth, in comparison to the existing environment. The viewshed analysis was performed within the VSA to assist the evaluation of potential visual impacts of the Project. The photo-simulation analysis was conducted in both the "leaf on" and "leaf off" conditions to provide context for how the Project would appear from various vantage points when vegetative screening is present and absent during differing times of year. The results of the study are documented in the Visual Technical Memorandum in Appendix H.

The purpose of the Visual Technical Memorandum is to evaluate and document any potential visual changes associated with the proposed Project in relationship to the existing landscape. Further, the visual resource investigation of the proposed Project utilizes current industry standards through prevalent practice standards, framework, and guidelines made publicly available by several federal agencies (i.e., the U.S. National Park Service, the U.S. Department of Agricultural – U.S. Forest Service, the U.S. Army Core of Engineers, and the U.S. Bureau of Land Management).

The results of the Project viewshed analysis were tabulated by community and "rural residential areas" within the VSA and presented in the Tech Memo. Per the study results, the proposed Project constitutes 13.57% of predicted visibility within Jefferson Township, contrariwise, this interprets as 86.43% of the VSA will not discern the Project. The largest occurrence of Project visibility is found within the rural residential areas and agricultural fields in Jefferson Township (8.58%), followed by the communities of Jefferson (3.21%), Eldersville (1.64%), and negligible amounts of visibility in Penowa. The 13.57% net increase in visibility is generally concentrated on locations in the immediate vicinity of the Project Site, which include McCready Road and Miller Road, and private agricultural fields and/or pasture, among others. Overall, the Project's visibility threshold (13.57%) is low given that the study is focusing on one portion of Jefferson Township within the VSA.

The local road with the most anticipated solar array visibility is McCready Road, which travels within the Project site and is comprised of gravel and dirt. According to AADT of sample local roads in the VSA (57 to 75 AADT), the number of residential viewers traveling on McCready Road would be very low.

In total, four (4) visual and historic resources were identified within the VSA, however, only one (1) received predicted visibility of the Project. State Game Lands (SGL) 303 received a minor

amount predicted visibility of the Project. This visibility is isolated along the perimeter of the SGL closest to the solar array. Due to the limited extent and the seldomly seen area on the periphery of the SGL, it is reasonable to conclude that the Project would not diminish the enjoyment of these State Game Lands as viewers would gravitate toward the interior of the lands where no Project views exist.

No historic resources within the VSA received predicted visibility of the Project. The following visual and historic resources are not predicted to discern the Project.

- Meadowcroft Rock Shelter and Historic Village (National Historic Landmark);
- Pine Bank Covered Bridge;
- Cross Creek Water Corridor.

The remaining resource entitled, "State Game Lands 303" received a negligible amount of predicted Project visibility.

Eight (8) KOP locations were selected for preparation of photo-simulations based upon several factors, such as presence of predicted visibility, distance to Project, Landscape Similarity Zones (LSZs)(regions with land cover and use, land forms and that are visually similar), compass direction, clarity of view, frequency of view, viewer types, and as applicable, sensitive locations. Section 4.3 of the Appendix H - Viewshed Tech Memo provides a thorough description of each KOP as it relates to the existing and proposed viewing environment. Per the results presented in Section 4.3 of the Tech Memo, three (3) out of eight (8) KOPs demonstrate minor visual change due to the Project, this includes KOPs 1, 4, and 10 which are simulated at a mile or more from the Project. Another three (3) of the eight (8) KOPs illustrate a low to moderate visual change, this includes KOPs, 2, 2 Alt, and 3 which are simulated from within a quarter to half-mile distance to the Project. This, along with the viewshed results, suggests the Project will not impact all places, locations, or sites at a variety of distances from the Project Site.

The remaining two (2) of eight (8) KOPs, 5 Alt and 7 Alt 2, were prepared as photo-simulations from Miller Road and are immediately adjacent to the Project, roughly 170 to 205 feet from the Project, respectively. Both KOPs are expected to result in some level of visual change due to the proposed conditions. However, both KOPs were prepared from strategic vantage points where small gaps existing in a tree hedgerow along the road. Therefore, local residents traveling on Miller Road (e.g., local roads in the VSA containing an estimated AADT between 57 and 75) will only catch brief glimpses of the solar panels due to an intervening proposed and existing vegetation along the road.

The results indicate that the quality of the existing landscape, the visual resources identified within the VSA, and a substantial amount of the public will not be adversely impacted by the Project. Most visual changes associated with the Project are documented in simulations on Miller Road that are positioned immediately adjacent to the Project site. The majority of Miller Road is

shielded by proposed and existing vegetation, except for limited areas of the road where KOP 5 Alt and 7 Alt 2 were prepared. The detailed modeling and results of the Viewshed Analysis are contained in Appendix H.

Glint and Glare Analysis

The Zoning Ordinance governing solar energy facilities requires that SEFs do not have a significant adverse impact on neighboring or adjacent uses. It is required that the "Applicant provide a completed Glare Study ensuring that glare created by the SEF does not fall into the red category." Additionally, the Zoning Ordinance specifies all adjacent roads and non-participating property owners' residences within 1,000 feet of the Facility must be included in the glare study.

This glare analysis was produced to determine the potential glare from the Project along the adjacent roadways and nearby properties within 1,000 to 2,000 feet of the Facility to meet this Zoning Ordinance requirement. In addition, because the Zoning Ordinance regulates development in a Pennsylvania township, receptors based within West Virginia were not included in the analysis.

To conduct the glint and glare analysis, TRC used methods developed by Sandia National Laboratories and described in the SGHAT User's Manual. The SGHAT compliant software used in this analysis is under license to TRC by ForgeSolar.

The SGHAT classifies solar glare into three categories, denoted as "green," "yellow," or "red" glare.

- Green glare is the mildest of the classifications and has low potential to cause after-image and no potential to cause retinal burn.
- Yellow glare is a moderate level of glare and has some potential for temporary after-image and no potential to cause retinal burn.
- Red glare is a serious and significant form of glare with potential to cause retinal burn and/or permanent eye damage

The Zoning Ordinance indicates that non-participating property owner residences, and roadways within 1,000 feet of the facility shall be included in the glare study. Therefore, presumed occupied properties located within 2,000 feet of an array area were evaluated for that array in the models. Twenty-four observation points (equating to 17 unique buildings) were identified within 2,000 feet proximity to the SEF along with the following roadways:

- Bethel Ridge Road
- Locust Road
- McCready Road
- Miller Road
- Shades of Death Road
- State Line Road

- Village Road

As modeled, glare is estimated to be observed from the SEF; however, based on the viewshed analysis a substantial portion of the glare would not be visible from the receptor locations due to the viewshed analysis providing a more detailed review of the surrounding visual obstruction than can be conducted in the glare model. Although, green and yellow glare is estimated to be visible from outside the SEF, the SEF meets the requirements of the Jefferson Township zoning ordinance as none of the estimated glare constitutes red glare. In addition, the estimated glare will not have a significant adverse impact on neighboring uses as the estimated impacts are either minor or will be generally short in duration (e.g., vehicles would be moving through the impacted segments of a roadway resulting in a shorter duration on the individual and not prolonged exposure). The detailed results of the site-specific modeling and analysis are contained in Appendix K.

The Project has been designed to comply with the SEF requirements as prescribed in Zoning Ordinance. The following sections specifically define compliance with the applicable sections of the SEF ordinance as noted, as well as the requirements for the electrical substations and electrical power transmission lines. Sections 25 and 26 address electrical power transmission lines and electrical substations. Section 27 addresses general performance standards required under the zoning ordinance.

3 Project Narrative (212.1.A.1.a)

The Project narrative section describes the proposed SEF. Per section 212.1.A.1.a, Cornerstone Solar, LLC proposes to develop the Cornerstone Solar, an approximately 200 MW AC solar energy facility on approximately 730 acres in Jefferson Township, Washington County, PA. The site is located approximately 25 miles southwest of Pittsburgh, with center coordinates at 40.315731, -80.509238. The Project Area extends to the PA/WV state line on its western boundary and is bisected by Bethel Ridge Road and Miller Road. The Project is proposed within the Solar Energy Facility Overlay District primarily across existing reclaimed mine land and existing open agricultural fields.

The Project will consist of the installation of approximately 442,392 photovoltaic solar modules along with associated electrical infrastructure, access roads, fencing, and operations facilities designed for utility-scale renewable power generation. The solar modules will be the SIL-580 model manufactured by Silfab Solar, each measuring 7.5 feet (89.7 inches) wide, 3.7 feet (44.6 inches) high, and 0.1 feet (1.4 inches) thick. Additional components of the Project will include a network of 20-foot-wide gravel access roads and electrical transmission lines, 48 inverters, and a substation. The inverters, model 4600 manufactured by SMA, will measure 9.1 feet (109.4 inches) wide, 7.6 feet (91.3 inches) high, and 5.2 feet (62.5 inches) deep. The transformer, manufactured by Mars Transformers, will measure 21.8 feet (261.6 inches) wide, 25.8 feet (309.6 inches) high, and 33.6 feet (403.2 inches) long.

The overhead 34.5 kV collector line is approximately 6,620 feet long, designed as a three-phase monopole configuration with 9-foot horizontal separation between conductors. Design data from the Cornerstone 34.5 kV Collector Line Plan & Profile (Appendix D2) indicate the following:

- Span lengths of 155 to 726 feet between structures.
- Typical structure spacing approximately 230 to 270 feet.
- Conductor sag profiles 1743 – 1746 lbs. everyday creep tension; 3029 – 5066 lbs. MOT creep tension.

The SEF will be completely enclosed in a 8-foot-high fence equipped with self-locking gates to ensure site security and controlled access (see Appendix D4 for Fence Detail Sheets). All entry gates shall be accessible 24 hours a day by emergency personnel and vehicles. An emergency shut-off device (ESD) shall be installed near main entry gates. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the SEF informing individuals of potential voltage hazards. Stabilized access drives at least 20 feet wide will provide access within the SEF arrays; these interior access drives will be maintained as gravel roads. Additionally, a minimum offset of 20 feet is provided between the arrays and perimeter fencing to provide a 20-foot-wide cart-way around the perimeter of the SEF. The solar array is setback 100 feet from property lines and 700 feet from nonparticipating residential structures. The SEF will not be used for advertising or displaying signage.

4 Solar Energy Facility Drawings (212.1.A.1.b)

Per Section 212.1.A.1.b, site drawings showing the location of the SEF and associated components and property lines are included in Appendix D1.

In accordance with the Solar Ordinance Section 212.3.A.2 the Project and its components have been designed and sited to avoid restricted areas and are not located in:

a. FEMA Flood Insurance Rate Map (FIRM) areas.
b. Regulated natural and man-made drainage corridors, extending twenty-five (25) feet from the centerline of any such drainage feature, unless approved by the Pennsylvania Department of Environmental Protection (PA DEP)
c. Cemeteries
d. Property listed on or eligible for the National Register of Historic Places or historic and cultural resources as defined in the Comprehensive Plan, except that those listed property owners, if in the Solar Energy Facility Overlay District, may choose to permit SEF on non-historical areas of their property.
e. Public rights-of-way
f. Private rights-of-way (unless permission is received)

g. Setback areas, which according to the SEF regulations, are a minimum of 100 feet from property lines and 700 feet from any non-participating owner's existing occupied residential structure. Additionally, all inverters shall be setback 700 feet from all adjacent nonparticipating owner's residential structures. Setbacks for substations are a minimum of 100 feet from property lines. The support poles for the overhead electric line (34.5 kV) are 100 feet from non-participating property boundaries, and the centerline of the proposed right of way is greater than 50 feet from residential structures and 300 feet from residential and special use zones. In addition, the right-of-way for the overhead electric line is 110% of the average supporting structures heights.
h. Pennsylvania does not have a specific state law regarding tree removal and vegetation in wooded areas on private property. Tree clearing, replacement, vegetative buffering, plantings, and management are contained in the Landscape Plan, Appendix I and Vegetation Management Plan, Appendix J.

The site design follows the applicable industry standards and complies with the PA Uniform Construction Code.

5 Participating Landowner Agreements (212.1.A.1.c)

Per Section 212.1.A.1.c, copies of affidavits between participating landowners of the real property on which the Project is to be located and the Applicant are Included in Appendix C. The affidavits demonstrate that the Applicant has permission of the six (6) participating landowners to apply for necessary permits or approvals for construction and operation of the SEF ("Participating Landowner Agreement").

6 SEF Properties and Adjacent Properties (212.1.A.1.d)

Per Section 212.1.A.1.d, the SEF properties and adjacent properties have been identified (see Figure 3, Appendix A), and the property owner information and Applicant agreement status (purchase, lease, or easement) has been tabulated and included in Table 1 in Appendix B. The Project will span across 21 different parcels owned by a total of six (6) individuals or entities and is adjacent to another 48 parcels in PA and nine (9) parcels in WV. Identification of the properties or portions thereof on which the proposed SEF will be located, and the properties adjacent to where the SEF will be located are detailed in Table 1 included in Appendix B.

7 Site Plan (212.1.A.1.e) – Refer to Section 4 Above

Per Section 212.1.A.1.e (and as noted in Section 4 Solar Energy Facility Drawings (212.1.A.1.b), a concept site plan showing the planned location of the SEF, property lines, setback lines, access roads (including the width of the roads, turnaround areas, and turnout locations), substation(s), electrical cabling from the SEF to the substation(s), ancillary equipment, buildings and structures, including associated distribution and/or transmission lines, and layout of all structures within the geographical boundaries of any applicable setback is included in Appendix D1.

In accordance with the Zoning Ordinance, the layout of the Project is in compliance with applicable industry standards (Section 3.A.4), fire and life safety requirements (Section 3.A.5), substation and collector line meets IEEE and NERC standards (Sections 4.E.1 and 4.E.2).

8 Contractor Documentation (212.1.A.1.f)

In accordance with Zoning Ordinance, the SEF installers must certify that they are listed as a certified installer on the PADEP approved solar installer list or that they meet the criteria to be a PADEP approved installer by meeting or exceeding one (1) of the following requirements:

a. Is certified by the North American Board of Certified Energy Practitioners (NABCEP).

b. Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited PV training program or a PV manufacturer's training

At the time of this application, the Applicant has not selected contractors to complete the Project installation. Contractors will be selected after land development approval and prior to issuing the building permit. The Applicant will provide contractor certification information to the Township when they have been selected to fulfill this requirement. The Applicant will accept this as a condition of CUP approval.

9 Other Relevant Studies, Certifications, Permits, and Approvals (212.1.A.1.g)

Per Section 212.1.A.1.g the Applicant, as part of the due diligence process during Project siting and design, completed several studies and approvals to identify, delineate, and document existing environmental resources and site conditions. The collected data was implemented into all aspects of the Project designs to avoid and minimize impacts to resources and to comply with federal, state and county regulations. A matrix outlining the studies and approvals that were completed at the time of this Application are detailed in Table 2 in Appendix B. As the Project involves the planned construction of overhead electrical power lines, an Avian Protection Plan (APP) has been developed to ensure compliance with the USFWS guidance and Migratory Bird Act requirements.

9.1 Avian Protection Plan (212.1.A.1.g.*i*)

The Project includes overhead power line construction for the 34.5 kV collector line installation. As required by the Zoning Ordinance, the Applicant has developed an APP following the guidelines by APLIC (Avian Power Line Interaction Committee) and USFWS. The APP is designed to ensure compliance with the Migratory Bird Act and is included in Appendix P.

9.2 National Pollutant Discharge Elimination System (NPDES) Permit (212.1.A.1.g.*ii*)

The Project will require a General NDPES construction storm water permit, as described in the Project permit matrix (Table 2, Appendix B). The Applicant will provide necessary permit approvals to the Township prior to issuance of the Building Permit.

10 Permit Status (212.1.A.1.h)

Additional studies, reports, certifications, permits, and approvals required by federal, state and county regulations to construct, operate and maintain the SEF may be required after the Applicant applies for the CUP. Per Section 212.1.A.1.h, studies and approvals that are ongoing or are anticipated to be required prior to construction have been identified and are included in Table 3 in Appendix B.

The current status and key information for each of the relevant federal, state, or county studies, reports, certifications, permits, and approvals anticipated for the Project are detailed in Table 3 in Appendix B. Additional studies required include, but are not limited to, Stormwater Management (Section 3.B.5.b) NPDES General Permit application and soil testing (if required by State or Federal Agencies). The Applicant will accept a condition to provide the Township all third party permits as a condition of approval prior to seeking a Building Permit.

11 Manufacturer Specifications (212.1.A.1.i)

Per Section 212.1.A.1.i, the manufacturer specifications for anticipated key components of the SEF, including composition, toxicological information and the physical and chemical properties of all panels are included in Appendix E.

Solar panels will demonstrate compliance with the United States Environmental Protective Agency (US EPA) Toxicity Characteristic Leaching Procedure Test (TCLP) to evidence their non-toxic status and be UL listed in accordance with Zoning Ordinance.

12 Safety Data Sheets (212.1.A.1.j)

A Safety Data Sheet (SDS) is a detailed document that provides comprehensive information about a hazardous chemical's properties, hazards, and safety precautions for handling, storing, and transporting it as required by OSHA or other third-party regulatory agencies. They include guidance on first aid, protective equipment, and spill response, with information typically provided by the manufacturer or supplier. To meet the ordinance requirement of Section 212.1.A.1.j, SDSs for anticipated hazardous materials used or installed on the development site, are included in Appendix F. Final SDSs for anticipated hazardous materials will also be provided to the appropriate emergency service professionals.

13 Acoustical Study (212.1.A.1.k)

In accordance with Zoning Ordinance, an acoustic study that addresses noise produced during construction and during the facilities operation was completed by the Applicant's consultant. Results of the Acoustical Study are discussed in the Section 2, Ambient Baseline Noise Monitoring. The complete Acoustical Study is provided in Appendix G.

14 View Shed Analysis (212.1.A.1.l)

As required in Section 212.1.A.1.l, viewshed studies and analysis have been performed for the Project. A Visual Technical Memorandum was completed by TRC and is included in Appendix H. Viewshed Analysis overview mapping is included in Appendix H1 and H2. Photo simulations depicting viewshed imagery from key observation points surrounding the site are included in Appendix H3.

15 Landscaping Plan (212.1.A.1.m)

Per Section 212.1.A.1.m, a landscaping plan has been developed for the Project to demonstrate compliance with the screening and buffering provisions of the Ordinance. The Zoning Ordinance includes requirements for "Screening and buffering" in areas where the viewshed analysis indicated that screening is required to minimize views if the SEF. In accordance with the Ordinance, vegetative buffering will be installed around the SEF in specific areas to prevent the SEF from being seen from roadways adjacent to the SEF and/or non-participating owner's residential structures on adjacent properties. The landscape plan includes approximately 4,000 linear feet x 25-foot-wide buffer planting zones comprised of Pennsylvania native, containerized tree and shrubs, PA solar farm seed mix, and PA pollinator seed mixes for areas beneath the solar arrays and outside the fence line, respectively. The landscaping plan also includes a 100-foot-wide buffer of existing forested vegetation for the eastern and southern boundaries of the northern portion of the Project, and select areas in the southern portion of the Project. The existing vegetative buffer would extend 100 feet from the perimeter fence and would be monitored and managed to maintain the screening effectiveness. The plan is provided in Appendix I.

16 Vegetation Management Plan (212.1.A.1.n)

Per Section 212.1.A.1.n, a Vegetation Management Plan including maintenance requirements has been developed for the Project and is included in Appendix J. Once ground cover is established, the Site will be mowed and trimmed regularly to ensure that vegetation does not shade the photovoltaic modules, allows unobstructed access to the array and its components, and presents a well-groomed site appearance. Mowing is typically performed three (3) to four (4) times per growing season until fully established, but this may be amended depending on rainfall and other observed growing conditions. Mowings will occur once to twice per year for maintenance purposes once fully established. At this time, the Applicant will not implement agrivoltaics, sheep grazing or gardening practices as a means to maintain vegetation.

The Vegetation Management Plan provides management practices for the buffer zone under the control of the Applicant, including the newly installed plantings within the 25-ft vegetative buffer on the southern portion of the Project, any supplemental plantings installed as replacements, and the 100-ft wide existing forested buffer on the northern and southern portions of the Project. In addition, the Vegetation Management Plan includes a commitment to not conduct commercial tree harvesting within the existing forested areas that will be owned or leased by the Applicant.

Vegetated areas will not be subject to chemical fertilization or herbicide/ pesticide application, except for those applications necessary to establish the vegetative cover or to prevent invasive species and in accordance with an approved erosion and sedimentation control plan.

In accordance with Section 212.3.A.2.h., the Applicant will comply with applicable local and state law related to removal of trees and vegetation in wooded areas within the context of the applicable NPDES General Permit requirements for proposed earth disturbances and construction stormwater runoff. Per the results of the PNDI review, time of year tree cutting restrictions between October 31 and March 31st, will be adhered to as a conservation measure as required by the USFWS.

Prior to commencement of construction, the Applicant shall provide the Township with the name, title, company, and contact information for the entity responsible for vegetation management and buffer maintenance. Once the long-term maintenance contractor is selected, the Township shall be provided with direct contact information for the contractor responsible for inspections, deficiency reporting, and corrective action implementation. Any change in responsible party during the life of the project shall be promptly communicated to the Township. The Applicant retains ultimate responsibility for compliance with the approved Vegetation Management Plan.

17 Glare Study (212.1.A.1.o)

Per Section 212.1.A.1.o, the Applicant has completed a Glint and Glare Study (Appendix K) using Sandia's Solar Glare Hazard Analysis Tool (SGHAT) tool. The results demonstrate that the SEF will not have significant adverse impact on neighboring or adjacent uses either through siting or through mitigation. In addition, glare created by the SEF does not fall into the "red category" per the Jefferson Township zoning ordinance requirements. Per the requirements, adjacent roads, and non-participating property owners' residences within 1000 feet were included in the study.

18 Certificates of Design Compliance (212.1.A.1.p)

As required in Section 212.1.A.1.p, a Certificate of Design Compliance (CDC) will be provided. The CDC is a document that certifies a product or building design meets specific legal, safety, and building code standards. It is often issued by a competent authority or third party, ensuring that a product or the design of a structure will, if correctly installed, comply with relevant laws and regulations. A solar farm's certificate of design compliance requires submitting detailed plans that demonstrate adherence to building, electrical, and fire codes, including the National Electric

Code (NEC) and International Building Code (IBC). Key requirements include detailed site and electrical diagrams, structural assessments, fire safety plans (including setbacks), and ensuring all components have the necessary listings and certifications.

The CDCs for the Project will be provided to the Township prior to issuance of the Building Permit. Certificates of design compliance will be obtained by the equipment manufacturers from Underwriters Laboratories (UL), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratories (ETL), Florida Solar Energy Center (FSEC) or other equivalent certifying organizations as the Project designs are finalized and the specific equipment to be installed, is known.

19 Construction Transportation Plan (212.1.A.1.q)

In compliance with Section 212.1.A.1.q, the Applicant developed a Construction Transportation Plan. The Construction Transportation Plan shows all roadways that will be utilized to access the SEF, access points include direct access from T-335 (Miller Road), Village Road, and from County Road No. 7. Haul routes will be utilized for delivery of equipment/materials and access to the work areas. Roadway repairs will be completed to address any failure areas along the planned haul routes precipitated by construction traffic. A field meeting and determination will be made by the Applicant Representative, Jefferson Township, PennDOT, and County Representative for the level of repairs, as appropriate.

The Applicant conducted a meeting with the Burgettstown School District to review the Project, anticipated construction traffic and to gather information on specific transportation concerns and requirements. It was discussed that both Bus 4 and Jake Schneider's Bus Contracting Service using vans run the routes closest to the Project site. This bus route will mostly use SR 4008 (Eldersville Road), T-388 (Cole School Road), and T-335 (Miller Road) with turnaround points at the SR 4014 (Stateline Road), T-779 (Shades of Death Road). The Applicant and their contractor will coordinate with Burgettstown Area Schol District to avoid construction traffic during school drop-off and pick-up times.

Temporary traffic control measures and devices to protect work zones shall be implemented in accordance with PennDOT Publication 213, Temporary Traffic Control Guidelines and WVDOH, Manual on Temporary Traffic Control for Streets and Highways, based on location and duration of the work. It is anticipated the reference traffic control details shall be the basis of the temporary traffic control pattern for each location where temporary traffic controls are required. It is anticipated that all work zones will be considered Short Term Operations. The Construction Transportation Plan is available in Appendix L.

To provide remedies for township roadway repair and maintenance that may be needed due to heavy truck and equipment access to the site, the Applicant and its contractors will enter into a road maintenance agreement with the Township prior to construction.

20 Public Utility Acknowledgement (212.1.A.1.r)

The Project is currently part of the PJM Transition Cycle 2 Interconnection, and PJM has been advised of the intent to install a grid-connected system, with an Interconnection Agreement anticipated by December 2026/January 2027. To comply with Section 212.1.A.1.r, the applicant will supply a redacted copy of the interconnection agreement prior to issuance of the Building Permit.

21 Emergency Response Plan (212.1.A.1.s)

The Applicant has collaborated with local emergency service professionals servicing the location of the SEF. These emergency service professionals included:

- Jefferson Township Volunteer Fire Department,
- Township Zoning Officer, and
- Washington County Department of Public Safety

The goal of the meetings was to gather site specific information and concerns to prepare an Emergency Response Plan and ensure that emergency service professionals can safely, effectively, and reasonably respond to an emergency involving an SEF.

The Emergency Response Plan includes site orientation, location, and review of SDS documentation, review of emergency vehicle access, location of significant structures including the Emergency Shut-off Devices (ESD) and what is rendered safe by activating these devices, and other matters, as necessary. The Applicants Emergency Response Plan is included in Appendix M. The SEF Owner/Operator will provide training to emergency service professionals regarding how to implement the plan at the SEF.

22 Non-Participating Landowner Notification (212.1.A.1.t)

In compliance with Section 212.1.A.1.t, The Applicant will notify, in writing, via certified mail, all non-participating property owners within 1,000 feet of the proposed development about the Project and the submission of the CUP to the Township for review. A map showing the non-participating landowners within 1,000 feet of SEF is included in Figure 4 of Appendix A, and a table of the landowners and address is included in Table 4, Appendix B.

A copy of the Non-Participating Landowner Notification letter to be distributed, is included in Appendix N.

23 Conditional Use Application Distribution (212.1.A.1.u)

As requested by the Township, the Applicant has provided six (6) physical copies and one (1) electronic copy (.pdf format) of this CUP Application and the above-listed supporting documents. The Applicant understands that one (1) copy will be kept at the Township Building for inspection

by residents who are located within 1,000 feet of the proposed development. Landowners will be informed of the CUP submission in their letter included in Appendix N.

24 Decommissioning Plan (212.3.A.22)

The Applicant has developed an SEF Decommissioning Plan in compliance with Section 212.3.A.22. A solar farm decommissioning plan is a comprehensive roadmap for dismantling a solar energy system at the end of its operational life, involving equipment removal, responsible recycling and disposal, and land restoration to approximate its original state. Key components include regulatory compliance, detailed cost analysis, financial assurance, and a site-specific strategy for removing components like panels, racking, inverters, and foundations.

The purpose of the Plan is to provide the general scope of decommissioning work as well as a construction cost estimate for a decommissioning assurance mechanism of the SEF and subject to the Zoning Ordinance. In accordance with the Zoning Ordinance, the owner/operator will have eighteen (18) months to dismantle and remove the SEF. The Decommissioning Plan for the Project, in accordance with the requirements details in the Zoning Ordinance, will be updated every five (5) years of SEF service. Financial security will be provided to the Township prior to issuance of the Building Permit.

The Facility will be decommissioned by completing the following major steps:

1. Removal of modules, racking, and foundation piles;
2. Removal of cabling, trays, and electrical equipment;
3. Removal of concrete pads, foundations, and debris;
4. Removal of the gravel access road and turnaround (if required by the landowner);
5. Site stabilization by placing soil and reseeding; and
6. Removal and disposal or recycling of certain materials.

The Decommissioning Plan for the Project is provided in (Appendix O).

The Cornerstone Solar Project has been designed to comply with the SEF requirements as prescribed in Article 4 of the Jefferson Township Zoning Ordinance including Solar Energy Facility Overlay Districts, as well as Section 210.12 and 210.13. The following sections specifically define compliance with the applicable sections as noted.

25 Electric Power Transmission Lines (210.12)

The planned collector line will link the part of the Project south of Bethel Ridge Road to another section on the reclaimed coal strip mine north of Bethel Ridge Road. An additional collector line will link the project east and west of Miller Road. Collectively, this overhead 34.5 kV line will

stretch approximately 6,620 feet and feature a three-phase monopole design. The collector line will meet 2017 National Electrical Safety Corporation from IEEE as amended, the North American Electric Reliability Corporation (NERC) standards as amended and comply with all state and federal laws applicable to the project. Final regulatory approval and evidence of compliance with all state and federal regulations applicable for the collector line will be provided prior to the commencement of construction. Further design details can be found in the Cornerstone 34.5 kV Collector Line Plan & Profile (Appendix D2). As shown in the elevation profile in Appendix D, the collector line utilizes the lower terrain of Scott Run valley to help minimize obtrusive sight lines. There are 24 proposed support structures, with heights ranging from 43 to 70 feet. The support structures and lines are located more than 50 feet from residential structures, outside the 100-foot setback of non-participating property boundaries, and outside the 300-ft setback from residential and special use zones. Most—13 out of the 24—will stand at 52 feet, 9 will be 56.5 feet, while only one (1) structure is planned at 70 feet, and one is planned at 43 feet. The right of way (ROW) is set at 115 feet wide over the 52 foot poles and 125 feet wide over the 56.5 foot poles, which provides a ROW equivalent to more than 110% of the average structure height. A larger ROW of 155 feet will be provided around the 70 foot pole. The Applicant will maintain the ROW and keep it clear of vegetation to permit EMS vehicle access and routine maintenance of the collector line. Additionally, the Project will include underground 34.5kV collector lines within fenced area of the SEF, and these underground lines will be located outside the 50-foot setback of residential structures.

In addition to the collector line, the Project will include a short segment of 345kV transmission line that will extend from the existing 345kV transmission line to the interconnection switchyard, referred to as the tie-in line. This tie-in line will be approximately 200 feet long and is the responsibility of the interconnection utility to construct. The nearest residence to the 345kV tie-in line is approximately 4,500 feet.

26 Electric Substation (210.13)

The SEF will incorporate a Project substation designed to aggregate power generated by the facility and transform it to the required interconnection voltage of 345 kV. Immediately adjacent to the Project substation, an interconnection switchyard will facilitate the connection to the existing 345 kV transmission line that runs along the Pennsylvania/West Virginia state line. The substations will meet 2017 National Electrical Safety Code from IEEE as amended, The North American Electric Reliability Corporation (NERC) standards as amended and comply with all state and federal laws applicable to the project. Further design details for the Project substation and interconnection switchyard can be found in Appendix D3. The Applicant will provide final regulatory approval and evidence of compliance with all state and federal regulations applicable for the substations prior to the commencement of construction. Both substations are situated on the western perimeter of the former coal strip mine, with the nearest non-participating residence located approximately 0.85 miles (4,500 feet) from the proposed substations. The substations are

positioned with a setback of 100 feet from property boundaries, and there are no non-participating property owners within 1,000 feet of the substations. The selected locations reduce visual impacts due to prevailing topography and existing forest cover, which significantly restrict views from neighboring properties (see Appendix H, View Shed Analysis, KOP 2ALT Photo Simulation). As visibility of the substations is minimal, additional berms and landscaping have not been included in the design. The substations design includes 20-foot wide cartway paths within the substation fence and on-site parking. Access to the substations will be provided via all-weather driveways (see Appendix D5 for driveway detail sheets). The Project collector substation will be enclosed by seven (7) foot tall chain link fencing topped with one (1) additional foot of barbed wire (three strands) to provide enhanced security around critical electrical infrastructure. The fencing will not intrude into the setback area. Fencing for the interconnection switchyard will be constructed in accordance with the requirements of the interconnecting utility. At this time, it is anticipated that the interconnection switchyard will be enclosed by a seven (7) foot tall chain link fence topped with one (1) additional foot of barbed wire (three strands), consistent with typical utility security standards and shall comply with the National Electrical Safety Code (see Appendix D4 for fence detail sheets).

27 Zoning Ordinance- Article 4- Supplemental Regulations

Article 4 of the Zoning Ordinance enumerates supplemental regulations that apply to all Zoning Districts and Zoning Overlay Districts including the Solar Energy Facility Overlay District. Article 4 includes requirements and Performance Standards not discussed previously. The Applicant developed the Project in accordance with the applicable sections and performance standards within Article 4 which are summarized in the sections below.

27.1 Section 405.4- Lighting

No intensive lighting is proposed as part of this Project and the SEF shall not be artificially lit except to the minimal extent required for safety or applicable federal, state, or local authorities. Specifically, lighting is proposed at SEF entrance gates, the collector substation, and interconnection switchyard. For the SEF and collector substation, any required lighting shall be directed downward so as to minimize negative impacts to adjacent uses, fitted with motion detector sensors to ensure shutoff when not in use, limited to minimum intensity, and warm colored. The owner will conform to the “dark sky” best practices. Regarding the interconnection switchyard, this facility will be owned, operated, and maintained by the interconnection electric utility. As such, lighting design and operational standards must comply with the utilities engineering, safety, and operational requirements. These standards are established to meet industry reliability and worker safety standards.

27.2 Section 406.3 – Electrical Disturbances

The proposed SEF includes solar photovoltaic (PV) modules and racking, DC to AC inverters, communications, equipment pads, a monitoring system, all standard interconnection-related

equipment on the customer side of the meter, including panel circuit breakers, utility disconnect switches, solar metering, conduit, and wiring. The system will be constructed to the design specifications in the proposed layouts provided with this submission.

None of the electrical equipment specified will emit dangerous radioactivity or create an electrical disturbance. Solar facilities do not generate significant Electromagnetic Fields (EMFs), nor do they interfere with telecommunications. All equipment must comply with FCC rules to limit any radio frequency power that is emitted by electronic devices.

27.3 Section 406.4 – Noise

The Project has been designed to comply with the noise requirements set forth in this section. The Project is not expected to generate sound at or beyond the lot line that exceeds the ambient noise level by 10 or more decibels. A Noise survey has been completed for the Project in June 16-17 and July 9-10, 2025 to characterize the existing ambient noise levels. The survey also included short term sound level monitoring at noise sensitive areas (nearby residences).

The Project is considered a “passive” renewable power generation facility, and noise levels are not expected to exceed 50.5 decibels, which is less than conversational talking volume. The inverters are the loudest components of the system. The proposed inverters to be used on this Project would have a maximum audible noise emission at full power of less than 65 decibels at 10m. The closest residence to the property line as presently proposed is approximately 320 feet (~98m). The further away from the inverters, the lower the perceived sound intensity will be. Additionally, the existing vegetation and proposed vegetive plantings for landscape screening will further attenuate any noise generated from the Project. Due to the distance between the Project and the nearest residences, it is not expected that the Project will cause a nuisance to adjacent uses during construction. To reduce Project sound levels during construction, equipment idling and the use of backup beepers will be minimized, and construction truck traffic routes will avoid nearby residences to the extent practicable.

27.4 Section 406.5 - Vibrations

The Project is not expected to emit any vibration detectable on a neighboring property on a regular or continuous basis during construction or when in operation.

27.5 Section 406.6 – Odors

The Project is not expected to emit any malodorous gas or matter which is discernable on any adjoining property. Limited amounts of temporary air pollution in the form of vehicle exhausts and fugitive dust associated with typical transport, use and operation of construction equipment and associated earth disturbance across the Project area is expected to occur during the construction phase. Once construction is completed and the facility is operational, the Project is not expected to emit any odor.

27.6 Section 406.7 – Air Pollution

Limited amounts of temporary air pollution in the form of vehicle exhausts and fugitive dust associated with typical transport, use and operation of construction equipment and associated earth disturbance across the Project area is expected to occur during the construction phase. Once construction is completed and the facility is operational, the Project will reach required vegetative stabilization and will not produce emissions of smoke, fly ash, dust, fumes, vapors, gases, or other air pollution which is harmful to health, animals, vegetation, or other properties.

27.7 Section 406.8- Glare

The PV solar panels that will be installed with this Project are coated with nonreflective materials designed to maximize light absorption and minimize glare. Glare or reflected sunlight is not an anticipated issue with PV solar projects, including the associated transmission lines and substations. Based on the Glare modeling and analysis performed, the Project does not result in any red glare and only limited, intermittent exposures of green and yellow glare are expected at peripheral locations. The absence of red glare meets the glare standards set forth in the ordinance.

27.8 Section 406.9 – Erosion

Construction of the Project will result in earth disturbances and the potential for soil erosion and transport. Prior to construction, the Applicant will submit geotechnical evidence prepared by a Professional Engineer licensed in the Commonwealth of Pennsylvania demonstrating that the proposed Project will be safe and that it will not contribute to or create conditions of increased susceptibility to landslides or movement of earth. It should be noted that the preliminary geotechnical study performed for the Project identified a type of natural rock layer known as “red beds,” which in some parts of western Pennsylvania can contribute to landslides. At this site, these red beds were found to lie deep below the ground surface—well beneath the levels that will be affected by construction. Based on this finding, the preliminary geotechnical report concluded that the red beds are not expected to pose a concern for the stability or safety of the Project Area during construction or operation.

The Project design will include development of a detailed Erosion and Sediment Control Plans and Construction Sequencing as part of the pending NPDES General Permit Application that will be prepared in the future prior to the initiation of any Project construction. The plans will include appropriate erosion and sediment control best management practices (BMPs) and temporary and permanent vegetative treatments. The BMPs and vegetative treatments will be implemented at the outset of initial site clearing, grubbing and surface grading and will be regularly maintained in operable condition or replaced throughout the construction phase, as prescribed by the PADEP’s Chapter 102 rules and regulations. As Operations and Maintenance Agreement will be recorded against the property per PADEP’s rules and regulations and will run with the land.

Disturbed bare earth will be temporarily seeded and mulched where appropriate and at the appropriate times during the construction phase until permanent seedings and plantings are installed and vegetation is established. A minimum 70% vegetative coverage density must be achieved across the site. Further, the Landscaping Plan and Vegetative Management Plan prescribe additional visual screening plantings and long-term maintenance and management of the site vegetation after construction is complete and the facility is in operation.

27.9 Section 406.10 – Water Pollution

The Project stormwater design will implement best management practices and sediment control measures during construction, as prescribed by the NPDES General Permit and Chapter 102 rules and regulations and PADEP, which will limit or eliminate potential for water pollution. Permanent stormwater management facilities will be incorporated into the design to infiltrate and attenuate stormwater runoff and control the quality and quantity of runoff from the site during storm events. Solar project infrastructure and facilities do not contain hazardous materials which are leachable and therefore pose no threat of soil, groundwater, nor surface water contamination.

27.10 Section 406.12- Debris

During the initial construction phase, various forms of associated construction debris in the form of cleared and grubbed vegetation, material debris and containers, packaging and various disposable plastic, paper and wood materials will be present on the site with the delivery and installation of solar facility equipment and supplies. Good housekeeping practices, designated waste receptacles and stockpile/laydown areas, and proper waste management and disposal facilities will be incorporated into the plans. Instructions for proper handling of the debris will prevent debris from leaving the site. When necessary, debris will be removed from the site periodically and disposed of at a permitted landfill site. Debris of any kind will not be disposed of on the Project site, and all fire hazards during and after construction will be mitigated or removed daily.