

**TOWNSHIP OF SERGEANT
McKEAN COUNTY, PENNSYLVANIA
ORDINANCE NO. _____**

**AN ORDINANCE OF THE TOWNSHIP OF SERGEANT, A SECOND
CLASS TOWNSHIP IN THE COUNTY OF McKEAN, COMMONWEALTH
OF PENNSYLVANIA, REGULATING SOLAR ENERGY FACILITIES
WITHIN THE TOWNSHIP AS A MATTER OF LAND USE AND ZONING**

WHEREAS, Section 1506 of the Second Class Township Code, Act of May 1, 1933, P.L. 103, No. 69, as amended by Section 1 of the Act of November 9, 1995, P.L. 350, No. 60, found at 53 P.S. §66506, entitled “General Powers,” authorizes any board of township supervisors to make and adopt ordinances necessary for the proper management, care and control of the Township, and the maintenance of the health and welfare of the Township and its citizens; and

WHEREAS, Section 1527 of the Second Class Township Code, Act of May 1, 1933, P.L. 103, No. 69, as amended by Section 1 of the Act of November 9, 1995, P.L. 350, No. 60 found at 53 P.S. §66527, entitled “Public Safety,” authorizes the Board of Township Supervisors to adopt ordinances to secure the safety of persons or property within the Township; and

WHEREAS, the Township seeks to promote the general health, safety and welfare of the community by adopting an Ordinance providing for access to and use of solar energy systems;

NOW, THEREFORE, it is hereby enacted and ordained by the Board of Supervisors of Sergeant Township, McKean County, Pennsylvania, in accordance with the general powers permitted by the Second Class Township Code (53 P.S. §65101, *et seq.*), the Municipalities Planning Code (“MPC”) and other relevant law, as follows:

Section 1. Title.

This Ordinance shall be known as the “Solar and Energy Facility Ordinance.”

Section 2. Purpose.

Both large ground-mounted solar and energy facilities as well as modest residential systems can serve the public interest when balanced appropriately with objective environmental concerns, public safety and quiet enjoyment of homes and camps within the Township. The purpose of this Ordinance is to establish reasonable standards governing the siting, construction, operation, maintenance, and decommissioning of utility-scale solar facilities and energy storage systems to protect residents, natural resources, public infrastructure, and emergency response capabilities in a manner that is complementary and, where possible consistent, with the McKean County Subdivision and Land Development Ordinance (“SALDO”).

Nothing herein shall abridge the rights of residents to constitutional protections guaranteed by Article I, Section 27 of the Constitution of the Commonwealth of Pennsylvania (Environmental Rights Amendment), including the right to clean air, pure water, and the preservation of environmental values.

A. Coordination with Other Laws.

Nothing herein shall otherwise replace or supersede general regulation requirements of the Township; County requirements and ordinances, including, but not limited to, zoning and land development ordinances; the MPC or other relevant laws. To the extent of conflict and only to the extent of said conflict, this Ordinance shall control.

B. Timelines.

All timelines in this Ordinance shall be consistent with the Municipalities Planning Code and the County Zoning Ordinance. The Township may extend review timelines with the written consent of the applicant.

SECTION 4. DEFINITIONS

ABANDONMENT – Cessation of substantially all operations of a Facility for twelve (12) consecutive months, unless otherwise approved in writing by the Township pursuant to Section 17.

ACCESS ROAD – Any road or travel way constructed, improved, or used to access or service any component of a Facility, including temporary construction roads and permanent operational roads.

ACCESSORY ENERGY STORAGE SYSTEM (AESS) – A stationary battery system serving on-site load only, not primarily for wholesale export, with nameplate energy ≤ 600 kWh on a single tax parcel and installed under the Pennsylvania UCC.

ACCESSORY SOLAR ENERGY SYSTEM – A ground- or roof-mounted photovoltaic system serving on-site load only, not primarily for wholesale export, occupying < 1.0 acre and with nameplate capacity ≤ 250 kW on a single tax parcel.

AGRIVOLTAICS – The co-development of land for photovoltaic generation and agricultural production (e.g., grazing, hay, shade-tolerant crops) using elevated racking and layouts that support continued agricultural use.

AHJ (AUTHORITY HAVING JURISDICTION) – The Township Board of Supervisors, its professional designee, and any state/federal agency with code authority for the Facility.

BATTERY ENERGY STORAGE SYSTEM (BESS) – A system consisting of one or more electrochemical cells, modules, and associated electrical equipment, in cabinets or containers, for storing electrical energy; includes inverters, transformers, HVAC, fire

detection/suppression, and control systems. Includes both integrated storage with solar and standalone BESS.

BOARD – Board of Supervisors for the Township of Sergeant.

CO-LOCATED (SOLAR + BESS) – A Battery Energy Storage System installed as part of the same Solar Energy Facility that: (i) lies entirely within the same Facility Boundary; (ii) shares the same Point of Interconnection and gentie/substation; (iii) uses the same primary access; (iv) is monitored under the same 24/7 alarm system; and (v) is sited such that the nearest BESS enclosure is within 1,000 feet of the nearest inverter or array equipment and no BESS enclosure is more than 2,000 feet from the mapped array field. A BESS not meeting all criteria shall be deemed Standalone BESS.

COMMERCIAL OPERATION / COMMERCIAL OPERATION DATE (COD) – The date on which the Facility first achieves sustained delivery of energy to the grid under the executed interconnection agreement and is declared commercially operational by the Owner as evidenced by written notice to the Township under §5(I).

DIA (DISCONNECTED IMPERVIOUS AREA) – Disconnection criteria as recognized by PA DEP for Chapter 102/PCSM design.

EMERGENCY RESPONDER – County-recognized fire and emergency services with jurisdiction over the Facility.

FACILITY – A Utility-Scale Solar Energy Facility and/or Battery Energy Storage System, together with all associated equipment and improvements.

FACILITY BOUNDARY – A single, continuous perimeter enclosing all equipment and improvements that comprise a Facility, as shown on the approved Site Plan. Non-contiguous “islands” are prohibited unless specifically approved; separated areas shall be treated as separate Facilities.

NFPA 855 – NFPA Standard for the Installation of Stationary Energy Storage Systems, as amended.

NON-PARTICIPATING PROPERTY – Any property not subject to a lease or easement for a Facility.

OCCUPIED BUILDING / RESIDENCE – Any structure used or intended for human occupancy, including seasonal dwellings and camps.

PFAS – Per- and polyfluoroalkyl substances.

POI (POINT OF INTERCONNECTION) – The interconnection point to the transmission or distribution grid.

PRIME FARMLAND SOILS – NRCS soil classes I–III.

RIGHT-OF-WAY (ROW), PUBLIC ROAD – The recorded width of a public road right-of-way as shown on PennDOT, County, or municipal maps, plats, or deeds; where the recorded width cannot be determined, the ROW shall be established by a Pennsylvania-licensed Professional Land Surveyor to the Township’s satisfaction.

RUMA – Road Use and Maintenance Agreement with the Township, County and/or Commonwealth for haul routes and construction traffic.

SETBACK – The minimum required horizontal distance (plan view) from the nearest point of a Facility component or its foundation/pad, or the Facility security fence if closer, to a specified boundary or receptor, measured per §9(B).

SOLAR ENERGY FACILITY, UTILITY-SCALE – A ground-mounted photovoltaic system primarily intended to generate electricity for delivery to the grid, occupying one (1) acre or more, together with inverters, transformers, BESS, fencing, roads, substations, and related infrastructure.

STANDALONE BESS – A Battery Energy Storage System that is not co-located with or dependent upon a Solar Energy Facility.

STEEP SLOPES – For purposes of this Ordinance: moderately steep = 15% to 25%; very steep = >25%.

UL 9540 / UL 9540A – Product safety standard for energy storage systems, and test method for thermal runaway fire propagation, respectively.

WELLHEAD PROTECTION ZONE – Areas delineated by PA DEP or a municipal authority for public water supplies; if none exist, the Township may designate interim zones based on hydrogeologic review.

WIND ENERGY FACILITY – As defined in the McKean County Wind Energy Facility Ordinance, as amended.

VALID COMPLAINT – A complaint to the Township or the Facility’s hotline/portal that (i) identifies the date/time and general location of the concern, and (ii) describes the nature of the impact (e.g., noise/EMI, glare, odor, traffic, environmental release). Anonymous complaints may be deemed valid if the Township can independently verify the condition.

SECTION 5. APPLICABILITY; PERMITS REQUIRED; TERM.

A. Permit Required.

No person shall construct, install, operate, or modify any Utility-Scale Solar Energy Facility or BESS (including Standalone BESS) without a Facility Permit from the Township. Accessory solar serving a single property is not regulated by this Ordinance. This Ordinance does not apply to portable or off-grid solar devices not exceeding 2 kW nameplate or 200 sq. ft. of total panel area used for agricultural fencing, gates, telemetry, cameras, signage, or similar on-site uses; such devices remain subject to the Pennsylvania UCC as applicable.

Applications for a permit shall act as a conditional use application to the Board of Supervisors. The use shall be permitted throughout the Township, provided the requirements of this Ordinance are met.

Relief from this Ordinance in the form of a variance(s) must be granted by the County Zoning Hearing Board prior to the issuance of a Permit.

Nothing herein shall limit the requirements of the County relative to land development and land development requirements/approvals.

B. Separate Permits; Consolidated Application.

Solar Energy Facilities and Battery Energy Storage Systems (BESS) require separate permits. The Applicant may submit a single consolidated Application covering both when they are co-located as defined in Section 4; however, the Board will issue distinct permits and may approve, condition, or deny either component independently. Any BESS that is not co-located shall be processed as Standalone BESS under this Ordinance with a separate Application and permit. Wind + BESS. Any BESS proposed with, or serving, a Wind Energy Facility shall be permitted separately as Standalone BESS under this Ordinance and shall not rely on wind setbacks or standards to satisfy BESS requirements.

C. Pre-Application Meeting.

A pre-application meeting with the Township, County Planning officials and consultants is recommended at least thirty (30) days prior to filing an Application.

D. Construction Start.

Permits shall be valid for eighteen (18) months; construction must commence within that time or the permit lapses. The Board may grant a one (1) six-month extension for good cause shown upon written request received at least thirty (30) days before lapse.

E. Operating Term Limit.

The operational term of any Facility permit shall not exceed twenty-five (25) years from Commercial Operation Date unless extended by the Township upon demonstration that all standards remain met and financial security is adjusted.

F. Transfers.

Permits may not be transferred or assigned without prior written approval from the Townships. Successors assume all obligations and conditions of the Permit.

G. Conditions Precedent.

Issuance is contingent upon establishment of escrow for professional fees associated with application review (Section 7) and posting of decommissioning security (Section 17).

H. Notice to Proceed (pre-Commercial Operation).

No Facility shall commence Commercial Operation until the Township issues a written Notice to Proceed. As conditions precedent, the Owner/Operator shall submit: (1) executed interconnection agreement; (2) as-built drawings and georeferenced GIS files (Facility Boundary, arrays, inverters/transformers, BESS units, internal roads, fencing/gates, laydown, substation/POI); (3) certification by a Pennsylvania-licensed Professional Engineer that construction conforms to approved plans and this Ordinance; (4) proof of insurance per §16; (5) decommissioning financial security per §17; (6) executed Emergency Response Plan training sign-offs per §14; and (7) proof that the public complaint hotline and portal required by Section 19 are activated and operational.

I. Commercial Operation Notice.

Within ten (10) days after Commercial Operation Date, the Owner shall provide written notice to the Township stating the COD and confirming that the §5(H) conditions precedent were satisfied.

J. Land Leases.

All land leases shall be included with the initial project application submitted with the Application. The leases shall be complete and unredacted, as signed by the landowner. This shall be deemed an ongoing obligation and as such, any land leases acquired after the date of initial application shall be promptly submitted to the Township. Site control for all permitted areas is required. Where Applicant owns the permitted area in fee simply, completely or in part, such deed(s) shall be provided with the Application.

SECTION 6. APPLICATION REQUIREMENTS

- A. A complete application shall be submitted with all required documentation outlined in Section 5-5 of the McKean County SALDO and shall include at minimum:
1. Engineer-stamped Site Plan showing all parcels; array and racking layout; BESS (including Standalone units); inverters/transformers; fencing and gates; internal roads; haul routes; construction laydown; substations; POI; signage; grading limits; drainage features; and limits of disturbance.
 2. Natural Resources Map identifying forests; wetlands; streams; riparian buffers; floodplains; rock outcrops; soil types; slopes tiered by 0–15%, 15–25%, >25%; and documented wildlife corridors.
 3. Environmental Impact Report by independent qualified professionals: acres of forest clearing; wildlife/habitat and T&E species screening; forest fragmentation analysis; wetland/stream impact assessment; groundwater and wellhead protection; and mitigation measures.
 4. Stormwater Pollution Prevention Plan (Chapter 102) with calculations, erosion/sediment controls, phasing, and post-construction BMPs; DIA analysis where applicable.
 5. Glare Study using recognized tools evaluating public roads, Non-Participating Residences/camps, and aviation corridors.
 6. Noise Study modeling inverters/transformers/HVAC/BESS cooling at property lines and residences for day- and night-time limits.
 7. Fire Protection & Emergency Response Plan (ERP), including site pre-planning, system schematics, shut-offs, BESS hazard profiles, water supply, access, training commitments, and incident communications.
 8. Geotechnical Report addressing bearing capacity, slope stability, cuts/fills, subsurface drainage, and any retaining structures.
 9. Climate & Severe Weather Resilience Plan addressing hail, wind, snow/ice, and flooding exposure; module specifications and hail resistance; racking design wind speed (ASCE 7-22 or successor); enclosure ratings; inspection and response protocols after severe events.
 10. Agricultural Impact Assessment for lands farmed within the past five (5) years (prime soils mapping; acres converted; agrivoltaic design, if any).

11. BESS Documentation: technology/chemistry; nameplate power (MW) and energy (MWh); UL 9540 listing; UL 9540A report set (full test reports; an executive summary may be made public, with sensitive portions provided to the County and Fire Official under an approved protective-handling protocol); NFPA 855 compliance narrative; gas detection/ventilation; explosion protection/deflagration mitigation (as informed by UL 9540A); water/runoff secondary containment; separation distances; and emergency shutdown procedures.
12. Traffic/Haul Route Plan; Road Use and Maintenance Agreement (RUMA) draft.
13. Decommissioning Plan and independent third-party cost estimate; Financial Security proposal.
14. Public Involvement: proof of mailed and published notices; public meeting materials; comment log.
15. Proof of Liability Insurance (Section 16).
16. Economic Impact Assessment. A study assessing potential impacts on local tourism, agriculture, forestry, and employment (including post-decommissioning effects), prepared by a qualified economist, with proposed mitigation measures if applicable.
17. Cumulative Impact Analysis: Assess combined environmental, noise, traffic, visual, and habitat fragmentation impacts with existing or proposed solar, wind, or storage projects within five (5) miles; identify shared mitigations.
18. Recycling & Materials Management Plan. A plan describing (i) expected waste streams by phase (construction, O&M, decommissioning), including modules, racking, wire, transformers, inverters, BESS components, packaging; (ii) hierarchy prioritizing reuse and recycling over disposal; (iii) named recyclers or take-back programs (if known) and their certifications or permits; (iv) chain-of-custody and manifesting; and (v) contractor training for handling, storage, and transport of damaged modules or BESS components.
19. Baseline Environmental Sampling Plan (see Section 19) prepared by an independent Pennsylvania-accredited laboratory, including: (a) soil sampling at representative upwind/downwind and downgradient locations; (b) surface water/sediment where present; (c) private potable wells within 2,500 feet (with owner consent). Analytes shall include, at a minimum, total metals (As, Cd, Cr, Cu, Pb, Se, Zn), fluoride, pH, TDS, and a PFAS analyte

list consistent with current EPA methods. Include QA/QC protocols and annual monitoring plan with event-based triggers.

20. Additional Information. The Board and the Planning Commission may require any additional technical study, modeling, or report reasonably necessary to evaluate public health, safety, environmental, traffic, signal interference, military airspace, or property impacts, including peer review at the Applicant's expense.
21. Pipeline Safety Review.

The Application shall identify all existing natural gas, oil, or hazardous liquid pipelines and associated rights-of-way within one (1) mile of any Facility component. The Applicant shall provide written confirmation of consultation with the pipeline operator(s) regarding proximity, access, and safety measures. All siting, construction, and operation shall comply with applicable PHMSA regulations (49 CFR Parts 190–199) and operator requirements. The County may require independent review by a qualified pipeline safety engineer, at the Applicant's expense, to evaluate risks and mitigation measures.

B. Application Completeness and Cure Period.

1. Within thirty (30) days of filing, the Township shall review each Application to determine whether it is complete. The Township's review periods shall not commence, or shall be tolled, until all required third-party peer reviews and any supplemental information requested by the Township or its consultants are received. Written notice of completeness or incompleteness shall be issued to the Applicant.
2. If incomplete, the Applicant shall have sixty (60) days from the date of the deficiency notice to cure all identified deficiencies. The Township may, upon written request and a showing of good cause, grant one extension of not more than thirty (30) days.
3. All complete Applications shall be sent to the County Planning Commission for review and recommendation prior to the Township considering action on the Application.
4. If the Application remains incomplete after the cure period (including any extension), it shall be deemed withdrawn. Any resubmission shall be treated as a new Application subject to all fees, deposits, and timelines in effect at the time of resubmission.
5. All Permit Application Fees are non-refundable, whether or not the Application is deemed incomplete or withdrawn.

6. The Township shall endeavor to issue a written decision approving, conditionally approving, or denying a complete Application within ninety (90) days of the completeness determination. However, the Township reserves the right, in its sole discretion, to extend any review, cure, hearing, or decision timeline as necessary to allow adequate review, consultation with independent experts or outside agencies, and full consideration of public input. Any such extension shall not be deemed a denial, nor prejudice the Township's authority to act on the Application. Any Township review period shall be tolled during the pendency of reviews, determinations, Planning Commission review, or approvals by state or federal agencies (including, but not limited to, FAA, DoD, PA DEP, or EPA) that the Township, in its discretion, deems necessary to evaluate the Application.

C. Public Notice and Hearing Schedule.

1. Within ten (10) business days of filing, the Applicant shall mail written notice of the Application to all property owners within two thousand (2,000) feet; for Applications including BESS (co-located or Standalone), within one (1) mile of the Facility Boundary, on a Township-approved form, and provide proof of mailing (certificate of mailing or USPS manifest) and the address list to the Township.
2. The Township shall not schedule a conditional use hearing until the Application is deemed administratively complete under Section 6 (Application Completeness and Cure Period) and the required escrow under Section 7 is fully funded. Proof of external approvals not expressly required by this Ordinance may be required as conditions of approval or prior to construction but are not prerequisites to administrative completeness or hearing scheduling.
3. At least fifteen (15) days before the hearing, the Applicant shall provide mailed notice to the same owners and the Township shall publish notice as required by law.
4. Failure to provide or prove notice is grounds to postpone the hearing at the Applicant's request or to deny the Application.
5. If, after initial notice, the Application undergoes material changes to the Facility Boundary, principal equipment locations, or haul routes, the Applicant shall provide re-notice under Section 6 (Public Notice and Hearing Schedule) at least fifteen (15) days before any continued or new hearing.

6. Within ten (10) business days of filing, post a 36" × 48" public notice sign at each public road entrance to the Facility Boundary stating the Applicant name, a brief project description, and a public contact/website for documents and comments; maintain signs through the hearing. The Applicant shall maintain a public website hosting current project filings approved for release by the Township, including the Site Plan, ERP summary, complaint process, and Annual Compliance Reports (redacted as needed under §19(K)).

D. Permit Application Fee.

All Permit Application Fees are non-refundable and due at filing. The following fees apply:

1. Utility-Scale Solar Energy Facility Permit: \$2,500 per Facility.
2. Standalone Battery Energy Storage System (BESS) Permit: \$2,500 per Facility.
3. Co-Located Solar + BESS: both subsections (1) and (2) apply (two permits, two fees).
4. Applications shall not be deemed filed until the applicable Permit Application Fee is paid in full.
5. Modification Inspection Fee. Applicant/Owner shall pay all Township professional costs for review of permit modifications.
6. The Township may amend fees associated with this Ordinance from time to time by Resolution.

- E. Failure of the Township to enforce any timeline or procedural requirement of this Ordinance shall not constitute a waiver of its rights, nor estop the Township from later enforcement of any provision herein.

F. Existing Facilities.

Any Solar Energy Facility existing on the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance; however, any modification, replacement, enlargement, repowering, or major repair of such Facility shall subject it to full compliance with all requirements herein.

SECTION 7. ESCROW FOR PROFESSIONAL REVIEW AND MONITORING

A. Professional Review & Monitoring Escrow.

Prior to deeming an application complete, the Applicant shall deposit funds into an escrow account to fully fund the Township's independent engineering, acoustical, geotechnical, environmental, fire protection, and legal review; construction inspections; and annual compliance monitoring. The escrow shall be replenished upon request to maintain the required balance. Initial deposit amounts and minimum balances shall be established by fee resolution and may be adjusted periodically. Peer reviewers shall be independent and free of conflicts (no work for the Applicant, affiliates, or the project within the past 24 months).

B. Professional Review & Monitoring Escrow — Amounts and Top-Up.

The Applicant/Owner shall deposit Fifty Thousand Dollars (\$50,000) with the Township at Application filing. The escrow shall be used to fund the Township's independent technical, engineering, environmental, legal, and administrative review; inspections; construction oversight; and annual compliance monitoring/testing. A minimum balance of Ten Thousand Dollars (\$10,000) shall be maintained at all times. Whenever the balance falls below \$10,000, the Applicant/Owner shall replenish the escrow to \$50,000 within fifteen (15) days of Township notice. Failure to replenish is grounds for suspension of review, permit suspension, or enforcement action. Any unused balance shall be returned within sixty (60) days after final denial, withdrawal, or two (2) years after Commercial Operation Date, whichever is later, less outstanding invoices.

SECTION 8. GENERAL REQUIREMENTS AND DESIGN STANDARDS

A. Resource Buffers.

No panels, roads, or related infrastructure shall be placed within: (i) 100 ft. of delineated wetlands; (ii) 100 ft. of any stream (intermittent or perennial); (iii) FEMA-mapped floodways/floodplains; or (iv) wellhead protection zones, unless otherwise approved by the Pennsylvania Department of Environmental Protection. Notwithstanding the foregoing, BESS is prohibited in FEMA-mapped floodways and floodplains and within 100 ft. of wetlands and streams. No waiver shall be granted for BESS.

B. Steep Slopes.

Arrays, BESS, and roads are prohibited on very steep slopes (>25%). On moderately steep slopes (15–25%), installation is allowed only with an engineer-sealed geotechnical and erosion control design that (i) avoids mass grading and benched terracing; (ii) retains natural contours; (iii) demonstrates no increased risk of slope failure or off-site sedimentation; and (iv) uses

contour-parallel rows, driven posts or ballasts, and energy dissipation. Retaining structures require sealed designs and stability analyses.

C. Forest Conservation.

Tree clearing shall be minimized. No net loss of forested acreage is permitted without a mitigation plan at a ratio not less than 2:1 (replanting on-site or at County-approved locations). Clear-cutting for solar or BESS is part of the Facility and may not be characterized as timber harvesting to avoid review. Fragmentation shall be minimized by using existing roads and openings and maintaining wildlife corridors where practicable.

D. Farmland & Prime Soils.

For areas farmed within the last five (5) years or mapped as Prime Farmland Soils: (i) topsoil shall be salvaged and stockpiled; (ii) subsoil compaction shall be remediated; (iii) tile drainage protected and restored; (iv) unless designed as agrivoltaics, no more than 50% of contiguous Prime Farmland Soils on any single tax parcel may be occupied by arrays; the Board may allow higher percentages where agrivoltaic practices are implemented and documented (Section 8.G).

E. Fencing & Screening.

Security Black Vinyl Coated fencing up to 8 ft. with wildlife-permeable design is required; barbed/razor wire prohibited. Vegetated screening using native species shall be planted around perimeters visible from public roads or Non-Participating Residences. The Owner shall maintain plantings and replace dead or failing vegetation. The Township may require a two (2) year landscape maintenance guarantee (cash escrow or LOC) to ensure establishment.

F. Undergrounding.

Collection lines onsite shall be underground to the maximum extent practicable, except at necessary transitions to equipment and substations.

G. Agrivoltaics Incentive.

The Township may reduce setbacks by up to 25% for arrays designed and operated as agrivoltaics (elevated racking; livestock passage; documented agricultural plan) or for projects achieving recognized pollinator-friendly certification, while meeting all health/safety standards. No setback reduction applies to BESS.

H. Cultural/Scenic Resources.

Facilities shall avoid and buffer scenic overlooks, designated trails, and historic/cultural sites to the maximum extent practicable.

I. Roads & Traffic.

The Applicant shall execute a Road Maintenance Use Agreement with the Township and road owner, if not the Township, prior to construction and restore roads to equal or better condition.

1. Pre-Construction Road Survey.

Before any heavy-haul activity, the Applicant shall fund a video/photo and written condition survey of all roads on the approved haul route(s), prepared by a qualified engineer and accepted in writing by the Township.

2. Road Damage Security.

Prior to any heavy-haul or construction traffic, the Applicant/Owner shall post a separate letter of credit or cash escrow in an amount set by the Engineer, in a form acceptable to the Solicitor, to cover restoration of roads, shoulders, ditches, structures, and appurtenances damaged by project traffic. The Engineer may adjust the amount based on haul routes, expected loads, seasonal conditions, and observed impacts.

3. Repairs and Restoration.

The Applicant/Owner shall promptly repair any damage attributable to project traffic to equal or better than pre-construction condition per Engineer direction. If repairs are not completed within a Township specified timeframe (not to exceed thirty (30) days for non-emergency conditions, or immediately for emergency hazards), the Township or other relevant municipal entity may draw on the Road Damage Security to perform or complete the work. Following any draw, the Applicant/Owner shall replenish the Road Damage Security to its original amount within fifteen (15) days of written notice.

4. Permits and Escorts.

The Applicant/Owner shall obtain all overweight/oversize permits and provide escorts/traffic control per law and the approved RUMA/Haul Route Plan.

J. Hazardous Materials; Cleaning Agents.

Spill prevention and containment must be provided for transformers (oil-filled) and BESS electrolytes. Any release shall be reported and remediated per law. Panel washing shall use only water or County-approved biodegradable, non-PFAS agents with full SDS disclosure; wash water shall be contained/managed to prevent

discharge to waters of the Commonwealth. On-site burial or disposal of components is prohibited. All cleaning agents and procedures shall be identified in the Annual Compliance Report (Section 19(E)); the Township may prohibit or condition use of agents presenting unacceptable environmental risk. Removed or replaced modules, racking, wire, inverters/transformers, and BESS components shall be managed off-site with priority to reuse and recycling at appropriately permitted facilities. The Owner shall use recyclers or refurbishers that are appropriately permitted and/or certified (e.g., R2 or e-Stewards, or equivalent) or demonstrate equivalent environmental and worker-safety controls. Landfilling within the Township is prohibited. All off-site transfers shall be documented by manifests or bills of lading and reported under §19(E). All construction and demolition wastes shall be transported off-site to duly permitted facilities; on-site burning or burial is prohibited.

K. Operations & Maintenance.

The Owner shall maintain the Facility in good repair; replace broken modules promptly; control vegetation; and keep fencing, screening, and signage in working order.

1. Vegetation Management Plan. Implement an integrated vegetation management plan using native, non-invasive species. If herbicides are used, products shall be applied by licensed applicators and shall not contain PFAS-based surfactants. The plan and any herbicide/SDS updates shall be summarized annually under §19(E).

L. Module Durability & Hail.

The Climate & Severe Weather Resilience Plan shall demonstrate that modules and racking meet or exceed industry-recognized hail and mechanical load performance. At a minimum, modules shall be demonstrated by manufacturer test data to withstand hail impacts of 35 mm (1.38 in) ice balls at ≥ 23 m/s with no glass breakage or safety hazard at not fewer than 11 impact locations per module (or an equivalent third-party enhanced hail certification, such as PVEL Hail Stress

Sequence or RETC Hail Durability Test, at equal or greater kinetic energy. The Facility shall maintain an automated severe-weather protocol that commands safe stow angles for arrays upon issuance of National Weather Service hail warnings for the site. The Owner shall inspect and remediate damage per Section 14(G) and Section 19.

1. Breakage Response. Maintain a module breakage protocol addressing glass/debris containment, collection, and off-site disposal/recycling; prohibit on-site burial; and prevent discharge to waters of the Commonwealth.

SECTION 10. WAIVERS

- A. Limited waivers of certain dimensional standards may be granted by the Board upon clear and convincing evidence that the waiver will not undermine health, safety, welfare, or environmental protections. Any waiver granted shall be recorded and run with the land.
- B. Non-Waivable Standards.

BESS location in FEMA-mapped floodways/floodplains or within 100 ft. of wetlands/streams; BESS separation from residences; and slope prohibitions on >25% grades shall not be waived. Buffers from wetlands/streams/floodplains for arrays, roads, or collection lines may be considered for limited waivers only upon written PA DEP/USACE authorization and a separate finding of no risk.
- C. Execution Requirements.

Any waiver shall be on an approved form; identify the parcel(s) and precise distance(s); advise the owner in writing to seek independent legal counsel; include a thirty (30)-day rescission period; be recorded with the McKean County Recorder of Deeds; and run with the land.
- D. Prohibited Waivers.

Setbacks and buffers for BESS in §8(A) and §9(F), floodway/floodplain prohibitions, and slope prohibitions on >25% grades are not waivable.

SECTION 11. NOISE, LOW-FREQUENCY SOUND (dBC), AND VIBRATION (INVERTERS/TRANSFORMERS/BESS)

- A. Purpose.

Sound from inverters, transformers, and BESS HVAC/cooling can affect the quiet enjoyment of rural properties—especially at night. This section sets limits and monitoring requirements, including low-frequency (dBC) evaluation, to protect residents, camps, and sensitive receptors.
- B. Pre-Construction Acoustic Assessment.
 - 1. Prepared by an independent, qualified acoustical consultant approved by the Township.
 - 2. Evaluate A-weighted (dBA) and C-weighted (dBC) levels and tonal/low-frequency content from all major sources (inverters, pad-mount transformers, BESS enclosures/HVAC, substation equipment).

3. Model worst-case operating conditions, night-time meteorology (downwind, stable atmosphere), and cumulative operation of all sound sources.
 4. Receptors: (a) all Non-Participating Property lines within one (1) mile of any inverter, transformer, BESS enclosure, or substation; (b) all dwellings/camps within one (1) mile; (c) sensitive receptors within one (1) mile.
 5. Establish ambient baseline (day/night) at representative receptors with Class 1 instrumentation per ANSI/ASA, excluding precipitation/high winds.
- C. Operational Sound Limits (apply at Non-Participating Property lines and at Non-Participating Dwellings).
1. Nighttime (10:00 p.m.–7:00 a.m.): $\text{Leq}(10\text{-min}) \leq 40 \text{ dBA}$ and $\text{Leq}(10\text{-min}) \leq 50 \text{ dBC}$.
 2. Daytime (7:00 a.m.–10:00 p.m.): $\text{Leq}(10\text{-min}) \leq 40 \text{ dBA}$ and $\text{Leq}(10\text{-min}) \leq 55 \text{ dBC}$.
 3. Short-duration maxima: $\text{Lmax} \leq 50 \text{ dBA}$ at night and $\leq 60 \text{ dBA}$ by day.
 4. Tonal/impulsive content: Apply +5 dB penalty to measured or modeled levels before comparison to limits when such content is present (per ISO 1996-2/ANSI methods).
 5. Emergency events (e.g., BESS venting, alarms) are exempt but must be logged and reported to the County within seven (7) days with cause and corrective measures.
- D. Construction Noise.
- Limit heavy construction within 1,000 ft. of a dwelling via BMPs (quiet alarms, mufflers, temporary barriers) and keep average construction noise $\leq 70 \text{ dBA Leq}(1\text{-hr.})$ during permitted hours. Construction activities involving heavy equipment within 1,000 ft. of a dwelling are limited to 7:00 a.m.–7:00 p.m., Monday–Saturday.
- E. Post-Construction Compliance Testing.
1. Within ninety (90) days of Commercial Operation, conduct testing at the same receptors (or as directed) using methods in Subsection F.

2. Annual testing for the first two (2) years and thereafter every three (3) years, or upon County request after credible complaints.
3. Any exceedance shall be corrected within thirty (30) days via mitigation (acoustic enclosures, silencers, quiet-mode controls, relocation, barriers) and re-tested.
4. Within ninety (90) days after any major equipment replacement or relocation (inverter, transformer, BESS enclosure/HVAC), conduct targeted compliance testing at affected receptors and provide a report.

F. Measurement & Reporting.

1. Class 1 meters capable of A/C weighting and 1/3-octave analysis; 1.5 m mic height; free-field placement.
2. Conditions: no precipitation; wind at mic ≤ 5 m/s; document meteorology and ground conditions.
3. Report $L_{eq}(10\text{-min})$, L_{90} , L_{10} , L_{max} for dBA/dBC; provide 1/3-octave spectra and tonal analysis.
4. Background subtraction shall not be used to mask exceedances.

G. Complaint Response and Testing; Curtailment.

Maintain 24/7 complaint line; respond to Township and complainant within ten (10) days. The Township may require targeted or facility-wide audits; costs borne by Owner if violations confirmed. Persistent exceedances may result in curtailment orders until compliance is verified.

H. Resident Waivers (Voluntary & Recorded).

No resident shall be required to waive the protections of this Section except by a recorded, site-specific waiver.

SECTION 12. STORMWATER, EROSION, SLOPE STABILITY, AND WATER RESOURCE PROTECTION

- A. Chapter 102 compliance and County Conservation District approval are required. Where panel areas cannot qualify as Disconnected Impervious Area (DIA), they shall be treated as impervious for PCSM design. Vegetation below panels must achieve at least 70% perennial cover with practices minimizing soil compaction.

- B. On slopes 15–25%, plans shall use low-impact racking (driven posts/ballasts), maintain contour-parallel rows, provide energy dissipation, and demonstrate no concentration of flow beyond DEP thresholds. Siting on slopes >25% is prohibited.

C. Spill Prevention & Containment.

Provide SPCC-equivalent measures for oil-filled equipment and BESS; physical means to contain firefighting water, electrolyte leaks, or debris from damaged equipment (curbing, sumps, isolation valves, lined containment, or engineered grading). Discharge to stormwater systems is prohibited without treatment/approval.

D. Private Wells and Surface Waters.

The Baseline Environmental Sampling Plan (Section 6.A.19) shall identify private wells within 2,500 ft. and surface waters potentially affected. The Owner shall offer baseline sampling to such wells (with consent) prior to construction and implement annual monitoring per Section 19. The County or the Township, upon written recommendation of the Township Engineer, may require installation of temporary or permanent groundwater monitoring wells at locations determined necessary by its consulting hydrogeologist; the Owner shall bear all costs of installation, sampling, analysis, and reporting. If construction or operation causes loss, reduction, or contamination of a private water supply, the Owner shall (i) provide a temporary supply of safe drinking water within twenty-four (24) hours of notification; (ii) fully restore or replace the impacted source at no cost to the property owner; and (iii) complete full remedy within fourteen (14) days unless extended by the County based on site-specific conditions.

E. Floodplains.

Arrays and BESS are prohibited in FEMA-mapped floodways and floodplains and within 100 ft. of wetlands and streams, **except** that arrays (not BESS) may be placed in floodplains **only** upon written PA DEP authorization and a separate County finding of no risk under §8(A). BESS is categorically prohibited in floodways/floodplains.

F. Post-Storm Inspection.

Within forty-eight (48) hours after severe weather (hail $\geq$ 1 inch diameter or wind gusts $\geq$ 60 mph), inspect arrays, inverters, transformers, and BESS; isolate and repair hazards before returning to service; report per Section 14(G) and Section 19.

SECTION 13. GLARE AND VISUAL MITIGATION; LIGHTING

A. Glare Analysis and Mitigation.

1. Modules shall be anti-reflective and certified low-glare. The Applicant shall submit a glare study using recognized FAA/DoD-accepted tools that evaluates potential glare to: (i) public roads; (ii) Non-Participating Residences/camps; (iii) FAA aviation corridors and public-use airports; and (iv) any United States Department of Defense (or successor department) Military Operations Areas (MOAs), low-level training routes, radar facilities, or airfields identified under Section 20.
2. Verified glare complaints shall require prompt mitigation. The Township may suspend operation of offending components until mitigated. Mitigation may include re-orientation, additional screening, matte/low reflectance materials, or other measures acceptable to the Township.

B. Lighting.

Lighting shall be the minimum necessary for safety and security, down-shielded, full-cutoff, and 3,000 K CCT or lower. Strobe lighting is prohibited except as required by code or aviation authorities.

SECTION 14. FIRE PROTECTION AND EMERGENCY RESPONSE

A. Codes and Standards; Third-Party Review.

1. Facilities shall comply with Pennsylvania UCC, NFPA 70 (NEC), and, for BESS, NFPA 855 (current adopted edition). BESS shall be UL 9540 listed; UL 9540A test data (or equivalent hazard analysis) shall be provided for the installed technology.
2. Prior to permit issuance, submit a fire protection and life safety package, including a hazard mitigation analysis prepared or reviewed by a qualified Fire Protection Engineer (FPE). The County Fire Official and Board or such Authority Having Jurisdiction must approve this package.

B. Detection, Suppression, and Propagation Control.

1. Solar inverters, pad-mount transformers, and BESS enclosures/buildings shall include appropriate detection (smoke/heat/off-gas) and automatic or manual suppression as required by code and the approved hazard analysis.

2. BESS units shall include measures to limit thermal propagation (spacing, fire-rated separations, or system-level protections) and, where indicated by UL 9540A results, deflagration venting or equivalent overpressure mitigation.
3. Annual testing/inspection of all detection/suppression systems is required; provide an annual Fire System Testing Report.

C. Access and Water Supply.

1. Provide fire lanes and all-weather access around arrays, BESS compounds, and substations per Fire Official requirements, including turning radii, widths, overhead clearances, and load ratings.
2. Provide an approved firefighting water supply commensurate with the hazard (nearest hydrant, on-site tanks, dry hydrant/draft point) as approved by the Fire Official.
3. Install Knox boxes and rapid access at each primary gate. Post hazard placards (including NFPA 704) and equipment-specific signage.

D. Grounding, Bonding, and Step/Touch Potential.

Prior to Commercial Operation, the Owner shall submit a stamped grounding/bonding design and an as-built acceptance test report demonstrating compliance with IEEE 80/81 (or successor) for step- and touch-potential at fences, gates, and public-accessible metallic objects. Perimeter fencing and gates shall be bonded/grounded; non-conductive gate handles shall be provided. Any exceedance shall be mitigated prior to COD and verified in the report.

E. Emergency Response Plan (ERP) and Training.

1. Prior to construction permits, submit an ERP including detailed site plans; access routes; shut-down and lock-out/tag-out procedures; energized equipment locations; hazardous materials inventory/SDS; alarm notification procedures; ventilation/venting strategies; water supply/foam; and post-incident cleanup/containment protocols.
2. Provide equipment-specific training for local responders prior to energization; refresher training annually and after major equipment changes.
3. Conduct at least one (1) tabletop drill annually and one (1) joint field drill every two (2) years; submit drill reports and corrective actions within thirty (30) days.

F. Runoff and Contamination Control.

Incorporate physical means to contain contaminated firefighting water, electrolyte leaks, or debris from damaged equipment. A foam management plan shall identify products and environmental controls. Fluorine-free foams are preferred where effective; if PFAS-containing foams are used, capture and lawful disposal/remediation are required.

G. Post-Storm Damage Checks.

Within forty-eight (48) hours after severe weather (hail $\geq$ 1 inch or gusts $\geq$ 60 mph), inspect equipment, isolate hazards, and repair prior to return to service. Owners shall provide a summary to the Township within seven (7) days.

H. Environmental Release Notification.

Notify the Township, County and any necessary permitting authority within seventy-two (72) hours of any reportable environmental release or spill under Pennsylvania or Federal law. Immediate verbal notice is required for any incident involving fire, explosion, or a public safety response. Provide written details and corrective actions.

I. Special Equipment and Training.

If the ERP or Fire Official identifies specialized equipment, PPE, monitoring devices, or training not currently available locally, the Owner shall fund procurement and training prior to commercial operation. Said equipment shall become property of the Township or designated responder.

J. Monitoring & Alarms.

Maintain 24/7 monitoring with automated alarms to on-call personnel, which shall integrate with local dispatch as directed by the Fire Official. Post 24-hour emergency contact at gates and critical equipment; keep current for the life of the project.

SECTION 16. LIABILITY INSURANCE

A. Coverage.

The Applicant, Facility Owner, and Operator shall maintain, at their sole cost, commercial general liability insurance on an occurrence form covering bodily injury, property damage, products/completed operations, and contractual liability for the duration of construction, operation, and decommissioning. Required limits may be satisfied by any combination of primary and follow-form excess/umbrella liability policies.

B. Minimum Limits.

Not less than ten million dollars (\$10,000,000) per occurrence and twenty million dollars (\$20,000,000) aggregate, with coverage specifically applicable to solar/BESS operations, equipment failure, fire, explosion, and environmental contamination.

C. Carrier Rating.

Policies shall be issued by insurers licensed in Pennsylvania and rated A- or better by A.M. Best (or equivalent).

D. Pollution Liability.

Coverage shall expressly include completed operations and pollution legal liability without exclusion for soil, air, or groundwater contamination. Pollution liability may be provided under a separate policy so long as it meets the requirements of this Section.

E. Additional Insured.

The Township (including its officers, employees, agents, and consultants) shall be named as additional insured on the liability policies for ongoing and completed operations; certificates and copies of the additional-insured endorsements shall be provided prior to construction and renewed annually.

F. Notice of Change.

Policies shall require at least thirty (30) days' written notice to the Township prior to cancellation, material reduction, or non-renewal.

G. Continuous Coverage.

Coverage shall remain in effect until decommissioning is completed to the Township's satisfaction.

H. Proof.

The Owner shall provide annual proof of insurance, including updated certificates and declarations pages, and shall furnish copies of endorsements upon request.

I. Enforcement.

Failure to maintain required insurance constitutes a violation of this Ordinance and may result in suspension or revocation of the permit.

- J. Primary & Non-Contributory; Waiver of Subrogation.

Insurance affording additional-insured status to the Township shall apply on a primary and non-contributory basis and shall include a waiver of subrogation in favor of the Township.

- K. Claims-Made Policies.

Any claims-made pollution or professional/technical liability policy shall have a retroactive date no later than the permit issuance date and an extended reporting period of at least two (2) years after completion of decommissioning.

SECTION 17. DECOMMISSIONING, RESTORATION, AND FINANCIAL SECURITY

- A. Financial Security.

Prior to construction, post financial security in the form of cash escrow equal to at least one hundred and twenty five percent (125%) of an independent third-party engineer's Decommissioning and Restoration Cost Estimate approved by the Township. Salvage value shall not be used to reduce the posted security before decommissioning occurs. The estimate shall be reviewed and updated at least every five (5) years (or more frequently if requested by the Township) and the security adjusted accordingly. Corporate guarantees and surety bonds are not acceptable.

- B. Scope.

Upon Abandonment or end of life, remove all panels, racking, foundations, BESS containers, inverters/transformers, pads, internal roads (unless requested by landowner), fencing, cabling, and poles; de-compact soils; replace topsoil; reseed with native species; and restore wetlands/streams if impacted. All components shall be removed from the site and managed off-site, with reuse and recycling maximized to the extent commercially reasonable. On-site disposal is prohibited.

- C. Abandonment.

A Facility is presumed abandoned as defined in §4. For Standalone BESS, abandonment includes failure to materially charge or discharge (export or provide grid services) for twelve (12) consecutive months, or failure to respond to Township written communications for sixty (60) days. The Township may draw on security to complete decommissioning and recover excess costs. Intermittent or minimal operation intended solely to avoid a finding of Abandonment shall not reset this 12-month period.

SECTION 18. ENVIRONMENTAL MONITORING; OPERATIONAL COMPLIANCE AND REPORTING

A. Baseline and Annual Monitoring.

1. Soil: Collect baseline composite soil samples at representative upwind/upgradient and downwind/downgradient locations (including beneath/adjacent to arrays and BESS) prior to construction. Repeat annually for the first three (3) years and every three (3) years thereafter, and after any Incident or qualifying weather event in Section 12(F). Analytes: total metals (As, Cd, Cr, Cu, Pb, Se, Zn), fluoride, pH, conductivity/TDS, and a PFAS panel consistent with current EPA methods.
2. Surface Water/Sediment (where present): Baseline and annual sampling upstream and downstream of discharge points or flow paths; same analytes as soil plus turbidity.
3. Private Potable Wells (with owner consent): Offer baseline and annual sampling to wells within 2,500 ft. of the Facility boundary for the analytes above. Provide plain-language results to homeowners and to the County.

B. Laboratory & QA/QC.

Sampling shall be performed by independent qualified professionals and analyzed by Pennsylvania-accredited laboratories. Chain-of-custody and QA/QC procedures shall be provided.

C. Action Levels & Response.

If any analyte exceeds baseline by a statistically significant margin or exceeds applicable standards, the Owner shall (i) immediately investigate the source, (ii) implement containment and remediation, (iii) provide alternate water supplies where wells are affected, and (iv) report findings and corrective actions to the Township within ten (10) days.

D. Chemicals and Materials Disclosure.

Provide and annually update a comprehensive inventory and SDS for oils, coolants, electrolytes, panel washing agents, and any other chemicals stored or used on-site. Disclose the presence of fluorinated materials or PFAS-containing products and management measures to prevent releases. Any change in chemistry, supplier, or cleaning procedure shall be reported to the Township within thirty (30) days and reflected in the ERP (Section 14) and the Section 6(A)(19) Sampling Plan as warranted. For BESS changes, see §22(B) 'Changes in Approved Configuration.'

E. Annual Compliance Report.

By March 1 each year, Applicant shall submit a report summarizing compliance with all sections; incidents (environmental, fire, electrical) and corrective actions; sampling and laboratory results with maps and QA/QC; maintenance logs; vegetation management; responder training; and proof of insurance. The report shall include the current chemical/SDS inventory required by Subsection D and any updates made in the prior year. Include a Materials & Recycling Report listing quantities by component and disposition for the prior year (reused, refurbished, recycled, disposed), receiving facility names/locations/permits (or certifications), and copies of manifests/bills of lading. The report shall also summarize any module breakage events and cleanups required by §8(L)(3). The first report is due the first March 1 following COD.

F. Inspections; Right of Entry.

The Township may conduct inspections with forty-eight (48) hours' notice, or without notice following an emergency, severe weather event, or credible complaint. Owner shall reimburse reasonable third-party inspection costs.

G. Recordkeeping.

Applicant/Operator shall maintain all records for the life of the project plus five (5) years and provide to the Township upon request.

H. Public Complaint Hotline and Portal.

Applicant/Operator shall maintain a publicly accessible 24-hour telephone hotline and an online complaint portal for Noise/EMI, glare, environmental concerns, and other operational impacts. Applicant/Operator shall acknowledge receipt and provide a tracking number within seven (7) business days.

I. Complaint Log and Quarterly Reports.

Applicant/Operator shall maintain a log (date/time; complainant name/contact if provided; location; nature; investigation; corrective actions and dates). Submit a Quarterly Complaint and Compliance Report to the County within thirty (30) days after each calendar quarter, including a copy of the log and all actions taken.

J. Complaint Response and Mitigation.

Upon receipt of a Valid Complaint alleging a potential violation, Applicant/Operator shall immediately investigate. If a violation is confirmed or suspected, implement interim mitigation (including curtailment or shutdown of offending equipment) and complete corrective actions within thirty (30) days, unless extended by the Township for good cause.

2. Chemistry Disclosure. Disclose module chemistry (e.g., mono/monoPERC, CdTe, CIGS) and any hazardous constituents; align cleanup and disposal with applicable solid/hazardous waste rules.
 3. Event Reporting. Include breakage events and cleanup documentation in the §19(E) Annual Compliance Report.
- M. Cybersecurity and Grid Integration. The Operator shall implement cybersecurity measures for inverter/BESS control systems consistent with industry standards (e.g., NIST SP 800-82) and coordinate with the utility for secure interconnection. Submit a Cybersecurity Plan and Grid Integration Protocol to the County before Commercial Operation. Include an annual officer-signed attestation in the §19(E) Annual Compliance Report confirming maintenance of controls consistent with the approved Plan.
- N. Ongoing Compliance with Best Practices.

The Facility shall comply with evolving technological standards and operational practices that reduce impacts to health, safety, or the environment. The Township may require reasonable updates throughout the life of the Facility.

SECTION 9. SETBACKS AND BUFFERS

A. Purpose.

The setback and buffer requirements in this Section are established to protect public health, safety, welfare, property values, environmental quality, natural resources, and rural character. These protections are consistent with the Township's authority under Article I, Section 27 of the Pennsylvania Constitution and its general police powers. The County finds that Utility-Scale Solar Energy Facilities and Battery Energy Storage Systems may create risks of glare to motorists and residences, noise and low-frequency sound from inverters/transformers/HVAC (particularly at night), fire and thermal-runaway hazards from BESS, releases from oil-filled and electrolyte-containing equipment, stormwater concentration and erosion on slopes, fragmentation of habitat, and visual/aesthetic intrusion. Minimum distances from property lines, occupied buildings, public roads, and sensitive natural features reduce these risks, facilitate emergency access, and preserve the quiet enjoyment of nearby homes and camps.

B. Measurement.

Setbacks in this Section are measured horizontally in plain view along the shortest line from the nearest point of the Facility component, its foundation or pad, or the perimeter security fence (whichever is closer) to: (i) the surveyed property line (interior lines wholly within a single approved Facility Boundary between fully participating parcels are not treated as Non-Participating lines); (ii) the public road

right-of-way (ROW) line, not the pavement edge or centerline—where the ROW is not of record, the Applicant shall establish it by survey acceptable to the Township; (iii) the closest exterior wall of an Occupied Building; and (iv) the boundary of the mapped natural resource, including the delineated wetland edge, the top of bank/ordinary high-water mark for streams, and the FEMA Special Flood Hazard Area boundary, as applicable. Where another adopted code or permit requires a greater distance, the more protective standard governs. Overhead collection or gen-tie lines are not subject to §9 setbacks unless expressly stated elsewhere; applicable electrical clearance codes still apply.

C. Arrays and Racking.

Minimum 200 ft. from Non-Participating Property lines; 200 ft. from adjacent cultural/scenic resources, 200 ft. from any Occupied Building, including seasonally utilized residential structures; 100 ft. from public roads measured from center of the road.

D. Inverters/Transformers.

Minimum 200 ft. from Non-Participating Property lines and 200 ft. from any Occupied Building.

E. Substations/O&M Buildings.

Minimum 200 ft. from Non-Participating Property lines and 200 ft. from any Occupied Building.

F. BESS (also see Section 22).

Minimum 200 ft. from Non-Participating Property lines; 200 ft. from any Occupied Building; 100 ft. from public roads; and sited outside floodplains and wetland buffers. Maintain a defensible space (vegetation management) of at least 30 ft. around outdoor BESS.

G. Natural Features.

See Section 8(A). These buffers are non-waivable except as expressly provided in Section 10(B).

H. Co-Location Proximity. For a Solar + BESS co-located Facility, BESS siting shall comply with Section 9(F) and remain within the proximity limits in the definition of CO-LOCATED. BESS proposed outside those limits shall be reviewed as Standalone BESS and require a separate permit.

K. Public Availability; Proprietary Information.

Reports required by this Ordinance shall be available to the public upon request, subject to redaction of proprietary or security-sensitive information approved by the Solicitor. Confidential or proprietary information must be designated by the Applicant/Operator in a timely manner.

SECTION 19. MILITARY AIRSPACE AND MILITARY COORDINATION

A. Notice and Submittals.

If any Facility component is subject to FAA or DoD review, or if the Facility lies within thirty (30) miles of a Military Operations Area (MOA), Restricted Airspace, low-level training route, radar, or airfield, the Applicant shall:

1. Notify the DoD Siting Clearinghouse and submit FAA Form 7460-1 as applicable.
2. Provide to the County all FAA/DoD determinations, comments, and conditions.
3. Submit the Section 13 glare analysis results to FAA and the DoD Siting Clearinghouse when within the distance threshold above, even if no component triggers a separate FAA obstruction filing.
4. Separate "no-objection" letters from individual military units are not required; coordination with defense authorities occurs through the DoD Siting Clearinghouse process when applicable.

SECTION 20. TEMPORARY STRUCTURES AND TEST EQUIPMENT

Temporary solar irradiance towers, meteorological sensors, data loggers, or trailers require a separate permit, must be removed within eighteen (18) months, adhere to setbacks of at least 200 ft. from property lines, avoid permanent foundations and forest clearing, and post a \$5,000 bond for removal and restoration.

SECTION 21. BATTERY ENERGY STORAGE SYSTEM (BESS) STANDARDS – INCLUDING STANDALONE

A. Applicability.

Applies to BESS whether integrated with solar or Standalone, regardless of the generation source served. Standalone BESS is a principal use subject to all standards.

B. Codes & Listings.

Comply with NFPA 855 and the International Fire Code as adopted; UL 9540 listing; provide the complete UL 9540A test report set for the specific cell/module/rack/container configuration to the Township and the Fire Official to inform siting and fire-protection design.

1. Changes in Approved Configuration. Any material change in battery chemistry, cell/module/rack configuration, container/enclosure model, or suppression/venting design from what was approved shall be submitted at least thirty (30) days before installation with updated UL 9540A results and a Fire Protection Engineer hazard analysis. The AHJ may require additional mitigations, separation, or re-testing prior to operation.

C. Fire & Explosion Safety.

Provide thermal runaway detection; gas/flammable off-gas monitoring; ventilation/exhaust; explosion/deflagration mitigation where indicated by UL 9540A; fire suppression (e.g., clean agent, water spray, aerosol) per manufacturer and AHJ; and thermal isolation between racks/containers.

D. Siting & Separation.

Unless greater distance is required by the AHJ based on UL 9540A and hazard analysis, BESS units shall be separated from each other by at least 3 ft. and from property lines/structures per Section 9 and manufacturer/NFPA criteria. Outdoor BESS shall maintain a minimum 30 ft. defensible space.

E. Secondary Containment.

Applicant/Owner shall provide curbing, trenching, or sumps to capture electrolyte or water run-off from suppression. Discharge to stormwater systems is prohibited without treatment/approval. Separate permitting may be required.

F. Environmental Constraints.

BESS is prohibited in floodways/floodplains and within 100 ft. of wetlands and streams.

G. Monitoring & Alarms.

Applicant/Operator shall provide 24/7 remote monitoring with automatic notifications to designated contacts for temperature, gas detection, smoke, and loss of power/HVAC. Exterior emergency contact placards shall be maintained at all times.

H. Training & Drills.

Applicant/Operator shall fund initial and annual training and drills for local responders.

I. Maintenance & Testing.

Applicant/Operator shall maintain BESS per manufacturer recommendations; provide periodic thermal imaging/infrared scans and keep records available to the Township.

J. Decommissioning.

BESS decommissioning shall comply with Section 17 and applicable hazardous waste and recycling regulations; on-site disposal is prohibited.

K. Shutdown & Isolation.

Applicant/Operator shall provide clearly labeled manual and remote shutdown with DC and AC isolation. Other related safety protocols shall be provided to the Township upon request.

SECTION 22. SUBDIVISION AND LAND DEVELOPMENT RESTRICTIONS

A. No Creation of Non-Compliance.

Parcels subject to Facility leases, easements, or occupied by Facility components may not be subdivided, lot-line adjusted, or otherwise altered in a manner that creates non-compliance with required setbacks, buffers, or separation distances in this Ordinance.

B. No New Occupied Buildings Inside Buffers.

No subdivision, lot-line change, lease, or easement shall enable the construction or placement of new Occupied Buildings within any setback or buffer that would have applied at the time of Permit issuance.

C. Continuing Compliance.

Any subdivision or land development involving a Facility parcel shall demonstrate continued compliance with all applicable standards herein. The Township may condition approval on recorded restrictions necessary to maintain compliant setbacks and buffers.

SECTION 23. ENFORCEMENT; REMEDIES AND PENALTIES; ADMINISTRATION

A. Enforcement.

1. Violations of this Ordinance constitute a public nuisance. Each day a violation continues constitutes a separate offense.
2. Notices and Orders. The Township may issue notices of violation, stop-work orders, and cease operation orders for non-compliance, imminent hazards, or failure to maintain required insurance (Section 16) or financial security (Section 17). Notice shall be provided to the address identified on the permit or as may be designated annually by the Applicant/Owner.
3. Complaint Enforcement Process
 - i. Upon the receipt of a written complaint setting forth the existence of unauthorized construction, modification, or use in violation of this Ordinance, or other notice thereof, the Township's Code Enforcement Officer, Solicitor or other representative that may be authorized by the Board (the "Enforcement Officer") shall cause written notice to be given either by personal service or registered or certified mail to the Applicant of the Property upon which the violation exists, to immediately cease and the construction, modification or the unauthorized use of the solar energy system. Such a written notice shall be required to enforce the remedies set forth in this Section.
 - ii. Upon failure of such Applicant to comply as directed within thirty (30) days of said notice, the Enforcement Officer, other municipal officials or solicitor may appear on behalf of the Township and initiate legal proceedings to enforce the provisions of this Ordinance before a District Magistrate. The Township may, alternatively, initiate zoning enforcement proceedings or other remedies in a manner consistent with the MPC and relevant Pennsylvania law.
 - iii. Any Applicant who or which shall violate or permit to be violated the provisions of this Ordinance shall, upon being found liable therefore in a civil enforcement proceeding brought by the Township before a District Magistrate, pay a fine of not less than One Thousand (\$1,000.00) per violation, plus all court costs.
 - iv. No fine shall be imposed, levied, or be payable until the date of the determination of the violation by a District Magistrate. Each day that a violation exists and is continued shall constitute a separate offense, unless the District Magistrate who determines that a violation has occurred further shall determine that there was a good faith basis for

the defendant to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of determination by such District Magistrate and thereafter every day shall constitute a separate offense.

B. Remedies.

In addition to the enforcement process identified in this Section, the Township may at its sole election (i) seek injunctive relief; (ii) revoke permits; (iii) draw on financial security to correct or abate violations or to complete decommissioning; or (iv) pursue such remedies as may be provided by law.

C. Suspension or Revocation.

1. The Township may suspend or revoke a permit for material misrepresentation, chronic or willful non-compliance, abandonment as defined herein, or failure to timely implement corrective actions. Failure to maintain required insurance or financial security shall be grounds for immediate suspension until cured.
2. The permit may be revoked if a permitted use, whether new or pre-existing is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the solar energy system not to be in conformity with this Ordinance.
3. Any suspensions or revocation may proceed upon failure of Applicant to comply as directed within thirty (30) days of said notice.

D. Cumulative Remedies.

Remedies are cumulative and not exclusive of any other remedy provided by law or equity.

E. Severability.

The provisions of this Ordinance are severable, and if any section, clause, sentence, part or provision thereof shall be held to be illegal, invalid or unconstitutional by any court of competent jurisdiction, such decision of the court shall not affect, impair or invalidate any of the remaining sections, clauses, sentences, parts or provisions of this Ordinance. It is hereby declared to be the intent of the Township Board of Supervisors that this Ordinance would have been adopted if such illegal, invalid or unconstitutional section, clause, sentence, part or provision had not been included herein.

F. Repealer/Savings.

The provisions of any prior ordinance which are inconsistent with the provisions of this Ordinance are hereby repealed to the extent of such inconsistency. Nothing contained in this Ordinance shall be construed to affect any suit or proceeding in any court, or any rights acquired, or liability incurred, or any cause of action existing prior to the enactment of this Ordinance.

G. Effective Date.

This Ordinance shall become effective immediately after the adoption hereof.

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ENACTED AND ORDAINED by the Board of Supervisors of Sergeant Township, McKean County, Pennsylvania, this _____ day of _____, 2026, in lawful session duly assembled.

ATTEST:

SERGEANT TOWNSHIP BOARD OF
SUPERVISORS

Secretary

Chairperson