WASHINGTON TOWNSHIP

WYOMING COUNTY, PENNSYLVANIA

ORDINANCE NO. 2021-84

AN ORDINANCE AMENDING THE WASHINGTON TOWNSHIP ZONING ORDINANCE OF DECEMBER 10, 2003, AS AMENDED, TO:

TEM 1 – ADD DEFINITIONS	1
IEM I - ADD DEFINITIONS	1
TEM 2 – MAKE CHANGES TO THE SCHEDULES OF USES	1
TEM 3 – UPDATE STANDARDS FOR MINERAL EXTRACTION	2
TEM 4 - UPDATE STANDARDS FOR MINERAL PROCESSING	3
TEM 5 - UPDATE STANDARDS FOR NATURAL GAS COMPRESSOR STATION	3
TEM 5 - UPDATE STANDARDS FOR NATURAL GAS COMPRESSOR STATISTICS	
TEM 6 – ADD STANDARDS FOR NATURAL GAS PROCESSING PLANTS	ر
TEM 7 - ADD STANDARDS FOR POWER GENERATION FACILITIES	
TEM 8 - AMEND SECTION 404.4 MAXIMUM BUILDING HEIGHT IN M-1 ZONES	12
TEM 8 - AMEND SECTION 101.1 MAXIMOW BUILDING TELESTIT IT. III I I I I I I I I I I I I I I	-13
TEM 9- AMEND SECTION 858 FOR WIND FARM USES	22
TEM 10- AMEND SECTION 838 FOR SOLAR ENERGY USES	-21

BE IT HEREBY ORDAINED AND ENACTED by the Board of Supervisors of Washington Township, Wyoming County, Pennsylvania, by authority of and pursuant to the provisions of Act of 1968, P.L. 805, No. 247 of the General Assembly of the Commonwealth of Pennsylvania, approved July 31, 1968, as reenacted and amended, known and cited as the "Pennsylvania Municipalities Planning Code," as follows:

The Washington Township Zoning Ordinance of December 10, 2003, as amended, is hereby amended as follows:

ITEM 1 - Amend and add the following definitions in Article III:

Add:

<u>Natural Gas Processing Plant</u>: A permanent facility designed and constructed to remove materials such as ethane, propane, butane and other constituents or similar substances from natural gas to allow all such natural gas to be of such quality as is required or appropriate for transmission or distribution to commercial markets, but not including facilities or equipment that is designed and constructed primarily to remove water, water vapor, oil and naturally occurring liquids from a natural gas. This also does not include a gas compressor station which is a facility primarily used for pressurization by turbine, motor or engine of gas for purposes of transmission through a pipeline.

Power Generation Facility: A facility that generates electric power for the purpose of transmission.

ITEM 2 - Make the following changes in the noted Schedule of Uses in Article IV:

Add power generation facilities to the list of special exception uses in the following Districts: -M-1 Manufacturing District

Add gas metering stations and natural gas processing plants to the list of special exception uses in the following Districts:

- -A-1 Agricultural District
- -M-1 Manufacturing District
- -C-3 Highway Commercial

ITEM 3 - Amend and Add \$825 as follows:

825.6 Informational Requirements

The applicant shall provide:

A. <u>Township Application Information</u> – The applicant shall, at a minimum, provide the information required by this Zoning Ordinance and the information required for land developments in the Subdivision and Land Development Ordinance. In addition the applicant shall submit all other information required to enable the

Township to assess the environmental, community and other public health, safety and welfare effects of the proposed operation. The findings of the Township based on this information shall serve as a basis for the establishment of conditions of approval in accord with this Ordinance and \$603(c)(2) of the Pennsylvania Municipalities Planning Code.

B. DEP Application Information – A copy of all applications and information required by the applicable DEP Rules and Regulations.

C. <u>Environmental Impact Statement</u> – The applicant shall file a full and complete Environmental Impact Statement in accordance with the requirements of \$703 of this Ordinance.

825.9 Additional Requirements for Oil and Gas Wells

A. Special Exception – Gas and oil well production is permitted as a special exception use in the A-1, C-1, C-2, C-3 and M-1 district for oil and gas well plots exceeding ten (10) acres. Gas and Oil Well Production in R-1 and R-2 residential districts shall be limited exclusively to public property and parks and lots or parcels individually owned compromising of at least twenty (20) acres and then only as a special exception.

B. Water Bodies - Two hundred (200) feet to any body of water, perennial or intermittent stream, or wetland.

- C. Compressor Units- In the event that one or more compressor units are incorporated in to the natural gas well or the process of extracting the natural gas from the well, then an application for a Special exception must be filed and approved and the following requirements must be met:
 - 1. The emergency response plan must be updated to identify this process and a plan must be provided to address the requirements set forth for emergency response plans;
 - 2. <u>Compressor noise</u>. The compressor and attendant equipment used in the compressor process shall be located within a full enclosed building with soundproofing adequate to comply with the noise levels established by \$701.6 or as otherwise established as a condition of approval. In any case, the operation of the equipment shall not create any noise that causes the exterior noise level to exceed the predevelopment ambient noise levels as measured within 300 feet of the compressor(s). The applicant and/or operator shall be responsible for establishing and reporting to the Township the predevelopment ambient noise level prior to the issuance of the zoning permit for the natural gas compressor on the wellpad

3. Local, State and Federal Regulations

All operations shall comply with all applicable local, state and federal laws and rules and regulations. No zoning permit shall be issued until such time as the applicant provides evidence of compliance with state and federal regulations.

- C. <u>Application</u> Applications for gas and oil well production as a special exception shall be accompanied by a site development plan prepared by a registered professional engineer, which shall include the following minimum information:
 - 12. The applicant shall submit an emergency response plan to the Township and the local fire companies and the Wyoming County emergency management department, providing, at a minimum, the recommended first response by fire companies and other first responders to address the following:
 - a. well leakage;
 - b. spill containment;
 - c. vandalism creating unknown conditions;
 - d. defective casing or cementing;
 - e. potential communication between the well and the public water supply; and

- f. control and disposal plan required by \$825.9B.11.
- g. a proposed response plan containing a N.I.M.S. compliant emergency management protocol
- h. emergency traffic control plan

ITEM 4 - Amend and Add \$826 as follows:

826.3 Informational Requirements

The applicant shall provide the information required by this \$826.3 and all other necessary information to enable the Township to assess the environmental, community and other public health, safety and welfare effects on the proposed operation. The findings of the Township based on this information shall serve as a basis

for the establishment of conditions of approval in accord with \$1208.4 of this Ordinance and \$603(c)(2) of the Pennsylvania Municipalities Planning \hat{Code} . The Applicant shall provide the following:

- A. Application Information The information required by this \$826, \$102.3.C, and all other necessary information to enable the Township to assess compliance with this Ordinance.
- B. <u>DEP Application Information</u> A copy of all applications and information required by the applicable DEP Rules and Regulations.
- C. Environmental Impact Statement The applicant shall file a full and complete Environmental Impact Statement in accordance with the requirements of \$703 of this Ordinance.

ITEM 5 - Amend and Add \$827 as follows:

827.2 Application

Applications for a gas compressor station and for metering stations as a special exception shall be accompanied by a site development plan prepared by a registered professional engineer, which shall include the following minimum information:

1. A copy of any permit application related to the permitting requirements for this use submitted to the PA Department of Environmental Protection (PA DEP) shall be submitted with the application for the special exception approval;

2. A survey by Registered Land Surveyor or Professional Engineer showing the location of structures, all public and private streets and all driveways on or within 300 feet of the

proposed property;

3. The survey to be submitted shall also demonstrate the following information:

a. the proposed location of the gas compressor station;

b. the proposed means of access to the gas compressor station;

c. the proposed gathering or transmission lines;

d. the distance from any existing structures on the subject property or the immediately adjacent properties;

e. location of local water supply wells or systems within 2500 feet of the facility; and

f. contours, existing and proposed, drawn at two foot vertical intervals

- 1. The applicant shall provide logs or other documentation showing the estimated deepest fresh groundwater.
- 2. The applicant shall provide the location of site streams, wetlands, and flood plains within five hundred (500) feet of gas compressor station location shall be set forth in the plan;
- 3. The applicant shall report all soils and slopes over 1.4 grade and landslide prone areas and other geological hazards.

4. The applicant shall locate all oil, natural gas, and electrical transmission lines

- 5. A site specific erosion and sedimentation control plan at a legible true scale, specific to the site shall be submitted.
- 6. The applicant shall provide a proposed scheduled indicating the following dates:

a. site preparation begins and ends;

b. anticipated construction begins and ends;

c. anticipated gas delivery to the site to begin;

d. anticipated commencement of compression and gas transmission to begin.

1. The Applicant shall provide copies of all applications for a highway occupancy permit submitted to the PA Department of Transportation.

2. The applicant shall provide a copy of the erosion and sedimentation control plan submitted

to PA DEP.

3. The applicant shall submit copies of other permit applications submitted to any state, local or federal public agency.

4. Proposed security including fencing and access controls and monitoring systems for the facility.

827.3 Local, State and Federal Regulations

All operations shall comply with all applicable local, state and federal laws and rules and regulations. No zoning permit shall be issued until such time as the applicant provides evidence of compliance with state and federal regulations.

827.4 Informational Requirements

The applicant shall provide the information required by this \$827.3 and all other necessary information to enable the Township to assess the environmental, community and other public health, safety and welfare effects of the proposed operation. The findings of the Township based on this information shall serve as a basis for the establishment of conditions of approval in accord with \$1208.4 of this Ordinance and \$603(c)(2) of the Pennsylvania Municipalities Planning Code. The Applicant shall provide the following:

- A. <u>Application Information</u> The information required by this \$827, all required application information, and all other necessary information to enable the Township to assess compliance with this Ordinance.
- B. <u>DEP Application Information</u> A copy of all applications and information required by the applicable DEP Rules and Regulations.
- C. Environmental Impact Statement The applicant shall file a full and complete Environmental Impact Statement in accordance with the requirements of \$703 of this Ordinance.

827.5 Reporting Requirements

For any facility approved by the Township, the operator shall submit to the Township copies of all DEP-required or DEP-issued documents and reports associated with the operation, within fifteen (15) days of the date of the document or report.

827.6 <u>Emergency Response Plan</u>

The applicant shall submit an emergency response plan to the Township, County Emergency Agency, local police departments and the local fire companies providing at a minimum the recommended first response by the fire companies and first responders to address the following:

a. pipeline leakage;

b. containment of potential contaminants;

c. vandalism or criminal activity creating unknown conditions;

d. malfunction of equipment;

e. potential accident discharge of environmental contaminants; and

f. control and disposal plan for effluence and waste

g. emergency traffic control plan

h. a proposed response plan containing a N.I.M.S. compliant emergency management protocol

i. natural gas transmission line malfunction or breakdown.

827.7 Emergency Contact Information

The applicant shall provide contact information for company representatives in the event of the occurrence of an emergency. The applicant shall meet with representatives of all first responders, applicable Township personnel and county emergency management departments to establish an acceptable emergency response plan.

827.8 Emergency Evacuation Plan

The applicant shall provide a plan for evacuation of the employees and other occupants of the facility in the event of an emergency. The applicant shall also provide a plan for transportation of injured individuals from its facility to a facility which can provide the required emergency services.

ITEM 6 - Add the following \$828:

Natural Gas Processing Plants 828

Natural gas processing plants shall be allowed only in those districts as specified in the schedule of uses. In addition to the performance standards in \$701 and all other applicable standards of this ordinance, the requirements of this \$828 shall apply.

828.1 Location Requirements

The facility shall comply with the following location requirements.

- A. Building Noise All equipment used in the natural gas processing plant shall be located within a full enclosed building with soundproofing adequate to comply with the noise levels established by \$701.6 or as otherwise established as a condition of approval. In any case, the operation of the equipment shall not create any noise that causes the exterior noise level to exceed the predevelopment ambient noise levels as measured within 300 feet of the natural gas processing plant building(s). The applicant and/or operator shall be responsible for establishing and reporting to the Township the predevelopment ambient noise level prior to the issuance of the zoning permit for the natural gas processing plant.
- B. <u>Setbacks</u> The following setbacks shall be maintained:
 - 1. <u>Property Lines, Road rights-of-Way</u> Two hundred (200) feet to adjoining properties and public road rights-of-way.
 - 2. <u>Residential Structures</u> Five hundred (500) feet to any existing residential structure not located on the project parcel.
 - 3. Water Bodies Two hundred (200) feet to any body of water, perennial or intermittent stream, or wetland.

C. Buffer

- 1. An undisturbed area of not less than fifty (50) feet in width shall be maintained along all property lines and road rights-of-way to provide a buffer and shall not be used for parking, storage or any other purpose except landscaping and crossing of access roads and required utilities and discharge/intake lines. In determining the type and extent of the buffer required, the Township shall take into consideration the design of the project structure(s) and site, topographic features which may provide natural buffering, existing natural vegetation, and the relationship of the proposed project to adjoining areas.
- 2. Any required landscaped buffer may be installed in the setback area, and shall consist of trees, shrubbery and other vegetation and shall be a minimum of twenty-five (25) feet wide.

- 3. Design details of buffers shall be included on the site plan, and buffers shall be considered improvements for the purposes of guaranteeing installation in accord with the requirements for land developments in the Subdivision and Land Development Ordinance.
- 4. It shall be the responsibility of the applicant and/or operator to maintain all buffers in good condition, free of rubbish, and replace any dying or dead plants or deteriorating landscape material.
- D. <u>Access Routes and Roads</u> The Applicant shall provide a map showing the public roads in the Township proposed to be used to access the facility and provide an evaluation of the condition of any Township road which will be used and the potential damage which may occur from such use.

828.2 Application

Applications for natural gas processing plant as a special exception shall be accompanied by a site development plan prepared by a registered professional engineer, which shall include the following minimum information:

1. A copy of any permit application related to the permitting requirements for this use submitted to the PA Department of Environmental Protection (PA DEP) shall be submitted with the application for the special exception approval;

2. A survey by Registered Land Surveyor or Professional Engineer showing the location of structures, all public and private streets and all driveways on or within 200 feet of the

proposed property;

3. The survey to be submitted shall also demonstrate the following information:

a. the proposed location of the natural gas processing plant;

b. the proposed means of access to the natural gas processing plant;

c. the proposed gathering or transmission lines;

d. the distance from any existing structures on the subject property or the immediately adjacent properties;

e. location of local water supply wells or systems; and

f. contours, existing and proposed, drawn at two foot vertical intervals

1. The applicant shall provide logs or other documentation showing the estimated deepest fresh groundwater.

2. The applicant shall provide the location of site streams, wetlands, and flood plains within five hundred (500) feet of power generation facility location shall be set forth in the plan;

3. The applicant shall report all soils and slopes over 1.4 grade and landslide prone areas and other geological hazards.

- 4. The applicant shall locate all oil, natural gas, and electrical transmission lines
- 5. A site specific erosion and sedimentation control plan at a legible true scale, specific to the site shall be submitted.
- 6. The applicant shall provide a proposed scheduled indicating the following dates:

a. site preparation begins and ends;

b. anticipated construction activity begins and ends;

c. anticipated natural gas processing production to begin.

1. The Applicant shall provide copies of all applications for a highway occupancy permit submitted to the PA Department of Transportation.

2. The applicant shall provide a copy of the erosion and sedimentation control plan submitted to PA DEP.

3. The applicant shall submit copies of other permit applications submitted to any state, local or federal public agency.

4. Proposed security including fencing and access controls and monitoring systems for the facility.

828.3 Local, State and Federal Regulations

All operations shall comply with all applicable local, state and federal laws and rules and regulations. No zoning permit shall be issued until such time as the applicant provides evidence of compliance with state and federal regulations.

828.4 <u>Informational Requirements</u>

The applicant shall provide the information required by this \$828.3 and all other necessary information to enable the Township to assess the environmental, community and other public health, safety and welfare effects of the proposed operation. The findings of the Township based on this information shall serve as a basis for the establishment of conditions of approval in accord with \$1208.4 of this Ordinance and \$603(c)(2) of the Pennsylvania Municipalities Planning Code. The Applicant shall provide the following:

- A. <u>Application Information</u> The information required by this \$828, all required application information, and all other necessary information to enable the Township to assess compliance with this Ordinance.
- B. <u>DEP Application Information</u> A copy of all applications and information required by the applicable DEP Rules and Regulations.

C. <u>Environmental Impact Statement</u> – The applicant shall file a full and complete Environmental Impact Statement in accordance with the requirements of \$703 of this Ordinance.

828.5 Emergency Response Plan

The applicant shall submit an emergency response plan to the Township, County Emergency Agency, local police departments and the local fire companies providing at a minimum the recommended first response by the fire companies and first responders to address the following:

a. pipeline leakage;

b. containment of potential contaminants;

c. vandalism or criminal activity creating unknown conditions;

d. malfunction of equipment;

e. potential accident discharge of environmental contaminants; and

f. control and disposal plan for effluence and waste

g. emergency traffic control plan

h. a proposed response plan containing a N.I.M.S. compliant emergency management protocol

i. electrical transmission line malfunction, breakdown or failure.

828.6 Reporting Requirements

For any facility approved by the Township, the operator shall submit to the Township copies of all DEP-required or DEP-issued documents and reports associated with the operation, within fifteen (15) days of the date of the document or report.

828.7 Emergency Contact Information

The applicant shall provide contact information for company representatives in the event of the occurrence of an emergency. The applicant shall meet with representatives of all first responders, applicable Township personnel and county emergency management departments to establish an acceptable emergency response plan.

828.8 Emergency Evacuation Plan

The applicant shall provide a plan for evacuation of the employees and other occupants of the facility in the event of an emergency. The applicant shall also provide a plan for transportation of injured individuals from its facility to a facility which can provide the required emergency services.

ITEM 7 – Add the following \$829:

Power Generation Facility 829

Power generation facilities shall be allowed only in those districts as specified in the schedule of uses. The power generation facility is a special exception allowed in all M-l zones. In addition to the performance standards in \$701 and all other applicable standards of this Ordinance, requirements of this \$829 shall apply.

829.1 Location Requirements

The facilities shall comply with the following location requirements:

- Minimum Parcel Size The minimum parcel size shall be sixty (60) acres for a power generation facility use. For each generator in excess of the first electrical generator, the parcel size shall be increased ten (10) acres per generator.
- 2. Building Noise All equipment used in the power generation facility shall be located within a full enclosed building with soundproofing adequate to comply with the noise levels established by \$701.6 or as otherwise established as a condition of approval. In any case, the operation of the equipment shall not create any noise that causes the exterior noise level to exceed the predevelopment ambient noise levels as measured within 300 feet of the power generation facility(ies). The applicant and/or operator shall be responsible for establishing and reporting to the Township the predevelopment ambient noise level prior to the issuance of the zoning permit for the natural gas processing plant.
- Setbacks The following setbacks shall be maintained: B.
 - 1. Property Lines, Road rights-of-Way Five hundred (500) feet to adjoining properties and public road rights-of-way.
 - 2. Residential Structures Seven hundred fifty (750) feet to any existing residential structure not located on the project parcel.
 - 3. Water Bodies Three hundred (300) feet to any body of water, perennial or intermittent stream, or wetland.

Buffer C.

- An undisturbed area of not less than one hundred (100) feet in width shall be maintained along all property lines and road rights-of-way to provide a buffer and shall not be used for parking, storage or any other purpose except landscaping and crossing of access roads and required utilities and discharge/intake lines. In determining the type and extent of the buffer required, the Township shall take into consideration the design of the project structure(s) and site, topographic features which may provide natural buffering, existing natural vegetation, and the relationship of the proposed project to adjoining areas.
- 2. Any required landscaped buffer may be installed in the setback area, and shall consist of trees, shrubbery and other vegetation and shall be a minimum of fifty (50) feet wide.
- 3. Design details of buffers shall be included on the site plan, and buffers shall be considered improvements for the purposes of guaranteeing installation in accord with the requirements for land developments in the Subdivision and Land Development Ordinance.
- 4. It shall be the responsibility of the applicant and/or operator to maintain all buffers in good condition, free of rubbish, and replace any dying or dead plants or deteriorating landscape material.
- A. Access Routes and Roads The Applicant shall provide a map showing the public roads in the Township proposed to be used to access the facility and provide an evaluation of the condition of any Township road which will be used and the potential damage which may occur from such use.

829.2 Application

Applications for power generation station as a special exception shall be accompanied by a site development plan prepared by a registered professional engineer, which shall include the following minimum information:

> 1. A copy of any permit application related to the permitting requirements for this use submitted to the PA Department of Environmental Protection (PA DEP) shall be submitted with the application for the special exception approval;

2. A survey by Registered Land Surveyor or Professional Engineer showing the location of structures, all public and private streets and all driveways on or within 200 feet of the proposed property;

3. The survey to be submitted shall also demonstrate the following information:

- a. the proposed location of the power generation station;
- b. the proposed means of access to the power generation station;

c. the proposed gathering or transmission lines;

d. the distance from any existing structures on the subject property or the immediately adjacent properties;

e. location of local water supply wells or systems; and

f. contours, existing and proposed, drawn at two foot vertical intervals

- 1. The applicant shall provide logs or other documentation showing the estimated deepest fresh groundwater.
- 2. The applicant shall provide the location of site streams, wetlands, and flood plains within five hundred (500) feet of power generation facility location shall be set forth in the plan;
- 3. The applicant shall report all soils and slopes over 1.4 grade and landslide prone areas and other geological hazards.

4. The applicant shall locate all oil, natural gas, and electrical transmission lines

- 5. A site specific erosion and sedimentation control plan at a legible true scale, specific to the site shall be submitted.
- 6. The applicant shall provide a proposed scheduled indicating the following dates:

a. site preparation begins and ends;

b. anticipated construction activity begins and ends;

c. anticipated generation and electric production to begin.

- 1. The Applicant shall provide copies of all applications for a highway occupancy permit submitted to the PA Department of Transportation.
- 2. The applicant shall provide a copy of the erosion and sedimentation control plan submitted to PA DEP.
- 3. The applicant shall submit copies of other permit applications submitted to any state, local or federal public agency.
- 4. Proposed security including fencing and access controls and monitoring systems for the facility.

829.3 Local, State and Federal Regulations

All operations shall comply with all applicable local, state and federal laws and rules and regulations. No zoning permit shall be issued until such time as the applicant provides evidence of compliance with state and federal regulations.

829.4 Informational Requirements

The applicant shall provide the information required by this \$829.3 and all other necessary information to enable the Township to assess the environmental, community and other public health, safety and welfare effects of the proposed operation. The findings of the Township based on this information shall serve as a basis for the establishment of conditions of approval in accord with \$1208.4\$ of this Ordinance and \$603(c)(2) of the Pennsylvania Municipalities Planning Code. The Applicant shall provide the following:

- A. <u>Application Information</u> The information required by this \$829, all required application information, and all other necessary information to enable the Township to assess compliance with this Ordinance.
- B. <u>DEP Application Information</u> A copy of all applications and information required by the applicable DEP Rules and Regulations.
- C. Environmental Impact Statement The applicant shall file a full and complete Environmental Impact Statement in accordance with the requirements of \$703 of this Ordinance.

829.5 Reporting Requirements

For any facility approved by the Township, the operator shall submit to the Township copies of all DEP-required or DEP-issued documents and reports associated with the operation, within fifteen (15) days of the date of the document or report.

829.6 Emergency Response Plan

The applicant shall submit an emergency response plan to the Township, Wyoming County emergency management Agency, local police departments and the local fire companies providing at a minimum the recommended first response by the fire companies and first responders to address the following:

a. pipeline leakage;

b. containment of potential contaminants;

- c. vandalism or criminal activity creating unknown conditions;
- d. malfunction of equipment;
- e. potential accident discharge of environmental contaminants; and
- f. control and disposal plan for effluence and waste
- g. emergency traffic control plan
- h. a proposed response plan containing a N.I.M.S. compliant emergency management protocol
- i. electrical transmission line malfunction, breakdown or failure.

829.7 Emergency Contact Information

The applicant shall provide contact information for company representatives in the event of the occurrence of an emergency. The applicant shall meet with representatives of all first responders, applicable Township personnel and county emergency management departments to establish an acceptable emergency response plan.

829.8 Emergency Evacuation Plan

The applicant shall provide a plan for evacuation of the employees and other occupants of the facility in the event of an emergency. The applicant shall also provide a plan for transportation of injured individuals from its facility to a facility which can provide the required emergency services.

ITEM 8 – Amend the following \$404:

Amend Section 404.4: Building Regulations: Maximum Building Height in an M-1 Zone to be Fifty (50) feet for all permitted uses, special exceptions, conditional uses and accessory uses

SECTION 847. SOLAR POWER ENERGY USES.

847 Solar Power Generation, Commercial

In addition to all other applicable standards in this Ordinance, the following regulations shall apply to commercial solar power generation facilities which shall be permitted only in the districts as provided by the Schedule of Uses.

847.1 Purposes

To accommodate the need for solar power facilities while regulating their location and number in the Township in recognition of the need to protect the public health, safety and welfare.

847.2 Permits: Use Regulations

- A. <u>Permits</u>- A special exception approval from the Zoning Hearing Board shall be required for every solar power facility installed in the Township. A Principal Solar Energy System shall be allowed in a M-1, manufacturing zone only.
- B. <u>Associated Use</u>- All other uses ancillary to the solar power facility (including a business office, maintenance depot, etc., greater than 1,000 sq. ft.) are prohibited from the solar power facility, unless otherwise permitted in the zoning district in which the solar power facility is located. This shall not prohibit the installation as accessory structures of equipment containers not intended for human occupancy to house only equipment necessary for the operation of the solar power facility.
- C. <u>Solar Power Facility as a Second Principal Use</u>- A solar power facility shall be permitted on the property with an existing use subject to the following land developments standards.
 - 1. The minimum lot area, minimum setbacks and maximum height required by this Ordinance for the solar power facility shall apply, and the land remaining for accommodation of the existing principal use(s) on the lot shall also continue to comply with the minimum lot area, density and other requirements.
 - 2. The vehicular access to the equipment building shall, whenever feasible, be provided along the circulation driveways of the existing use.
 - The applicant shall present documentation that the owner of the property has granted an easement or other legal interest for the land for the proposed solar power facility and that vehicular access is provided to the solar power facility.

- 1. COMPLIANCE WITH INDUSTRY STANDARDS. The ASES layout, design, installation, and ongoing maintenance shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), or other similar certifying organizations, and shall comply with the UCC, regulations adopted by the Pennsylvania Department of Labor and Industry, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the permit application.
- 2. INSTALLERS. ASES installers must demonstrate they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) approved solar installer list or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:
- A. Is certified by the North American Board of Certified Energy Practitioners (NABCEP) for PV installation.
- 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 program and successfully installed a minimum of three PV systems.
- C. For residential applications, a registered home improvement contractor with the Attorney General's Office.
 - 3. MAINTAIN IN GOOD WORKING ORDER. Upon completion of installation, the ASES shall be maintained in good working order in accordance with the manufacturer's standards and any other codes under which the ASES was constructed. Failure of the owner to maintain the ASES in good working order is grounds for enforcement action by the zoning officer under Section 1008 of the zoning ordinance.
 - 4. UNDERGROUND REQUIREMENTS. All on-site utility, transmission, and plumbing lines shall be placed underground.

GLARE.

- A. All ASES shall be placed such that concentrated solar radiation or glare does not project onto nearby properties, structures, buildings, or roadways.
- B. The applicant has the burden of proving that any glare produced does not have a significant adverse impact on neighboring or adjacent uses either through sitting or mitigation.

7. SOLAR EASEMENTS. If a solar easement, intended to guarantee unobstructed solar access, is desired by the applicant, owner or landowner for an ASES, such matter shall be carried out as a private agreement among the parties of which the municipality shall not be a party. The municipality shall also not be responsible for ensuring the maintenance or enforcement of any solar easement.

8. ROOF MOUNTED AND WALL MOUNTED ASES.

A. LOCATION. A roof mounted or wall mounted ASES may be located on a principal or accessory building.

B. SETBACKS.

- i. Wall mounted ASES shall comply with the setbacks for an accessory structure under Section 401(a).
 - ii. Roof mounted ASES shall not extend beyond any portion of the roof edge.
- C. HEIGHT. ASES mounted on roofs or walls of any building shall be subject to the maximum height requirement specified for a principal building within the zoning district in which it is located.
- D. CODE COMPLIANCE. For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the UCC and that the roof or wall must be capable of holding the load imposed on the structure. Applications for roof mounted ASES shall be accompanied by engineer stamped plans that demonstrate the structural sufficiency of the roof to hold the weight of the ASES.

9. GROUND MOUNTED ASES.

A. SETBACKS.

- i. The minimum yard setbacks from side and rear property lines shall comply with the required setbacks for a principal structure setback of the zoning district in which it is located.
- ii. Ground mounted ASES are prohibited in front yards, between the principal building and the public street, excluding front yard locations which are located not less than 200 feet from the front property line.
- B. HEIGHT. Freestanding ground mounted ASES shall not exceed 20 feet in height above the ground elevation surrounding the systems.

C. MAXIMUM IMPERVIOUS SURFACE.

- i. The surface area of the arrays of a ground mounted ASES, regardless of the mounted angle of any solar panels, shall be considered impervious and calculated in the percentage of impervious cover. ASES shall not exceed the maximum impervious cover for the zoning district in which it is located.
- ii. If applicable, the applicant shall submit a stormwater management plan that demonstrates compliance with the municipal stormwater management regulations.
- D. SCREENING. Ground mounted ASES when located less than 50 feet from a property line shall be screened from any adjacent property that is residentially zoned or used for residential purposes. The screening shall be in accordance with Section 414.
- 10. SAFETY AND WARNING SIGNAGE. Appropriate safety and warning signage concerning voltage shall be affixed to the ground mounted electrical devices, equipment, and structures. All electrical control devices associated with the ASES shall be locked to prevent unauthorized access or entry.
- 11. LOCATION RESTRICTIONS. A ground-mounted ASES may not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system or in any other location on the property that would alter or impede stormwater runoff from collecting in a constructed stormwater conve;yance system.

12. ACCESSORY WIND ENERGY FACILITIES (AWEF) STANDARDS.

1. COMPLIANCE STANDARDS. The layout, design and installation of of AWEF shall conform to applicable industry standards, including those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society of Testing and Materials (ASTM), or other pertinent certifying organizations and comply with the UCC and all applicable building and electrical codes of the municipality. The manufacturer specifications shall be submitted as part of the permit application.

2. NOISE.

- A. The sounds produced by an AWEF shall not exceed 45 dBA Lmax as measured at the property line at ground level.
- B. Methods for measuring and reporting acoustic emissions from AWEF shall be equal to or exceed the minimum standards for precision described in ANSI/ASA S12.9 Part 3, Short Term Measurements with an Observer Present; S 12.100, Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas; and Computer Modeling Shall comply with ANSI ASA S12.6 (ISO9613-2) Attenuation of sound during propagation outdoors-Part 2 General method of Calculation.

- 3. ACCESSORY BUILDING STORAGE. When an accessory building is necessary for storage cells or related mechanical equipment, the accessory building shall comply with accessory building requirements of Section 401(a).
 - 4. UNDERGROUND REQUIREMENTS. All on-site utility, transmission lines, and cables shall to the maximum extent possible be placed underground.
- 5. UTILITY NOTIFICATION. The owner of an AWEF shall provide the municipality with written confirmation that the public utility to which the AWEF will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection Off-grid AWEF shall be exempt from this requirement.

847.4 PRINCIPAL SOLAR ENERGY SYSTEM (PSES).

- 1. COMPLIANCE WITH INDUSTRY STANDARDS. The PSES layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with the PA Uniform Construction Code, regulations adopted by the Pennsylvania Department of Labor and Industry, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the permit application.
- 2. INSTALLERS. PSES installers must demonstrate they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) approved solar installer list or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:
 - A. Is certified by the NOrth American Board of Certified Energy Practitioners (NABCEP) for solar thermal installations.
 - B. Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited solar thermal training program or a solar collector's manufacturer's training program and successfully installed a minimum of three solar thermal systems.
- 3. MAINTAIN GOOD WORKING ORDER. Upon completion of installation, the PSES shall be maintained in good working order in accordance with manufacturer's standards and any other codes under which the PSES was constructed. Failure of the owner to maintain the PSES in good working order is grounds for enforcement action by the zoning officer under Section 1008.

- 4. UNDERGROUND REQUIREMENTS. All on site transmission and plumbing lines shall be placed underground.
- 5. UTILITY NOTIFICATION. The owner of ta PSES shall provide the municipality with written confirmation that the public utility company to which the PSES will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection.
- 6. SIGNAGE. No portion of the PSES shall contain or be used to display advertising. The manufacturer's name and equipment information or indication of ownership shall be allowed on any equipment of the PSES provided it complies with the nameplate and identification sign requirements in Chapter 9.

7. GLARE.

- A. All PSES shall be placed such that concentrated solar radiation or glare does not project onto nearby properties, structures, buildings and roadways.
- B. The applicant has the burden of proving that any glare produced does not have a significant adverse impact on neighboring or adjacent uses either through sitting or mitigation.
- 8. NOISE STUDY. A noise study shall be performed and included with the zoning permit application. The noise study shall be performed by an independent noise study expert and paid for by the applicant. Noise from a PSES may not exceed 50dBA, as measured at the property line.
- 9. BUFFER AND SCREENING REQUIREMENTS. A PSES shall be considered a land development and shall comply with the general landscaping requirements of Section 414. In addition, no trees or other landscaping required as a condition of approval may be removed during the installation or operation of a PSES.
- 10. CONTACT INFORMATION. The PSES owner or operator shall provide current contact information to the municipality which includes a phone number and identifies a responsible person for the municipality or public to contact regarding emergencies, inquiries and complaints for the duration of the project. The contact information shall be conspicuously posted on the property so that a person would not believe they were trespassing while viewing it.
- 11. EMERGENCY PREPAREDNESS PLAN. The owner or operator shall furnish a written emergency preparedness plan outlining the procedures on how emergencies will be handled. The plan shall include the manner that the owner or operator will coordinate with local emergency service providers in the event of an emergency.
- 12. SOLAR EASEMENTS. Where a solar easement is proposed by the owner or landowner for a PSES, a written agreement in recordable form constituting a covenant running with land shall be provided to the municipality as part of the subdivision or land development. The municipality

may not be a party to any agreement, nor an intended third-party beneficiary and may not be responsible for enforcement or maintenance of any solar easement.

- 13. PERFORMANCE STANDARDS. The performance standards of this Section shall regulate all PSES instead of the environmental protection regulations of Chapter 6.
 - 14. SALDO. All PSES shall constitute a subdivision and/or land development.

15. DECOMMISSIONING.

- A. The PSES owner is required to notify the municipality immediately upon cessation or abandonment of the use. The PSES shall be presumed to be discontinued or abandoned if no electricity is generated by the system for a continuous period of 12 months.
- B. The PSES owner shall then have six months in which to dismantle and remove the PSES including all solar related equipment or appurtenances related thereto, including but not limited to buildings, cabling, electrical components, transmission and plumbing lines, roads foundations, and other associated facilities from the property. The owner shall also restore the land to its original condition pre-dismantling condition. If the owner fails to dismantle or remove the PSES and restore the land within the six-month time period, the municipality may, but shall not be required to, complete the decommissioning and land restoration at the owner's expense.
- C. At the time of issuance of the permit for the construction of the PSES, the owner shall provide financial security to the municipality to secure the expense of dismantling and removing the PSES and restoration of the land to its original condition. The financial security shall be in the amount of 110 percent of the final costs of the decommissioning. The decommissioning funds shall be posted and maintained during the life of the project in the form of performance bond, irrevocable letter of credit or other financial form of security acceptable to the governing body.
- D. An independant and certified professional engineer shall be retained by the governing body at the owner's cost to estimate the total cost of decommissioning without regard to salvage value of the equipment. Thereafter, the owner shall retain an engineer to provide the municipality with cost estimates of decommissioning after the first year of operation and every fifth year thereafter.
- 16. GROUND MOUNTED PRINCIPAL SOLAR SYSTEMS. Ground mounted PSES shall have a:
 - A. Minimum lot size of 10 acres.
 - B. Minimum setback at all property lines of 100 feet.
 - C. Maximum height of 20 feet.

- 17. MAXIMUM IMPERVIOUS SURFACE. The surface area of the arrays of a ground mounted PSES, regardless of the mounted angle of any solar panels, shall be considered part of the impervious cover.
- 18. MINIMUM/MAXIMUM LOT SIZE. The minimum lot size for the development of a PSES shall be Five (5) acres. The maximum lot size shall be 150 (One hundred and fifty) acres.

858 Wind Farms

In addition to all other applicable standards in this Ordinance, the following regulations shall apply to wind farms which shall be permitted as conditional uses only in the districts as provided by the Schedule of Uses.

858,1 <u>Purposes</u>

- A. To accommodate the need for wind farms while regulating their location and number in the Township in recognition of the need to protect public health, safety and welfare.
- B. To avoid potential damage to adjacent properties from windmill structure failure and falling ice, through engineering and property sitting of such structures.

858.2 <u>Permits: Use Regulations</u>

- A. <u>Permits-</u> A special exception approval by the Zoning Board shall be required for every wind farm and windmill installed at any location in the Township. A Principal Wind Energy Facility (PWEF) shall be allowed in a M-1, manufacturing zone only.
- B. Associated Use- All other uses ancillary to the wind farm (including a business office, maintenance depot, etc., greater than 1,000 sq. ft.) are prohibited from the wind farm, unless otherwise permitted in the zoning district in which the wind farm is located. This shall not prohibit the installation as accessory structures of equipment containers not intended for human occupancy to house only equipment necessary for the operation of the wind farm.
- C. Wind Farm as a Second Principal Use- A wind farm shall be permitted on a property with an existing use subject to the following land development standards.
 - 1. The minimum lot area, minimum setbacks and maximum height required by this Ordinance for the wind farm and windmills shall apply, and the land remaining for accommodations of the existing principal use(s) on the lot shall also continue to comply with the minimum lot area, density and other requirements.
 - 2. The vehicular access to the equipment building shall, whenever feasible, be provided along the circulation driveways of the existing use.
 - 3. The applicant shall present documentation that the owner of the property has granted an easement or other legal interest for the land for the proposed facility and that vehicular access is provided to the facility.

858.3 Standards

A. Wind Farm Height- The applicant shall demonstrate that the windmills are at the minimum required to function satisfactorily. No windmill that is taller than this minimum height shall be approved.

B. Parcel Size; Setbacks

- 1. Separate Parcel- If the parcel on which the wind farm is a separate and distinct parcel, the zoning district minimum lot size shall apply and in all cases, the lot shall be of the size that all required setbacks are satisfied. No windmill shall be located closer to any property line than its height plus the normal setback for the district. The setback for equipment containers, other accessory structures and guy wire anchors shall be a minimum of thirty (30) feet.
- 2. <u>Lease, License or Easement</u>- If the land on which the wind farm is leased, or is used by license or easement, the setback for any windmill, the support structure, equipment containers, other accessory structures, and guy wire anchors shall be a minimum of thirty (30) feet from the line of lease, license or easement. In any case, no windmill shall be located closer to any property line (not lease, license or easement line) than its height plus the normal setback for the district.
- 3. <u>Principal Structures</u>- No windmill shall be located less than five hundred (500) feet from any principal residential structure existing prior to the erection of the windmill.
- C. Wind Farm Support Structure Safety- The applicant shall demonstrate that the proposed windmills are safe and the surrounding areas will not be negatively affected by structure failure, falling ice or other debris, electromagnetic fields, or radio frequency interference. All windmills shall be fitted with anti-climbing devices, as approved by manufacturers. The applicant shall submit certification from a Pennsylvania registered professional engineer that a proposed Wind farm and support structure will be designed and constructed in accord with the accepted engineering practices and all requirements of any applicable construction code. Within forty-five (45) days of initial operation, the owner and/or operator of the wind farm shall provide a certification from a Pennsylvania registered professional engineer that the wind farm and all structures comply with all applicable regulations.
- D. <u>Fencing</u>- A fence shall be required around windmills and other equipment, unless the design of the structures adequately provides for safety.
- E. <u>Landscaping</u>- Landscaping may be required to screen as much of the wind farm ground features as possible, the fence surrounding the support structure, and any other ground level features (such as a building), and in general buffer the wind farm ground features from neighboring properties. The Township may permit any combination of existing vegetation, topography, walls, decorative fences or other features instead of landscaping, if the same achieves the same degree of screening as the required landscaping.
- F. <u>Licenses; Other Regulations; Insurance</u>- The applicant must demonstrate that it has obtained the required licenses from governing state and federal agencies. The applicant shall also document compliance with all applicable state and federal regulations. The applicant shall submit the name,

- address and emergency telephone number for the operator of the Wind Farm; and a Certificate of Insurance evidencing general liability coverage in the minimum amount of \$1,000,000 per occurrence and property damage coverage in the minimum amount of \$1,000,000 per occurrence covering the wind farm.
- G. Access; Required Parking- Access to the wind farm shall be provided by means of public street or easement to a public street. The easement shall be a minimum of twenty (20) feet in width and shall be improved to a width of at least ten (10) feet with a dust-free, all weather surface for its entire length. If the wind farm site is fully automated, adequate parking shall be required for maintenance workers. If the site is not automated, the number of required parking spaces shall equal the number of people on the largest shift.
- H. <u>Color and Lighting: FAA and PA DOT Notice</u>- Windmills shall comply with all applicable Federal Aviation Administration (FAA) and PA DOT Bureau of Aviation regulations. No windmill may be artificially lighted except as required by FAA requirements. The applicant shall provide a copy of the response to *Notice of Proposed Construction or Alteration* forms submitted to the FAA and PA DOT Bureau of Aviation.
- I. <u>Communications Interference</u>- The applicant shall document that the radio, television, telephone or reception of similar signals for nearby properties will not be distrubed or diminished, and this may be accomplished by remedial measures instituted by the wind farm developer.
- J. <u>Historic Structures</u>- A wind farm shall not be located within five-hundred (500) feet of any structure listed on any public historic register.
- K. <u>Discontinued Use-</u> Should any wind farm or windmill cease to be used, the owner or operator or then owner of the land on which the wind farm or windmill is located, shall be required to remove the same within one (1) year from the abandonment of use. Failure to do so shall authorize the Township to remove the facility and access the cost of removal to the foregoing parties. The Township may also file a municipal lien against the land to recover the costs of removal and attorney's fees. In addition, at the time of zoning permit issuance for any windmill, the Township shall require a financial guarantee, in a term, form and amount determined by the Board of Supervisors with the advice of the Township Solicitor, to guarantee the removal of the windmill.
- L. <u>Site Plan</u>- A full site plan shall be required for all wind farm sites, showing the wind farm, windmills, building, fencing, buffering, access, and all other items required for conditional uses by this Ordinance.

A. COMPLIANCE STANDARDS. The layout, design and installation of AWEF shall conform to applicable industry standards, including those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), Det Notske Veritas, Germanischer Lloyd Wind Energies, the American Society of Testing and Materials (ASTM), or other pertinent certifying organizations and comply with the UCC and all applicable building and electrical codes of the municipality. The manufacturer specifications shall be submitted as part of the permit application.

B. NOISE.

- A. The sound produced by an AWEF shall not exceed 45 dBA Lmax as measured at the property line at ground level.
- B. Methods for measuring and reporting acoustic emissions from AWEF shall be equal to or exceed the minimum standards for precision described in ANSI/ASA S12.9 Part 3, Short Term Measurements with an Observer Present; S 12.100, Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas; and Computer Modeling shall comply with ANSI.ASA S12.6 (ISO 9613-2) Attenuation of sound during propagation outdoors-Part 2 General method of Calculation.
- C. ACCESSORY BUILDING STORAGE. When an accessory building is necessary for storage cells or related mechanical equipment, the accessory building shall comply with accessory building requirements of Section 503.
- D. UNDERGROUND REQUIREMENTS. All on site-utility, transmission lines, and cables shall to the maximum extent possible be placed underground.
- E. UTILITY NOTIFICATION. The owner of an AWEF shall provide the municipality with written confirmation that the public utility to which the AWEF will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection. Off-grid AWEF shall be exempt from this requirement.
- F. SIGNAGE. The display of advertising is prohibited, except for the identification of the manufacturer of the system.
- G. LIGHTING. AWEF may not be lit, except for any lighting required to comply with Federal Aviation Administration (FAA) or Pennsylvania Department of Transportation Bureau of Aviation (BOA) regulations.
- H. COLORED. AWEF shall be painted a non-reflective, flat color such as white, off grey or grey unless required to be colored differently by the FAA or BOA regulations.
- I. BRAKING SYSTEM. AWEF shall be equipped with a redundant braking system. This includes both aerodynamic overspeed controls (including variable pitch, tip, and other similar systems) and

mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation may not be considered a sufficient braking system for overspeed protection.

- J. SHADOW FLICKER. An AWEF shall not cause shadow flicker on any occupied building on a non-participating landowner's property.
- K. LOCATION. No part of any AWEF shall extend over parking areas, access drives, driveways or sidewalks.
- L. INSURANCE. The owner of the AWEF shall provide evidence to the municipality that the owner's insurance policy has been endorsed to cover an appropriate level of damage or injury that might result from the installation and operation of the AWEF.
- M. ICE THROW. The potential ice throws or ice shedding for an AWEF shall not cross the property line of the lot on which the AWEF is located nor impinge on any right-of-way or overhead utility line.
- N. ELECTRONIC INTERFERENCE. The owner of the AWEF shall ensure that the design and operation of the AWEF avoids disruption or loss of radio, telephone, television, cell, internet, VOR signalization for aircraft or similar signals, and shall mitigate any harm caused thereby.

O. WARNINGS.

- i. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers.
- ii. Visible, reflective, colored objects, such as flags, reflectors, or tape shall be placed on the anchor points of guy wires and along guy wires up to height of 10 feet above the ground.

P. GROUND MOUNTED AWEF.

- i. The minimum lot size is two acres.
- ii. The maximum height of an AWEF with blades extended is 120 feet.
- iii. The minimum ground clearance for an AWEF is 80 feet.
- iv. An AWEF shall be setback from property lines, occupied dwelling, above ground utility lines, railroads, and rights-of-way by a distance equal to or no less than one and a half times the total height of an AWEF.
- v. No more than one ground mounted AWEF shall be permitted per lot or contiguous lots in common ownership.

- vi. A ground mounted AWEF shall be prohibited in front yards, between the principal building and the street right-of-way. The minimum distance between the ground and the wind rotor blade shall be 20 feet.
- vii. An AWEF shall be surrounded by a six-foot high fence if the AWEF is not otherwise rendered unclimbable up to 12 feet above the ground.

17. BUILDING MOUNTED AWEF.

- i. A building mounted AWEF may be located on any lot regardless of lot size.
- ii. A building mounted AWEF shall comply with the height restriction of the zoning district in which it is located for a principal building.
- iii. No more than one building mounted AWEF shall be permitted on a lot, or a contiguous lot in common ownership.
- iv. The applicant shall provide evidence to the municipality that the plans for a building mounted AWEF comply with the UCC and other adopted building codes.

858.5. PRINCIPAL WIND ENERGY FACILITIES (PWEF).

A. COMPLIANCE STANDARDS.

- 1. The design of the PWEF shall conform to applicable industry standards, including those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL). Det Norske Veritas, Germanisheer Lloyd Wind Energies, the American Society of Testing and Materials (ASTM), or other pertinent certifying organizations and comply with all applicable building and electrical codes of the Township. The applicant shall submit certificate of design compliance obtained by the equipment manufacturers from Underwriters Laboratories, Det Norske Veritas, Germanisheer Lloyd Wind Energies, or other similar certifying organizations. The manufacturer specifications shall be submitted with the zoning permit application.
- 2. To the extent applicable, the PWEF shall comply with the PA Uniform Construction Code.
- 3. All electrical components of the PWEF shall conform to the relevant and applicable local, state, and national codes, and relevant and applicable international standards.

B. NOISE.

1

1. The audible sound from a wind turbine may not exceed 45 A-weighted decibels, and shall also not exceed 55 C-weighted decibels, as each is measured at the lot line of a property of a

non-participating landowner within one mile or less from the nearest property line on which a wind turbine is located unless a written waiver is provided by the owner of such property. This requirement shall be a maximum noise level using Lmax standard, and not based upon an average. Audible tones from electrical or mechanical components are prohibited. Measurements shall comply with ANSI/ASA S12.9 Part 3, Short Term Measurements with an Observer Present; S 12.100, Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas; and Computer Modeling shall comply with ANSI.ASA S12.6 (ISO9613-2) Attenuation of sound during propagation outdoors- Part 2 General method of Calculation.

- 2. The above maximum noise limits shall be reduced to 42 A- weighted and 52 C- weighted decibels between the hours of 10 p.m. and 7 a.m. local time. However, the noise limits shall not be reduced below 45 A- weighted decibels where the applicant provides evidence that the current continuous background sound level without the wind turbines would be higher than 42 A-weighted decibels. The continuous background sound level shall be determined per the methods of ANSI/ASA S12.100.
- 3. All required noise studies and testing shall be completed by a qualified independent professional having specialized expertise in noise analysis. The qualifications of the person conducting the analysis shall be included in the conditional use application. ANSI standards shall be used for calibration of the noise meter.
- 4. With the Special Exception application, the applicant shall provide a written noise study that projects the maximum sound levels at the property line of the nearest five non-participating landowners, and that recommends measures that may be used as conditions by the governing body to minimize noise impacts. The noise study shall document compliance with the A- and C- weighted decibels maximum level requirements of this Section.
- 5. The applicant shall provide an independent written test of actual noise produced by the project upon completion, and every two subsequent years after the project is completed, to document compliance with the noise standards in this Section. If the project will involve more than 10 total wind turbines, then the noise study shall also be completed after each 10 wind turbines are put into service. If the testing finds that the noise levels in this Section are being violated, then the owner of the wind turbines shall immediately take the wind turbine(s) out of service until such modifications, replacements or repairs are made to the wind turbine(s) as are required necessary to make them comply with the noise levels of this Section.
- 6. In addition to the noise studies provided above, at any time when the zoning officer has reasonable cause to believe that the noise limits of this Section is being violated, the zoning officer may request that the municipality or its authorized agents conduct its own tests to ascertain compliance with the noise limits. The facility operator shall assist with the test as necessary.
- 7. If the municipality institutes an enforcement action because of a violation of the noise limits, and if the owner is found liable of the violation in a civil enforcement proceeding, then in addition to any other rights or remedies available to the municipality, the judgement shall require the owner of

the project to pay all of the municipality's costs and expenses to prove non-compliance with the noise requirements, including the tests to determine the noise levels. Such costs shall be paid within 30 days by the facility owner after the final judgment. In the event the facility remedies at law or equity to recover such costs and expenses from the owner, including placing a municipal lien against the property upon which the project is located. By authorizing the facility owner to make an application, the landowner consents to the ability of the municipality to place a lenient against the land in the event of a violation.

- 3. VIBRATIONS. A wind turbine shall not cause vibrations through the ground which are perceptible beyond the property line of the parcel on which it is located. Wind turbines may not cause airborne vibrations which are perceptible to people or structures.
- 4. ACCESSORY BUILDINGS, STRUCTURES AND MECHANICAL EQUIPMENT.
 - A. When an accessory building or structure is necessary, it shall comply with the principal building requirements of the zoning district in which it is located.
 - B. Accessory buildings, structures and equipment associated with PWEF shall be screened from any adjacent property that is residentially zoned or used for residential purposes under Section 414. The screen shall consist of plant materials which provide visual screen. In lieu of a planting screen, a decorative fence meeting the requirements of the zoning ordinance may be used.
 - C. The design of accessory buildings and related structures shall, to the extent reasonable, use materials, colors, textures, screening, and landscaping that will blend into the natural setting and existing environment.
- 5. UNDERGROUND REQUIREMENTS. On-site transmission and power lines between wind turbines shall be placed underground.
- 6. UTILITY NOTIFICATIONS. The owner of a PWEF shall provide the municipality with written confirmation that the public utility to which the PWEF will be connected has been informed of the intent to install a grid connected system and approved of such connection.
- 7. SIGNAGE. PWEF shall not display advertising, except for reasonable identification of the turbine manufacturers, facility owner or operator.
- 8. LIGHTING. PWEF shall not be artificially lighted, except to the extent required by the Federal AViation Administration, the Pennsylvania Department of Transportation Bureau of Aviation (BOA) or other applicable authority that regulates air safety.
- 9. COLOR.
 - A. PWEF shall be painted a non-reflective, flat color such as white, off grey, or grey unless required to be colored differently by FAA or BOA regulations.

- B. The design of the buildings and related structures shall, to the extent reasonable, use materials, colors, textures, screening, and landscaping that will blend the PWEF into the natural setting and existing environment.
- 10. BRAKING SYSTEM. All PWEF shall be equipped with a redundant braking system. This includes both aerodynamic overspeed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation may not be considered a braking system for overspeed protection.

11. SHADOW FLICKER.

- A. The applicant shall provide an analysis with a map of the shadow flicker impacts of the project upon any non-participating landowner's property that will be impacted by this effect. The analysis shall be conducted by a qualified professional using generally accepted modeling methods and shall estimate the number of hours per year that a non-participating landowner's property will be impacted by shadow flicker for a total of more than 20 hours per year, and no more than 30 minutes per day. Such analysis shall include recommendations for conditions that may be established by the Board of Supervisors to minimize the number of affected non-participating landowner's properties, the hours affected and the severity of the impacts from shadow flicker. This provision shall not apply to an affected property if a written and signed waiver is provided by the owner of said property.
- B. A PWEF shall be designed in such a manner as to not cause shadow flicker on a roadway.
- 12. LOCATION. No part of any PWEF shall extend over the parking areas, access drives, driveways, or sidewalks. No blade or any component part of a PWEF shall extend beyond the boundaries of the zoning district in which it is located. Wind turbines shall be separated from each other by a minimum distance of five times the diameter of the rotors.
- 13. INSURANCE. The PWEF owner or operator shall maintain a current general liability policy covering:
 - A. \$1,000,000 of personal or bodily injury to or death of any person.
 - B. \$3,000,000 for personal or bodily injury to or death of any number of persons arising from any one occurrence.
 - C. \$1,000,000 dollars for any instance of property damage.
 - D. An umbrella liability insurance coverage shall also be maintained with coverage to be not less than \$3,000,000 for each occurrence and \$3,000,000 in aggregate. Certificates of insurance for the above required coverage shall be provided to the municipality annually.
- 14. ICE THROW. The potential ince throws or ice shedding for a PWEF shall not cross the property line on which a PWEF is located nor impinge on any right-of-way or overhead utility line.

- 15. ELECTRONIC INTERFERENCE. The facility owner and operator shall ensure that the design and operation of any PWEF avoids any disruption or loss of radio, telephone, television, cell, internet, VOR signalization for aircraft, or similar signals, and shall mitigate any harm caused by the wind energy facility.
- 16. LOT SIZE. For a tract of land to be eligible for PWEF, it shall have a minimum lot size of four acres for each wind turbine.

17. SETBACK DISTANCES.

- A. Wind turbines shall be set back from the nearest occupied building or non occupied building on the participating landowner's property a distance not less than the setback requirements for the zoning district in which it is located for a principal building or two times the turbine height, whichever is greater. The setback distance shall be measured horizontally from the center of the wind turbine base to the nearest point on the foundation of the occupied building or non-occupied building.
- B. Wind turbines shall be set back from the nearest occupied building or non occupied building located on a non-participating Landowner's property a distance of not less than five times the turbine height or 1,500 feet, whichever is greater as measured horizontally from the center of the wind turbine base to the nearest point on the foundation of the occupied or non-occupied building.
- C. All wind turbines shall be set back from the nearest property line a distance of not less than the setback requirements for a principal building in the zoning district in which it is located or two times the turbine height, whichever is greater. The setback distance shall be measured to the center of the wind turbine base.
- D. All wind turbines shall be set back from the nearest public road a distance not less than the setback requirements for a principal building in the zoning district in which it is located or two times the turbine height, whichever is greater, as measured from a right-of-way line of the nearest public road to the center of the wind turbine base.
- E. Each wind turbine shall be set back from above-ground power lines, public telephone lines and television cable lines a distance no less than two times its total height. The set back distance shall be measured from the center of the wind turbine base to the nearest point on such lines.
- F. Wind turbines shall be set back at least 1,500 feet from important bird areas as identified by Pennsylvania Audubon and at least 500 feet from identified wetlands.
- G. Each wind turbine shall be set back from any historic structure, district, site or resource listed in the state inventory of historic places maintained by the Pennsylvania Historical and Museum Commission and all airports and heliports a distance of not less than 2,500 feet. The distance shall be measured from the center of the wind turbine base to the nearest point on the foundation of a historic building, structure or resource, or the nearest property line of a historic district, site, runway or helipad.

H. The base of any wind turbine shall be setback 500 feet from the centerline of a perennial waterway and 2,000 feet from the average water level of a public water supply reservoir.

18. HEIGHT. The maximum wind turbine height may not exceed 450 feet and must comply with all regulations imposed by the FAA.

19. VISUAL IMPACT AND ANALYSIS.

- A. Where wind characteristics permit, wind turbines shall, to the greatest possible extent, be set back from the tops of visually prominent ridgelines.
- B. Wind energy facilities shall be designed and located to the greatest extent possible to minimize adverse visual impacts to locations throughout the municipality.
- C. The applicant shall provide a visual analysis of the project. The analysis shall include a three-dimensional computer-generated surface model that accurately depicts the wind turbines in the proper scale and location in relationship to the surrounding terrain from not less than ten different locations within the municipality as selected by the governing body. The ten locations shall include any combination of public roads and public and/or private properties that may experience the greatest visual impacts. The applicant shall also be required to conduct a subsequent balloon test at the ten selected locations to confirm the visual impact of the three-dimensional computer generated surface model. Public notice as defined under the Pa MPC shall be required regarding the time and dates of balloon tests.
- 20. PROPERTY VALUES. The applicant shall submit an analysis by a qualified appraiser of the actual impacts lupon residential property values of a similar set of wind turbines in a mostly rural community within the United States. Such analysis shall compare changes in property values of impacted dwellings to changes in property values of non-impacted dwellings over the same period. Properties within a one-mile radius of a wind farm shall be considered, as well as properties that radius. The study shall be completed by an appraiser who has an active MAI, SRA or SRPA certification from the appraisal institute. The appraiser must also have a Pennsylvania appraiser license.

21. WARNINGS.

- A. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substantive.
- B. Visible, reflective, colored objects, such as flags, reflectors, tape shall be placed on the anchor points of guy wires and along the guy wires up to a height of 10 feet from the ground.
- C. To limit climbing access, a six-foot high fence with a locking gate shall be placed around the PWEF.
- D. Wind turbines' climbing apparatus shall be limited to no lower than 15 feet from the ground or the wind turbines' climbing apparatus shall be fully contained and locked within the tower structure.

23. USE OF PUBLIC ROADS

- A. The Applicant shall identify all state, county and local public roads to be used within the municipality to transport equipment and parts for construction, operation and maintenance of the PWEF.
- B. The municipality engineer or a qualified third-party engineer selected by the municipality and paid for by the applicant, shall document road conditions prior to construction. The documentation shall include photographs and video recordings of all approved travel routes to substantiate the report. The applicant shall ensure a municipal official delegated by the governing body is present when photographs and videotapes are taken. Copies of the inspection report, photographs and videotapes shall be submitted to the municipality. The engineer shall document road conditions again 30 days after construction is completed or as weather permits. The applicant is responsible for all repairs and remediation of any damaged roads resulting from the installation or subsequent maintenance of a wind energy facility. Such repairs and remediation shall be completed within 30 days from the time of damage unless a greater amount of time is approved by the governing body.
- C. Any road damage caused by the applicant or its contractors shall be promptly repaired at the applicant's expense.
- D. A bond shall be posted by the applicant to compensate the municipality for any damage to municipal roads in compliance with state regulations. An improvement and maintenance agreement shall also be entered into between the operator and the municipality in a form acceptable to the municipal solicitor to ensure that if any roads are damaged the operator shall be responsible for their replacement or repair.
- E. The applicant shall demonstrate that it has appropriate financial security to ensure the prompt repair or replacement of damaged roads.
- F. Every effort should be made to use existing roads and logging roads. New deforestation and forest fragmentation must be kept to a minimum. Private entrance roads to PWEF shall be maintained in a mud-free condition.

24. LOCAL EMERGENCY SERVICES.

- A. The Applicant shall provide a copy of the project summary and site plan to local emergency services, including municipal designated emergency service providers.
- B. The facility owner and operator shall abide by all applicable local, state, and federal fire code and emergency guidelines.
- C. Upon request, the Applicant shall cooperate with emergency services to develop and coordinate implementation of emergency response plan for the PWEF.

D. The facility owner and operator shall maintain a phone number and identify a responsible person for emergency contact.

25. DECOMMISSIONING.

- A. The facility owner and operator shall complete, at their own expense decommissioning of the PWEF or individual wind turbines, and all related improvements, within 12 twelve months after the end of the useful life of the facility or individual wind turbines, or when the use has been discontinued or abandoned by the facility owner and operator. The PWEF or individual wind turbines will be presumed to be at the end of its useful life, discontinued or abandoned if no electricity is generated for a continuous period of 12 months.
- B. Decommissioning shall include removal of wind turbines, buildings, cabling, electrical components, roads, foundations to a depth of 36 inches, transmission lines and any other associated facilities.
- C. Disturbed earth shall be graded and re-seeded, unless the landowner requests in writing and receives written approval from the municipality that the access roads, or other land surface areas not be restored.
- D. An independent and certified professional engineer shall be retained to estimate the total cost of decommissioning ("Decommissioning Costs") without regard to salvage value of the equipment, and the cost of decommissioning net salvage value of the equipment ("Net Decommissioning Costs"). The estimates shall be submitted to the municipality after the first year of operation and every fifth year thereafter.
- E. The facility owner or operator shall post and maintain decommissioning funds, representing a financial guarantee in an amount equal to net decommissioning costs, provided that at no point shall decommissioning funds shall be posted and maintained with a bonding company or Federal or Commonwealth of Pennsylvania chartered lending institution chosen by the facility owner or operator and participating land owner posting the financial security, provided that bonding company or lending institution is authorized to conduct such business within the Commonwealth of Pennsylvania and is approved by the municipality.
- F. Decommissioning funds may be in the form of a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial assurance as may be acceptable to the municipality.
- G. If the facility owner or operator fails to complete decommissioning within the six-month period, then the landowner shall have six months to complete decommissioning.
- H. If neither the facility owner or the operator, nor the landowner complete decommissioning within the periods prescribed above, then the municipality shall have the authority to take such measures as necessary to secure and utilize decommissioning funds to complete decommissioning activities. The entry onto and submissions of evidence of a participating landowner agreement to the municipality shall constitute agreement and consent of the parties to the agreement, their respective heirs,

- successors and assigns that the municipality may take such action as necessary to implement the decommissioning plan.
- I. The escrow agent shall release the decommissioning funds when the facility owner or operator has demonstrated and the municipality concurs that the decommissioning has been satisfactorily completed, or upon written approval of the municipality in order to implement the decommissioning plan.

SEVERABILITY

Should any section, subsection, clause, provision or other portion of this Ordinance be declared invalid by any court of competent jurisdiction, such decision shall not affect the validity of the remainder of this Ordinance; the Board of Supervisors having adopted this Ordinance as if such invalid portions had not been included therein.

EFFECTIVE DATE

This Ordinance shall become effective immediately upon adoption.

Α	D	\cap	P	T	T	\cap	N	
4 1	·Ŀ	\mathbf{v}	1			\mathbf{v}	TA	

This Ordinance ordained and enacted this <u>10</u> Day of <u>Octavor</u>, 2021, by the Board of Supervisors of Washington Township, Wyoming County, Pennsylvania, to be effective immediately.

Chairman

Willia 2 Ball III

Supervisor

ATTEST:

Township Secretary