

**CHARTER TOWNSHIP OF LOWELL**  
**KENT COUNTY, MICHIGAN**  
**ORDINANCE NO. 01-2025Z**

At a regular meeting of the Lowell Charter Township Board held at the Lowell Charter Township Hall on March 17, 2025, beginning at 7:00 p.m., Township Board Member Thompson made a motion to adopt this Ordinance Amendment, which motion was seconded by Township Board Member Anderson.

**AN ORDINANCE TO AMEND THE LOWELL CHARTER TOWNSHIP ZONING ORDINANCE BY AMENDING CHAPTER 2 “DEFINITIONS,” SECTION 2.02 “B – DEFINITIONS” BY ADDING A NEW DEFINITION TITLED “BATTERY ENERGY STORAGE SYSTEMS (BESS);” TO AMEND CHAPTER 2 “DEFINITIONS,” SECTION 2.04 “D- DEFINITIONS” BY ADDING A NEW DEFINITION TITLED “DATA CENTERS;” TO AMEND CHAPTER 2 “DEFINITIONS,” SECTION 2.19 “S – DEFINITIONS” BY ADDING A NEW DEFINITION TITLED “SOLAR ENERGY SYSTEMS;” TO AMEND CHAPTER 2 “DEFINITIONS,” SECTION 2.23 “W – DEFINITIONS” BY ADDING A NEW DEFINITIONS TITLED “WIND ENERGY SYSTEMS;” TO AMEND CHAPTER 4 “GENERAL PROVISIONS,” SECTION 4.29 “SOLAR ENERGY SYSTEMS;” TO AMEND CHAPTER 4 “GENERAL PROVISIONS,” SECTION 4.31 “WIND ENERGY SYSTEMS;” TO AMEND CHAPTER 4 “GENERAL PROVISIONS,” BY ADDING A NEW SECTION ENTITLED “SECTION 4.47 – BATTERY ENERGY STORAGE SYSTEMS (BESS);” TO ADD PRINCIPAL USE SOLAR ENERGY SYSTEMS (UTILITY SCALE) TO SECTIONS 5.03 AND 6.03; TO REMOVE WIND ENERGY SYSEMS GREATER THAN 65 FEET FROM SECTION 7.03; AND TO AMEND CHAPTER 16 “INDUSTRIAL PLANNED UNIT DEVELOPMENT DISTRICT (I-PUD);” TO AMEND CHAPTER 29, “AMENDMENTS TO ZONING TEXT AND ZONING MAP.”**

**Section 1. Amendment.** Chapter 2 “Definitions” Section 2.02 “B” – Definitions is hereby amended to add a new definition titled “Battery Energy Storage Systems (BESS)” and shall be listed alphabetically in order as appropriate to that Section and read as follows:

Battery Energy Storage Systems (BESS): One or more devices, assembled together, capable of storing and discharging electricity primarily intended to supply electricity to a building or the electrical utility grid network. This includes. But is not limited to, the following: battery cells; enclosures and dedicated-use buildings; thermal, battery, and energy management system components; inverters; access roads; distribution; collection, and feeder lines; wires and cables; conduit; footings; foundations; towers; poles; crossarms; guy lines and anchors; substations; interconnection or switching facilities; circuit breakers

and transformers; overhead and underground control, communications and radio relay systems, and telecommunications equipment; utility lines and installations; and accessory equipment and structures. (March 17, 2025).

**Section 2. Amendment.** Chapter 2 “Definitions,” Section 20.04 “D” – Definitions is hereby amended to add a new definition entitled “Data Centers,” and shall be listed alphabetically in order as appropriate to that Section and read as follows:

Data Centers: An industrial facility that processes, transfers, stores, and/or communicates digital information. A data center may comprise a corporate or enterprise, colocation, retail, wholesale, telecommunication, hyperscale facility, or a combination thereof. A data center facility may include but is not limited to, data halls, offices, security centers, soundwalls, screening, security fencing, signage, water and waste water utility systems, transmission lines, switchgears, transformers, inverters, generators and other redundancy equipment, mechanical yards, air-cooled, liquid-cooled, or evaporative-cooling chiller systems, electrical distribution equipment, batteries, uninterruptable power supply (UPS) systems, power distributions systems (PDS), and other similar equipment or accessory structures (March 17, 2025).

**Section 3. Amendment.** Chapter 2 “Definitions” Section 2.19 “S” – Definitions is hereby amended to add a new definition titled “Solar Energy Systems,” and shall be listed alphabetically in order as appropriate to that Section and read as follows:

Solar Energy Systems (SES): A photovoltaic system or solar thermal system for generating and/or storing electricity or heat, including all above and below-ground equipment or components required for the system to operate correctly and to be secured to a roof surface, building surface, or the ground. This includes any necessary operations and maintenance building(s) but does not include any temporary construction offices, substation(s), or other transmission facilities between the SES and the point of interconnection to the electric grid (March 13, 2025).

**Section 4. Amendment.** Chapter 2 “Definitions” Section 2.23 “W” – Definitions is hereby amended to add a new definition titled “Wind Energy Systems (WES),” and shall be listed alphabetically in order as appropriate to that Section and read as follows:

Wind Energy Systems (WES): An electricity generating facility consisting of one or more wind turbines under common ownership or operation control, and includes, but is not limited to, substations, MET Towers, cables/wires and other buildings accessory to such facility, located on private land which is under lease or other property agreement with a utility grid wind energy system owner/operator, whose main purpose is to supply electricity to off-site customers(s). It includes substations, MET towers, cables and wires, and other building accessories for such facilities. (March 17, 2025).

**Section 5. Amendment.** Chapter 4 “General Provisions,” Section 4.29 “Solar Energy Systems (SES)” is hereby amended to read in its entirety as follows:

**Sec 4.29            SOLAR Energy Systems (SES)**

a)            **Definitions.**

**Accessory-Use Solar Energy System:** An accessory solar energy system generating up to and including one (1) Mega Watt Direct Current (MW DC) installed and used for the primary purpose of serving on-site uses and to provide power for use by owners, lessees, tenants, residents, or other occupants of the lot on which it is erected. It may be comprised of or similar to the following: building-

integrated photovoltaic systems (“BIPV”), ground-mounted solar energy collectors, solar-thermal, and/or building-mounted solar energy collectors.

Affected Local Unit: The unit of government in which all or part of a proposed facility will be located. This may be a township, village, city, or county.

Ancillary Solar Equipment: Any accessory part or device of a solar energy system that does not require direct access to sunlight, such as batteries, electric meters, inverters, converters, or water heater tanks.

Applicant: An applicant for a solar permit in Lowell Charter Township, whether it be an accessory use solar energy system or a principal use solar energy system.

Building-Integrated Photo Voltaic Solar Energy System (“BIPV”): A solar energy system that is an integral part of a primary or accessory building or structure (rather than a separate mechanical device), replacing or substituting for an architectural or structural component of the building or structure. Building-integrated systems include but are not limited to photovoltaic or hot water solar energy systems contained within roofing materials, windows, skylights, and awnings.

Building Mounted Solar Energy System: A solar energy system mounted upon racking or a support system mounted to the exterior surface of, but not the roof, of a building or structure.

Dual Use: A solar energy system that employs one or more of the following land management and conservation practices throughout the project site:

Pollinator Habitat: Solar sites are designed to meet a score of seventy-six (76) or more on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites. Alternatively, the Tier 2 Pollinator Scorecard developed by the Rights-of-Way as Habitat Working Group can be used to evaluate pollinator habitats and management practices.

Conservation Cover: Solar sites designed in consultation with conservation organizations that focus on restoring native plants, grasses, and prairie to protect specific species (e.g., bird habitat) or provide specific ecosystem services (e.g., carbon sequestration, soil health).

Forage for Grazing: Solar sites incorporating rotational livestock grazing and forage production as part of an overall vegetative maintenance plan.

Agrivoltaics: Solar sites that combine raising crops for food, fiber, or fuel and generating electricity within the project area to maximize land use.

Dual Use: This does not include using solar arrays on parcels or lots that already have an established use, such as dwellings, commercial buildings, etc.

Ground-Mounted Solar Energy System: A solar energy system mounted on ground-mounted supports, like a rack or pole attached to or resting on the ground.

Maximum Tilt: The maximum angle of a solar array (i.e., most vertical position) for capturing solar radiation compared to the horizon line.

Minimum Tilt: The minimal angle of a solar array (i.e., most horizontal position) for capturing solar radiation compared to the horizon line.

Non-Participating Parcel(s): One or more existing lots or parcels for which there is no signed lease or easement for developing a principal-use (large) SES associated with the Applicant's project.

Participating Parcel(s): One or more lots under a signed lease or easement for developing a principal-use (large) SES associated with the applicant's project.

Photovoltaic (PV) System: A semiconductor material that generates electricity from sunlight.

Principal-Use (Large) Solar Energy System: A commercial and/or utility principal-use solar energy system generating more than one (1) megawatt direct Current for off-site use through the electrical grid or export to the wholesale market.

Property Owner or Lessor: Any person, agent, firm, corporation, limited liability company, or partnership that alone, jointly, or severally with others: (1) has legal or equitable ownership or title to any premises, dwelling, or dwelling unit, with or without accompanying actual possession thereof: or (2) has charge, possession care, or control of any premises, dwelling or dwelling unit, as an agent of the owner or as executor, administrator, trustee, or guardian of the estate of the beneficial owner. The person shown on the Kent County Register of Deeds records to be the owner of a particular property shall be presumed to be the person who owns or is in control of that property.

Repowering: Reconfiguring, renovating, or replacing a solar energy system to maintain or increase the power rating of the solar energy system within the existing project footprint.

Retrofit: To install, fit, update, or adapt a device or equipment to a pre-existing solar energy system.

Roof-Mounted Solar Energy System: A solar energy system mounted on racking that is attached to or ballasted on the roof of a building or structure.

Solar Array: A photovoltaic panel, solar thermal collector, or collection of panels or collectors in a solar energy (electric energy or other energy) system that collects solar radiation.

Solar Collector Surface: Any part of a solar energy system that absorbs solar energy for the system's transformation process. The collector surface does not include frames, supports, and mounting hardware.

Solar Energy: A solar energy system can collect radiant energy from the sun through heat or light.

Solar Energy System (SES): A photovoltaic system or solar thermal system for generating and/or storing electricity or heat, including all above and below-ground equipment or components required for the system to operate correctly and to be secured to a roof surface, building surface, or the ground. This includes any necessary operations and maintenance building(s) but does not include any temporary construction offices, substation(s), or other transmission facilities between the SES and the point of interconnection to the electric grid.

Solar Thermal System: A system of equipment that converts sunlight into heat.

UL Listed: Refers to the Underwriters Laboratory product certification database.

**b) General Requirements for all Solar Energy Systems**

This Section applies to solar energy systems to be installed and constructed after the effective date of this Section within an affected local unit.

- (1) Lawful solar energy systems constructed prior to the effective date of this section shall not be required to meet the requirements of this section, provided that any structural change, upgrade, or modification to an existing solar energy system that materially alters the size, location or placement of such system shall comply with the provisions of this section.
- (2) The granting of any permit for a solar energy system does not constitute solar access rights.
- (3) A solar energy system shall be constructed and placed so it does not create a glare for persons off-site.
- (4) A solar energy system shall always be properly maintained, including measures to maintain each structure's original appearance.
- (5) The height of a solar energy system shall be measured from the highest point of the panel when oriented at its maximum tilt to the ground immediately below the panel.
- (6) Solar energy systems shall be installed, maintained, and used only per the manufacturer's directions. A copy of such directions shall be submitted to the Township offices prior to installation while applying for a permit.
- (7) Solar energy systems and the installation and use thereof shall comply with the Township building code. The landowner shall obtain all applicable Kent County, State of Michigan, and federal permits.
- (8) Any Solar Energy System not operated for twelve months as determined by the Township shall be considered abandoned or non-functional and subject to removal. Upon a determination by the Township that an SES should be decommissioned and within 90 days of receipt of written notification from the Township, the owner/operator shall begin to remove the SES from the site and proceed promptly toward completion in accordance with the approved decommissioning plan.

c) **Accessory Use Solar Energy Systems (Private)**

(1) **Rooftop, Building-Mounted, and Building-Integrated (BIPS) Accessory Use Solar Energy Systems.**

- i. Roof, building-mounted, and building-integrated (BIPS) SES, as defined herein, are permitted accessory uses in all zoning districts. A building permit is required before installation. Before the issuance of any permit, an applicant for an accessory use SES shall submit a data sheet and installation instructions from the equipment manufacturer and other information as requested by the Zoning Administrator.

- ii. A roof-mounted SES shall not project more than five feet above the highest point of the roof and, in any case, shall not exceed the maximum building height limitation for the zoning district in which it is located and shall not project beyond the roof's eaves.
- iii. Each roof and building-mounted Solar Energy System shall securely and safely attach to a building or structure. Proof of the safety and reliability of the means of such attachment shall be submitted to the Building Official prior to installation. Such proof shall be subject to the Building Official's approval.
- iv. No building-mounted SES shall exceed the height of the building wall to which it is attached.
- v. Each building-mounted SES shall not be mounted on a building wall that faces a public or private street.

**(2) Ground-Mounted Accessory Use Solar Energy Systems.**

As defined herein, ground-mounted accessory-use solar energy systems are permitted in all zoning districts, but a building permit is required before installation. Before the issuance of any permit, an applicant for a ground-mounted accessory use SES shall submit an accurate sketch plan to the Township Zoning Administrator providing the location of the parcel containing the SES, the location of the SES, the height of the SES, including a data sheet and installation instructions from the equipment manufacturer and other information as requested by the Zoning Administrator.

Ground-mounted solar energy systems are allowed only in the AG-1, AG-2, R-1, General Commercial, Light Industrial, and the I-96 Planned Unit Development zoning districts as a permitted accessory use subject to review and approval by the Zoning Administrator according to the following requirements.

- i. In the AG-1 and AG-2 zoning districts, an accessory use ground-mounted SES:
  - 1. Shall not occupy an area greater than one acre in size and shall comply with the minimum setback requirements for accessory buildings for the district in which it is located;
  - 2. Shall not exceed fifteen (15) feet above natural grade.
- ii. In the R-1 zoning district, an accessory use ground-mounted SES:
  - 1. Shall be a minimum of 100 feet from any front lot line and shall not cover more than 25% of the front yard;

2. Shall comply with the minimum side and rear setback requirements for accessory buildings in the R-1 district;
3. Shall not cover more than 25% of the rear yard;
4. Shall not exceed ten (10) feet above natural grade.

iii. In the General Commercial zoning district, an accessory use ground-mounted SES:

1. Shall only be located in the rear yard and shall not cover more than 25% of the rear yard;
2. Shall comply with the minimum setback requirements for principal buildings;
3. Shall not exceed ten (10) feet above natural grade.

iv. In the Light Industrial and I-96 Planned Unit Development zoning districts. An accessory uses ground-mounted SES.

1. Shall not occupy more than 25% of the area of the parcel on which it is located;
2. Shall comply with the minimum setback requirements for principal buildings;
3. Shall not exceed ten (10) feet above natural grade.

**(3) Principal Use Solar Energy Systems (Utility-Scale).**

A principal-use solar energy system, also known as utility-scale solar energy systems or solar farms, as defined herein shall only be permitted within the Prime Agricultural (AG-1) and Rural Agricultural (AG-2) Zoning Districts subject to review and approval of a Special Use Permit by the Planning Commission in accordance with the requirements and procedures of Chapter 20, Special Land Use Permits herein.

- i. All principal-use solar energy systems must be at least 20 acres in area. A parcel containing a principal-use solar energy system does not require frontage on a public street.
- ii. Setbacks.
  1. The perimeter fencing of the principal use solar energy system facility shall be set back at least 50 feet from all non-participating parcel property lines, as defined by this ordinance.
  2. All principal-use solar energy facility perimeter fencing shall be set back at least 300 feet from the nearest point of the outer wall of all occupied community

buildings and dwelling units on nonparticipating parcels as defined in this ordinance.

3. All principal-use solar energy system facility perimeter fencing shall be set back at least 50 feet from the nearest edge of a public road right of way.
  - i. Height. A principal-use SES shall not exceed 25 feet above natural grade. The height shall be measured from the highest point of the panel when oriented at its maximum tilt to the ground immediately below the panel.
  - ii. Sound. A principal-use solar energy system facility shall not generate any sound in excess of 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling on an adjacent non-participating parcel. The sound decibel modeling shall use the A-weighted scale designed by the American National Standards Institute (ANSI).
  - iii. Outdoor Lighting. The principal use solar system facility shall not produce excessive outdoor light pollution and shall implement dark-sky friendly lighting solutions. The applicant shall provide the Township with a listing of the lighting fixtures and their specifications indicating that they are dark-sky-friendly compliant designs.
  - iv. Safety/Access. Per the National Electrical Code, as amended, a security fence shall be placed around the perimeter of the principal use solar energy system facility. Knox boxes and keys shall be provided at locked entrances for emergency personnel access.
  - v. Electrical Interconnections. The facility shall be designed for interconnection to a public utility electrical power grid and shall be operated with such interconnection. All electrical interconnection or distribution lines shall comply with all applicable codes. The applicant shall provide the Township with evidence of approval from the appropriate utility company.
  - vi. Permitting. Principal Use Solar Energy Facilities shall obtain all necessary permits from all permitting authorities at the federal, State of Michigan, and local levels. The applicant shall provide a copy of all required permits to the Township.
    1. The principal use solar facility shall comply with any more stringent requirements adopted by the Michigan Public Services Commission (MPSC) than those outlined by Part 8 of Public Act 295 of 2008. If it is determined upon review by the State and the MPSC that the requirements are necessary for compliance with federal or state environmental regulations.

2. The portion of the premises on which the array of collector panel structures is located shall remain impervious and planted with natural turf, field grasses, or pollinator habitat.
  3. The Planning Commission may establish a landscaping requirement if it is determined that a buffer for existing land use is necessary. Any landscaping shall be installed along the public right-of-way of the parcel(s) containing a principal-use solar facility. Any screening comprised of trees shall include a minimum of one deciduous or coniferous tree for every 50 feet of public right-of-way frontage. Trees shall be at least four feet tall when planted and remain alive and viable for the project's life. Landscaping berms or other screening methods may be used as approved by the Planning Commission upon review.
  4. Use of above-ground transmission lines for the SES shall be prohibited within the site.
  5. Every principal use SES must always be maintained in good repair and condition and shall not pose a potential safety hazard. The applicant shall provide a written description of the maintenance program to be used to maintain the SES.
- vii. Application Requirements. In addition to the site plan required by Chapter 21, Site Plan Review of this Ordinance, the applicant shall provide all the following information to the Township:
1. Proof of a lease, deed, or purchase agreement for the parcel where the proposed principal use solar energy facility will be located.
  2. The type of solar panel to be used and any hazardous materials that may be held on-site.
  3. Total nameplate energy output and anticipated system useful life, development phases, and possible future expansions.
  4. Information on the visual impact of the proposed solar farm using photos or computer-generated images of the project on the site to demonstrate the project's appearance from off-site.
  5. Maintenance and construction schedule. The applicant shall provide a written description of the maintenance program to be used to maintain the solar facility's principal use and the anticipated construction schedule.
  6. Digital versions of all planning and construction documents are required pursuant to Chapter 21, Site Plan Review. Digital submittals are in addition to paper plans and do not replace current submission requirements. Digital versions shall be submitted in PDF format.

7. A decommissioning plan as required by Section 4.29(e)(1) herein.
8. Distance from the proposed principal-use solar facility to the nearest habitable dwelling unit on a parcel that does not contain the principal-use solar facility.
9. A security plan detailing on-site security provisions may include fencing, security guards, video surveillance, and similar measures.
10. A landscaping plan illustrating the number, size, type, and spacing of trees proposed to screen the solar farm from nearby roadways.
11. Additional information as required by Chapter 21, Site Plan Review, of this Ordinance, or as may be required by the Planning Commission.
12. The Planning Commission may waive or modify some of the above requirements at the applicant's request if it determines they are deemed unnecessary after review.

viii. Decommissioning:

The applicant shall submit a decommissioning plan to the Township, which shall address all the following:

1. Defined conditions upon which decommissioning will be initiated (i.e., end of land lease, no power production for twelve months, obsolete equipment, and similar circumstances).
2. A description of how the system's useful life will be determined and who will make this determination.
3. The removal of all non-utility-owned equipment, conduits, structures, fencing, roads, and building foundations to a depth of six (6) feet below grade.
4. Restoration of property to its condition prior to the development of the solar farm, including measures to ensure that soils are not contaminated during decommissioning.
5. The timeframe for completion of decommissioning activities.
6. An engineer's cost estimate for all aspects of the decommissioning plan.
7. A description of any agreement with the landowner regarding decommissioning.

8. Provisions for updating the decommissioning plan.
  9. A statement signed by the owner or operator that they take full responsibility for reclaiming the site in accordance with the decommissioning plan and the Special Land Use Permit upon cessation of use.
  10. The Planning Commission may require that the owner or operator provide a financial guarantee to cover the costs of decommissioning the site in accordance with Section 4.29(e)(2).
- ix. Removal Cost Guarantee. The cost of removal and site restoration is the full responsibility of the landowner, applicant, and/or owner/operator. To provide the greatest possible financial assurance that there will be sufficient funds to remove the solar energy system and restore the site, the following steps shall be followed.
1. For each solar energy system, the applicant/owner/operator shall determine an amount of money equal to the estimated removal and restoration cost. The Planning Commission may require independent verification of the adequacy of this amount.
  2. This money shall be deposited in an escrow account specified by Lowell Charter Township, which may be an interest-bearing account. A surety bond, letter of credit, or other financial promise shall not be accepted. An escrow account shall be deposited in accordance with the adopted Lowell Charter Township Escrow Policy, as amended, with the Township by the Applicant when the Applicant applies for a Special Land Use for a Principal Use Solar Energy System. The monetary amount deposited by the Applicant in escrow with Township shall be the amount set by a resolution adopted by the Lowell Charter Township Board to cover all reasonable costs and expenses associated with the Special Exception Use review and approval process, which costs shall include, but are not limited to, reasonable fees of the Township Attorney, Township Planner, and Township Engineer, as well as costs for any reports or studies that are reasonably related to the zoning process for the application. Such escrow amount shall be in addition to any filing or application fees applicable to Special Land Use applications as established by resolution.
  3. At any point during the Special Land Use review process, the Township may require that the Applicant place additional funds into escrow with the Township if the Township deems the existing escrow amount deposited by the Applicant insufficient. If the escrow account needs replenishing and the Applicant refuses to do so within thirty (30) days, the Special Land Use process shall cease unless and until the Applicant makes the required additional escrow deposit. The Applicant must also comply with any applicable zoning escrow resolutions or other ordinances adopted by the Township. The Township shall provide a summary of all account activity to the Applicant within a timely manner upon

request. Any funds remaining within the escrow after approval of the Special Land Use shall be returned in a timely manner to the Applicant.

4. Withdrawals will be made from this account solely by Lowell Charter Township or its designee only to pay for removal and site restoration of the solar energy system as provided for in this Ordinance.
5. Lowell Charter Township will return to the owner/operator any funds left in the account for each solar energy system after removal and site restoration.

**Section 6. Amendment.** Chapter 4 “General Provisions,” Section 4.31 “Wind Energy Systems (WES)” is hereby amended to read in its entirety as follows:

**Sec 4.31 WIND ENERGY SYSTEM (WES)**

a) **Purpose:** This section aims to establish standards and procedures by which the installation and operation of a Wind Energy System (WES) shall be regulated within the Township to promote the safe, effective, and efficient use of wind energy.

b) **Definitions:**

Wind Energy System (WES): shall mean any combination of the following:

- (1) A mill or machine operated by wind acting on oblique vanes or sails that radiate from a horizontal shaft;
- (2) A surface area such as a blade, rotor, or similar device, either variable or fixed, for utilizing the wind for electrical or mechanical power;
- (3) A shaft, gearing, belt, or coupling utilized to convert the rotation of the surface area into a form suitable for driving a generator, alternator, or other electricity-producing device;
- (4) The generator, alternator, or other device to convert the mechanical energy of the surface area into electrical energy;
- (5) The tower, pylon, or other structure upon which any, all, or some combination of the above are mounted.
- (6) A windmill traditionally used to pump water shall not be considered a Wind Energy System.

On-Site Use Wind Energy System: A WES providing energy only to the property where the structure is located, to adjacent properties under the same ownership or control as the property where the structure is located, or by the mutual consent of adjoining property owners.

Single WES for Commercial Purposes: A single WES placed upon a lot or parcel intending to sell or provide electricity to a site or location other than the premises upon which the WES is located. The WES may or may not be owned by the owner of the property upon which the WES is placed.

Wind Farm: Clusters of two or more WES placed upon a lot or parcel intending to sell or provide electricity to a site or location other than the premises upon which the WES are located. The WES may or may not be owned by the owner of the property upon which the WES is placed.

Utility Grid Wind Energy Systems: A WES designed and constructed to provide electricity to the electric utility grid.

Structure Mounted WES: A WES mounted or attached to an existing structure or building.

Interconnected WES: A WES that is electrically connected to the local electrical power utility system and can provide power to the local electrical power utility system.

WES Height: The distance from the ground at normal grade and the highest point of the WES, which is the tip of a rotor blade when the blade is in full vertical position.

WES Setback: The distance from the base of the tower or structure upon which the WES is mounted to the nearest lot line. In the case of multiple parcels utilized for numerous or single WES, the setbacks shall be taken from the outside boundary of the parcels used for the WES project.

Nacelle: In a wind turbine, the nacelle is the structure that houses all of the generating components, gearbox, drive train, and other components.

Shadow Flicker: Alternating changes in light intensity caused by the moving blade of a WES casting shadows on the ground and stationary objects such as dwellings.

Applicant: The person, firm, corporation, company, limited liability corporation, or other entity that applies for Township approval under this section, as well as the applicant's successor(s), assign(s), and/or transferee(s) to any approved WES. An applicant must have the legal authority to represent and bind the landowner or lessee who will construct, own, and operate the WES. The obligations regarding a zoning approval for any approved WES shall be with the owner of the WES and jointly and severally with the owner and operator or lessee of the WES if different than the owner.

- (1) Wind Energy Systems Allowed as a Permitted Use: Any On-Site Use Wind Energy System, including structure-mounted WES that are 65 feet or less in total height, shall be a permitted use in all zoning districts, subject to the following:
  - i. The height of the WES with the blade in a vertical position shall not exceed 65 feet.
  - ii. A WES shall be set back from all lot lines a distance equal to 1.5 times the height of the WES as measured from the lot line to the base of the tower, and no portion of the WES, including the guy wire anchors, shall be located within or above the required front or side yard setbacks.
  - iii. A structure-mounted WES shall have a distance from the nearest property line equal to the height of the WES as measured from the point of attachment to the structure or building to the top of the WES with the blade in the vertical position and blade arcs created by a WES mounted on an existing structure shall have a minimum clearance of eight feet or be designed so the blade or other moving parts do not present a safety hazard.

- iv. A permit shall be required to be obtained from Lowell Township to construct and operate an On-Site Use WES 65 feet or less in total height. A permit shall be issued after an inspection of the WES by Lowell Township or an authorized agent of the Township, and where the inspection finds that the WES complies with all applicable state construction and electrical codes, local building permit requirements, and all manufacturers' installation instructions.
- v. The WES shall not operate or remain on the property unless a permit has been issued. The Township shall receive a copy of the manufacturer's installation instructions and construction drawings from the applicant.
- vi. An On-Site Use WES may provide electrical power to more than one dwelling unit, provided the dwelling units are located on property or properties adjacent to the property or properties on which the WES is located.

c) **Wind Energy Systems Requiring a Special Use Permit**

Any WES, including a structure-mounted WES that is greater than 65 feet in height, may be allowed as a Special Use only within the AG-1 and AG-2 Districts, subject to the following regulations and requirements of this Section and also the general special land use review procedures and standards of Chapter 20, Special Land Use Permits, of this Zoning Ordinance:

- (1) Site Plan Requirements – For those WES for which a Special Use is required, the following items shall be included with or on the site plan:
  - i. All requirements for a site plan contained in Chapter 21, Site Plan Review, herein including the area and dimensions of the area to be purchased or leased for the WES.
  - ii. Location, height, and type of all existing and proposed buildings, structures, electrical lines, towers, guy wires, guy wire anchors, security fencing, and any other above-ground structures proposed or existing for the parcel or parcels containing the WES.
  - iii. Specific distances from the WES structures to all other buildings, structures, and above-ground utilities on the parcel or parcels upon which the WES is proposed to be located.
  - iv. Location of all existing and proposed overhead and underground electrical transmission or distribution lines located on the parcel(s) upon which the WES is proposed to be located, as well as within 300 feet of the parcel(s) boundaries.
  - v. Rotor or blade clearance over and from any structure, adjoining property, or trees on the parcel or parcels proposed for the WES and adjacent parcels.
  - vi. Land uses within 300 feet of the parcel.
  - vii. Access drives to the WES, including dimensions and composition, with a narrative describing the proposed maintenance of the drives.

- viii. All lighting proposed for the site, including diagrams of lighting fixtures proposed if requested by the Planning Commission.
  - ix. Security measures proposed to prevent unauthorized trespass and access.
  - x. Standard drawings of the structural components of the WES, including structures, towers, bases, and footings. A registered engineer shall certify drawings and any necessary calculations that show that the system complies with all applicable local, state, and federal building, structural, and electrical codes.
  - xi. Additional information as required by Chapter 20 Special Land Uses of this Ordinance, or as may be required by the Planning Commission.
  - xii. The Planning Commission may waive or modify the above requirements at the applicant's request if it is determined that those items would not be needed to review the project properly.
- (2) Height. - The height of a WES for which a Special Use shall have no wind turbine blade tip, at its maximum blade tip height, extend beyond the height allowed under the Determination of No Hazard to Air Navigation by the Federal Aviation Administration under 14 CFR part 77.
- (3) Setbacks. - A WES shall meet the following setback minimums:
- i. 2.1 times the maximum blade tip height measured to the nearest part of the exterior wall of occupied community buildings or residential dwellings on non-participating parcels.
  - ii. 1.1 times the maximum blade tip height measured from the exterior wall of residential dwellings or other buildings on participating parcels.
  - iii. 1.1 times the maximum blade tip height from the property lines of non-participating parcels.
  - iv. 1.1 times the maximum blade tip height measured to the centerline of the public road right of way from all public road rights of way.
  - v. 1.1 times the maximum blade tip height as measured to the centerline of the easements containing overhead electrical transmission or communication lines, not including utility service lines that connect to individual houses or outbuildings.
- (4) Lighting - A WES shall provide lighting as may be required by the FAA. The WES shall be equipped with functioning light-mitigating technology. To allow for proper conspicuity of a wind turbine at night during construction, a turbine may be lighted with temporary lighting until the permanent lighting configuration, including light-mitigating technology, is implemented. The applicant may request a temporary extension from the Township if the

applicant provides the approved paperwork from the Michigan Public Services Commission with proof in writing and stating all the following:

- i. The purpose of the exemption.
  - ii. The proposed length of the exemption.
  - iii. A description of the light mitigating technologies submitted to the Federal Aviation Administration.
  - iv. The technical or economic reasoning why light mitigating technology is not feasible.
  - v. Any other specific information that the MPSC requested.
- (5) Radar Interference – The WES must comply with and meet any standard for standards concerning radar interference and lighting, subject to subsection (4) of this Ordinance or any relevant issues raised by the Michigan Public Services Commission.
- (6) The WES must comply with any more stringent requirements adopted by the Michigan Public Service Commission as long as the determination is based upon any necessary state or federal requirements for environmental regulation.
- (7) Maintenance Program Required. The applicant shall provide a written description of the maintenance program to be used to maintain the WES, including a schedule of the types of maintenance tasks to be performed.
- (8) Decommissioning Plan Required. The applicant shall provide a written description of the anticipated life of the system and facility; the estimated cost of decommissioning; the method of ensuring that funds will be available for decommissioning and restoration of the site; and removal and restoration procedures and schedules that will be employed if the WES becomes obsolete or abandoned.
- (9) Siting Standards and Visual Impact:
- i. A WES shall be designed and placed to minimize adverse visual and noise impacts on neighboring areas.
  - ii. A WES project with more than one WES structure or tower shall utilize similar design, size, color, operation, and appearance throughout the project.
- (10) Inspection. Upon approving any WES, the Township shall have the right to inspect the premises on which the WES is located at all reasonable times with prior notice and permission of the property owner. The Township may hire a consultant to assist with such inspections at the applicant's cost.

- (11) Insurance. The WES operator shall maintain a current insurance policy that will cover the installation and operation of the WES. The amount of the policy shall be a condition of approval.
- (12) Performance Guarantee. If a Special Use is approved pursuant to this section, The Planning Commission may require a security in the form of a cash deposit, surety bond, or irrevocable letter of credit in a form, amount, time duration and with a financial institution deemed acceptable to the Township, which will be furnished by the applicant to the Township in order to ensure full compliance with this section and any conditions of approval.

d) **Standards for All WES:** All WES shall comply with the following:

(1) Sound Pressure Level.

- i. Wind energy systems shall not exceed 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling unit on an adjacent non-participating parcel.
- ii. Utility Grid Systems and Wind Farms shall be subject to the requirements of Section 4.31(e)(1)(i) above. Still, the sound pressure level shall be measured at the property line closest to the WES at the outside boundary of all property used for the Utility Grid System. In addition, the applicant shall provide modeling and analysis that will demonstrate that the Utility Grid System or Wind Farm will not exceed the maximum permitted sound pressure.

(2) Shadow Flicker – The WES shall be sited so that any occupied community building or residence on a non-participating parcel will not experience more than 30 hours per year of shadow flicker under planned operating conditions as indicated using industry-standard computer modeling.

(3) Construction Codes, Interconnection Standards, Federal, State and Township Codes.

- i. All applicable state construction and electrical codes and local building permit requirements;
- ii. Federal Aviation Administration requirements.
- iii. The Michigan Airport Zoning Act, Public Act 23 of 1950, as amended;
- iv. The Michigan Tall Structures Act, Public Act 259 of 1959, as amended;
- v. Any State or Federal regulations regarding private landing strips in or adjacent to Lowell Township
- vi. The Michigan Public Service Commission and Federal Energy Regulatory Commission if the WES is interconnected.

(4) Safety

- i. Each WES shall be equipped with both a manual and automatic braking device capable of stopping the WES operation in high winds so that the rotational speed of the rotor blade does not exceed the design limits of the rotor.
- ii. To prevent unauthorized access, each WES must comply with at least one of the following provisions, and more than one if required by the Planning Commission:
- iii. The tower climbing apparatus shall not be located within 12 feet of the ground.
- iv. A locked anti-climb device shall be installed and maintained.
- v. A tower capable of being climbed shall be enclosed by a locked, protective fence at least ten feet high with a barbed wire fence.

(5) All WES shall have lightning protection.

(6) If a tower is supported by guy wires, the wires shall be visible to a height of at least 10 feet above the guy wire anchors

(7) The minimum height of the lowest position of the rotor or blade shall be at least 30 feet above the ground.

(8) Signs.

- i. Each WES shall have one sign not to exceed two square feet posted at the base of the tower, or, if the structure is fenced, on the fence. The sign shall include the following information:
  1. The words "Warning: high voltage"
  2. Emergency phone numbers.
  3. A WES shall not include advertising, except the nacelle may have lettering exhibiting the manufacturer's and/or owner's identification.

(9) Electromagnetic Interference. WES shall be designed, constructed, and operated so as not to cause radio and television interference.

(10) Maintenance. WES must always be kept and maintained in good repair and condition and shall not pose a potential safety hazard.

(11) All distribution lines from the WES to the electrical grid connection shall be located and maintained underground, both on the property where the WES will be located and off-site. The Planning Commission may waive the requirement that distribution lines for the WES

which are located off-site (i.e., are not located on or above the property where the WES will be located) be located and maintained underground if the Planning Commission determines that to install, place, or keep such distribution lines underground would be impractical or unreasonably expensive.

- (12) A WES, except for structure mounted WES, may be located on a lawful parcel or parcels that do not have frontage on a public or private road.

**Section 7. Amendment.** An amendment to Chapter 4, "General Provisions," to add a new Section 4.47 entitled "Battery Energy Storage Systems (BESS)" is hereby to read in its entirety as follows:

**Section 4.47 - Off-Site Battery Energy Storage Systems (BESS)**

- a) Definitions:

Augmentation: The process of supplementing or replacing some or all system components to maintain the nameplate capacity (measured in megawatts).

Battery Energy Storage Management System: An electronic system that protects energy storage systems from operating outside their safe operating parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.

Battery Energy Storage System (BESS): One or more devices, assembled together, capable of storing and discharging electricity primarily intended to supply electricity to a building or the electrical grid. This includes, but is not limited to, the following: battery cells; enclosures and dedicated-use buildings; thermal, battery, and energy management system components; inverters; access roads; distribution, collection, and feeder lines; wires and cables; conduit; footings; foundations; towers; poles; crossarms; guy lines and anchors; substations; interconnection or switching facilities; circuit breakers and transformers; overhead and underground control, communications and radio relay systems, and telecommunications equipment; utility lines and installations; and accessory equipment and structures.

Commissioning: A systematic process that provides documented confirmation that a battery energy storage system functions according to the intended design criteria and complies with applicable code requirements.

Decommissioning: The process of removing equipment and other infrastructure associated with a project and restoring the site for viable reuse consistent with the zoning district.

Dedicated-Use Building: A building that is only used for battery energy storage system components and equipment, as defined in the NFPA 855 Standard for the Installation of Stationary Energy Storage System.

Non-Participating Property: Real property that is not participating property.

On-Site Battery Energy Storage System: A Battery Energy Storage System (BESS) that is intended primarily to serve the electricity needs of the applicant property but may, at times, discharge into the electric grid.

Off-Site Battery Energy Storage System: A Battery Energy Storage System (BESS) for the primary purpose of Off-Site use through the electrical grid.

Small Off-Site Battery Energy Storage System: An Off-Site Battery Energy Storage System (BESS) with a nameplate capacity of 20 MW or less.

Medium Off-Site Battery Energy Storage System: An Off-Site Battery Energy Storage System (BESS) with a nameplate capacity greater than 20 MW and less than 50 MW. Off-Site BESS with a nameplate capacity of 50 MW or more but with an energy discharge capability of less than 200 MWh are also considered Medium Off-Site BESS.

Large Off-Site Battery Energy Storage System: An Off-Site Battery Energy Storage System (BESS) with a nameplate capacity of 50 MW or more and an energy discharge capability of 200 MWh or more.

Participating Property: Real property that is either owned by an applicant or that is the subject of an agreement that provides for the payment by an applicant to a landowner of monetary compensation regardless of whether any part of the BESS system is constructed on the property.

Repowering: The process of reconfiguring, supplementing, or replacing some or all of the system components to increase the nameplate capacity (measured in megawatts).

b) The following requirements shall apply to all off-site battery energy storage systems:

- (1) Site Selection. In the Ag-1 and AG-2 Agricultural Districts, this land use shall not unreasonably diminish farmland, including, but not limited to, prime farmland and, to the extent that evidence of such farmland is available in the evidentiary record, farmland dedicated to the cultivation of specialty crops.
- (2) Battery Energy Storage Systems, Small Off-Site, shall be allowed as a special land use in the I-1 and I-PUD. Battery Energy Storage Systems, Large Off-Site shall be permitted as a special land use in the following zoning districts: Ag-1, Ag-2, I-1, I-PUD, and the following minimum setbacks shall be required. Setbacks are measured from the nearest facility structure to the nearest point on the associated item:
  - i. 50 feet from any property line of a non-participating property
  - ii. 300 feet from the nearest point on the outer wall of a dwelling on non-participating property
  - iii. 50 feet measured from the nearest edge of a public road right-of-way.
- (3) Height. The height of battery energy storage system structures, except for electric distribution and transmission poles, shall not exceed a height of twenty (20) feet as measured from the natural grade of the property beneath the structure. Stacking of battery storage system components is prohibited.

- (4) Fencing. The system shall be completely enclosed with fencing in compliance with the latest version of the National Electrical Safety Code or any applicable successor standard approved by the Michigan Public Service Commission.
- (5) Sound. The system may not generate a maximum sound in excess of 55 average hourly decibels as measured at the property line of an adjacent non-participating property. Decibel modeling shall use the A-weighted scale designed by the American National Standards Institute. The Planning Commission may require the applicant to provide a sound study as part of the special land use review process.
- (6) Lighting. The system must implement dark sky-friendly lighting solutions.
- (7) Impacts of Battery Energy Storage System, Small Off-Site and Battery Energy Storage System, Large Off-Site. The following requirements shall apply to the entire system or designated components of the system, as indicated:
  - i. Safety Signage. The system shall post signs in compliance with NFPA 70/70E or any applicable successor code in place at the time of application for approval. Additionally, signage shall be provided per NFPA 855 7.4.4 or any applicable successor code in place at the time of application for approval, including information on the system type and technology, special hazards, fire suppression system, and 24-hour emergency contact information, including a reach-back phone number. A visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
  - ii. Other Signage. The Planning Commission may permit or require additional signage as necessary to ensure the safe operation of the system.
- (8) The facility shall comply with NFPA 855 “Standard for the Installation of Stationary Energy Storage Systems” or any applicable successor standard adopted by the Michigan Public Service Commission.
- (9) The Planning Commission shall require reasonable measures to minimize visual impacts by preserving existing natural vegetation, requiring new vegetative screening, or other appropriate measures. The Planning Commission shall determine such visual screening measures as may be required on a site-specific basis pursuant to the standards for special land use approval as specified in Chapter 20, the landscaping and screening standards of Section 4.25, and/or the standards for site plan approval as specified in Chapter 21 of this Ordinance, as most applicable to the circumstances. In making this determination, the Planning Commission is expressly authorized to consider whether additional visual screening measures are appropriate where a system is proposed to be located on property adjacent to a residential use and/or a residential district zoning classification. All screening/landscaping shall be properly maintained throughout the project's life, including replacing any dead landscaping within six months.

- (10) If the system includes an access drive(s) for maintenance purposes, the surface of the access drive(s) shall be permeable (unless on brownfield land or an already paved surface at the time of application for approval, such as a parking lot or former building foundation).
- (11) Except as otherwise depicted on and subject to the approval of the Planning Commission, the area within which the system is located shall not be paved with asphalt/concrete or any other impermeable surface material to water other than for slab foundations for structures and equipment. This shall not apply to a system located on brownfield land or an existing paved area, such as a former building slab or an unused parking area when adequate parking remains for all other uses on the site.
- (12) All surface water runoff created by the construction and operation of the project shall be effectively managed on-site.
- (13) Installation and Operational Safety. The system shall comply with all of the following requirements:
- i. The system shall be designed and constructed for interconnection to a Michigan Public Service Commission or Midcontinent Independent System Operator-regulated utility electrical power grid and shall be operated with such interconnection.
  - ii. The system and all foundation elements shall comply with all applicable building and electrical code requirements and any applicable federal/state regulations. The manufacturer's engineer or another qualified engineer shall provide written certification that the design, installation (including foundations), and interconnection comply with the manufacturer and industry standards, all applicable local construction and electrical codes, and any applicable federal/state regulations.
  - iii. Other than transmission or distribution lines for interconnection to the electric power grid, all electrical wiring shall be buried underground; except where the manufacturer's engineer or a qualified engineer employed by the utility that owns/operates the electrical power grid to which the system shall be interconnected certifies an underground wiring installation is not permitted by an applicable code and/or applicable federal/state regulation, with attached complete documentation supporting any such certification.
  - iv. The system shall be designed, located, and maintained to comply with all applicable codes and regulations.
- (14) Public Safety. The Emergency Response Plan and Fire Response Plan shall provide reasonable protection of the public health, welfare and safety including but not limited to an emergency shutdown procedure in place and shall provide the local fire department site safety plans to include electrical, fire, smoke, and hazardous materials release, emergency response protocols and identification of typical hazards related to, electrical, fire, smoke and hazardous materials pertinent to the facility. Upon request, all systems shall provide first responder training at the site.

- (15) Repair and Augmentation. In addition to repairing or replacing facility components to maintain the system, the facility may at any time be augmented without the need to submit a new site plan so long as the augmentation is within the same footprint (e.g., same dedicated use building or on footings/foundations in the exact location) as the original permit. If there is a change in the battery chemistry, an updated Hazard Mitigation Analysis and Emergency Operation Plan shall be provided. When a facility is anticipated to be augmented over its lifetime by adding additional components, the applicant should apply for the final/augmented site arrangement. A proposal to increase the size the project footprint may be considered a new application, subject to the ordinance standards at the time of the request.
- (16) Decommissioning and Removal. A decommissioning plan is required at the time of application. The decommission plan shall include:
- i. The anticipated manner in which the project will be decommissioned, including a description of which above-grade and below-grade improvements will be removed, retained (e.g., access drive, fencing), or restored for viable reuse of the property consistent with the zoning district. Pursuant to this requirement, the decommissioning plan shall include removing any structures up to forty-eight (48) inches below grade for disposal.
  - ii. The projected decommissioning costs shall reflect the actual cost of decommissioning the project. The salvage value shall not be included in the cost of decommissioning the project.
  - iii. The method of ensuring that funds will be available for site decommissioning and stabilization (in the form of a surety bond or cash deposit). A review of the surety bond amount, based on inflation and current removal costs, shall be completed every 4 years for the project's life and approved by the Planning Commission.
- (17) A Battery Energy Storage System owner may at any time:
- i. Proceed with the decommissioning plan approved by the Planning Commission, and remove the system as indicated in the most recent approved plan; or
  - ii. Amend the decommissioning plan with the Planning Commission's approval and proceed according to the revised plan.
  - iii. Decommissioning of a Battery Energy Storage System must commence when the soil is dry to prevent soil compaction and must be completed within 18 months after abandonment. A Battery Energy Storage System that has not operated for 12 consecutive months shall prompt an abandonment hearing.
  - iv. Restoration shall include bringing the soil and topography of the land to their predevelopment composition to ensure permitted uses upon restoration. Soil tests shall be required as part of the decommissioning plan both before development and prior to the decommissioning.

- b) Special Land Use Permit and Site Plan Application Requirements. Applications for special land use permit approval shall comply with Chapter 20 of this Ordinance. A formal application for site plan approval for this land use shall comply with Chapter 21 of this Ordinance. An incomplete application will not be accepted. Each such application shall also be subject to the following additional submission requirements:
- (1) The applicant's complete name, address, and telephone number.
  - (2) The planned date for the start of construction and the expected duration of construction.
  - (3) A system description, including a site plan described in Section 224 of the Clean and Renewable Energy Waste Reduction Act, 2008 PA 295, MCL 460.1224. The following items must be shown on the site plan:
    - (4) A map of all properties upon which any facility or ancillary feature component would be located and all properties within one thousand (1,000) feet. This should indicate the location of all existing structures and shall identify such structures as occupied or vacant.
    - (5) Lot lines and required setbacks shown and dimensioned, including horizontal and vertical elevation drawings that show the location and height of the Battery Energy Storage System on the land and dimensions of the Battery Energy Storage System.
    - (6) The size and location of existing and proposed water utilities, including any proposed connections to public or private community sewer or water supply systems.
    - (7) A map of any existing overhead and underground major facilities for electric, gas, telecommunications transmission within the facility and surrounding area
    - (8) The location and size of all surface water drainage facilities, including source, volume expected, route, and course to final destination.
    - (9) A map depicting the proposed facilities, adjacent properties, all structures within participating and adjacent properties, property lines, the projected sound isolines, and the modeled sound isolines, including the statutory limit.
  - (10) A description of the expected use of the system.
  - (11) Expected public benefits of the proposed system.
  - (12) The expected direct impacts of the proposed system on the environment and natural resources and how the applicant intends to address and mitigate these impacts.
  - (13) Information on the effects of the proposed system on public health and safety.
  - (14) A description of the portion of the community where the system will be located.

- (15) A statement and reasonable evidence that the proposed system will not commence commercial operation until it complies with applicable state and federal environmental laws, including, but not limited to, the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106. J. Evidence of consultation, before submission of the application, with the Department of Environment, Great Lakes, and Energy and other relevant state and federal agencies before submitting the application, including, but not limited to, the Department of Natural Resources and the Department of Agriculture and Rural Development.
- (16) The Soil and Economic Survey Report under Section 60303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.60303, for the county where the proposed system will be located.
- (17) Interconnection queue information for the applicable regional transmission organization.
- (18) If the proposed site of the system is undeveloped land, a description of feasible alternative developed locations, including, but not limited to, vacant industrial property and brownfields, and an explanation of why they were not chosen.
- (19) If the system is reasonably expected to have an impact on television signals, microwave signals, agricultural global position systems, military defense radar, radio reception, or weather and doppler radio, a plan to minimize and mitigate that impact. Information in the plan concerning military defense radar is exempt from disclosure under the Freedom of Information Act, 1976 PA 442, MCL 15.231 to 15.246, and shall not be disclosed by the commission or the electric provider or independent power producer except pursuant to court order.
- (20) A stormwater assessment and a plan to minimize, mitigate, and repair any drainage impacts at the applicant's expense. The applicant shall make reasonable efforts to consult with the county drain commissioner before submitting the application and shall include evidence of those efforts in the application.
- (21) A fire response plan and an emergency response plan.
- (22) The fire response plan (FRP) shall include:
  - i. Evidence of consultation or a good faith effort to consult with local fire department representatives to ensure that the FRP aligns with acceptable operating procedures, capabilities, resources, etc. If consultation with local fire department representatives is not possible, provide evidence of consultation or a good faith effort to consult with the State Fire Marshal or other local emergency manager.
  - ii. A description of all on-site equipment and systems to be provided to prevent or handle fire emergencies.
  - iii. A description of all contingency plans to be implemented in response to a fire emergency.

- iv. A commitment to review and update the FRP with fire departments, first responders, and county emergency managers at least once every three (3) years.
- v. An analysis of whether plans to be implemented in response to a fire emergency can be fulfilled by existing local emergency response capacity. The analysis should include the identification of any specific equipment or training deficiencies in local emergency response capacity and recommendations for measures to mitigate deficiencies.
- vi. Other information the applicant(s) find relevant.
- vii. The emergency response plan (ERP) shall include:
  - 1. Evidence of consultation or a good faith effort to consult with local first responders and county emergency managers to ensure that the ERP is in alignment with acceptable operating procedures, capabilities, resources, etc.
  - 2. An identification of contingencies that would constitute a safety or security emergency (fire emergencies are to be addressed in a separate fire response plan);
  - 3. Emergency response measures by contingency;
  - 4. Evacuation control measures by contingency;
  - 5. Community notification procedures by contingency;
  - 6. An identification of potential approach and departure routes to and from the facility site for police, fire, ambulance, and other emergency vehicles;
  - 7. A commitment to review and update the ERP with fire departments, first responders, and county emergency managers at least once every three (3) years;
  - 8. An analysis of whether plans to be implemented in response to an emergency can be fulfilled by existing local emergency response capacity and identification of any specific equipment or training deficiencies in local emergency response capacity; and
  - 9. Other information the applicants find relevant.
- viii. A report detailing the sound modeling results and mitigation plans to ensure that sound emitted from the system will remain below the statutory limit throughout the system's operational life.
- ix. Any other information regarding compliance with the requirements herein.

- (18) Waiver. Because of the ever-changing technical capabilities of battery storage infrastructure and new technology in general, the Lowell Charter Township Planning Commission shall have the authority to review and consider alternatives to the dimensional and physical requirements contained in this ordinance as part of the special land use review process and other requirements.
- (19) Building Permits. A building permit will be issued only when all the following are supplied and approved before receiving a zoning compliance permit: equipment specification sheets, identification and contact information for the installer(s) of the proposed system, Augmentation Plan, approved Decommissioning Plan and Decommissioning Agreement in recordable form and acceptable to the Township Attorney, life expectancy of the system components including the anticipated schedule for battery replacement to maintain megawatts over the system's lifetime, Hazard Mitigation Analysis, Operation and Maintenance Manual, identification and contact information for the installer of the system, electrical schematic plan for the system, including disconnect devices, an approved FRP and ERP, an executed Community Host Agreement in the amount of \$2,000 per megawatt, and proof of financial guarantee for decommissioning.
- (20) Transfers. No transfer in ownership of the Battery Energy Storage System shall occur prior to providing 60 days' notice to the Township and upon Township approval verifying that the new owner agrees to carry out the terms of the special land use and site plan approval.

**Section 8. Amendment.** An amendment to Chapter 16 "Industrial Planned Unit Development District (I-PUD)," Section 16.03 "Permitted Land Uses" to add a new subpart (land use entitled "Data Centers" will hereby read in its entirety as follows:

**Sec 16.03 Permitted Land Uses**

Land, buildings, and structures in the I-PUD District shall be used for the following purposes only:

- a) Warehousing, storage, or transfer buildings, excluding the storage or transfer of bulk petroleum or related products, garbage, or rubbish.
- b) Truck terminals, including maintenance and service facilities.
- c) Light manufacture, compounding, processing, producing, packaging, treating, fabrication and assembling from previously prepared materials, but excluding raw materials, of any of the following:
  - (1) Textiles and textile products, including woven fabric, knit goods, floor coverings, yarn and thread, and other textile goods.
  - (2) Apparel and other finished products made from fabrics, leather goods, fur, canvas, and similar materials.
  - (3) Lumber and wood products, including millwork, prefabricated structural wood products, and containers.

- (4) Furniture and fixtures.
  - (5) Paperboard containers, building paper, building board, and bookbinding.
  - (6) Plastics, perfumes, and synthetic fibers.
  - (7) Engineering, measuring, optical, medical, photographic, and similar instruments.
  - (8) Jewelry, silverware, toys, athletic equipment, musical instruments, signs and displays, and office goods and equipment, including computers and associated devices and equipment.
  - (9) Metal products
- d) Wholesale establishments, including automotive equipment, drugs, chemicals, dry goods, apparel, food, farm products, electrical goods, hardware, machinery, equipment, metals, paper products and furnishings, and lumber and building products.
  - e) Research, design and development facilities, testing and experimental laboratories.
  - f) Printing and publishing.
  - g) Trade and industrial schools.
  - h) Tool and die manufacturing establishments.
  - i) Essential public service structures and buildings which are above ground and located outside street rights of way, including electrical substations.
  - j) Building contractors, provided that all goods, supplies, materials, and equipment shall be stored or kept inside a fully enclosed building.
  - k) Data Centers
  - l) Other uses similar to the above listed uses provided that the Township Board determines, following a recommendation from the Planning Commission, that the operational characteristics and effects of such uses are compatible with the uses listed above and that such uses comply with the intent and purposes of the I-PUD district as set forth in Section 16.01.
  - m) Customary accessory buildings and uses.
  - n) Towers and antennas over 35 feet in height per Section 4.40 herein (6 August, 2014)

**Section 9. Severability.** The provisions of this Ordinance/ordinance amendment are hereby declared to be severable, and if any part or provision of this Ordinance/ordinance amendment

should be declared invalid or unenforceable by any court of competent jurisdiction, such invalidity or unenforceability shall not affect any other part or provision of the Ordinance/ordinance amendment.

**Section 10. The Zoning Ordinance is Otherwise Unchanged.**

The balance of the Lowell Charter Township Zoning Ordinance remains unchanged and in full force and effect, except as revised by these amendments.

**Section 11. Effective Date.** This Ordinance/ordinance amendment shall become effective upon the expiration of seven (7) days following the publication of a summary of its provisions in a local newspaper of general circulation.

YEAS: Hale, Benedict, Burt, Anderson, Blough, Thompson, Vander Ziel

NAYS: None

ABSENT/ABSTAIN: None

THIS ORDINANCE/ORDINANCE AMENDMENT IS DECLARED TO BE DULY ADOPTED.

**CERTIFICATION**

I hereby certify that the above is a true copy of the Ordinance/ordinance amendment adopted at the time, date, and place specified above pursuant to the required statutory procedures.



Monica Burt  
Lowell Charter Township Clerk

ADOPTED DATE: March 17, 2025

PUBLICATION DATE: March 26, 2025

EFFECTIVE DATE: April 1, 2025