

522 - WIND ENERGY CONVERSION SYSTEMS REGULATIONS

522.01 Purpose

The purposes of this Chapter are to:

- A. Assure that any development and production of wind-generated electricity in the City of Tipton and Jurisdictional Fringe is safe and effective;
- B. Facilitate economic opportunities for local residents; and
- C. Promote the supply of wind energy in support of Indiana's alternative energy sources potential and other such economic development tools.

522.02 Intent

It is the intent of the Wind Energy Conversion Systems (WECS) siting regulations to provide a regulatory scheme for the construction and operation of WECS in the jurisdiction of the City of Tipton Plan Commission; subject to reasonable restrictions these regulations are intended to preserve the health and safety of the public.

522.03 Applicability

The provisions of this Chapter are applicable to those districts which allow wind energy conversion systems (WECS), govern the siting of WECS and substations that generate electricity to be sold to wholesale or retail markets, or that generate electricity for private use. In addition to notification requirements as prescribed by the Rules of Procedure for approval processes applications for Conditional Use approvals for Commercial WECS shall include all owners of property within the project area.

522.04 Prohibition

No applicant shall construct, operate, or locate a wind energy conversion system (WECS) within the jurisdiction of the City of Tipton Plan Commission without having fully complied with the provisions of this Chapter.

522.05 Conflict with Other Regulations

Nothing in this Chapter is intended to preempt other applicable state and federal laws or regulations, including compliance with all Federal Aviation Administration rules and regulations and shall comply with the notification requirements of the Federal Aviation Administration. Nor are they intended to interfere with, abrogate, or annul any other ordinance, rule, or regulation, statute or other provision of law. In the event that any provision of these regulations imposes restrictions different from any other ordinance, rule, regulation, statute, or provision of law, the provisions that are more restrictive or that imposes higher standards shall govern.

522.06 District Regulations

A. Location

Commercial, Non-commercial, and Micro WECS will be permitted, or not permitted, in various districts as prescribed by Article Three, Use Standards (Table A).

B. Height

1. Non-Commercial WECS or Meteorological Towers

Any Non-commercial WECS Towers or Meteorological Towers greater than two hundred (200) feet in height, calculated to the blade tip at its highest point for WECS, shall require a variance from developmental standards approval.

2. Commercial WECS or Operational Support Meteorological Towers

For Commercial WECS Towers and Operational Support Meteorological Towers there are no limitations on height, except those height limitations imposed by Federal Aviation Administration rules and regulations.

3. Micro WECS

Any Micro WECS Tower exceeding sixty feet in height calculated to the blade tip at its highest point, shall require a variance from developmental standards approval.

522.07 Setback Requirements

A. Minimum setback distances for COMMERCIAL WECS TOWERS

Distance from a...	Minimum Setback Distance
Property line, measured from the center of the WECS Tower to the property line	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point), provided that the distance is no less than three hundred and fifty (350) feet (i) The setback requirement is waived if the affected adjoining landowners sharing the common property line are Participating Landowners. (ii) A WECS Tower may be placed up to the property line, if a fully executed and recorded written waiver agreement is secured from the affected adjoining Non-Participating Landowner.
Residential dwellings in Agricultural, Industrial or Commercial zoned districts, measured from the center of the WECS Tower to the nearest corner of the structure	One thousand (1,000) feet. ¹
Residential dwellings in residential districts, measured from the WECS tower to residential district.	One thousand three hundred twenty (1,320) feet.
Public road right-of-way, measured from the center of the WECS Tower to the edge of the right-of-way	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point), provided that the distance is no less than three hundred and fifty (350) feet ²
Other rights-of-way, such as railroads and public utility easements, measured from the center of the WECS Tower to the edge of the right-of-way	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point), provided that the distance is no less than three hundred and fifty (350) feet
Public conservation lands, measured from the center of the WECS Tower to the nearest point of the public conservation land in question	Seven hundred and fifty (750) feet

¹ The setback for residential dwellings shall be reciprocal in that no residential dwelling shall be constructed within one thousand (1,000) feet of a COMMERCIAL WECS Tower, measured from the center of the WECS Tower to the nearest corner of the structure.

² The setback shall be measured from future public rights-of-way width if a planned public road improvement or expansion is known at the time of application.

City of Tipton Zoning Ordinance

Distance from a...	Minimum Setback Distance
Wetlands, as defined by the U.S. Army Corps of Engineers, measured from the center of the WECS Tower to the nearest point of the wetland in question	As determined by a permit obtained from the Army Corps of Engineers
Incorporated limits of a municipality, measured from the center of the WECS Tower to the corporate limits	Fifteen hundred (1,500) feet
Above-ground electric transmission line, measured from the center of the WECS Tower	1.1 times the total height (where the blade tip is at its highest point)

B. Commercial WECS Power Collection and Transmission System

1. WECS Substation shall meet accessory structure setbacks.
2. For all Substations, setbacks from property lines are waived if the affected adjoining landowners sharing the common property line are all Participating Landowners.
3. For all poles carrying overhead wiring connecting Commercial WECS Towers to a Substation for connection to a utility's electric transmission line, there are no setback requirements from property lines as long as the poles are located within a recorded easement for such purpose.

C. Minimum setback distances for NON-COMMERCIAL and MICRO WECS TOWERS

Distance from a...	Minimum Setback Distance
Property line, measured from the center of the WECS Tower to the property line	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point), provided that the distance is no less than the required yard setback prescribed for that district
Residential dwellings, measured from the center of the WECS Tower to the nearest corner of the structure	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point)
Public road right-of-way, measured from the center of the WECS Tower to the edge of the right-of-way	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point), provided that the distance is no less the required yard setback prescribed for that district ³

³ The setback shall be measured from future public rights-of-way width if a planned public road improvement or expansion is known at the time of application.

City of Tipton Zoning Ordinance

Distance from a...	Minimum Setback Distance
Other rights-of-way, such as railroads and public utility easements, measured from the center of the WECS Tower to the edge of the right-of-way	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point), provided that the distance is no less than the required yard setback prescribed for that district
Public conservation lands, measured from the center of the WECS Tower to the nearest point of the public conservation land in question	Seven hundred and fifty (750) feet
Wetlands, as defined by the U.S. Army Corps of Engineers, measured from the center of the WECS Tower to the nearest point of the wetland in question	As determined by a permit obtained from the Army Corps of Engineers
Incorporated limits of a municipality, measured from the center of the WECS Tower to the corporate limits	Fifteen hundred (1,500) feet
Above-ground electric transmission lines, measured from the center of the WECS Tower	1.1 times the total height of the WECS Tower (where the blade tip is at its highest point)

D. Horizontal extension for Non-commercial and Micro WECS

The furthest horizontal extension (including guy wires) shall not extend into a required setback by the zoning district or be closer than twelve (12) feet to any primary structure, or public right-of-way easement for any above-ground telephone, electric transmission or distribution lines.

E. Minimum setback distances for all METEOROLOGICAL TOWERS

Distance from a...	Minimum Setback Distance
Property line, measured from the center of the Meteorological Tower to the property line	1.1 times the total height of the Meteorological Tower, provided that the distance is no less than the required yard setback (i) The setback requirement is waived if the affected adjoining landowners sharing a common property line are Participating Landowners
Residential dwellings, measured from the center of the Meteorological Tower to the nearest corner of the structure	1.1 times the total height of the Meteorological Tower
Public road right-of-way, measured from the center of the Meteorological Tower to the edge of the right-of-way	1.1 times the total height of the Meteorological Tower, provided that the distance is no less than the required yard setback ⁴

⁴ The setback shall be measured from future public rights-of-way width if a planned public road improvement or expansion is known at the time of application.

Distance from a...	Minimum Setback Distance
Other rights-of-way, such as railroads and public utility easements, measured from the center of the Meteorological Tower to the edge of the right-of-way	1.1 times the total height of the Meteorological Tower, provided that the distance is no less than the required yard setback

F. Horizontal extension for all Meteorological Towers

The furthest horizontal extension (including guy wires) shall not extend into a required setback by the zoning district or be closer than twelve (12) feet to any primary structure, or public right-of-way easement for any above-ground telephone, electric transmission or distribution lines.

522.08 SAFETY DESIGN AND INSTALLATION STANDARDS

A. Equipment type

1. All turbines shall be constructed of commercially available equipment.
2. All Meteorological Towers may be guyed.
3. Experimental or proto-type equipment still in testing which does not fully comply with industry standards, may be approved by the Board of Zoning Appeals per the variance process established by this Ordinance.
4. Commercial WECS towers shall be of tubular construction or appearance, not guyed or with exposed girders.
4. Roof mounted units must be documented to be suitable for the specific structure for which it is intended and certified by a registered engineer or architect.

B. Industry standards and other regulations

All WECS shall conform to applicable industry standards, as well as all local, state and federal regulations. An applicant shall submit certificate(s) of design compliance that wind turbine manufacturers have obtained from Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energie, or an equivalent third party.

C. Controls and brakes

1. Braking system

All WECS Towers shall be equipped with a redundant braking system. This includes both aerodynamic over speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Stall regulation shall not be considered a sufficient braking system for over speed protection.

2. Operation mode

All mechanical brakes shall be operated in a fail-safe mode.

D. Electrical components

1. Standards

All electrical components of all WECS shall conform to applicable local, state and national codes, and any relevant national and international standards.

2. Collection cables

All electrical collection cables between each WECS Tower shall be located underground wherever possible.

3. Transmission lines

All transmission lines that are buried should be at a depth consistent with or greater than local utility and telecommunication underground lines standards or as negotiated with the land owner or the land owner's designee until the same reach the property line or a substation adjacent to the property line.

E. Color and finish

In addition to all applicable Federal Aviation Administration requirements, the following shall also apply to all WECS:

1. Wind turbines and towers

All wind turbines and towers that are part of a WECS shall be white, grey, or another non-obtrusive color.

2. Blades

All blades shall be white, grey, or another non-obtrusive color. Blades may be black in order to facilitate deicing.

3. Finishes

Finishes shall be matte or non-reflective.

a. Exceptions

Exception may be made for Meteorological Towers, where concerns exist relative to aerial spray applicators.

F. Guy wires and anchor points

For all guyed towers, one of the following warning mechanisms shall be used for each anchor point:

1. Visible and reflective objects, such as flags, plastic sleeves, reflectors, or tape placed on the anchor points of guy wires and along the innermost guy wires up to eight (8) feet above the ground.

2. Visible fencing not less than four (4) feet in height installed around anchor points of guy wires.

G. WECS and Non-commercial WECS warnings and notices

The following notices shall be clearly visible on all WECS and Non-Commercial WECS Towers and accessory facilities:

1. "No Trespassing" signs shall be attached to any perimeter fence.
2. "Danger" signs shall be posted at the height of five (5) feet on WECS Towers and accessory structures.
3. A sign shall be posted on the WECS Tower showing an emergency telephone number.
4. The manual electrical and/or overspeed shutdown disconnect switch(es) shall be clearly labeled.
5. Sign or signs shall be posted on the pad-mounted transformer and the Substation(s) warning of high voltage.
6. Private roads providing access to Commercial WECS shall have posted an Emergency-911 address private road sign.

H. Meteorological Towers

Consideration shall be given to paint aviation warnings as required by the Federal Aviation Administration on all Meteorological Towers.

I. Climb prevention

All Commercial WECS Tower designs shall include features to deter climbing or be protected by anti-climbing devices such as:

1. Fences with locking portals at least six (6) feet in height; or
2. Anti-climbing devices fifteen (15) feet vertically from the base of the WECS Tower; or
3. Locked WECS Tower doors.

J. Blade clearance

The minimum distance between the ground and any protruding blades(s) utilized on all Commercial WECS Towers shall be twenty-five (25) feet, as measured at the lowest point of the arc of the blades. The minimum distance between the ground and any protruding blade(s) utilized on all Non-commercial or Micro WECS Towers shall be a minimum of fifteen (15) feet, as measured at the lowest point of the arc of the blades. In any case, the minimum distance shall be increased as necessary to provide for vehicle clearance in locations where over-sized vehicles might travel.

K. Lighting

All lighting, including lighting intensity and frequency of strobe, shall adhere to but not exceed requirements established by Federal Aviation Administration and this Ordinance.

L. Shielding

Except with respect to lighting required by the Federal Aviation Administration, lighting may require shielding so that no glare extends substantially beyond any WECS Tower and must conform to Section 314 of this Ordinance.

M. Materials handling, storage and disposal

1. Solid wastes

All solid wastes whether generated from supplies, equipment, parts, packaging, operation or maintenance of the WECS, including old parts and equipment related to the construction, operation and/or maintenance of the WECS shall be removed from the site promptly and disposed of in accordance with all federal, state, and local laws.

2. Hazardous materials

All hazardous materials or waste related to the construction, operation and/or maintenance of any WECS shall be handled, stored, transported and disposed of in accordance with all applicable local, state and federal laws.

522.10 Other Applicable Standards

A. Guyed wire anchors

No guyed wire anchors shall be allowed within any required public road right-of-way.

B. Sewer and water

All facilities or structures that are part of the WECS Project shall comply with the existing septic and well regulations as required by the Tipton County Health Department and/or the State of Indiana Department of Public Health.

C. Noise and vibration

At any non-participating residentially zoned lot, public school or public library, for a period of more than 10% out of every hour the A-weighted sound pressure levels as a result of the sound emitted by the WECS shall not exceed either, the greater of 45 decibels or, 5 decibels above the ambient baseline sound pressure level (as defined) of the WECS project area at critical wind speeds (as defined). At any non-participating residence on Agricultural, Industrial, or Commercial zoned land, for a period of more than 10% out of every hour, the audible A-weighted sound pressure levels as a result of the sound emitted by the WECS shall not exceed the greater of 51 decibels or, 5 decibels above the ambient baseline sound pressure level of the WECS project area at critical wind speeds. For participating land owners the same standards apply to their residences except the do not exceed decibel level is 55 decibels versus 51. The ambient baseline sound pressure level, if used, shall be determined by a baseline acoustic emissions study arranged by the Tipton Plan Commission and funded by the applicant. All methods for measuring and reporting acoustic standards shall be equal to or exceed the minimum standards for precision described in the International Electrotechnical Commission IEC 61400-11 Standard: *Wind turbine generator*

systems-part 11: Acoustic noise measurement techniques. Noise and vibration levels shall be in compliance with all other applicable county, state and Federal regulations.

D. Utility interconnection

The WECS, if interconnected to a utility system, shall meet the requirements for interconnection and operate as prescribed by the applicable regulations of the electrical utility, as amended from time to time.

E. Signage

All signs pertaining to a WECS Project must comply with Section 505, Sign Standards, unless otherwise specified as follows:

1. No sign shall exceed sixteen (16) square feet in surface area except development signs.
2. No sign shall exceed eight (8) feet in height.
3. The manufacturers or owner's company name and/or logo may be placed upon the compartment containing the electrical equipment.
4. An identification sign relating to the WECS Project development shall be located on each side of the total WECS Project area. There shall be no less than four (4) and no more than six (6) signs. Development signs must be sized in compliance with Section 505 and must include seven (7) day per week contact information to reach a responsible representative with authority to resolve problems associated with development of a WECS Project.
5. No other advertising signs or logos shall be placed or painted on any structure or facility that is part of the WECS Project.

F. Feeder lines

Feeder lines installed as part of any WECS shall not be considered an essential service. To wit, all communications and feeder lines installed as part of any WECS shall be buried underground wherever possible.

G. Other appurtenances

No appurtenances other than those associated with the WECS construction, operations, maintenance, decommissioning/removal, and permit requirements shall be connected to any WECS Tower except with express, written permission by the Board of Zoning Appeals.

522.11 OPERATION AND MAINTENANCE

A. Physical modifications

In general, any physical modification to any WECS that alters the mechanical load, mechanical load path, or major electrical components shall require re-certification.

Like-kind replacements shall not require re-certification. Therefore, prior to making any physical modification, the owner or operator shall confer with the Building Commissioner Staff to determine whether the physical modification requires re-certification.

B. Interference

Prior to construction, a communications study to minimize interference with public or public serving utility microwave transmissions shall be completed. If necessary, the applicant, owner and/or operator shall mitigate interference with electromagnetic communications, such as radio, telephone, microwaves, or television signals caused by any WECS. In addition, the applicant, owner, and/or operator shall comply with the following:

1. Pre-construction

The applicant shall complete a communications study prior to construction so as to minimize interference with any public or public serving utility microwave transmissions.

2. Post-construction

If, after construction of the WECS, the owner or operator receives a written complaint related to interference with the broadcast of residential television, telecommunication, communication or microwave transmissions, the owner or operator shall take reasonable steps to mitigate said interference. Interference with private telecommunications systems such as GPS shall be between the company and the complainant.

3. Failure to remedy a complaint

If an agreement to remedy a known interference is not reached within ninety (90) days, appropriate action will be taken, which may result in requiring the WECS to become inactive. This does not apply to interference with private telecommunications systems.

C. Declaration of public nuisance

Any WECS thereof declared to be unsafe by the Building Commissioner by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, damage or abandonment is hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal in accordance with the approved Decommissioning Plan.

522.12 DECOMMISSIONING PLAN

Prior to receiving an Improvement Location Permit and Building Permit under this Ordinance, the City and/or County and the applicant, owner and/or operator shall formulate a decommissioning plan outlining the anticipated means and cost of removing a WECS at the end of their serviceable life or upon becoming a discontinued or abandoned use to ensure that the WECS is properly decommissioned. This requirement applies to all WECS projects except Micro-WECS projects of no more than an aggregate one (1) kilowatt rated capacity or less.

A. Content of decommissioning plan shall include:

1. Assurance

Written assurance that the WECS will be properly decommissioned upon the expiration of the project life or in the event that the WECS Project is abandoned.

2. Cost estimates

The applicant shall provide a contractor cost estimate for demolition and removal of the WECS. The cost estimates shall be made by a competent party: such as a professional engineer, a contractor capable of decommissioning or a person with suitable expertise or experience with decommissioning WECS.

3. Financial assurance

Applicant will provide financial assurance in an amount at least equal to said demolition and removal contractor cost estimate, through the use of a bond, letter of credit or other security acceptable to the City and/or County, for the cost of decommissioning each WECS Tower and related improvements constructed under the permit. Said security will be released when each WECS Tower is properly decommissioned as determined by the Building Commissioner. Said financial assurance may also take into account details of salvage value and recovery of that value if agreed to by both parties.

4. Abandonment by the owner or operator

Written assurance that in the event of abandonment by the owner or operator, the applicant will provide an affidavit to the City and/or County representing that all easements and/or leases for WECS Towers shall contain terms that provide financial assurances, including access to the salvage value of the equipment, for the property owners to ensure that the WECS Towers are properly decommissioned within one (1) year of expiration or earlier of termination of the WECS Project.

B. Discontinuation and abandonment

All WECS shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Building outlining the steps and schedule for returning the WECS to service.

1. Removal

An applicant's obligations shall include removal of all physical material pertaining to the project improvements to no less than a depth of four (4) feet below ground level within three hundred sixty-five (365) days of the discontinuation or abandonment of the WECS or WECS Project, and restoration of the project area to as near as practicable the condition of the site immediately before construction of such improvements. Removal obligations shall be completed by the owner or by the County or City of Tipton at the owner's expense.

2. Written notices

Prior to implementation of the existing procedures for the resolution of such default(s), the appropriate City and/or County body shall first provide written notice to the owner

and/or operator, setting forth the alleged default(s). Such written notice shall provide the owner and/or operator a reasonable time period not to exceed sixty (60) days, for good faith negotiations to resolve the alleged default(s).

5. Costs incurred by the City and/or County

If the City and/or County removes a WECS Tower and appurtenant facilities, it may sell the salvage to defray the costs of removal. By approval, the permittee or grantor grants a license to Tipton County to enter the property to remove a WECS Tower and appurtenant facilities pursuant to the terms of an approved decommissioning plan.

522.13 LIABILITY INSURANCE

The owner or operator of any Commercial or Non Commercial WECS shall maintain a current general liability policy covering bodily injury and property damage and may be required to name City of Tipton and/or Tipton County as an additional insured with dollar amount limits per occurrence, in the aggregate, and a deductible, which is suitable to the City and/or County.

522.14 APPLICATION PROCEDURES

A. Permits and variances for all types of WECS shall be applied for and reviewed under the procedures established by this Ordinance and shall include the following information:

1. Contact information of project applicant including

The name(s), address(es), and phone number(s) of the applicant(s), as well as a description of the applicant's business structure and overall role in the proposed project.

2. Contact information of current project owner

The name(s), address(es), and phone number(s) of the owner(s), as well as a description of the owner's business structure and overall role in the proposed project, and including documentation of land ownership or legal control of the property on which the WECS is proposed to be located. The Building Commissioner shall be informed of any changes in ownership.

3. Contact information of project operator

The name(s), address(es) and phone number(s) of the operator(s) if other than the owner. If the owner assigns a different operator they are obligated to notify the Building Commissioner.

4. Legal description

The legal description, address, and general location of the project.

5. A WECS Project Description, including to the extent possible, information on each wind turbine proposed, including:

- a. Number of turbines;
- b. Type;
- c. Name plate generating capacity;
- d. Tower height;
- e. Rotor diameter;
- f.. Total height;
- g. Anchor base;
- h. The means of interconnecting with the electrical grid;
- i. The potential equipment manufacturer(s); and
- j. All related accessory structures.

6. A site layout plan

A site layout plan, drawn at an appropriate scale, showing distances pertaining to all applicable setback requirements, regulated drains, flood plains, and wetlands certified by a registered land surveyor.

7. Engineering certification

For all WECS, the manufacturer's engineer or another qualified registered professional engineer shall certify, as part of the building permit application that the foundation and tower design of the WECS is within accepted professional standards, given local soil and climate conditions. An engineering analysis of the WECS Tower showing compliance with the applicable regulations and certified by a licensed professional engineer shall also be submitted. The analysis shall be accompanied by standard drawings of the wind turbine structure, including the tower, base, and footings.

8. Utility notification

No WECS shall be installed until evidence has been given that the local electrical utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

9. Any other item reasonably requested by the Building Commissioner.

522.15 APPLICATIONS FOR COMMERCIAL AND NON-COMMERCIAL WIND ENERGY CONVERSION SYSTEMS

A. In addition to the application requirements listed in 522.14, Applications for Non-Commercial and Commercial WECS shall also include the following information:

1. Demonstration of energy need

The primary purpose of the production of energy from a Non-Commercial WECS shall be to serve the energy needs of that tract. The applicant(s) shall demonstrate how much energy is needed and how the proposed size and number of the WECS Towers fulfills this need. Net-metering may be allowed, but shall not be the primary intent of the WECS.

2. Statement of Federal Aviation Administration compliance

A statement of compliance with all applicable Federal Aviation Administration rules and regulations, including any necessary approvals for installations within close proximity to an airport.

3. Proof of correspondence and cooperation with wildlife agencies

For the purposes of preventing harm to migratory birds and in compliance with the Migratory Bird Treaty applicants shall provide documentation that they are in communication and cooperation with the U.S. Fish and Wildlife Service and the Indiana Department of Natural Resources.

4. Compliance with National Electrical Code

A line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code. This information is frequently supplied by the manufacturer.

5. Any other item reasonably requested by the Building Commissioner.

522.16 APPLICATIONS FOR COMMERCIAL WIND ENERGY CONVERSION SYSTEMS

A. In addition to the application requirements listed in 522.14 and 522.15, Applications for All Commercial WECS shall also include the following information:

1. A preliminary site layout plan

In addition to the site layout plan described in 522.14, Applications for All Wind Energy Conversion Systems, an application for a Commercial WECS shall include a preliminary site layout plan with distances drawn to an appropriate scale illustrating the following:

- a. Property lines, including identification of adjoining properties and notations identifying participating and non-participating landowners;
- b. The latitude and longitude of each individual WECS Tower, along with individual identification of each WECS Tower;
- c. Dimensional representation of the structural components of the WECS Tower construction including the base and footings;
- d. WECS access roads;
- e. Substations;

- f. Electrical cabling;
- g. Ancillary equipment;
- h. Primary structures within one quarter (1/4) mile of all proposed WECS Towers;
- i. Distances from each individual WECS Tower to each setback requirement;
- j. Location of all public roads which abut, or traverse the proposed site;
- k. The location of all above-ground utility lines within a distance of two (2) times the height of any proposed WECS structure;
- l. The location of any historic or heritage sites as recognized by the Division of Historic Preservation and Archeology of the Indiana Department of Natural Resources, within one (1) mile of a proposed WECS Tower; and
- m. The location of any wetlands based upon a delineation plan prepared in accordance with the applicable U.S. Army Corps of Engineers requirements and guidelines, within one (1) mile of a proposed WECS Tower.

B. Topographic map

A USGS topographical map, or map with similar data, of the property and the surrounding area, including any other WECS Tower within a two (2) mile distance, but no less than a one quarter (1/4) mile radius from the proposed project site, with contours of not more than five (5) foot intervals.

C. Noise and wind profile

Location of all known residential, commercial or public structures within one (1) mile of the proposed WECS Tower, including a description of the potential sonic impacts of said WECS Tower and affect of wind resources on adjacent properties.

D. Copy of the Communications Study

522.17 Applications for all Meteorological Towers

A. Applications for all Meteorological Towers shall include the following information:

- 1. A copy of the agreement where landowner has authorized the placement of a Meteorological Tower on their property.
- 2. Preliminary site layout plan
- 3. A preliminary site layout plan with distances drawn to an appropriate scale including the following:
- 4. Property lines, including identification of adjoining properties;
- 5. The latitude and longitude of each individual Meteorological Tower;
- 6. Dimensional representation of the structural components of the tower construction, including the base and footings;

7. Ancillary equipment;
8. Required setback lines;
9. Location of all public roads which abut, or traverse the proposed site;
10. The location of all above-ground utility lines within a distance of 2 times the height of any proposed tower;
11. The location of all underground utility lines;
12. Any other items reasonably requested by the Area Plan Department; and
13. Variance approval if any Non-Commercial WECS or Meteorological Tower is greater than 200 feet in height.

522.18 PRE-CONSTRUCTION REQUIREMENTS

Prior to the issuance of any Improvement Location Permit, the following shall be required and materials submitted and reviewed by the Building Commissioner, who shall certify that the submissions are in compliance with all applicable regulations:

- A. Federal Aviation Administration permit application and approval, if applicable.
- B. Decommissioning plan as described in Section 522.12.
- C. Economic Development Agreement, Drainage, and Road Use and Maintenance Agreements required before issuance of an improvement location permit.
 1. An Economic Development Agreement approved by the County Commissioners and City Officials, if appropriate, which may be developed in conjunction with Tipton County Community and Economic Development. It is preferable that said agreement be completed prior to the application for conditional use.
 2. A Road Use and Services Maintenance Agreement approved by the County Commissioners or City Officials, and Street Department and County Highway Superintendent, as applicable, that addresses the following:
 - a. A compilation of routes that will be used for construction and maintenance purposes, approved by the Superintendent;
 - b. a documented baseline survey to determine existing road conditions prior to construction. The survey shall include photographs, or video, or a combination thereof, and a written agreement to document the condition of the public facility;
 - c. a corporate surety bond in an amount to be fixed by a professional engineer may be required by the Tipton County Highway Superintendent to ensure the county that future repairs are completed to the satisfaction of the unit of local government. The cost of bonding is to be paid by the applicant. This requirement may be addressed in conjunction with the Economic development Agreement;

- d. a plan to address transportation routes and conditions during construction. If the route includes a public road, it shall be approved by the Tipton County Highway Superintendent. Any affected school system(s) transportation department must be consulted;
- e. a plan to avoid damage and to address repair to damaged roads;
- f. a requirement that newly constructed WECS access roads will not impede the flow of water; and
- g. provisions to address crop, field tile, waterway and other infrastructure damage.

D. An Erosion Control Plan developed in consultation with the Natural Resources Conservation Services (NRCS), and compliant with any storm water quality management plan adopted by the applicable jurisdiction.

E. A Utility Plan drawn to the same scale as the site layout plan illustrating the location of all underground utility lines associated with the total WECS Project. This may be incorporated into the site plan.

F. A Dust Control Plan detailing reasonable measures to be employed to control dust during construction of a Commercial WECS Project.

G. A Storm Water Plan employing best management practices as required by the approved Drainage Plan/Agreement on file with the Tipton County Surveyor.

520.19 POST-CONSTRUCTION REQUIREMENTS

A. Post-construction, the applicant shall comply with the following provisions:

1. Road Repairs

Any road damage caused by the construction of project equipment, the installation of the same, or the removal of the same, shall be repaired as per the Road Use and Services Maintenance Agreement.

2. As-Built Plans Requirement

Whereupon completion of all development, the exact measurements of the location of utilities and structures erected during the development are necessary for public record and shall therefore be recorded. The applicant, owner, or operator shall submit a copy of the Final Construction Plans (as-built plans), as amended, to the Building Inspector with the exact measurements shown thereon. The Building Inspector, after being satisfied that the measurements are substantially the same as indicated on the originally approved final plan(s), shall approve, date and sign said Construction Plans for the project, which the applicant, owner, or operator shall then record.

3. Change in ownership

It is the responsibility of the owner or operator listed in the application to inform the Plan Commission Staff of all changes in ownership and operation during the life of the project, including the sale or transfer of ownership or operation.

522.20 DEFINITIONS AND ADMINISTRATION

For the purposes of administering and enforcing this Section, refer to Article Two-Definitions, Article-Eight, Board of Zoning Appeals and Article Nine-Administrative Procedure of this Ordinance.