City of Long Lake
Hennepin County, Minnesota
ORDINANCE NO. 2011-XXX

AN ORDINANCE AMENDING THE CITY OF LONG LAKE ZONING ORDINANCE REGARDING SOLAR AND WIND ENERGY PROVISIONS IN ALL ZONING DISTRICTS

The City Council of the City of Long Lake does hereby ordain as follows:

Section 1. City of Long Lake Zoning Ordinance, Section 2 (Definitions) is amended to add the following definitions:

Subd. 177a. Solar energy facilities, exterior building. A device or structure that is designed for the collection, storage and distribution of solar energy for the purpose of providing energy to the principal or accessory building on the property, that is not considered an integral part of a building such as windows and roof shingles and is exterior to the principal or accessory buildings on the property. Examples of exterior solar energy facilities include solar panels mounted on the exterior of a roof and wall mounted solar panels.

Subd. 206a. Wind Energy Conversion System (WECS). A device, such as a windmill or wind turbine, and accessory facilities including the support structure, energy storage, and necessary operating equipment, that converts wind energy into electricity.

Subd. 206b. Wind Energy Conversion System (WECS) Tower. A wind energy conversion system (WECS) tower consisting of a single pole, constructed without guy wires and anchors.

Section 2. City of Long Lake Zoning Ordinance, Section 7 (R-1 and R-1A Single Family Residential Districts), Subd. 2 is amended to add the following subparts:

H. Solar energy systems, exterior, provided the following standards are met:

1. All solar panels attached to the wall of a principal or accessory building must be flush mounted or at an angle of no more than a five (5) percent deviation from the wall.
2. Roof mounted solar panels shall comply with the following:
   a. The height of a roof mounted solar panel shall not exceed twenty (20) feet as measured from the ground or three (3) feet above the ridgeline of the roof peak of the principal building on the property, whichever is greater.
   b. On flat or shed roofs, the height of a solar mounted roof panel shall not exceed ten (10) feet as measured from the surface of the roof, or twenty (20) feet as measured from the ground, whichever is greater.
   c. The solar panels shall be mounted to align with the slope of the roof, and shall not deflect more than ten (10) percent from the roof angle.

d. Solar roof panels shall be setback from the roof edge a minimum of one (1) foot and shall not be located on any roof overhang.

3. Window awnings constructed to allow solar energy collection shall be permitted provided all required building setbacks are met.

4. All required permits must be obtained before construction of solar collection systems.

I. Wind energy conversion systems (WECS) that have a rated capacity of no more than fifteen (15) kilowatts, provided the following standards are met:

1. No more than one (1) WECS shall be allowed per lot.

2. The diameter of the circle described by the moving rotor blades shall not exceed thirty-five (35) feet.

3. The height of the WECS (including the rotor blades) shall not exceed twenty (20) feet or the height of the principal building on the property, whichever is greater.

4. The WECS (including the rotor blades) shall meet the required lot setbacks, or fifty (50) percent of the height of the WECS (including the rotor blades), whichever is greater.

5. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.

6. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.

7. Building and electrical permits must be obtained by the applicant following the submission of all information required by the applicable State code and submission of certification by the manufacturer's engineer or other qualified engineer that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.

8. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Section 3. City of Long Lake Zoning Ordinance, Section 13 (B-1 Limited Business District), Subd. 4 is amended to add the following subparts:

E. Solar energy systems, exterior, provided the following standards are met:

1. All solar panels attached to the wall of a principal or accessory building must be flush mounted or at an angle of no more than a five (5) percent deviation from the wall.

2. Roof mounted solar panels shall comply with the following:

a. The height of a roof mounted solar panel shall not exceed twenty (20) feet as measured from the ground or three (3) feet above the ridgeline of the roof peak of the principal building on the property, whichever is greater.

b. On flat or shed roofs, the height of a solar mounted roof panel shall not exceed ten (10) feet as measured from the surface of the roof, or twenty (20) feet as measured from the ground, whichever is greater.

c. The solar panels shall be mounted to align with the slope of the roof, and shall not deflect more than ten (10) percent from the roof angle.

d. Solar roof panels shall be setback from the roof edge a minimum of one (1) foot and shall not be located on any roof overhang.

3. Window awnings constructed to allow solar energy collection shall be permitted provided all required building setbacks are met.

4. All required permits must be obtained before construction of solar collection systems.

F. Wind energy conversion systems (WECS) that have a rated capacity of no more than fifteen (15) kilowatts, provided the following standards are met:

1. No more than one (1) WECS shall be allowed per lot.

2. The diameter of the circle described by the moving rotor blades shall not exceed thirty-five (35) feet.

3. The height of the WECS (including the rotor blades) shall not exceed twenty (20) feet or the height of the principal building on the property, whichever is greater.

4. The WECS (including the rotor blades) shall meet the required lot setbacks, or fifty (50) percent of the height of the WECS (including the rotor blades), whichever is greater.

5. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.

6. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.

7. Building and electrical permits must be obtained by the applicant following the submission of all information required by the applicable State code and submission of certification by the manufacturer's engineer or other qualified engineer that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.

8. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Section 4. City of Long Lake Zoning Ordinance, Section 14A (B-2A Service Business District), Subd. 4 and Section 15 (B-3 Lakeshore Business District), Subd. 3 is amended to add the following subparts:

C. Solar energy systems, exterior, provided the following standards are met:

1. All solar panels attached to the wall of a principal or accessory building must be flush mounted or at an angle of no more than a five (5) percent deviation from the wall.

2. Roof mounted solar panels shall comply with the following:

a. The height of a roof mounted solar panel shall not exceed twenty (20) feet as measured from the ground or three (3) feet above the ridgeline of the roof peak of the principal building on the property, whichever is greater.

b. On flat or shed roofs, the height of a solar mounted roof panel shall not exceed ten (10) feet as measured from the surface of the roof, or twenty (20) feet as measured from the ground, whichever is greater.

c. The solar panels shall be mounted to align with the slope of the roof, and shall not deflect more than ten (10) percent from the roof angle.

d. Solar roof panels shall be setback from the roof edge a minimum of one (1) foot and shall not be located on any roof overhang.

3. Window awnings constructed to allow solar energy collection shall be permitted provided all required building setbacks are met.

4. All required permits must be obtained before construction of solar collection systems.

D. Wind energy conversion systems (WECS) that have a rated capacity of no more than fifteen (15) kilowatts, provided the following standards are met:

1. No more than one (1) WECS shall be allowed per lot.

2. The diameter of the circle described by the moving rotor blades shall not exceed thirty-five (35) feet.

3. The height of the WECS (including the rotor blades) shall not exceed twenty (20) feet or the height of the principal building on the property, whichever is greater.

4. The WECS (including the rotor blades) shall meet the required lot setbacks, or fifty (50) percent of the height of the WECS (including the rotor blades), whichever is greater.

5. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.

6. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.

7. Building and electrical permits must be obtained by the applicant following the submission of all information required by the applicable State code and submission of certification by the manufacturer's engineer or other qualified engineer that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.

8. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Section 5. City of Long Lake Zoning Ordinance, Section 15 (VC-1 Village Commercial District), Subd. 4 is amended to add the following subparts:

E. Solar energy systems, exterior, provided the following standards are met:

1. All solar panels attached to the wall of a principal or accessory building must be flush mounted or at an angle of no more than a five (5) percent deviation from the wall.

2. Roof mounted solar panels shall comply with the following:

   a. The height of a roof mounted solar panel shall not exceed twenty (20) feet as measured from the ground or three (3) feet above the ridgeline of the roof peak of the principal building on the property, whichever is greater.

   b. On flat or shed roofs, the height of a solar mounted roof panel shall not exceed ten (10) feet as measured from the surface of the roof, or twenty (20) feet as measured from the ground, whichever is greater.

   c. The solar panels shall be mounted to align with the slope of the roof, and shall not deflect more than ten (10) percent from the roof angle.

   d. Solar roof panels shall be setback from the roof edge a minimum of one (1) foot and shall not be located on any roof overhang.

3. Window awnings constructed to allow solar energy collection shall be permitted provided all required building setbacks are met.

4. All required permits must be obtained before construction of solar collection systems.

F. Wind energy conversion systems (WECS) that have a rated capacity of no more than fifteen (15) kilowatts, provided the following standards are met:

1. No more than one (1) WECS shall be allowed per lot.

2. The diameter of the circle described by the moving rotor blades shall not exceed thirty-five (35) feet.

3. The height of the WECS (including the rotor blades) shall not exceed twenty (20) feet or the height of the principal building on the property, whichever is greater.

4. The WECS (including the rotor blades) shall meet the required lot setbacks, or fifty (50) percent of the height of the WECS (including the rotor blades), whichever is greater.

5. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.

6. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.

7. Building and electrical permits must be obtained by the applicant following the submission of all information required by the applicable State code and submission of certification by the manufacturer's engineer or other qualified engineer that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.

8. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Section 6. City of Long Lake Zoning Ordinance, Section 16 (I-1 Industrial District), Subd. 3 is amended to add the following subparts as follows:

C. Solar energy systems, exterior, provided the following standards are met:

1. All solar panels attached to the wall of a principal or accessory building must be flush mounted or at an angle of no more than a five (5) percent deviation from the wall.

2. Roof mounted solar panels shall comply with the following:

   a. The height of a roof mounted solar panel shall not exceed twenty (20) feet as measured from the ground or three (3) feet above the ridgeline of the roof peak of the principal building on the property, whichever is greater.

   b. On flat or shed roofs, the height of a solar mounted roof panel shall not exceed ten (10) feet as measured from the surface of the roof, or twenty (20) feet as measured from the ground, whichever is greater.

   c. The solar panels shall be mounted to align with the slope of the roof, and shall not deflect more than ten (10) percent from the roof angle.

   d. Solar roof panels shall be setback from the roof edge a minimum of one (1) foot and shall not be located on any roof overhang.

3. Window awnings constructed to allow solar energy collection shall be permitted provided all required building setbacks are met.

4. All required permits must be obtained before construction of solar collection systems.

D. Wind energy conversion systems (WECS) that have a rated capacity of no more than fifteen (15) kilowatts, provided the following standards are met:

1. No more than one (1) WECS shall be allowed per lot.

2. The diameter of the circle described by the moving rotor blades shall not exceed thirty-five (35) feet.

3. The height of the WECS (including the rotor blades) shall not exceed twenty (20) feet or the height of the principal building on the property, whichever is greater.

4. The WECS (including the rotor blades) shall meet the required lot setbacks, or fifty (50) percent of the height of the WECS (including the rotor blades), whichever is greater.

5. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.

6. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.

7. Building and electrical permits must be obtained by the applicant following the submission of all information required by the applicable State code and submission of certification by the manufacturer's engineer or other qualified engineer that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.

8. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Section 7. City of Long Lake Zoning Ordinance, Section 16 (I-1 Industrial District), Subd. 4 is amended to add the following subpart as follows:

J. Wind Energy Conversion Systems (WECS) that have a rated capacity of no more one-hundred and sixty (160) kilowatts, provided the following standards are met:

1. The maximum height of the WECS (including the rotor blades) shall not exceed one-hundred and fifteen (115) feet.

2. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.

3. The base of the WECS tower shall meet all setback requirements required for the principal building of the zoning district.

4. The rotor blades shall not extend into the required setbacks required for the principal building on the property.

5. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.

6. The applicant shall submit engineering certification by a qualified engineer of the turbine, rotor blades, foundation, safety, predicted noise levels and tower design that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.

7. Greater setbacks for the WECS monopole and rotor blades may be required by the City based upon the review of the engineering certification required in 6. above, to ensure safety and to minimize impacts on adjacent properties.

8. Building and electrical permits must be obtained by the applicant in compliance with the applicable State code prior to commencement of any grading or building associated with the WECS.

9. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Section 8. City of Long Lake Zoning Ordinance, Section 16A (I-2 Industrial District), Subd. 3 and Section 16B (INST- Institutional District), Subd. 3 is amended to add the following subparts as follows:

D. Solar energy systems, exterior, provided the following standards are met:

1. All solar panels attached to the wall of a principal or accessory building must be flush mounted or at an angle of no more than a five (5) percent deviation from the wall.

2. Roof mounted solar panels shall comply with the following:

a. The height of a roof mounted solar panel shall not exceed twenty (20) feet as measured from the ground or three (3) feet above the ridgeline of the roof peak of the principal building on the property, whichever is greater.

b. On flat or shed roofs, the height of a solar mounted roof panel shall not exceed ten (10) feet as measured from the surface of the roof, or twenty (20) feet as measured from the ground, whichever is greater.

c. The solar panels shall be mounted to align with the slope of the roof, and shall not deflect more than ten (10) percent from the roof angle.

d. Solar roof panels shall be setback from the roof edge a minimum of one (1) foot and shall not be located on any roof overhang.

3. Window awnings constructed to allow solar energy collection shall be permitted provided all required building setbacks are met.

4. All required permits must be obtained before construction of solar collection systems.

E. Wind energy conversion systems (WECS) that have a rated capacity of no more than fifteen (15) kilowatts, provided the following standards are met:

1. No more than one (1) WECS shall be allowed per lot.

2. The diameter of the circle described by the moving rotor blades shall not exceed thirty-five (35) feet.

3. The height of the WECS (including the rotor blades) shall not exceed twenty (20) feet or the height of the principal building on the property, whichever is greater.

4. The WECS (including the rotor blades) shall meet the required lot setbacks, or fifty (50) percent of the height of the WECS (including the rotor blades), whichever is greater.

5. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.

6. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.

7. Building and electrical permits must be obtained by the applicant following the submission of all information required by the applicable State code and submission of certification by the manufacturer's engineer or other qualified engineer that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.

8. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Section 9. City of Long Lake Zoning Ordinance, Section 16A (I-2 Industrial District), Subd. 4 is amended to add the following subpart as follows:

G. Wind Energy Conversion Systems (WECS) that have a rated capacity of no more one-hundred and sixty (160) kilowatts, provided the following standards are met:

1. The maximum height of the WECS (including the rotor blades) shall not exceed one-hundred and fifteen (115) feet.
2. Rotor blades must maintain a minimum of twelve (12) feet of clearance between the lowest point of the blade and the ground.
3. The base of the WECS tower shall meet all setback requirements required for the principal building of the zoning district.
4. The rotor blades shall not extend into the required setbacks required for the principal building on the property.
5. The WECS (including the rotor blades) shall be designed utilizing earth tone colors and textures that are compatible with the adjacent buildings.
6. The applicant shall submit engineering certification by a qualified engineer of the turbine, rotor blades, foundation, safety, predicted noise levels and tower design that the WECS and associated facilities are of adequate design for the soil and climate conditions of Long Lake.
7. Greater setbacks for the WECS monopole and rotor blades may be required by the City based upon the review of the engineering certification required in 6. above, to ensure safety and to minimize impacts on adjacent properties.
8. Building and electrical permits must be obtained by the applicant in compliance with the applicable State code prior to commencement of any grading or building associated with the WECS.
9. If the WECS has not been operated or is inoperable for a period of one year, or fails to meet the conditions of this ordinance, the City may order it be dismantled and the site restored to its original condition.

Note: The ~~stricken language~~ is deleted; the underlined language is inserted.

Date of Adoption:

Date of Publication:

Effective Date:

BY:

Tim Hultmann, Mayor

ATTEST:

Jeanette Moeller, City Clerk