ORDINANCE NO. _____

(Adoption of this ordinance would establish regulations pertaining to any solar energy developments in the City of Washington).

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF WASHINGTON, ILLINOIS BY ADDING A NEW CHAPTER ENTITLED "SOLAR ENERGY CODE"

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WASHINGTON, TAZEWELL COUNTY, ILLINOIS, as follows:

Section 1. That Chapter 154 of the Code of Ordinances of the City of Washington be, and the same hereby is, amended by adding a new subchapter thereof entitled, entitled "Solar Energy Code," which shall read as follows:

"SOLAR ENERGY CODE

§ 154.725 PURPOSE

The purpose of this Chapter is to facilitate the construction, installation, and operation of Solar Energy Systems in the City in a manner that promotes economic development and ensures the protection of health, safety, and welfare while also avoiding adverse impacts on adjoining property or on the environment. It is the intent of this ordinance to encourage the development of Solar Energy Systems that reduce reliance on foreign and out-of-state energy resources, bolster local economic development and job creation. This Chapter is not intended to abridge safety, health or environmental requirements contained in other applicable codes, standards, or ordinances.

§ 154.726 DEFINITIONS

For the purpose of this chapter, the following definitions are adopted:

ACCESSORY. As applied to a building, structure, or use, one which is on the same lot with, incidental to and subordinate to the main or principal structure or use and which is used for purposes customarily incidental to the main or principal structure, or the main or principal use.

BUILDING INTEGRATED SOLAR ENERGY SYSTEM. A solar energy system that integrates photovoltaic modules into the building structure as the roof or façade and which does not alter the relief of the roof.

COMMERCIAL/LARGE SCALE SOLAR FARM. A utility scale commercial facility that converts sunlight to electricity, whether by photovoltaics, concentrating solar thermal devices, or various experimental technologies for onsite or offsite use with the primary purpose of selling wholesale or retail generated electricity.

COMMUNITY SOLAR GARDEN. A community solar-electric (photovoltaic) array, of no more than five (5) acres in size, that provides retail electric power (or financial proxy for retail power) to multiple households or businesses residing in or located off-site from the location of the solar energy system.

GROUND MOUNT SOLAR ENERGY SYSTEM. A solar energy system that is directly installed onto the ground and is not attached or affixed to an existing structure.

PHOTOVOLTAIC SYSTEM. A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells, that generate electricity whenever light strikes them.

QUALIFIED SOLAR INSTALLER. A trained and qualified electrical professional who has the skills and knowledge related to the construction and operation of solar electrical equipment and installations and has received safety training on the hazards involved.

ROOF MOUNT SOLAR ENERGY SYSTEM. A solar energy system in which solar panels are mounted on top of a building roof as either a flush mounted system or as modules fixed to frames which can be tilted toward the south at an optimal angle.

SOLAR COLLECTOR. A device, structure or part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical or electrical energy.

SOLAR ENERGY. Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

SOLAR ENERGY SYSTEM (SES). The components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing. The term applies, but is not limited to, solar photovoltaic systems, solar thermal systems and solar hot water systems.

SOLAR STORAGE BATTERY/UNIT. A component of a solar energy device that is used to store solar generated electricity or heat for later use.

SOLAR THERMAL SYSTEMS. Solar thermal systems that directly heat water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water and heating pool water.

§ 154.727 GROUND MOUNT AND ROOF MOUNT SOLAR ENERGY SYSTEMS

A. Roof Mount Solar Energy Systems designed to serve only the occupants of the parcel on which they are located and placed on the roof of a principal structure shall not require a special use. Roof Mount Solar Energy Systems designed to serve only the occupants of the parcel on which they are located and placed on the roof of an accessory structure shall require a special use. Ground Mount Solar Energy Systems shall not be permitted. Such systems are accessory structures allowed only on zoning lots with a principal structure. An application shall be submitted to the Code Enforcement Officer demonstrating compliance with all applicable provisions of the City Code and with the following requirements:

1. Height:

    a. Roof mount solar energy systems placed on a principal structure shall not exceed the height of the principal structure on the zoning lot where the system is located.

b. Roof mount solar energy systems placed on an accessory structure shall not exceed the height of the accessory structure on the zoning lot where the system is located.

2. Mounting on Pitched Roofs: Roof mount solar energy systems on pitched roofs shall not be permitted to tilt or rotate at a slope greater or less than the roof to which it is attached. Such roof mount solar energy systems cannot extend more than eight inches (8") from the roof surface to which it is attached.

3. Mounting on Flat Roofs: Roof mount solar energy systems on flat roofs on residential or non-residential structures shall not extend more than two feet (2') vertically or extend above the building parapet, whichever is less.

4. Setback: The collector surface and mounting devises for roof mount systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built. Exterior piping for solar systems generating heated water may extend beyond the perimeter of the building on a side yard exposure.

5. Roof Coverage: Roof mount solar energy systems shall not occupy more than fifty percent (50%) of the aggregate square footage of the roof area. If a roof mount solar energy system is installed on multiple roofs on the same structure, the coverage on any one (1) roof side shall not occupy more than thirty percent (30%) of the total square footage of that particular roof side on which the roof mount is located and shall not exceed fifty percent (50%) of the aggregate square footage of the roofs on which the roof mounts are located. The roof shall be considered a part of a building completely covering and permanently attached to such building and can be flat or pitched. Any roof that has a pitch of more than 1.5 inches in 12 inches shall be considered a separate roof side.

6. Reflection Angles: Reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties.

7. Visibility: Solar energy systems shall be located in a manner to reasonably minimize view blockage for surrounding properties and shading of property to the north while still providing adequate solar access for collectors. They shall be designed to blend into the architecture of the building or be screened from routine view from public rights-of-way provided that the screening shall not affect the operation of the system.

8. Color: Roof mount solar energy systems shall match, as closely as possible, the color of the roof to which it is attached.

9. Safety: Roof mount solar energy systems, excluding building integrated systems, shall allow for adequate roof access for firefighting purposes to the south facing or flat roof upon which the panels are mounted.

10. Approved Solar Components: Electric solar energy system components shall have a UL listing or approved equivalent and solar hot water systems shall have an SRCC rating.

11. Compliance with Building Codes: All solar energy systems shall meet approval of any currently adopted International Building Code, National Electric Code, and Illinois Plumbing Code.

12. Utility Notification: All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

13. Restrictions on Solar Energy Systems Limited: Consistent with 765 ILCS 165, no homeowner's agreements, covenants, common interest community or other contracts between multiple property owners within a subdivision shall prohibit or restrict homeowners from installing solar energy systems.

14. Historic Buildings: Solar energy systems on designated historic landmarks or within designated historic districts must receive approval of the Historic Preservation Commission, consistent with the standards for solar energy systems on historically designated buildings published by the U.S. Department of Interior.

§ 154.728 BUILDING INTEGRATED SOLAR ENERGY SYSTEMS

Building Integrated Solar Energy Systems shall be permitted in all Zoning Districts in the City without a Special Use but shall meet the requirements of all applicable provisions of the City Code, including the currently adopted International Building Code.

§ 154.729 COMMUNITY SOLAR GARDENS

Community Solar Gardens are allowed as a Special Use in all zoning districts subject to the following requirements:

A. Community Solar Gardens may be located on rooftops.

B. An interconnection agreement must be completed with the electric utility in whose service the territory the system is located.

C. Dimensional Standards: All solar garden related structures in newly platted and existing subdivisions shall comply with the principal structure setback, height, and coverage limitations for the district in which the system is located.

D. Other Standards:

1. Ground Mount Systems shall comply with all required standards for structures in the zoning district in which the system is located.

2. All solar gardens shall comply with the currently adopted International Building Code.

3. All solar gardens shall comply with all other State requirements.

§ 154.730 COMMERCIAL/LARGE SCALE SOLAR FARM

Commercial/Large Scale Solar Farms may be allowed by Special Use in the AG-1 Agriculture and I-2 Heavy Industrial Districts. The following information shall also be submitted as part of an application for a Commercial/Large Scale Solar Farm:

A. A site plan with existing conditions showing the following:

1. Existing property lines and property lines extending one hundred (100) feet from the exterior boundaries including the names of adjacent property owners and the current use of those properties.

2. All routes that will be used for the construction and maintenance purposes shall be identified on the site plan. All routes for either egress or ingress shall be shown.

3. Location and size of any abandoned wells, sewage treatment systems.

4. Existing buildings and impervious surfaces.

5. A contour map showing topography at two (2) foot intervals. A contour map of surrounding properties may also be required.

6. Existing vegetation (list type and percent of coverage: i.e. cropland/plowed fields, grassland, wooded areas, etc.)

7. Any delineated wetland boundaries.

8. A copy of the current FEMA FIRM maps that shows the subject property including the one hundred (100)-year floor elevation and any regulated flood protection elevation, if available.

9. Surface water drainage patterns.

10. The location of any subsurface drainage tiles.

11. Location and spacing of the solar collector.

12. Location of underground and overhead electric lines connecting the solar farm to a building, substation or other electric load.

13. New electrical equipment other than at the existing building or substations that is to be the connection point for the solar farm.

B. A site plan with proposed conditions showing the following:

1. Location and spacing of the solar panels.

2. Location of access roads.

3. Location of underground or overhead electric lines connecting the solar farm to a building, substation, or other electric load.

4. New electrical equipment other than at the existing building or substation that is to be the connection point for the solar farm.

C. Fencing and Weed/Grass Control

1. An acceptable weed/grass control plan for property inside and outside the fenced area for the entire property shall be submitted. The applicant and any successor shall during the operation of the Solar Farm adhere to the weed/grass control plan.

2. Perimeter fencing shall be installed around the boundary of the solar farm having a maximum height of eight (8) feet. The fence shall contain appropriate warning signage that is posted such that it is clearly visible on the site.

3. The applicant shall maintain the fence in good condition.

D. Manufacturer's Specifications: The manufacturer's specifications and recommended installation methods for all major equipment, including solar panels/collectors, mounting systems, and foundations for poles and racks.

E. Connection and Interconnection

1. A description of the method of connecting the solar array to a building or substation.

2. Utility interconnection details and a copy of written notification to the utility company requesting the proposed interconnection.

F. Setbacks: A minimum of fifty (50) feet must be maintained from all property lines. Solar panels shall be kept at least five hundred (500) feet from a residence that is not part of the parcel on which the facility is located.

G. Fire Protection: A fire protection plan for the construction and the operation of the facility, and emergency access to the site.

H. Endangered Species and Wetlands: Solar Farm developers shall be required to initiate a natural resource review consultation with the Illinois Department of Natural Resources (IDNR) through the Department's online EcoCat Program or any successor program. Areas reviewed through this process will be endangered species and wetlands. The cost of the EcoCat consultation shall be borne by the developer.

I. Road Use Agreements: All routes on City streets that will be used for the construction and maintenance purposes shall be identified on the site plan. All routes for either egress or ingress need to be shown. The routing shall be approved subject to the approval of the City Engineer. The Solar Farm Developer shall complete and provide a preconstruction baseline survey to determine existing road conditions for assessing potential future damage due to development related traffic. The development shall provide a road repair plan to ameliorate any and all damage, installation, or replacement of roads that might be required by the developer. The developer shall provide a letter of credit or surety bond in an amount and form approved by the Code Enforcement Officer when warranted.

J. Stormwater and NPDES: Solar farms are subject to the City's stormwater management, erosion, and sediment control provisions and NPDES permit requirements.

K. Decommissioning of the Solar Farm

1. The Developer shall provide a decommissioning plan for the anticipated service life of the facility or in the event the facility is abandoned or has reached its life expectancy. If the solar farm is out of service or not producing electrical energy for a period of twelve (12) months, it will be deemed nonoperational and decommissioning and removal of that facility shall commence according to the decommissioning plan as provided and approved. A cost estimate for the decommissioning of the facility shall be prepared by a professional engineer or contractor who has expertise in the removal of the solar farm. The decommissioning cost estimate shall explicitly detail the cost before considering any projected salvage value of the out of service solar farm. A restoration plan shall also be provided for the site with the application. The decommissioning plan shall include the following:

2. Removal of the following within six (6) months after the farm became non-operational:

    a. All solar collectors and components, above ground improvements and outside storage.

    b. Foundations, pads and underground electrical wires ad reclaim site to a depth of four (4) feet below the surface of the ground.

    c. Hazardous material from the property and dispose in accordance with Federal and State law.

3. The decommissioning plan shall also include an agreement between the applicant and the City that:

    a. The financial resources for decommissioning shall be secured by a Surety Bond, or cash deposited in an escrow account with an escrow agent acceptable to the Code Enforcement Officer.

    b. The agreement shall establish conditions in which the funds will be disbursed.

    c. The City shall have access to the security for the purpose of completing decommissioning if decommissioning is not completed by the owner of the project within six (6) months of the end of project life or facility abandonment.

    d. The City shall have the right to enter the site, pursuant to reasonable notice to effect or complete decommissioning.

    e. The City shall have the right to seek injunctive relief to effect or complete decommissioning, and to seek reimbursement from the owner for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real estate owned by applicant or applicant's successor, or in which they have an interest, for the amount of the excess, and to take all steps allowed by law to enforce said lien.

§154.731 COMPLIANCE WITH BUILDING CODE

All solar energy systems shall require a permit from the Code Enforcement Officer and shall comply with any other applicable provisions of the City Code, State law, or Federal law.

§ 154.732 LIABILITY INSURANCE

The owner operator of the solar farm shall maintain a current general liability policy covering bodily injury and property damage and name the City as an additional insured with limits of at least one million dollars ($1,000,000.00) per occurrence and five million dollars ($5,000.000.00) in the aggregate with a deductible of no more than five thousand dollars ($5,000.00).

§ 154.733 ADMINISTRATION AND ENFORCEMENT

The Code Enforcement Officer shall enforce the provisions of this chapter through inspections on such schedule as he deems appropriate. The Code Enforcement Officer has the authority to enter upon the premises where a solar energy system is located at any time by coordinating a reasonable time with the operator/owner of the facility. Any person, firm or cooperation who violates, disobeys, omits, neglects, refuses to comply with, or resists enforcement of any of the provisions of this chapter shall be subject to the general penalty provisions of the City Code.

§ 154.734 BUILDING PERMIT FEES

The fees for processing the applications for solar energy systems shall be as follows:

0-4 kilowatts (kW-dc)	$75.00
5-10 kilowatts (kW-dc)	$150.00
11-50 kilowatts (kW-dc)	$300.00
51-100 kilowatts (kW-dc)	$500.00
101-500 kilowatts (kW-dc)	$1,000.00
501-1000 kilowatts (kW-dc)	$3,000.00
1001-2000 kilowatts (kW-dc)	$5,000.00

Section 2. That this ordinance shall be in full force and effect from and after its passage, approval, and publication as provided by law.

Section 3. That all ordinances or parts thereof in conflict herewith are hereby expressly repealed.

PASSED AND APPROVED this _____ day of _____, 2018.

AYES: _____

NAYS: _____

_____
Mayor

ATTEST:

_____
City Clerk