

**ARTICLE XIV - ARRAYS****Section 1. Purpose**

The purpose of this section is to accomplish the following objectives with the least possible regulation:

1. To encourage the development of on-site energy production and consumption;
2. To protect the public health and safety;
3. To promote the general welfare of the community;
4. To meet the goals of the Comprehensive Plan;
5. To conserve the environment, wildlife habitat, fisheries and unique natural areas; and
6. To fit these systems harmoniously into the fabric of the community by providing standards for alternative energy systems and other types of arrays.

**Section 2. Authority**

The Washington Planning Board is vested with the authority to review and approve, approve with conditions or reject any application for arrays as defined in this Ordinance.

1. The Washington Planning Board reserves the right to hire independent third party consultants to review array proposals in order to determine the impact to surrounding properties or public safety implications or resolve any other issues regarding the proposal.
2. In the event that the Planning Board requires expert opinions, advice or testimony during the course of reviewing the application, it will use due diligence to obtain and utilize free services from governmental or non-profit sources.
3. Should the Planning Board be unable to obtain and utilize free services, it shall require the applicant to pay for such services, after giving notice to the applicant of the name of the expert, the area of qualification of the expert, and the purpose for which the expert is required, and the approximate cost of the expert.

4. The applicant shall be provided with an opportunity to meet with the Planning Board to arrange a schedule for payment of the costs.
5. The applicant shall have the right to request a public hearing before the Appeals Board to determine if the experts, as noticed by the Planning Board, are necessary to a determination of any issue properly before the Planning Board, and if the approximate costs of the expert are reasonable.
6. The applicant shall request the hearing within 10 days of receipt of the notice establishing the necessity and costs of any independent third party consultant, or such time as is agreed to by the Planning Board and the applicant.
7. It will be the applicant's burden to prove that the requested expert is unnecessary, or that the cost is not reasonable.

In addition to any other applicable provisions of this Ordinance, before granting Site Plan Approval for any land-use activity described in this section, the Planning Board must find that the proposed plan will comply with such of the following standards as are applicable.

### **Section 3. Exempt Arrays**

The following arrays are exempt from this Article provided they meet all other requirements of this Ordinance:

1. Roof-mounted on any legally-permitted residential or residential accessory structure.
2. Ground- or pole-mounted for private use with a panel area less than 5,000 square feet.
3. Building integrated solar (i.e., shingle, hanging solar, canopy, etc.).
4. Repair or replacement of array components that do not enlarge the area of the existing array.
5. Arrays regulated by the Washington Wireless Telecommunication Facility (WTF) Ordinance.

### **Section 4. Location and Size**

Arrays may be permitted in all districts subject to all requirements of securing site plan approval and a building permit and the following size restrictions:

1. Resource Protection (RP) District: less than or equal to one-half ( $\frac{1}{2}$ ) acre.
2. Farm and Forest (FF) District: less than or equal to ten (10) acres.
3. Rural (RU) District: less than or equal to five (5) acres.
4. Rural/Commercial (RC) District: any size.
5. Village (VI) District: less than or equal to one-half ( $\frac{1}{2}$ ) acre.
6. Planned Development (PD) District: any size.
7. Shoreland Limited Residential (LR) District: less than or equal to one-half ( $\frac{1}{2}$ ) acre.
8. Watershed (WS) District: less than or equal to the underlying district limit.
9. Historic Preservation (HP) District: less than or equal to one-half ( $\frac{1}{2}$ ) acre.

#### **Section 5. Site Plan Review**

All non-exempt arrays must be approved by the Washington Planning Board through the Town of Washington Site Plan Review process which is a part of this Ordinance.

The following requirements are additional to all other requirements of this Ordinance to be included in the Site Plan.

1. A Site Plan stamped and certified by a Maine registered engineer.
2. A revegetation plan for any cleared areas with appropriate plantings that are native to the region when the facility is decommissioned.
3. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) whose minimum requirements meet the standards in Section 6, below. Such plan must be filed in the Knox County Registry of Deeds prior to the first operation of the array.
4. A Waste Stream Management Plan (WSMP) for the construction waste and debris at the site of the said Array, including but not limited to cardboard, wood, scrap metal, scrap wire, and clearing and grading wastes, from the construction site and

the disposal site(s) of such waste. Information on the amount of material that is being recycled shall be included in the WSMP.

#### Section 6. Guarantee For Removal

At the time of approval of a proposed array, and prior to initiating construction of any array within the Town of Washington, the applicant must guarantee the costs for the removal of the facility.

1. The amount of the guarantee shall be equal to the estimated removal cost, provided by the applicant and certified by a professional civil engineer licensed in Maine or a professional array construction company.
2. The owner of the facility shall provide the Planning Board with a revised removal cost estimate and structural evaluation prepared by a professional civil engineer licensed in Maine or a professional array construction company every five (5) years from the date of the Planning Board's approval of the site plan.
3. If the cost has increased more than fifteen (15) percent, then the owner of the facility shall provide additional security in the amount of the increase. The applicant may also request adjustments in the guarantee.
4. Types and Contents Of Guarantee

One of the following performance guarantees chosen by the applicant shall be provided on approval of the application.

##### a. Interest-Bearing Escrow Account

A cash contribution equal to the estimated removal cost for the establishment of an escrow account shall be made by either a certified check made out to the Town, direct deposit into a savings account, or purchase of a certificate of deposit.

- i. For any account opened by the applicant, the Town shall be named as owner or co-owner, and consent of the Town shall be required for a withdrawal.
- ii. Any interest earned on the escrow account shall be returned to the applicant unless the Town has found it necessary to draw on the account, in which case the interest earned shall be proportionately

divided between the amount returned to the applicant and the amount withdrawn to complete the required work.

b. Performance Bond

A performance bond shall detail the conditions of the bond, the method for release of the entire bond or portions of the bond to the Town, and the procedures for collection by the municipality. The bond documents shall specifically reference the array facility for which approval is sought.

c. Irrevocable Letter of Credit

An irrevocable letter of credit from a bank or other lending institution shall indicate that funds have been set aside for the removal of the array facility and may not be used for any other project or loan.

The conditions and amount of the performance guarantee shall be determined by the Planning Board with the advice of the Town Selectmen, and/or Town Attorney, expenses paid for by the applicant.

**Section 7. Decommissioning and Abandonment**

1. The lessee of the Facility, or the owner of the parcel if there is no lessee, will do the following as a minimum to decommission the project.

- a. Remove all non-utility owned equipment, conduits, structures, fencing, and foundations to a depth of at least four feet below grade.
- b. Remove all graveled areas and access roads unless the owner of the leased real estate requests in writing for it to stay in place.
- c. Restore the land to a condition reasonably similar to its condition before development, including replacement of top soil removed or eroded.
- d. Revegetate any cleared areas with appropriate plantings that are native to the region according to the approved Site Plan unless requested in writing by the owner of the real estate to not revegetate due to plans for agricultural planting or other development subject to site plan review.

2. All said removal and decommissioning shall occur within 12 months of the facility ceasing to operate.
3. Abandonment will occur as a result of any of the following conditions unless the lessee or owner of the facility or of the parcel notifies the Code Enforcement Officer of the intent to maintain and reinstate the operation of the facility within 30 days of the following events:
  - a. The land lease ends; or
  - b. The system does not function for 12 months; or
  - c. The system is damaged and will not be repaired or replaced.

A notice of the intent to maintain and reinstate the operation of the facility shall be updated every six months with a statement of the progress made towards that goal.

If the facility has not returned to operational condition within two years from the date of the first notice of the intent to maintain and reinstate the operation of the facility the Code Enforcement Officer shall find the facility has been abandoned unless there is documentable evidence that the process has had significant progress and in the Code Enforcement Officer's opinion is likely to be completed in a timely manner.

4. Upon determination of abandonment based on the foregoing, the Code Enforcement Officer shall notify the party (or parties) responsible by certified mail or by hand delivery with signed receipt that they must remove the facility and restore the site to its condition prior to development within three hundred and sixty (360) days of notice by the Code Enforcement Officer. A copy of the notice shall be forwarded by the Code Enforcement Officer to the Board of Selectmen.
  - a. In the event the lessee of the facility fails to remove the array and its components as outlined above, the landowner shall remove the facility within 90 days of notice by the Code Enforcement Officer.
  - b. In the event the landowner fails to remove the facility as stated above, the Town of Washington shall have the facility removed at the expense of the landowner.

- c. Any unpaid costs associated with the removal after one year of removal shall be enforced as a tax lien placed on the real estate of the array site.

**Section 8. General Standards for All Arrays**

1. Arrays legally constructed prior to the effective date of this Article shall not be required to meet the requirements of this Article, unless they are expanded.
2. Unless otherwise specified through a written contract or agreement, a copy of which is on file with the Washington Code Enforcement Officer, the property owner of record will be presumed to be the responsible party for owning and maintaining the array.
3. Approval under this Article is conditional upon compliance with all other provisions of the Land Use Ordinance, the Maine Plumbing and Electrical Codes, Natural Resources Protection Act, Site Law, Stormwater Management Law or other applicable regulations and any requirements of the local utility if any array is to be connected to any existing electric grid.
4. An array shall not be constructed until the Site Plan has been approved by the Planning Board and a Building Permit has been issued by the Code Enforcement Officer and all time for appeal by others has expired during which no appeal has been filed.
5. All arrays shall be operated and located such that no disruptive electromagnetic interference with signal transmission or reception is caused beyond the site. If it has been demonstrated that the system is causing disruptive interference beyond the site, the system operator shall promptly eliminate the disruptive interference or cease operation of the system.
6. All on-site electrical wires or piping associated with the system shall be installed underground except for "tie-ins" from above-ground mounted installations and to public-utility company transmission poles, towers and/or lines. This standard may be waived by the Planning Board if the project terrain is determined to be unsuitable for underground installation.
7. The array site shall not display any permanent or temporary signs, writing, symbols, logos or any graphic representation

of any kind except appropriate manufacturer's or installer's identification and warning signs.

8. Array placement must be designed to minimize or negate any solar glare onto nearby properties, airports or roadways.
9. If lighting is provided at site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or the night sky. Motion sensor control is preferred.
10. Any point of potential contact of people or animals with generated electric current must be secured.
11. The boundaries of any array that border any road or any abutting residential dwelling lot shall consist of a vegetated buffer the width of the required setback along that border additionally to any fence that may be erected and existing vegetation should be used to satisfy these planting requirements where possible. No vegetation or fence shall interfere with a required clear sight triangle at a driveway or intersection.

Berms with vegetation are encouraged as a component of any buffer and the Planning Board may allow up to 25% reduction in the required buffer width with a berm.
12. Arrays covering permanent parking lots and other hardscape areas approved by the Planning Board are encouraged in order to limit the amount of stormwater flowage. Such installations may have the vegetated buffer requirements substituted by the buffer requirements of the overall project at the discretion of the Planning Board.
13. If electric storage batteries are included as part of any array system, they must be installed according to all requirements set forth in the National Electric Code and State Fire Code when in operation. When no longer in operation, the batteries shall be disposed of in accordance with the laws and regulations of the Town of Washington and any other applicable laws and regulations relating to solid, special, or hazardous waste disposal.
14. Financial gain from "Net metering" for electric power is not considered a commercial activity if the benefits of it are for private use.



15. Collective or cooperative arrays are not considered commercial if they benefit only the collective or cooperative owners.

Section 9. Solar Energy Conversion Arrays (SECA)

1. Setbacks:

All parts of the SECA shall be setback from all property lines a distance equal to the required minimum setback of the district in which it is located plus ten (10) feet for each 100,000 square feet or fraction thereof of array collector surface area.

2. Height:

A ground- or pole-mounted SECA shall have a maximum height of 20 feet in all districts as measured from the ground level to the system's highest point at full tilt except for the Rural/Commercial, Farm and Forest, and Planned Development districts where the maximum height shall be 40 feet as measured from the ground level to the system's highest point at full tilt.

3. Roof Load:

The weight of any SECA proposed to be roof mounted on any non-exempt structure must be calculated and a determination must be made in writing by a registered engineer stamped certification or finding that the load rating of the underlying structure can accommodate the additional weight.

4. Lot Coverage:

The maximum surface area of a ground- or pole-mounted panel system, regardless of the mounted angle, shall be calculated as part of the overall lot coverage.

5. Design Standards:

- a. Any height limitations of this Ordinance shall not be applicable to roof-mounted solar collectors provided that such structures are erected only to such height as is reasonably necessary to accomplish the purpose for which they are intended to serve.
- b. SECA installations shall not obstruct solar access to neighboring properties.

- d. The SECA structure shall be a non-reflective color that blends the system and its components into the surrounding landscape to the greatest extent possible and incorporates non-reflective surfaces to minimize any visual disruptions.

**ARTICLE XIV XV - DEFINITIONS**

**Section 2. Definitions**

ARRAY: an installation of more than one component installed, linked or wired together for a single purpose. The area of the system includes all the land of the parcel or parcels it is placed on or inside the perimeter of the system, which extends to any exterior fencing.

For the purposes of this Ordinance, any single antenna or panel greater than 5,000 square feet of surface area or any single wind energy conversion unit greater than 80 feet high is included in this definition.

Examples of arrays are, but are not limited to, solar heating panels, solar photovoltaic panels, concentrated solar thermal installations, antenna arrays and wind farms.

BERM: a barrier constructed of landscaped earth, four (4) feet or more in height measured from the outside base of the berm. Berms may be pierced with reasonable access ways no more than twelve (12) feet in width as approved by the Planning Board.

COMMERCIAL ARRAYS: arrays that provide power or signals for commercial applications, such as but not limited to: fee-based public supply, factories, remote traffic controls, telecommunications, or oil and gas industry applications, except as specifically exempt by this Ordinance.

SOLAR ENERGY CONVERSION ARRAY (SECA): the components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The term applies, but is not limited to, solar photovoltaic (PV) systems, solar thermal systems, concentrated solar thermal installations, and solar hot water systems.