STAFF REPORT

To: Snyderville Basin Planning Commission
From: Ray Milliner, County Planner
Date of Meeting: February 25, 2020
Type of Item: Code Amendment – Work Session
Process: Legislative

RECOMMENDATION: Staff recommends that the Planning Commission review the proposed language to create regulations for Major and Minor Solar Arrays in the Snyderville Basin Development Code and provide direction.

Proposal
The purpose of the amendments is to create regulations for Solar Arrays in the Snyderville Basin. Currently the Code is silent on these structures.

Background
Staff is proposing changes to the Snyderville Basin Development Code. The proposed changes include:

1. Creation of regulations for Minor Solar Arrays. These would be either roof mounted, or ground mounted and would be intended for use by the property owner to supplement the electricity bill. Staff is proposing that these uses be permitted in all zoning districts.
2. Creation of a Major Solar Array. This would be for large scale arrays intended to create electricity for sale to local power companies or to be used for industrial purposes. This use has been proposed as a low impact or conditional use in all zones.

Items for Discussion
Staff is requesting that the Planning Commission review the attached language and provide direction on the following issues.
1. Are the proposed criteria appropriate? Are there other issues that need to be addressed? Are they too restrictive?

**Recommendation**

Staff recommends that the Planning Commission review the proposed language to create regulations for Major and Minor Solar Arrays in the Snyderville Basin Development Code and provide direction.

**Exhibits**

Exhibit A. Proposed Language
MINOR SOLAR ARRAY:

A. Standards: All Minor Solar Array systems shall comply with the following requirements.

1. Setbacks, and Height:

   a. Setbacks: A freestanding Minor Solar Array shall be located a minimum of six feet (6') from all property lines and other structures, except the structure on which it is mounted.

   b. Location: A roof mounted Minor Solar Array shall be designed to be incorporated in the roof plan or architectural features of the Building or Structure to the best extent possible.

      A. Panels shall generally be mounted flush to the roof plane.

      B. In instances where due to the existing roof angle the panel needs to be angled from the roof plane for optimum solar gain, alternative designs may be considered upon review of a visual analysis and mitigation of visual impacts from surrounding properties.

   c. Height: In no case shall a Minor Solar Array exceed by more than three feet (3') the maximum building height permitted in the zoning district in which it is located or shall not extend more than twelve feet (12') above the roofline of the structure upon which it is mounted, whichever is less.

2. Solar Easements: Solar easements are not a requirement for County approval. A property owner who has installed or intends to install a Minor Solar Array shall be responsible for negotiating with other property owners in the vicinity for any desired solar easement to protect solar access for the system and shall record the easement with the Summit County Recorder.

3. Off Street Parking and Loading Requirements: Minor Solar Arrays shall not remove or encroach upon required parking or loading areas for other uses on the site or access to such parking or loading areas.

MAJOR SOLAR ARRAY:

A. Standards: All Major Solar Array systems shall comply with the following requirements.

1. Setbacks: A Major Solar Array shall meet all minimum setback requirements for the zone in which it is located.

2. Height: A Major Solar Array shall not exceed twenty feet (20') in height measured from Existing or Finished grade.

4. Solar Easements: Solar easements are not a requirement for County approval. A property owner who has installed or intends to install a Minor Solar Array shall be responsible for negotiating with other property owners in the vicinity for any desired solar easement to protect solar access for the system and shall record the easement with the Summit County Recorder.
3. Electrical Wires: All electrical wires associated with a Major Solar Array, shall be located underground except for wires connecting to the electrical distribution grid.

4. Nonmaintained Or Abandoned Arrays: The Chief Building Official may require nonmaintained or abandoned solar array to be removed from the premises when such a system has not been repaired or put into use by the owner, person having control or person receiving benefit of such structure within thirty (30) calendar days after notice of nonmaintenance or abandonment is given to the owner, person having control or person receiving the benefit of such structure. The County may require a performance bond or other means of financial assurance to guarantee removal of abandoned structures.

5. Utility Interconnection: No solar array shall be installed that does not meet the requirements of Rocky Mountain Power for an interconnected customer owned generator. Off grid systems shall be exempt from this requirement.

6. Off Street Parking and Loading: No additional parking is required for a solar array; however, a solar array may not replace or hinder existing required parking and loading.

SMALL WIND ENERGY SYSTEMS:

A. Standards: All Small Wind Energy systems shall comply with the following requirements.

1. Setback: The base of the tower shall be set back from all property lines, public rights of way, and public utility lines a distance equal to the total extended height plus five feet (5’). If the small wind energy system is on a roof, the total extended height is equal to the roof height and tower height. Guywires and other support devices shall be set back at least five feet (5’) from all property lines.

2. Tower Height: Where the total extended height meets the sound and setback requirements of this section (see subsection A1 of this section), there shall be no specific height limitation, except as imposed by federal aviation administration (FAA) regulations per subsection A10 of this section.

3. Sound: Sound produced by the turbine under normal operating conditions, as measured at the property line of any adjacent property improved with a dwelling unit at the time of the issuance of the zoning certificate, shall not exceed fifty five (55) dBA for any period of time. The fifty five (55) dBA sound level may be exceeded during short term events out of the owner's control such as utility outages and/or severe windstorms.

4. Appearance, Color, And Finish: Colors permitted include grays, browns, greens, tans and other earth tones. Bright, luminescent, or neon colors are prohibited.

5. Clearance: The blade tip or vane of any small wind energy system shall have a minimum ground clearance of fifteen feet (15’) as measured at the lowest point of the arc of the blades. Blades on small wind energy systems in residential districts shall not exceed twenty percent (20%) of tower height. All portions of the system shall maintain a clearance from power utility lines as required by the Utah high voltage line safety act.
6. **Signage Prohibited:** All signs on a wind generator, tower, building, or other structure associated with a small wind energy system visible from any public road, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification, shall be prohibited.

7. **Lighting:** No illumination of the turbine or tower shall be allowed unless required by the federal aviation administration (FAA).

8. **Access:** No foot pegs, rungs, or other climbing aids shall be allowed below twelve feet (12') on a freestanding tower. For lattice or guyed towers, sheets of metal or wood or similar barriers shall be fastened to the bottom tower section such that it cannot readily be climbed.

9. **Compliance with FAA Regulations:** No small wind energy system shall be constructed, altered, or maintained to project above any of the imaginary airspace surfaces described in FAR part 77 of the FAA guidance on airspace protection or other current FAA regulations governing airspace protection.

10. **Utility Notification:** No small wind energy system shall be installed until evidence has been submitted to the County that the relevant electric 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.

11. **Abandonment:** If a wind turbine is inoperable for six (6) consecutive months the owner shall be notified by Summit County that they must, within six (6) months of receiving the notice, restore their system to operating condition or remove the wind turbine from the tower. If the owner(s) fails to restore their system to operating condition within the six (6) month time frame, then the owner shall be required, at his expense, to remove the wind turbine from the tower for safety reasons.

12. **Off Street Parking or Loading Requirements:** A small wind energy system shall not remove or encroach upon required parking or loading areas for other uses on the site or access to such parking or loading areas.

**DEFINITIONS**

**SOLAR ARRAY, MINOR:** “Minor Solar Array” shall mean solar panels that are roof mounted, wall mounted, or ground mounted, and arranged in a group to capture maximum amount of sun light to convert it into usable electricity. A Minor Solar Array can provide enough electricity to power a single home or buildings located on the same property.

**SOLAR ARRAY, MAJOR:** “Major Solar Array” shall mean solar panels that are roof mounted, wall mounted, or ground mounted, and arranged in a group to capture the maximum amount of sun light to convert it into usable electricity. A Major Solar Array is designed to and can provide an energy supply to large numbers of consumers.

**WIND ENERGY SYSTEM, SMALL:** “Small Wind Energy System” shall mean a wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics that has a
rated capacity of not more than one hundred kilowatts (100 kW) and that is intended to generate electricity primarily for buildings and/or uses on the same property, thereby reducing on site consumption of utility power.