

# ZTA19-03 – Solar Energy Facilities

Thursday, August 6, 2020

How did we get here?

- Section 1.3D of the Zoning Ordinance states that if a use is not listed in Appendix C, then the use is prohibited. It also says that any applicant can request a text amendment to include a use not specifically permitted, in accordance with Article 12.
- Inquiries pertaining to how to process solar facilities in Jefferson County started late 2017.
- Torch Clean Energy first contacted our Office in December 2018. Staff advised that if a solar facility were established in the RLIC or IC districts, the project could process by right; however, the inquiry was specific to parcels zoned Rural.
- Staff advised that a text amendment would be required, in accordance with Sec. 1.3D and Article 12 of the Zoning Ordinance.
- August 2019 - Sam Gulland with Torch Clean Energy began working with Staff to discuss the amendment process.
- December 2019, Mr. Gulland presented a request to the Planning Commission on behalf of Stanley Dunn, local landowner, to amend the Zoning Ordinance to include provisions for Solar Facilities to be established in the Rural zoning district as a Conditional Use.

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## How did we get here?

- February 2020 – PC appointed subcommittee to develop requirements to allow solar facilities to process by right (not Conditional Use), while incorporating site development standards to address buffers, setbacks, and decommissioning.
- May 2020 – The subcommittee presented their draft
- June 2, 2020 – PC Public Hearing; Pubic Comment period open for ten business days.
- June 23, 2020 – PC made final revisions and forwarded to County Commission with recommendation that the proposed text was consistent with Comprehensive Plan.

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- ZTA19-03 specifically addresses Solar Energy Facilities as a principal land use.
  - Solar Energy Facilities = large arrays of solar panels erected for the purpose of generating electricity for the wholesale market.





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- ZTA19-03 does not impact roof top solar panels, or ground mounted solar panels, which are accessory to a residence or business.
  - Solar Panels serving a residence or business are permitted under the current rules as an Accessory Use (i.e. incidental to principal use)



# ZTA19-03 – Summary of Standards

## as recommended in the draft amendment by the Planning Commission

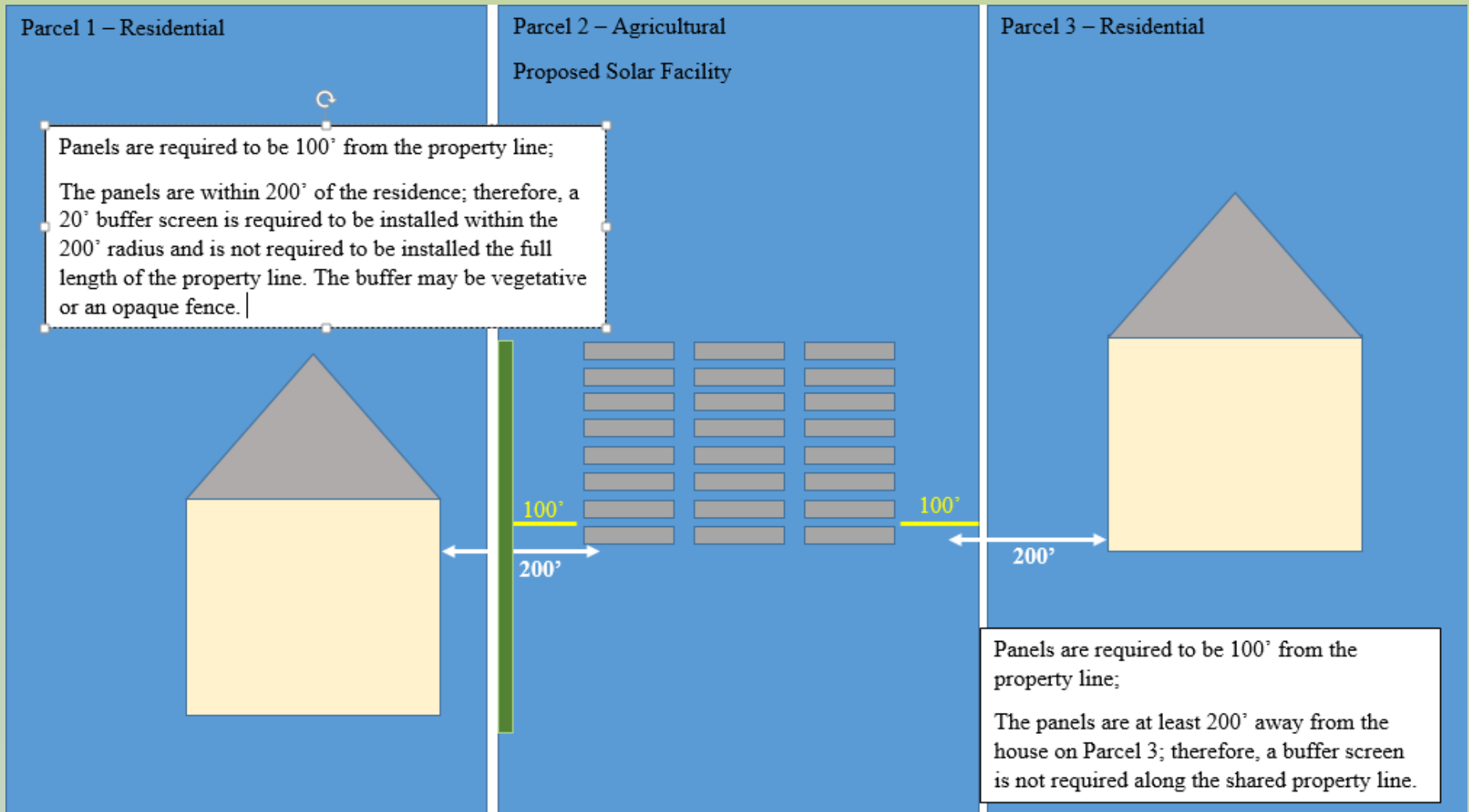
- Pre-Proposal Conference (informational) meeting recommended (not required).
- Concept Plan required for Solar Energy Facilities = Public Workshop before Planning Commission.
  - Includes submission of a preliminary outline of decommissioning plan.
    - Outline = timeline of lease; plan for removal of solar facility
- Upon approval of Concept Plan, a Zoning Certificate Application shall be submitted, which is administratively processed.
  - Full Decommissioning Plan required with submission of ZC application. Decommissioning Plan shall be deemed acceptable by the County Engineering Staff.
- Stormwater Management is required in accordance with the Stormwater Management Ordinance
  - Exemption for solar facilities which comply with conditions (Best Management Practices) outlined in SWM Ordinance.
  - Exemption criteria developed based on research from other jurisdictions and a study by the American Society of Civil Engineers
- Building Permit is required for any structures and/or electrical work.

# ZTA19-03 – Summary of Standards

- The Concept Plan requires a Public Workshop before the Planning Commission.
- Setbacks for **Solar Panels**: 100 feet from all external/perimeter property lines and from the edge of the State ROW or Easement of any State Road.
- Setbacks for **accessory components**, excluding solar panels: 25 feet from all external/perimeter property lines and from the edge of the State ROW or Easement of any State Road.
- 20' Buffer Screen required when **solar panels** are located within 200 feet of any residence, Category 1 Historic Resource, Institution for Human Care, or similar use.
  - Buffer screen may be vegetative or an opaque fence
- **Accessory components** located within 200 feet of any residence, Category 1 Historic Resource, Institution for Human Care, etc. shall comply with the provisions of Sec. 4.11.

# ZTA19-03 – Summary of Standards

- Exhibit A: When is a buffer screen required?



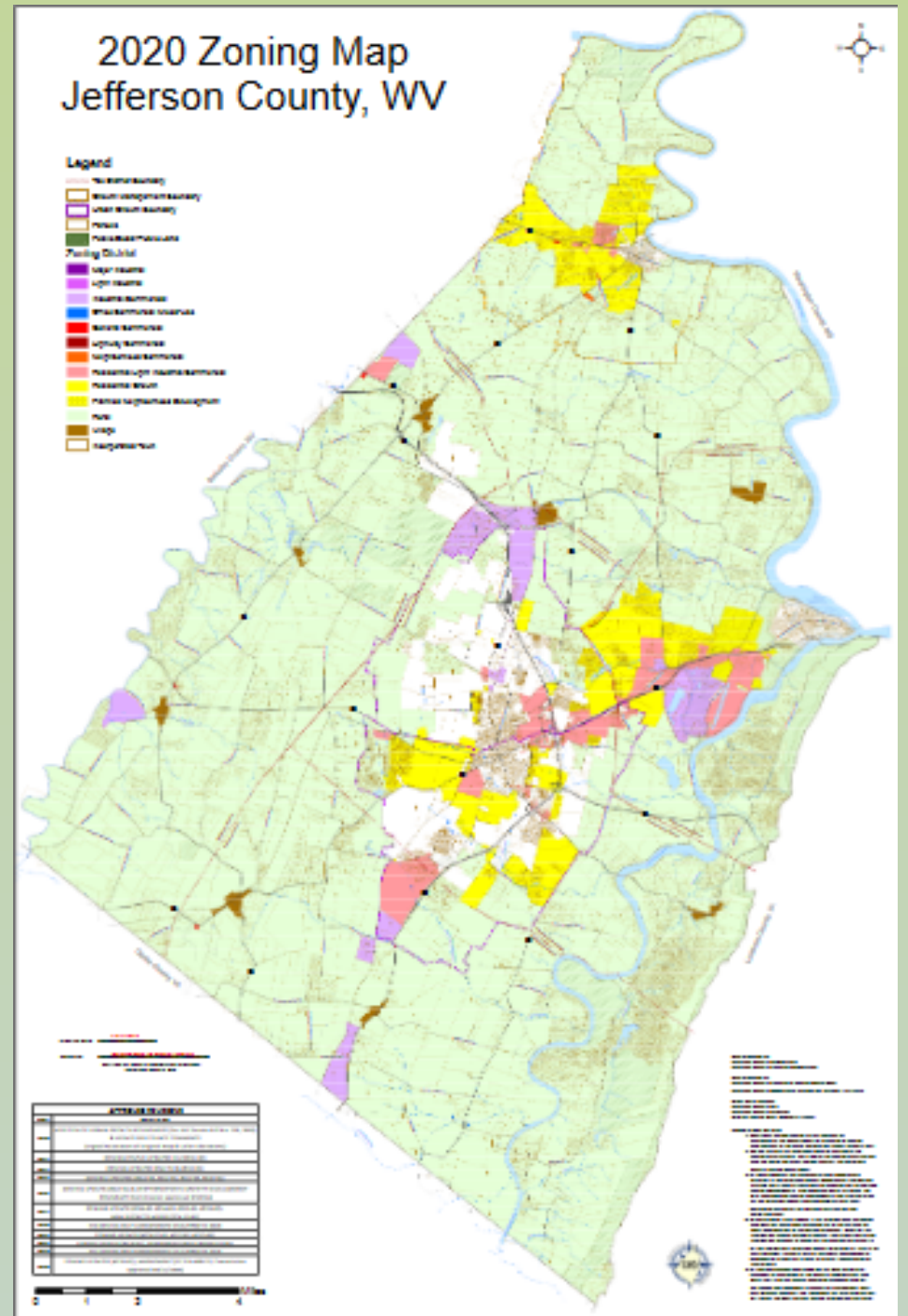


The text amendment proposes allowing Solar Energy Facilities to process by right in the following zoning districts:

- General Commercial (Red)
- Highway Commercial (Brownish-Red - N/A)
- Light Industrial (Pink – N/A)
- Major Industrial (Purple – N/A)
- Rural (Green)
- Residential Growth (Yellow)
- Residential-Light Industrial-Commercial (Salmon)
- Industrial Commercial (Pinkish Purple)

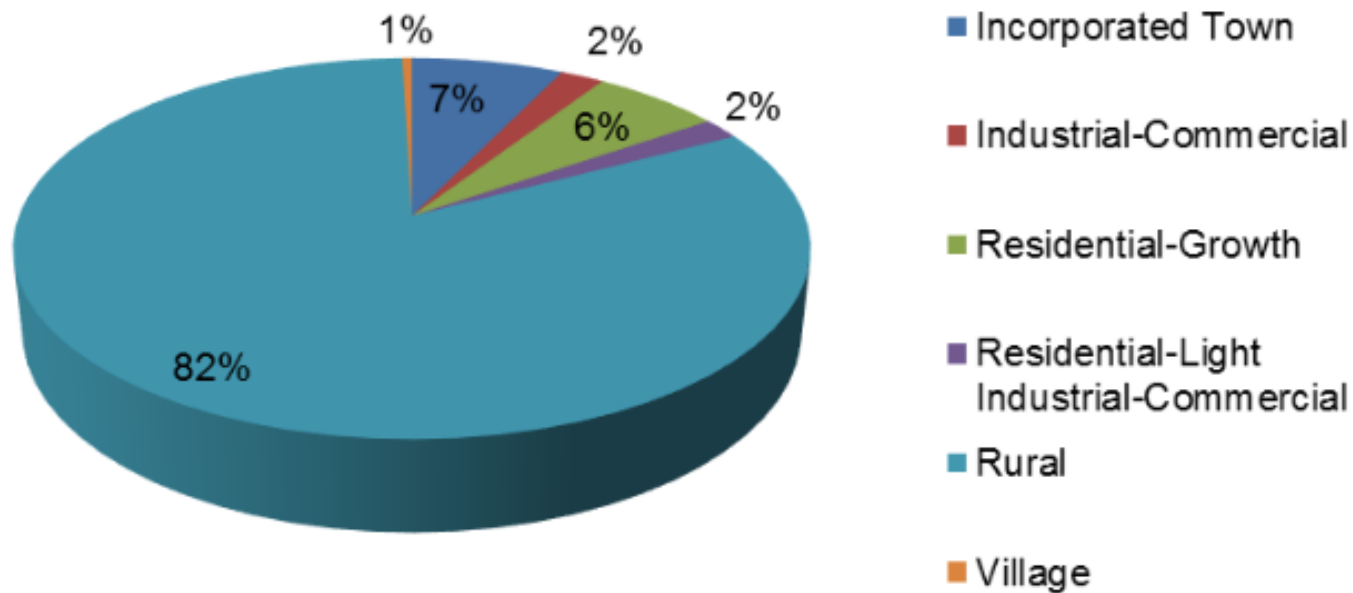
- Prohibited in the following zoning districts:
- Neighborhood Commercial (Orange)
  - Planned Neighborhood Commercial (dotted yellow- N/A)
  - Office Commercial (Blue – N/A)
  - Village (Brown)

\*There are several factors in determining where to locate a project, including access to substations that can support new energy production.





**Figure 15: Percentage of Land by Zoning District Type in Jefferson County, WV**



Source: Jefferson County GIS and Addressing Office

Excerpt from Envision Jefferson 2035 Comprehensive Plan  
Page 179

# Frequently Asked Questions

- Can solar facilities be co-located with agricultural land uses?
  - Yes. Solar Facilities can be co-located with agricultural land uses “...like sheep grazing for vegetation control, apiaries for honey production, and even hand-picked high-value crops.” (American Planning Association – March 2020 - “Are You Solar Ready?”).
  - Vegetative ground covers can help maintain soil quality to support reverting to an agricultural land use at the end of production.
- Unlike a large residential subdivision or a commercial project, once the solar operation ceases to operate, the panels and accessory structures can be removed and the site can be restored to its original condition.
- Are solar panels toxic?
  - According to a study published by the [North Carolina Sustainable Energy Association](#),

## 5.1 Toxic Chemicals

Although solar panels contain some caustic chemicals, they are sealed and the chemicals enclosed such that they cannot mix with water or vaporize into the air.<sup>68, 69</sup> Furthermore, most panels are made with tempered glass and are manufactured to endure all weather conditions, even weather events such as hail. Solar PV panels are even regularly installed in Arctic and Antarctic climates. Finally, in cases of fire, solar panels must reach a temperature of 1000° C before they emit toxic substances. These temperatures would be rare at solar installations, due to the lack of fuel for fires to burn. For example, grass fires do not typically burn hotter than 200° C.<sup>71</sup>

# Frequently Asked Questions

- How many acres is the proposed solar project?
  - There are no pending or proposed projects in the Dept. of E, P, & Z at this time.
  - The text amendment was initiated because the Zoning Ordinance currently does not have any provisions to process a solar energy facility in Jefferson County.
  - During the presentation in December 2019, when the text amendment was first presented, Mr. Gulland represented that projects typically utilize 200-800 acres.
  - The text amendment does not provide a minimum or maximum acreage requirement.
  - There are several factors in determining where to locate a project, including access to substations that can support new energy production.

# ZTA19-03 – Solar Energy Facilities

## Senate Bill 583

- Does SB 583 restrict the siting of solar energy facilities?
  - No. SB583 does not apply to solar facilities generally and does not restrict the siting of any such facilities.
- SB583 is a specific program for utility-owned and operated solar and is not the only option for a solar project.
- Zoning approval is required prior to state approval as part of the siting certificate process. The State can still deny a site, even if local approval is granted.

# ZTA19-03 – Solar Energy Facilities

## Next Steps

- The County Commission is required by W. Va. Code Chapter 8A to hold a Public Hearing on the Planning Commission's recommended draft.
- There is no timeframe to take action on the draft.
- Changes to the draft cannot be made until after the public hearing is held.
- There are no rules in effect until the County Commission takes action.

## Questions?



# ZTA19-03 – Solar Energy Facilities

## Conclusion

- ZTA19-03 addresses Solar Energy Facilities as a principal land use and does not address roof top solar or ground mounted panels which serve a residence or business (accessory use).
- The draft before you is the Planning Commission's recommended draft. Their recommendation includes allowing these types of facilities by right (not Conditional Use), with the Concept Plan providing an avenue to notice the public of a proposed project.
- The draft amendment includes minimum site development standards (see slides 6 & 7) to address concerns surrounding aesthetics of a solar project; and also includes a requirement for a decommissioning plan to provide some protection for the land owner.
- SB583 is a specific program for utility-owned and operated solar and is not the only option for a solar project.
- The County Commission is required to hold a Public Hearing on the Planning Commission's recommended draft.

## Questions?