

To: Ordinance Review Committee  
From: Mark Eyerman  
Subject: Solar Array Standards  
Date: April 22, 2021

When we created provisions for commercial solar arrays, we created a use called a “Solar Electric Production Facility” or SEPF in which the solar facility would be the principal or secondary use of the property. But this use does not include solar facilities that are associated with or accessory to the principal use. In the discussion and through the definition we tried to provide for two types of facilities, one that would be mounted on the roof or structure of a building and the second in which the panels are mounted on the ground. Here are some thoughts on the issues that are evolving.

1. **Use Categories** - Maybe the first question for the committee to consider is whether it makes sense to keep ground-mounted and building-mounted arrays as one use or to split them into two uses since the issues are a little different. If we want to think about splitting how building-mounted and ground-mounted arrays are treated we could do this through footnotes in the use table or creating separate uses (SEPF – Building Mounted and SEPF – Ground Mounted) and/or establishing differing performance standards (see discussion below). Here are a couple of overly general observations:

- Building-mounted commercial arrays are most likely to go on large commercial buildings in areas where commercial uses are allowed so the impact of adding solar is incremental
- The size of building-mounted arrays is limited by the size of the building that they go on
- The visual impact of roof mounted arrays is probably different than for large ground mounted arrays
- The size and thus the impact of ground-mounted arrays is limited only by the desired output of the facility and the size of the lot

*Question 1 – Should the City continue to treat building-mounted SEPFs and ground-mounted SEPFs the same?*

2. **Allowed Zoning Districts** – The City currently allows SEPFs in a number of zones throughout the community. These include the following: R, RG, PR, PIC, PD, ECR, MUV, PHD, IT and CPD as well in the HDR on lots of more than 5 acres. My memory (but a little hazy) is that the committee was thinking in terms of building-mounted arrays and small scale ground-mounted arrays when deciding what districts they should be allowed in. It may be helpful to compare where SEPFs are allowed versus other somewhat similar commercial/industrial type uses (see the Use Table in Section

7). I looked at communication towers, outdoor storage facility, self-storage buildings, light manufacturing, wholesale and warehouse, and mid and large size windmills. These are obviously not direct comparisons but have some of the same characteristics as SEPFs especially ground-mounted arrays. Many of these types of uses are not allowed in some of the districts where SEPFs are now allowed. This is potentially problematic for larger ground-mounted arrays.

If the ORC thinks this is a concern we could address this in a number of different ways:

1. The City could continue to allow them in these districts but add a minimum lot size requirement for SEPFs (especially ground-mounted arrays) in some of the more residential districts
2. Adopt performance standards for SEPFs (again especially ground-mounted arrays) such as larger setbacks from residential properties, enhanced screening, and siting based on scenic/visual considerations.
3. Eliminate all SEPFs or ground-mounted SEPFs as a permitted use in some of the more residential districts

*Question 2 – Should the ORC propose reducing or limiting where SEPFs can be located and if so how – eliminating in some districts and/or managing locations through performance standards or lot size limits?*

**3. Performance Standards** – Currently there are no specific performance standards for SEPFs. They are subject to Site Plan Review (SPR), must meet the setback requirements for the district in which they are located and are subject to the Buffer and Screening Requirements of 8.11.4. The SPR standards of 6.5.2 give the PB the ability to address the character of the site, impact on neighboring properties, landscaping and buffering, and how the development is sited on the lot. However these standards are general and generic in nature. The buffer requirements generally require a 25 foot wide buffer with certain screening requirements within the buffer but allow the PB to increase the width of the buffer and to allow alternative buffering and screening provisions. The submission requirements for SPR require the submission of photos or photo simulations showing the design and context of the proposed development. However there are no pre-established “objective numerical” standards specifically for SEPFs. This area is complicated since there can potentially be a wide range in the type of array and its location. The issues with a rooftop array in the industrial park or on the older buildings in the MUV are different from the issues with a large ground-mounted array in the R or MUV District for example.

*Question 3 – Are the current SPR and buffer requirements adequate for reviewing proposals for SEPFs or should the ordinance include more objective performance for these uses?*

4. **Final Thoughts** – Here are a few final thoughts to try to move the discussion forward. These are not recommendations just ideas for the ORC to think about:

- In retrospect the issues involved with ground-mounted SEPFs and building-mounted SEPFs are different and probably should be treated differently. So I lean toward creating two separate categories of use. I think this makes discussion of where they should be allowed and if additional standards are needed much easier.
- With two use categories I'd consider limiting where ground-mounted SEPFs can be located either by removing them as permitted uses in some zones or adding minimum lot size requirements or a combination of both.
- Then we could limit building-mounted SEPFs to zones that contain or allow uses that are typically located in larger structures such as shopping centers, manufacturing, warehousing, etc.
- Finally we could consider adding some performance standards for ground-mounted SEPFs that could include enhanced setbacks tied to the scale of the array and a requirement for a visual impact assessment (this could go into the SRP submission requirements)
- And it is important to remember that the definition of a SEPF does not include accessory solar arrays so if the owner of a building anywhere in the City wants to put solar panels on the roof to generate power or install a ground-mounted array that is not regulated as a SEPF.