

To: Ordinance Review Committee
From: Mark Eyerman
Subject: Treatment of SEPFs
Date: May 14, 2021

At the last meeting we discussed possible revisions in how the City treats Solar Electric Production Facilities (SEPFs). Here is an overview of what I think we reached agreement on:

1. The ordinance will be revised to create two categories of SEPFs recognizing that building mounted and ground mounted facilities have potentially different impacts on adjacent properties and are appropriate in different zones. The two categories might be called Solar Electric Production Facilities – Ground-Mounted and Solar Electric Production Facilities – Building-Mounted. My thinking is that we would retain the current definition of Solar Electric Production Facility and then add definitions of the two subcategories that refer to the main definition – a SEPF that is mounted on a building and a SEPF that is mounted on the ground or a support structure attached to the ground. Then we would replace SEPF in the Table of Land Uses with the two new categories: SEPF – Ground-Mounted and SEPF – Building-Mounted. Attached are draft amendments to the definitions section and to the Table of Land Uses.
2. In the Table of Land Uses we will then revise where the two new uses are allowed. SEPF – Building-Mounted will be allowed everywhere except in the RP District and the shoreland zones. SEPF – Ground-Mounted would continue to be allowed where they are now (R, RG, PR, PIC, PD, ECR, MUV, PHD, IT, and CPD) except that HDR would be deleted and CC and TD would be added. Included in the amendments to the Table of Uses will be these changes – see attached.
3. There was agreement on providing enhanced buffering for ground-mounted SEPFs. Rather than trying to revise the screening and buffering section of the ordinance, I'm thinking that it might be better to include the enhanced buffering requirement in new performance standards for SEPFs. So I have done that in the draft of possible performance standards below.
4. I have also added a provision in the submission requirements for Site Plan Review that requires an applicant to conduct a visual impact assessment to identify where the installation of a ground-mounted SEPF will be visible from and how the array will be buffered to meet the performance standards.
5. Finally we discussed adding performance standards for SEPFs in the use specific performance standards section. For building-mounted SEPFs, there was discussion of limiting the height of the array above the roof to 2-3 feet. For

ground-mounted SEPFs in addition to enhanced buffering there as discussion of providing for an increased setback from adjacent residential uses and for a limit of the height of the array. I have included a performance standard that requires a one hundred foot setback of any part of the array from the property line of a lot in residential use with a provision that the PB may reduce the setback if it is not needed to provide adequate buffering. I have also included a standard limiting the height of ground-mounted arrays to ten feet above grade.

Draft Amendments Dealing with Solar Electric Production Facilities

Proposed additions to the Land Use Ordinance are underlined;
proposed deletions are ~~stuck-out~~.

1. Amend SECTION 17 DEFINITIONS by adding definitions of Solar Electric Production Facility – Building-Mounted and Solar Electric Production Facility – Ground Mounted in proper alphabetical order to read:
 - **Solar Electric Production Facility – Building-Mounted: A Solar Electric Production Facility that is mounted on the roof or exterior wall surface of a building.**
 - **Solar Electric Production Facility – Ground-Mounted: A Solar Electric Production Facility that is mounted on the ground or on a supporting structure other than a building.**
2. Amend Section 7.6.4 Industrial, Wholesale & Transportation Uses in the Land Use Table in Section 7.6 to read:

Industrial, Wholesale & Transportation Uses																
	RP	SLR	SL	R	RG	HDR	PR	TD	PIC	PD	ECR	CC	MUV	PHD	IT	CPD
Sawmill	N	N	N	P	N	N	N	N	C	P ⁶	N	N	N	N	N	N
Solar Electric Production Facility – <u>Building-Mounted</u>	N	N	N	P	P	N ¹⁵	P	P	P	P	P	P	P	P	P	P
<u>Solar Electric Production Facility – Ground-Mounted</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>P</u>	<u>P</u>	<u>N</u>	<u>P</u>	<u>N</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>N</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
Trucking & Freight Facility	N	N	N	N	N	N	N	N	C	P ⁶	N	N	N	N	N	N
Waste Processing Facility	N	N	N	N	N	N	N	N	P	N	N	N	N	N	N	N
Wholesale & Warehouse	N	N	N	N	N	N	N	P	C	P	N	P ⁷	N	P	P	N
Windmill Small	N	P	P	C	P	P	P	P	C	C	P	P	P	P	P	P
Windmill Mid-size	N	N	N	P	N	N	N	N	P	P	P	N	N	P	N	N
Windmill Large	N	N	N	P	N	N	N	N	P	P	P	N	N	P	N	N

3. Amend Section 6.3.4 Additional Information for Applications for Site Plan Review by adding a new section 3.3.4.4 to read:

6.3.4.4 If the application is for a Solar Electric Production Facility – Ground-Mounted, a visual impact assessment identifying all locations where the solar array will be visible from residential uses located within one thousand (1000) feet of any portion of the solar array as measured from the closest part of the residential structure and illustrating how the screening requirements of Section 10.30 will be met. The assessment shall include photos of the pre-development visual conditions and visual simulations of the post development visual conditions incorporating the screening recommended in the assessment.

4. Amend SECTION 10 SPECIAL ACTIVITY PERFORMANCE STANDARDS by adding a new Section 10.30 Solar Electric Production Facility to read:

10.30 Solar Electric Production Facilities

10.30.1 No part of a Solar Electric Production Facility that is mounted on the roof or exterior wall of a building shall project more than two (2) feet from the primary surface of the roof or wall.

10.3.2 No part of a Solar Electric Production Facility that is mounted on the ground or a supporting structure that is not part of a building shall project more than ten (10) feet above the average grade of the ground beneath the array.

10.3.3 No part of a ground-mounted Solar Electric Production Facility shall be located with one hundred (100) feet of the property line of a lot that is improved with a residential use. The Planning Board as part of the review and approval of the site plan for the facility may reduce the setback of the array from the property line of a lot if it finds that:

10.3.3.1 No structural elements of the facility including the solar array will visible from the residential lot considering the reduction in the setback, or

10.3.3.2 All structural elements of the facility will be screened from view from the residential lot in accordance with the standards of 10.3.4.

10.3.4 A ground-mounted Solar Electric Production Facility shall be screened from view from all residential uses located within one thousand (1000) feet of any portion of the solar array as measured from the closest part of the residential structure. The screening shall provide an opaque visual barrier at least eight (8) feet in height and may consist of one or more of the following:

10.3.4.1 A solid vegetative buffer consisting of plant materials that will provide a year-round visual screen; or

10.3.4.2 A berm combined with a vegetative buffer consisting of plant materials that will provide a solid year-round visual screen; or

10.3.4.3 A solid fence combined with plantings on the residential side of the fence in accordance with Option 3 for a Semi-Full Screen as set forth in 8.11.4.5, or

10.3.4.4 An alternative plan for screening the facility identified in the visual impact assessment and approved by the Planning Board.