



MEMORANDUM

TO: Village President and Village Board
FROM: James M. Hogue, Village Planner
DATE: May 6, 2020
RE: Board & Commissions Report for 5/12/20

This memo intends to update the Village Board as to the status of projects and activities of the Long Grove Plan Commission & Zoning Board of Appeals (PCZBA), Conservancy & Scenic Corridor Committee (CSCC) and the Architectural Commission (AC).

PCZBA 5.5.20 (held remotely) - 1 Action Item

- B) PUBLIC HEARING - Consideration of amendments to the Village Code for the Village of Long Grove, Title 5, Zoning Regulations, without limitation, as referred by the Village Board, for the review, recommendation and amendment of the adopted Alternative Energy Systems (AES) Regulations.**

VOTE: - Recommended approval with one modification to the draft regulations as proposed dealing with AES on detached accessory structures.

The PCZBA reviewed the revised draft of the AES regulations at this meeting. The revisions included the recommendations\discussion per the joint VB\PCZBA Meeting in January and the PCZBA discussion at the March 3rd regular meeting.

Revisions from the joint VB\PCZBA Meeting held in January;

- As revised all “Wind energy systems, whether mounted on the ground or attached to a building or other structure, **are a prohibited use** in all zoning districts within the Village. For purposes of this section, “wind energy system” means a system or device containing one or more turbines (whether orientated on a horizontal axis or a vertical axis) that are turned by wind to produce electricity”.
- The definition for the height of ground mounted SES is proposed to be clarified;
- Regarding roof mounted SES the following language is proposed; “Color. Building-mounted SES shall be framed and finished in a neutral color that blends with the color and finish of the building surface on which the SES is mounted.” This would apply to the “skirts” around the perimeter of the roof-mounted solar array and not the solar panels themselves.

- Disposal; the following language is proposed – “Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations; provided, however, that energy system equipment and building materials shall be disposed of by recycling, rather than landfilling, to the maximum extent possible”. After discussion this PCZBA felt this was as far as the regulation could go in relation to this issue;
- Decommissioning – The PCZBA discussed this matter and concluded that this was an important aspect of the overall regulations and should remain as written (for both SES and GES energy systems).

The PCZBA requested more information with regard to the issue of a maximum size of ground mounted SES systems. To certain extent the proposed regulations are self-enforcing on this issue (lot coverage, set-back, maximum power generation capacity, etc.). The PCZBA asked if and how other jurisdictions address this issue.

Additionally, the PCZBA discussed the possibility of screening requirements for roof mounted SES’s on detached accessory structures. As an accessory structure is limited to 15’ in height, (as opposed to 35’ for principal structure), in the residential districts consideration of additional screening may be appropriate. The PCZBA requested additional information on this topic as well.

The PCZBA also discussed “micro-grids” and the possibility of a solar powered subdivision. It was determined that matter could be addressed as part of a PUD application. Crafting regulations for an unknown scenario is difficult and may not address all issues associated with such a proposal.

Research\Revisions for the May 5th Meeting;

Staff presented the results of the research done with regard to the questions raised by the PCZBA in March. The conclusions were as follows;

Eleven communities AES regulations (the lack thereof) were reviewed by staff. Only two of these communities (Wadsworth and Lake Bluff) allow ground mounted solar systems. Neither of these has screening requirements or an absolute cap on the size of such a facility. Applicable bulk regulations, such as lot coverage do apply.

Other communities only allow roof mounted solar AES panels on a principal structure and accessory structures. Some limit such systems to principal structures only, unless integrated into the accessory structure (i.e. solar shingles). Kildeer only allows integrated system on principal structures. No maximum roof coverage nor additional screening is spelled out in these regulations.

In an effort provide some guidance to the PCZBA staff also researched “Best Practices” for solar energy systems. The following excerpt was found from a model ordinance in the state of Georgia with regard to screening.

Visual Buffer & Fencing (excerpt from Georgia Model Ordinance)

A solar ordinance may require a visual buffer or fencing for aesthetic and safety reasons. There is no single Best practice regarding visual buffers, and existing solar ordinances offer a wide variety of standards ranging From reasonable to burdensome and flexible to rigid. This is because the need, ability, and means to protect

the visual character of a community differs greatly on a case-by-case basis.

In requiring a visual buffer, the goal is to shield a solar energy system from the public eye to ensure that the system does not impact the community culture. This is most pressing in residential zoning districts or along scenic view sheds. However, completely shielding the entire solar energy system from view is not always the best option. Allowing views of the system can help the community become familiarized with solar energy and its benefits.

In some cases, such as where residences are elevated high above a system, building a complete visual buffer is impossible. Visual buffers can also simply be unnecessary. For example, the view of a solar energy system will likely not disrupt the character of a commercial or industrial zoning district and they are generally unnecessary to shield glare from a system.

Visual buffers can take a variety of forms. Existing mature tree growth, vegetation, and natural landforms may provide a sufficient buffer, and leaving them in place minimizes the impact of the solar energy system on the environment. Any vegetative visual buffers can also mitigate stormwater runoff and provide wildlife habitat.

However, it can be difficult for a zoning authority to accurately enforce standards for vegetative visual buffers—whereas fences and earth berms can completely and immediately obscure the view of a solar energy system, vegetative buffers take time to grow into place and likely provide more of a screen than a total obstruction of the view.

Overall the proposed AES regulations for the Village are consistent with the “basics” of other regulations reviewed and far more comprehensive than most.

Staff unable to find an absolute cap on the size of ground-mounted AES in the regulations reviewed or “best practices” research. Typically the “bulk” regulation (i.e. lot coverage, set-back) and maximum power generation capacity on the system are used to address the size of a ground mounted facility.

Attorney Gates Alford Gave and overview of the revisions to the “redline” draft presented to the PCZBA for the May 5th Meeting. These include;

- Added language to further describe and clarify aesthetic and color standards for building mounted SES.

- Decommissioning requirements:

Added language relating to the end-of-life decommissioning plan requirements and an owner’s obligation to update the plan upon request of the Village. This change was made in both the SES and GES sections.

Revised to clarify that partial abandonment of a system will trigger the owner’s obligation to decommission and remove the abandoned components. This change was made in both the SES and GES sections.

No changes were made to the provisions relating to disposal of system components at end-of-life. The PCZBA reviewed these provisions in light of the Board’s comments but did not wish to recommend changes.

Overall, during the discussion of these regulations by the PCZBA, the Commission was satisfied that these proposed regulations adequately regulated AES in the Village.

One additional issue was raised, originally mentioned by a resident at the March 3rd Meeting, regarding screening language for roof mounted solar systems for an accessory building as opposed to a principal structure.

Staff noted that none of the ordinances reviewed contained language of this nature. But some of the ordinances prohibited solar panels on the roof of detached accessory structures unless integrated into the structure (i.e. solar shingles). Staff suggested language be created which limited roof mounted solar panels to principal structures, including the accessory portion thereof and eliminate solar panels on detached accessory structures.

Attorney Gates-Alford suggested that solar panels on the roofs of detached accessory structures be considered as special uses. While more cumbersome, costly and time consuming it would allow for a public hearing\public notice. Screening issues could then be discussed by the applicant, commission and residents. Potentially any screening issues could be resolved to the satisfaction of all parties involved.

It was also noted the PCZBA could recommend approval of the regulations as drafted if they felt this issue was adequately addressed in the draft regulations as presented.

The PCZBA then further discussed this matter and concluded that solar panels on detached accessory structures were acceptable if a portion of the power generated from those panels was used to supply power to the detached structure. The following language was added to the regulations in response to this discussion;

“SES may be mounted on the roof of a permitted principal or accessory structure; provided, however, that any SES on a detached accessory structure shall serve, at least in part, to provide power to the detached accessory structure on which it is mounted”.

With the addition of this language to the proposed regulations, a motion was made by Commissioner Terrett, seconded by Commissioner Dworak-Mathews. On a voice vote; all aye motion carries.

(Note: the redline draft included with this report has changes in two colors, those highlighted in blue include changes requested for the May 5th meeting; those in red were requested at the May 5th Meeting.)

Next Regular Meetings; CSCC; May Meetings Cancelled AC; 5.18.20; PCZBA; 6.2.20