RE: Proposed Solar Energy Ordinance

Dear Members of the Durham Planning Board,

Again, I want to thank you all for your service to the community, particularly your continued effort to guide our future growth with respect to sustainable energy practices.

With respect to the proposed Solar Energy Ordinance, I offer for your consideration some specific amendments which I believe will improve your draft proposal. I respectfully request that the chairman ask for each of the motions be made by a member of the Board so that there can be open discussion among you of the merits of the proposals. Failing that, I ask that one or more members bring to the table the following suggestions for discussion.

Proposed Amendments

- 1. Article II, Definitions, Solar Energy Systems
 - A. Move to amend "Solar Energy System" to read as follows:

A structure or device and related components used to transform solar energy into electricity or thermal energy.

Rationale: This definition will 1, simplify the language and 2, add the word "device" because the term "structure" in the proposed definition may not apply to roof-mounted panels.

B. Move to amend "Freestanding Solar Energy System" to read as follows:

A ground mounted solar energy system (including stationary or tracking system) that is detached from a residence or other structure. A solar energy system that is installed on a detached carport is considered a freestanding solar energy system

Rationale: Including reference to "Enterprise Systems", as proposed in your draft, is not applicable to the definition. Any solar system mounted on a detached "carport" should be considered a "freestanding solar system" whether the power produced is used on site or off site as in "enterprise" installations.

C. Move to amend "Shared Solar Energy System" to read as follows:

A solar energy system that serves houses and/or developments situated on two or more contiguous lots. The system is considered accessory to the uses on each of the lots that it serves.

Rationale: This change eliminates possible confusion in distinguishing neighborhood installations where a neighborhood may collaborate from "enterprise systems" which may include expansive commercial projects.

2. <u>Table of Uses, Section 175-53 under Subsection VI. Utility & Transportation Uses (page 3)</u>

A. Move to amend the proposed **Table of Uses** to <u>not permit</u> Enterprise Solar Systems within Residential Zones by replacing "P" and "CU" with "X".

Rationale: The community has designated zones for commercial type development and areas for residential development. Permitting "Enterprise Solar Systems" which may be expansive in size, in residential zones is inconsistent with the objectives of our zoning regulations.

B. Move to amend the proposed <u>Table of Uses, Enterprise Solar System</u> to require a conditional use permit in both the Commercial Core Zones and Research Industry Zones and to prohibit freestanding solar systems in the Coes Corner zone.

Rationale: We should anticipate that Enterprise Solar Systems will, of necessity, be quite large and the impact of such systems may be substantial. To permit such installations by right would be folly. There is potential for severe negative impact to the community. While this rapidly evolving technology should be supported, we should not leave ourselves vulnerable to abuse. Further, one wonders if a roof-mounted "Enterprise System" could ever qualify as a "principle use" since the roof would presumably be over the principle use.

3. Article XX – Standards for Specific Uses, Section 175-109

A. Section R, 2, Purpose:

Move to replace the "encourage" with "regulate".

Rationale: The purpose is to regulate.

B. Section R, 3, Applicability

Move to replace "use" with the word "produce".

Rationale: Solar installations are best evaluated by how much energy they <u>produce</u> rather than the amount they <u>consume</u>.

C. Section R, 4, b Placement

Move to amend Section R, 4, B Placement to read as follows:

<u>Placement</u>. For a , <u>Freestanding solar energy system</u> No no part of the system may be placed closer to the front property line (and side property line in the case of a corner lot) than the fully enclosed part of the house closest to the street. In addition, for no part of a freestanding solar energy system that exceeds 10 feet in height may be placed closer to the front property line (and side property line in the case of a corner lot) than the fully enclosed part of the house for the term of a corner lot.

Rationale: Clarification needed. Further, the Board should consider how this requirement will apply to permitted, existing structures that are very close to the road and have significant side yards to ensure that the intent of the ordinance to preserve viewscapes is met. (See Section R, 2, **Purpose**)

D. Section R, 4, c Special Exception

Move to delete the section.

Rationale: While "Special Exceptions" may be reasonable in some circumstances, the use of the phrase "not practical" is worrisome because it is vague and subjective. Please discuss this issue as it relates to this section <u>and</u> in Section 5, E, 1. The more definitive the ordinance the better.

E. Section R, 6, d, Enterprise Solar Energy System (principal use)

Move to amend this paragraph to read as follows:

Where a solar energy system is allowed by conditional use, the conditional use permit shall be granted only if the Planning Board determines that: a) the proposal conforms to the general conditional use criteria contained in Article VII; and b) the location, topography, site conditions, design, and proposed screening for the proposed project are such that it will not be prominently visible from town or state roads. from Bay Road, Bennett Road, Durham Point Road, Mast Road, or Packers Falls Road.

Rationale: Enterprise Systems should be restricted to non-residential zones. "General" conformance dilutes the intent of the Conditional Use Permit ordinance.

F. Section R, 7, c Maximum Height

This section needs to be re-worked to account for the differences between roof-mounted systems on flat roofs vs pitched roofs. Height of 10 feet above a ridge pole on a pitched roof is decidedly different from that on a flat roof. Also, we have height restrictions in various zones for a reason. There is no rationale to eliminate height restrictions.

4. Table 175-109 R Review Process for Solar Energy Systems

This table will need to be revised to be consistent with changes adopted by the Board.

Tax Implications

The current policy of the Town is to provide tax abatement for solar installations. The introduction of "Enterprise" installations raises the question as to whether commercial enterprise solar installations would provide increased tax revenue. I suggest the planning board members discuss this issue and offer a recommendation to the Town Council regarding tax implications.

Public Hearing

Following your consideration of these proposals and any action you may take as a consequence of my suggestions and those of others, I respectfully request that the Public Hearing on this matter be continued beyond the September 12, 2018 date so that citizens may offer additional comments on changes resulting from the input you receive.

Respectfully,

Malcolm Sandberg