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VIA ELECTRONIC MAIL

South Burlington City Council
City of South Burlington
575 Dorset Street
South Burlington, VT 05403

Re: Public Hearing on Amendments to the City's Land Development Regulations (LDRs)

Dear Councilors:

I am submitting one additional comment around Solar PV in my personal capacity in addition to the comments I submitted on Dec. 7.

I am pleased that the draft regulations would require commercial buildings to be solar ready. I note that in the course of several presentations the South Burlington Energy Committee (the "SBEC") requested that commercial buildings with solar-ready zones be then required to install solar photovoltaic systems ("Solar PV").

Installation of more Solar PV will be critical for South Burlington to meet its climate goals. While the energy mix provided by Green Mountain Power (GMP) to South Burlington is relatively clean there remains a high demand for more clean electricity as electric cars, heat pumps and other electrification measures are anticipated to draw ever larger amounts of electricity. In this regard, the Vermont Energy Action network concluded that, among other things, to meet its goals the State would need to add at least 500 MW of solar photovoltaic (Solar PV) power by 2025.

The public raised two concerns around this requirement: (1) it could be uneconomic to require the installation of very small systems and (2) there should not be a requirement to install a system that could generate more energy than a building could use.

I think the issues raised by the public could be fairly easily addressed with a provision like the below, and I would urge the council to include a Solar PV requirement similar to the below in the regulations:

"Any building required to establish a "solar-ready zone" shall be required to install a solar photovoltaic ("Solar PV") system designed to reasonably maximize (assuming the use of standard solar panels) the Solar PV potential of the solar-ready zone, provided that:

- (a) *The requirement set forth herein shall be reduced to the extent the interconnection with the relevant utility cannot accommodate a Solar PV system of the size otherwise required, or the Solar PV system otherwise required would be anticipated to generate in its first year of operation more kilowatt hours (kWh) than the “Expected Building Usage”.*
- a. *The number of kWh that a solar photovoltaic system is anticipated to generate shall be determined based on the site conditions by applying the “PVWatts calculator” published by the National Renewable Energy Laboratory (NREL) (or an equivalent or successor calculator).*
 - b. *The “Expected Building Usage” shall be a reasonable estimate of the number of kWhs that the building is expected to consume during its first full year of typical operation.*
- (b) *The requirement set forth herein shall be eliminated if the largest system that could reasonably be installed on the solar-ready zone would be anticipated to generate less than [3000] kWh of electricity in the first year of operation (using the methodology set forth above).¹*

There are already a number of jurisdictions that require solar PV on new installations, including Watertown, MA for commercial buildings and California and the City of South Miami for residential. South Burlington should be a climate change leader and join these forward-thinking jurisdictions.

Respectfully submitted,

Andrew Chabnick

¹ Note that 3000 kWh would typically be generated by about 10 panels.