

Submitted by Pat Hanlon, Town Meeting Member Precinct 5

April 20, 2023

Dear fellow TMMs:

I am writing to ask for your support of Warrant Article 10, which proposes opting in to the new “Municipal Opt-In Specialized Stretch Energy Code” promulgated by the State Department of Energy Resources (DOER) in December. The Specialized Code is the net-zero code required by the state legislature in the “Next Generation Roadmap for Massachusetts Climate Policy,” enacted in 2021. Unlike the Stretch Energy Code, which Arlington was one of the first towns to adopt in 2010 and which focuses on energy efficiency generally, the Specialized Code is specifically aimed at supporting the state’s goal of net zero energy by 2050.

Arlington was active in the administrative process leading up to promulgation of the Specialized Code. Just last year Town Meeting adopted by a vote of 170-8 a resolution proposed by the Clean Energy Future Committee (CEFC) urging DOER to adopt a strong net zero code. Among other things, Article 73 advocated mandatory electrification of new construction and major renovations and adoption of high, state of the art energy standards to minimize greenhouse gas (GHG) emissions.

While the Specialized Code is more cautious than the proposal Town Meeting supported in 2022, it is still a major step in the right direction, and Arlington should adopt it now.

What does the Specialized Code do?

Most of the particular requirements of the Specialized Code relate to residential projects, and I will focus on those. The Specialized Code only addresses new construction. It will not affect the routine renovations, alterations, and additions that are so common in Arlington as residents accommodate growing families and new ways of using their houses. This is a good thing, because the problem of retrofitting energy efficient housing is very different and requires a different approach. At the same time, however, the new Specialized Code does not currently address gut renovations, which are also common in Arlington, and which do present opportunities for electrification, improving building envelopes, and more. I return to this point below.

Electrification. While the Specialized Code does not require 100% electrification, as Town Meeting advocated, it does encourage electrification in at least two ways.

Prewiring. Projects that are not all-electric must include the infrastructure necessary for conversion to all-electric in the future. This “prewiring” requirement is in effect an electrification-readiness requirement. Of course, builders who are required to wire for electrification have an incentive to take the final step and go all-electric. If they don’t, however, the homeowner is free to do so later, without having to shoulder the heavy burden of refitting the electrical system. Prewiring helps to future-proof new construction.

High Performance Buildings. The Specialized Code emphasizes the “high, state of the art energy standards” that Town Meeting asked for last year. Again, having invested in the construction of higher quality buildings, builders have an incentive to take the next step and take full advantage of that investment to go all-electric. This policy is particularly strong in connection with the construction of large houses, over 4,000 conditioned square feet. Such houses account for a large and growing proportion of new single-family houses in Arlington. If a builder goes all-electric, the Specialized Code

does not require much more. Otherwise, the builder must achieve net zero emissions through the HERS 0 or Phius Zero standard (assuming solar is feasible). DOER believes that most builders will prefer to go all electric. But zero energy is good too.

Passive House for Multifamily Buildings. The Specialized Code is especially innovative in its treatment of large multifamily buildings (buildings over 12,000 square feet). After phase-in, the code will require such buildings to achieve Passive House precertification. Passive House is generally considered the gold standard for high-performance buildings. For multifamily structures, it results in up to 80-90% reduction in heating demand compared to the base energy code. The state currently offers generous subsidies for Passive House construction, and there has been an explosion in in new Passive House multifamily buildings as a result. HCA's proposed all-affordable housing project on Sunnyside Avenue is already planned as a Passive House building.

The advantage in reducing GHG emissions through Passive House is obvious. But there is more. Buildings following Passive House standards are less expensive to operate, more comfortable, quieter, and healthier. The initial cost differential between Passive House and other building standards is small (on the order of 1-4%) and rapidly declining. Since many multifamily buildings provide affordable dwelling units wholly or in part, requiring better multifamily buildings is an environmental justice win. This is perhaps why the Housing Corporation of Arlington, the major builder of new affordable homes in our town, supports the Specialized Code and, even without it, is proposing to follow Passive House standards in its newest project.

What's Next?

The town must take advantage of the progress that DOER has made by adopting the Specialized Code in its current version. Of course there is more to be done. Next fall, Town Meeting will have an opportunity to join the fossil-fuel-free demonstration project which will largely put into effect to the Clean Heat Bylaw approved by Town Meeting in 2020. That project will enable us to mandate electrification and to address gut renovations, among other things. While adoption of the Specialized Code is not an absolute requirement for participation in the demonstration project, it will clearly help.

In addition, DOER will continually update the Specialized Code just as it has the original Stretch Code. For example, consideration of embodied carbon, which Town Meeting called for last year and which has been a major concern in Arlington, is already on the DOER agenda. Opting into the Specialized Code is not just a matter of adopting a specific set of regulations. It is also joining with the state and other communities – at this writing including Brookline, Cambridge, Lexington, Lincoln, Newton, Somerville, Watertown and now Boston – in a march toward net zero. It is an exciting opportunity.

Respectfully,

Pat Hanlon

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