

Respondent: Richard J. Murphy

Docket No. 2025-R-CCE-0008 – State Energy Conservation

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Representing Organizations:

Lutheran Senior Services of Dover, Inc.

Luther Towers of Dover, Inc

Luther Towers III of Dover, Inc.

Luther Towers IV of Dover, Inc.

Luther Village I of Dover, Inc.

Luther Village II of Dover, Inc.

Luther Village III of Dover, Inc.

Luther Village IV of Dover, Inc

Martin Luther Foundation of Dover, Inc.

I want to thank DNREC for proposing adoption of the 2024 IECC, while recognizing that they did not adopt the 2021 IECC for very valid reasons. It is good that the state of Delaware should move forward and stay in step with the advancing energy conservation codes and I commend your efforts in this regard.

I would also like to express my relief in learning that the adoption of appendices RB, RD, RJ, and RK of the residential code, and appendices CG, CH, CI, and CJ of the commercial code, as published in the Public Register, were in error and in fact are not planned for adoption.

Next, I would ask for clarification on a couple of issues:

Section 3.1 states "**401.2 Application.** Residential buildings shall comply with section R401.2.1, 401.2.2, 4.1.2.3 R401.2.4 or R401.2.5, and Appendix RE."

I read that to mean that any one of the five paths may be chosen, and must include appendix RE. Would that be correct?

Section 4.2 states "As of December 31, 2025, all new residential building construction in the state of Delaware shall be zero net energy capable in accordance with 16 **Del.C. 7602(c)**

16Del.C. 7602(c) states "Therefore, a net zero energy capable home must be energy efficient enough that if the home or building owner chooses to add on-site generation, net zero energy consumption could be achieved."

At first glance it appears that section 4.2 effectively eliminates the first four energy compliance paths in section 3.1. Would I be correct in assuming that based on the definition of "net zero energy capable" it does not negate the alternate compliant paths but just indicates that a home must be capable of being alternatively supplied from an on-site energy source?

If the answer to that question is yes, what would the acceptable alternative energy sources be? It is my understanding that a fossil fuel fired generator is only acceptable as an emergency supply for residential. Would DNREC approve a natural gas generator as a form of cogeneration or alternative supply?

Since the other appendices are not planned for adoption, my remaining concern is for the adoption of appendix RE. However, if comments during the public comment period would shift the Department's opinion on those other appendices I would hope that we would be allowed an opportunity for comment, as those also place an undue burden on affordable housing.

I am opposed to adoption of appendix RE on Electric Vehicle Charging Infrastructure.

The first reason is that EV charging is not an energy conservation issue and therefore should not be addressed in an energy conservation code. I suspect this is why the International Code Council chose to place it in an appendix rather than as part of the energy code. EV charging is related to alternative fuel sources, which is an environmental debate not relating to energy conservation.

The second reason I am opposed to appendix RE is that it adds another barrier to affordable housing. The organizations I represent comprise seven different affordable housing projects for seniors, providing 437 units of affordable housing for our at-risk senior citizens. We are actively pursuing the construction of our eighth building, an additional 72-unit project at our Luther Village campus.

For our multifamily senior affordable housing project with 72 units and 82 parking spaces it means that we would need to install 5 EVSE spaces with charging stations and provide the circuit capacity and raceways for an additional 10 units with an additional EVSE space at an accessible location. Only 55% of our residents own personal vehicles. That means we will have about 40 cars for our 72 units. Currently Electric Vehicle's (EV) make up about .2% of the vehicles on the road in Delaware. Given that most of our residents are in the extremely low or very low-income category, and the balance are in the low-income category, I would be very surprised if we had one EV amongst our residents. I suppose the charging stations could double as hitching posts for our Amish visitors.

You might say that my calculations are incorrect, because appendix RE as amended by the Department only requires fifteen EV ready spaces and one EVSE accessible space.

It is important to note that in August of 2023 Delaware enacted SB103 (Part VII Title 16 Chapter 80) which established requirements for EV charging to be effective January 1, 2025. These requirements demand 5% of the parking spaces (rounded up to the nearest whole number) be established as EVSE spaces with an additional EVSE space at an accessible location. In addition to the EVSE spaces the statute requires an additional 10% of the parking spaces (rounded up to the nearest whole number) be set up as EV Capable Spaces. This legislation states *"This Act expires on the date of publication in the Register of Regulations of a notice by the Secretary of the Department of Natural Resources and Environmental Control that the Regulations for State Energy Conservation Code, Regulation 2101 of Title 7 of the Delaware Administrative Code, which are adopted under § 7602 of Title 16 of the Delaware Code, have been updated to match or exceed the standards adopted by this Act."*

Since the requirements of the Department's amended Appendix RE are not as stringent as the Act, Title 16, Chapter 80 will remain in place. This will serve to create confusion in the Industry since the Delaware Energy Code, as adopted, will appear to address the needs of EV charging in DE, but they will be mute because they will not be the rule of law on this subject.

I believe the recommendations of Appendix RE by the IECC council are more carefully thought out and more appropriate than the amended RE as recommended by the Department or Title 16 Chapter 80 for the following reasons:

1. The amended appendix eliminates EV capable spaces and requires EV ready spaces with one EVSE space. An EV capable space only requires the installation of the underground piping to the parking spaces and available circuit capacity, which is the largest barrier to installing EVSE spaces after the initial construction project has been completed. The additional infrastructure to convert to EVSE spaces is a natural cost to install EV charging and will not be a barrier to those who are installing EV charging out of actual demand. The cost of installing the circuits in the raceway of an EV capable space to convert it to an EV Ready space is the same during construction or after construction. Therefore, this cost should be driven by demand not statute. The IECC Council recognized this and only required EV capable spaces. Requiring EV ready or EVSE spaces is government overreach.
2. Appendix RE and the amended appendix RE base their percentage calculation of spaces on the number of units or number of parking spaces, whichever is less. This accommodates projects that have an excess of parking spaces above their unit count to accommodate event parking for a community room or other event style attractions.
3. I do believe the Council's level of 40% EV capable Spaces is excessive. Simply because spaces are not installed during construction does not mean they cannot be installed post construction. Ideally, the cost to install underground raceways during construction is cheaper than post construction, but this should only apply to a reasonable number of spaces. Demand should drive additional space either during construction or post construction.

My first recommendation to the Department would be to modify the amendment to appendix RE as follows:

RE101.1 Definitions.

Electric Vehicle Capable Space (EV Capable Space). *An automobile parking space that is provided with electrical infrastructure such as, but not limited to, raceways, cables, electrical capacity, a panelboard or other electrical distribution equipment space necessary for the future installation of an EVSE.*

RE101.2.1 Quantity. *New one- and two-family dwellings and townhouses with a designated attached or detached garage or other on-site private parking provided adjacent to the dwelling unit shall be provided with one EV ready or EVSE space per dwelling unit. R-2 occupancies or allocated parking for R-2 occupancies in mixed-use buildings shall be provided with an EV Capable Space, EV ready space or EVSE space for 10 percent of the dwelling units or automobile parking spaces, whichever is less. In addition, they shall be provided with an EVSE space for 5 percent of the dwelling units or automobile parking spaces, whichever is less.*

1. At least 1 EVSE space must be in an area available for use by all residents and available for use by all residents of the R-2 occupancy. The EVSE space must be accessible by an individual with a disability.

Exceptions:

1. Where the local electric distribution entity certifies in writing that it is not able to provide 100 percent of the necessary distribution capacity within 2 years after the estimated certificate of occupancy date, the required EV charging infrastructure shall be reduced based on the available existing electric distribution capacity.
2. Where substantiation is approved that meeting the requirements of Section RE101.2.4 will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the builder or developer by more than \$450 per dwelling unit.
3. Multifamily Affordable Housing projects shall be exempt from the requirement to install EVSE spaces other than the one required at an accessible location.

My alternate recommendation to the Department would be as follows:

RE101.1 Definitions.

Electric Vehicle Capable Space (EV Capable Space). An automobile parking space that is provided with electrical infrastructure such as, but not limited to, raceways, cables, electrical capacity, a panelboard or other electrical distribution equipment space necessary for the future installation of an EVSE.

RE101.2.1 Quantity. New one- and two-family dwellings and townhouses with a designated attached or detached garage or other on-site private parking provided adjacent to the dwelling unit shall be provided with one EV ready or EVSE space per dwelling unit. R-2 occupancies or allocated parking for R-2 occupancies in mixed-use buildings shall be provided with an **EV Capable Space**, EV ready space or EVSE space for 10 percent of the dwelling units or automobile parking spaces, whichever is less.

1. At least 1 EVSE space must be in an area available for use by all residents and available for use by all residents of the R-2 occupancy. The EVSE space must be accessible by an individual with a disability.

Adding the EV Capable Space back into the regulation allows for the elimination of the perceived barrier to EV charging because the installation of additional circuit capacity and underground piping is cheaper during the construction phase than post construction. Requiring circuits to be installed for EV Ready spaces costs no more post construction than it does during construction if the raceways are already installed. These costs should be demand driven and not unnecessarily drive up the cost of housing for citizens who do not require them.

I would further recommend that the Secretary petition the state legislature and the Governor to repeal Part VII Title 16 Chapter 80 for the reasons cited in this comment and to eliminate confusion in the industry about where the regulations governing EV charging infrastructure in the state of Delaware are located.

To demonstrate why appendix RE is a barrier to affordable housing:

Our current design for our 72-unit multifamily senior citizen affordable housing project in Luther Village was designed based on the DOE Net Zero Home Ready Multifamily Std. This requires that we install 8 EVSE spaces and an additional 7 EV capable spaces. The quoted cost for this is \$137,000. That equates to a cost per unit of \$1,900. That is an undue burden for an affordable housing community to bear on a feature that is destined to go unutilized in this community. However, if the spaces are EV Capable it can be implemented less painfully later when demand suggests it is appropriate.

If Title 16 Chapter 80 is not replaced by the new DE energy code or repealed the cost to install for our 72-unit building would be \$101,200 or \$1,405 per unit.

If appendix RE is adopted as currently recommended by DNREC the cost to install EV charging infrastructure for our 72 unit building would be \$55,200 or \$767/unit. Plus, an additional \$46,000 or \$639/unit to satisfy Title 16 chapter 80 for a total cost of \$101,200 or \$1,406/unit.

If Recommendation 1 is adopted our cost would be \$33,200 or \$461/unit

If Recommendation 2 is adopted the cost would be as currently recommended by DNREC, unless Title 16 Chapter 80 is repealed then it would be the same as recommendation 1

By enacting recommendation 1 to appendix RE it will be at least as stringent as Title 16 Chapter 80 and minimize the impending barrier to affordable housing. This will cause Title 16 chapter 80 to dissolve and the industry will find their requirements in one location.

I have attached a spreadsheet which helps visualize the cost burden for each adoption path.

Thank you for your consideration of my comments.

Statute	Single Family	Multi-Family	72 Unit Bldg w/ 82 pkg spaces	Cost to install for 72 unit multifamily	Cost per unit on 72 unit bldg
Part VII Title 16 chapter 80 (SB 103)					
Electric Vehicle Capable Parking Space	1	10% of parking spaces	9	\$ 101,200	\$ 1,406
Electric Vehicle Ready Space	N/A	N/A			
Electric Vehicle Charging Infrastructure Parking Space	0	5% of parking spaces	5		
Handicap Accessible Electric Vehicle Charging Infrastructure Parking Space	0	1	1		
DE Administrative Code 2101	One or Two Family	Multi-Family			
Electric Vehicle Capable Space	N/A	N/A		\$ 55,200	\$ 767
Electric Vehicle Ready Space	1 per unit	20% - pkg spaces or units whichever is less	15		
Electric Vehicle Supply Equipment Installed Space	0	0			
Handicap Accessible Electric Vehicle Supply Equipment Installed Space	0	1	1		
Primary Recommended Changes to Admin Code 2101					
Electric Vehicle Capable Space	1 per unit	10% - pkg spaces or units whichever is less	8	\$ 33,200	\$ 461
Electric Vehicle Ready Space					
Electric Vehicle Supply Equipment Installed Space	0	5% - pkg spaces or units whichever is less	Exempt		
Handicap Accessible Electric Vehicle Supply Equipment Installed Space	0	1	1		
Secondary Recommended Changes to Admin Code 2101					
Electric Vehicle Capable Space	1 per unit	10% - pkg spaces or units whichever is less	8	\$95,200 This would be the number if SB103 is not repealed. If SB103 is repealed this number would be equivalent to recommendation 1.	\$ 1,322
Electric Vehicle Ready Space					
Electric Vehicle Supply Equipment Installed Space			5		
Handicap Accessible Electric Vehicle Supply Equipment Installed Space		1	1		

This assumes:

\$8,000 per charging unit (This price likely increases if gov't subsidy goes away)

\$1,200 per circuit including breaker

\$2,500 for underground raceways per unit

\$4,000 per 200 amp panel

\$6,000 per 400 amp panel