

HEARING OFFICER'S REPORT

TO: The Honorable Gregory Patterson
Cabinet Secretary, Dept. of Natural Resources and Environmental Control

FROM: Theresa Smith, Regulatory Specialist, Office of the Secretary,
Dept. of Natural Resources and Environmental Control

RE: **Proposed Regulatory Amendments to 7 DE Admin. Code 2101:
*Regulations for State Energy Conservation Code***

DATE: March 2, 2026

I. **BACKGROUND AND PROCEDURAL HISTORY:**

A public hearing was held on Tuesday, July 22, 2025, at 6:00 p.m. via the State of Delaware's Zoom Video Communication Platform by the Department of Natural Resources and Environmental Control ("DNREC," "Department") to receive comment on proposed amendments to 7 DE Admin. Code 2101: *Regulations for State Energy Conservation Code* ("Amendments"). Pursuant to 16 *Del. C.* § 7602, *Delaware's Energy Conservation Code Act*, the Department is required to adopt the most recent, or highest available version, of the International Energy Conservation Code ("IECC"), as well as the latest American Society of Heating, Refrigerating and Air-Conditioning Engineers/Illuminating Engineering Society of North America ("ASHRAE") energy standard, as determined triennially by the Department.

In June of 2020, the Department adopted by reference the 2018 IECC and ASHRAE 90.1-2016 in their entirety, pursuant to 16 *Del.C.* § 7602. The Department began its next triennial review in the Fall of 2022. During that review, the Department also considered Senate Bill 289, passed in 2024, which amend Senate Bill 59 (July 29, 2009) to implement zero net energy ("ZNE") capability goals. Senate Bill 289 established specific compliance timelines requiring that all new residential building construction in Delaware be ZNE-capable by December 31, 2025, and that all new commercial building construction be ZNE-capable by December 31, 2030, as codified in

16 *Del.C.* § 7602. A ZNE-capable building is one that is constructed to a standard of energy efficiency such that, with the addition of on-site renewable energy generation, it could achieve zero net energy consumption from the utility provider.

In addition to the triennial review, pursuant to 16 *Del. C.* § 7605, the Department must implement measures that require all new commercial building construction to include a solar- ready zone. Under 16 *Del. C.* Ch.80, the Department must also establish requirements for electric vehicle (“EV”) charging infrastructure for new residential construction.

In February 2025, the Department convened the Delaware Energy Code Collaborative (“Code Collaborative”) to evaluate the adoption of the 2021 IECC (with selected 2024 IECC updates) or the 2024 IECC. Both options included ZNE requirements. The Department also reviewed available appendices of the 2024 IECC in accordance with 16 *Del. C.* Ch.80 and 16 *Del. C.* § 7605. During preliminary meetings, stakeholders expressed interest for the adoption of 2024 IECC.

The Department considered stakeholder input and reviewed the Pacific Northwest National Lab’s National Cost-Effectiveness of Residential Provisions of the 2021 and 2024 IECC reports. The analyses indicated that the 2024 IECC is more cost-effective in across all climate zone and the core provisions of the 2024 IECC demonstrate significant lifecycle cost savings compared to earlier editions.

In May 2025, the Department convened another Code Collaborative meeting to review a draft of the proposed amendments adopting the 2024 IECC with ZNE-capable amendments for residential buildings and the 2024 IECC/ASHRAE 90.1-2022 for commercial and high-rise residential buildings. The Department presented available pathways. For residential buildings, the available compliance paths were the Prescriptive Path, the Simulated Building Performance Path, the Energy Rating Index Path, the Passive House Path, and the Zero Energy Ready Homes Path. For commercial buildings,

the compliance options were the 2024 IECC prescriptive option, the 2024 IECC simulated building performance option, and ASHRAE 90.1-2022.

The Department also reviewed potential 2024 IECC appendices: Appendix RB (Solar-Ready Provisions); Appendix RD (Electric Energy Storage Provisions); Appendix RE (EV Charging Infrastructure); Appendix RJ (Demand Responsive Controls); and Appendix RK (Electric Ready Residential Building Provisions).

At the conclusion of the meetings, the Department drafted the proposed Amendments.

The Department published its initial proposed Amendments in the July 1, 2025, *Delaware Register of Regulations*. Among the proposed amendments, the Department included five compliance paths for residential buildings that included revisions for ZNE compliance: (1) the Prescriptive Path, requiring compliance with Sections R401 through R404 and R408, along with an additional 30 credits from Table R408.2, which must come from at least two different measures; (2) the Simulated Building Performance Path, requiring compliance with Section R405 and demonstration through energy modeling that the annual energy cost of the home is no more than 60% of the standard reference design for dwellings with fuel-burning appliances, or 65% for other dwellings; (3) the Energy Rating Index (ERI) Path, requiring compliance with Section R406 and establishes an ERI target of 42 before accounting for on-site power production. Delaware removed the requirement for an ERI value of zero after factoring in on-site power production. While the ERI value is derived from Appendix RC for Climate Zone 4, Delaware did not propose to adopt the appendix in its entirety; (4) the Passive House Path, requiring compliance with Section R407 and certification through a recognized Passive House program; and (5) the Zero Energy Ready Homes (ZERH) Path, requiring compliance with Section R409 and is based on the U.S. Department of Energy's Version 2 program requirements that included meeting the ZERH National Rater Checklist, ENERGY STAR baseline, and requirements related to the envelope, duct systems, water heating

efficiency, lighting and appliances, indoor air quality, renewable readiness, EV readiness, heat pump water heater readiness, and heat pump space heating readiness.

The Department also proposed to adopt with amendments, Appendix RE (EV Charging Infrastructure), pursuant to 16 *Del. C.* Ch.80. Residential buildings would be required to comply with Appendix RE standards, which establish EV-ready or EV space requirements for new single-family homes, townhouses, and low-rise multifamily buildings. For one- and two-family dwellings and townhouses with attached or adjacent private parking, one EV-ready space per dwelling unit is required. Low-rise multifamily buildings must provide EV-ready or EVSE spaces for 20 percent of dwelling units or parking spaces, whichever is less.

For commercial buildings, the Department proposed adoption of the 2024 IECC prescriptive option, the 2024 IECC simulated performance option, or ASHRAE 90.1-2022.

Pursuant to 16 *Del. C.* § 7605, the Department also proposed to adopt with amendments, Appendix CB (Solar-Ready Zone). Appendix CB requires new commercial buildings to designate a solar-ready zone comprising 40% of the gross roof area with orientation between 110 and 270 degrees of true north. Construction documents must identify the solar-ready zone, conduit pathways, and reserved panel space.

On July 22, 2025, the Department held a public hearing on the proposed amendments to 7 DE Admin. Code 2101-*Regulations for State Conservation Code*. At the hearing the Department also vetted revisions to the proposed amendments that included: (1) a correction to the Register Notice published in the July 1st *Delaware Register of Regulations* to reflect Appendix RE and Appendix CB as the only adopted appendices; and (2) adding R408.2.1.4 in Table R408.2 as written for Climate Zone 4 in the 2024 IECC. The revisions were non-substantive in nature; therefore, no further action was needed from the Department. For clarity, the proposed amendments as revised at the hearing are referred to as the “*revised* proposed amendments.”

At said hearing there were thirty-seven (37) members of the public in attendance. Pursuant to Delaware law, the hearing record (“Record”) remained open for fifteen (15) additional days subsequent to the date of the public hearing for receipt of public comment. The Record formally closed with regard to public comment at close of business on August 6, 2025. The Department received total of forty verbal and written comments.

Following the closure of the record and at the request of this Hearing Officer, the Division of Climate, Coastal, and Energy’s staff prepared a Technical Response Memorandum (“TRM”), attached hereto as Appendix “B”. The TRM responded to comments that reflected both support for the *revised* proposed amendments and concerns regarding ZNE provisions, including implementation and cost impacts. As a result of the comments received, the Department made the following additional technical revisions that are non-substantive to improve clarity and reduce unintended impacts: consistency in terminology (e.g., references to Phius verifiers vs raters) and a revision to clarify window U-factor values in Table R408.2.1.2.

Pursuant to 7 *Del. C.* § 6010, Secretary Gregory Patterson reviewed the *revised* proposed amendments. In light of public comments received and the ongoing housing affordability concerns that Delaware is challenged with, the Secretary declined to approve the *revised* proposed Amendments. Secretary Patterson directed Department staff to re-propose regulations without ZNE-capable requirements. A letter dated October 27, 2025, of this decision was issued and included in the Record.

On December 1, 2025, the Department published modifications to the *revised* proposed amendment, in the *Delaware Register of Regulation* (the “Modified Proposed Amendments”). The Modified Proposed Amendments adopt the following residential pathways as presented in the 2024 IECC (rather than with revisions as presented in the *revised* proposed amendments): Prescriptive; Simulated Performance; ERI; and Tropical Climate Region.

In conjunction eliminating ZNE provisions, the timelines set forth in 16 *Del. C.* § 7602(c) have likewise been removed. While state law continues to mandate ZNE-capable construction after December 31, the proposed regulatory framework does not establish corresponding standards for residential builders. The Department has indicated that, if policymakers determine that adoption of the ZNE-capable provisions should be deferred, clarification or the amendment of the statutory requirements, by the General Assembly and the Governor during the 2026 legislative session, may be warranted.

The Department also proposes to adopt the amended versions of Appendix RE and Appendix CB, to align with 16 *Del.C.* Ch. 80 and 16 *Del.C.* § 7605, respectively. It should be noted no additional modifications were proposed to those appendices.

The Department anticipates that the benefits of adopting the 2024 IECC without zero net energy capable amendments for residential buildings, together with the 2024 IECC/ASHRAE 90.1-2022 for commercial and high-rise residential buildings, and the inclusion of Appendix RE and Appendix CB, will increase efficiency, reduce emissions, and improve occupant health and comfort, while aligning with statutory mandates and national standards. This update is necessary to comply with statutory requirements and improve building performance statewide.

As the Department published the *modified* proposed amendments in the *Delaware Register of Regulations*, the hearing record re-opened on December 1, 2025, for a thirty-day period, closing on December 31, 2025. During this time, the Department received eight written comments from public members.

Following the close of the public comment period, and at the request of this Hearing Officer, the Division of Climate, Coastal, and Energy's staff prepared a Supplemental Technical Response Memorandum ("Supplemental TRM"), attached hereto as Appendix "C". That TRM will be discussed in further detail below.

The Department has the statutory basis and legal authority to act with regard to the *modified* proposed amendments pursuant to 16 *Del.C. § 7602, Delaware’s Energy Conservation Code Act*. The Department initially published its proposed Amendments in the July 1, 2025, *Delaware Register of Regulations*. A public hearing was held on July 22, 2025, at which time the Department staff thoroughly vetted revision to the proposed amendments.

Following the hearing, a review of the record, and in accordance with 7 *Del. C. § 6010*, Secretary Patterson directed Department staff to modify the *revised* proposed amendments. The *modified* proposed amendments were subsequently published in the December 1, 2025, *Delaware Register of Regulations*.

The Record reflects that all statutory notice and procedural requirements applicable to this matter were met by the Department as required by law.

II. SUMMARY OF THE PUBLIC HEARING RECORD:

The Record consists of the following documents: (1) a verbatim transcript; (2) fourteen (14) documents introduced by Department staff at the public hearing held on July 22, 2025, and marked by this Hearing Officer at the time of the hearing accordingly as Department Exhibits 1-14; (3) a Technical Response Memorandum (“TRM”); (4) a letter from Secretary Gregory Patterson, dated October 27, 2025; (5) the *modified* proposed amendments published in the December 1, 2025, *Delaware Register of Regulations*; and (6) a Supplemental Technical Response Memorandum (“Supplemental TRM”). The Department’s person primarily responsible for the drafting and overall promulgation of the *modified* proposed Amendments, Anna Keating, Planner II, Division of Climate, Coastal, & Energy, developed the Record with the relevant documents in the Department’s files.

As stated previously, the Department’s Division of Climate, Coastal, and Energy staff prepared a TRM that responded to forty (40) comments received through the initial

15-day comment period, ending on August 6, 2025. In addition, they also prepared a Supplemental TRM, responding to a total of eight (8) comments received during the additional 30-day comment period, ending December 31, 2025.

Comments received during the initial comment period addressed concerns regarding the proposed ZNE provisions. Subsequent to the initial comments received, the modified the proposed *revised* amendments, that remove ZNE provisions in order to reduce the potential cost burden associated with new construction requirements.

Comments received from the initial comment period and the additional comment period drew concern to adopting the appendices, while others requested additional appendices by adopted.

While reaching the determination to eliminate ZNE-capable requirements, the Department considered the need to balance environmental protection and public health objectives with the ongoing housing affordability challenges in Delaware. The Department proposes to adopt the appendices RE and CB to comply with the statutory requirements and to balance feasibility and industry concerns. Based on the Home Innovation Research Labs 2024 IECC cost analysis, the estimated incremental cost to comply with Appendix RE is approximately \$536 per single-family dwelling to meet the EV-ready requirement and \$821 to meet the EVSE requirement. The Department determined these costs are comparatively modest and supports emissions reduction goals under the *Climate Change Solutions Act of 2023*.

In addition, a commenter requested that ASHRAE 62.2-2022 be adopted in conjunction with the 2024 IECC to enhance ventilation standards, inspection, and certification requirements. Pursuant to 16 *Del. C.* § 7602, the Department is required to adopt the most recent version of the IECC for new detached one- and two-family dwellings and all other new residential buildings three stories or less in height. As the statute specifically directs adoption of the most recent IECC, the Department does not currently have clear authority to add separate ASHRAE standards beyond those already

included in the code. Accordingly, the Department recommends that the General Assembly consider amending the statute to explicitly authorize the State Energy Office to adopt ASHRAE standards for residential construction, should it determine such authority is necessary. In the interim, local jurisdictions may adopt ASHRAE standards through stretch codes, and the Department intends to address technical concerns through training and educational materials following promulgation of the regulation.

Lastly the Department received a request to incorporate Appendix RG (Zero Energy Appendix- Residential) as an optional compliance overlay, to provide guidance for builders prepared to construct ZNE-capable homes and regulatory guidance for ZNE-capable construction.

While the Department did not specifically propose to adopt Appendix RG, the adoption of the 2024 IECC would make all appendices available as optional resources for local jurisdictions to adopt other appendices of the 2024 IECC.

The Department concluded that adopting the 2024 IECC for residential buildings and the 2024 IECC/ ASHRAE 90.1-2022 for commercial and high-rise residential buildings, as well as Appendix RE (EV Charging Infrastructure) and Appendix CB (Solar-Ready Zone) will improve building quality, grid resiliency, emissions reductions, public health, and energy affordability for building owners and occupants across the state.

Accordingly, the Department's *modified* proposed Amendments are attached hereto as Appendix "A" for the Secretary's review.

I find that the DCCE's TRM and Supplemental TRM offers a detailed review of the *modified* proposed Amendments, identifies all the concerns raised by the public, and responds to the concerns in a balanced manner, accurately reflecting the information contained in the Record. Thus, the aforementioned TRM and Supplemental TRM are attached hereto as Appendix "B" and Appendix "C", respectively, and expressly incorporated herein as such.

III. RECOMMENDED FINDINGS AND CONCLUSIONS:

Based on the Record developed, I find and conclude that the Department has provided appropriate reasoning regarding the need for the *modified* proposed amendments to 7 DE Admin. Code 2101: *Regulations for State Energy Conservation Code*, specifically, to adopt by reference the 2024 IECC for residential buildings, the 2024 IECC/ASHRAE 90.1- 2022 for commercial and high-rise residential buildings, Appendix RE (EV Charging Infrastructure) with amendments, and Appendix CB (Solar-Ready Zone) with amendments. I also find that the *modified* proposed amendments are necessary to comply with state law, and I recommended that the Secretary adopt the *modified* proposed amendments as the final amendments to 7 DE Admin. Code 2101. Accordingly, I recommend promulgation of the same, in the customary manner provided by law.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has the statutory basis and legal authority to act with regard to this proposed regulatory promulgation, pursuant to 16 *Del.C.* §§ 7602, 7605 and 16 *Del. C.* Ch.80.
2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.* Chapter 60, to issue an Order adopting these *modified* proposed Amendments as final;
3. The Department provided adequate public notice of the initial proposed Amendments, the modified proposed amendments, and all proceedings in a manner required by the law and regulations, and provided the public with an adequate opportunity to comment on the same, including at the time of the public hearing held on July 22, 2025, during the 15 days subsequent to the hearing (through August 6, 2025), and the 30 days subsequent to the December 1, 2025 publication of the *modified* proposed amendments, before making any final decision;

4. Promulgation of the *modified* proposed Amendments to 7 DE Admin. Code 2101, *Regulations for State Energy Conservation Code* will enable the Department to adopt by reference the 2024 IECC for residential buildings, the 2024 IECC/ASHRAE 90.1- 2022 for commercial and high-rise residential buildings, and Appendix RE (EV Charging Infrastructure) and Appendix CB (Solar-Ready Zone) with amendments, pursuant to 16 *Del.C.* §§ 7602 & 7605, and 16 *Del. C.* Ch.80;

5. The Department has reviewed the *modified* proposed Amendments in the light of the *Regulatory Flexibility Act*, consistent with 29 *Del.C.* Ch. 104, and believes the same to be lawful, feasible and desirable, and the recommendations as proposed should be applicable to all Delaware citizens equally;

6. The Department has reviewed the *modified* proposed regulatory promulgation in the light of 7 *Del.C.* § 10003 and 29 *Del.C.* § 10118(b)(3), and has determined a full assessment of all impacts are needed to further evaluate greenhouse gas emissions, based on the PNNL study, showing a 6.32% reduction of CO₂ by adopting the 2024 IECC, compared to the 2021 IECC;

7. The Department’s proposed regulatory Amendments, as published in the December 1, 2025, *Delaware Register of Regulations*, are set forth in Appendix “A” hereto, and are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, they should be approved as final regulatory Amendments, which shall go into effect ten days after their publication in the next available issue of the *Delaware Register of Regulations*;

8. The Department shall submit the proposed Amendments as final regulatory amendments to the *Delaware Register of Regulations* for publication in its next available issue and provide such other notice as the law and regulation require, and the Department determines is appropriate; and

9. The Department shall serve and publish its Order on its internet site.

Theresa Smith
Public Hearing Officer