2025

Codes, Standards and New Construction Quarterly Newsletter

Q1 2025 TEAM UPDATES

What's New

New Priorities in the New Year

STANDARDS: The atmosphere for federal appliance standards has changed significantly in 2025. Executive orders have resulted in delays to several effective dates and have the potential to impact the appliance standards process in the future. NEEA staff have continued to respond to requests from the Department of Energy regarding delays in effective dates. It is well documented that federal appliance standards deliver value and choice to consumers, offer equivalent or better functionality, and accelerate innovation in appliance design.

State standards, on the other hand, are accelerating. There is renewed interest in adding benefits like load flex connectability and increased efficiency when possible. The Appliance Standards Awareness Project

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(ASAP) is <u>tracking state standards</u> within 18 states. NEEA staff are closely coordinating to support state standards that fill in the gap left by delays in federal standards.

CODES: NEEA staff have been busy with many code activities. Active code development projects are underway in Washington, Oregon, and at the national level with the International Energy Conservation Code (IECC), which is the reference code for Idaho and Montana. These projects will continue through the end of the year and into 2026.

In addition, evaluations of past standards are nearing completion, including the Montana code update to IECC 2021 with amendments. Finally, NEEA has launched new code trainings for the year to support the adopted codes from 2024.

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Questions about this newsletter may be addressed to:

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Q1 2025 TEAM UPDATES *Continued*

We hope you enjoy reading our quarterly newsletter. Please let us know if you have any questions or ideas on other information that would be helpful for you.

NEW CONSTRUCTION: To collect data that could support potential code changes, NEEA supports utility new construction programs by funding data collection and analysis tools, coordination and collaboration forums, and training and education resources. In Q1 2025, NEEA staff, with contractor support, interviewed utility staff about their new construction programs. With the 2024 code changes, NEEA staff are interested in gathering ideas to make beneficial program changes as tools and resource are updated to align with pending changes.

This newsletter provides details of all NEEA's codes, standards and new construction activities organized by state. Beyond the code and standards development efforts, NEEA provides trainings, educational materials, tools to aid in compliance, help desks to address market questions, and state level collaboratives that organize to address opportunities and gaps in their states.

Please enjoy the Q1 2025 quarterly newsletter, and reach out with any questions or ideas on other information that may be helpful to include in future editions. Please let us know if you have any questions or ideas on other information that would be helpful for you.



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Questions about this newsletter may be addressed to:

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BUILDING ENERGY CODE ADOPTION BY STATE

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State	Sector	Code Version	Adopted Date	Effective Date	
	COMMERCIAL	2018 International Energy Conservation Code (IECC)	4/2/2020	1/1/2021	
IDAHO	RESIDENTIAL	2018 IECC with weakening amendments	4/2/2020	1/1/2021	
	COMMERCIAL	2021 IECC (with mid-cycle weakening amendments)	6/6/2022	9/8/2022 (amended 9/21/2024)	
MONTANA	RESIDENTIAL	2021 IECC with weakening amendments	6/6/2022	9/8/2022	
2021 Oregon Energy Efficiency Specialty Code (OEESC) (ASHRAE 90.1-2019)		4/1/2021	10/1/2021		
OREGON	COMMERCIAL	2025 OEESC (ASHRAE 90.1-2022 with weakening amendments)	1/1/2025	7/1/2025	
	RESIDENTIAL	2023 Oregon Residential Specialty Code (ORSC) (custom state-developed code)	10/1/2023	4/1/2024	
WASHINGTON	COMMERCIAL	2021 Washington State Energy Code (WSEC) (2021 IECC with strengthening amendments)	11/28/2023	3/15/2024	
	RESIDENTIAL	2021 WSEC (2021 IECC with strengthening amendments)	11/28/2023	3/15/2024	



Market Progress Evaluation Report #6

NEEA contracted with NMR Group, Inc. to conduct the sixth Market Progress Evaluation Report (MPER) for its commercial and residential codes efforts. This study is intended to build on and complement the learnings generated through the recently completed Codes MPER #5 conducted by ADM Associates and will focus on the following research objectives:

- 1. Assess NEEA's progress on selected logic model outcomes, including those associated with (a) the Codes team's training and education activities, (b) voluntary certification and above-code construction, and (c) jurisdictional goals and state-level code support.
- 2. Conduct a qualitative analysis of NEEA's progress on outcomes associated with its code influence activities conducted during code cycles from 2018 onward, with a particular focus on code influence activities from 2023 onward.
- 3. Conduct formative evaluation regarding market actor awareness, use and valuing of key code compliance tools, including the Washington State Energy Code Commercial Technical Support website and webtool, COMcheck, and REScheck.

The study kicked off in October 2024, with instrument development completed in early Q4 2024 and data collection to follow. A final report is anticipated in Q3 2025.



International Energy Conservation Code (IECC)

In Q1 2025, the Residential and Commercial Consensus Committees formed topical subgroups and began reviewing the roughly 400 code change proposals submitted for the 2027 IECC. The committees are scheduled to finish reviewing these proposals by the end of Q2 2025.

Following selection to the Commercial Consensus Committee in Q4 2024, NEEA staff were selected to the Commercial HVAC & Water Heating subgroup and the Residential Modeling & Whole Building subgroup. As such, NEEA staff have a vote on all the proposals heard by each of these groups ensuring Northwest needs are elevated to the committee level.

Commercial Code

General Updates

In Q1 2025, the State Building Code Council's (SBCC's) Commercial Energy Technical Advisory Group (TAG) began reviewing code change proposals submitted for the 2024 Washington State Energy Code–Commercial (WSEC-C). These proposals were due on January 14, 2025, and the TAG is about midway through its review of the roughly 200 proposals – dozens of which were developed and submitted by NEEA and its contractors and collaborators.

Education and Training

NEEA provides training and technical assistance on the current WSEC-C provisions. Training attendees and recipients of technical support include design and construction professionals, building officials, plan examiners, home builders, contractors, field inspectors and fire marshals.

Educational resources and trainings on the 2021 WSEC-C are available for on-demand viewing on NEEA's commercial WSEC website.

The WSEC-C training delivered in Q1 2025 is listed in the table below.

Training Topic	Course Length	Attendees	Location	Date
WSEC-C & IMC Overview - WABO Education Institute	8 hours	140	Lynnwood, WA	3/18/2025

WASHINGTON STATE

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Commercial Code

Code Compliance Webtool

The 2021 WSEC-C edition of the code compliance webtool was launched in Q1 2024. It continues to undergo improvements based on inquiries through the technical assistance hotline and to be updated based on changes to the code or formal interpretations.

As of Q1 2025, <u>the WSEC-C code compliance webtool</u> had over 12,600 registered users and more than 24,800 non-test projects submitted through the tool, 5,800 of which are 2021 WSEC projects.

Residential Code

General Updates

In Q1 2025, the SBCC established its Residential Energy TAG roster for this cycle and convened the TAG to develop the Integrated Draft for the 2024 Washington State Energy Code–Residential (WSEC-R). This document generally melds the most efficient elements of the 2021 WSEC-R and the 2024 IECC. The SBCC then voted to open the public comment period for 2024 WSEC-R code change proposals. These proposals are due May 19, 2025.

Education and Training

NEEA provides training and technical assistance on the current WSEC-R provisions. Training attendees and recipients of technical support include design and construction professionals, building officials, plan examiners, home builders, contractors, field inspectors and fire marshals.

The WSEC-R on-demand trainings, training webinar schedule and additional resources can be found on the <u>Washington State University</u> <u>Energy Program</u> and <u>BetterBuiltNW</u> websites.

Residential Code

Education and Training (Continued)

The WSEC-R live trainings delivered in Q1 2025, and available on-demand trainings, are listed in the table below.

Training Topic	Course Length	Attendees	Location	Date
Energy Code 2021 Overview	1.5 hours	21	Webinar	1/8/2025
Energy Code 2021 Overview	1.5 hours	43	Webinar	2/12/2025
Energy Code Overview for AIA Spokane	1.5 hours	22	Webinar	2/5/2025
Energy Code Overview for Snohomish County AHJ	1.5 hours	51	Webinar	3/12/2025
Energy Code Best Practices in Plan Review - WABO	4 hours	147	Lynnwood, WA	3/19/2025
2018 WSEC-R: Summary of the 2018 WA State Residential Energy Code	10 mins	36	On Demand	Various
2018 WSEC-R: Residential Energy Code Compliance	2 hours	6	On Demand	Various
2018 WSEC-R: Balanced Ventilation with ERVs & HRVs (short version)	1 hour	9	On Demand	Various
2018 WSEC-R: Efficient Building Envelope Options	1 hour	2	On Demand	Various
2018 WSEC-R: Heating & Air Conditioning System Inside Options	14 mins	7	On Demand	Various
Using the C3 Calculator to Calculate Ventilation Rates	10 mins	8	On Demand	Various
Filling out the Compliance Certificate for Ventilation Systems	10 mins	20	On Demand	Various
2021 WSEC-R: Cost Effective HVAC Strategies to Meet New WSEC-R (Mitsubishi)	1.5 hours	83	On Demand	Various
2021 WSEC-R: Market Trends, Builder Choices, and Resources	1.5 hours	76	On Demand	Various

*On-Demand training attendance numbers are cumulative starting from January 1, 2025.

Commercial Code

General Updates

The 2025 Oregon Energy Efficiency Specialty Code (OEESC) was formally adopted on January 1, 2025, and will fully go into effect on July 1, 2025. The 2025 OEESC is based on ASHRAE Standard 90.1-2022 but contains amendments that reduce energy efficiency.

After soliciting code change proposals from the public in Q4 2024, the Building Codes Division finalized its Oregon Commercial Reach Code (OCRC) update in Q1 2025. The <u>2025 OCRC</u> went into effect on April 1, 2025.

Residential Code

General Updates

The Building Codes Division (BCD) announced its process and schedule for updating the Oregon Residential Specialty Code (ORSC) at the Q1 2025 Oregon Energy Code Stakeholder Panel meeting. BCD plans to convene a working group in spring 2025 to develop a first draft for the 2026 ORSC, upon which the public will have the opportunity to submit code change proposals in summer 2025.

Residential Code

Education and Training

NEEA partners with organizations across the state to provide technical assistance and training on the current and upcoming Oregon residential and commercial energy codes. Training attendees include design and construction professionals, building officials, plan examiners, home builders, contractors, field inspectors and fire marshals.

In addition, Oregon Building Codes Division provides residential energy code training resources and videos on its website.

The Oregon energy code trainings delivered in Q1 2025 are listed in the table below.

Training Topic	Course Length	Attendees	Location	Date
2025 Oregon Energy Efficiency Specialty Code (OEESC) - Architects and Designer Focus	2 hours	268	Webinar	3/6/2025
2025 Oregon Energy Efficiency Specialty Code (OEESC) - Engineer Focus	2 hours	116	Webinar	3/13/2025

Residential Code

Field Study and Evaluation

Oregon Residential Code Compliance Evaluation

NEEA kicked off the Oregon Residential Code Compliance Evaluation in February 2024. Through this study, NEEA will gather market data about homes built under the 2021 Oregon Residential Specialty Code (ORSC) to meet the following objectives:

- Calculate code compliance among single-family buildings constructed under the 2021 ORSC.
- Investigate whether and how new construction homes use natural gas for space and water heating as well as other end uses, including stoves and hearths, and the prevalence of gas hookups in homes with all-electric appliances.
- Document the proportion of new construction homes built with above-code elements.
- Provide an analysis of builders' choices and rationale regarding the efficiency level to which homes are built (base code, reach code, ENERGY STAR[®] Homes) and selection and implementation of the 2021 ORSC-required Additional Measure.

The final report is anticipated in Q2 2025.

General Updates

In Q1 2025, the Division of Occupational and Professional Licenses (DOPL) began holding public listening sessions to collect feedback regarding the proposed update to the 2024 I-codes (including the 2024 IECC). Four sessions (three in person, one hybrid) were held in March 2025, and several more are scheduled in Q2 2025. In addition, a presentation on the potential energy code update was scheduled at the Building Code Board's April 2025 meeting.

Education and Training

NEEA provides training and technical assistance on the current Idaho energy code. Training attendees and recipients of technical support include design and construction professionals, building officials, plan examiners, home builders, contractors, field inspectors and fire marshals.

More information about the Idaho building energy code, trainings and resources can be found at the Idaho Energy Code website.

The Idaho energy code trainings delivered in Q1 2025 are listed in the table below.

Training Topic	Course Length	Attendees	Location	Date
Air Balance Certification	8 hours	7	Webinar	1/15/2025
Duct and Envelope Tightness Testing Certification	16 hours	2	Webinar	1/21-22/2025
2018 IECC IDABO Conference	4 hours	13	Meridian, ID	1/17/2025
Attic Ventilation for Point Roofing	1 hour	4	Boise, ID	2/27/2025
Air Sealing for Second Chance Construction	1 hour	3	Nampa, ID	2/28/2025
Air Balance Certification	8 hours	3	Webinar	3/19/2025

Field Study and Evaluation

Idaho Commercial Code Evaluation

The Idaho Commercial New Construction Code evaluation study will assess the path(s) by which, and the degree to which, code compliance is achieved with the amended 2018 IECC in newly constructed buildings. The study will also measure building energy performance compared with the average energy performance of buildings constructed under previous code. The results of the study will provide direction to the development and implementation efforts of the NEEA Codes team and will provide other regional code stakeholders guidance in targeting their energy efficiency work in the commercial new construction sector.

NEEA contracted with Opinion Dynamics to conduct this study. The kickoff meeting took place in August 2023 and a sampling plan was prepared in December 2023, with sample development currently underway. Data collection, including desk review of permit data and in-person/virtual site visits, began in Q2 2024 and is scheduled to conclude in Q2 2025. This study includes analysis of billing data, with data collection planned to continue through Q2 2025. Analysis and final report preparation will follow once data collection is complete. The final report is anticipated in Q3 2025.

General Updates

The Montana energy codes had no significant updates in Q1 2025. The state Department of Labor and Industry held its annual <u>codes</u> <u>education conference</u> March 24–28, 2025 in Helena, MT.

Education and Training

Montana energy code training providers developed and posted a <u>virtual course for building and duct tightness</u> training and are continuing outreach efforts to encourage participation. The training can be found on the National Center for Appropriate Technology's (NCAT's) website under the Residential Energy Services section. Additional energy code resources can be found on <u>Montana DEQ's</u> <u>Energy Program website</u>.

Information on the Montana Homes Collaborative can be found on NCAT's website.

The Montana energy code training delivered in Q1 2025 is listed in the table below.

Training Topic	Course Length	Attendees	Location	Date
Habitat for Humanity Helena Site Visit Training	2 hours	24	Helena, MT	3/27/2025



Field Study and Evaluation

Montana 2018 Commercial New Construction Code Compliance Evaluation

The Montana 2018 Commercial New Construction Code Compliance Evaluation field study focuses on assessing how and the extent to which code compliance is achieved with the 2018 IECC in newly constructed buildings in Montana. The study will include measurements of energy performance of these buildings as compared with the average energy performance of buildings constructed under previous code. The sampling frame encompasses all commercial buildings constructed in Montana under its version of the 2018 IECC, which was in effect from February 13, 2021, through June 5, 2022. NEEA's ultimate objective is to obtain results that will inform the development and implementation efforts of its Codes team, as well as to provide guidance for other regional stakeholders so that they can better target their energy efficiency work in the commercial new construction sector.

The contractor conducted a kickoff meeting in Q2 2022. Data collection focused on reviewing permit data paired with visits to a subset of sites for data validation. Permit and on-site data collection and analysis continued through Q2 2024. Billing data collection was attempted for this study but has been excluded from ongoing project activities due to a prohibitively low response rate from eligible building contacts. The final Montana 2018 Commercial New Construction Evaluation <u>report</u> outlines the results of the compliance analysis and comparative site visits. It was published to neea.org in January 2025.



MONTANA STATE

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Field Study and Evaluation (Continued)

Montana Residential Code Compliance Evaluation

NEEA is reviewing its assumptions underlying its estimation of energy savings resulting from NEEA's and its partners' involvement in the Montana state code processes. Using data collected through site visits to residential new construction building sites and interviews with market actors, this research will address the following objectives:

- Assess statewide compliance with selected code requirements among single-family homes built under IECC 2018 with Montana amendments and IECC 2021 with Montana amendments.
- Develop estimates of statewide energy code compliance and compliance within urban and rural jurisdictions separately using data collected on individual code requirements.
- Provide statewide findings regarding primary space and water heating fuel and above-code elements using data collected on individual code requirements.

This work kicked off in Q1 2023 and paused in Q3 2023 due to permit data collection challenges. The project re-launched in early 2024 with a focus on on-site data collection. The final report is expected in Q2 2025.

General Updates

In Q1 2025, the U.S. Department of Energy (U.S. DOE) <u>published notices delaying the effective dates</u> of four test procedure final rules (general service lamps; central air conditioners and heat pumps; residential and commercial clothes washers and consumer clothes dryers; compressors) and three standards final rules (gas instantaneous water heaters; walk-in coolers and freezers; commercial refrigerators, freezers and refrigerator-freezers).

The U.S. DOE also published a Notice of Data Availability (NODA) for a standard for portable electric spas, issued a withdrawal of determination for miscellaneous gas products as a covered consumer product, and withdrew three proposed rules for standards (consumer boilers; battery chargers; fans and blowers).

NEEA submitted the following comment letter in Q1 2025:

• Test Procedures for Residential and Commercial Clothes Washers and Consumer Clothes Dryers; Final rule, delay of effective date.

Evaluation

Battery Chargers Standard Evaluation (Notice of Withdrawal Issued by U.S. DOE)

NEEA contracted with Michaels Energy to conduct a qualitative assessment of NEEA's influence on the standards process for battery chargers and to provide a quantitative estimate of the share of savings resulting from NEEA's and other efficiency organizations' efforts. The project kicked off in October 2023. In January 2025 U.S. DOE published a Notice of Withdrawal for the standard, citing pushback from multiple parties. Because a final rule will not be published, NEEA cancelled the evaluation.

Portable Air Conditioners Standard Evaluation

NEEA contracted with Michaels Energy to conduct a qualitative assessment of NEEA's influence on the standards process for portable air conditioners and to provide a quantitative estimate of the share of savings resulting from NEEA's and other efficiency organizations' efforts. The project kicked off in November 2024. Michaels Energy will review NEEA records and publicly available documents and conduct interviews with key stakeholders from NEEA, U.S. DOE and other organizations. A final report is anticipated in Q2 2025.

Air Compressors Standard Evaluation

NEEA contracted with Michaels Energy to conduct a qualitative assessment of NEEA's influence on the standards process for air compressors and to provide a quantitative estimate of the share of savings resulting from NEEA's and other efficiency organizations' efforts. The project kicked off in November 2024. Michaels Energy will review NEEA records and publicly available documents and conduct interviews with key stakeholders from NEEA, U.S. DOE and other organizations. A final report is anticipated in Q2 2025.

General Updates

NEEA staff selected complementary projects with the CSA Group for various test methods and standards definitions. The projects will continue through 2025.

General Updates

Residential New Construction market activities focus on removing barriers to the adoption of above-code efficiency measures in new construction and collecting market evidence that supports future code advancement. To accelerate market adoption, these market activities influence builders and key trades to adopt above-code technologies and best practices. The interventions focus on both gas and electric technologies and residential building measures.

Highlights of Q1 2025 include:

- Published monthly newsletters for January, February and March 2025 covering topics including high-performance builds on the Confederated Tribes of Grand Ronde [Reservation/lands], benefits of a building science approach, and a recap of the in-person Sustainable Homes Professional course offered by BetterBuiltNW and Earth Advantage. Current and past newsletters can be found on <u>BetterBuiltNW's website</u>.
- The BetterBuiltNW team met with utilities that currently or recently participated in the Performance Path program to understand barriers to participation. These insights will help the team work to develop a new measure offering for residential new construction in the region.
- In coordination with Portland Home Builders Association and the Energy Trust of Oregon, the BetterBuiltNW team helped develop sessions for the <u>BuildRight Conference</u> on April 30 May 1, 2025.

Education and Training

The BetterBuiltNW website offers many on-demand trainings and resources for builders on above-code building practices, including Top 10 Best Practices for Today's Homebuilder and topic-specific trainings about envelope, HVAC measures, and many others. These ondemand trainings can be found on the <u>BetterBuiltNW training website</u>.

Residential new construction above-code trainings delivered in Q1 2025 are listed in the table below.

Training Topic	Course Length	Attendees	Location	Date
Top 10 Best Practices for Today's Homebuilder	3 hours	106	On-demand	Various
Building with Ducts Inside Conditioned Spaces	3 hours	102	On-demand	Various
Sustainable Homes Professional (SHP)	15–20 hours	7	On-demand	Various
How to Cost Effectively Build Zero Energy Homes	3 hours	18	On-demand	Various
On The Level: Exterior Air Barrier Details in the NW	1 hour	14	On-demand	Various
On The Level: Balanced Ventilation Approaches for Healthy Indoor Air	1 hour	78	On-demand	Various
On The Level: Installation Elements for ERVs & HRVs	1 hour	59	On-demand	Various
On The Level: Using Building Science to Inform Envelope Design	1 hour	60	On-demand	Various
On The Level: Practical Solutions for Selecting & Installing Exterior Insulation	1 hour	11	On-demand	Various
On The Level: Design and Quality Control Best Practices for ERVs/HRVs	1 hour	65	On-demand	Various
Zero Energy Homes: Updates & Cost-Effective Approaches	1 hour	47	On-demand	Various
Simple Steps to Improve Ductwork Installations	1 hour	1	On-demand	Various
45L: What You Need to Know	1 hour	37	On-demand	Various
Sustainable Homes Professional (SHP)	16 hours	17	Portland, OR	1/3/25 & 1/17/25

*On-Demand training attendance numbers are cumulative starting from January 1, 2025.

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