

November 5, 2025

Oregon Building Codes Division
1535 Edgewater Street NW
Salem, OR 97304

Re: Section N1105.8 (Heat Pump Requirement) in the 2026 Oregon Residential Specialty Code, Chapter 11 – Energy Efficiency

To BCD Staff and Members of the Committee:

Thank you for the opportunity last week to comment on the 2026 Oregon Residential Specialty Code (ORSC), Chapter 11. I am writing to further express concern with Section N1105.8, which would mandate that any new dwelling with split-system air-conditioning also include heat-pump operation for heating. For the reasons outlined below, I urge BCD to remove or substantially revise this requirement and adopt alternative proposals (PP-09, PP-10, PP-11) that meet energy-efficiency objectives without undermining affordability, equity, or reliability.

NWGA represents the three natural gas utilities and two transmission pipelines that provide warmth and comfort to over 2 million Oregon residents (805,000 households), and productive energy for more than 85,000 Oregon businesses and industries.

NWGA members support and are actively engaged in reducing regional greenhouse gas emissions (GHGs) and increasing regional energy efficiency by smartly utilizing 30,000 miles of existing energy infrastructure represented by the natural gas transmission and distribution systems in Oregon. Natural gas plays, and will continue to play, an essential role in Oregon's clean energy future.

Oregon's Housing Reality: Don't Regulate Away Affordability

Oregon faces a well-documented housing shortfall. The Oregon Housing Needs Analysis (OHNA) sets a production target of 29,522 homes per year statewide—an ambitious benchmark aimed at restoring affordability and supply. A policy that raises the cost of each new home moves us further from that goal, not closer.

According to the **Oregon Department of Energy's (ODOE) 2025 Biennial Heat Pump Report**, installing heat pumps raises the average project cost by 57.7% compared to traditional systems—an especially steep barrier for low- and moderate-income buyers and for smaller builders operating on thin margins. Consistent with this, NAHB's 2025 priced-out analysis shows that every \$1,000 increase in the price of a median-priced new home excludes ~115,000

households nationwide. Even small, prescriptive code adders, when multiplied across the whole home, have outsized consequences for who can buy.

Section N1105.8 “would inflict additional costs on homeowners,” thereby making new housing less accessible, and it cites ODOE’s cost delta directly. The letter also flags NAHB’s priced-out effect as a relevant affordability metric for Oregon families.

Bottom line: In a state that must add nearly 30,000 units per year, BCD should avoid prescriptive mandates that raise first costs where equal or better compliance can be achieved via choice-based pathways.

Energy Reliability and Resource Adequacy Threats

The heat pump mandate does not exist in a vacuum. Oregon’s electric grid is under extraordinary strain due to rapid increases in load from multiple sectors—all happening at once. A new analysis from Energy + Environmental Economics (E3)—commissioned by regional utilities and owners—shows:

- A 9 GW resource gap by 2030 under accelerated load growth;
- That preferred renewable-heavy resources currently contribute only modestly to resource adequacy; and,
- Extended winter cold events representing the highest risk for grid reliability.

This gap is approximately equal to *all* of Oregon’s current annual electricity demand. Mandating new electric heating at this moment would significantly increase peak loads specifically during the most constrained periods—multi-day winter cold snaps, when heat pumps are at their **least effective operational mode**.

This is not just theoretical. A regional review of available research by **Guidehouse** (https://www.nwga.org/files/ugd/054dfe_ab2f35db6afc41b980fd15c96854d9aa.pdf) emphasizes:

- The region is experiencing surging electric demand, driven by data center growth, electrification of transportation and buildings;
- Extreme weather is already overwhelming both gas and electric systems;
- Natural gas remains the essential flexibility and resiliency resource that keeps the grid functioning when renewables and batteries cannot; and,
- Joint resource planning between gas and electric sectors must improve to avoid cascading failure risk.

A policy choice to shift heating load onto an electrically constrained system is therefore a policy choice to **increase the likelihood of rolling outages**—potentially during the coldest hours of the year.

We must ask: What is the public safety impact if tens of thousands of new homes depend solely on electric heating, and the power goes out?

Gas furnaces with electric blowers require only minimal backup power. Heat pumps require electricity to operate fundamentally. This difference matters when hours-long outages become days-long crises.

Reliability & Peak Risk: Winter Is the Constraint, and Heat Pump Mandates Add to It

Electrification is accelerating just as the region faces tightening margins. The E3 Phase 1 resource-adequacy assessment for the Pacific Northwest, again, projects a 9-GW gap by 2030 under accelerated load growth, with the most constraining reliability conditions during extended winter cold events in very low-water years. Preferred resources (wind/solar/batteries) contribute only modestly to firm adequacy under these stress conditions, and development faces permitting, interconnection, and cost headwinds. These findings are echoed by trade-press coverage and the Regional Energy Symposium held October 9th.

The January 12–16, 2024 cold snap demonstrated how close the West is running to the edge: CAISO, Powerex, and Western Power Pool (WPP) post-event reports detail elevated prices, emergency actions, and heavy interstate support, underscoring how thin the cushion is when cold persists for days. NERC’s seasonal and long-term assessments continue to warn about emerging adequacy risks amid rising electrification and retirements, especially during peak conditions.

Mandating electric heating in every cooled new home compounds winter peaks—exactly when the grid is most constrained. Independent system operators around the country are modeling this shift explicitly:

- ISO-New England now publishes a heating electrification forecast that shows winter peaks growing far faster than summer, and evidences material MW increases in winter peak demand from heat-pump adoption. (https://www.iso-ne.com/static-assets/documents/100023/heat_fx_2025.pdf);
- MISO has stated that broad electrification shifts its system from summer to winter peaking, implying the need for new capacity and flexibility precisely at cold times. (https://cdn.misoenergy.org/Electrification_Insights538860.pdf); and,
- SPP studies similarly show higher winter peaks with heating electrification. (<https://www.spp.org/documents/72773/future%20load%20scenarios%20for%20southwest%20power%20pool%20-%20evolved%20energy%20research%20-%202024.pdf>)

The Guidehouse review synthesizes 19 studies and concludes: gas-electric interdependence is rising, the West's adequacy is critically challenged by retirements and renewable integration limits, and natural gas generation remains the essential flexibility backstop during extreme events. The report calls for integrated planning and warns traditional siloed metrics (e.g., PRM) understate correlated risks like multi-day cold.

Bottom line: Adding mandated electric heating load to every cooled new home is misaligned with a system already struggling to serve winter peaks. That is a real reliability and consumer-protection problem.

Equity, Resilience, and the “Worst-Day” Standard

Section N1105.8 also raises equity concerns. ODOE's cost findings (average 57.7% higher project costs) hit low-income and rural households hardest, especially during unplanned replacements when affordability and speed are paramount. The Utilities' letter underscores that forced fuel switching can trap homeowners in expensive, longer lead-time projects right when a furnace has failed mid-winter.

From a resilience standpoint, a home heated by an electric-only heat pump is more exposed during outages. In multi-day winter events—exactly the periods we are most worried about—gas furnaces (with minimal backup power) or hybrid systems provide a safer fallback. Regional January-2024 after-action reports show how prolonged cold strains systems for days; policies should prioritize survivability during these “long-duration, low-renewable” conditions. (<https://www.caiso.com/documents/wintermarketperformancereportforjan2024.pdf>)

Bottom line: Equity and resilience require options. A singular, prescriptive technology mandate fails households who most need flexibility and speed of repair.

Oregon Already Has a Strong Energy Code—Avoid Diminishing Returns

Oregon consistently ranks among the most efficient states for building codes and programs. That means many of the low-cost efficiency gains are already captured. Layering on prescriptive electrification (via N1105.8) risks diminishing returns and higher costs per unit of savings—particularly when paired with the systemic risks outlined above. The Utilities' letter points out that Oregon's stringent codebase is already delivering savings—and that the heat-pump mandate is not needed to maintain leadership in efficiency.

The Regional Planning Consensus: Coordination, Not Siloed Mandates

The Guidehouse review calls for coordinated, cross-sector planning and identifies five systemic gaps, including: obscured visibility into gas-electric interdependencies; insufficient understanding of coincident peaks; and traditional planning metrics failing to capture fuel and weather risks. It explicitly recommends integrated modeling, hybrid heating strategies, and customer-centric metrics that optimize total energy service value—not “gas vs. electric” in isolation.

Bottom line: This is not a debate over the *existence* of heat pumps. It's a recognition that hybrid and choice-based approaches can lower total system cost, reduce peaks, and improve resilience—all while cutting emissions.

The Solutions on the Table: PP-09, PP-10, and PP-11

The NW Gas Association, representing our member companies, continue to propose two practical pathways that align with the research and protect Oregon households:

1. **PP-09:** Remove Section N1105.8 to preserve affordability, reliability, and choice, keeping Oregon aligned with model codes while allowing climate-appropriate system design by builders.
2. **PP-10:** Exempt retrofits/emergency replacements from mandatory heat-pump installation—preventing unplanned cost shocks and enabling fast, safe restorations of service. **THANK YOU FOR ACCEPTING “NEW CONSTRUCTION ONLY” LANGUAGE INTO THE PROPOSED ENERGY EFFICIENCY CODE!**
3. **PP-11:** Provide a high-efficiency gas furnace alternative path. This fosters innovation in lower-carbon gaseous fuels (renewable natural gas, hydrogen blends) and supports hybrid heating as a peak-shaving strategy.

Adopting these changes would align code with **real-world reliability constraints, equity,** and **consumer protection**—without abandoning the state's long-standing leadership in energy efficiency.

A Better Path for Oregon Building Efficiency

I respectfully recommend that OBCD:

- **Reject or revise Section N1105.8** (adopt **PP-09**). Preserve the ability for builders to right-size solutions to site, climate, and customer.
- **Allow a high-efficiency gas path** (adopt **PP-11**). Enable hybrid systems (e.g., HP + gas furnace) that shave peaks, improve outage resilience, and can leverage decarbonizing gaseous fuels over time.
- **Align with regional planning.** Build code pathways that support gas-electric coordination, advance shared data, and reflect extreme-weather scenarios rather than perfect averages.

Keep Oregon's leadership in efficiency—but target cost-effective levers (envelopes, ducts, commissioning, controls) that lower bills and reduce peaks without mandating a single heating technology across all geographies and income levels.

Section N1105.8 would raise housing costs, worsen winter peak risk, and reduce resilience for households most vulnerable to outages and price shocks. The weight of regional evidence—from ISO modeling to post-event analyses to evolving DOE test procedures—argues for flexibility, optionality, and coordination, not a one-size-fits-all mandate.

Oregon can lead in efficiency and reliability by removing N1105.8 and adopting PP-09, PP-10, and PP-11. These proposals preserve affordability and reliability, protect equity in emergency replacements, and enable hybrid pathways that trim winter peaks and improve outage survivability, all while supporting long-term decarbonization through smarter, integrated planning.

Thank you for your consideration and for your continued service to Oregonians. I welcome further discussion and can provide further research upon request.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Dan Kirschner", with a stylized flourish at the end.

Dan Kirschner
CEO