



**Comments of Kevin Rose, Building Energy Senior Technical Associate
Northeast Energy Efficiency Partnerships (NEEP)
To the Maryland Senate of the General Assembly
Regarding Senate Bill 0262 and House Bill 0323
March 31, 2015**

Senator Miller and members of the Senate:

On behalf of Northeast Energy Efficiency Partnerships (NEEP)¹, thank you for the opportunity to provide comment on Senate Bill 0262, An Act Concerning Maryland Building Performance Standards - Energy Codes - Local Authority, and its companion House Bill 0323, An Act Concerning Maryland Building Performance Standards - Modifications - Energy Codes. NEEP was founded in 1996 as a non-profit whose mission is to serve the Northeast and Mid-Atlantic to accelerate energy efficiency in the building sector through public policy, program strategies and education. Our vision is that the region will fully embrace energy efficiency as a cornerstone of sustainable energy policy to help achieve a cleaner environment and a more reliable and affordable energy system. NEEP is one of six Regional Energy Efficiency Organizations, as designated by the U.S. Department of Energy, which work to support several energy initiatives in their states, including enhancing compliance with building energy codes.

Opposition to SB 0262 / HB 0323:

NEEP strongly opposes SB 0262 because it will weaken the State's energy code by allowing the use of unrestricted tradeoffs. Having an energy code that varies by county would also cause confusion for practitioners working in the State.

At first glance, this bill still prohibits local jurisdictions from adopting weakening amendments to the code. However, granting counties the authority to determine energy code equivalency would lead to the adoption of unrestricted trade-offs. Under this scheme, envelope provisions that typically last 30-50 years (or more) are allowed to be exchanged with efficient equipment that typically last 10-20 years (or less). Building codes exist to protect owners and tenants; building energy codes are designed to safeguard building owners and tenants from long-term financial burdens like high energy bills that can result from short-term construction decisions. **Unrestricted trade-offs are only equivalent to the energy code over the useful life of the installed equipment and therefore should not be permitted.**

Attached to these comments is the summary of a thorough [analysis](#)² finding that trade-offs significantly weaken the energy code. The report specifies that equipment trade-offs reduce the energy savings the International Energy Conservation Code (IECC) is intended to produce due to the energy wasted over the balance of a building's life as well as the free-ridership effect. The Department of Energy (DOE) also identified these two sources of lost energy savings in its [determination](#)³ on the 2009 IECC, which removed such trade-offs from the code:

¹ [NEEP](#) is a regional non-profit organization founded in 1996 whose mission is to promote the efficient use of energy in homes, buildings, and industry throughout the Northeast and Mid-Atlantic through regionally coordinated programs and policies that increase the use of energy efficient products, services and practices, and help achieve a cleaner environment and a more reliable and affordable energy system. The comments are presented by NEEP staff and don't necessarily reflect the views of NEEP's Board, sponsors or partners.

² *Review and Analysis of Equipment Trade-offs in Residential Energy Codes*. ICF International. 23 Sep 2013.

³ *Updating State Residential Building Energy Efficiency Codes: Notice of final determination*. Department of Energy. 19 Jul 2011.



Another change does not directly alter code stringency in the performance path but may ultimately result in some energy savings is the removal of the option to trade high-efficiency HVAC equipment for reductions in other requirements in the code, such as reduced envelope insulation. Because building envelopes have substantially longer lives than HVAC and/or water heating equipment, energy savings from envelope improvements may persist for many more years than comparable equipment improvements. Also, because high-efficiency equipment is already the predominant choice in many markets, disallowing envelope/equipment trade-offs is likely to result in improved overall efficiency in many situations.

Since these trade-offs were removed from the code, efforts to reintroduce them have been defeated in the development process of each new revision of the IECC.

Furthermore, Maryland's new building energy code provides home builders with a new compliance pathway that provides flexibility without compromising long-term energy savings. The 2015 IECC, which was adopted statewide last year, introduces an Energy Rating Index pathway based on RESNET's HERS Index that provides builders with a mechanism for receiving credit for high efficiency equipment that maintains adequate safeguards for protecting the quality of the building envelope.

In addition, this bill would also trade a uniform state energy code for a patchwork of energy codes varying county to county. These differing local codes would cause confusion for builders, subcontractors, engineers, architects, industry representatives, building officials, energy raters, etc. throughout the State, particularly those who work across county borders. It would also make it more difficult for the state to demonstrate compliance with DOE's 90 percent compliance requirement, which is tied to the funds received through the American Recovery and Reinvestment Act. Further, the success of the Maryland Energy Administration's DOE-funded residential code compliance study hinges upon having a consistent energy code environment over the course of its three year life.

While NEEP would prefer if these bills were defeated, we recommend adopting the bill as modified in the House if a version of this bill must be passed. The [HB 0323 amendments](#) remove the local determination concerns explained above by assigning the Department of Housing and Community Development (DHCD) to act as a gatekeeper of sorts for determining equivalency of proposed alternative compliance schemes. While this will help to safeguard the efficiency of the code, important considerations like the time horizon and metrics used to analyze this equivalency are left unexplained. Additionally, this modification will impose an additional time and resource burden upon DHCD to review submitted approaches. The opportunity cost of the passage of this version of the bill is that it will necessarily handicap DHCD commitments elsewhere due to staffing and budget constraints.

In conclusion, NEEP opposes the passage of SB 0262 / HB 0323 but prefers passage as modified in the House to the version originally submitted. Please do not hesitate to contact NEEP for technical support and assistance in these efforts.

Contact information:

Kevin Rose
Building Energy Senior Technical Associate
NEEP - Northeast Energy Efficiency Partnerships
91 Hartwell Avenue, Lexington, MA 02421-3137
781-860-9177 Ext.158
krrose@neep.org