



# EM&V Committee Meeting

October 15, 2024



# Agenda

1. Welcome and Introductions
2. 2024 Q1-Q2 Bi-Annual Snapshots
3. Savings Allocation/Reporting Framework Updates
4. TRM Updates
5. Next Steps and Public Comment

# Bi-Annual Snapshots

# **Savings Allocation/Reporting Framework Updates**

# Savings Allocation/Reporting Framework: Path Forward

- Work since July
  - Updated reporting template to include all fuels MMBtu number
- Work to be done
  - Schedule additional meetings with individual PAs

# Example: Energy Impacts

- Ductless Heat Pump displacing Oil Heating

	Fuel Impacts	Conversion Factor	Common Savings Unit (MMBtu)
Oil Impacts	60 MMBtu		60.00 MMBtu
Electric Impacts	-3,500 kWh	x 0.003412	-11.94 MMBtu
<b>Total Energy Impacts</b>			<b>48.06 MMBtu</b>

**TRM**

# Overview and Current Status

- Delaware's Technical Reference Manual (TRM) is currently in a draft form for the 2025 year
- The TRM supports implementers in accurately claiming energy savings for various measures, and support portfolio planning processes for the 2026 – 2028 cycle
- Optimal previously presented the draft 2025 TRM updates at the Q2 EEAC EM&V meeting in July

# Previous EM&V Questions on TRM Updates

Question	Current Status
NTG Updates for Gas Measures in TRM	<p><u>Completed</u></p> <p>NTG rates aren't listed in the TRM but came up during the EM&amp;V discussion previously. However, since DE programs claim NTG on a per program aggregate basis – different from other states claims on a per measure basis -- There isn't enough granularity to support a different value or incorporating the NTG rates into the TRM on a measure level basis.</p>
Residential Full Load Hour updates	<p><u>On Hold</u></p> <p>The full load hours remain unchanged and in line with nearby jurisdictions. A study would need to be conducted to provide direct updates to the residential full load hours, which are based on secondary sources of nearby areas.</p>
New gas measure additions to TRM	<p><u>Completed*</u></p> <p>*Additional work being done to include hybrid (or partial displacement) electric heat pumps</p>

# Update Timeline

- Our recommendations on the timeline are as follows:
  - Q2/Q3
    - Develop priority measure updates
    - Draft TRM updates for PA measures/code impacts
  - Q3 2024
    - Present TRM update at Q3 EM&V Committee Meeting
  - Q3/Q4 2024
    - Finalize TRM updates post Q3-committee meeting to be ready for the 2025 program year

# New Measure Additions/Updates

- Agricultural Measures
  - Engine Block Heater Timer, Auto Milker Takeoff, Dairy Scroll Compressor, High-Efficiency Fans, Heat Reclaimers, Low Pressure Irrigation, Dairy Refrigeration Tune-Ups
- Tier 2 Powerstrips, Low-Flow Aerators and Showerheads, and Vending Machine Controls
- Commercial Duct Sealing
- Equipment Tune-Ups
  - Furnaces
  - Boilers
  - DHW
- Residential Combination HVAC/DHW Boiler
- Controls for Central Domestic Hot Water Recirculation Pumps
- Additional baselines for potential “Fuel Switching” measures, to incorporate gas-fired equipment as the baseline

# Proposed Future Updates in 2025

- DE Legislation is expected to vote upon updating the state energy code to adopt the 2021 International Energy Conservation Code (2021 IECC) & ASHRAE 2019 standards
  - Anticipated to occur during 2025 legislative session

For more information on the specific changes between the 2018 and 2021 IECC versions, please see the DNREC summary document below.

<https://documents.dnrec.delaware.gov/energy/buildings/2021-IECC-Changes-Commercial.pdf>

Mechanical Systems		
C403.1	General	Data Center Systems are exempt from sections C403.4 (heating and cooling system controls) and 403.5 (economizers).
C403.1.2	Data centers	Requires data centers to comply with Sections 6 and 8 of ASHRAE 90.4 (Energy Standard for Data Centers) with some modifications.
C403.2.3	Building mechanical systems	Requires HVAC fault detection and diagnostic (FDD) systems for new buildings $\geq 100,000$ sqft and lists required FDD functions.
C403.3.2	HVAC equipment performance	Increases the number of equipment efficiency tables from nine to 16 to incorporate additional equipment types. Many minimum efficiencies are updated to reflect new federal testing standards.
C403.4.1.1	Heat pump supplementary heat	Limits operation of supplemental electric resistance heat to four specific operating conditions.
C403.5	Economizers	Adds exception for VRF systems installed with a dedicated outdoor air system.
C403.7.1	Demand control ventilation	Decreases the average occupant load threshold from 25 to 15 people per 1,000 sqft, resulting in more space types requiring DCV.



# Thank you

Questions?

