Change Log for 45VH2-GREET "Guidelines to Determine Well-to-Gate Greenhouse Gas (GHG) Emissions of Hydrogen Production Pathways"

January 2025 Model and Supporting Documentation:

Updates in January documentation include:

- Description of electricity inputs that can be simulated for high-temperature electrolysis.
- Description of the ability to represent steam co-product for facilities that use reformers with cryogenic CCS.
- Description of the revised approach to account for impurities and mixed gases, in alignment with the 45V Final Regulations.
- Description of the grid regions represented in the model, based on the 45V Final Regulations.
- Description of methane feedstock (renewable natural gas (RNG) from manure, RNG from wastewater treatment plants, upgraded coal mine methane) added to the model.
- Description of the manner in which CCS rates must be determined for natural gas turbines used for power generation.
- Description of the manner in which sub-annual accounting may be conducted in 2030.

August 2024 Model and Supporting Documentation:

Updates in August documentation include:

- Description of renewable electricity feedstock that may be simulated for high-temperature electrolysis. The new narrative is in the "Electrolysis" portion of Section 2.3 and in the Appendix.

March 2024 Supporting Documentation:

Updates in the March 2024 documentation include:

- Inclusion of Appendix A, which defines hydrogen production pathways represented in 45VH2-GREET
- Corrects the description regarding properties of steam co-products on page 11.
- Corrects the emissions factor for electricity production from natural gas turbines with CCS on page 14.