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FOR IMMEDIATE RELEASE

OptiFuel's Total-Zero™ 5600 hp RNG-Electric Line Haul Locomotive and RNG-Powered Tender are on Track for Testing at the Federal Railroad Administration's Transportation Technology Center

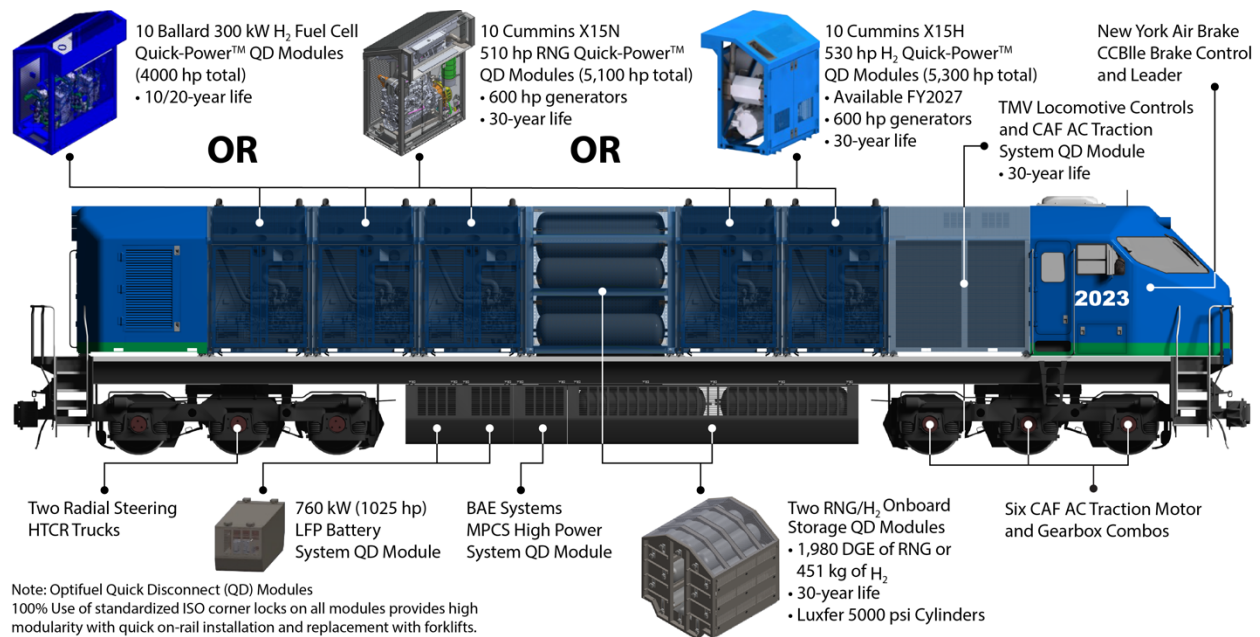


Renewable Natural Gas (RNG) Produced from 100% Existing USA Organic Waste Streams, is the Only Readily Available Turnkey Renewable Fuel with Negative Carbon Intensity, has the Lowest Cost, and can be Conveniently Accessed Through Existing Natural Gas Pipeline Infrastructure Running along US Railroad Right of Ways

BEAUFORT, SC – January 12, 2024 – OptiFuel Systems (“OptiFuel”) announced that it will begin testing a prototype 5600 hp **Total-Zero™ Renewable Natural Gas (RNG) Line Haul Locomotive** and 2500 hp **Total-Zero™ Powered Tender** with 7,500 DGE (diesel gallon equivalent) capacity, in **January 2025**. The RNG-powered line haul locomotive produces 5100 hp of continuous power from zero emission Cummins RNG engines using OptiFuel’s Quick-Power™ technology with a peak power of 5600 hp with the standard LFP battery pack. Focused on sustainability, OptiFuel’s **near-term, low risk, affordable** Total-Zero™ RNG-Electric Line Haul Locomotive will have **ZERO** Well-to-Wheel (WTW) nitrogen oxides (NOx) and particulate matter (PM) criteria emissions and **Negative Carbon Intensity** (CI) while simultaneously improving fuel cost and operating range by 25%.

This innovative solution aims to eliminate harmful pollutants that are released from diesel and renewable diesel engines that are detrimental to air quality and public health. Partially funded with a Department of Energy (DOE) grant, the program will perform pre-production testing at the Federal Railroad Administration’s (FRA) Transportation Technology Center (TTC) for 12 months.

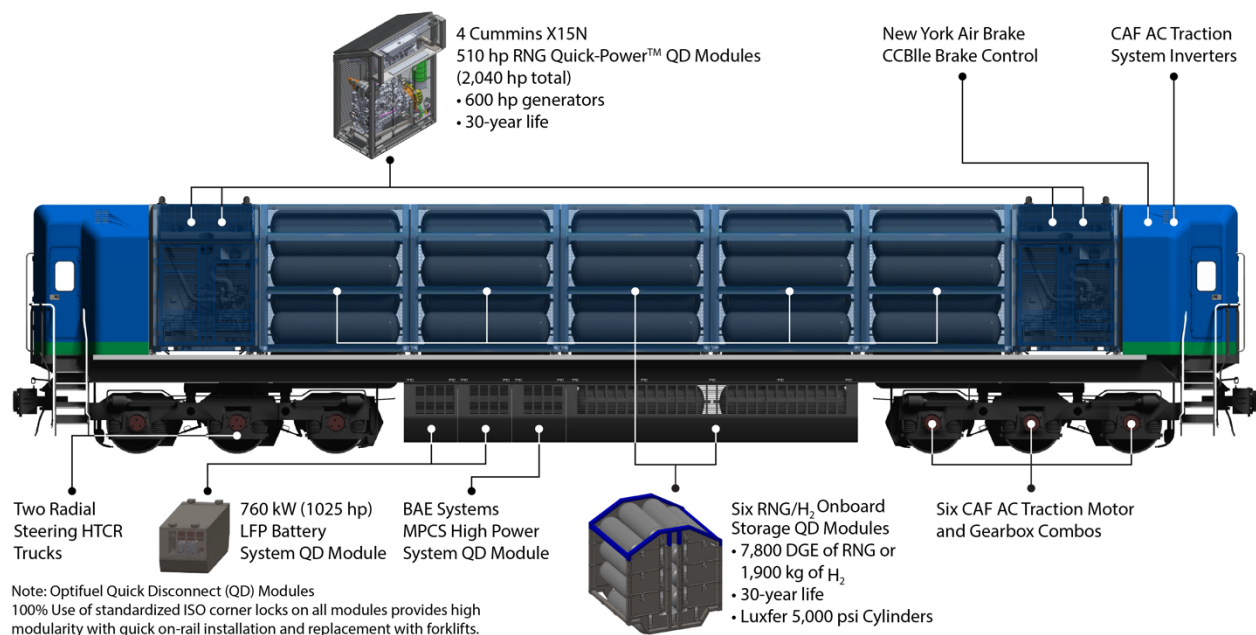
In 2026, OptiFuel will start a 2-year, 1-million-mile test program with ten pre-production 5600 hp RNG line haul locomotives and five 10,000 DGE RNG tenders operating around the US. Upon successful completion, plans are to begin **full production in 2028**. The RNG line haul locomotive is estimated to be priced around \$5.5 million and can be purchased or leased.



OptiFuel’s Modular, Total Zero™ Locomotive Supports Hydrogen or RNG Power Sources for Locomotives from 45 ft to 80 ft and 1000 to 5600 Horsepower.

“As the designer and builder of the fuel cell, hydrogen storage, and battery modules for Sierra Northern Railway’s (SERA) hydrogen hybrid switcher locomotives, OptiFuel is uniquely qualified to understand the strength and weakness of battery-electric and hydrogen fuel cell hybrid locomotives”, said Scott Myers, OptiFuel’s President. “However, we now believe that RNG is the preferred path to zero emission line haul locomotives and tenders due to the physics of energy storage, overall operating cost, operating risk, fuel availability and cost over the next 20 years. A 4500 hp line haul locomotive requires continuous high power for extended hours, something that neither battery-electric nor hydrogen fuel cell hybrid line haul locomotive solutions will be able to do.”

OptiFuel is committed to spearheading the sustainable revolution with locomotives and refueling solutions that make fleet transitions affordable. Unique to OptiFuel's locomotive designs is the **use of modularity** consisting of standard Quick Disconnect (QD) modules using standardized ISO corner locks. "About 90% of the same components are used for our 1000 hp to 5600 hp RNG or hydrogen switchers and line haul locomotives and our RNG standard and powered tenders", states Myers. By using lower cost components in high volume production, the railroads can significantly reduce the cost to decarbonizing all 38,000 freight locomotives in the US over the next 25 years, a CAPEX cost that we believe will be around \$150 billion. However, that cost will be offset by significant annual operating cost savings thanks to lower fuel cost, lower maintenance cost, higher reliability, and increased system automation, allowing the railroads to increase market shares in moving goods across the US.



OptiFuel's 2500 hp Total-Zero™ Powered Tender uses the same modules as the locomotive and will carry 7,500 Diesel Gallon Equivalents (DGE) of RNG

OptiFuel's customer focus is underscored by its comprehensive refueling services and fuel station infrastructure plan. This plan addresses not only the capital expenditure challenges related to refueling, but also resolves the logistics and planning burden of combined diesel-RNG fleets. OptiFuel is committed to facilitating smooth fleet transitions from diesel to renewable fuels without disrupting operations. OptiFuel's Refueling Solutions Plan provides for line haul operators to run trains in a consist with both old (diesel) and new (RNG) locomotives without changes to routes, distance between stops, refueling time, or capital expense budgets. This diesel-RNG locomotive integrated refueling system approach is already in service at the Indiana Harbor Belt Railroad (IHB) outside of Chicago.

The estimated 3,000 RNG tenders and associated 60 RNG locomotive and tender refueling stations required by the Class 1 locomotives around the US will be provided at **no cost** – offsetting an estimated \$8.5 billion in infrastructure expense to the railroads. This zero-cost approach is based upon the railroads buying RNG over a ten-year period of around \$2.00 a Diesel Gallon Equivalent (DGE). The RNG volume and price will be secured by long-term contracts connected to specific RNG-production sites with stable, known production volumes.

Instead of imposing limitations and constraints, OptiFuel equipment empowers railroad customers to reliably enhance operations, regain valuable competitive advantage, and take back market share lost to trucking through dependable and improved services. The robustness and sustainability of the rail network safeguards the integrity of the US supply chain, facilitates the efficient transportation of goods across the country, and serves as a pivotal driver to economic health.

OptiFuel Systems is the technical lead partnering with GTI Energy as the formal applicant to the Department of Energy¹. Other technical partners are Cummins, BAE Systems, Luxfer Gas Cylinders, TMV Control Systems Inc., ENSCO, CAF Group, New York Air Brake, and Powerhouse, a Marmon Rail Company.

¹*This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Vehicles Technology Office Award Number **DE-EE0009215**. The views expressed herein do not necessarily represent the views of the U.S. Department of Energy or the United States Government.*

About OptiFuel Systems LLC:

OptiFuel Systems is a solution provider designing and manufacturing **Total-Zero™** emission products and services in the hard-to-abate transportation and industrial markets, specifically in rail, marine and power generation. OptiFuel works as a systems integrator with strategic partners to engineer innovative technology that is low-risk and modular with flexible fuel options consisting of affordable renewable natural gas (RNG) and hydrogen fuels. Products include switcher and line haul freight locomotives, RNG and hydrogen tenders, stationary and mobile refueling systems, and mobile and stationary standby and emergency generators. Services include sales, leasing, long-term maintenance, and refueling services. Customers are expected to achieve increased reliability, reduced lifetime maintenance costs, minimized downtime, greater sustainability, and an impressive up to 30% enhancement in fuel economy. OptiFuel's Total-Zero™ RNG-electric locomotives and hydrogen-electric locomotives are EPA certified as zero NOx and PM emissions and have achieved FRA concurrence. Recently, OptiFuel announced a \$30 million Series A2 fundraising round to further scale business operations and strategic opportunities rapidly developing across key markets.