



THE HYDROGEN-AUTONOMOUS INTERSECTION

In a sign of things to come, the very first OEM to adopt a major autonomous vehicle control system doesn't even build diesel trucks.

I have a confession to make: As often as I write about autonomous trucks, my default setting when I'm thinking about them is "diesel" – as in an autonomous diesel truck.

I know full well that other, alternative truck powertrains will, of course, take advantage of autonomous technology when they enter into mainstream production. I was at the Tesla Semi Truck launch in Hawthorne, CA, back in 2017, after all. And Elon Musk made it abundantly clear then that autonomous control would be a key productivity feature on the Semi electric tractor.

But, the only autonomous vehicle evaluation drives (or rides, if you prefer) up to this point have all been in diesel-powered trucks. And that tends to subconsciously color my perception, I think.

That's why I found it extremely interesting when news hit this week that hydrogen fuel cell truck OEM Nikola will be the North American truck manufacturer to offer the PlusDrive autonomous control system as a factory-installed option on its Tre battery electric vehicles (BEVs) and hydrogen fuel cell models beginning next year.

Nikola is a fascinating company. And I know several of its engineers working on perfecting the Tre and its BEV/fuel cell technology. But I've not yet had the opportunity to test drive one of their trucks (Hint, hint.)

On the other hand, I have had two extensive test drives with the PlusDrive vehicle control system and came away deeply impressed with its ease of use, driver interface and productivity and safety capabilities for both fleets and drivers. In fact, I currently believe the Plus's approach to autonomous vehicle systems makes the most sense for the trucking industry at the current time – a way to ease both drivers and fleets into the Autonomous Age with a system that delivers real benefits in terms of driver safety and productivity.

Until now, PlusDrive has been available to any truck OEM as a retrofit system. The Plus test truck I drove on two separate trips to check out the technology was a Peterbilt Model 579, for example. So, it's a timely reminder as to just how fast technology is moving in trucking today to see Nikola – instead of a more "traditional" OEM – step up to take the initiative to offer PlusDrive as a factory option for fleets.

Nikola says that, together with its base powertrain technology, PlusDrive will moderate and predict the optimal and safest speed, while also taking full advantage of regenerative braking in traffic and slowing conditions. The vehicle is expected to keep the best position within the lane and account for other large vehicles and emergency vehicles.

“ Smart fleets are looking for ways to leverage as many new complementary technologies on their next generation of trucks as possible.

In a press release detailing the agreement, Nikola noted that multiple fleets including PGT Trucking and Christenson Transportation have agreed to pilot the initial Nikola PlusDrive-enabled trucks which will be available in late 2023. Given the overwhelming fleet interest in the system, Nikola is establishing an Enhanced Driver Assistance Customer Council to collaborate with fleets and Plus to continue refining the system.

And it's worth noting that forward-thinking fleets today



Hydrogen fuel cell truck OEM Nikola will be the first truck builder to offer PlusDrive autonomous control as a factory-installed option on its Tre tractors, beginning next year.

are considering both alternative fuels and powertrains, as well as autonomous control systems for their near-future needs. “PGT Trucking is committed to advancing the transportation industry through the Future of Flatbed, strategically partnering with like-minded companies, like Nikola, to implement innovative technology and equipment into our fleet,” Gregg Troian, PGT Trucking president, noted in the press release. “We will actively participate in the ongoing development of the Nikola PlusDrive-enabled units, using these trucks in real-world applications, improving safety standards and enhancing the lifestyle for our drivers.”

Likewise, Don Christenson, president, Christenson Transportation, said, “Christenson Transportation has [invested] and continues to invest in the safest technology available on the market to lower our carbon emissions to meet the goals of our customers and the communities we serve. The Nikola PlusDrive-enabled trucks, along with the current Nikola Tre BEV and hydrogen electric vehicles, will play a significant role in helping us achieve this vision and improve work-life

balance for our drivers. We are proud to be one of the first customers to pilot these trucks this year and play an active role in the launch of this innovative technology.”

This news from Nikola and Plus is a timely reminder that technology in trucking is happening on multiple fronts simultaneously. Smart fleets understand that and are looking for ways to leverage as many new complementary technologies on their next generation of trucks as possible. And that’s the sort of forward thinking that drives the change that can eventually transform an entire industry.

About the Author: Jack Roberts is a transportation journalist who has been covering North American commercial vehicles for 25 years and has developed a reputation as a leading authority/futurist concentrating on new trucking technology, including autonomous vehicles, battery-electric trucks and emerging blockchain technology.



The North American Council for Freight Efficiency (NACFE) works to drive the development and adoption of efficiency enhancing, environmentally beneficial, and cost-effective technologies, services, and operational practices in the movement of goods across North America. NACFE provides independent, unbiased research, including Confidence Reports on available technologies and Guidance Reports on emerging ones, which highlight the benefits and consequences of each, and deliver decision-making tools for fleets, manufacturers, and others. NACFE partners with Rocky Mountain Institute (RMI) on a variety of projects including the Run on Less fuel efficiency demonstration series, electric trucks, emissions reductions, and low-carbon supply chains. www.nacfe.org