

## **Joint Legislative Public Hearing on 2024 Executive Budget Proposal**

SUBJECT: Environmental Conservation

Legislative Office Building  
Tuesday, February 7, 2024 @ 9:30 AM  
Albany, New York

Written Testimony provided by Mr. John Hroncich, BAE Systems, North American Transit Sales Director

Thank you and Good Afternoon, Chairwoman Glick and fellow Environmental Conservation Committee Members. My name is John Hroncich. I reside in Vestal NY and work at BAE Systems' Power and Propulsion Solutions business headquartered in Endicott NY. I am the business' Director for North American transit bus sales. On behalf of BAE Systems' 2,200 employees across New York State, I am here to ask for your support of policies that support the use of proven Made-in-New York technologies as New York transitions, ultimately, to zero emission electrification solutions for our heavy-duty transportation and transit vehicles.

For over 27 years, BAE Systems' hybrid electric transit bus propulsion systems, designed, developed and manufactured at our Endicott NY global headquarters, have been leading the United States transit bus market's transition to clean, electrified fleet operations. Since 1996, 17,000 BAE Systems-powered hybrid electric transit buses have been deployed; 2,340 have been fielded across New York State including 2,120 buses with New York City's Metropolitan Transportation Authority (MTA) and 190 for Westchester County's Bee-Line bus service. Just in New York City alone, BAE Systems' hybrid electric buses have saved the MTA 20 million gallons in diesel fuel and have prevented 30,000 tons of GHG emissions.

We also ask for your support for hybrid electric buses in the MTA's 2025 – 2029 Capital Plan. The majority of the MTA's 1,300 hybrid electric buses are scheduled to retire over the course of their next Capital Plan. The MTA's current hybrid electric bus fleet, once the largest in the world, should be replenished with next-generation, zero emissions capable hybrid electric buses. According to the MTA's own Zero Emissions Transition Plan, hybrid electric buses have proven to be significant fuel and emissions savers over diesel and compressed natural gas (CNG) buses.

Hybrid electric buses have been an integral part of the U.S. transit fleet's workforce development as the industry moves to more and more zero emission bus operations. Zero emission transit buses, such as hydrogen fuel cell electric and battery electric buses, rely on the same components, software and training found in BAE Systems' hybrid electric buses. Hybrid electric buses have been referred to as an integral 'stepping stone' technology path to fully zero emission bus operations. It is why many fleets outside of New York State have made BAE Systems hybrid electric buses their baseline bus of choice and the workhorses of their operations. Regional transit bus fleets such as Boston's MBTA, Philadelphia's SEPTA, Toronto's TTC and Montreal's bus fleets have all ditched conventionally-powered diesel bus in favor of BAE Systems' hybrid electric powered buses. Their workforces are ready and trained for the

future; already proficient with diagnosing and repairing electric drive systems and safely working on high voltage systems.

I ask for your support of NY State Senate Bill S5366A and Assembly Bill A7731. Each are active pieces of legislation aimed at requiring “public transportation systems to purchase zero-emission capable hybrid buses or zero-emission buses and related equipment and facilities for a four-year period commencing January 1, 2025”. These Bills will put New York State’s transit agencies on a proven path towards zero emissions. The State of Connecticut has already enacted similar legislation. These Bills are designed to complement NY State Senate Bill S6089 and NY State Assembly Bill A6414 which aim to require only zero emission transit buses be purchased in NY State starting in 2029.

BAE Systems supports the implementation of a Clean Fuels Standard for New York State. A clean fuel standard (CFS) reduces transportation emissions at no cost to the State and has been projected to likely generate between \$1-1.4 billion per year in economic benefits to the State. A CFS would require manufacturers and importers of high-carbon intensity fuels like fossil gasoline and diesel to either reduce the carbon intensity of their fuels or purchase credits from low-carbon intensity fuel manufacturers and importers, such as operators of electric bus fleets like public transit agencies. The CFS provides meaningful support, paid by polluters, for public transit agencies, school busses, delivery vans, and for-hire vehicle fleet operators to switch to cleaner vehicle technologies.

While fielding zero-emission capable hybrid buses is a proven, smart stepping-stone towards converting transit bus fleets to zero emissions operations, New York is poised to accelerate in to a growing market for zero emissions battery electric and hydrogen fuel cell electric buses. BAE Systems, headquartered in Endicott NY, is a market leader in providing electric drive powertrains for leading bus manufacturers. For example, we are providing our Endicott-made components to Nova Bus’ LFSe+ battery electric bus platform. In 2023, Nova Bus and BAE Systems won the largest order ever in North America, for battery electric buses. Over 1,200 buses will be fielded in Montreal , Quebec City and their surrounding suburbs. We are bringing Latham NY-based Plug Power in to the transit bus market with an innovative hydrogen fuel cell bus offering. The fuel cell engines will be made at Plug’s Slingerland NY facility and the first buses will enter service in Rochester NY. BAE Systems’ powertrain technology also provides a paths to market for Wolfspeed in Marcy NY and Derecktor Shipyards in Mamaroneck NY.

Thank you for allowing me to share our perspective and position on getting New York’s transportation and transit fleets to zero emission operations. We are proud to be a New York-based company delivering leading technologies to help with our collective goals for cleaner air and economic growth.