

# NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

## Notice of Promulgation

Notice is hereby given in accordance with section 1043(b) of the New York City Charter (“Charter”) that the Taxi and Limousine Commission (“TLC”) promulgates amendments to its vehicle specification rules governing non-accessible taxicab vehicles.

The rule is promulgated pursuant to sections 1043 and 2303 of the Charter and section 19-503 of the Administrative Code of the City of New York. This rule was published in the City Record on November 18, 2022 for public comment. On December 21, 2022 a public hearing was held virtually by the TLC and the rule was adopted by the Commission on January 25, 2023.

## STATEMENT OF BASIS AND PURPOSE OF RULE

The TLC is amending sections of the existing vehicle specification rules governing non-accessible taxicab vehicles. The promulgated rule permits fully electric vehicles, powered only by electric batteries and not gasoline, to be hacked up as taxis.

### Electric Vehicle Pilot Program

On May 4, 2021, the TLC approved a resolution to evaluate the use of electric vehicles as taxis through a pilot program. The TLC pilot program began on August 10, 2021, and will end with this rule promulgation.

Prior to the pilot, the Tesla Model 3 was the only electric vehicle approved for taxi use. The Model 3 met all the specifications under the TLC vehicle specification rules. However, the Model 3’s power output was measured in kilowatts and necessitated the conversion to the traditional horsepower measurement. The resulting horsepower measurement fell within the engine specifications of the existing TLC rules.

While the horsepower conversion for electric vehicles was permissible in the absence of TLC rules specifically addressing electric vehicle specifications, the horsepower measurement is not the appropriate metric for electric vehicles.

### Differences between combustion engines and electric vehicles

Current TLC vehicle specifications present limited electric vehicle options for medallion owners. Pursuant to existing TLC Rule Section 67-05.1(f), vehicles that are approved as taxis cannot have a horsepower that exceeds 295. This poses an issue with regard to electric vehicles being approved as taxis, given that their design is inherently and distinctly different from the design of traditional combustion engine vehicles.

The horsepower measurement that is used for traditional combustion engines measures the peak power for the engine. A combustion engine must increase its revolutions per

minute (RPMs) to achieve its peak power output. However, an electric motor offers instant power, which results in the maximum acceleration being available to an electric vehicle immediately. Due to this difference, the important thing to monitor is the acceleration of the electric vehicles rather than the horsepower measurement as it relates to safety.

### Acceleration Rate Standard

As a result of the different engine measurements for electric and internal combustion vehicles, TLC's Safety and Emissions Division has developed appropriate engine standards to address the acceleration issue that is unique to electric vehicles.

Electric vehicles classified as high-performance models were excluded from the potential pool for taxi use given their rapid acceleration rate. A review of the acceleration data for these high-performance electric vehicles illustrates that these vehicles achieve acceleration rates of 4.0 seconds or less from 0 to 60 mph. Such acceleration rates present an unacceptable risk of collision. Consequently, any vehicles below the 4.0 second acceleration threshold were deemed not suitable for taxi use.

The Safety and Emission Division then refined the engine specification methodology. The distance between two traffic lights, representing one city block, 264 feet, was chosen as the standard for measurement. The practical and technical experience of the Safety and Emission Division dictated that no vehicle should be able to traverse that distance in less than 3 seconds. As in the case of high-performance electric vehicles, acceleration rates in excess of that mark were deemed to present an unacceptable risk of collision. Under these parameters the electric vehicle would be travelling no faster than 88 feet per second. This rate of speed was then translated, accordingly, into the equivalent acceleration rate of not less than 4.4 seconds from 0 to 60 mph. Consequently, the proposed rule establishes that no vehicle shall accelerate from 0 to 60 mph in less than 4.4 seconds.

### Pilot Program Results

The pilot program allowed electric vehicles with adequate interior volume and with rates of acceleration not exceeding 4.4 seconds from 0 to 60 mph, to be used as taxis in affiliation with a licensed medallion. The pilot tested eight models that were approved for use in the pilot program pursuant to the pilot specifications. Additional models may be approved under the proposed rules.

The goals of the pilot program were to: (1) reduce fuel and maintenance costs for taxicab owners and agents; (2) reduce greenhouse gas emissions in accordance with City initiatives; and, (3) permit taxicab drivers to operate longer and further than previously possible due to the recent advances in battery technology.

There are fourteen participating medallions and more applicants have been approved and are awaiting hack-up. Data gathered from the participants has provided useful information for analysis. There has been no data to suggest that electric vehicles within the parameters established by the pilot program pose any major safety concern operating

as taxis.

Making electric vehicles a permanent option

Given the growing demand for electric vehicles from medallion owners and agents, coupled with the viability of electric vehicle technology, TLC proposed permanent rules permitting electric vehicles to operate as taxis. The addition of rules permitting fully electric vehicles to operate as taxis demonstrates TLC's continued efforts to contribute to a cleaner city. Partnerships with the Department of Transportation and the Department of Citywide Administrative Services, directed to expanding the city's charging network, will facilitate the growth of electric vehicles within the medallion sector as the market grows over time.

The Commission's authority for this rule is found in section 2303 of the New York City Charter and section 19-503 of the Administrative Code of the City of New York.

New material is underlined.

[Deleted material is in brackets]

Subdivision (f) of section 67-05.1 of Title 35 of the Rules of the City of New York, relating to the engine size of vehicles that may be hacked up as taxicabs, is REPEALED, and a new subdivision (f) is added, to read as follows:

(f) Power specifications

(1) Internal combustion vehicles

The vehicle may not be equipped with an engine whose maximum horsepower exceeds 295.

(2) Hybrid-electric vehicles

The horsepower of a hybrid-electric vehicle is determined by combining the electric power and the internal combustion power of the vehicle's engine. The total of these two figures may not exceed a horsepower of 295.

(3) Electric vehicles

The electric vehicle must accelerate from 0 to 60 mph in not less than 4.4 seconds.