NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

RESOLULTION APPROVING BATTERY ELECTRIC VEHICLE TAXI PILOT PROGRAM

May 4, 2021

The New York City Taxi and Limousine Commission (TLC) hereby approves a pilot program pursuant to section 52-27(a) of the Commission's rules to test whether more battery electric vehicles ("BEVs"), defined as vehicles that are fully-electric, use rechargeable batteries, and do not use gasoline, can be used safely and efficiently for taxi use (the "BEV Pilot"). Currently, existing TLC rules do not explicitly permit the use of fully electric vehicles as yellow taxis, however, to date, TLC has recently permitted the use of one BEV model. Medallion Owners and Agents have expressed a desire to have more than just one model of BEV approved for use as a taxi. Pursuant to TLC Rule Section 67-05.1(f), all vehicles approved for use as taxis cannot have a horsepower that exceeds 295. This prohibits most BEVs from being approved as taxis on both a conceptual and practical level. On a conceptual level, BEVs' motor outputs are measured in kilowatts, not horsepower, so the concept of horsepower does not apply to BEVs. On a practical level, many BEVs, if their kilowatt output is converted to horsepower, would exceed the 295 horsepower limit in TLC's rules. In the instance in which the existing BEV model was permitted, the kilowatts were converted to the horsepower measurement and that vehicle's horsepower did not exceed 295. However, horsepower is not a similar measure of power output since BEVs instantly achieve power while gas combustible engines must build revolutions per minute (RPMs) through acceleration until the vehicle reaches its maximum power.

The use of BEVs offers the benefits of reduced fuel costs and reduced Greenhouse Gas Emissions. Reduction of Greenhouse Gases is a major goal for New York City, and the City, the TLC, and medallion owners alike share an interest in making more of the taxi fleet electric. However, limitations on horsepower are not the only obstacle to widespread adoption of BEVs in the taxi fleet. First, due to a lack of readily available charging infrastructure, drivers of BEVs often report "range anxiety," the concern that their vehicles will not have enough of a charge to make it to the closest charging station. This anxiety may be compounded when driving a taxi, where a driver does not know if any particular passenger's destination will put the vehicle beyond its battery range or anywhere near a charging station. Second, many recent BEV models have acceleration rates that may be dangerous for drivers unfamiliar with driving BEVs, especially on city blocks. This is a phenomenon related exclusively to BEVs and does not exist in the world of traditional taxis since traditional combustion engines build speed, gradually increasing revolutions per minute (RPMs), whereas power is immediately available to BEVs.

To address the battery range concern, TLC conducted a pilot program for BEVs used as taxis between April 2013 and March 2015. However, that pilot program was limited in its scope and findings. That pilot program only tested the use of one specific electric vehicle, the Nissan LEAF. Additionally, there were only 4 participant vehicles in the pilot. While TLC was able to gather some information, the sample size was too small to provide conclusive data related to electric vehicle taxi usage.

Since the first pilot, BEV design and charging infrastructure have improved enough to warrant piloting BEVs for use as taxis again. BEV technology has improved, and there are many more

models available for participants than at the time of the initial pilot. Nearly every major auto manufacturer has developed an electric vehicle within the last several years. In addition to the wider pool of available vehicles, the battery technology for electric vehicles has also improved significantly, increasing driving range and battery extending lifespan.

As the number of electric vehicles increased, the charging infrastructure in New York City grew in response. The Department of Citywide Administrative Service (DCAS) has two charging stations currently available for public use and expects to have a total of five public charging stations operational by June 2021. Additionally, medallion fleet garages have installed electric chargers within their facilities. There are also 531 chargers available throughout the city located in private parking garages.

With the number of BEVs and charging stations increasing throughout the City, the TLC believes it is time to expand the use of additional BEVs as taxis in NYC. To address potential safety concerns about acceleration, particularly surrounding drivers who lease BEVs for short periods and who do not regularly drive BEVs, the TLC will permit medallion owners who wish to put their medallions on BEVs ("Pilot Participants" or "Participants") to apply to have a BEV certified for use as a yellow taxi on the conditions that:

- 1. The BEV the Medallion Owner puts forward for certification meets all the requirements for hacking up a vehicle as a taxi contained in 67-05.1 of TLC's Rules, with the exception of the requirements contained in 67-05.1(f),
- 2. The BEV does not have a 0-60 mph acceleration rate faster than 4.4 seconds, and
- 3. The Participant certifies that all TLC Licensed Drivers that operate the BEV as a taxicab will be trained to operate the BEV and demonstrate their ability to safely operate the BEV to the Participant prior to operating the BEV as a taxicab.

Pursuant to Chapter 52, Subchapter C of the Commission's Rules, participation in the TLC Pilot Program is subject to the following terms:

1. Duration

a. The TLC Pilot Program will commence on the date on which the first BEV is certified for use as taxi and will continue for a maximum of 12 consecutive months. The Chairperson can terminate the TLC Pilot Program at any time.

2. Pre-Qualification Conditions

- a. Each Participant in the TLC Pilot Program must enter into a memorandum of understanding ("TLC MOU") with the Chairperson on behalf of the Commission, to be approved as to form by the New York City Law Department, obligating the Participant to adhere to all requirements of this Resolution. The TLC MOU may set forth additional specifications for each requirement.
- b. This Resolution contains a summary of the major MOU terms but does not include each and every term.
- c. The TLC MOU will be consistent with this resolution.
- d. The Chairperson may immediately terminate a TLC MOU pursuant to the terms of the MOU or if, in the Chairperson's discretion, there is an imminent threat to the health or safety of members of the public, taxi drivers, or other individuals.

3. Means of Public Notice

a. Notice of opportunity to participate in the TLC Pilot Program will be published in the City Record and on the TLC website.

4. Number of Participants

a. There will be no maximum number of Participants.

5. MOU Submission

- a. The MOU template for the TLC Pilot Program, setting forth the specific terms of participation and instructions for submitting the MOU, will be made available on the TLC website.
- b. The Commission will begin accepting MOUs for participation in the TLC Pilot Program immediately after the MOU template is published on the TLC website.
- c. The Commission will accept MOUs throughout the duration of the TLC Pilot Program.

6. Selection of Pilot Participants

- a. Selection of Participants will be made by the Chairperson.
- b. MOUs will be accepted only from Medallion Owners or Agents.
- c. Medallion Owners or Agents who apply to participate in the TLC Pilot Program ("Applicants") must demonstrate both of the following:
 - i. The Applicant is applying to certify a BEV as a taxicab that meets all of the requirements contained in 67-05.1, excepting 67-05.1(f), and said BEV has a 0-60 mph acceleration rate slower than 4.4 seconds, and
 - ii. The Applicant has demonstrated the ability to train any driver that will operate the BEV as a taxi on safe operation of the BEV prior to the driver operating the BEV as a taxi.
- d. Criteria for selection of Applicants will include responsiveness to the public notice and the performance history of the Applicant, including history of violations of Commission rules or other applicable laws.

7. Exemptions

a. Participants will be exempt from section 67-05.1(f) of the Commission's rules when hacking up a non-accessible BEV as a taxicab pursuant to the terms of this Pilot.

8. Retirement Dates and Wheelchair Accessibility Obligations

- a. Participants' taxicabs will be subject to the retirement requirements contained in section 67-18 of TLC's Rules.
- b. To the extent the Chair terminates the Pilot prior to commencing rulemaking to make permanent rules governing BEVs used as taxis, or the use of BEVs as taxis is otherwise prohibited or modified pursuant to future rulemaking, the Participant must attach their medallion to a vehicle pursuant to terms outlined in the MOU.
- c. Participating in the Pilot does not remove a Medallion Owner's obligation to place a Wheelchair Accessible Vehicle into service pursuant to Section 58-50 of

TLC's Rules. A Participant may not place a BEV into service in lieu of a Wheelchair Accessible Vehicle.

9. Reporting and Evaluation

- a. During the Pilot Program, the Chair will review available data, including but not limited to trip records and crash data, to evaluate:
 - i. The range, both distance and time, of BEVs used as taxis
 - ii. The impact of BEV's range on the length of driver shifts
 - iii. The rate of crashes involving BEVs used as taxis as compared to the rate of crashes of non-BEVs used as taxis
 - iv. Average speed of BEVs while being used as taxis as compared to the average speed of non-BEVs while being used as taxis
 - v. Any other analysis or evaluation the Chair deems necessary to determine the viability of using BEVs as taxis
- b. A final report, including a recommendation on whether to commence rulemaking, will be issued to the Commission within six months of the conclusion of the Pilot Program. The Chairperson will commence rulemaking, if warranted, within six months of the issuance of the final report.

10. Compliance

- a. Participants must comply with all applicable local, state and federal laws, including TLC rules, except for those exemptions provided in this Resolution.
- b. Participants must comply with all MOU requirements.
- c. Participants must not file with the Commission any statements that they know or reasonably should know to be false, misleading, deceptive or materially incomplete.
- d. Participants must not commit fraud, misrepresentation and larceny, willful acts of omission and commission; and must not act against the best interests of the public, including but not limited to acts or threats of harassment, abuse, use or threat of physical force, or failure to cooperate with a law enforcement officer or the Commission.
- e. Participants must notify the TLC in writing of any suspension or revocation of any license granted to a Participant by any local, state or federal agency.