

May 20, 2019

Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue, SE
West Building, Ground Floor, Room W12-140
Washington, DC 20590-0001

**Re: Docket NHTSA-2019-0016
Docket NHTSA-2019-0017
Petitions for Temporary Exemption from Safety Standards**

Enclosed are the comments of the Association of Global Automakers, Inc., with regard to NHTSA's March 19, 2019, notices of receipt of petitions for exemption from General Motors and Nuro, Inc. If you have any questions on this matter, please contact me.

Sincerely,



Paul Scullion
Senior Manager, Vehicle Safety and Connected Automation

Enclosure

**COMMENTS OF THE ASSOCIATION OF GLOBAL AUTOMAKERS, INC.,
REGARDING NHTSA’S MARCH 19, 2019, NOTICES OF RECEIPT OF PETITIONS
FOR EXEMPTION FILED BY GENERAL MOTORS
AND NURO, INC.**

May 20, 2019

The Association of Global Automakers, Inc., (“Global Automakers”)¹ appreciates the opportunity to provide comments in response to the agency’s notices of receipt of petitions for exemption from safety standards that were filed by General Motors (GM) and Nuro, Inc. The petitions seek exemption from various safety standards requirements for electrically-powered automated vehicles (AVs). Global Automakers strongly supports NHTSA moving forward on these petitions. In addition, we offer several policy comments on the process that the agency applies to exemption petitions regarding AVs.

AVs provide an extremely promising approach for improving vehicle safety. Automated driving directly addresses the single greatest cause of highway crashes, as identified by NHTSA – driver error. In addition, automation provides significant opportunities to improve highway transportation efficiency, provides new mobility solutions, facilitates the effective movement of people, goods, and services, and helps ensure that the United States maintains a leadership role in supporting the development of technology necessary for a modern, twenty-first century transportation system. The automotive industry is making significant investments in the testing and deployment of automated driving systems (ADS) and other innovative technologies to help better protect occupants and other road users. Safety is a top priority. With rapid advances in the development of ADSs, the agency’s efforts in this area are critical to ensuring that the potential life-saving benefits of this technology can be realized.

The following comments are intended to address the questions highlighted in the NHTSA notices.

1. **Timely resolution of exemption requests is critical to advancing technology.** Given the magnitude of the safety issue that AVs can address, NHTSA has an obligation to take all reasonable steps to support the expeditious implementation of important new safety technologies. As stated in the GM petition and cited in the agency’s notice on that petition, “(e)very day of delay in getting autonomous vehicles safely on American Roads is a day in which we are losing lives that could be saved.” Yet we note that it is approaching a year-and-a-half since the GM petition was submitted and 7 months since the Nuro petition was filed, and we are currently only at the notice of receipt

¹ The Association of Global Automakers represents the U.S. operations of international motor vehicle manufacturers, original equipment suppliers, and other automotive-related trade associations. Global Automakers works with industry leaders, legislators, regulators, and other stakeholders in the United States to create public policies that improve motor vehicle safety, encourage technological innovation and addresses environmental needs. Our goal is to foster an open and competitive automotive marketplace that encourages investment, job growth, and development of vehicles that can enhance Americans’ quality of life. Our members’ account for 40 percent of all U.S. production. international automakers account for 47 percent of all U.S. sales of passenger vehicles and light trucks. For more information, visit www.globalautomakers.org.

stage of agency consideration. We urge the agency to further accelerate its consideration of these petitions. In making this request for expedition, we recognize that these petitions present cases of first impression involving highly complex technical, legal, and policy issues. We are in no way suggesting that the agency should neglect its obligation to carefully review the safety of the vehicles that are the subjects of these petitions. However, the potential safety benefits of AVs are so great that the rulemaking process cannot be allowed to be indefinitely delayed.

For vehicles with non-conventional design attributes, the exemption process is one of the few, if not only deployment pathway available to these companies to introduce their AVs into the market. Unfortunately, the exemption process is inherently burdensome (for both the agency and manufacturers) and time consuming. And while we appreciate the agency's recent efforts to streamline aspects of the process, the reliance on exemptions provides no long-term regulatory certainty, and also sends the wrong message to consumers in our opinion, implying that AVs are less safe than conventional vehicles.

We strongly recommend that the agency move expeditiously to update, where necessary, its regulations to provide a certification pathway for automated vehicles that minimize the need to rely on exemptions as a means of certification – particularly for vehicles absent manual driving controls. We recommend that the agency act expeditiously to initiate the following:

- Adopt revisions to safety standards that have no reasonable application to automated driving systems-dedicated vehicles (ADS-DV) (i.e., those without manual driving controls). The steering control system standards (FMVSS 203 and 204) are examples of such standards. Explicitly stating the applicability of these standards to vehicles with manual driving controls would remove them from the scope of future exemption petitions, thereby simplifying the certification process.
- Address references to drivers and/or required interactions with manual driving controls. ADS-DVs could currently be certified to a significant number of standards but for references in those standards to human drivers and manual driving controls. Where applicable, providing clarification as to whether (and/or how) an ADS could be deemed to perform the function of a human driver would further simplify the certification process.
- Alternative test procedures. The agency should adopt procedural regulations that would authorize an expedited review process within the NHTSA Office of Vehicle Safety Compliance that would allow for the use of alternative test procedures or processes for manufacturers to demonstrate compliance. Such alternative test procedures should be permitted only if they allow verification of the of compliance with the standard's existing performance requirements.
- AV-specific safety criteria. The agency should continue as a high priority its work to identify gaps in the current FMVSS requirements that should be addressed to assure the safety of AVs. New AV-specific standards may be needed.

In the interim, manufacturers need guidance from NHTSA on what data should be included in AV exemption petitions, what design features are necessary, and a commitment from DOT

management to process petitions expeditiously, while assuring safety. A greater sense of urgency is required.

2. **Terms attached to exemptions.** We support NHTSA's applying relevant and reasonable terms when granting a petition, particularly if doing so would expedite the processing of the exemption petition. For example, and especially during the first introductions of AVs, it may be appropriate in certain cases for the agency to initially limit the scale of deployment to provide assurance that the vehicles perform as intended. As is currently being explored by the agency, it may also be appropriate in the context of a pilot program deployment (particularly for early introductions of AVs) to require the successful petitioner to report certain data regarding on-road operation of the vehicles, including any unanticipated events that occur.²
3. **Emissions-based exemptions.** The agency describes the legislative history of the low-emission vehicle exemption in its notice regarding the Nuro petition.³ We note that AVs qualify as "low-emission" in two respects. First, these vehicles are expected to incorporate a range of advanced powertrain technologies. Second, as the agency is well aware through its work on fuel economy standards, vehicle efficiency depends to a significant degree on the manner that vehicles are driven. AVs have the potential to improve efficiency through use of less aggressive driving practices as well as through identification and use of routes that experience less traffic congestion. Granting exemption petitions to facilitate the use of AVs would enable the development of data to quantify these potential emission benefits. The low-emission vehicle exemption pathway should be available to manufacturers of AVs. It would be inappropriate for NHTSA to narrowly construe this exemption to exclude vehicles that have significant potential to demonstrate new emission reductions.
4. **New AV category.** In its notice on the Nuro petition, NHTSA invites comment on the establishment of a new vehicle classification category for light and/or low-speed passenger-less automated vehicles to which a subset of FMVSS requirements would apply.⁴ Global Automakers supports this approach, and recommends agency research that supports a data-driven process to identify any potential standards that may be necessary. As with the current FMVSS 500, we recognize the potential need for AV regulations to address potential safety related issues not currently contemplated by existing FMVSS. It appears that this approach would be feasible.
5. **The "public interest" consideration.** Under 49 U.S.C. 30113(b)(3)(A), exemptions may be granted only if the agency makes a finding that granting the exemption is in the public interest and the safety law. While we recognize that making a determination with respect to the public interest consideration may not be readily quantifiable, we believe that NHTSA should be able to make a qualitative judgement based on available information. In evaluating this matter, NHTSA should consider all the potential benefits of automation, including safety, environmental, and economic benefits. In particular, the agency should strongly consider the revolutionary potential to address

² For example, data elements from SAE J1698/1 2018 05: Event Data Recorder – Output Data Definition

³ See 84 Fed. Reg. 10176, footnote 21.

⁴ See 53 Fed. Reg. 10180, question 4.

the principal cause of highway fatalities and injuries – driver errors. In our view, the public interest in successful implementation of automated driving systems is beyond question, and the risks of any safety-related concerns related to the introduction of ADS can be mitigated by appropriate oversight by the agency.