



May 6, 2024

VIA EMAIL

Eddie Gates
Director, Field Quality
Tesla, Inc.
45500 Fremont Blvd
Fremont, CA 94538

Subject: Information Request ID RQ24009

Dear Mr. Gates:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Recall Query (RQ24009) to investigate the remedy effectiveness of Recall 23V838.

EA22002 and Recall 23V838 Timeline

In a series of meetings beginning on October 16, 2023, NHTSA reviewed observations and concerns regarding investigation EA22002, Autopilot¹ System Driver Controls, with Tesla. After continued meetings between Tesla and NHTSA, Tesla submitted a recall to NHTSA on December 12, 2023. In describing the safety defect, Tesla's Defect Information Report (DIR) explained that "the prominence and scope of the system's controls may be insufficient to prevent driver misuse," and Tesla committed to the deployment of a multipart remedy aimed at improving system controls and engagement controls and reducing mode confusion. Tesla's five-part remedy involved changes to the system or introduction of new features.

1. Item 1: Mode confusion

Remedy: Add a single-pull activation option for the activation of Autopilot. Enablement of this optional function causes inadvertent steering overrides to disengage both Autosteer and TACC leading to a more pronounced slowdown to alert the driver that Autosteer has been canceled and they must resume immediate control of the vehicle. This function is not default on vehicles who received the remedy in the field and can readily be enabled and disabled by consumers.

2. Item 2: Autopilot can be engaged off-highway

¹ The simultaneous engagement of Tesla's Traffic-Aware Cruise Control (TACC) and Autosteer.

Remedy: Increase strictness of driver attentiveness requirements when approaching traffic controls off-highway.

3. Item 3: Immediate Driver disengagement upon Autopilot activation

Remedy: Increase driver monitoring in the moments following Autopilot engagement.

4. Item 4: Drivers may disengage from task

Remedy: Introduction of a one-week suspension of Autopilot for drivers who receive three or five forced Autopilot disengagements (depending on cabin camera availability), also called a strikeout. A strikeout occurs after three strikes, which result after an alert escalation or receiving frequent warnings for inattention, however other factors may be required to receive a strike.

5. Item 5: Prominence and size of alerts

Remedy: Enlarge attentiveness notification font and move the alert higher on center screen closer to the driver’s range of vision (Model 3 and Model Y only).

Remedy Concerns

ODI has identified several concerns regarding the 23V838 remedy:

Crash circumstances:

The preliminary analysis shows that crashes occurred in vehicles with the remedy installed across all three crash types identified in ODI’s investigation number EA22002. These crash types are discussed in the document “Additional Information Regarding EA22002” which is available in the investigation file for that investigation. ODI plans to evaluate the impact of the recall remedy on these crash types as well as whether the remedy resolved the defect identified in Safety Recall Report 23V838.

Crash Type	Total
Frontal Plane Struck Vehicle / Object / Person in travel path	9
Yaw / Spin / Understeer (Low traction environment)	6
Inadvertent Steering Override (Cancel Autosteer, keep TACC)	5
<i>Total</i>	<i>20</i>

Table 1: Preliminary Crash Analysis of Vehicles with the Remedy Installed at the Time of the Incident, Conducted by NHTSA

VRTC Testing:

NHTSA completed preliminary testing at its Vehicle Research and Test Center (VRTC) . In its evaluation of the remedy, VRTC was unable to identify a difference in the initiation of the driver warning cascade between pre-remedy and post-remedy (camera obscured) conditions. ODI will evaluate the adequacy of recall remedy warnings as part of this investigation.

Remedy Permanence:

Tesla changed the sensitivity and sample window of the increased driver attentiveness requirements after Autopilot engagement (Item 3). ODI will evaluate this change and any other changes in the 23V838 remedy along with their reasons and effects.

Notably, Item 1 of the recall (single pull activation of Autopilot) is not the default setting on vehicles that received the remedy in the field. For those vehicles, the consumer must navigate to a menu and enable the feature. Additionally, the feature can readily be enabled and disabled by the driver. VRTC testing also showed it was possible to make this change while driving.

Non-Remedy Updates:

Tesla has released non-remedy updates related to conditions investigated in EA22002 and identified by NHTSA to Tesla prior to 23V838. The known released non-remedy updates include:

1. Update to reduce Hydroplane (Yaw) Crashes
2. Update to reduce High Speed Captive Turn Lane Collisions

ODI will assess the timing and driving factors behind these updates, their impacts on subject vehicle field performance, and Tesla's basis for not including them in 23V838.

Information Request

To support this continued work, we request updated and additional information from Tesla.

Unless otherwise stated in the text, the following definitions apply to this information request:

- **OEDR**: Object and event detection and response or the subtasks of the dynamic driving task (DDT)² that include monitoring the driving environment (detecting, recognizing, and classifying objects and events and preparing to respond as needed) and executing an appropriate response to such objects and events (i.e., as needed to complete the DDT and/or DDT fallback).³
- **Subject System**: Suite of software, hardware, data, and any other related systems on or off the vehicle that contribute to the conferral of any vehicle capabilities that Tesla labels Level 2 or above, including but not limited to the various "Autopilot" packages, but not including Full-Self Driving Supervised/Beta.

² "DDT" means the same as and is coterminous with the definition of "Dynamic Driving Task" in SAE J3016, Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles § 3.13 (April 2021).

³ "OEDR" means the same as and is coterminous with the definition of "Object and Event Detection and Response" in SAE J3016, Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles § 3.20 (April 2021).

- **Subject Vehicles:** All Tesla vehicles, model years 2014 - 2024, equipped with the subject system at any time, manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions.
- **Subject Crashes:** Incidents in which subject vehicles experience a crash in the United States (including any of its territories) with the subject system engaged at any time during the period beginning 30 seconds immediately prior to the commencement of the crash.
- **Non-remedy Update:** any update by Tesla to the subject system on or after September 1, 2023 (regardless of delivery method) that relate to or may relate to the subject crashes, including any such update that is currently under development.
- **Tesla:** Tesla, Inc., all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Tesla (including all business units and persons previously referred to), who are or were involved in any way as of January 1, 2011 with any of the following related to the subject crashes and/or the subject system in the subject vehicles:
 - a. Design, engineering, analysis, modification or production (e.g., quality control);
 - b. Testing, assessment or evaluation;
 - c. Consideration or recognition of potential or actual defects, reporting, record-keeping and information management (e.g., complaints, field reports, warranty information, part sales), analysis, claims, investigations, inquiries, lawsuits or arbitrations; or
 - d. Communication to, from, or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to persons who have the capacity to obtain information from dealers.
- **Document:** “Document” is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings,

discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Tesla, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Tesla or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 C.F.R. § 579.4.

For my staff to evaluate the 23V838 recall remedy and related matters, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Responses to these questions should reply wholly to the request without referencing previously submitted documents.

Please repeat the applicable request verbatim above each response. After Tesla's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, the number of subject vehicles Tesla has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Tesla, state the following:
 - a. Vehicle identification number (VIN);
 - b. Model;
 - c. Model Year;

- d. Subject component trade/trim name, part number and design version installed as original equipment, including:
 - i. Software version;
 - ii. Firmware version;
 - iii. Hardware version;
 - iv. Cabin Camera installed (yes/no);
- e. Date of manufacture;
- f. Date warranty coverage commenced;
- g. Date subject recall was sent to the vehicle;
- h. Date subject recall was installed on the vehicle;
- i. The number of strikes the vehicle has received related to Autopilot;
- j. The date(s) of the strikes;
- k. The number of strikeouts the vehicle has received related to Autopilot;
- l. The date(s) of the strikeouts;
- m. The number of suspensions the vehicle has received related to Autopilot;
- n. The date(s) of the suspensions;
- o. Date and mileage of Cabin Camera Data Sharing enabled;
- p. The state or territory in the United States where the vehicle was originally sold or leased (or delivered for sale or lease);
- q. Latest known vehicle mileage and commensurate date;
- r. Subject component trade/trim name, part number and design version installed as an aftersales customer-requested upgrade; including:
 - i. Software version;
 - ii. Firmware version;
 - iii. Hardware version;
 - iv. Cabin Camera installed (yes/no);
- s. Whether the vehicle ever had Full-Self Driving Supervised/Beta including free trials;
 - i. Start date of Full-Self Driving enrollment Supervised/Beta;
 - ii. End date of Full-Self Driving Supervised/Beta enrollment;
- t. Date and identities of the most recent software, firmware, and hardware updates, including but not limited to all such updates related to the subject recall.

Provide the table in Microsoft Access 2010, or a compatible format, entitled “PRODUCTION DATA.”

- 2. Provide the cumulative mileage covered by Model/Model Year and HW (Autopilot hardware) version in the following categories:
 - a. January 2021 through December 12, 2023 by month starting on the first of the month;
 - i. With the subject system in use; and
 - ii. Without the subject system in use.
 - b. Post December 12, 2023 by week, with a week defined as seven days starting on Sunday;
 - i. With the subject system in use and the subject recall remedy installed;
 - ii. With the subject system in use and without the subject recall remedy installed; and
 - iii. Without the subject system in use.

A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

3. Describe in detail the process (including supporting engineering and safety assessment evidence and any other relevant information) by which Tesla decided to file the Part 573 Safety Recall Report assigned No. 23V838.

Provide copies of all documents related to Tesla's decision, regardless of whether the documents are in interim, draft, or final form.

4. Describe in detail, separately for each non-remedy update relating to the subject system, the process used to formulate and deploy that update (including supporting engineering and safety assessment, evidence and any other information) including but not limited to:
 - a. The reasoning regarding why the update was not included in Recall 23V838;
 - b. How the update relates to crash types investigated in EA22002;
 - c. How the problem/issue was identified;
 - d. The expected crash reduction related to the update;
 - e. The actual crash reduction related to the update;
 - f. Tesla's assessment regarding the safety implications of the update; and
 - g. State whether Tesla intends to file a safety recall pursuant to 49 U.S.C. § 30118 covering this update. If not, please furnish Tesla's technical and/or legal basis for declining to do so.

Provide copies of all documents related to these updates, regardless of whether the documents are in interim, draft, or final form.

5. Furnish a count of Hands-on-Wheel warnings displayed by the subject system by Model/Model Year and HW version in the following categories:
 - a. January 2021 through December 12, 2023 by month starting on the first of the month;
 - b. Post December 12, 2023 by week, with a week defined as seven days starting on Sunday;
 - i. With the subject recall remedy installed; and
 - ii. Without the subject recall remedy installed.
6. Explain and describe in detail the process, engineering and safety explanation, evidence, and information used for design decisions regarding Tesla's decision to implement a single-pull activation option for the activation of Autopilot as part of the remedy for recall 23V838, including but not limited to:
 - a. Explain how this aspect of the remedy addresses the defect;
 - b. All reasoning, engineering rationale, and all relevant information used to design this feature;

- c. What human factors⁴ considerations and principles were used when designing this feature;
 - i. Explain how the design was validated using human factors (including, but not limited to human participant evaluations);
 - ii. Identify the identifier in part e of this Request;
- d. State whether Tesla calculated a predicted effectiveness percentage concerning crashes addressed by this feature.
 - i. If so, provide this value;
 - ii. Explain in detail how this value was calculated including where the analysis variables originated;
- e. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, “actions”) that relate to, or may relate to, this item in the subject recall in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:
 - i. Action title or identifier;
 - ii. The actual or planned start date;
 - iii. The actual or expected end date;
 - iv. Brief summary of the subject and objective of the action;
 - v. Engineering group(s)/supplier(s) responsible for designing and for conducting the action;
 - vi. A brief summary of the findings and/or conclusions resulting from the action;
- f. For all deployed modification/changes to this item, provide separately:
 - i. The identifier/title related to this item in Request 15;
 - ii. Explain in detail the reasons for this modification/change;
 - iii. Explain how this modification/change impacts the effectiveness of this feature;
- g. Explain the reasoning, engineering rationale, and all relevant information used regarding the decision to allow vehicle owners to revert the single pull feature to the prior double pull activation setting;
- h. Explain the reasoning, engineering rationale, and all relevant information used regarding the decision for the single pull activation setting not to be the default activation setting on vehicles subject to recall 23V838;
- i. Describe the consumer facing notifications and communications regarding the single pull activation setting, including but not limited to feature description and feature enablement. Provide dates that all consumer facing notifications and communications were first issued or appeared in vehicles; and
- j. Provide the number of vehicles with the single pull feature active and inactive by week and model/model year, with a week defined as seven days starting on Sunday, since the introduction of the recall remedy.

Provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents by parts a - j.

⁴ See, e.g., <https://www.hfes.org/About-HFES/What-is-Human-Factors-and-Ergonomics>.

7. Explain and describe in detail the process, engineering and safety explanation, and evidence for design decisions regarding Tesla's decision to increase the strictness of driver attentiveness requirements when approaching traffic controls off-highway as part of the remedy for recall 23V838, including but not limited to:
 - a. Explain how this item of the remedy addresses the defect;
 - b. All reasoning, engineering rationale and all relevant information used to design this feature;
 - c. What human factors considerations and principles were used when designing this feature;
 - i. Explain how the design was validated using human factors (including, but not limited to human participant evaluations);
 - ii. Identify the identifier in part e of this Request;
 - d. State whether Tesla calculated a predicted effectiveness percentage concerning crashes addressed by this feature.
 - i. If so, provide this value;
 - ii. Explain in detail how this value was calculated including where the analysis variables originated;
 - e. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, this item in the subject recall in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:
 - i. Action title or identifier;
 - ii. The actual or planned start date;
 - iii. The actual or expected end date;
 - iv. Brief summary of the subject and objective of the action;
 - v. Engineering group(s)/supplier(s) responsible for designing and for conducting the action;
 - vi. A brief summary of the findings and/or conclusions resulting from the action;
 - f. For all deployed modification/changes to this item, provide separately:
 - i. The identifier/title related to this item in Request 15;
 - ii. Explain in detail the motivation for this modification/change;
 - iii. Explain how this modification/change impacts the effectiveness of this feature;
 - g. Explain the triggering criteria for increased monitoring of this feature;
 - h. Explain in detail the requirements for a driver to receive alerts under this item; and
 - i. The number of Hands-on-Wheel Warnings by week with a week defined as seven days starting on Sunday, by Model and HW version, displayed by the subject system related to this aspect of the remedy.

Provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents by parts a - i.

8. Explain and describe in detail the process, engineering and safety explanation, and evidence for design decisions regarding Tesla's decision to increase driver monitoring in the moments

following Autopilot engagement as part of the remedy for recall 23V838, including but not limited to:

- a. Explain how this item of the remedy addresses the defect;
- b. All reasoning, engineering rationale and all relevant information used to design this feature;
- c. What human factors considerations and principles were used when designing this feature;
 - i. Explain how the design was validated using human factors (including, but not limited to human participant evaluations);
 - ii. Identify the identifier in part e of this Request;
- d. State whether Tesla calculated a predicted effectiveness percentage concerning crashes addressed by this feature.
 - i. If so, provide this value;
 - ii. Explain in detail how this value was calculated including where the analysis variables originated;
- e. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, “actions”) that relate to, or may relate to, this item the subject recall in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:
 - i. Action title or identifier;
 - ii. The actual or planned start date;
 - iii. The actual or expected end date;
 - iv. Brief summary of the subject and objective of the action;
 - v. Engineering group(s)/supplier(s) responsible for designing and for conducting the action;
 - vi. A brief summary of the findings and/or conclusions resulting from the action;
- f. For all deployed modification/changes to this item, provide separately:
 - i. The identifier/title related to this item in Request 15;
 - ii. Explain in detail the motivation for this modification/change;
 - iii. Explain how this modification/change impacts the effectiveness of this feature ;
- g. Explain the triggering criteria for increased driver monitoring of this item;
- h. Explain in detail the requirements for a driver to receive alerts under this item; and
- i. Provide the number of Hands on Wheel Warnings by week with a week defined as seven days starting on Sunday, by Model, Model Year and HW version, displayed by the subject system related to this feature of the remedy.

Provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents by parts a - i.

9. Explain and describe in detail the process, engineering and safety explanation and evidence for design decisions regarding Tesla’s decision to implement a one-week suspension policy based on accumulated strikeouts as part of the remedy for recall 23V838, including but not limited to:
 - a. Explain how this item of the remedy addresses the defect;
 - b. All reasoning, engineering rationale, and all relevant information used to design this

- feature;
- c. What human factors considerations and principles were used when designing this feature;
 - i. Explain how the design was validated using human factors (including, but not limited to human participant evaluations);
 - ii. Identify the identifier in part e of this Request;
 - d. State whether Tesla calculated a predicted effectiveness percentage concerning crashes addressed by this feature.
 - i. If so, provide this value;
 - ii. Explain in detail how this value was calculated including where the analysis variables originated;
 - e. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, “actions”) that relate to, or may relate to, this item in the subject recall in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:
 - i. Action title or identifier;
 - ii. The actual or planned start date;
 - iii. The actual or expected end date;
 - iv. Brief summary of the subject and objective of the action;
 - v. Engineering group(s)/supplier(s) responsible for designing and for conducting the action;
 - vi. A brief summary of the findings and/or conclusions resulting from the action;
 - f. For all deployed modifications/changes to this item provide separately:
 - i. The identifier/title related to this item in Request 15;
 - ii. Explain in detail the motivation of this modification/change;
 - iii. Explain how this modification/change impact the effectiveness of this feature;
 - g. Explain in detail the requirements for a driver to receive strikes under this item; and
 - h. The number of strikes, strikeouts, and suspensions incurred through use of the subject system by week with a week defined as seven days starting on Sunday and by Model, Model Year and HW.

Provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents by parts a - h.

10. Explain and describe in detail the process, engineering and safety explanation and evidence for design decisions regarding Tesla’s decision to increase the size and prominence of driver facing alerts and warnings as part of the remedy for recall 23V838, including but not limited to:
 - a. Explain how this item of the remedy addresses the defect;
 - b. All reasoning, engineering rationale and all relevant information used to design this feature;
 - c. What human factors considerations and principles were used when designing this feature;
 - i. Explain how the design was validated using human factors (including, but not limited to human participant evaluations);

- ii. Identify the identifier in part e of this Request;
- d. State whether Tesla calculated a predicted effectiveness percentage concerning crashes addressed by this feature.
 - i. If so, provide this value;
 - ii. Explain in detail how this value was calculated including where the analysis variables originated;
- e. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, “actions”) that relate to, or may relate to, this item in the subject recall in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:
 - i. Action title or identifier;
 - ii. The actual or planned start date;
 - iii. The actual or expected end date;
 - iv. Brief summary of the subject and objective of the action;
 - v. Engineering group(s)/supplier(s) responsible for designing and for conducting the action;
 - vi. A brief summary of the findings and/or conclusions resulting from the action.
- f. For all deployed modifications/changes to this item provide separately:
 - i. The identifier/title related to this item in Request 15;
 - ii. Explain in detail the motivation of this modification/change;
 - iii. Explain how this modification/change impact the effectiveness of this feature.

Provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents by parts a - f.

11. Describe Tesla’s use of human factor science in its design and sustainment of the subject system, including but not limited to:
- a. Tesla’s design process as it relates to human factors;
 - b. Tesla’s assessment of the importance of human factors;
 - c. The human factors validation of the subject system;
 - d. Identify each and every job or position title related to human factors involving the design and development of the subject system since the inception of the subject system:
 - i. Identify the role;
 - ii. Number of employees that hold this role currently (noting vacancies);
 - iii. Role creation date;
 - iv. Typical prior experience historically;
 - v. Typical education historically;
 - vi. Required prior human factors experience historically;
 - vii. State whether this position still exists;
 - (1) If not, provide the end date of the position and explain why this position no longer exists.

Provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents.

12. Describe the role that the cabin camera plays in the enforcement of driver engagement / attentiveness and the manner in which its inputs are factored into the subject system's operation prior to, and after, December 12, 2023, including but not limited to:
 - a. Whether changes relating to the cabin camera were incorporated into the remedy for recall 23V838;
 - b. The impact of any changes on driver engagement alert types and timing and how those changes integrate with the existing engagement strategy;
 - c. Recoverable data elements pointing to the cabin camera's influence either via telemetry or from the vehicle's onboard storage; and
 - d. The cabin camera's impact on driver alerting and recoverable data if the driver does not opt to share data from the camera with Tesla.

13. Explain in detail the process Tesla uses to learn of/identify crashes reportable under NHTSA's Standing General Order 2021-01 ("the SGO") including but not limited to current and previously used sources.

14. Explain in detail for each source identified in Question 13 the following:
 - a. The start date of the source's use;
 - b. The end date of the source's use;
 - c. Whether Tesla receives information from this source by notification or whether Tesla actively searches this source;
 - i. If the source is searched, how often is a search performed;
 - d. The number of crashes initially identified (prior to qualification by Tesla) by this source by month;
 - e. All search and system constraints of the source;
 - f. Enabling criteria which would result in Tesla being aware of a reportable crash;
 - g. All changes and modifications to the source or in the search method of the source since Tesla was first served with the SGO including but not limited to any changes in c – f :
 - i. The date or approximate date on which the modification or change was incorporated;
 - ii. A detailed description of the modification or change;
 - iii. The reason(s) for the modification or change; and
 - iv. How the modification or change affects Tesla's reporting pursuant to the SGO.

Provide copies of all policies, procedures, and documents referenced in response to a-g.

15. For each trade name/trim level of the subject system available in the subject vehicles, describe all modifications or changes made by, or on behalf of, Tesla in the design, material composition, manufacture, quality control, supply, function, or installation of the subject system that relate to, or may relate to, driver engagement/attentiveness and OEDR by the

subject system in the subject vehicles since July 1, 2023. For each such modification or change, provide the following information:

- a. Action title or identifier;
- b. The date or approximate date on which the modification or change was incorporated into vehicle production;
- c. A detailed description of the modification or change;
- d. The reason(s) for the modification or change;
- e. If the change is related to the remedy for recall 23V838;
 - i. What aspect(s) of the remedy is affected;
- f. The hardware, firmware, and software names and numbers of the original version;
- g. The hardware, firmware, and software names and numbers of the modified version;
- h. Primary distribution method of related firmware and software updates (over the air or in-person service); and
- i. When the modified version / update was made available as a service component.

Also, provide the above information for any modification or change that Tesla is aware of which may be incorporated into vehicle production or pushed to subject vehicles in the field within the next 120 days.

A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

16. For all subject crashes of which Tesla is aware, including but not limited to crashes previously reported pursuant to the SGO after December 12, 2023, provide the following:
 - a. VIN;
 - b. Incident date and time;
 - c. Location of the crash;
 - d. Road class type;
 - e. SGO number;
 - f. Driving mode;
 - g. Remedy on vehicle at the time of incident;
 - h. Related remedy items;
 - i. Firmware at the time of incident;
 - j. Number of Hands on Wheel Alerts in the incident drive cycle;
 - i. Visual
 - ii. Audible
 - iii. Visual + Audible
 - k. Time interval between last Hands on Wheel alert and collision;
 - l. Last Hands on Wheel Alert Type (visual, audible, visual + audible)
 - m. Strikes at time of incident;
 - n. Strikeouts at time of incident;
 - o. Speed at impact; and
 - p. List the available documents related to this incident including but not limited to:
 - i. Time interval between last Hands-on-Wheel alert and collision;
 - ii. EDR

- iii. CAN logs
- iv. Video/imagery
- v. PAR

Provide copies of all documents referenced in response to Request 16 part p.

A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

17. Furnish copies of all internal and external communications that are related to or may relate to the subject recall and subject non-remedy updates, including but not limited to communications that are related to or may relate to the following:
- a. Tesla's safety defect determination decision making;
 - b. Issue investigation;
 - c. Action design including human factors considerations (initial and modifications); and
 - d. Testing.

Organize response documents in chronological order and identify the following: sender, receiver(s), subject, and date sent.

Legal Authority for This Request

This letter is being sent to Tesla pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports. It constitutes a new request for information.

Civil Penalties

Tesla's failure to respond promptly and fully to this letter could subject Tesla to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$27,168 per violation per day, with a maximum of \$135,828,178 for a related series of daily violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. *See* 49 C.F.R. § 578.6(a)(3). Such violations include failing to respond completely, accurately, or in a timely manner to ODI information requests.

If Tesla cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client privilege, attorney work product protection, or other privilege or protection, Tesla does not submit one or more requested documents or items of information in response to this information request, Tesla must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

If Tesla's response contains any information that you claim is confidential business information (CBI), Tesla must request two secure electronic file transfer links from Alexa Ardron at alexa.ardron@dot.gov. One secure electronic file transfer link is for your request for confidential treatment. Please see enclosure 1 for additional instructions on submitting a request for confidential treatment that is compliant with 49 C.F.R. Part 512 (specifically, a request for confidential treatment must include the four required parts that are discussed in enclosure 1). The second secure electronic file transfer link is for your non-confidential response to this letter. Do not submit any confidential business information in your non-confidential submission. Please refer to RQ24009 in Tesla's response to this letter and in a request for confidential treatment that Tesla may submit.

In addition to submitting your request for confidential treatment and any files containing CBI through the secure electronic file transfer link, as a CBI Portal Pilot participant, you will also need to submit your request and files containing CBI to NHTSA's Office of the Chief Counsel via the CBI Portal. If you do not submit your request and files containing CBI to NHTSA's Office of the Chief Counsel via the CBI Portal, you must notify the investigator referenced in this IR to ensure that the secure file transfer link for your request for confidential treatment is directed to the Office of the Chief Counsel accordingly.

Due Date

Tesla's response to this letter must be submitted to this office by July 1, 2024. If Tesla finds that it is unable to provide all of the information requested within the time allotted, Tesla must request an extension from me at gregory.magno@dot.gov no later than five business days before the response due date. If Tesla is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Tesla then has available, even if an extension has been granted.

If you have any technical questions concerning this matter, please contact Alexa Ardron of my staff at alexa.ardron@dot.gov.

Sincerely,

Gregory Magno

Gregory Magno, Chief
Vehicle Defects Division - D
Office of Defects Investigation

Enclosure 1, Information for Requests for Confidential Treatment.

All pre-formatted data collection files will be provided after a meeting regarding these requests.

ENCLOSURE 1 – INFORMATION FOR REQUESTS FOR CONFIDENTIAL TREATMENT

If you believe that your response contains any material that you claim is confidential business information, submit these materials to NHTSA’s Office of the Chief Counsel in accordance with 49 C.F.R. Part 512. **All requests for confidential treatment must be submitted directly to the Office of the Chief Counsel. Upon request, ODI will provide you with a secure file transfer link for your submission to the Office of the Chief Counsel.**

In addition, as a CBI Portal Pilot participant, you will also need to submit your request and files containing CBI to NHTSA’s Office of the Chief Counsel via the Confidential Business Information Portal. If you are not currently registered for the CBI Portal, please send a registration request to cbi-helpdesk@dot.gov.

Requests for confidential treatment are governed by Part 512. A current version of this regulation is available on the internet at <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-V/part-512>.

How to request confidential treatment:

NHTSA is currently treating electronic submission as an acceptable method for submitting confidential business information to the agency under Part 512. If you claim that any of the information or documents provided in your response constitutes confidential business information within the meaning of 5 U.S.C. § 552(b)(4) or are protected from disclosure pursuant to 18 U.S.C. § 1905, you must request a secure file transfer link from the ODI contact listed in your Information Request. ODI will copy a representative from the Office of the Chief Counsel on the secure file transfer link for your request for confidential treatment. You must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with Part 512, to the Office of the Chief Counsel. Do not send a hard copy of a request for confidential treatment to NHTSA’s headquarters.

Your request must include a request letter that contains supporting information, pursuant to Part 512.8. Your request must also include a certificate, pursuant to Part 512.4(b) and Part 512, Appendix A.

You are required to submit one unredacted “confidential version” of the information for which you are seeking confidential treatment. Pursuant to Part 512.6, the words “ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION” or “CONFIDENTIAL BUSINESS INFORMATION CONTAINED WITHIN BRACKETS” (as applicable) must appear at the top of each page containing information claimed to be confidential. Where not all information on a page is claimed to be confidential, identify each item of information for which confidentiality is requested within brackets: “[].”

You are also required to submit one redacted “public version” of the information for which you are seeking confidential treatment. Pursuant to Part 512.5(a)(2), the redacted “public version” should include redactions of any information for which you are seeking confidential treatment (i.e., the only information that should be unredacted is information for which you are **not** seeking confidential treatment).

For questions about a request for confidential treatment, please contact Dan Rabinovitz in the

Office of the Chief Counsel at Daniel.Rabinovitz@dot.gov or (202) 366-8534.