



NISSAN NORTH AMERICA, INC.

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Franklin, TN 37068
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December 19th, 2017

Department of Motor Vehicles
Licensing Operations Division – Compliance Unit
2415 First Ave, M/S S441
Sacramento, CA 95818

Attention: Rodney Aoki

Re: Nissan Autonomous Vehicle Disengagement Report 2017

Dear Mr. Aoki:

Enclosed for review and processing is the completed Nissan AV Disengagement Report up to and including December 1, 2016 through November 30, 2017

Vehicles Covered in this report:

- Leaf #1 CA License DST 562 43U
- Leaf #2 CA License DST 562 78V
- Leaf #3 CA License DST 562 41V
- Q50 #1 CA License DST 562 42V
- Q50 #2 CA License DST 562 39N

Pursuant to California code of Regulations title 13, article 3.7, section 227.46, the annual report shall summarize disengagement for each month as follows:

- The total number of autonomous mode disengagement and the circumstances or testing conditions at the time of the disengagement including:
 - The location: interstate, freeway, highway, rural road, street, or parking facility.
 - A description of the facts causing the disengagement, including: weather conditions, road surface, construction, emergencies, accidents or collisions, and whether the disengagement was the result of a planned test of the autonomous technology.
- The total number of miles each autonomous vehicle tested in autonomous mode on public roads for each months
- The period of time elapsed form when the autonomous vehicle test driver was alerted of a technology failure and the driver assumed manual control of the vehicle.

If you have any question regarding the report or require further information, please contact me at the below number.

Thiago Aguiar
Nissan Research Center – Silicon Valley
Nissan North America, Inc.
(408) 215-6927

Type Key/Definitions:

Type#	Description	Reported?
1	Av System fails and requires driver to take over.	YES
2	AV system does not recognize failure, but the needs to take over for safety.	YES
2A-a	AV is about to collide with another vehicle or obstacle due to self-steering.	YES
2A-b	Av is about to rear-end another vehicle due to insufficient deceleration of the AV.	YES
2A-c	Another vehicle is about to rear-end the AV due to sudden deceleration of the AV.	YES
2B	AV driver is expecting a failure and can easily handle the disengagement (typical during early development)	NO
3	AV driver stops AV Mode voluntarily to finish experiment (End Of Experiment)	NO

Results of Planned Tests:

** Occurred during early development and failures were expected during these planned tests.

ID #	Date	Time	AV ID	Testing Conditions	Locations	Weather/Road conditions	Elapsed Time	Type
March 2017								
1	3/17/2017	2:00PM	Leaf #1 (Alfa)	AV did not fully stop at Intersecon	City Street	Sunny/Dry	<1 Sec	2
April 2017								
2	4/18/2017	11:45 AM	Leaf #2 Bravo	Lane sharing with Bicycle	City Street	Sunny/Dry	<1 Sec	2
May 2017								
3	5/5/2017	2:353 PM	Q50#2	Software crash	City and highway	Sunny/Dry	<1 Sec	1
4	5/9/2017	10:14 AM	Leaf #2 Bravo	Free-way exit GPS signal issue	City and highway	Sunny/Dry	0 Sec	1
5	5/22/2017	2:40 PM	Leaf #2 Bravo	GPS signal issue	City Street	Sunny/Dry	0 Sec	1
6	5/23/2017	12:20 PM	Leaf #2 Bravo	GPS signal issue	City Street	Sunny/Dry	<1 Sec	1
7	5/26/2017	1:41 PM	Leaf #2 Bravo	GPS signal issue	City Street	Sunny/Dry	<1 Sec	1

8	5/27/2017	4:09 PM	Leaf #2 Bravo	Software crash	City Street	Sunny/Dry	< 1 Sec	1
9	5/30/2017	5:12 AM	Leaf #2 Bravo	Software crash	City Street	Sunny/Dry	< 1 Sec	1
10	5/31/2017	10:57 AM	Leaf #2 Bravo	Software crash	City and highway	Cloudy/Dry	< 1 Sec	1
June 2017								
11	6/2/2017	11:19 AM	Leaf #2 Bravo	GPS signal issue	City Street	Cloudy/Dry	<1 Sec	1
12	6/5/2017	10:20 AM	Leaf #2 Bravo	Software crash	City Street	Sunny/Dry	<1 Sec	1
13	6/15/2017	11:20 AM	Leaf #2 Bravo	Insufficient deceleration with vehicle in front	City Street	Sunny/Dry	<1 Sec	2A-B
14	6/19/2017	4:07 PM	Leaf #2 Bravo	unexpected steering due to path change	City Street	Sunny/Dry	<1 Sec	2A-A
August 2017								
15	8/21/2017	6:32 PM	Leaf #2 Bravo	Traffic signal turned red as AV entered intersection	City Street	Sunny/Dry	<1 Sec	2
16	8/30/2017	3:45 PM	Leaf #3 Charlie	Software crash	City Street	Sunny/Dry	<1 Sec	1
September 2017								
17	9/1/2017	4:40 PM	Leaf #2 Bravo	Software crash	City Street	Sunny/Dry	<1 Sec	1
October 2017								
18	10/18/2017	6:15 PM	Leaf #2 Bravo	Excessive Acceleration approaching another vehicle	City and highway	Sunny/Dry	0 Sec	2A-B
November 2017								

19	11/2/2017	1:59	Q50 #1	Insufficient deceleration with vehicle in front	City Street	Sunny/Dry	<1 Sec	2A-B
20	11/2/2017	2:02	Q50 #1	Insufficient deceleration with vehicle in front	City Street	Cloudy/Dry	<1 Sec	2A-B
21	11/3/2017	4:31 PM	Q50 #1	Software crash	City and highway	Sunny/Dry	0 Sec	1
22	11/6/2017	2:29 AM	Q50 #1	Insufficient deceleration with vehicle in front	City and highway	Sunny/Dry	< 1 Sec	2A-B
23	11/22/2017	5:56 AM	Q50 #1	Insufficient deceleration with vehicle in front	City and highway	Sunny/Dry	0 Sec	2A-B
24	11/29/2017	2:00 PM	Leaf #3 Charlie	Software crash	City and highway	Sunny/Dry	< 1 Sec	1

Summary

Month - Year		Total # of Disengagements	Total Miles on Public Roads
December	2016	0	491
January	2017	0	423
February	2017	0	152
March	2017	1	345
April	2017	1	164
May	2017	8	884
June	2017	4	665
July	2017	0	208
August	2017	2	568
September	2017	1	339
October	2017	1	331
November	2017	6	437
Totals		24	5007