

LG Energy Solution Michigan, Inc.
Final Response to September 21, 2021 Information Request (PE 20-016)

This final response to the Agency's September 21, 2021 Information Request regarding Preliminary Evaluation ("PE") 20-016 is submitted on behalf of LG Energy Solution Michigan, Inc., a U.S. subsidiary of LG Energy Solution, Ltd. (collectively referred to herein "LGES"). LGES submitted a partial response to the Agency's Information Request on November 19, 2021.

As agreed in a November 16, 2021 email from the Office of Defects Investigation ("ODI"), this final response provides LGES's consolidated responses to Request Nos. 10 and 11, which identify alleged fire incidents of which LGES is aware, that involve pouch-cell and cylindrical batteries in Electric Vehicles ("EVs"), including the information categories in Request No. 10 a.-e. and Request No. 11 a.-e. Also, per the November 16 email, the time period covered by the Information Request will be January 1, 2016 to the present. Additionally, as explained in LGES's November 19, 2021 partial response, LGES is supplementing its response to Request No. 1 to include responsive information related to cylindrical-cell batteries.

This response was prepared pursuant to a diligent search for the requested information. The scope of LGES's search for responsive information focused on the locations where responsive information is most likely to be maintained and on review of LGES files in which responsive information ordinarily would be expected to be found and to which LGES ordinarily would refer. LGES notes that although electronic information was included within the scope of its search, it has not attempted to retrieve from computer storage electronic files that were overwritten or deleted.

Responses to the Agency's requests are set forth below. LGES is providing responsive information only insofar as such information is not subject to the attorney-client privilege or attorney work product.

As requested, after each numeric designation, we have set forth verbatim the request for information, followed by LGES's response. Unless otherwise stated, LGES has undertaken to provide responsive information dated up to and including December 14, 2021.

Request No. 1

Identify all automobile manufacturing companies (OEM) and battery suppliers to whom LGES provided the subject components. Separately, for each OEM (i.e. customer) and supplier, provide the following additional information in tabular form:

- a. *Customer name (i.e. General Motors);*
- b. *Customer contact information including the name(s) and title(s) of person(s) familiar with the subject components, address, phone number(s), email address(es) and other pertinent information;*
- c. *Customer part number;*
- d. *LGES part number;*
- e. *LGES manufacturing location (including assembly line if pertinent);*

- f. Address the parts were shipped to;*
- g. Any information LGES possesses regarding the final stage user/OEM of the part number;*
- h. Any information LGES possesses regarding the market (US or foreign) the part was intended for; and*
- i. Total number of parts provided (for the manufacturing location in item e) by year of manufacture.*

Response to Request No. 1

In accordance with 49 CFR Part 512, responsive information is contained in LGES's request for confidential treatment in the file named "Conf Bus Info – Supplemental Response to PE20016 IR Req. No. 1.xlsx." This file contains information related to cylindrical batteries produced for commercially available vehicles; responsive information related to pouch-cell batteries was provided in LGES's November 19, 2021 response. LGES notes that the information provided in this response reflects its best estimates based on reasonable searches of production and shipping records as of November 30, 2021. Where LGES could not locate the requested information (for example the part number used by its customer), LGES left the corresponding cell blank. With respect to the vehicle and market information, LGES's response reflects its current understanding. LGES did not confirm this information with its customers. For the production numbers, LGES used a dash to designate years with no production parts.

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Request No. 10

List all OEMs that have reported to LGES any issues with the subject components. For each such allegation, furnish:

- a. OEM;*
- b. Date of allegation;*
- c. LGES part number;*
- d. Platform / model / model year of vehicle component installed in; and*
- e. LGES's assessment of the cause and effect*

Response to Request No. 10

See consolidated response below.

Request No. 11

List all the instances LGES is aware of involving fire with the subject components.

- a. Reporting entity*
- b. Date of allegation;*
- c. LGES part number*
- d. Platform / model / model year of vehicle component installed in; and*
- e. LGES's assessment of the cause and effect*

Consolidated Response to Request Nos. 10 and 11

Per discussions with ODI, LGES is providing a consolidated response to Requests Nos. 10 and 11 that identifies all alleged fire incidents in EVs (that contain LGES-produced pouch-cell battery cells, modules and/or packs and cylindrical batteries) of which LGES is aware and that addresses generally the information categories in Request No. 10 a.-e. and Request No. 11 a.-e. The LGES “assessment of cause and effect” (per subpart e. to both) is provided in lieu of a separate response to Request No. 12 as to these alleged incidents. Additionally, during our discussions, ODI indicated that it is seeking information regarding U.S. and non-U.S. incidents, and as a result, we are providing information regarding non-U.S. incidents involving vehicles that are identical or substantially similar to vehicles sold in the U.S.

LGES may become aware of a fire in an EV equipped with LGES-produced components, regardless of the fire’s source or cause. In certain cases, the high-voltage battery has been ruled out as the potential cause of the incident. Because the phrase “involving fire with the subject components” in Request No. 11 is ambiguous, LGES has interpreted this phrase to include only alleged fire incidents of which LGES is aware in which the vehicle’s high-voltage battery has not been ruled out as a potential cause. Although LGES does not view fire incidents where the battery has been ruled out as responsive to Request No. 11, in the interest of transparency, LGES’s response nonetheless also includes a list of incidents where the high-voltage battery may have exhibited or did exhibit some evidence of fire-related damage, even though the battery has been ruled out as the cause. (LGES is not including fire incidents that involve intentional fires (such as arson) or fire incidents where the high-voltage battery has no apparent fire-related damage.)

In accordance with 49 CFR Part 512, information in response to Request Nos. 10 and 11 is contained in LGES’s request for confidential treatment in the file named “Conf Bus Info – Response to PE20016 IR Req. Nos. 10 and 11.xlsx.”

The response divides the incidents into the following categories:

- (1) Field Events: Alleged fire incidents in which LGES does not have sufficient information to determine the potential cause or in which the high-voltage battery is potentially the origin.
- (2) Kona Recall Population: Alleged fire incidents that LGES understands involve vehicles included in the populations covered by the Hyundai Kona EV recalls.¹
- (3) Bolt Recall Population: Alleged fire incidents that LGES understands involve vehicles included in the populations covered by the General Motors Bolt EV recalls.²
- (4) Battery Ruled Out: Alleged fire incidents in which there may be or is some evidence of fire damage to the high-voltage battery, but the battery has been ruled out as a potential cause.

¹ The relevant NHTSA recall numbers are 20V-630 and 21V-127.

² The relevant NHTSA recall numbers are 20V-701, 21V-560, and 21V-650.

Each tab includes columns listing the LGES customer (which in many instances is the entity reporting the alleged incident to LGES), the location of the alleged incident, the approximate date LGES became aware of the incident, the LGES part number, and the LGES “assessment of the cause and effect” based upon LGES’s understanding as of December 14, 2021. LGES has also included columns listing the platform (if known), model, and model year of the vehicle involved in each alleged incident based upon information currently available to LGES.

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Sincerely,

LG Energy Solution Michigan, Inc.