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**BALLOT VOTE SHEET** 

Date: January 11, 2017

TO : The Commission

Todd A. Stevenson, Secretary

THROUGH: Patricia A. Adkins, Executive Director

Mary T. Boyle, General Counsel

FROM : Patricia M. Pollitzer, Assistant General Counsel

David M. DiMatteo, Attorney, OGC

SUBJECT: Automatic Residential Garage Door Operators; Revision of the Underwriters

Laboratories, Inc.'s "Standard for Safety for Door, Drapery, Gate, Louver, and

Window Operators and Systems," UL 325

BALLOT VOTE DUE: Wednesday, January 18, 2017

Staff is forwarding to the Commission a memorandum recommending that the Commission allow recent changes to entrapment protection provisions in Underwriters Laboratories, Inc.'s (UL) "Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems," also known as UL 325, to be incorporated into the Commission's automatic residential garage door operator (GDO) standard. On December 20, 2016 the Commission received notification from UL of revisions to UL 325.

Public Law 101-608 mandated that the entrapment protection provisions of UL 325 be considered a consumer product safety rule. The statute further provides that if UL revises UL 325, then UL must notify the CPSC and "the revision shall be incorporated in the consumer product safety rule . . . unless, within 30 days of such notice, the Commission notifies the Laboratories that the Commission has determined that such revision does not carry out the purposes of [the original entrapment protection requirements]."

Staff recommends that the Commission allow the entrapment protection revisions to be incorporated into the consumer product safety rule. Should the Commission concur with staff's recommendation, the Office of Hazard Identification and Reduction will work with the Office of the General Counsel on a draft notice of proposed rulemaking (NPR) that will include the UL revisions.

Commission's GDO standard.	ow the revisions to UL 325 to be included
Signature	Date
Do not approve staff's recommendation included in the Commission's GDO sta	n to allow the revisions to UL 325 to be andard.
Signature	Date
Take other action (please specify):	

Attachment: CPSC Staff Memorandum titled, "Revision of Residential Garage Door Operator Standard, 16 C.F.R. part 1211"

This document has been electronically approved and signed.

### Memorandum

Date: Jan 11, 2017

TO : The Commission

Todd Stevenson, Secretary

THROUGH: Patricia H. Adkins, Executive Director

Mary T. Boyle, General Counsel

FROM : George A. Borlase, Ph.D., P.E., Assistant Executive Director,

Office of Hazard Identification and Reduction

Vincent Amodeo, Mechanical Engineer Directorate for Engineering Sciences

SUBJECT: Revision of residential garage door operator standard, 16 C.F.R. part 1211

#### Introduction

This memorandum informs the Commission that Underwriters Laboratories Inc. (UL) recently revised UL's voluntary standard titled, "Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems," also known as UL 325 sixth edition. As explained below, the Commission has a mandatory standard for automatic residential garage door operators (GDOs) to protect against entrapment. 16 C.F.R. part 1211. The relevant statute provides that when UL revises the entrapment protection provisions of UL 325, UL must notify the Commission and, unless the Commission makes a determination within 30 days that the revision does not carry out the purposes of the original entrapment protection requirements, UL's revision is included in the Commission's mandatory standard. For the reasons discussed below, staff recommends that the Commission allow the recent revisions to become part of the Commission's mandatory GDO standard.

#### Discussion

The Consumer Product Safety Improvement Act of 1990 (Improvement Act) mandated that all automatic residential GDOs conform to the entrapment protection requirements of UL 325. In response to this mandate, the Commission issued the safety standard for automatic residential GDOs (16 C.F.R. part 1211) on June 19, 1991. The Improvement Act provides that when UL makes changes to the entrapment protection provisions of UL 325, UL must notify the Commission of proposed revisions. UL's changes must be incorporated into 16 C.F.R. part 1211, unless the agency notifies UL within 30 days that the Commission has determined that the revisions do not carry out the purposes of the Improvement Act. The purpose of the Improvement Act is to protect children from becoming entrapped by garage doors.

On December 20, 2016, UL notified the Commission that UL published revisions to UL 325 sixth edition on December 7, 2016 (Letter attached). Should the Commission find that the

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revisions do not achieve the purposes of the Improvement Act the Commission must notify UL before January 15, 2017, to prevent the changes from being incorporated into 16 C.F.R. part 1211.

The recent revisions comprise three changes to UL 325 sixth edition. The three changes are listed in Appendix A.<sup>1</sup> Commission staff reviewed these changes.

Commission staff determined that one of the changes does not affect 16 C.F.R. part 1211 because it is a change to drapery operator requirements, which are not covered by the Commission's mandatory GDO safety standard.

The two remaining revised requirements (summarized below<sup>2</sup>) are relevant to the mandatory residential GDO standard. The changes were made by UL to allow an alternate means to comply with the requirements for solid-state circuits and to specify additional requirements for control accessories that allow unattended operation.

- 2. Addition of an alternate method for evaluating protective electronic circuits and controls using requirements based on the Standard for Safety of Household and Similar Electrical Appliances, Part 1: General Requirements, UL 60335-1.
  UL 991 "Standard for Tests for Safety-Related Controls Employing Solid-State Devices" is currently incorporated by reference in the Commission's mandatory safety standard for GDOs at §§ 1211.4 (c), 1211.5 (a), and 1211.5 (b) (3) for assessing the reliability of electronic or solid-state circuits, including entrapment protection circuits, which perform back-up, limiting, or other functions intended to reduce the risk of fire, electric shock, or injury to persons. The latest UL 325 revision added a supplement section that provides alternate means to comply with assessing these types of circuits in the GDO system. The UL 325 supplement is based on international standard UL/IEC 60335-1, "Safety of Household and Similar Appliances, Part 1: General Requirements." UL/IEC 60335-1 will eventually replace UL 991, which is being phased out. The transition to implementing UL/IEC 60335-1 is being done across many UL product standards to promote harmonization with international standards.
- 3. Addition of a new section titled, "Unattended operation control accessory," Section 32.6.

  Some GDOs allow for unattended operation. Initial versions of this type of device were "timer-to-close" functions, and requirements were added at § 1211.14 during the 2016 update of 16 C.F.R. part 1211 to address this type of device. More recent unattended operation functions being sold allow for remote monitoring and unattended activation via wireless or Internet-connected devices. To address these new operating features, additional requirements were added to UL 325 to ensure safe operation. The new requirements clarify that the devices

<sup>&</sup>lt;sup>1</sup> Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems, UL 325, can be obtained from Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, II 60062, tele 847.272.8800, www.UL.com <sup>2</sup> Line item numbers correspond to UL 325 revision changes outlined in Appendix A.

may be standalone or integral to the operator, or a combination of both. Visual and audible alarm requirements are clarified, and provisions are specified for maintaining compliance with the entrapment protection of an external accessory. Requirements for instructions and markings were also updated for these devices.

Staff recommends that the Commission allow the most recent entrapment protection changes to UL 325 sixth edition to be incorporated into the mandatory product safety standard for automatic residential GDOs at 16 C.F.R. part 1211. Engineering Sciences staff believes that the various revisions improve the level of safety afforded by the mandatory standard, by making it easier to conduct tests, by providing better instructions/markings to the user, and by adding test requirements to cover technologies currently on the market. These changes will further reduce the risk of child entrapment under garage doors, and thus, advance the purposes of the Improvement Act. Should the Commission conclude that incorporation of the 2016 revisions into the mandatory standard is appropriate, technical staff will work with the Office of the General Counsel to prepare a draft Federal Register (FR) notice revising part 1211 to include the new UL requirements. Staff will then forward the FR notice to the Commission for a vote.

# Appendix A

UL Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems, UL 325, Sixth Edition, Dated October 14, 2013

## Summary of Topics

The revisions dated February 24, 2016, were issued to incorporate the following changes in requirements (*Revisions that effect GDO entrapment protection are in bold*):

- 1. Revised 12.3.4 to reduce the minimum length allowable for power cords used on cord connected drapery operators.
- 2. Addition of an alternate method for evaluating protective electronic circuits and controls using requirements based on the Standard for Safety of Household and Similar Electrical Appliances, Part 1: General Requirements, UL 60335-1.
- 3. Addition of a new section titled, "Unattended operation control accessory," Section 32.6.



December 15, 2016

U.S. Consumer Product Safety Commission Mr. Todd Stevenson Office of the Secretary 4330 East-West Highway Bethesda, MD 20814

Subject: UL 325 - Published Revisions

Dear Mr. Stevenson,

In accordance with Public Law 101-608, Underwriters Laboratories Inc. hereby notifies the CPSC regarding published revisions to the sixth edition of the Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems, UL 325.

On April 29, 2016 UL proposed revisions to the residential garage door operator portion of UL 325. Ballots and comments to these proposed revisions were due June 13, 2016. During the course of UL's consensus (STP) process, additional revisions to proposal were necessary. UL proposed these revisions to the STP on September 16, 2016. Ballots and comments to these proposed revisions were due March 20, 2015. No additional changes were made to the proposal, and revisions were published December 7, 2016.

Attached is a copy of the revised pages, related to residential garage door operators, as published in the Standard. If you have any questions, please feel free to contact me.

Yours truly,

Reviewed by:

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