

January 2, 2025

Akhira Watson Project Manager for TC 943 UL Standards & Engagement Email: akhira.watson@ul.org

Dear Ms. Watson:

Re: CPSC staff Comments on <u>Proposals for UL 943</u>, <u>Standard for Ground-Fault Circuit-Interrupters (GFCIs)</u>
Dated November 22, 2024

U.S. Consumer Product Safety Commission (CPSC or Commission) staff¹ supports the proposals, dated November 22, 2024, to revise UL 943. Staff will post these comments into the work area for these proposals in the Collaborative Standards Development System (CSDS). The proposed requirements are necessary to complement the GFCI Interoperability requirements added to UL 101, *Standard for Leakage Current for Utilization Equipment*.

Topic - 1 - Optional Rating: UL 943 for other than 60 Hz - High Frequency HF

CPSC staff supports incorporation of requirements for an HF GFCI into UL 943, but as part of the mandatory Class A GFCI requirements and not optional. Creating an optional rating Class A GFCI device may cause consumer confusion and lower confidence in the use of GFCIs.

Just as there are numerous applications and installations where current class A GFCIs operate effectively without interoperability issues, the proposed Class A HF GFCI requirements are compatible with new products tested to UL 101 requirements as well as existing products in the field. This will ensure there are no compatibility issues with products and GFCIs when new products or components are replaced on GFCI-protected circuits.

Topic - 2 - Optional Rating: UL 943 for other than 60 Hz - High Frequency Plus HF+

CPSC staff supports the concept of the HF+ requirements being incorporated into class A GFCIs, but believes that more research is necessary before the trip level can be effectively set. These requirements should be a mandatory requirement when a trip level is established.

Topic - 3 - Remote Critical Software Update Functionality: UL 5500 and UL 60730-1/ CAN/CSA E60730-1,

¹ These views are those of CPSC staff, and have not been reviewed or approved by, and may not reflect the views of the Commission.



Annex H.11.12.4

CPSC staff agrees with the proposal as written, including the consensus UL 5500 remote critical software functionality requirements. GFCIs are safety devices, and any loss of product functionality could result in injury or death. Any remote product updates need to be performed in a safe and secure manner to prevent safety risks introduced through improper product updates or network vulnerabilities.

Topic - 4 - Corresponding Proposal to implement the intent of the Formal Interpretation

CPSC staff supports the added text to implement the intent of the Formal Interpretation as it provides additional clarity on the intent of the requirement.

Topic - 5 - EMC Proposal - Immunity Update

CPSC staff supports the added text as it supports the overarching goal that GFCIs continue to operate as intended when new or updated technologies are introduced to the branch circuit protected by a GFCI. The proposal also harmonizes with the requirements for UL 1699 devices that operate in similar environments.

CPSC staff appreciates the opportunity to comment on this matter and encourages industry to adopt these changes for Topic 1 without delay.

Sincerely,

Douglas Lee

Electrical Program Area Risk Manager

Office of Risk Reduction

Cc: Jacqueline Campbell, CPSC Voluntary Standards Coordinator Arthur Lee, CPSC Electrical Program Manager