



MEETING LOG

SUBJECT: *Underwriters Laboratories (UL) Technical Committee (TC) 101 Meeting for Standard for Leakage Current for Utilization Equipment*

FY 24 OP PLAN ENTRY: National Electrical Code

DATE OF MEETING: March 19, 2024

LOCATION OF MEETING: UL Northbrook, IL and virtual

CPSC STAFF FILING MEETING LOG: Douglas Lee, Office of Hazard Identification and Reduction (EXHR)

FILING DATE: 4/17/24

CPSC ATTENDEE(S): Douglas Lee (EXHR) (Virtual)

NON-CPSC ATTENDEE(S):

Marina Currie, UL 101 Project Manager

UL TC 101 members and guests

Please contact UL staff for a list of attendees

Summary of Meeting:

The TC 101 meeting was held to review standards work to address the unwanted tripping of ground-fault circuit-interrupters (GFCIs) that has been occurring since the introduction of Department of Energy requirements for higher energy efficient products.

UL provided an update of testing on GFCIs and various appliances that were used to address interoperability issues. Two draft proposals for UL 943 Class A GFCIs were reviewed. These draft proposals are identified as green zone (Class A-HF) and red zone (Class A-HF+) proposals and both incorporate high frequency noise immunity requirements (4 mA times Frequency Factor (FF) from 60 Hz to 150 kHz) to address the unwanted tripping of GFCIs in higher energy efficient products. The red zone proposal additionally must trip at 6 mA times FF from 60 Hz to 150 kHz. Both draft proposals were presented as optional requirements for Class A devices.

UL staff also discussed their work to develop a new test instrument to simplify and improve leakage current and high frequency testing. Digital testing methodologies and test circuits were discussed based on previous test results and information developed over the past few years.

UL staff discussed their work to reproduce reaction frequency factors for volunteers and comparison to Professor Dalziel, UL 101, and IEC 60479 data. They are drafting a proposal relative to muscle stimulation work and seeking funding to get better data for peak vs. RMS human body experimental results.



AHAM (Association of Home Appliance Manufacturers) staff discussed new work for TC 101 to address unwanted tripping from arc-fault circuit-interrupters (AFCIs). CPSC staff indicated that this work would be beneficial in order to minimize unwanted tripping issues and improve consumer use of AFCI technology and fire safety. The TC discussed that this work may not be addressed under TC 101 although many of the same participants would be involved.

Next Steps: Staff will continue to monitor and participate in UL and *National Electrical Code* standards work. Staff will also review proposals when they are distributed for ballot or comment.