2007 Codes & Standards Activities at CSA and UL

Presented by John Merando
(Bechtel)

Canadian Standards Association

6 standards were issued by CSA in 2007:

- **CSA C22.2 No. 2556**: Test Methods for Wire and Cable (new edition)
- **CSA C22.2 No. 52**: Underground Service Entrance Cables (amendment)
- **CSA C22.2 No. 75**: Thermoplastic-Insulated Wires and Cables (new edition)

Canadian Standards Association

2007 CSA publications issued (continued):

- **CSA C22.2 No. 131**: Type TECK 90 Cable (new edition)
- **CSA C22.2 No. 51**: Armored Cables (amendment)
- **CSA C22.2 No. 210**: Appliance Wiring Materials (amendment)

Underwriters Laboratories

•**UL 44 –** Major revision to UL 44 based on changes implemented in UL 2556:

- Deleted figures, tables, test methods & Annex H
- Deleted requirements for Lead-Alloy conductors
- Revised cable marking requirements (esp. AL)
- Clarified country specific marking for cables not intended for outdoor use
- Changed mandrel diameter & related testing
- Re-instated Deep Well Pump overall jacket thickness requirements
- Clarified tables regarding types RW75, RW90, RWU75 and RWU90

Underwriters Laboratories

- **UL 62 –** 17th Edition issued which harmonized the NMX-J-436-ANCE, CSA C22.2 No. 49 & UL 62 requirements.

- **UL 83 –** Revised test methods based on UL 2556.

- **UL 719 –** Revised to allow 2/C, 3/C, & 4/C cables w/o binder tapes for Type NM cable sizes AWG 14 to AWG 10.

Underwriters Laboratories

- **UL 493 –** New edition includes:

- Revised SI units for tensile strength
- Added minimum ultimate elongation for Non-UF-B specimens
- Clarified that continuous eddy-current option not limited to single conductor cable only
- Clarified UG conductor color requirements
- Clarified cable types permitted to be marked Type NMC-B

Underwriters Laboratories

- **UL 758**
  - Long term testing of covering materials for jackets postpones implementation date from 11-1-2006 to 5-1-2008.
  - Added mPPE and mPPE-PE materials to Table 7.1

- **UL 854**
  - Removed references to Lead Alloy coatings and updated references to ASTM standards.

Underwriters Laboratories

- **UL 1063** (new edition issued)

- Replaced term “Natural Grey” with “Gray” for circuit conductor identification
- Deleted table for markings of additional uses of MTW
- Reorganized units for conductor sizes
- Clarified conductor size ranges
- Revised metric units in Table 8.1 for PVC

Underwriters Laboratories

- **UL 1072** (4th Edition published)

  - Deleted UL listing for 5 kV non-shielded cable as of 6/30/07
  - Proposal under review to reduce assembly jacket thickness under armor for multi-conductor cables
  - Proposal under review to correct performance criteria for FT4/IEEE 1202 VTF test

Underwriters Laboratories

- **UL 1309**

- Proposal under review to reduce jacket thickness over corrugated aluminum armor
- Proposal under review to reduce jacket thickness over braided armor cable

Underwriters Laboratories

- **UL 1569** (3rd Edition of Metal Clad Cables)
  - Replaced “LS” with “ST1” designation for Limited Smoke Rating
  - Updated references to NEC
  - Revised circuit conductor identification from “Natural Gray” to “Gray”
  - Clarified that Tables 6.3 & 6.4 apply to only single conductor cable
  - Clarified that footnote “a” applies to DC resistance, and not cross-sectional area

Underwriters Laboratories

- **UL 1666** (5th Edition issued 2/16/07)
  - Fifth edition is technically equivalent to ANSI approved fourth edition
  - Only formatting and editorial changes made

- **UL 1685** (3rd Edition issued 4/25/07)
  - Revised test procedures and test equipment to reflect present practice
  - Proposal under review to revise product evaluation criteria from cable damage to char height in FT4/IEEE 1202 VTF test

Underwriters Laboratories

- **UL 2556**

- Added flame tests
- Added cross-sectional area by diameter method
- Allow cross-sectional area by weight method to apply to any conductor
- Added definitions for left-hand and right hand lay
- Added new method to determine length of lay

Underwriters Laboratories

- **UL 2556** (continued)

➢ Added method to determine carbon black content

➢ Clarified cold bend test procedure regarding room temperature of specimen

➢ Revised temperature correction factors of Table E.1

➢ Added Annex J to identify which ANCE test method documents are included in Trinational Test Methods Standard.