



Canadian Standards Association
Mississauga, Ontario
To the Part I Committee

Subject No. 3119

Chair: M.S. Anderson

Date: March 3, 2004

Title: Use of Arc Welding Cable, Rule 50-014(2)

Submitted by: Pat Cusack, ARISE Technologies Corporation, 321 Shoemaker Street, Kitchener, Ontario, N2E 3B3, Tel 519 725 2244, Fax 519 725 8907 on June 2, 2003

Proposal: Add a new Subrule 50-014 (2):

50-014(2) Notwithstanding Section 12, welding cable specified in Table D1 shall be permitted for connection of DC circuits not exposed to weather in PV systems rated less than 100 Vdc.

Reason for Request: Arc welding cable is commonly used in low voltage DC supply systems due to its fine stranding, flexibility, and superior insulation toughness. This rule would recognize common practice.

Supporting Information: Arc welding cable is available certified by CSA to 600 volts. Table D1 allows it to be used in arc welding equipment up to 100 Vdc open circuit. Use should be restricted to areas not exposed to weather or sunlight.

Chair's Comments: I support the proposal.

Subcommittee Deliberations: It was found in some of the comments that:

-There are approved cables available that provide the required flexibility. For example Diesel locomotive cable which is extremely flexible and has a RW90 rating.

-There are no tables in the Code book to provide the ampacities for arc welding cables.

-Due to the random stranding method, welding cables may not have equivalent ampacity ratings.

-Table 11 would have to be modified to reflect this change.
Reason enough to close the subject.

Subcommittee Recommendation: That the subject be closed.