

CANADIAN ELECTRICAL CODE

SUBJECT: Section 84 – Interconnection of Electric Power Production Sources

Rule 84-024 Disconnecting Means – General

The intent of Rule 84-024(c), which requires that the disconnecting means "...have contact operation verifiable by direct visible means..." is better described "...have contacts in the open position visually verifiable..." and is considered to have been met when:

1. The output of the electric power production source is 750V or less and the open position of the contacts can be visually verified by opening the door of the disconnecting means enclosure, unless of the draw-out type.
2. The output of the electric power production source is greater than 750V and the open position can be visually verified through a suitable transparent opening of the disconnecting means or otherwise meets Rule 36-214 of the CE Code.

Rationale

- The intent for Rule 84-024(c) is described in the CE Code Handbook as "...able to visually verify that the contact of the disconnecting means is open..."¹. The definition of *Visible-break disconnect* in Part I of the Alberta Distributed Generation Interconnection Guide states that the design of the disconnect "...must allow adequate visible inspection of the contacts in the open position."²
- The Code does not prescribe how visible verification should to be achieved in either Rules 84-024 or 36-214.
- Section 84 was introduced at a time when high-voltage (HV - > 750V) electric power production sources were the norm for interconnected systems. Low-voltage (LV - ≤ 750 V) interconnected systems (solar photovoltaic, fuel cell) are becoming increasingly popular.
- Because of the higher degrees of safety risk associated with HV switchgear, transparent windows are a common industry practice for HV applications.
- Aside from installations of interconnected electric power production sources, nowhere else does the CE Code require visual verification of contact position in LV disconnecting means.

This interpretation is provided specifically to address the visual verification requirement of Rule 84-024(c) in the CE Code. Requests to use alternative disconnecting means that do not have 'contact position visually verifiable' as described in the interpretation should be addressed through a variance with the local inspection authority having jurisdiction.

¹ "CE Code Handbook" – published by the Canadian Standards Association

² "Alberta Distributed Generation Interconnection Guide" – developed by the Alberta Distributed Generation Technical and Policy Committee