



NRC Canadian Codes Centre

2011 National Energy Code for Buildings (NECB) – Electrical Power Systems and Motors

Heather Knudsen, P. Eng.

January 2012



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Introduction

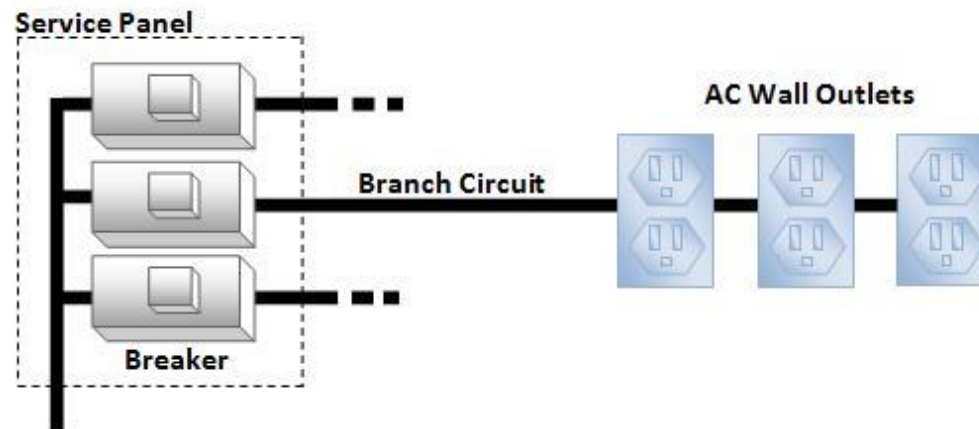
- Presentation is part of a series of seven
- Model code developed by Canadian Commission on Building and Fire Codes
- Must be adopted by provincial/territorial authorities to become law

Outline

- Scope
- Compliance options
- Prescriptive
- Performance compliance

Scope

- Applies to electrical power systems and motors connected to building's electrical service



Compliance paths

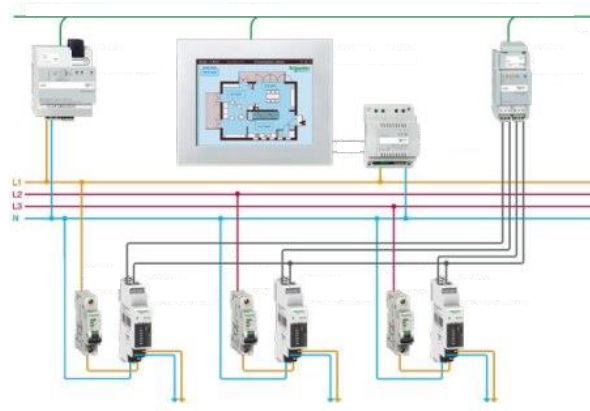
- Prescriptive path
- Performance compliance path

Prescriptive – system monitoring

- For systems > 250 kVA, must have means to monitor energy consumption of
 - HVAC systems
 - Interior lighting
 - Exterior lighting

Prescriptive – system monitoring

- Buildings with tenants or dwelling units → means to monitor
 - Total building
 - Each individual tenant or dwelling unit



Prescriptive – voltage drop

- Feeder conductors → max 2% at design load
- Branch circuit conductors → max 3% at design load

Prescriptive – equipment efficiency

Transformers

Motors

} Referenced standards



Performance compliance limitations

- NECB Part 7 Electrical Power Systems and Motors → no limitations



Questions?

www.nationalcodes.nrc.gc.ca

Thank you



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