

To: All HQ Directors: Prof. Services, Planning & Major Projects  
All Regional Managers: Prof. Services, Planning & Operations  
All District Highways Managers

**Subject: Policy for Pole Loading on Rehabilitation Projects**

**References:**

Highway Engineering Electrical Standards Manual, BC MoTH

**PURPOSE:**

To clarify the Ministry's Policy with regard to the loading on existing traffic signal and message sign poles.

**BACKGROUND:**

Many existing MoTH traffic signal and sign poles are loaded to capacity or are overloaded. In an effort to reduce the cost of rehabilitation projects by having to replace poles when adding a signal head section, the Ministry Executive has made a risk management decision to accept pole overloading as defined below.

**PROCEDURE:**

The following Design and Monitoring procedures shall be followed by design and maintenance personnel when planning and implementing rehabilitation of traffic signal and signing installations:

**Design:**

- Loading on existing traffic signal and message sign poles shall not be exceeded by more than 25% (i.e., combined stress ratio not to exceed 1.25) This shall apply to all poles other than directional or advance warning signs on type 1 or type 3 poles which shall not be overloaded by more than 31%.
- Pole loading shall be verified by the Ministry's Pole Capacity program.
- Service panel entrances that are not on type 2, 4, 4A or 5 shafts require a welded bushing as shown on Standard Specification drawing SP235-2.4.1

Monitoring:

- The Senior Electrical Engineer shall be notified, in writing, of any pole failures. Identify the type of pole, how the pole failed (i.e., natural causes such as wind or unnatural causes such as being struck by a vehicle) and the nature of the pole damage.
- The Senior Electrical Engineer shall produce a yearly summary report of pole failures to the Chief Highway Engineer by June 15th.

CONTACTS:

Ross Casey, AScT, Electrical Standards Technician  
Highway Engineering Standards Branch, Electrical Section  
387-7688

Al Sadler, P. Eng., Senior Electrical Engineer  
Highway Engineering Standards Branch, Electrical Section  
387-7686



Merv Clark, P. Eng.  
A/Chief Highway Engineer

cc: ADM Highways Operations  
ADM Planning & Major projects  
All Regional Directors