

1 Q. **C-113, Replace Insulators, \$411,600**

2 On p. C-115 Hydro notes that "... in situations where the insulators are under
3 structural stress, the cement growth condition will lead to a failure of the
4 insulator." Please explain the conditions that would cause the insulators to be
5 under stress, structural or otherwise.

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8 A. All installed insulators are subject to structural stress as they are used to support
9 energized equipment such as bus and transmission line conductor in an outdoor
10 environment. Insulators experiencing cement growth issues will fail under normal
11 stress conditions. Normal conditions include stresses from the weight of the
12 equipment, normal wind and ice loading, and so forth.