

1 Q. Re: Upgrade Terminal Station - Wiltondale:

2 How long has the grounding system in the Wiltondale Terminal Station been
3 substandard compared to Hydro's terminal engineering standards?
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6 A. The grounding system in the Wiltondale Terminal Station is original to the station
7 and was installed in 1975. At that time, Hydro's terminal station engineering
8 standards did not address step and touch potentials in terminal stations. Following
9 best engineering practice at that time, the grounding system design was based on
10 the size of the terminal station and the value of resistance required to provide an
11 acceptable ground reference for relay and fuse protection systems.
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13 Effective in 1986, the Institute of Electrical and Electronics Engineers (IEEE)
14 published standard IEEE Std 80-1986 IEEE Guide for Safety in AC Substation
15 Grounding. Revised in 2000, IEEE Std 80-2000 is based on the safety criteria of
16 acceptable step and touch potentials.
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18 Hydro's terminal engineering standards are being revised based on the latest
19 revision of the IEEE Std 80-2000. While Hydro continues to upgrade its terminal
20 station grounding systems to the current standard in a planned manner, it is cost
21 effective to upgrade the grounding system as a part of the proposed project for the
22 Wiltondale Terminal Station.