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Ontario Energy Board

FOCA’s Comments on the Farm Stray Voltage Issue

I have reviewed the Staff discussion paper and the Consultant reports and wish to comment as follows;

1. The ultimate solution to this issue is to separate the farm grounding from the utility grounding system. This can be accomplished at minimal cost by removing the grounding strap from the utility transformer neutral bushing to its tank.
2. This solution clearly separates utility and customer grounding system responsibilities.
3. Farm neutral voltage will be found to drop nealy to zero.
4. This solution has been used on many occasions in Ontario and elsewhere and is completely in accordance with the grounding objectives in Section 10 of the Ontario Electrical Safety Code and the US National Electric Code.
5. In Ontario, virtually all farms have more than one building, each with a service entrance and an ESA approved grounding system.
6. The downside for the utility is that it loses the benefit of the multiple grounding systems on the farm premises, and may have to improve its own neutral grounding system to mitigate the increased neutral voltage imposed on other customers further down the line.

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Consultant to FOCA