

# Safe Work Practices



<b>Title:</b>  <b>Setting Poles in Energized Conductors</b>	<b>Reference:</b> SWP-5.04	<b>Revision:</b> 1
	<b>Page:</b> 1 of 2	
	<b>Date:</b> 4/20/2017	
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## 1.0 GENERAL

1.1 The purpose of this document is to outline the setting of poles in energized conductors.

## 2.0 PROCEDURE

- 2.1 No excavation shall be conducted until a Dig Safe ticket has been submitted and approved, all relevant utilities have been notified, and their facilities located.
- 2.2 Poles shall be supported by digger derrick or by other means when trenching disturbs soil adjacent to the pole.
- 2.3 All digger-derrick trucks are to be grounded when the boom or the load is within the MAD zone.
- 2.4 When grounding vehicles and equipment, one of the following methods shall be used:
  - a) Connect a grounding conductor from the truck to the system neutral on the pole.
  - b) Connect a grounding conductor from the truck to a ground rod at the pole if one exists (be sure ground rod is connected to the system neutral).
  - c) If a ground rod is not present, place a ground rod and connect a grounding conductor from the truck to the ground rod.
  - d) Connect a grounding conductor from the truck to an existing anchor rod.
  - e) Connect a grounding conductor to a substation ground grid.
  - f) A truck ground does not make it safe to touch the truck.
- 2.5 Equipment requiring a grounding conductor shall be so equipped. Either one of two following methods is acceptable:
  - a) A reel of grounding wire installed on the truck and electrically bonded to the frame. All of the conductor shall be completely spooled off the reel.
  - b) A grounding lug with a clean tab installed on the truck and electrically bonded to the frame. Use an external conductor to accomplish grounding.
- 2.6 Insulated pole guards and/or insulating cover-up are required if the pole being handled may come into contact with any energized lines or parts or the pole or digger are in the mad zone.
- 2.7 Before setting poles through or near lines energized at 19.9/34.5 kV or above, Yellow Tag clearance shall be obtained. Refer to *Section 6.6 Yellow Tag of the Versant Power Safety Manual*.
- 2.8 Rubber gloves shall be worn at all times by employees while handling poles when they might come in contact with energized conductors.
- 2.9 Insulated pole tongs or cant dogs shall be used with rubber gloves when handling poles set through or near energized conductors above 15 kV. **If gloves rated for the available voltage are used, insulated pole tongs or cant dogs are not needed.**

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	<b>Page:</b> 2 of 2	
	<b>Date:</b> 4/20/2017	
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- 2.10 The butt of the pole should remain in contact with the ground during setting operations.
- 2.11 When piking poles, hold the pike pole to the side of the body and not in front.
- 2.12 Following the setting, replacement or removal of poles, disturbed soil shall be properly tamped to a level not less than the adjacent ground.
- 2.13 Open pole holes shall never be left unguarded. Any open pole hole left unguarded shall be covered completely or filled in.
- 2.14 A qualified line worker shall be able to set a pole near energized lines with appropriate supervision from a 1<sup>st</sup> Class Line Worker as described in Section 5.1 Attachment A of the Versant Power Safety Manual.
- 2.15 A crane, digger-derrick, or other equipment that allows the operator to stand or sit on the machine without making contact with ground, or any other difference in potential, can be considered an equal potential zone. Rubber gloves are not re-quired to be worn by the operator in this environment, as it offers the operator no additional protection. To reduce the risk of exposure, the operator must remain on the equipment at all times that the boom or the load is within the MAD zone. The operator must thoroughly understand, observe, respect and take measures to prevent touch and step potentials should a pole (and therefore the truck, truck ground cables and any attached trailer) become accidentally energized.

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