

Puget Sound Energy
Accident Report
September 6th 2016

Reported by

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Accident Investigator

Local 77

On September 6th 2016 at the Longmire Substation located in Yelm, WA a PSE sub crew was in the process of wiring a newly installed vacuum circuit breaker. The crew consisted of a Foreman, (2) Journeyman Wireman, an 8th step Hot Wireman Apprentice, and (2) 1st step Wireman Apprentices. Substation voltage of 115kv/12.5kv. The VCB the crew was working on was a brand new install it had never been energized, just put in place and bolted down. The task at hand when the accident occurred was to install paddles on the source and load side bushings on the top of the VCB for the permanent connections. In the attached photos, equip. ID 25 is the new breaker, equip. ID 26 is an existing energized breaker. In figure #3 the two x's represent where the feet of the fiberglass ladder were placed and the x on the cabinet where the 8th step apprentice's working position was on the ladder in order to reach the bushings that in the picture are now under squirrel covers. VCB 25 had no grounding cables or conductors of any kind attached yet as it had never been energized. The crew was discussing which direction the paddle, bolts and nuts should face. The 8th step apprentice had his left hand on the picking point of the VCB 25 (fig #2) and swung his right arm out straight with a metal paddle in his right hand to point out the paddle alignment on VCB 26. When he did this the paddle came close enough or made contact with the energized bushing of VCB 26 (fig. #1). Close enough for the apprentice to be electrocuted, he fell from the ladder and hit his head on the concrete pad. The apprentice was transported via ambulance to St. Peters Hospital in Olympia stabilized and transported to Harborview. He was kept for observation for 24 hrs. and released, he has burns on the inside of his hands, possible concussion, and could have any of the post effects of an electrical contact. The crew stated that there was caution tape a couple feet from ground level around the breaker, and that they had frequently talked about the fact that there were energized breakers, bushings, and bus around their work area. The only reference to ground for the case of VCB 25 were the anchor bolts holding the legs of the case to the pad.

Preventative measures to avoid this accident:

cover, rubber blankets, insulator hoods, barricades

Be aware of reach or falling for incidental contact from working position.





