

Incident Summary #II-851653-2019 (#12284) (FINAL)

SUPPORTING INFORMATION	Incident Date	May 9, 2019	
	Location	Duncan	
	Regulated industry sector	Electrical - High voltage electrical system (greater than 750V)	
	Impact	Qty injuries	0
		Injury description	NA
		Injury rating	NA
	Damage	Damage description	Small forest fire, approximately 50x100.
		Damage rating	Minor
	Incident rating	Minor	
Incident overview	A private 2.4kv power line appears to have arced to an guy line causing a fire.		
INVESTIGATION CONCLUSIONS	Site, system and components	<p>Pole structure means a main support for a line and consists of one or more poles plus any guys, anchors, push braces, and civil works required to provide structural stability and make it free standing.</p> <p>Primary line means a line operating at a potential in excess of 750 V conductor to ground and lower than 60 kV conductor-to-conductor.</p> <p>Span guy means a guy that spans the distance between structures.</p>	
	Failure scenario(s)	<p>Clearance between the primary line and the span guy run parallel to each other was approximately 25mm as observed on May 10th. With the lines this close together simply leaning against the pole was enough to get them to touch each other.</p> <p>Originally the span guy was installed approximately 10-12 inches below the primary in 1996, (Witness Statements). A severe wind storm last December damaged the line and Pole Structure downstream of the span guy location, the line was reinstalled, and likely changed the loading and sag characteristics of the structure.</p> <p>The span guy only had insulators at the uphill end, the bolt that attached the span guy to the downhill terminal pole was a couple inches away from a grounded surge arrester brace. This was a low enough resistance to blow the expulsion fuse located approximately 400m away.</p>	
	Facts and evidence	Photos, witness statements.	
	Causes and contributing factors	The fire was caused by the improper installation of the span guy.	



Uphill pole.



Terminal pole at beach



View of primary line and span guy, approximately 25mm apart.