Pacific Gas and Electric Company

Rectifier Test and Site Evaluation

GD&TS
09-2003
FO-11.1-A

Inspector						Date	
Rectifier #						Div.	
Rectifier Mfg.						Office	
Serial #						City	
Rectifier Test	Readings	ac Volts as Found/Left		dc Volts as Found/Left		Amps as Found/Left	

Ground Test	Fusible ac Disconnect Switch?	Fuse Size
Readings	Breaker ac Disconnect Switch?	Breaker Size

	Items of Inspection	Finding Y/N P (poor), OK, or NA	Fixed? Initial	Action Taken
Pole	Check riser, switch box, and rectifier for ac			
	Verify weatherhead is installed or ac service conduit riser is sealed			
	Riser nail clips/straps don't exceed 3' spacing			
	PVC Sch. 80 service riser free of separations, defects, and securely strapped			
All	Test for presence of voltage on ac disconnect switch and rectifier enclosures			
	Verify ac disconnect switch enclosure is locked			
	Verify ac disconnect switch handle is locked "on"			
	Verify ac disconnect switch handle is capable of being locked in "on" position			
	Inspect ac disconnect switch for internal corrosion Poor/OK			
	Verify ground wire is connected to ac disconnect neutral bus			
	Verify bonding screw or jumper is installed in ac disconnect neutral bus			
	Verify bonding screw or jumper and ac disconnect switch box are common			
	Validate that the hot leg is fused and that the neutral wire is connected to the neutral bus			
	Verify fuse or circuit breaker in ac disconnect is 10% greater than the maximum amp rating of rectifier or next standard size fuse or breaker (2, 2.5, 3, 5, 7.5, or 15 amp)			
All	Rectifier enclosure locked?			
	Inspect rectifier for internal corrosion Poor/OK			
	Verify rectifier input voltage is 120 volts ac			
	Test rectifier dc output voltage			
	Test rectifier shunt			
	Exercise and lubricate variac as appropriate			
	Inspect paint condition of rectifier and ac disconnect switch enclosures			
	Verify all ground rods are below grade			
	Test grounding system and verify ground resistance is at or below 25 ohms or has two ground rods			
All	If ground resistance is above 25 ohms, verify integrity of all grounding connections			
	Install additional rod if resistance is stil greater than 25 ohms			
	Inspect rectifier and ac disconnect switch for any openings or exposed wires			
	Verify gas distribution sticker is installed			
Underground	Verify waterproof ac disconnect switch is installed at subsurface rectifier sites			
	Verify that the rectifier case is grounded			
	Verify waterproof fuse holder is properly installed			
	Test for presence of voltage on rectifier case			
	Inspect rectifier case for signs of corrosion or leakage			
	Inspect gasket for deterioration or debris when replacing rectifier cover			