

Rectifier Test and Site Evaluation

Inspector		Rectifier #	Date
Address		Rectifier Mfg.	Div.
City		CPA	Office
Serial #			City
Rectifier Test Readings	ac Volts as Found	dc Volts as Found	Amps as Found
	ac Volts as Left	dc Volts as Left	Amps as Left
Ground Test Readings	Ohms as Found	Fusible ac Disconnect Switch?	Fuse Size
	Ohms as Left	Breaker ac Disconnect Switch?	Breaker Size
Items of Inspection		Finding Y/N P (poor), OK, or NA	Fixed? Initial
Pole	Check riser, switch box, and rectifier for ac		
	Check for continuity between the ac disconnect and the dc riser		
	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	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		
All	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)		
	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		
All	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		
	If ground resistance is above 25 ohms, verify integrity of all grounding connections		
	Install additional rod if resistance is still 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		
	Test for ac on the rectifier case and ground rod		
	Check for continuity between the neutral bus and ground rod		
	Verify waterproof fuse holder is properly installed		
	Inspect rectifier case for signs of corrosion or leakage		
Inspect gasket for deterioration or debris when replacing rectifier cover			