



Apprentice Name: _____

Step 3 - Apprentice Substation Technician Job Competency / Demonstration Form

COMPETENCIES/SKILLS		RATING		
		Please circle		
#1	Explain the routine tests that should be performed on a new power transformer before putting the unit in service.	1	2	3
#2	Explain the tests used to determine if the moisture level inside transformer's solid insulation systems is within accepted limits, or vacuum drying should be performed.	1	2	3
#3	Explain how to check moisture level in a power transformer using a dielectric oil test set.	1	2	3
#4	Explain how to process transformer oil using filter press equipment.	1	2	3
#5	Explain the internal parts found in a voltage regulator and describe their function.	1	2	3
#6	Explain the basic settings on a control panel for a voltage regulator.	1	2	3
#7	Explain how to put a voltage regulator in service and how to safely take it out of service	1	2	3
#8	Explain how to make sure a regulator is in " <u>neutral</u> " position.	1	2	3
#9	Explain how to perform an inspection on a voltage regulator.	1	2	3
#10	Explain the difference between bracket grounding and equipotential grounding.	1	2	3
#11	On a de-energized system and under supervision demonstrate installation and removal of personal protective grounds.	1	2	3
#12	Demonstrate how to correctly inspect personal protective grounds.	1	2	3
#13	Explain step and touch potential.	1	2	3
#14	What test should be performed on current transformers during acceptance testing?	1	2	3
#15	Explain how to demagnetize a current transformer.	1	2	3
#16	Explain/demonstrate how to read the nameplate data on a current transformer.	1	2	3
#17	Demonstrate how to inspect and clean a live-line switch stick.	1	2	3
#18	On a de-energized substation and under supervision: open and close a group operated air brake switch.	1	2	3
#19	On a de-energized substation and under supervision: open and close regulator switches.	1	2	3
#20	On a de-energized substation and under supervision: open and close feeder recloser source, load and transfer bus disconnect switches.	1	2	3
#21	Ability to follow directions.	1	2	3
#22	Positive attitude toward work and others.	1	2	3

RATINGS:

1. Exceeds Expectations
2. Meets Expectations
3. Needs Improvement

COMMENTS/REMARKS
<p>I find this apprentice competent in the skills listed above and ready to advance to the next level.</p> <p>Supervisor's signature: _____ Date: _____</p>