



Apprentice Name: _____

Step 1 - Apprentice Substation Technician Job Competency / Demonstration Form

COMPETENCIES/SKILLS		RATING		
		Please circle		
#1	Describe the function of both a switchyard and substation.	1	2	3
#2	Identify the basic equipment found in both a switchyard and a substation.	1	2	3
#3	List items typically checked during a routine inspection of a substation and a switchyard.	1	2	3
#4	List & identify some of the safety hazards that may be found in a substation or switchyard.	1	2	3
#5	Explain the different types of fall arrest equipment used in substation work.	1	2	3
#6	Identify the different types of personal protective equipment needed when working in a substation or switchyard.	1	2	3
#7	Explain how to calculate the Working Load Limit (WLL) of a rope.	1	2	3
#8	Describe the three common configurations that a sling may be used. Explain how, according to the name tag, the working Load Limit (WLL) can vary depending on the configuration.	1	2	3
#9	Using a company substation one-line diagram, explain how power flows through the station.	1	2	3
#10	Identify and list the steps for de-energizing, isolating, and grounding a power transformer.	1	2	3
#11	Explain the safety hazards of open circuiting a Current Transformer (CT) under load.	1	2	3
#12	List the steps required to (check-out) a voltage detector. Explain why it is necessary to test the detector before each use.	1	2	3
#13	Identify and explain the basic steps in making equipment "electrically" safe to work on.	1	2	3
#14	Explain the reason for tagging equipment.	1	2	3
#15	Name the different types of fire extinguishers & types of fires they are to be used on.	1	2	3
#16	Explain the purpose of the grounding grid in a substation.	1	2	3
#17	Identify any special precautions necessary when working with capacitors or capacitor banks.	1	2	3
#18	Identify chemical hazards that may exist in substations and switchyards.	1	2	3
#19	Explain the purpose of a Transfer Bus in a substation.	1	2	3
#20	Describe the general procedures for responding to an injury at work.	1	2	3
#21	Explain the difference between a ground switch and a temporary ground.	1	2	3
#22	Describe the proper procedure for safely installing a temporary ground.	1	2	3
#23	Inspect and demonstrate properly setting up both a step ladder and an extension ladder.	1	2	3
#24	Describe how circuit breakers, reclosers and fuses can operate in an electrical system to reduce the dangers created by faults.	1	2	3
#25	Ability to follow directions.	1	2	3
#26	Positive attitude toward work and others.	1	2	3

RATINGS:

Exceeds Expectations

Meets Expectations

Below Expectations

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>