



Apprentice Name: \_\_\_\_\_

### Step 1 - Apprentice Substation Technician Job Competency / Demonstration Form

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

**RATINGS:**

Exceeds Expectations

Meets Expectations

Below Expectations

COMMENTS/REMARKS

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I find this apprentice competent in the skills listed above and ready to advance to the next level.

Supervisor's signature: \_\_\_\_\_ Date: \_\_\_\_\_