



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

Step 7 - Apprentice Substation Technician Job Competency / Demonstration Form

COMPETENCIES/SKILLS		RATING
#1	Describe the various forms of communication used by your utility.	
#2	Describe the transmission medium used by your utility to transmit data.	
#3	The role of a Substation Technician concerning the utilities communications systems varies with each utility and its size. Describe your role with your utilities communications systems.	
#4	Research within your utility and learn what various aluminum conductors are typically used for transmission lines and main distribution feeders. List the conductors and their industry alloy name.	
#5	Describe what will happen if an open circuit occurs in the secondary circuit of a current transformer (CT).	
#6	Name three of the accepted industry standard communication protocols. Which communication protocol is used by your utility?	
#7	List the three general relay technologies developed over the years to implement system protection functions.	
#8	Review your utility's FR clothing requirements and guidelines. Write down what rating of PPE cal/cm <sup>2</sup> your utility requires its field employees to wear.	
#9	Obtain a single line diagram of a circuit or substation and write a switching tag to clear a piece of equipment or line section. (Use one of your utilities routine tags for this exercise).	
#10	Contact your engineering department and ask them to explain how they evaluate load transfers when approving clearances.	
#11	Review a switch manufacturer's catalog and confirm the switch interrupting capacities for various types of switches. List the switch types by Catalog Number, Voltage Rating, Current Carrying Capacity and Interrupting Capacity.	
#12	Ability to follow directions.	
#13	Positive attitude toward work and others.	

RATINGS:

Exceeds Expectations

Meets Expectations

Below Expectations

COMMENTS/REMARKS

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

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