



Apprentice Name: _____

Step 7 - Apprentice Substation Technician Job Competency / Demonstration Form

COMPETENCIES/SKILLS		RATING		
		Please circle		
#1	Describe the various forms of communication used by your utility.	1	2	3
#2	Describe the transmission medium used by your utility to transmit data.	1	2	3
#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.	1	2	3
#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.	1	2	3
#5	Describe what will happen if an open circuit occurs in the secondary circuit of a current transformer (CT).	1	2	3
#6	Name three of the accepted industry standard communication protocols. Which communication protocol is used by your utility?	1	2	3
#7	List the three general relay technologies developed over the years to implement system protection functions.	1	2	3
#8	Review your utility's FR clothing requirements and guidelines. Write down what rating of PPE cal/cm ² your utility requires its field employees to wear.	1	2	3
#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).	1	2	3
#10	Contact your engineering department and ask them to explain how they evaluate load transfers when approving clearances.	1	2	3
#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.	1	2	3
#12	Ability to follow directions.	1	2	3
#13	Positive attitude toward work and others.	1	2	3

RATINGS:

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

COMMENTS/REMARKS	

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

Supervisor's signature: _____ Date: _____