

Training Delivery Plan for Distribution Network Helper (PSS/Q2010) V3.0
Under Recognition of Prior Learning (RPL)

NOTE: This shall be applicable to existing employees who do not have requisite qualification and who are assisting in operation and maintenance of distribution system wrt **CEA's notification / communication dated 12th January 2024.**

NSQF Level: 4

QP Code: PSS/Q2010

NOSs:

1. **PSS/N1331:** Apply basic health and safety practices for power related work
2. **PSS/N1336:** Working effectively with others
3. **SGJ/N1702:** Optimize resource utilization at workplace
4. **PSS/N0106:** Erection of Power Distribution Lines and sub-stations
5. **PSS/N0108:** Laying of underground and AB cables
6. **PSS/N0107:** Operation and maintenance of 11/0.433 KV Distribution Substation
7. **PSS/N0105:** Repair and maintenance of power distribution lines and components
8. **DGT/VSQ/N0101:** Employability Skills

Training Duration: 90 Hrs.

Eligibility: 5th Pass with 6-years relevant experience

Day	NOS	Duration	Time	Session Description	Remarks
Registration, Inauguration (9.00 to 9:30)					
Orientation Training					
1	PSS/N0106	F/N (4 Hrs)	9:30-13:30	<ul style="list-style-type: none"> • Power Sector and its sub-sectors • Functions of Power Distribution Company • Organisation structure of Distribution Company • Electricity Act 2003, CERC, SERC functions 	Theory
		A/N (2 Hrs)	14:00-16:00	<ul style="list-style-type: none"> • Basics of Electricity • Duties and Responsibilities of Distribution Lineman and Reporting Structure 	Theory
	PSS/N1336	A/N (2 Hrs)	16:00-18:00	<ul style="list-style-type: none"> • Interpersonal Relation • Positive Attitude • Self Confidence • Motivation • Leadership 	Theory/ Demonstration
2	PSS/N1336	F/N (2 Hrs)	9:00-11:00	<ul style="list-style-type: none"> • Conflict and its management • Taking ownership and dealing with change • Time management • Stress management 	Theory/ Demonstration
		F/N (2 Hrs)	11.00 -13:00	<ul style="list-style-type: none"> • Familiarization with Assessment Process and Terms 	Theory
Bridge Course Training					
2	PSS/N0106 & PSS/N0108	A/N(2hrs)	13:30 -15:30	<ul style="list-style-type: none"> • Materials, Components, Accessories, etc. used in Power Distribution (Poles, conductors, insulators, cross arm etc.) 	Theory/ Demonstration
		A/N(2hrs)	15:30-17:30	<ul style="list-style-type: none"> • Tools and Equipment used for Operation and Maintenance of Electricity Distribution System 	Theory/ Demonstration
3		F/N (4 Hrs)	9:00-13:00	<ul style="list-style-type: none"> • Protection Equipment in Distribution System 	Theory / Demonstration

	PSS/N0108 & PSS/N0107			<ul style="list-style-type: none"> (CTs, PTs, Fault indicator, principle of fuse, auto re closer, sectionalised etc.) Overhead /underground Distribution System and Access points Causes of conductor Damage, causes of insulator damage etc, 	
		A/N (4 Hrs)	13:30 -17:30	<ul style="list-style-type: none"> Handling Distribution line components Maintaining LT and HT Distribution line components including regulatory provisions 	Theory/ Demonstration
4	PSS/N0107	F/N (4 Hrs)	9:00-13:00	<ul style="list-style-type: none"> Underground Distribution System Various types of cables (PVC, PILCA, XLPE) Cable joints Co-Existing underground utilities 	Theory/ Demonstration
		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> AB Cables Different type their usage Advantage Disadvantage etc 	Theory
5	PSS/N0105	F/N (4 Hrs)	09:00-13:00	<ul style="list-style-type: none"> Different types of Insulations used in Cables and their purpose. Conductor Metal Types, Composition and Shapes Procedure of Laying Cables Pulling Methods and Calculations 	Theory/ Demonstration
		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> 33/11KV substation details –Power transformer, switch gear (circuit breakers etc.), isolators, Earth switch current transformers, various panels etc. (All these may be explained by field visit to 33/11kv substation) Types of Distribution Substation Functions and working principles of Distribution Substation Components 	Theory/ Demonstration
6	PSS/N0105	F/N (4 Hrs)	09:00-13:00	<ul style="list-style-type: none"> Operation & Maintenance of 11KV/0.433KV Distribution Substation Different parts of Distribution Transformer and its functions and T&P for substation construction and maintenance 	Theory/ Demonstration
		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> Distribution Substation Maintenance Activities OIL Testing, Insulator Bushings, Earthing, Cable sealing ends etc. 	Theory/ Demonstration
7	PSS/N0105	F/N (4 Hrs)	09:00-13:00	<ul style="list-style-type: none"> Maintenance schedule of Distribution transformers Causes of Distribution Substation Equipment Failure, Faults Preventive Maintenance Distribution transformer fuse ratings Safety measures to be taken while working with Transformer 	Theory/ Demonstration
		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> Materials and accessories used in Power Distribution Tools and Equipment used in testing, repair & Maintenance Pre-monsoon inspection – tree cutting, sagging, earthing Ground Patrolling of HT & LT Lines Preparing log sheet 	Theory/ Demonstration
8	PSS/N1331	F/N (4 Hrs)	09:00-13:00	<ul style="list-style-type: none"> Knowledge of Material testing Equipment How to minimize hazards in Power lines 	Theory/ Demonstration
		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> Basic Health and Safety Practices for Power related work CEA Safety Regulations 2023 	Theory
9	PSS/N1331	F/N (4 Hrs)	09:00-13:00	<ul style="list-style-type: none"> Workplace Hazards and Risks Safety related Electricity Safe Working Practices 	Theory
		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> Fire Safety Personal Protective Equipment (PPE) Safe working practices while working with tools and machines 	Theory/ Demonstration
10	PSS/N1336	F/N (4 Hrs)	09:00-13:00	<ul style="list-style-type: none"> Causes of Accidents and its prevention Various Dangers associated with the use of electrical equipment First Aid First Aid Procedures 	Theory/ Demonstration

		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> • Transportation, Handling and storage of materials • Basics of Computer and Applications 	Theory & Demonstration
11	SGJ/N1702	F/N (4 Hrs)	09:00-13:00	<ul style="list-style-type: none"> • Potential hazards, risks and threats based on the nature of work • Layout of the workstation and electrical and thermal equipment used • Organizations procedures for minimizing waste • Efficient and inefficient utilization of material and water • Ways of efficiently managing material and water in the process • Basics of electricity and prevalent energy efficient devices 	
		A/N (4 Hrs)	13:30-17:30	<ul style="list-style-type: none"> • Ways to recognize common electrical problems • Common practices of conserving electricity • Usage of different colours of dustbins • Categorization of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics • Waste management and methods of waste disposal • Common sources of pollution and ways to minimize it 	
12	DGT/VSQ /N0101	F/N (2 Hrs)		<ul style="list-style-type: none"> • Need for employability skills; various constitutional and personal values; Different environmentally sustainable practices and their importance; how to use basic spoken English language; Do and don't of effective communication; Ways to identify business opportunities; Types of customers and their needs 	
		Assessment			

Lunch Break 13:00 hrs to 13:30 hrs