



QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR POWER SECTOR

What are **Occupational** Standards(OS)?

OS describe what individuals need to do, know and understand in order to carry out a particular job role or function

OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack- Helper- Power System(Transmission)

SECTOR: Power SUB-SECTOR: Transmission **OCCUPATION:** Lineman **REFERENCE ID:** PSS/Q0104 ALIGNED TO: NCO-2004/7245.90

Helper- Power System (Transmission) supports and assists Power System Technicians (Lineman) to maintain and repair overhead and underground power transmission systems.

Brief Job Description: The incumbent in the job will carry out equipment upkeep, material and equipment transportation activities to support erection and maintenance of overhead and underground powerlines and cables, transformers, etc. They will help in fixing nuts and bolts and other mechanical support to the lineman as well.

Personal Attributes: Physically and mentally able to safely perform essential functions of the job. This will also include differently abled people who can perform the job with or without reasonable accommodations (modified practices.) The candidate should be able to climb ladders, scaffolds, poles and towers of various heights. Also able to crawl and work in confined spaces such as attics, manholes and crawlspaces. The candidate should be able to read, hear and understand instructions and warnings.



Qualifications Pack For Helper: Power System (Transmission)



Qualifications Pack Code	PSS/Q0104		
Job Role	Helper- Power System (Transm		iission)
Credits (NSQF)	TBD	Version number	1.0
Sector	Power	Drafted on	26/03/2016
Sub-sector	Transmission	Last reviewed on	19/07/2016
Occupation	Lineman	Next review date	18/07/2018

Job Role	Helper- Power System (Transmission)	
Role Description	Helper- Power System (Transmission) helps lineman in operating, maintaining and repairing overhead power transmission systems.	
NSQF level	2	
Minimum Educational Qualifications	8 th Pass	
Maximum Educational Qualifications	Not Applicable	
Training (Suggested but not mandatory)	Not Applicable	
Experience	Not Applicable	
Applicable National Occupational Standards (NOS)	 Compulsory: <u>PSS/N0111 Assisting in repair and maintenance of power transmission lines and components</u> <u>PSS/N2001 Use basic health and safety practices as the workplace</u> <u>PSS/N1336 Work effectively with others</u> <u>Optional:</u> Not Applicable 	
Performance Criteria	As described in the relevant OS units	





	Keywords /Terms	Description
Definitions	Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Defi	Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
	Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
	Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
	Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
	Sub-functions	Sub-functions are sub-activities essential achieving the objectives of the function.
	Job role	Job role defines unique set of functions that together form a unique employment opportunity in an organization.
	Occupational Standards (OS)	OS specify the standards of performance an individual must achieve consistently while carrying out a function at the workplace. Occupational Standards as set of competencies is applicable both in Indian and overreaching global contexts.
	Performance Criteria	Performance Criteria defined for a task are statements that together specify the standard of performance while carrying out the task.
	National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in Indian context.
	Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
	Qualifications Pack(QP)	Qualifications Pack comprises set of OS, together with the educational, training and other criteria that are required to perform a job role satisfactorily at workplace. A Qualifications Pack is assigned a unique qualification pack code for clear identification.
	Knowledge and Understanding	Knowledge and Understanding are statements which together as a set specify the technical, generic, professional and organization specific knowledge that an individual needs to possess in order to perform and meet the required standards consistently.
	Organizational Context	Organizational Context includes the way the organization is structured and how it operates. It includes elements of operational knowledge contents defined in relation to functioning of an organization that a skilled professional need to possess specific to its precise areas of responsibility.
	Technical Knowledge	Technical Knowledge is the specific domain knowledge needed to accomplish the task in combination with other competencies. It is usually coined with specifically





	designated roles and responsibilities.		
Core Skills/Generic	Core Skills or Generic Skills as set are group of skills. It is key to working in today's		
Skills	world. These skills are typically needed in any work environment. In the context of the		
	OS, these include mainly communication related skills that are applicable to most job		
	roles.		
Sector Sector is a conglomeration of different business operations having similar bus			
and interests. It may also be defined as a distinct subset of the economy whos			
	components share similar characteristics and interests.		
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and		
	interests of its components.		
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client		
	industries served by the industry.		
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an		
	industry.		
Keywords /Terms	Description		
-			
T&D	Transmission and Distribution		
T&D REC	Transmission and DistributionRural Electrification Corporation		
REC	Rural Electrification Corporation		
REC AB Cables	Rural Electrification Corporation Aerial Bunched Cables		
REC AB Cables HT	Rural Electrification Corporation Aerial Bunched Cables High Tension		
REC AB Cables HT LT	Rural Electrification Corporation Aerial Bunched Cables High Tension Low Tension		
REC AB Cables HT LT HV	Rural Electrification Corporation Aerial Bunched Cables High Tension Low Tension High Voltage		
REC AB Cables HT LT HV LV	Rural Electrification Corporation Aerial Bunched Cables High Tension Low Tension High Voltage Low Voltage		
REC AB Cables HT LT HV LV BDV	Rural Electrification CorporationAerial Bunched CablesHigh TensionLow TensionHigh VoltageElectrification VoltageBreakdown Voltage		
REC AB Cables HT LT HV LV BDV ULF	Rural Electrification CorporationAerial Bunched CablesHigh TensionLow TensionHigh VoltageLow VoltageBreakdown VoltageUltra Low Frequency		







PSS/N0111 Assisting in repair and maintenance of Sub-Station, Power Transmission Lines and components

National Occupational Standard



Overview

This unit covers the competencies required for assistants to power system lineman in repair and maintenance of substation & power transmission lines.







PSS/N0111

Assisting in repair and maintenance of Sub-Station, Power Transmission Lines and components

Unit Code	PSS/N0111	
Unit Title (Task)	Assist in repair and maintenance of substation, power transmission lines and components	
Description	This unit covers the competencies required by assistants who help power system linemen in the repair and maintenance of substation & power transmission, transmission lines and components. This includes handling of tools and equipment for repair and maintenance and carrying out necessary tasks in a safe, efficient and effective manner. This will also include preventive and corrective maintenance of overhead and underground lines and cables. The candidate will be expected to perform mostly under supervision.	
	This unit/task covers the following:	
	 handling tools and equipment 	
	 assisting in repair and maintenance for Power Transmission lines 	
Scope	 assist in carrying out replacement activities as required post repair and maintenance activities 	
Performance Criteria(PC	C) w.r.t. the Scope	
Element	Performance Criteria	
Handling tools and equipment	 The user/individual on the job needs to: PC1. prepare and maintain the work area as per procedure or operation specification PC2. identify accurately and acquire correct tools, equipment and instruments required for various aspects of repair and maintenance of substation & power transmission, transmission lines and components PC3. ensure the tools and equipment are cleaned, well maintained, calibrated and approved for use PC4. assess components of Transmission line for damage or risk for damage through visual and sensory methods PC5. access and survey area in accordance with established procedures PC6. select and use tools and equipment such as chainsaws, pruning saws, man lifts and chippers to trim trees or its branches where required PC7. identify hazards of trimming trees such as limits of approach, public safety and step and touch potential 	
Assist in carrying out replacement activities as required	 The user/individual on the job needs to: PC8. follow instructions and perform tasks such as holding, handing over components, measuring, loading and unloading, etc. accurately and safely 	







Post-repair and maintenance activities	 The user / individual on the job should be able to: PC9. deal promptly and effectively with problems within control, and seek help and guidance from the relevant people for problems that cannot be resolved PC10. leave the work area in a safe and tidy condition on completion of the repair and maintenance activities refer unresolved job related problems to appropriate personnel for support PC11. monitor the problem and keep the supervisor informed about progress or an delays in resolving the problem
Knowledge and Underst A. Organizational Context	 The user/individual on the job needs to know and understand: KA1. relevant legislation, standards, policies, and procedures followed in the company relevant to own employment and performance conditions KA2. relevant health and safety requirements applicable in the work place KA3. own job role and responsibilities and sources for information pertaining to employment terms, entitlements, job role and responsibilities KA4. reporting structure, inter-dependent functions, lines and procedures in the work area KA5. how to engage with specialists for support in order to resolve incidents and service requests KA6. importance of working in clean and safe environment practices and procedures KA7. relevant people and their responsibilities within the work area KA8. escalation matrix and procedures for reporting work and employment related







National Occupational Standards

В.	Technical Knowledge	Lines and components The individual on the job needs to know and understand:
	-	KB1. principles of electricity
		KB2. common electricity terminology and correct interpretation of the same
		Terminology: e.g. Current, Voltage, Resistance, Inductance, Capacitance,
		Kilovolt ampere (kvA), Kilowatt (kw), active power, Kilowatt hour: (kwh)(unit
		electric consumption)
		KB3. specific terminology used in Transmission and Distribution Line work
		KB4. elements of the power system
		elements: e.g. generation, transmission, transmission metering, etc.
		KB5. different types of material and accessories used in power T&D
		KB6. tools and equipment used in testing, repair and maintenance
		KB7. specific health and safety precautions which must be taken when carrying ou
		T&D lines repair and maintenance work especially live line or equipment
		KB8. various types of circuits
		KB9. overhead Transmission system apparatus such as regulators and reclosers
		KB10. function of battery and battery chargers
		KB11. part and functioning of DG set
		KB12. access points such as vaults, open trenches and manholes & cables and
		junction boxes
		KB13. underground Transmission system apparatus such as transformers, switching
		& cables and junction boxes
		KB14. types and sizes of conductors and cables
		KB15. need for an authorized permit on 11 KV and above voltage line
		KB16. hazards associated with carrying out power line maintenance and how they
		can be minimized
		KB17. importance of ensuring that tools and equipment are suitable, well
		maintained, calibrated and operating effectively
		KB18. importance of following good housekeeping and fire prevention procedures
		KB19. importance of following job instructions and defined maintenance procedure
		KB20. relevant material preparation methods and techniques to be undertaken, pri-
		to using for testing and maintenance activities
		KB21. components of transmission lines
		KB22. problems and conditions which render electrical towers or towers in need of
		maintenance or replacement
		KB23. importance of leaving the work area and equipment in a safe and clean
		condition on completion of the repair and maintenance activities
		KB24. importance of reporting problems in a timely manner
		KB25. principles and practices of electrical safety
		KB26. standard procedures how to deal with electric shocks and electrocutions to
		rescue and minimize damage and harm
		KB27. personal protective equipment (PPE) and clothing that must be worn during
		the inspection, repair and maintenance activity and from where can it be
		obtained
Ski	lls (S)	







PSS/N0111 Assisting in repair and maintenance of Sub-Station, Power Transmission Lines and components







PSS/N0111	Assisting in repair and maintenance of Sub-Station, Power Transmission Lines and components
	 The user/individual on the job needs to know and understand: SB7. identify problems and review related information to develop and evaluate options and implement solutions SB8. prioritize and plan for solving problem SB9. take help from the junior engineer to solve the problems SB10. monitor problem solving to take corrective action with individuals and organizations SB11. analyse problems and changes in conditions, operations, and the environment to solve problems
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB12. analyze the problem seen in the equipment SB13. collect the information and technical data and define process for doing testing and maintenance
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB14. critically evaluate operation parameters in relation to product features intended

NOS Version Control

1

NOS Code		PSSS/N0111	the second second
Credits (NSQF)	TBD	Version number	1.0
Industry	Power	Drafted on	26/03/2016
Industry Sub-sector	Transmission	Last reviewed on	19/07/2016
Occupation	Lineman	Next review date	18/07/2018







PSS/N2001

Use basic health and safety practices for power related work

National Occupational Standard



Overview

This unit covers health, safety and security for power related work. This includes procedures and practices that candidates need to follow to help maintain a healthy, safe and secure work environment.







National Occupational Standards

Unit Code PSS/N2001			
Unit Title (Task)	Use basic health and safety practices for power related work		
Description	This unit covers health, safety and security for power related work. This includes procedures and practices that candidates need to follow to help maintain a healt safe and secure work environment. It covers responsibilities towards self, others, assets and the environment.		
Scope	 This unit/task covers the following: health and safety fire safety emergencies, rescue and first-aid procedures 		
Performance Criteria(PC)	w.r.t. the Scope		
Element	Performance Criteria		
Health and safety	 The user/individual on the job needs to: PC1. use protective clothing/equipment for specific tasks and work conditions. PC2. state the name and location of people responsible for health and safety in the workplace PC3. state the names and location of documents that refer to health and safety in the workplace PC4. identify job-site hazardous work and state possible causes of risk or accide in the workplace PC5. follow electrical safe working procedures such as Tag out/Lock out and display PTW (Permit To Work), PC6. follow warning signs (danger, out of service, etc.) while working with electrical systems PC7. use standard safe working practices when working at heights, confined are and trenches PC8. test any electrical equipment and system using insulated testing devices before touching them PC9. ensure positive isolation of electrical equipment & system as per given standards PC10. recognize any abnormalities in electrical equipment or system installed ale annunciation and/or noticing parameters from gauge/ indicator installed PC11. carry out safe working practices while dealing with hazards to ensure the safety of self and others PC12. state methods of accident prevention in the work environment of the job PC13. state location of general health and safety equipment in the workplace PC14. inspect for faults, set up and safely use of scaffolds and elevated platform and ladder PC15. lift, carry and transport heavy objects & tools safely using correct procedu from storage to workplace and vice versa PC16. inspect Grid station and its equipment routinely for any signs of oil and ware leakage PC17. store flammable materials and machine lubricating oil safely and correctly 		







SS/N2001 Use basic	health and safety practices for power related work
	 line with environmental policy standards PC19. apply good housekeeping practices at all times PC20. identify common hazard signs displayed in various areas PC21. retrieve and/or point out documents that refer to health and safety in the workplace PC22. inform relevant authorities about any abnormal situation/behavior of any equipment/system promptly
Fire safety	 The user/individual on the job needs to: PC23. use the various appropriate fire extinguishers on different types of fires correctly PC24. distinguish types of fire PC25. demonstrate rescue techniques applied during fire hazard PC26. demonstrate good housekeeping in order to prevent fire hazards PC27. demonstrate the correct use of a fire extinguisher
Emergencies, rescue and first-aid procedures	 The user/individual on the job needs to: PC28. demonstrate how to free a person from electrocution PC29. administer appropriate first aid to victims where required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc. PC30. demonstrate basic techniques of bandaging PC31. respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments PC32. perform and organize loss minimization or rescue activity during an accident in real or simulated environments PC33. administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock, before the arrival of emergency services in real or simulated cases PC34. demonstrate the artificial respiration and the CPR Process PC35. participate in emergency procedures Emergency procedures: raising alarm, safe/efficient, evacuation, correct means of escape, correct assembly point, roll call, correct return to work PC36. complete a written accident/incident report or dictate a report to another person, and send report to person responsible PC37. demonstrate correct method to move injured people and others during an emergency
Knowledge and Understar	
A. Organizational Context	 The user/individual on the job needs to know and understand: KA1. names (and job titles if applicable), and where to find, all the people responsible for health and safety in a workplace KA2. names and location of documents that refer to health and safety in the workplace







	asic health and safety practices for power related work
B. Technical Knowl	
	KB1. meaning of "hazards" and "risks"
	KB2. health and safety hazards commonly present in the work environment and
	related precautions
	KB3. possible causes of risk, hazard or accident in the workplace and why risk
	and/or accidents are possible
	KB4. possible causes of risk and accident
	KB5. methods of accident prevention
	KB6. safe working practices when working with tools and machines
	KB7. safe working practices while working at various hazardous sites
	KB8. where to find all the general health and safety equipment in the workplace
	KB9. various dangers associated with the use of electrical equipment
	KB10. positive isolation of electrical equipment and system
	KB11. safe handling and disposal of hazardous power plant wastes
	KB12. use of emission and pollution control devices and measures taken to control
	pollution
	KB13. various safety procedures and equipment used to work at heights, trenches
	and confined places
	KB14. safe working practices specific to working with electrical equipment & system
	e.g. lock out/ tag out, PTW, etc.
	KB15. preventative and remedial actions to be taken in the case of exposure to tox
	materials
	KB16. importance of using protective clothing/equipment and other insulated worl
	gear while handling electrical system and equipment
	KB17. precautionary activities taken to prevent fire accident
	KB18. various causes of fire
	KB19. techniques of using the different fire extinguishers
	KB20. different methods of extinguishing fire
	KB21. different materials used for extinguishing fire
	KB22. emergency rescue techniques applied during a fire hazard
	KB23. various types of safety signs and what they mean
	KB24. appropriate basic first aid treatment relevant to the condition e.g. shock,
	electrical shock, bleeding, breaks to bones, minor burns, resuscitation,
	poisoning, eye injuries
	poisoning, eye injunes
Skills (S)	
A. Core Skills/	Writing Skills
Generic Skil	S The year / individual on the job, needs to know and understand how to
	The usery individual on the job needs to know and understand now to.
	SA1. note the information communicated by the officer incharge
	SA2. note down observations (if any) related to the operation/maintenance
	Reading Skills
	The user/individual on the job needs to know and understand how to:
	SA3. read and interpret the process required for different types of manuals for
	maintenance
	SA4. read and interpret the flowchart of all parts of an assembly
	SA5. read manuals and documents to understand the product-details & how they







PSS/N2001 Use basic health and safety practices for power related work can be used **Oral Communication (Listening and Speaking skills)** The user/individual on the job needs to know and understand how to: SA6. discuss task lists, schedules and activities with the colleague/supervisor SA7. effectively communicate with the team members SA8. attentively listen and comprehend the information given by the colleague/supervisor/contractor SA9. communicate clearly with the colleague on the issues faced during query/fault **B.** Professional **Decision Making** Skills The user/individual on the job needs to know and understand how to: SB1. follow colleague/contractor rule-based decision making process SB2. take decisions with systematic course of actions and/or response **Plan and Organize** The user/individual on the job needs to know and understand: SB3. planning and organization of tasks to meet deadlines **Customer Centricity** The user/individual on the job needs to know and understand how to: SB4. build customer relationships and use customer centric approach **Problem Solving** The user/individual on the job needs to know and understand how to: SB5. seek and comprehend operation related inputs for clarification SB6. find ways of modifying difficult operating stages to make it operation friendly **Analytical Thinking** The user/individual on the job needs to know and understand how to: SB7. work systematically and logically to resolve the issues and identify causation and anticipate unexpected results SB8. quick approach and solution towards faults repairing **Critical Thinking** The user/individual on the job needs to know and understand how to: SB9. critically evaluate operation parameters in relation to system normality SB10. develop a holistic and comprehensive profile of grid station on segregated discrete process







PSS/N2001 Use basic health and safety practices for power related work <u>NOS Version Control</u>

NOS Code	PSS/N2001					
Credits (NSQF)	TBD Version number 1.0					
Industry	Power	26/03/2016				
Industry Sub-sector	Generation, Transmission & Distribution	Last reviewed on	19/07/2016			
Occupation	Technician	Next review date	18/07/2018			

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PSS/N1336

Work effectively with others

National Occupational Standard



Overview

This unit covers basic practices that improve effectiveness of working with others in an organizational set-up







Work effectively with others

PSS/N1336

Unit Code	PSS/N1336			
Unit Title (Task)	Work effectively with others			
Description	This unit covers basic etiquette and competencies that a candidate is required to possess and demonstrate in their behavior and interactions with others at the workplace.			
	These cover areas such as communication etiquette, discipline, listening, handling conflict and grievances.			
Scope	This unit/task covers the following:working with others			
Performance Criteria(PC)	w.r.t. the Scope			
Element	Performance Criteria			
Working with others	 The user/individual on the job should be able to: PC1. accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required PC2. accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt PC3. give information to others clearly, at a pace and in a manner that helps them to understand PC4. display helpful behavior by assisting others in performing tasks in a positive manner, where required and possible PC5. consult with and assist others to maximize effectiveness and efficiency in carrying out tasks PC6. display appropriate communication etiquette while working PC7. display active listening skills while interacting with others at work PC8. use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism PC9. demonstrate responsible and disciplined behavior at the workplace PC10. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict 			
Knowledge and Understa				
A. Organizational Context (Knowledge of the company / organization and its processes)	 The user/individual on the job needs to know and understand: KA1. legislation, standards, policies, and procedures followed in the organisation relevant to own employment and performance conditions KA2. reporting structure, inter-dependent functions, lines and procedures in the work area KA3. relevant people and their responsibilities within the work area KA4. escalation matrix and procedures for reporting work and employment related issues 			







SS/N1336	Work effectively with others			
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. various categories of people that one is required to communicate and co-			
	 ordinate with in the organization KB2. importance of effective communication in the workplace KB3. importance of teamwork in organizational and individual success KB4. various components of effective communication KB5. key elements of active listening KB6. value and importance of active listening and assertive communication KB7. barriers to effective communication KB8. importance of tone and pitch in effective communication KB9. importance of avoiding casual expletives and unpleasant terms while communicating professional circles KB10. how poor communication practices can disturb people, environment and cause problems for the employee, the employer and the customer KB12. importance of discipline for professional success KB13. what constitutes disciplined behavior for a working professional KB14. common reasons for interpersonal conflict KB15. importance of developing effective working relationships for professional success KB16. how to express and address grievances appropriately and effectively KB16. how to express and address grievances appropriately and effectively KB17. importance and ways of managing interpersonal conflict effectively 			
Skills (S) (Optional)	KB17. Importance and ways of managing incerpersonal connect effectively			
A. Core Skills/ Generic Skills	Writing Skills The user/ individual on the job needs to know and understand how to: SA1. note the information communicated by the officer incharge SA2. note down observations (if any) related to the operation/maintenance Reading Skills			
	The user/individual on the job needs to know and understand how to: SA3. read and interpret the process required for different types of manuals SA4. read and interpret the flowchart of all parts of an assembly SA5. read manuals and documents to understand the product-details & how they can be used			
	Oral Communication (Listening and Speaking skills)			
	 The user/individual on the job needs to know and understand how to: SA6. discuss task lists, schedules and activities with the colleague/supervisor SA7. effectively communicate with the team members SA8. attentively listen and comprehend the information given by the colleague/supervisor/contractor SA9. communicate clearly with the colleague on the issues faced during query/fault 			
B. Professional Skills	Decision Making The user/individual on the job needs to know and understand how to: SB11. follow colleague/contractor rule-based decision making process			





National Occupational Standards PSS/N1336 Work effectively with others SB12. take decisions with systematic course of actions and/or response **Plan and Organize** The user/individual on the job needs to know and understand: SB13. planning and organization of tasks to meet deadlines **Customer Centricity** The user/individual on the job needs to know and understand how to: SB14. build customer relationships and use customer centric approach **Problem Solving** The user/individual on the job needs to know and understand how to: SB15. seek and comprehend operation related inputs for clarification find ways of modifying difficult operating stages to make it operation friendly **Analytical Thinking** The user/individual on the job needs to know and understand how to: SB16. work systematically and logically to resolve the issues and identify causation and anticipate unexpected results. Quick approach and solution towards faults repairing **Critical Thinking** The user/individual on the job needs to know and understand how to: SB17. critically evaluate operation parameters in relation to system normality develop a holistic and comprehensive profile of grid station on segregated discrete process stages of blank forming processes

NOS Version Control

NOS Code		PSS/N1336	
Credits (NSQF)	TBD	Version number	1.0
Industry	Power	Drafted on	26/03/2016
Industry Sub-sector	Generation, Transmission & Distribution	Last reviewed on	19/07/2016
Occupation	Technician	Next review date	18/07/2018

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Qualifications Pack For Helper: Power System (Transmission)



<u>Annexure</u>

Nomenclature for QP and NOS







The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers	
[Insert Name of Sub-sector1, Font: Calibri (Body), size 11, Bold]	[Insert range]	
[Insert Name of Sub-sector2, Font: Calibri (Body), size 11, Bold]	[Insert range]	
[Insert Name of Sub-sector3, Font: Calibri (Body), size 11, Bold]	[Insert range]	
[Insert Name of Sub-sector4, Font: Calibri (Body), size 11, Bold]	[Insert range]	

Sequence	Description	Example
Three letters	Industry name	[ABC, Font: Calibri (Body), size 11]
Slash	/	/
Next letter	Whether Q P or N OS	Ν
Next two numbers	Occupation code	01
Next two numbers	OS number	01





CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Helper Power System (Transmission)

Qualification Pack PSSS/Q0104

Sector Skill Council Power

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC

2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC

3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)

4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria

5. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS

6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

Assessable Outcomes	Assessn	nent Criteria	Total Marks	Out of	Theory	Skills Practical
1 PSS/N0111: Assisting in repair and maintenance of		prepare and maintain the work area as per procedure or operation specification	100	9	3	6
Sub-Station, Power Transmission Lines and components	i	identify accurately and acquire correct tools, equipment and instruments required for various aspects of repair and maintenance of Sub-Station, Transmission lines and components		9	3	6
		ensure the tools and equipment are cleaned, well maintained, calibrated and approved for use		9	3	6
	Transmission lir risk for damage	assess components of Transmission line for damage or risk for damage through visual and sensory methods		9	3	6
		access and survey area in accordance with established procedures		9	3	6





	PC6. select and use tools and equipment such as chainsaws, pruning saws, man lifts and chippers to trim trees or its branches where required		9	3	6
	PC7. identify hazards of trimming trees such as limits of approach, public safety and step and touch potential		9	3	6
	PC8. follow instructions and perform tasks such as holding, handing over components, measuring, loading and unloading, etc. accurately and safely		9	3	6
	PC9. deal promptly and effectively with problems within control, and seek help and guidance from the relevant people for problems that cannot be resolved		9	3	6
	PC10. leave the work area in a safe and tidy condition on completion of the repair and maintenance activities refer unresolved job related problems to appropriate personnel for support		9	3	6
	PC11. monitor the problem and keep the supervisor informed about progress or any delays in resolving the problem		10	3	7
		Total	100	33	67
2 PSS/ N 2001	PC1. use protective clothing/ equipment				
(Use basic health and safety practices	for specific tasks and work conditions.		3	0	3
at the workplace)	PC2. state the name and location of people responsible for health and safety in the workplace	100	2	0	2
	PC3. state the names and location of documents that refer to health and safety in the workplace		2	0	2
	PC4. identify job-site hazardous work and state possible causes of risk or accident in the workplace		3	1	2
	PC5. follow electrical safe working procedures such as Tag out/Lock out and display PTW (Permit To Work),		3	1	2





PC6.	follow warning signs (danger, out of
	service, etc.) while working with
	electrical systems
PC7.	use standard safe working practices
	when working at heights, confined
	areas and trenches
PC8	test any electrical equipment and
1 00.	system using insulated testing
	devices before touching them
DCO	
PC9.	ensure positive isolation of
	electrical equipment & system as
	per given standards
PC10	.recognize any abnormalities in
	electrical equipment or system
	installed alarm annunciation and/or
	noticing parameters from gauge/
	indicator installed
PC11	.carry out safe working practices
	while dealing with hazards to
	ensure the safety of self and others
PC12	state methods of accident
	prevention in the work
	environment of the job role
DC13	.state location of general health and
FCID	safety equipment in the workplace
PC14	inspect for faults, set up and safely.
	use of scaffolds and elevated
	platforms and ladder
PC15	lift, carry and transport heavy
	objects & tools safely using correct
	procedures from storage to
	workplace and vice versa
PC16	inspect Grid station and its
	equipment routinely for any signs
	of oil and water leakage
PC17	store flammable materials and
101/	machine lubricating oil safely and
DC10	correctly
PCI8	.check that the emission and
	pollution control devices are
	working properly in line with
	environmental policy standards
	.apply good housekeeping practices
PC19	apply good housekeeping practices
PC19	at all times

3	1	2
3	1	2
3	1	2
3	1	2
3	1	2
3	1	2
2	0	2
2	0	2
2	0	2
2	1	1
2	0	2
2	0	2
3	1	2
3	1	2
2	0	2



Qualifications Pack For Helper: Power System(Transmission)



PC21.retrieve and/or point out	
documents that refer to health and	
safety in the workplace	
PC22.inform relevant authorities about	
any abnormal situation/behavior of	
any equipment/system promptly	
PC23.use the various appropriate fire	
extinguishers on different types of	
fires correctly	
PC24.distinguish types of fire	
o <i>n</i>	
PC25.demonstrate rescue techniques	
applied during fire hazard	
PC26.demonstrate good housekeeping in	
order to prevent fire hazards	
PC27.demonstrate the correct use of a	
fire extinguisher	
PC28 domonstrate how to free a person	
PC28.demonstrate how to free a person from electrocution	
PC29.administer appropriate first aid to	
victims where required e.g. in case	
of bleeding, burns, choking, electric	
shock, poisoning etc.	
PC30.demonstrate basic techniques of	
bandaging	
PC31.respond promptly and	
appropriately to an accident	
situation or medical emergency in	
real or simulated environments	
PC32.perform and organize loss	
minimization or rescue activity	
during an accident in real or	
simulated environments	
PC33.administer first aid to victims in	
case of a heart attack or cardiac	
arrest due to electric shock, before	
the arrival of emergency services in	
real or simulated cases	
PC34.demonstrate the artificial	
respiration and the CPR Process	
PC35.participate in emergency	
procedures Emergency procedures:	
raising alarm, safe/efficient,	
evacuation, correct means of	

2	0	2
3	0	3
2	1	1
3	1	2
3	1	2
3	1	2
3	1	2
3	1	2
3	0	3
3	1	2
3	1	2
3	1	2
3	1	2
3	1	2
3	1	2



Qualifications Pack For Helper: Power System(Transmission)



	escape, correct assembly point, roll call, correct return to work				
	PC36.complete a written accident/incident report or dictate a report to another person, and send report to person responsible		3	1	2
	TOTAL		100	24	66
3 PSS/N1336 Work effectively with others	PC1. accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required		10	3	7
	PC2. accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt		10	3	7
	PC3.give information to others clearly, at a pace and in a manner that helps them to understand		10	3	7
	PC4. display helpful behavior by assisting others in performing tasks in a positive manner, where required and possible	100	10	3	7
	PC5. consult with and assist others to maximize effectiveness and efficiency in carrying out tasks		10	3	7
	PC6. display appropriate communication etiquette while working		10	3	7
	PC7. display active listening skills while interacting with others at work		10	3	7
	PC8. use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism		10	3	7
	PC9. demonstrate responsible and disciplined behaviors at the workplace		10	3	7
	PC10. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict		10	3	7
			100	30	70