

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR POWER SECTOR

### What are Occupational Standards(OS)?

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

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

#### Contact Us:

Power Sector Skill Council  
2<sup>nd</sup> Floor, CBIP Building,  
Malcha Marg,  
Chanakyapuri, New  
Delhi - 110021

E-mail: [pssc@cbip.in](mailto:pssc@cbip.in)



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### Introduction

## Qualifications Pack: Tower Foundation Power Transmission

SECTOR: Power

SUB-SECTOR: Transmission

OCCUPATION: Tower Foundation

REFERENCE ID: PSS/Q2004

ALIGNED TO: NCO-2004/NILT

Tower foundation Power transmission is required to possess knowledge of preparing tower foundation as per design of transmission tower

Brief Job Description: Carrying out tower foundation based on design drawing of transmission tower

Personal Attributes: Work is performed mostly outdoors in all weather conditions. Work requires the ability to perform manual activities. Work also involves bending, climbing, pulling, lifting and carrying, kneeling, walking, and standing for significant periods of time. Candidate will be exposed to different geography, different and difficult terrain.



Qualifications Pack For Tower Foundation Power  
Transmission



Job Details

Qualifications Pack Code	PSS/Q2004		
Job Role	Tower Foundation Power Transmission		
Credits (NSQF)	TBD	Version number	1.0
Sector	Power	Drafted on	25/01/2016
Sub-sector	Transmission	Last reviewed on	19/07/2016
Occupation	Tower Foundation	Next review date	19/07/2018
NSQC Clearance Date	Not Applicable		

Job Role	Tower Foundation Power Transmission
Role Description	Carry out tower foundation of power transmission tower. The candidate is also expected to perform in material preparation and handling.
NSQF level	4
Minimum Educational Qualifications	10th Standard
Maximum Educational Qualifications	Not Applicable
Training (Suggested but not mandatory)	Not Applicable
Minimum Job Entry Age	18 Years
Experience	6 months as mason preferred
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <ol style="list-style-type: none"> <li><u>PSS/N2007 Carry out foundation activities of transmission tower</u></li> <li><u>PSS/N2001 Use basic health and safety practices as the workplace</u></li> <li><u>PSS/N1336 Work effectively with others</u></li> </ol> <p>Optional: Not Applicable</p>
Performance Criteria	As described in the relevant OS units



Definitions	Keywords /Terms	Description
	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.
	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.	

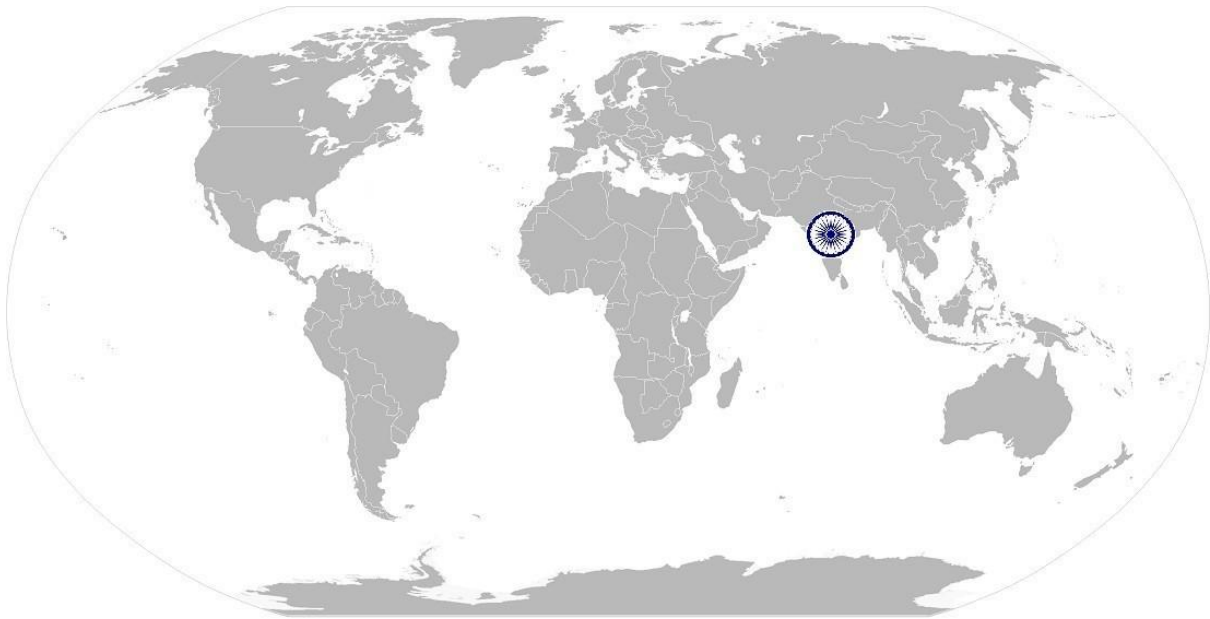


Technical Knowledge	Technical Knowledge is the specific domain knowledge needed to accomplish the task in combination with other competencies. It is usually coined with specifically designated roles and responsibilities.
Core Skills/Generic Skills	Core Skills or Generic Skills as set are group of skills. It is key to working in today's 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.
<b>Keywords /Terms</b>	<b>Description</b>
PPE	Personal Protective Equipment
KW	Kilowatt
V	Volt
KWH	Kilo Watt Hour
PTW	Permit to work
CPR	Cardio Pulmonary Resuscitation
GIS	Geographical Information System

Acronyms



# National Occupational Standard



## Overview

This unit is about the tower foundation activities performed by an tower foundation power transmission



PSS/N2007

Carry out foundation activities of transmission tower

National Occupational Standard

Unit Code	PSS/N2007
Unit Title (Task)	Carry out foundation activities of transmission tower
Description	He will carry out and perform tower foundation of transmission tower as per design and instructions.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> <li>transmission tower foundation</li> </ul>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Transmission tower foundation	<p>The user/individual on the job needs to:</p> <p>PC1. demonstrate knowledge of power transmission towers</p> <p>PC2. demonstrate understanding of types of towers</p> <p>PC3. be aware of types of foundation, stub setting, material testing etc.</p> <p>PC4. be aware of strata of land and geography transmission line area</p> <p>PC5. have knowledge to understand drawing of transmission tower foundation in accordance to different types of tower</p> <p>PC6. differentiate and apply knowledge of type/component/member of tower</p> <p>PC7. apply knowledge of foundation material RCC</p> <p>PC8. have the knowledge of excavation process for tower foundation</p> <p>PC9. carry all the tools &amp; equipment needed for foundation</p> <p>PC10. install proper earthing of equipment for healthy operation</p> <p>PC11. help with logistic and material handling</p> <p>PC12. apply knowledge of excavation process</p> <p>PC13. have understanding of template for foundation of towers, civil foundation design, dimensions and foundation of stub configuration</p> <p>PC14. be aware of guidelines for ground clearance of stubs</p>
Knowledge and Understanding (K)	
A. Organizational Context	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. relevant legislation, standards, policies, and procedures followed in the organisation relevant to own employment and performance conditions</p> <p>KA2. relevant health and safety requirements applicable in the work place</p> <p>KA3. own job role and responsibilities and sources for information pertaining to employment terms, entitlements, job role and responsibilities</p> <p>KA4. reporting structure, inter-dependent functions, lines and procedures in the work area</p> <p>KA5. how to engage with specialists for support in order to resolve incidents and service requests</p> <p>KA6. importance of working in a clean and safe environment</p> <p>KA7. relevant people and their responsibilities within the work area</p>





PSS/N2007

Carry out foundation activities of transmission tower

B. Technical Knowledge	<p>The individual on the job needs to know and understand:</p> <p>KB1. various type of transmission tower</p> <p>KB2. various type of tower foundation based on type of transmission tower</p> <p>KB3. foundation material</p> <p>KB4. tower foundation process</p> <p>KB5. tools and tackles used in tower foundation</p> <p>KB6. technical manuals, blueprints, schematics, diagrams, plans, specifications estimate time, material and equipment needed to complete assignments</p> <p>KB7. handling of all machineries, equipment &amp; vehicles related to tower foundation</p> <p>KB8. use of appropriate judgment and initiative pertaining to work methods and tools</p> <p>KB9. quality parameters, quality assessment based on physical parameters</p>
Skills (S)	
A. Core Skills/ Generic Skills	<p style="background-color: #e1eef6;">Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. note the information communicated by the engineer</p> <p>SA2. note down observations (if any) related to the process</p> <p style="background-color: #e1eef6;">Reading Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. read and interpret the process required for various types of operations</p> <p>SA4. read, interpret and process flowchart for all operations</p> <p>SA5. read manuals and operations documents to understand the equipment used into operation</p> <p style="background-color: #e1eef6;">Oral Communication (Listening and Speaking skills)</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. discuss task lists, schedules and activities with colleagues</p> <p>SA7. effectively communicate with the team members</p>
B. Professional Skills	<p style="background-color: #e1eef6;">Decision Making</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. follow organization rule-based decision making process</p> <p>SB2. take decision with systematic course of actions and/or response</p> <p style="background-color: #e1eef6;">Plan and Organize</p> <p>The user/individual on the job needs to know and understand:</p> <p>SB3. planning and organization of tasks to meet deadlines</p> <p style="background-color: #e1eef6;">Customer Centricity</p> <p style="background-color: #e1eef6;">Not Applicable</p> <p style="background-color: #e1eef6;">Problem Solving</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB4. seek and Comprehend operation related inputs for clarification</p> <p>SB5. find ways of modifying difficult operating stages to make it operation friendly</p>



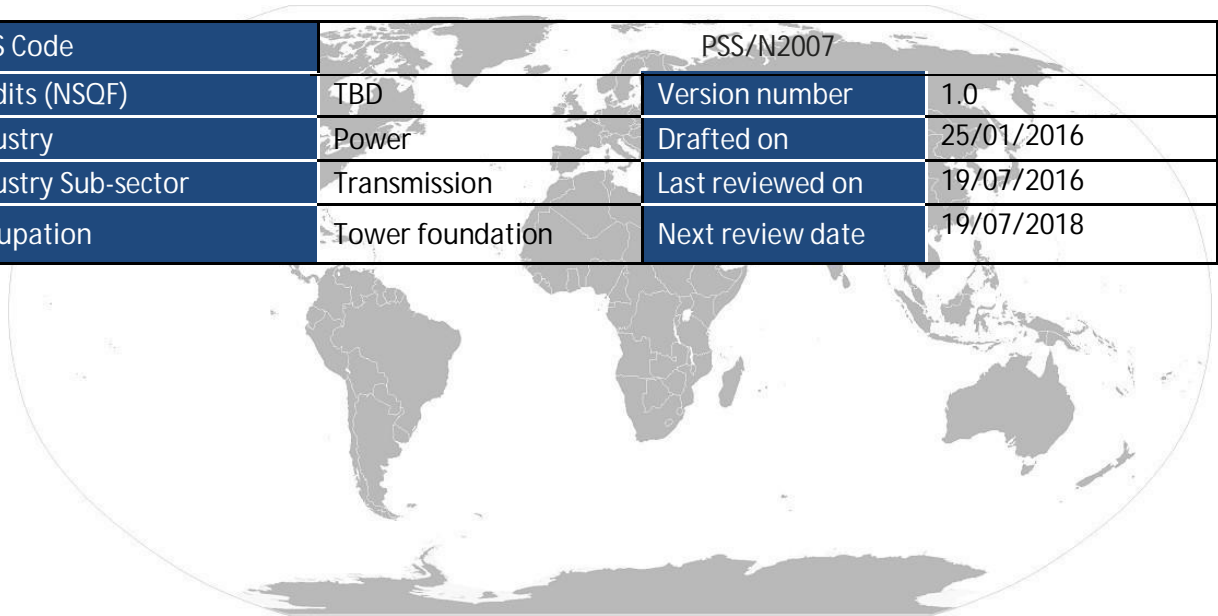
PSS/N2007

Carry out foundation activities of transmission tower

	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB6. apply domain information to set and define operation parameters that ensure economy and quality of the service
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB7. critically evaluate operation parameters in relation to operations intended

## NOS Version Control

NOS Code	PSS/N2007		
Credits (NSQF)	TBD	Version number	1.0
Industry	Power	Drafted on	25/01/2016
Industry Sub-sector	Transmission	Last reviewed on	19/07/2016
Occupation	Tower foundation	Next review date	19/07/2018

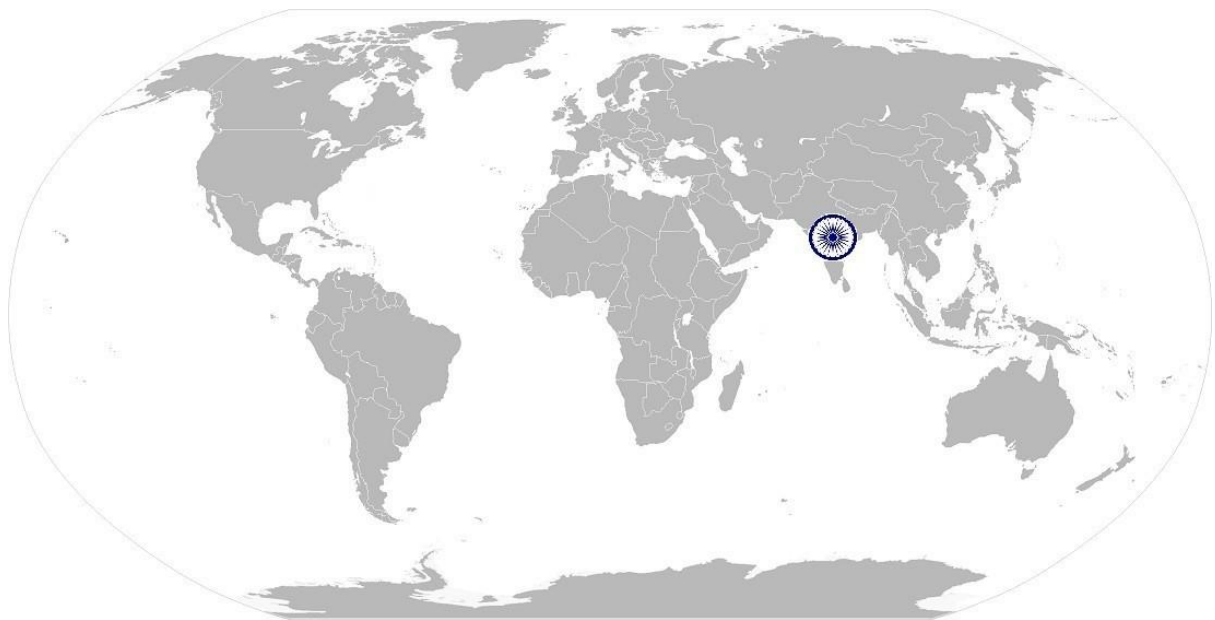






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# National Occupational Standard



## 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.



**PSS/N2001      Use basic health and safety practices for power related work**

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 healthy, safe and secure work environment. It covers responsibilities towards self, others, assets and the environment. .
Scope	This unit/task covers the following: <ul style="list-style-type: none"> <li>· health and safety</li> <li>· fire safety</li> <li>· emergencies, rescue and first-aid procedures</li> </ul>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Health and safety	<p>The user/individual on the job needs to:</p> <p>PC1. use protective clothing/equipment for specific tasks and work conditions.</p> <p>PC2. state the name and location of people responsible for health and safety in the workplace</p> <p>PC3. state the names and location of documents that refer to health and safety in the workplace</p> <p>PC4. identify job-site hazardous work and state possible causes of risk or accident in the workplace</p> <p>PC5. follow electrical safe working procedures such as Tag out/Lock out and display PTW (Permit To Work),</p> <p>PC6. follow warning signs (danger, out of service, etc.) while working with electrical systems</p> <p>PC7. use standard safe working practices when working at heights, confined areas and trenches</p> <p>PC8. test any electrical equipment and system using insulated testing devices before touching them</p> <p>PC9. ensure positive isolation of electrical equipment &amp; system as per given standards</p> <p>PC10. recognize any abnormalities in electrical equipment or system installed alarm annunciation and/or noticing parameters from gauge/ indicator installed</p> <p>PC11. carry out safe working practices while dealing with hazards to ensure the safety of self and others</p> <p>PC12. state methods of accident prevention in the work environment of the job role</p> <p>PC13. state location of general health and safety equipment in the workplace</p> <p>PC14. inspect for faults, set up and safely use of scaffolds and elevated platforms and ladder</p> <p>PC15. lift, carry and transport heavy objects &amp; tools safely using correct procedures from storage to workplace and vice versa</p> <p>PC16. inspect Grid station and its equipment routinely for any signs of oil and water leakage</p> <p>PC17. store flammable materials and machine lubricating oil safely and correctly</p> <p>PC18. check that the emission and pollution control devices are working properly in line with environmental policy standards</p>



NOS

National Occupational Standards



PSS/N2001 Use basic health and safety practices for power related work

	<p>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</p>
<p>Fire safety</p>	<p>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</p>
<p>Emergencies, rescue and first-aid procedures</p>	<p>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</p>
<p><b>Knowledge and Understanding (K)</b></p>	
<p>A. Organizational Context</p>	<p>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.</p>

PSS/N2001 Use basic health and safety practices for power related work

B. Technical Knowledge	<p>The individual on the job needs to know and understand:</p> <p>KB1. meaning of “hazards” and “risks”</p> <p>KB2. health and safety hazards commonly present in the work environment and related precautions</p> <p>KB3. possible causes of risk, hazard or accident in the workplace and why risk and/or accidents are possible</p> <p>KB4. possible causes of risk and accident</p> <p>KB5. methods of accident prevention</p> <p>KB6. safe working practices when working with tools and machines</p> <p>KB7. safe working practices while working at various hazardous sites</p> <p>KB8. where to find all the general health and safety equipment in the workplace</p> <p>KB9. various dangers associated with the use of electrical equipment</p> <p>KB10. positive isolation of electrical equipment and system</p> <p>KB11. safe handling and disposal of hazardous power plant wastes</p> <p>KB12. use of emission and pollution control devices and measures taken to control pollution</p> <p>KB13. various safety procedures and equipment used to work at heights, trenches and confined places</p> <p>KB14. safe working practices specific to working with electrical equipment &amp; system e.g. lock out/ tag out, PTW, etc.</p> <p>KB15. preventative and remedial actions to be taken in the case of exposure to toxic materials</p> <p>KB16. importance of using protective clothing/equipment and other insulated work gear while handling electrical system and equipment</p> <p>KB17. precautionary activities taken to prevent fire accident</p> <p>KB18. various causes of fire</p> <p>KB19. techniques of using the different fire extinguishers</p> <p>KB20. different methods of extinguishing fire</p> <p>KB21. different materials used for extinguishing fire</p> <p>KB22. emergency rescue techniques applied during a fire hazard</p> <p>KB23. various types of safety signs and what they mean</p> <p>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</p>
<b>Skills (S)</b>	
A. Core Skills/ Generic Skills	<p style="background-color: #e6f2ff; padding: 2px;">Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. note the information communicated by the officer incharge</p> <p>SA2. note down observations (if any) related to the operation/maintenance.</p> <p style="background-color: #e6f2ff; padding: 2px;">Reading Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. read and interpret the process required for different types of manuals for maintenance.</p> <p>SA4. read and interpret the flowchart of all parts of an assembly.</p>



PSS/N2001      Use basic health and safety practices for power related work

	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. SA7. effectively communicate with the team members. SA8. attentively listen and comprehend the information given by the colleague /contractor. SA9. communicate clearly with the colleague on the issues faced during query/fault.
	Decision Making
B. Professional 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 stages of blank forming processes





# NOS

National Occupational Standards

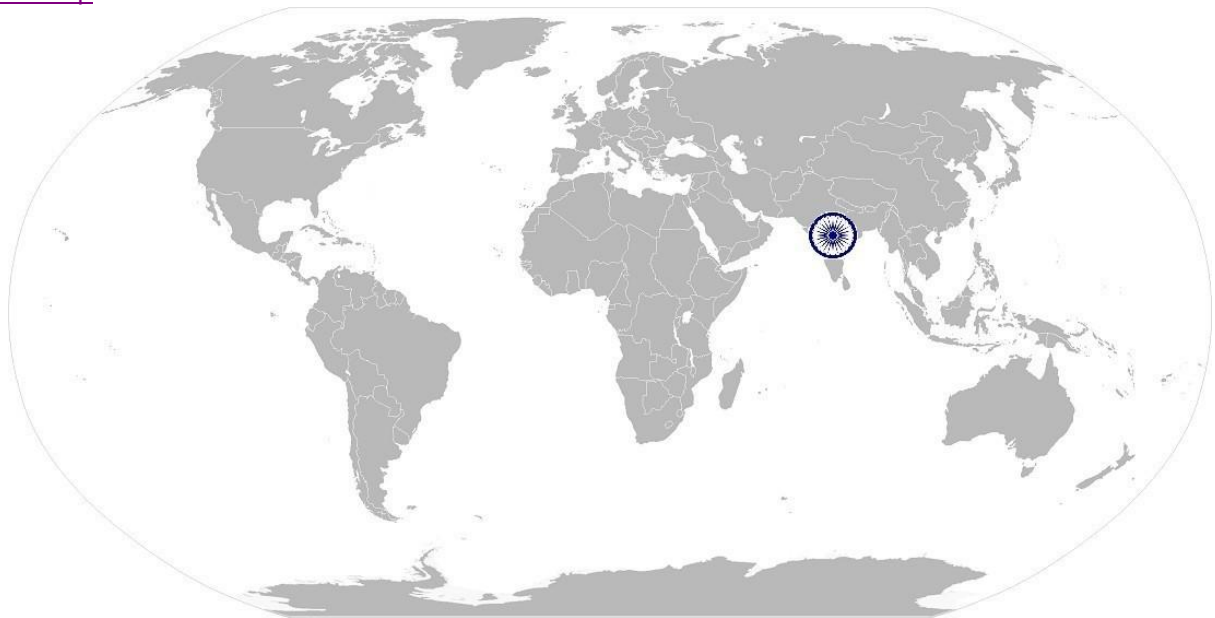


PSS/N2001 Use basic health and safety practices for power related work

## NOS Version Control

NOS Code	PSS/N2001		
Credits (NSQF)	TBD	Version number	1.0
Industry	Power	Drafted on	04/06/2016
Industry Sub-sector	Generation, Transmission & Distribution	Last reviewed on	19/07/2016
Occupation	Technician	Next review date	19/07/2018

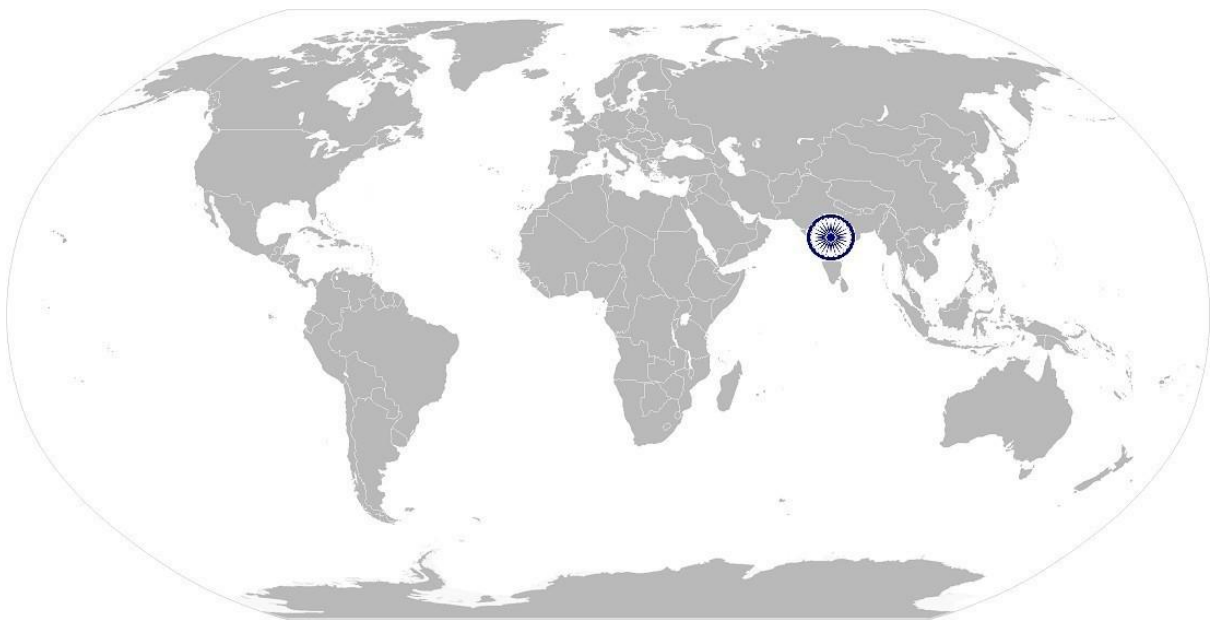
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# National Occupational Standard



## Overview

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



PSS/N1336

Work effectively with others

National Occupational Standard	Unit Code	PSS/N1336
	Unit Title (Task)	Work effectively with others
	Description	<p>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.</p> <p>These cover areas such as communication etiquette, discipline, listening, handling conflict and grievances.</p>
	Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>working with others</li> </ul>
	Performance Criteria(PC) w.r.t. the Scope	
	Element	Performance Criteria
	Working with others	<p>The user/individual on the job should be able to:</p> <p>PC1. accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required</p> <p>PC2. accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt</p> <p>PC3. give information to others clearly, at a pace and in a manner that helps them to understand</p> <p>PC4. display helpful behavior by performing tasks in a positive manner, where required and possible</p> <p>PC5. perform with others to maximize effectiveness and efficiency in carrying out tasks</p> <p>PC6. display appropriate communication etiquette while working .</p> <p>PC7. display active listening skills while interacting with others at work</p> <p>PC8. use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism</p> <p>PC9. demonstrate responsible and disciplined behavior at the workplace</p> <p>PC10. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict</p>
	Knowledge and Understanding (K)	
	A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. legislation, standards, policies, and procedures followed in the organisation relevant to own employment and performance conditions</p> <p>KA2. reporting structure, inter-dependent functions, lines and procedures in the work area</p> <p>KA3. relevant people and their responsibilities within the work area</p> <p>KA4. escalation matrix and procedures for reporting work and employment related issues</p>



<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. various categories of people that one is required to communicate and coordinate with in the organization</p> <p>KB2. importance of effective communication in the workplace</p> <p>KB3. importance of teamwork in organizational and individual success</p> <p>KB4. various components of effective communication</p> <p>KB5. key elements of active listening</p> <p>KB6. value and importance of active listening and assertive communication</p> <p>KB7. barriers to effective communication</p> <p>KB8. importance of tone and pitch in effective communication</p> <p>KB9. importance of avoiding casual expletives and unpleasant terms while communicating professional circles</p> <p>KB10. how poor communication practices can disturb people, environment and cause problems for the employee, the employer and the customer</p> <p>KB11. importance of ethics for professional success</p> <p>KB12. importance of discipline for professional success</p> <p>KB13. what constitutes disciplined behavior for a working professional</p> <p>KB14. common reasons for interpersonal conflict</p> <p>KB15. importance of developing effective working relationships for professional success</p> <p>KB16. how to express and address grievances appropriately and effectively</p> <p>KB17. importance and ways of managing interpersonal conflict effectively</p>
<p>Skills (S) (Optional)</p>	
<p>A. Core Skills/ Generic Skills</p>	<p>Writing Skills</p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. note the information communicated by the officer incharge.</p> <p>SA2. note down observations (if any) related to the operation/maintenance.</p> <p>Reading Skills</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. read and interpret the process required for different types of manuals</p> <p>SA4. read and interpret the flowchart of all parts of an assembly.</p> <p>SA5. read manuals and documents to understand the product-details &amp; how they can be used.</p> <p>Oral Communication (Listening and Speaking skills)</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. discuss task lists, schedules and activities with the colleague.</p> <p>SA7. effectively communicate with the team members.</p> <p>SA8. attentively listen and comprehend the information given by the colleague /contractor.</p> <p>SA9. communicate clearly with the colleague on the issues faced during query/fault.</p>
<p>B. Professional Skills</p>	<p>Decision Making</p> <p>The user/individual on the job needs to know and understand how to:</p>



PSS/N1336

Work effectively with others

	SB11. follow colleague/contractor rule-based decision making process. 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.

## NOS Version Control

NOS Code	PSS/N1336		
Credits (NSQF)	TBD	Version number	1.0
Industry	Power	Drafted on	04/06/2016
Industry Sub-sector	Generation, Transmission & Distribution	Last reviewed on	19/07/2016
Occupation	Technician	Next review date	19/07/2018

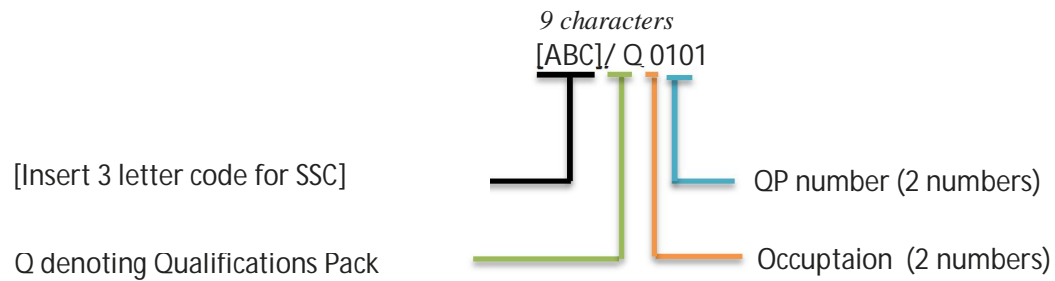
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## Annexure

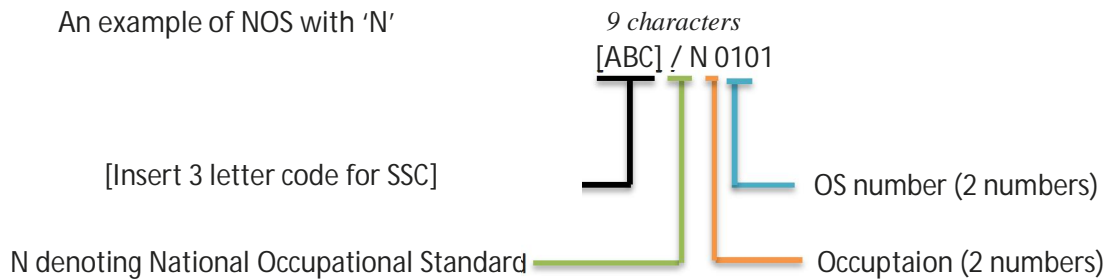
### Nomenclature for QP and NOS

#### Qualifications Pack



#### Occupational Standard

An example of NOS with 'N'





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 QP or NOS	N
Next two numbers	Occupation code	01
Next two numbers	OS number	01





## CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Tower Foundation Power Transmission

Qualification Pack PSS/Q2004

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	Assessment criteria for outcomes	Marks Allocation			
		Total Marks	Out Of	Theory	Skills Practical
1. PSS/N2007 Carry out foundation activities of transmission tower	PC1. demonstrate knowledge of power transmission towers	100	6	2	4
	PC2. demonstrate understanding of types of towers		8	3	5
	PC3. be aware of types of foundation, stub setting, material testing etc.		10	3	7
	PC4. be aware of strata of land and geography transmission line area		6	2	4
	PC5. have knowledge to understand drawing of transmission tower foundation in accordance to different types of tower		9	2	7
	PC6. differentiate and apply knowledge of type/component /member of tower		8	2	6
	PC7. apply knowledge of foundation material-RCC		8	2	6
	PC8. have the knowledge of excavation process for tower foundation		8	2	6



	PC9. carry all the tools & equipment needed for foundation		6	3	3
	PC10. install proper earthing of equipment for healthy operation		7	2	5
	PC11. help with logistic and material handling		5	2	3
	PC12. apply knowledge of excavation process		6	2	4
	PC13. have understanding of template for foundation of towers, civil foundation design, dimensions and foundation of stub configuration		8	2	6
	PC14. be aware of guidelines for ground clearance of stubs		5	1	4
	Total		100	30	70
2. PSS/N2001 Use basic health and safety practices for power related work	PC15. use protective clothing/equipment for specific tasks and work conditions.		3	0	3
	PC1. state the name and location of people responsible for health and safety in the workplace		2	0	2
	PC2. state the names and location of documents that refer to health and safety in the workplace		2	0	2
	PC3. identify job-site hazardous work and state possible causes of risk or accident in the workplace		3	1	2
	PC4. follow electrical safe working procedures such as Tag out/Lock out and display PTW (Permit To Work),	100	3	1	2
	PC5. follow warning signs (danger, out of service, etc.) while working with electrical systems		3	1	2
	PC6. use standard safe working practices when working at heights, confined areas and trenches		3	1	2
	PC7. test any electrical equipment and system using insulated testing devices before touching them		3	1	2



PC8.	ensure positive isolation of electrical equipment & system as per given standards	3	1	2
PC9.	recognize any abnormalities in electrical equipment or system installed alarm annunciation and/or noticing parameters from gauge/ indicator installed	3	1	2
PC10.	carry out safe working practices while dealing with hazards to ensure the safety of self and others	3	1	2
PC11.	state methods of accident prevention in the work environment of the job role	2	0	2
PC12.	state location of general health and safety equipment in the workplace	2	0	2
PC13.	inspect for faults, set up and safely use of scaffolds and elevated platforms and ladder	2	0	2
PC14.	lift, carry and transport heavy objects & tools safely using correct procedures from storage to workplace and vice versa	2	1	1
PC15.	inspect Grid station and its equipment routinely for any signs of oil and water leakage	2	0	2
PC16.	store flammable materials and machine lubricating oil safely and correctly	2	0	2
PC17.	check that the emission and pollution control devices are working properly in line with environmental policy standards	3	1	2
PC18.	apply good housekeeping practices at all times	3	1	2



PC19.	identify common hazard signs displayed in various areas	2	0	2
PC20.	retrieve and/or point out documents that refer to health and safety in the workplace	2	0	2
PC21.	inform relevant authorities about any abnormal situation/behavior of any equipment/system promptly	3	0	3
PC22.	use the various appropriate fire extinguishers on different types of fires correctly	2	1	1
PC23.	distinguish types of fire	3	1	2
PC24.	demonstrate rescue techniques applied during fire hazard	3	1	2
PC25.	demonstrate good housekeeping in order to prevent fire hazards	3	1	2
PC26.	demonstrate the correct use of a fire extinguisher	3	1	2
PC27.	demonstrate how to free a person from electrocution	3	1	2
PC28.	administer appropriate first aid to victims where required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc.	3	0	3
PC29.	demonstrate basic techniques of bandaging	3	1	2
PC30.	respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments	3	1	2
PC31.	perform and organize loss minimization or rescue activity during an accident in real or simulated environments	3	1	2



	PC32.	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		3	1	2
	PC33.	demonstrate the artificial respiration and the CPR Process		3	1	2
	PC34.	participate in emergency procedures Emergency procedures: raising alarm, safe/efficient, evacuation, correct means of escape, correct assembly point, roll call, correct return to work		3	1	2
	PC35.	complete a written accident/incident report or dictate a report to another person, and send report to person responsible		3	1	2
	PC36.	demonstrate correct method to move injured people and others during an emergency		3	1	2
				100	24	76
3. PSS/N1336 Work effectively with others	PC1.	accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required	100	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 behaviour by performing tasks in a positive manner, where required and possible		10	3	7
	PC5.	perform with others to maximize effectiveness and efficiency in carrying out tasks		10	3	7
	PC6.	display appropriate communication etiquette while working		10	3	7



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	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 behaviours 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