



Please refer [Guidelines for STT/Apprenticeship/OEM Qualification File](#)

QUALIFICATION FILE

Technician – Power System Transmission

Short Term Training (STT) Long Term Training (LTT) Apprenticeship

Upskilling Dual/Flexi Qualification For ToT For ToA

General Multi-skill (MS) Cross Sectoral (CS) Future Skills OEM

NCrF/NSQF Level: 4

Submitted By: Chief Executive Officer

Power Sector Skill Council, B-17, Qutab Institutional Area,

New Delhi – 110 016

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Section 1: Basic Details

1.	Qualification Name	Technician – Power System Transmission	
2.	Sector/s	Power	
3.	Type of Qualification: <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i>	Qualification Name of existing/previous version:
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>		
5.	National Qualification Register (NQR) Code Version <i>(Will be issued after NSQC approval)</i>	QG-04-PW-00871-2023-V1-PSSC	6. NCrf/NSQFLevel: 4
7.	Award (Certificate/Diploma/Advance Diploma/Any Other) <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Certificate	
8.	Brief Description of the Qualification	The individual in the job role maintains sub-station, poles, Towers and other related hardware in transmission system. They install, maintain and repair overhead and underground power lines and cables, and other associated equipment such as insulators, conductors, lightning arrestors, switches, metering systems, transformers and lighting systems.	
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification &Relevant Experience: 12th Grade Pass with Science Background OR Completed 2nd year of 3-year regular diploma in relevant field after 10th OR Pursuing 2nd year of 3-year regular Diploma in relevant field after 10th OR 10th grade pass with two years of any combination of NTC/NAC/CITS or equivalent in relevant trade OR 11 Grade Pass with 1 Year of relevant experience OR	

		10th Grade Pass with 2 year of relevant experience OR Previous relevant Qualification of NSQF Level 3.5 with 1.5 years relevant Experience OR Previous relevant Qualification of NSQF Level 3 with 3 years relevant Experience																			
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	14	11. Common Cost Norm Category (I/II/III) (wherever applicable): 1																		
12.	Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	N/A																			
13.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>144</td> <td>246</td> <td>30</td> <td></td> <td>420</td> </tr> <tr> <td>Online</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> (Refer Blended Learning Annexure for details)		Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	144	246	30		420	Online					
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																
Classroom (offline)	144	246	30		420																
Online																					
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/7413.0100																			
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)																				

16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:

18.	Is the Job Role Amenable to Persons with Disability	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If “Yes”, specify applicable type of Disability:	
19.	How Participation of Women will be Encouraged	Women candidates can be encouraged to join this job role/Qualification by giving them job opportunities & making them industry ready in Power Sector	
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No PSS/N1705 Perform operations of water treatment plant	
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input type="checkbox"/> Yes <input type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
22.	Name and Contact Details of Submitting / Awarding Body SPOC <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Dr. V K Singh Email: ceo@psscindia.org Contact No.: 91-11-40793153, 40793152 Website: www.psscindia.org	
23.	Final Approval Date by NSQC: 31-08-2023	24. Validity Duration: 3 years	25. Next Review Date: 31-08-2026

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory Pr.-Practical OJT-On the Job Man.-Mandatory Training Rec.-Recommended Proj.-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Perform repair and maintenance of power transmission lines and components	PSS/N3401	Core	4	9	95	175	30		270	30	70			100	
2.	Apply basic health and safety practices for power related work	PSS/N1331	Non-Core	2	1	15	15			30	30	70			100	
3.	Work effectively with others	PSS/N1336	Non-Core	4	1	10	20			30	30	70			100	
4.	Employability Skills (60 Hours)	DGT/VSQ/N0102	Non-Core	4	2	24	36			60	50				50	
5.	OJT				1			30								
Duration (in Hours) / Total Marks						14	144	246	30	420	140	210			350	

Elective NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/N on-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/N on-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage –Aggregate at qualification level: 70 %(Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage –NOS/Module-wise:70 %(Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

1.	Trainer’s Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Trainer Prerequisites						
		Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
				Years	Specialization	Years	Specialization	
		B.Tech	Electrical	1	Power transmission utility or with the turnkey/EPC contractors			
		Diploma	Electrical	3	Power transmission utility or with the turnkey/EPC contractors			
		ITI	Electrician	5	Power transmission utility or with the			

					turnkey/EPC contractors			
2.	Master Trainer’s Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Master Trainers (Power Distribution) -Score Matrix						
		S.No.	Parameter	Category		Score		
		1	Qualification	B.E/ Btech (Electrical)		50		
				Diploma(Electrical)		45		
		2	Experience(in Years)	>20		45		
				15 to 20		40		
				10 to 15		35		
		3	Training Experience (in Years)	> 5		3		
				2 to 5		2		
				<2		1		
4	Familiarity with Skilling Eco Sysytem	Yes		1				
5	TOT Platform Skills Qualified by MEPSC	Yes		1				
3.	Tools and Equipment Required for Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If “Yes”, details to be provided in Annexure) Provided in						
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	N/A						

Section 3: Training Related

Section 4: Assessment Related

1.	Assessor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Assessor Prerequisites
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		Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
				Years	Specialization	Years	Specialization	
		B.Tech	Electrical	1	Power transmission utility or with the turnkey/EPC contractors			
		Diploma	Electrical	3	Power transmission utility or with the turnkey/EPC contractors			
		ITI	Electrician	5	Power transmission utility or with the turnkey/EPC contractors			
2.	Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	N/A						
3.	Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	N/A						
4.	Assessment Mode(Specify the assessment mode)	Online/Offline						

5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(details to be provided in Annexure-if it is different for Assessment)</i>
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Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years)(Yes/No): N/A
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): N/A
3.	Government /Industry initiatives/ requirement (Yes/No): YES
4.	Number of Industry validation provided: 5
5.	Estimated nos. of persons to be trained and employed: 100
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes If "No", why: Yes

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1	Annexure: NCrF/NSQF level justification based on NCrF level/NSQF descriptors <i>(Mandatory)</i>	Mentioned in Qualification File			
2	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online)</i>	S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
		1.	Screw Driver	As per requirement	15
		2.	Phase Tester	As per requirement	5
		3.	Combination Pliers	As per requirement	5

<i>course)</i>	4.	Nose Pliers	As per requirement	5
	5.	Spanner Set	As per requirement	5
	6.	Adjustable Wrench	As per requirement	5
	7.	Measuring Tape	As per requirement	3
	8.	Hammer	As per requirement	5
	9.	Center Punch	As per requirement	
	10.	Crimping Tool	As per requirement	5
	11.	Portable Electric Drill Machine	As per requirement	3
	12.	Blow Lamp	As per requirement	5
	13.	Cable Socket Punching Tool	As per requirement	3
	14.	Digital Multimeter	As per requirement	2
	15.	Clip On Meter Or Clamp On Tester	As per requirement	4
	16.	Megger(Analogue)	As per requirement	2
	17.	Earth Tester	As per requirement	2
	18.	Neon(Power) Tester	As per requirement	1
	19.	Discharge Rod	As per requirement	
	20.	Ladder	As per requirement	1
	21.	Helmet	As per requirement	5
	22.	Gloves	As per requirement	5
	23.	Danger Sign Board	As per requirement	1

24.	Safety Belt	As per requirement	1
25.	Safety Sign Board	As per requirement	1
26.	Safety Boot	As per requirement	1
27.	Tagging	As per requirement	3
28.	Rubber Mat	As per requirement	1
29.	Thermo Vision Camera	As per requirement	1
30.	Mask	As per requirement	1
31.	Rope	As per requirement	1
32.	Soil testing equipment	As per requirement	1
33.	rope	As per requirement	1
34.	2-way, 3-way pulleys	As per requirement	
35.	Step bolts	As per requirement	
36.	Bird guard	As per requirement	
37.	Dampers	As per requirement	
38.	Theodolite	As per requirement	
39.	Soil Resistivity testing Equipmnet	As per requirement	
40.	Survey tools: Global Positioning System (GPS), Differential Geographical Positioning System (DGPS), GIS (geographic information system) technology	As per requirement	
41.	Hi-Pot Set	As per requirement	

	42.	CT/PT Ratio Tester	As per requirement	
	43.	Relay Test Bench	As per requirement	2
	44.	Thermo Vision Camera	As per requirement	
	45.	Tan Delta test kit	As per requirement	
	46.	CT analyzer	As per requirement	15
3	Annexure: Detailed Assessment Criteria (Mandatory)	Mentioned in Model Curriculum		
4	Annexure: Assessment Strategy(Mandatory)	Mentioned in Model Curriculum		
5	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is “Blended Learning”)	N/A		
6	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	N/A		
7	Annexure: Acronym and Glossary (Optional)	Mentioned in Model Curriculum & in Qualification Files		
8	Supporting Document: Model	Attached		

	Curriculum (Mandatory – Public view)	
9	Supporting Document: Career Progression (Mandatory - Public view)	Mentioned in Qualification Files
1	Supporting Document: Occupational Map (Mandatory)	Attached
1	Supporting Document: Assessment SOP (Mandatory)	Attached
1	Any other document you wish to submit:	N/A

Annexure: Evidence of Level

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
Process	<p>Job that requires well developed skills, with clear choice of procedures in familiar context</p> <ul style="list-style-type: none"> • identify various types of circuits and their components correctly • identify accurately and obtain correct tools, equipment and instruments 	<p>Power System Technician (Transmission) in the job requires well developed skills, with clear choice of procedures in familiar context. Refer to evidence provided in adjacent column. Hence it falls under Level 4</p>	4

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<p>required for various aspects of repair and maintenance of Transmission lines and components</p> <ul style="list-style-type: none"> • identify hazards in trimming trees such as limits of approach, public safety and step and touch potential • identify various types of circuits accurately • identify and acquire correct tools, equipment and instruments required for transmission line assessment and inspection • select and use test equipment such as tong testers, clip-on meter, multimeters, fault indicators meggers and voltmeters to verify fault and integrity • monitor the problem and keep the supervisor informed about progress or any delays in resolving the problem • 		
Professional knowledge	<p>Knowledge of facts, principles processes and general concepts, in a field of work and study.</p> <ul style="list-style-type: none"> • common electricity terminology and correct interpretation of the same • sizes and current carrying capacity of different types of conductors • various types of circuits and equipment • troubleshooting and repair methods for 	<p>Power System Technician (Transmission) should have Knowledge of facts, principles processes and general concepts, in a field of work and study.</p> <p>Refer to evidence provided in adjacent column. Hence it falls under Level 4</p>	4

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<p>various components of transmission</p> <ul style="list-style-type: none"> • lines • access points such as vaults, open trenches and manholes • co-existing underground utilities • causes of conductor damage • hazards associated with carrying out power line maintenance and how they can be minimized • preparation of equipment for testing and repair activities • components of transmission lines • problems and conditions which render electrical poles or towers in need of maintenance or replacement • methods and parameters to check quality of line components against required quality standards • safety concerns and precautions for working at significant height and with high wind velocities • follow warning signs while working with electrical systems • follow procedures for safe working with electrical equipment • use standard safe working practices when working at heights, confined areas and trenches • ensure positive isolation of electrical 		

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<p>equipment & system as per the given standards</p> <ul style="list-style-type: none"> • identify and retrieve general health and safety equipment in the workplace • store flammable materials and machine lubricating oil safely and correctly • check that the emission and pollution control devices are working properly in line with environmental policy standards • free an affected person from electrocution safely as per the recommended procedure • administer basic first aid including CPR to the victims of heart or cardiac arrest due to electric shock, before the arrival of emergency services • act promptly and appropriately to an accident situation or medical emergency in real or simulated environments • meaning of hazards and risks • possible causes of risk, hazard or accident in the workplace and why risk and accidents are possible • possible causes of risk and accident • safe working practices when working with tools and machines • safe working practices while working at various hazardous sites 		

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> • various dangers associated with the use of electrical equipment • use of emission and pollution control devices and measures taken to control pollution • express and address grievances appropriately and effectively • importance and ways of managing interpersonal conflict • effectively importance of ethics for professional success • common reasons for interpersonal conflict • barriers to effective communication • importance of tone and pitch in effective communication • importance of avoiding casual expletives and unpleasant terms while communicating in professional circles • key elements of active listening 		
Professional skill	<p>Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts.</p> <ul style="list-style-type: none"> • identify various types of circuits and their components correctly • identify accurately and obtain correct 	<p>Power System Technician (Transmission) should possess practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts, and some communication skills</p>	

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<p>tools, equipment and instruments required for various aspects of repair and maintenance of Transmission lines and components</p> <ul style="list-style-type: none"> • identify hazards in trimming trees such as limits of approach, public safety and step and touch potential • identify various types of circuits accurately • identify and acquire correct tools, equipment and instruments required for transmission line assessment and inspection • select and use test equipment such as tong testers, clip-on meter, multimeters, fault indicators meggers and voltmeters to verify fault and integrity • monitor the problem and keep the supervisor informed about progress or any delays in resolving the problem 		
Core skill	<p>Language to communicate written or oral, with required clarity</p> <ul style="list-style-type: none"> • accept information and instructions from the supervisor and fellow workers and seek clarification, when required • pass the information to the persons authorized to receive it, within agreed 		4

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<p>timescales and confirm its receipt</p> <ul style="list-style-type: none"> • pass the information to others clearly, at a pace and in a manner that helps them understand it • assist others in performing tasks in a positive manner with a helpful attitude • consult and assist fellow workers to maximize effectiveness and efficiency in carrying out tasks • use appropriate communication etiquette while working • Communication etiquette: avoid abusive language; use appropriate titles and terms of respect; do not eat or chew while talking etc. • listen attentively and respond appropriately while interacting with others at work • use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism • act responsibly and demonstrate disciplined behaviours at the workplace • Disciplined behaviours: Punctuality; completing tasks within agreed timescales, ensuring quality standards; not gossiping and wasting time, honesty, etc. 		

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> • escalate grievances and problems to the appropriate authority as per the organisational procedure to resolve them and avoid conflict <p>basic understanding of socialpolitical and naturalenvironment.</p> <ul style="list-style-type: none"> • safe working practices specific to working with electrical equipment & system e.g. lock out/ tag out, PTW, etc. • techniques of using different types of fire extinguishers • different methods of extinguishing fire • rescue techniques applied during fire hazards • basic techniques of bandaging • good housekeeping in order to prevent fire hazards • correct use of fire extinguishers • perform and organise loss minimization or rescue activity during an accident in real or simulated environments • follow safe working practices while working in hazardous conditions to ensure the safety of self and others • use various methods of accident prevention in the work environment • identify and retrieve general health and 		

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	safety equipment in the workplace <ul style="list-style-type: none"> • use good housekeeping practices at all times • maintain good housekeeping in order to prevent fire hazards • 		
Responsibility	Responsibility for own work and learning <ul style="list-style-type: none"> • identify various types of circuits and their components correctly • identify accurately and obtain correct tools, equipment and instruments required for various aspects of repair and maintenance of Transmission lines and components • identify hazards in trimming trees such as limits of approach, public safety and step and touch potential • identify various types of circuits accurately • identify and acquire correct tools, equipment and instruments required for transmission line assessment and inspection • select and use test equipment such as tong testers, clip-on meter, multimeters, fault indicators meggers and voltmeters to verify fault and integrity • monitor the problem and keep the 	Power System Technician (Transmission)n should have the responsibility for own work and learning Hence it falls under Level 4	4

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<p>supervisor informed about progress or any delays in resolving the problem</p> <ul style="list-style-type: none"> • common electricity terminology and correct interpretation of the same • sizes and current carrying capacity of different types of conductors • various types of circuits and equipment • troubleshooting and repair methods for various components of transmission lines • access points such as vaults, open trenches and manholes • co-existing underground utilities • causes of conductor damage • hazards associated with carrying out power line maintenance and how they can be minimized • preparation of equipment for testing and repair activities • components of transmission lines • problems and conditions which render electrical poles or towers in need of maintenance or replacement • methods and parameters to check quality of line components against required quality standards • safety concerns and precautions for working at significant height and with high wind velocities 		

NSQF NCrF/Domain	Key requirements of the job role/outcome of the qualification	How the job role/outcomes relate to the NCrF/NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none"> • follow warning signs while working with electrical systems • follow procedures for safe working with electrical equipment • use standard safe working practices when working at heights, confined areas and trenches • ensure positive isolation of electrical equipment & system as per the given standards • identify and retrieve general health and safety equipment in the workplace • store flammable materials and machine lubricating oil safely and correctly • check that the emission and pollution control devices are working properly in line with environmental policy standards • free an affected person from electrocution safely as per the recommended procedure • administer basic first aid including CPR to the victims of heart or cardiac arrest due to electric shock, before the arrival of emergency services • act promptly and appropriately to an accident situation or medical emergency in real or simulated environments 		

Annexure: Tools and Equipment(Lab Set-Up)

List of Tools and Equipment
Batch Size:30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
47.	Screw Driver	As per requirement	15
48.	Phase Tester	As per requirement	5
49.	Combination Pliers	As per requirement	5
50.	Nose Pliers	As per requirement	5
51.	Spanner Set	As per requirement	5
52.	Adjustable Wrench	As per requirement	5
53.	Measuring Tape	As per requirement	3
54.	Hammer	As per requirement	5
55.	Center Punch	As per requirement	
56.	Crimping Tool	As per requirement	5
57.	Portable Electric Drill Machine	As per requirement	3
58.	Blow Lamp	As per requirement	5
59.	Cable Socket Punching Tool	As per requirement	3
60.	Digital Multimeter	As per requirement	2
61.	Clip On Meter Or Clamp On Tester	As per requirement	4
62.	Megger(Analogue)	As per requirement	2

63.	Earth Tester	As per requirement	2
64.	Neon(Power) Tester	As per requirement	1
65.	Discharge Rod	As per requirement	
66.	Ladder	As per requirement	1
67.	Helmet	As per requirement	5
68.	Gloves	As per requirement	5
69.	Danger Sign Board	As per requirement	1
70.	Safety Belt	As per requirement	1
71.	Safety Sign Board	As per requirement	1
72.	Safety Boot	As per requirement	1
73.	Tagging	As per requirement	3
74.	Rubber Mat	As per requirement	1
75.	Thermo Vision Camera	As per requirement	1
76.	Mask	As per requirement	1
77.	Rope	As per requirement	1
78.	Soil testing equipment	As per requirement	1
79.	rope	As per requirement	1
80.	2-way, 3-way pulleys	As per requirement	
81.	Step bolts	As per requirement	
82.	Bird guard	As per requirement	

83.	Dampers	As per requirement	
84.	Theodolite	As per requirement	
85.	Soil Resistivity testing Equipmnet	As per requirement	
86.	Survey tools: Global Positioning System (GPS), Differential Geographical Positioning System (DGPS), GIS (geographic information system) technology	As per requirement	
87.	Hi-Pot Set	As per requirement	
88.	CT/PT Ratio Tester	As per requirement	
89.	Relay Test Bench	As per requirement	2
90.	Thermo Vision Camera	As per requirement	
91.	Tan Delta test kit	As per requirement	
92.	CT analyzer	As per requirement	15

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Laptop/Computer
2. LCD
3. Projector
4. Board
5. Table
6. Chairs
7. White Board Makar

Annexure: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	Powergrid	Sh. Arun Kumar Goel	General Manager	Iffco Chowk, Sector-29, Saudamini Building, Haryana - 122001	9599192366	arunkgoel@powergrid.in	
2	DTL	Sh. Ram Kumar	DGM(T) Planning	Jhandewalan, New Delhi		-	
3	Patikari Power Pvt. Ltd.	Sh. SayedJavedMohsin	Managing Director	1st House, Bhumian Estate, NavBaharBhumian Road, Chhota Shimla - 171002	9871705638	javed@patikari.com	
4	UJVN Ltd	Vivek Atreya	General Manager (MD-O)	UJJwal, Maharani Bagh, G.M.S. Road, Dehradun		vivek.atreya@ujvnl.com	
5	Arora Switch gear pvt ltd	Sanjay Arora	Director	D- 48, Sector A- 5&6, Tronica City Loni, Ghaziabad, Uttar Pradesh 201102	9810014308		

Annexure: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates	Women	People with Disability

	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2023-2024	100	70-75%	10-15	70-75%	N/A	N/A
2024-2025	100	70-75%	10-15	70-75%	N/A	N/A
2025-2026	100	70-75%	10-15	70-75%	N/A	N/A

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
1	21-22	32	32	32*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	22-23	42	42	37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

- Certificates of participation were distributed

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

1. INDIGRID Employer Funded
2. NERPSIP Employer Funded

Content availability for previous versions of qualifications:

Participant Handbook Facilitator Guide Digital Content Qualification Handbook Any Other:

Languages in which Content is available: English & Hindi

Annexure: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available

on: <https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	<input checked="" type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge	Laptop, Computer, LCD, Projector, Board	
2	<input checked="" type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	Laptop, Computer, LCD, Projector, Board	
3	<input checked="" type="checkbox"/> Showing Practical Demonstrations to the learners	Laptop, Computer, LCD, Projector, Board	
4	<input checked="" type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	Laptop, Computer, LCD, Projector, Board	
5	<input checked="" type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice	Laptop, Computer, LCD, Projector, Board	
6	<input checked="" type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations	Laptop, Computer, LCD, Projector, Board	
7	<input checked="" type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	Laptop, Computer, LCD, Projector, Board	

Annexure: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

Compulsory NOS		Marks Allocation	
Total Marks: 300			
Assessment outcomes	Assessment Criteria for outcomes	Theory	Skills Practical
PSS/N3401 Perform repair and maintenance of power transmission lines and components	PC1.identify various types of circuits and their components correctly	1	3
	PC2.identify and acquire correct tools, equipment and instruments required for various aspects of repair, maintenance, assessment and inspection of transmission lines and components	1	2
	PC3.identify hazards in trimming trees such as limits of approach, public safety and step and touch potential access	1	2
	PC4. conduct site inspection for emergency cases following established procedures	1	2
	PC5.climb tower while following all necessary safety procedures and using PPE	0	2
	PC6.identify various types of circuits accurately	1	3

PC7.ensure the tools and equipment are well maintained, calibrated and approved for use	0	2
PC8.use transmission line tools, equipment and hardware in line with job requirements for maintenance operations	1	2
PC9.prepare and maintain the work area as per procedure or operation specification	1	3
PC10.obtain work permit to proceed with work from the appropriate personnel in accordance with the organizational procedure	1	2
PC11.switch off, isolate, discharge and earth (side) line cables	0	2
PC12.perform off-line overhead line maintenance procedure	1	3
PC13.perform off-line underground line maintenance procedure	1	2
PC14.ensure pole dismantling and re-setting procedure is carried out as per standard procedure, where required	1	2
PC15.install components on transmission lines including gang operated air brake switches for transmission lines, controlled breakers, ground switches, capacitor stations, insulator pressure washing, submarine and underground transmission cable, grid interconnections etc.	2	3

PC16.select and use test equipment such as tong testers, clip-on meter, multimeters, fault indicators meggers and voltmeters to verify fault and integrity	1	3
PC17.document switching procedures with all relevant details clearly and accurately	2	2
PC18.repair conductor by splicing, jointing, using armor rods, line guards, vibration dampers	1	2
PC19.evaluate the work carried out by the team members and ensure it is as per the standard requirements and provide any feedback in a timely, polite and supportive manner	1	2
PC20.report any issues along with the remedial actions such as repairs or replacements, and estimated repair time to the relevant authority	1	2
PC21.replace pole as per standard procedure, where required	1	2
PC22.carry out guy and anchor replacement on various structure types	1	2
PC23.carry out conductor patch and splice repair on single conductor, bundled conductor of various sizes and line voltages	1	2

PC24.replace components such as transformers, CT (Current Transformer), CVT (Capacitive Voltage Transformer), LA (Lightening Arrestor), breakers, towers, conductors, disconnects, timber or x-arm, conductors, poles, switches, elbows, terminations and insulators safely	1	3
PC25.replace other line components due to damage or unsuitability as per standard procedure, where required	1	2
PC26.replace underground cables, as per standard procedures where required	1	2
PC27.restore the system to normal operating status by using switching procedures	1	2
PC28. identify problems that are not within one's own capability or limits of authority and seek support from authorized persons for resolving the same	1	2
PC29.leave the work area in a safe and tidy condition on completion of the repair and maintenance activities	0	2
PC30.refer unresolved job-related problems to the appropriate personnel for support	2	2

	PC31.monitor the problem and keep the supervisor informed about progress or any delays in resolving the problem	1	3
		30	70
PSS/N1331 Apply basic health and safety practices for power related work	PC1.use protective clothing/equipment for specific tasks and work conditions	1	2
	PC2.identify job-site hazards and possible causes of risks/accident at the workplace	1	2
	PC3.follow procedures for safe working with electrical equipment	1	2
	PC4.follow warning signs while working with electrical systems	1	2
	PC5.use standard safe working practices when working at heights, confined areas and trenches	1	2
	PC6.test any electrical equipment and system using insulated testing devices before touching them	1	2
	PC7.ensure positive isolation of electrical equipment & system as per the given standards	1	1
	PC8.identify any abnormalities in electrical equipment or system installed alarm and/or noticing parameters from gauge/ indicator installed	1	2

PC9.follow safe working practices while working in hazardous conditions to ensure the safety of self and others	1	2
PC10.use various methods of accident prevention in the work environment	1	2
PC11.identify and retrieve general health and safety equipment in the workplace	1	2
PC12.set up and use scaffolds, elevated platforms and ladders safely	1	3
PC13.inspect scaffolds, elevated platforms and ladders for faults and rectify them	1	3
PC14.lift, carry and transport heavy objects & tools safely using correct procedures from storage to the workplace and vice versa	0	3
PC15.inspect power plant and its equipment routinely for any signs of oil, water and steam leakage	1	3
PC16.store flammable materials and machine lubricating oil safely and correctly	1	2
PC17.check that the emission and pollution control devices are working properly in line with environmental policy standards	1	2

PC18.use good housekeeping practices at all times	1	2
PC19.identify common hazard signs displayed in various areas	1	2
PC20.inform the relevant authorities about any abnormal situation/behavior of any equipment/system without delay	1	2
PC21.use various appropriate fire extinguishers for different types of fires correctly	1	2
PC22.use appropriate rescue techniques during fire hazard	1	2
PC23.maintain good housekeeping in order to prevent fire hazards	1	2
PC24.use a fire extinguisher correctly in case of fire	0	2
PC25.administer appropriate first aid to the victims for the relevant injuries	1	2
PC26.act promptly and appropriately to an accident situation or medical emergency in real or simulated environments	1	2
PC27.perform and organise loss minimization or rescue activity during an accident in real or simulated environments	1	4

	PC28.administer basic first aid including CPR to the victims of heart or cardiac arrest due to electric shock, before the arrival of emergency services	1	2
	PC29.demonstrate basic emergency procedures during emergency mock drills for better understanding of procedures applied in emergencies	1	2
	PC30.free an affected person from electrocution safely as per the recommended procedure	1	2
	PC31.move injured people and others to a safe place during emergencies	0	3
	PC32.write an incident report or dictate a report to another person, and send report to the authorized person	2	2
		30	70
PSS/N1336 Work effectively with others	PC1.accept information and instructions from the supervisor and fellow workers and seek clarification when required	3	7
	PC2.pass the information to the persons authorized to receive it within agreed timescales and confirm its receipt	4	6

PC3.pass information to others clearly, at a pace and in a manner that helps them understand it	4	6
PC4.assist others in performing tasks in a positive manner with a helpful attitude	4	8
PC5.consult and assist fellow workers to maximize effectiveness and efficiency in carrying out tasks	3	9
PC6.use appropriate communication etiquette while working	2	6
PC7.listen attentively and respond appropriately while interacting with others at work	2	6
PC8.use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism	2	6
PC9.act responsibly and demonstrate disciplined behaviours at the workplace	2	8
PC10.escalate grievances and problems to the appropriate authority as per the organisational procedure to resolve them and avoid conflict	4	8
	30	70

DGT/VSQ/N0102: Employability Skills (60 Hours)

S. No	Module Name	Assessment Marks
1.	Introduction to Employability Skills	2
2.	Constitutional values - Citizenship	2
3.	Becoming a Professional in the 21st Century	6
4.	Basic English Skills	6
5.	Career Development & Goal Setting	3
6.	Communication Skills	4
7.	Diversity & Inclusion	2
8.	Financial and Legal Literacy	5
9.	Essential Digital Skills	8
10.	Entrepreneurship	4
11.	Customer Service	3
12.	Getting ready for Apprenticeship & Jobs	5
	Total	50

Annexure: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

<1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records

2. Testing Environment:

- Check the Assessment location, date and time
- If the batch size is more than 30, then there should be 2 Assessors.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.

3. Assessment Quality Assurance levels/Framework:

- Question bank is created by the Subject Matter Experts (SME) are verified by the other SME
- Questions are mapped to the specified assessment criteria
- Assessor must be ToA certified & trainer must be ToT Certified

4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding

5. Method of verification or validation:

- Surprise visit to the assessment location

6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored

On the Job:

1. Each module (which covers the job profile of Automotive Service Assistant Technician) will be assessed separately.
2. The candidate must score 60% in each module to successfully complete the OJT.
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
 - Videos of Trainees during OJT
 -
4. Assessment of each Module will ensure that the candidate is able to:
 - Effective engagement with the customers
 - Understand the working of various tools and equipment
 ->

Annexure: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency

AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf