



TPWODL
TP WESTERN ODISHA DISTRIBUTION LIMITED
 (A Tata Power and Odisha Government Joint Venture)

FIELD QUALITY PLAN

Doc. Title	Field Quality Plan for HT Line (11KV & 33KV)			
Doc. No.	TPWODL-Quality-FQP-01			Date: 01.12.2025
Rev. No.	Prepared By: LE, Quality	Reviewed by : TL, Quality	Approved By: HOG, Quality	Other detail:

A.	Process Description: -		Pre-Execution Check							
Sl. No.	Activity		Characteristics	Type of Check	ACCEPTANCE NORMS	Reference Standard	Frequency of Check			Remarks
							BA	SSE	QA	
1	Receipts and storage for materials	1.1	Receipts at store /sites	Visual	Material make to be verified as per Approved Manufacturer List of TPWODL	MDCC/ Inspection report /Original Invoice Copy	P	W	R	P - Perform W - Witness R – Review & Verification
		1.2	Visual Inspection	Visual	Damaged during transit are stacked separately if any.	As per standard	P	W	R	
		1.3	Storage	Visual	Received materials are stored as per standard practice.	As per standard	P	W	R	
2	Availability of Material & Resources	2.1	All materials should be available as per the estimated BOQ.	Visual	There should not be any damage/ deterioration in the available materials.	Estimated BOQ	P	W	R	
		2.2	Manpower	Visual	Required Manpower shall be available.	As per standard	P	W	R	
		2.3	Tools & Tackles	Visual	Tools & Tackles for the execution of job shall be readily available under good condition.	As per standard	P	W	R	
3	Transportation	3.1	Transportation of material	Visual	Transportation of material from BA store to site in proper way to avoid any damage to the material.	As per standard	P	W	R	
B.	Process Description:-		During Execution Check							
Sl. No.	Activity		Characteristics	Type of Check	ACCEPTANCE NORMS	Reference Standard	Frequency of Check			Remarks
							BA	SSE	QA	
4	Pole Erection	4.1	Excavation of Pit	Visual	1/6 th Length of the pole.	Approved Drawing/RO/Estimate	P	W	R	
		4.2	Pole grouting/Concreting	Visual	Volume and Ratio as per RO/Estimate copy	Approved Drawing/RO/Estimate	P	W	R	
		4.3	Pole alignment.	Visual	Pole alignment shall be proper.	As per Standard	P	W	R	
		4.4	Muffing/Couping	Visual	Volume and Ratio as per RO/Estimate copy	Approved Drawing/RO/Estimate	P	W	R	
		4.5	Paint	Visual	Yellow Colour Paint(GIS Numbering & Zebra Stripping) to be done.	Approved Drawing/RO/Estimate	P	W	R	
		4.6	Danger board & Anti-climbing devices	Visual	Danger Board & Barbed Wire shall be fixed with fixing clamp	As per Standard	P	W	R	
		4.7	Coil Earthing	Visual	Coil earthing shall be done as per drawing and connection to be done between spiral wire and pole earth wire.	Approved Drawing/RO/Estimate	P	W	R	

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5	HT Stay Set	5.1	Excavation of Pit	Visual	As per Approved stay construction Drawing	As per Approved Drawing	P	W	R	
		5.2	Grouting of Anchor plate and Anchored with earth Filling	Visual	As per Approved stay construction Drawing	As per Approved Drawing	P	W	R	
		5.3	Erection of Guy insulation	Visual	As per Approved stay construction Drawing	As per Approved Drawing	P	W	R	
		5.4	Stay Wire	Visual	1. Stay wire size to be as per RO/Estimate. 2. Proper fixing and tightening to be done for stay wire.	As per Approved Drawing	P	W	R	
		5.5	Fixing of Complete Stay set	Visual	Complete Stay set includes: 1. Turn buckle assembly 2. Stay Rod & Stay Plate 3. Stay insulator 4. Stay Wire 5. Stay clamps with nuts & bolts	As per Approved Drawing	P	W	R	
6	DP/4 Pole/Cut-Point Fittings/H-Pole	6.1	Isolator/AB Switch/HG Fuse	Visual	1. Check the level and alignment 2. All connection are secured and tight.	As per approved drawing	P	W	R	
		6.2	Fixing of structural Items like Channel Angle, PG, Wedge connector & Paddle clamps etc.	Visual	1. Galvanizing & finishing to be checked. 2. All bonding materials/accessories such as welded plates, bolts, nuts/washers, clamps and all other grounding materials are to be corrosion resistance.	As per drawing	P	W	R	
		6.3	Fixing of LA	Visual	1. Visual verification of polymer housing to be checked so that there will no damages in the LA.	As per approved drawing	P	W	R	
		6.4	Check the clearance after the stringing	Visual	Ground clearance should be as CEA guideline.	CEA Guidelines	P	W	R	
		6.5	Droppings/Sagging	Visual	Sagging to be verified for each span should be with in limitation as per CEA guidelines.	As per CEA guidelines	P	W	R	
		6.6	Jointing	Visual	1. Joints should be compression type. 2. All joints and splices should be 15 mtrs. Away from pole. 3. There shall not be any Mid-Span joint over Rly / River / Main Road Crossing.	As per Standard.	P	W	R	
		6.7	Jumpering	Visual	Jumpering should be done by 2 no of PG clamp and parabolic shape to maintain maximum clearance.	As per Standard	P	W	R	
		6.8	Bird Guard, Anti-climbing devices & Danger Board	Visual	Barbed wire to be fixed at each pole with clamp. Danger board to be fixed at each pole with back clamp.	As per Approved drawing	P	W	R	

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7	Conductor/ Medium Voltage Covered Conductor.	7.1	Handling of the conductor.	Visual	Conductors should be care- fully handled to avoid any damage. Cable Surface shall be free from fault, Flaws etc.	As per Standard	P	W	R	
		7.2	Check the clearance & Sagging after the stringing	Visual	1. Clearence should be as CEA guideline. 2. The tensioning and sagging shall be done in accordance with the approved stringing charts or sag tables.	CEA Guidelines	P	W	R	
		7.3	Stringing of Conductor	Visual	1. Proper SAG to be maintained 2. Cable joint should be done at Pole by IPC connector.	CEA Guidelines	P	W	R	
		7.4	Jointing with IPC or Wedge and Non-metalic ties	Visual	1. Joints should be compression type. 2. All joints and splices should be 30 mtrs. Away from pole. 3. Jointing to be done as per standard.	As per Standard	P	W	R	
		7.5	Jumpering	Visual	Jumpering should be done by 2 no of PG clamp and parabolic shape to maintain maximum clearance. Jumpering may be done with Wedge Connector.	As per Standard/ As per Approved drawing.	P	W	R	
8	Fitting & Accessories	8.1	Fixing of structural Items like V- Cross Arm, Pg Clamps, Wedge Connectors & accessories.	Visual	After the erection of supports and providing guys, the cross-arms are to be mounted on the support with necessary connectors, clamps, bolts and nuts.	As per RO/Estimate/Drawing.	P	W	R	
		8.2	Insulator hoisting and Bindings (Pin and disc)	Visual	1. It shall be verified that there is no crack or any other damage to insulators. 2. The “distribution tie “ meant for pin insulator binding should be of no. 6 size and that of soft annealed wire having a minimum length of 3 mtr. 3. Guarding / pilot insulators at the sharp angle points has to be provided.	As per Approved drawing	P	W	R	
		8.3	Hardware fitting	Visual	1. It shall be checked that there is no damage to any component of hardware fittings. 2. It shall be verified that all nuts and bolts are tightened properly. 3. It shall be made sure that all the necessary security pins (split pins) are fixed properly.	As per standard.	P	W	R	
		8.4	Guarding	Visual	Guarding shall be provided as per requirement.	As per RO/Estimate/Drawing.	P	W	R	
		8.5	Anti-climbing devices & Danger Board	Visual	Barbed wire and Danger board to be fixed at each pole with back clamp.	As per Approved drawing	P	W	R	

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9	Earthing	9.1	Earthing for All metallic items	Visual	All Metallic items like AB Switch, Isolator, AB Switch handle, Isolator operating box etc., shall be connected with Earthing flat as per RO/Estimate.	As per TPWODL specification/CEA guidelines.	P	W	R	
		9.2	Separate Earthing for LA	Visual	The earthing lead for lightning arrestor shall not pass through any iron or steel pipe. It shall be taken as directly as possible from the lightning arrestor "without touching any metal part to a separate-vertical ground electrode or junction of the earth mat already provided for the sub- station of voltage exceeding 650 V subject to the avoidance of bends wherever practicable.	As per TPWODL specification/CEA guidelines.	P	W	R	
		9.3	Earthing for WPB/DP/4 Pole/ H-pole	Visual	1. Coil earthing to be done for all WPB pole as per RO/ Estimate 2. Flat earthing to be done for WPB & H-pole and equipments and welding for the same to be done properly. 3. All the earthing flats to be connected with pipe earthing for Every DP & 4 Pole as per RO/Estimate.	As per RO/Estimate/Drawing.	P	W	R	
		9.4	Pipe Earthing	Visual	Pipe earthing to be done for Every DP, 4 Pole as per RO/Estimate	As per RO/Estimate	P	W	R	
		9.5	Guarding Earthing	Visual	Every guard wire shall- be connected with earth at each point at which its electrical continuity is broken and shall also be connected with the rails at intervals of not more than five spans.	As per CEA guidelines	P	W	R	
		9.6	Earth Pit chamber	Visual	Earthpit chambers to be Constructed/provided as per Drawing.	As per RO/Estimate/Drawing.	P	W	R	

Abbreviations:

BA: Business Associate

SSE: Site Supervising Engineer
(Project/SDO/Section Manager/Div Estimator)

QA: Quality Assurance Team