
	Torrent Power Ltd. - Distribution	Doc. No.: TPDF02-DIS01-OCP-017
	OCP - LOADING, UNLOADING & TRANSPORTING OF MATERIAL	Rev. No. /Dt: 01 / 08.03.2022

DOCUMENT CONTROL


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Amendment Details:

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1	1	0	01.12.2021	First Issue	Shilajit Ray Satish Shah	Snehal Shah Abdulrashid Shaikh
2	1	1	08.03.2022	First Revision (Clause -12.4)	Shilajit Ray Satish Shah	Snehal Shah Abdulrashid Shaikh

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1. PURPOSE

- 1.1. Loading, unloading & transporting of material from Stores to site & vice-versa

2. SCOPE OF DOCUMENT

- 2.1. The scope of this document is to define a structured activity-level flow for Loading, unloading, transporting and storage of material.
- 2.2. The process document aims to define the guidelines to ensure the process effectiveness as required by the Integrated Management System.

3. FIELD OF APPLICATION

- 3.1. This procedure is used for loading, unloading & transporting of material from Stores to site & vice-versa in TPL-D's Franchisee areas of Bhiwandi & SMK.

4. FREQUENCY

- 4.1. As and when required

5. AUTHORITIES AND RESPONSIBILITY

- 5.1. The Head of Department is responsible for Execution & implementation of this procedure for effectiveness

6. REFERENCES

- 6.1. Road Safety Manual & RTO guidelines

7. SPECIFIC COMPETENCY REQUIREMENTS


- 7.1. Technician/GET/Jr.Exe/Exe/AM/M should have Knowledge of
 - (1) Safe working practices and use of PPE
- 7.2. Technician/GET/Jr.Exe/Exe/AM/M shall have authority for electrical isolation and issue of PTW

8. INTERFACE WITH OTHER DEPARTMENTS/SECTIONS, IF ANY

- 8.1. Store department for material issuance & receipt

9. TOOLS AND TACKLES

- 9.1. Cotton Belts / nylon ropes and D-shackle for lifting as per equipment / material to be transported.
- 9.2. Cotton ropes.
- 9.3. Tools kit
- 9.4. FRP Ladder as per site requirement.
- 9.5. Hydra/Crane if required
- 9.6. Transportation Vehicle
- 9.7. Barricading Cone

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- 9.8. Barricading Tape
- 9.9. MS checker plates/channel & wooden slippers, if required.
- 9.10. Jack / Chain pulley block as per site requirement.
- 9.11. Crowbar as per site requirement.

10. PERSONAL PROTECTIVE EQUIPMENTS / SAFETY TOOLS

Following PPEs shall be used to carry out work at site.

- 10.1. Safety Shoes/ Gum Boot.
- 10.2. Safety helmets.
- 10.3. Reflective jacket
- 10.4. Full body harness if required


11. SIGNIFICANT RISK PARAMETERS

- 11.1. Quality Management System: Low
- 11.2. Impact on Environment: High
- 11.3. Health and Safety Risk: High
- 11.4. Energy Management: Low
- 11.5. Asset Management Risk: High

12. PROCEDURE

12.1. JOB PREPARATION

- (1) Study the job requirement i.e.
 - (a) BOM to be required for the job.
 - (b) Store location for material loading and unloading.
 - (c) Site location for material loading and unloading
 - (d) Site location feasibility for loading, transporting etc.
 - (e) Type of transporting vehicle, crane, hydra etc. required for loading unloading.
- (2) Checking the availability of material to be transported
- (3) Type of tools and tackles required for loading, transporting & unloading the material / equipment.
- (4) Check documents of Lifting/loading vehicle/tools (i.e., Driving licence, PUC, RC book, insurance, Fitness certificate, Form 11 etc.), a copy of which shall be available in the vehicle. In case valid Form 11 is not available & job is urgent, use hook having SWL as 5T for handling loads of 2T and below under close supervision.
- (5) Ensure that the contractor / technician crew has necessary manpower for loading, unloading, handling & transportation of the material & equipment.

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- (6) Issuing of material, returning of material, gate pass etc. as per the standard process.

12.2. PRECAUTIONS


- (1) Barricade the working area by barricading tape and appropriate sign board shall be displayed near the barricaded area.
- (2) Working area should be free from slippery material to prevent slipping
- (3) Aware all persons for nearby live equipments and maintain safe clearance and safety while working.
- (4) Use all required PPEs during execution of job.
- (5) Ensure site supervision by TPL officer during odd hours work.
- (6) Avoid use of hydra in sloping road.
- (7) Use wheel choke & apply hand brake to prevent hydra from slipping in sloping road.

12.3. ISOLATION (IF REQUIRED)


- (1) For isolation equipment from the system follows the procedure as per OCP No: TPDF02-DIS01-OCP-005 for Distribution Network Isolation and Normalisation as per the switching requirement.

12.4. WORK PROCEDURE

- (1) Safe practices for loading/unloading any equipment
 - (a) The workmen shall be aware of safe methods of material handling while loading, unloading & transporting.
 - (b) The workmen shall avoid lifting with jerk or too quickly.
 - (c) The workmen should avoid lifting while in awkward position.
 - (d) The workmen should avoid handling loads which are too heavy or which obstruct the vision.
 - (e) The workmen handling electric hoist shall have enough knowledge of how to operate the hydra/crane.
 - (f) Raising or lowering of heavy objects by two or more workmen shall be governed by a well-understood code signals to ensure unity of action
 - (g) Only light loads should be lifted with various sizes of Manila or cotton ropes. These ropes should not be used over sharp metal edges.
 - (h) Use suitable hoisting apparatus for hauling and carriage of loads above 500 kg.
 - (i) All slings should be provided with rings, shackles, links, hooks or eyes of a proper size so that they could be safely suspended.
 - (j) Cotton belts are preferable for hoisting and lifting purposes.
 - (k) The supervisor should know proper use of knots, ties, safe methods of hooking.

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- (l) When material is being loaded, workmen must not stand between that object and the Loading Vehicle. Nobody shall stand or pass under a suspended load.
- (m) Hoisting equipment operator shall only accept signals from the concerned supervisor who is handling the job of loading /unloading of equipment.
- (n) Special, care shall be taken by the operator to avoid swinging of suspended load.
- (o) The operator shall not leave the hoisting apparatus with load suspended.
- (p) During erection of any heavy equipment like Transformer, CSS, Switchgear, Fsp etc., Tag lines should be used to control suspended load's rotation, prevent load from swinging uncontrollably and secure load's landing.
- (q) If required use MS checker plates & wooden slippers for unloading of heavy equipment from loading vehicle or tractor trolley
- (r) While lifting switch gear for placing pipe under it, except for the people involved in lifting equipment, no other person would stand in the vicinity of the equipment.
- (s) Unloading of poles
 - I. Workmen shall not stand on the unloading side while unloading of poles.
 - II. Pole shall be unloaded from trucks and trailers by the following methods as circumstances and traffic conditions may permit
 - i. By lowering the poles with rope only where conditions require this method
 - ii. By shaking poles from the end of a load
 - iii. By means of a boom, mobile type crane or skids
 - III. Dumping the entire load from a trailer shall be prohibited
 - IV. When rolling a pole from a load, a supporting rope shall be used to control its descent. Dropping of poles over the side of a truck or a trailer shall be prohibited
 - V. When unloading poles which have been secured with the tie wires or straps, only the binding for the layer being unloaded, shall be removed.
- (t) Transport of conductors
 - I. The conductor drum is to be loaded in a truck, trolley or hand cart by means of iron tripod stand & chain pulley block.
 - II. The conductor drum should be rolled very slowly while being shifted to the tripod stand/Jack late so that wooden planks of the drum are not damaged.
 - III. In some of the cases, a suitable sloping trench is available in store yard, where truck can be backed into, so that truck platform comes in level

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with ground level beyond the trench & then drum can be rolled over the ground on to the truck without the need of any tripod etc.

- IV. The conductor drums or the coils are then transported to the work site carefully. The vehicle should be slowly down on curves, as otherwise the conductor drums may fall sideways, damaging the conductors.
- V. The conductor of string is to be carried out from one tension point to other and hence the conductor drums or the coils are unloaded near the tension locations with due care so that conductors are not damaged

(u) Unloading of OH line accessories


- I. Unload poles and their required fittings near to their respective locations both for main line as well as strut or flaying stay poles.
- II. Unload drum/coils of conductor at suitable substation location or near to the locations from where stringing sagging of the line is to be carried out.
- III. Unload coils of GI wire for guarding/cradle guarding at suitable substation location or near to the locations from where stringing sagging of guard wire/cradle guarding is to be carried out.

(2) Safe practices while transporting materials

- (a) It should be tied with vehicle by means of cotton/plastic rope
- (b) No workman shall stand between the equipment and the sides of the transport vehicles during transporting.
- (c) While making turnings or going up or down inclines with loaded vehicles, due care is to be taken during driving and over speeding is to be avoided.
- (d) During the course of transport of any heavy equipment like transformers, breaker etc. they shall be rigidly secured to the transport vehicle to prevent skidding as well as any damage due to jerk during transportation.
- (e) If poles are to be transported on a flat type of trailer, truck etc., they shall be stacked neatly & fastened together tightly.
- (f) Poles must be securely held on truck/ trolley to assure that the binders will not be released in rough going.
- (g) Workmen shall not travel on trailer loaded with poles.
- (h) Danger flag (Red Colour) shall be fixed on at either end of poles. The red flag/ light must be visible in any direction.

(3) Safe practices for storage of material and equipment.

- (a) The storage of material in planned basis.
- (b) PSC/ Rail/Joist/H-beam poles are to be stacked on wooded slippers above ground wherever possible. The ends of which shall not be project in to walkway as well as over hanged on the support.

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- (c) When the poles are stacked temporarily near a road, they should be placed as possible to the edge of the road. They should not be stored at a point in the road where there are short turns.
- (d) Poles stored on the road/highways should not have cross arms attached
- (e) Area for storing of material on open site should be properly barricaded.

12.5. RESTORATION (IF REQUIRED)

- (1) If isolation of the system is taken, then take clearance from concerned person and Cancel "Permit to work"
- (2) For normalisation of above switching follow the procedure as per OCP No: TPDF02-DIS01-OCP-005 for Distribution Network Isolation and Normalisation.

12.6. WORK CHECKLIST

- (1) Not Applicable

12.7. UPDATION

- (1) Not Applicable


13. IMPACT ANALYSIS OF SIGNIFICANT RISKS

13.1. QUALITY MANAGEMENT SYSTEM

- (1) Not applicable

13.2. HEALTH AND SAFETY

- (1) Details of Health and Safety Hazard involved
 - (a) working/travelling in extreme weather condition
 - (b) Animal/ insect bite
 - (c) Vehicles topple
 - (d) Use of faulty Tools
 - (e) Negligence of use of safety PPEs / Non usage of PPEs/ Use of faulty PPEs
 - (f) Use of uncertified or improper lifting tools
 - (g) Swinging of objects while Loading / Unloading with handling equipment
 - (h) Fall of personnel due to wrong methods of lifting material/wrong operation
 - (i) Carrying overload
 - (j) Failure of loading / unloading equipment
 - (k) Working under suspended load
 - (l) Slips, trips and Falls of Persons
 - (m) Fall of person from Height

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- (n) Consumer aggression
- (o) Collide with another vehicle
- (p) Fall of external object
- (q) Poor illumination
- (2) Health and Safety Precautions required
 - (a) Ensure use of proper PPEs
 - (b) Ensure use of Barricading Tape and caution board
 - (c) Ensure physical condition of Loading and unloading equipment/accessories
 - (d) Ensure load testing certificate by vendor
 - (e) Ensure proper isolation if required

13.3. ENVIRONMENT


- (1) Details of Environmental impact
 - (a) Resource depletion
 - (b) Noise pollution
 - (c) Air Pollution
- (2) Precautions to minimize Environmental impact
 - (a) Ensure that all persons working at site are aware about the significant environmental impacts
 - (b) Ensure that all type of generated waste including hazardous waste should be collected and submitted to stores as per OCP no: TPDF02-STO01-OCP-006.

13.4. ENERGY MANAGEMENT

- (1) Details of energy use involved
 - (a) Fuel consumption in transportation/ material movement
- (2) Precautions to minimise energy use
 - (a) Ensure Optimum Usage & Turn off the engine when not in use

13.5. ASSET MANAGEMENT

- (1) Details of Asset related risks
 - (a) Loss of Equipments
 - (b) Frequent Small Duration Forced Outages
 - (c) Sustained Forced Outage requiring Major Repair
 - (d) Frequent Planned Outages
 - (e) Overloading of equipment

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- (f) Mishandling by handling equipment
- (g) Derating
- (h) Ageing/ Corrosion/ Rusting
- (2) Mitigation plan for asset related risks
 - (a) Work as per OCP
 - (b) Training to workforce

14. LIST OF ATTACHMENTS

Sr	Document /Record Description	Reference No.
1)	PPEs Tools Check List	TPDF02-DIS01-CHK-001-F06
2)	Permit To Work	TPDF02-SAQ02-OCP-005-F02

***** End of Procedure *****