



SECTION – 2.32

Works related to installation and commissioning of the proposed BESS at B-Plot, including its integration with the associated transformer and power evacuation through the existing 132 kV switchyard

1.0.0 INTRODUCTION

The broad scope outlined herein is conceptual in nature and is intended to provide an overall understanding of the work involved.

Bidder shall review all available data, site conditions, and the existing system configuration, and accordingly carry out the required work.

All activities shall be aligned with best industry practices and shall ensure seamless integration of the BESS plant with the existing step-up transformer and switchyard.

2.0.0 SCOPE OF WORK

2.1.1 The scope of work includes dismantling, removal, and disposal activities, along with civil restoration, minor repairs, and painting works. These tasks are associated with the revival of Station-2, including the 132 kV Switchyard, Transformer Yard, B-Plot (proposed BESS area), and other associated areas.

3.0.0 DISMANTLING AND REMOVAL WORKS

3.1.0 All equipment, panels, marshalling boxes, junction boxes, LT motors, and associated accessories shall be carefully dismantled without causing damage to adjacent installations intended to be retained.

3.2.0 All LT power, control and communication cables shall be removed completely on an end-to-end basis, including terminations, glands, lugs, cable trays (where applicable), and supports.

3.3.0 Foundation of equipment's / panels shall be removed up to a minimum depth of 500 mm below finished ground level or as per project requirement.

3.4.0 Removed material shall be handed to the owner at designated area with the GIPCL Baroda Plant complex.

3.5.0 Removed debris and waste of all types shall be disposed of in accordance with prevailing environmental rules and regulations.

3.6.0 Removed scrap material shall be handed over to owner at designated location / area within GIPCL premises.

4.0.0 SPECIFIC AREA-WISE REQUIREMENTS

4.1.0 Station-2 Switchyard

- i. Removal of LT ACDBs (2 Nos.), marshaling panels (5 Nos.), and junction boxes of instrument transformers (7 Nos). The quantities indicated are approximate and for guidance only.
- ii. Removal of all LT Power, Control and communication cables of entire switchyard.
- iii. Dismantling of all luminaires, lighting systems and receptacles.



- iv. The scope of the bidder shall include dismantling of designated 132 kV switchyard equipment (CTs, CVTs, wave traps, etc.) as per the SLD and tender documents, and supply, installation, and commissioning of required dropper conductors and associated connectors.

4.2.0 Illumination Towers (Located near to Switchyard South-West Corner)

- i. Removal of all luminaires, fixtures, and cabling.
- ii. Tower may be used for illumination of the switchyard if found suitable.

4.3.0 Transformer Yard (50/70 MVA, 132/11 kV)

- i. Removal of all LT control and power cabling associated with:
 - Cooling Control Cabinet
 - OLTC drive mechanism
 - All transformer accessories.
- ii. Removal Cooling Control Cabinet

4.4.0 B-Plot

- i. Removal of all LT motors (around 8 to 10) along with its cabling.
- ii. Removal of all LT power, control and communication cabling of entire B-Plot area.
- iii. Dismantling and removal of borewell panels along with the double-pole structure used for the borewell lifting arrangement.

4.5.0 Project related other areas

- i. Dismantling and removal of existing underground and or above-ground fire hydrant lines in the areas of the transformer yard, switchyard, cable corridors, and other areas as required for execution of the project.
- ii. The hydrant lines shall be dismantled along with all associated accessories (e.g., valves, detection lines, etc.).
- iii. The removed lines shall be properly blanked/isolated to ensure continuity and integrity of the remaining system.

5.0.0 CIVIL WORKS AND RESTORATION

5.1.1 All dismantled locations shall be restored to original condition and finished to match surrounding or as specified.

5.1.2 Removal of existing civil structures, pond, dyke walls, and foundations that are either not in use and/or not suitable for the proposed BESS plant in the B-Plot. The scope of work shall include all necessary dismantling, demolition, debris removal, and disposal activities, along with site clearance as required.

5.1.3 Minor repairs to switchyard and transformer yard gates shall include:

- Alignment correction
- Replacement of damaged members (if required).
- Proper functioning of hinges and locking arrangements

6.0.0 FENCING AND GATES (B-PLOT AREA)



6.1.0 New fencing shall be provided along the East boundary (Cooling Tower side) as per approved drawings.

6.2.0 Fencing shall include but not limited to:

- Structural supports
- chain link mesh
- Anti-corrosive treatment

6.3.0 Two numbers of main gates shall be installed complete with:

- Structural frames
- Locking arrangements
- Painting and finishing

6.4.0 Refer tender document for detail specifications.

7.0.0 FENCING TRANSFORMER YARD

7.1.0 New fencing shall be provided along the West boundary (Towards 160 MVA transformer side) as per approved drawings.

8.0.0 PAINTING WORKS

8.1.0 For detail specification of painting, cleaning, scraping, and removal of rust, dust, oil, and old paint, paint shade and finishing, refer detail technical specification's given in the tender document.

8.2.0 Areas Covered:

- Switchyard fencing.
- Switchyard Main Entry Gates (4 Nos.)
- Illumination Tower (1 No) located near switchyard.
- Transformer yard fencing and gates.
- Illumination towers (2 Nos Located at / near B-Plot)
- B-Plot existing boundary walls and barbed wire and its supports.

9.0.0 CLEANING AND SITE CLEARANCE

9.1.0 Thorough cleaning of all work areas including B-Plot shall be carried out.

9.2.0 Final site shall be clean and levelled condition suitable for further development.

9.3.0 Cutting and removal of wild vegetation, grass, bushes, etc., shall be carried out and the same shall be disposed of appropriately.

10.0.0 STORM WATER DRAIN AND ROAD WORK

10.1.0 Storm water drain (Masonry) with proper slope towards discharge pit or connected with existing storm water drain shall be constructed.

10.2.0 Bituminous road work with required width in B plot with base preparation shall be constructed as per tender specifications.