

TRENCH TWO
COMPONENT DETAILS OF ADB
FUNDED ASSAM POWER SECTOR ENHANCEMENT
INVESTMENT PROGRAM
(LOAN NO 2677 - IND)

PACKAGE A

CONSTRUCTION OF 220/132/33 KV GRID SUBSTATIONS.

- a. 2X100 MVA 220/132 KV SONABIL GRID SUBSTATION.
- b. 2X100 MVA 220/132 KV & 2X40 MVA 132/33 KV SONAPUR GRID SUBSTATION

PACKAGE B.

CONSTRUCTION OF 132/33 KV GRID SUBSTATIONS.

- a. 2X40 MVA 132/33 KV KAMAKHYA GRID SUBSTATION (GIS).
- b. 2X25 MVA 132/33 KV JORHAT (WEST) GRID SUBSTATION.
- c. 2X25 MVA 132/33 KV BORDUBI GRID SUBSTATION.
- d. 2X16 MVA 132/33 KV MATIA GRID SUBSTATION.
- e. 2X25 MVA 132/33 KV BILASIPARA GRID SUBSTATION.
- f. 2X16 MVA 132/33 KV HAILAKANDI GRID SUBSTATION.

PACKAGE C

CONSTRUCTION OF 220 KV DOUBLE TRANSMISSION LINE.

- a. 220 KV DOUBLE CIRCUIT LILO AT SONAPUR FROM 220 KV DOUBLE CIRCUIT SAMAGURI – SARUSAJAI LINE
– LENGTH 20 KM APPROX.
- b. 220 KV DOUBLE CIRCUIT LILO AT SONABIL FROM 220 KV DOUBLE CIRCUITSAMAGURI – BALIPARA LINE AT SONABIL.
– LENGTH 1.5 KM APPROX.
- c. 220 KV DOUBLE CIRCUIT MARANI – NAMRUP TRANSMISSION LINE
– LENGTH 142 KM APPROX.

PACKAGE D

CONSTRUCTION OF 132 KV DOUBLE TRANSMISSION LINE.

- a. 132 KV DOUBLE CIRCUIT LILO AT SONABIL FROM 132 KV DOUBLE CIRCUIT DEPOTA – GOHPUR LINE
– LENGTH 1.5 KM APPROX.
- b. 132 KV DOUBLE CIRCUIT LILO AT SONAPUR FROM 132 KV DOUBLE CIRCUIT CHANDRAPUR – NARANGI – DISPUR - KAHILIPARA LINE AT SONABIL.
– LENGTH 25 KM APPROX.
- c. 132 KV SINGLE CIRCUIT LILO AT JORHAT (WEST) FROM 132 KV SINGLE CIRCUIT GARMUR - BOKAKHAT TRANSMISSION LINE.
– LENGTH 5 KM APPROX.
- d. 132 KV SINGLE CIRCUIT LILO AT BORDUBI FROM 132 KV SINGLE CIRCUIT NAMRUP – TINSUKIA TRANSMISSION LINE.
- LENGTH 6 KM APPROX.
- e. 132 KV SINGLE CIRCUIT LILO AT HAILAKANDI FROM 132 KV PANCHGRAM – DULLAVCHERRA TRANSMISSION LINE.
- LENGTH 1.5 KM APPROX.
- f. 132 KV SINGLE CIRCUIT ON DOUBLE CIRCUIT TOWER AGIA – MATIA TRANSMISSION LINE.
- LENGTH 24 KM APPROX
- g. STRINGING OF 2ND CIRCUIT OF EXISTING 132 KV SAMAGURI – LANKA TRANSMISSION LINE.
- LENGTH 61 KM APPROX.

PACKAGE E

PART A

- a. REPLACEMENT OF 2X10 MVA TRANSFORMERS BY 2X40 MVA TRANSFORMERS AT 132/33 KAHILIPARA GRID SUBSTATION.
- b. REPLACEMENT OF 2X16 MVA TRANSFORMERS BY 2X25 MVA TRANSFORMERS AT 132/33 KV JAGIROAD GRID SUBSTATION.
- c. REPLACEMENT OF 2X10 MVA TRANSFORMERS BY 2X25 MVA TRANSFORMERS AT 132/33 KV GOHPUR GRID SUBSTATION.
- d. REPLACEMENT OF 2X10 MVA TRANSFORMERS BY 2X25 MVA TRANSFORMERS AT 132/33 KV NORTH LAKHIMPUR GRID SUBSTATION.

- e. REPLACEMENT OF 2X16 MVA TRANSFORMERS BY 2X25 MVA TRANSFORMERS AT 132/33 KV LANKA GRID SUBSTATION.
- f. REPLACEMENT OF 2X10 MVA TRANSFORMERS BY 2X25 MVA TRANSFORMERS AT 132/33 KV MARGHERITA GRID SUBSTATION.
- g. ADDITION OF 2X100 MVA 220/132 KV AUTO TRANSFORMERS AND 2X40 MVA 132/33 KV TRANSFORMERS AT 220/132/33 KV TINSUKIA GRID SUBSTATION.
- h. ADDITION OF 1X100 MVA 220/132 KV AUTO TRANSFORMERS AT 220/132/33 KV BOKO GRID SUBSTATION.
- i. ADDITION OF 2X25 MVA 132/33 KV TRANSFORMERS AT 220/132/33 KV TINSUKIA GRID SUBSTATION.

PART B

- a. EXTENSION OF 2 (TWO) NUMBERS OF 220 KV LINE BAYS AT 220/132/33 KV NAMRUP SUBSTATION.
- b. EXTENSION OF 2 (TWO) NUMBERS OF 220 KV LINE BAYS AT 220/132/33 KV MARIANI GRID SUBSTATION.
- c. EXTENSION OF 1 (ONE) NUMBER OF 132 KV LINE BAY AT 132/33 KV LANKA GRID SUBSTATION.
- d. EXTENSION OF 1 (ONE) NUMBERS OF 132 KV LINE BAY AT 220/132/33 KV AGIA GRID SUBSTATION.

PART C

- a. INSTALLATION OF 2X5 MVAR 33 KV BUS CAPACITOR AT 132/33 KV PAILAPOOL GRID SUBSTATION.
- b. INSTALLATION OF 2X5 MVAR 33 KV BUS CAPACITOR AT 132/33 KV GOHPUR GRID SUBSTATION.
- c. INSTALLATION OF 2X10 MVAR 33 KV BUS CAPACITOR AT 132/33 KV GARMUR GRID SUBSTATION.
- d. INSTALLATION OF 2X10 MVAR 33 KV BUS CAPACITOR AT 132/33 KV SISHUGRAM GRID SUBSTATION.
- e. INSTALLATION OF 2X5 MVAR 33 KV BUS CAPACITOR AT 132/33 KV NAZIRA GRID SUBSTATION.
- f. INSTALLATION OF 2X5 MVAR 33 KV BUS CAPACITOR AT 132/33 KV PANCHGRAM GRID SUBSTATION.

- g. INSTALLATION OF 2X5 MVAR 33 KV BUS CAPACITOR AT 132/33 KV CHANDRAPUR GRID SUBSTATION.**

PART D

- a. REPLACEMENT OF OLD AND OBSOLUTE CIRCUIT BREAKERS**
- i. 220 KV SF6 CIRCUIT BREAKERS – 12 NUMBERS.**
 - ii. 132 KV SF6 CIRCUIT BREAKERS – 61 NUMBERS.**
 - iii. 33 KV SF6 CIRCUIT BREAKERS – 61 NUMBERS.**
- b. REPLACEMENT OF OLD AND OBSOLUTE CURRENT TRANSFORMERS.**
- i. 220 KV CURRENT TRANSFORMERS – 6 NUMBERS.**
 - ii. 132 KV CURRENT TRANSFORMERS – 69 NUMBERS.**
 - iii. 33 KV CURRENT TRANSFORMERS – 42 NUMBERS.**
- c. REPLACEMENT OF OLD AND OBSOLUTE POTENTIAL TRANSFORMERS.**
- i. 132 KV POTENTIAL TRANSFORMERS – 9 NUMBERS.**
 - ii. 33 KV CURRENT TRANSFORMERS – 9 NUMBERS.**
- d. REPLACEMENT OF OLD AND OBSOLUTE ISOLATORS.**
- i. 220 KV ISOLATORS – 6 NUMBERS.**
 - ii. 132 KV ISOLATORS – 26 NUMBERS.**
- e. REPLACEMENT OF OLD AND OBSOLUTE RELAY & CONTROL PANELS.**
- i. 220 KV LINE PANELS – 2 NUMBERS.**
 - ii. 132 KV LINE PANELS – 15 NUMBERS.**
 - iii. 132 KV TRANSFORMERS PANELS – 2 NUMBERS**
 - iv. 132 KV BUS COUPLER PANELS – 8 NUMBERS**
- f. REPLACEMENT OF OLD AND OBSOLUTE RELAYS BY NUMERICAL RELAYS.**
- i. DISTANCE RELAYS – 3 NUMBERS.**
 - ii. TRANSFORMER DIFFERENTIAL RELAYS – 4 NUMBERS.**
- g. REPLACEMENT OF OLD BATTERY BANK BY NEW BATTERY BANKS.**
- i. 220 VOLTS BATTERY BANK – 1 SET.**
 - ii. 110 VOLTS BATTERY BANK – 5 SETS.**