	PURCHASE SPECIFICATION	Doc. No:-	REG20190497
		Part	03/05
		Rev no	00
Rudrapur	GROUP : REG (RENEWABLE ENERGY GROUP)		

SCOPE OF WORK & TECHNICAL SPECIFICATIONS

1. Cable Laying (4 core AL armoured):

Sl.No	Cable type	Size (sqmm)	Length (meter)
1	4 core AL armoured cable	185	175
2	4 core AL armoured cable	300	210

Bidder to note that cable laying shall be done from ACCB Location (roof) to Basement (vertical run) than to individual Energy Sub Station (ESS).

All accessories for cable laying, including clamps, hooks, ties, double compression cable glands, cable lugs, SS304 bolts/ nuts/ plain and spring washers, anchoring arrangement shall be in vendor scope of supply. Cutting the wall/surface and making good the same as required is also included in the scope of the contractor. Contractor has to arrange for cutting of the cables and jointing by using suitable cable jointing kits. All arrangement, tools & tackles in this regard will be in Contractor's scope. This include the minor shifting of cable drum (with in NBCC premises).

Cable shall be lied on existing cable tray. Bidder to fix the cable by help of U-hooks/plates using SS fasteners.

Bidder is requested to visit the site to understand the actual site conditions.

Note: -


- Office block having 04 buildings, each building having 4-10 floor building.
- Two cable vault is available in each building; space is available at cable vault.
- Cable shall be laid on existing cable tray. Where cable tray is not available, bidder shall finalize the cable route in consultation with BHEL/NBCC. On the basis of final route BHEL will get cable tray erected.
- Bidder may note that this work also includes to make wall opening for passing the cable at basement-1 or 2 (as required). At some places minor civil work may be required for cable laying. Also note that fall-sealing work has been completed at site. Fall-sealing may be required to remove for cable laying. Bidder shall be responsible for disassembly or assemble of fall-sealing.
- Please note that all damaged work shall be repair work shall be in bidder scope.
- Bidder to take utmost precaution while working as these blocks are already occupied by VIPs. Bidder is also requested to work in off-timing (expect office timing) to avoid disturbance to office employees.

I. Termination of 4C AC cables at ACCB and ESS end

- For AC side connection at string inverters and ACCB/ACDB boxes, cable as per SLD, 1.1kV, Copper, XLPE, armored as per IS: 7098 part-1, together with nickel plated brass double compression cable glands, cable lugs, SS304 bolts/ nuts/ plain and spring washers shall be in vendor scope of supply. Termination shall be carried out using appropriate tools and torque setting as per BHEL/CUSTOMER approval.

II. Identification marking of cables using cable tags

- Cable tags shall be provided at both ends of the cables: at SPV modules, string Inverters, data loggers, ACCB boxes, LTPDB panels and so on.
- Cable tag shall be of rectangular shape.

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- Cable tag shall be of 2mm thick aluminum with number punched (embossed) on it and securely attached to the cable by not less than two turns of 20 SWG GI wire conforming to IS:280.
- Reference shall be made to **"Cable installation methodology"** of this specification. Vendor shall submit the technical details of cable tags, ID numbering scheme for BHEL/ CUSTOMER approval during detailed engineering.

