

BILL OF QUANTITIES CUM PRICE SCHEDULE (Annexure-I)**Name of the Work:-**ETC Package for Unit-II & Unit-III Commissioning at 400/132 KV Switchyard for Barh STPP Stage-I (3x660 MW) in Bihar.**Customer:-** M/s NATIONAL THERMAL POWER CORPORATION (NTPC)**Tender Specification No. :** - TBSM/BARH/ETC/TENDER /22-23 Date: 04.04.2022

Sl. No.	Description of Item	Quantity	UOM	Unit Rate (Rs.)	Total Amount (Rs.)
1	ETC of Main Equipment of 390 kV Surge Arrester (Gapless type) with Surge monitors and terminal connectors, etc.	6	Nos.	4,014.99	24,089.94
2	ETC of Main Equipment of 400 kV Bus Post Insulator with corona ring along with BPI clamp suitable for twin moose ACSR conductor.	6	Nos.	2,063.43	12,380.57
3	Erection of Pipe Structure for 390kV LA and 400kV BPI.	5	MT	4,359.15	21,795.74
4	Erection of GRP Panels. Testing and commissioning of relays is under the scope of panel supplier. Necessary manpower support, tools, tackles and testing equipment in scope of ETC contractor.	10	Nos.	6,878.09	68,780.88
5	LT Cabling 7Cx2.5 sq. mm PVC/Cu including laying, tagging, dressing, ferruling, lugging, soldering, tapping, jointing, crimping, termination and drilling/ cutting holes in cable gland plates - laying can be either on trays, supports, cable trestle, underground, buried in ground or through GI/ PVC pipe over/ under ground, through wall, etc. All erection materials viz. ferrules, copper lugs, cable ties/ straps, Al. tags, markers, GI/ PVC wall sleeves with rubber/ nylon bushes and flexible steel conduits shall be supplied by bidder. Note: The work will also involve removal of panel gland-plates, drilling holes and closing the balance holes.	5	Kms	16,457.11	82,285.56
6	LT Cabling 7Cx1.5 sq. mm PVC/Cu including laying, tagging, dressing, ferruling, lugging, soldering, tapping, jointing, crimping, termination and drilling/ cutting holes in cable gland plates - laying can be either on trays, supports, cable trestle, underground, buried in ground or through GI/ PVC pipe over/ under ground, through wall, etc. All erection materials viz. ferrules, copper lugs, cable ties/ straps, Al. tags, markers, GI/ PVC wall sleeves with rubber/ nylon bushes and flexible steel conduits shall be supplied by bidder. Note: The work will also involve removal of panel gland-plates, drilling holes and closing the balance holes.	5	Kms	16,457.11	82,285.56
7	LT Cabling 10Cx2.5 sq. mm PVC/Cu including laying, tagging, dressing, ferruling, lugging, soldering, tapping, jointing, crimping, termination and drilling/ cutting holes in cable gland plates - laying can be either on trays, supports, cable trestle, underground, buried in ground or through GI/ PVC pipe over/ under ground, through wall, etc. All erection materials viz. ferrules, copper lugs, cable ties/ straps, Al. tags, markers, GI/ PVC wall sleeves with rubber/ nylon bushes and flexible steel conduits shall be supplied by bidder. Note: The work will also involve removal of panel gland-plates, drilling holes and closing the balance holes.	10	Kms	17,027.31	1,70,273.14

8	<p>LT Cabling 10Cx1.5 sq. mm PVC/Cu including laying, tagging, dressing, ferruling, lugging, soldering, tapping, jointing, crimping, termination and drilling/ cutting holes in cable gland plates - laying can be either on trays, supports, cable trestle, underground, buried in ground or through GI/ PVC pipe over/ under ground, through wall, etc. All erection materials viz. ferrules, copper lugs, cable ties/ straps, Al. tags, markers, GI/ PVC wall sleeves with rubber/ nylon bushes and flexible steel conduits shall be supplied by bidder.</p> <p>Note: The work will also involve removal of panel gland-plates, drilling holes and closing the balance holes.</p>	10	Kms	17,027.31	1,70,273.14
9	<p>LT Cabling 12Cx1.5 sq. mm PVC/Cu including laying, tagging, dressing, ferruling, lugging, soldering, tapping, jointing, crimping, termination and drilling/ cutting holes in cable gland plates - laying can be either on trays, supports, cable trestle, underground, buried in ground or through GI/ PVC pipe over/ under ground, through wall, etc. All erection materials viz. ferrules, copper lugs, cable ties/ straps, Al. tags, markers, GI/ PVC wall sleeves with rubber/ nylon bushes and flexible steel conduits shall be supplied by bidder.</p> <p>Note: The work will also involve removal of panel gland-plates, drilling holes and closing the balance holes.</p>	20	Kms	17,027.31	3,40,546.29
10	<p>LT Cabling 14Cx2.5 sq. mm PVC/Cu including laying, tagging, dressing, ferruling, lugging, soldering, tapping, jointing, crimping, termination and drilling/ cutting holes in cable gland plates - laying can be either on trays, supports, cable trestle, underground, buried in ground or through GI/ PVC pipe over/ under ground, through wall, etc. All erection materials viz. ferrules, copper lugs, cable ties/ straps, Al. tags, markers, GI/ PVC wall sleeves with rubber/ nylon bushes and flexible steel conduits shall be supplied by bidder.</p> <p>Note: The work will also involve removal of panel gland-plates, drilling holes and closing the balance holes.</p>	20	Kms	22,699.81	4,53,996.27
11	<p>LT Cabling 19Cx2.5 sq. mm PVC/Cu including laying, tagging, dressing, ferruling, lugging, soldering, tapping, jointing, crimping, termination and drilling/ cutting holes in cable gland plates - laying can be either on trays, supports, cable trestle, underground, buried in ground or through GI/ PVC pipe over/ under ground, through wall, etc. All erection materials viz. ferrules, copper lugs, cable ties/ straps, Al. tags, markers, GI/ PVC wall sleeves with rubber/ nylon bushes and flexible steel conduits shall be supplied by bidder.</p> <p>Note: The work will also involve removal of panel gland-plates, drilling holes and closing the balance holes.</p>	10	Kms	24,970.77	2,49,707.74
12	<p>Supply of cable glands - Nickel Plated (coating thickness not less than 10 microns) NTPC approved/ Sunil & Co./ Arup/ Comet/ QPIE make brass cable glands, double compression heavy-duty type complete with necessary armour clamp & tapered washer, etc. for the following cables (Bidder's Scope is to supply and fixing) Qty. may vary by $\pm 50\%$. 7Cx2.5 sq. mm Cu</p>	50	Nos.	266.71	13,335.52
13	<p>Supply of cable glands - Nickel Plated (coating thickness not less than 10 microns) NTPC approved/ Sunil & Co./ Arup/ Comet/ QPIE make brass cable glands, double compression heavy-duty type complete with necessary armour clamp & tapered washer, etc. for the following cables (Bidder's Scope is to supply and fixing) Qty. may vary by $\pm 50\%$. 7Cx1.5 sq. mm Cu</p>	50	Nos.	226.71	11,335.28

14	Supply of cable glands - Nickel Plated (coating thickness not less than 10 microns) NTPC approved/ Sunil & Co./ Arup/ Comet/ QPIE make brass cable glands, double compression heavy-duty type complete with necessary armour clamp & tapered washer, etc. for the following cables (Bidder's Scope is to supply and fixing) Qty. may vary by ±50%. 10Cx2.5 sq. mm Cu	50	Nos.	306.44	15,322.12
15	Supply of cable glands - Nickel Plated (coating thickness not less than 10 microns) NTPC approved/ Sunil & Co./ Arup/ Comet/ QPIE make brass cable glands, double compression heavy-duty type complete with necessary armour clamp & tapered washer, etc. for the following cables (Bidder's Scope is to supply and fixing) Qty. may vary by ±50%. 10Cx1.5 sq. mm Cu	50	Nos.	260.47	13,023.68
16	Supply of cable glands - Nickel Plated (coating thickness not less than 10 microns) NTPC approved/ Sunil & Co./ Arup/ Comet/ QPIE make brass cable glands, double compression heavy-duty type complete with necessary armour clamp & tapered washer, etc. for the following cables (Bidder's Scope is to supply and fixing) Qty. may vary by ±50%. 12Cx1.5 sq. mm Cu	50	Nos.	286.52	14,326.20
17	Supply of cable glands - Nickel Plated (coating thickness not less than 10 microns) NTPC approved/ Sunil & Co./ Arup/ Comet/ QPIE make brass cable glands, double compression heavy-duty type complete with necessary armour clamp & tapered washer, etc. for the following cables (Bidder's Scope is to supply and fixing) Qty. may vary by ±50%. 14X2.5 sq.mm Cu	50	Nos.	340.49	17,024.70
18	Supply of cable glands - Nickel Plated (coating thickness not less than 10 microns) NTPC approved/ Sunil & Co./ Arup/ Comet/ QPIE make brass cable glands, double compression heavy-duty type complete with necessary armour clamp & tapered washer, etc. for the following cables (Bidder's Scope is to supply and fixing) Qty. may vary by ±50%. 19Cx2.5 sq. mm Cu	50	Nos.	368.85	18,442.72
19	SAS: Armoured Fibre Optic system Cable for SAS (to be laid in GI Pipe) (Scope - Laying of the cables in the 50NB GI pipe), Supply of GI Pipe (NTPC accepted) shall also be in contractor's scope. Supply and Laying of 50 mm GI pipes (medium grade) conduits along with socket, bend and joint on trench rack support. Cutting, threading, fixing of clamps sockets/ bends/ joints where required etc. complete. Supply of required clamp for fixing GI conduits on Cable rack shall be in ETC contractor scope. (Payment will be made for the as erected pipe length). GI conduits shall be used for laying of fiber optic cables/ sensor cables.	2	Kms	6,08,195.66	12,16,391.32
20	Armoured FO cable along with connectors for SAS shall be laid in 50mm dia. GI pipes. The laying and splicing of network/ optical cables shall be in the contractor scope. However, Optical cable will be laid under SAS supplier's supervision. Supply of FO cable is not in contractor scope.	2	Kms	23,279.83	46,559.67
Total Amount (in Rs.) - Excluding GST)					30,42,176