

**INDIAN MEDICINES PHARMACEUTICAL CORPORATION LTD.****CORRIGENDUM -01****(Revised BOQ for Item no. 1.1 & 5.5 & Dismantling)****Subject: Modernization, Upgradation & Expansion of existing Plant facilities at IMPCL, Mohan (Package –II- Electrical Substation, DG Sets and other Electrical works)****Tender No: HLL/IDN/IMPCL/2013/14/02****The description and quantities of the following BOQ items are revised and given below. The rates for these items shall be quoted in this Corrigendum-01 and amount shall be brought forward to the Summary of BOQ (Main BOQ).**

<b>BOQ Page No.</b>	<b>BOQ Sl. No</b>	<b>DSR-12 Code No.- NSR</b>	<b>Ref.</b>	<b>Revised BOQ Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate (Rs. )</b>	<b>Amount in Figure (Rs.)</b>	<b>Amount in Words (Rs.)</b>
<b>2</b>	<b>1 (1.1a)</b>	<b>NSR</b>	<b>HT SWITCH GEAR &amp; SAFETY EQUIPMENTS ( H.T. Panel)</b>	Supply, erection, testing and commissioning of indoor Four (4 ) panel 11 KV HT Distribution Board with One( 1) No Incomer and Three (3) Nos outgoing Vacuum Circuit Breakers (VCB) for consumer isolation in the HT Breaker room as per specifications complete in all respects & conforming to IEC:60694,60056& 60129 / IS standards as well as UK Electricity Board requirement.	<b>Set</b>	<b>1</b>			
				<b>Technical Specification</b>					
				The Indoor Power Distribution Board is meant for Consumer SS at load end. The 11 KV Gear unit shall be of indoor floor mounting, free standing Type with 1 No 11 KV VCB for receiving HT Supply of 11KV(E) and 3 Nos VCBs for out					

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				going to Transformers. The rated Voltage of Switch Gear shall be 12 KV. The Power frequency Voltage shall be 28 KV, & Lightning Impulse withstand Voltage shall be 75 KV. The min S.C. current withstand capacity shall be 25 KA for 1 second.					
				The panel shall be provided with mechanical door interlocks with Switch/ VCB & Standard safety features for Earthing Interlocks, Safety clearances etc as per IS.					
				The Panel shall be suitable for operation in Tropical Climate with an Ambient of 45Degree C (max), Relative Humidity of 90%,MSL <1000M.The Degree of Protection shall be IP:30 or better. The Panel shall be fabricated with min 2mm Thick CRCA sheet, suitably reinforced & shall be Epoxy Powder coated. HT & LT components shall be segregated suitably with SAFETY SHUTTERS .The Panel shall be subjected to Routine Tests as per IS / IEC. Type Test certificates for Identical Panels shall be furnished					
				<b>INCOMING- 1 No. :- Shall Comprise of</b>					
				1No. - Metal Clad housing with having 630A Vacuum circuit breaker with Manual & Electric operated mechanism 1 - Set- Tripping coil & closing Coil 24V DC 1 - Set of isolating plug and receptacle 1 - Set of Automatic safety shutter					

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				1 - Set of breaker control switch (TNC) 1 - Set of dual core CT's as follows: Core I - 160-80/5-5A class 5P-10 (15 VA) Core II - 160-80/5-5A class -1 (15 VA) 1 - set of 11/ $\sqrt{3}$ KV / 110/ $\sqrt{3}$ Volt, 100 VA burden & accuracy class1, 3 nos. single phase construction, dry type cast resin PT 1 - Multifunction Meter with selector switch for per phase Current, Voltmeter, KW, KWH, Reactive & Active power & frequency. 1 - Set of ON/OFF/Trip/ Spring Charged & Trip circuit healthy and phase indicating lamps. 1 No.- H.T. Cable joint box suitable for 3C x 240 sq.mm aluminum conductor XLPE cable, 11 KV (E) 1- Set of IDMTL relay with 2 elements of O/C protection (50%-200%), instantaneous O/C protection (200%-800%) & 1 element of E/F protection (10%-40%). 1 no. O/V relay 1 no. Anti-Pumping Relay 1 no. Trip Circuit supervision relay. 1 no. Negative phase sequence protection relay. 1 no. Master Trip relay. 1 no. 8 window Annunciation system for alarm & Trip status of relays, HT Breakers complete with acknowledgement & Reset Button. Provision for Termination of 3x 300 sq.mm XLPE					

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				11 KV(E) cable excluding cable glands and cable Bus Bar : - 1 Set of 600 amps TP air insulated Cu. bus bar					
				<b>OUTGOING: 3 Nos.: Each shall comprise of</b>					
				1 - Metal clad housing with having 630A Vacuum circuit breaker Manual & Electric operated mechanism (spring charged motor 230VAC) 1 - Tripping coil & closing Coil 24V DC 1 - Set of isolating plug and receptacle 1 - Set of Automatic safety shutter 1- Set of breaker control switch (TNC) Dual core CT's with Ammeter as given below for outgoing feeders respectively: Core I - 80A-40A/5-5A class 5P-10 (15VA) Core II - 80A-40A/5-5A class I (15VA) 1 - Multifunction Meter with selector switch for per phase Current, Voltmeter, KW, KWH, KVA, Reactive & Active power & Power factor. 1- Set ON/OFF, Trip & Trip ckt healthy indication lamp 1 - H.T. cable joint box for 3C x 240 Sq.mm XLPE cable (11 KV earthed) 1- Set of IDMTL relay with 3 element of O/C protection (50%-200%), Instantaneous Over Current protection (200%-800% and 1 element of E/F protection (10%-40%) Restricted Earth Fault Relay with 2000/1A PS class CT to be mounted on neutral of Transformers.(CT					

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				to be provided by HT panel Vendor) 2 - Aux. relay 1 - Trip circuit supervision relay 1 - No. Anti-Pumping Relay 1 - Master Trip relay 1 - No. 8 window Annunciation system for alarm & Trip status of relays, HT Breakers complete with acknowledgement & Reset Button. Provision for Termination of 3x 185 sq.mm XLPE 11 KV(E) cable excluding cable glands and cable SITC for HT Panel as per specification & as described above					
				All feeders shall be provided with Inscription Plates & Suitable Danger Boards in 2 Languages.(English, Hindi )					
	<b>1 (1.1b)</b>	<b>NSR</b>		<b>DC SYSTEM</b>	<b>Set</b>	<b>1</b>			
				<b>A. BATTERY , BATTERY CHARGER CUM D.C. BOARD FOR D.C.CONTROL</b>					
				Supply, installation, testing and commissioning of 24V, 120 AH rating heavy duty, Valve Regulated maintenance free Battery unit suitable for boost/trickle charging including Suitable floor Mounted Battery Racks, Interconnections, Batteries duly charged and complete with all accessories, etc. The Rack shall be painted with Anti-Acid Resistant paint. Preferred					

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				<b>B. BATTERY CHARGER</b>					
				Supply, Erection, Testing & Commissioning of Battery Charger Unit for above Battery with provisions of Auto-Manual selector for "Boost Charging", Float Charging" suitable for 240+/- 10%V,1Ph Supply complete with D.C. Distribution Board. The Housing for above shall be of Indoor Type, fabricated with 2mm thick CRCA sheet ,Floor Mounting cabinet with louvers, The Unit shall be complete with Adjustable Taps for Transformer for adjusting Booster current, Silicon Type Full wave Rectifier, DCMCBS, Protections & Diagnostics, Solid state Alarm Annunciator, Indicating lamps etc.					
				<b>C. D.C. DISTRIBUTION BOARD shall consist of the following.</b>					
				<b>Incoming</b>					
				1 set of 16A, DP MCB (DC)					
				<b>Outgoing</b>					
				4 nos. 6A, DP MCBs, incoming and outgoing terminals.					
				1 set of indicating lamps and DC voltmeter					
				The DC DB shall be part of Charger Panel					
				<b>Sub TOTAL FOR HT PANEL&amp; DC SYSTEM</b>					

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20	5.5	NSR		Design, supply, assembling and erection of 6 Meter (Tentative) high Lattice structure fabricated from ISMB, ISMC & ISA MS sections and MS gusset plates etc., as required complete including all hardware as required for fixing, including two coats of red oxide primer & epoxy painted with approved colour and shade as required, excluding the RCC foundation work but including supply of design & shop drg. of the foundation and the Lattice structure all complete.	Kg	2000			
New Item	8.0	NSR		<b>DISMANTLING</b>					
				Dismantling, Shifting , reinstallation testing & commissioning DG set -200KVA/180KVA along with existing panel boards as per specifications & drawings complete including RCC / PCC foundation for DG set as per the structural detail for Dynamic/vibration Loads to be submitted by the contractor and approved by the HLL/ Engineer-in-Charge. The required foundation bolts, nuts, cable termination/ adopter box suitable to terminate up to 4 nos. of 3.5Cx300 sq.mm XLPE cables, as required for a complete installation shall be provided. The required different sizes of cables, if provided, shall be paid separately as per relevant	Set	1			

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				BOQ items .The shifting & installations shall be complete as per design /details /technical specifications and directions of Engineer-in-Charge and the rate of this item shall be inclusive of all such operations. The quoted rate shall be inclusive of cost of all operations of dismantling, shifting, stacking/storing, reinstallation, testing & commissioning and disposal/handing over of surplus materials to client complete as per directions of Engineer in-Charge.					
				Sub Total of DISMANTLING					
				Total for HT PANEL & DC SYSTEM and DISMANTLING					

**Note:** Corrigendum/addendum shall be part of tender document

\*\*\*\*END of ANNEXURE-A\*\*\*\*\*